UNIVERGE SV8100

Features and Specifications Manual

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Features

1

Features

SECTION 1 ABOUT THIS CHAPTER

This chapter provides an alphabetical listing of the features that are available with the UNIVERGE SV8100 system.

Each feature provides the following information:

Description – briefly describes the feature and how it is use.

Conditions – provides special operating conditions (if any) that need to be considered with using the feature.

Default Settings – indicates the factory default setting (if any)

System Availability – describes multiline terminals that can be used with this feature and lists any additional equipment, such as adapters or blades, that must be installed for this feature to operate.

Programming – lists the memory blocks that support the feature.

Related Features – lists features that are associated with the feature being described (e.g., the Account Codes feature lists the Speed Dialing feature in the related features list because speed dialing bins can contain stored account code (if any).

Operation – provides step-by-step instructions for using the feature.

SECTION 2 IMPORTANT NOTES

Simplifying Multiline Terminal Operation with One-Touch Keys

A multiline terminal user can access many features Service Codes (e.g., Service Code 844 sets Call Forward Busy/No Answer). To streamline the operation of their telephone, a multiline terminal user can store these codes under One-Touch Keys. This provides one-button operation for almost any feature. To find out more, turn to the One-Touch Calling and One-Touch Serial Operation features.

Programmable Keys

When reading an instruction using programmable keys, you will see a notation similar to (*PRG 15-07 or SC nnn*). This means that the key requires service code nnn, and you can program this code in Program 15-07 or by dialing Service Code 851 or 852. Refer to the Programmable Function Keys feature for more information.

Using Handsfree

The manual assumes each extension has Automatic Handsfree. This lets a user just press a line key or Speaker key to answer or place a call. For extensions without Automatic Handsfree, the user must:

- Lift the handset or press **Speaker** for Intercom dial tone.
- Lift the handset or press **Speaker**, then press a line key for trunk dial tone.

Port Assignments

Port Calculation for Trunks:
The system detects the type of blade (trunk or extension) and assigns the required extension or trunk ports to the slot. The system will use the next available port numbers – it will not reserve any ports.

Account Code – Forced/Verified/Unverified

Description

Account Codes are user-dialed codes that help the system administrator categorize and/or restrict trunk calls. The system has two types of Forced Account Codes:

- Forced Account Codes (Unverified)

  Forced Account Codes ***require*** an extension user to enter an Account Code every time they place a trunk call. If the user does not enter the code, the system prevents the call. As with Account Codes, the extension user can elect to enter an Account Code for an incoming call. However, the system does not require it.

  Once set up in system programming, you can enable Forced Account Codes on a trunk-by-trunk basis. In addition, Forced Account Codes can apply to all outside calls or just long distance calls. Forced Account Codes for Toll Calls restricts calls according to the following chart:

Number of Digits Dialed	If first digit is not 1	If first digit is 1
1~3	Not allowed	Not allowed
4~7	Allowed – does not require Account Code	Allowed – requires Account Code
More than 7[1]	Allowed – requires Account Code	Allowed – requires Account Code
800 and 888	Allowed – requires Account Code	Allowed – does not require Account Code
011 (International)	Allowed – requires Account Code	N/A
911	Allowed – does not require Account Code	N/A

[1] *If you change the local call length in Toll Restriction, this value changes accordingly.*

- Verified Account Codes

  With Verified Account Codes, the system compares the Account Code the user dials to a list of up to 2000 pre-programmed codes. If the Account Code is in the list, the call goes through. If the code dialed is not in the list, the system prevents the call. Verified Account Codes can have 3~16 digits using the characters 0~9 and **#**. During programming, you can use “wild cards” to streamline entering codes into system

memory. For example, the entry 123@ lets users dial Verified Account Codes from 1230 through 1239.

Operator Notification

To prevent Account Code abuse, the system can notify the operator each time an Account Code violation occurs (Program: 20-13-20). This can happen if the user fails to enter an Account Code (if Forced) or enters a Verified Account Code that is not in the list. The notification is an automatic Intercom call to the attendant and a *RESTRICT* message in the operator display.

Account Codes for Incoming Calls

The system allows extension users to enter Account Codes for incoming calls. When this option is enabled, a user can dial * while on an incoming call, enter an Account Code, and then dial * to return to their caller. If the option is disabled, any digits the user dials after answering an incoming call outdial on the connected trunk.

Hiding Account Codes

Account Codes can be optionally hidden from a telephone display. This would prevent, for example, an unauthorized co-worker from obtaining a Verified Account Code by watching the display and making note of the digits that dial out. When hidden, the Account Code digits show as * on the telephone display.

Account Code Capacity

Account Codes print along with the other call data on the SMDR record after the call completes. Account Codes can have 1~16 digits using 0~9 and **#**. Verified Account Codes can have 3~16 digits.

Redialed Numbers Do Not Contain Account Codes

When using the Last Number Redial, Save or Repeat Dial features, the system does not retain Account Code information. Any number redialed with these features, the user needs to reenter an Account Code.

. *If a user enters *12345*203 926 5400*67890*, if the Last Number Redial feature is used, the system dials the number as 203 926 5400*67890*. The *67890*is not treated as an Account Code.*

Conditions

- If a user enters a code that exceeds the 16 digit limit, the system ignores the Account Code Entry.
- If the system has Account Codes disabled, the digits dialed (e.g., *1234*) appear on the SMDR report as part of the number dialed.
- If using Forced Account Code with single line telephone you need a VRS to get the prompts to enter the Forced Account Code.
- When you use Forced Account Code on only toll calls, and you dial a local call, you hear a beep.
- Speed Dial – System/Group/Station bins can contain stored Account Codes. They can be prevented from being displayed using Program 20-07-04.
- To simplify Account Code Entry, store the Account Code (e.g., *1234*) in a One-Touch Key. Just press the key instead of dialing the codes.
- Account Codes appear on the SMDR report (even if they are hidden on the telephone display).
- Do not use an asterisk within a PBX/CTX access code when using Account Codes. The *, causes the trunk to stop sending digits to the central office until another * is entered.
- Account Codes for incoming calls not available for single line telephones.

Default Settings

Account Codes are disabled.

System Availability

Terminals

Any Station

Required Component(s)

VRS for Forced Account Codes for Single Line Telephones

Related Features

Automatic Route Selection

PBX Compatibility

Speed Dial – System/Group/Station

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-11	**Basic Trunk Data Setup – Account Code Required**	Enable (1) or disable (0) Account Codes for each trunk.	0 = Disable 1 = Enable (default = 1)
15-07-01	**Programmable Function Keys**	Assign a function key as an Account Code key (code 50). Use this key instead of the dial pad to enter the * before and after the Account Code.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-20	**Class of Service Options (Supplementary Service) – Account Code/Toll Restriction Operator Alert (Restricted Operation Transfer)**	In an extension Class of Service, turn On (1) or Off (0) the Operator Alert when a forced account code is incorrectly entered.	0 = Off 1 = On (default = 1 for COS 01~15)
21-01-14	**System Options for Outgoing Calls – Forced Account Code Inter-digit Timer**	The system waits this time for a user to enter a Forced Account code.	0~64800 (seconds) (default = 3 seconds)
21-04-01	**Toll Restriction Class for Extensions**	Use this option to assign a Toll Restriction Class (1~15) to an extension.	Day/Night Mode 1~9 (9 = Power Failure Mode) 1~15 (default = 2)

Program Number	Program Name	Description/Comments	Assigned Data
21-24-01	Forced Access Dialing - Emergency Number	Emergency Number Data will be defined in this Program.	Up to 16 digits Enter. 1-9,0, *, # (default = No Setting)
35-05-01	**Account Code Setup – Account Code Mode**	For each Class of Service (1~15) use this option to select the Account Code Mode.	0 = Account Codes disabled. (Codes entered dial out as part of initial call.) 1 = Account Codes optional (not required). 2 = Account Codes required (forced) but not verifiable. 3 = Account Codes required (forced) and verifiable. (default = 0)
35-05-02	**Account Code Setup – Forced Account Code Toll Call Setup**	Use this option to enable Account Codes for all calls or just toll calls (for mode 2 or 3 in Program 35-05-01).	0 = Account Codes for toll and local calls (All) 1 = Account Codes just for toll calls (STD) (default = 0)
35-05-03	**Account Code Setup – Account Codes for Incoming Calls**	For each Class of Service (1~15), enter 1 in this option to enable Account Codes for incoming calls. Enter 0 to disable Account Codes for incoming calls. If disabled, any codes you enter dial out on the connected trunk.	0 = Disable Account Codes for incoming calls 1 = Enable Account codes for incoming calls (default = 0)
35-05-04	**Account Code Setup – Hiding Account Codes**	For each Class of Service (1~15), enter 1 to have the system hide Account Codes on an extension display as they are entered. Enter 0 to have the Account Codes displayed.	0 = Account Codes Displayed 1 = Account Codes not Displayed (default = 0)
35-06-01	**Verified Account Code Table – Verified Account Code**	Use this option to enter data into the Verified Account Code Table. You can enter up to 2000 codes from 3~16 digits in length. For a wild card @, press the LK 1.	Up to 16 digits Enter: 1~9, 0, **#**, @ (@ = Wild Card) (default not assigned)
40-10-01	**Voice Announcement Service Option – VRS Fixed Message**	Used (1) or Not Used (0) the Fixed VRS messages.	0 = Not Used 1 = Used (default = 1)

Operation

To enter an Account Code any time while on a trunk call:

The outside caller cannot hear the Account Code digits you enter. You can use this procedure if your system has Optional Account Codes enabled. You may also be able to use this procedure for incoming calls. This procedure is not available for single line telephones.

1. Dial *.

   - OR -

   Press your Account Code key (Program 15-07-01 or SC 851: code 50).

2. Dial your Account Code (1~16 digits, using 0~9 and **#**).

   . *If Account Codes are hidden, each digit you dial shows an "*****" character on the telephone display.*

3. Dial *.

   - OR -

   Press your Account Code key (Program 15-07-01 or SC 851: code 50).

To enter a Forced Account Code before dialing the outside number:

If your system has Forced or Verified Account Codes, you may use this procedure instead of letting the system prompt you for your Account Code. You may also use this procedure if your system has Optional Account Codes.

If your system has Verified Account Codes enabled, be sure to choose a code programmed into your Verified Account Code list.

1. Access trunk for outside call.

   . *You can access a trunk by pressing a line key or dialing a code. Refer to* *Central Office Calls, Placing on page 1-227* *for more information.*

2. Dial *.

   - OR -

   Press your Account Code key (Program 15-07-01 or SC 851: code 50).

3. Dial your Account Code [1~16 digits, using 0~9 and **#** or (3~16 digits for Forced)].

   . *If you make an incorrect entry, your system may automatically alert the operator. If Account Codes are hidden, each digit you dial shows an * on the telephone display (depending on programming).*

4. Dial *.

   - OR -

   Press your Account Code key (Program 15-07-01 or SC 851: code 50).

5. Dial the number you want to call.

To dial an outside number and let your system tell you when a Forced Account Code is required:

1. Access a trunk and dial the number you want to call.
2. Wait for your call to go through.

   - OR -

3. If you hear *"Please enter an Account Code," (depending on system programming)* and your display shows *ENTER ACCOUNT CODE*.
   - Dial *.

     - OR -

     Press your Account Code key (Program 15-07-01 or SC 851: code 50).
   - Dial your Account Code (3~16 digits, using 0~9 and **#**).
     If Account Codes are hidden, each digit you dial shows an * on the telephone display.
   - Dial *.

     - OR -

     Press your Account Code key (Program 15-07-01 or SC 851: code 50).

To enter an Account Code for an incoming call:

This procedure is not available for single line telephones.

1. Answer incoming call.

   . *If Account Codes for Incoming Calls is disabled, the following steps dial digits out onto the connected trunk.*
2. Dial *.
3. Enter the Account Code (1~16 digits).

   . *You can enter any code of the proper length.*
4. Dial *.

To enter a Forced Account Code at a single line telephone:

1. Access trunk for outside call.

   . *You can access a trunk by dialing a code. Refer to Central Office Calls, Placing for more information.*

   . *With Forced Account Codes, you hear, "Please enter an Account Code."(depending on programming).*
2. Dial *.
3. Enter Account Code (3~16 digits).
4. Dial *.
5. Dial number you want to call.

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Account Code Entry

Description

Account Codes are user-dialed codes that help the system administrator categorize and/or restrict trunk calls. Optional Account Codes allow a user to enter an Account Code while placing a trunk call or anytime while on a call. The system does not require the user to enter the optional account code.

Account Codes for Incoming Calls

The system can control the ability of extension users to enter Account Codes for incoming calls. When this option is enabled, a user can dial * while on an incoming call, enter an Account Code, and then dial * to return to their caller. If the option is disabled, any digits the user dials after answering an incoming call outdial on the connected trunk.

Hiding Account Codes

Account Codes can be optionally hidden from a telephone display. This prevents, for example, an unauthorized co-worker from obtaining a Verified Account Code by watching the display and making note of the digits that dial out. When hidden, the Account Code digits show an * on the telephone display.

Account Code Capacity

Account Codes print along with the other call data on the SMDR record after the call completes. Account Codes can have 1~16 digits using 0~9 and **#**.

Redialed Numbers Do Not Contain Account Codes

When using the Last Number Redial, Save or Repeat Dial features, the system does not retain Account Code information. To redial any number with these features, the user must enter an Account Code.

. *If a user enters *12345*203 926 5400*67890*, if the Last Number Redial feature is used, the system dials the number as 203 926 5400*67890*. The *67890* is not treated as an Account Code.*

Conditions

- If a user enters a code that exceeds the 16 digit limit, the system ignores the Account Code Entry.
- If the system has Account Codes disabled, the digits dialed (e.g., *1234*) appear on the SMDR report as part of the number dialed.
- Do not use an asterisk in a PBX access code when using Account Codes. Otherwise, after the *, the trunk stops sending digits to the central office.

- Account Codes appear on the SMDR report (even if they are hidden on the telephone display).
- To simplify Account Code Entry, store the Account Code (e.g., 1234) in a One-Touch Key. Press the key instead of dialing the codes.
- Speed Dialing bins can contain stored Account Codes. Prevent them from being displayed using Program 20-07-04.

Default Settings

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Automatic Route Selection

One-Touch Calling

PBX Compatibility

Speed Dial – System/Group/Station

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-11	**Basic Trunk Data Setup – Account Code Required**	Enable (1) or disable (0) Account Codes for each trunk.	0= Disable 1= Enable (default = 1)
15-07-01	**Programmable Function Keys**	Assign a function key as an Account Code key (code 50). Use this key instead of the dial pad to enter the * before and after the Account Code.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
21-01-04	**System Options for Outgoing Calls – Dial Tone Detection Time**	Adjust the interval the system waits for the Telco to return Dial Tone.	0~64800 (seconds) (default = five seconds)
35-05-01	**Account Code Setup – Account Code Mode**	Use this option to select the Account Code Mode.	0 = Account Codes Disabled (Codes entered dial out as part of initial call.) 1 = Account Codes optional (not required). 2 = Account Codes required but not verified. 3 = Account Codes required (forced) and verified. (default = 0)
35-05-02	**Account Code Setup – Forced Account Code Toll Call Setup**	Enable Account Codes for all calls or just toll calls (for mode 2 or 3 in Program 35-05-01).	0 = Account Codes for toll and local calls (All) 1 = Account Codes just for toll calls (STD) (default = 0)
35-05-03	**Account Code Setup – Account Codes for Incoming Calls**	For each Class of Service (1~15), enter 1 in this option to enable Account Codes for incoming calls. Enter 0 to disable Account Codes for incoming calls. If disabled, any codes you enter dial out on the connected trunk.	0 = Account Codes for incoming calls disabled (No) 1 = Account codes for incoming calls (Yes) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
35-05-04	**Account Code Setup – Hiding Account Codes**	For each Class of Service (1~15), enter 1 to have the system hide Account Codes on an extension display as they are entered. Enter 0 to have the Account Codes displayed.	0 = Display Account Codes 1 = Hide Account Codes (default = 0)
35-06-01	**SMDR Account Code Setup – Verified Account Code**	Use this table to enter Account Codes into the Verification Account Code List. You can enter up to 2000 codes with three ~ six digits, using the characters 0 ~ 9 or **#**. Use the LK1 to enter a wild card. For example, the entry @234 means the user can enter 0234-9234.	Up to 16 digits Enter: 1~9, 0, **#**, @ (@ = Wild Card) (default not assigned)

Operation

To enter an Account Code anytime while on a trunk call:

The outside caller cannot hear the Account Code digits you enter. You can use this procedure if your system has Optional Account Codes enabled. You may also be able to use this procedure for incoming calls. This procedure is not available for single line telephones.

1. Dial *.

   - OR -

   Press your Account Code key (Program 15-07 or SC 851: code 50).

2. Dial your Account Code (1~16 digits, using 0~9 and **#**).

   . *If Account Codes are hidden, each digit you dial shows an * on the telephone display.*

3. Dial *.

   - OR -

   Press your Account Code key (Program 15-07 or SC 851: code 50).

To enter an Account Code before dialing the outside number:

If your system has Forced or Verified Account Codes, you may use this procedure instead of letting the system prompt you for your Account Code. You may also use this procedure if your system has Optional Account Codes.

If your system has Verified Account Codes enabled, be sure to choose a code programmed into your Verified Account Code list.

1. Access trunk for outside call.

   . *You can press a line key or dial a code (except 9) to access a trunk. Refer to Central Office Calls, Placing on page 1-227 for more information.*

2. Dial *.

   - OR -

   Press your Account Code key (Program 15-07 or SC 851: code 50).

3. Dial your Account Code (1~16 digits, using 0~9 and **#**).

   . *If you make an incorrect entry, your system may automatically alert the operator. If Account Codes are hidden, each digit you dial shows an * on the telephone display.*

4. Dial *.

   - OR -

   Press your Account Code key (Program 15-07 or SC 851: code 50).

5. Dial the number you want to call.

To enter an Account Code for an incoming call:

This procedure is not available for single line telephones.

1. Answer incoming call.

   . *If Account Codes for Incoming Calls is disabled, the following steps dial digits out to the connected trunk.*

2. Dial *.

3. Enter the Account Code.

   . *You can enter any code of the proper length. Incoming Account Codes cannot be Forced or Verified.*

4. Dial *.

To enter an Account Code at a single line telephone:

1. Access trunk for outside call.

   . *You can access a trunk by dialing a code. Refer to Central Office Calls, Placing for more information.*

2. Dial *.

3. Enter Account Code (1~16 digits).

4. Dial *.

5. Dial number you want to call.

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Alarm

Description

Alarm lets any station extension work like an Alarm clock. An extension user can have Alarm remind them of a meeting or an appointment. There are two types of Alarms:

- Alarm 1 (sounds only once at the preset time)
- Alarm 2 (sounds every day at the preset time)

Conditions

- Single line telephones ring and Music on Hold is heard when the Alarm sounds.
- Only a Multiline Terminal can view what time the Alarm is currently set for.

Default Settings

Alarm is enabled.

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-01-06	**System Options – Alarm Duration**	Set the duration of the Alarm signal.	0~64800 seconds (default = 30 seconds)

Operation

To set the alarm:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **827**.

3. Dial alarm type (**1** or **2**).

   . *Alarm 1 sounds only once. Alarm 2 sounds each day at the preset time.*

4. Dial the alarm time (24-hour clock).

   . *For example, for 1:15 PM dial **1315**.*
   A confirmation tone is heard if the alarm has been set. If the alarm was not set, an error tone is heard instead.

5. At the multiline terminal, press **Speaker** to hang up.

   - OR -

   At the single line telephone, hang up.

To silence an alarm:

1. At multiline terminal, press **Exit.**

   - OR -

   At the single line telephone, lift the handset.

   . *The single line set user hears Music on Hold when the handset is lifted.*

To check the programmed alarm time at a multiline terminal:

1. Press **Help**.
2. Dial **827**.
3. Dial alarm type (**1** or **2**).

   . *The programmed time displays.*

4. Press **Exit**.

To cancel an alarm:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **827**.
3. Dial alarm type (**1** or **2**).
4. Dial **9999**.
5. At a multiline terminal, press **Speaker** to hang up.

   - OR -

   At the single line telephone, hang up.

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Alarm Reports

Description

The UNIVERGE SV8100 system logs various errors and reports information about the operation that can be used to determine the cause of a problem. The system can indicate several errors on the multiline telephone display, output to a USB stick on the CD-CP00, or be downloaded in PCPro. The report data can also be sent via e-mail.

Alarm Report

The Alarm Reports indicate:

- System start-up/upgrade date and time
- Blade communication error with date and time and the restoration date and time
- Date and time a blade was removed from the system
- Date and time an extension was disconnected from the system
- Date and time of any system data change

Table 1-1 Sample Alarm Report

<< Alarm Report **05/16/2006 14:30 PAGE 001**

LVL	NO	STAT	DATE	TIME	ITEM	UNIT	SLT	PRT	PARAMETER
MIN	0002	REC	05/16/06	14:21	PKG Installation	PRT	02	00	
MAJ	0010	ERR	05/16/06	14:21	ISDN Link	PRT	02	12	
MAJ	0010	REC	05/16/06	14:21	ISDN Link	PRT	02	12	
MIN	0002	ERR	05/16/06	14:33	PKG Installation	PRT	02	00	
MIN	0002	ERR	05/16/06	14:33	PKG Installation	ESI	05	00	
MIN	0002	ERR	05/16/06	14:33	PKG Installation	SLIB	07	00	
MAJ	0050	WAR	05/16/06	14:33	System Start Up	none	00	00	
MIN	0002	REC	05/16/06	14:33	PKG Installation	PRT	02	00	
MAJ	0014	ERR	05/16/06	14:33	NTCPU-LAN Link	none	00	00	
MAJ	0014	REC	05/16/06	14:35	NTCPU-LAN Link	none	00	00	
MIN	0002	ERR	05/16/06	14:36	PKG Installation	CTP	08	00	
MIN	0002	REC	05/16/06	14:37	PKG Installation	VMS	08	00	
MIN	0002	ERR	05/16/06	14:38	PKG Installation	VMS	08	00	
MIN	0002	REC	05/16/06	14:40	PKG Installation	PRT	07	00	
MIN	0002	ERR	05/16/06	14:40	PKG Installation	PRT	07	00	
MAJ	0006	ERR	05/16/06	14:41	Blocking	ESIB	01	05	
MAJ	0006	REC	05/16/06	15:01	Blocking	ESIB	01	05	
MAJ	0006	ERR	05/16/06	15:05	Blocking	ESIB	01	07	
MAJ	0006	REC	05/16/06	15:07	Blocking	ESIB	01	07	

Table 1-2 Alarm Report Definitions

Alarm Report Heading	Definitions
LVL	Alarm Type (MAJ = Major, MIN = Minor)
NO	Number of Alarm (4-digit)
STAT	Status (REC = Recovered, ERR = Error, WAR = Warning
DATE	Date the Alarm Occurred
TIME	Time the Alarm Occurred
ITEM	Name of the Alarm
UNIT	Name of the Blade
SLT	Chassis Slot Number
PRT	Chassis Port Number
PARAMETER	Related Information

Table 1-3 Alarm Report Item Definitions

Item Name	Definition
PKG Installation	Blade is removed or inserted.
ISDN Link	ISDN Line failure is detected.
CD-CP00 – LAN Link	CD-CP00 – Lan connection failure is detected.
Blocking	Terminal Failure may have occurred because terminal blocking is detected. Terminal is unplugged or wire is disconnected.
System Data Change	System Upgrade performed or Programming change.
System Start Up	System is reset.
SMDR Link	Connection failure has been detected between the CD-CP00 and SMDR printer device.

System Information

The system can print a report of the blades installed, the port assignments, and the port types. This information is sent to the extension defined in Program 90-13.

The System Information Reports indicate:

- Date and Time of the Report
- Blade names
- Slot condition (working, blocked)
- Port assignment
- Port classification

Table 1-4 Sample System Information Printout

System Information **05/18/2006 11:02**

slot	location	type	assign port	condition	note
1	1-1	DLC	1-16	Running	******** -------- Connect: *
2	1-2	PRT	1-23	Running	
3	1-3	COT	25-28	Running	
4	1-4	none	none	Not Install	
5	1-5	DLC	33-40	Not Install	-------- Connect: *
6	1-6	LCA	17-24	Running	
7	1-7	PRT	29-51	Not Install	
8	1-8	VM00	25-32	Running	
9	2-1	none	Not Install		
10	2-2	none	Not Install		
11	2-3	none	Not Install		
12	2-4	none	Not Install		
13	2-5	none	Not Install		
14	2-6	none	Not Install		
15	2-7	none	Not Install		
16	2-8	none	Not Install		

Table 1-4 Sample System Information Printout (Continued)

System Information **05/18/2006 11:02**

slot	location	type	assign port	condition	note
17	3-1	none	Not Install		
18	3-2	none	Not Install		
19	3-3	none	Not Install		
20	3-4	none	Not Install		
21	3-5	none	Not Install		
22	3-6	none	Not Install		
23	3-7	none	Not Install		
24	3-8	none	Not Install		

Conditions

- Alarm Reports and System Information Reports can be output to a USB stick on the CD-CP00.
- The UNIVERGE SV8100 supports the following Alarms to be output to the LCD of a multiline terminal:
  - SMDR Buffer Full
  - CD-CP00-LAN link Error
- The UNIVERGE SV8100 does not support printouts of the following Alarms:
  - Power Failure
  - RAM Backup Battery Error
  - Networking Keep Alive Error
- Up to 12 System Alarm times can be scheduled to print on a Monthly, Daily, and Hourly time frame. The report indicates both Major and Minor Alarms.
- System Information Reports cannot be set to output at a scheduled time.
- When using the E-mail functionality of reports, the E-mail address in Program 90-11-10 (From Address) must be set for the E-mail feature to work.
- Once output of new alarms is performed, these same alarms are not output a second time. New alarms must be generated before Program 90-12-04 can be performed a second time.
- Up to 100 System Alarm Reports can be stored. When the buffer fills, the oldest record is

deleted to allow the new record to be saved.

- If the System is set up to E-mail the Alarm Reports and the Mail Server is down, the report is not sent.
- System Information Reports cannot be set for output via E-mail.
- Scheduled Alarm Reports via E-mail prints all alarms. When the system detects New alarms, this information is output via E-mail on an individual basis.
- E-mail Alarm Reports can be sent when each New alarm occurs (Per Event). If you want to receive complete Alarm Reports periodically, you must specify 12 individual dates and times in Program 90-24-01 ~ Program 90-24-04 (per period).

. *A maximum of 99 entries are emailed with the scheduled alarms.*

Default Settings

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

USB memory stick

Related Features

None

Guide to Feature Programming

Setting Up Alarms:

Program Number	Program Name	Description/Comments	Assigned Data
90-10-01	**System Alarm Setup – Alarm Type**	Set the alarm type 14 and 60. **Alarm 14 – CD-CP00-LAN Link Error (IP Layer 1)** Assign a Major or Minor alarm status to the LAN link. This program also assigns whether or not the alarm is displayed to a key telephone and whether or not the alarm information is reported to the predefined destination. **Alarm 60 – SIP Registration Error Notification** Assign a Major or Minor alarm status to the SIP Registration Error. This program also assigns whether or not the alarm is displayed to a key telephone and whether or not the alarm information is reported to the predefined destination.	0 = Not Set 1 = Major Alarm 2 = Minor Alarm (default = 0)
90-10-02	**System Alarm Setup – Report**	Assign whether or not the alarm is displayed to a multiline terminal and whether or not the alarm information is reported to the predefined destination in Program 90-11.	0 = No Report (no autodial) 1 = Report (autodial) (default = 0)
90-24-01	**System Alarm Report Notification Time Setup – Month**	Set the month for the alarm report to print.	Month 00~12 (0 = Disabled) (default = 00)
90-24-02	**System Alarm Report Notification Time Setup – Day**	Set the day for the alarm report to print.	Day 00~31 (0 = Disabled) (default = 00)
90-24-03	**System Alarm Report Notification Time Setup – Hour**	Set the hour for the alarm report to print.	Day 00~23 (0 = Disabled) (default = 00)
90-24-04	**System Alarm Report Notification Time Setup – Minute**	Set the minute for the alarm report to print.	Day 00~59 (0 = Disabled) (default = 00)

Printing Reports:

Program Number	Program Name	Description/Comments	Assigned Data
90-12-01	**System Alarm Output – Output Port Type**	Indicate the type of connection used for the System Alarms. The baud rate for the COM port should be set in Program 10-21-02.	0 = No Setting 1~3 = Reserved 5 = USB Memory (default = 0)

Printing System Information Reports:

Program Number	Program Name	Description/Comments	Assigned Data
90-13-01	**System Information Output – Output Port Type**	Indicate the type of connection system information.	0 = No Setting 5 = USB (default = 0)
90-13-02	**System Information Output – Destination Extension Number**	If the output port type (Program 90-13-01) is set to CTA, enter the extension number with the CTA connection.	Extension Number (up to eight digits) (default not assigned)

E-mailing Alarm Reports:

Program Number	Program Name	Description/Comments	Assigned Data
10-12-01	**CD-CP00 Network Setup – IP Address**	Assign the IP Address.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.254.255.254 192.0.0.1 ~ 223.255.255.254 (default = 192.168.0.10)
10-12-02	**CD-CP00 Network Setup – Subnet Mask**	The setting of Subnet Mask is invalid when all Host Addresses are 0. If the network section is: 0, 127, 128.0, 191.255, 192.0.0, 223.255.255 The setting of Subnet Mask is invalid.	128.0.0.0 240.0.0.0 254.0.0.0 255.192.0.0 255.252.0.0 255.255.128.0 255.255.248.0 255.255.255.0 255.255.255.224 255.255.255.252 192.0.0.0 248.0.0.0 255.0.0.0 255.224.0.0 255.254.0.0 255.255.192.0 255.255.252.0 255.255.255.128 255.255.255.240 255.255.255.254 224.0.0.0 252.0.0.0 255.128.0.0 255.248.0.0 255.255.0.0 (Default) 255.255.224.0 255.255.254.0 255.255.255.192 255.255.255.248 255.255.255.255 (default = 255.255.0.0)
10-12-03	**CD-CP00 Network Setup – Default Gateway**	Assign the default gateway IP address for the CD-CP00.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.254.255.254 192.0.0.1 ~ 223.255.255.254 (default = 0.0.0.0)

Program Number	Program Name	Description/Comments	Assigned Data
90-11-02	**System Alarm Report – Report Method**	When Alarm Reports are to be e-mailed, set this option to 1. This program has higher priority than Program 90-12-06.	0 = No Report 1 = E-mail Address (default = 0)
90-11-06	**System Alarm Report – SMTP Host Name**	When Alarm Reports are to be e-mailed, set the SMTP name (for example, smtp.yourisp.com). Contact your ISP (Internet Service Provider) for the correct entry if needed.	Up to 255 characters (default not assigned)
90-11-07	**System Alarm Report – SMTP Host Port Number**	When Alarm Reports are to be e-mailed, set the SMTP host port number. Contact your ISP (internet service provider) for the correct entry if needed.	0 ~ 65535 (default = 25)
90-11-08	**System Alarm Report – To Email Address**	When Alarm Reports are to be e-mailed, set this e-mail address to which the report should be sent.	Up to 255 characters (default not assigned)
90-11-09	**System Alarm Report – Reply Address**	When Alarm Reports are to be e-mailed, set the e-mail address where replies should be e-mailed.	Up to 255 characters (default not assigned)
90-11-10	**System Alarm Report – From Address**	When Alarm Reports are to be e-mailed, set this e-mail address for the station sending the report.	Up to 255 characters (default not assigned)
90-11-11	**System Alarm Report – DNS Primary Address**	When Alarm Reports are to be e-mailed, set the DNS primary address.	0.0.0.0 ~ 255.255.255.255 (default = 0.0.0.0)
90-11-12	**System Alarm Report – DNS Secondary Address**	When Alarm Reports are to be e-mailed, set the DNS secondary address.	0.0.0.0 ~ 255.255.255.255 (default = 0.0.0.0)
90-11-13	**System Alarm Report – Customer Name**	When Alarm Reports are to be e-mailed, enter a name to identify the particular system.	Up to 255 characters (default not assigned)
90-25-01	**System Alarm Report CC Mail Setup – CC Mail Address**	Define the mail address to receive the system alarm report CC Mail setup.	Up to 255 characters (default not assigned)

Operation

To use this feature at any terminal:

The user must be logged in with an Installer (IN) level password as defined in Program 90-02.

Alphanumeric Display

Description

Multibutton display telephones have a 3-line, 24 character per line Alphanumeric Display that provides various feature status messages. These messages help the display telephone user process calls, identify callers and customize features.

Conditions

- The contrast is not adjustable when the telephone has background music enabled.

Default Settings

Enabled for all display telephones.

System Availability

Terminals

All Display Multiline Terminals.

Required Component(s)

None

Related Features

Clock/Calendar Display

Selectable Display Messaging

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-13	**Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for Multiline Terminal**	If needed, redefine the service code used to select the language for display multiline terminals.	MLT (default = 778)
15-02-01	**Multiline Telephone Basic Data Setup – Display Language Selection** (To select options 8~10, press either 8 or Recall, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	Select the language to be displayed on a multiline terminal display.	0 = Japanese 1 = English 2 = German 3 = French 4 = Italian 5 = Spanish 6 = Dutch 7 = Portuguese 8 = Norwegian 9 = Danish 10 = Swedish 11 = Turkish 12 = Latin American Spanish 13 = Romanian 14 = Polish (default = 1)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-11-08	**Class of Service Options (Hold/ Transfer Service) – Transfer Information Display**	For Class of Service in an extension, turn Off or On an incoming transfer preanswer display for an extension.	0 = Off 1 = On (default = 1 for COS 01~15)

Operation

Operation is automatic if enabled in programming.

Analog Communications Interface (ACI)

Description

The Analog Communications Interface (ACI) feature uses a PGD(2)-U10 ADP (Door Phone/Paging) adapter to provide two analog ports (with associated relays) for Music on Hold, External Paging, Door Boxes and auxiliary devices such as tape recorders and loud bells. The system allows up to 48 PGD(2)-U10 ADPs (when used for ACI ports) for a maximum of 96 analog ports. Each PGD(2)-U10 ADP requires an unused port on a DLCA Blade.

Music on Hold

You can connect up to two customer-provided Music on Hold music sources to a PGD(2)-U10 ADP. This lets you add additional music sources if the external source on the CD-CP00 ETU or the internal source is not adequate. By using PGD(2)-U10 ADPs, you can even have a different music source for each trunk.

When the system switches the ACI analog port to a trunk on Hold, the PGD(2)-U10 ADP relay associated with the ACI analog port closes. You can use this ability to switch on the music source, if desired.

Extension users can dial the ACI analog port extension number and listen to the connected music source. The PGD(2)-U10 ADP relay associated with the port closes when the call goes through.

For Music on Hold, connect the music source to the PGD(2)-U10 ADP module. Connect the music source control leads to the CTL (control relay) jack. Refer to the UNIVERGE SV8100 System Hardware Manual for additional details.

External Paging

An ACI analog port can also be an External Page output. When connected to customer-provided External Paging equipment, the ACI port provides External Paging. To use the External Paging, an extension user just dials the ACI analog port extension number and makes the announcement. The system broadcasts the announcement from the ACI analog port and simultaneously closes the associated PGD(2)-U10 ADP relay. You can use the relay closure to control the External Paging amplifier, if required. This external paging zone is not included in external all call paging or combination paging (internal and external).

For External Paging, connect the Paging amplifier to the PGD(2)-U10 ADP jack. Connect the amplifier control leads to the CTL (control relay) jack. Refer to the UNIVERGE SV8100 System Hardware Manual for additional details.

Auxiliary Device Control

The PGD(2)-U10 ADP can control a customer-provided tape recorder. When an extension user dials the ACI analog port extension number, they can automatically start the recorder and activate the record function. When the user hangs up, the recording stops and the tape recorder turns off. For tape recording, connect the tape recorder AUX input jack to the PGD(2)-U10 ADP jack. Connect the recorder control leads (if available) to the CTL (control relay) jack. Refer to the System Hardware Manual for additional details.

By using Department Calling, you can arrange multiple tape recorders into a pool. When an extension user dials the Department Group pilot number, they reach the first available tape recorder in the pool.

The relays in the PGD(2)-U10 ADP can optionally control customer-provided external ringers (loud bells) and buzzers. When an extension user dials the ACI analog port extension number, the associated PGD(2)-U10 ADP relay closes and activates the ringer. You can use this ability to control an emergency buzzer for a noisy machine shop floor, for example.

ACI Call Recording

ACI Call Recording allows you to use a recording device connected to a PGD(2)-U10 ADP to automatically record calls. The recording device is typically a customer-provided tape recorder. You can set up ACI Call Recording to output to a single ACI port/recording device or to a pool of ACI ports/ devices. With a single device, all calls are stored in a centralized location. With a pool of devices, you'll be sure to have a port available for recording – even in peak traffic periods. You can set up recording per trunk or per extension.

When set up for automatic recording, ACI Call Recording starts automatically as soon as the user places or answers their call. The system can be programed to record all *incoming* trunk calls which ring an extension. This includes the following trunk types:

- Central Office calls programmed to ring the extension
- Direct Inward Dialing (DID)
- Direct Inward Line (DIL)
- Direct Inward System Access (DISA)
- Tie lines

The system can also be programmed to record *outgoing* trunk calls, however, this is only possible using E&M Tie Lines, PRI or BRI trunks.

ACI Call Recording is not available for intercom calls, transferred calls, or calls placed on hold and answered by an extension with Call Recording enabled. To manually record any call (transferred, ICM, outgoing CO trunk, etc.), use the Voice Mail Conversation Record key (Service Code 851 + 78).

Physical Ports and Software Ports

Each PGD(2)-U10 ADP consists of a physical port for connection to the telephone system and two logical ports. For programming purposes, the ports are also called software ports. The physical port connects to a station position on a ESI ETU. During installation, the first PGD(2)-U10 ADP you set up is physical port 1; the second PGD(2)-U10 ADP is physical port 2, etc. Each PGD(2)-U10 ADP has two software ports, which are numbered independently of the physical ports. Normally, the first PGD(2)-U10 ADP set up has software ports 1~2; the second PGD(2)-U10 ADP has software ports 3~4, etc. There are a total of 96 software ports (48 PGD(2)-U10 ADPs x 2 ports each). During programming, you assign ACI extension numbers and Department Group options to PGD(2)-U10 ADP software ports, not physical ports. During installation, you connect equipment to the jacks on the PGD(2)-U10 ADP that correspond to the software port. Refer to the UNIVERGE SV8100 System Hardware Manual for installation details.

Conditions

- ACD agents who are logged on can be recorded.
- When ACI software ports are set to be a Background Music music source, it only plays to a speaker, not a multiline telephone.
- An extension cannot have Hotline keys for ACI software ports. Music on Hold ACI software ports can be Music on Hold music sources.
- An extension can have One-Touch Keys for ACI software ports. The gives the extension user:
  - One-Touch access to external music
  - One-Touch External Paging
  - One-Touch loud ringer control
- ACI software ports can provide External Paging with control, independent of the External Paging circuits on the CD-CP00. The PGD(2)-U10 ADP can be connected to any DLC port.

The devices connected to the PGD(2)-U10 ADP must be compatible with the specifications below. Refer to the UNIVERGE SV8100 System Hardware Manual for installation details.

PGD(2)-U10 ADP/ACI Interface Specifications	
Relay Contacts	
Maximum Contact Ratings	30 V DC @ 60 mA
	90 V AC @ 10 mA
Minimum Application Load	1 V DC @ 1 mA
Audio/Music Input	
Input Impedance	47 K Ohms @ 1 K Hz

PGD(2)-U10 ADP/ACI Interface Specifications	
Maximum Input	0.4Vrms or 1.0Vp-p.
Audio/Paging Output	
Output Impedance	600 Ohms @ 1 K Hz
Maximum Output	+ 3 dBm

Default Settings

No PGD(2)-U10 ADPs programmed.

System Availability

Terminals

None

Required Component(s)

PGD(2)-U10 ADP

Related Features

Automatic Call Distribution (ACD)

Background Music

Hotline

One-Touch Calling

Paging, External

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup (DLCA PKG Setup) – Terminal Type (B1)**	Assigns or displays the current terminal type assigned to B Channel 1 for each port on the DLCA.	0 = Not set 1 = Multiline Terminal 2 = SLT Adapter 3 = Bluetooth Cordless Handset 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Doorbox) 9 = PGD (ACI) 10 = DSS Console 11 = -- Not Used -- (default = 0)
10-03-06	**ETU Setup (DLCA PKG Setup) – Terminal Type (B2)**	Assigns or displays the current terminal type assigned to B Channel 2 for each port on the ESI.	0 = Not set 6 = PGD(2)-U10 ADP (Paging) 7 = PGD(2)-U10 ADP (Tone Ringer) 8 = PGD(2)-U10 ADP (Door Box) 9 = PGD(2)-U10 ADP (ACI) 12 = APR (B2 Mode) (default = 0)
10-07-01	**Conversation Record Circuits**	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)
10-41-01	General Purpose Contact Detector Setup - Slot Number	Define the slot number of the DLC to which the 2PGDAD is connected.	0 = No Setting 1-24 = Slots 1-24 (default = 0)
10-41-02	**General Purpose Contact Detector Setup - Physical Port Number**	Define the slot number of the DLC to which the 2PGDAD is connected	0 = No Setting 1-16 = Ports 1-16 (default = 0)
10-41-03	General Purpose Contact Detector Setup - Relay Circuit Number	Define the slot number of the DLC to which the 2PGDAD is connected	Assigned Data: 0 = No Setting 1-2 = Circuit Number 1-2 (default = 0)
11-06-01	**ACI Extension Numbering**	Assign extension numbers to ACI software ports. Select a number outside of the normal extension number range.	ACI Ports: 1~96 (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
11-08-01	**ACI Group Pilot Number**	Assign pilot numbers to ACI groups. When a user dials the pilot number, they reach an available ACI software port within the group.	ACI Groups 1~16 (default not assigned)
14-09-01	**Conversation Recording Destination for Trunks – ACI Recording Destination Extension Number**	Use this option to assign the ACI Call Recording destination per trunk. The destination can be an ACI port extension number (assigned in Program 11-06-01) or an ACI Department Group pilot number (assigned in Program 11-08-01). If destinations are assigned in Program 14-09 and Program 15-12, the destination in Program 15-12 is followed.	Extension Number = Maximum eight digits (default not assigned)
14-09-02	**Conversation Recording Destination for Trunks – ACI Automatic Recording for Incoming Calls**	Determine whether or not a trunk should be automatically recorded when an incoming call is received.	0 = Off 1 = On (default = 0)
15-07-01	**Programmable Function Keys**	If required, program and ACI Conversation Record Key (code 69 + 0). This key allows an extension user to press the key to manually record a call to the ACI	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-12-01	**Conversation Recording Destination for Extensions – ACI Recording Destination Extension Number**	Use this option to assign the ACI Call Recording destination on a per extension basis. The destination can be an ACI port extension number (assigned in Program 11-06) or an ACI Department Group pilot number (assigned in Program 11-08). If destinations are assigned in Program 14-09 and Program 15-12, the destination in Program 15-12 is followed.	Extension Number = Maximum eight digits (default not assigned)
15-12-02	**Conversation Recording Destination for Extensions – ACI Automatic Recording for Incoming Calls**	Determine whether or not an extension should be automatically recorded when an incoming call is received.	0 = Off 1 = On (default = 0)
33-01-01	**ACI Port Type Setup – ACI Type**	Set each ACI software port for input (1) or input/output (2). Use input ports for Music on Hold sources. Use output ports for External Paging/ringer control.	ACI Ports: 1~96 ACI Types: 0 = None 1 = MOH/BGM (Input) 2 = External Audio Port (Input/Output (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
33-02-01	**ACI Department Calling Group – Group Number**	Assign ACI software ports to ACI Department Groups. This lets ACI callers connect to ACI software ports by dialing the group pilot number (set in Program 11-08).	ACI Ports: 1~96 ACI Groups: 1~16 Default: ACI Port/Group/Priority 01/ 1/ 1 02/ 1/ 2 : / :/ : 96/ 1/ 96

Operation

To call an ACI software port:

1. Press the **Speaker**.
2. Dial ACI software port extension number.

   - OR -

   Dial ACI Department Group extension number.

   - OR -

   Press the **One-Touch Key** for ACI extension or Department Group.

After you call an ACI software port:

- If the port is set for input (Program 33-01-01=1) and a music source is connected, you hear music.

  - OR -

- If the port is set for output (Program 33-01-01=2) and External Paging is connected, you can page into the external zone.

  - OR -

- If the port is set for output (Program 33-01-01=2) and a loud ringer is connected, you activate the loud ringer.

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Ancillary Device Connection

Description

Ancillary Device Connection allows installation of selected peripheral (ancillary) devices to a multiline terminal. This feature enhances peripheral device objectives.

An UNIVERGE SV8100 multiline terminal user can accomplish this by using the AP(R)-R/APR-L Unit (Analog Port Adapter with Ringer) or AP(A)-R Unit (Analog Port Adapter without Ringer) for analog telephone devices, or installing the AD(A)-R/APA-L Unit to connect devices such as tape recorders.

The AP(A)-R/AP(R)-R/APA-L Units are the interface for installing a single line telephone, Modem, credit card reader, wireless headset, or other compatible analog device.

System Availability

Terminals

All multiline terminals.

Required Component(s)

AP(R)-R, AP(A)-R, PSA-L, ADA-L, APR-L

Conditions

- The optional device fits underneath the terminal.
- A single line telephone connected to an AP(R)-R Unit or AP(A)-R Unit cannot perform Trunk-to-Trunk Transfer and does not support a conference with itself and two outside parties.
- A single line telephone connected to an AP(R)-R Unit or AP(A)-R Unit does not support Message Waiting Indication or Caller ID Indication.
- An AP(R)-R Unit (analog port adapter with ringer) can be installed on a multiline terminal and function separately from the multiline terminal.
- When Program 10-03-06 is assigned as APR you cannot manually assign a port number for an APR. The system uses ports 193~256 (starting with 256 and working down) for a total of 64 APR ports. APR 1 uses port 256, and APR 2 uses port 255, and so on.

- When Program 10-03-06 is assigned as APR you cannot manually assign a port number for the APR.
- Phones that have an APR/APA installed do not pass voice to a trunk until the interdigit time expires (Program 21-01-03).
- When a single line phone is connected to an AP(R)-R or APR-L, a conference cannot be established unless the 2nd channel of ESI is used for APR in Program 10-03-06 and Program 10-03-07.
- When a single line phone is connected to an AP(R)-R or APR-L, the 2nd channel of ESI must be used (Programs 10-03-06 and 10-03-07) in order to switch back and forth between a call and a call waiting.
- ADA-L can send confirmation sound to far end but the recording machine must generate confirmation sound.

Default Settings

None

Related Features

SV8100 Terminals

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-03	**ETU Setup (LCA PKG Setup) – Transmit Gain Level (S-Level)**	Customize the transmit and receive levels of the CODEC Gain Types for 500/2500 type single line telephones.	1~63 (-15.5 +15.5dB) [default = 32 (0dB)]
10-03-04	**ETU Setup (LCA PKG Setup) – Receive Gain Level (R-Level)**	Customize the transmit and receive levels of the CODEC Gain Types for 500/2500 type single line telephones.	1~63 (-15.5 +15.5dB) [default = 32 (0dB)]
15-03-01	**Single Line Telephone Basic Data Setup – SLT Signaling Type**	Use this option to tell the system the type of dialing the connected telephone uses.	0 = DP 1 = DTMF (default = 1)
15-03-04	**Single Line Telephone Basic Data Setup – Flashing**	Enables/disables Flash for single line (500/2500 type) telephones.	0 = No 1 = Yes (default = 1)

Operation

Depends on the connected ancillary device.

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Answer Hold

Description

Answer Hold allows a multiline terminal user to press the flashing Answer Key to answer an incoming ringing call or a Camp-On call. When the multiline terminal user is already answering a call, the first call is automatically placed on hold, depending on the user setting in Program 15-02-06.

Conditions

- When multiple incoming calls activate the Answer Key LED, the LED continues to flash until all calls are answered.
- Use Program 15-02-06 (Normal Common, Exclusive Hold, Park Hold) to set the type of Hold key to be used (Default = Normal Common).
- For calls placed in a Park Group, the LED blinks fast (green).
- For calls placed in a Park Group by another user, the LED blinks slow (red).
- The Answer Hold Feature is not available for Virtual Extensions.
- The Answer Hold feature does not function for incoming internal calls.
- CO/PBX incoming calls, not assigned to ring or assigned to another ring group, do not activate the Answer Hold feature.
- If the direct trunk appearance key is not assigned, the next incoming call cannot be answered.

Default Settings

Normal Hold

System Availability

Terminals

Any Multiline Terminal

Required Component(s)

Not Applicable

Related Features

Answer Key

Central Office Calls, Answering

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-02-06	**Multiline Telephone Basic Data Setup – Hold Key Operating Mode**	Use this option to set the function of the Multiline Hold key. The Hold key can activate normal Hold or Exclusive Hold.	0 = Normal (Common) 1 = Exclusive Hold 2 = Park Hold (default = 0)
15-07-01	**Programmable Function Keys**	Assign a park group to multiline terminal line key.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
11-12-32	**Service Code Setup (for Service Access) – Answer for Park Hold**	Assign for a key on the multiline terminal or single line telephone for park hold.	MLT, SLT (default = 861)
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 01~15)

Operation

To answer a call on a different line key with a call in progress:

1. Receive a CO/PBX, DID/DISA/DIL/E&M incoming ring.

   . ***Answer*** *flashes.*

2. Press **Answer** and answer the new call.

   . *The **Answer** LED goes out. The original call is put on hold.*

3. If additional calls are received, press **Answer** to place the current call on hold and connect to the

next call as long as CO line keys are available.

Answer Key

Description

Multiline Terminals have an Answer Key with an LED that flashes when the Multiline Terminal user receives an incoming CO/PBX, Tie/DID transfer, or CO/PBX transfer call. When multiple calls are received, The Answer Key is used to pick up calls and continues flashing until the last unanswered call is answered. Press the Answer Key during a call to hold the current call and allow the next call to be answered.

Conditions

- The Answer LED functions for incoming CO/PBX calls, CO/PBX transfer/camp-on calls, and transfer/camp-on Tie/DID calls.
- Incoming calls answered by Answer are handled *first in-first out*.
- An Internal call, internal transfer/camp-on call, SIE/VE calls do not activate the Answer LED.

Default Settings

None

System Availability

Terminals:

All Multiline Terminals

Required Component(s)

None

Related Features

Answer Hold

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup**	Assign the incoming trunk type for each trunk.	Incoming Type for Day/ Night Mode (1~8): 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to Ring Groups. Use this program to assign extensions (up to 32) to Ring Groups. Calls ring extensions according to Ring Group programming. There are 100 available ring groups.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	Assign trunks to incoming Ring Groups. Use this program to assign Normal Ring Trunks (Program 22-02) to Incoming Ring Groups (Program 22-04).	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)
22-07-01	**DIL Assignment**	Assign the destination extension or Department Group Pilot Number for each DIL Incoming trunk.	Number of Transferring Destinations for Day/ Night Modes (1~8): Extension Number (maximum eight digits) Pilot Number (default not assigned)

Operation

To answer calls using the Answer Key:

1. Receive CO/PBX incoming ring.
2. Press **Answer**.
3. Talk with the CO/PBX incoming calling party.
4. When additional CO incoming calls are received, press **Answer** to place the current call on hold and connect the multiline terminal user to the next call.

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AspireNet

Description

Use the AspireNet networking feature to integrate multiple phone systems (SV8100 and Aspire) into a single “virtual” SV8100 communications server. Interconnected with ISDN PRI or BRI or VoIP, each phone system becomes a node on the network that can communicate with any other phone system node.

AspireNet provides seemless feature support for all features connected to the network.

Centralized Network Attendant

Centralized Network Attendant allows multiple networked systems to share a single centralized attendant. This centralized attendant can receive calls from and transfer calls to any destination in any network node. Unanswered calls recall and route as if they were part of a single, much larger system.

Flexible Network Routing

Use network routes to set up ISDN and VoIP networking between many separate systems – or use mixed (ISDN or VoIP) networking per system for greater network performance. Data tables in the system program define the routing for each network node. These tables are easily customized to meet the requirements of each networking configuration.

Users may place an intercom call or transfer a call to any extension at any location by simply dialing an extension number. The communications server analyzes each extension number received and determines how to route the call to its final destination. The feature which handles this route selection is called Flexible Routing (F-Routing). F-Routing also has the ability to select alternate routes to the destination extension if the primary destination is busy. Up to 48 routes are available for networking. Once an extension number is dialed, the system checks the routing, accesses the assigned trunk group and places the call. Each extension is assigned a route or routes that decides which trunk group to access and any modified dialed data if required.

When a SV8100 is connected via a VoIP connection to an Aspire system in a tie-line type setup, in order to transfer calls from the SV8100 to the Aspire, in addition to the VoIP programs specified in the VoIP feature (Refer the VoIP Manual for more details), set up the Flexible Routing Tables as follows:

● **Program 44-05-01 : ARS/F-Route Table** ; Table Number 1 = 9 (Trunk Group for SV8100 VoIP Trunk)

● **Program 10-23-02 : H.323 System Interconnection, IP Address** ; System Number 3 = 172.16.9.10 (IP Address for Aspire System)

● **Program 10-23-04 : H.323 System Interconnection, Alias Address** ; System Number 3 = 4 (For Dial 4 Calls)

With this programming, the SV8100 will wait for the Trunk Interdigit Timer to expire before dialing out after an Aspire system's extension (4xxx) is dialed.

If the F-Routing is set up with Program 44-05-01; Table Number 1 set to 103 (Networking) and Program 10-27-01; System ID 3 = 172.16.9.10 (IP Address for Aspire system), though the Aspire system will be able to transfer calls to the SV8100, the SV8100 system will not be able to transfer to the Aspire system.

PRI AspireNet With Two Local Voice Mails, Masters Must Have Different Numbering

When programming a PRI network with each SV8100 having their own local voice mail, the master numbers for the voice mails must be defined in different series in Program 11-01. The second digit of the extension number can not be the same. For example, 700 and 701 will not work, however 700 and 710 can be used.

With Two Local Voice Mails, Network ID Must Match in Programming

With a networked system, with each system having their own voice mail, in order for users to properly connect to the correct voice mail when leaving a message, the programming must be set as described below.

PRI AspireNet

Each node on a networked SV8100 is defined in **Program 10-03-11 : Blade Setup - Networking System Number** for the desired PRI slot. In the local system (Site 1), **Program 11-01-01 : System Numbering** has a digit defined for networking (example: 7x=8 (network)).

The ID entry in Program 10-03-11 must match the ID set in Program 11-01-01. Otherwise, callers could not press "8" to leave a message at a networked user's voice mail. For example:

● In Site 1 in **Program 10-03-11 = 1**, **Program 11-01-01 7X=8, ID = 2**.

When Site 1's extension 301 calls Site 2's extension 401, then presses digit "8", the user would hear a reorder tone.

● In Site 1 in **Program 10-03-11 = 1**, **Program 11-01-01 7X=8, ID = 1**.

When Site 1's extension 301 calls Site 2's extension 401, then presses digit "8", the user will hear the voice mail message for extension 401.

Note that in order to assign a system ID, the "type" must temporarily be set to "8" (networking).

Once the system ID has been assigned, you can change the type to the required entry (2).

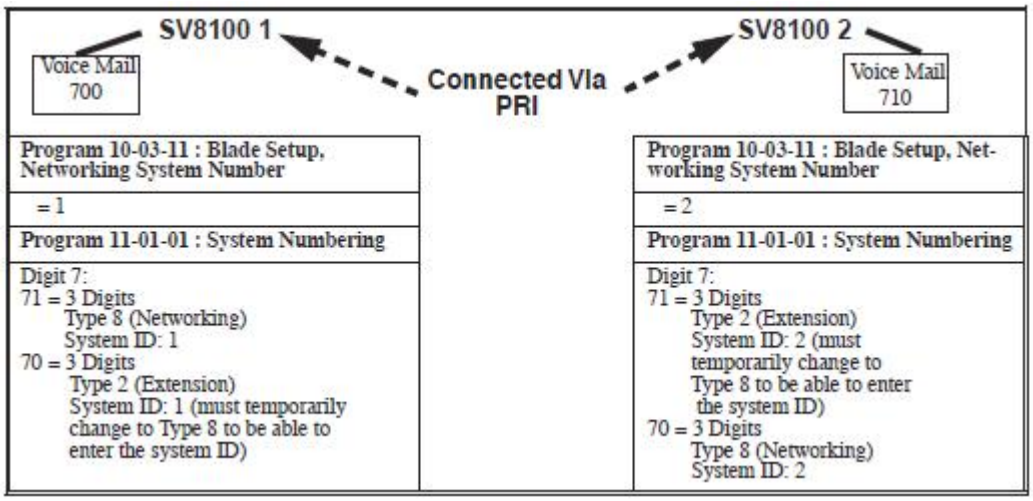
Programming

1. Set Program 11-01-01 to "8" (networking) for the local and remote voice mail master numbers and define the ID number.

2. Set the local system ID in Program 10-03-11 to the same entry defined in Program 11-01-01.

3. Change Program 11-01-01 for the local voice mail master number back to "2" (extension number).

Refer to the example below:



IP AspireNet

Each node on an IP networked SV8100 is defined in Program 10-27-01 : IP System ID. For example, Site A has ID 1 and Site B system has ID 2 in Program 10-27-01. *This must be the same in every node*

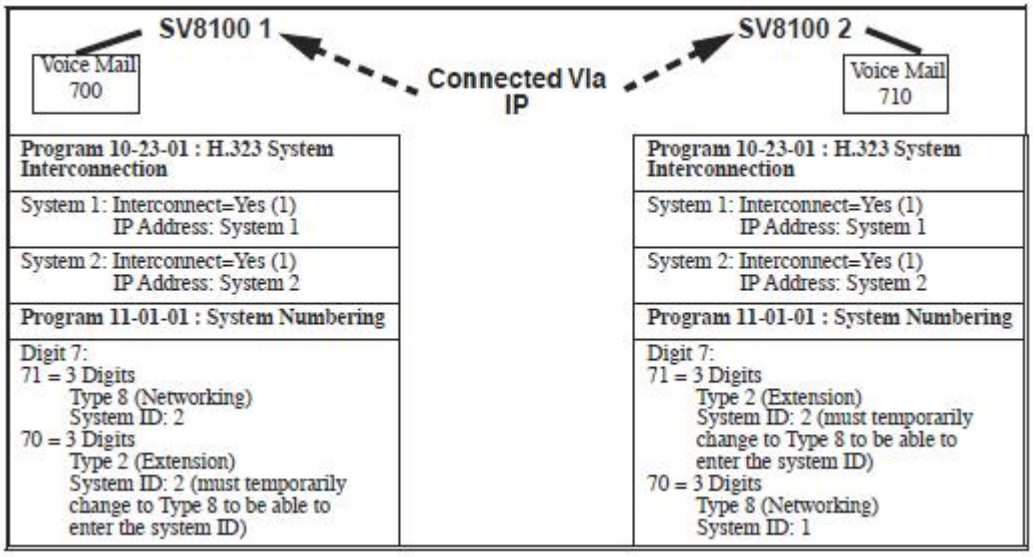
.In **Program 11-01-01 : System Numbering**, if Site 1 system (system ID 1) has 700 as the master number, the entry for "70" would be "2".

Site 2 system (system ID 2) has 710 as the master number, the entry for "71" would also be "2".

Note that in order to assign a system ID, the "type" must temporarily be set to "8" (networking). Once the system ID has been assigned, you can change the type to the required entry (2).

The system ID defined in Program 11-01-01 is where the voice mail master number resides.

Refer to the example below:



Multiple Site AspireNet Available

IP AspireNet allows for a maximum of 50 nodes. With ISDN AspireNet, the maximum number of nodes depends on the type of trunks used - PRI, BRI or a mixture of both.

The recommended connection for multiple system networking is to interconnect all the SV8100s using hardware (required with ISDN AspireNet) and programming. This also allows such features as Park to be used in a network.

With VoIP AspireNet, the system IDs for each networked system are defined in **Program 10-27 : IP System ID.** An IP address is defined for each node, and using the Numbering Plan (Program 11-01xx), the dialed digits are analyzed, the system ID is determined, and the call is routed to the networked system.

With ISDN AspireNet, interconnecting the systems is accomplished by defining a master blade and slave blade between each system **(Program 10-03-10 : Blade Setup - Master/Slave System**).

Each system must have an ISDN blade for each other system in the network.

The networked systems can be interconnected using a combination of PRI and VoIP trunks. In this type of setup, the IP resources will received priority over the PRI resources. The PRI will be used when the IP resources are busy. The following two graphics indicate correct networking layouts. Each one provides connection between all three systems within the network.

ISDN AspireNet Clock Source

When using ISDN AspireNet (PRI or BRI) on the SV8100, the option selected in **Program 10-03-01 : Blade Setup - ISDN Line Mode** determines the clock source for the networked connection. The following information indicates how, with each option, the clock source is obtained for the networked systems.

Option 3: Network Mode (Leased Line)

Telco sends the clock to the Master System

Telco sends the clock to the Slave System

Option 4: Network Mode (Interconnected Line)

Master System sends the clock to the Telco (or direct connection without telco) which then sends the clock to the Slave System

Option 5: (Interconnected Line, Fixed Layer 1=NT)

Master System sends the clock to the Telco

Slave System sends the clock to the Telco

Keep Alive Programs

Two options in Program 10-31 for use with the AspireNet feature are available to define the interval of Keep Alive and how many times the system resends Keep Alive.

PRI Channel Limitation

The system provides an option which can be used to assign the number of B-channels to be used for each ISDN blade. This allows for fractional PRIs when used with multiple site networking. If this program is limited to less than "30" on one side of the network, then it also limits both inbound and outbound network calls. This also applies on the other side of the network as well.

Transfer Network Trunk to Local Voice Mail Using Voice Mail Key

IP or PRI network sites that have their own voice mail can transfer a call into voice mail using the following steps if the inbound call originated in another site (for example, a call comes in to Site A and it translates to an extension at Site B):

● HOLD + the Voice Mail Programmable Function Key (Program 15-07 or SC 851 + 77) or MSG key (Program 15-02-26=1) + the extension number.

Keep the following in mind when using this option:

● **Note that if you have a local and central voice mail, you can not have the same mailbox number at each node**. If both sites have the same mailbox, when transferring a call, it will be transferred into the local voice mail and not across the network.

● As this software change allows transferring to a general message by a Single Line Set, the following two operations have different results between Networking Call Transfer and Internal Call Transfer.

- Hold + Voice Mail Master Dial then hang up.

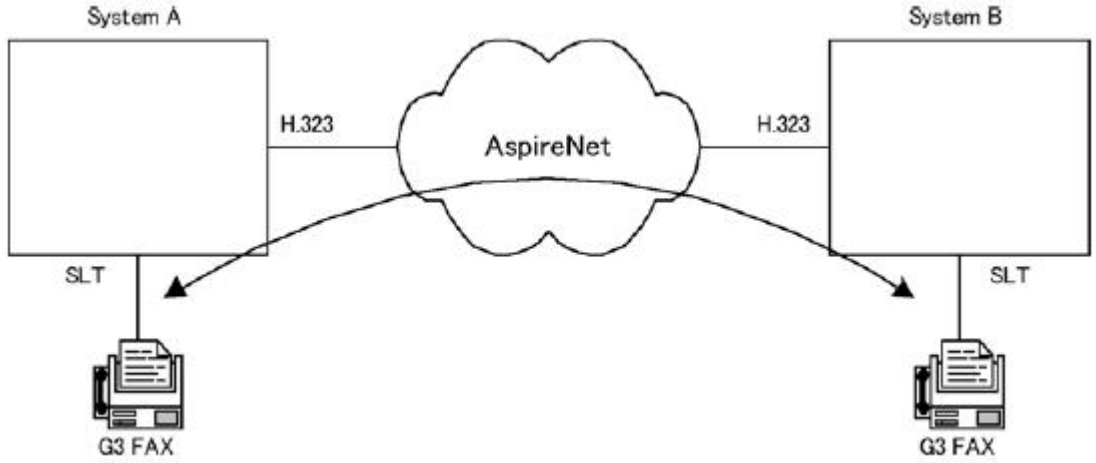
- Hold + Service Code (Own Mailbox Access - *8) then hang up.

Fax Over AspireNet

The purpose of AspireNet is to be able to connect several systems and have them appear to operate as one system. However, some restrictions apply. With Fax Over AspireNet using H.323 trunks, if a resource is busy, the operation may not be performed efficiently. Although the operation continues if there is no G.711 compression, there is no resending procedure with RTP. The software enhances this operation to provide better performance.

With IP AspireNet, the modem signal of the fax relay uses H.245. This enhancement only applies to G3.

Examples: **FAX Relay with SLT Extension (G3)**



Setup:

●System A

Program15-03-03 = G3 Fax 1 (special)

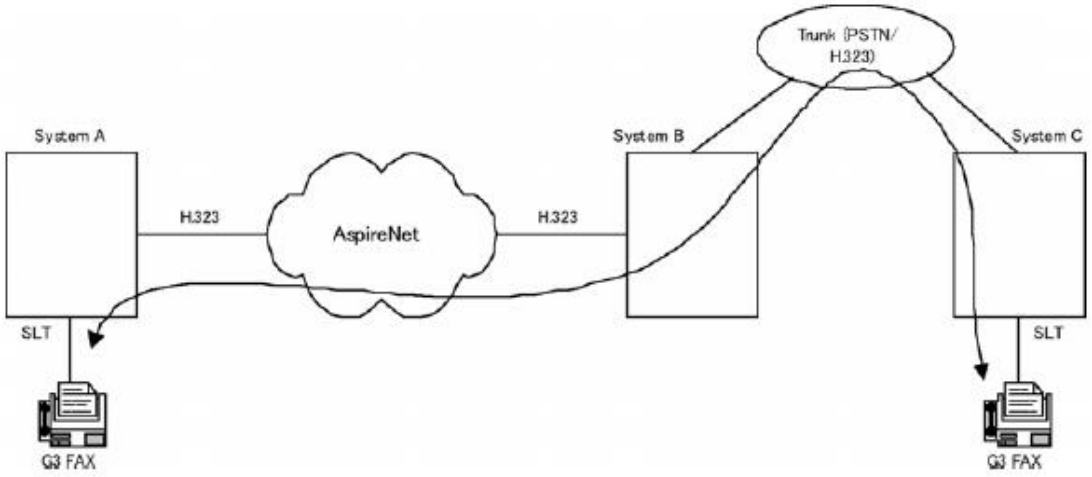
Program84-12-32 = 2 (Each Port Mode)

●System B

Program15-03-03 = G3 Fax 1 (special)

Program84-12-32 = 2 (Each Port Mode)

FAX Relay with Trunks



Setup:

●System A

Program15-03-03 = G3 Fax 1 (special)

Program 84-12-32 = 2 (Each Port Mode)

●System B

Program 15-03-03 = G3 Fax 1 (special)

Program 84-12-32 = 2 (Each Port Mode)

●System C

Program15-03-03 = G3 Fax 1 (special)

Program 84-01-59 = 2 Each Port Mode

Conditions

- Refer to the **SV8100 VoIP Manual(NECIC-AP-004).**

Default Settings

Disabled

System Availability

Terminals

Required Component(s)

None

Related Features

Refer to the Aspire Networking Guide

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-19-01	**VoIP DSP Resource Selection – DSP Resource**	Specify the operating mode of the DSP resource on the VOIPDB blade. This program setting has no affect on the terminal/trunk port assignments or usage.	0 = Common use for both IP extensions and trunks 1 = IP Extension 2 = SIP Trunk 3 = CCIS 4 = Use for NetLink 5 = Blocked (Default: Resource 1-128 = 0)
10-20-01	**LAN Setup for External Equipment – TCP Port, External Device 4**	Define the TCP port (0~65535) when communicating to the Networking System (type 4).	0~65535 default: External Device 1 (CTI Server) = 0 External Device 2 (ACD MIS) = 0 External Device 4 (Networking System) = 30000 External Device 5 (SMDR Output) = 0 External Device 6 (DIM Output) = 0 External Device 11 (O&M Server) = 8010
10-20-03	**LAN Setup for External Equipment – Keep Alive Time**	Use to define the keep alive time for communicating to external equipment.	1~255 (seconds) (default = 30)
10-31-01	**Networking Keep Alive Setup – Keep Alive Interval**	This program is used to set the interval of Keep Alive. The SV8100 does not send Keep alive when this item is set to "0". If this entry is greater than "0", networked PRI spans which are using Kentrox DSUs will not re-sync when removed from service then returned to service.	0-65535 (seconds) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
10-31-02	**Networking Keep Alive Setup – Keep Alive Retry Timer**	Set how many times the SV8100 resends Keep Alive.	1~255 (default = 5)

Operation

Refer to bthe Aspire Networking Guide.

Attendant Call Queuing

Description

Attendant extensions can have up to 32 incoming calls queued before additional callers hear busy tone. This helps minimize call congestion in systems that use the attendant as the overflow destination for unanswered calls. For example, you can program Direct Inward Lines and Voice Mail calls to route to the attendant when their primary destination is busy. With Attendant Call Queuing, these unanswered calls would normally “stack up” for the attendant until they can be processed.

The 32 call queue total includes Intercom, DISA, DID, DIL, Tie Line and transferred calls. If the attendant does not have an appearance for the queued call, it waits in line to be answered. If the attendant has more than 32 calls queued, an extension can Transfer a call to the attendant only if they have Busy Transfer enabled.

Attendant Call Queuing is a permanent, non-programmable system feature.

Conditions

- Forwarding when unanswered or busy can occur only at the attendant if there are more than 32 calls in queue.
- Assigning a station as operator in Program 20-17-01 enables call queuing function.
- Program 20-17-01 setting overrides setting in Program 20-09-07:Call Queuing Class of Service Option when set to disable.

Default Settings

Enabled

System Availability

Terminals

Any Multiline Terminal assigned as an operator

Required Component(s)

None

Related Features

Call Forwarding

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-01-01	**System Numbering – Service Code**	Set the system internal (Intercom) numbering plan. The numbering plan assigns the first and second digits dialed and affects the digits an extension user must dial to access other extensions and features, such as service codes and trunk codes. If the default numbering plan does not meet the site requirements, use this program to tailor the system numbering to the site.	Refer to System Numbering Default Settings table in the UNIVERGE SV8100 Programming Manual for a list of default settings.
20-01-01	**System Options - Operator Access Mode**	Assign the priority of a call when calling an operator telephone.	0 = Step 1 = Circular (default = 0)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-17-01	**Operator Extension – Operator's Extension Number**	Define the extension numbers which are to be used by operators.	Up to eight digits (default = No setting)
24-02-01	**System Options for Transfer – Busy Transfer**	Disable (0) or Enable (1) extensions to transfer calls to an attendant that has more than 32 calls in queue.	0 = Disable 1 = Enable (default = 0)

Operation

None

Automatic Call Distribution (ACD)

Description

Automatic Call Distribution (ACD) uniformly distributes calls among agents of a programmed ACD Group. When a call rings into an ACD Group, the system automatically routes the call to the agent that has been idle the longest. Automatic Call Distribution is much more sophisticated and comprehensive than Department Calling and other group services – it can accurately judge the work load at each agent and distribute calls accordingly. The system allows up to 64 ACD Groups and 256 ACD agents.

You can put any agent in any group. An agent can be in more than one group only when using AICs. This allows, for example, a Technical Service representation to answer customer service calls at lunch when many of the Customer Service representatives are unavailable.

The ACD Master Number is the extension number of the whole group. Calls directly ringing or transferred to the ACD Master number enter the group and are routed accordingly. Although the master number can be any valid extension number, you should choose a number that is out of the normal extension range.

Automatic Call Distribution operation is further enhanced by:

ACD Call Queuing

When all agents in an ACD Group are unavailable, an incoming call queues and causes the Queue Status Display to occur on the ACD Group Supervisor display. The display helps the supervisor keep track of the traffic load in their group.

The Queue Status Displays shows:

- The number of calls queued for an available agent in the group.
- The trunk that has been waiting the longest, and how long it has been waiting.

For each ACD Group, you can set the following conditions:

- The number of trunks that can wait in queue before the Queue Status Display occurs.
- How often the time in queue portion of the display reoccurs.
- If the supervisor should hear a Queue Alarm when the time in queue portion reoccurs.
- This alarm is a single beep tone that reminds the supervisor to check the condition of the queue.
- A remote K-CCIS user can call, or transfer to an ACD Pilot number. However, an incoming K-CCIS call to the ACD Pilot does NOT provide a Link Reconnect.

ACD Overflow (With Announcements)

ACD offers extensive overflow options for each ACD Group. For example, a caller ringing in when all agents are unavailable can hear an initial announcement (called the 1st Announcement). This announcement can be a general greeting like, “Thank you for calling. All of our agents are currently busy helping other customers. Please stay on the line and we will help you shortly.” If the caller continues to wait, you can have them hear another announcement (called the 2nd Announcement) such as, “Your business is important to us. Your call will be automatically answered by the first available agent. Please stay on the line.” If all the ACD Group agents still are unavailable, the call can automatically overflow to another ACD Group or the Voice Mail. If all agents in the overflow ACD Group are busy, Lookback Routing automatically ensures that the waiting call rings into the first agent in either group that becomes free.

You can assign an ACD Group with any combination of 1st Announcement, 2nd Announcement and overflow methods. You can have, for example, a Technical Service group that plays only the 2nd Announcement to callers and then immediately overflows to Voice Mail. At the same time, you can have a Customer Service group that plays both announcements and does not overflow.

You can assign an ACD Group to play the Queue Depth only when using the VRS for message. The Queue Depth can be played after the 1st Announcement only, 2nd Announcement only, or after both Announcements.

Dial Out of Delay Announcements

When listening to a VRS delay announcement, the caller can press a 1-key option to transfer them out to another extension, Voice Mail, Ring Group, another ACD Group, and to a Speed Dial bin. The caller can press the digit during the message only or for X seconds after the message. This is a per Queue option, but it effects both the first and second delay announcement if set.

VRS Delay Announcements Using InMail

InMail can be used to provide ACD Delay Announcements. Any of the 16 (1~16) InMail Master mailboxes (Program 47-03-01) can be set to Announcement mailboxes and can be used as the message source for the 1st and 2nd Announcement Messages. This option is applicable only to ACD Overflow modes that are assigned ACD delayed messages and Program 41-08-03 must be set to 2.

Agent Log In and Log Out Services

An ACD Agent can log in and log out of their ACD Group. While logged in, the agent is available to receive ACD Group calls. When logged out, the agent is excluded from the group calls. The programmable keys and Alphanumeric Display on an agent telephone show at a glance when they are logged in or logged out.

Agent Identity Code (AIC)

An Agent Identity Code (AIC) allows ACD agents to log in any extension without setting Program 41-02-01. Using AIC, ACD agents can also log in to multiple ACD groups at the same time (up to 64 ACD Groups). The system also allows all extensions (up to the system maximum) to log in using the same AIC code. AIC and ACD groups for each work period (mode pattern number) can be set in Program 41-18-01 as shown in the following example.

Table #	AIC	Operation Group	Mode Pattern Number							
			1	2	3	4	5	6	7	8
1	789	1	1	1	-	-	-	-	-	-
2	789	1	2	1	-	-	-	-	-	-
3	789	1	16	1	-	-	-	-	-	-
4	567	10	10	10	10	10	10	10	10	10
5	678	2	2	2	2	2	2	2	2	2
6	678	2	3	3	3	3	3	3	3	3
7	678	2	5	5	5	5	5	5	5	5

Example:

With this example, ACD works as follows:

Example 1: Log In with AIC 789

- During Mode Pattern 1, ACD agents belong to ACD groups 1, 2, and 16 at the same time.
- During Mode Pattern 2, ACD agents belong to only ACD group 1.
- During Mode Pattern 3~8, ACD agents do not belong to any ACD group and the ACD extensions work as normal extensions.

Example 2: Log In with AIC 567

- During Mode Patterns 1~8, ACD agents belong to only ACD group 10.

Example 3: Log In with AIC 678

- During Mode Patterns 1~8, ACD agents belong to ACD groups 2, 3 and 5 at the same time.

Multiple Agent Log In

ACD agents can log in any extension with multiple AICs (up to three). Using the example setup above, ACD works as follows:

EXAMPLE:

Example 1: Log In with AIC 789 and 567

- During Mode Pattern 1, ACD agents belong to ACD groups 1, 2, 10 and 16 at the same time.
- During Mode Patter 2, ACD agents belong to ACD groups 1 and 10.
- During Mode Pattern 3~8, ACD agents belong to only ACD group 10.

Example 2: Log In with AIC 789, 567 and 678

- During Mode Pattern 1, ACD agents belong to ACD groups 1, 2, 3, 5, 10 and 16 at the same time.
- During Mode Pattern 2, ACD agents belong to ACD groups 1, 2, 3, 5 and 10.
- During Mode Pattern 3~8, ACD agents belong to only ACD groups 2, 3, 5 and 10.

Some conditions with Multiple Agent Log In:

- ACD agents cannot log in to the system supervisor or group supervisor extension.
- To log in with AIC, the extension should be set to AIC Log In mode in Program 41-17-01.
- If the extension is set to AIC log in mode in Program 41-17-01, the system ignores the setting of Program 41-02-01 for the extension.
- Multiple extensions (up to the maximum capacity of the extension) can log-in with one AIC. For example, even if ACD agent A logs in extension 350 with AIC 789, ACD agent B can also log in to extension 351 with the same AIC 789 at the same time.
- A supervisor cannot log out an agent logged in by an AIC code.

Emergency Call

If an ACD Agent needs assistance with a caller, they can place an Emergency Call to their ACD Group Supervisor. Once the supervisor answers the Emergency Call, they automatically monitor both the ACD Agent and the caller. If the agent needs assistance, the supervisor can join in the conversation. Emergency Call can be a big help to inexperienced ACD Agents that need technical advise or assistance with a difficult caller. The supervisor can easily listen to the conversation and then “jump in” if the situation gets out of hand.

Enhanced DSS Operation

A programmed extension user can use their DSS Console to monitor the status of the ACD Agents within a group. The DSS Console is an essential tool for supervisors. The console key flash rates tell the supervisor at a glance which of the group agents are:

- Logged onto the group (i.e., in service).
- Logged out of the group (i.e., out of service).
- Busy on a call.
- Placing an Emergency Call to the supervisor.
- Not available or installed.

The ACD Supervisor can also use their console for placing and transferring calls – just like any other extension user.

Flexible Time Schedules

An ACD Work Schedule lets you divide a day into segments (called Work Periods) for scheduling the activity in your ACD Groups. You can set up four distinct Work Schedules, with up to eight Work Periods in each Work Schedule. Each day of the week has one Work Schedule, but different days can share the same schedule. For example, your Monday through Friday Work Schedule could consist of only two Work Periods. Work Period 1 could be from 8:00 AM to 5:00 PM – when your business is open. Work Period 2 could be from 5:00 PM to 8:00 AM – which covers those times when your business is closed.

Headset Operation (With Automatic Answer)

An ACD Agent or ACD Group Supervisor can use a customer-provided headset in place of the handset. The headset conveniently frees up the user's hands for other work and provides privacy while on the call. In addition, an ACD Agent with a headset can have Automatic Answer. This allows an agent busy on a call to automatically connect to the next waiting call when they hang up.

Incoming Call Routing

Incoming trunk calls can automatically route to specific ACD Groups. These types of calls ring directly into the ACD Group without being transferred by a co-worker or the Automated Attendant.

Rest Mode

Rest Mode temporarily logs-out an ACD agent's telephone. There are two types of Rest Mode:

Manual Rest Mode:
An ACD Agent can enable Manual Rest Mode anytime they want to temporarily leave the ACD Group. They might want to do this if they go to a meeting or get called away from their work area. While in Rest Mode, calls to the ACD Group do not ring the agent's telephone.

Automatic Rest Mode:
When an ACD Group has Automatic Rest Mode, the system automatically puts an agent's telephone in Rest Mode if it is not answered. This ensures callers do not have to wait while ACD rings an extension that is not answered. For multiline terminals, the system enables Automatic Rest Mode for all telephones with Rest Mode keys. For single line telephones, you must set an option in programming to enable Automatic Rest Mode. If an agent's telephone is placed into Rest Mode because a call is not answered, the agent needs to manually cancel Rest Mode to log back into the ACD group.

With a Rest Mode key programmed on an ACD agent's telephone, when the agent is in rest mode, the key is lit. If the Rest Mode key is pressed while an agent is on a call, the key flashes to indicate a pre-Rest Mode status. When the current call is finished, the agent's telephone is in rest mode. The agent can place intercom calls or receive direct incoming calls while in Rest Mode. The ability to receive incoming intercom calls is defined in system programming for each ACD group.

. *An ACD System Supervisor cannot be placed in Rest Mode.*

Supervisor, ACD Group

You can designate an extension in an ACD Group to be the group supervisor. Once assigned as an ACD Group Supervisor, the user can:

- Take the entire ACD Group out of service.
- Check the log out status of each agent after the group is taken down.
- Restore the ACD Group to service.

During programming, you can choose one of three modes of operation for each ACD Group supervisor:

- Supervisor's extension cannot receive calls to the ACD Group.
- Supervisor's extension can receive only ACD Group calls during overflow conditions.
- Supervisor's extension receives calls just like any other ACD Group agent.

An ACD Group can have only one supervisor. An extension can be a supervisor for only one ACD Group.

Supervisor, ACD System

You can designate an extension as an ACD System Supervisor. Once assigned as an ACD System Supervisor, the user can:

- Take all the system ACD Groups out of service simultaneously.
- Check the log out status of each agent after the groups are taken down.
- Restore all the ACD Groups to service simultaneously.

The system can have only one ACD System Supervisor.

Work Time

Work Time temporarily busies-out an ACD agent's telephone so they can work at their desk uninterrupted. This gives the agent time to fill out important logs and records as soon as they are finished with their call. There are two types of Work Time:

Manual Work Time:
An ACD Agent can enable Manual Work Time anytime they need to work at their desk undisturbed. You might prefer this Work Time mode if an agent only occasionally has to fill out follow-up paper work after they complete their call. When the agent is through catching up with their work, they manually return themselves to the ACD Group.

Automatic Work Time:
The system implements Automatic Work Time for the agent as soon as they hang up their current call. This is helpful in applications (such as Tech Service groups) where follow-up paperwork is a requirement for every call. When the agent is done with their work, they manually return themselves to the ACD Group.

Hotline Key Shows Agent Status

An extension Hotline key provides the normal Busy Lamp Field (BLF) for co-workers and a unique BLF for ACD Agents. Like the supervisor's DSS Console BLF, the unique BLF shows when the covered agent is in service, out of service or busy on a call. This enhanced BLF gives a department manager, for example, ACD Group monitoring abilities without having to become a supervisor with a DSS Console.

Hotline gives a multiline terminal user one-button calling and Transfer to another extension (the Hotline partner). Hotline helps co-workers that work closely together. The Hotline partners can call or Transfer calls to each other just by pressing a single key. Enhanced for ACD applications, Hotline provides a unique Busy Lamp Field for ACD agents as well as a BLF for co-workers that are not ACD agents. The charts below show both sets of BLF indications.

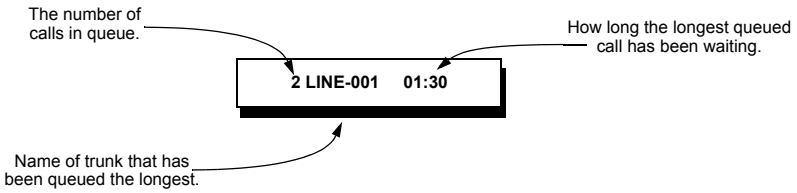
BLF For ACD Agents	
When the key is . . .	**The ACD Agent is . . .**
Off	Idle and is not an ACD Agent
On	Busy
Double Wink Off	Making an Emergency Call
Wink Off	Logged off or not installed
Double Wink On	Logged on

BLF For ACD Agents (Continued)	
BLF For Co-Workers That Are Not ACD Agents	
When the key is . . .	**Your co-worker is . . .**
Off	Idle
On	Busy or ringing
Fast	Flash In Do Not Disturb – All calls (option 3) or Intercom calls (option 2)

Enhanced Supervisor Options:
An ACD supervisor can individually assign extensions to ACD Groups, and set an agent's status once assigned. This provides the supervisor with tremendous flexibility to reassign agents as work loads vary.

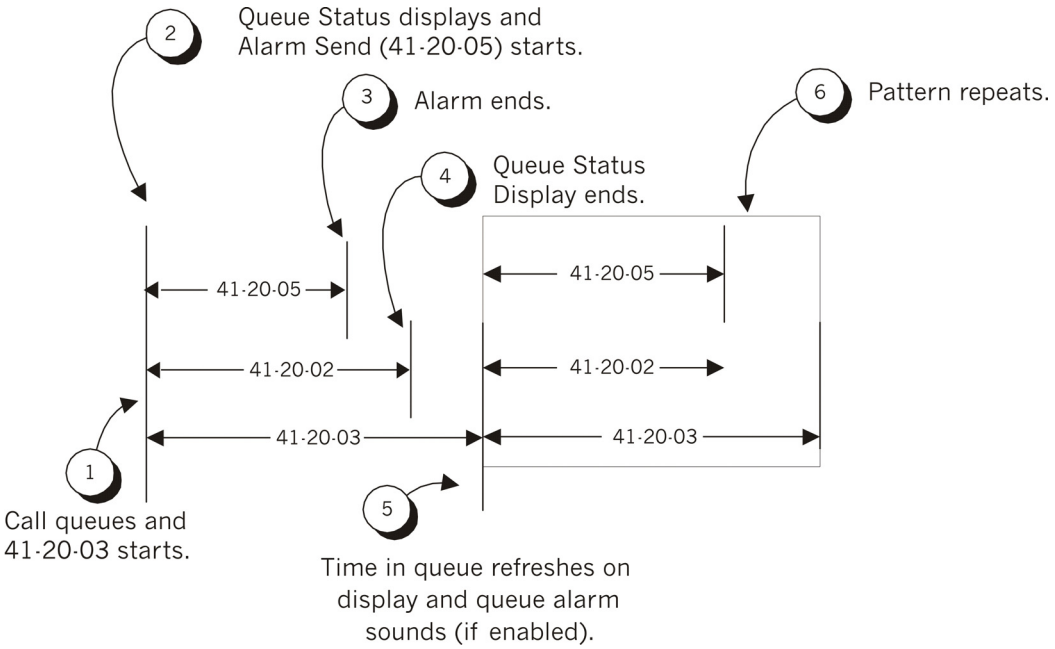
Queue Status Display with Scrolling:
When all agents in an ACD Group are unavailable, an incoming call queues and causes the Queue Status Display to occur on the ACD Group Supervisor and/or agent's display (based on the Class of Service). The display helps the supervisor keep track of the traffic load in their group. Any display multiline terminal can have a Queue Status Display Check programmable function key. The multiline terminal user can press this key anytime while idle, and using the VOL (s) and VOL (t), scroll through the Queue Status Displays of all the ACD Groups. The Queue Status Displays shows (see the Queue Status Display illustration below):

- The number of calls queued.
- The trunk that has been waiting the longest, and how long it has been waiting.



For each ACD Group, you can set the following conditions:

- The number of trunks that can wait in queue before the Queue Status Display occurs.
- How often the time in queue portion of the display reoccurs (see the Queue Status display Timing illustration below).
- Queue Status Display holding time.
- Queue Status Alarm enable/disable.
- Queue Status Alarm sending time.



When Logged Out of ACD Group:

When ACD agents are logged out and a call is placed into the ACD queue, the telephones of the logged out agents display the Queue Status and they hear the alarm according to the settings defined in system programming. Pressing the Queue Status Display Programmable Function key returns the telephone to idle until the time in Program 41-20-03 expires again.

. *Do not use both Program 41-15-01~02 and Program 41-20-01~05 to set the ACD queue alarm. Select either one or the other for the system to follow.*

Feature	Available in Program 41-15-01~02	Available in Program 41-20-01~05
Queue Status Display	---	Yes
Queue Status Display Time	---	Yes
Alarm	Yes	Yes
Alarm Send Time	Program 41-15-02 determines the length/ interval of the alarm.	Yes
Interval Time of Queue Status Display		Yes
Class of Service	---	Yes

Feature	Available in Program 41-15-01~02	Available in Program 41-20-01~05
Timing of alarm and display queue status	Alarm triggered after the number of calls in Program 41-15-01 is exceeded.	Alarm triggered after the number of calls in Program 41-20-01 is exceeded. Then follows Program 41-20-03 timing for displaying status.

- *If a telephone is not idle, it cannot use the Queue Status Display Programmable Function key.*
- *The Queue Status Display is not shown and the Queue Alarm is not heard by ACD agents in Off-Duty mode.*
- *To scroll through the ACD groups queue status, the Queue Status Display Programmable Function key must be used. You cannot scroll when the Queue Status Display is displayed due to an alarm.*
- *If the Queue Status display and alarm are active and the queued called is answered/disconnected, the display and alarm continue until the times in Program 41-20-02 and Program 41-20-05 expire.*
- *When an overflowed call is in queue, the call is included in its original ACD group queue and not in the group queue to which it overflowed.*
- *The Queue Status is not displayed on a supervisor's telephone based on the settings in Programs 41-20-xx. The supervisor must use the Queue Status Display Programmable Function key to view the queue.*

Programmable Wrap-up Timer

When an agent finishes their call, the system automatically starts a wrap-up timer and blocks any ACD calls to the agent. This gives them time to complete important logs and records before a new call comes in. When the time expires, the system returns the agent to the ACD Group to handle new callers.

MIS

The UNIVERGE SV8100 ACD MIS is a series of Windows®-based software programs designed to enhance the ACD features of the UNIVERGE SV8100 Telephone System. The software displays both real-time data and historical reports. Refer to the UNIVERGE SV8100 ACD MIS Supervisors Manual for more information.

ACD Group as Overflow Destination

The system can transfer an overflow call to a specific ACD Group, off-site via a speed dial bin, Ring Group or to voice mail using Program 41-09-01. When Program 41-08-02: ACD Overflow Destination has the ACD Overflow Destination set to 65, the system overflows the call to the ACD Group programmed in Program 41-09-01. (The system does not allow you to program an ACD group with that ACD group as the overflow.) If, while the call is ringing, the extension where the call was transferred becomes available, both the extension and the overflow ACD group ring.

Conditions

System:

- InMail can be used to play ACD Delay Announcements.
- If all agents are logged out of an ACD Queue, a transferred call to the ACD Pilot number recalls immediately back to the transferring party.
- If all agents are logged out of an ACD Queue trunk call directly, ringing the Queue is placed in queue.
- If defined in Program 22-11-03, DID calls in queue display the trunk name with the Queue Status feature.
- When Program 12-07-01 is customized, an agent's display does not indicate the WAIT ACD LOGIN status, however an agent may still log in.
- Conversation Recording is programmed system-wide – it is not ACD feature-specific.
- Refer to the *UNIVERGE SV8100 ACD Manual* for additional information.
- Up to 16 channels (speech paths) are available when using the DSP with VRS installed on the CD-CP00 for messages.
- When the PGD(2)-U10 ADP is providing the 1st Delay Announcements, it continues to play until the call is answered, abandoned, or the timer in 41-10-04 expires and starts to play the 2nd Delay Announcement. The 2nd Delay Announcement continues to play until the call is answered, abandoned, or the timer in 41-10-05 expires and drops the call. This message does not start from the beginning because it is on a constant loop.
- The Dial Out of Queue feature is not supported during InMail Delay Announcements.
- When all InMail talk paths (ports) are simultaneously being accessed by InMail Mailbox subscribers or Voice Mail Delay Announcements, or combination of the two, the next incoming call to the InMail will Ring No Answer until an available talk path becomes idle (First Come – First Served).
- When Voice Mail Delay Announcements are being played, InMail talk paths (ports) are used.
- InMail cannot be used for ACD Night Announcement.
- Program 41-08-03: ACD Overflow Options – Delay Announcement Source Type.
- The ACI port used for the ACD Delay Announcements program like Music on Hold (MOH) ACI ports. Refer to the MOH Music on Hold on page 1-625.

MIS:

- The UNIVERGE SV8100 system does not buffer the ACD Statistics when the PC running the ACD Server application is not connected.
- If an ACD Queue call is transferred to another logged-in Agent, it shows that both agents took a call but the queue only shows it as one total call.
- The programming of the Agents and Queues in the UNIVERGE SV8100 system are not transferred to the PC running the ACD Server/MIS applications. The ACD Server/MIS applications are programmed separately.
- If the caller overflows out of the Queue to a Speed Dial Bin, Ring Group, or Voice Mail it reports as an abandoned call.
- If the caller overflows out of the Queue to a Speed Dial Bin, Ring Group, or Voice Mail it reports as an overflow call.
- A supervisor assigned to not receive calls or take calls after the overflow timer is reached will show as idle in MIS when they are logged in and idle even when calls are queued up and not reaching the overflow timer.

Default Setting

Refer to the UNIVERGE SV8100 ACD Manual for more details.

System Availability

Terminals

All Terminals

Required Component(s)

ACD Software License

PZ-VM21 Unit

InMail (2 or 4) port flash drive
(For Delay Announcements using InMail)

Required Software

None

Related Features

Direct Inward Dialing (DID)

InMail

Music on Hold

Night Service

Voice Mail Integration (Analog)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-13-01	**Service Code Setup (for ACD) – ACD LogIn/Log Out (for KTS)**	Assign for multiline terminals and single line telephones.	MLT, SLT (default = 839)
11-13-02	**Service Code Setup (for ACD) – ACD Log Out (for SLT)**	Assign for single line telephones.	SLT (default = 755)
11-13-03	**Service Code Setup (for ACD) – Set ACD Wrap-Up Time (for SLT)**	Assign for single line telephones.	SLT (default = 756)
11-13-04	**Service Code Setup (for ACD) – Cancel ACD Wrap-Up Time (for SLT)**	Assign for single line telephones.	SLT (default = 757)
11-13-05	**Service Code Setup (for ACD) – Set ACD Off Duty (for SLT)**	Assign for single line telephones.	SLT (default = 758)
11-13-06	**Service Code Setup (for ACD) – Cancel ACD Off Duty (for SLT)**	Assign for single line telephones.	SLT (default = 759)
11-13-08	**Service Code Setup (for ACD) – Agent ID Code Login**	Assign to allow an AIC Agent to log into a group.	MLT (default not assigned)
11-13-09	**Service Code Setup (for ACD) – Agent ID Code Logout**	Assign to allow an AIC Agent to log out of a group.	MLT (default not assigned)
11-13-10	**Service Code Setup (for ACD) – ACD Agent Login by Supervisor**	Assign to allow an ACD Supervisor to log into a group.	MLT (default = 767)
11-13-11	**Service Code Setup (for ACD) – ACD Agent Logout by Supervisor**	Assign to allow an ACD Supervisor to log out of a group.	MLT (default = 768)

Program Number	Program Name	Description/Comments	Assigned Data
11-13-12	**Service Code Setup (for ACD) – Change Agent ACD Group by Supervisor**	When using service code 669 to change an agent ACD group, the supervisor must enter a 2-digit number for the group. For example, to change to ACD group 4, the entry would be 669 04.	MLT (default = 769)
11-13-13	**Service Code Setup (for ACD) – ACD Agent Changing Own ACD Group**	When this service code is used, an ACD Agent can reassign themselves to another ACD Group.	MLT (default = 775)
11-17-01	**ACD Group Pilot Number**	Assign the ACD Master Number for each ACD Group.	ACD Group Number: 01~64 ACD Group Pilot Number: Up to eight digits (default not assigned)
15-07-01	**Programmable Function Keys**	Assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	When an extension or a virtual extension is assigned to the function key on the key telephone, select the ring tone when receiving a call on that key.	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Ring Tone Extension (default = 0, Tone Pattern 1)
15-09-01	**Virtual Extension Ring Assignment**	Assign the ringing options for an extension Virtual Extension Key or Virtual Extension Group Answer Key, which is defined in Program 15-07. Make an assignment for each Night Service Mode. There are 256 Virtual Extension Ports.	Day Night/Mode: 1~8 Ringing: 0 = No Ringing 1 = Ring (default = 0)
15-11-01	**Virtual Extension Delayed Ring Assignment**	assign the delayed ringing options for an extension Virtual Extension or Virtual Extension Group Answer keys (defined in Program 15-09). You make an assignment for each Night Service Mode. There are 256 Virtual Extension Ports.	Day Night/Mode: 1~8 Ringing: 0 = Immediate Ring 1 = Delayed Ring (default = 0)
20-04-03	**System Options for Virtual Extensions – SIE/Virtual Extension Delay Interval**	SIE Keys/Virtual Extensions set for Delayed Ringing (see Program 15-11) ring the extension after this interval.	0~64800 (default = 10 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (COS) to an extension. There are 15 Classes of Service that can be assigned. Assign eight entries, one for each Night Service Mode.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension to manually (0) or automatically (1) receive off-hook signals.	0 = Off 1 = On (default = 0 for COS 01~15)
20-13-33	**Class of Service Options (Supplementary Service) – ACD Supervisor Position Enhancement**	Set this option to on for the operator to use service codes in Program 11-13-10 ~ 11-13-13.	0 = Off 1 = On (default = 0 for COS 01~15)
20-13-39	**Class of Service Options (Supplementary Service) – ACD Queue Status Display**	Turns off or on the ACD Queue Status Display for an extension Class of Service. Any extension, which has this option enabled, also hears the queue alarm.	0 = Off 1 = On (default = 0 for COS 01~15)
22-01-11	**System Options for Incoming Calls – VRS Waiting Message Interval Time**	Setup the sending duration time of the Auto – Attendant & Queuing. The message is repeatedly sent out within the specified time.	0~64800 (seconds) (default = 20)
30-01-01	**DSS Console Operating Mode**	Use this program to set the mode of the system DSS consoles. The entry for this option applies to all the system DSS consoles.	0 = Business Mode 1 = Hotel Mode 2 = ACD Monitor Mode 3 = Business/ACD Mode (default = 0)
30-05-04	**DSS Console Lamp Table – ACD Agent Busy**	Use this program to define the LED patterns for functions on the DSS consoles. The entry for this option applies to all the system DSS consoles.	Lamp Pattern Data 0 ~ 7 [default = 7(on)]
30-05-05	**DSS Console Lamp Table – Out of Schedule (ACD DSS)**	Use to define the LED patterns for out of schedule (ACD/DSS) functions on the DSS consoles.	Lamp Pattern Data 0~7 [default = 0 (Off)]
30-05-06	**DSS Console Lamp Table – ACD Agent Log Out (ACD DSS)**	Use this program to define the LED patterns for functions on the DSS consoles.	Lamp Pattern Data: 0~7 [default = 5 (IL)]
30-05-07	**DSS Console Lamp Table – ACD Agent Log In (ACD DSS)**	Use this program to define the LED patterns for functions on the DSS consoles.	Lamp Pattern Data: 0~7 [default = 4 (IR)]
30-05-08	**DSS Console Lamp Table – ACD Agent Emergency (ACD DSS)**	Use this program to define the LED patterns for functions on the DSS consoles.	Lamp Pattern Data: 0~7 [default = 6 (IW)]

Program Number	Program Name	Description/Comments	Assigned Data
40-10-01	**Voice Announcement Service Option – VRS Fixed Message**	Enable (1) or disable (0) the system ability to play the fixed VRS messages (such as You have a message).	0 = Not Used 1 = Used (default = 1)
41-01-01	**System Options for ACD – System Supervisory Extension**	Define the ACD Supervisor for the entire system.	Up to eight digits (0~9, *, #) (default not assigned)
41-01-02	**System Options for ACD – Login ID Code Digit**	Define the number of digits for agent login ID code.	0~20 (0 = No Login ID) (default = 0)
41-01-03	**System Options for ACD – ACD MIS Connection Ports**	Define what port is used for ACD MIS connection. Currently only LAN is supported.	0 = None 3 = LAN (CD-CP00) (default = 0)
41-01-04	**ACD-MIS Command Notification**	ACD-MIS Command Notification when a BT message is returned.	0 = Notifies 1 = No notification (default = 0)
41-02-01	**ACD Group and Agent Assignments**	For each ACD extension number, assign an ACD Group (1~64). An ACD Group number is assigned to each Work Period number (1~8).	ACD Work Period Mode Number: 1~8 ACD Group Number: 0~64 (0 = No Setting) (default = 0)
41-03-01	**Incoming Ring Group Assignment for ACD Group – ACD Group Number**	For each incoming trunk group set up in Program 22-05, designate which ACD Group (1~64) the trunks should ring for each of the eight Work Periods.	ACD Group Number: 0~64 (0 = No Setting) (default = 0)
41-03-02	**Incoming Ring Group Assignment for ACD Group – Night Announcement Service**	Designate for each incoming trunk, whether or not Night Announcement Service is assigned.	0 = No 1 = Yes (default = 0)
41-03-03	**Incoming Ring Group Assignment for ACD Group – Priority**	Determine whether an incoming call to a trunk ring group should follow a priority assignment.	0, 1~7 0 = No Priority 1 = Highest Priority 7 = Lowest Priority (default = 0)
41-04-01	**ACD Group Supervisor – Group Supervisor Extension**	Assign the group supervisor extension.	Extension Number = Up to eight digits (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
41-04-02	**ACD Group Supervisor – Operation Type**	Assign the supervisor operating type.	0 = Do Not receive any ACD incoming calls (No) 1 = Receive ACD incoming calls in case of overflow (Busy) 2 = Receive ACD incoming calls all the time (Yes) (default = 0)
41-05-01	**ACD Agent Work Schedules**	Use this program to set up the Work Schedules for ACD Agents and Groups. For each ACD Work Schedule (1~4), designate the start and stop times for each of the eight Work Periods. After the schedules are set up in this program, assign them to days of the week in Program 41-07. (This is the same program used by the Trunk Work Schedules.) After the schedules are set up in this program, assign them to days of the week in Program 41-07.	Work Period Mode Number = 1~ 8 Start Time = 0000~2359 End Time = 0000~2359 Default: (Start) 0000 (End) 0000
41-06-01	**Trunk Work Schedules**	Use this program to set up the Work Schedules for trunks. For each Work Schedule (1~4), designate the start and stop times for each of the eight Work Periods. After the schedules are set up, assign them to days of the week in Program 41-07.	Work Period Mode Number = 1~ 8 Start Time = 0000~2359 End Time = 0000~2359 Default: (Start) 0000 (End) 0000

Program Number	Program Name	Description/Comments	Assigned Data
41-07-01	**ACD Weekly Schedule Setup**	Assign the four Work Schedules (1~4) to days of the week. The assignments made in this program apply to both the ACD Agent Work Schedules (Program 41-05) and the Trunk Work Schedules (Program 41-06).	Day No./Time Pattern: 1 = Sunday/ 0~4 (0 = No ACD) (default = 0) 2 = Monday/ 0~4 (0 = No ACD) (default = 0) 3 = Tuesday/ 0~4 (0 = No ACD) (default = 0) 4 = Wednesday/ 0~4 (0 = No ACD) (default = 0) 5 = Threadiest/ 0~4 (0 = No ACD) (default = 0) 6 = Friday/ 0~4 (0 = No ACD) (default = 0) 7 = Saturday/ 0~4 (0 = No ACD) (default = 0)
41-08-01	**ACD Overflow Options – Overflow Operation Mode**	Assign the overflow mode (0~9), destination and announcement message types. Delay Announcement functions are not available for ACD pilot number calls. Each ACD Group can have unique overflow options.	0 = No overflow (None) 1 = Overflow with No Announcement 2 = No Overflow with First Announcement Only 3 = No Overflow with First & Second Announcements 4 = Overflow with First Announcement Only 5 = Overflow with First and Second Announcement 6 = Not Used 7 = Not Used 8 = No Overflow with Second Announcement Only 9 = Overflow with Second Announcement Only (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
41-08-02	**ACD Overflow Options – ACD Overflow Destination**	Assign the overflow mode (0~9), destination and announcement message types. Delay Announcement functions are not available for ACD pilot number calls. Each ACD Group can have unique overflow options.	0 = No Setting 1~64 = ACD Group 65 = Overflow Table (Program 41-09) 66 = Voice Mail Integration 67 = System Speed (Program 41-08-05) 68 = Incoming Ring Group (Program 41-08-06) (default = 0)
41-08-03	**ACD Overflow Options – Delay Announcement Source Type**	Assign the overflow mode (0~9), destination and announcement message types. Delay Announcement functions are not available for ACD pilot number calls. Each ACD Group can have unique overflow options.	0 = ACI 1 = VRS 2 = InMail (default = 0)
41-08-04	**ACD Overflow Options – ACD Overflow Transfer Time**	Define the time before ACD overflow occurs. Each ACD Group can have unique overflow options.	0~64800 (seconds) (default = 0 seconds)
41-08-05	**ACD Overflow Options – System Speed Dial Bin**	Assign the speed dial bin to be used as the ACD overflow destination. Using a speed dial bin for ACD Overflow is supported only for off premise calls.	0~1999 (Used when 41-08-02 is set to 67) (default = 1999)
41-08-06	**ACD Overflow Options – Incoming Ring Group**	Assign the Ring Group for ACD overflow calls to go to.	1~100 (Used when 41-08-02 is set to 68) (default = 1)
41-09-01	**ACD Overflow Table Setting**	Use this program to define the ACD group to which a call is transferred when overflow occurs.	0~65 0 = No Setting 65 = In-Skin Voice Mail Integration (default = 0)
41-10-01	**ACI Delay Announcement – 1st Delay Announcement ACI Port Number**	Use this program to define the ACI port number to be used for the delay announcement. This program is activated when the delay announcement source and options are assigned as ACI in Program 41-08-03.	0~96 0 = No Setting (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
41-10-02	**ACI Delay Announcement – 2nd Delay Announcement ACI Port Number**	Use this program to define the ACI port number to be used for the delay announcement.This program is activated when the delay announcement source and options are assigned as ACI in Program 41-08-03.	0~96 0 = No Setting (default = 0)
41-10-03	**ACI Delay Announcement – 1st Delay Announcement Connection Timer**	Use this program to define the time before the 1st Delay Announcement is played.	0~64800 (seconds) (default = 30 seconds)
41-10-04	**ACI Delay Announcement – 2nd Delay Announcement Connection Timer**	Set the time between when the 1st Delay Announcement plays and when the 2nd Delay Announcement plays.	0~64800 (seconds) (default = 30 seconds)
41-10-05	**ACI Delay Announcement – 2nd Delay Announcement Sending Duration**	Set the timer for how long the 2nd Delay Announcement plays. After this time expires, the call disconnects. To keep the call in queue, set this time to 0.	0~64800 (seconds) (default = 30 seconds)
41-11-01	**VRS Delay Announcement – Delay Message Start Timer**	Set the time when the VRS message should start.	0~64800 (seconds) (default = 0 seconds)
41-11-02	**VRS Delay Announcement – 1st Delay Message Number**	Assign the VRS message number to be used as the message source for the 1st and 2nd Delay Announcement Messages. Refer to Program 41-08 for more on setting up the ACD overflow options. This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08-03.	0~101 0 = No Message 101 = Fixed Message (default = 101)
41-11-03	**VRS Delay Announcement – 1st Delay Message Sending Count**	Set the number of times the 1st VRS message will be played.	0~255 (default = 0)
41-11-04	**VRS Delay Announcement – 2nd Delay Message Number**	Assign the VRS message number to be used as the message source for the 1st and 2nd Delay Announcement Messages. Refer to Program 41-08 for more on setting up the ACD overflow options. This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08-03.	0~49 0 = No Message 101 = Fixed Message (default = 101)
41-11-05	**VRS Delay Announcement – 2nd Waiting Message Sending Count**	Set the number of times the 2nd VRS message is played.	0~255 (default = 0)
41-11-06	**VRS Delay Announcement – Tone Kind at Message Interval**	Define what callers hear during the interval between VRS waiting messages.	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
41-11-07	**VRS Delay Announcement – ACD Forced Disconnect Time after the 2nd Delay Message**	Define the time after the last VRS message is played before the ACD call is disconnected.	0~64800 (seconds) 0 = No Disconnect (default = 60 seconds)
41-11-08	**VRS Delay Announcement – Queue Depth Announcement (Requires VRS)**	Define when, if at all, the Queue Depth is played to waiting callers.	0 = Disable 1 = After 1st (1st) 2 = After 2nd (2nd) 3 = After 1st and 2nd (1st and 2nd) (default = 0)
41-12-01	**Night Announcement Setup – Night Announcement Source Type**	Define the source for each ACD groups night announcement. Night announcement availability depends on the setting in Program 41-03-02.	0 = ACI 1 = VRS (default = 0)
41-12-02	**Night Announcement Setup – Night Announcement ACI Port Number**	Define the ACI port to be used for the ACD Night Announcement function.	0~96 0 = No Setting (default = 0)
41-12-03	**Night Announcement Setup – ACD Night Announce Sending Time**	Define the length of time the ACD night Announcement will play. Only used when Program 41-12-01 is set to 0 (ACI). Night announcement availability depends on the setting in Program 41-03-02.	0~64800 (seconds) (default = 0 seconds)
41-13-01	**VRS Message Number for Night Announcement – VRS Message Number**	Define the VRS message number to be used as the night announcement. This program is activated when the night announcement source is assigned as VRS in Program 41-12-01.	0~100 0 = No Message (default = 0)
41-13-02	**VRS Message Number for Night Announcement – Tone Kind at Message Interval**	Define what is heard between VSR Night Announcements.	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source (default = 0)
41-14-01	**ACD Options – Emergency Call Operation Mode**	Define if Emergency Calls ring the system supervisory extension or not when the group supervisory extension is busy. This option allows the supervisor to press an Emergency Key (programmed for this feature) once to monitor the call or twice to barge in on the call. The supervisor must be logged in for this feature to work.	0 = Call to system supervisory extension when group supervisory extension is busy. 1 = No calls to system supervisory extension when group supervisory extension is busy. (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
41-14-02	**ACD Options – Automatic Wrap Up Mode**	Define if agents manually enter wrap mode by pressing a key, or are put automatically into wrap mode at end of an ACD call. This setting applies to all agents in the selected group.	0 = After wrap up mode key is pressed (Manual) 1 = After call is finished automatically (Auto) (default = 0)
41-14-03	**ACD Options – ACD Priority for Overflow Calls**	This option determines whether the ACD group should use its own priority assignment or if it should follow the priority assigned in Program 41-03-03.	0 = Own group priority 1 = Priority order by Program 41-03-03 (default = 0)
41-14-04	**ACD Options – Automatic Answer**	This option enables/disables Automatic Answer for agents using headsets.	0 = Off 1 = On (default = 0)
41-14-06	**ACD Options – Call Queuing after 2nd Announcement**	This option determines whether the caller should hear the 2nd Delay Announcement and then be taken out of queue (1), or be placed back into queue (0).	0 = Enable (Yes) 1 = Disable (No) (default = 0)
41-14-07	**ACD Options – Automatic Off Duty for SLT**	This option enables/disables Automatic Off Duty (rest) mode for agents with single line telephones.	0 = No change to off duty mode 1 = Change to off duty mode automatically (Skip) (default = 0)
41-14-08	**ACD Options – ACD Off Duty Mode**	This option enables (1) or disables (2) the agent's ability to receive internal calls in ACD Off Duty Mode.	0 = Cannot receive internal call 1 = Can receive internal call (default = 0)
41-14-09	**ACD Options – Automatic Wrap Up End Time**	This option sets the number of seconds for the Automatic Wrap Up End Time.	0~64800 (seconds) (default = 0 seconds)
41-14-10	**ACD Options – ACD No Answer Skip Time**	This option sets how long a call to the ACD Group rings an idle extension before routing to the next agent.	0~64800 (seconds) (default = 0 seconds)
41-14-12	**ACD Options – Start Headset Ear Piece Ringing (for SLT)**	This option sets the ringing start time for the headset ear piece on a single line telephone.	0~64800 (seconds) (default = 0 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
41-14-13-1	**ACD Options – ACD Queue 1-Digit Assignment**	Set various options for ACD Groups. When an option is set for an ACD Group, the setting is in force (if applicable) for all agents in the group. For each ACD Queue (1~64) assign the One-Digit number (0~9, *, #) to be used for the One-Digit Dial Out Option.	1st Data: Up to one digit (0, 1~9, #, *) 2nd Data: (default = Blank)
41-14-13-2	**ACD Options – Destination Number Type**	Set various options for ACD Groups. When an option is set for an ACD Group, the setting is in force (if applicable) for all agents in the group. For each ACD Queue (1~64), assign the Destination Number Type.	2nd Data: 0 = None 1 = Extension or Voice Mail 2 = Incoming Ring Group 3 = Speed Dial Bin 4 = ACD Group (default = 0)
41-14-13-3	**ACD Options – Destination Number**	Set various options for ACD Groups. When an option is set for an ACD Group, the setting is in force (if applicable) for all agents in the group. For each ACD Queue (1~64), assign the destination number for the assigned Destination Type.	3rd Data: Up to eight digits (0, 1~9, #, *) (default = Blank)
41-14-14	**ACD Options – DTMF Detection Assignment during Delay Announcement**	Set various options for ACD Groups. When an option is set for an ACD Group, the setting is in force (if applicable) for all agents in the group. For each ACD Queue (1~64), assign if the One-Digit Dial Out option can (1 = Yes) or cannot (0 = No) be pressed during the Delay Announcements.	0 = Does not detect during message 1 = Detect during message (default = 1)
41-14-15	**ACD Options – DTMF Detect Time after Delay Announcement Message**	Set various options for ACD Groups. When an option is set for an ACD Group, the setting is in force (if applicable) for all agents in the group. For each ACD Queue (1~64), assign the amount (0~64800 seconds) of time after the Delay Announcement that the 1-Digit Dial Out option works.	0~64800 (seconds) (default = 0 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
41-15-01	**ACD Queue Alarm Information – Number of Calls in ACD Queue to Activate Alarm Information**	Define the number of calls that must be in queue before the Alarm Information is activated. Do not use these programs if the alarm options are defined in Program 41-20-01 through 41-20-05.	0~200 0 = No Alarm (default = 0)
41-15-02	**ACD Queue Alarm Information – Interval Time of Alarm Information**	Define how long the Alarm will ring when activated. Do not use these programs if the alarm options are defined in Program 41-20-01 through 41-20-05.	0~64800 (seconds) (default = 0 seconds)
41-16-01	**ACD Threshold Overflow – Number of Calls in Queue**	This option defines the maximum number of calls allowed in the ACD queue before overflow occurs.	0~200 (0 = No Limitation) (default = 0)
41-16-02	**ACD Threshold Overflow – Operation Mode for ACD Queue**	This option defines how the system should handle calls when the number of calls in queue exceeds the threshold.	0 = The last waiting call is transferred 1 = The longest waiting call is transferred 2 = Send Busy Tone (default = 0)
41-17-01	**ACD Login Mode Setup**	Define the ACD login mode for each extension. If the AIC Login Mode is enabled, set the AIC Login and AIC Logout service codes for the AIC members in Program 11-13-08 and 11-13-09.	0 = Normal Login Mode 1 = AIC Login Mode (default = 0)
41-18-01	**ACD Agent Identity Code Setup – ACD Agent Identity Code**	Define the ACD Agent Identity Codes.	Up to four digits (default not assigned)
41-18-02	**ACD Agent Identity Code Setup – Default ACD Group Number**	Define the default ACD group for AIC Agents in each AIC table.	0~64 0 = No Setting (default = 0)
41-18-03	**ACD Agent Identity Code Setup – ACD Group Number in Mode 1**	For each AIC table, define the ACD group AIC Agents are in during mode 1.	0~64 0 = No Setting (default = 0)
41-18-04	**ACD Agent Identity Code Setup – ACD Group Number in Mode 2**	For each AIC table, define the ACD group AIC Agents are in during mode 2.	0~64 0 = No Setting (default = 0)
41-18-05	**ACD Agent Identity Code Setup – ACD Group Number in Mode 3**	For each AIC table, define the ACD group AIC Agents are in during mode 3.	0~64 0 = No Setting (default = 0)
41-18-06	**ACD Agent Identity Code Setup – ACD Group Number in Mode 4**	For each AIC table, define the ACD group AIC Agents are in during mode 4.	0~64 0 = No Setting (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
41-18-07	**ACD Agent Identity Code Setup – ACD Group Number in Mode 5**	For each AIC table, define the ACD group AIC Agents are in during mode 5.	0~64 0 = No Setting (default = 0)
41-18-08	**ACD Agent Identity Code Setup – ACD Group Number in Mode 6**	For each AIC table, define the ACD group AIC Agents are in during mode 6.	0~64 0 = No Setting (default = 0)
41-18-09	**ACD Agent Identity Code Setup – ACD Group Number in Mode 7**	For each AIC table, define the ACD group AIC Agents are in during mode 7.	0~64 0 = No Setting (default = 0)
41-18-10	**ACD Agent Identity Code Setup – ACD Group Number in Mode 8**	For each AIC table, define the ACD group AIC Agents are in during mode 8.	0~64 0 = No Setting (default = 0)
41-19-01	**ACD Voice Mail Delay Announcement – Delay Message Start Timer**	This option assigns how long the system waits before playing the Delay Message.	0 ~ 64800 (seconds) (default = 0)
41-19-02	**ACD Voice Mail Delay Announcement – Mailbox Number for 1st Announcement Message**	This option assigns the Voice Mail ACD Announcement Mailbox as the message source for the 1st Announcement Message.	Dial (up to eight digits) (default not assigned)
41-19-03	**ACD Voice Mail Delay Announcement – 1st Delay Message Sending Count**	This option assigns the 1st Delay Message Sending Count. This entry must be set to 1 or higher for the message to play.	0 = No message is played 1 ~ 255 (default = 0)
41-19-04	**ACD Voice Mail Delay Announcement – Mailbox Number for 2nd Announcement Message**	This option assigns the Voice Mail ACD Announcement Mailboxes as the message source for the 2nd Announcement Message.	Dial (up to eight digits) (default not assigned)
41-19-05	**ACD Voice Mail Delay Announcement – 2nd Delay Message Sending Count**	This option assigns the 2nd Delay Message Sending Count. This entry must be set to 1 or higher for the message to play.	0 = No message is played 1 ~ 255 (default = 0)
41-19-06	**ACD Voice Mail Delay Announcement – Wait Tone Type at Message Interval**	This option assigns what the caller hears between the messages.	0 = Ring Back Tone 1 = Music On Hold Tone 2 = Background Music Source (default = 0)
41-19-07	**ACD Voice Mail Delay Announcement – ACD Forced Disconnect Time after 2nd Announcement**	This option assigns how long the system waits after the end of the ACD Delay Message before disconnecting.	0 ~ 64800 (seconds) (default = 0)
41-19-08	**ACD Voice Mail Delay Announcement – Delay Message Interval Time**	This option sets the timer for the interval between the Delay Messages.	0 ~ 64800 (seconds) (default = 20 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
41-20-01	**ACD Queue Display Settings – Number of Calls in Queue**	Program 41-15 can also provide a queue alarm to the agents. The options in Program 41-20 should not be used if 41-15 is set. This option assigns the number of calls that can accumulate in the ACD queue before the Queue Status Display (and optional queue alarm) occurs.	0=No Display, 1~200 (default = 0)
41-20-02	**ACD Queue Display Settings – Queue Status Display Time**	Program 41-15 can also provide a queue alarm to the agents. The options in Program 41-20 should not be used if 41-15 is set. This option assigns how long the Queue Status display remains on the telephone display.	0~64800 (seconds) (default = five seconds)
41-20-03	**ACD Queue Display Settings – Queue Status Display Interval**	Program 41-15 can also provide a queue alarm to the agents. The options in Program 41-20 should not be used if 41-15 is set. This option assigns the interval that refreshes the Queue Status Alarm time in queue display and causes the optional queue alarm to occur on telephones active on a call, logged out, or in wrap-up.	0~64800 (seconds) (default = 60 seconds)
41-20-04	**ACD Queue Display Settings – ACD Call Waiting Alarm**	Program 41-15 can also provide a queue alarm to the agents. The options in Program 41-20 should not be used if 41-15 is set. This option enables or disables the queue alarm.	0 = Disable (Off) 1 = Enable (On) (default = 0)
41-20-05	**ACD Queue Display Settings – ACD Call Waiting Alarm Hold Time**	Program 41-15 can also provide a queue alarm to the agents. The options in Program 41-20 should not be used if 41-15 is set. This option assigns how long the Call Waiting Alarm should sound.	0~64800 (seconds) (default = 0 seconds)
47-03-01	**InMail Group Mailbox Options – Master Mailbox Active**	Use this option to enable or disable the Master Mailbox. A Master Mailbox is not accessible when it is disabled.	0 = Disable (No) 1 = Enable (Yes) (default = 0)
47-03-02	**InMail Group Mailbox Options – Master Mailbox Number**	The Master Mailbox Number is the same as the Department Group master (pilot) number. Use this option to select the Department Group master (pilot) number associated with the Master Mailbox you are programming.	Digits (eight maximum, using 0~9). No Setting (entered by pressing Hold) (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
47-03-03	**InMail Group Mailbox Options – Master Mailbox Type**	Use this option to set the Master Mailbox type.	0 = None 1 = Subscriber 2 = Call Routing (default = 1)

Operation

Using the Headset with Automatic Answer for ACD Agents:

1. With the multiline terminal in an idle state, press **Feature**.
2. Press the **HEADSET** key (Program 15-07-01 or SC 851: 05).
   . *The Headset key blinks when Automatic Headset is activated.*
   . *To cancel Automatic Headset, repeat these steps.*

Transferring Trunk Calls to the ACD Pilot Number:

1. While on an outside call, press **Transfer**.
2. Dial the ACD Pilot number.
3. Hang up.
   . *The call is transferred to the ACD group.*

A Supervisor can monitor an ACD call:

1. When an ACD agent is on an outside call, the supervisor presses the **MONITOR** key (Program 15-07-01 or SC 852: *15).
   . *The supervisor can hear but cannot participate in the call. If participation is required, use the Barge-In feature instead.*
2. To cancel the call monitoring, press the **MONITOR** key again.

AIC Agent Log In

To log in:

Multiline Terminal

1. Press the **ACD LOG IN/LOG OUT** key (Program 15-07-01 or SC 852: *10).

   - OR -

   Press **Speaker** and dial the AIC Log In service code (Program 11-13-08).

2. Dial the log in code (up to 20 digits).
   . *This step is not required if the ID code is disabled in Program 41-01-02.*
3. Dial the Agent Identity Code (AIC) (up to four digits).
   . *The **ACD LOG IN/LOG OUT** key lights.*

To log out (for single or multiple agent log ins):

Multiline Terminal

. *All AIC log ins become logged out.*

1. Press the **ACD LOG IN/LOG OUT** key (Program 15-07-01 or SC 852: *10).
2. Dial **1** to accept.

   - OR -

   Press **Speaker** and dial the AIC Log In service code (Program 11-13-08).
   . *The **ACD LOG IN/LOG OUT** key goes out.*

Single Line Telephone

. *All AIC log ins become logged out.*

1. Lift the handset.Dial the AIC Log Out service code (Program 11-13-08).

   - OR -

1. To log out of an ACD group without using AIC: Lift the handset.
2. Dial the ACD Log Out service code **755** (Program 11-13-02).

Multiple Agent Log In

To log in:

Multiline Terminal

After already being logged in:

1. Press the **ACD LOG IN/LOG OUT** key (Program 15-07-01 or SC 852: *10).
2. Dial **0** to cancel the log out option.
3. Dial the Agent Identity Code (AIC) (up to four digits).
   . *The **ACD LOG IN/LOG OUT** key lights.*

   - OR -

   Press **Speaker** and dial the AIC Log In service code (Program 11-13-08).
4. Dial the Agent Identity Code (AIC) (up to four digits).
   . *The ACD Log In/Log Out key lights.*

Single Line Telephone

. *Follow Steps 1~3 to log in with additional AICs (up to three) anytime.*

1. Lift the handset and dial the AIC Log In service code (Program 11-13-08).
2. Dial the log in code (up to 20 digits).
   . *This step is not required if the ID code is disabled in Program 41-01-02.*
3. Dial the first Agent Identity Code (AIC) (up to four digits).
   . *You hear a confirmation tone when immediately logging in with additional AICs.*
4. For second agent log: Dial the second Agent Identity Code (AIC) (up to four digits).
   . *You hear a confirmation tone.*
5. For third agent log: Dial the third Agent Identity Code (AIC) (up to four digits).
   . *You hear a confirmation tone.*

Queue Status Display

When Logged Into ACD Group

1. With an idle multiline terminal, press the Queue Status Display Programmable Function Key (Code: *19).
   . *The display indicates the number of calls in queue, the trunk name, and the time the call has been waiting.*
   . *When the Queue Status Display key is pressed, the queue status of the extension group is displayed. When the extension is not in an ACD group, the Queue Status of group 1 is displayed instead.*
   . *When an agent logs in using an AIC code, the Queue Status of the default ACD group defined in PRG 41-18-02 is displayed.*
2. Press **VOL UP** and **VOL DOWN** to scroll through the Queue Status Displays of all the ACD Groups.
3. Press the **CLEAR** key to return the telephone to an idle state.

When Logged Out of ACD Group

When ACD agents are logged out and a call is placed into the ACD queue, the telephones of the logged out agents display the Queue Status and they hear the alarm according to the settings defined in system programming.

Pressing the Queue Status Display Programmable Function key returns the telephone to idle until the time in Program 41-20-03 expires again.

Rest Mode

To set the manual Rest Mode:

Multiline Terminal

1. With the multiline terminal in an idle state, press the **ACD Rest Mode** key (Program 15-07-01 or SC 852: *13).
   - *The ACD Rest Mode key lights. If the Rest Mode key is pressed while the agent is on an active call, the key flashes until the agent hangs up.*
   - *This operation is not available for the System Supervisor.*

Single Line Telephone

1. Lift the handset and dial **758**.
   - *A fast busy is heard.*
   - *To set Pre-Rest Mode (while on a call), press the hookflash and then dial 658. Press the Hookflash again to return to the outside party. Rest Mode begins once the call is completed.*
2. Hang up.

To cancel the manual Rest Mode:

Multiline Terminal

1. Press the **ACD Rest Mode** key (Program 15-07-01 or SC 852: *13).
   - *The ACD Rest Mode key light goes off.*

Single Line Telephone

1. Lift the handset.
   - *A fast busy is heard.*
2. Dial **759**.
3. Hang up.

Automatic Release

Description

Automatic Release drops the line circuit when an outside party abandons the call. For this feature to work with Loop Start Trunks, the CO/PBX providing the outside line must provide a timed disconnect signal. Automatic Release is normally provided on Ground Start, DID, ISDN, and Tie Line trunks.

Conditions

- Automatic Release on ISDN trunks is provided by the protocol.
- When an outside line is accessed using a dedicated line key, the LED associated with the line key goes off when Automatic Release occurs.
- On Loop Start trunks Automatic Release is only available on incoming calls.
- This feature functions while a call is in progress, on hold, or in a conference.
- This feature applies to all ICM type calls in progress, holding or parked.
- When Automatic Release occurs and the telephone is in handsfree mode, **Speaker** automatically turns off. If using the handset, the station is set to idle when the handset goes on-hook.

Default Settings

None

System Availability

Terminals

Not applicable

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-02-09	**Analog Trunk Data Setup – Busy Tone Detection**	This option enables/disables Busy Tone Detection.	0 = Disable (No) 1 = Enable (Yes) (default = 0)
14-02-14	**Analog Trunk Data Setup – Loop Start/Ground Start**	This option identifies the analog trunk as either loop or ground start.	0 = Loop Start (Loop) 1 = Ground Start (Ground) (default = 0)
80-04-01	**Call Progress Tone Detector Setup – Detection Level**	Use this option to set the Detection Level.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1 (DT) – 0 (-25dBm) Type 2 (BT) – 0 (-25dBm) Type 3 (RBT) – 0 (-25dBm) Type 4, Type 5 – 0

Program Number	Program Name	Description/Comments	Assigned Data
80-04-02	**Call Progress Tone Detector Setup – Min. Detection Level**	Use this option to set the minimum detection level.	0~15 detect level 0: –15dBm(0) to –30dBm(15) detect level 1: –30dBm(0) to –45dBm(15) detect level 2: –40dBm(0) to –55dBm(15) default: Type 1 (DT) – 15 (-25dBm) Type 2 (BT) – 15 (-25dBm) Type 3 (RBT) – 15 (-25dBm) Type 4, Type 5 – 0
80-04-03	**Call Progress Tone Detector Setup – S/N Ratio**	Use this option to set the Signal to Noise ratio.	0~4 (0dB ~ -20dB) Default: Type 1 (DT) = 4 (-20dB) Type 2 (BT) = 4 (-20dB) Type 3 (RBT) = 4 (-20dB) Type 4 = 0 Type 5 = 0
80-04-04	**Call Progress Tone Detector Setup – No Tone Time**	Use this option to set No Tone Time.	0~255 (30+30-7680ms) default: Type 1 (DT) – 132 (3990ms) Type 2 (BT) – 132 (3990ms) Type 3 (RBT) – 132 (3990ms) Type 4, Type 5 – 0
80-04-05	**Call Progress Tone Detector Setup – Pulse Count**	Use this option to set the Pulse Count.	1~255 default: Type 1 (DT) – 1 Type 2 (BT) – 1 Type 3 (RBT) – 1 Type 4, Type 5 – 0

Program Number	Program Name	Description/Comments	Assigned Data
80-04-06	**Call Progress Tone Detector Setup – ON Minimum Time**	Use this option to set the minimum On time.	1~255 (30+30-7680ms) default: Type 1 (DT) – 63 (300ms) Type 2 (BT) – 9 (300ms) Type 3 (RBT) – 25 (780ms) Type 4, Type 5 – 0
80-04-07	**Call Progress Tone Detector Setup – ON Maximum Time**	Use this option to set the maximum On time.	0~255 (30+30-7680ms) default: Type 1 (DT) – 0 Type 2 (BT) – 14 (450ms) [ET] Type 3 (RBT) – 40 1230ms) Type 4, Type 5 – 0
80-04-08	**Call Progress Tone Detector Setup – OFF Minimum Time**	Use this option to set the minimum Off time.	1~255 (30+30-7680ms) default: Type 1 (DT) – 1 (60ms) Type 2 (BT) – 9 (300ms) Type 3 (RBT) – 52 (2520ms) Type 4, Type 5 – 0
80-04-09	**Call Progress Tone Detector Setup – OFF Maximum Time**	Use this option to set the maximum Off time.	0~255 (30+30-7680ms) default: Type 1 (DT) – 1 (60ms) Type 2 (BT) – 14 (450ms) Type 3 (RBT) – 80 (3480ms) Type 4, Type 5 – 0

Operation

None

Automatic Route Selection

Description

Automatic Route Selection (ARS) provides call routing and call restriction based on the digits a user dials. ARS gives the system the most cost-effective use of the connected long distance carriers.

ARS is an on-line call routing program that you can customize (like other system options) from a display telephone. ARS accommodates 400 call routing choices – without a custom-ordered rate structure database. With ARS, you can modify the system routing choices quickly and easily. This is often necessary in the telecommunications world of today where the cost structure and service choices frequently change.

The ARS feature can add or delete digits and route calls according to pre-determined levels. When UNIVERGE SV8100 systems are networked together by Tie lines or K-CCIS, the networked systems can be called by a system number and a user extension number, just an extension number, or by using a trunk access code.

ARS Feature Summary

ARS provides:

Call Routing

ARS can apply up to 24-digit analysis to every number dialed. For programming, ARS provides separate 8-digit and 24-digit tables. Each table can have up to 250 numbers.

- Dialing Translation (Special Dialing Instructions)

  ARS can automatically execute stored dialing instructions (called Dial Treatments) when it chooses a route for a call. The system allows up to 15 Dial Treatments. The Dial Treatments can:

  - Insert or delete an area code (NPA)
  - Add digits (such as a dial-up OCC number), pauses and waits to the dialing sequence
  - Require the user to enter an authorization code when placing a call (refer to Program 44-03)

- Time of Day Selection

  For routing purposes, ARS provides 10 different day selections (called Time Schedule Patterns). Each Time Schedule Pattern can provide up to 20 time intervals which are assigned to one of the eight day/night modes. The Time Schedule Patterns are then assigned to a day of the week (Monday~Friday, Saturday, Sunday or Holiday).

- Hierarchical Class of Service Control

  ARS allows or denies call route choices based on an extension ARS Class of Service. This allows lower Classes of Service (e.g., 1) to access routes unavailable to higher Classes of Service (e.g., 16). The system provides up to 16 (0=unrestricted, 1~16) ARS Classes of Service.

- Separate Routing for Selected Call Types

  To provide unique control, you can program separate routing instructions for:

  - Directory assistance calls
  - Emergency calls

Basic ARS Operation

When a user places an outside call, ARS analyzes the digits dialed and assigns one of 400 Selection Numbers to the call. The Selection Number chosen depends on which digits the user dialed. ARS then checks the time of day, the day of week and the extension ARS Class of Service. Based on these call routing options, ARS selects a trunk group for the call and imposes the Dial Treatment instructions (if any).

Class of Service Option Allows Outgoing Calls to Not Follow Access Map

Using this option allows a Class of Service to be set so that ARS does not follow the trunk access map settings (Program 14-07-01 and Program 15-06-01). The feature allows an extension user to have CO line keys on their telephone which allow incoming access only. The user has only outgoing access on the CO lines when using ARS to place a call.

Class of Service Matching

With the ARS Class of Service Match Access feature, you can determine whether the system should allow a call based on the COS assigned to the Dial Analysis Table (Program 26-02). This change can be used to create a tenant-like application. It then uses the trunk group defined in the Additional Entry in Program 26-02-03 to place the outgoing call.

When this feature is enabled, the calls are routed in sequential order, and forward provided the Class of Service for the trunk groups match.

For this feature, **Program 26-01-06: Automatic Route Selection Service**, **COS Match Access** is used.

The examples below use the following system programming:

Program 26-02 for Dial Analysis Table for ARS set as:

Table No.	Program 26-02-01 Dial	Program 26-02-02 Service Type	Program 26-02-03 Add Data	Program 26-02-04 ARS COS
1	203@@@@@@@	1:Route to trunk group	3 (Group 3)	5
2	214@@@@@@@	1:Route to trunk group	1 (Group 1)	4
197	@@@@@@@@@@	1:Route to trunk group	2 (Group 2)	4
198	@@@@@@@@@@	1:Route to trunk group	3 (Group 3)	3
199	@@@@@@@@@@	1:Route to trunk group	2 (Group 2)	2
200	@@@@@@@@@@	1:Route to trunk group	1 (Group 1)	1

Program 12-02 for Automatic Night Service Patterns as:

Time Pattern No.	Program 12-02-01 Start Time	Program 12-02-02 End Time	Program 12-02-03 Operation Mode
1	00:00	08:30	2 (Night)
2	08:30	17:00	1 (Day)
3	17:00	00:00	2 (Night)

Program 12-02 for Automatic Night Service Patterns as:

Mode	Ext. 301	Ext. 302	Ext. 401	Ext. 402
Mode 1 (Day)	1	2	3	3
Mode 2 (Night)	1	4	3	5

Program 26-01-03 for ARS Misdialed Number Handling as: 1 (Warning Tone)

With Program 26-01-06: ARS COS Match Access disabled (set to 0):

- If at 9:00 AM, each extension dialed 9+(203)926-5400
  All Extension would use Trunk Group 3
- If at 9:00 AM, each extension dialed 9+(214)262-2000
  All Extension would use Trunk Group 1
- If at 6:00 PM, each extension dialed 9+(203)926-5400
  All Extension would use Trunk Group 3
- If at 6:00 PM, each extension dialed 9+(214)262-2000
  Extension 301, 302 and 401 would use Trunk Group 1
  Extension 402 would not be able to dial out as the COS is lower

With Program 26-01-06: ARS COS Match Access enabled (set to 1):

- If at 9:00 AM, each extension dialed 9+(203)926-5400
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3
- If at 9:00 AM, each extension dialed 9+(214)262-2000
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3
- If at 6:00 PM, each extension dialed 9+(203)926-5400
  Extension 301 would use Trunk Group 1
  Extension 302 would use Trunk Group 2
  Extension 401, 402 would use Trunk Group 3
- If at 6:00 PM, each extension dialed 9+(214)262-2000
  Extension 301, 302 would use Trunk Group 1
  Extension 401 would use Trunk Group 3
  Extension 402 would not be able to dial out as the COS does not match

Conditions

- Do not use ARS behind a Centrex/PBX.
- Line keys, outgoing trunk group keys, dialing 804 + trunk group, dialing +trunk number, and speed dial numbers assigned to a certain trunk group can all be used to by-pass ARS.
- If no PBX access code is entered in the Dial Treatment, the system can still dial 911.
- Toll Restriction overrides ARS.
- A system with Automatic Route Selection cannot also have Trunk Group Routing.

- With ARS installed, Trunk Queuing automatically queues for the least costly route. The system automatically redials the queued call when the extension user lifts the handset.
- Speed Dialing may bypass ARS routing.
- Set up other options for outgoing calls (e.g., unassign line keys, adjust gains, ARS access key, etc.).
- Refer to the Dial Tone Detection feature for the specifics on how the system handles Dial Tone Detection.
- If an entry of 911 is programmed in ARS, but ARS is turned off, 911 calls still attempt to route using ARS.

Default Setting

ARS is off (disabled) at default.

System Availability

Terminals

None

Required Component(s)

None

Related Features

Central Office Calls, Placing

Code Restriction

Dial Tone Detection

Speed Dial – System/Group/Station

Trunk Group Routing

Trunk Queuing/Camp On

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-01-01	**System Numbering**	Set the system internal (Intercom) numbering plan. The numbering plan assigns the first and second digits dialed and affects the digits an extension user must dial to access other extensions and features, such as service codes and trunk codes. If the default numbering plan does not meet the site requirements, use this program to tailor the system numbering to the site.	Refer to SV8100 Programming Manual for a detailed description of this program.
11-09-01	**Trunk Access Code**	Specify the digit or digits to be used to access ARS (normally 9).	Dial up to four digits (default = 9)
11-09-02	**2nd Trunk Route Access Code**	Use this program to define additional trunk access codes.When a user dials the Alternate Trunk Route Access Code, the system routes their call to the Alternate Trunk Route.	Dial up to four digits (default not assigned)
12-01-01	**Night Mode Function Setup – Manual Night Mode Switching**	Turn Off (0) or On (1) any extensions from activating Manual Night Service.	0 = Off 1 = On (default = 1)
12-01-02	**Night Mode Function Setup – Automatic Night Mode Switching**	According to a preset schedule, enable (1) or disable (0) Automatic Night Service for the system. Make sure to set the Service Patterns in Program 12-02-01, Program 12-02-02 and Program 12-02-03.	0 = Off 1 = On (default = 1)
12-02-01	**Automatic Night Service Patterns –Start Time**	Define the daily pattern of the Automatic Mode Switching. Each Mode Group has 10 patterns. These patterns are used in Programs 12-03 and 12-04. The daily pattern consists of 20 timer settings. This option defines the starting time.	0000~2359 Refer to the SV8100 Programming Manual for defaults.
12-02-02	**Automatic Night Service Patterns –End Time**	Define the daily pattern of the Automatic Mode Switching. Each Mode Group has 10 patterns. These patterns are used in Programs 12-03 and 12-04. The daily pattern consists of 20 timer settings. This option defines the ending time.	0000~2359 Refer to the SV8100 Programming Manual for defaults.

Program Number	Program Name	Description/Comments	Assigned Data
12-02-03	**Automatic Night Service Patterns –Operation Mode**	Define the daily pattern of the Automatic Mode Switching. Each Mode Group has 10 patterns. These patterns are used in Programs 12-03 and 12-04. The daily pattern consists of 20 timer settings. This option defines the operation mode that the system should be in during each time number.	1~8 (default = 1 or 2 depending on time pattern and time number.)
12-03-01	**Weekly Night Service Switching**	Define which time pattern should be used on each day of the week.	Night Mode Service Group Numbers: 01~32 Time Schedule Pattern Number: 1~10 Day of Week: 01 = Sunday (default = Time Pattern 2) 02 = Monday (default = Time Pattern 1) 03 = Tuesday (default = Time Pattern 1) 04 = Wednesday (default = Time Pattern 1) 05 = Thursday (default = Time Pattern 1) 06 = Friday (default = Time Pattern 1) 07 = Saturday (default = Time Pattern 2)S
12-04-01	**Holiday Night Service Switching**	Define a yearly schedule of holiday night-switch settings. This schedule is used for setting special days when the company is expected to be closed, such as national holidays.	Days and Months: 0101~1231 (e.g. 0101 = Jan. 1; 1231 = Dec. 31) Time Pattern Number: 0~10 (0 = No Setting) (default not assigned)
12-05-01	**Night Mode Group Assignment for Extensions**	Assign Day/Night Mode Group for each extension.	Night Mode Service Group Number: 01~32 (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
12-06-01	**Night Mode Group Assignment for Trunks**	Assign a Day/Night Mode Group for each trunk port.	Trunk Port Number: 001~200 Night Mode Service Group Number: 01~32 (default Night Mode Service Group Number = 1)
12-07-01	**Text Data for Night Mode**	Use this program to make an original text message, which, depending on programming, can be displayed on an LCD of a multiline telephone in each Mode.	Night Mode Service Group Number: 01~32 Day/Night Mode: 1~8 Text Message: Maximum 12 Characters (alphabetic or numeric) Default Text Messages for Day/Night Modes: Mode 1 = No Setting Mode 2 = <Night> Mode 3 = <Midnight> Mode 4 = <Rest> Mode 5 = <Day2> Mode 6 = <Night2> Mode 7 = <Midnight2> Mode 8 = <Rest2>
12-08-01	**Night Mode Service Range**	Define the changing range of toggle key for each Day/Night Mode.	Night Mode Service Group Number: 01~32 Range: 2~8 (default = 2)
14-05-01	**Trunk Group – Trunk Group Number**	Program trunks of the same carrier type into the same trunk group.	Trunks 1-200 Trunk Group 1-100 Priority - 1-200 (default = All trunks in Trunk Group 1 with priorities of: Trunk 1 = Priority 1 Trunk 2 = Priority 2 Trunk 200 = Priority 200)

Program Number	Program Name	Description/Comments	Assigned Data
14-07-01	**Trunk Access Map Setup**	Set up the Trunk Access Maps. This sets the access options for trunks.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Maps 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold) Access Map 2-200 = Trunk Ports 1~200 assigned with option 0 access (No access).
15-06-01	**Trunk Access Map for Extensions**	Assign Trunk Access Maps to extensions.	Trunk Access Maps: 1~200 (default = 1)
15-13-01	**Loop Keys - Outgoing Option**	Assign trunk groups for outgoing loop keys (0=ARS, Trunk Groups 1-100). Selecting “0” for ARS should only be used when ARS is enabled in Program 26-01-01 or it could cause the loop key to lock up	0-100 (0 = Assigns the Loop Key for ARS, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-48)

Program Number	Program Name	Description/Comments	Assigned Data
15-13-02	**Loop Keys - Incoming Option**	Assign trunk groups for incoming loop keys	0-100 (0 = Assigns the Loop Key to all trunk groups), 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-48)
20-03-04	**System Options for Single Line Telephones – Dial Sending Start Time for SLT or ARS**	When ARS or an analog extension user accesses a trunk and dials an outside call, the system waits this interval before outdialing the first digit.	0~64800 (seconds) (default = 3 seconds)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day/Night Mode: 1~8 Class of Service for Extensions: 1~15 Defaults: All extension numbers are set as Class 1.
20-08-17	**Class of Service Options (Outgoing Call Service) – ARS Override of Trunk Access Map**	Turn Off or On an extension capability to override the trunk access map programming (Program 14-07-01 and Program 15-06-01) for outgoing calls.	0 = Off 1 = On (default = 0 for COS 01~15)
21-02-01	**Trunk Group Routing for Extensions**	Use this program to assign Program 14-06 routes to extensions.	Day/Night Mode: 1~8 Route Table Number: 0~100 (0 = No Setting) (default = 1)
26-01-01	**Automatic Route Selection Service – ARS Service**	Enable (1) or disable (0) ARS.	0 = Disable (Off) 1 = Enable (On) (default = 0)
26-01-02	**Automatic Route Selection Service – Network Outgoing Inter-Digit ARS Timer**	With Networking, this timer (0~64800 seconds) replaces Program 20-03-04 when determining if all network protocol digits are received. If ARS is enabled at Site B, this timer can be programmed for 5 (500 msec) at Site A. If ARS is disabled and Site B is using F-Route for outbound dialing, this timer should be programmed for 30 (3 seconds) at Site A.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
26-01-03	**Automatic Route Selection Service – ARS Misdialed Number Handling**	If a user dials a number not programmed in ARS, this option determines if the system should route over trunk group 1 (0) or play error tone (1).	0 = Route to Trunk Group 1 1 = Play Warning Tone to Dialer (default = 0)
26-01-06	**Automatic Route Selection Service – Class of Service Match Access**	With the ARS Class of Service Match Access feature, you can determine whether or not the system should allow a call based on the COS assigned to the Dial Analysis Table (Program 26-02). This change can be used to create a tenant-like application. It then uses the trunk group set in the Additional Entry in Program 26-02-03 to place the out-going call. When this feature is enabled, the calls are routed in sequential order, and forward – provided the Class of Service for the trunk groups match.	0 = Disable (Off) 1 = Enable (On) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
26-01-07	**Automatic Route Selection Service – F-Route Access COS Reference**	Use this program to define the system options for Automatic Route Selection (ARS).	0 = F-Route 1 = ARS (default = 0)
26-02-01	**Dial Analysis Table for ARS/LCR – Dial**	Enter the digits (16 digits maximum: 1~9, 0 * #, @; 400 separate entries) for the Dial Analysis Table which is analyzed by ARS/LCR. This table is checked after any programmed F-Route operations have completed. The system then refers to Program 26-02-02 and Program 26-02-03 to determine the routing for the call. To enter a wild card/ don't care digit, press Line Key 1 to enter an @ symbol. It is important to remember that the system checks the table numbers in numerical order. This means that entries for specific numbers should be entered first (such as your local area codes), then enter the items containing wild card digits. If the system sees an entry of 2@@, any table entries which follow are ignored. For example, if 268, 269, and 270 are local exchanges, these would be the first three table entries which route according to the settings made in Program 26-02-02 and Program 26-02-03 for each of the table entries. If the next entry is 2@@, the system checks no further in this program and routes all other 2xx numbers according to the entries made in Program 26-02-02 and Program 26-02-03 for this table entry.	Dial Digits (16 digits maximum) 1~9, 0, *, #, or for wild character (Press line key 1) (default not assigned)
26-02-02	**Dial Analysis Table for ARS – ARS Service Type**	For each Dial Analysis Table (1~200), select 0 for no ARS, 1 for Service Type 1 – Route to Trunk Group Number to have the number route to a trunk group [Refer to Program 26-02-03] or 2 for Service Type 2 – F-Route Selected to have the dialed number controlled by the F-Route table. If Service Type 2 is selected and F-Route operation is on, the F-Route table used is determined by Program 44-04. If F-Route operation is off, the routing is determined by Program 44-05.	0 = No Service (None) 1 = Route to Trunk Group 2 = Select F-Route Access (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
26-02-03	**Dial Analysis Table for ARS – Additional Data/Service Number**	For each Dial Analysis Table (1~200), if Service Type 1 was selected in Program 26-02-02, enter the trunk group number (0~100, 0 = No Route).	If Service Type 1 (in 26-02): Select Trunk Group Number (0~100, 0 = No Route) If Service Type 2 (in 26-02): F-Route Time Schedule Not Used = 0~500 (F-Route Table Number). Refer to Program 44-05: ARS/F-Route Table F-Route Time Schedule Used = 0~500 (F-Route Selection Number). Refer to Program 44-04: ARS/F-Route Selection for Time Schedule. (default = 0)
26-02-04	**Dial Analysis Table for ARS – ARS Class of Service**	For each Dial Analysis Table (1~200), set the Automatic Route Selection (ARS) Class of Service (0~16).	0~16 (default = 0)
26-02-05	**Dial Analysis Table for ARS – Dial Treatment for ARS**	For each Dial Analysis Table (1~200), set the Automatic Route Selection (ARS) Dial Treatment (0~15) to be used.	0~15 (default = 0)
26-02-07	**Dial Analysis Table for ARS – Network Specified Parameter Table**	For each Dial Analysis Table (1~200), set the Automatic Route Selection (ARS) Network Specified Parameter Table (0~16) to be used.	0~16 (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
26-03-01	**ARS Dial Treatments – Treatment Code**	Assign the Dial Treatments (1~15) for automatic ARS dialing translation. Assign Dial Treatments to Service Numbers (Trunk Groups) in Program 26-02. The ARS Dial Treatment options are: **3** - Delete the NPA if dialed as part of the initial call. This requires at least eight digits in the ARS table (Program 26-02-01). **2** - Delete the leading digit if dialed as part of the initial call. This requires at least eight digits in the ARS table (Program 26-02-01). **1** - Add a leading 1 if not dialed as part of the initial call. This requires at least eight digits in the ARS table (Program 26-02-01). **INPA** - Insert the NPA specified by NPA. **DNN** - Outdial the NN number of digits or execute the code that follows. For example, D041234 out-dials 124. Valid entries are 0~9, **#**, *, Wnn (wait nn seconds) and P (pause). Each digits code counts as a digit. So for example, if a P was added for a pause, the entry would look like: D05P1234. This Dial Treatment can only be added from telephone programming. **Wnn** - Wait nn seconds. **P** - Pause in analog trunk. **R** - Redial the initially dialed number, including any modifications. **E** - End of Dial Treatment. All Dial Treatments must end with the E code. **X** - When ARS is enabled, X must be entered in the Dial Treatment for the system to output the extension number of the call originator to the black box for the E911 feature.	24 characters maximum (default not assigned)
26-04-01	**ARS Class of Service**	Set an extension ARS Class of Service (0~16). Automatic Route Selection uses ARS Class of Service when determining how to route extension calls.	Day/Night Mode: 1~8 Class = 0~16 (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
26-11-01	**Transit Network ID Table – Transmit Network ID (Carrier ID)**	Enter the Transit Network Selection information element to be added to an ARS call using an ISDN trunk. This information element identifies a requested transit network.	0000~9999 (Fixed four digits) (default not assigned)
44-01-01	**System Options for ARS/F-Route – ARS/F-Route Time Schedule**	Select whether the ARS/F-Route feature should use the time schedule (0=not used, 1=used). If this option is set to 0, the F-Route table selected is determined only by the digits dialed without any relation to the day or time of the call. If this option is set to 1, the system first refers to Program 44-10. If there is a match, the pattern defined in that program is used. If not, the F-Route pattern in Program 44-09 and time setting in Program 44-08 are used.	0 = Not Used 1 = Used (default = 0)
44-02-01	**Dial Analysis Table for ARS/ F-Route Access – Dial**	Set the Dial digits for the Pre-Transaction Table for selecting ARS/F-Route (eight digits max: 1~9, 0 * #, @). To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol.	Up to eight digits (Use line key 1 for a 'Don't Care' digit, @) (default not assigned)
44-02-02	**Dial Analysis Table for ARS/ F-Route Access – Service Type**	Set the Service Type (0~3) for the Pre-Transaction Table for selecting ARS/F-Route.	0 = No Setting (None) 1 = Extension Call (Own) 2 = ARS/F-Route Table (F-Route) 3 = Dial Extension Analyze Table (Option) (default = 0)
44-02-03	**Dial Analysis Table for ARS/ F-Route Access – Additional Data**	If a Service Type is set to F-Route in Program 44-02-02, set which F-Route table to be used.	1=Delete Digit = 0~255 (255 : Delete All Digits) 2=0~500 (0 = No Setting) 3=Dial Extension Analyze Table Number = 0~4 (0 = No Setting) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
44-02-04	**Dial Analysis Table for ARS/ F-Route Access – Dial Tone Simulation**	Determine if the Dial Tone Simulation is on (1) or off (0) for the Pre-Transaction Table for selecting ARS/F-Route. If enabled, this option sends dial tone to the calling party once the routing is determined. This may be required if the central office at the destination does not send dial tone.	0 = Off 1 = On (default = 0)
44-03-01	**Dial Analysis Extension Table – Dial**	Set the Dial digits (24 digits max: 1~9, 0 * #, @) to be used for the Dial Extension Analysis Table. When Program 44-02-02 is set to type 3, this program sets the dial extension analysis table. These tables are used when the analyzed digits must be more than eight digits. To enter a wild card/ don't care digit, press Line Key 1 to enter an @ symbol.	Up to 24 digits Digits = 1~9, 0, *, #, @ (Press Line Key 1 for wild character @) (default not assigned)
44-03-02	**Dial Analysis Extension Table – ARS/F-Route Select Table Number (1~250)**	When dialed digits match the setting in Program 44-03-01, select the ARS/R-Route table number (0~500) to be used for the Dial Extension Analysis Table.	0~500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is checked. With Program 44-01 set to 1, Program 44-04 is checked. (default = 0)
44-03-03	**Dial Analysis Extension Table – ARS/F-Route Select Table Number (251)**	If the received digits are not identified in tables 1~250, the F-Route selection table number (0~500) defined in table 251 is used.	0~500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is checked. With Program 44-01 set to 1, Program 44-04 is checked. (default = 0)
44-03-04	**Dial Analysis Extension Table – Next Table Area Number (252)**	If the received digits do not match the digits set in tables 1~250, table number 252 is used refer to the next Extension Table Area (1~4) to be searched.	0~4 (default = 0)
44-04-01	**ARS/F-Route Selection for Time Schedule**	Assign each ARS/F-Route Selection number (1~500) to an ARS/F-Route table number for each ARS/F-Route time mode. There are eight time modes for ARS/F-Route Access.	ARS/F-Route Time Mode: 1~8 ARS/F-Route Table Number = 0~500 (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
44-05-01	**ARS/F-Route Table – Trunk Group Number**	Select the trunk group number to be used for the outgoing ARS call.	0~100, 255 0 = No Setting 255 = Extension Call (default = 0)
44-05-02	**ARS/F-Route Table – Delete Digits**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Enter the number of digits to be deleted (0~255) from the dialed number.	0~255 (255 = Delete All) (default = 0)
44-05-03	**ARS/F-Route Table – Additional Dial Number Table**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Enter the table number (defined in Program 44-06) for additional digits to be dialed (0~1000).	0~1000 (default = 0)
44-05-04	**ARS/F-Route Table – Beep Tone**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select whether or not a beep is heard if a lower priority trunk group is used.	0 = Off (No Beep) 1 = On (Beep)s (default = 0)
44-05-05	**ARS/F-Route Table – Gain Table Number for Internal Call**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the gain table number to be used for internal calls (0~500).	0~500 0 = No Setting (default = 0)
44-05-06	**ARS/F-Route Table – Gain Table Number for Tandem Connections**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the gain table number to be used for the tandem call (defined in Program 44-07).	0~500 0 = No Setting (default = 0)
44-05-07	**ARS/F-Route Table – ARS Class of Service**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the Class of Service to be used for ARS (0~16). Extension ARS COS is determined in Program 26-04-01.	0~16 (default = 0)
44-05-08	**ARS/F-Route Table – Dial Treatment**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the Dial Treatment to be used (0~15). The Dial Treatments are defined in Program 26-03-01	0~15 (default = 0)
44-05-09	**ARS/F-Route Table – Maximum Digit**	Input the maximum number of digits to send when using the F-Route.	0~24 (default = 0)
44-05-10	**ARS/F-Route – CCIS over IP Destination Point Code**	For each ARS/F-Route table (1~500). Set the CCIS over IP Destination Point Code (0~16367).	0~16367 (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
44-05-11	**ARS/F-Route – Network Specified Parameter Table**	For each ARS/F-Route table (1~500) assign the priority (1~4). Assign the Network Specified Parameter Table (0~16).	0~16 (default = 0)
44-06-01	**Additional Dial Table**	If an Additional Dial Number Table is entered in Program 44-05-03, define the additional dial table (1~1000) to add digits in front of the dialed ARS/F-Route number (24 digits max: 1-9, 0 ***** **#**, Pause). To enter a wild card/don't care digit, press Line Key 1 to enter a P (pause) symbol.	Up to 24 digits Enter: 1~9, 0, *, #, Pause (press line key 1 to enter a pause) (default not assigned)
44-07-01	**Gain Table for ARS/F-Route Access – Incoming Transmit**	Set the gain table to be used (1~500). If an extension dials ARS/F-Route number; The Extension Dial Gain Table is activated, which is assigned in Program 44-05. The Extension Dial Gain Table follows Outgoing transmit and Outgoing receive settings. If the incoming call is transferred to another line using ARS/F-Route; The Tandem Gain Table is activated, which is assigned in Program 44-05. The Tandem Gain Table follows the Incoming transmit and Incoming receive settings for incoming line, and Outgoing transmit and Outgoing receive settings for the outgoing line. For ARS/F-Route calls, the CODEC gains defined in Program 14-01-02 and Program 14-01-03 are not activated.	1~63 (-15.5 ~ +15.5dB) (default = 32)
44-07-02	**Gain Table for ARS/F-Route Access – Incoming Receive**		1~63 (-15.5 ~ +15.5dB) (default = 32)
44-07-03	**Gain Table for ARS/F-Route Access – Outgoing Transmit**		1~63 (-15.5 ~ +15.5dB) (default = 32)
44-07-04	**Gain Table for ARS/F-Route Access – Outgoing Receive**		1~63 (-15.5 ~ +15.5dB) (default = 32)
44-08-01	**Time Schedule for ARS/F-Route**	Define the daily pattern of the ARS/F-Route feature. ARS/F-Route has 10 time patterns. These patterns are used in Program 44-09 and Program 44-10. The daily pattern consists of 20 time settings.	Time Number: 01~20 Start Time = 0000~2359 End Time = 0000~2359 Mode: 1~8 Default = All Schedule Patterns: 0:00 – 0:00, Mode 1

Program Number	Program Name	Description/Comments	Assigned Data
44-09-01	**Weekly Schedule for ARS/ F-Route**	Define a weekly schedule for using ARS/F-Route day numbers 1~7 (1 = Sun, 7 = Sat), pattern numbers (1~10). The pattern number is defined in Program 44-08-01.	1 = Sunday (Pattern 1~10) (default Pattern = 1) 2 = Monday (Pattern 1~10) (default Pattern = 1) 3= Tuesday (Pattern 1~10) (default Pattern = 1) 4 = Wednesday (Pattern 1~10) (default Pattern = 1) 5 = Thursday (Pattern 1~10) (default Pattern = 1) 6 = Friday (Pattern 1~10) (default Pattern = 1) 7 = Saturday (Pattern 1~10) (default Pattern = 1)
44-10-01	**Holiday Schedule for ARS/ F-Route**	Define a yearly schedule for ARS/ F-Route. This schedule is used for setting special days such as national holidays (pattern numbers 1~10). The pattern number is defined in Program 44-08-01.	Date: 0101~1231 Schedule Pattern Number = 0~10 0 = No Setting (default = 0)
80-03-01	**DTMF Tone Receiver Setup – Detect Level**	Use Items 11~32 to set the criteria for dial tone detection for outgoing ARS calls.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1~5 = 0
80-03-02	**DTMF Tone Receiver Setup – Start Delay Time**	Use this option to define the start delay time for DTMF Tone Receiver.	0~255 (0.25 ms ~ 64 ms) default: Type 1~5 = 0

Program Number	Program Name	Description/Comments	Assigned Data
80-03-03	**DTMF Tone Receiver Setup – Min. Detect Level**	Use this option to define the minimum detection level for DTMF Tone Receiver.	0~15 detect level 0: –10dBm(0) to –25dBm(15) detect level 1: –15dBm(0) to –30dBm(15) detect level 2: –20dBm(0) to –35dBm(15) detect level 3: –25dBm(0) to –40dBm(15) detect level 4: –30dBm(0) to –45dBm(15) detect level 5: –35dBm(0) to –50dBm(15) detect level 6: –40dBm(0) to –55dBm(15) detect level 7: -45dBm(0) to -60dBm(15) detect level 8: -50dBm(0) to -65dBm(15) detect level 9: -55dBm(0) to -70dBm(15) detect level 10: -60dBm(0) to -75dBm(15) detect level 11: -65dBm(0) to -80dBm(15) detect level 12: -70dBm(0) to -85dBm(15) detect level 13: -75dBm(0) to -90dBm(15) detect level 14: -80dBm(0) to -95dBm(15) detect level 15: -85dBm(0) to -100dBm(15) default: Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3~5 = 10 (-20dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-04	**DTMF Tone Receiver Setup – Max. Detect Level**	Use this option to define the maximum detection level for DTMF Tone Receiver.	0~15 detect level 0: 0dBm(0) to –15dBm(15) detect level 1: –5dBm(0) to –20dBm(15) detect level 2: –10dBm(0) to –25dBm(15) detect level 3: –15dBm(0) to –30dBm(15) detect level 4: –20dBm(0) to –35dBm(15) detect level 5: –25dBm(0) to –40dBm(15) detect level 6: –30dBm(0) to –45dBm(15) detect level 7: -35dBm(0) to -50dBm(15) detect level 8: -40dBm(0) to -55dBm(15) detect level 9: -45dBm(0) to -60dBm(15) detect level 10: -50dBm(0) to -65dBm(15) detect level 11: -55dBm(0) to -70dBm(15) detect level 12: -60dBm(0) to -75dBm(15) detect level 13: -65dBm(0) to -80dBm(15) detect level 14: -70dBm(0) to -85dBm(15) detect level 15: -75dBm(0) to -90dBm(15) default: Type 1~5 = 2 (-2dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-05	**DTMF Tone Receiver Setup – Forward Twist Level**	Use this option to define the forward twist level for DTMF Tone Receiver.	0~9 (1dB ~ 10dB) default: Type 1 = 5 (6dBm) Type 2 = 5 (6dBm) Type 3 = 5 (6dBm) Type 4 = 5 (6dBm) Type 5 = 5 (6dBm)
80-03-06	**DTMF Tone Receiver Setup – Backwards Twist Level**	Use this option to define the backwards twist level for DTMF Tone Receiver.	0~9 (1dB ~ 10dB) default: Type 1 = 0 (1dBm) Type 2 = 0 (1dBm) Type 3 = 0 (1dBm) Type 4 = 0 (1dBm) Type 5 = 0 (1dBm)
80-03-07	**DTMF Tone Receiver Setup – ON Detect Time**	Use this option to define the On detection time for DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) default: Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)
80-03-08	**DTMF Tone Receiver Setup – OFF Detect Time**	Use this option to define the Off detection time for DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) default: Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)

Operation

To place a call using ARS:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

   . *You hear normal Intercom dial tone.*

2. Dial **9**.

   . *You hear a second, "stutter" dial tone.*

3. Dial the outside number.

   - *If you hear another "stutter" dial tone, you must enter your extension ARS Authorization Code.*

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Background Music

Description

Background Music (BGM) sends music from a customer-provided music source to the speakers of the Multiline Telephone when the station is idle.

Conditions

- An ACI [PGD(2)-U10 ADP] port must be used as an alternate External Music on Hold or Background Music source when different External MOH and BGM sources are required.
- Background Music stops while the Multiline Terminal is in use.
- Originating a call, answering a voice announcement, a ringing call, or internal paging interrupts Background Music.
- Background Music is not available on single line telephones.

Default Settings

Background Music (BGM) is allowed

System Availability

Terminals

All Multiline Terminals

Required Component(s)

- Externally provided Music Source.
- PGD(2)-U10 ADP if different external MOH and BGM sources are required.

Related Features

Music on Hold

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-38-01	**BGM Resource Setup – BGM Resource Type**	Configure the Background Music Source input (0) for CD-CP00 or (1) for ACI Port.	0 = CD-CP00 (MOH/IN) 1 = ACI Port (default = 0)
10-38-02	**BGM Resource Setup – ACI Port Number for BGM Source (only used if Program 10-38-01 is set to 1)**	Program the ACI Port to be used for BGM (0~96).	0 ~ 96 (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-30	**Class of Service Options (Supplementary Service) – Background Music**	For extension Class of Service, allow (1) or deny (0) an extension from turning Background Music on and off.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To turn Background Music on or off:

1. Press idle **Speaker**.
2. Dial **825**.
3. Press **Speaker** to hang up.

Barge-In

Description

Barge-In permits an extension user to break into another extension user's established call, including Conference calls. This sets up a Conference-type conversation between the intruding extension and the parties on the initial call. With Barge-In, an extension user can get a message through to a busy co-worker right away.

There are two Barge-In modes: Monitor Mode (Silent Monitor) and Speech Mode. With Monitor Mode, the caller Barging In can listen to another user's conversation but cannot participate. With Speech Mode, the caller Barging In can listen and join another user's conversation.

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Conditions

- An extension user can barge-in on a conference.
- An extension user cannot barge-in on an Intercom call if one of the intercom callers is using Handsfree Answerback. Both Intercom parties must lift the handset or press Speaker.
- With Program 20-13-10 set to 0, a barged into call can be placed on hold by the originator of the outside call. Both the outside caller and the extension that barged into the call are placed on hold.
- With Program 20-13-10 set to 1, a call which is barged into can be placed on Park by the originator of the outside call, but only the outside caller is placed in Park. The extension which barged into the call is dropped.
- Privacy blocks Barge-In attempts.
- Function keys simplify the Barge-In operation.
- When Silent Monitor Mode is used, MIC or Feature + 1 can be used to activate speech path to the internal and external parties.

Default Setting

Disabled

System Availability

Terminals

Multiline and Single Line Terminals

Required Component(s)

None

Related Features

Call Monitoring

Conference

Hold

Intercom

Off-Hook Signaling

Park

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-08	**Service Code Setup (for Service Access) – Barge-In**	Determine what the service code should be for an internal party to use the Barge-In feature.	MLT, SLT (default = 710)
11-16-02	**One-Digit Service Code Setup – Barge-In**	Use this option to set up Item 02 for single digit Barge-In. For example, you can assign Item 02 to use digit 5 for Barge-In. This allows you to program a function key with an extension number plus the Barge-In code (i.e., 5). This allows one-touch access to the Barge-In feature for extension.	(default not assigned)
15-07-01	**Programmable Function Keys**	Assign a function key for Barge-In (code 34).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	Enables the extension Barge-In Mode to be speech mode (0) or Monitor mode (1).	0 = Off 1 = On (default: 0 for COS 1~15)
20-13-15	**Class of Service Options (Supplementary Service) – Barge-In, Initiate**	Turns Off (0) or On (1) an extension user ability to barge-in on other's calls.	0 = Off 1 = On (default: 1 for COS 1~15)
20-13-16	**Class of Service Options (Supplementary Service) – Barge-In, Receive**	In an extension Class of Service, turn On (1) or Off (0) Barge-In at the receiving extension (i.e., Barge-In receive).	0 = Off 1 = On (default: 1 for COS 1~15)
20-13-17	**Class of Service Options (Supplementary Service) – Barge-In Tone/Display (Intrusion Tone)**	In an extension Class of Service, turn On (1) or Off (0) the Barge-In (Intrusion) Tone. If disabled, this also turns off the Barge-In display at the called extension.	0 = Off 1 = On (default: 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-32	**Class of Service Options (Supplementary Service) – Multiple Barge-Ins**	In an extension Class of Service, allow (1) or deny (0) the extension ability to have multiple users Barge-In to their conversation.	0 = Off 1 = On (default: 0 for COS 1~15)
20-14-11	**Class of Service Options for DISA/E&M – DISA/Tie Trunk Barge-In**	In an extension Class of Service, enable (1) or disable (0) a DISA or tie trunk user from using the Barge-In feature.	0 = Off 1 = On (default: 0 for COS 1~15)
20-18-07	**Service Tone Timers – Intrusion Tone Repeat Time**	After a user barges in, the system repeats the Barge-In tone after this interval.	0~64800 seconds (default = 0 seconds)
21-01-03	**System Options for Outgoing Calls – Trunk Interdigit Time (External)**	Program how long an extension must wait before using the Barge-In feature can be used on a call (this timer waits until it expires before putting a call in a talk state). This timer also affects Voice Over.	0~64800 seconds (default = 10 seconds)

Operation

To Barge-In after calling a busy extension:

. *The time in Program 21-01-03 must expire before you can Barge-In.*

1. Call a busy extension.
2. Press Barge-In key (Program 15-07-01 or SC 851: 34).

To Barge-In without first calling the busy extension:

1. Pick up the handset or press **Speaker**.
2. Dial **810**.

   - OR -

   Press Barge-In key (Program 15-07-01 or SC 851: 34).
3. Dial busy extension.

   . *The extension user hears a warning tone.*

   . *The DISA user is rerouted to the defined ring group.*

   . *The Tie Line user hears a busy tone.*

   - OR -

The following steps are not available for DISA or Tie Line trunks:

1. Dial the extension number of the busy internal party.
2. Dial the single digit service code or the service code **810**.

To Barge-In to a Conference Call:

1. Pick up the handset or press **Speaker** and dial the service code (default = **810**).

   . *If the telephone does not have the proper COS, a warning tone is sent. After the user hangs up, the system automatically places a callback to the extension.*

2. Dial the extension number or press a DSS key of a telephone within a conference call.

   When a new call is added to the conference, an intrusion tone is heard by all parties in the Conference, depending on system programming, and all display multiline terminals show the joined party. If a Conference is not possible:

   . *The extension user hears a warning tone.*

   . *The DISA user is rerouted to the defined ring group.*

   . *The Tie Line user hears a busy tone.*

   Not available for DISA or Tie Line trunks.

   - OR -

1. Dial the extension number of the internal party.
2. Dial the single digit service code or the service code **810**.

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Battery Backup – System Memory

Description

The battery on the CD-CP00 retains the Clock/Calendar and Last Number Redial (LNR) buffers for each station when the CD-CP00 encounters a power loss. With a fully charged battery, the settings are retained for approximately three years.

The system programmed memory (Customer Database) is stored in Nonvolatile Memory and can be erased only by performing a First Initialization.

. *For additional storage time, the database and Caller ID History can be copied to the Compact Flash card on the CD-CP00.*

Conditions

- The battery on the CD-CP00 should be removed during long term storage but must be installed (protection against loss of power) just before ETU installation to provide battery backup for System Memory.
- When fully charged, the battery retains System Memory for approximately three years.
- You should replace the CD-CP00 battery every three years.
- During normal operation, the battery is continually recharged using a built-in charging circuit from the CD-CP00.
- To prevent loss of the Caller ID History, you should perform a database save before storing the CD-CP00.
- Battery backup on the CD-CP00 does not protect the following:
  - Callback
  - Off-line Status (for programming system or station assignments)
  - Repeat Redial
  - Trunk Queuing/Camp-On
  - Caller ID History

Default Settings

None

. *The battery must be installed on the CD-CP00 prior to programming a customer database.*

System Availability

Terminals

Not applicable

Required Component(s)

None

Related Features

Battery Backup – System Power

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
90-03-01	**Save Data**	Use this program to save the programmed data on the SRAM and Flash ROM to the 16MB/ 32MB ATA removable Compact Flash memory card. This program should be used after changing the programmed data.	Dial 1 + Press **Transfer** (default not assigned)

Operation

None

Battery Backup – System Power

Description

A built-in battery provides complete system operating power for approximately 30 minutes during commercial power outages. When optional (locally provided) batteries are connected and fully charged, full system operation can be maintained for an extended time. Actual time depends on system configuration, traffic conditions, and the capacity of the batteries.

Conditions

- During normal operation, the batteries are continually recharged by a built-in charging circuit.
- The CD-CP00 is equipped with batteries for system battery backup.
- External Battery Pack can be connected to the system to provide extended time in the event of commercial power outage. Refer to the UNIVERGE SV8100 System Hardware Manual for further details.

Default Settings

None

System Availability

Terminals

Not applicable

Required Component(s)

CD-CP00

Related Features

Battery Backup – System Memory

Programming

None

Operation

None

Call Duration Timer

Description

Call Duration Timer lets a multiline terminal with an LCD time their trunk calls on the telephone display. This helps users that must keep track of their time on the telephone. For incoming trunk calls, the Call Time begins as soon as the user answers the call.

Conditions

- The Call Timer starts over each time the call is retrieved from Hold or Park.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals with an LCD

Required Component(s)

None

Related Features

Alphanumeric Display

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-06	**Class of Service Options (Incoming Call Service) – Incoming Time Display**	If this option is set to 1, the Incoming Call Time is displayed on the multiline terminals LCD while the telephone is ringing.	0 = Off 1 = On (default = 0 for COS 01~15)
20-13-36	**Class of Service Options (Supplementary Service) – Call Duration Timer Display**	In an extension Class of Service, turn On (1) or Off (0) a Call Timer for the extension.	0 = Off 1 = On (default = 1 for COS 01~15)
21-01-03	**System Options for Outgoing calls – Trunk Interdigit Time (External)**	The time the system waits for this time to expire before starting the Call Timer.	0~64800 (seconds) (default = 10 seconds)

Operation

To time your trunk calls:

1. Place a trunk call.

   . *The timer starts automatically.*

Call Forwarding – Park and Page

Description

When an extension user is away from their phone, Park and Page can let them know when they have a call waiting to be answered. The Personal Greeting and Park & Page options can have up to 200 messages total (note that the Park & Page feature uses two messages). To enable Park and Page, the user records a Personal Greeting along with an additional Paging announcement. Park and Page then answers an incoming call and plays the Personal Greeting to the caller. The caller then listens to Music on Hold (if available) while the system broadcasts the prerecorded Paging announcement. When the extension user hears the Page, they can go to any telephone and use Directed Call Pickup to intercept the call.

For example, John Smith could record a Personal Greeting that says:

“Hello, this is John Smith. I am away from my phone right now but please hold on while I am automatically paged.”

The prerecorded Paging announcement could say:

“John Smith, you have a call waiting on your line.”

The incoming caller hears the first message and listens to Music on Hold while the system broadcasts the second message. John Smith could then walk to any phone and pick up his call. If John doesn’t pick up the call, the Page periodically repeats.

Park and Page follows the rules for Personal Greeting for All Calls, immediately rerouted. This means that Park and Page activates for ringing Intercom calls, DID calls and DISA calls. It also activates for calls transferred from the Automated Attendant. Additionally, calls from the Automated Attendant follow Automatic Overflow routing if not picked up. Park and Page activates for transferred outside calls but does not play the Personal Greeting to the caller. If a call comes in when the specified Page zone is busy, the system broadcasts the announcement when the zone becomes free.

Conditions

- Park and Page announcements only repeat once.
- Voice Announcement (VAU) recording time is fixed at two minutes and cannot be changed.
- While Park and Page is enabled, only one DID call at a time can be processed. Subsequent calls hear a busy tone.

Default Setting

- Park and Page is available at default for internal paging access code 801, zone 1.
- User access code of 795. See feature Operation. Set Program 40-10-01 for VRS guidance

message.

System Availability

Terminals

None

Required Component(s)

InMail, PZ-VM21 and CD-CP00

Related Features

Analog Communication Interface (ACI)

Music on Hold

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-58	**Service Code Setup (for Setup/ Entry Operation) – Call Forward with Personal Greeting**	Call forward with Personal greeting VRS. Service code setup.	MLT, SLT (default = 795)
11-12-19	**Service Code Setup (for Service Access) – Internal Group Paging**	Service code setup.	MLT, SLT (default = 801)
11-12-20	**Service Code Setup (for Service Access) – External Paging**	External paging access code. Service code setup.	MLT, SLT (default = 803)
11-12-24	**Service Code Setup (for Service Access) – Combined Paging**	Combined paging, internal/ external access code. Service code setup.	MLT, SLT (default = 751)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
31-02-01	**Internal Paging Group Assignment – Internal Paging Group Number**	Assign extensions to Internal Paging Groups (i.e., Page Zones).	0~64 (0 = No Setting) Default: All Stations = 0
31-03-01	**Internal Paging Group Settings – Internal Paging Group Name**	Assign names to Internal Paging Groups (i.e., Page Zones). The system shows the names you program on the telephone displays.	Up to 12 Characters 01 = Group 1 02 = Group 2 : 64 = Group 64

Program Number	Program Name	Description/Comments	Assigned Data
31-04-01	**External Paging Zone Group – Paging Group Number**	Assign each External Paging Speaker to an External Paging Zone.	Paging Group Number 0~8 (0 = No Setting) Speaker 1 [PGD(2)-U10 ADP] = 1 (Group 1) Speaker 2 [PGD(2)-U10 ADP] = 2 (Group 2) Speaker 3 [PGD(2)-U10 ADP] = 3 (Group 3) Speaker 4 [PGD(2)-U10 ADP] = 4 (Group 4) Speaker 5 [PGD(2)-U10 ADP] = 5 (Group 5) Speaker 6 [PGD(2)-U10 ADP] = 6 (Group 6) Speaker 7 [PGD(2)-U10 ADP] = 7 (Group 7) Speaker 8 [PGD(2)-U10 ADP] = 8 (Group 8) Speaker 9 (CD-CP00) = 1 (Group 1)
31-06-01	**External Speaker Control – Broadcast Splash Tone Before Paging (Paging Start Tone)**	Use this option to enable or disable splash tone before Paging over an external zone. If enabled, the system broadcasts a splash tone before the External Paging announcement.	0 = No Tone (None) 1 = Splash Tone 2 = Chime Tone (default = 2)
31-06-02	**External Speaker Control – Broadcast Splash Tone After Paging (Paging End Time)**	Use this option to enable or disable splash tone after Paging over an external zone. If enabled, the system broadcasts a splash tone at the end of an External Paging announcement.	0 = No Tone (None) 1 = Splash Tone 2 = Chime Tone (default = 2)
40-10-01	**Voice Announcement Service Option – VRS Fixed Message**	Enable (1) or disable (0) the system ability to play the fixed VRS messages (such as You have a message.).	0= Not Used 1= Used (default = 1)
40-10-05	**Voice Announcement Service Option – Park and Page Repeat Timer (VRS Msg Resend)**	If a Park and Page is not picked up in this interval, the Paging announcement repeats.	0~64800 (seconds) (default = 0 seconds)

Operation

To have the system page you when you have a call:

1. Press **Speaker** (or lift the handset at the single line telephone) and dial **795**.
2. When you hear, “Please start recording,” record you Personal Greeting.

. *If you already have Park and Page or Personal Greeting set up, you can dial:*

***3** to erase (the optionally HOLD to cancel the erase)*
***5** to listen (then **#** again to listen again)*
7 to re-record

3. Dial **#7**.
4. When you hear, “Please start recording,” record your page and dial **#** when the announcement is complete.

   . *A paging chime overrides the first four seconds of an announcement. Allow a delay in announcement recording for chime time.*

5. Dial the Page Zone that should broadcast your announcement.
   For example, for Internal Zone 1 dial 801 + 1, or for Combined Paging Zone, 1 dial 751 + 1.
6. Dial the Park and Page type:
   2 = All Calls
   3 = Outside Calls Only
7. Press **Speaker** to hang up (or go on-hook at the single line telephone).

To pick up your Park and Page:

1. Press **Speaker** (or lift the handset at the single line telephone).
2. Dial **715** + your extension number.

To cancel your Park and Page:

1. Press **Speaker** (or lift the handset at the single line telephone).
2. Dial **795** + **3**.
3. Press **Speaker** to hang up (or go on-hook at the single line telephone).

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Call Forwarding

Description

Call Forwarding permits an extension user to redirect their calls to another extension or an off-premise number. Call Forwarding ensures that the user's calls are covered when they are away from their work area. The types of Call Forwarding are:

- Call Forwarding when Busy or Unanswered

  Calls to the extension forward when busy or unanswered.

- Call Forwarding – Centrex

  When using PBX/Centrex trunks, calls to the extension perform a Centrex transfer using Immediate, Busy and No Answer Forwarding.

- Call Forwarding Immediate

  All calls forward immediately to the destination, and only the destination rings.

- Call Forwarding with both Ringing

  All calls forward immediately to the destination, and both the destination and the forwarded extension ring (not for Voice Mail).

- Call Forwarding when Unanswered

  Calls forward only if they are unanswered (Ring No Answer).

- Call Forwarding Follow Me

  Refer to Call Forwarding with Follow Me on page 1-155 for more information.

- Personal Answering Machine Emulation

  Allows the extension to emulate an answering machine. Refer to SV8100 InMail for more information.

Call Forwarding reroutes calls ringing an extension, including calls transferred from another extension. Call Forwarding can also be split, allowing internal and external calls to forward to different destinations. The extension user can enable Call Forwarding from their telephone. An extension user can also set the forwarding for another extension by using Call Forward for any Extension to Destination. To redirect calls while a user is at another telephone, use Call Forwarding with Follow Me. A periodic VRS announcement can remind users that their calls are forwarded.

Conditions

- Virtual Extensions can be set to Call Forward. Program 15-02-21 must be set to a 1, to allow the Virtual Extension to place outgoing calls.

- If an extension in a call forward chain has Call Forward with Both Ring or Call Forward with Follow Me set, calls do not continue routing to other extensions in the chain.
- Call Forwards can be chained allowing calls to forward from one extension to the next. Up to 32 extensions can be linked in a call forward chain.
- Periodic reminder message requires a PZ-VM21 daughter board for Voice Response System (VRS).
- Call Forwarding an extension in a Department Group prevents that extension from receiving Department Pilot Calls.
- Ring Groups do not follow Call Forwarding.
- Call Forward Split does not allow for Call Forward with Follow Me.
- If Call Forwarding off premise, a trunk access code must be included in the forwarding number.
- Call Forward with Follow Me allows for a single station to set follow me for multiple stations. When canceling Call Forward with Follow Me, the use must specify the station to cancel or cancel all.
- The telephone must be in an idle state to enable call forwarding with a Programmable Function Key, or receiving dial tone to enable call forwarding with a service code.
- Call Forward for any Extension to Destination cannot be set or canceled from a Virtual Extension.
- Call Forwarding/Do Not Disturb Override allows for Overriding a Call Forwarding or DND setting at another extension.
- When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension as to why the call is ringing to their telephone.
- An extension user can forward their calls to a Department number.
- A DSS key indicates a Call Forwarding indication for extensions.
- When DND All and Call Forward are set on the same telephone, call forwarding works. If Busy and No Answer Forwarding are set to different locations, it follows the Busy forwarding.
- Function keys simplify Call Forwarding operation.
- If an extension Class of Service denies Call Forwarding (Program 20-11-01~Program 20-11-05, off), the extension can still dial the service code to Set/Cancel Call Forwarding, but it can not set any data.
- Call Forward Both Ring Split does not work to an off-premise destination.
- If an IP telephone has forwarding set and then loses connection, it follows the forwarding.
- If an IP phone has Busy and No Answer Forwarding set to different locations and it loses

connection, it follows No Answer forwarding.

Default Setting

Enabled

System Availability

Terminals

Any Station and Virtual Extensions

Required Component(s)

None

Related Features

Call Forwarding, Off-Premise

Call Forwarding with Follow Me

Call Forwarding/Do Not Disturb Override

Central Office Calls, Answering

Department Calling

Direct Station Selection (DSS) Console

Do Not Disturb

Programmable Function Keys

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-10-06	**Service Code Setup (for System Administrator) – Setting the Automatic Transfer for Each Trunk Line**	Set the service code for setting automatic transfer for each trunk line.	MLT (default = 833)
11-10-07	**Service Code Setup (for System Administrator) – Canceling the Automatic Transfer for Each Trunk Line**	Set the service code for canceling automatic transfer for each trunk line.	MLT (default = 834)
11-10-08	**Service Code Setup (for System Administrator) – Setting the Destination for Automatic Trunk Transfer**	Set the service code for setting the destination for automatic trunk transfer.	MLT (default = 835)
11-10-18	**Service Code Setup (for System Administrator) – Off-Premise Call Forward by Door Box**	Set the service code for setting automatic transfer for each trunk line.	MLT (default = 822)
11-11-01	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – All**	Set the service code for setting call forwarding all calls.	MLT, SLT (default = 848)
11-11-02	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Busy**	Set the service code for setting call forwarding for busy calls.	MLT, SLT (default = 843)
11-11-03	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – No Answer**	Set the service code for setting call forwarding for no answer.	MLT, SLT (default = 845)
11-11-04	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Busy/No Answer**	Set the service code for setting call forwarding for busy or no answer.	MLT, SLT (default = 844)
11-11-05	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Both Ring**	Set the service code for setting call forwarding for busy or no answer.	MLT, SLT (default = 842)
11-11-07	**Service Code Setup (for Setup/ Entry Operation) – Call Forwarding – Follow Me**	Set the service code for setting call forwarding for follow me.	MLT, SLT (default = 846)
11-11-08	**Service Code Setup (for Setup/ Entry Operation) – Do Not Disturb**	Set the service code for setting call forwarding for Do Not Disturb.	MLT, SLT (default = 847)
11-11-45	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward All (Split)**	Set or Cancel the call forward all split.	MLT, SLT (default not assigned)
11-11-46	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy (Split)**	Set or Cancel the call forward busy split.	MLT, SLT (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-47	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward No Answer (Split)**	Set or Cancel the call forward no answer split.	MLT, SLT (default not assigned)
11-11-48	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy/No Answer (Split)**	Set or Cancel the call forward busy or no answer split.	MLT, SLT (default not assigned)
11-11-49	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Both Ring (Split)**	Set or Cancel the call forward the both ring split.	MLT, SLT (default not assigned)
11-11-52	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward All Destination (No Split)**	Set or Cancel the call forward all destination with no split.	MLT, SLT (default = 791)
11-11-53	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy Destination (No Split)**	Set or Cancel the call forward busy destination with no split.	MLT, SLT (default = 792)
11-11-54	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward No Answer Destination (No Split)**	Set or Cancel the call forward no answer destination with no split.	MLT, SLT (default = 793)
11-11-55	**Service Code Setup (for Setup/ Entry Operation) – Call Forward Busy No Answer Destination (No Split)**	Set or Cancel the call forward busy or no answer destination with no split.	MLT, SLT (default = 794)
11-11-58	**Service Code Setup (for Setup/ Entry Operation) – Call forward with Personal Greeting**	Set the service code for setting call forwarding with Personal Greeting.	MLT, SLT (default = 795)
11-12-01	**Service Code Setup (for Service Access) – Bypass Call**	Use to customize the Service Codes which are used for bypass calls.	MLT, SLT (default = 807)
11-16-06	**Single Digit Service Code Setup – DND/Call Forward Override Bypass**	Use to customize the one-digit Service Codes used when a busy or ring back signal is heard.	(default not assigned)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-01	**Class of Service Options (Hold/ Transfer Service) – Call Forward All**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forward Immediate.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-02	**Class of Service Options (Hold/ Transfer Service) – Call Forward When Busy**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Busy.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-03	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding When Unanswered**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Unanswered.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-04	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding (Both Ringing)**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding with Both Ringing.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-05	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding with Follow Me**	In an extension's Class of Service, turn On (1) or Off (0) an extensions ability to set Call Forward with Follow Me.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-23	**Class of Service Options (Hold/ Transfer Service) – VE Call Forward Set/Cancel**	In an extension Class of Service, turn On (1) or Off (0) the ability to set and cancel Call Forwarding for a Virtual Extension.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook Signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension user to manually (0) or automatically (1) receive Off-Hook signals. An example of an Off-Hook signal is the tone heard when receiving a second call.	0 = Off 1 = On (default = 0 for COS 1~15)
24-02-03	**System Options for Transfer – Delayed Call Forwarding Time**	Set the Delayed Call Forwarding interval. For an unanswered call, Call Forward No Answer occurs after this interval.	0~64800 (seconds) (default = 10)
24-09-01	**Call Forward Split Settings – Call Forwarding Type:**	Use to assign Call Forwarding Type and the destination numbers for each extension/virtual extension.	0 = Call Forwarding Off 1 = Call Forwarding with both ring 2 = Call Forwarding when no answer 3 = Call Forwarding all calls 4 = Call Forwarding busy or no answer 5 = Call Forwarding when busy (default = 0)
24-09-02	**Call Forward Split Settings – CO Call Forwarding Destination for Both Ring, All Call, No Answer**	Use to assign CO Call Forwarding Destination for ring, all call and no answer.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-03	**Call Forward Split Settings – Intercom Call Forwarding Destination for Both ring, All Call, No Answer**	Use to assign Intercom Call Forwarding Destination for ring, all call and no answer.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-04	**Call Forward Split Settings – CO Call Forwarding Busy Destination**	Use to assign CO Call Forwarding for busy destinations.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-05	**Call Forward Split Settings – Intercom Call Forwarding Busy Destination**	Use to assign Intercom Call Forwarding for busy destinations.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-06	**Call Forward Split Settings – Call Forwarding Destination for CTX/ PBX for All Call, No Answer**	Use to assign Call Forwarding for CTX/PBX all call, no answer destinations.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-07	**Call Forward Split Settings – Call Forwarding Destination for CTX/ PBX for Busy**	Use to assign Call Forwarding destinations for busy CTX/PBX calls.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)

Operation

To set Call Forward – Immediate at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Immediate Service Code (default: 848).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** Keys. (Program 15-07-01, 10 or SC 851, Key Code 10)
3. Dial **1** (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

   . *Refer to* *Call Forwarding – Park and Page on page 1-137*.

   . *The Call Forwarding Programmable Function Key lights.*

To cancel Call Forward – Immediate at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Immediate Service Code (default: 848).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 10 or SC 851, Key Code 10)
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

   . *The Call Forwarding Programmable Function Key turns off.*

To set Call Forward – Busy/No Answer at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Busy/No Answer Service Code (default: 844).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 13 or SC 851, Key Code 13)
3. Dial **1** (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

. *Refer to Call Forwarding – Park and Page on page 1-137.*

. *The Call Forwarding Programmable Function Key turns on.*

To cancel Call Forward – Busy/No Answer at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Busy/No Answer Service Code (default: 844).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 13 or SC 851, Key Code 13)
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

   . *The Call Forwarding Programmable Function Key turns off.*

To set Call Forward – Both Ring at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Both Ring Service Code (default: 842).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 14 or SC 851, Key Code 14)
3. Dial **1** (Set).
4. Dial the destination extension number.
5. Press **Speaker** or hang up.

   . *The Call Forwarding Programmable Function Key turns on.*

To cancel Call Forward – Both Ring at a forwarding station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Both Ring Service Code (default: 842).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 14 or SC 851 Key Code 14)
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

   . *The Call Forwarding Programmable Function Key turns off.*

To set Call Forward – Follow Me from the destination station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Follow Me Service Code (default: 846).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 10 or SC 851, Key Code 15)
3. Dial **1** (Set).
4. Dial the station number to be forwarded and then the destination number.
5. Press **Speaker** or hang up.

   . *The Call Forwarding Programmable Function Key goes on.*

To cancel Call Forward – Follow Me from the destination station:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward – Follow Me Service Code (default: 846).

   - OR -

   At the multiline terminal only, press the **Call Forwarding Programmable Function** keys. (Program 15-07-01, 10 or SC 851, Key Code 15)
3. Dial **0** (Cancel).
4. Dial the station number, which is forwarded, or **0** to cancel all extensions.
5. Press **Speaker** or hang up.

   . *The Call Forwarding Programmable Function Key turns off.*

To set Call Forward Immediate for any Extension to Destination:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Immediate for any Extension to Destination Service Code (Default: 791).
3. Dial **1** (Set).
4. Dial the extension number to be forwarded and then the destination number.
5. Press **Speaker** or hang up.

To cancel Call Forward Immediate for any Extension:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Immediate for any Extension to Destination Service Code (default: 791).

3. Dial **0** (Cancel).
4. Dial the station number which is forwarded.
5. Press **Speaker** or hang up.

To set Call Forward Busy/No Answer for any Extension to Destination:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Busy/No Answer for any Extension to Destination Service Code (default: 794).
3. Dial **1** (Set).
4. Dial the extension number to be forwarded and then the destination number.
5. Press **Speaker** or hang up.

To cancel Call Forward Busy/No Answer for any Extension to Destination:

1. Pick up the handset or press **Speaker**.
2. Dial the Call Forward Busy/No Answer for any Extension to Destination Service Code (default: 794).
3. Dial **0** (Cancel).
4. Dial the station number, which is forwarded.
5. Press **Speaker** or hang up.

To set Call Forward – Immediate using a Virtual Extension:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward – Immediate Service Code (default: 848).
3. Dial **1** (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

. *Refer to Call Forwarding – Park and Page on page 1-137.*

To cancel Call Forward – Immediate at a forwarding station:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward – Immediate Service Code (default: 848).
3. Dial **0** (Cancel).

4. Press **Speaker** or hang up.

To set Call Forward – Busy/No Answer using a Virtual Extension:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward – Busy/No Answer Service Code (Default: 844).
3. Dial **1** (Set).
4. Dial the destination extension or off-premise number.
5. Press **Speaker** or hang up.

. *Refer to Call Forwarding – Park and Page on page 1-137.*

To cancel Call Forward – Busy/No Answer using a Virtual Extension:

1. Press the idle **Virtual Extension** key.
2. Dial the Call Forward – Busy/No Answer Service Code (default: 844).
3. Dial **0** (Cancel).
4. Press **Speaker** or hang up.

Call Forwarding with Follow Me

Description

While at a co-worker's desk, a user can have Call Forwarding with Follow Me redirect their calls to the co-worker's extension. This helps an employee who gets detained at a co-worker's desk longer than expected. To prevent losing important calls, the employee can activate Call Forwarding with Follow Me from the co-worker's telephone.

Call Forwarding with Follow Me reroutes calls from the destination extension. To reroute calls from the initiating (forwarding) extension, use Call Forwarding.

Conditions

- Call Forwarding an extension in a Department Group prevents that extension from receiving Department Pilot Calls.
- Multiple Stations can set Call Forward Follow Me to one station.
- Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls ring an idle Department Group member, then follow Program 22-08 programming then Program 22-05 programming.

Default Setting

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Do Not Disturb

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-07	**Service Code Setup (for Setup/ Entry Operation) – Call Forwarding – Follow Me**	Assign the service code of Call Forward Follow Me.	MLT, SLT (default = 846)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) (15 = Call Forward with Follow Me) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-11-05	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding with Follow Me**	In an extension's Class of Service, turn On (1) or Off (0) an extensions ability to set Call Forward with Follow Me.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To activate Call Forward Follow Me from a multiline terminal:

1. At a multiline terminal, other than your own, press **Speaker** and dial Service Code (**846**, Program 11-11-07).

   - OR -

   Press the Call Forward Follow Me key (Program 15-07-01 or SC 851: Code 15).

2. Dial **1** to set.
3. Dial the Extension to forward.

. *The multiline terminal with display indicates on the display of the telephone which Call Forward Follow Me is set. Also, the Programmed Follow Me Flexible Line Key flashes (if assigned) when Follow Me is set.*

To cancel Call Forward Follow Me from your own Multiline Terminal:

1. At your multiline terminal, press **Speaker** and dial Service Code (**846**, Program 11-11-07).

   - OR -

   Press the Call Forward Follow Me key (Program 15-07-01 or SC 851: Code 15).
2. Dial **0** to cancel.
3. Dial **0** (Cancel All Forward Follow Me).

   - OR -

   Dial the extension number with Follow Me set.

To activate Call Forward Follow Me from a single line telephone:

1. At a single line telephone, other than your own, lift the handset and dial the Service Code (**846** Program 11-11-07).
2. Dial **1** to set.
3. Dial the extension to forward.

To cancel Call Forward Follow Me from your own single line telephone:

1. At your single line telephone, lift the handset and dial Service Code (**846**, Program 11-11-07).
2. Dial **0** to cancel.
3. Dial **0** (Cancel All Forward Follow Me).

   - OR -

   Dial the extension number with Follow Me set.

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Call Forwarding, Off-Premise

Description

Off-Premise Call Forwarding allows an extension user to forward their calls to an off-site location. By enabling Call Forward, Off-Premise, the user can stay in touch by having the system forward their calls while they are away from the office. The forwarding destination can be any telephone number the user enters, such as a mobile phone, home office, hotel or meeting room. Off-Premise Call Forwarding can route the off-site telephone number over a specific trunk or through a trunk group, Automatic Route Selection or Trunk Group Routing.

Off-Premise Call Forwarding reroutes the following types of incoming calls:

- Ringing intercom calls from co-worker's extensions
- Calls routed from the VRS or Voice Mail [1]
- Direct Inward Lines [1]
- DISA, DID and Tie Line calls to the forwarded extension [1]
- Transferred calls [1]

Off-Premise Call Forwarding does not reroute Virtual Extension keys or Ring Group calls (i.e., trunk ringing according to Ring Group assignments made in Program 22-04 and Program 22-05).

Conditions

- If a call that forwards Off-Premise goes out on a trunk assigned as TIE or DID, and the called party does not answer before the timer in Program 34-07-05, the call recalls to the station that performed the transfer.
- Call Forwarding Off-Premise requires either loop start trunks with disconnect supervision or ground start trunks.
- The trunk access code and the outside telephone number combined cannot exceed 24 digits.
- Call Forwarding an extension in a Department Group prevents that extension from receiving Department Pilot Calls.
- If a Programmable Function key is not defined for Call Forwarding (10~17), the DND key flashes to indicate that the extension is call forwarded.
- DID calls to an extension with Off-Premise Call Forwarding set do not recall if there is no answer.

1. Off-Premise Call Forwarding can reroute an incoming trunk call only if the outgoing trunk selected has disconnect supervision enabled (refer to the Programming section).

- Calls to extensions with DND active do not follow Call Forwarding programming. DIL calls ring an idle Department Group member, then follow Program 22-08 programming then Program 22-05 programming.
- Door Boxes must be programmed for the calls to be transferred Off-Premise.
- The outside number Call Forwarding dials can only be a number normally allowed by the forwarded extension Toll Restriction.
- In systems with a DSP daughter board for VRS, callers to an extension forwarded off-premise hear, “Please hold on, your call is being rerouted.” This option can be disabled in Program 40-10-01 by setting it to disable.
- When a station is in DND and any Call Forwarding Off Premise is set, the call forwards immediately.
- Call Forwarding, Off-Premise is not supported when using Alternate Trunk Group Routing.

Default Setting

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Call Forwarding

Code Restriction

Direct Inward Dialing (DID)

Do Not Disturb

Door Box

Virtual Extensions

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-09-01	**DTMF and Dial Tone Circuit Setup**	Allocate the circuits on the CD-CP00 ETUs for either DTMF receiving or dial tone detection. Program 14-01-13 Basic Trunk Data Setup – Loop Supervision Enable (1) loop supervision for each trunk that should be able to use Call Forwarding Off-Premise.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
11-07-01	**Department Group Pilot Numbers – Dial**	Use to assign pilot numbers to each Department Group set up.	Up to eight digits (default not assigned)
11-11-01	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – All**	Use to assign the Call Forward All Service Code.	MLT, SLT (default = 848)
11-11-02	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Busy**	Use to assign the Call Forward Busy Service Code.	MLT, SLT (default = 843)
11-11-03	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – No Answer**	Use to assign the Call Forward No Answer Service Code.	MLT, SLT (default = 845)
11-11-04	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Busy/No Answer**	Use to assign the Call Forward Busy No Answer Service Code.	MLT, SLT (default = 844)
11-11-05	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Both Ring**	Use to assign the Call Forward Both Ring Service Code.	MLT, SLT (default = 842)
11-11-45	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward All (Split)**	Use to assign the Call Forward All Split Service Code.	MLT, SLT (default not assigned)
11-11-46	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy (Split)**	Use to assign the Call Forward Busy Split Service Code.	MLT, SLT (default not assigned)
11-11-47	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward No Answer (Split)**	Use to assign the Call Forward No Answer Split Service Code.	MLT, SLT (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-48	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy/No Answer (Split)**	Use to assign the Call Forward Busy No Answer Split Service Code.	MLT, SLT (default not assigned)
11-11-49	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Both Ring (Split)**	Use to assign the Call Forward Both Ring Split Service Code.	MLT, SLT (default not assigned)
11-11-52	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward All Destination (No Split)**	Use to assign the Call Forward All for any Extension Service Code.	MLT, SLT (default = 791)
11-11-53	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy Destination (No Split)**	Use to assign the Call Forward Busy for any Extension Service Code.	MLT, SLT (default = 792)
11-11-54	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward No Answer Destination (No Split)**	Used to assign the Call Forward No Answer for any Extension Service Code.	MLT, SLT (default = 793)
11-11-55	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy/No Answer Destination (No Split)**	Use to assign the Call Forward Busy No Answer for any Extension Service Code.	MLT, SLT (default = 794)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-12	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding Off-Premise (External Call Forwarding)**	In an extensions Class of Service, turn On (1) or Off (0) setting up Call Forwarding Off-Premise at the extension.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook Signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	Timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer, outgoing from trunk, Tandem Trunking). When this time expires, a warning tone is heard.	0~64800 (seconds) (default = 1800 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
24-09-01	**Call Forward Split Settings – Call Forwarding Type**	Use to assign Call Forwarding Type and destination numbers for each extension/virtual extension.	0 = Call Forwarding Off 1 = Call Forwarding with both ring 2 = Call Forwarding when no answer 3 = Call Forwarding all calls 4 = Call Forwarding busy or no answer 5 = Call Forwarding when busy (default = 0)
24-09-02	**Call Forward Split Settings – CO Call Forwarding Destination for Both Ring, All Call, No Answer**	Use to assign CO Call Forwarding destination numbers for both ring, all call and no answer.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-03	**Call Forward Split Settings – Intercom Call Forwarding Destination for both ring, All Call, No Answer**	Use to assign Intercom Call Forwarding destination numbers for both ring, all call and no answer.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-04	**Call Forward Split Settings – CO Call Forwarding Busy Destination**	Use to assign CO Call Forwarding busy destination numbers.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-05	**Call Forward Split Settings – Intercom Call Forwarding Busy Destination**	Use to assign Intercom Call Forwarding busy destination numbers.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-06	**Call Forward Split Settings – Call Forwarding Destination for CTX/ PBX for All Call, No Answer**	Use to assign Call Forwarding destination numbers for CTX/PBX for all call and no answer.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
24-09-07	**Call Forward Split Settings – Call Forwarding Destination for CTX/ PBX for Busy**	Use to assign Call Forwarding destination numbers for CTX/PBX for busy.	1~9, 0, #, *, R, @ (Up to 24 digits) (default not assigned)
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller or any Trunk-to-Trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard.	0~64800 (seconds) (default = 30 seconds)
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	This time determines how long the system waits before disconnecting a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard.	0~64800 (seconds) (default = 15 seconds)

Trunk-to-Trunk Forwarding – Normal (0) Trunks

Program Number	Program Name	Description/Comments	Assigned Data
11-10-06	**Service Code Setup (for System Administrator) – Setting the Automatic Transfer for each Trunk Line**	Customize the service code to be used to set the Automatic Trunk Forwarding feature.	MLT (default = 833)
11-10-07	**Service Code Setup (for System Administrator) – Canceling the Automatic Transfer for each Trunk Line**	Customize the service code to be used to cancel the Automatic Trunk Forwarding feature.	MLT (default = 834)
11-10-08	**Service Code Setup (for System Administrator) – Setting the Destination for Automatic Trunk Transfer**	Customize the service code to be used to set the destination for the Automatic Trunk Forwarding feature.	MLT (default = 835)
13-01-01	**Speed Dialing Function Setup – Speed Dialing Auto Outgoing Call Mode**	Determine if dialing an Speed Dialing number will dial an outside number (seizing a trunk as assigned in Program 13-05) or an Intercom number (0 = Trunk Dialing Mode, 1 = Extension Dialing Mode).	0 = Trunk Outgoing Mode 1 = Intercom Outgoing Mode (default = 0)
13-04-01	**Speed Dialing Number and Name – Speed Dialing Data**	Enter the Common and Group Speed Dialing numbers and names which are to be used for Trunk-to-Trunk Forwarding.	1~9, 0, *, **#** Pause (Press line key 1) Recall/Flash (Press line key 2) @ = Code to wait for answer supervision in ISDN (Press line key 3) (maximum 24 digits) (default not assigned)
14-01-26	**Basic Trunk Data Setup – Automatic Trunk-to-Trunk Transfer Mode**	Enable or Disable each trunk the ability to use Step Transfer.	0 = Normal Transfer (Normal) 1 = Step Transfer (Step) (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-05	**Class of Service Options (Administrator Level) – Set/ Cancel Automatic Trunk-to-Trunk Transfer**	Turn On (1) or Off (0) the ability of an extension to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup – Incoming Type**	Used to assign the incoming trunk type for each trunk. There is one item for each Mode. When using Trunk-to-Trunk Forwarding the trunks must be set for Normal (0).	0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
24-02-11	**System Options for Transfer – No Answer Step Transfer**	Assign the amount of time each transfer destination rings before step transfer is performed.	0~64800 (seconds) (default = 10 seconds)
24-02-12	**System Options for Transfer – No Answer Trunk-to-Trunk Transfer**	This timer defines the amount of time that elapses before the automatic Trunk-to-Trunk Transfer is performed.	0~64800 (seconds) (default = 0 seconds)
24-04-01	**Automatic Trunk-to-Trunk Transfer Target Setup**	Assign the Speed Dialing number bin (0~1999) to a trunk and the mode which should be used as the destination of the Automatic Trunk-to-Trunk Forwarding.	0~1999 (default = 1999)

Trunk-to-Trunk Forwarding – DID (3) Trunk Forwarding by Department Groups

. *Refer to Departmental Calling for additional Department Group programming.*

Program Number	Program Name	Description/Comments	Assigned Data
11-07-01	**Department Group Pilot Numbers – Dial**	Assign pilot numbers to the Extension (Department) Groups you set up in Program 16-02.	Up to eight digits (default not assigned)
11-11-25	**Service Code Setup (for Setup/ Entry Operation) – Automatic Transfer Setup for Each Extension Group**	Customize the service code to be used to set the Automatic Trunk Forwarding feature for a Department Group.	MLT, SLT (default = 702)
11-11-26	**Service Code Setup (for Setup/ Entry Operation) – Automatic Transfer Cancellation for Each Extension Group**	Customize the service code to be used to cancel the Automatic Trunk Forwarding feature for a Department Group.	MLT, SLT (default = 703)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-27	**Service Code Setup (for Setup/ Entry Operation) – Destination of Automatic Transfer Each Extension Group**	Customize the service code to be used to set the destination for the Automatic Trunk Forwarding feature for a Department Group.	MLT (default = 704)
13-01-01	**Speed Dialing Function Setup – Speed Dialing Auto Outgoing Call Mode**	Determine if dialing an Speed Dialing number will dial an outside number (seizing a trunk as assigned in Program 13-05) or an Intercom number (0 = Trunk Dialing Mode, 1 = Extension Dialing Mode).	0 = Trunk Outgoing Mode 1 = Intercom Outgoing Mode (default = 0)
13-04-01	**Speed Dialing Number and Name – Speed Dialing Data**	Enter the Common and Group Speed Dialing numbers and names which are to be used for Trunk-to-Trunk Forwarding.	1~9, 0, *, **#** Pause (Press line key 1) Recall/Flash (Press line key 2) @ = Code to wait for answer supervision in ISDN (Press line key 3) (maximum 24 digits) (default not assigned)
14-01-04	**Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**	CODEC gain set at 0 dB [Program 14-01-04 = 32 (CODEC Gain Type 2)] can be used to set the transmit CODEC gain type for multiline Conference or transferred calls.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-05	**Basic Trunk Data Setup – Receive Gain Level for Conference and Transfer Calls**	CODEC gain set at 0 dB [Program 14-01-04 = 32 (CODEC Gain Type 2)] can be used to set the transmit CODEC gain type for multiline Conference or transferred calls.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 16 (-8dB)]
14-06-01	**Trunk Group Routing – Priority Order Number**	Used to set the priority order number 1~4.	0 = Not Specify 1~100 : Trunk Group Number 1001~1100 : 1000 + Route Table Number) Default: Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified).

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign an Automatic Forwarding at Department Group key (58) or a Delayed Forwarding at Department Group key (59) for an extension user.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
16-02-01	**Department Group Assignment for Extensions**	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	Department Groups 1-64 Priority 1-512 Default = All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 512 priority = 512
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-11-17	**Class of Service Options (Hold/ Transfer Service) – Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)**	Turn On (1) or Off (0) the ability of an extension in a Department Group to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 1 for COS 1~15)
24-05-01	**Department Group Transfer Target Setup**	Assign the Speed Dialing number bin to be used as the destination of the Department Group Trunk-to-Trunk Forwarding.	0~1999 (default = 1999)

Trunk-to-Trunk Forwarding – DID (3) Trunk Forwarding Using DID Translation Table

. *Refer to Direct Inward Dialing (DID) for additional DID programming.*

Program Number	Program Name	Description/Comments	Assigned Data
22-11-05	**DID Translation Table Number Conversion – Transfer Destination Number 1**	For each DID Translation Table entry (1-2000), specify the first and second Transfer Destinations if the callers receives a busy or no answer (action defined in Program 22-11-04) . *If the Transfer Destinations are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).*	0 = No Setting 1~100 = Incoming Group 101 = (Not Used) 102 = In-Skin/External Voice Mail or InMail 201~264 = Extension Group 400 = Valid Extension Number 401 = DISA 501~548 = DISA/VRS Message 1000~999 = Speed Number (000~999) (default = 0)
22-11-06	**DID Translation Table Number Conversion – Transfer Destination Number 2**		

Operation

To activate Call Forwarding Off-Premise non-split:

1. At a multiline terminal, press **Speaker**.

   - OR -

   At a single line telephone, lift the handset.

2. Dial the Call Forwarding Service Code.

   - OR -

   At a multiline terminal only, press the Call Forwarding Programmable Function keys (Program 15-07-01, Program 15-07-10 ~Program 15-07-15 or SC 851 Key Code 10~15).

3. Dial **1** (Set).

4. Dial the Trunk Access Code (default: 9) + Number (9+2142622000).

   . *Trunk access codes are 9 (ARS/Trunk Group Routing), 804 + Line Group (1~9, 01~99 or 001~100) or 805 + Line number (e.g., 05 or 005 for line 5).*

   . *Your DND or Call Forwarding (Device) Programmable Function key flashes.*

To cancel Call Forwarding Off-Premise non-split:

1. At a multiline terminal, press **Speaker**.

- OR -

At a single line telephone, lift the handset.

2. Dial the Call Forward Access Code (default not assigned).
3. Dial **0** (Cancel).

To activate Call Forwarding Off-Premise Split:

1. At a multiline terminal, press **Speaker**.

   - OR -

   At a single line telephone, lift the handset.
2. Dial the Call Forwarding Service Code.
3. Dial **1** (Set).
4. Dial **1** (Internal) or **0** (External).
5. Dial Trunk Access Code (default: 9) + number (9 + 2142622000).

   . *Trunk access codes are 9 (ARS/Trunk Group Routing), 704 + Line Group (1~9, 01~99 or 001~100) or **#**9 + Line number (e.g., 05 or 005 for line 5).*

   . *Your DND or Call Forwarding (Device) Programmable Function key flashes.*

To cancel Call Forwarding Off-Premise Split:

1. At the multiline terminal, press **Speaker**.

   - OR -
2. At a single line telephone, lift the handset.
3. Dial the Call Forward Access Code (default not assigned).
4. Dial **0** (Cancel).

   . *If Internal and External are set both are canceled.*

   . *Your DND or Call Forwarding (Device) Programmable Function key flashes.*

Off-Premise Call Forwarding for Door Boxes

. *These operations are performed at the Door Box Ringing Extension only.*

To activate Call Forwarding Off-Premise for a Door Box:

. *This option only works for ISDN PRI or BRI Trunks.*

1. At the multiline terminal, press **Speaker** + dial SC **822**.

   - OR -

   At the multiline terminal only, press Call Forward (Device) key (Program 15-07-01 or SC 851, code 54).

   - OR -

   At the single line telephone, lift the handset + dial **822**.

2. Dial the Door Box number (**1~4**).

3. Dial the Speed Dialing number where the calls should be forwarded.

4. Press **Speaker** (or hang up at the single line telephone) to hang up.

To cancel Call Forwarding Off-Premise for a Door Box:

1. At the multiline terminal, press **Speaker** + dial SC **822**.

   - OR -

   At the multiline terminal only, press Call Forward (Device) key (Program 15-07-01 or SC 851, code 54).

   - OR -

   At the single line telephone, lift the handset + dial **822**.

2. Dial **0** (Cancel).

Trunk-to-Trunk Forwarding

Set the Destination and Forward the Line:

1. Lift the handset.

2. Dial **835**.

3. Dial trunk port number (**001~200**) to be defined.

4. Select the mode (**1~8**) to be defined.

5. Enter the telephone number, which is the destination of the forwarded trunk.

   . *The number is stored in the Speed Dial bin number assigned in Program 24-04-01. This entry overwrites any existing number defined in the bin.*

6. Press **Hold** to accept the entry.

7. Repeat from Step 3 to define another mode entry or press **Speaker** to hang up.

Cancel the Line Forwarding:

1. Lift the handset.
2. Dial **835**.
3. Dial trunk port number (**7 001~200**) to be defined.
4. Select the mode (**1~8**) to be defined.
5. Press the **Exit** key.
6. Press **Speaker** to hang up.

Automatic Trunk-to-Trunk Transfer (Step Transfer) (follows the predefined destination in Program 24-04-01) Set Automatic Trunk Forwarding:

. *The Speed Dial bin must be defined in Program 13-04-01 for the line to forward.*

1. Lift the handset.
2. Dial **833**.
3. Dial trunk port number to be used (**001~200**).
4. Press **Speaker** to hang up.

Cancel Automatic Trunk Forwarding:

1. Lift the handset.
2. Dial **834**.
3. Dial trunk port number to be used (**001~200**).
4. Press **Speaker** to hang up.

Department Group Line Forwarding

Method 1
Set the Destination and Forward the Line:

1. Lift the handset.
2. Dial **704**.
3. Dial the Department Group number (**01~64**) to be defined.
4. Select the time mode (**1~8**) to be defined.
5. Enter the telephone number, which is the destination of the forwarded trunk.

   . *The number is stored in the Speed Dial bin number assigned in Program 24-04-01. This entry overwrites any existing number defined in the bin.*

6. Press **Hold** to accept the entry.
7. Repeat from Step 3 to define another time mode entry or press **Speaker** to hang up.

Cancel the Line Forwarding:

1. Lift the handset.
2. Dial **704**.
3. Dial the Department Group number (**01~64**) to be defined.
4. Select the time mode (**1~8**) to be defined.
5. Press the **Exit** key.
6. Press **Speaker** to hang up.

Method 2 (follows the pre-defined destination in Program 24-05-01)
Set Automatic Trunk Forwarding:

. *The Speed Dial bin must be defined in Program 13-04-01 for the line to forward.*

1. Lift the handset.
2. Dial **702**.
3. Dial the Department Group number (**01~64**) to be defined.
4. Press **Speaker** to hang up.

Cancel Automatic Trunk Forwarding:

1. Lift the handset.
2. Dial **703**.
3. Dial the Department Group number (**01~64**) to be defined.
4. Press **Speaker** to hang up.

Call Forwarding/Do Not Disturb Override

Description

An extension user can override Call Forwarding or Do Not Disturb at another extension. This is helpful, for example, to dispatchers and office managers that always need to get through.

Conditions

None

Default Setting

Disabled

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-01	**Service Code Setup (for Service Access) – Bypass Call**	Customize the Service Code which is to be used for Call Forwarding/DND Override.	MLT, SLT (default = 807)
11-16-06	**Single Digit Service Code Setup – DND/Call Forward Override Bypass**	Customize the 1-digit Service Code used for DND/Call Forward Override.	(default not assigned)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-04	**Class of Service Options (Supplementary Service) – Call Forward/DND Override (Bypass Call)**	Turn On or Off the ability to use Call Forwarding/DND Override.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To override an extension Call Forwarding or Do Not Disturb:

1. Call the forwarded or DND extension.
2. Press the Override key (Program 15-07 or SC 851: 37) or dial **807**.

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Call Monitoring

Description

Call Monitoring allows selected Multiline Terminal Users to monitor another user's conversation without the ability to participate. A programmable audible alert tone can be sent to that station user. Without the audible alert (silent monitor), no indication is provided to either the monitored station or the outside party.

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Call Monitoring with Coaching Ability

Call Monitoring with Coaching Ability allows for the transmit path to be opened to only the monitored station, to provide the Coaching ability for the person that is performing the Call Monitoring. Pressing the MIC key, or dialing Feature + 1 toggles the Coaching ability on and off.

Conditions

- Call Monitoring is allowed for internal calls.
- An extension user cannot Monitor an Intercom call if one of the Intercom callers is using Hands-free Answerback. Both Intercom parties must lift the handset or press **Speaker**.
- An extension user cannot monitor a conference, however an extension programmed for Call Monitor can barge In to a conference.
- With Program 20-13-10 set to 0, a call, which has been barged into, can be placed on hold by the originator of the outside call. Both the outside caller and the extension, which is monitoring the call, are placed on hold.
- The handset and microphone are muted during Call Monitoring.
- Live Record does not work for Call Monitor calls.
- While being monitored, an extension cannot receive Voice Over.
- When a monitored extension places a call on hold, Call Monitor is automatically finished.

- With Program 20-13-10 set to 1, a call which is being Monitored can be placed on park by the originator of the outside call, but only the outside caller is placed in park. The extension which is monitoring the call is dropped.
- When Program 20-13-10 is set to 0 (OFF), coaching is not permitted. When Program 20-13-10 is set to 1 (ON), Program 20-13-45 takes effect.
- When Silent Monitor Mode is used, MIC or Feature + 1 can be used to activate speech path to the internal and external parties.

Default Setting

Disabled.

System Availability

Terminals

All terminals

Required Component(s)

None

Related Features

Barge-In

Conference

Hold

Intercom

Park

Programmable Function Keys

InMail

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-08	**Service Code Setup (for Service Access) – Barge-In**	Determine what the service code should be for an internal party to use the Barge-In feature.	MLT, SLT (default = 810)
11-16-02	**Single Digit Service Code Setup – Barge-In**	Use to customize the one-digit Service Codes used for Barge-In.	(default not assigned)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	Enables the extension Barge-In Mode to be speech mode (0) or Monitor mode (1) (i.e., Barge-In initiator).	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-15	**Class of Service Options (Supplementary Service) – Barge-In, Initiate**	Turns off (0) or on (1) an extension user ability to barge-in on other's calls.	0 = Off 1 = On (default =1 for COS 1~15)
20-13-16	**Class of Service Options (Supplementary Service) – Barge-In, Receive**	In an extension Class of Service, turn On (1) or Off (0) Barge-In at the receiving extension (i.e., Barge-In receive).	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-17	**Class of Service Options (Supplementary Service) – Barge-In Tone/Display (Intrusion Tone)**	In an extension Class of Service, turn On (1) or Off (0) the Barge-In (Intrusion) Tone. If disabled, this also turns off the Barge-In display at the called extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-32	**Class of Service Options (Supplementary Service) – Deny Multiple Barge-Ins**	In an extension Class of Service, allow (1) or deny (0) the extension ability to have multiple users Barge-In to their conversation.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-45	**Class of Service Options (Supplementary Service) – MIC Key Mode While Call Monitoring**	Set per class of service, when in Call Monitoring Mode determines if the monitored parties receives the barge in alert tone when Coaching Mode is enabled.	0 = Enable 1 = Disable (default =0 for COS 1~15)
20-14-11	**Class of Service Options for DISA/E&M – DISA/Tie Trunk Barge-In**	In an extension Class of Service, enable (1) or disable (0) a DISA or tie trunk user from using the Barge-In feature.	0 = Off 1 = On (default = 0 for COS 1~15)
20-18-07	**Service Tone Timers – Intrusion Tone Repeat Time**	After a user Barges In, the system repeats the Barge-In tone after this interval. Normally, you should disable this time by entering 0. (This time also affects any other type of call interruption features, such as Voice Mail Conversation Recording, Voice Over, etc.)	0~64800 (seconds) (default = 0 seconds)
21-01-03	**System Options for Outgoing Calls – Trunk Interdigit Time (External)**	Program how long an extension must wait before using the Barge-In feature can be used on a call (this time expires before a call is put in a talk state). This time also affects Voice Over.	0~64800 (seconds) (default =10 seconds)

Operation

The call must be set up for about 10 seconds before it can be Monitored. Listen for busy/ring or busy tone.

To Call Monitor after calling a busy extension:

1. Call a busy extension.
2. Press the Barge-In key (Program 15-07 or SC 851: 34).

- OR -

The following steps are not available for DISA or Tie Line trunks.

1. Dial the extension number of the busy internal party.
2. Dial the single digit service code or the service code **810**.

To Call Monitor without first calling the busy extension:

1. Press **Speaker** or lift handset.
2. Dial **810** or press the Barge-In key (Program 15-07 or SC 851: 34).
3. Dial a busy extension.

. *If Monitoring is not possible:*

- *the extension user hears a warning tone.*
- *the DISA user is rerouted to the defined ring group.*
- *the Tie Line user hears a busy tone.*

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Call Redirect

Description

Call Redirect allows a multiline terminal user to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call. This can be useful if you are on a call and another rings in to your extension. By pressing the Call Redirect key, the call is transferred, allowing you to continue with your current call.

This feature works with the following calls:

- Normal trunk call
- DID
- DISA
- DIL
- E&M
- ICM

The following calls *cannot* be redirected with the feature:

- ACD
- Transferred
- Department Group (all ring mode)
- Door Box
- Virtual Extension

Conditions

- After pressing the Call Redirect key, the call does not recall to the extension.
- The predefined destination must be an extension number or voice mail pilot number.
- When a call is Redirected to another phone it does not follow the forwarding on that phone.

Default Setting

Enabled

System Availability

Terminals

Any Multiline Terminal

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-11-16	**Class of Service Options (Hold/ Transfer Service) – Call Redirect**	Turn On (1) or Off (0) a multiline terminal user's ability to transfer a call to a predefined destination (such as an operator, voice mail, or another extension) without answering the call.	0 = Off 1 = On (default =0 for COS 1~15)

Operation

To redirect a ringing call:

With an incoming call ringing your extension, press the Call Redirect key (Program 15-07 or SC 851: 49 + Destination Extension Number) without lifting the handset.

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Call Waiting/Camp-On

Description

With Call Waiting, an extension user may call a busy extension and wait in line (Camp-On) without hanging up. When the user Camps-On, the system signals the busy extension with two beeps indicating the waiting call. The call goes through when the busy extension becomes free. Call Waiting helps busy extension users know when they have additional waiting calls. It also lets callers wait in queue for a busy extension without being forgotten.

Conditions

- If an extension user Camps-On and then hangs up, the system converts the Camp-On to a callback.
- Off-Hook Signaling gives an extension the ability to block a caller from dialing 704 to Camp-On and/or DID callers from automatically camping on.
- Function keys simplify Call Waiting/Camp-On operation.
- An extension user may be able to Transfer a call to a busy extension.
- Trunk Queuing lets an extension user camp-on to a trunk.
- Call Queuing must also be disabled to disable Call Waiting.

Default Setting

Enabled

System Availability

Terminals

Multiline Terminal and Single Line Telephone

Required Component(s)

None

Related Features

Callback

Off-Hook Signaling

Programmable Function Keys

Transfer

Trunk Queuing/Camp On

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-23	**Service Code Setup (for Setup/ Entry Operation) – Second Call for DID/DISA/DIL**	This service code enables Second Call to each extension when Program 20-09-01 (Second Call) is set to 0 (disable).	MLT (default = 779)
11-12-04	**Service Code Setup (for Service Access) – Set Camp-On**	Customize the Service Code, which is to be used for setting Camp-On.	MLT, SLT (default = 850)
11-12-05	**Service Code Setup (for Service Access) – Cancel Camp-On**	Customize the Service Code, which is to be used for cancelling Camp-On.	MLT, SLT (default = 870)
11-12-47	**Service Code Setup (for Service Access) – Call Waiting Answer/ Split Answer**	If required, use this program to change the code users dial to Split while on a call.	SLT (default = 894)
11-16-05	**Single Digit Service Code Setup – Camp-On**	Customize the 1-digit Service Code used for setting Camp-On.	(default = N/A)
15-02-06	**Multiline Telephone Basic Data Setup – Hold Key Operating Mode**	Use this option to set the function of the Multiline Hold key. Hold can activate normal Hold or Exclusive Hold.	0 = Normal (Common) 1 = Exclusive Hold 2 = Park Hold (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-02-12	**Multiline Telephone Basic Data Setup – Off-Hook Ringing**	Use this option to set the telephone Off-Hook signaling.	0 = Muted Off-Hook Ringing 1 = No Off-Hook Ringing 2 = Not Used 3 = Beep in Speaker (SP) 4 = Beep in Handset (HS) 5 = Speaker & Handset Beep (default =0)
15-07-01	**Programmable Function Keys**	Use to assign a function for Camp-On (code 35). This key is also the Callback key.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-01-08	**System Options – Trunk Queuing Callback Time**	Set the Trunk Queuing callback time. A Trunk Queuing Callback rings an extension for this interval.	0~64800 (seconds) (default = 15 seconds)
20-01-09	**System Options – Callback/ Trunk Queuing Cancel Time**	The system cancels an extension Callback or Trunk Queueing request after this interval.	0~64800 (seconds) (default = 64800 seconds)
20-03-01	**System Options for Single Line Telephones – SLT Call Waiting for Answer Mode**	For a busy single line (500/2500 type) telephone, set the mode used to answer a camped-on trunk call. For ESL sets, enabling this option (1) allows the user to dial Service Code for Voice Mail Conversation Record.	0 = Hookflash (Hooking) 1 = Hookflash + Service Code 894 (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DDI/ DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook Signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive off-hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-35	**Class of Service Options (Supplementary Service) – Block Camp-On**	Use this option to turn On (1) or Off (0) extension ability to block callers from dialing **#** to camp-on.	0 = Off 1 = On (default = 0 for COS 1~15)
20-18-06	**Service Tone Timers – Interval of Call Waiting Tone**	Use this option to set the interval between call waiting tones. This timer also sets the interval between Off-Hook signaling alerts.	0~64800 (seconds) (default = 10 seconds)

Operation

To Camp-On a busy extension:

1. Call the busy extension.
2. Dial **850** or press the Camp-On key (Program 15-07 or SC 851: 35).
3. Do not hang up.

. *To camp-on to a trunk, refer to* *Trunk Queuing/Camp-On on page 1-911*.

To cancel a Camp-On request:

1. Hang up.
2. At a multiline terminal, press **Speaker** and dial **870**.

   - OR -

   At a multiline terminal, press the Camp-On key (Program 15-07 or SC 851: 35).

   - OR -

   At the single line telephone, lift the handset and dial **870**.

To Split (answer a waiting call) at a single line telephone:

. *Listen for Call Waiting Tones.*

1. Hookflash and dial **894** to repeatedly split between the two calls.

   . *The operation depends on the setting in Program 20-03-01.*

   . *This operation is valid only before the caller performs the camp-on operation (refer To Camp-0n a busy extension – step 2).*

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Callback

Description

When an extension user calls a co-worker that does not answer or is busy, they can leave a Callback request for a return call. The user does not have to repeatedly call the unanswered extension back, hoping to find it idle.

The system processes Callback requests as follows:

1. Caller at extension A leaves a Callback at extension B.

   . *Caller can place or answer additional calls in the meantime.*

2. When extension B becomes idle, the system rings extension A. This is the Callback ring.

3. Once caller A answers the Callback ring, the system rings (formerly busy or unanswered) extension B.

   . *If caller A does not answer the Callback ring, the system cancels the Callback.*

4. As soon as caller B answers, the system sets up an Intercom call between A and B.

Callback Automatic Answer determines how an extension user answers the Callback ring. When Callback Automatic Answer is enabled, a user answers the Callback ring when they lift the handset. When Callback Automatic Answer is disabled, the user must press the ringing line appearance to answer the Callback ring.

Conditions

- An extension can leave only one Callback request at a time.
- If an extension user initiates a Callback but does not hang up, their extension Camps-On to the busy extension.
- Function Keys simplify Callback operation.

Default Setting

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Call Waiting/Camp-On)

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-05	**Service Code Setup (for Service Access) – Cancel Camp-On**	If required, redefine the service code used cancel Camp-On.	MLT, SLT (default = 870)
11-12-44	**Service Code Setup (for Service Access) – Callback Test for SLT**	If required, redefine the service code used for SLT Callback Test.	SLT (default = 899)
11-16-05	**Single Digit Service Code Setup – Camp-On**	If required, redefine the service code used to set Camp-On.	(default = N/A)
15-02-11	**Multiline Telephone Basic Data Setup – Callback Automatic Answer**	Enable (1) or disable (0) Callback Automatic Answer.	0 = Off 1 = On (default = 1)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-01-07	**System Options – Callback Ring Duration Time**	Set the duration of the Callback ring.	0~64800 (seconds) (default = 15 seconds)
20-01-09	**System Options – Callback/ Trunk Queuing Cancel Time**	The system cancels Callback and Trunk Queuing requests after this interval.	0~64800 (seconds) (default = 64800 seconds)

Operation

To place a Callback:

1. Call unavailable (busy or unanswered) extension.
2. Dial **850** or press the Callback key (Program 15-07 or SC 851: 35).
3. Hang up.
4. Lift the handset when busy extension calls you back.

. *If the unavailable extension was unanswered (not busy), the Callback goes through after your co-worker uses their telephone for the first time.*

. *If you have Callback Automatic Answer, you automatically place a call to the formerly busy extension when you lift the handset. If you do not have Callback Automatic Answer, you must press the ringing line appearance to place the call.*

To cancel a Callback:

1. At the multiline terminal, press **Speaker** and Dial **870**.

   - OR -

   At the multiline terminal, press Camp-On key (Program 15-07 or SC 851: 35).

   - OR -

   At the single line telephone, lift the handset and dial **870**.

To test Callback at a single line telephone:

1. Lift the handset.
2. Dial **899**.
3. Hang up.
4. When the telephone rings, lift the handset.

   . *You hear the Hold tone.*

5. Hang up.

Caller ID Call Return

Description

The Caller ID Call Return feature allows the voice mail system to use Caller ID information captured with the message to call and connect the person that left the message with the voice mail user that is checking messages.

Conditions

- A caller using a telephone without Softkeys, calling from outside the system, or from a remote system is prompted to hear Caller ID information and return a call.
- Return Call is available for subscriber messages and public messages.
- Return Call is accessible to a subscriber during and after message playback.
- Return Call is available for new and old messages.
- Return Call is accessible to a subscriber using Softkeys in Softkey mode or using DTMF in voice conversation Mode.
- When Centralized Voice Mail is used, the remote voice mail user gets only Caller ID number when voice mail answers incoming CO calls and performs an Await-Answer transfer to the remote user. A Call that forwards to voice mail from the remote system does not have Caller ID information.
- Live Record is not available when using Return Call.
- Use Program 14-01-22 Caller ID to Voice Mail to enable or disable on a per trunk basis the ability to send the Caller ID digits to voice mail.
- After the call is ended by either party, the voice mail user is disconnected.

Default Setting

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

- InMail

Related Features

InMail

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-22	**Basic Trunk Data Setup – Caller ID to Voice Mail**	Enable (1) or disable (0) the system ability to send the Caller ID digits to voice mail.	Trunks 1~200 0 = Disable 1 = Enable (default = 0)
14-02-10	**Analog Trunk Data Setup – Caller ID**	Enable or disable a trunk to receive Caller ID information.	Trunks 1~200 0 = Disable 1 = Enable (default = 0)
15-02-04	**Multiline Telephone Basic Data Setup – Redial (Speed Dial) Control**	Use this option to control the function of the extension Redial key when used with Speed Dialing. The Redial key can access either the Common or Group Speed Dialing numbers.	0 = Common and Individual Speed Dialing 1 = Group Speed Dialing (default = 0)

Operation

None

Caller ID

Description

Caller ID allows a display terminal to show an incoming caller's telephone number (called the Directory Number or DN) and optional name. The Caller ID information is available as pre-answer display. With the pre-answer display, the user previews the caller's number before picking up the ringing line.

. *On the CD-CP00 for Caller ID (also used for DTMF receivers and Call Progress Tone Detection) 32 resources are available. The PZ-BS10 provides an additional 64 resources.*

Second Call Display

While busy on a call, the telephone display can show the identity of an incoming trunk or Intercom call. For incoming trunk calls, the display shows the Caller ID or the trunk name if Caller ID are not installed. For incoming Intercom calls, the display shows the calling extension name.

Caller ID supports the Telco Called Number Identification (CNI) and Called Number Delivery (CND)

service, when available.

The telephone display can show up to 12 Caller ID digits (for non-ACD calls).

Once installed and programmed, Caller ID is enabled for all trunk calls, including:

- Ring Group calls
- Calls transferred from another extension
- Calls transferred from the VRS
- Calls transferred from Voice Mail (unscreened)
- Direct Inward Lines (DILs)

Caller ID temporarily stores 50 calls (total of abandoned and answered/unanswered). New calls replace old calls when the buffer fills.

Temporary Memory

An unanswered call causes the Call History key (Program 15-07 or SC 851: 08) to flash, indicating a new call was placed in the temporary memory. If enabled in programming, the telephone display shows CHECK LIST.

This Caller ID data from the temporary memory can be saved in either Speed Dial bins or in One-Touch keys making them available for placing future calls.

Outputting Caller ID Data

The system includes the Caller ID data on the SMDR report. The report provides the incoming call DN in the DIALED NUMBER field. The CLASS field shows PIN (just like all other incoming calls).

Caller ID data can also output to a PC or other type of computer through the 1st Party TAPI driver. This allows for off-line database lookups. In a customer service department, for example, the computer could search for a caller's records and display their account status even before a customer service representative picked up the telephone.

Display Reason for No Caller ID Information

With Caller ID enabled, the system provides information for analog calls that do not detect the Caller ID information. If the Caller ID information is restricted, the telephone display shows PRIVATE. If the system cannot provide Caller ID information because Telco information is not detected, the display shows NO CALLER INFO.

Option to Enable Caller ID Name for SLT

System programming provides an option for single line telephones to display Caller ID.

Caller ID Sender Queuing Added

The UNIVERGE SV8100 system can provide Caller ID (calling party number) to a single line telephone with a display.

The system can queue incoming calls to the single line telephone if the system Caller ID sender resources are busy. Refer to Program 20-19-05 in the *UNIVERGE SV8100 Programming Manual*.

If the single line telephone user lifts their handset while an incoming call is waiting in queue, they hear silence (no dial tone) and cannot dial out. When the single line telephone user goes back on-hook, the system immediately sends the queued call to the single line telephone without Caller ID.

Option Available for FSK or DTMF Type for Single Line Telephone

An option (Program 15-03-11) is available for the Caller ID which allows you to select either FSK or DTMF as the Caller ID type to be received by a single line telephone.

Option Available for FSK or DTMF Type from Analog Trunk

An option (Program 14-02-16) is available for the Caller ID which allows you to select the type of Caller ID signal from an analog trunk – FSK or DTMF.

Conditions

- To have pre-answer Caller ID from the voice mail, the call must be an unscreened transfer.
- Caller ID is provided by the CD-CP00. The PZ-BS10 blade, which plugs into the chassis, can provide additional resources for Caller ID if needed.
- Caller ID Name can display up to 12 characters.
- Caller ID Number can display up to 11 characters.
- A Caller ID Number with more than 12 digits follows Program 20-19-01 (first 10 or the last 10 digits).

- Caller ID information can be stored in Speed Dialing or One-Touch bins.
- Caller ID can be displayed for incoming calls and transferred calls.
- ARS can block outgoing Caller ID information on a call-by-call basis. To do this, insert the Caller ID block code (e.g., .141) in the ARS Dial Treatments.
- Trunks with Privacy Release enabled display Caller ID until the call is answered. To view it after the call has been picked up, press the line key, which sets the call to private mode. To keep the call on Privacy Release, press the Help + Exit keys.
- An extension user can display the Caller ID information for a call in Park if Automatic Handsfree in Program 15-02-08 is set to 0 (Preselect).
- An extension user can display the Caller ID information for multiple incoming calls without answering the call by pressing the line key if Automatic Handsfree in Program 15-02-08 is set to 0 (Pre-select).
- Caller ID information outputs on the SMDR report.
- The system can send Caller ID digits to the voice mail if allowed in Program 14-02-10.
- When there are more than 20 characters set in Program 20-20 : Message Setup for Non-Caller ID Data, either the first or last character is missing (based on the entry in Program 20-19-01).
- If Program 20-09-06: Class of Service Options (Incoming Call Service): Incoming Time Display is set to 1 (On), the first line displays the time and date.
- When you shut down the system, incoming history data is cleared. But you can back up the history data by pressing **Speaker + # * # 9**.
- Program 15-07-01 button (63) when enabled, removes the CPN from the setup message when making an outbound ISDN call, this is a toggle enable/disable button and can be used on a Call-by-Call basis. Programs 14-01-20, 14-01-21 and 20-08-15 are used for analog trunks only and can only be set on a per trunk/Class of Service basis.
- SLT users cannot block an incoming call based on the incoming Caller ID information on a station-by-station basis.

Default Setting

Disabled

System Availability

Terminals

All Multiline Terminals with a display and Single Line Telephones equipped to receive Caller ID

Required Component(s)

- CD-4COTA, PZ-4COTE
- CD-2BRIA, PZ-2BRIA
- CD-PRTA

Related Features

Automatic Route Selection

Caller ID Call Return

Conference, Voice Call/Privacy Release

Park

Speed Dial – System/Group/Station

Station Message Detail Recording

InMail

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-02-04	**Location Setup – Area Code**	Enter the local area code.	(default not assigned)
10-02-05	**Location Setup – Trunk Access Code**	Enter the trunk access code digits required to place an outgoing call.	Dial up to eight digits 0~9, *, **#** (default not assigned)
10-09-01	**DTMF and Dial Tone Circuit Setup**	Allocate the circuits (1~16 or 1~64) on the CD-CP00 for either DTMF receiving or dial tone detection.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
11-15-03	**Service Code Setup, Administrative (for Special Access) – Backup Data Save**	This service code is used for back up the programmed data on the SRAM and Call History to the Flash ROM. While saving the database, it may cause system lock up.	MLT **# * #** 9
14-01-20	**Basic Trunk Data Setup – Block Outgoing Caller ID**	Enable (1) or disable (0) the system from automatically blocking outgoing Caller ID information when a user places a call.If allowed (i.e. block, enabled), the system automatically inserts the Caller ID block code (defined in 14-01-21) before the user dialed digits. If prevented (i.e., block disabled), the system outdials the call just as it was dialed by the user.	Trunks 1~200 0 = Disable 1 = Enable (default = 0)
14-01-21	**Basic Trunk Data Setup – Caller ID Block Code**	Enter the code, up to eight digits, that should be used as the Caller ID Block Code. This code is automatically inserted before dialed digits if Program 14-01-20 is set to '1'.	Trunks 1~200 Dial (up to eight digits)

Program Number	Program Name	Description/Comments	Assigned Data
14-01-22	**Basic Trunk Data Setup – Caller ID to Voice Mail**	Enable (1) or disable (0) the system ability to send the Caller ID digits to voice mail.	Trunks 1~200 0 = Disable 1 = Enable (default = 0)
14-02-10	**Analog Trunk Data Setup – Caller ID**	Enable or disable a trunk to receive Caller ID information.	Trunks 1~200 0 = Disable 1 = Enable (default = 0)
15-02-08	**Multiline Telephone Basic Data Setup – Automatic Handsfree**	Use this option to set whether pressing a key accesses a One-Touch Key (1) or if it preselects the key (0).	0 = Preselect 1 = One-Touch (Automatic Handsfree) (default = 1)
15-02-40	**Multiline Telephone Basic Data Setup – Additional Dial for Caller ID Call Return**	Enter the digits to be dialed in front of the Caller ID when using Caller ID Call Return.	Up to four digits (0, 1~9, **#**, *) (default not assigned)
15-03-09	**Single Line Telephone Basic Data Setup – Caller ID Function – For External Module**	Enable (1) or disable (0) the Caller ID FSK signal for an external Caller ID module or a 3rd party vendor telephone with Caller ID display. If voice mail is used, this setting must be disabled or the system integration codes for disconnect are incorrect. For Caller ID Sender Queuing, set this option to “1”.	0 = Disable 1 = Enable (default = 0)
15-03-10	**Single Line Telephone Basic Data Setup – Caller ID Name**	Determine whether or not a single line telephone extension user’s telephone should display the Caller ID name.	0 = Disable 1 = Enable (default = 1)
15-03-11	**Single Line Telephone Basic Data Setup – Caller ID Type**	Determine whether the Caller ID type is FSK or DTMF.	0 = FSK 1 = DTMF (default = 0)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-02-08	**System Options for Multiline Telephones – LCD Display Holding Time**	This time determines how long a user display shows Caller ID for a second incoming call.	0~64800 (seconds) (default = five seconds)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-15	**Class of Service Options (Outgoing Call Service) – Block Outgoing Caller ID**	Turn Off (0) or On (1) a user Class of Service from automatically blocking outgoing Caller ID information when a call is placed. If block is enabled, the system automatically inserts the Caller ID block code (defined in Program 14-01-21) before the user dialed digits (this requires Program 14-02-10 to be enabled). If block is disabled, the system outdials the call just as it was dialed by the user.	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-02	**Class of Service Options (Incoming Call Service) – Caller ID Display**	Turns Off (0) or On (1) the Caller ID display at an extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-04	**Class of Service Options (Incoming Call Service) – Notification for Incoming Call List Existence**	Determine whether or not the CHECK LIST message is displayed to indicate a missed call.	0 = Off 1 = On (default =1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive off-hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-19-01	**System Options for Caller ID – Caller ID Displaying Format (If displaying digits are more than 12 digits)**	Determine whether the first 10 digits (0) or last 10 digits (1) should be displayed when Caller ID exceeds 12 digits.	0 = First 10 digits (Upper) 1 = Last 10 digits (Lower) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
20-19-05	**System ID Options for Caller ID – Caller ID Sender Queuing Time (Sender Wait)**	With the Caller ID Sender Queuing option, determine how long an incoming call will wait in queue for a DSP resource to become available. If a resource becomes available during this time, the call immediately rings the single line telephone with Caller ID. If the time expires before a resource becomes available, the system rings the single line telephone without Caller ID (until the queuing time expires, the single line telephone does not ring). If the queuing timer is set to "0", the system does not queue the incoming call.	0~64800 (seconds) (default = 0 seconds)
20-20-01	**Message Setup for Non-Caller ID Data – Private Call**	Enter the text to be displayed for Caller ID when a user receives a call which is classified as a private call.	24 Alphanumeric Characters (default = UNAVAILABLE INFO)
20-20-02	**Message Setup for Non-Caller ID Data – Call from Out of Service Area**	Enter the text to be displayed for Caller ID when a user receives a call which is classified as an out-of-service area call.	24 Alphanumeric Characters (default = OUT-OF-STATE)
20-20-03	**Message Setup for Non-Caller ID Data – Call Information with Error**	Enter the text to be displayed for Caller ID when a user receives a call which is classified as a call with a CID error.	24 Alphanumeric Characters (default = NO CALLER INFO)
90-03-01	**Save Data**	Use to save the programmed data on the SRAM and Flash ROM to the 16MB/32MB ATA removable Compact Flash memory card. Also, used to save stored Caller ID if permanently saved with service code #*#9 (11-15-03).	Dial **1** + press **Transfer** (Press **Transfer** to cancel.)
90-04-01	**Load Data**	Use to load the system data from the inserted Compact Flash Memory to the SRAM and Flash ROM in the system. Also, used to load stored Caller ID.	Dial **1** + press **Transfer** (Press **Transfer** to cancel.)

Operation

Storing a Number

To store a Caller ID number in an Speed Dial bin:

1. With a multiline terminal in an idle condition the display shows:

```
    1-01 FRI  09:00AM
301                STA 301
 LIST   DIR   ICM   PROG
```

2. Press the **LIST** Softkey. The display shows:

```
LIST MENU

Redial  CID
```

3. Press the **CID** Softkey (Caller ID). The display shows:

```
##:          xxxxxxxxxxxxx
             mm-dd  hh:mm
↑    ↓       Store    DEL
```

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
↑ = Preview List
↓ = Next List
Store = Store in List
DEL = Delete from List

4. Press the **STORE** Softkey. The display shows:

```
##:          xxxxxxxxxxxxx
             mm-dd  hh:mm
STA   SYS
```

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
STA = Store in Station Speed Dial bin.
SYS - Store in System Speed Dial bin.

5. Press the **STA** or **SYS** Softkey. The display shows:

```
Store to SYS: COMMON
ENTER BIN
```

6. Dial the Speed Dial bin in which the number is to be stored. If you press **Hold**, the next available Speed Dial bin will be used. The display shows:

```
SYS XXXX:
          xxxxxxxxxxxxx
```

. *If all Speed Dial bins are used, the display shows "TABLE IS FULL".*

7. Press **HOLD**. The display shows:

```
SYS XXXX
          -
```

8. Enter the name to be associated with the stored number.

Table 1-5 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } Æ ¨ Á À Â Ã Ç É Ê ì ó
2	Enter characters: **A-C, a-c, 2**.
3	Enter characters: **D-F, d-f, 3**.
4	Enter characters: **G-I, g-i, 4**.
5	Enter characters: **J-L, j-l, 5**.
6	Enter characters: **M-O, m-o, 6**.
7	Enter characters: **P-S, p-s, 7**.
8	Enter characters: **T-V, t-v, 8**.
9	Enter characters: **W-Z, w-z, 9**.
0	Enter characters: 0 ! " **#** $ % & ' ( ) ô Õ ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? **B E σ S** ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed - ex: TOM). Pressing **#** again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
HOLD	Clear all the entries from the point of the flashing cursor and to the right.

9. Press **Transfer**. The display shows:

```
SET SYS
```

10. Press **Speaker**.

. *The telephone returns to idle.*

To store a Caller ID number in a One-Touch key:

1. With a telephone in an idle condition the display shows:

```
    1-01 FRI  09:00AM
301                STA 301
 LIST   DIR   ICM   PROG
```

2. Press the **LIST** Softkey. The display shows:

```
LIST|MENU

Redial  CID
```

3. Press the **CID** Softkey (Caller ID). The display shows:

```
##:          xxxxxxxxxxxxx
             mm-dd  hh:mm
↑    ↓       Store    DEL
```

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
↑ = Preview List
↓ = Next List
Store = Store in List
DEL = Delete from List

4. Press the **STORE** Softkey. The display shows:

```
##:          xxxxxxxxxxxxx
             mm-dd  hh:mm
STA  SYS
```

= List Number
xx = Caller ID number
mm-dd hh:mm = incoming date and time
STA = Store in Station Speed Dial bin.
SYS = Store in System Speed Dial bin.

5. Press the **STA** Softkey. The display shows:

```
Store to ONE-TOUCH
ENTER BIN
```

6. Press the **One-Touch** key in which the number is to be stored or dial **1~9**, **0**. If you press **Hold**, the next available One-Touch key will be used. The display shows:

Key ##:
xxxxxxxxxxxxx

. *If all One-Touch keys are used, the display shows "TABLE IS FULL".*

7. Press **Hold**. The display shows:

KEY ##
-

8. Enter the name to be associated with the stored number. Refer to Table 1-5 Keys for Entering Names on page 1-210.

9. Press **Hold**. The display shows:

KEY PROG ONE TOUCH

10. Press **Speaker**.

. *The telephone returns to an idle condition.*

Temporary Memory

An unanswered call causes the Call History key (Program 15-07 or SC 851: 08) to flash, indicating a new call was placed in the temporary memory. If enabled in programming, the telephone display shows CHECK LIST.

1. Press the **Call History** key (Program 15-07 or SC 851: 08) or press the **LIST** Softkey and CID.

. *The last addition to the list is displayed.*

2. Press the **ARROW DOWN** Softkey to scroll through the list of numbers in memory.

3. Press the **DEL** Softkey to delete the entry and scroll to the next entry.

4. The **Call History** key remains on as long as entries remain in memory.

5. To place a call back to a number in the temporary memory list, with the number to be dialed displayed, press a line key or **Speaker**. (Refer to Table 1-5 Keys for Entering Names on page 1-210.)

. *The outgoing call is placed.*

To display Caller ID for a call in Park:

. *Program 15-02-08 is set to 0 (preselect) for this feature.*

1. *With Program 15-02-08 set to 0 (preselect)* and a call in park, press the **PARK** key. (Program 15-07 or SC 852: *04.

   With Program 15-02-08 set to 1 (One-Touch) and a call in park, press **RECALL** then the **PARK** key (Program 15-07 or SC 852 *04).

Checking your Answered/Unanswered Caller ID Calls

To review the last 50 outside calls your extension received:

1. At a display multiline terminal, press the **LIST** Softkey.
2. Press **CID**.

   . *The first row of your display shows the Caller ID number. If there is an "*" next to the call record number in the left-hand corner, this indicates that it is a call you missed (unanswered). The second row shows the date and time of the call.*

   . *Press the up and down softkeys to see the list of calls available in the buffer.*
3. If the Caller ID includes a name, you can press the **HELP** key to view the number of the caller.
4. To call the displayed number, press a **line Key**.

   - OR -

   To erase the displayed number without returning the call, press the **DEL** Softkey.
5. Press **Speaker** to hang up.

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Central Office Calls, Answering

Description

The system provides flexible routing of incoming CO (trunks) calls to meet the exact site requirements. This lets trunk calls ring and be answered at any combination of system extensions. A maximum of 200 trunks are available. For additional information on making trunks ring, refer to Ring Groups on page 1-731.

Delayed Ringing

Extensions in a Ring Group can have delayed ringing for trunks. If the trunk is not answered at its original destination, it rings the DIL No Answer Ring Group (this ring group applies to DIL or non-DIL trunks). This could help a secretary that covers calls for their boss. If the boss does not answer the call, it rings the secretary's telephone after a programmable interval.

Universal Answer

Universal Answer allows an employee to answer a call by going to any multiline terminal and dialing a unique Universal Answer code. The employee does not have to know the trunk number or dial any other codes to pick up the ringing trunk. You normally set up Universal Answer along with Universal Night Answer (refer to Night Service on page 1-639). When a Universal Night Answer call rings the External Paging, an employee can answer the call from the first available telephone. You might also want to use Universal Answer in a noisy warehouse or machine shop where the volume of normal telephone ringing is not adequate. After hearing the ringing over the Paging, an employee can then easily pick up the call from a shop telephone.

The Automatic Off-Hook Answer of Universal Answer Call options (Program 20-10-07) determines whether or not the extension has the Auto Answer feature for ringing calls. This option allows a user to simply lift the handset to answer a ringing call; dialing the service code is not necessary.

Additional Trunk Ring Tones

Various ring tone patterns and melodies for incoming calls are available (Program 22-03-11); Ring Tone Patterns 1~4 and Melodies 1~5.

Sidetone Volume Setup

This option allows system programming for the multiline terminal side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

Conditions

- The incoming ring group assignment programmed in Program 41-03-01 overrides the setting in Program 22-05-01.
- Ringing calls can be picked up regardless of access map programming.

- An extension user can answer an outside call just by lifting the handset.
- Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period. Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.
- Line keys simplify answering outside calls.
- If the Absent text message was set by the originating extension, the destination extension displays the assigned text message instead of the Reason for Transfer message.
- If an extension is assigned to a Trunk Access Map that has no access for a trunk, the extension can still retrieve parked calls on that trunk. The extension can also Group Call Pickup and Direct Call Pickup calls ringing another extension on that trunk.

Default Setting

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

Any Trunk ETU (i.e., CD-4COTA, CD-2BRIA, CD-PRTA, etc.)

Related Features

Automatic Call Distribution (ACD)

Call Forwarding

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Direct Inward System Access (DISA)

Directed Call Pickup

Do Not Disturb

Group Call Pickup

ISDN Compatibility

Line Preference

Long Conversation Cutoff

Night Service

Programmable Function Keys

Selectable Display Messaging

Warning Tone for Long Conversation

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-XX	**ETU Setup**	Use program 10-03-XX to setup and confirm the basic configuration data for each blade. This program represents different data depending on the blade installed in the slot. Please refer the SV8100 Programming Manual for a more detailed description of this program.	The assigned data varies depending on the blade installed in the slot. Please refer to the SV8100 Programming Manual for a more detailed description of the 10-03-XX programs.
11-11-13	**Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for Multiline Terminal**	Select the service code which can be used at an extension to change the displayed language on a multiline terminal display.	MLT (default = 778)
11-12-30	**Service Code Setup (for Service Access) – Specified Trunk Answer**	If required, redefine the service code used to answer a specific trunk which is either ringing or on hold.	MLT, SLT (default = 772)
11-12-43	**Service Code Setup (for Service Access) – Universal Answer**	If required, redefine the service code used for Universal Answer.	MLT, SLT (default = 872)
14-01-02	**Basic Trunk Data Setup – Transmit Level**	Customize the transmit and receive levels of the CODEC Gain Types for each trunk.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-03	**Basic Trunk Data Setup – Receive Level**	Customize the transmit and receive levels of the CODEC Gain Types for each trunk.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-02-02	**Analog Trunk Data Setup – Ring Detect Type**	This option sets Extended Ring Detect or Immediate Ring Detect for the trunk. For T1 loop/ground start trunks, this option must be set to 1 for the trunks to ring and light correctly.	Trunks 1~200 0 = Normal/delayed 1 = Immediate Ringing (default = 0)
14-05-01	**Trunk Group – Trunk Group Number**	Assign trunks to trunk groups then go to Program 14-06-01 below to set up Trunk Group Routing.	Trunks 1-200 Trunk Groups 1-100 Default = Trunks 1-200 assigned to trunk group 1 with priorities equal to the trunk number. Trunk 1 = Priority 1 Trunk 200 = Priority 200.

Program Number	Program Name	Description/Comments	Assigned Data
14-06-01	**Trunk Group Routing – Priority Order Number**	Used to set the priority order number 1~4.	0 = Not Specify 1~100 : Trunk Group Number 1001~1100 : 1000 + Route Table Number Default: Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified).
14-07-01	**Trunk Access Map Setup**	Set up the Trunk Access Maps. This sets the access options for trunks. Ring Group programming overrides Access Map programming.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2-200 = Trunk Ports 1~200 assigned with option 0 access (Nc access).
15-01-05	**Basic Extension Data Setup – Restriction for Outgoing Disable on Incoming Line**	Enable or disable supervised dial detection for an extension.	0 = No 1 = Yes (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-02-01	**Multiline Telephone Basic Data Setup – Display Language Selection** (To select options 8~10, press either 8 or Recall, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	Use to define the display language for Multiline terminals. (To select options 8~10, press either 8 or Recall, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	0 = Japanese 1 = English 2 = German 3 = French 4 = Italian 5 = Spanish 6 = Dutch 7 = Portuguese 8 = Norwegian 9 = Danish 10 = Swedish 11 = Turkish 12 = Latin American Spanish 13 = Romanian 14 = Polish (default = 1)
15-02-02	**Multiline Telephone Basic Data Setup – Trunk Ring Tone**	Use this option to set the tone (pitch) of the incoming trunk ring for the extension port you are programming.	1 = High 2 = Medium 3 = Low 4 = Ring Tone 1 5 = Ring Tone 2 6 = Ring Tone 3 7 = Ring Tone 4 8 = Ring Tone 5 (default = 2)
15-02-22	**Multiline Telephone Basic Data Setup – Multiple Incoming From Intercom and Trunk**	When this option is set to 0 (disabled), incoming calls to an extension indicate on any Hotline key for that extension as solid (busy). When this option is set to 1 (enabled), lighting is determined by the setting of Program 22-01-01 Incoming Call Priority. If set to trunk priority (1), the Hotline key lights solid when a trunk call rings in. If set to intercom priority (0), the Hotline key does not light for incoming trunk calls, but lights solid for intercom calls.	0 = Disable 1 = Enable (default = 1)
15-03-03	**Single Line Telephone Basic Data Setup – Terminal Type**	Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-06-01	**Trunk Access Map for Extensions**	Assign Trunk Access Maps to extensions.	Trunks 1~200 (default = 1)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-13-01	**Loop Keys - Outgoing Option**	Assign trunk groups for outgoing loop keys (0=ARS, Trunk Groups 1-100). Selecting “0” for ARS should only be used when ARS is enabled in Program 26-01-01 or it could cause the loop key to lock up.	0 - 100 (0 = Assigns the Loop Key to all trunk groups, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-48)
15-13-02	**Loop Keys - Incoming Option**	Assign trunk groups for incoming loop keys	0 - 100 (0 = Assigns the Loop Key to all trunk groups, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-48)
20-02-09	**System Options for Multiline Telephones – Disconnect Supervision**	Use this option to enable (1) or disable (0) disconnect supervision for the system trunks.	0 = Disable 1 = Enable (default = 1)
20-02-15	**System Options for Multiline Telephones – Caller ID Display Mode**	Use to define the Caller ID display mode for multiline terminals.	0 = Name and Number (Both) 1 = Name 2 = Number (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-10-07	**Class of Service Options (Answer Service) – Automatic Off-Hook Answer**	Turns Off (0) or On (1) an extension to use Universal Auto Answer (no service code required).	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) the extension ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)
21-01-15	**System Options for Outgoing Calls – Outgoing Disable on Incoming Line (Toll Restriction)**	Enable (1) or disable (0) the Outgoing Disable on Incoming Line feature.	0 = Disable 1 = Enable (default = 0)
21-01-16	**System Options for Outgoing Calls – Supervise Dial Detection Timer**	With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver.	0~64800 (seconds) (default = 20 seconds)
21-01-17	**System Options for Outgoing Calls – Restriction Digit in Outgoing Disable on Incoming Line**	With the Outgoing Disable on Incoming Line feature, determine the number of digits (0~9) to be dialed before the call should be disconnected.	Digits 0~9 (default = 4)
22-01-01	**System Options for Incoming Calls – Incoming Call Priority**	Use this option to determine if Intercom calls or trunk calls have answer priority when both are ringing simultaneously.	0 = Intercom call priority 1 = Trunk call priority (default = 1)
22-01-02	**System Options for Incoming Calls – Incoming Call Ring No Answer Alarm**	Enable (1) or disable (0) the Incoming Call RNA Alarm. If enabled, the ring cadence will change for a call that rings longer than the interval set in Program 22-01-03.	0 = Disable 1 = Enable (default = 0)
22-01-03	**System Options for Incoming Calls – Ring No Answer Alarm Time**	Set the Ring No Answer Alarm interval. If a trunk rings a multiline terminal longer than this interval, the system changes the ring cadence.	0~64800 (seconds) (default = 60 seconds)
22-01-04	**System Options for Incoming Calls – DIL No Answer Recall Time**	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0~64800 (seconds) (default = 0 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup**	Use this option to set the feature type for the trunk you are programming.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-03-01	**Trunk Ring Tone Range – Ring Tone Pattern**	Assign Ring Tone Ranges to trunks. Trunks ring extensions according to the Ring Tone Range selected in Program 22-03-0 and the settings made with either Service Code 720 or Program 15-02-02.	0~8 (Ring Tone Pattern 1~4) (Melody 1~ Melody 5) (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to ring groups.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	To have the trunks ring extensions, assign trunks to a Ring Group. The incoming ring group assignment programmed in Program 41-03-01 overrides the setting in this program.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)
22-06-01	**Normal Incoming Ring Mode**	Indicate whether the trunks in the Ring Group assigned in Program 22-04-01 should ring (1) or not ring (0).	0 = No Ring 1 = Ring (default = 1)
22-07-01	**DIL Assignment**	Assign the destination extension for each DIL incoming trunk (001~200). . *For this selection to work, set Program 22-02-01 to 4 = DIL.*	Extension Number (maximum eight digits) (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
22-08-01	**DIL/IRG No Answer Destination**	If an incoming trunk call rings longer than the DIL No Answer Time (Program 22-01-04), it routes to the destination you specify in this option. Determine if the destination should be a Ring Group, In-Skin/External Voice Mail, or Central Voice Mail.	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 0)
23-03-01	**Universal Answer/Auto Answer**	Use this program to let an extension user automatically answer trunk calls that ring other extensions. When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming (defined in Program 14-06).	Maximum eight digits Day/Night Mode 1~8 Route Table Number 0~100 (default = 0)

Operation

To answer an incoming trunk call:

1. Lift the handset.

To use Universal Answer to answer a call ringing over the Paging system:

1. Go off-hook.

   . *Depending on system programming, this may answer the call and you can skip Step 2.*

2. Dial **872**.

   . *If you hear error tone, your extension Class of Service prevents Universal Answer.*

To listen to the incoming trunk ring choices:

1. Press **Speaker**.
2. Dial **811** + **2**.
3. Select the ringing (**1~8**) and tone range (**1~4**) you want to check.
4. Go back to step 3 to listen to additional choices or press **Speaker** to hang up.

To change the ringing of your incoming trunk:

1. Press **Speaker**.
2. Dial **820** + **2**.
3. Select the ringing (**1~8**).
4. Press **Speaker** to hang up.

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Central Office Calls, Placing

Description

The system provides flexibility in the way each extension user can place outgoing trunk calls. This lets you customize the call placing options to meet site requirements and each individual's needs. To place a call the user can:

- Press Line Keys
- Press a Trunk Group Key
- Press a Trunk Group Routing (dial 9) Key
- Dial a code for a specific trunk (805 + the trunk number)
- Dial a code for a Trunk Group (804 + group number)
- Dial a code for Trunk Group Routing or ARS (9)
- Dial an Alternate Trunk Route Access Code (which you must define)
- Press or Use a Speed Dial bin

There are 200 available trunks.

Trunk Port Disable

The system provides a service code (default: 745) which can be used by an extension user to block a trunk for outgoing calls. The user which busied out the trunk still has access to it. All other users are blocked from seizing it to place an outgoing call. The trunk, however, can still be answered by any users programmed with the trunk access.

Sidetone Volume Setup

Allows the system programming for the multiline terminal side tone volume. There are two levels, based on whether the connected trunk is a digital trunk or analog trunk.

Conditions

- If the trunk name seize display is enabled in programming, the Call Timer starts automatically after the user places a trunk call. Disabling the trunk name seize display also disables the Call Timer.
- The system can automatically select the correct type of line to use based on the number dialed and the time.
- With Automatic Handsfree, an extension user can press a line key to place a trunk call without lifting the handset or pressing Speaker. Users without Automatic Handsfree can

preselect a line key before lifting the handset or pressing Speaker.

- Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time period. Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.
- An extension Toll Class of Service may prevent them from dialing certain numbers.
- Dialing 9 or any other trunk access code after dialing an extension results in termination of the intercom call and a trunk is seized.
- Phones that have an APR/APA installed do not pass voice to a trunk until the interdigit timer expires (Program 21-01-03).

Default Setting

Enabled

System Availability

Terminals

All Multiline terminals

Required Component(s)

Any Trunk ETU (i.e., CD-4COTA, CD-2BRIA, CD-PRTA, etc.)

Related Features

Alphanumeric Display

Automatic Route Selection

Code Restriction

Dial Tone Detection

Handsfree Answerback/Forced Intercom Ringing

Long Conversation Cutoff

Microphone Cutoff

Programmable Function Keys

Trunk Group Routing

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-XX	**ETU Setup**	Use program 10-03-XX to setup and confirm the basic configuration data for each blade. This program represents different data depending on the blade installed in the slot. Please refer the SV8100 Programming Manual for a more detailed description of this program.	The assigned data varies depending on the blade installed in the slot. Please refer to the SV8100 Programming Manual for a more detailed description of the 10-03-XX programs.
11-01-01	**System Numbering**	Use to set system numbering plan.	Refer to UNIVERGE SV8100 Programming Manual
11-09-01	**Trunk Access Code**	If required, change the single-digit Trunk Access Code (normally 9). If you change this code, you must also review the settings in Program 11-01-01 for the new code selected.	Dial (up to four digits) (default = 9)
11-09-02	**Trunk Access Code – 2nd Trunk Route Access Code**	Assign the Service Code set up in Program 11-01-01 for Alternate Trunk Route Access.	Dial (up to four digits) (default not assigned)
11-10-27	**Service Code Setup (for System Administrator) – Trunk Port Disable for Outgoing Calls**	Define the service code which should be used by an extension user to block a trunk from being used for outgoing calls.	MLT, SLT (default = 745)
11-11-13	**Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for Multiline Terminal**	Select the service code which can be used at an extension to change the displayed language on a multiline terminal display	MLT (default = 778)
11-12-01	**Service Code Setup (for Service Access) – Bypass Call**	Define the service code for Activating Call Forwarding/Do Not Disturb Override. This code is available only if you disable the voice mail Single Digit dialing code in Program 11-16-09.	MLT, SLT (default = 807)
11-12-14	**Service Code Setup (for Service Access) – Trunk Group Access**	Define the service code which should be used by an extension user to select outgoing Trunk Group.	MLT, SLT (default = 804)
14-01-01	**Basic Trunk Data Setup – Trunk Name**	Set the names for trunks. The trunk name displays on a multiline terminal for incoming and outgoing calls.	Up to 12 Characters Line 001 Line 002 Line 003 : Line 200

Program Number	Program Name	Description/Comments	Assigned Data
14-01-02	**Basic Trunk Data Setup – Transmit Level**	Customize the transmit and receive levels of the CODEC Gain Types for each trunk.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-03	**Basic Trunk Data Setup – Receive Level**	Customize the transmit and receive levels of the CODEC Gain Types for each trunk.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-07	**Basic Trunk Data Setup – Outgoing Calls**	Use this option to allow (1) or prevent (0) outgoing calls on the trunk you are programming.	0 = Deny (No) 1 = Allow (Yes) (default = 1)
14-01-10	**Basic Trunk Data Setup – DTMF Tones for Outgoing Calls**	For each trunk, enable (1) or disable (0) the ability to hear the DTMF of the digits dialed when placing the outgoing call.	0 = Disable 1 = Enable (default = 1)
14-02-05	**Analog Trunk Data Setup – Dial Tone Detection for Manually Accessed Trunks**	Use this option enable/disable dial tone detection for directly accessed trunks. If disabled, the system outdials on the trunks without monitoring for dial tone.	0 = Dial Tone Detection Not Used 1 = Dial Tone Detection Used (default = 1)
14-02-11	**Analog Trunk Data Setup – Next Trunk in Rotary if No Dial Tone**	Use this option to enable (1) or disable (0) the system ability to skip over a trunk if dial tone is not detected. This option pertains to calls placed using Speed Dial, Automatic Route Selection (ARS), Last Number Redial or Save Number dialed. It does not pertain to line key or Direct Trunk Access calls.	0 = Disable 1 = Enable (default = 0)
14-02-14	**Analog Trunk Data Setup – Loop Start/Ground Start**	Select loop start (0) or ground start (1) for the trunk.	0 = Loop Start (Loop) 1 = Ground Start (Ground) (default = 0)
14-05-01	**Trunk Group – Trunk Group Number**	Assign trunks to Trunk Groups. You can also assign the outbound priority for trunks within the group. When users dial up the trunk group, they seize the trunks in the order you specify in the outbound priority entry. . *At default, all group are assigned to Trunk Group 1.*	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order)

Program Number	Program Name	Description/Comments	Assigned Data
14-06-01	**Trunk Group Routing – Priority Order Number**	Used to set the priority order number 1~4.	0 = Not Specify 1~100 : Trunk Group Number 1001~1100 : 1000 + Route Table Number Default: Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified)
14-07-01	**Trunk Access Map Setup**	Set up the Trunk Access Maps. This sets the access options for trunks. Ring Group programming overrides Access Map programming.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold) Access Maps 2-200 = Trunk Ports 1-200 assigned with option 0 (No access).

Program Number	Program Name	Description/Comments	Assigned Data
15-02-01	**Multiline Telephone Basic Data Setup – Display Language Selection** (To select options 8~10, press either 8 or Recall, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	Use to define the display language for Multiline terminals.	0 = Japanese 1 = English 2 = German 3 = French 4 = Italian 5 = Spanish 6 = Dutch 7 = Portuguese 8 = Norwegian 9 = Danish 10 = Swedish 11 = Turkish 12 = Latin American Spanish 13 = Romanian 14 = Polish (default = 1)
15-02-08	**Multiline Telephone Basic Data Setup – Automatic Handsfree**	Use this option to set whether pressing a key accesses a One-Touch Key (1) or if it preselects the key (0).	0 = Preselect 1 = One-Touch (Automatic Handsfree) (default = 1)
15-03-03	**Single Line Telephone Basic Data Setup – Terminal Type**	Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special (default = 0)
15-06-01	**Trunk Access Map for Extensions**	Assign Trunk Access Maps to extensions.	Trunks 1~200 (default = 1)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-13-01	**Loop Keys - Outgoing Option**	Assign trunk groups for outgoing loop keys (0=ARS, Trunk Groups 1-100). Selecting “0” for ARSshould only be used when ARS is enabled in Program 26-01-01 or it could cause the loop key to lock up.	0 - 100 (0 = Assigns the Loop Key for ARS, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)

Program Number	Program Name	Description/Comments	Assigned Data
15-13-02	**Loop Keys - Incoming Option**	Assign trunk groups for incoming loop keys	0 - 100 (0 = Assigns the Loop Key to all trunk groups, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)
20-02-06	**System Options for Multiline Telephones – Preselection Time**	Set the preselection time When a multiline terminal user preselects a line key, the system remembers the preselection for this time.	0~64800 (seconds) (default = 5 seconds)
20-02-09	**System Options for Multiline Telephones – Disconnect Supervision**	Use this option to enable (1) or disable (0) disconnect supervision for the system trunks.	0 = Disable 1 = Enable (default = 1)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-12	**Class of Service Options (Administrator Level) – Trunk Port Disable**	Turn Off (0) or On (1) the extension ability to use the Trunk Port Disable feature.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-08-02	**Class of Service Options (Outgoing Call Service) – Trunk Outgoing Calls**	Turns off (0) or on (1) outgoing trunk calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) the extension ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)
21-01-15	**System Options for Outgoing Calls – Outgoing Disable on Incoming Line (Toll Restriction)**	Enable or Disable the Outgoing Disable on Incoming Line feature.	0 = Disable 1 = Enable (default = 0)
21-01-16	**System Options for Outgoing Calls – Supervise Dial Detection Timer**	With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver.	0~64800 (seconds) (default = 20 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
21-01-17	**System Options for Outgoing Calls – Restriction Digit in Outgoing Disable on Incoming Line**	With the Outgoing Disable on Incoming Line feature, determine the number of digits (0~9) to be dialed before the call should be disconnected.	Digits 0~9 (default = 4)
21-02-01	**Trunk Group Routing for Extensions**	Assign Program 14-06 routes to extensions.	0~100 (0 = No Setting) (default = 1)
21-15-01	**Individual Trunk Group Routing for Extensions**	Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code. Refer to Trunk Group Routing to set up outbound routing.	0~100 (0 = No Setting) (default = 0)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	Timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer, outgoing from trunk, Tandem Trunking). When this time expires, a warning tone is heard.	0~64800 (seconds) (default = 1800 seconds)
24-02-10	**System Options for Transfer – Disconnect Trunk to Trunk Timer**	Timer starts after the Warning Tone is heard (24-02-07). When time expires, the trunk is disconnected.	0~64800 (seconds) (default = 0 seconds)

Operation

To place a call over a trunk group:

1. Go off-hook.
2. Dial **804**.
3. Dial trunk group number (**001~100**).
4. Dial the number.

- OR -

1. At the multiline terminal, press the **trunk group** key (Program 15-07-01 or SC 851: *02 + group).
2. Dial the number.

To place a call using Trunk Group Routing:

1. Go off-hook.

2. Dial **9**.

   . *If your system has an Alternate Trunk Route Access code, you may dial that instead.*

3. Dial the number.

- OR -

1. At the multiline terminal, press the **Trunk Group Routing** key (Program 15-07-01 or SC 852: *02 plus trunk group).

2. Dial the number.

To place a call over a specific trunk:

1. Dial **805**.

2. Dial the line number (e.g., 005 for line 5).

3. Dial the number.

- OR -

1. At the multiline terminal, press line key (Program 15-07-01 or SC 852: *01 001 to 200).

2. Dial the number.

To busy out a trunk from outbound usage:

1. Press **Speaker** + **745** + Trunk Number (**001~200**) + **1**.

   . *The user which busied out the trunk still has access to it. All other users are blocked from seizing it to place an outgoing call. The trunk, however, can still be answered by any user programmed with the trunk access.*

To Remove a Trunk from a Busied Out State:

1. Press **Speaker** + **745** + Trunk Number (**001~200**) + **0**.

Class of Service

Description

Class of Service (COS) sets various features and dialing options (called items) for extensions. The system allows any number of extensions to share the same Class of Service. An extension can have a different Class of Service for each of the Night Service modes. This lets you program a different set of dialing options for daytime operation, nighttime operation and even during lunch breaks. An extension Class of Service can be changed in system programming or via a Service Code (normally 677). There are 15 available Classes of Service.

Conditions

- Before assigning a new COS, make sure the new COS matches the old COS or you may enable options, which the extension should not have or remove options, which it should have.
- An extension can have a different Class of Service for each Service mode. At default, the Mode names are assigned as follows:
  - Mode 1 = No setting
  - Mode 2 = Night
  - Mode 3 = Midnight
  - Mode 4 = Rest
  - Mode 5 = Day2
  - Mode 6 = Night2
  - Mode 7 = Midnight2
  - Mode 8 = Rest2

Default Setting

- All extensions have Class of Service 1 in all Night Service modes.

If changing Class of Service via Service Code:

- An extension can use Service Code 777 to change another extension Class of Service (Program 20-13-28 = 1).
- An extension can automatically block another extension attempt to change their Class of Service via Service Code 777 (Program 20-13-28 = 0).
- The default Service Code for this option is 777 (Program 11-11-24 = 777).

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Night Service

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-24	**Service Code Setup (for Setup/ Entry Operation) – Change Station Class of Service**	If required, use this option to change the Service Code a user dials to change an extension Class of Service.	MLT (default = 777)
11-19-01	**Remote Conference Pilot Number Setup - Maximum Channels**	Set the maximum number of channels which can be used with PRI NetLink.	Dial (Up to 8 digits) (default: No Remote Conference Pilot Numbers assigned to any Conference Group (1-4).)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-01	**Class of Service Options (Administrator Level) – Manual Night Service Enabled**	Turns Off (0) or On (1) an extension for manually Switching the Night Mode (Service Code 718). This option must be enabled for an extension to be able to display the Night indication.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-02	**Class of Service Options (Administrator Level) – Changing the Music on Hold Tone**	Turn off or on extension user ability to change the Music on Hold tone.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-03	**Class of Service Options (Administrator Level) – Time Setting**	Turn off or on extension user ability to set the Time via Service Code 728.	0 = Off 1 = On (default = 1 for COS 1~15)
20-07-04	**Class of Service Options (Administrator Level) – Storing Speed Dialing Entries**	Turns Off (0) or On (1) an extension to store System or Group Speed Dialing numbers.	0 = Off 1 = On (default = 1 for COS 1~15)
20-07-05	**Class of Service Options (Administrator Level) – Set/ Cancel Automatic Trunk-to-Trunk Transfer**	Turn On (1) or Off (0) the ability of an extension to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-07-10	**Class of Service Options (Administrator Level) – Programmable Function Key Programming (Appearance Level)**	Turns Off (0) or On (1) the ability for an extension to program the Appearance function keys using Service Code 852.	0 = Off 1 = On (default = 1 for COS 01~15)
20-07-11	**Class of Service Options (Administrator Level) – Forced Trunk Disconnect (analog trunk only)**	Turns Off (0) or On (1) an extension to use Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-12	**Class of Service Options (Administrator Level) – Trunk Port Disable**	Turn Off (0) or On (1) the extension ability to use the Trunk Port Disable feature.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-13	**Class of Service Options (Administrator Level) – VRS Record (VRS Msg Operation)**	Turns Off (0) or On (1) an extension ability to record, erase and listen to VRS messages.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-14	**Class of Service Options (Administrator Level) – VRS General Message Play**	Turns an extension Off (0) or On (1) to dial 4 or Service Code 611 to listen to the General Message.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-15	**Class of Service Options (Administrator Level) – VRS General Message Record/Delete**	Turns Off (0) or On (1) an extension for dialing Service Code 612 and record, listen to, or erase the General Message.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-18	**Class of Service Options (Administrator Level) – SMDR Printout Accumulated Extension Data**	Determine if the Accumulated Extension Data is included in the SMDR printout for each Class of Service.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-19	**Class of Service Options (Administrator Level) – SMDR Printout Department Group (STG) Data**	Determine if the Department Group STG) Data is included in the SMDR printout for each Class of Service.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)

Program Number	Program Name	Description/Comments	Assigned Data
20-07-20	**Class of Service Options (Administrator Level) – SMDR Printout Accumulated Account Code Data**	Determine if the Accumulated Account Code Data is included in the SMDR printout for each Class of Service.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-23	**Class of Service Options (Administrator Level) – CO Message Waiting Indication Callback Number Programming**	Enable or disable an extension ability to receive CO Message Waiting Indication.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-24	**Class of Service Options (Administrator Level) – Set/ Cancel Private Call Refuse**	Enable or disable an extension ability to set or cancel Private Call Refuse.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-25	**Class of Service Options (Administrator Level) – Set/ Cancel Caller ID Refuse**	Enable or disable an extension ability to set or cancel Caller ID Refuse.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-26	**Class of Service Options (Administrator Level) – Dial-In Mode Switch**	Enable or Disable an extension user ability to set or cancel dial-in mode switch.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-27	**Class of Service Options (Administrator Level) – Do-Not-Call Administrator**	Enable or Disable an extension user ability to set or cancel do not call administrator.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-01	**Class of Service Options (Outgoing Call Service) – Intercom Calls**	Turn Off or On Intercom calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-02	**Class of Service Options (Outgoing Call Service) – Trunk Outgoing Calls**	Turns off (0) or on (1) outgoing trunk calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-03	**Class of Service Options (Outgoing Call Service) – System Speed Dialing**	Turns Off (0) or On (1) an extension ability to make outbound calls using system speed dial numbers.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-04	**Class of Service Options (Outgoing Call Service) – Group Speed Dialing**	Turns Off (0) or On (1) an extension ability to make outbound calls using group speed dial numbers.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-08-05	**Class of Service Options (Outgoing Call Service) – Dial Number Preview (Preset Dial)**	Turn off or on extension user ability to use Dial Number Preview.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-06	**Class of Service Options (Outgoing Call Service) – Toll Restriction Override**	Turn off or on Toll Restricting Override (Service Code 663).	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-07	**Class of Service Options (Outgoing Call Service) – Repeat Redial**	Turns Off (0) or On (1) an extension to use Repeat Redial.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-08	**Class of Service Options (Outgoing Call Service) – Toll Restriction Dial Block**	Turn off or on an extension user ability to use Dial Block.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-09	**Class of Service Options (Outgoing Call Service) – Hotline/Extension Ringdown**	Turn off or on Ringdown Extension for extensions with this COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-10	**Class of Service Options (Outgoing Call Service) – Signal/ Voice Call**	Turns Off or On an extension allowing it to force Handsfree Answerback or Forced Intercom Ringing for outgoing Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-11	**Class of Service Options (Outgoing Call Service) – Protect for the Call Mode Switching from Caller**	When an extension is set to ring mode for ICM calls, enabling this option prevents callers from changing the call to voice announce mode.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-12	**Class of Service Options (Outgoing Call Service) – Department Group Step Calling**	Turn off or on an extension user ability to use Department Group Step Calling.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-13	**Class of Service Options (Outgoing Call Service) – ISDN CLIP**	Determine if the ISDN calling line identity presentation and screening indicators are to be allowed.	0 = Off 1 = On (default =1 for COS 1~15)
20-08-14	**Class of Service Options (Outgoing Call Service) – Call Address Information**	Use to enable or disable Call Address Information for each Class of Service.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-08-15	**Class of Service Options (Outgoing Call Service) – Block Outgoing Caller ID**	Turn Off (0) or On (1) a user Class of Service from automatically blocking outgoing Caller ID information when a call is placed. If block is enabled, the system automatically inserts the Caller ID block code (defined in Program 14-01-21) before the user dialed digits (this requires Program 14-02-10 to be enabled). If block is disabled, the system outdials the call just as it was dialed by the user.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-16	**Class of Service Options (Outgoing Call Service) – Display E911 Dialed Extension Name and Number**	Turn off or on an extension ability to display the name and number of the extension that dialed 911.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-17	**Class of Service Options (Outgoing Call Service) – ARS Override of Trunk Access Map**	Turn off or on an extension user ability to override the trunk access map programming for outgoing calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-19	**Class of Service Options (Outgoing Call Service) – Hotline for SPK**	Turn off or on an extension user ability to activate hotline or ringdown when pressing the Speaker key.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-20	**Class of Service Options (Outgoing Call Service) – Hot Key Pad**	Turn On (1) or Off (0) the ability of an extension to make a call by just dialing the number without first going off hook.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-21	**Class of Service Options (Outgoing Call Service) – Automatic Trunk Seizing by Pressing Speaker Key**	Used to enable or disable the ability to access trunks when going off hook by pressing the speaker key for each Class of Service.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-22	**Class of Service Options (Outgoing Call Service) – Voice Over to busy Virtual Extension**	Used to enable or disable the ability to make voice over to a busy virtual extension for each Class of Service.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns off or on the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a line Keys available for the second call and a previous call is ringing the extension but has not been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-02	**Class of Service Options (Incoming Call Service) – Caller ID Display**	Turns Off (0) or On (1) the Caller ID display at an extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-03	**Class of Service Options (Incoming Call Service) – Sub Address Identification**	Define whether an extension displays the Caller Sub-Address.	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-04	**Class of Service Options (Incoming Call Service) – Notification for Incoming Call List Existence**	Determine whether or not the CHECK LIST message is displayed to indicate a missed call.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-05	**Class of Service Options (Incoming Call Service) – Signal/ Voice Call**	Turn off or on an extension ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-06	**Class of Service Options (Incoming Call Service) – Incoming Time Display**	If this option is set to 1, the Incoming Call Time is displayed on the multiline terminals LCD while the telephone is ringing.	0 = Off 1 = On (default = 0 for COS 01~15)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-08	**Class of Service Options (Incoming Call Service) – Calling Party Information**	Turn off or on and extension user ability to display calling party information on CCIS calls.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-10-01	**Class of Service Options (Answer Service) – Group Call Pickup (Within Group)**	Turn off or on Group Call Pickup for calls ringing an extension Pickup Group as well as ring group calls (Service Code *#).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-02	**Class of Service Options (Answer Service) – Group Call Pickup (Another Group)**	Turn off or on Group Call Pickup for calls ringing outside a group (Service Code 769).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-03	**Class of Service Options (Answer Service) – Group Call Pickup for Specific Group**	Turn off or on Group Call Pickup for a specific group using service code 768.	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-04	**Class of Service Options (Answer Service) – Telephone Call Pickup**	Turn off or on an extension ability to pick up a call ringing into a Pickup Group (Service Codes * #).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-05	**Class of Service Options (Answer Service) – Directed Call Pickup for Own Group**	Turn off or on Directed Call Pickup for calls ringing an extension Pickup Group (Service Code 756).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-06	**Class of Service Options (Answer Service) – Meet-Me Conference and Paging**	Turns Off (0) or On (1) an extension to use Meet-Me Conference and Paging.	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-07	**Class of Service Options (Answer Service) – Automatic Off-Hook Answer**	Turns Off (0) or On (1) an extension to use Universal Auto Answer (no service code required).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-08	**Class of Service Options (Answer Service) – Virtual Extension Off-Hook Answer**	Turns Off (0) or On (1) an extension ability to answer an incoming call on a Secondary Incoming Extension (SIE)/ Virtual Extension simply by lifting the handset.	0 = Off 1 = On (default = 0 for COS 01~15)
20-10-09	**Class of Service Options (Answer Service) – Call Pickup Callback**	Turn off or on an extension user ability to use Call Pickup to Pick up Callback calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-10-10	**Class of Service Options (Answer Service) – Answer Preset**	Used to enable or disable Answer Preset for each Class of Service.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-01	**Class of Service Options (Hold/ Transfer Service) – Call Forward All**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forward Immediate.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-02	**Class of Service Options (Hold/ Transfer Service) – Call Forward When Busy**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Busy.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-03	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding When Unanswered**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Unanswered.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-04	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding (Both Ringing)**	In an extension Class of Service, turn On (1) or Off (0) an extension user ability to set Call Forward with Follow Me.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-05	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding with Follow Me**	In an extension's Class of Service, turn On (1) or Off (0) an extensions ability to set Call Forward with Follow Me.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-06	**Class of Service Options (Hold/ Transfer Service) – Unscreened Transfer (Ring Inward Transfer)**	Turns Off (0) or On (1) an extension ability to use Unscreened Transfer.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-07	**Class of Service Options (Hold/ Transfer Service) – Transfer Without Holding**	Turn Off or On an extension ability to use Transfer Without Holding.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-08	**Class of Service Options (Hold/ Transfer Service) – Transfer Information Display**	Turn off or on an extension incoming Transfer pre-answer display.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-09	**Class of Service Options (Hold/ Transfer Service) – Group Hold Initiate**	Turn off or on an extension ability to initiate a Group Hold.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-10	**Class of Service Options (Hold/ Transfer Service) – Group Hold Answer**	Turn off or on an extension ability to pick up a call on Group Hold.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-11	**Class of Service Options (Hold/ Transfer Service) – Automatic On-Hook Transfer**	Turn Off (0) or On (1) an extension ability to use Automatic On-Hook Transfer.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-12	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding Off-Premise (External Call Forwarding)**	In an extensions Class of Service, turn On (1) or Off (0) setting up Call Forwarding Off-Premise at the extension.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-13	**Class of Service Options (Hold/ Transfer Service) – Operator Transfer After Hold Callback**	Turn off or on an extension ability to have a call which recalls from hold transfer to the operator.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-14	**Class of Service Options (Hold/ Transfer Service) – Trunk-to-Trunk Transfer Restriction**	Turns Off (0) or On (1) the Trunk-to-Trunk Transfer Restriction. If enabled, Trunk-to-Trunk Transfer is not possible.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-15	**Class of Service Options (Hold/ Transfer Service) – VRS Personal Greeting (Message Greeting)**	Turn off or on an extension user ability to dial Service Code *4 7 to record, listen to or erase the Personal Greeting Message.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-16	**Class of Service Options (Hold/ Transfer Service) – Call Redirect**	Turn On (1) or Off (0) a multiline terminal user ability to transfer a call to a predefined destination (such as an operator, voice mail, or another extension) without answering the call.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-17	**Class of Service Options (Hold/ Transfer Service) – Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)**	Turn On (1) or Off (0) the ability of an extension in a Department Group to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-18	**Class of Service Options (Hold/ Transfer Service) – No Recall**	Allow (0) or deny (1) answered Transferred calls from recalling the originating extension.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-19	**Class of Service Options (Hold/ Transfer Service) – Hold/ Extended Park**	Determine whether an extension Class of Service should allow normal or extended Park (0 = Normal for Program 24-01-06, 1 = Extended for Program 24-01-07).	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-20	**Class of Service Options (Hold/ Transfer Service) – No Callback**	Turn off or on an extension ability to receive Callbacks.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-21	**Class of Service Options (Hold/ Transfer Service) – Restriction for Tandem Trunking on Hang Up**	Allow (0) or deny (1) an extension users's ability to set up a tandem/ conference call automatically when they hang up.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-22	**Class of Service Options (Hold/ Transfer Service) – Restrict Unsupervised Conference**	Allow or deny an extension user to initiate a Trunk-to-Trunk Transfer (Tandem Trunking).	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-23	**Class of Service Options (Hold/ Transfer Service) – VE Call Forward Set/Cancel**	In an extension Class of Service, turn On (1) or Off (0) the ability to set and cancel Call Forwarding for a Virtual Extension.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-24	**Class of Service Options (Hold/ Transfer Service) – Trunk Park Hold Mode**	Set the hold type when a trunk call is put on hold by an extension.	0 = Non Exclusive Hold (Off) 1 = Exclusive Hold (On) (default = 0 for COS 1~15)
20-11-25	**Class of Service Options (Hold/ Transfer Service) – Transfer Park Call**	Turn on or off an extension user ability to transfer a parked call.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-26	**Class of Service Options (Hold/ Transfer Service) – Station Park Hold Mode**	Turn off or on an extension's ability to place a call at a co-worker's extension using Personal Park.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-27	**Class of Service Options (Hold/ Transfer Service) – Call Park Automatically Search**	Use this option to turn On (1) or Off (0) using the Call Park Automatically Search option.	0 = Off 1 = On (default = 1 for COS 1~15)
20-12-02	**Class of Service Options (Charging Cost Service) – Advice of Charge**	ISDN-AOC This option turns off (0) or on (1) a DISA or tie trunk caller's ability to dial 9 for Trunk Group Routing or Automatic Route Selection.	0 = Off 1 = On (default = 1 for COS 1~15)
20-12-03	**Class of Service Options (Charging Cost Service) – Cost Display (TTU)**	ISDN billing information	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-01	**Class of Service Options (Supplementary Service) – Long Conversation Alarm**	Turns Off (0) or On (1) the Warning Tone for Long Conversation (not for single line telephones).	0 = Off 1 = On (default =1 for COS 1~15)
20-13-02	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Incoming)**	Turn off or on an extension user ability to use Long Conversation Cutoff for incoming calls.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-03	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Outgoing)**	Turn off or on an extension user ability to use Long Conversation Cutoff for outgoing calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-04	**Class of Service Options (Supplementary Service) – Call Forward/DND Override (Bypass Call)**	Turn On or Off the ability to use Call Forwarding/DND Override.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook Signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-07	**Class of Service Options (Supplementary Service) – Message Waiting**	Turns Off (0) or On (1) an extension ability to leave Message Waiting.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-08	**Class of Service Options (Supplementary Service) – Conference**	Turn off or on an extension user ability to initiate a conference or Meet Me Conference.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-09	**Class of Service Options (Supplementary Service) – Privacy Release**	Turn off or on an extension user ability to initiate a Voice Call Conference.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	Enables the extension Barge-In Mode to be speech mode (0) or Monitor mode (1) (i.e., Barge-In initiator).	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-11	**Class of Service Options (Supplementary Service) – Room Monitor, Initiating Extension**	Turns Off (0) or On (1) an extension user ability to Room Monitor other extensions.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-12	**Class of Service Options (Supplementary Service) – Room Monitor, Extension Being Monitored**	Turns Off (0) or On (1) an extension ability to be monitored.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) the extension ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-14	**Class of Service Options (Supplementary Service) – Department Calling (PLT No Called Extension)**	Turns off or on an extension user ability to call a Department Group Pilot.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-15	**Class of Service Options (Supplementary Service) – Barge-In, Initiate**	Turns Off (0) or On (1) an extension user ability to barge-in on other's calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-16	**Class of Service Options (Supplementary Service) – Barge-In, Receive**	In an extension Class of Service, turn On (1) or Off (0) Barge-In at the receiving extension (i.e., Barge-In receive).	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-17	**Class of Service Options (Supplementary Service) – Barge-In Tone/Display (Intrusion Tone)**	In an extension Class of Service, turn On (1) or Off (0) the Barge-In (Intrusion) Tone. If disabled, this also turns off the Barge-In display at the called extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-18	**Class of Service Options (Supplementary Service) – Programmable Function Key Programming (General Level)**	Turns Off (0) or On (1) an extension user ability to program General function keys using Service Code 851 (by default). (Refer to Program 20-07-10 for Service Code 852.)	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-19	**Class of Service Options (Supplementary Service) – Selectable Display Messaging (Text Messaging)**	Turns Off (0) or On (1) an extension user ability to use Selectable Display Messaging.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-20	**Class of Service Options (Supplementary Service) – Account Code/Toll Restriction Operator Alert (Restricted Operation Transfer)**	Turn off or on operator alert when an extension improperly enters an Account Code or violates Toll Restriction.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-21	**Class of Service Options (Supplementary Service) – Extension Name**	Turns Off (0) or On (1) an extension user ability to program its name.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-22	**Class of Service Options (Supplementary Service) – Busy Status Display (Called Party Status)**	Turn Off or On the ability to display the detail state of called party.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-24	**Class of Service Options (Supplementary Service) – Privacy Release by Pressing Line Key**	Turn off or on a user ability to press a line key to barge into an outside call. The Barge-In feature must be enabled if this option is used.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-26	**Class of Service Options (Supplementary Service) – Group Listen**	Turn off or on an extension user ability to use Group Listen.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-27	**Class of Service Options (Supplementary Service) – Busy on Seizing Virtual Extension**	If set to 1, you can call a busy extension which is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to off for this option to work.	0 = Off 1 = On (default = 1 for COS 01~15)
20-13-28	**Class of Service Options (Supplementary Service) – Allow Class of Service to be Changed**	Turn off or on the ability of an extension COS to be changed via Service Code 677.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-29	**Class of Service Options (Supplementary Service) – Paging Display**	Turns Off (0) or On (1) an extension user ability to display paging information.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-30	**Class of Service Options (Supplementary Service) – Background Music**	For extension Class of Service, allow (1) or deny (0) an extension from turning Background Music on and off.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-31	**Class of Service Options (Supplementary Service) – Connected Line Identification (COLP)**	Use to define the supplementary feature availability for each extension Class of Service (COS).	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-32	**Class of Service Options (Supplementary Service) – Deny Multiple Barge-Ins**	In an extension Class of Service, allow (1) or deny (0) the extension ability to have multiple users Barge-In to their conversation.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-33	**Class of Service Options (Supplementary Service) – ACD Supervisor's Position Enhancement**	This option must be on for the operator to use service codes in Program 11-13-10 through Program 11-13-13.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-34	**Class of Service Options (Supplementary Service) – Block Manual Off-Hook Signaling**	Turn Off (0) or On (1) an extension user ability to block off-hook signals manually sent from a co-worker.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-35	**Class of Service Options (Supplementary Service) – Block Camp-On**	Use this option to turn On (1) or Off (0) extension ability to block callers from dialing **#** to camp-on.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-36	**Class of Service Options (Supplementary Service) – Call Duration Timer Display**	In an extension Class of Service, turn On (1) or Off (0) a Call Timer for the extension.	0 = Off 1 = On (default = 1 for COS 01~15)
20-13-38	**Class of Service Options (Supplementary Service) – Headset Ringing**	In an extension Class of Service, turn off or on an extension user ability to use the Headset ringing.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-39	**Class of Service Options (Supplementary Service) – ACD Queue Status Display**	Turn off or on the ACD Queue Status Display for an extension Class of Service. Any extension which has this option enabled also hears the queue alarm.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-40	**Class of Service Options (Supplementary Service) – Do Not Disturb**	Turn Off or On an extension user ability to set or cancel Do Not Disturb.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-41	**Class of Service Options (Supplementary Service) – Voice Mail Message Indication on DSS**	Turn Off (0) or On (1) the Voice Mail Message Indication for an extension on a DSS console.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-42	**Class of Service Options (Supplementary Service) – Extension Data Swap Enabling**	Turn off or on an extensions ability to use the Station Relocation feature.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-44	**Class of Service Options (Supplementary Service) – Live Monitor Enabling**	Turn off or on an extensions ability to use Live Monitor.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-45	**Class of Service Options (Supplementary Service) – MIC Key Mode While Call Monitoring**	Set per class of service, when in Call Monitoring Mode determines if the monitored parties receives the barge in alert tone when Coaching Mode is enabled.	0 = Enable 1 = Disable (default = 0 for COS 1~15)
20-13-46	**Class of Service Options (Supplementary Service) – Remote Conference**	Turn Off or On an extension ability to place an intercom call to join a Remote Conference call.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-47	**Class of Service Options (Supplementary Service) – Station Number Display**	Determine if a station Number is displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-48	**Class of Service Options (Supplementary Service) – Station Name Display**	Determine if a station Number will be displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-49	**Class of Service Options (Supplementary Service) – BLF Indication on CO Incoming State**	Determine if a BLF of the station will light when a Normal CO call is ringing the phone.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-50	**Class of Service Options (Supplementary Service) – AIC Agent display which call is from**	Determine if the station logged in via AIC codes will show which queue the call is coming from.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-51	**Class of Service Options (Supplementary Service) – Number and Name appear in the directory**	Determine if an extension name and number are listed (On) or unlisted (Off) in the directory.	0 = Off 1 = On (default = 1 for COS 1~15)
20-14-01	**Class of Service Options for DISA/E&M – First Digit Absorption (Delete First Digit Dialed)**	For Tie Lines, enable or disable the ability to absorb (ignore) the first incoming digit. Use this to make the tie trunk compatible with 3- and 4-digit Tie Line service. This option does not apply to DISA.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-02	**Class of Service Options for DISA/E&M – Trunk Group Routing/ARS Access**	This option enables or disables a DISA or tie trunk caller's ability to dial 9 for Trunk Group Routing or Automatic Route Selection.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-03	**Class of Service Options for DISA/E&M – Trunk Group Access**	This option enables or disables a DISA or tie trunk caller's ability to access trunk groups for outside calls (Service Code 704).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-04	**Class of Service Options for DISA/E&M – Outgoing System Speed Dialing**	This option enables or disables a DISA or tie trunk caller's ability to use System Speed Dialing.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-05	**Class of Service Options for DISA/E&M – Operator Calling**	This option enables or disables a DISA or tie trunk caller's ability to dial 0 for the telephone system operator.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-06	**Class of Service Options for DISA/E&M – Internal Paging**	This option enables or disables a DISA or tie trunk caller's ability to use the telephone system Internal Paging.	0 =Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-14-07	**Class of Service Options for DISA/E&M – External Paging**	This option enables or disables a DISA or tie trunk caller's ability to use the telephone system External Paging.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-08	**Class of Service Options for DISA/E&M – Direct Trunk Access**	This option enables or disables a DISA or tie trunk caller's ability to use Direct Trunk Access (Service Code 715).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-09	**Class of Service Options for DISA/E&M – Forced Trunk Disconnect <Not for ISDN T-point>**	This option enables or disables a tie trunk caller's ability to use Forced Trunk Disconnect (Service Code *26). This option is not available to DISA callers.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-10	**Class of Service Options for DISA/E&M – Call Forward Setting by Remote via DISA**	Enable or disable a DISA callers ability to use the Call Forward service codes (Program 11-11-01 through Program 11-11-05).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-11	**Class of Service Options for DISA/E&M – DISA/Tie Trunk Barge-In**	In an extension Class of Service, enable (1) or disable (0) a DISA or tie trunk user from using the Barge-In feature.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-12	**Class of Service Options for DISA/E&M – Retrieve Park Hold**	Turn off or on the ability for a DISA caller to retrieve parked or held calls.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To change an extension Class of Service (via Service Code 777):

1. Press **Speaker**.
2. Dial **777**.
3. Dial the extension number you want to change.
   - *You see: MODE1:nn*
   - *Press **Hold** to leave the current value unchanged.*
   - *The extension you dial may be set to block your attempt to change their Class of Service.*
4. Enter the Day 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
   - *You see: MODE2:nn*
   - *Press **Hold** to leave the current value unchanged.*

5. Enter the Night 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
   - *You see: MODE3:nn*
   - *Press **Hold** to leave the current value unchanged.*
6. Enter the Midnight 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
   - *You see: MODE4:nn*
   - *Press **Hold** to leave the current value unchanged.*
7. Enter the Rest 1 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
   - *You see: MODE5:nn*
   - *Press **Hold** to leave the current value unchanged.*
8. Enter the Day 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
   - *You see: MODE6:nn*
   - *Press **Hold** to leave the current value unchanged.*
9. Enter the Night 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
   - *You see: MODE7:nn*
   - *Press **Hold** to leave the current value unchanged.*
10. Enter the Midnight 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
    - *You see: MODE8:nn*
    - *Press **Hold** to leave the current value unchanged.*
11. Enter the Rest 2 Mode Class of Service for the extension you selected in step 3 and press **Hold**.
    - *You see: Enter Station**#***
12. Go to step 3 and enter another extension number.

    - OR -

    Press **Speaker** to hang up.

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Clock/Calendar Display

Description

The system uses Clock/Calendar Display for:

- Central Office Calls (Access Maps)
- Class of Service (Class)
- Direct Inward Lines
- Display Telephones
- Night Service (Automatic)
- Programmable Trunk Parameters
- Ring Groups
- Station Message Detail Recording
- System Reports
- Toll Restriction (Class)
- Trunk Group Routing
- Voice Mail
- Voice Response System

Using the Daylight Savings Setup program, you can determine whether the system should automatically adjust the system time for daylight savings time/standard time changes.

Clock Adjustment

The system can be programmed to automatically adjust the system clock on a nightly basis. This feature allows you to make adjustments should the system cabinet regularly lose or gain time.

Conditions

- The system retains the Clock/Calendar Display after a power failure or system reset.
- Changing the time may change the current Class of Service (COS) service depending on the COS mode setup.
- You can program the system to automatically switch modes.
- Single line telephones cannot set the time and date.
- Changing the system time automatically changes the InMail time.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals with a display

Required Component(s)

None

Related Features

Class of Service

Night Service

Single Line Telephones

InMail

Voice Mail Integration (Analog)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-01-01	**Time and Date – Year**	Enter two digits (00~99) for the year.	00~99 (default not assigned)
10-01-02	**Time and Date – Month**	Enter two digits (01~12) for the month.	01~12 (default not assigned)
10-01-03	**Time and Date – Day**	Enter two digits (01~31) for the day.	01~31 (default not assigned)
10-01-04	**Time and Date – Week**	Enter the digit (1 = Sunday, 7 = Saturday) to indicate the day of the week.	1 = Sunday, 7 = Saturday (default not assigned)
10-01-05	**Time and Date – Hour**	Enter two digits (00~23) for the hour.	00~23 (default not assigned)
10-01-06	**Time and Date – Minute**	Enter two digits (00~59) for the minutes.	00~59 (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
10-01-07	**Time and Date – Second**	Enter two digits (00~59) for the seconds.	00~59 (default not assigned)
10-24-01	**Daylight Savings Setup – Daylight Savings Mode**	Enable (1) or disable (0) the system ability to adjust the time for daylight savings/standard time.	0 = Disable 1 = Enable (default = 0)
10-24-02	**Daylight Savings Setup – Time for Daylight Savings**	Enter the time of day the system should adjust for daylight savings time (0000~2359).	00:00~23:59 (default = 02:00)
10-24-03	**Daylight Savings Setup – Start of Month (Summer Time)**	Enter the month of system should adjust the time for daylight savings time (01~12).	01~12 1 = Jan 2 = Feb, etc. (default = 4)
10-24-04	**Daylight Savings Setup – Start of Week**	Enter the week of the month the system should adjust the time for daylight savings time.	0~5 0 = Last Week of Month (default = 1)
10-24-05	**Daylight Savings Setup – Start of Week Day**	Enter the day of the week the system should adjust the time for daylight savings time.	1~7 (1 = Sun, 2 =Mon, etc.) (default = 1)
10-24-06	**Daylight Savings Setup – End of Month**	Enter the month of system should adjust the time for standard time.	01~12 (default = 10)
10-24-07	**Daylight Savings Setup – End of Week**	Enter the week of the month the system should adjust the time for standard time.	0~5 0 = Last Week of the Month (default = 0)
10-24-08	**Daylight Savings Setup – End of Week Day**	Enter the day of the week the system should adjust the time for daylight savings time.	1~7 (1 = Sun, 2 =Mon, etc.) (default = 1)
20-02-07	**System Options for Multiline Telephones – Time and Date Display Mode**	Select the display mode (type 1~8) for Time and Date (i.e., time and date format).	1~8 Type 1 = (12 hour) 10 MAR TUE 3:15PM Type 2 = (12 hour) 3:15PM MAR 10 TUE Type 3 = (12 hour) 3-10 TUE 3:15 PM Type 4 = (12 hour) 3:15PM TUE 10 MAR Type 5 = (24 hour) 10 MAR TUE 15:15 Type 6 = (24 hour) 15:15 MAR 10 TUE Type 7 = (24 hour) 3-10 TUE 15:15 Type 8 = (24 hour) 15:15 TUE 10 MAR (default = 3)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-03	**Class of Service Options (Administrator Level) – Time Setting**	Turn off or on an extension ability to set the Time via Service Code 728.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

The date must be set in system programming (10-01).

To set the system Time:

1. Press **Speaker**.
2. Dial **828**.
3. Dial two digits for the hour (24 hour clock, 13 = 1:00 PM).
4. Dial two digits for the minutes (00~59).
5. Press **Speaker** to hang up.

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Code Restriction

Description

Code Restriction limits the numbers an extension user may dial. By allowing extensions to place only certain types of calls, you can better control long distance costs. The system applies Code Restriction according to the Code Restriction Class. The system allows for up to 15 Code Restriction Classes and 512 extensions.

Conditions

- If a Code Restriction Class has the same entries in both a permit and restriction table, the system does not restrict the call.
- Code Call Digit counting may prevent users from taking advantage of long distance automated services like ACD and automated Technical Service.
- Code Restriction is applied when accessing ARS.
- If Program 21-01-10 is programmed with an entry other than 0, a call cannot have a talk path unless the user dials at least the number of digits entered in this option when placing an out going call. This means that an entry of 4 or higher in this program causes a problem when dialing 999 or 112. Since these are only 3-digit numbers, the call does not have a talk path, preventing the emergency dispatcher from hearing the caller. This option should be kept at its default setting of 0 to prevent any problem with dialing 999 or 112.
- Common Permit Code Table

  Use the Common Permit Code Table when you have numbers you want all Code Restriction Classes to dial. To let all users dial 999 or 112, for example, put 999 & 112 in the Common Permit Code Table. The Common Permit Code Table overrides the Restrict Code and Common Restrict Code Tables. The system provides 10 tables, with 10 entries in each table. Each code is four digits maximum, using 0~9, **#**, * and the Recall key (as a wild card).
- Common Restrict Code Table

  The Common Restrict Code Table lets you globally restrict certain numbers for all Code Restriction Classes. Be sure you do not allow the codes you want to restrict in the Permit Code Table or the Common Permit Code Table. The system provides 10 tables, with 10 entries in each table. Each code is four digits maximum, using 0~9, **#**, * and Recall (as a wild card).
- Restrict Code Table

  When you want Code Restriction to allow most calls and restrict only selected calls, use the Restrict Code Table. To block only 1-900 calls, for example, enter 1900 in the Restrict Code Table. (If the same Code Restriction Class has both Permit and Restrict Code Tables, the

system restricts calls that you enter only in the Restrict Code Table. Calls entered in both tables are not restricted.) The system provides four tables, with 60 entries (restricted codes) in each table. A restricted code is 12 digits maximum, using 0~9, **#**, * and Recall (as a wild card).

- Permit Code Table

  The Permit Code Table lets you set up Code Restriction so that users can dial only selected (permitted) telephone numbers. Use this table when you want to restrict most calls. To allow all users to dial only area code 01203, for example, enter 01203 in the Permit Code Table. 01203 + (digits) are the only numbers users can dial. (If the same Code Restriction Class has both Permit and Restrict Code Tables, the system restricts calls that you enter only in the Restrict Code Table. Calls entered in both tables are not restricted.) The system provides four tables, with 200 entries (permitted codes) in each table. A permitted code is 12 digits maximum, using 0~9, **#**, * and Recall (as a wild card).

- International Call Restriction

  International Call Restriction lets you limit the international calls an extension user may dial. You can build a restrict table to prevent only certain calls, or you can build a permit table to allow only certain calls. To allow most international calls, use the *International Call Restrict Table*. To prevent most international calls, use the *International Call Allow Table*. The system provides 10 International Call Restrict tables with up to four digits in each table entry and 20 International Call Allow tables, with up to six digits in each table entry. Valid entries are 0~9, **#**, * and Recall (for a wild card).

- Code Restriction for Speed Dialing

  Speed Dialing can bypass or follow Code Restriction. If you allow many users to program Speed Dialing, consider code restricting the numbers they dial. If only administrators can program Speed Dialing, Code Restriction may not be necessary. You can separately restrict Group and Common Speed Dialing.

- Toll Digit Counting

  Use Call Digit Counting to limit the number of digits local callers can dial. You can use this option to prevent users from accessing local dial-up services. For example, set the Maximum Number of Digits in Local Calls to seven to limit local callers to dialing local numbers only. The system provides four tables in which you can make entries for this option. The range is 4~30 digits.

- Code Call Digit Counting

  With Code Call Digit Counting, you can limit the number of digits long distance callers can dial. This lets you prevent callers from dialing extensively into long distance dial-up services. You can make four entries (4~30 digits).

- Toll Free Trunks

Certain trunks can be completely unrestricted, such as the company president's Private Line. Users can place calls on Code Free Trunks anytime – to anywhere, without inadvertently being Code restricted.

- PBX Call Restriction

  Code Restriction programming lets you enable/disable PBX Call Restriction and enter PBX access codes. You only need to do this if your system is behind a PBX and you have trunks programmed for behind PBX operation. Additional Default Entries For Common Permit Code Table

  Additional entries have been added to the default Common Permit Code Table. The default setting is as follows:

  - Table 1: 911
  - Table 2: 1800
  - Table 3: 1888
  - Table 4: 1822
  - Table 5: 1833
  - Table 6: 1844
  - Table 7: 1855
  - Table 8: 1866
  - Table 9: 1877

- Tie Line Code Restriction Enhanced

  In Program 34-01-05: E&M Tie Line Basic Setup – System Code Restriction, if this option is set to 0, the system follows the setting in Program 21-05-13: Code Restriction Class – Restriction of Tie Line Calls to determine whether or not the Code restriction setting in Program 34-08 is to be followed. If this option is set to 1, the system follows the system Code restriction settings defined in Program 21-05-01 through Program 21-05-13.

- A user can temporarily override an extension's Code Restrictions.
- The system allows or denies outgoing access to trunks depending on Code Restriction.
- When using DISA or Tie Lines, additional programming is required for Code Restriction (DISA, refer to Program 25-10; Tie Lines, refer to Program 34-04).
- A user can temporarily block their extension Code Restriction access, preventing unwanted calls from being placed on their telephone while they are away from their desk.
- A phone and a trunk will have a Restriction Class. The higher class applies for outgoing calls.

  For example:

  - When trunk class is 01 and station class 02, Toll Restriction Class 02 is applied.
  - When trunk class is 15 and station class 03, Toll Restriction Class 15 is applied.

Default Setting

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Central Office Calls, Placing

Code Restriction Override

Code Restriction, Dial Block

Direct Inward System Access (DISA)

PBX Compatibility

Multiple Trunk Types

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-08	**Basic Trunk Data Setup – Toll Restriction**	For each trunk, enter 1 to enable Toll Restriction; enter 0 to disable Code Restriction.	0 = Restriction Disabled (No) 1 = Restriction Enabled (Yes) (default = 1)
15-02-30	**Multiline Telephone Basic Data Setup – Toll Restriction Class**	Select the Toll Restriction Class to be used when placing a call from a virtual extension.	0 = Vir. Ext. (Virtual Extension Class) 1 = Real Ext. (Real Extension Class) (default = 1)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-02	**Class of Service Options (Outgoing Call Service) – Trunk Outgoing Calls**	Turns Off (0) or On (1) outgoing trunk calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-20	**Class of Service Options (Supplementary Service) – Account Code/Toll Restriction Operator Alert (Restricted Operation Transfer)**	Turn off or on operator alert when an extension improperly enters an Account Code or violates Toll Restriction.	0 = Off 1 = On (default = 1 for COS 1~15)
21-01-10	**System Options for Outgoing Calls – Dial Digits for Toll Restriction Path**	If this option is programmed with an entry other than 0, a call does not have a talk path unless the user dials at least the number of digits entered in this option when placing an outgoing call. This means that an entry of 4 or higher in this program causes a problem when dialing 911. Since it is only a 3-digit number, the call does not have a talk path, preventing the emergency dispatcher from hearing the caller. This option should be kept at its default setting of 0 to prevent any problem with dialing 911. If the system detects the call is answered, by detecting Reversal in analog trunks, this restores both – way voice paths immediately.	0~24 (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
21-01-15	**System Options for Outgoing Calls – Outgoing Disable on Incoming Line (Toll Restriction)**	Enable or disable the Incoming Line feature system wide. When enabled applies code restriction when hook flash is sent on inbound trunk followed by dialed digits.	0 = Disable 1 = Enable (default = 0)
21-01-16	**System Options for Outgoing Calls – Supervise Dial Detection Timer**	With the Outgoing Disable on Incoming Line feature, if dial tone is not detected after the extension answers an incoming line, the system determines the call is unable to complete and releases the DTMF receiver.	0~64800 (seconds) (default = 20 seconds)
21-01-17	**System Options for Outgoing Calls – Restriction Digit in Outgoing Disable on Incoming Line**	With the Outgoing Disable on Incoming Line feature, determine the number of digits (0~9) to be dialed before the call should be disconnected.	Digits 0~9 (default = 4)
21-04-01	**Toll Restriction Class for Extensions**	Use to assign a Toll Restriction class to an extension for modes 1-8.	Day/Night Mode 1~9 (9 = Power Failure Mode) 1~15 (default = 2)
21-05-01	**Toll Restriction Class – International Call Restriction Table**	For the Toll Restriction Class you select, assigned (1) or unassigned (0) the International Call Restrict Table (Program 21-06-01).	0 = Unassigned (No) 1 = Assigned (Yes) default: 1, 6~15 = 0 2~5 = 1
21-05-02	**Toll Restriction Class – International Call Permit Code Table**	For the Toll Restriction Class you select, assign (1) or unassign (0) the International Call Permit Table (Program 21-06-02).	0 = Unassigned 1 = Assigned default: 1, 3~15 = 0 2 = 1
21-05-04	**Toll Restriction Class – Maximum Number of Digits Table Assignment**	Select the table (defined in Program 21-06-03) to be used to determine the maximum number of digits allowed for outgoing calls.	1~4 =Table 0 =Disable (None) Default: 1, 2, 6~15 = 0 3 = 1 4 = 2 5 = 3
21-05-05	**Toll Restriction Class – Common Permit Code Table**	It chooses whether the table set up by Program 21-06-04 is referred to, or not referred to.	0 = Unassigned 1 = Assigned Default: 1, 8~15 = 0 2~7 = 1

Program Number	Program Name	Description/Comments	Assigned Data
21-05-06	**Toll Restriction Class – Common Restriction Table**	It chooses whether the table set up by Program 21-06-05 is referred to, or not referred to.	0 = Unassigned 1 = Assigned Default: 1, 6~15 = 0 2~5 = 1
21-05-07	**Toll Restriction Class – Permit Code Table**	Set the tables 1~4 when referring to the table set up by Program 21-06-06.	1~4 =Table 0 = Disable (None) Default: 1~6, 8~15 = 0 7 = 1
21-05-08	**Toll Restriction Class – Restriction Table**	Set the tables 1~4 when referring to the table set up by Program 21-06-07.	1~4 =Table 0 = Disable (None) Default: 1, 2, 6~15 = 0 3 = 1 4 = 2 5 = 3
21-05-09	**Toll Restriction Class – Restriction for Common Speed Dials**	For the Code Restriction Class you select, enable (1) or disable (0) Code Restriction for Common Speed Dialing numbers.	0 = Does Not Restrict 1 = Following Restriction Check (default =0)
21-05-10	**Toll Restriction Class – Restriction for Group Speed Dials**	For the Toll Restriction Class you select, enable (1) or disable (0) Code Restriction for Group Speed Dialing numbers.	0 = Does Not Restrict 1 = Following Restriction Check (default =0)
21-05-11	**Toll Restriction Class – Intercom Call Restriction**	For the Toll Restriction Class you select, enable (1) or disable (0) Intercom Call Restriction. If enabled, extensions cannot place or receive Intercom calls.	0 = Disable 1 = Enable (default = 0)
21-05-12	**Toll Restriction Class – PBX Call Restriction**	For the Toll Restriction Class you select, enable (1) or disable (0) PBX Call Restriction.	1~4 =Table 0 = Disable (None) Default: 1~6, 8~15 = 0 7 = 1
21-05-13	**Toll Restriction Class – Restriction of Tie Line Calls**	Select whether or not the Toll Restriction set up in Program 34-08-01 is enabled (1) or disabled (0).	0 = Disable 1 = Enable (default = 0)
21-06-01	**Toll Restriction Table Data Setup – International Call Restriction Table**	Enter the international dialing codes you want to restrict.	Dial (Up to four digits) default: Tables 1~10 = No Setting

Program Number	Program Name	Description/Comments	Assigned Data
21-06-02	**Toll Restriction Table Data Setup – International Call Permit Code Table**	Enter the international dialing codes you want to permit.	Dial (Up to six digits) Default: Tables 1~20 = No Setting
21-06-03	**Toll Restriction Table Data Setup – Maximum Number of Digits Table Assignment**	Select the maximum number of digits allowed in outgoing calls for each table (4~30).	4-30 default: Tables 1~ 4 = 30
21-06-04	**Toll Restriction Table Data Setup – Common Permit Code Table**	Program codes into the Common Permit Code Table.	Dial (Up to four digits) default: Table 1 ~ 10 = No Setting
21-06-05	**Toll Restriction Table Data Setup – Common Restriction Table**	Program codes into the Common Restrict Code Table.	Dial (Up to 12 digits) default: Tables 1~ 10 = No Setting
21-06-06	**Toll Restriction Table Data Setup – Permit Code Table**	Program codes into the Permit Code Tables.	Dial (Up to 12 digits) default: Table 1~4 = No Setting
21-06-07	**Toll Restriction Table Data Setup – Deny Restriction Table**	Program codes into the Restrict Code Tables (200 codes per table maximum).	Dial (Up to 12 digits) default: Table 1~4 = No Setting
21-06-08	**Toll Restriction Table Data Setup – PBX Access Code**	The system allows up to four tables for PBX access codes. PBX Access Codes can have up to two digits, using 0~9, **#**, * and LINE KEY 1 (don't care). Refer to the PBX Compatibility feature for the specifics.	Dial (Up to two digits) default: Table 1~4 = No Setting
21-21-01	**Toll Restriction for Trunks (Seized Trunk Basis Setting) – Restriction Class**	Enter the Toll Restriction Class for the selected trunk.	1~15 (default = 1)
34-01-05	**E&M Tie Line Basic Setup – System Toll Restriction**	Determine if an incoming Tie Line call should be subject to Toll Restriction.	0 = No (Off) 1 = Yes (On) (default = 0)
34-08-01	**Toll Restriction Data for E&M Tie Lines**	Define the Toll Restriction data for E&M Tie Lines. This data should be defined if Tie Line Code Restriction is enabled in Program 21-05-13.	Up to 10 digits (0~9, *, **#**) (default not assigned)

Operation

To place a trunk call if your system is Code Restricted:

1. Place call normally.

   . *If your Code Restriction Class does not allow the number you dial, your call is cut off.*

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Code Restriction Override

Description

Code Restriction Override lets a user temporarily bypass the Code Restriction for an extension. This helps a user that must place an important call that Code Restriction normally prevents. For example, you could set up Code Restriction to block 100 calls and then provide a Code Restriction Override code to your attendant and executives. When the attendant or executive needs to place a 100 call, they just:

- Press **Speaker**, dial a service code, and enter their override code.
- Press **Speaker** and dial a trunk access code (e.g., 9 or 805 002).
- Place the 100 call without restriction.

You can assign a different Code Restriction Override code to each extension. Or, extensions can share the same override code.

Code Restriction Override overrides *all* Code Restriction programming. Walking Code Restriction allows you to assign a Code Restriction level for each user. When a call is placed using Walking Code Restriction, the restriction for the call is based on the Code Restriction level defined in Programs 21-05-xx and Programs 21-06-xx.

Conditions

- Off-Premise notification and external extensions require access to outside lines.
- In the Class heading in the SMDR report, POTA indicates that the call was placed using Temporary Code Restriction Override.
- Code Restriction Override and Walking Code Restriction temporarily overrides an extension Code Restriction.
- If the system has VRS, users hear, “Your call cannot go through. Please call the operator” when they dial a number that Code Restriction prevents.

Default Setting

Disabled

Related Features

Central Office Calls, Placing

Code Restriction

Station Message Detail Recording

Voice Response System (VRS)

Guide to Feature Programming

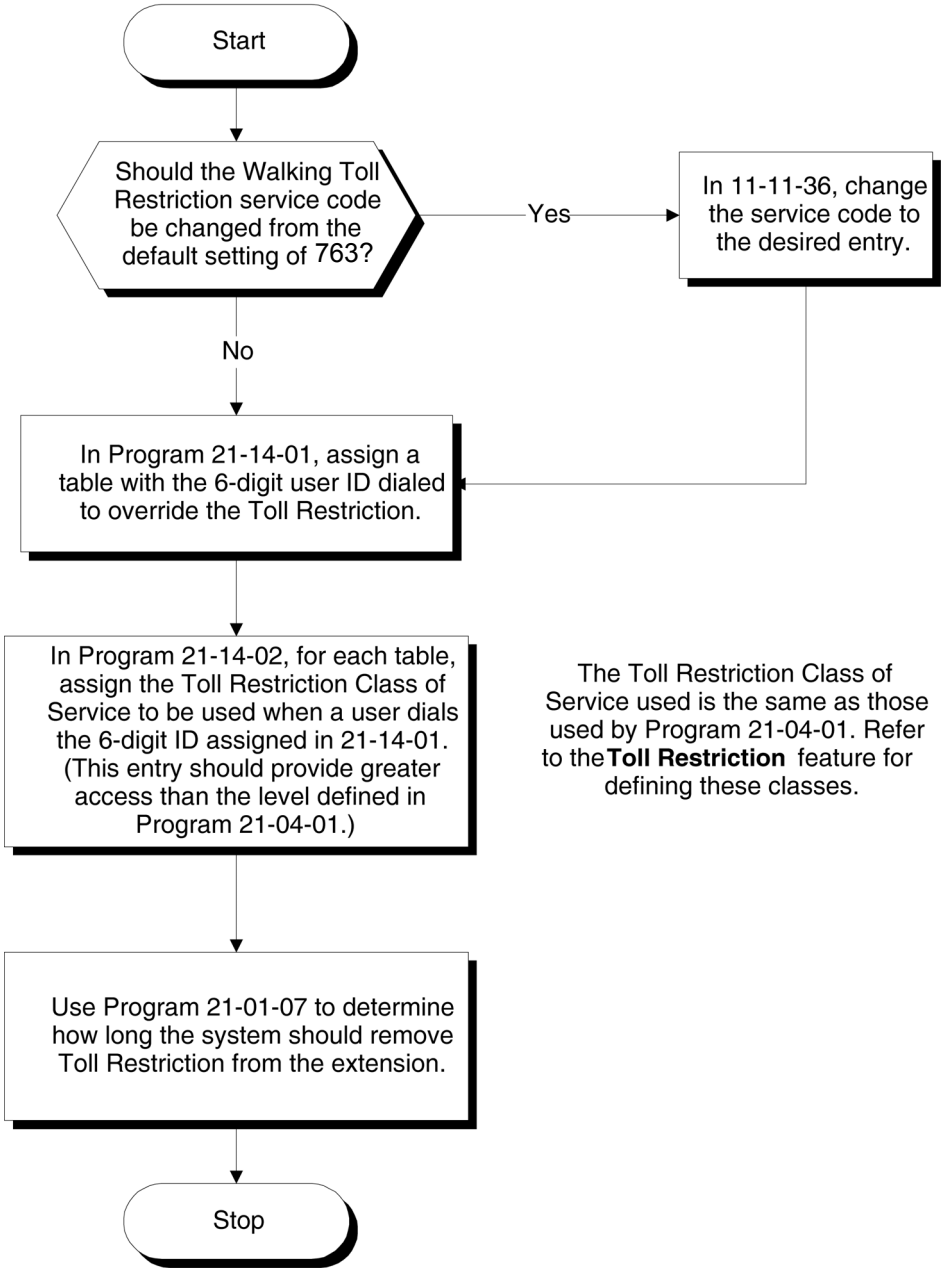
Program Number	Program Name	Description/Comments	Assigned Data
11-11-34	**Service Code Setup (for Setup/ Entry Operation) – Temporary Toll Restriction Override**	If required, change the service code (875) for Temporary Toll Restriction Override.	MLT, SLT (default = 875)
11-11-36	**Service Code Setup (for Setup/ Entry Operation) – Toll Restriction Override**	If required, change the service code (763) for Toll Restriction Override.	MLT, SL7 (default = 763)
20-08-06	**Class of Service Options (Outgoing Call Service) – Toll Restriction Override**	Turn off or on Toll Restricting Override (Service Code 663).	0 = Off 1 = On (default = 1 for COS 1~15)
21-01-07	**System Options for Outgoing Calls – Toll Restriction Override Time**	Set the Toll Restriction Override Time. After dialing the Toll Restriction Override codes, the system removes Toll Restriction for this Time.	0~64800 (seconds) (default = 10 seconds)
21-07-01	**Toll Restriction Override Password Setup**	Assign Toll Restriction Override codes to extensions. Each code must have four digits, using any combination of 0~9, **#** and *. Each extension can have a separate code, or many extensions can share the same override code.	Maximum four digits (0~9, **#**, *) (default not assigned)
21-14-01	**Walking Toll Restriction Password Setup – User ID**	Enter the Walking Toll Restriction Override User ID codes (six digits) into tables. Up to 500 different override codes can be entered.	Dial (Six digits) (default not assigned)
21-14-02	**Walking Toll Restriction Password Setup – Walking Toll Restriction Class Number**	Enter the Walking Toll Restriction Class of Service (1~15) to be used for each table number assigned in Program 21-14-01.	1~15 (default = 15)
35-02-01	**SMDR Output Options – Toll Restricted Call**	SMDR can include or exclude calls blocked by Toll Restriction.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-02	**SMDR Output Options – PBX Calls**	When the system is behind a PBX, SMDR can include all calls or just calls dialed using the PBX trunk access code.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-03	**SMDR Output Options – Trunk Number or Name**	Select whether the system should display the trunk name (0) or the number (1) on SMDR reports. . *If this option is set to 0, Program 35-02-14 must be set to 0.*	0 = Name 1 = Number (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
35-02-04	**SMDR Output Options – Summary (Daily)**	Set this option to (1) to have the SMDR report provide a daily summary (at midnight every night).	0 = Not Displayed 1 = Displayed (default = 1)
35-02-05	**SMDR Output Options – Summary (Weekly)**	Set this option to (1) to have the SMDR report provide a weekly summary (every Saturday at midnight).	0 = Not Displayed 1 = Displayed (default = 1)
35-02-06	**SMDR Output Options – Summary (Monthly)**	Set this option to (1) to have the SMDR report provide a monthly summary (at midnight on the last day of the month).	0 = Not Displayed 1 = Displayed (default = 1)
35-02-07	**SMDR Output Options – Toll Charge Cost**	Set this option to (1) have the SMDR report include toll charges.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-08	**SMDR Output Options – Incoming Call**	Enable this option (1) to have the SMDR report include incoming calls. If you disable this option (0), incoming calls do not print.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-09	**SMDR Output Options – Extension Number or Name**	Set this option (1) to have the SMDR report include extension numbers. Set this option (0) to have the SMDR report include extension names.	0 = Name 1 = Number (default = 0)
35-02-10	**SMDR Output Options – All Lines Busy (ALB) Output**	Determine if the All Lines Busy (ALB) indication should be displayed.	0 = Not Displayed 1 = Displayed (default = 0)
35-02-12	**SMDR Output Options – DID Table Name Output**	Determine if the DID table name should be displayed.	0 = Not Displayed 1 = Displayed (default = 0)
35-02-13	**SMDR Output Options – CLI Output When DID to Trunk**	Determine if the CLI output should be displayed for DID.	0 = Not Displayed 1 = Displayed (default = 0)
35-02-14	**SMDR Output Options – Date**	Determine whether the date should be displayed on SMDR reports. . *This option must be set to 0 if the trunk name is set to be displayed in Program 35-02-03.*	0 = Not Displayed 1 = Displayed (default = 0)
35-02-15	**SMDR Output Options – CLI/DID Number Switching**	Determine whether or not the CLI/ DID Number Switching should be displayed.	0 = CLI (CLIP) 1 = DID Calling Number (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
35-02-16	**SMDR Output Options – Trunk Name or Received Dialed Number**	Determine how the SMDR should print incoming calls on ANI/DNIS or DID trunks. If set to (1), ANI/DNIS trunks can print DNIS digits. If set to (0) trunk names are printed instead.	0 = Trunk Port Name 1 = Received Dialed Number (default = 0)
35-02-17	**SMDR Output Options – Print Account Code or Caller Name of Incoming Call**	Determine if SMDR should print Account Code or Caller Name of Incoming Call.	0 = ACC 1 = CNAME (default = 0)
35-02-18	**SMDR Output Options – Print Mode for Caller Name of Incoming Call**	Determine how SMDR should print Caller Name of Incoming Call.	0 = Normal 1 = Line Feed (default = 0)

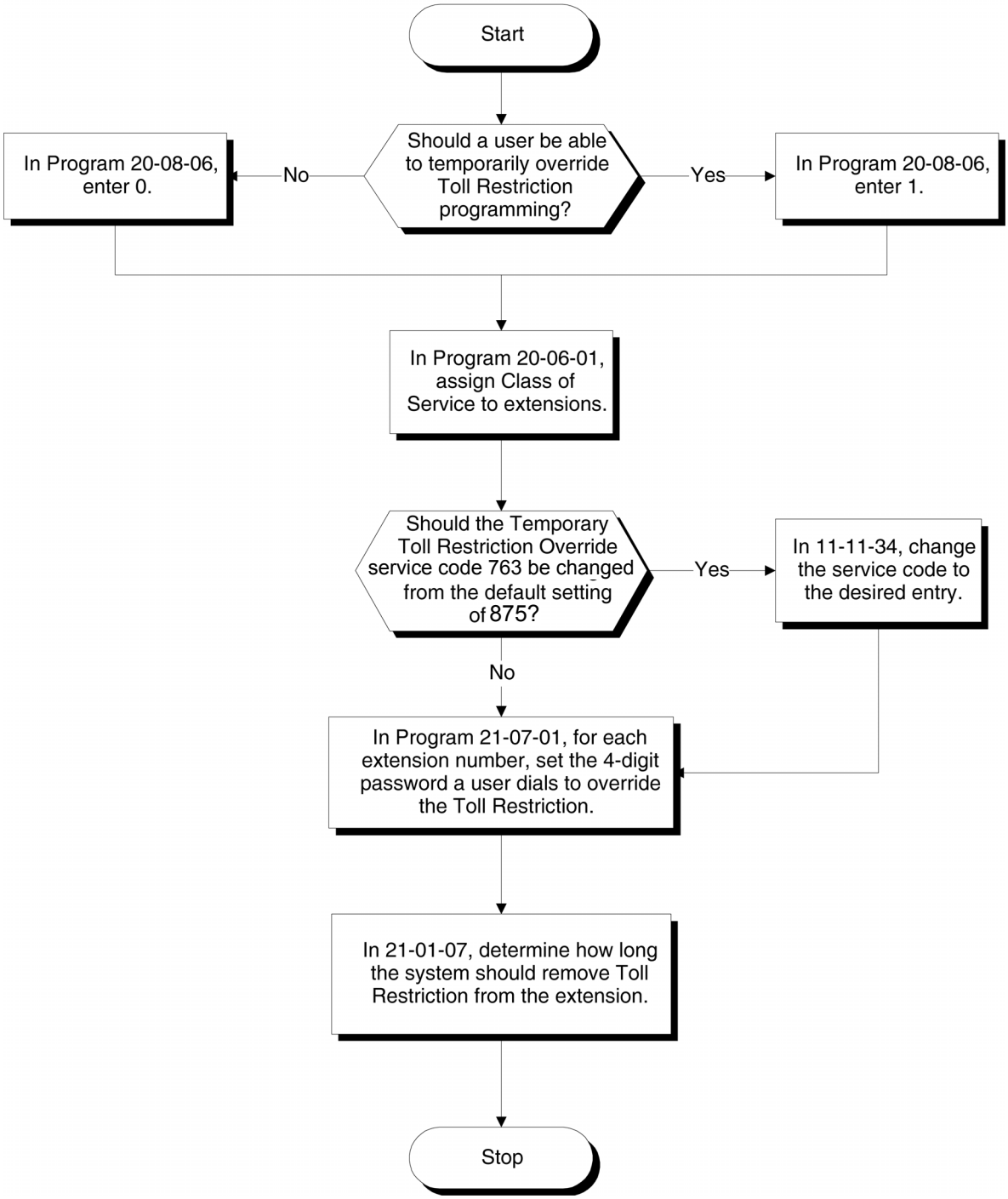
Walking Code Restriction

Walking Toll Restriction



Temporary Code Restriction Override

Temporary Toll Restriction Override



Operation

To temporarily override a restricted extension Code Restriction:

. *You can override restriction for only one call at a time.*

1. At the multiline terminal, press **Speaker**.

   - OR -

   At single line telephone, lift the handset.

2. Dial **875**.

3. Dial the 4-digit Code Restriction Override code.

   . *If you wait too long before going to the next step, you may have to repeat the procedure. After dialing the service code, the display indicates the override codes as they are being entered. As the last digit is entered, the display is cleared and ICM dial tone is heard.*

   . *You hear error tone if you dial your code incorrectly.*

4. Press idle line key or dial trunk access code.

5. Dial the number without any restriction.

To use your Walking Code Restriction level at an extension:

. *You can override restriction for only one call at a time.*

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **763** and dial the 6-digit Walking Toll Restriction Class of Service code.

   . *After dialing the service code, the display indicates the override codes as they are being entered. As the last digit is entered, the display is cleared and ICM dial tone is heard.*

   . *You hear error tone if you dial your code incorrectly.*

3. Press idle line key or dial trunk access code.

4. Dial the number.

   . *The call is allowed or denied based on the user's Toll Restriction Class of Service level.*

Code Restriction, Dial Block

Description

Code Restriction, Dial Block lets a user temporarily block dialing on an extension. This helps a user block his or her phone from being used by another person while they are away from their desk. A user would need to enter a 4-digit personal code to enable/disable this feature.

Dial Block can also be set by the supervisor's access code. If Dial Block is set by an extension user, the supervisor cannot release it. Additionally, if Dial Block is set by the supervisor's code, the extension user cannot release it.

Important: This function works by password and Class of Service control (the supervisor is not an assigned extension). If Dial Block is available for all Classes of Service, everyone may become a supervisor if they know the Dial Block password.

Conditions

- If the system is reset by a first initialize, the Dial Block feature is cleared.
- This feature is not available for ISDN S-Bus extensions.
- Both Program 21-09-01 (Code Restrict Class) and Program 21-10 (Dial Block Restriction Class per Extension) can be set at the same time. However the system gives priority to the setting in Program 21-10.
- Dial Block can temporarily block an extension Code Restriction setting by changing to a predefined table that has more restrictions.

Default Settings

Disabled

System Availability

Terminals:

None

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-10-17	**Service Code Setup (for System Administration) – Dial Block by Supervisor**	Assign a service code to be used by the supervisor to set Dial Block for another extension.	MLT (default = 701)
11-11-33	**Service Code Setup (for Setup/ Entry Operation) – Dial Block**	Assign a service code to be used for Dial Block.	MLT, SLT (default = 700)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension ports = Class 1
20-08-08	**Class of Service Options (Outgoing Call Service) – Toll Restriction Dial Block**	Turn off or on an extension ability to use Dial Block.	0 = Off 1 = On (default = 0 for COS 1~15)
21-09-01	**Dial Block Setup – Toll Restriction Class with Dial Block**	Assign a Code Restriction COS (1~15) when the Dial Block feature is used.	1~15 (default = 1)
21-09-02	**Dial Block Setup – Supervisor Password**	Assign a 4-digit password to be used by the supervisor to enable or disable Dial Block for other extensions.	0~9, <ArialN Caps11>*, # (4-digit fixed) (default not assigned)
21-10-01	**Dial Block restriction Class per Extension**	Assign the Code Restriction COS (1~15) to be used by an extension when the Dial Block feature is enabled. If this data is “0”, Code Restriction COS follows Program 21-09-01.	0, 1~15 (0 = No Setting) (default = 0)
90-19-01	**Dial Block Release**	Enter the extension number to be released from the Dial Block Restriction. This program can be used when a password is forgotten by the user.	[Release?]: Dial **1**+ press **Transfer** (Press **Hold** to cancel.)

Operation

To set Dial Block:

1. At the multiline terminal, press **Speaker**

   - OR -

   At the single line telephone, lift the handset.

2. Dial **700** (default).

3. Dial the 4-digit Dial Block Code (as set in programming).

4. Dial **1**.

   . *Confirmation tone is heard.*

5. Press **Speaker** or replace the handset to hang up.

To release Dial Block:

1. At the multiline terminal, press **Speaker**

   - OR -

   At the single line telephone, lift the handset.

2. Dial **700**.

3. Dial the 4-digit Dial Block code.

4. Dial **0**.

   . *Confirmation tone is heard.*

5. Press **Speaker** or replace the handset to hang up.

To set Dial Block from another extension:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **701** (default).

3. Dial the 4-digit Dial Block code (as set in programming).

4. Dial the extension number to blocked.

5. Dial **1**.

   . *Confirmation tone is heard.*

6. Press **Speaker** or replace the handset to hang up.

To release Dial Block from another extension:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **701**.

3. Dial the 4-digit Dial Block code.

4. Dial the extension number to be released from Dial Block.

5. Dial **0**.

   . *Confirmation tone is heard.*

6. Press **Speaker** or replace the handset to hang up.

Conference

Description

Conference lets an extension user add additional inside and outside callers to their conversation. With Conference, a user can set up a multiple-party telephone meeting without leaving the office. The CD-CP00 provides 64 conference ports, allowing any number of internal or external parties to be conferenced together for a limit of 32 parties. This means that one extension can conference up to 31 internal and/or external parties together (the originator would be the 32nd party reaching the maximum of 32). While this Conference call is active, another user can initiate a separate Conference also for a limit of 32 parties, or any number of conferences can be initiated with any number of parties (up to 32) until all 64 Conference ports are busy.

Conditions

- An ADA module is required for speech recording.
- Split allows a user to alternate (i.e., switch) between their callers in Conference. This allows a dispatcher, for example, to control a telephone meeting between themselves, a customer and a service technician. The dispatcher can meet together with all parties, privately set up a service strategy with the technician and then meet again to set the schedule.
- Split cycles through the Conference in the same order in which the Conference was initially set up. If a user places an outside call, conferences extension 200 followed by extension 201, Split cycles from the trunk, to 200 and finally to 201. The Split cycle then repeats.
- If a user's extension has Barge-In ability enabled, they can also Barge-In on an established Conference. This permits, for example, an attendant or supervisor to join a Conference in an emergency. It also allows a co-worker to leave a conference – and then rejoin the telephone meeting when it is convenient to do so.

  . *If a user's extension has Barge-In monitor enabled (Program 20-13-10), they can Silent Monitor a conference already in progress (Program 99-01-49 option 49 must be set to 1).*

- A Class of Service option is available which allows or denies an extension user from automatically setting up a Conference/Tandem Trunking call upon hanging up the telephone.
- An extension with Barge-In ability can Transfer a call into an existing Conference. This allows, for example, an attendant to locate co-workers and then Transfer them into an existing telephone meeting. There is no need for the attendant to locate all the parties at the same time and sequentially add them into the Conference. Transfer Call Into Conference Code (not assigned).
- An option is available which allows an extension Conf key to be programmed for Conference or for Transfer. When set for Transfer, the user places a call on hold, dials the extension to which it should be transferred, and presses Conf. The call is then transferred.

When set for Conference, with an active call, the user presses Conf, places a second call, then presses Conf twice. All the calls are then connected.

- Users can Barge-In on a Conference call if allowed in programming.
- Define the outgoing call options for each trunk and user.
- Set up a Conference with a co-worker in your immediate work area.
- DISA and Tie Line users may use the Barge-In feature on a Conference call if they know the service code and are permitted in their DISA/Tie Line Class of Service.
- Meet Me Conference lets an extension user set up a Conference via Paging.
- Meet Me Paging lets an extension user set up a two-party meeting via Paging.
- A user can set up an Unsupervised Trunk-to-Trunk Conference and then drop out of the call, allowing the remaining parties to continue the conversation. Establish two trunk calls press the Hold key and dial **#**8.
- You can optionally program Conf (Transfer) for Transfer. In this case, the Multiline Terminal must have a Conference function key. The system also allows a call to be transferred into a Conference call.
- When the Conference Originator hangs up with a conference on Hold, or when trying to add another caller, all internal calls are dropped.
- Conferencing when talking on a Virtual Extension:
  - While talking on a Virtual Extension, if the station has an internal call on Hold, a conference call cannot be established.
  - While talking on a Virtual Extension, if the station receives an intercom call (call to its actual station number), a conference call cannot be established.
  - While talking on a Virtual Extension, if the station has a call on Hold, a conference call cannot be established.

Default Setting

Enabled

System Availability

Terminals

Multiline and Single Line Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-07-01	**Conversation Record Circuit**	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)
11-12-08	**Service Code Setup (for Service Access) – Barge-In**	Determine what the service code should be for an internal party to use the Barge-In feature.	MLT, SLT (default = 810)
11-12-47	**Service Code Setup (for Service Access) – Call Waiting Answer/ Split Answer**	If required, use this program to change the code users dial to Split while on a call.	SLT (default = 894)
11-12-57	**Service Code Setup (for Service Access) – Tandem Trunking**	With two trunks in Conference press the Hold key and dial 753 and the Conference/Tandem happens.	MLT, SLT (default = 753)
11-12-58	**Service Code Setup (for Service Access) – Transfer Into Conference**	If required, change the service code used to transfer a call into a Conference call.	MLT, SLT (default not assigned)
11-16-02	**Single Digit Service Code Setup – Barge-In**	Use to customize the one-digit Service Codes used for Barge-In.	(default not assigned)
14-01-04	**Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**	Use to select the CODEC gain type used by the trunk when it is part of an unsupervised conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
15-02-24	**Multiline Telephone Basic Data Setup – Conference Key Mode**	This option allows an extension Conf key to be programmed for Conference or for Transfer. When set for Transfer (1), the user places a call on hold, dials the extension to which it should be transferred, the presses the Conf key. The call is then transferred. When set for Conference (0), with an active call, the user presses the Conf key, places a second call, then presses the Conf key twice. All the calls are then connected.	0 = Conference 1 = Transfer (default = 0)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension ports = Class 1
20-11-21	**Class of Service Options (Hold/ Transfer Service) – Restriction for Tandem Trunking on Hang Up**	Allow (0) or deny (1) an extension users's ability to set up a tandem/ conference call automatically when they hang up.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-08	**Class of Service Options (Supplementary Service) – Conference**	Turn off or on an extension ability to initiate a conference or Meet Me Conference.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	In an extension Class of Service, enable the Barge-In Speech Mode (0) or Monitor Mode (1) at the initiating extension (i.e., Barge-In initiator).	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-15	**Class of Service Options (Supplementary Service) – Barge-In, Initiate**	Turns Off (0) or On (1) an extension user ability to barge-in on other's calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-16	**Class of Service Options (Supplementary Service) – Barge-In, Receive**	In an extension Class of Service, turn On (1) or Off (0) Barge-In at the receiving extension (i.e., Barge-In receive).	0 = Off 1 = On (default = 1 for COS 1~15)
20-14-11	**Class of Service Options for DISA/E&M – DISA/Tie Trunk Barge-In**	In an extension Class of Service, enable (1) or disable (0) a DISA or tie trunk user from using the Barge-In feature.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To establish a Conference:

Multiline Terminal

1. Establish intercom or trunk call.
2. Press **Conf** or **Conf** softkey (Program 15-07 or SC 851: 07).
3. Dial the extension you want to add.

- OR -

Access outside call.

- OR -

Retrieve call from Park orbit.

. *To get the outside call, you can either press a line key or press the Speaker key and dial 9, the Trunk Access Code + the trunk number (default **#**9). You can optionally go back to step 2 to add more parties to your Conference.*

4. When called party answers, press the **Conf** softkey or **Conf** twice.

. *If you cannot add additional parties to your Conference, you have exceeded the system Conference limit.*

. *If the call being added is busy/unanswered:*
With an outside call, press the line key for a call previously added to the Conference. The unanswered call drops and the initiator is back into the Conference call.

. *Adding an Intercom call to an outside Conference call: Press the **Conf** softkey on the Multiline Terminal display or Conf twice to re-establish the Conference. If using a non-display telephone, press **Conf** twice.*

. *With only Intercom calls in the Conference: Press **Conf** twice to re-establish the Conference. If the voice mail answers, there is no way to drop that extension out. You must drop the Conference call.*

5. Repeat steps 2~4 to add more parties.

Single Line Telephone

1. Establish Intercom or trunk call.
2. Hookflash and dial **826**.
3. Dial extension you want to add.

- OR -

Access trunk call.

- OR -

Retrieve call from Park orbit.

4. Hookflash and repeat step 3 to add more parties.

- OR -

Hookflash twice to set up the Conference.

To Split (alternate) between the parties in Conference:

Multiline Terminal

1. Press **Conf** (**Transfer**) or **Conference** key (Program 15-07 or SC 851: 07).
2. Dial Split service code (**894**).

. *Repeat this procedure to alternate between the remaining parties in the Conference. Press the **Conf** softkey or press Conf twice to set up the Conference again.*

Single Line Telephone

1. Hookflash and dial **894**.

   . *Repeat this procedure to alternate between the remaining parties in the Conference. Hookflash twice to set up the Conference again.*

To drop an outside call from the Conference:

1. Press **Hold** to place the conference call on hold.
2. Hang up.

   . *The lines involved in the Conference ring back separately to the telephone.*

3. Answer and disconnect the unwanted outside call.
4. To re-establish the Conference, answer the remaining call by pressing **Conf** after each call is answered. Press **Conf** twice when all calls have been answered.

To exit a Conference without affecting the other parties:

Multiline Terminal

1. Hang up.

   . *If you press Hold while on a call with two outside callers, the outside callers hear what is programmed in Program 10-04-01.*

Single Line Telephone

1. Hang up.

   . *If you are not permitted to use Tandem Trunking, outside callers may hear Music on Hold.*

To Barge-In to Conference Call:

1. Pick up the handset or press **Speaker** and dial the service code (default = **810**).

   . *If the telephone does not have the proper COS, a warning tone is sent. After the user hangs up, the system automatically places a Callback to the extension.*

2. Dial the extension number or press a **DSS** key of a telephone within a Conference call.

   . *When a new call is added to the conference, an intrusion tone is heard by all parties in the Conference, depending on system programming, and all display multiline terminals show the joined party. If a Conference is not possible:*

   - *the extension user hears a warning tone*
   - *the DISA user is rerouted to the defined ring group*

   - OR -

   - *the Tie Line user hears a busy tone.*

   - OR -

The following steps are not available for DISA or Tie Line trunks:

1. Dial the extension number of the internal party.
2. Dial the single digit service code, if programmed.
   - *Instead of the single digit service code, the service code 710 can also be dialed at this point.*

To Transfer a Call into a Conference:

1. While on a call, press **Hold**.
2. Dial the Transfer to Conference service code (default = **not assigned**).
   - *If the telephone does not have the proper COS, a warning tone is sent. After the user hangs up, the system automatically places a Callback to the extension.*
   - *The display shows the line Number, Number/Name and Extension Name/Number.*
3. Dial the extension number or press a **DSS** key of a telephone in a Conference call.
   - *If an error tone is heard, Barge-In is not enabled for the extension and the call cannot go through. Retrieve the call by pressing the flashing line Key or hang up and the call recalls the extension.*
   - *When the call is transferred into the Conference, an intrusion tone is heard by all parties in the conference, depending on the entries in Program 20-13-17 and Program 80-01, and all display multiline terminals show the joined party.*
   - *To cancel the transfer, press the flashing line Key to retrieve the call.*
4. Hang up.

Conference, Remote

Description

The Remote Conference feature enhances the Conference feature by allowing outside parties to dial a Remote Conference pilot number and a Conference Group number to connect to a Conference call.The conference circuits on the CD-CP00 are used to join each party to the conference. A maximum of 32 conference participants is possible for one Conference. However, the conference call cannot be split over the CD-CP00's conference blocks. This could limit the number of participants if other conference circuits are in use.

A maximum of 4 simultaneous Remote Conference calls is possible. The conference call is password protected so that any user joining the conference would be required to enter a password before being connected.

- One terminal or trunk needs one conference channel to participate in the conference.
- The conference call cannot be split over the CD-CP00's two conference blocks, limiting the number of conference participants to 32.

Conditions

None

Default Setting

Not defined

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-19-01	**Remote Conference Pilot Number Setup - Maximum Channels**	Assign the pilot number (up to 8 digits) to be used for the Remote Conference. This is the number that outside parties will call in order to connect to a conference.	Dial (Up to 8 digits) (default: No Remote Conference Pilot Numbers assigned to any Conference Group (1-4).)
14-01-02	**Basic Trunk Data Setup – Transmit Level**	The option sets the amount of transmit gain (signal amplification) for the trunk being programmed.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-03	**Basic Trunk Data Setup – Receive Level**	The option sets the amount of receive gain (signal amplification) for the trunk being programmed.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-04	**Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**	The option sets the amount of transmit gain (signal amplification) for the trunk being programmed when it's part of an Unsupervised Conference or transferred.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-05	**Basic Trunk Data Setup – Receive Gain Level for Conference and Transfer Calls**	The option sets the amount of receive gain (signal amplification) for the trunk being programmed when it's part of an Unsupervised Conference or transferred.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 16 (-8dB)]
14-02-09	**Analog Trunk Data Setup – Busy Tone Detection**	Enable (1) this option to allow analog trunks which can not detect disconnecting to be released at the end of the conference.	0 = Disable 1 = Enable (default = 0)
20-13-46	**Class of Service Options (Supplementary Service) – Remote Conference**	For each Class of Service (01-15), determine whether an extension should be able to place an intercom call to join a Remote Conference call.	0 = Off 1 = On (default = 1 for COS 1~15)
20-34-01	**Remote Conference Group Setup - Conference Name**	For each conference group, enter the name (up to 12 characters) displayed at the time of a Remote Conference. This entry will display on the keyset LCD.	Maximum 12 characters (default: Group1 - Conf 1 Group2 - Conf 2 Group3 - Conf 3 Group4 - Conf 4)

Program Number	Program Name	Description/Comments	Assigned Data
20-34-02	**Remote Conference Group Setup - Password**	For each conference group, define the 4-digit password of a Remote Conference.	Fixed 4 digits dial (0-9,@) (default: Group1 - 1111 Group2 - 2222 Group3 - 3333 Group4 - 4444)
20-34-03	**Remote Conference Group Setup - Maximum Participants**	For each conference group, define the maximum number of participants of a Remote Conference (0-32).	**0**~3**2** (default = 8)
20-34-04	**Remote Conference Group Setup - Maximum Conference Duration**	For each conference group, define the maximum duration of a Remote Conference. When this time passes, the conference is disconnected by the SV8100.	**0**~64800 (default = 7200)
20-34-05	**Remote Conference Group Setup - End Tone Alert Time**	For each conference group, determine how long prior disconnecting a Remote Conference call (based on the maximum conference duration above) the SV8100 should send out a beep. This is used to warn the conference participants of the pending disconnect.	**0**~64800 (default = 300)

Related Features

Barge-In

The Barge-In feature cannot be used for an extension user on a Remote Conference call.

Call Forward

The Remote Conference pilot number can not be set as the destination for Call Forward.

Hold

Using Hold while on a Remote Conference call is not possible.

Networking

With Networking, each system must have a VRS.

Transfer

Calls cannot be transferred to the Remote Conference session.

Operation

To joining a Remote Conference Call:

1. Internal Extension:

Lift the handset and dial the extension number of the Remote Conference pilot number (assigned in Program 11-19-01).

- OR -

1. External Party:

Dial the telephone number for the Remote Conference pilot number(assigned in Program 11-19-01).

- When using a subaddress, dial the Remote Conference pilot number as the Subaddress

2. The password is requested by the VRS (Password please).
3. Dial the password of the conference group.
4. If the password matches, the participant becomes part of the Remote Conference.

If the password does not match, a warning tone is heard.

- A busy tone will also be heard if the maximum number of Remote Conference participants has been reached or if a conference resource cannot be secured.
- As the maximum time for the conference nears, the system will provide an end tone to the participants according to the timer in Program 20-34-05. Once this timer expires, if the conference is still ongoing, the call will be disconnected by the system.

Conference, Voice Call/Privacy Release

Description

Voice Call Conference lets extension users in the same work area join in a trunk Conference. To initiate a Voice Call Conference, an extension user just presses the Meet-Me Conference key and tells their co-workers to join the call. The system releases the privacy on the trunk, and other users can just press the trunk line key to join the call. Line keys assigned for the trunk blink indicating that privacy has been released, and others can join the current call.

Voice Call Conference does not use the telephone system features to announce the call. The person initiating the Voice Call Conference just announces it verbally. A tone, indicating others have joined the conference, can be provided.

The CD-CP00 provides 64 Conference circuits, to allow internal or external parties to be conferenced together up to a limit of 32.

Privacy Mode Toggle Option

The Privacy Mode Toggle option allows an extension user to quickly change an outside call from the non-private mode to the private mode. If the outside call is on a line key, the user just presses the line key to switch from non-private mode to private mode. For systems using the Privacy Mode Toggle option, trunks initially have the privacy released. The remainder of the call is private. Unlike pressing the line key, pressing the Meet-Me Conference key toggles back and forth between private and non-private mode for the call.

Conditions

- Virtual Extensions do not support Voice Call Conference Programmable Function keys.
- Voice Call Conference requires a Meet-Me Conference function key and trunk line keys.
- This feature is not available on single line telephones.
- With Caller ID enabled, a call with Privacy Release shows the Caller ID until the call is answered. It can be viewed again by pressing the line key, though this sets the call to Private mode. To keep the call on Privacy Release, press the Help + Exit keys.

Default Setting

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Caller ID

Conference

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-07-01	**Conversation Record Circuits**	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)
14-01-19	**Basic Trunk Data Setup – Privacy Mode Toggle Option**	Determine if a trunk should be able to be toggled to a private/ non-private line (0 = Disabled, 1 = Enabled). This option is not required for Voice Call Conference.	0 = Disable Private Line (Normal) 1 = Enable Private Line (Private Line) (default = 0)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-09	**Class of Service Options (Supplementary Service) – Privacy Release**	Turn off or on an extension ability to initiate a Voice Call Conference.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-17	**Class of Service Options (Supplementary Service) – Barge-In Tone/Display (Intrusion Tone)**	In an extension Class of Service, turn On (1) or Off (0) the Barge-In (Intrusion) Tone. If disabled, this also turns off the Barge-In display at the called extension.	0 = Off 1 = On (default = 1 for COS 1~15)
31-01-04	**System Options for Internal/ External Paging – Privacy Release Time**	Set the interval users have to join a Voice Call Conference after it is announced. (Note that this interval is also used for Meet Me Conference.)	0~64800 (seconds) (default = 90 seconds)

Operation

To join a Voice Call Conference (if invited):

1. After Conference request, press indicated line key.
   - *A **Conf** indication is displayed on both telephones.*
   - *A trunk with privacy release or Voice Call Conference blinks.*

To exit a Voice Call Conference without affecting the other parties:

1. Press **Speaker** to hang up.

To toggle between Private and Non-Private mode:

1. Press the Meet-Me Conference key (Program 15-07-01, SC 851: 32).

   - OR -

   Press the Trunk Line Key. (This toggles from Non-Private to Private. To go back to Non-Private, the Meet-Me Conference Key above must be pressed.)

Continued Dialing

Description

Continued Dialing allows an extension user to dial a call, wait for the called party to answer and then dial additional digits. This helps users that need services like Voice Mail, automatic banking and Other Common Carriers (OCCs).

There are two types of Continued Dialing:

Continued Dialing for Intercom Calls

Depending on an extension Class of Service, a multiline terminal user may be able to dial additional digits after their Intercom call connects. In systems with Voice Mail, for example, Continued Dialing lets extension users dial the different options after the Voice Mail answers. Without Continued Dialing, extension users cannot access these Voice Mail options.

Continued Dialing for Trunk Calls

Continued Dialing gives a user access to outside services like automatic banking, an outside Automated Attendant, bulletin boards and Other Common Carriers (OCCs). After the outside service answers, the user can dial digits for whatever options the services allow. Without Continued Dialing, the system Toll Restriction cuts off the call after a specific number of dialed digits. See Programming below for additional information.

Continued Dialing may make the system more susceptible to toll fraud.

Conditions

- The ability to use Continued Dialing on trunk calls is set by Toll Restriction programming.
- Continued Dialing for intercom calls only applies to calls made to analog type devices.
- With Pulse to Tone Conversion, users can place calls to services over Dial Pulse trunks - and then dial DTMF digits after the service answers.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Pulse to Tone Conversion

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-03-03	**Single Line Telephone Basic Data Setup – Terminal Type**	Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) the extension ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)
21-04-01	**Toll Restriction Class for Extensions**	Assign a Toll Restriction Class (1~15) to an extension.	Day/Night Mode 1~9 (9 = Power Failure Mode) 1~15 (default = 2)
21-05-04	**Toll Restriction Class – Maximum Number of Digits Table Assignment**	Select the table (defined in Program 21-06-03) to be used to determine the maximum number of digits allowed for outgoing calls.	1~4 =Table 0 =Disable (None) Default: 1, 2, 6~15 = 0 3 = 1 4 = 2 5 = 3
21-06-03	**Toll Restriction Table Data Setup – Maximum Number of Digits Table Assignment**	Set the Maximum Number of digits dialed for each table.	4-30 default: Tables 1~4 = 30

Operation

To use Continued Dialing:

1. Place an intercom or trunk call.

2. Continue dialing after the call connects.

. *Toll Restriction and Class of Service programming may limit Continued Dialing.*

Data Line Security

Description

Data Line Security protects any station port from receiving audible tones (such as Camp-On or Override) and denies a station from barging in while busy to prevent disruption of data transmission when using a modem or facsimile machine.

Conditions

- When a multiline terminal and a single line telephone are assigned for Data Line Security, Tone Override/Voice Override and Call Alert notification tone are not heard over the handset speaker.
- Data Line Security protects a station from Barge-in, even when Barge-In is allowed in Class of Service.
- When any multiline terminal or single line telephone calls a station with Data Line Security, a constant busy tone is heard.

Default Setting

None

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-09-05	**Class of Service Options (Incoming Call Service) – Signal/ Voice Call**	Turn off or on an extension ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-06	**Class of Service Options (Incoming Call Service) – Incoming Time Display**	If this option is set to 1, the Incoming Call Time is displayed on the multiline terminal LCD while the telephone is ringing.	0 = Off 1 = On (default = 0 for COS 01~15)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turns off or on an extension ability to receive Off-Hook signals. . *20-09-07 must be set to 0 also for this to be effective.*	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-35	**Class of Service Options (Supplementary Service) – Block Camp-On**	Use this option to turn On (1) or Off (0) extension ability to block callers from dialing **#** to camp-on.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

None

Delayed Ringing

Description

Delayed Ringing allows programmed secondary answering positions to ring on incoming calls after a programmed time. This feature applies to CO/PBX lines, Secondary Incoming Extensions, Virtual Extensions, and Call Arrival Keys.

Conditions

- An extension user can answer an outside call just by lifting the handset (depending on programming).
- Terminals must have a CO line appearance for a trunk call to be answered on the telephone.

Default Settings

None

System Availability

Terminals:

All Terminals

Required Component(s)

None

Related Features

Central Office Calls, Answering

Secondary Incoming Extension

Virtual Extensions

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-07-01	**Trunk Access Map Setup**	Set up the Trunk Access Maps. This sets the access options for trunks. Ring Group programming overrides Access Map programming.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1= Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Maps 2~200= Trunk Ports 1~200 assigned with option 0 (No access).
15-06-01	**Trunk Access Map for Extensions**	Assign Trunk Access Maps to extensions.	Trunks 1~200 (default = 1)
15-07-01	**Programmable Function Keys**	Assign CAR/SIE/VE function keys (code *03 + extension number) or CO function keys (Code *01 + trunk port) on multiline terminals.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-09-01	**Virtual Extension Ring Assignment**	Individually program an extension Virtual Extension key(s) to either ring (1) or not ring (0).	Mode 1: 0 = Not Ring 1 = Ring (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-11-01	**Virtual Extension Delayed Ring Assignment**	Use to assign the delayed ringing options for an extension Virtual Extension or Virtual Extension Group Answer keys (defined in Program 15-09).	KY01 Mode 1: 0 = (No) Immediate Ring 1 = (Yes) Delay Ring (default = 0)
20-04-03	**System Options for Virtual Extensions – SIE/Virtual Extension Delay Interval**	SIE Keys/Virtual Extensions set for Delayed Ringing (see Program 15-11) ring the extension after this interval.	0~64800 (seconds) (default = 10 seconds)
22-01-04	**System Options for Incoming Calls – DIL No Answer Recall Time**	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0~64800 (seconds) (default = 0 seconds)
22-02-01	**Incoming Call Trunk Setup**	Use this option to set the feature type for the trunk you are programming.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-08-01	**DIL/IRG No Answer Destination**	If an incoming trunk call rings longer than the DIL No Answer Time (Program 22-01-04), it routes to the destination you specify in this option. Determine if the destination should be a Ring Group, In-Skin/External Voice Mail, or Central Voice Mail.	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 0)

Operation

To answer Delay Ringing calls:

1. Go off-hook.

   - OR -

   Press **Answer**.

- OR -

Press the flashing key.

. *Either Trunk key or SIE/VE key.*

To program a SIE/VE key on a phone:

1. Press **Speaker**.
2. Dial **852**.
3. Press the key you want to program.
4. Dial ***03**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold** once for Immediate Ring (skip to step 8 for Delayed Ring).
7. Dial the mode number in which the key will ring.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
8. Press **Hold** for a second time for Delayed Ring, or Skip to step 10.
9. Dial the mode number in which the key will delay ring.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
10. Press **Speaker**.

Department Calling

Description

With Department Calling, an extension user can call an idle extension in a preprogrammed Department Group (64 Department Groups available) by dialing the group pilot number. For example, this would let a caller dial the Sales department just by knowing the Sales department pilot number. The caller does not have to know any of the Sales department extension numbers.

Two types of routing are available with Department Calling: Priority Routing and Circular Routing. With Priority Routing, an incoming call routes to the highest priority extensions first. Lower priority extensions ring only if all higher priority extensions are busy. With Circular Routing, each call rings a new extension.

Overflow Routing

Department Calling also provides overflow routing for extensions within the group. If a user directly dials a busy extension within a Department Group, the system can optionally route the call to the first available group member. The system follows Program 22-15-01 ~ 22-15-07 for playing the periodic VRS message.

Department Calling also allows for each Department group to transfer calls to a predefined Speed dial bin (Program 24-05-01) immediately or after a Delayed time (Program 24-02-08). Internal and transferred calls are not supported for Delayed transfer.

DID and Overflow Routing

Three types of Overflow are supported for DID calls:

- Immediate Transfer:

  This feature can be enabled or disabled by using a (58) key programmed in Program 15-07. It can also be done by using the service codes in Program 11-11-25 (set) and Program 11-11-26 (cancel). When this feature is activated, any DID calls pointed directly to the Pilot Number go immediately to the transfer destination and do not ring anyone in the group. To set up the destination you use Program 24-05 and Program 13-04. Once these programs are set, the access code assigned in Program 11-11-27 can be used to change the destination as needed.

- Delay:

  This feature can be enabled or disabled by using a (59) key programmed in Program 15-07. It can also be done by using service codes assigned in Program 11-11-28 (set) and Program 11-11-29 (cancel). When this feature is activated, any DID calls pointed directly to the Pilot follow one of the two patterns:

  - If all available members are busy or logged out, the call goes immediately to the transfer destination.
  - If agents are logged in and not busy, the call comes in and hunts through the idle members until the timer in Program 24-02-08 expires. Once this time expires, the call is routed to the transfer destination

assigned in Program 24-05 and Program 13-04. Once these programs are assigned, the access code assigned in Program 11-11-27 can be used to change the destination as needed.

- DND:

  This feature can be enabled by using a (60) key programmed in Program 15-07 or by using service codes assigned in Program 11-11-30 (set) and Program 11-11-31 (cancel). When this feature is activated any DID pointed directly to the Pilot gets a busy tone and the call does not route.

User Log Out/Log In

An extension user can log out and log in to a Department Calling Group. By logging out, the user removes their extension from the group. Once logged out, Department Calling bypasses their extension. When they log back in, Department Calling routes to their extension normally. All users can dial a code to log in or log out of their Department Calling Group. A multiline terminal can optionally have a function key programmed to login/logout.

Enhanced Hunting

Department Calling is enhanced with expanded hunting abilities. Hunting sets the conditions under which calls to a Department Group pilot number will cycle through the members of the group. The hunting choices are:

- Busy

  A call to the pilot number hunts past only a busy group member to the first available extension.

- **Not Answered**

  A call to the pilot number cycles through the idle members of a Department Calling group. The call continues to cycle until it is answered or the calling party hangs up. If the Department Group has Priority Routing enabled, and the highest priority member is busy, the call does not hunt to the next available extension.

- Busy or Not Answered

  A call to the pilot number cycles through the idle members of a Department Calling group. The call continues to cycle until it is answered or the calling party hangs up.

If all members of the Department Group are busy, an incoming or transferred call to the group pilot number queues for an available member. Each group has a queue that can hold any number of waiting calls. If a display telephone is waiting in queue, the user sees: *WAITING (group name)*. If a transferred call in queue is an outside call, and the system has DSP daughter board installed with the VRS, the queued caller hears, *"Please hold on. All lines are busy. Your call will be answered when a line becomes free."*

The VRS can also transfer calls to Department Groups. Refer to Voice Response System (VRS) on page 1-989 for information on setting up the VRS.

The system prevents hunting to a Department Group extension if it is:

- Busy on a call
- In Do Not Disturb
- Call Forwarded
- Logged Out

Conditions

- When a DIL rings to a Department Group, the DIL may follow overflow programming (Program 22-01-04 and Program 22-08-01).
- If all agents are logged out and an intercom call to the Department Group is made you get a busy signal.
- Extensions in a Department Group which have Call Forwarding enabled are not included in the call hunt. The extension to which the user is forwarded does not receive the hunted calls. When you use the automatic Department Step calling (Program 16-01-03) it hunts only to members with the same or lower priority.
- Easily step call to an idle Department Group member if the member called is busy.
- A virtual extension can be programmed to receive multiple calls which can camp-on to the extension – no analog port is required.
- An extension user can Transfer a call to a Department Group Pilot number. If unanswered, the call recalls (depending on programming) the transferring extension after the Transfer Recall Time (Program 24-02-04).
- Voice mail uses one Department Group for voice mail.
- When Program 16-01-05 is set to (1) Automatic, all telephones in the Department group Ring for ICM calls & DID calls Directed to the Department Group Pilot Number only.
- The Overflow feature is only supported for DID calls pointed directly to the Pilot Number. POTS lines and transferred DIDs ignore the Overflow settings.
- When a Department Group is assigned as the VM Department Group in Program 45-01-01 it will only work as priority mode no matter what Program 16-01-02 is set to for that

Department Group.

- Program 16-01-05 (Extension Group All Ring Mode Operation) does not work to a Secondary Department Group.

Default Setting

Disabled

Priority Routing

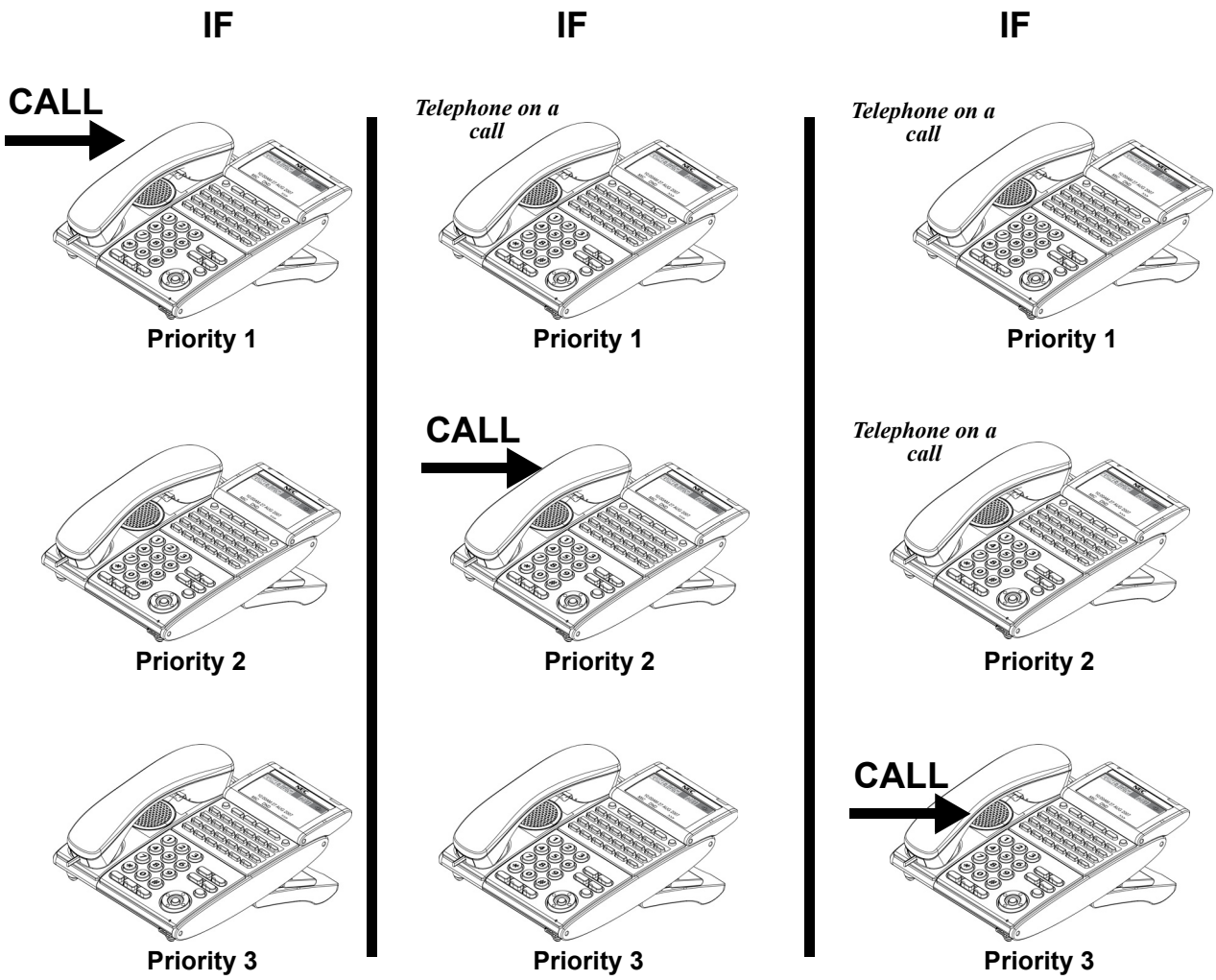


Figure 1-1 Department Calling Priority Call Routing

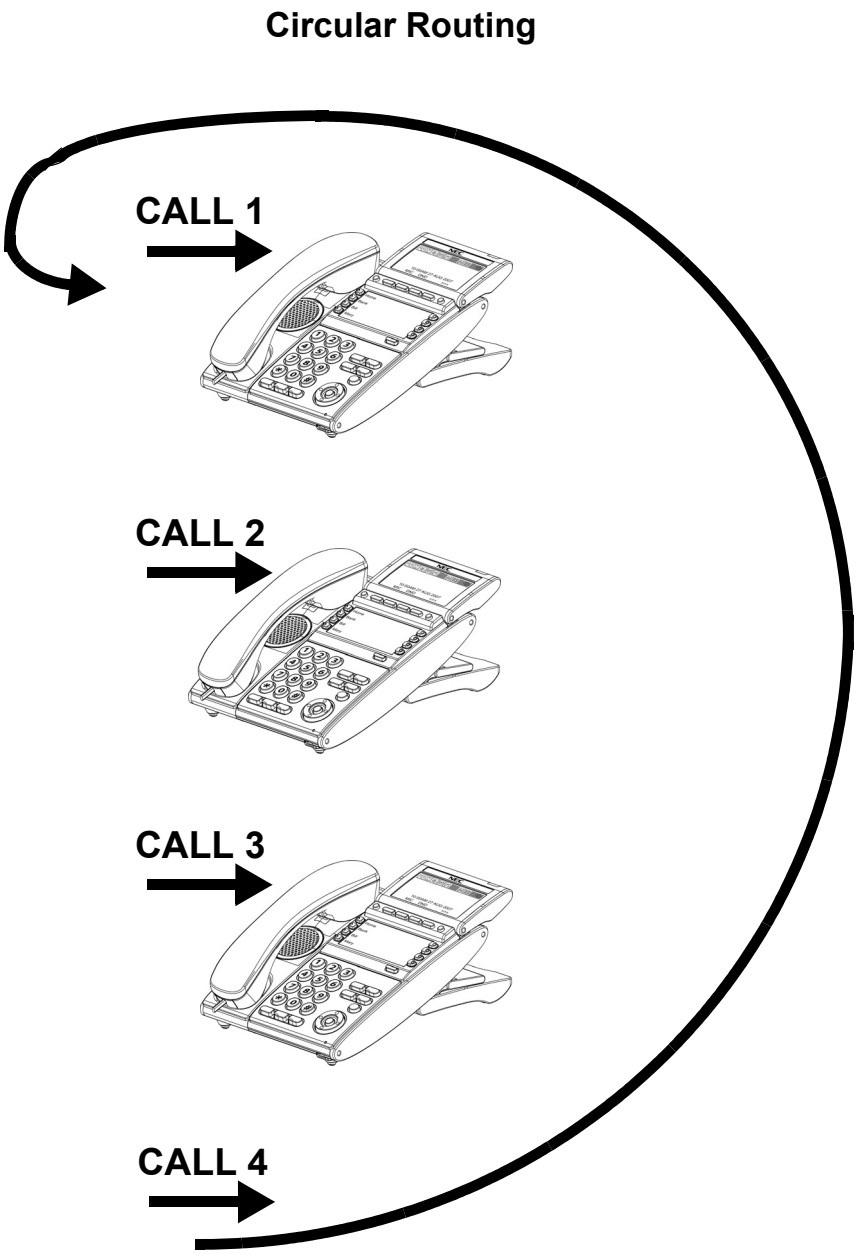


Figure 1-2 Department Calling Circular Routing

System Availability

Terminals

All Terminals

Required Component(s)

VRS for Messaging

Related Features

Call Forwarding

Department Step Calling

Transfer

InMail

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-07-01	**Department Group Pilot Numbers – Dial**	Use to assign pilot numbers to each Department Group set up.	Up to eight digits (default not assigned)
11-11-25	**Service Code Setup (for Setup/ Entry Operation) – Automatic Transfer Setup for Each Extension Group**	Use this option to set the service code to activate immediate automatic transfer for ICM and transferred calls to Department Groups.	MLT, SLT (default = 702)
11-11-26	**Service Code Setup (for Setup/ Entry Operation) – Automatic Transfer Cancellation for Each Extension Group**	Use this option to set the service code to deactivate immediate automatic transfer for ICM and transferred calls to Department Groups.	MLT, SLT (default = 703)
11-11-27	**Service Code Setup (for Setup/ Entry Operation) – Destination of Automatic Transfer Each Extension Group**	Use this option to set the service code for setting the destination for immediate automatic transfer for ICM and transferred calls to Department Groups.	MLT (default = 704)
11-11-28	**Service Code Setup (for Setup/ Entry Operation) – Delayed Transfer for Every Extension Group**	Use this service code to set the delayed transfer destination Department Group.	MLT, SLT (default = 705)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-29	**Service Code Setup (for Setup/ Entry Operation) – Delayed Transfer Cancellation for Each Extension Group**	Use this service code to cancel the delayed transfer destination Department Group.	MLT, SLT (default = 706)
11-12-09	**Service Code Setup (for Service Access) – Change to STG (Department Group) All Ring**	Use this option to set the service code for ringing all members of a Department Group.	MLT, SLT (default = 780)
11-16-10	**Single Digit Service Code Setup – (Department) STG All Ring Mode**	Assign the Single Digit (post-dialing) Service Code for All Member Ring.	(default not assigned)
15-07-01	**Programmable Function Keys**	Assign a Department Calling key (46) so extension users can install or remove themselves from the Department Calling Group. Additional keys can also be assigned for Department Group features immediate calling destination (58), delayed calling destination (59) and DND destination (60).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
16-01-01	**Department Group Basic Data Setup – Department Name**	Assign a name to the Extension (Department) Groups.	Maximum 12 characters (default not assigned)
16-01-02	**Department Group Basic Data Setup – Department Calling Cycle**	Set the routing cycle for calls into a department (i.e., when a user dials the department pilot number). The system can ring the highest priority extension available (Priority Routing, 0) or cycle in circular order to a new idle extension for each new call (Circular Routing, 1).	0 = Normal Routing (Priority) 1 = Easy – UCD Routing (Circular) (default = 0)
16-01-03	**Department Group Basic Data Setup – Department Routing When Busy (Auto Step Call)**	Set how the system routes an Intercom call to a busy Department Group member. The caller can hear busy tone (0) or overflow to the first available Department Group member (1). This option is for Intercom calls to an extension, not a pilot number.	0 = Normal (Intercom caller to busy department member hears busy) 1 = Circular (Intercom callers to busy department member routes to idle member) (default = 0)
16-01-04	**Department Group Basic Data Setup – Hunting Mode**	Set if an unanswered call should hunt once stopping at the last member tried (0) or continually hunt through the idle members (1).	0 = Last extension is called and hunting is stopped 1 = Circular (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
16-01-05	**Department Group Basic Data Setup – Extension Group All Ring Mode Operation**	Set if all members of the group should ring automatically (1) or through the use of the service code (0) defined in Program 11-12-09. Selecting automatic will override the settings of Programs 16-01-03 and 16-01-04.	0 = Manual 1 = Automatic (default = 0)
16-01-06	**Department Group Basic Data Setup – STG Withdraw Mode**	Use to set the STG withdraw mode for each department group.	0 = Disable (Camp On) 1 = Enable (Overflow Mode) (default = 0)
16-01-07	**Department Group Basic Data Setup – Call Recall Restriction for STG**	Determine whether or not an unanswered call transferred to a Department Group should recall the extension from which it was transferred.	0 = Disable (Recall) 1 = Enable (No Recall) (default = 0)
16-01-09	**Department Group Basic Data Setup – Department Hunting No Answer Time**	Set how long a call rings a Department Group extension before hunting occurs.	64800 (seconds) (default = 15 seconds)
16-01-10	**Department Group Basic Data Setup – Enhanced Hunt Type**	Set the type of hunting for each Extension (Department) Group.	0 = No queuing 1 = Hunting When Busy 2 = Hunting When Not Answered 3 = Hunting When Busy or No Answer (default = 0)
16-02-01	**Department Group Assignment for Extensions**	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	Department Groups 1-64 Priority 1-512 Default = All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 512 priority = 512
16-03-01	**Secondary Department Group**	Use this program to assign extensions to multiple Department Groups and set the priority assignment. Each Secondary Department Group can have up to 16 extensions assigned.	Extension Number Maximum eight digits Priority Order 0~999 (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-17	**Class of Service Options (Hold/ Transfer Service) – Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)**	Turn On (1) or Off (0) the ability of an extension in a Department Group to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-14	**Class of Service Options (Supplementary Service) – Department Calling (PLT No Called Extension)**	Turns off or on an extension user ability to call a Department Group Pilot.	0 = Off 1 = On (default = 1 for COS 1~15)
22-02-01	**Incoming Call Trunk Setup – Incoming Type**	If you want a trunk to be a DIL to a Department Group, assign Service Type 4 for each Night Service Mode. Refer to Program 22-07-01.	0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-07-01	**DIL Assignment**	For each trunk assigned Service Type 4 in Program 22-02-01 above, assign the DIL destination as the Department Group pilot number (as assigned in Program 11-07-01).	Extension Number (maximum eight digits) (default not assigned)
24-02-05	**System Options for Transfer – Message Wait Ring Interval Time**	For Single Line Telephones (SLTs) without message waiting lamps, this is the time between intermittent ringing. If this value is set to 0, the system rings once.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
24-02-08	**System Options for Transfer – Delayed Transfer Timer for All Department Groups**	Determine the time a call should ring a Department Group before transferring the call.	0~64800 (seconds) (default = 10 seconds)
24-05-01	**Department Group Transfer Target Setup**	Assign the Speed Dial bin to each Department Group to hold the destination for the immediate automatic transfer of ICM and transferred calls to the Department Group feature.	0~1999 (default = 1999)

Operation

To call a department group:

1. Go off-hook.
2. Dial department extension number.

   . *The system routes the call to the first free telephone in the department group.*
3. **Optional:** To manually ring all members of the group, dial the single digit service code assigned for All Member Ring (Program 11-16-10).

To log out of your Department Calling Group:

. *While you are logged out, Department Calling cannot route calls to your extension.*

1. Press **Speaker**
2. Dial **750** + **1**.

   - OR -

   Press **Department Calling Log** In key (Program 15-07-01 or SC 851: 46).

   . *The key lights while you are logged out.*

To log back in to your Department Calling Group:

. *When you log back in, Department Calling routes calls to your extension.*

1. Press **Speaker**.
2. Dial **750** + **0**.

   - OR -

   Press Department Calling Log In key (Program 15-07-01 or SC 851: 46).

   . *The key goes out when you log back in.*

To change the Department Group Overflow Destination:

1. Press **Speaker**.
2. Dial **704** + **Department Group** (01 ~ 64).
3. Dial **01 ~ 08** (Refer to Program 24-05).
4. Dial the destination the calls **route to**.
5. Press **Hold**.

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Department Step Calling

Description

After calling a busy Department Calling Group member, an extension user can have Department Step Calling quickly call another member in the group. The caller does not have to hang up and place another Intercom call if the first extension called is unavailable. Department Step Calling also allows an extension user to cycle through the members of a Department Group.

Conditions

- If required, use this option to change the Department Step Calling Single Digit Service Code (default code = 2).
- A function key for Department Step Calling can be assigned (code 36).
- In Program 20-08-12, enable (1) or disable (0) an extension ability to use Department Step Calling.

Default Setting

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Department Calling

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-07	**Service Code Setup (for Service Access) – Step Call**	If required, customize the Step Call service code to be used by an extension user.	MLT, SLT (default = 808)
11-16-01	**Single Digit Service Code Setup – Step Call**	If required, use this option to change the Department Step Calling Single Digit Service Code.	(default = 2)
15-07-01	**Programmable Function Keys**	Assign a function key Department Step Calling (code 36).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-12	**Class of Service Options (Outgoing Call Service) – Department Group Step Calling**	Turn off or on an extension ability to use Department Group Step Calling.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To make a Step Call:

1. Place a call to a busy Department Group member.

   - OR -

   Place a call to a Department Group pilot number.

2. Dial Department Step Code (2) to call the next available Department Group member.

3. Repeat step 2 to call other Department Group members.

   . *You step through Department Groups set in Program 16-02-01.*

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Dial Pad Confirmation Tone

Description

For an extension with Dial Pad Confirmation Tone enabled, the user hears a beep each time they press a key. This is helpful for Intercom calls and Dial Pulse trunk calls, since these calls provide no Call Progress tones.

Conditions

- Dial Pad Confirmation Tone does not apply to single line telephones.
- Dial Pad Confirmation Tone is not canceled when dialing in handset mode.
- Dial Pad Confirmation Tone is canceled when dialing in handsfree mode, but only for internal calls. The tone is still heard for external dialing.

Default Setting

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-19	**Service Code Setup (for Setup/ Entry Operation) – Key Touch Tone On/Off**	If required, change the service code to enable or disable the Key Touch Tone.	MLT (default = 824)

Operation

To enable/disable Dial Pad Confirmation Tone:

1. Pick up the handset or press **Speaker**.
2. Dial **824**.

Dial Tone Detection

Description

If a trunk has Dial Tone Detection enabled, the system monitors for dial tone from the Telco or PBX when a user places a call on that trunk. If the user accesses the trunk directly (by pressing a line key or dialing **#** 9 and the trunk number), the system drops the trunk if dial tone does not occur. If the user accesses the trunk via a Trunk Group (by dialing a trunk group code or automatically using a feature like Last Number Redial), the system can drop the trunk or optionally skip to the next trunk in the group. Refer to the chart under Programming for more information.

Conditions

None

Default Setting

Disabled for manually dialed calls; enabled for automatically dialed calls.

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Automatic Route Selection

Central Office Calls, Placing

Last Number Redial

Save Number Dialed

Speed Dial – System/Group/Station

Trunk Group Routing

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-09-01	**DTMF and Dial Tone Circuit Setup**	If dial tone detection is enabled, be sure to allocate at least one circuit for dial tone detection [ICM/Trunk (0) or Trunk (2)].	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
14-02-05	**Analog Trunk Data Setup – Dial Tone Detection for Manually Accessed Trunks**	Use this option enable/disable dial tone detection for directly accessed trunks. If disabled, the system outdials on the trunks without monitoring for dial tone.	0 = Dial Tone Detection Not Used 1 = Dial Tone Detection Used (default = 1)
14-02-11	**Analog Trunk Data Setup – Next Trunk in Rotary if No Dial Tone**	If enabled, the system skips over a trunk if dial tone is not detected. This option pertains to calls placed using Speed Dial, ARS, Last Number Redial or Save Number Dialed. It does not pertain to line key or Direct Trunk Access calls.	0 = Disable 1 = Enable (default = 0)
21-01-04	**System Options for Outgoing Calls – Dial Tone Detection Time**	If dial tone detection is enabled, the system waits this time for the Telco to return dial tone. When the time expires, the system assumes dial tone is not present. To disable this time (and have the system wait continuously), enter 0.	0~64800 (seconds) (default = 5 seconds)
21-01-05	**System Options for Outgoing Calls – Disconnect Time When Dial Tone Not Detected**	If 14-02-11 is enabled, the system skips over a trunk if dial tone is not detected. This option pertains to calls placed using Speed Dial, ARS, Last Number Redial or Save Number dialed. It does not pertain to line key or Direct Trunk Access calls.	0~64800 (seconds) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
21-01-06	**System Options for Outgoing Calls – Dial Pause at First Digit**	If Dial Tone Detection is disabled, the system waits based on this time before sending dialed digits. If using Dial Tone Detection, this time should be set longer than the time set in Program 21-01-05, otherwise, if this time is set shorter than Program 21-01-05, Dial Tone Detection is satisfied and Program 21-01-05 is disregarded (not used).	0~64800 (seconds) (default = 3 seconds)

Table 1-6 Dial Tone Detection Program Interaction

Method	14-02-05	14-02-11	Result if dial tone not present . . .
Press a line key - or - Dial 805+ Trunk number	0	0	Trunk hangs (does not disconnect)
	0	1	Trunk hangs (does not disconnect)
	1	0	Trunk drops
	1	1	Trunk drops
Dial a Trunk Group code - or - Automatically through a feature	0	0	Trunk hangs (does not disconnect)
	0	1	Trunk reroutes after time-out
	1	0	Trunk drops
	1	1	Trunk reroutes after time-out

Operation

Dial Tone Detection is automatic if enabled in programming.

Dialing Number Preview

Description

Dialing Number Preview lets a display multiline terminal user dial and review a number before the system dials it. Dialing Number Preview helps the user avoid dialing errors.

Conditions

- An extension user cannot edit the displayed number.
- To place an outgoing call, an extension user must have outgoing access to a line or trunk group key.
- If the system has VRS installed, you must press * to preview a number.

Default Setting

Enabled

System Availability

Terminals

All Display Multiline Terminals

Required Component(s)

None

Related Features

Central Office Calls, Placing

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-05	**Class of Service Options (Outgoing Call Service) – Dial Number Preview (Preset Dial)**	Turn off or on an extension ability to use Dial Number Preview.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To use Dial Number Preview to place a call (multiline terminal only):

1. Do not lift the handset or press **Speaker**.
2. To preview *any number*, dial the number you wish to call.

   . *With VRS installed, you must press * to preview the number.*

   To preview a Speed Dial – System/Group number, press **Redial** and dial the Speed Dial – System/Group bin number you want to call.

   . *The number is displayed.*
3. To dial out the displayed trunk number, press a Line/Trunk Group key.

   . *If the previewed number as a trunk access code (e.g., 9), you can press **Speaker** instead.*

   - OR -

   To dial an Intercom number, press **Speaker**.

   - OR -

   To cancel the number without dialing it out, press **Hold**.

Digital Trunk Clocking

Description

The UNIVERGE SV8100 CD-CP00 has a built-in clock source for all digital trunk blades. Digital trunk blades are connected via an internal PLO (Phase Locked Oscillator) to derive Primary Clock from the network in priority order. If priority is set up incorrectly, or if two primary clocks are coming in, slips may occur causing improper data synchronization. The Phase Locked Oscillator (PLO) equipped with the UNIVERGE SV8100 CD-CP00 is the timing source for all digital trunk blades in the system. The PLO synchronizes the system and clocks signals from another office. When the UNIVERGE SV8100 is a clock receiver office, the PLO generates the clock signal according to the source clock signals received from the source office within the network. The source clock signals are extracted from digital trunk blades and are supplied to the PLO.

The PLO synchronization source priorities are as follows:

1. CD-PRTA
2. CD-2BRIA
3. CD-CP00

Conditions

- If multiple PRIs exist, the system chooses the first one that synchronized with the carrier.
- If there are multiple PRIs and the one being used for the source goes down, the system begins to count forward in slot numbers looking for the next available PRI.
- If multiple BRIs exist and no CD-PRTA exists, the SV8100 CD-CP00 chooses the first BRI that synchronized with the carrier.
- If there is one CD-PRTA and the one being used for the source goes down, the SV8100 CD-CP00 looks to see if there are any BRIs installed in the system. If there are no BRIs, the SV8100 CD-CP00 becomes the new synchronization source. The reason for this is when a CD-PRTA is installed in the system, all T1s must be assigned as (INTERNAL). T1 (INTERNAL) is not a clocking priority.

Default Setting

None

System Availability

Terminals

N/A

Required Component(s)

CD-CP00

CD-2BRIA

- OR -

CD-PRTA

Related Features

ISDN Compatibility

Digital Trunk Clocking Examples:

If multiple PRIs exist, the first one that synchronized with the carrier is chosen. In this example, the PRI in 02 was the first to synchronize with the carrier; therefore, it is the PLO synchronization source.

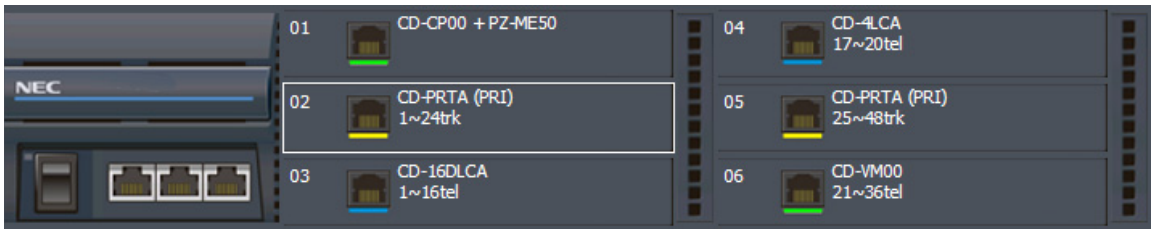

Figure 1-3 Digital Trunk Clocking Example 1

If there are multiple PRIs and the one being used for the source goes down, the system begins to count forward in slot numbers looking for the next available PRI. In this example, the PRI in 02 went down, so the system now begins looking forward in slot numbers for the next PRI to use as the clock source.

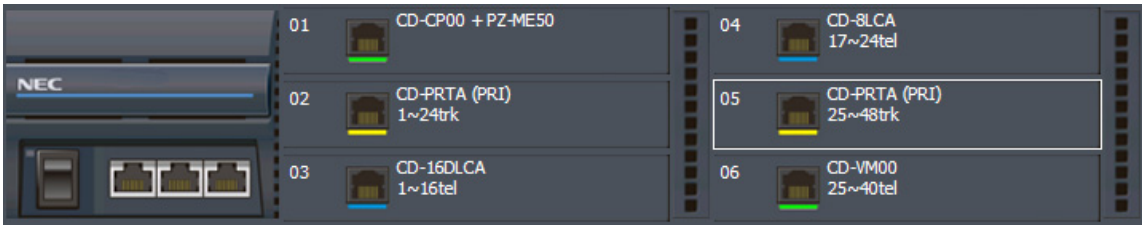

Figure 1-4 Digital Trunk Clocking Example 2

In this example, the PRI in 05 was the first to synchronize with the carrier and became the PLO synchronization source. The PRI in 05 then went down and the system began looking forward in slot numbers to find the next PLO source. In this case, the PRI in 02 was the next source because after it looks through the rest of the slots in the system, it starts over with 01.

Figure 1-5 Digital Trunk Clocking Example 3

In this example, there are multiple T1 circuits in the system. There can only be one T1 circuit assigned as EXTERNAL in the system, so the T1 assigned as EXTERNAL is the PLO synchronization source.

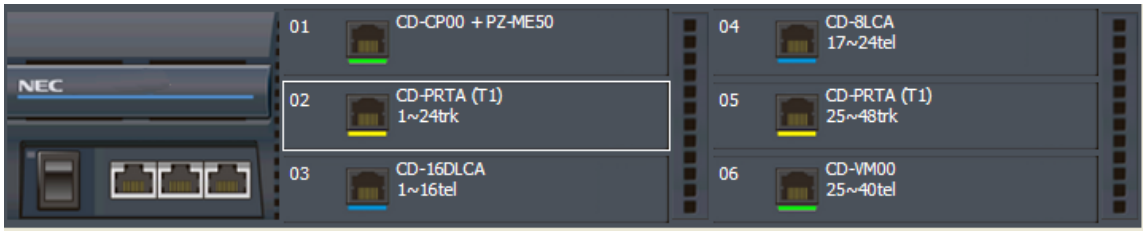

Figure 1-6 Digital Trunk Clocking Example 4

In this example, there are multiple T1 circuits and a BRI circuit. Since the T1 assigned as EXTERNAL has higher priority than a BRI, the T1 EXTERNAL is the PLO synchronization source.

Figure 1-7 Digital Trunk Clocking Example 5

In this example, there is a PRI, multiple T1s, and a BRI. The PRI was the PLO synchronization source until it went down. The BRI then becomes the PLO synchronization source because when a PRI is in the system, T1s cannot be assigned as EXTERNAL, which are not in the PLO Synchronization Source priority list.

Figure 1-8 Digital Trunk Clocking Example 6

If multiple BRIs exist and no PRI or T-1 EXTERNAL exists, the system chooses the first BRI that synchronized with the carrier. In this example, the BRI in 04 synchronized with the carrier first and became the PLO synchronization source.

Figure 1-9 Digital Trunk Clocking Example 7

In this scenario, the PRI was the clocking source until it went down. There are no other PRIs, T1 (Externals), or BRIs in the system. The CD-CP00 now becomes the PLO synchronization source.

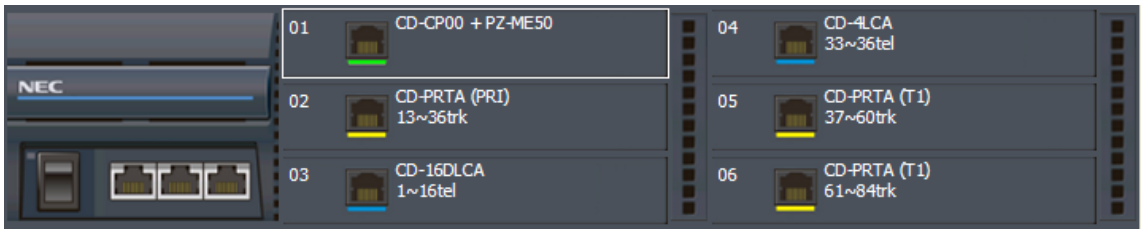

Figure 1-10 Digital Trunk Clocking Example 8

Guide to Feature Programming

Refer to the related features for programming.

Operation

Refer to the related features for details.

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Direct Inward Dialing (DID)

Description

Direct Inward Dialing (DID) lets outside callers directly dial system extensions. DID saves time for callers who know the extension number they wish to reach. To place a DID call, the outside caller dials the local exchange and additional digits to ring the telephone system extension. For example, DID number 926-5400 can directly dial extension 400. The caller does not have to rely on attendant or secretary call screening to complete the call.

. *Direct Inward Dialing requires DID service from Telco.*

In addition to direct dialing of system extensions, DID provides:

- DID Dialed Number Translation
- Flexible DID Service Compatibility
- DID Intercept
- DID Camp-On

There are 20 DID Translation tables that can be divided between 2000 entries.

DID Dialed Number Translation

DID allows different tables for DID number translation. This gives you more flexibility when buying DID service from Telco. If you cannot buy the exact block of numbers you need (e.g., 301~556), use the translation tables to convert the digits received. For example, a translation table could convert digits 501~756 to extension numbers 301~556.

The UNIVERGE SV8100 system has 2000 DID Translation Table entries that you can allocate among the 20 DID Translation Tables. One translation is made in each entry. For a simple installation, you can put all 2000 entries in the same table. For more flexibility, you can optionally distribute the 2000 entries among the 20 tables.

In addition to number conversion, each DID Translation Table entry can have a name assigned to it. When the DID call rings the destination extension, the programmed name displays.

Flexible DID Service Compatibility

With three-digit service, the Telco sends three digits to the system for translation. Be sure to program your system for compatibility with the provided Telco service. For example, if the Telco sends four digits, make sure you set up the translation tables to accept four digits.

DID Camp-On

DID Camp-On sets what happens to DID calls to busy extensions when you have Busy Intercept disabled. With DID Camp-On enabled, a call to a busy extension camps-on for the DID Ring No Answer Time. It then diverts to the programmed DID Intercept extension ring group or Voice Mail. Without DID Camp-On, the caller to the busy extension hears only busy tone.

DID Routing Through the VRS

DID calls can optionally route through the VRS. The DID caller hears an initial Automated Attendant Greeting explaining their dialing options. If the caller misdials, they hear a second greeting with additional instructions. For example, the first Automated Attendant Greeting can be, “Thank you for calling. Please dial the extension number you wish to reach or dial 0 for the operator.” If the caller inadvertently dials an extension that does not exist, they could hear, “The extension you dialed is unavailable. Please dial 0 for assistance or dial **#** to leave a message so we can call you back.”

You assign Automated Attendant greetings (i.e., VRS Messages) to the numbers in each Translation Table. This provides you with extensive flexibility when determining which greetings the system should play for which dialed numbers. You could, for example, set up 926 5401 through 926 5449 to route to extensions 401~449, and have 926 5450 route to the automated attendant.

. *If you translate a DID so that it hits a specific VRS message, you must disable Program 25-01-02. Otherwise, the outside caller waits while hearing the DISA dial tone.*

The system allows an extension to be defined as a 1-digit number that can be dialed by the outside caller on a DID/DISA trunk using the VRS. The outside caller can access the desired extension/ department group by dialing only one digit after the system answers the call. If the same number is used as the first digit of an extension number and the 1-digit access code for DID/DISA, the outside caller cannot access the extension.

Example:

If 2 is defined as a 1-digit access code to department group 300, outside callers cannot access extensions 200~299 directly.

SMDR Includes Dialed Number

The SMDR report can optionally print the trunk name (entered in system programming) or the number the incoming caller dialed (i.e., the dialed DID digits). This gives you the option to analyze the SMDR report based on the number your callers dial. (This option also applies to an ISDN trunk.)

DID Intercept

DID Intercept automatically reroutes DID calls under certain conditions. There are three DID Intercepts:

- Vacant Number Intercept

  If a caller dials an extension that does not exist or misdials, Vacant Number Intercept can reroute the call to the programmed DID Intercept extension ring group or Voice Mail. Without Vacant Number Intercept, the caller hears error tone after misdialing.

- Busy Intercept

  Busy Intercept determines DID routing when a DID caller dials a busy extension. If Busy Intercept is enabled, the call immediately routes to the programmed DID Intercept extension ring group or Voice Mail. If Busy Intercept is disabled, the call follows DID Camp-On programming.

- Ring-No-Answer Intercept

  Ring-No-Answer Intercept sets the routing options for DID calls that ring unanswered at the destination extension. With Ring-No-Answer Intercept enabled, the unanswered call reroutes to the DID Intercept extension ring group or Voice Mail after the DID Ring-No-Answer Time. If Ring-No-Answer Intercept is disabled, the unanswered call rings the destination until the outside caller hangs up.

Delayed DID

Delayed DID allows a user a programmed time to answer a call. If the call is not answered in this time, the system automatically answers the call. An outside party hears a voice message, music, or dial tone according to the following conditions:

- If a VRS is installed, the system sends a prerecorded message from the VRS.
- If a customer-provided audio system (example: tape recorder) is connected, an error message or music can be played for the caller.
- If equipment is not connected for an announcement, the system sends a unique dial tone to the outside caller.

This feature is not available for the normal incoming call on ISDN trunks.

DID Intercept Destination for Each DID Number

With this feature the system allows you to program a DID Intercept destination for a DID number which receives no answer or busy call. The system can be programmed to use a trunk ring group, the VRS or the voice mail as the programmed destination. Each vacant number intercept for a DID number can have two destinations. The first destination is for an invalid DID number, busy or no answer extension. The second destination is for a no answer trunk ring group.

. *If the first programmed destination is a Ring Group and the second Destination is Voice Mail, the call does not forward to VoiceMail.*

For busy or no answer intercept calls, a third destination can be defined in Program 22-12. If the first and third destinations are programmed but the second destination is not, the incoming call goes to the third destination after the first destination. If the first and second destinations are not programmed, but the third destination is, the call goes directly to the third destination.

This feature works for DID trunks with a trunk service type 3 in Program 22-02. Other types of trunks may use the DID table, but the DID intercept feature is not yet supported.

With the DID Intercept for each DID number feature, when the primary destination (Program 22-11-05) is set to Voice Mail, the Voice Mail protocol is:

1. Busy Intercept = Forward Busy

2. Ring-No-Answer Intercept = Forward RNA

When the secondary destination (Program 22-11-06) is set to Voice Mail, the Voice Mail protocol is based on the first destination routing. When the incoming call is forwarded to the first destination by a busy intercept, the Voice Mail protocol forwards busy calls. When the incoming call is routed to the first destination by a ring-no-answer intercept, the protocol forwards ring-no-answer. The Voice Mail transfers the calls to the mailbox number defined in Program 22-11-02.

. *Any valid DID number must be entered in the DID table (Program 22-11 or Program 22-17-01). If a valid DID number is not entered, there is no ring destination for any incoming calls to that number (the calls do not ring any extension in the system).*

. *If the first programmed destination is a Ring Group and the second Destination is Voice Mail, the call does not forward to VoiceMail.*

Calls Can Follow Ring Group Programming for Transferring Calls

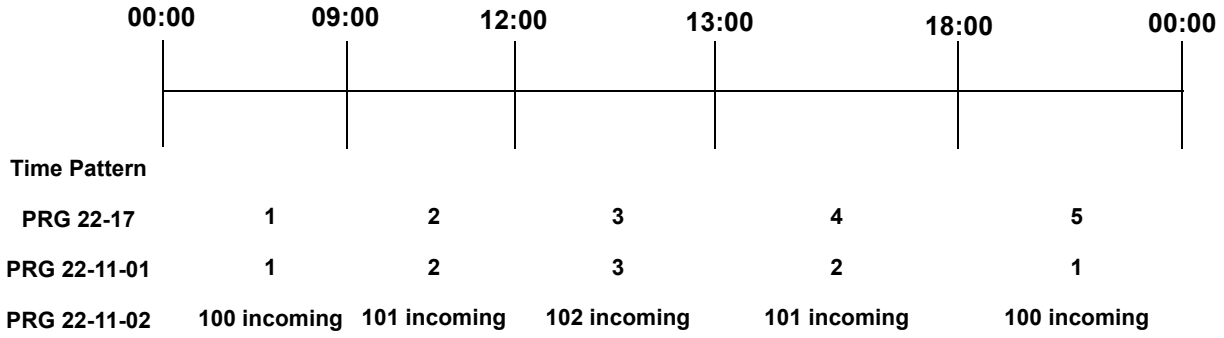
An option has been added to Program 22-11 which allows you to determine if the DID routing should use the programmed ring group entry in Program 22-12-01 when transferring calls from a busy or no answer number.

If DID digits match with the conversion table but there is no extension, no Voice Mail, or Voice Mail did not boot up, use Program 22-11-11 to decide what to do with the incoming call. Go to (1) normal ring (default) or (0) caller hears a Busy Tone.

DID Call by Time Schedule

DID Call by Time Schedule allows for 100 programmed DID Conversion table entries (**PRG 22-17-01**) that can be routed based on Time Patterns. Each DID Conversion table has a maximum of eight programmable Time Patterns and each Time Pattern can reference one of the 2000 different Dial-In Conversion table entries in **PRG 22-11-01**.

Example 1 (Automatic Change)



PRG 22-11-01 and PRG 22-11-02		
Table No.	**Receive Dial**	**Transfer Dial**
1	No setting	100
2	No setting	101
3	No setting	102

PRG 22-17					
Table No.	**Receive Dial**	**Time Pattern**	**Start Time**	**End Time**	**PRG 22-11**
1~100	1111	1	00:00	09:00	1
		2	09:00	12:00	2
		3	12:00	13:00	3
		4	13:00	18:00	2
		5	18:00	00:00	1
		6	00:00	00:00	0
		7	00:00	00:00	0
		8	00:00	00:00	0

Table 1-7 Example 2 (Manual Change)

PRG 22-17					
Table No.	**Receive Dial**	**Time Pattern**	**Start Time**	**End Time**	**PRG 22-11**
1~100	1111	1	00:00	00:00	1
		2	00:00	00:00	2
		3	00:00	00:00	3
		4	00:00	00:00	0
		5	00:00	00:00	0
		6	00:00	00:00	0
		7	00:00	00:00	0
		8	00:00	00:00	0

Conditions

- DID service must be purchased from your local telephone company.
- DID Intercept for each DID number works for DID trunks with a trunk service type 3 in Program 22-02. Other types of trunks may use the DID table, but the DID intercept feature for each DID number is not yet supported.
- When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the reason for Transfer option can display to the transferred extension when the call is ringing to their telephone.
- DISA also allows outside callers to dial system extensions directly.
- The Off-Hook Signaling provide DID calls with signaling options. Refer to Off-Hook Signaling for specific details.
- DID trunks do not ring external page speakers. Only trunks defined as normal in Program 22-02-01 ring external page speakers.
- To simplify answering DID calls, assign function keys as line keys for the DID trunks.
- SMDR can print trunk port names or received dialed number for ANI/DNIS or DID trunks. If enabled, DNIS digits can be printed on the SMDR reports instead of the trunk name.
- Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).
- When defining trunks as DID or DID Mode in Program 22-02-01, DID translation (Program 22-11 or Program 22-17) must be used, even if the incoming digits match the extension number.
- When using DID Call by Time Schedule and breaking out the Time Patterns, set the start time to 00:00 and end time to 00:00 for this feature to operate correctly. Refer to DID Call by Time Schedule on page 1-345 for more details.
- DID Call by Time Schedule Priority is given to the pattern that is set **manually**. However, when a time pattern changes with the time schedules set in Program 22-17, the pattern applied by the Manual change is canceled and the Time Pattern is given priority.
- When Transfer Operation Mode is set to busy, call queuing must be turned off for it to work.

Default Setting

Disabled

Related Features

Central Office Calls, Answering

Direct Inward Line (DIL)

Direct Inward System Access (DISA)

Off-Hook Signaling

Paging, External

Programmable Function Keys

Station Message Detail Recording

Transfer

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup**	Use program 10-03-XX to setup and confirm the basic configuration data for each blade. This program represents different data depending on the blade installed in the slot. Please refer the SV8100 Programming Manual for a more detailed description of this program.	The assigned data varies depending on the blade installed in the slot. Please refer to the SV8100 Programming Manual for a more detailed description of the 10-03-XX programs.
14-05-01	**Trunk Group – Trunk group Number**	Put DID trunks in the same trunk group (other than group 1). If you have several types of DID trunks, put each type in a separate trunk group.	Trunks 1-200 Trunk Group 1-100 Priority 1-200 Default = All trunks in Trunk Group 1 with priority in trunk order. Trunk 1 priority = 1 Trunk 200 priority = 200.
15-07-01	**Programmable Function Keys**	You can assign line Keys for DID trunks (Trunks: 1~200).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)
21-01-02	**System Options for Outgoing Calls – Intercom Interdigit Time**	Set the time-out interval for DID callers that do not dial. After this time, the DID call routes according to Vacant Number Intercept programming.	0~64800 (seconds) (default = 10 seconds)
22-01-06	**System Options for Incoming Calls – DID Ring-No-Answer Time**	Set the DID Ring No Answer (RNA) Intercept time (0~64800 seconds). In systems with RNA Intercept, the DID call rings the destination extension for this time, and then rings Intercept Ring Group. (default: 20).	0~64800 (seconds) (default = 20 seconds)
22-02-01	**Incoming Call Trunk Setup**	For each Night Service Mode, enter service type 3 when the trunk should be a DID trunk.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to Ring Groups. Calls ring the extensions according to programming in Program 22-06.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-09-01	**DID Basic Data Setup – Expected Number of Digits**	For each DID Translation Table (1~20), enter the number of digits the table expects to receive from the CO (eight maximum). For example, for a table used with 3-digit DID service, enter 3.	1~8 (default = 4)
22-09-02	**DID Basic Data Setup – Received Vacant Number Operation**	Use this option to enable or disable Vacant Number Intercept.	0 = Disconnect 1 = Transfer (default = 0)
22-10-01	**DID Translation Table Setup**	Assign the start and end range of DID Translation Table entries (1~2000) to each DID Translation Table (1~20).	0~2000 (0 = No Setting) default: 1st: 1 Start – 1, End – 200 2 Start – 201, End – 400 3 Start – 401, End – 600 4 Start – 601, End – 800 5 Start – 801, End – 1000 6 Start – 1001, End – 1200 7 Start – 1201, End – 1400 8 Start – 1401, End – 1600 9 Start – 1601, End – 1800 10 Start – 1801, End – 2000 2nd: 1~20 Start – 0, End – 0
22-11-01	**DID Translation Number Conversion – Received Number**	For each DID Translation Table entry (1~2000), specify the digits received by the system.	Maximum eight digits (default: Conv. Table:1-100 = Rec'd No. 00 -99, Conv.Table:101- 2000 = Rec'd No. are not assigned.

Program Number	Program Name	Description/Comments	Assigned Data
22-11-02	**DID Translation Number Conversion – Target Number**	For each DID Translation Table entry (1~2000), specify the extension the system dials after translation.	Maximum 24 digits (default : Conv. Table:1-100 = Target No. 200 - 299, Conv.Table:101- 2000 = Target No. are not assigned.
22-11-03	**DID Translation Number Conversion – DID Name**	For each DID Translation Table entry (1~2000), specify the name that should show on the dialed extension display when it rings.	Maximum 12 digits (default not assigned)
22-11-04	**DID Translation Number Conversion – Transfer Operation Mode**	For each DID Translation Table entry (1~2000), specify the condition required to transfer the call to the destination defined in Program 22-11-05 and Program 22-11-06.	0 = No Transfer 1 = Busy 2 = No Answer 3 = Both (default = 0)
22-11-05	**DID Translation Table Number Conversion – Transfer Destination Number 1**	Use to define the 1st transfer destination for each tables received number.	0 = No Setting 1~100 = Incoming Group 101 = (Not Used) 102 = In-Skin/External Voice Mail or InMail 201~264 = Extension Group 400 = Valid Extension Number 401 = DISA 501~548 = DISA/VRS Message 1000~999 = Speed Number (000~999) (default = 0)
22-11-06	**DID Translation Table Number Conversion – Transfer Destination Number 2**	400 = Allows the outside party to dial a different extension number in the translation table (for example, ring no answer to a dialed number, the caller then hears a dial tone, allowing them to enter another Valid Extension Number). 401 = Provides the caller with DISA dialing options (requires using the DISA password). Note: This applies to 22-11-05 and 22-11-06. . *If the Transfer Destinations are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).*	
22-11-07	**DID Translation Number Conversion – Call Waiting**	For each DID Translation Table entry (1~2000), specify whether or not Call Waiting should be allowed (0 = Disable, 1 = Enable).	0 = Disable (No) 1 = Enable (Yes) (default = 0)
22-11-08	**DID Translation Number Conversion – Maximum Number of DID Calls**	For each DID Translation Table entry (1~2000), specify the maximum number of DID calls.	0~200 (0 = No Limit) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
22-11-09	**DID Translation Number Conversion – Music On Hold Source**	For each DID Translation Table entry (1~2000), specify the source of music to be used for DID trunks.	0 = IC/MOH Port 1 = BGM Port 2 = ACI Port (default = 0)
22-11-10	**DID Translation Number Conversion – ACI Music Source Port**	For each DID Translation Table entry (1~2000), if item 2 is selected in Program 22-11-09, specify the port to be used for the source of music heard on DID trunks.	When a sound source type is 2 in above : (0~96) (default = 0)
22-11-11	**DID Translation Number Conversion – Ring Group Transfer**	Enable (1) or disable (0) each conversion table to follow the Ring Group programming defined in Program 22-12-01 : DID Intercept Ring Group. If Program 22-11-05 : DID Translation Number Conversion, Transfer Destination Number 1 and Program 22-11-06 : DID Translation Number Conversion, Transfer Destination Number 2 are set, the priority of transferring is in this order: Program 22-11-05 then Program 22-11-06 then if Program 22-11-11 is enabled, Program 22-12-01.	0 = Disable (Caller hears Ringback) 1 = Enable (Go to normal ring) (default = 1)
22-12-01	**DID Intercept Ring Group**	For each DID Translation Table, program the DID Intercept destination. The destination can be a Ring Group, In-Skin/External Voice Mail, or Centralized Voice Mail. This program is used when there is no destination programmed in Program 22-11-05. It is unrelated to Program 22-11-06 and Program 22-11-07.	0 (No Setting) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)
22-13-01	**DID Trunk Group to Translation Table Assignment**	Assign the DID trunk groups to translation tables. If all the DID trunks use the same type of DID service, you may have only one DID trunk group and one DID Translation Table (with many entries).	0~20 (0 = No Setting) (default = 1)
25-01-01	**VRS/DISA Line Basic Data Setup – VRS/DISA Dial-In Mode**	Determine whether the system should use option 0 (Extension number/Service code specify) or option 1 (Use dial conversion table) for calls.	0 = Extension Number Service Code Specify (Intercom) 1 = Use Dial Conversion Table (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
25-01-03	**VRS/DISA Line Basic Data Setup – VRS/DISA Transfer Alarm**	Determine whether the system should use option 0 (Normal) or option 1 (Alarm) for calls.	0 = Normal 1 = Alarm (default = 0)
25-02-01	**VRS/DISA VRS Message**	For each trunk port and each night mode, select the message source (0 = No Message, 1 = VRS, 2 = ACI, 3 =S LT), assign the VRS message number to be used as the Automated Attendant Message for each trunk, which is assigned as VRS/DISA [with VRS = 01~48 (VRS message number), with ACI = 1~4 or 01~16 (ACI group number), with SLT = 1~8 or 01~64 (Department Group number)].	0 = No Message 1 = 01~100 (VRS Messages) 2 = 01~4 (ACI Group Number) 3 = 01~64 (Extension Group Number) (default = 0)
25-03-01	**VRS/DISA Transfer Ring Group With Incorrect Dialing**	For each trunk port, set what happens to a call when the DISA or Automated Attendant caller dials incorrectly or waits too long to dial. The call can either disconnect (0) or Transfer to an alternate destination (a ring group, In-Skin/External, Centralized). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode.	Ring Groups: 1~100 Trunk Ports: 001~200 Day/Night Mode: 1~8 0 (Disconnect) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)
25-04-01	**VRS/DISA Transfer Ring Group With No Answer/Busy**	For each trunk port (001~200), set the operating mode of each DISA trunk. This sets what happens to the call when the DISA or Automated Attendant caller calls a busy or unanswered extension. The call can either disconnect (0) or Transfer to an alternate destination (a ring group, In-Skin/ External, Centralized). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode.	Ring Groups: 1~100 Trunk Ports: 001~200 Day/Night Mode: 1~8 0 (Disconnect) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)
25-05-01	**VRS/DISA Error Message Assignment**	For each trunk that is answered by the VRS, enter the VRS message (1~48) the outside caller hears if they dial incorrectly after answer. If you enter 0, the call reroutes according to Program 25-03 and Program 25-04. Make one entry for each Night Service mode.	0~100 (0 = No Setting) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
25-06-02	**VRS/DISA One-Digit Code Attendant Setup – Destination Number**	Set up single digit dialing for Automated Attendant callers. For each VRS Message programmed to answer outside calls, specify: ❍ The digit the Automated Attendant caller dials (1~12, where 10 = 0, 11 =* and 12 = #). (Keep in mind that if you assign destinations to digits three and four, outside callers cannot dial system extensions that begin with that digit.) ❍ The destination reached (four digits maximum) when the caller dials the single digit code.	Up to eight digits (default not assigned)
25-07-01	**System Timers for VRS/DISA – VRS/DISA Dial Tone Time**	After answering a VRS/DISA trunk, the system waits this time for the caller to dial the first digit of the DISA password. If the caller fails to dial in this time, the system drops the call.	0~64800 (seconds) (default = 10 seconds)
25-07-02	**System Timers for VRS/DISA – VRS/DISA No Answer Time**	A VRS/DISA caller can ring an extension for this time before the system sets the call as a Ring No Answer. After this time expires, the call follows the programmed Ring No Answer routing (set in Program 25-03 and Program 25-04).	0~64800 (seconds) (default = 10 seconds)
25-07-04	**System Timers for VRS/DISA – Calling Time to Automatic Answering Telephone Set**	Set the answering waiting time of the automatic answering extension when an incoming DID trunk call is received.	0~64800 (seconds) (default = 10 seconds)
25-07-05	**System Timers for VRS/DISA – Duration Time for Guidance Message by Automatic Answering Telephone Set**	Set the announcement time of the automatic answering extension before an incoming DID trunk caller is disconnected.	0~64800 (seconds) (default = 10 seconds)
25-07-06	**System Timers for VRS/DISA – Duration Time for Guidance Message by ACI**	Set the announcement time by the ACI before an incoming DID trunk caller is disconnected.	0~64800 (seconds) (default = 10 seconds)
25-07-11	**System Timers for VRS/DISA – VRS/DISA Answer Delay Time**	Set the time the system waits after receiving an incoming VRS/DISA call before the system automatically answers the call.	0~64800 (seconds) (default = 0 seconds)
25-07-13	**System Timers for VRS/DISA – VRS/DISA Busy Tone Interval**	If a DISA caller dials a busy extension (and Program 25-04-01 = 0), the system plays busy tone for this time before disconnecting.	0~64800 (seconds) (default = 5 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-14	**System Timers for VRS/DISA – Delayed VRS Answer Time**	Assign the delay time from switching from a normal incoming status to DID mode. If this time is set to 0, the call switches to DID mode immediately.	0~64800 (seconds) (default = 10 seconds)

Direct Call by Time Schedule

Program Number	Program Name	Description/Comments	Assigned Data
11-10-35	**Service Code Setup (for Administrator) – Dial-In Mode Switching**	Assign the service code Dial-In Mode Switching.	MLT, SLT (default not assigned)
15-07-01	**Programmable Function Keys**	Assign a function key for one-touch access to the Dial-In Mode Switching setup code (Code 88).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-07-26	**Class of Service Options (Administrator Level) – Dial-In Mode Switch**	Enable (1) or Disable (0) an extension ability to manually change Dial-In Modes.	0 = Off 1 = On (default = 0 for COS 1~15)
22-02-01	**Incoming Call Trunk Setup**	For each Night Service Mode, enter service type 8 when the trunk should be a DID (DDI) Mode Switching trunk.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
22-11-02	**DID Translation Number Conversion – Target Number**	For each DID Translation Table entry (1~2000), specify the extension the system dials after translation. . *Do not assign Received Digits in PRG 22-11-01 when using DID Call by Time Schedule.*	Maximum 24 digits (default : Conv. Table:1-100 = Target No. 200 - 299, Conv.Table:101- 2000 = Target No. are not assigned.
22-17-01	**Dial-In Conversion Table Area Setup for Time Pattern – Received Dial**	Use to define the received numbers for each Dial-In Conversion Table (Program 22-17-02, 22-17-03 and 22-17-04).	Up to eight digits (default not assigned)
22-17-02	**Dial-In Conversion Table Area Setup for Time Pattern – Start of Time**	Use to define the Starting Time for each DID Translation table in Program 22-17-01.	0000~2359 (Time) (default = 0000)
22-17-03	**Dial-In Conversion Table Area Setup for Time Pattern – End of Time**	Use to define the Ending Time for each DID Translation table in Program 22-17-01.	0000~2359 (Time) (default = 0000)
22-17-04	**Dial-In Conversion Table Area Setup for Time Pattern – Dial-In Conversion Table Number**	Used to assign each time pattern to a DID Translation Table Entry in Program 22-11.	0~2000 (default = 0)

Operation

DID calls ring extensions like normal trunk calls.

To Activate DID Call by Time Schedule:

1. At any display multiline terminal, press **Speaker**.
2. Dial the Dial-In Mode Switching Service Code (Default = Not assigned).

   - OR -

   Press the Dial-In Mode Switching Programmable Function key (Program 15-07-01, 88, or SC 851 Key Code 88).
3. Dial **1~100** (table number).

4. Dial the Time Pattern **1~8**.

Table 1-8 LED Flash Patterns

Time Pattern	LED Appearance
Pattern 1	Off
Pattern 2	On
Pattern 3	Slow Flash
Pattern 4	Fast Flash
Patterns 5~8	Off

Direct Inward Line (DIL)

Description

A Direct Inward Line (DIL) is a trunk that rings an extension, virtual extension or Department Group directly. Since DILs only ring one extension or group (i.e., the DIL destination), employees always know which calls are for them. For example, a company operator can have a Direct Inward Line for International Sales Information. When outside callers dial the DIL telephone number, the call rings the operator on the International Sales line key. The DIL does not ring other extensions.

There are 200 available trunks, 64 Department Groups, 256 extensions and 256 virtual extensions.

DIL Delayed Ringing

Extensions in a Ring Group can have delayed ringing for another extension DIL. If the DIL is not answered at its original destination, it rings the DIL No Answer Ring Group. This could help a Technical Service department, for example, that covers calls for an Inside Sales department. If the Inside Sales calls are not answered, they ring into the Technical Service department.

Conditions

- If unanswered, a DIL without delayed ringing rings an extension until the outside party hangs up.
- If a DIL rings a Department Group and all agents are busy, the system routes the call as follows:
  1. The trunk rings the overflow destination assigned in Program 22-08.
  2. If there is no 22-08 assignment, the call rings according to the Ring Group assignments in Program 22-04 and Program 22-05.
  3. If none of the destinations in steps 1~2 above are available, the call continues to ring until a destination becomes free.
- The DIL follows call forwarding programming, even to voice mail.
- When a call is transferred by Call Forwarding – No Answer, Call Forwarding – Busy, or DND, the Reason for Transfer can display at the transferred extension.
- You can place DILs in trunk groups to make outgoing DIL calls easier.
- If a DIL destination extension is in DND, an incoming call rings according to Ring Group programming (Program 22-08 then Program 22-05).
  - *If a user puts the telephone in Do Not Disturb, calls routed to the telephone in DND **do not** follow call forwarding.*
- A user can activate Group Call Pickup to intercept a DIL ringing another extension.

- Program a name for a DIL in Program 14-01-01. This makes it easier to identify the incoming call.
- If a Multiline Terminal is busy, a second incoming DIL call provides Call Alert Notification, depending on chassis programming. The second DIL call waits in line for the user to answer the call. The outside caller hears ringback tone while this occurs.
- If an extension has a line key for a DIL, the call rings the key. If not, the call rings an available line appearance. For other extensions, the DIL indicates busy.
- A DIL rings its assigned extension without Ring Group programming. A DIL only rings its assigned extension. It does not ring other extensions in a Ring Group.
- Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer, or DND).

Default Setting

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Call Forwarding

Central Office Calls, Answering

Central Office Calls, Placing

Department Calling

Do Not Disturb

Group Call Pickup

Name Storing

Off-Hook Signaling

Paging, External

Programmable Function Keys

Ring Groups

Transfer

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	To have the DIL ring a key, program a line key for the DIL trunk.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)
22-01-04	**System Options for Incoming Calls – DIL No Answer Recall Time**	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0~64800 (seconds) (default = 0 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup**	Assign each DIL Service Type 4. Make an entry for each Night Service mode.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign the extensions that should receive the overflow to the ring group programmed in Program 22-08. Set the ringing in Program 22-06.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-07-01	**DIL Assignment**	Set the destination extension number for each DIL – for each Night Service mode. The destination can be an extension port, virtual extension number, or Department Group pilot number (as assigned in Program 11-07-01).	Extension Number (maximum eight digits) (default not assigned)
22-08-01	**DIL/IRG No Answer Destination**	For each DIL with delayed ringing, enter the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time. Make an entry for each Night Service mode.	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 0)

Operation

To answer a call on your Direct Inward Line:

1. Lift the handset.
2. Press the flashing line key for DIL on the multiline terminal.

- Pressing the flashing Answer Key puts the first call on hold and answers the second incoming call. This can be repeated until all incoming calls are answered.
- If you have Ringing Line Preference, lift the handset to answer the call.
- If you do not answer the call, it may ring other extensions (i.e., the DIL No Answer Ring Group).

To place a call on your Direct Inward Line:

1. Lift the handset.
2. At the multiline terminal, press the line key for DIL.

   - OR -

   Dial **805** and the DIL trunk number (e.g., 005).

   - OR -

   Dial **804** and the DIL trunk group number (e.g., 05).

   - OR -

   Dial **9** for Trunk Group Access.
3. Dial the number.

Direct Inward System Access (DISA)

Description

DISA permits outside callers to directly dial system extensions, trunks and selected features. This could help an employee away from the office that wants to directly dial co-workers or use the company trunks for long distance calls. To use DISA, the employee:

- Dials the telephone number that rings the DISA trunk
- Waits for the DISA trunk to automatically answer with a unique dial tone
- Dials the 6-digit DISA password (access code)
- Waits for a second unique dial tone
- Accesses a system trunk, uses a selected feature or dials a system extension

DISA calls ring system extensions like other outside calls. If an extension has a line key for the DISA trunk, the call rings that key.

You can set DISA operation differently for each Night Service mode. For example, a trunk can be a normal trunk during the day and a DISA trunk at night. You can also set the routing for DISA trunks when the caller dials a busy or unanswered extension, dials incorrectly or forgets to dial.

DISA allows 15 users, 15 DISA Classes of Service and 200 trunks.

DISA Class of Service

DISA Class of Service provides features and dialing restrictions for DISA callers. This allows you to control the ability of the DISA callers dialing into your system. When a DISA caller first accesses the system, they can be prompted to enter a DISA password before proceeding. The system associates the password entered with a specific user number, which in turn has a Class of Service. If the Class of Service allows the action (such as making outgoing trunk calls), the call goes through. If the DISA Class of Service does not allow the action, the system prevents the call. The DISA Class of Service options are:

- Trunk Group Routing/ARS Access

  When a DISA caller dials into the system, they may be able to dial 9 and place outside calls. Any toll charges are incurred by the system. The call follows the system Trunk Group Access or Automatic Route Selection – whichever is enabled.

- Trunk Group Access

  DISA callers may be able to access a specific trunk group for outgoing calls through the system. To access a Trunk Group, the user dials Service Code 704 followed by the Trunk Group number (Trunk Groups 1~100). This allows the DISA caller to place an outgoing call over the selected

group. Trunk Group Access bypasses the system Trunk Group Routing/ARS/Trunk Access Maps. As with dial 9 access, any toll charges are incurred by the system.

- Speed Dial – System/Group/Station

  The System Speed Dial dialing bins may be available to DISA callers. This could save the DISA caller time when dialing. To access the System Speed Dialing bins, the caller dials Service Code 813 and the System Speed Dial Bin number.

- Operator Calling

  A DISA caller may be able to dial 0 for the system operator.

- Paging

  Internal and External Paging may be available to DISA callers. This allows co-workers in adjacent facilities, for example, to broadcast announcements to each other.

- Direct Trunk Access

  DISA callers may be able to select a specific trunk for outgoing calls through the system. To directly access a trunk, the user dials Service Code 805 followed by the trunk number (e.g., 001). This allows the DISA caller to place an outgoing call over the selected trunk. Direct Trunk Access bypasses the system Trunk Group Routing/ARS/Trunk Access Maps. As with dial 9 access, any toll charges are incurred by the system.

- Call Forward

  DISA callers may be able to set Call Forwarding to redirect extension calls to another extension. Call Forwarding ensures that the user's calls are covered when they are away from their work area.

- DISA/Tie Trunk Barge-In

  The DISA/Tie Trunk Barge-In option allows a DISA/Tie Line caller to break into another extension user's established call. This sets up a three-way conversation between the intruding party and the two parties on the initial call.

DISA Toll Restriction

The digits a DISA caller dials for an outgoing call may be subject to the system Toll Restriction. For example, Toll Restriction can prevent users from dialing a 1-900 service. When an incoming DISA caller tries to use system trunks to dial 1-900, Toll Restriction denies the call.

DISA Operating Modes

The DISA Operating Modes determine what happens when a DISA caller forgets to dial, calls a busy or unanswered extension or dials incorrectly. The system can either drop the call or send it to a preset Ring Group (called the DISA Transfer Destination).

Department Calling with Overflow Message

If a DISA caller dials a busy Department Calling Group, the system can periodically play the voice prompt, *"Please hold on. All lines are busy. Your call will be answered when a line becomes free."* while the caller waits. The interval between the voice prompts is the VRS Waiting Message Interval Time. When an extension in the Department Group becomes available, the call automatically goes through. If the Department Calling Group remains busy past the DISA No Answer Time, the DISA call routes to the overflow destination or disconnects. (What happens to the unanswered call is set by the DISA Operating Mode). The Overflow Message requires a VRS.

Warning Tone for Long DISA Calls

You can set up the system to provide a warning tone to DISA callers that have been on a call too long. The warning tone can be just a reminder (which the caller can ignore) or can be followed by a forced disconnect of the call. When the DISA caller hears the warning tone, they have the option of dialing a code to continue the conversation or disconnect.

Trunk Continue/Disconnect Codes

Users have the option to use a Continue or Disconnect service code. The Continue service code extends the conversation for a programmed time. If the user enters the Disconnect service code, the call is immediately disconnected.

Example:

The following example indicates how a call will be handled with the system programmed as follows:

- Program 14-01-25: **1**
- Program 20-28-01: **#**
- Program 20-28-02: **No Setting**
- Program 20-28-03: **180**
- Program 24-02-07: **600** (Used only with manually transferred Tandem Trunk calls)
- Program 24-02-10: **30** (Used only with manually transferred Tandem Trunk calls)
- Program 25-07-07: **600** (Used only with automatically transferred Tandem Trunk calls or DISA calls)
- Program 25-07-08: **30** (Used only with automatically transferred Tandem Trunk calls or DISA calls)

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).

2. After 10 minutes (Tandem Trunking = Program 24-02-07 or DISA = Program 25-07-07), a warning tone is heard and the user dials **#** (Program 20-28-01) to extend the conversation.
3. After three minutes (Program 20-28-03), the warning tone is heard again. After 30 seconds (Tandem Trunking = Program 24-02-10 or DISA = Program 25-07-08), the call is disconnected.

Conditions

- The DISA caller must use an analog (DTMF) telephone. DISA is compatible with calling devices that meet the DTMF signaling requirements of EIA Specification RS-464. DISA trunks must be ground start or supervised loop start.
- The Continue/Disconnect code must be DTMF.
- With an analog trunk, the Continue/Disconnect code may work using DTMF sounds from the opposite side trunk. With an ISDN trunk, Program 14-01-25 must be enabled to detect the Continue/Disconnect code.
- The Continue/Disconnect code is not accepted while dialing a trunk.
- Continue/Disconnect codes do not work if all DTMF receivers are busy.
- When used with the Networking feature, both systems must be programmed the same.
- In a system with ARS enabled:
  When a DISA caller dials 9 for an outside call (if allowed), the system routes the call via ARS.
- In a system with ARS disabled:
  When a DISA caller dials 9 for an outside call (if allowed), the system uses the routes programmed for Trunk Group Routing.
- Transferred calls on DISA, DID, DIL, ISDN trunks, or from the VRS can display the reason a call is being transferred (Call Forward, Busy, No Answer or DND).
- Long conversation cutoff is controlled separately for manually transferred Tandem Trunk calls, automatically transferred Tandem Trunk calls, and DISA calls.
- Tandem Trunking also uses the Continue/Disconnect codes DISA uses.
- Department Calling with Overflow Message requires a DSP daughter board for VRS.
- DISA can only be set to call forward to another extension. Call Forward Off-Premise is not supported.

Default Setting

Disabled

System Availability

Terminals

Remote Analog DTMF telephones

Required Component(s)

PZ-VM21 and InMail (for Announcements)

Related Features

Automatic Route Selection

Central Office Calls, Answering

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Long Conversation Cutoff

Tandem Trunking (Unsupervised Conference)

Transfer

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-09-01	**DTMF and Dial Tone Circuit Setup**	Reserve at least one circuit for DTMF reception (entry 0 or 2). Use the following as a guide when allocating DTMF receivers: ❍ In light traffic sites, allocate one DTMF receiver for every 10 devices that use them. ❍ In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
11-01-01	**System Numbering**	Used to define the system numbering plan.	Refer to UNIVERGE SV8100 System Program Manual
11-09-02	**Trunk Access Code – 2nd Trunk Route Access Code**	Assign the Service Code set up in Program 11-01 for 2nd (Alternate) Trunk Route Access.	Dial (up to four digits) (default not assigned)
14-01-02	**Basic Trunk Data Setup – Transmit Level**	Customize the transmit and receive levels of the CODEC Gain Types for each trunk.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-03	**Basic Trunk Data Setup – Receive Level**	Customize the transmit and receive levels of the CODEC Gain Types for each trunk.	Trunks 1~200 1~63 (-15.5 ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-13	**Basic Trunk Data Setup – Trunk-to-Trunk Transfer**	If DISA caller can place outgoing calls through the system (refer to Program 20-14 in the *UNIVERGE SV8100 Programming Manual*), enable loop supervision (1) for the DISA trunk. If DISA caller cannot use the system trunks for outgoing calls, enter 0 to disable loop supervision.	0 = Disable 1 = Enable (default = 0)
20-01-05	**System Options – DTMF Receive Active Time**	After answering the call, the system attaches a DTMF receiver to the DISA trunk for this time.	0~64800 (seconds) (default = 10 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-01	**Class of Service Options for DISA/E&M – First Digit Absorption (Delete First Digit Dialed)**	For tie lines, enable or disable the ability to absorb (ignore) the first incoming digit. Use this to make the tie trunk compatible with 3- and 4-digit tie line service. This option does not apply to DISA.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-02	**Class of Service Options for DISA/E&M – Trunk Group Routing/ARS Access**	This option enables or disables a DISA or tie trunk caller ability to dial 9 for Trunk Group Routing or Automatic Route Selection (ARS).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-03	**Class of Service Options for DISA/E&M – Trunk Group Access**	This option enables or disables a DISA or tie trunk caller ability to access trunk groups for outside calls (Service Code 804).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-04	**Class of Service Options for DISA/E&M – Outgoing System Speed Dialing**	This option enables or disables a DISA or tie trunk caller ability to use the System Speed Dialing.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-14-05	**Class of Service Options for DISA/E&M – Operator Calling**	This option enables or disables a DISA or tie trunk caller ability to dial 0 for the telephone system operator.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-06	**Class of Service Options for DISA/E&M – Internal Paging**	This option enables or disables a DISA or tie trunk caller ability to use the telephone system Internal Paging.	0 =Off 1 = On (default = 0 for COS 1~15)
20-14-07	**Class of Service Options for DISA/E&M – External Paging**	This option enables or disables a DISA or tie trunk caller ability to use the telephone system External Paging.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-08	**Class of Service Options for DISA/E&M – Direct Trunk Access**	This option enables or disables a DISA or tie trunk caller ability to use Direct Trunk Access (Service Code 805).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-09	**Class of Service Options for DISA/E&M – Forced Trunk Disconnect <Not for ISDN T-point>**	This option enables or disables a tie trunk caller ability to use Forced Trunk Disconnect (Service Code 3). This option is not available to DISA callers.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-10	**Class of Service Options for DISA/E&M – Call Forward Setting by Remote via DISA**	Enable or disable a DISA caller ability to use the Call Forward service codes (Programs 11-11-01 ~ 11-11-05).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-11	**Class of Service Options for DISA/E&M – DISA/Tie Trunk Barge-In**	In an extension Class of Service, enable (1) or disable (0) a DISA or tie trunk user from using the Barge-In feature.	0 = Off 1 = On (default = 0 for COS 1~15)
21-15-01	**Individual Trunk Group Routing for Extensions**	Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code. Refer to Trunk Group Routing to set up outbound routing.	0~100 (0 = No Setting) (default = 0)
22-01-11	**System Options for Incoming Calls – VRS Waiting Message Interval Time**	Setup the duration time between announcing the VRS Waiting Message for Auto – Attendant & Queuing. The message is repeatedly sent out in the specified time.	0~64800 (seconds) (default = 20 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup**	For DISA operation, set the trunk service type to 2. You can have a different service type for each Night Service mode.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign the extensions that should receive the overflow. Set the ringing in Program 22-06.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
25-01-01	**VRS/DISA Line Basic Data Setup – VRS/DISA Dial-In Mode**	Select whether the DISA trunk uses the Extension number/ Service code specify (0) or the Dial Conversion Table (1).	0 = Extension Number Service Code Specify (Intercom) 1 = Use Dial Conversion Table (default = 0)
25-01-02	**VRS/DISA Line Basic Data Setup – DISA User ID**	Select whether or not the DISA User ID is to be used.	0 = Off 1 = On (default = 1)
25-01-03	**VRS/DISA Line Basic Data Setup – VRS/DISA Transfer Alarm**	Select whether the DISA transfer alarm should be used.	0 = Normal 1 = Alarm (default = 0)
25-02-01	**VRS/DISA VRS Message**	Assign the source and VRS message number to be used as the Automated Attendant Message for each trunk (001~200) which is assigned as a VRS/DISA.	0 = No Message 1 = 01~100 (VRS Messages) 2 = 01~4 (ACI Group Number) 3 = 01~64 (Extension Group Number) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
25-03-01	**VRS/DISA Transfer Ring Group With Incorrect Dialing**	Set the operating mode of each DISA trunk. This sets what happens to the call when the DISA caller dials incorrectly. The call can either disconnect (0), transfer to an alternate ring group destination, or transfer to In-Skin/ External Voice Mail, or Centralized Voice Mail.	Ring Groups: 1~100 Trunk Ports: 001~200 Day/Night Mode: 1~8 0 (Disconnect) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)
25-04-01	**VRS/DISA Transfer Ring Group With No Answer/Busy**	Set the operating mode of each DISA trunk. This sets what happens to the call when the DISA caller calls a busy or unanswered extension. The call can either disconnect (0), or transfer to an alternate ring group destination, In-Skin/External Voice Mail, or Centralized Voice Mail.	Ring Groups: 1~100 Trunk Ports: 001~200 Day/Night Mode: 1~8 0 (Disconnect) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)
25-05-01	**VRS/DISA Error Message Assignment**	Assign the VRS message number to be used as the Automated Attendant error message. For each VRS/DISA trunk that the VRS answers, enter the VRS message (1~48) the outside caller hears if they dial incorrectly. If you enter 0 (i.e., no error message), the call reroutes according to Program 25-03 and Program 25-04. For each trunk, you make a separate entry for each Night Service mode.	0~100 (0 = No Setting) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
25-06-01	**VRS/DISA One-Digit Code Attendant Setup – Next Attendant Message Number**	Set up single digit dialing through the VRS. This gives VRS callers single-key access to extensions, the company operator, Department Calling Groups and Voice Mail. For each VRS message set to answer outside calls (see Program 25-02 and Program 25-05), you specify: ❍ The digit the VRS caller dials (0~9, *, #). (Keep in mind that if you assign destinations to digits, outside callers cannot dial system extensions, starting with that digit. ❍ The destination reached (eight digits maximum) when the caller dials the specified digit. The destination can be an extension, a Department Calling pilot number or the Voice Mail master number. A one-digit code can be assigned for each Automated Attendant message.	0~100 (0 = No Setting) 101 = Voice MAil Answers 104 = Refer to 25-04: VRS/DISA Transfer Ring Group with No Answer/ Busy 105 = Dial the other extension (default = 0)
25-06-02	**VRS/DISA One-Digit Code Attendant Setup – Destination Number**	Set up single digit dialing for Automated Attendant callers. For each VRS Message programmed to answer outside calls, specify: ❍ The digit the Automated Attendant caller dials (1~12, where 10 = 0, 11 =* and 12 = #). (Keep in mind that if you assign destinations to digits three and four, outside callers cannot dial system extensions that begin with that digit.) ❍ The destination reached (four digits maximum) when the caller dials the single digit code.	Up to eight digits (default not assigned)
25-07-01	**System Timers for VRS/DISA – VRS/DISA Dial Tone Time**	After answering the DISA trunk, the system waits this time for the caller to dial the first digit of the password. If the caller fails to dial in this time, the system drops the call.	0~64800 (seconds) (default = 10 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-02	**System Timers for VRS/DISA – VRS/DISA No Answer Time**	A DISA caller can ring an extension for this time before the system sets the call as a Ring No Answer. After this time expires, the call follows the programmed Ring No Answer routing. (Refer to Program 25-04 in the SV8100 Programming Manual.	0~64800 (seconds) (default = 10 seconds)
25-07-03	**System Timers for VRS/DISA – Disconnect after VRS/DISA retransfer to IRG**	Define the system timers which affect DID and DISA after VRS/ DISA retransfer to IRG.	0~64800 (seconds) (default = 60 seconds)
25-07-04	**System Timers for VRS/DISA – Calling Time to Automatic Answering Telephone Set**	Set the answering waiting time of the automatic answering extension when an incoming DID trunk call is received.	0~64800 (seconds) (default = 10 seconds)
25-07-05	**System Timers for VRS/DISA – Duration Time for Guidance Message by Automatic Answering Telephone Set**	Set the announcement time of the automatic answering extension before an incoming DID trunk caller is disconnected.	0~64800 (seconds) (default = 10 seconds)
25-07-06	**System Timers for VRS/DISA – Duration Time for Guidance Message by ACI**	Set the announcement time by the ACI before an incoming DID trunk caller is disconnected (0~64800 seconds).	0~64800 (seconds) (default = 10 seconds)
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller or any automatically transferred trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard.	0~64800 (seconds) (default = 30 seconds)
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	This time determines how long the system waits before disconnecting a a DISA or any automatically transferred trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard.	0~64800 (seconds) (default = 15 seconds)
25-07-09	**System Timers for VRS/DISA – DISA Internal Paging Time**	This is the maximum time of an Internal Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call.	0~64800 (seconds) (default = 30 seconds)
25-07-10	**System Timers for VRS/DISA – DISA External Paging Time**	This is the maximum time an External Page is placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-11	**System Timers for VRS/DISA – VRS/DISA Answer Delay Time**	Set the time the system waits after receiving an incoming VRS/DISA call before the system automatically answers the call (0~64800 seconds).	0~64800 (seconds) (default = 0 seconds)
25-07-13	**System Timers for VRS/DISA – VRS/DISA Busy Tone Interval**	If a DISA caller dials a busy extension (and Program 25-04 = 0), the system plays busy tone for this time before disconnecting.	0~64800 (seconds) (default = 5 seconds)
25-08-01	**DISA User ID Setup – Password**	For each DISA user, set the 6-digit password.	Dial (Six digits fixed) (0~9, *, #) (default not assigned)
25-09-01	**Class of Service for DISA Users**	Assign a DISA Class of Service for each user. The DISA Class of Service cannot be 0. You cannot use the Program 20-xx-xx and Program 42-xx-xx programs to assign Class of Service to DISA trunks (15 users, with one password and DISA Class of Service 1~15 for each user).	Day/Night Mode = 1~8 Function Class = 1~15 (default = 1)
25-10-01	**Trunk Group Routing for DISA**	Use this program to assign the Trunk Group Route chosen when a user places a DISA call into the system and dials 9. Set Trunk Group Routing in Program 14-06. If the system has ARS, dialing 9 accesses ARS. The route chosen is based on the DISA Class of Service, which is determined by the password the caller dials.	Day/Night Mode = 1~8 Route Table Number = 0~100 (0 = No Setting) (default = 1)
25-11-01	**DISA Toll Restriction Class**	If the system uses Toll Restriction, enter a Toll Restriction Class (1~15) for each DISA user (1~15). The system uses the Toll Restriction Class you enter in Program 21-05. The Toll Restriction Class assigned to a DISA call is based on the DISA Class of Service, which is determined by the password the caller dials. You cannot use Program 21-04 to assign Toll Restriction to DISA trunks.	Day/Night Mode = 1~8 Toll Restriction Class = 1~15 (default = 2)

Program Number	Program Name	Description/Comments	Assigned Data
25-12-01	**Alternate Trunk Group Routing for DISA**	Assign the trunk route that DISA Callers access if they dial the Alternate Trunk Route Access Code. Refer to Central Office Calls, Placing on page 1-227 for more information on setting up Alternate Trunk Route Access.	Day/Night Mode = 1~8 Route Table Number = 0~100 (0 = No Setting) (default = 0)

Trunk Continue/Disconnect Codes

Program Number	Program Name	Description/Comments	Assigned Data
14-01-25	**Basic Trunk Data Setup – Continued/Discontinued Trunk-to-Trunk Conversation**	When Program 24-02-10 is set to disconnect a trunk after the defined time, determine whether or not a user should have the ability to use the continue/ disconnect code.	0 = Disable (No) 1 = Enable (Yes) (default = 0)
22-07-01	**DIL Assignment**	Assign the master/pilot number of the voice mail group from Program 11-07-01 as the DIL destination. If all Voice Mail ports are in the same unique Extension (Department) Group (see Program 16-02 above), the DIL rings another Voice Mail port if its assigned port is busy.	Extension Number (maximum eight digits) (default not assigned)
20-28-01	**Trunk to Trunk Conversation – Conversation Continue Code**	When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0~9, *, **#**) to extend the conversation for the time defined in Program 20-28-03. If the Continue and Disconnect codes are programmed the same (e.g., **#**), the system follows the "Continue" operation. Using the Continue code before the warning tone is heard has no action.	0~9, #, * (default not assigned)
20-28-02	**Trunk to Trunk Conversation – Conversation Disconnect Code**	When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0~9, *, **#**) to immediately disconnect their call. Using the Disconnect code before the warning tone is heard disconnects the call.	0~9, #, * (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
20-28-03	**Trunk to Trunk Conversation – Conversation Continue Time**	When Program 14-01-25 is enabled, determine the time a call is extended when the user dials the Continue code (defined in Program 20-28-01).	0~64800 (seconds) (default = 0 seconds)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	This timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer/Tandem Trunking). When this time expires, a warning tone is heard. If Program 24-02-10 is set, the conversation disconnects after that time expires. This timer is set again when the external digit time expires. One of the trunks used must be an analog trunk (or leased line). . *This applies to manually transferred Tandem Trunk and DISA calls.*	0~64800 (seconds) (default = 1800 seconds)
24-02-10	**System Options for Transfer – Disconnect Trunk-to-Trunk**	Determine how long a conversation continues after the time in Program 24-02-07 expires. If this option is set to 0, the conversation is disconnected immediately. This program has no affect if Program 24-02-07 is set to 0. One of the trunks used must be an analog trunk (or leased line). . *This applies to manually transferred Tandem Trunk and DISA calls*	0~64800 (seconds) (default = 0 seconds)
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller can talk before the Long Conversation tone is heard. If Program 25-07-08 is set to 0, the call is disconnected after the time expires. This timer is set again when the external digit time expires. . *This applies to automatically transferred Tandem Trunk and DISA calls.*	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	This timer determines how long the system waits before disconnecting a DISA call after the Long Conversation tone is heard. This program has no affect if Program 25-07-07 is set to 0. . *This applies to automatically transferred Tandem Trunk and DISA calls.*	0~64800 (seconds) (default = 15 seconds)

Operation

To place a DISA call into the system:

1. Dial the telephone number that rings the DISA trunk.
2. Wait for the DISA trunk to automatically answer with a unique dial tone.
3. Dial the 6-digit DISA password (access code).
4. Wait for a second unique dial tone.

5. Dial an extension.

   - OR -

   Dial **9** for Trunk Group Routing or ARS.

   - OR -

   Dial Alternate Trunk Route Access Code (if enabled).

   - OR -

   Dial **804** + a trunk group number (**1~100**) for an outside call.

   - OR -

   Dial **805** + a trunk number (**1~200**) for an outside call.

   - OR -

   Dial **803** + System Speed Dialing bin number.

   - OR -

   Dial **0** for the operator.

   - OR -

   Dial **801** + an Internal Paging Zone number (**0**, **1~9**, **00**, **01~64**).

   - OR -

   Dial **803** + an External Paging Zone number (**1~8** or **0** for All Call).

   - OR -

   Dial **810** + a busy extension number to barge in to a call.

To forward extension calls using a DISA call into the system:

1. Dial the telephone number that rings the DISA trunk.
2. Wait for the DISA trunk to automatically answer with a unique dial tone.
3. Dial the 6-digit DISA password (access code).
4. Wait for a second unique dial tone.
5. Dial the Call Forward service code (as defined in Program 11-11-01 through Program 11-11-05).
6. Dial the number of the extension to be forwarded.
7. Dial **1** to set Call Forwarding or 0 to cancel Call Forwarding.
8. Dial the extension number to which the calls will be forwarded.

To use the Continue code to extend a DISA call:

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After the programmed time (Program 25-07-07), a warning tone is heard and the user dials the Continue code (Program 20-28-01) to extend the conversation.
3. After the programmed time (Program 20-28-03), the warning tone is heard again. After the programmed time (Program 25-07-08), the call is disconnected if the Continue code is not dialed again.

Direct Station Selection (DSS) Console

Description

The DSS Console gives a multiline terminal user a Busy Lamp Field (BLF) and one-button access to extensions, trunks, and system features. This saves time for users that do a lot of call processing (e.g., attendants, operators, or dispatchers). The DSS Console simplifies:

- Calling extensions and door boxes
- Placing, answering and transferring outside calls
- Making an External or Internal Page
- Switching the Night Service mode
- Activating DSS Console Alternate Answer

The DSS Console also provides DSS Console Alternate Answer. This lets a multiline terminal user with a DSS Console quickly reroute their calls to a co-worker. Transferred and dial 0 calls ring both DSS Consoles and, if the VRS is installed, the main operator hears the message, “Your calls have been forwarded”. Central office calls ring both consoles and no message is heard by the operator.

You can also program the DSS Console keys to store Service Codes (up to 29 digits long). This provides the DSS Console user with many of the features available on One-Touch and Programmable Feature Keys. The DSS Console keys can optionally store additional associated digits after the Service Code. For example, storing 80401 under a DSS Console key accesses Trunk Group 1 when the console user presses the key.

The maximum number of consoles allowed per system is 32.

DSS Lamp Table Changed to Apply to DSS/Hotline Keys for Multiline Terminals

Using Programs 30-05-02~30-05-21 DSS Console Lamp Table, you can assign LED flash patterns for DSS and Hotline keys on multiline terminals and DSS Consoles.

ACD/Non-ACD Agent DSS Lamping Available

With the UNIVERGE SV8100 system, Programs 30-05-02~30-05-21 allow a non-ACD DSS console to light indicating the status of both non-ACD agents and ACD agents, but ACD agents do not show ACD status (Logged In/Out, etc.), only idle, busy, etc.

Conditions

- Changing flash patterns for DSS Consoles also changes them for Hotline keys.
- When installing a DSS, the system must auto-detect the console for the LEDs to function correctly. When connecting the DSS to an extension previously defined with another circuit type, undefine the circuit type (enter 00 in Program 10-03-01 for the extension number), then connect the DSS Console.
- Programmable Function Keys for ACD codes (*10, *12, *13, *14, *15, *16, *17, *18, *19) cannot be programmed on a DSS Console.
- Programmable Function keys for Trunk Group (*02) and Virtual Extension (*03) cannot be programmed on a DSS Console as the system does not allow entry of the additional data required for these keys.
- A user can use the One-Touch Programmable Function Key (code 01) to have DSS Console keys for Personal Speed Dial and common and group Speed Dial.
- Lighting status for ACD agents and non-ACD agents does not appear on the same console type. For ACD agent's lighting status, a DSS Console must be programmed as an ACD console in Program 30-01-01. For non-ACD agents, the console must be programmed as a business console.
- A DSS key indicates only a Call Forwarding indication for extensions forwarded with Immediate Call Forwarding.
- A DSS Console can have line keys for placing and answering calls.
- The DSS Console provides one-touch calling and a Busy Lamp Field for Door Boxes. Refer to Door Box on page 1-413 when programming Door Boxes.
- The DSS Console provides one-touch Night Service switching. Refer to Night Service on page 1-639 when programming Night Service options.
- Like a One-Touch Key, a user can have DSS Console keys for Direct Station Selection, Trunk Calling, Personal Speed Dial, Speed Dialing, and Service Code access.
- The DSS Console provides one-touch External and Internal Page zone access. Refer to Paging, External on page 1-673 and Paging, Internal on page 1-681.
- You can program the DSS Console keys with service codes to provide the functions of many of the Programmable Function keys. The stored service code can have up to three digits, but it can have additional option codes added (e.g. to set Immediate Call Forward for all calls. Trunk Group (*02) and Virtual Extension (*03) codes can not be programmed on a DSS Console as the system does not allow entry of the additional data required.
- The capacity of a console can be expanded by assigning a Page key (shift key). The Page key (shift key) must be assigned on keys 55~60.
- The expanded capacity for DSS Consoles (two pages), is not supported for DSS Consoles in the ACD Monitor Mode.
- When a multiline terminal user is on a call, they can transfer to another station by pressing

a DSS key for that station. It is not necessary to press Transfer to transfer to another station using a DSS key.

. *When a multiline terminal user is on a call, they must press Transfer to transfer a call off site with a DSS key.*

- Pauses can be entered in the dial string of a DSS/One Touch button. The pause is entered as P in the dial string and causes the system to wait three seconds before sending the rest of the digits that follow the P (pause). Multiple pauses can be entered.
- The @ can be entered in the dial string of a DSS/One Touch button. The @ only applies to ISDN and Intercom calls. When using the @, the system waits for the destination to answer (answer supervision), and then sends the rest of the digits.
- Entering a P (pause) in a DSS/One Touch dial string can be used for CO calls, Intercom calls, or after the @ for ISDN calls.

Default Setting

- No DSS Consoles assigned (in Program 30-02-01).
- All DSS Console key ranges are ports 1~200.
- Once a DSS Console is enabled, the console keys are DSS keys (Program 30-03-01).

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Automatic Call Distribution (ACD)

Call Forwarding

Central Office Calls, Answering

Central Office Calls, Placing

Door Box

Night Service

One-Touch Calling

Paging, External

Paging, Internal

Programmable Function Keys

Speed Dial – System/Group/Station

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup (DLCA PKG Setup) – Terminal Type (B1)**	Use to setup and confirm the Basic Configuration data for terminal type (B1).	0 = Not set 1 = Multiline Terminal 2 = SLT Adapter 3 = Bluetooth Cordless Handset 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Doorbox) 9 = PGD (ACI) 10 = DSS Console 11 = -- Not Used -- (default = 0)
15-02-08	**Multiline Telephone Basic Data Setup – Automatic Handsfree**	Set to 1 for a DSS Console to have one-touch operation. If set to 0, the user must lift the handset before pressing a DSS key for the call to complete.	0 = Preselect 1 = One-Touch (Automatic Handsfree) (default = 1)
20-06-01	**Class of Service for Extensions**	Assign Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive off-hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-49	**Class of Service Options (Supplementary Service) – BLF Indication on CO Incoming State**	Determine if a BLF of the station will light when a Normal CO call is ringing the phone.	0 = Off 1 = On (default = 0 for COS 1~15)
20-17-01	**Operator Extension – Operator's Extension Number**	Define the extension numbers which are to be used by operators.	Up to eight digits (default = No setting)
30-01-01	**DSS Console Operating Mode**	Set the mode of the system DSS Consoles. The available options are Regular (Business) Mode (0), Hotel Mode (1), ACD Monitor Mode (2) or Business/ACD Mode (3).	0 = Business Mode 1 = Hotel Mode 2 = ACD Monitor Mode 3 = Business/ACD Mode (default = 0)
30-02-01	**DSS Console Extension Assignment – Extension Number**	The extension number for the multiline terminal connected with the DSS console (up to eight digits).	Up to eight digits. (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
30-03-01	**DSS Console Key Assignment**	Customize DSS Console keys to function as DSS keys, Service Code keys, Programmable Function Keys, and One-Touch Calling keys. The key [when defined as a DSS/One-Touch key (code 01)] can have any function up to four digits (e.g., extension number or Service Code). The function information (such as extension number or Service Code) would then be entered as the additional data.	Key Number 001~114 0~99 (General Functional Level) 97 = Door Box Access key (additional data: 1~8 Door Box No.) * 00 ~ * 99 (Appearance Functional Level)
30-04-01	**DSS Console Alternate Answer**	Used to define the DSS Console Alternate answer number.	Alternate DSS No. 01~32 0 = No Setting (Default = 0)
30-05-02	**DSS Console Lamp Table – Busy Extension**	Use to define the LED patterns for busy extensions on the DSS consoles.	0~7 [default = 7 (On)]
30-05-03	**DSS Console Lamp Table – DND Extension**	Use to define the LED patterns for busy DND extensions on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-04	**DSS Console Lamp Table – ACD Agent Busy**	Use to define the LED patterns for busy ACD agents on the DSS consoles.	0~7 [default = 7 (On)]
30-05-05	**DSS Console Lamp Table – Out of Schedule (ACD DSS)**	Use to define the LED patterns for out of schedule (ACD/DSS) on the DSS consoles.	0~7 [default = 0 (Off)]
30-05-06	**DSS Console Lamp Table – ACD Agent Log Out (ACD DSS)**	Use to define the LED patterns for ACD agents that are logged out on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-07	**DSS Console Lamp Table – ACD Agent Log In (ACD DSS)**	Use to define the LED patterns for ACD agents that are logged in on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-08	**DSS Console Lamp Table – ACD Agent Emergency (ACD DSS)**	Use to define the LED patterns for ACD agent using emergency on the DSS consoles.	0~7 [default = 6 (IW)]
30-05-09	**DSS Console Lamp Table – Hotel Status Code 1 (Hotel DSS)**	Use to define the LED patterns for hotel status code 1 on the DSS consoles.	0~7 [default = 7 (On)]
30-05-10	**DSS Console Lamp Table – Hotel Status Code 2 (Hotel DSS)**	Use to define the LED patterns for hotel status code 2 on the DSS consoles.	0~7 [default = 1 (FL)]

Program Number	Program Name	Description/Comments	Assigned Data
30-05-11	**DSS Console Lamp Table – Hotel Status Code 3 (Hotel DSS)**	Use to define the LED patterns for hotel status code 3 on the DSS consoles.	0~7 [default = 2 (WK)]
30-05-12	**DSS Console Lamp Table – Hotel Status Code 4 (Hotel DSS)**	Use to define the LED patterns for hotel status code 4 on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-13	**DSS Console Lamp Table – Hotel Status Code 5 (Hotel DSS)**	Use to define the LED patterns for hotel status code 5 on the DSS consoles.	0~7[(default = 5 (IL)]
30-05-14	**DSS Console Lamp Table – Hotel Status Code 6 (Hotel DSS)**	Use to define the LED patterns for hotel status code 6 on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-15	**DSS Console Lamp Table – Hotel Status Code 7 (Hotel DSS)**	Use to define the LED patterns for hotel status code 7 on the DSS consoles.	0~7[(default = 6 (IW)]
30-05-16	**DSS Console Lamp Table – Hotel Status Code 8 (Hotel DSS)**	Use to define the LED patterns for hotel status code 8 on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-17	**DSS Console Lamp Table – Hotel Status Code 9 (Hotel DSS)**	Use to define the LED patterns for hotel status code 9 on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-18	**DSS Console Lamp Table – Hotel Status Code 0 (Hotel DSS)**	Use to define the LED patterns for hotel status code 0 on the DSS consoles.	0~7 [default = 0 (Off)]
30-05-19	**DSS Console Lamp Table – Hotel Status Code * (Hotel DSS)**	Use to define the LED patterns for hotel status code * on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-20	**DSS Console Lamp Table – Hotel Status Code # (Hotel DSS)**	Use to define the LED patterns for hotel status code # on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-21	**DSS Console Lamp Table – VM Message Indication**	Use to define the LED patterns for VM message indications on the DSS consoles.	0~7 [default = 3 (RW)]
30-10-01	**DSS Console IP Terminal Setup – MAC Address**	Read Only program that displays the MAC address of the IP terminal a DSS console is associated with.	00-00-00-00-00-00 ~ FF-FF-FF-FF-FF-FF (Default = 00-00-00-00-00-00)

Operation

Calling an extension from your DSS Console:

1. Press the **DSS Console** key.
   - *If the call voice-announces, you can make it ring by dialing 1.*
   - *If you do not have Handsfree, you must lift the handset to speak.*

Extension Busy Lamp Field	
When the DSS key is...	**The assigned extension is...**
On	Busy on a call
Off	Idle
Flashing Fast	In Do Not Disturb

Answering a trunk call from your DSS Console:

1. Press the flashing **DSS Console** key assigned to the trunk.
   - *If you do not have Handsfree, you must lift the handset to speak.*

Transferring a call using your DSS Console:

1. Place or answer the call.
2. Press **Transfer** to transfer the call.
3. Press the DSS key for the extension to receive the transfer.
4. (Optional) Announce the call.
   - *If called party does not want the call, press the flashing line key to retrieve it.*

Making an External Page using your DSS Console:

1. Press the **DSS Console External Page** zone key (1~8).
   - *If the zone you want is busy, try again later.*
   - *If you do not have Handsfree, lift the handset to make your announcement.*

External Page Busy Lamp Field	
When the DSS key is...	**The External Page zone is...**
On	Busy
Off	Idle

Making an Internal Page using your DSS Console:

1. Press the **DSS Console Internal Page** zone key (Group key 1~64).
   - *If the zone you want is busy, try again later.*
   - *If you do not have Handsfree, lift the handset to make your announcement.*

Internal Page Busy Lamp Field	
When the DSS key is...	**The Internal Page zone is...**
On	Busy
Off	Idle

Switching the Night Service mode from your DSS Console:

1. Press the Night Service key.

Night Service Busy Lamp Field	
When this key is ON...	**The system is in the...**
DAY	Day 1 Mode
NIGHT	Night 1 Mode
BREAK	Break 1 Mode
NIGHT 2	Night 2 Mode

Using a DSS Console key as a One-Touch or Programmable Function Key:

. *A user can have DSS Console keys programmed as One-Touch Keys. These keys can be used for Direct Station Selection, Trunk Calling, Personal Speed Dial, Speed Dialing, and Service Code access. The stored service code cannot be longer than three digits.*

1. Press the **DSS Console** key for function.

   . *For example, you can forward your calls by pressing **DSS** key + 1 + destination. Your DSS key must have been previously programmed for Call Forward.*

Directed Call Pickup

Description

Directed Call Pickup permits an extension user to intercept a call ringing another extension. This allows a user to conveniently answer a call for a co-worker from their own telephone. With Directed Call Pickup, an extension user can pick up:

- Trunk calls (i.e., Ring Group calls)
- Direct Inward Lines
- Transferred trunk calls
- Transferred Intercom calls
- Ringing and voice-announced Intercom calls

Conditions

- Calls which were on hold or transferred which recall the extension can be answered using Directed Call Pickup.
- Personal Park also uses the Directed Call Pickup code.
- Voice Mail Park and Page also uses the Directed Call Pickup code.
- Directed Call Pickup cannot be used to pick up a call ringing at an ACD agent.

Default Setting

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Department Calling

Group Call Pickup

Hold

Hotline

Park

Secretary Call Pickup

Secondary Incoming Extension

Transfer

Virtual Extensions

InMail

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-25	**Service Code Setup (for Service Access) – Direct Call Pickup - Own Group**	Use to customize the Service Codes for direct call pickup – own group.	MLT, SLT (default = 856)
11-12-26	**Service Code Setup (for Service Access) – Call Pickup for Specified Group**	Use to customize the Service Codes for call pickup for specified group.	MLT, SLT (default = 868)
11-12-27	**Service Code Setup (for Service Access) – Call Pickup**	Use to customize the Service Codes for call pickup.	MLT, SLT (default = 867)
11-12-28	**Service Code Setup (for Service Access) – Call Pickup for Another Group**	Use to customize the Service Codes for call pickup for another group.	MLT, SLT (default = 869)
11-12-29	**Service Code Setup (for Service Access) – Direct Extension Call Pickup**	Use to customize the Service Codes for direct extension call pickup.	MLT, SLT (default = 715)
11-12-30	**Service Code Setup (for Service Access) – Specified Trunk Answer**	Use to customize the Service Codes for specified trunk answer.	MLT, SLT (default = 772)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service to extensions (1~15).	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-10-05	**Class of Service Options (Answer Service) – Directed Call Pickup for Own Group**	Turns off or on Directed Call Pickup for calls ringing an extension Pickup Group (Service Code 756).	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To use Directed Call Pickup to intercept a call to a co-worker's extension:

1. Pick up the handset or press **Speaker**.
2. Dial 715.
3. Dial number of extension whose call you want to intercept.

. *If more than one call is coming in, the system sets the priority for which call it answers first.*

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Directory Dialing

Description

Directory Dialing allows a Multiline Terminal user to select a co-worker or outside caller from a list of names, rather than dialing the telephone number. There are four types of Directory Dialing:

- SPD–Speed Dials
- EXT–co-worker's Extensions
- STA–Personal Speed Dials
- TELBK–Telephone Book

Conditions

- Directory Dialing sorts and searches directory names in alphabetical order (based on all characters entered of the name) when the system starts up or reboots. The system resorts extension names when:
  - You change Program 15-01-01 (Extension Numbers and Names).
  - Any user dials 800 and changes their extension name.
- Directory Dialing follows all the programmed options and conditions for Speed Dial - System/Group/Station, Intercom Calling and One-Touch Calling.
- Extension Directory only shows a telephones/VEs that are connected and have a name assigned in Program 15-01-01.

Default Setting

Enabled

System Availability

Terminals

All Display Multiline Terminals with Softkeys

Required Component(s)

None

Related Features

Last Number Redial

Name Storing

Speed Dial – System/Group/Station

Softkeys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-13-51	**Class of Service Options (Supplementary Service) – Number and Name Appear in the Directory**	Determine if an extension name and number will be listed (On) or unlisted (Off) in the directory.	0 = Off 1 = On (default = 1 for COS 1~15)
21-01-02	**System Options for Outgoing Calls – Intercom Interdigit Time**	If a user waits longer than this time between Directory Dialing steps, Directory Dialing automatically cancels.	0~64800 (seconds) (default = 10 seconds)

Operation

To use Directory Dialing from a multiline terminal with an LCD:

1. Press the **Dir** softkey.
2. Press the **softkey** for the Directory Dialing type:
   - SPD–Speed Dials
   - EXT–co-worker's Extensions
   - STA–Personal Speed Dials
   - TELBK–Telephone Book

   . *Directory Dialing follows any feature restrictions that your system may have enabled. For example, if your extension cannot normally use Speed Dial – System/Group/Station, Directory Dialing can not access it either.*
3. Dial letter/number range for the party you want to call (e.g., dial 2 for A, B, C or 2).

   . *You can enter several letters to help narrow the search.*

   . *Press **#** to enter additional letters on the same key (ex: TOM = 8666**#**6).*
4. Press the **Down Arrow** softkey to jump to that section.
5. Press the Volume s or t key to scroll through the list.

   . *If you wait too long between your selections, Directory Dialing automatically cancels.*
6. Lift the handset or press the **DIAL** softkey, or press **Speaker** to place the selected call.

   . *If you selected an outside call, it routes according to your system Trunk Group Routing/ARS setup.*

To cancel Directory Dialing:

Press the **Exit** key.

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Distinctive Ringing, Tones and Flash Patterns

Description

Distinctive Ringing, Tones and Flash Patterns provide extension users with audible and visual call status signals. This lets users tell the type of calls by listening to the ringing/tones and watching the keys. It also helps users monitor the progress of their calls. In addition, Distinctive Ringing lets multiline terminal users customize their Intercom and trunk call ringing. This is helpful for users that work together closely. For example, if several co-workers set their multiline terminals to ring at different pitches, each co-worker can always tell which calls are for them. You can also customize the tones the system uses for splash tone, confirmation tone, trunk ring tone, Intercom ring tone and Alarm ring tone. Refer to the chart below and the UNIVERGE SV8100 Programming Manual for more details.

Table 1-9 Distinctive Ringing: Tones and Flash Patterns

Program	Description
80-01-01~04 Service Tone Setup	Set the frequency of the system splash tone. This is the tone the system uses, for example, to alert the user of an incoming voice-announced Intercom call.
30-05-02~21 DSS Console Lamp Table	Set the DSS and Hotline key flash rates for busy, idle, DND, ACD Agent status, and hotel options.

Conditions

- Single line telephone users cannot listen to or hear the pitch of the telephone incoming ring.
- If Program 22-03-01 is set to 0~3 and Program 15-02-02 is set to 1~3, trunk calls follow the ring pattern in Program 22-03-01 and the pitch in Program 15-02-02.
- If Program 22-03-01 is set to 4~8 and Program 15-02-02 is set to 1~3, trunk calls follow the ring pattern in Program 22-03-01.
- If Program 22-03-01 is set to 0~8 and Program 15-02-02 is set to 4~8, trunk calls follow the ring pattern in Program 15-02-02.
- If Program 15-08 : Incoming Virtual Extension Ring Tone Setup is set to Incoming Ring Tone Extension, then Program 15-10 : Incoming Virtual Extension Ring Tone Order Setup must have one of the priorities set to Incoming Ring Tone Extension.
- The following voice mail features require system tones be changed in Program 80-01-02 to work. Refer to the Programming section of the InMail feature for details.
  - Call Holding
  - Busy Greeting
  - Call Screening

- Await Answer Transfer

- When a ring group call rings a Single Line Station, the BLF indication shows busy.
- The priority of the Large LED is as follows:
  1. CO Call Ringing
  2. Message Waiting Received
  3. VM Message Waiting
  4. Message Waiting Set

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-02-02	**Multiline Telephone Basic Data Setup – Trunk Ring Tone**	From the range specified in Program 22-03-01, select the multiline terminal extension trunk ring tone.	1 = High 2 = Medium 3 = Low 4 = Ring Tone 1 5 = Ring Tone 2 6 = Ring Tone 3 7 = Ring Tone 4 8 = Ring Tone 5 (default = 2)
15-02-03	**Multiline Telephone Basic Data Setup – Extension Ring Tone**	Select the extension intercom ring tone.	1 = High 2 = Medium 3 = Low 4 = Ring Tone 1 5 = Ring Tone 2 6 = Ring Tone 3 7 = Ring Tone 4 8 = Ring Tone 5 (default = 8)
15-02-35	**Multiline Telephone Basic Data Setup – Message Waiting Lamp Cycle for Calling Extension**	Select the cycle method that the Large LED flashes when the extension has set Message Waiting.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 7)
15-02-36	**Multiline Telephone Basic Data Setup – Message Waiting Lamp Cycle for Called Extension**	Select the cycle method that the Large LED flashes when the extension has Message Waiting set to the extension.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 3)
15-02-37	**Multiline Telephone Basic Data Setup – Voice Mail Message Wait Lamp Color**	Use to set up various message wait lamp cycle options for lamp color.	0 = Green 1 = Red (default = 1)
15-02-38	**Multiline Telephone Basic Data Setup – Voice Mail Message Wait Lamp Cycle**	Select the cycle method that the Large LED flashes when the extension has a VM Message Waiting set to the extension.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 3)

Program Number	Program Name	Description/Comments	Assigned Data
15-08	**Incoming Virtual Extension Ring Tone Setup**	Use to assign a ring tone range (0~4) to incoming virtual extensions assigned to a Virtual Extension key (Program 15-07).	ICM Tone Pattern, 0 = Pattern 1 1 = Pattern 2 2 = Pattern 3 3 = Pattern 4 (default = 0)
15-10-01	**Incoming Virtual Extension Ring Tone Order Setup**	When two or more virtual extensions are set on a function key on the telephone, and the tone pattern by which the sound of each extension differs, the priority of ring sound is set up.	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Extension Ring Tone Order 1 Pattern 0 = Pattern 1 (default) Order 2 Pattern 1 = Pattern 2 (default) Order 3 Pattern 2 = Pattern 3 (default) Order 4 Pattern 3 = Pattern 4 (default)
20-13-49	**Class of Service Options (Supplementary Service) – BLF Indication on CO Incoming State**	Determine if a BLF of the station will light when a Normal CO call is ringing the phone.	0 = Off 1 = On (default = 0 for COS 1~15)
20-15-01	**Ring Cycle Setup – Normal Incoming Call on Trunk**	Used to define the ringing cycle for Normal Incoming Trunk calls.	Ringing Cycle = 1~13 (default = 3)
20-15-02	**Ring Cycle Setup – PBX, CES Incoming Call**	Used to define the ringing cycle for PBX, CES incoming calls.	Ringing Cycle = 1~13 (default = 8)
20-15-03	**Ring Cycle Setup – Incoming Internal Call**	Used to define the ringing cycle for incoming Internal Calls.	Ringing Cycle = 1~13 (default = 8)
20-15-04	**Ring Cycle Setup – DID/DISA/ VRS**	Used to define the ringing cycle for DID/DISA/VRS Calls.	Ringing Cycle = 1~13 (default = 8)
20-15-05	**Ring Cycle Setup – DID/DDI**	Used to define the ringing cycle for DID/DDI calls.	Ringing Cycle = 1~13 (default = 8)
20-15-06	**Ring Cycle Setup – Dial-In in the E&M Tie Line**	Used to define the ringing cycle for Dial-In and E&M Tie Line calls.	Ringing Cycle = 1~13 (default = 8)
20-15-07	**Ring Cycle Setup – Door Box Ringing for SLT**	Used to define the ringing cycle for Door Box ringing for SLT.	Ringing Cycle = 1~13 (default = 2)
20-15-08	**Ring Cycle Setup – Virtual Extension Ring**	Used to define the ringing cycle for Virtual Extension Ringing.	Ringing Cycle = 1~13 (default = 8)
20-15-09	**Ring Cycle Setup – Callback**	Used to define the ringing cycle for Callback.	Ringing Cycle = 1~13 (default = 4)
20-15-10	**Ring Cycle Setup – Alarm for SLT**	Used to define the ringing cycle for Alarm for SLT.	Ringing Cycle = 1~13 (default = 5)

Program Number	Program Name	Description/Comments	Assigned Data
20-15-11	**Ring Cycle Setup – VRS Waiting Message Incoming Call**	Used to define the ringing cycle for Incoming VRS Waiting Message.	Ringing Cycle = 1~13 (default = 6)
22-03-01	**Trunk Ring Tone Range**	Set the ring tone range (1~9) for each trunk.	0~8 (Ring Tone Pattern 1~4) (Melody 1~ Melody 5) (default = 0)
80-01-01	**Service Tone Setup – Repeat Count**	Customize the system basic tones and system service tones. You need to reset for the changes to take affect.	0~255 (0 = until On-Hook)

Operation

To listen to the incoming ring choices:

1. Press **Speaker**.
2. Dial **811**.
3. Dial **1** to check ringing for intercom calls.

   - OR -

   Dial **2** to check ringing for trunk calls.
4. For Intercom calls, select the pitch you want to check (1~8).

   - OR -

   For trunk calls, select the pitch (1~8) and the tone (1~4) you want to check.
5. Go back to step 4 to listen to additional choices or press **Speaker** to hang up.

To change the pitch of your incoming ring (multiline terminal only):

1. Press **Speaker**.
2. Dial **820**.
3. Dial **1** to change ringing for Intercom calls.

   - OR -

Dial **2** to change ringing for trunk calls.

4. Select the pitch (1~8).
5. Press **Speaker** to hang up.

Do Not Disturb

Description

Do Not Disturb blocks incoming calls and Paging announcements. DND permits an extension user to work by the telephone undisturbed by incoming calls and announcements. The user can activate DND while their telephone is idle or while on a call. Once activated, incoming trunk calls still flash the line keys. The user may use the telephone in the normal manner for placing and processing calls.

Five Do Not Disturb options are available at each extension. These options can be accessed via Multiline Terminal Softkeys, DND feature key or DND system access code.

- 1 = Incoming trunk calls blocked.
- 2 = Paging, incoming Intercom, Call Forwards and transferred trunk calls blocked.
- 3 = All calls blocked.
- 4 = Incoming Call Forwards blocked.
- 0 = Do Not Disturb canceled.

Multiline Line Terminals will display the following to indicate the type of DND that has been set.

- 1 = DND EXTERNAL
- 2 = DND INTERCOM
- 3 = DND ALL
- 4 = DND TRANSFER

Conditions

- Do Not Disturb access code is programmable via Program 11-11-08.
- If there is no Call Forwarding key (Program 15-07: 10~17), the DND key blinks when the extension is forwarded.
- Virtual Extension (VE) do not support DND Programmable Function keys.
- Multiline Terminal users can activate or deactivate Do Not Disturb while on a call. This option is not available for single line telephones.
- When DND and Call Forward are set on the same telephone, call forwarding works. If Busy and No Answer Forwarding are set to different locations, it follows the Busy forwarding.
- If an extension already receiving forwarded calls activates DND option 4, callers to the forwarded extension hear DND tone.

- If an extension activates DND option 4, other extensions can still forward calls to it, but the callers hear DND tone.
- An extension user can override Call Forwarding or Do Not Disturb at another extension using any of the following methods:

  1. Program 11-12-01 Service Code Setup (for Service Access) – Bypass Call (default: 807)
  2. Program 11-16-06 Single Digit Service Code Setup – DND/Call Forward Override Bypass (default: No Setting)
  3. OVRD Softkey

- When a call is transferred because of Call Forwarding No Answer, Call Forwarding Busy, or DND, the Reason for Transfer option can display to the transferred extension while the call is ringing to the user telephone.
- DND modes 1~3 causes calls to follow Program 22-08 programming, then Program 22-05 programming even if the extension is forwarded.
- When Selectable Display Messaging is set as DND All, all other DND modes are canceled when Selectable Display Messaging is canceled.
- When DND and any Call Forwarding is set, the call forwards immediately.

Default Settings

Enabled for all extensions.

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Call Forwarding

Call Forwarding/Do Not Disturb Override

Central Office Calls, Answering

Direct Inward Line (DIL)

Distinctive Ringing, Tones and Flash Patterns

Selectable Display Messaging

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-08	**Service Code Setup (for Setup/ Entry Operation) – Do Not Disturb**	Assign Service Code for DND.	MLT, SLT (default = 847)
11-12-01	**Service Code Setup (for Service Access) – Bypass Call**	Assign Service Code for DND.	MLT, SLT (default = 807)
11-16-06	**Single Digit Service Code Setup – DND/Call Forward Override Bypass**	If a single digit service code is to be used, assign an available code number.	(default not assigned)
15-07-01	**Programmable Function Keys**	Use to assign functions to multiline terminal line keys (DND = 3).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-04	**Class of Service Options (Supplementary Service) – Call Forward/DND Override (Bypass Call)**	Turns Off or On an extension ability to use Call Forwarding/DND Override.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-40	**Class of Service Options (Supplementary Service) – Do Not Disturb**	Turn Off or On an extension user ability to set or cancel Do Not Disturb.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To activate or deactivate Do Not Disturb while your extension is idle:

Multiline Terminal Using Softkeys

1. Do not lift handset.
2. Press Program softkey.

3. Press DND softkey.
4. Press Set softkey.
5. Choose the following softkey
   Ext ICM ALL Cfwto
6. Ext=Incoming Trunk Calls Blocked
   ICM=Incoming Intercom, Paging, call forwards and Transferred Trunk Calls Blocked.
   ALL=All Calls Blocked
   Cftwto=Call Forwards Blocked
7. To Cancel DND
8. Do not lift handset
9. Press Program softkey
10. Press DND softkey.
11. Press Cncl softkey.

Multiline Terminal Using Feature Key or Access Code

1. Do not lift the handset.
2. Press the **DND** feature key programmed in (Program15-07-01 or SC:851:03).

   - OR -

   Press **Speaker** and dial **847**.
3. Dial the DND option code.
   0 = Cancel DND
   1 = Incoming Trunk Calls Blocked
   2 = Paging, incoming Intercom, Call Forwards and Transferred Trunk Calls Blocked
   3 = All Calls Blocked
   4 = Call Forwards Blocked

Single Line Telephone

1. Lift the handset.
2. Dial **847**.
3. Dial the DND option code.
   0 = Cancel DND
   1 = Incoming Trunk Calls Blocked
   2 = Paging, Incoming Intercom, Call Forwards and Transferred Trunk Calls Blocked
   3 = All Calls Blocked
   4 = Call Forwards Blocked

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Door Box

Description

The Door Box is a self-contained Intercom unit typically used to monitor an entrance door. A visitor at the door can press the Door Box call button (like a door bell). The Door Box then sends chime tones to all extensions programmed to receive chimes. To answer the chime, the called extension user just lifts the handset. This lets the extension user talk to the visitor at the Door Box. The Door Box is convenient to have at a delivery entrance, for example. It is not necessary to have company personnel monitor the delivery entrance; they answer the Door Box chimes instead. Any number of system extensions can receive Door Box chime tones.

Each Door Box has a pair of normally open relay contacts that can connect to an electric door strike. Use these contacts to remotely control the entrance door. After answering the Door Box chimes, a multiline terminal user can press the Recall key to activate the Door Box contacts. This in turn releases the electric strike on the entrance door. The device connected to the Door Box contacts cannot exceed the contact ratings shown in the following table:

Door Box Specifications	
Contact Configuration	Normally Open
Maximum Load	60mA @30 VDC 10mA @90 VDC
Maximum Initial Contact Resistance	50m Ohms

The system can have up to eight Door Boxes. Six chime tones are available.

Conditions

- The Door Box Feature Requires a PGD(2)-U10 ADP. A maximum of 56 PGD(2)-U10 ADP units can be installed in an UNIVERGE SV8100 system. Refer to the UNIVERGE SV8100 System Hardware Manual for more information.
- If a PGD(2)-U10 ADP circuit has a Door Box (doorphone) connected, you cannot use that circuit for External Paging.
- Door Boxes can ring multiline, single line, and wireless telephones.
- External Call forward by Doorphone can forward Doorphone calls Off-Premise while a user is away. This feature only works for ISDN lines.
- Off-hook signaling is available for Door Boxes. If an extension user is on the telephone, the Large LED flashes indicating the Door Box ringing, and the display shows a call from the door box.

- Each channel in the PGD(2)-U10 ADP has a jumper which must be set for Door Box operation. Refer to the UNIVERGE SV8100 System Hardware Manual for additional details.
- A Single Line Telephone (SLT), connected to an APR does not ring when the Door Phone rings the multiline telephone.
- Dterm cordless telephones are not supported with the Door Box feature.
- The door strike relay can only be activated from the recall key on a multi-line phone.
- The door strike cannot be activated when a door box is forwarded off-premise.

Default Setting

Disabled

System Availability

Terminals

All Stations

Required Component(s)

PGD(2)-U10 ADP

Related Features

ISDN Compatibility

Paging, External

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01 (1)	**ETU Setup (DLCA PKG Setup) – Terminal Type (B1)**	Use to setup and confirm the Basic Configuration data for terminal type (B1).	0 = Not set 1 = Multiline Terminal 2 = SLT Adapter 3 = Bluetooth Cordless Handset 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Doorbox) 9 = PGD (ACI) 10 = DSS Console 11 = -- Not Used -- (default = 0))
10-03-06	**ETU Setup (DLCA PKG Setup) – Terminal Type (B2)**	Use to setup and confirm the Basic Configuration data for terminal type. For DLC package support, set the terminal type to 8 [PGD (for Door Box)]. First set 10-03-01 to 0 with no device plugged into that port, then plug the device in and the system should recognize it as a door box and then set Program 10-03-06.	0 = Not set 6 = PGD(2)-U10 ADP (Paging) 7 = PGD(2)-U10 ADP (Tone Ringer) 8 = PGD(2)-U10 ADP (Door Box) 9 = PGD(2)-U10 ADP (ACI) 12 = APR (B2 Mode) (default = 0)
10-05-01	**General Purpose Relay Setup – Slot No. Physical Port of DLCA Sensor Circuit No.**	Define which Relay circuits (5~8) on a PGD(2)-U10 ADP Adapter are used for General Purpose Relay.	Slot No: 0~24 DCLA Port: 0~16 Relay No: 0, 5~8 . *After each entry, pressing the Transfer Key advances to the next entry.* (default = 0 - 0 - 0)
11-12-36	**Service Code Access (for Service Access) – Door Box Access**	If the service code for Doorphone Access is not acceptable, change it here.	MLT, SLT (default = 802)
15-07-01	**Programmable Function Keys**	Assign a function key for External Call Forward by Doorphone (Code 54).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
32-01-01	**Door Box Timers – Door Box Answer Time**	Set the time a user has to answer the Door Box chimes.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
32-01-02	**Door Box Timers – Door Lock Cancel Time**	Set the time the Door Box strike stays open when the single line telephone user hookflashes or a multiline terminal user presses the Recall key.	0~64800 (seconds) (default = 10 seconds)
32-01-03	**Door Box Timers – Off-Premise Call Forward by Door Box Disconnect Timer**	Define the conversation period for an Off-Premise Call Forward by Door Box call. When this timer expires, the caller hears busy tone for 3 seconds (fixed time), and the call is then disconnected.	0~64800 (seconds) (default = 60 seconds)
32-02-01	**Door Box Ring Assignments**	Determine which Door Boxes should ring which extensions by entering the extension number. Each Door Box can be programmed to ring up to 32 extensions and an extension can be programmed to ring for multiple Door Boxes.	Maximum eight digits (default not assigned)
32-03-01	**Door Box Basic Setup – Chime Pattern**	Set the chime pattern (0~6) for each Door Box.	0 = None 1 = Door Box Ring 1 2 = Door Box Ring 2 3 = Door Box Ring 3 4 = Door Box Ring 4 5 = Door Box Ring 5 6 = Door Box Ring 6 default: Door Box 1 = 1 Door Box 2 = 2 Door Box 3 = 3 Door Box 4 = 4 Door Box 5 = 5 Door Box 6 = 6 Door Box 7 = 1 Door Box 8 = 1
32-03-02	**Door Box Basic Setup – CODEC Transmit Gain Setup**	Set the Transmit Gain for each Door Box.	1~63 (-15.5dB ~ +15.5dB) (default = 32)
32-03-03	**Door Box Basic Setup – CODEC Receive Gain Setup**	Set the Receive Gain for each Door Box.	1~63 (-15.5dB ~ +15.5dB) (default = 32)
32-04-01	**Doorphone Name Setup**	This command defines the name of each Doorphone	Up to 12 characters (default not assigned)

Operation

To call a Door Box:

Multiline Terminal

1. Press **Speaker**
2. Dial **802**.
3. Dial Door Box Number (**1~8**).

Single Line Telephone

1. Lift the handset.
2. Dial **802**.
3. Dial Door Box Number (**1~8**).

To activate the Door Box strike:

Multiline Terminal

1. While talking to the Door Box, press the Recall key.

Single Line Telephone

1. While talking to the Door Box, hookflash.

To answer a Door Box chime:

1. Lift the handset or press **Speaker**.

To Answer a Door Box call while busy on another call:

Multiline Terminal

If you are busy on a call, the display shows the incoming Door Box call and the large LED flashes.

1. Place your active call on hold by pressing **Hold**.
2. When you hear dial tone, dial the door box access code (**802** by default) plus the door box number (**1~8**) to answer the Door Box call.

   . *To retrieve the original call, hang up with the door box and press the Conf key.*

Single Line Telephone

If you are busy on a call, an off-hook signal is heard indicating the incoming Door Box call.

1. Press the **Flash** key or hookflash to place your active call on hold.
2. Dial the door box access code (**802** by default) plus the door box number (**1~8**) to answer the Door Box call.

   . *To retrieve the original call, hang up. The original call rings the single line telephone.*

To activate Call Forwarding Off-Premise for a Door Box:

. *This option only works for ISDN PRI or BRI Trunks.*

1. At the multiline terminal, press **Speaker** + dial SC 822.

   - OR -

   At the multiline terminal only, press the External Forward by Doorphone key (Program 15-07-01 or SC 851, code 54).

   - OR -

   At the single line telephone, lift the handset + dial 822.
2. Dial the Door Box number (**1~4**).
3. Dial the Speed Dialing number where the calls should be forwarded.
4. Press **Speaker** (or hang up at the single line telephone) to hang up.

To cancel Call Forwarding Off-Premise for a Door Box:

1. At the multiline terminal, press **Speaker** + dial SC 822.

   - OR -

   At the multiline terminal only, press External Forward by Doorphone key (Program 15-07-01 or SC 851, code 54).

   - OR -

   At the single line telephone, lift the handset + dial 822.

2. Dial **0** for Cancel.

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Drop Key

Description

The Drop Key abandons a call while retaining the PBX/Centrex line to originate another call. The Drop Key is provided by programming a Programmable Function Key. This feature allows Recall to be used to provide a hookflash to the PBX or Central Office. A single line telephone user can use the Drop Key function by an access code.

Conditions

- The Drop key provides a timed disconnect signal on CO/PBX lines.
- The Drop key cannot be used for internal, DID, or Tie line calls.

Default Setting

None

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Flash

PBX Compatibility

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-42	**Service Code Setup (for Service Access) – Flash on Trunk lines**	Use to customize the flash on trunk lines Service Codes.	SLT (default = 806)
11-12-59	**Service Code Setup (for Service Access) – Trunk Drop Operation for SLT**	Use to customize the trunk drop operation for SLT Service Codes.	SLT (default not assigned)
14-02-03	**Analog Trunk Data Setup – Flash Type**	Use this option to select the flash type.	0 = Open Loop Flash 1 = Ground **Always** set this option for Open Loop Flash (0) (default = 0)
14-02-04	**Analog Trunk Data Setup – Hooking Type**	This option lets you use Flash for Timed Flash (Program 81-01-14) or Disconnect (Program 81-01-15). (A user implements Flash by pressing the FLASH key while on a trunk call.)	0 = Timed Flash (Hooking) 1 = Disconnect (Cut) (default = 0)
15-02-05	**Multiline Telephone Basic Data Setup – Transfer Key Operation Mode**	If the Conf key should access Flash, enter 2. Otherwise, enter 0 or 1.	0 = Transfer 1 = Call back 2 = Hook (default = 0)
15-03-04	**Single Line Telephone Basic Data Setup – Flashing**	Enables/disables Flash for single line (500/2500 type) telephones.	0 = No 1 = Yes (default = 1)
15-07-01	**Programmable Function Keys**	Assign a function key for Drop Key (code 84) if required.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Operation

To use the Drop key from a Multiline Terminal with a CO/PBX call in progress:

1. Press the **Function** key programmed as a Drop key.
2. Receive the new CO/PBX dial tone.
3. Dial the desired number.

To use the Feature Key plus Recall key from a Multiline Terminal with a CO/PBX call in progress:

1. Press **Feature**.
2. Press **Recall**.

   . *Receive the new CO/PBX dial tone.*
3. Dial the desired number.

To use the Drop key feature from a single line telephone with a CO/PBX call in progress:

1. Hookflash.
2. Receive internal dial tone.
3. Dial the Service Code (Program 11-12-59, Default Not Assigned).
4. Receive the new CO/PBX dial tone.
5. Dial the desired number.

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Facsimile CO Branch Connection

Description

The UNIVERGE SV8100 system provides branch connection of locally provided facsimile machines to CO/PBX lines. Additional dedicated CO/PBX lines are not required for a facsimile to operate. The facsimile shares any CO/PBX line on the COI Package and Power Failure (PF) circuit.

Conditions

- This function requires a CD-4COTA Package to connect a facsimile in branch to a direct CO/PBX line.
- A PF circuit is required. The CD-4COTA has PF circuits on the first two ports.
- PF and FAX branch connection does not work together at the same port. Select either way in Program 14-02-21.
- For the FAX Branch Line, Incoming Group or DIL should be programmed.
- The systems cannot distinguish between an incoming facsimile call and a CO/PBX call. Incoming call may be automatically answered by FAX Machine. Ringing assignments should be turned off for fax lines.
- When the facsimile is used, the associated CO line key indicates Busy LED on a multiline terminal.
- When the facsimile is not used, the Fax Branch CO/PBX line can be used as an outside line.
- Code restriction does no apply to outgoing calls from the Fax machine.
- Connection of the facsimile machine does not require extra system ports.
- The PZ-4COTx blade does not contain any Power Fail or Fax Branch Exchange circuits.
- Power Fail and Fax CO Branch Connection cannot be used on the same CO port at the same time.
- Program 14-02-21 must be used to set a CO port to use this feature.

Default Settings

None

System Availability

Terminals

None

Required Component(s)

CD-4COTA

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-02-14	**Analog Trunk Data Setup – Loop Start/Ground Start**	Select loop start (0) or ground start (1) for the trunk.	0 = Loop Start (Loop) 1 = Ground Start (Ground) (default = 0)
14-02-21	**FAX Branch Connection**	Sets CO for Fax Branch Connection. . *If FAX Branch is selected, Program 14-10 Power Failure Telephone Setting is NOT valid.*	0 = No 1 = Yes (default = 0)
14-05-01	**Trunk Group**	Assign trunks to trunk groups (1~100).	Trunk Group Number: 0~100 Priority Number: 1~200 (Default trunks 1~200 = Priority 1~200)
22-01-04	**System Options for Incoming Calls – DIL No Answer Recall Time**	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0~64800 (seconds) (default = 0 seconds)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to ring groups.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	To have the trunks ring extensions, assign trunks to a Ring Group. The incoming ring group assignment programmed in Program 41-03-01 overrides the setting in this program.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)
22-08-01	**DIL/IRG No Answer Destination**	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 0)

Operation

None

Flash

Description

Flash allows an extension user to access certain CO and PBX features by interrupting the trunk loop current. Flash lets an extension user take full advantage of whatever features the connected Telco or PBX offers. You must set the Flash parameters for compatibility with the connected Telco or PBX.

Conditions

The system does not provide a ground flash.

Default Setting

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Drop Key

PBX Compatibility

InMail

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-42	**Service Code Setup (for Service Access) – Flash on Trunk Lines**	Use to customize the Service Codes for flash on trunk lines.	SLT (default = 806)
14-02-03	**Analog Trunk Data Setup – Flash Type**	Make sure this item is set for open loop Flash (0).	0 = Open Loop Flash 1 = Ground (default = 0)
14-02-04	**Analog Trunk Data Setup – Hooking Type**	For each trunk, indicate if Flash is for Flash (0) or open loop disconnect (1).	0 = Timed Flash (Hooking) 1 = Disconnect (Cut) (default = 0)
14-04-01	**Behind PBX Setup**	For each trunk, indicate if the trunk is installed behind a PBX.	0 = Stand Alone (Trunk) 1 = Behind PBX (PBX) 2 = Not Used 3 = CTX assume 9 (default = 0)
15-03-04	**Single Line Telephone Basic Data Setup – Flashing**	Enables/disables Flash for single line telephones.	0 = No 1 = Yes (default = 1)

Operation

To flash the trunk you are on:

From a Multiline Terminal

1. Press **Recall**.

From a Single Line Telephone

1. Hookflash.
2. Dial **806**.

Flexible System Numbering

Description

Flexible System Numbering lets you reassign the system port-to-extension assignments. This allows an employee to retain their extension number if they move to a different office. In addition, factory technicians can make comprehensive changes to your system number plan. You can have factory technicians:

- Set the number of digits in internal (Intercom) functions. For example, extension numbers can have up to eight digits.
- Change your system Service Code numbers.
- Assign single digit access to selected Service Codes.

Talk to your sales representative to find out if this program is available to you.

You can also use Flexible System Numbering to change the system Trunk Group Routing code. Although the default code of 9 is suitable for most applications, you can alter the code if needed.

The system provides a completely flexible system numbering plan. Refer to the chart below and the UNIVERGE SV8100 Programming Manual for more details.

Flexible System Numbering	
Program	**Description**
11-01-01 System Numbering	Set the system internal (Intercom) numbering plan. The numbering plan includes the digits an extension user must dial to access features and other extensions.
11-09-01 Trunk Access Code	Assign the single-digit trunk access code (normally 9). This is the code users dial to access Automatic Route Selection or Trunk Group Routing.
11-20-01 Dial Extension Analyze Table	Use tables 01 ~ 128 to assign the digits to be dialed using the Dial Extension Analyze Tables. These tables are used when Program 11-01-01 is set to option 9 = Dial Extension Analyze. (Up to eight digits can be assigned and the valid entries are: 0, 1 ~ 9, **#**, *,)
11-20-02 Dial Extension Analyze Table	Assign the Type of Dial for the Dial Extension Analyze Table from Program 11-20-01. (Svc Code, Intercom, Operator, or F-Route)

Flexible System Numbering (Continued)	
Program	**Description**
11-10 Service Code Setup (for System Administrator) 11-11 Service Code Setup (for Setup/Entry Operation) 11-12 Service Code Setup (for Service Access) 11-13 Service Code Setup (for ACD) 11-14 Service Code Setup (for Hotel) 11-15 Service Code Setup, Administrative (for Special Access)	Customize the Service Codes.
11-16 Single Digit Service Code Setup	Assign the Single Digit Service Codes. these are the post-dialing codes a user can dial after placing an Intercom call to a co-worker.

Conditions

- Programming follows a telephone extension number, not the port number in most cases. If you relocate a telephone, you may need to change additional programming. For example, if you change the extension assigned to a port in Program 11-02, the line key programming does not follow. However, if you move the extension using the Station Relocation Feature, the line key programming does follow.
- Since making changes in Program 11-01 does not automatically make any other changes in any other program, changing the number plan after the system is in operation may cause problems in the following programs:

PRG 11-01 Type 2 (Extension Number)				PRG 11-01 Type 1 (Service Codes)		
11-02	11-08	15-12	22-11	11-10	11-14	21-11
11-04	11-17	16-01-01	25-06	11-11	11-15	30-03
11-06	15-01-01	15-14	30-03	11-12	15-07	
11-07	15-07	21-11		11-13	15-14	

- Any feature which requires dialing a code or extension number can be affected.
- When the system searches the Dial Extension Analyze Table (PRG 11-20-01), the system uses prefix searching, giving the lower table number the higher priority. For example, the user programs 211 in table 1 and 2113 in table 2, then dials 2113, the system selects table 1.

Example for 310X

10s Group (4-digit)
11-01-01 = Dial 3 31 Digit 4 = (9)Dial Extension Analyze Table
11-20-01 Table 1 = Dial 310
11-20-02 Table 1 = Intercom

Example for 3100X

100s Group (5-digit)
11-01-01 = Dial 3 31 Digit 7 = (9)Dial Extension Analyze Table
11-20-01 Table 1 = Dial 3100
11-20-02 Table 1 = Intercom

Example for 31000X

1000s Group (6-digit)
11-01-01 = Dial 3 31 Digit 4 = (9)Dial Extension Analyze Table
11-20-01 Table 1 = Dial 31000
11-20-02 Table 1 = Intercom

Example for 310000X

10,000s Group (7-digit)
11-01-01 = Dial 3 31 Digit 7 = (9)Dial Extension Analyze Table
11-20-01 Table 1 = Dial 310000
11-20-02 Table 1 = Intercom

Default Setting

Extensions and Virtuals are numbered in the following order:

Program 11-02-01 and Program 11-04-01

- Physical Extensions:
  - Extn Port 1 = 200 ~ Extn Port 300 = 499
  - Extn Port 301 = 5000 ~ Extn Port 512 = 5211
- Virtual Extensions:
  - All VE Ports = No setting

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-01-01	**System Numbering – Service Code**	Customize the system internal (Intercom) numbering plan.	Refer to Univerge SV8100 System Program Manual
11-02-01	**Extension Numbering**	Assign extension numbers to extension ports. The telephone programming identity follows the port number – not the extension number.	Up to eight digits 1 200 2 201 3 202 ~ ~ 300 499 301 5000 ~ ~ 512 5211
11-04-01	**Virtual Extension Numbering**	Assign virtual extension numbers.	Up to eight digits Default not assigned
11-06-01	**ACI Extension Numbering**	Use to define the virtual extension number to be used for the ACI extension numbering.	ACI Ports: 1~96 (default not assigned)
11-07-01	**Department Group Pilot Numbers – Dial**	Use to assign pilot numbers to each Department Group set up	Up to eight digits (default not assigned)
11-08-01	**ACI Group Pilot Number**	Use to assign the pilot number to the ACI Groups set in Program 33-02.	ACI Groups: 1~16 (default not assigned)
11-09-01	**Trunk Access Code**	If required, change the single-digit Trunk Access Code (normally 9). If you change this code, you must also review the settings in Program 11-01-01 for the new code selected.	Dial (up to four digits) (default = 9)
11-09-02	**Trunk Access Code – 2nd Trunk Route Access Code**	Assign the Service Code set up in Program 11-01-01 for Alternate Trunk Route Access.	Dial (up to four digits) [default not assigned)]
11-10-01	**Service Code Setup (for System Administrator) – Night Mode Switching**	Use to customize the night mode switching Service Codes for the System Administrator.	MLT,SLT (default = 818)
11-10-03	**Service Code Setup (for System Administrator) – Setting the System Time**	Use to customize the system time Service Codes for the System Administrator.	MLT (default = 828)
11-10-04	**Service Code Setup (for System Administrator) – Storing Common Speed Dialing Numbers**	Use to store common speed dialing Service Codes for the System Administrator.	MLT (default = 853)

Program Number	Program Name	Description/Comments	Assigned Data
11-10-05	**Service Code Setup (for System Administrator) – Storing Group Speed Dialing Numbers**	Use for storing group speed dialing numbers for the System Administrator.	MLT (default = 854)
11-10-06	**Service Code Setup (for System Administrator) – Setting the Automatic Transfer for Each Trunk Line**	Set the service code for setting automatic transfer for each trunk line.	MLT (default = 833)
11-10-07	**Service Code Setup (for System Administrator) – Canceling the Automatic Transfer for Each Trunk Line**	Set the service code for canceling automatic transfer for each trunk line.	MLT (default = 834)
11-10-08	**Service Code Setup (for System Administrator) – Setting the Destination for Automatic Trunk Transfer**	Set the service code for setting the destination for automatic trunk transfer.	MLT (default = 835)
11-10-12	**Service Code Setup (for System Administrator) – Night Mode Switching for Other Group**	Use to customize the night mode switching for other group Service Codes for the System Administrator.	MLT (default = 718)
11-10-16	**Service Code Setup (for System Administrator) – Leaving Message Waiting (Requires CPU to be licensed for Hotel/Motel)**	Use to customize the leave message waiting Service Codes for the System Administrator (requires CPU to be licensed for Hotel/Motel).	MLT (default = 726)
11-10-17	**Service Code Setup (for System Administrator) – Dial Block by Supervisor**	Use to customize the supervisor dial block Service Codes for the System Administrator.	MLT (default = 701)
11-10-18	**Service Code Setup (for System Administrator) – Off-Premise Call Forward by Door Box**	Use to customize the night mode switching Service Codes for the System Administrator.	MLT (default = 822)
11-10-20	**Service Code Setup (for System Administrator) – VRS - Record/ Erase Message**	Use to customize the night mode switching Service Codes for the System Administrator.	MLT, SLT (default = 716)
11-10-21	**Service Code Setup (for System Administrator) – VRS - General Message Playback**	Use to customize the VRS general message playback for the System Administrator.	MLT, SLT (default = 711)
11-10-22	**Service Code Setup (for System Administrator) – VRS - Record or Erase General Message**	Use to customize the VRS record or erase general message for the System Administrator.	MLT, SLT (default = 712)
11-10-23	**Service Code Setup (for System Administrator) – SMDR - Extension Accumulated Printout Code**	Use to customize the SMDR extension accumulated printout codes for the System Administrator.	MLT (default = 721)

Program Number	Program Name	Description/Comments	Assigned Data
11-10-24	**Service Code Setup (for System Administrator) – SMDR - Group Accumulated Printout Code**	Use to customize the SMDR group accumulated printouts for the System Administrator.	MLT (default = 722)
11-10-25	**Service Code Setup (for System Administrator) – Account Code Accumulated Printout Code**	Use to customize the account code accumulated printout Service Codes for the System Administrator.	MLT (default = 723)
11-10-26	**Service Code Setup (for System Administrator) – Forced Trunk Disconnect**	Use to customize the forced trunk disconnect Service Codes for the System Administrator.	MLT, SLT (default = 724)
11-10-27	**Service Code Setup (for System Administrator) – Trunk Port Disable for Outgoing Calls**	Define the service code which should be used by an extension user to block a trunk from being used for outgoing calls.	MLT, SLT (default = 745)
11-10-32	**Service Code Setup (for System Administrator) – Set Private Call Refuse**	Use to customize the set private call refuse Service Codes for the System Administrator.	MLT, SLT (default not assigned)
11-10-33	**Service Code Setup (for System Administrator) – Entry Caller ID Refuse**	Use to customize the entry caller ID Service Codes for the System Administrator.	MLT (default not assigned)
11-10-34	**Service Code Setup (for System Administrator) – Set Caller ID Refuse**	Use to customize the set caller ID refuse Service Codes for the System Administrator.	MLT, SLT (default not assigned)
11-10-35	**Service Code Setup (for System Administrator) – Dial-In Mode Switching**	Use to customize the forced trunk disconnect Service Codes for the System Administrator.	MLT, SLT (default not assigned)
11-10-36	**Service Code Setup (for System Administrator) – Change the Guidance Message Number on Voice Mail Auto Attendant**	Use to change the guidance message number on voice mail auto attendant Service Codes for the System Administrator.	MLT, SLT (default not assigned)
11-11-01	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – All**	Set the service code for setting call forwarding all calls.	MLT, SLT (default = 848)
11-11-02	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Busy**	Set the service code for setting call forwarding for busy calls.	MLT, SLT (default = 843)
11-11-03	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – No Answer**	Set the service code for setting call forwarding for no answer.	MLT, SLT (default = 845)
11-11-04	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Busy/No Answer**	Set the service code for setting call forwarding for busy or no answer.	MLT, SLT (default = 844)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-05	**Service Code Setup (for Setup/ Entry Operation) – Call Forward – Both Ring**	Set the service code for setting call forwarding for busy or no answer.	MLT, SLT (default = 842)
11-11-07	**Service Code Setup (for Setup/ Entry Operation) – Call Forwarding – Follow Me**	Set the service code for setting call forwarding for follow me.	MLT, SLT (default = 846)
11-11-08	**Service Code Setup (for Setup/ Entry Operation) – Do Not Disturb**	Set the service code for setting call forwarding for Do Not Disturb.	MLT, SLT (default = 847)
11-11-09	**Service Code Setup (for Setup/ Entry Operation) – Answer Message Waiting**	Use to customize the answer message waiting used for registration and setup.	MLT, SLT (default = 841)
11-11-10	**Service Code Setup (for Setup/ Entry Operation) – Cancel All Messages Waiting**	Use to cancel all messages waiting used for registration and setup.	MLT, SLT (default = 873)
11-11-11	**Service Code Setup (for Setup/ Entry Operation) – Cancel Message Waiting**	Use to cancel message waiting used for registration and setup.	MLT, SLT (default = 871)
11-11-12	**Service Code Setup (for Setup/ Entry Operation) – Alarm Clock**	Use to customize the alarm clock used for registration and setup.	MLT, SLT (default = 827)
11-11-13	**Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for multiline terminal**	Use to customize the display language for multiline terminal used for registration and setup.	MLT (default = 778)
11-11-14	**Service Code Setup (for Setup/ Entry Operation) – Text Message Setting**	Use to customize the text message setting used for registration and setup.	MLT (default = 836)
11-11-15	**Service Code Setup (for Setup/ Entry Operation) – Enable Handsfree Incoming Intercom Calls**	Use to customize the enable handsfree incoming intercom calls used for registration and setup.	MLT (default = 821)
11-11-16	**Service Code Setup (for Setup/ Entry Operation) – Force Ringing of Incoming Intercom Calls**	Use to customize the force ringing of incoming intercom calls used for registration and setup.	MLT (default = 823)
11-11-17	**Service Code Setup (for Setup/ Entry Operation) – Programmable Function Key Programming (2-Digit Service Codes)**	Use this option to set the service code (default 751) to assign 2-digit function codes to the Function keys.	MLT (default = 851)
11-11-18	**Service Code Setup (for Setup/ Entry Operation) – BGM On/Off**	Use to customize the BGM On/Off used for registration and setup.	MLT (default = 825)
11-11-19	**Service Code Setup (for Setup/ Entry Operation) – Key Touch Tone On/Off**	Use to customize the key touch tone Off/On used for registration and setup.	MLT (default = 824)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-20	**Service Code Setup (for Setup/ Entry Operation) – Change Incoming CO and ICM Ring Tones**	Use to customize the change incoming CO and ICM ring tones used for registration and setup.	MLT (default = 820)
11-11-21	**Service Code Setup (for Setup/ Entry Operation) – Check Incoming Ring Tones**	Use to check incoming ring tones used for registration and setup.	MLT (default = 811)
11-11-22	**Service Code Setup (for Setup/ Entry Operation) – Extension Name Programming**	Use to customize the Extension name programming used for registration and setup.	MLT (default = 800)
11-11-23	**Service Code Setup (for Setup/ Entry Operation) – Second Call for DID/DISA/DIL**	Use to customize the second call of DID/DISA/DIL used for registration and setup.	MLT (default = 779)
11-11-24	**Service Code Setup (for Setup/ Entry Operation) – Change Station Class of Service**	Allows an extension user to change the COS of another extension. Must be allowed in Program 20-13-28.	MLT (default = 777)
11-11-25	**Service Code Setup (for Setup/ Entry Operation) – Automatic Transfer Setup for Each Extension Group**	Customize the service code to be used to set the Automatic Trunk Forwarding feature for a Department Group.	MLT, SLT (default = 702)
11-11-26	**Service Code Setup (for Setup/ Entry Operation) – Automatic Transfer Cancellation for Each Extension Group**	Customize the service code to be used to cancel the Automatic Trunk Forwarding feature for a Department Group.	MLT, SLT (default = 703)
11-11-27	**Service Code Setup (for Setup/ Entry Operation) – Destination of Automatic Transfer Each Extension Group**	Customize the service code to be used to set the destination for the Automatic Trunk Forwarding feature for a Department Group.	MLT (default = 704)
11-11-28	**Service Code Setup (for Setup/ Entry Operation) – Delayed Transfer for Every Extension Group**	Use to customize the delayed transfer for every extension group used for registration and setup.	MLT, SLT (default = 705)
11-11-29	**Service Code Setup (for Setup/ Entry Operation) – Delayed Transfer Cancellation for Each Extension Group**	Use to customize the delayed transfer cancellation for each extension group used for registration and setup.	MLT, SLT (default = 706)
11-11-30	**Service Code Setup (for Setup/ Entry Operation) – DND Setup for Each Extension Group**	Use to customize the Service Codes which are used for registration and setup.	MLT, SLT (default = 707)
11-11-31	**Service Code Setup (for Setup/ Entry Operation) – DND Cancellation for Each Extension Group**	Use to customize the DND cancellation for each extension group used for registration and setup.	MLT, SLT (default = 708)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-33	**Service Code Setup (for Setup/ Entry Operation) – Dial Block**	Use to customize the dial block used for registration and setup.	MLT, SLT (default = 700)
11-11-34	**Service Code Setup (for Setup/ Entry Operation) – Temporary Toll Restriction Override**	Use to customize the temporary toll restriction override used for registration and setup.	MLT, SLT (default = 875)
11-11-35	**Service Code Setup (for Setup/ Entry Operation) – Pilot Group Withdrawing**	Use to customize the Service Codes which are used for registration and setup.	MLT, SLT (default = 750)
11-11-36	**Service Code Setup (for Setup/ Entry Operation) – Toll Restriction Override**	Use to customize the toll restriction override used for registration and setup.	MLT, SLT (default = 763)
11-11-37	**Service Code Setup (for Setup/ Entry Operation) – Ring Volume Set**	Use to customize the ring volume set used for registration and setup.	MLT (default = 829)
11-11-38	**Service Code Setup (for Setup/ Entry Operation) – Programmable Function Key Programming (3-Digit Service Codes)**	Use this option to set the service code (default 752) to assign 3-digit function codes to the Function keys.	MLT (default = 852)
11-11-39	**Service Code Setup (for Setup/ Entry Operation) – Station Speed Dial Number Entry**	Use to customize the station speed dial entry used for registration and setup.	ML, SLT (default = 855)
11-11-41	**Service Code Setup (for Setup/ Entry Operation) – Tandem Ringing**	Use to customize the tandem ringing used for registration and setup.	MLT, SLT (default = 744)
11-11-43	**Service Code Setup (for Setup/ Entry Operation) – Headset Mode Switching**	Use to customize the headset mode switching used for registration and setup.	MLT, SLT (default = 788)
11-11-44	**Service Code Setup (for Setup/ Entry Operation) – Auto Attendant**	Use to customize the auto attendant used for registration and setup.	MLT, SLT (default = 790)
11-11-45	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward All (Split)**	Use to assign the Call Forward All Split Service Code.	MLT, SLT (default = 782)
11-11-46	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy (Split)**	Use to assign the Call Forward Busy Split Service Code.	MLT, SLT (default = 783)
11-11-47	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward No Answer (Split)**	Use to assign the Call Forward No Answer Split Service Code.	MLT, SLT (default =784)
11-11-48	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy No Answer (Split)**	Use to assign the Call Forward Busy No Answer Split Service Code.	MLT, SLT (default = 785)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-49	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Both Ring (Split)**	Use to assign the Call Forward Both Ring Split Service Code.	MLT, SLT (default = 786)
11-11-50	**Service Code Setup (for Setup/ Entry Operation) – Set Message Waiting Indication**	Use to customize the set message waiting indication used for registration and setup.	SLT Up to eight digits
11-11-51	**Service Code Setup (for Setup/ Entry Operation) – Cancel Message Waiting Indication**	Use to customize the cancel message waiting indication used for registration and setup.	SLT Up to eight digits
11-11-52	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward All Destination (No Split)**	Use to assign the Call Forward All for any Extension Service Code.	(default = 791)
11-11-53	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward Busy Destination (No Split)**	Use to assign the Call Forward Busy for any Extension Service Code.	MLT, SLT (default = 792)
11-11-54	**Service Code Setup (for Setup/ Entry Operation) – Set/Cancel Call Forward No Answer Destination (No Split)**	Used to assign the Call Forward No Answer for any Extension Service Code.	MLT, SLT (default = 793)
11-11-55	**Service Code Setup (for Setup/ Entry Operation) – Call Forward Busy No Answer Destination (No Split)**	Set or Cancel the call forward busy or no answer destination with no split.	MLT, SLT (default = 794)
11-11-57	**Service Code Setup (for Setup/ Entry Operation) – Set Do Not Call Table**	Use to customize the set do not call table used for registration and setup.	(default not assigned)
11-11-58	**Service Code Setup (for Setup/ Entry Operation) – Call Forward with Personal Greeting**	Set the service code for setting call forwarding with Personal Greeting.	MLT, SLT (default = 795)
11-12-01	**Service Code Setup (for Service Access) – Bypass Call**	Set the service code for Activating Call Forwarding/Do Not Disturb Override. This code is available only if you disable the voice mail Single Digit dialing code in Program 11-16-09.	MLT, SLT (default = 807)
11-12-02	**Service Code Setup (for Service Access) – Conference**	Use to customize the conference Service Codes used for service access.	MLT, SLT (default = 826)
11-12-03	**Service Code Setup (for Service Access) – Override (Off-Hook Signaling)**	Use to customize the override (off-hook signaling) used for service access.	MLT, SLT (default = 809)

Program Number	Program Name	Description/Comments	Assigned Data
11-12-04	**Service Code Setup (for Service Access) – Set Camp-On**	Customize the Service Code, which is to be used for setting Camp-On.	MLT, SLT (default = 850)
11-12-05	**Service Code Setup (for Service Access) – Cancel Camp-On**	Customize the Service Code, which is to be used for cancelling Camp-On.	MLT, SLT (default = 870)
11-12-06	**Service Code Setup (for Service Access) – Switching of Voice Call and Signal Call**	Use to customize the switching of voice call and signal call used for service access.	MLT, SLT (default = 812)
11-12-07	**Service Code Setup (for Service Access) – Step Call**	Use to customize the step call used for service access.	MLT, SLT (default = 808)
11-12-08	**Service Code Setup (for Service Access) – Barge-In**	Determine what the service code should be for an internal party to use the Barge-In feature.	MLT, SLT (default = 810)
11-12-09	**Service Code Setup (for Service Access) – Change to STG (Department Group) All Ring**	Use this option to set the service code for ringing all members of a Department Group.	MLT, SLT (default = 780)
11-12-10	**Service Code Setup (for Service Access) – Station Speed Dialing**	Assign Service code for accessing System Speed Dial bins.	MLT, SLT (default = 813)
11-12-11	**Service Code Setup (for Service Access) – Group Speed Dialing**	Use to customize the group speed dialing Service Codes used for service access.	MLT, SLT (default = 814)
11-12-12	**Service Code Setup (for Service Access) – Last Number Dial**	Assign a service code to use Last Number Dial.	MLT, SLT (default = 816)
11-12-13	**Service Code Setup (for Service Access) – Saved Number Dial**	Customize the service code to be used for dialing a saved number.	MLT, SLT (default = 815)
11-12-14	**Service Code Setup (for Service Access) – Trunk Group Access**	Use to customize the Service Codes which are used for service access.	MLT, SLT (default = 804)
11-12-15	**Service Code Setup (for Service Access) – Specified Trunk Access**	Use to customize the Service Codes which are used for specified trunk access.	MLT, SLT (default = 805)
11-12-16	**Service Code Setup (for Service Access) – Trunk Access Via Networking**	Use to customize the Service Codes which are used for trunk access via networking.	MLT, SLT (default = 866)
11-12-17	**Service Code Setup (for Service Access) – Clear Last Number Dialing Data**	Assign a service code to clear the Last Number Dial.	MLT, SLT (default = 876)
11-12-18	**Service Code Setup (for Service Access) – Clear Saved Number Dialing Data**	Define the service code for Clear Save Number Dialing List if it is not acceptable.	MLT, SLT (default = 885)

Program Number	Program Name	Description/Comments	Assigned Data
11-12-19	**Service Code Setup (for Service Access) – Internal Group Paging**	Define the service code for accessing an internal paging group.	MLT, SLT (default = 801)
11-12-20	**Service Code Setup (for Service Access) – External Paging**	External paging access code. Service code setup.	MLT, SLT (default = 803)
11-12-21	**Service Code Setup (for Service Access) – Meet-Me Answer to Specified Internal Paging Group**	Use to customize the Service Codes used for meet-me answer to specified internal paging group service access.	MLT, SLT (default = 864)
11-12-22	**Service Code Setup (for Service Access) – Meet-Me Answer to External Paging**	Use to customize the Service Codes used for meet-me answer to external paging service access.	MLT, SLT (default = 865)
11-12-23	**Service Code Setup (for Service Access) – Meet-Me Answer in Same Paging Group**	Use to customize the Service Codes used for meet-me answer in same paging group service access.	MLT, SLT (default = 863)
11-12-24	**Service Code Setup (for Service Access) – Combined Paging**	Combined paging, internal/ external access code. Service code setup.	MLT, SLT (default = 751)
11-12-25	**Service Code Setup (for Service Access) – Direct Call Pickup - Own Group**	Use to customize the Service Codes for direct call pickup – own group which are used for service access.	MLT, SLT (default = 856)
11-12-26	**Service Code Setup (for Service Access) – Call Pickup for Specified Group**	Use to customize the Service Codes for call pickup for specified group which are used for service access.	MLT, SLT (default = 868)
11-12-27	**Service Code Setup (for Service Access) – Call Pickup**	Use to customize the Service Codes for call pickup which are used for service access.	MLT, SLT (default = 867)
11-12-28	**Service Code Setup (for Service Access) – Call Pickup for Another Group**	Use to customize the Service Codes for call pickup for another group which are used for service access.	MLT, SLT (default = 869)
11-12-29	**Service Code Setup (for Service Access) – Direct Extension Call Pickup**	Use to customize the Service Codes for direct extension call pickup which are used for service access.	MLT, SLT (default = 715)
11-12-30	**Service Code Setup (for Service Access) – Specified Trunk Answer**	If required, redefine the service code used to answer a specific trunk which is either ringing or on hold.	MLT, SLT (default = 772)
11-12-31	**Service Code Setup (for Service Access) – Park Hold**	Set the service code which should be used for placing a call in Park.	MLT, SLT (default: 831)

Program Number	Program Name	Description/Comments	Assigned Data
11-12-32	**Service Code Setup (for Service Access) – Answer for Park Hold**	Set the service code which should be used for answering a call in Park.	MLT, SLT (default: 861)
11-12-33	**Service Code Setup (for Service Access) – Group Hold**	If required, redefine the service code used to answer a specific trunk which is either ringing or on hold.	MLT, SLT (default = 832)
11-12-34	**Service Code Setup (for Service Access) – Answer for Group Hold**	If required, redefine the service code used to answer a specific trunk which is either ringing or on hold.	MLT, SLT (default = 862)
11-12-35	**Service Code Setup (for Service Access) – Station Park Hold**	Set the service code to be used for placing a call in a Personal Park.	MLT, SLT (default = 773)
11-12-36	**Service Code Setup (for Service Access) – Door Box Access**	If the service code for Doorphone Access is not acceptable, change it here.	MLT, SLT (default = 802)
11-12-37	**Service Code Setup (for Service Access) – Common Canceling Service Code**	Use to customize the Service Codes used for common canceling service code access.	MLT, SLT (default = 720)
11-12-38	**Service Code Setup (for Service Access) – General Purpose Indication**	Use to customize the Service Codes used for general purpose indication access.	MLT (default = 883)
11-12-39	**Service Code Setup (for Service Access) – Voice Mail Center Access**	Use to customize the Service Code for Voice Mail Center Access.	(default not assigned)
11-12-40	**Service Code Setup (for Service Access) – Station Speed Dialing**	Use to customize the station speed access Service Codes.	MLT, SLT (default = 761)
11-12-41	**Service Code Setup (for Service Access) – Voice Over**	The service code used for the Voice Over feature.	MLT (default = 890)
11-12-42	**Service Code Setup (for Service Access) – Flash on Trunk lines**	Use to customize the Service Codes which are used for flash on trunk lines.	SLT (default = 806)
11-12-43	**Service Code Setup (for Service Access) – Answer No-Ring Line (Universal Answer)**	Customize the service code to be used to manually answer a Universal Night Answer.	MLT, SLT (default = 872)
11-12-44	**Service Code Setup (for Service Access) – Callback Test for SLT**	If required, redefine the service code used for SLT Callback Test.	SLT (default = 899)
11-12-45	**Service Code Setup (for Service Access) – Enabled On Hook When Holding (SLT)**	Use to customize the Service Codes which are used for the enabled on hook when holding (SLT).	SLT (default = 849)

Program Number	Program Name	Description/Comments	Assigned Data
11-12-46	**Service Code Setup (for Service Access) – Answer On Hook When Holding (SLT)**	Use to customize the Service Codes which are used for the answer on hook when holding (SLT).	SLT (default = 859)
11-12-47	**Service Code Setup (for Service Access) – Call Waiting Answer/ Split Answer**	If required, use this program to change the code users dial to Split while on a call.	SLT (default = 894)
11-12-48	**Service Code Setup (for Service Access) – Account Code**	Use to customize the Service Codes which are used for the account code.	SLT (default = 891)
11-12-50	**Service Code Setup (for Service Access) – General Purpose Relay**	Define the service code to be used for turning the general purpose relay on and off.	MLT, SLT (default = 880)
11-12-51	**Service Code Setup (for Service Access) – VM Access (InMail and VMS)**	Use to customize the Service Codes which are used for the VM access (InMail and VMS).	MLT, SLT (default = 717)
11-12-52	**Service Code Setup (for Service Access) – Live Monitoring (InMail)**	Define access code used for InMail Live Monitoring (VRS). At default this program is not set.	MLT (default = 725)
11-12-53	**Service Code Setup (for Service Access) – Live Recording at SLT**	Use to customize the Service Codes which are used for live recording at SLT.	MLT, SLT (default = 754)
11-12-54	**Service Code Setup (for Service Access) – VRS Routing for ANI/ DNIS**	Define the service code to use when setting up ANI/DNIS Routing to the VRS Automated Attendant. Using the Transfer feature, this also allows a call to be transferred to the VRS.	(default = 882)
11-12-56	**Service Code Setup (for Service Access) – E911 Alarm Shut Off**	Select the Service Code that an extension user can dial to shut off the E911 Alarm Ring.	MLT (default not assigned)
11-12-57	**Service Code Setup (for Service Access) – Tandem Trunking**	With two trunks in Conference press the Hold key and dial and the Conference/Tandem happens.	MLT, SLT (default = 753)
11-12-58	**Service Code Setup (for Service Access) – Transfer Into Conference**	If required, change the service code used to transfer a call into a Conference call.	MLT, SLT (default not assigned)
11-12-59	**Service Code Setup (for Service Access) – Trunk Drop Operation for SLT**	Use to customize the trunk drop operation for SLT Service Codes which are used for service access.	SLT (default not assigned)
11-13-01	**Service Code Setup (for ACD) – ACD LogIn/Log Out (for KTS)**	Assign for multiline terminals and single line telephones.	MLT, SLT (default = 839)
11-13-02	**Service Code Setup (for ACD) – ACD Log Out (for SLT)**	Assign for single line telephones.	SLT (default = 755)

Program Number	Program Name	Description/Comments	Assigned Data
11-13-03	**Service Code Setup (for ACD) – Set ACD Wrap-Up Time (for SLT)**	Assign for single line telephones.	SLT (default = 756)
11-13-04	**Service Code Setup (for ACD) – Cancel ACD**	Assign for single line telephones.	SLT (default = 757)
11-13-05	**Service Code Setup (for ACD) – Set ACD Off Duty (for SLT)**	Assign for single line telephones.	SLT (default = 758)
11-13-06	**Service Code Setup (for ACD) – Cancel ACD Off Duty (for SLT)**	Assign for single line telephones.	SLT (default = 759)
11-13-08	**Service Code Setup (for ACD) – Agent ID Code Login**	Assign to allow an AIC Agent to log into a group.	MLT (default not assigned)
11-13-09	**Service Code Setup (for ACD) – Agent ID Code Logout**	Assign to allow an AIC Agent to log out of a group.	MLT (default not assigned)
11-13-10	**Service Code Setup (for ACD) – ACD Agent Login by Supervisor**	Assign to allow an ACD Supervisor to log into a group.	MLT (default = 767)
11-13-11	**Service Code Setup (for ACD) – ACD Agent Logout by Supervisor**	Assign to allow an ACD Supervisor to log out of a group.	MLT (default = 768)
11-13-12	**Service Code Setup (for ACD) – Change Agent ACD Group by Supervisor**	When using service code 669 to change an agent ACD group, the supervisor must enter a 2-digit number for the group. For example, to change to ACD group 4, the entry would be 669 04.	MLT (default = 769)
11-13-13	**Service Code Setup (for ACD) – ACD Agent Changing Own ACD Group**	When this service code is used, an ACD Agent can reassign themselves to another ACD Group.	MLT (default = 775)
11-14-01	**Service Code Setup (for Hotel) – Set DND for Own Extension**	Use to customize the set DND for own extension used with the Hotel/Motel feature.	MLT, SLT (default = 727)
11-14-02	**Service Code Setup (for Hotel) – Cancel DND for Own Extension**	Use to customize the cancel DND for own extension used with the Hotel/Motel feature.	MLT, SLT (default = 728)
11-14-03	**Service Code Setup (for Hotel) – Set DND for Other Extension**	Use to customize the set DND for other extension used with the Hotel/Motel feature.	MLT, SLT (default = 729)
11-14-04	**Service Code Setup (for Hotel) – Cancel DND for Other Extension**	Use to customize the cancel DND for other extension used with the Hotel/Motel feature.	MLT, SLT (default = 730)
11-14-05	**Service Code Setup (for Hotel) – Set Wake Up Call for Own Extension**	Use to customize the set wake up call for own extension used with the Hotel/Motel feature.	MLT, SLT (default = 731)

Program Number	Program Name	Description/Comments	Assigned Data
11-14-06	**Service Code Setup (for Hotel) – Cancel Wake Up Call for Own Extension**	Use to customize the cancel wake up call for own extension used with the Hotel/Motel feature.	MLT, SLT (default = 732)
11-14-07	**Service Code Setup (for Hotel) – Set Wake Up Call for Other Extension**	Use to customize the set wake up call for other extension used with the Hotel/Motel feature.	MLT, SLT (default = 733)
11-14-08	**Service Code Setup (for Hotel) – Cancel Wake Up Call for Other Extension**	Use to customize the cancel wake up call for other extension used with the Hotel/Motel feature.	MLT, SLT (default = 734)
11-14-09	**Service Code Setup (for Hotel) – Set Room to Room Call Restriction**	Use to customize the set room to room call extension used with the Hotel/Motel feature.	MLT, SLT (default = 735)
11-14-10	**Service Code Setup (for Hotel) – Cancel Room to Room Call Restriction (Hotel)**	Use to customize the cancel room to room call restriction (hotel) used with the Hotel/Motel feature.	MLT, SLT (default = 736)
11-14-11	**Service Code Setup (for Hotel) – Change Toll Restriction Class for Other Extension**	Use to customize the change toll restriction class for other extension used with the Hotel/ Motel feature.	MLT, SLT (default = 737)
11-14-12	**Service Code Setup (for Hotel) – Check-In**	Use to customize the check-in Service Codes which are used with the Hotel/Motel feature.	MLT, SLT (default = 738)
11-14-13	**Service Code Setup (for Hotel) – Check-Out**	Use to customize the check-out Service Codes which are used with the Hotel/Motel feature.	MLT, SLT (default = 739)
11-14-14	**Service Code Setup (for Hotel) – Room Status Change for Own Extension**	Use to customize the room status change for own extension Service Codes which are used with the Hotel/Motel feature.	MLT, SLT (default = 740)
11-14-15	**Service Code Setup (for Hotel) – Room Status Change for Other Extension**	Use to customize the room status change for other extension Service Codes which are used with the Hotel/Motel feature.	MLT, SLT (default = 741)
11-14-16	**Service Code Setup (for Hotel) – Room Status Output**	Use to customize the room status output Service Codes which are used with the Hotel/Motel feature.	MLT (default = 742)
11-14-17	**Service Code Setup (for Hotel) – Hotel Room Monitor**	Use to customize the hotel room monitor Service Codes which are used with the Hotel/Motel feature.	MLT, SLT (default = 770)
11-14-18	**Service Code Setup (for Hotel) – Set Hotel PMS Code Restriction**	Use to customize the set hotel PMS code restriction Service Codes which are used with the Hotel/Motel feature.	MLT (default = 766)

Program Number	Program Name	Description/Comments	Assigned Data
11-15-01	**Service Code Setup, Administrative (for Special Access) – Remote Maintenance**	Use to customize the remote maintenance Service Codes which are used by the administrator in the Hotel/Motel feature.	(default = 830)
11-15-02	**Service Code Setup, Administrative (for Special Access) – ACD Access in Dial-In Conversion Table**	Use to customize the ACD access in dial-in conversion table Service Codes which are used by the administrator in the Hotel/Motel feature.	(default = 860)
11-15-03	**Service Code Setup, Administrative (for Special Access) – Backup Data Save**	This service code is used for back up the programmed data on the SRAM and Call History to the Flash ROM. While saving the database, it may cause system lock up.	MLT (default = **#** * **#** 9)
11-15-05	**Service Code Setup, Administrative (for Special Access) – System Programming Mode, Log-On**	Use to customize the system programming mode, log-on Service Codes which are used by the administrator in the Hotel/ Motel feature.	MLT (default = **#** * **#** *)
11-15-06	**Service Code Setup, Administrative (for Special Access) – Wake on LAN to APSU Unit**	Use to customize the wake on LAN to APSU unit Service Codes.	MLT (default not assigned
11-15-09	**Service Code Setup, Administrative (for Special Access) – Transfer to Incoming Ring Group**	When a call is transferred using this service code, it is transferred to the ring group destination for that incoming trunk. For example, trunk 2 is in Ring Group 4. When the call is transferred using this service code, the trunk rings all extensions programmed for Ring Group 4 or ring the External Paging Group for Ring Group 4, depending on how the system is programmed.	(default not assigned)
11-15-11	**Service Code Setup, Administrative (for Special Access) – Ethernet Port Reset**	Use to customize the ethernet port reset Service Codes.	(default not assigned)
11-15-12	**Service Code Setup, Administrative (for Special Access) – Extension Data Swap**	Ext. Data Swap = xxx (service code in accordance with Program 11-01).	MLT (default not assigned)
11-15-13	**Service Code Setup, Administrative (for Special Access) – Remote Access from DISA**	Use to customize the service code for Remote Access for DISA.	(default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
11-15-14	**Service Code Setup, Administrative (for Special Access) – Modem Access**	Assign the service code to be used to access the internal modem on the CD-CP00.	(default not assigned)
11-16-01	**Single Digit Service Code Setup – Step Call**	Assign the Single Digit (post-dialing) Service Codes.	(default not assigned)
11-16-02	**Single Digit Service Code Setup – Barge-In**	Use this option to set up Item 02 for single digit Barge-In. For example, you can assign Item 02 to use digit 5 for Barge-In. This would allow you to program a function key with an extension number plus the Barge-In code (i.e., 5). This allows one-touch access to the Barge-In feature for extension.	(default not assigned)
11-16-03	**Single Digit Service Code Setup – Switching of Voice/Signal Call**	Use to customize the switching of Voice/Signal call Service Codes used when a busy or ring back signal is heard.	(default = 1)
11-16-04	**Single Digit Service Code Setup – Intercom Off-Hook Signaling**	Assign a one-digit service code to be used for Off-Hook Signaling.	(default not assigned)
11-16-05	**Single Digit Service Code Setup – Camp-On**	Customize the 1-digit Service Code used for setting Camp-On.	(default not assigned)
11-16-06	**Single Digit Service Code Setup – DND/Call Forward Override Bypass**	Customize the 1-digit Service Code used for DND/Call Forward Override.	(default not assigned)
11-16-07	**Single Digit Service Code Setup – Message Waiting**	Use to customize the message waiting Service Codes used when a busy or ring back signal is heard.	(default not assigned)
11-16-08	**Single Digit Service Code Setup – Voice Over**	Service code used for the Voice Over feature.	(default not assigned)
11-16-09	**Single Digit Service Code Setup – Access to Voice Mail**	Use to customize the access to voice mail Service Codes used when a busy or ring back signal is heard.	(default not assigned)
11-16-10	**Single Digit Service Code Setup – (Department) STG All Ring Mode**	Assign the Single Digit (post-dialing) Service Code for All Member Ring.	(default not assigned)
11-16-11	**Single Digit Service Code Setup – Station Park Hold**	Customize the one-digit service code to be used when placing a call in Personal Park.	(default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
11-20-01	**Dial Extension Analyze Table – Dial Digits**	Use tables 01 ~ 128 to assign the digits to be dialed using the Dial Extension Analyze Tables. These tables are used when Program 11-01-01 is set to option 9 = Dial Extension Analyze. Up to eight digits can be assigned	Dial (Up to eight digits: 0, 1~9, **#**, *, @)
11-20-02	**Dial Extension Analyze Table – Type of Dials**	Assign the Type of Dial for the Extension Analyze Table from Program 11-20-01.	Type of Dials: 0 = Not used 1 = Service Code 2 = Extension Number 5 = Operator Access 6 = F-Route Access (default not assigned)

Operation

None

Flexible Timeouts

Description

The Flexible Timeouts feature provides a variety of timers in the Resident System Program to allow the system to operate without initial programming. The system timers can be changed to meet customer needs according to the system application requirements.

A Timer Class is used to allow terminals and trunks to have different timers for the same feature. There are 16 timer Classes (0~15). The following table shows the Programs that are used depending on the Timer Class used:

Timer Class 0	Timer Class 1~15	Title	Comment
20-01-08	20-31-01	Trunk Queuing Callback Time	Trunk Queuing callback rings an extension for this time. Station Timer Class is referred by the station that sets trunk queuing.
20-01-09	20-31-02	Callback / Trunk Queuing Cancel Time	The system cancels an extension Callback or Trunk Queuing request after this time. Station Timer Class is referred by the station that sets an extension Callback or Trunk Queuing.
20-04-03	20-31-03	SIE/Virtual Extension Delay Interval	If VE is set for Delayed Ringing (Program 15-11-01), ring the covering extension after this time. Station Timer Class is referred by the station assigned to VE.
21-01-02	20-31-04	Intercom Interdigits Time	When placing Intercom calls, users must dial each digit in this time. Station Timer Class is referred by stations. Trunk Timer Class is referred by DID/ Automatic Answer Trunk/E&M trunks.
21-01-03	20-31-05	Trunk Interdigits Time	When placing CO calls, users must dial each digit in this time. Station Timer Class is referred by stations. Trunk Timer Class is referred by DID/ Automatic Answer Trunk/E&M trunks.
21-01-09	20-31-06	Hotline Time Start Time	A Ringdown extension automatically calls its programmed destination after this time. Station Timer Class is referred by the stations which sets Hotline.
22-01-03	20-31-07	Ring No Answer Alarm Time	If a trunk rings a key telephone longer than this time, the system changes the ring cadence. This indicates to the user that the call was ringing too long. Trunk Timer Class is referred by the trunk.

Timer Class 0	Timer Class 1~15	Title	Comment
22-01-04	20-31-08	DIL No Answer Recall Time	A DIL that rings its programmed destination longer than this time diverts to the DIL No Answer Ring Group (Program 22-08-01). Trunk Timer Class is referred by the trunk.
22-01-06	20-31-09	DID Ring-No-Answer Time	In systems with DID Ring No Answer Intercept, this time sets the Ring No Answer time. This time is how long a DID call rings the destination extension before rerouting to the intercept ring group. Trunk Timer Class is referred by DID trunk.
24-01-01	20-31-10	Hold Recall Time (Non Exclusive Hold)	A call on Hold recalls the extension that placed it on Hold after this time. Station Timer Class is referred by held call.
24-01-02	20-31-11	Hold Recall Callback Time (Non Exclusive Hold)	A Hold recall rings an extension for this time. Station Timer Class is referred by held call.
24-01-03	20-31-12	Exclusive Hold Recall Time	A call on Hold recalls the extension that placed it on Hold after this time. Station Timer Class is referred by held call.
24-01-04	20-31-13	Exclusive Hold Recall Callback Time	An Exclusive Hold Recall rings an extension for this time. If not picked up, the call goes back on Non exclusive Hold. Station Timer Class is referred by held call.
24-01-06	20-31-14	Park Hold Time – Normal	A call left parked longer than this time recalls the extension that initially parked it. Trunk or Station Timer Class is referred by held call.
24-02-03	20-31-15	Delayed Call Forwarding Time	If activated at an extension, No Answer Call Forwarding occurs after this time. Station Timer Class is referred by the station sets No Answer Call Forward.
24-02-04	20-31-16	Transfer Recall Time	A transferred call recalls to the extension that initially transferred it after this time. Station Timer Class is referred by transferred call.
25-07-02	20-31-17	VRS/DISA No Answer Time	After this time expires, the call follows the programmed Ring No Answer routing (Program 25-03 and 25-04-01). Trunk Timer Class is referred.
25-07-03	20-31-18	Disconnect after VRS/DISA Re-transfer to IRG	Disconnect after re-transfer to Incoming Ring Group. Trunk Timer Class is referred.
25-07-07	20-31-19	Long Conversation Warning Tone Time	Determine the time trunk-to-trunk conversation can talk before the Long Conversation tone is heard. Trunk Timer Class is referred.

Timer Class 0	Timer Class 1~15	Title	Comment
25-07-08	20-31-20	Long Conversation Disconnect Time	This timer determines how long the system waits before disconnecting a trunk-to-trunk conversation call after the Long Conversation tone is heard. Trunk Timer Class is referred.
25-07-09	20-31-21	DISA Internal Paging Time	This is the maximum length of an Internal Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call. Trunk Timer Class is referred.
25-07-10	20-31-22	DISA External Paging Time	This is the maximum length of an External Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call. Trunk Timer Class is referred.
31-01-02	20-31-23	Page Announcement Duration	This timer sets the maximum length of External Page announcements. Station or Trunk Timer Class is referred by the caller makes announcement.

Conditions

- Timer Classes are used for VE also.
- When Timer Class is set to 0 it uses the system-wide timers.
- All stations and trunks are assigned to Timer Class 0 at default.
- Both system-wide timers (Timer Class 0) and Timer Class timers (Timer Class 1~15) can be used in the same system.

Default Setting

Timer Class set to 0 for all trunks and extensions.

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-01-08	**System Options – Trunk Queuing Callback Time**	Set the Trunk Queuing callback time. A Trunk Queuing Callback rings an extension for this interval.	0~64800 (seconds) (default = 15 seconds)
20-01-09	**System Options – Callback/ Trunk Queuing Cancel Time**	The system cancels an extension Callback or Trunk Queueing request after this interval.	0~64800 (seconds) (default = 64800 seconds)
20-04-03	**System Options for Virtual Extensions – SIE/Virtual Extension Delay Interval**	SIE Keys/Virtual Extensions set for Delayed Ringing (see Program 15-11) ring the extension after this interval.	0~64800 (default = 10 seconds)
20-29-01	**Timer Class for Extensions**	Assign the timer class (0~15) to each extension for each Night mode. This entry includes virtual extension number.	0~15 0 = Not assigned (default = 0)
20-30-01	**Timer Class for Trunks**	Assign the timer class (0~15) to each trunk for each Night mode.	0~15, **#**, * 0 = Not assigned (default = 0)
20-31-01	**Timer Class Timer Assignment – Trunk Queuing Callback Duration Time**	Trunk Queuing Callback rings an extension for this amount of time.	0~64800 (seconds) (default = 15 seconds)
20-31-02	**Timer Class Timer Assignment – Callback / Trunk Queuing Cancel Time**	The system cancels an extension Callback or Trunk Queueing request after this amount of time.	0~64800 (seconds) (default = 64800 seconds)
20-31-03	**Timer Class Timer Assignment – SIE/Virtual Extension Delay Interval**	SIE Keys/Virtual Extensions set for Delayed Ringing (refer to 15-11: Virtual Extension Delayed Ring Assignment) ring the extension after this interval.	0~64800 (seconds) (default = 10 seconds)
20-31-04	**Timer Class Timer Assignment – Intercom Interdigits Time (Intercom I/D Timer)**	When placing Intercom calls, extension users must dial each digit in this time.	0~64800 (seconds) (default = 10 seconds)
20-31-05	**Timer Class Timer Assignment – Trunk Interdigits Time (Trunk I/D Timer)**	The system waits for this time to expire before placing the call in a talk state (Call Timer starts after time expires, Voice Over and Barge-In are not allowed until after time expires).	0~64800 (seconds) (default = 5 seconds)
20-31-06	**Timer Class Timer Assignment – Hotline Time Start Time (Hotline Start)**	A Ringdown extension automatically calls its programmed destination after this time.	0~64800 (seconds) (default = 5 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
20-31-07	**Timer Class Timer Assignment – Ring No Answer Alarm Time**	If a trunk rings a multiline telephone longer than this interval, the system changes the ring cadence. This indicates to the user that the call has been ringing too long.	0~64800 (seconds) (default = 60 seconds)
20-31-08	**Timer Class Timer Assignment – DIL/Incoming Ring Group No Answer Time**	Longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0~64800 (seconds) (default = 0 seconds)
20-31-09	**Timer Class Timer Assignment – DID Ring-No-Answer Time**	In systems with DID Ring-No-Answer Intercept, this interval sets the Ring-No-Answer time. This interval is how long a DID call rings the destination extension before rerouting to the intercept ring group.	0~64800 (seconds) (default = 20 seconds)
20-31-10	**Timer Class Timer Assignment – Hold Recall Time (Non Exclusive Hold)**	A call on Hold recalls the extension that placed it on Hold after this time. This time works with the Hold Recall Callback Time (Program 24-01- 02).	0~64800 (seconds) (default = 90 seconds)
20-31-11	**Timer Class Timer Assignment – Hold Recall CallBack Time (Non Exclusive Hold)**	A trunk recalling from Hold or Park rings an extension for this time. This time works with Hold Recall Time or Park Hold Time. After this time, the system invokes the Hold Recall Time again. Cycling between time Program 24-01-01 and 24-01-02 and Program 24-01-06 and 24- 01-07 continues until a user answers the call.	0~64800 (seconds) (default = 30 seconds)
20-31-12	**Timer Class Timer Assignment – Exclusive Hold Recall Time**	A call left on Exclusive Hold recalls the extension that placed it on Hold after this time.	0~64800 (seconds) (default = 90 seconds)
20-31-13	**Timer Class Timer Assignment – Exclusive Hold Recall Callback Time**	An Exclusive Hold Recall rings an extension for this time. If not picked up, the call goes back on System Hold.	0~64800 (seconds) (default = 30 seconds)
20-31-14	**Timer Class Timer Assignment – Park Hold Time – Normal**	Use to assign the Park Hold time on a class of service basis.	0~64800 (seconds) (default = 90 seconds)
20-31-15	**Timer Class Timer Assignment – Delayed Call Forwarding Time (Call Forward No Answer)**	If activated at an extension, Delayed Call Forwarding occurs after this time. This also sets how long a Transferred call waits at an extension forwarded to Voice Mail before routing to the called extension mailbox.	0~64800 (seconds) (default = 10 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
20-31-16	**Timer Class Timer Assignment – Transfer Recall Time**	An unanswered transferred call recalls after this time to the extension that initially transferred it.	0~64800 (seconds) (default = 30 seconds)
20-31-17	**Timer Class Timer Assignment – DID/DISA No Answer Time (Disconnect or IRG or VM)**	A VRS/DISA caller can ring an extension for this time before the system sets the call as a Ring No Answer. After this time expires, the call follows the programmed Ring No Answer routing (set in Program 25-03 and 25-04).	0~64800 (seconds) (default = 10 seconds)
20-31-18	**Timer Class Timer Assignment – Disconnect after Re-transfer to IRG**	Use to assign Disconnect after Re-transfer to IRG time.	0~64800 (seconds) (default = 60 seconds)
20-31-19	**Timer Class Timer Assignment – Long Conversation Warning Tone Time (Trunk to Trunk)**	Determine the time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can last before the Long Conversation tone is heard.	0~64800 (seconds) (default = 30 seconds)
20-31-20	**Timer Class Timer Assignment – Long Conversation Disconnect (Trunk to Trunk)**	This time determines how long the system waits before disconnecting a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation call after the Long Conversation tone is heard.	0~64800 (seconds) (default = 15 seconds)
20-31-21	**Timer Class Timer Assignment – DISA Internal Paging Time**	This is the maximum length of an Internal Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call.	0~64800 (seconds) (default = 30 seconds)
20-31-22	**Timer Class Timer Assignment – DISA External Paging Time**	This is the maximum length of an External Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call.	0~64800 (seconds) (default = 30 seconds)
20-31-23	**Timer Class Timer Assignment – Page Announcement Duration**	This timer sets the maximum length of Page announcements. (Affects External Paging only).	0~64800 (seconds) (default = 1200 seconds)
21-01-02	**System Options for Outgoing Calls – Intercom Interdigit Time**	Set the time-out interval for DID callers that do not dial. After this interval, the DID call routes according to Vacant Number Intercept programming.	0~64800 (seconds) (default = 10 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
21-01-03	**System Options for Outgoing Calls – Trunk Interdigit Time (External)**	Program how long an extension must wait before using the Barge-In feature can be used on a call (this timer waits until it expires before putting a call in a talk state). This timer also affects Voice Over.	0~64800 seconds (default = 10 seconds)
21-01-09	**System Options for Outgoing Calls – Ringdown Extension Timer (Hotline Start)**	After the user lifts the handset, the extension automatically calls the ringdown destination after this interval. A setting of 0 immediately rings the programmed extension. Any other setting delays the ringdown the number of seconds programmed.	0~64800 seconds (default = 5 seconds)
22-01-03	**System Options for Incoming Calls – Ring No Answer Alarm Time**	Set the Ring No Answer Alarm interval. If a trunk rings a multiline terminal longer than this interval, the system changes the ring cadence.	0~64800 (seconds) (default = 60 seconds)
22-01-04	**System Options for Incoming Calls – DIL No Answer Recall Time**	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0~64800 (seconds) (default = 0 seconds)
22-01-06	**System Options for Incoming Calls – DID Ring-No-Answer Time**	Set the DID Ring No Answer (RNA) Intercept time (0~64800 seconds). In systems with RNA Intercept, the DID call rings the destination extension for this time, and then rings Intercept Ring Group.	0~64800 (seconds) (default = 20 seconds)
24-01-01	**System Options for Hold – Hold Recall Time**	Set the Hold Recall Time. A call on Hold recalls the extension that placed it on Hold after this time.	0~64800 (seconds) (default = 90 seconds)
24-01-02	**System Options for Hold – Hold Recall Callback Time**	Set the Hold Recall Callback Time. A trunk recalling from Hold rings an extension for this time.	0~64800 (seconds) (default = 30 seconds)
24-01-03	**System Options for Hold – Exclusive Hold Recall Time**	Set the Exclusive Hold Recall Time. A call on Exclusive Hold recalls the extension that placed it on Hold after this time.	0~64800 (seconds) (default = 90 seconds)
24-01-04	**System Options for Hold – Exclusive Hold Recall Callback Time**	Set the Hold Recall Time. A trunk recalling from Hold rings an extension for this time. If still unanswered, the call changes to System Hold.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
24-01-06	**System Options for Hold – Park Hold Time - Normal**	Set the Park Hold Time (0~64800 seconds). A call that is parked longer than the programmed interval recalls the extension where it was initially parked. Refer to Flexible System Numbering on page 1-431 for setting Flexible Timeouts for Class of Service.	0~64800 (seconds) (default = 90 seconds)
24-02-03	**System Options for Transfer – Delayed Call Forwarding Time**	Set the Delayed Call Forwarding interval. For an unanswered call, Call Forward No Answer occurs after this interval.	0~64800 (seconds) (default = 10)
24-02-04	**System Options for Transfer – Transfer Recall Time**	Set the Transfer Recall Time. An unanswered transferred call recalls to the extension that initially transferred it after this interval. This time also sets how long a transferred call camps-on to a busy extension.	0~64800 (seconds) (default = 30)
25-07-02	**System Timers for VRS/DISA – VRS/DISA No Answer Time**	A VRS/DISA caller can ring an extension for this time before the system sets the call as a Ring No Answer. After this time expires, the call follows the programmed Ring No Answer routing (set in Program 25-03 and Program 25-04).	0~64800 (seconds) (default = 10 seconds)
25-07-03	**System Timers for VRS/DISA – Disconnect after VRS/DISA retransfer to IRG**	Define the system timers which affect DID and DISA after VRS/ DISA retransfer to IRG.	0~64800 (seconds) (default = 60 seconds)
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard.	0~64800 (seconds) (default = 30 seconds)
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	This time determines how long the system waits before disconnecting a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation call after the Long Conversation tone is heard.	0~64800 (seconds) (default = 15 seconds)
25-07-09	**System Timers for VRS/DISA – DISA Internal Paging Time**	This is the maximum length of an Internal Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-10	**System Timers for VRS/DISA – DISA External Paging Time**	This is the maximum length of an External Page placed by a DISA caller. If the Page continues longer than this time, the system terminates the DISA call.	0~64800 (seconds) (default = 30 seconds)
31-01-02	**System Options for Internal/ External Paging – Page Announcement Duration**	Set the maximum allowable duration for a Paging announcement.	0~64800 (seconds) (default = 1200 seconds)

Operation

Please refer to the feature for the operation.

Forced Trunk Disconnect

Description

Forced Trunk Disconnect allows an extension user to disconnect (release) another extension active outside call. The user can then place a call on the released trunk. Forced Trunk Disconnect lets a user access a busy trunk in an emergency, when no other trunks are available. Maintenance technicians can also use Forced Trunk Disconnect to release a trunk on which there is no conversation. This can happen if a trunk does not properly disconnect when the outside party hangs up.

Forced Trunk Disconnect abruptly terminates the active call on the line. Only use this feature in an emergency and when no other lines are available.

Conditions

This feature only works on an analog trunk. ISDN and IP trunks do not have the Forced Trunk Disconnect available.

Default Setting

- Disabled

System Availability

Terminals

All Terminals

Required Component(s)

Analog Trunks

Related Features

Central Office Calls, Placing

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-10-26	**Service Code Setup (for System Administrator) – Forced Trunk Disconnect**	Assign the Service Code.	MLT, SLT (default not assigned)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (COS) to an extension. There are 15 Classes of Service that can be assigned. Assign eight entries, one for each Night Service Mode.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extensions = Class 1
20-07-11	**Class of Service Options (Administrator Level) – Forced Trunk Disconnect (analog trunk only)**	Turns Off (0) or On (1) an extension to use Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.	0 = Off 1 = On (default = 0 for COS 1~15)
21-01-18	**System Options for Outgoing Calls – Reset Dial After Failure of Trunk Access**	Enable (1) or Disable (0) the ability to continue to dial codes or extensions after receiving Trunk Busy. This needs to be set to Enabled (1) for this feature to work.	0 = Disable 1 = Enable (default = 0)

Operation

To disconnect a busy trunk:

Multiline Terminal

1. Press line key for trunk.

   - OR -

   Dial trunk access code (**805** + trunk number).

   . *You hear busy tone. Trunk numbers are 001~200.*

2. Dial the Service Code (not set at default).

   . *You hear confirmation beeps as the system disconnects the trunk.*

   . *You can now place a call on the free trunk.*

3. Press the line key for the trunk disconnected in Step 2.

- OR -

Dial the trunk access code (**805** + trunk number) for the trunk disconnected in Step 2.

Single Line Telephone

1. Dial trunk access code (**805** + trunk number).

   . *You hear busy tone. Trunk numbers are 001~200.*

2. Dial Service Code (not set at default).

   . *You hear confirmation beeps as the system disconnects the line.*

3. Hookflash.

   . *You can now place a call on the free line.*

4. Dial the trunk access code (**805** + trunk number) for the trunk disconnected in Step 2.

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Group Call Pickup

Description

Group Call Pickup allows an extension user to answer a call ringing another extension in a Pickup Group. This permits co-workers in the same work area to easily answer each other's calls. The user can intercept the ringing call by dialing a code or pressing a programmed Group Call Pickup key. If several extensions within the group are ringing at the same time, Group Call Pickup intercepts the call based on the extension priority within the Pickup Group.

With Group Call Pickup, a user can intercept the following calls:

- A call ringing the user's own pickup group
- A call ringing another pickup group when the user knows the group number
- A call ringing another pickup group when the user does not know the group number

There are 64 Call Pickup Groups available.

Conditions

- A Call Pickup Group cannot have an associated name.
- Group Call Pickup can be used to answer calls recalling from Hold or Park.
- Group Call Pickup cannot be used to answer calls ringing Call Arrival Keys or Virtual Extensions.
- Virtual Extensions can use Group Call Pickup to answer calls ringing a multiline terminal or single line telephone.
- Users can pickup calls regardless of their access map programming.
- Directed Call Pickup provides another way of answering a co-worker's call.
- Function keys simplify Group Call Pickup operation.

Default Setting

Enabled

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

Central Office Calls, Answering

Directed Call Pickup

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-25	**Service Code Setup (for Service Access) – Direct Call Pickup - Own Group**	Use to customize the Service Codes for direct call pickup – own group.	MLT, SLT (default = 856)
11-12-26	**Service Code Setup (for Service Access) – Call Pickup for Specified Group**	Use to customize the Service Codes for call pickup for specified group.	MLT, SLT (default = 868)
11-12-27	**Service Code Setup (for Service Access) – Call Pickup**	Use to customize the Service Codes for call pickup.	MLT, SLT (default = 867)
11-12-28	**Service Code Setup (for Service Access) – Call Pickup for Another Group**	Use to customize the Service Codes for call pickup for another group.	MLT, SLT (default = 869)
15-07-01	**Programmable Function Keys**	Assign Group Call Pickup keys: Code 24 for an extension Pickup Group and ring group calls (Service Code 867) Code 25 for a telephone ringing in another Pickup Group when the caller does not know the group number (Service Code 869) Code 26 (+ group) for a telephone ringing in another specific Pickup Group (Service Code 868)	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-10-01	**Class of Service Options (Answer Service) – Group Call Pickup (Within Group)**	In an extension Class of Service, enable (1) or disable (0) an extension ability to pick up calls ringing their pickup group (Service Code 856).	0 = Disable 1 = Enable (default = 1 for COS 1~15)
20-10-02	**Class of Service Options (Answer Service) – Group Call Pickup (Another Group)**	Turn off or on Group Call Pickup for calls ringing outside a group (Service Code 869).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-03	**Class of Service Options (Answer Service) – Group Call Pickup for Specific Group**	Turn off or on Group Call Pickup for a specific group using service code 868.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-10-04	**Class of Service Options (Answer Service) – Telephone Call Pickup**	Turn off or on an extension ability to pick up a call ringing into a Pickup Group (Service Codes 867).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-05	**Class of Service Options (Answer Service) – Directed Call Pickup for Own Group**	Turn off or on Directed Call Pickup for calls ringing an extension Pickup Group (Service Code 856).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-09	**Class of Service Options (Answer Service) – Call pickup Callback**	Turn off or on an extension ability to use Call Pickup to pick up Callback calls.	0 = Off 1 = On (default = 0 for COS 1~15)
23-02-01	**Call Pickup Groups**	Assign extensions to Pickup Groups. Also, use this option to assign an extension priority within a Pickup Group (Priority Number 1~999).	Call Pickup Groups: 1~9 or 01~64 (default = 1 – xxx)

Operation

To answer a call ringing another telephone in your Pickup Group:

1. Pick up the handset or press **Speaker**.
2. At multiline terminal only, press the **Group Call Pickup** key (Program 15-07 or SC 851: 24).

   - OR -

   Dial **856** or **867**.

   . *Service Code ***#** can pick up any call in the group, plus any Ring Group calls. Service Code 756 cannot pick up Ring Group calls.*

To answer a call ringing a telephone in another Pickup Group when you do not know the group number:

1. Pick up the handset or press **Speaker**.
2. At multiline terminal only, press the **Group Call Pickup** key (Program 15-07 or SC 851: 25).

   - OR -

   Dial **869**.

To answer a call ringing a telephone in another Pickup Group when you know the group number:

1. Pick up the handset or press **Speaker**.

2. At multiline terminal only, press the **Group Call Pickup** key (Program 15-07 or SC 851: 26 + group).

   - OR -

   Dial **868** and the group number (1~9 or 01~64).

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Group Listen

Description

Group Listen permits a multiline terminal user to talk on the handset and have their caller's voice broadcast over the telephone speaker. This lets the multiline terminal user's co-workers listen to the conversation. Group Listen turns off the multiline terminal handsfree microphone so the caller does not pick the co-worker's voices during a Group Listen.

Conditions

- An extension in the headset mode cannot use Group Listen.
- Group Listen is not available to single line telephones.

Default Setting

Disabled

System Availability

Terminals

Digital Multiline Terminal

Required Component(s)

None

Related Features

Handset Operation

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-26	**Class of Service Options (Supplementary Service) – Group Listen**	Turn off or on an extension ability to use Group Listen.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To initiate Group Listen:

1. Place or answer call using the handset.
2. Press **Speaker** twice (but do not hang up).
   - ***Speaker*** *flashes slowly.*
   - *You can talk to the caller through your handset. Your co-workers hear your caller's voice over your telephone speaker after pressing* ***Speaker*** *twice. Pressing* ***Speaker*** *a third time turns off Group Listening.*

To talk Handsfree after initiating Group Listen:

1. Hang up the handset.

To cancel Group Listen (without hanging up your call):

1. Do not hang up.
2. Press the flashing **Speaker**.
   - *You can talk to the caller over the handset. Your co-workers can no longer hear the caller's voice.*

Handset Mute

Description

Handset Mute is provided to most terminals connected to the UNIVERGE SV8100 system. While talking on the Multiline Terminal handset, a station user can press a programmable function button to mute the transmit speech path. The station user can still hear the outside (or intercom) voice.

Conditions

- The Handset Transmission Cut Off key is solid when active.
- Two service set tones are heard when Handset Mute is activated or deactivated.
- The called party must have answered using handset or speakerphone for the mute feature to work.

Default Setting

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign a function key for Handset Transmission Cut Off (code 40).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Operation

While talking on a terminal handset:

1. Press the **Handset Transmission Cut-Off** key (Program15-07-01; Key 40 or SC 851 Key Code 40).

Handsfree and Monitor

Description

Handsfree allows a Multiline Terminal user to process calls using the speaker and microphone in the telephone instead of the handset. Handsfree is a convenience for workers who do not have a free hand to pick up the handset. For example, a terminal operator could continue to enter data with both hands while talking on the telephone.

There are three variations of Handsfree.

- Handsfree

  The user can press Speaker to place and answer calls instead of using the handset.

- Automatic Handsfree

  The user can press a trunk line key or virtual extension key without lifting the handset or pressing the Speaker key. An extension can have Automatic Handsfree for outgoing calls or for both outgoing calls and incoming calls.

- Monitor

  User can place a call without lifting the handset, but must lift the handset to speak.

Conditions

- Handsfree and Monitor are not available for single line telephones.
- Prime Line Selection affects how incoming and outgoing calls are handled and thus determines what happens when the user presses the speaker key.
- Monitoring volume may be adjusted using the volume control on the Multiline Terminal.
- When a Multiline Terminal user lifts the handset, the monitoring condition is automatically released, and the Speaker LED goes off.
- A Multiline Terminal is considered off-hook by the system when this feature is used.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Microphone Cutoff

Prime Line Selection

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-02-08	**Multiline Telephone Basic Data Setup – Automatic Handsfree**	Use this option to set whether pressing a key accesses a One-Touch Key (1) or if it preselects the key (0).	0 = Preselect 1 = One-Touch (Automatic Handsfree) (default = 1)
15-02-16	**Multiline Telephone Basic Data Setup – Handsfree Operation**	Enable (1) or disable (0) ability of an extension to use the speakerphone on outside calls. When disabled, users can hear the conversion, but cannot respond handsfree.	0 = Disable 1 = Enable (default = 1)
20-02-12	**System Options for Multiline Telephones – Forced Intercom Ring (ICM Call Type)**	Use this option to enable (1) or disable (0) Forced Intercom Ringing. If enabled, incoming Intercom calls normally ring. If disabled, Intercom calls voice-announce.	0 = Disable (Voice) 1 = Enable (Signal) (default = 0)
20-06-01	**Class of Service for Extensions**	Assign Class of Service (1~15) for extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension ports = Class 1
20-09-05	**Class of Service Options (Incoming Call Service) – Signal/ Voice Call**	Turn off or on an extension ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To talk Handsfree:

1. Press **Speaker**, **Trunk Line** key or **Virtual Extension** key.
2. Place the call.
3. Speak toward the telephone when the called party answers.

To change a handset call into a Handsfree call:

1. Press **Speaker** and hang up the handset.
2. Press **Speaker** again to hang up.

To change a Handsfree call into a handset call:

1. Lift the handset.

To turn on/off Monitor:

1. Press **MIC**, Feature + 1, or the Microphone Function Key (Program 15-07 or SC 851 : 02) to turn on or off the Microphone.

   . *Monitor is off when **MIC** LED is lit, the Microphone Function Key is lit, or the handset is lifted.*

Handsfree Answerback/Forced Intercom Ringing

Description

Handsfree Answerback permits an extension user to respond to a voice-announced Intercom call by speaking toward the telephone, without lifting the handset. Like Handsfree, this is a convenience for workers who do not have a free hand to pick up the handset.

Conditions

- Handsfree Answerback does not require the Speaker phone to be enabled (Program 15-02-16).
- A Multiline Terminal user can process calls using the speaker and microphone in the telephone (instead of the handset).
- With Microphone Cutoff enabled, Handsfree Answerback callers to an extension hear a single beep (instead of two).
- Incoming Intercom calls always ring single line telephones.
- The extension you are calling must be set to Voice for this feature to work.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Handsfree and Monitor

Microphone Cutoff

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-15	**System Numbering – Enable Handsfree Incoming Intercom Calls**	If required, change the service code used for setting an extension to voice announce for incoming ICM calls.	MLT (default = 821)
11-11-16	**System Numbering – Force Ringing of Incoming Intercom Calls**	If required, change the service code used for setting an extension to forced ringing for incoming ICM calls.	MLT (default = 823)
11-12-06	**Service Code Setup (for Service Access) – Switching of Voice Call and Signal Call**	If required, change the service code used for toggling an outgoing ICM call between a voice call and signal call.	MLT, SLT (default = 812)
15-02-16	**Multiline Telephone Basic Data Setup – Handsfree Operation**	Enable (1) or disable (0) ability of an extension to use the speakerphone on outside calls. When disabled, users can hear the conversion, but cannot respond handsfree.	0 = Disable 1 = Enable (default = 1)
20-02-12	**System Options for Multiline Telephones – Forced Intercom Ring (ICM Call Type)**	Use this option to enable (1) or disable (0) Forced Intercom Ringing. If enabled, incoming Intercom calls normally ring. If disabled, Intercom calls voice-announce.	0 = Disable (Voice) 1 = Enable (Signal) (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension ports = Class 1
20-08-10	**Class of Service Options (Outgoing Call Service) – Signal/ Voice Call**	In an extension Class of Service, enable (1) or disable (0) an extension ability to toggle between Handsfree Answerback and Forced Intercom Ringing for outgoing Intercom calls (dial 1 or Service Code 812).	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-05	**Class of Service Options (Incoming Call Service) – Signal/ Voice Call**	Turn off or on an extension ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To enable Handsfree Answerback for your incoming Intercom calls:

1. Press idle **Speaker**.
2. Dial **821**.
3. Press **Speaker** to hang up.

. *This disables Forced Intercom Ringing.*

To enable Forced Intercom Ringing for your incoming Intercom calls:

1. Press idle **Speaker**.
2. Dial **823**.
3. Press **Speaker** to hang up.

. *This disables Handsfree Answerback.*

To change the way your Intercom call signals the extension you are calling:

1. Dial **1**.

. *If ringing, your call voice-announces. If voice-announced, your call starts to ring the destination. This option is also available at single line telephones.*

Headset Operation

Description

A multiline terminal user can use a customer-provided headset in place of the handset. Like using Handsfree, using the headset frees up the user's hands for other work. However, Headset Operation provides privacy not available from Handsfree.

As the headset plugs into a separate jack on the bottom of the telephone, the handset can still be connected to the telephone. This gives you the option to use the handset, headset or the speakerphone for calls.

Conditions

- While using the headset, the Headset function key becomes a release (disconnect) key and no dial tone is heard from the speaker.
- While in the headset mode, the hook switch is not functional.
- An extension with a headset can still receive voice-announced Intercom calls and respond handsfree when idle.
- A Headset Function key is required to answer or place a call in headset mode.

Default Setting

Disabled

System Availability

Terminals

None

Required Component(s)

Headset

Related Features

Handsfree Answerback/Forced Intercom Ringing

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-62	**Service Code Setup (for Setup/ Entry Operation) – Headset Ring Volume Adjustment**	If needed, change the service code used to adjust the Headset Ring Volume.	MLT (default = 874)
15-02-41	**Multiline Telephone Basic Data Setup – Incoming Ring Setup**	Determine if incoming calls ring the speaker or headset.	0 = Speaker Normal Ring 1 = Headset Ring (default = 0)
15-02-42	**Multiline Telephone Basic Data Setup – Incoming Off-Hook Ring Setup**	Determine if incoming off-hook ringing rings the speaker or the headset.	0 = Speaker Off-Hook Ring 1 = Headset Off-Hook Ring (default = 0)
15-02-43	**Multiline Telephone Basic Data Setup – Headset Ring Duration**	If incoming ringing is set for headset, set the duration the call rings the headset before ringing the speaker.	0 = No Switch to Speaker Ring 1 = 10 seconds 2 = 20 seconds 3 = 30 seconds 4 = 40 seconds 5 = 50 seconds 6 = 1 minute (default = 0)
15-07-01	**Programmable Function Keys**	Assign a function key for Headset Operation (code 05).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-02-05	**System Options for Multiline Telephones – Headset Busy Mode**	Set the conditions under which a headset extension is busy to incoming callers: ❍ The Headset extension is busy to incoming callers when only one extension appearance is busy (0). **- OR -** ❍ Headset extension is busy to incoming callers only when both extension appearances are busy (1).	0 = No 1 = Yes (default = 0)
20-02-12	**System Options for Multiline Telephones – Forced Intercom Ring (ICM Call Type)**	Determine whether intercom calls should ring or voice-announce extensions.	0 = Disable (Voice) 1 = Enable (Signal) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension to manually (0) or automatically (1) receive off-hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To enable the headset:

1. Plug in the headset into the headset jack on the bottom of the telephone.
2. Program a **Headset** key (Program 15-07 or SC 851: 05).

. *You hear a confirmation beep.*

To use the headset:

. *The Headset key lights when on a call. To disconnect, press the Headset key again.*

. *You can still use the handset for calls or respond to voice-announced Intercom calls with the headset plugged in. The headset only activates when the Headset key is pressed.*

- Answer a ringing call by pressing the **Headset** key.

- OR -

- Press the **Headset** key and then a line key or press **Speaker** then **9** to make a outgoing call.

- OR -

- Press the **Headset** key to get intercom dial tone.

- OR -

- If on a call, press the **Headset** key to hang up.

Hold

Description

Hold lets an extension user put a call in a temporary waiting state. The caller on Hold hears silence or Music on Hold, not conversation in the extension user's work area. While the call waits on Hold, the extension user may process calls or use a system feature. Calls left on Hold too long recall the extension that placed them on Hold. There are four types of Hold:

- System Hold

  An outside call a user places on Hold flashes the line key (if programmed) at all other multiline terminals. Any multiline terminal user with the flashing line key can pick up the call.

- Exclusive Hold

  When a user places a call on Exclusive Hold, only that user can pick up the call from Hold. The trunk appears busy to all other multiline terminals that have a key for the trunk. Exclusive hold is important if a user does not want a co-worker picking up their call on Hold.

- Group Hold

  If a user places a call on Group Hold, another user in the Department Group can dial a code to pick up the call. This lets members of a department easily pick up each other's calls.

- Intercom Hold

  A user can place an Intercom call on Hold. The Intercom call on Hold does not indicate at any other extension.

Hold Recall to Operator

Hold Recall to Operator enhances how the system handles calls that are left on hold too long. With Hold Recall to Operator:

- A trunk call recalls the extension that placed it on Hold after the Hold/Exclusive Hold Recall Time.
- The recalling trunk rings the extension that placed it on Hold for the Hold/Exclusive Hold Recall Callback Time.
- After the Hold/Exclusive Hold Recall Callback Time, the trunk call rings the operator.

Hold Recall to Operator applies to trunk calls placed on System Hold, Exclusive Hold and Group Hold. It does not apply to Intercom calls.

Conditions

- The called extension must lift the handset or press the Speaker key before the call can be placed on hold.
- Callers on Hold hear Music on Hold, if programmed.
- An extension can have function keys for System Hold and Exclusive Hold.
- Analog single line telephones can only use Exclusive Hold and Group Hold.
- If station A calls station B, and station A puts station B on hold and then calls station C, station C cannot transfer the call.
- In order for a station to retrieve a held ICM call, the station must have an ICM key assigned in 15-07 (*00).

Default Setting

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Music on Hold

Programmable Function Keys

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-30	**Service Code Setup (for Service Access) – Specified Trunk Answer**	If required, redefine the service code used to answer a specific trunk which is either ringing or on hold.	MLT, SLT (default = 772)
11-12-33	**Service Code Setup (for Service Access) – Group Hold**	If required, redefine the service code used to answer a specific trunk which is either ringing or on hold.	MLT, SLT (default = 832)
11-12-34	**Service Code Setup (for Service Access) – Answer for Group Hold**	If required, redefine the service code used to answer a specific trunk which is either ringing or on hold.	MLT, SLT (default = 862)
14-01-16	**Basic Trunk Data Setup – Forced Release of Held Call**	Enable (1) or disable (0) Forced Release of Held Call.	0 = Disable 1 = Enable (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
14-07-01	**Trunk Access Map Setup**	Set up the Trunk Access Maps. This sets the access options for trunks.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Maps 2~200 = Trunk Ports 1~200 assigned with option 0 (No access).
15-02-06	**Multiline Telephone Basic Data Setup – Hold Key Operating Mode**	Use this option to set the function of the Multiline Hold key. The Hold key can activate normal Hold or Exclusive Hold.	0 = Normal (Common) 1 = Exclusive Hold 2 = Park Hold (default = 0)
15-02-07	**Multiline Telephone Basic Data Setup – Automatic Hold for CO Lines**	Determines whether an extension will disconnect the trunk line (1) or automatically hold it (0) when you direct select a CO line without placing the call on hold first. Automatic Hold does not work until the elapse call timer is displayed.	0 = Hold 1 = Disconnect (Cut) (default = 1)
15-02-11	**Multiline Telephone Basic Data Setup – Callback Automatic Answer**	Enable (1) or disable (0) Callback Automatic Answer.	0 = Off 1 = On (default = 1)
15-06-01	**Trunk Access Map for Extensions**	Assign Trunk Access Maps to extensions.	Trunks 1~200 (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign a function key for Exclusive Hold (code 45). If an extension has its fixed Hold key reassigned (in Program 15-02-06), assign a function key for System Hold (code 44).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
16-02-01	**Department Group Assignment for Extensions**	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	Department Groups 1-64 Priority 1-512 Default = All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 512 priority = 512
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension ports = Class 1
20-11-09	**Class of Service Options (Hold/ Transfer Service) – Group Hold Initiate**	In an extension Class of Service, enable (1) or disable (0) an extension ability to initiate Group Hold (Service Code 732).	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-10	**Class of Service Options (Hold/ Transfer Service) – Group Hold Answer**	In an extension Class of Service, enable (1) or disable (0) an extension ability to pick up a call placed on Group Hold (Service Code 862).	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-13	**Class of Service Options (Hold/ Transfer Service) – Operator Transfer After Hold Callback**	Turns Off or On an extension ability to have a call which recalls from Hold transfer to the operator.	0 = Off 1 = On (default = 0 for COS 1~15)
20-17-01	**Operator Extension – Operator's Extension Number**	Define the extension numbers which are to be used by operators.	Up to eight digits (default = No setting)
24-01-01	**System Options for Hold – Hold Recall Time**	Set the Hold Recall Time. A call on Hold recalls the extension that placed it on Hold after this time.	0~64800 (seconds) (default = 90 seconds)
24-01-02	**System Options for Hold – Hold Recall Callback Time**	Set the Hold Recall Callback Time. A trunk recalling from Hold rings an extension for this time.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
24-01-03	**System Options for Hold – Exclusive Hold Recall Time**	Set the Exclusive Hold Recall Time. A call on Exclusive Hold recalls the extension that placed it on Hold after this time.	0~64800 (seconds) (default = 90 seconds)
24-01-04	**System Options for Hold – Exclusive Hold Recall Callback Time**	Set the Hold Recall Time. A trunk recalling from Hold rings an extension for this time. If still unanswered, the call changes to System Hold.	0~64800 (seconds) (default = 30 seconds)
24-01-05	**System Options for Hold – Forced Release of Held Call**	Set the Forced Release of Held Calls interval. If enabled in Program 14-01-16, the system disconnects a call if on Hold longer than this interval.	0~64800 (seconds) (default = 64800 seconds)

Operation

System Hold

To place an outside call on System Hold:

Press **Hold**.

To pick up an outside call on System Hold:

If you know the specific line number, dial **772** + Line number (**001~200**).

Exclusive Hold

To place an outside call on Exclusive Hold:

Press the **Exclusive Hold** key (Program 15-07-01 or SC 851: 45).

- OR -

Press **Feature** + **Hold**.

Single Line Telephone

1. Hookflash.
2. Dial **849**.

To pick up an outside call on Exclusive Hold:

Press flashing **line** key.

Single Line Telephone

Dial **859**.

Group Hold

To place a call on Hold so anyone in your Department Group can pick it up:

1. Press **Hold**.
2. Dial **832**.
3. Press **Speaker** to hang up.

Single Line Telephone

1. Hookflash.
2. Dial **832**.
3. Hang up.

To pick up a call on Group Hold:

1. Press **Speaker**.
2. Dial **862**.

Single Line Telephone

1. Lift the handset.
2. Dial **862**.

Intercom Hold

To place an Intercom call on Intercom Hold:

1. Press **Hold**.
2. Press **Speaker** to hang up.

To pick up an Intercom call on Intercom Hold:

1. Press **Speaker**.
2. Press flashing **Feature**.

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Hot Key-Pad

Description

The Hot Key-Pad feature allows the user to place a call without lifting the handset or pressing Speaker. When the user dials another extension number on an idle telephone with Hot Key-Pad enabled, the Speaker lights and the internal call is made. When the user dials the trunk access code from a telephone with Hot Key-Pad enabled, Speaker lights, a trunk is seized and the outgoing call is made.

Conditions

- When a user dials any digits on a station with Hot Key-Pad enabled, the Speaker key lights.
- After a user dials the trunk access code on a station with Hot Key-Pad enabled, a trunk is seized when dialing the first digit of the called party number.
- When both Hot Key-Pad and Dialing Number Preview are turned on, Hot Key-Pad has priority and Dialing Number Preview does not work.
- When both Hot Key-Pad and Hotline are turned on, Hot Key-Pad has priority and Hotline does not work.
- When placing an outgoing call with the Hot Key-Pad feature, the user must dial the trunk access code before dialing the called party number.
- The ARS feature can be used when placing outside calls with the Hot Key-Pad feature.
- When both Hot Key-Pad and VRS Fixed Messaging are turned on, VRS fixed messaging does not work.
- The Hot Key-Pad Feature also works when dialing service codes.

Default Settings

Disabled

System Availability

Terminals

All Multiline Terminals

Required Software:

None

Related Features

Central Office Calls, Placing

Class of Service

Dialing Number Preview

Hotline

Intercom

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service to extensions (1~15).	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension ports = Class 1
20-08-20	**Class of Service Options (Outgoing Call Service) – Hot Key Pad**	Turn On (1) or Off (0) the ability of an extension to make a call by just dialing the number without first going off-hook.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To place an intercom call using Hot Key-Pad:

The multiline terminal is idle. No need to press speaker key.

1. Dial the extension.
2. Dialed extension rings.

To place a trunk call using Hot Key-Pad:

The multiline terminal is idle. No need to press speaker key.

1. Dial the trunk access code, **9** by default, and the external destination number you wish to call.

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Hotline

Description

Hotline gives a multiline terminal user one-button calling and Transfer to another extension (the Hotline partner). Hotline helps co-workers that work closely together. The Hotline partners can call or Transfer calls to each other just by pressing a single key.

The Hotline feature has two applications.

- Hotline (Hotline partner)
- Ringdown Extension, Internal/External (Refer to Ringdown Extension (Hotline), Internal/External on page 1-737.)

In addition, the Hotline key shows the status of the partner's extension.

When the key is . . .	The extension is . . .
Off	Idle
On	Busy or ringing
Fast Flash	DND – All calls (option 3) or Intercom calls (option 2)
Double Wink On	ACD Agent logged onto the group
Wink Off	ACD Agent logged off

There are 512 internal Hotline extensions available.

Conditions

- An extension user cannot use Hotline to pick up a call ringing their partner's extension.
- If a station is an ACD agent, the Hotline key blinks to indicate the ACD agent's status.
- Hotline keys can be assigned to the DSS consoles.
- Hotline does not override Do Not Disturb.
- Hotline always follows the Handsfree Answerback/Forced Intercom Ringing mode set at the called extension. The Hotline caller can override the setting, if desired.
- External Hotline automatically dials a telephone number or Speed Dial – System/Group/Station number when the handset is lifted.
- If the partner's extension is busy, Hotline does not automatically activate Off-Hook Signaling.

- A Hotline is a uniquely programmed function key.

Default Setting

Disabled

Related Features

Automatic Call Distribution (ACD)

Distinctive Ringing, Tones and Flash Patterns

Direct Station Selection (DSS) Console

Do Not Disturb

Handsfree Answerback/Forced Intercom Ringing

Off-Hook Signaling

Programmable Function Keys

Ringdown Extension, Internal/External

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign a function key for Hotline (code 01 + partner's extension number).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-02-22	**Multiline Telephone Basic Data Setup – Multiple Incoming From Intercom and Trunk**	When this option is set to 0 (disabled), incoming calls to an extension indicate on any Hotline key for that extension as solid (busy). When this option is set to 1 (enabled), lighting is determined by the setting of Program 22-01-01 Incoming Call Priority. If set to trunk priority (1), the Hotline key lights solid when a trunk call rings in. If set to intercom priority (0), the Hotline key does not light for incoming trunk calls, but lights solid for intercom calls.	0 = Disable 1 = Enable (default = 1)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service to extensions (1~15).	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension ports = Class 1
20-08-09	**Class of Service Options (Outgoing Call Service) – Hotline/Extension Ringdown**	Turn off or on hotline or ringdown for extensions with this COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-19	**Class of Service Options (Outgoing Call Service) – Hotline for SPK**	Turn off or on an extensions' ability to activate hotline or ringdown when pressing the Speaker key.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-06	**Class of Service Options (Hold/ Transfer Service) – Unscreened Transfer (Ring Inward Transfer)**	Turns Off (0) or On (1) an extension ability to use Unscreened Transfer.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-11	**Class of Service Options (Hold/ Transfer Service) – Automatic On-Hook Transfer**	Turn Off (0) or On (1) an extension ability to use Automatic On-Hook Transfer.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Program 20-02-03 and Program 20-13-06 set the conditions under which a Hotline, Reverse Voice Over or DSS Console key indicates that an extension is busy. With condition 1 in the following chart, the BLF LED is on only when both extension line appearances are busy. In conditions 2~4, the BLF LED is on when one line appearance is busy.	0 = Off 1 = On (default = 0 for COS 1~15) Refer to Table 1-10 Extension Busy Setup on page 1-504
21-01-09	**System Options for Outgoing Calls – Ringdown Extension Timer (Hotline Start)**	A Ringdown extension automatically calls its programmed destination after this time.	0~64800 (default = 5)
21-11-01	**Extension Ringdown (Hotline) Assignment**	Define the Hotline destination number for each extension number.	(maximum 24 digits) 0, *, #, Pause, Hook Flash, @ (Code to wait for answer supervision) (default not assigned)
22-01-01	**System Options for Incoming Calls – Incoming Call Priority**	Use this option to determine if Intercom calls or trunk calls have answer priority when both are ringing simultaneously.	0 = Intercom call priority 1 = Trunk call priority (default = 1)
30-05-02	**DSS Console Lamp Table – Busy Extension**	Use to define the LED patterns for busy extensions on the DSS consoles.	0~7 [default = 7 (On)]
30-05-03	**DSS Console Lamp Table – DND Extension**	Use to define the LED patterns for DND extensions on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-04	**DSS Console Lamp Table – ACD Agent Busy**	Use to define the LED patterns for busy ACD agents function on the DSS consoles.	0~7 [default = 7 (On)]
30-05-05	**DSS Console Lamp Table – Out of Schedule (ACD DSS)**	Use to define the LED patterns for out of schedule (ACD/DSS) on the DSS consoles.	0~7 [default = 0 (Off)]
30-05-06	**DSS Console Lamp Table – ACD Agent Log Out (ACD DSS)**	Use to define the LED patterns for ACD agents that are logged out on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-07	**DSS Console Lamp Table – ACD Agent Log In (ACD DSS)**	Use to define the LED patterns for ACD agents that are logged in the DSS consoles.	0~7 [default = 4 (IR)]
30-05-08	**DSS Console Lamp Table – ACD Agent Emergency (ACD DSS)**	Use to define the LED patterns for ACD agents in emergency on the DSS consoles.	0~7 [default = 6 (IW)]

Program Number	Program Name	Description/Comments	Assigned Data
30-05-09	**DSS Console Lamp Table – Hotel Status Code 1 (Hotel DSS)**	Use to define the LED patterns for hotel status code 1 on the DSS consoles.	0~7 [default = 7 (On)]
30-05-10	**DSS Console Lamp Table – Hotel Status Code 2 (Hotel DSS)**	Use to define the LED patterns for hotel status code 2 on the DSS consoles.	0~7 [default = 1 (FL)]
30-05-11	**DSS Console Lamp Table – Hotel Status Code 3 (Hotel DSS)**	Use to define the LED patterns for hotel status code 3 on the DSS consoles.	0~72 (WK) [default = 2 (WK)]
30-05-12	**DSS Console Lamp Table – Hotel Status Code 4 (Hotel DSS)**	Use to define the LED patterns for hotel status code 4 on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-13	**DSS Console Lamp Table – Hotel Status Code 5 (Hotel DSS)**	Use to define the LED patterns for hotel status code 5 on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-14	**DSS Console Lamp Table – Hotel Status Code 6 (Hotel DSS)**	Use to define the LED patterns for hotel status code 6 on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-15	**DSS Console Lamp Table – Hotel Status Code 7 (Hotel DSS)**	Use to define the LED patterns for hotel status code 7 on the DSS consoles.	0~7 [default = 6 (IW)]
30-05-16	**DSS Console Lamp Table – Hotel Status Code 8 (Hotel DSS)**	Use to define the LED patterns for hotel status code 8 on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-17	**DSS Console Lamp Table – Hotel Status Code 9 (Hotel DSS)**	Use to define the LED patterns for hotel status code 9 on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-18	**DSS Console Lamp Table – Hotel Status Code 0 (Hotel DSS)**	Use to define the LED patterns for hotel status code 0 on the DSS consoles.	0~7 [default = 0 (Off)]
30-05-19	**DSS Console Lamp Table – Hotel Status Code * (Hotel DSS)**	Use to define the LED patterns for hotel status code * on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-20	**DSS Console Lamp Table – Hotel Status Code # (Hotel DSS)**	Use to define the LED patterns for hotel status code # on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-21	**DSS Console Lamp Table – VM Message Indication**	Use to define the LED patterns for VM message indication on the DSS consoles.	0~7 [default = 3 (RW)]

Table 1-10 Extension Busy Setup

	Program 20-13-06	Program 20-02-03	BLF [1] Status	Busy Status
1	1	0	Off	No
2	1	1	On	Yes
3	0	0	On	Yes
4	0	1	On	Yes

[1] BLF is on for extension receiving a voice announced Intercom call.

Operation

To place a call to your Hotline partner:

1. Press the **Hotline** key (Program 15-07 or SC 851: 01 + partner's extension number).

   . *You can optionally lift the handset after this step for privacy.*

To transfer your outside call to your Hotline partner:

1. Press the **Hotline** key.
2. Announce the call and hang up.

   - OR -

   Hang up to have the call wait at your Hotline partner unannounced.

   . *If unanswered, the call recalls like a regular transferred call.*

To answer a call from your Hotline partner:

1. If you hear two beeps, speak toward the telephone.

   - OR -

   If your telephone rings, lift the handset.

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Howler Tone Service

Description

Howler Tone Service provides a Howler Tone when a station remains off-hook after a call is completed or when a station is off-hook and digits are not dialed in a programmed time.

Conditions

Howler tone is generated 30 seconds after a call is disconnected and the telephone is left off-hook or the telephone is left off-hook without dialing.

Default Setting

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

None

Operation

None

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Intercom

Description

Intercom gives extension users access to other extensions. This provides the system with complete internal calling ability.

Handsfree Answerback/Forced Intercom Ringing

Handsfree Answerback permits an extension user to respond to a voice-announced Intercom call by speaking toward the telephone, without lifting the handset. Like Handsfree, this is a convenience for workers who do not have a free hand to pick up the handset. Refer to Handsfree Answerback/Forced Intercom Ringing on page 1-479 feature for more information.

Busy Status Display

When a display multiline terminal user places an Intercom call to a busy extension, the details of the busy status (who is talking to the extension or which line is in use by the extension) can be displayed. The details of the trunk busy status (the extension using the line) can be displayed after trying to access the trunk. This feature provides a user information which can determine whether they should use the Barge-In feature for the extension or trunk. This information automatically displays for a multiline terminal once programmed.

Conditions

- Preventing ICM calls does not affect dialing other service codes, including 911.
- Intercom calls can ring or be voice-announced at the called extension.
- Intercom Abandoned Call Display remembers the last five Intercom calls to an extension.
- Ringing Line Preference can automatically answer ringing Intercom or trunk calls when the user lifts the handset.
- An extension can have a name assigned that identifies the extension to callers.
- Dialing 9 or any other trunk access code after dialing a busy extension results in termination of the Intercom call and a trunk is seized.
- In order for a station to retrieve a held ICM call, the station must have an ICM key assigned in 15-07 (*00).

Default Setting

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Handsfree Answerback/Forced Intercom Ringing

Intercom

Line Preference

Name Storing

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-13	**Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for Multiline Terminal**	Select the service code which can be used at an extension to change the displayed language on a multiline terminal display.	MLT (default = 778)
15-02-01	**Multiline Telephone Basic Data Setup – Display Language Selection** (To select options 8~10, press either 8 or Recall, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	Select the language to be displayed on a multiline terminal display.	0 = Japanese 1 = English 2 = German 3 = French 4 = Italian 5 = Spanish 6 = Dutch 7 = Portuguese 8 = Norwegian 9 = Danish 10 = Swedish 11 = Turkish 12 = Latin American Spanish 13 = Romanian 14 = Polish (default = 1)
20-06-01	**Class of Service for Extensions**	Assign Class of Service (1~15) for extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-01	**Class of Service Options (Outgoing Call Service) – Intercom Calls**	Turns off or on Intercom calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-11	**Class of Service Options (Outgoing Call Service) – Protect for the Call Mode Switching from Caller**	When an extension is set to ring mode for ICM calls, enabling this option prevents callers from changing the call to voice announce mode.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-07	**Class of Service Options (Hold/ Transfer Service) – Transfer Without Holding**	Turns Off or On an extension ability to use Transfer Without Holding.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-22	**Class of Service Options (Supplementary Service) – Busy Status Display (Called Party Status)**	Turns Off or On the ability to display the detailed state of the called party.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-17-01	**Operator Extension – Operator's Extension Number**	Define the extension numbers which are to be used by operators.	Up to eight digits (default = No setting)
20-18-01	**Service Tone Timers – Extension Dial Tone Time**	After getting Intercom dial tone, a multiline terminal user has this time to dial the first digit of the Intercom call.	0~64800 (seconds) (default = 30 seconds)
21-01-02	**System Options for Outgoing Calls – Intercom Interdigit Time**	When placing Intercom calls, users must dial each digit within this time.	0~64800 (seconds) (default = 10 seconds)
82-01-01 (01)	**Incoming Ring Tone – Frequency 1**	Customize the Intercom ring tone.	1 = 520Hz 2 = 540Hz 3 = 660Hz 4 = 760Hz 5 = 1100Hz 6 = 1400Hz 7 = 2000Hz Default: Refer to Table 1-11 Incoming Ringing Tone on page 1-513
82-01-02	**Incoming Ring Tone – Frequency 2**	Customize the Intercom ring tone.	
82-01-03	**Incoming Ring Tone – Modulation**	Use this program to customize the Intercom Ring Tone modulation if desired.	0 = No Modulation 1 = 8Hz Modulation 2 = 16Hz Modulation 3 = Envelope (default = 2)

Handsfree Answerback/Forced Intercom Ringing:

Program Number	Program Name	Description/Comments	Assigned Data
20-02-12	**System Options for Multiline Telephones – Forced Intercom Ring (ICM Call Type)**	Determine if an extension ICM calls should be set as Forced Intercom Ringing (1). If disabled (0), Intercom calls voice-announce. For all NEC Cordless telephones, this option must be set to "1" as voice announce is not possible.	0 = Disable (Voice) 1 = Enable (Signal) (default = 0)
20-06-01	**Class of Service for Extensions**	Assign Class of Service (1~15) for extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-08-10	**Class of Service Options (Outgoing Call Service) – Signal/ Voice Call**	Turns Off or On an extension allowing it to force Handsfree Answerback or Forced Intercom Ringing for outgoing Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-05	**Class of Service Options (Incoming Call Service) – Signal/ Voice Call**	Turn off or on an extension ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook Signals.	0 = Off 1 = On (default = 0 for COS 1~15)
80-01-01 (28)	**Service Tone Setup – Tone 28 (Speaker Monitor Tone)**	This tone changes the tone the originator of an ICM call hears. (The tone cannot be changed for what is heard by the user when receiving an ICM call.)	Refer to Service tones (Service Tone #28).
80-01-02	**Service Tone Setup – Basic Tone Number**	Use to define up to 64 Service Tones. Each service tone is defined by the combination of 32 Basic Tones.	1~33 (0 = No Tone) (33=Default Time Slot).
82-01-01	**Incoming Ring Tone – Frequency 1**	Customize the Intercom ring tone.	1 = 520Hz 2 = 540Hz 3 = 660Hz 4 = 760Hz 5 = 1100Hz 6 = 1400Hz 7 = 2000Hz Default: Refer to Table 1-11 Incoming Ringing Tone on page 1-513

Table 1-11 Incoming Ringing Tone

Incoming Ring Tone Number	Tone Type	Frequency 1	Frequency 2	Modulation
Pattern 1 (Trunk Incoming)	High Mid Low	1100 660 520	1400 760 660	16Hz Modulation 16Hz Modulation 16Hz Modulation

Table 1-11 Incoming Ringing Tone

Incoming Ring Tone Number	Tone Type	Frequency 1	Frequency 2	Modulation
Pattern 2 (Trunk Incoming)	High Mid Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
Pattern 3 (Trunk Incoming)	High Mid Low	2000 1400 1100	760 660 540	16Hz Modulation 16Hz Modulation 16Hz Modulation
Pattern 4 (Trunk Incoming)	High Mid Low	2000 1400 1100	760 660 540	8Hz Modulation 8Hz Modulation 8Hz Modulation
Intercom Incoming Pattern	High Mid Low	1100 660 520	1400 760 660	8Hz Modulation 8Hz Modulation 8Hz Modulation
Alarm Sensor Pattern	High Mid Low	760 760 760	760 760 760	No Change No Change No Change

Operation

To place an Intercom call:

1. At multiline terminal, press **Speaker**.

   - OR -

   At single line telephone, lift the handset.

2. Dial extension number (or **0** for your operator).

   . *Your call may voice-announce or ring the called extension. Dial 1 to change the way your call alerts the called extension.*

   . *If the extension you call is busy or does not answer, you can dial another extension without hanging up.*

To answer an Intercom call:

1. If you hear two beeps, speak toward telephone.

   . *Your telephone picks up your voice.*

   - OR -

   If your telephone rings, lift the handset.

To check the extension data (multiline terminal only):

1. Press the **Help** key.

2. Dial the extension number.

   . *You display shows your telephone extension number, port number and extension/Department Group.*

   . *You can also check any other extension numbers information by pressing Help + the extension number.*

3. Press **Exit** to return the normal time/date display.

To change how Intercom calls ring the extension:

1. Press **Speaker** or lift the handset.
2. Dial **823** to have calls ring your extension.

   - OR -

3. Dial **821** to have calls voice announce to your extension.

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ISDN Compatibility

Description

ISDN-BRI

Integrated Service Digital Network – Basic Rate Interface (ISDN-BRI) is a Public Switched Telephone Network (PSTN) service that provides two B channels and a D channel (2B + D) for voice call trunking. The B channels provide two voice path connections. Caller ID is usually a standard feature on ISDN-BRI provided trunks. Caller ID indication displays the calling party telephone number on the LCD of the Multiline Terminal for CO incoming calls. This interface provides voice communication path only.

ISDN-PRI

ISDN-PRI (Integrated Service Digital Network – Primary Rate Interface) is a Public Switched Telephone Network (PSTN) service that provides 30 B channels and 2 D channel2 (30B+D) for trunking. Caller ID indication displays the calling party telephone number on the LCD of the Multiline Terminal for CO incoming calls. This interface provides voice communication path only.

ISDN – BRI/PRI Features

- DID Line Service

  When configured for DID Line Service, the trunks emulate Loop Start or Ground Start trunks for outgoing calls and DID trunks for incoming calls.

- Calling Line Identification Presentation (CLIP)

  Program 10-03-05: ETU Configuration – CLIP Information Announcement, will allow the Calling Party Number IE in the Setup Message for a call when placed out an ISDN Trunk.

- Calling Party Number (CPN) Presentation from Station

  Calling Party Number (CPN) Presentation from Station allows each unique station or virtual extension 10-digit number (representing the DID number of the originating station) to be sent out over the ISDN Network, if it is programmed. If there is no Extension Calling Number assigned, the system will send the calling number for the ISDN trunk. If both the extension and trunk information is programmed, the extension information is sent as it takes priority.

- SMDR Includes Dialed Number

  The SMDR report can optionally print the trunk name (entered in system programming) or the number the incoming caller dialed (i.e., the dialed ISDN digits). This gives you the option of analyzing the SMDR report based on the number your callers dial. (This option also applies to a DID trunk as well.)

- Display Shows Why Caller ID is Not Available

  With Caller ID enabled, the system provides information for ISDN calls that do not contain the

Caller ID information. If the Caller ID information is restricted, the telephone display shows UNAVAILABLE INFO. If the system is not able to provide Caller ID information because the Telco information is not available, then the display shows OUT-OF-STATE.

Conditions

- Primary Rate Interface (PRI):

  The system is compatible with ISDN Primary Rate Interface (PRI) services. PRI services currently supported include:

  - Basic PRI Call Control (BCC)
  - Display of incoming caller's name and number when allowed by Telco
  - Routing in the system based on the number the caller dialed
  - ISDN maintenance functions (such as In Service/Out of Service Messaging)
  - Speech and 3.1 KHz audio

  PRI capability requires the installation of CD-PRTA. Each PRI circuit provides 32 PRI channels (30B + 2D). The T1/PRI Interface uses a single slot. When installed, the T1/PRI Interface uses the first block of 32 consecutive trunks. For example, if you have an CD-4COT + PZ-4COT installed for trunks 1~8, the T1/PRI Interface will automatically use trunks 9~40. If you have CD-4COT + PZ-4COT installed for trunks 1~8 and 17~24, the T1/PRI ETU will use trunks 25~56. The T1/PRI Interface cannot use trunks 9~16 (even if available) since they are not part of a consecutive block of 32 trunks.

- When using Mobile Extension in a NetLink Network, the ISDN/PRI must be utilized in the Primary System.
- When using fractional PRI, the blade comes up as zero ports until program 10-03-06 is set to the 4/8/12/16/20/24(auto), and then reset.
- If fractional PRI has the number of ports changed, the Trunk Port number might change if they become split or fit into an empty gap of trunk ports. For example, if you have a CD-4COT + PZ-4COT for Trunks ports 1~8 and 17~24 and the PRI (12 ports) was assigned as 25~36 and the PRI is changed to be eight ports instead of 12 ports, the new trunk port numbers would be 9~16 because the eight ports can now fix into the gap without being split ports. Another example, if you have a CD-4COT + PZ-4COT for Trunks ports 1~8 and 17~24 and the PRI (8 ports) was assigned as 9~16 and then you change the PRI to be 12 ports instead of eight, the new trunk ports would be 25~36 because the ports have to be split to keep the original port numbers, and this is not supported.
- If using a CSU/DSU, Program 10-03-13 must be set to 0. If not using a CSU/DSU, Program 10-03-13 must be set to 1~7 or anything other than 0.
- Restrictions for Calling Party Name:

The UNIVERGE SV8100 supports receiving the name from the Network in supported formats only and cannot send the Calling Name. Refer to Table 1-12 Restrictions for Calling Party Names.

Table 1-12 Restrictions for Calling Party Names

Protocols	Name Delivery Formats
NI-2	Facility Information Elements
4ESS (AT&T Custom)	Not Supported
AT&T5ESS Lucent Custom	Facility Information Element
DMS-100 (Custom) *	Display Information Element *
DMS-100 (National; ISDN) **	Facility Information Element **

* *Nortel Specification NIX-A211-1*

** *Nortel Specification NIS-A233-1*

- CO Line Service is not supported.

  ISDN – PRI cannot be configured for CO Emulation

- B-Channel to Trunk Association

  When an Incoming ISDN-BRI/PRI call is received, the system assigns the lowest trunk number of the ISDN circuit to the incoming call associated with the B-Channel. When an Outgoing call is placed using the ISDN-PRI/BRI, the system assigns the Trunk and B-Channel association according to the chart below. This is based on the Trunk-to-Trunk Group and Trunk Group Priority assignment in (Program 14-05-01).

Refer to the charts below for examples:

Incoming Call

Station User → Talking on TK009

Trunk Number	B-Channel Number
9	1
10	2
11	3
12	4
13	5
14	6
15	7
16	8
17	9
18	10
19	11
20	12
21	13
22	14
…31	…23

← Incoming call from the Network on Channel 23. In most cases, the Network will control/select the B-Channel used for an incoming call.

Outgoing Call

Trunk Number	Trunk Group	Trunk Priority	B-Channel Number
9	1	9	1
10	1	8	2
11	1	7	3
12	1	6	4
13	1	5	5
14	1	4	6
15	1	3	7
16	1	2	8
17	1	1	9
18	2	3	10
19	2	2	11

Station user → places outgoing trunk call by dialing Trunk

Outgoing Call	Trunk Number	Trunk Group	Trunk Priority	B-Channel Number
Access code. Outgoing call is placed on the associated B-Channel.	20	2	1	12
	21	3	11	13
	22	3	10	14
	…31	3	...1	…23

. *In addition to T1/PRI interface ETUs, PRI also requires a CSU/DSU Unit and interconnecting cables to interface with the Telco.*

- Basic Rate Interface (BRI)

  Caller ID Name to Single Line Telephone is *NOT* supported for ISDN (BRT) Trunks.

  The system is compatible with ISDN Basic Rate Interface (BRI) services. BRI services currently supported include:

  - Basic BRI Call Control (BCC)
  - Point-to-Point BRI Terminal Connection (no daisy-chaining)
  - Multipoint BRI Terminal Connection (daisy-chaining)

  BRI services require the installation of CD-2BRIA. Each CD-2BRIA has two BRI circuits. The CD-2BRIA uses a single universal slot.

  . *A PZ-2BRIA daughter board can be added to the CD-2BRIA to add two more BRI circuits for a total of 4.*

  For each BRI line, two different Terminal Endpoint Unidentified (TEIs) are assigned to two different Service Profile Identifiers (SPIDs).

  The two different SPIDs for each BRI line, are related to different trunk logical port numbers. One BRI provides two trunk logical ports when it is connected to a CO line. Each SPID is assigned to a different TEI. This relationship is made in the initialization of the BRI line when it is connected to the CO.

  This relationship between SPID and TEIs are created as follows.

  LOGICAL-PORT-NUMBER + 0 = SPID-1
  LOGICAL-PORT-NUMBER + 1 = SPID-2

  When using the SMDR reports for BRI, all incoming BRI calls are displayed under the CLASS column as IVIN.

- When using Mobile Extension in a NetLink Network, the ISDN/PRI must be utilized in the Primary System.
- Automatic Data Link Failure Recovery

If a data link error is detected by the BRI ETU, the system tries to recover the data link and send the SPID to the central office. To provide this enhancement, the BRI ETU must be able to indicate to the system when a data link error has occurred.

In addition to the BRI Interface ETU, BRI Services require the installation of NT1 Network Terminators and interconnecting cabling.

- CO Line Service is not supported.

  ISDN–BRI cannot be configured for CO Emulation.

- BRI and DID Callers with Non-Matching SPID Numbers

  This feature allows you to determine whether the system checks the called party number with the SETUP message and the SPID setup. Depending on the system programming, this can allow DID calls to be received on BRI trunks and direct them according to the DID Translation Table (Program 22-11).

- Special Conditions Related to Ordering DID Service For ISDN-BRI

  Telcos may refer to this in different ways. The reference Verizon uses to order such service is Additional Directory Numbers with no new terminating equipment (only a dialable number). When you want Additional Directory Numbers to hunt when a B-Channel is busy, the service may be called Busy Diversion.

- Calling Party Number (CPN) presentation from station is available for virtual extensions.

Default Setting

None

System Availability

Terminals

Not Applicable

Required Component(s)

To provide ISDN-PRI trunk connection:

- CD-PRTA

To provide ISDN-BRI trunk connection:

- CD-2BRIA or CD-2BRIA with PZ-2BRIA

- NT-1 for each BRI (locally provided)

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Forced Trunk Disconnect

Station Message Detail Recording

Transfer

Guide to Feature Programming

ISDN – BRI Installation

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup (BRIA PKG) – ISDN Line Mode**	Setup and confirm the Basic Configuration data for each CD-2BRIA. Use this program to select the ISDN Line Mode.	0 = Not Used 1 = T-Point (default = 1)
10-03-03	**ETU Setup (BRIA PKG Setup) – Connection Type**	Setup and confirm the Basic Configuration data for each CD-2BRIA. Confirm the connection type for each CD-2BRIA.	0 = Point-to-Multipoint 1 = Point-to-Point (default = 0)
10-03-04	**ETU Setup (BRIA PKG Setup) – Layer 3 Timer Type**	Setup and confirm the Basic Configuration data for each CD-PRTA. This program selects the Layer 3 timer type (1~5). Each timer value of Layer 3 is set up for each type in Program 81-06 (T-Bus).	1~5 (default = 1)
10-03-08	**ETU Setup (BRIA PKG Setup) – Dial Sending Mode**	ISDN protocol definition. Select either enblock or overlap sending.	0 = Enblock Sending 1 = Overlap Sending (default = 1)
10-03-09	**ETU Setup (BRIA PKG Setup) – Dial Information Element**	ISDN Protocol definition. If Overlap Sending is selected in Program 10-03-08, select either Keypad Facility (0) or Called Party Number (1) for the dial information element.	0 = Keypad Facility 1 = Called Party Number (default = 0)
10-03-13	**ETU Setup (PRTA PKG Setup) – Loss of Signal Detection Limit**	If the transmit/receive voltage is less than the setting in Program 10-03-13, the system considers this as Loss-Of-Signal and the PRI does not come up. Note that there are different values based on the setting in Program 10-03-12 for the PRI.	0 = Level 0 (lowest sensitivity) 1 = Level 1 2 = Level 2 3 = Level 3 4 = Level 4 5 = Level 5 6 = Level 6 7 = Level 7 (highest sensitivity) (default = 2)
10-06-01	**ISDN BRI Setup – TEI Selection**	Select the method the system uses when assigning Terminal Endpoint Identifier (TEI) values to the BRI Circuit.	0 = Select by SPID number 1 = Select by Channel ID Number (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
10-06-02	**ISDN BRI Setup – DID Mode**	Select the method the system uses when assigning DID Mode to the BRI Circuit.	0 = Route by Called Party Number 1 = Route by Redirecting Number (default = 0)
10-06-03	**ISDN BRI Setup – SPID 1**	Assign the SPID Number for B-Channel 1.	Dial up to 20 digits (default not assigned)
10-06-04	**ISDN BRI Setup – SPID 2**	Assign the SPID Number for B-Channel 2.	Dial up to 20 digits (default not assigned)
21-12-01	**ISDN Calling Party Number Setup for Trunks – Calling Party Number Data**	Assign Calling Party Numbers for each trunk (maximum 16 digits per entry). . *After the above programming is complete a reset of the CD-2BRIA is required.*	(maximum 16 digits) 1-0, *, **#** Default: (All trunks = No setting)

ISDN – PRI Installation

Program Number	Program Name	Description/Comments	Assigned Data
10-03-04	**ETU Setup (PRTA PKG Setup) – Layer 3 Timer Type**	Setup and confirm the Basic Configuration data for each CD-PRTA This program selects the Layer 3 timer type (1~5). Each timer value of Layer 3 is set up for each type in Program 81-06 (T-Bus).	1~5 (default = 1)
10-03-06	**ETU Setup (PRTA PKG Setup) – Length of Cable**	Setup and confirm the Basic Configuration data for each CD-PRTA. Select the length of cable to be used.	0 = Level 1 1 = Level 2 2 = Level 3 3 = Level 4 4 = Level 5 (default = 2)
10-03-08	**ETU Setup (PRTA PKG Setup) – Dial Sending Mode**	ISDN protocol definition. Select either enblock or overlap sending.	0 = Enblock Sending 1 = Overlap Sending (default = 0)
10-03-09	**ETU Setup (PRTA PKG Setup) – Dial Information Element**	ISDN protocol definition. If Overlap Sending is selected in Program 10-03-08, select either Keypad Facility (0) or Called Party Number (1) for the dial information element.	0 = Keypad Facility 1 = Called Party Number (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
10-03-18	**ETU Setup (PRTA PKG Setup) – Type of Number**	Select the number type for the ISDN circuit.	0 = Unknown 1 = International number 2 = National number 3 = Network Specific number 4 = Subscriber number 5 = Abbreviated number (default = 0)
10-03-19	**ETU Setup (PRTA PKG Setup) – Numbering Plan Identification**	Select the Numbering Plan used for the ISDN circuit.	0 = Unknown 1 = ISDN numbering plan 2 = Data numbering plan 3 = Telex numbering plan 4 = National standard numbering plan 5 = Private numbering plan (default = 0)
10-03-20	**ETU Setup (PRTA PKG Setup) – Network Exchange Selection**	Select the ISDN protocol for the ISDN circuit.	0 = Standard (Same as NI-2) 1 = reserved 2 = reserved 3 = DMS (A211) 4 = 5ESS 5 = DMS (A233) 6 = 4ESS 7 = NI-2 (default = 0)
10-03-21	**ETU Setup (PRTA PKG Setup) – PRI Number of Ports**	Select the number of ports for the PRI.	0 = Auto 1 = 4 Ports 2 = 8 Ports 3 = 12 Ports 4 = 16 Ports 5 = 20 Ports 6 = 24 Ports 7 = 28 Ports (default = 0)
10-39-01	**Fractional Setup**	Use this to enable (1) or disable (0) the T1/PRI fractional function.	0 = Disable 1 = Enable (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
14-05-01	**Trunk Group – Trunk Group Number**	Assign trunks to trunk groups then go to Program 14-06-01 below to set up Trunk Group Routing.	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order.)
21-01-03	**System Options for Outgoing Calls – Trunk Interdigit Time (External)**	The time the system waits for the timer to expire before placing the call in a talk state.	0~64800 (seconds) (default = 10)
21-12-01	**ISDN Calling Party Number Setup for Trunks – Calling Party Number Data**	Assign Calling Party Numbers for each trunk (maximum 16 digits per entry). . *After the above programming is complete a reset of the CD-PRTA is required.*	(maximum 16 digits) 1-0, *, **#** Default: (All trunks = No setting)

DID Services for either ISDN – BRI or PRI

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup**	Assign the incoming trunk type for each trunk.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-09-01	**DID Basic Data Setup – Expected Number of Digits**	For each DID Translation Table (1~20), enter the number of digits the table expects to receive from the CO (eight maximum). For example, for a table used with 3-digit DID service, enter 3. For additional DID Services refer to Direct Inward Dialing (DID) on page 1-341.	1~8 (default = 4)

Program Number	Program Name	Description/Comments	Assigned Data
22-11-01	**DID Translation Number Conversion – Received Number**	For each DID Translation Table entry (1~2000), specify the digits received by the system.	(maximum eight digits) (default: Conv. Table:1-100 = Rec'd No. 00 -99, Conv.Table:101- 2000 = Rec'd No. are not assigned.
22-11-02	**Translation Number Conversion – Target Number**	For each DID Translation Table entry (1~2000), specify the extension the system dials after translation.	(maximum 24 digits) (default: Conv. Table:1-100 = Target No. 200- 299, Conv.Table:101- 2000 = Target No. are not assigned.

Calling Party Number Presentation for either ISDN – BRI or PRI

Program Number	Program Name	Description/Comments	Assigned Data
10-03-05	**ETU Setup (PRTA PKG Setup) – CLIP Information Announcement**	Based on this setting, the system includes a Presentation Allowed (1) or Presentation Restricted (0) in the Setup message to allow or deny the Calling Party Number. Program 15-01-04 must also be set to 1 if this option is enabled.	0 = Disable 1 = Enable (default = 1)
15-01-04	**Basic Extension Data Setup – ISDN Caller ID**	If both Program 15-01-04 and Program 10-03-05 are enabled (1), the system includes Caller ID in the Setup message as Presentation Allowed. If these options are disabled (0), it is Presentation Restricted.	0 = Disable 1 = Enable (default = 1)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-13	**Class of Service Options (Outgoing Call Service) – ISDN CLIP**	Determine if the ISDN calling line identity presentation and screening indicators are to be allowed.	0 = Off 1 = On (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
21-12-01	**ISDN Calling Party Number Setup for Trunks**	Assign Calling Party Numbers for each trunk (maximum 16 digits per entry). When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-13), the system sends the calling number for the ISDN trunk defined in 21-12. If the Calling Party Number is assigned in both Program 21-12 and Program 21-13, the system sends the data in Program 21-13.	(maximum 16 digits) 1-0, *, **#** Default: (All trunks = No setting)
21-13-01	**ISDN Calling Party Number Setup for Extensions**	Assign each extension a Calling Party Number (maximum 16 digits per entry). The calling number is the subscriber number of the dial-in number. When a call is made by an extension which does not have an Extension Calling Number assigned (Program 21-12), the system sends the calling number for the ISDN trunk defined in Program 21-13. If a Calling Party Number is assigned in both Program 21-12 and Program 21-13, the system sends the data in Program 21-13.	0~9, *, **#** (Max. 16 digits) (default not assigned)

ISDN – PRI Network Specific Assignment

Program Number	Program Name	Description/Comments	Assigned Data
26-02-07	**Dial Analysis Table for ARS/LCR – Network Specified Parameter Table**	Use this program to define the network specified parameter table for each ARS Table.	0~16 (default = 0)
26-12-01	**Network Specified Parameter Table for ARS – Type of Number**	Use this program to define the type of Number parameter for an ISDN outgoing call.	0 = System Default 1 = Unknown 2 = International No. 3 = National No. 4 = Network Specific No. 5 = Subscriber No. 6 = Abbreviated No. (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
26-12-02	**Network Specified Parameter Table for ARS – Numbering Plan Identification**	Use this program to define the Numbering Plan Identification Parameter for an ISDN outgoing call.	0 = System Default 1 = Unknown 2 = ISDN Plan 3 = Data Plan 4 = Telex Plan 5 = National Standard Plan 6 = Private Plan (default = 0)
44-05-11	**ARS/F-Route Table – Network Specified Parameter Table**	Use this program to define the network specified parameter table for each F-Route table.	0~16 (default = 0)

SMDR Dialed Digits for either ISDN – BRI or PRI

Program Number	Program Name	Description/Comments	Assigned Data
35-02-15	**SMDR Output Options – CLI/DID Number Switching**	Determine if the CLI/DID Number should be displayed.	0 = CLI (CLIP) 1 = DID Calling Number (default = 0)
35-02-16	**SMDR Output Options – Trunk Name or Received Dialed Number**	Determine how the SMDR should print incoming calls on ANI/DNIS or DID trunks. If set to (1), ANI/DNIS trunks can print DNIS digits, if set to (0) trunk names are printed instead. . *For additional SMDR Services refer to Station Message Detail Recording on page 1-829.*	0 = Trunk Port Name 1 = Received Dialed Number (default = 0)

General ISDN Programs

Program Number	Program Name	Description/Comments	Assigned Data
14-01-13	**Basic Trunk Data Setup – Trunk-to-Trunk Transfer**	For each trunk that should be able to participate in a tandem call, enter 1. To disable a trunk from Tandem Trunking, enter 0. Required for 2 B-Channel transfer.	0 = Disable 1 = Enable (default = 0)

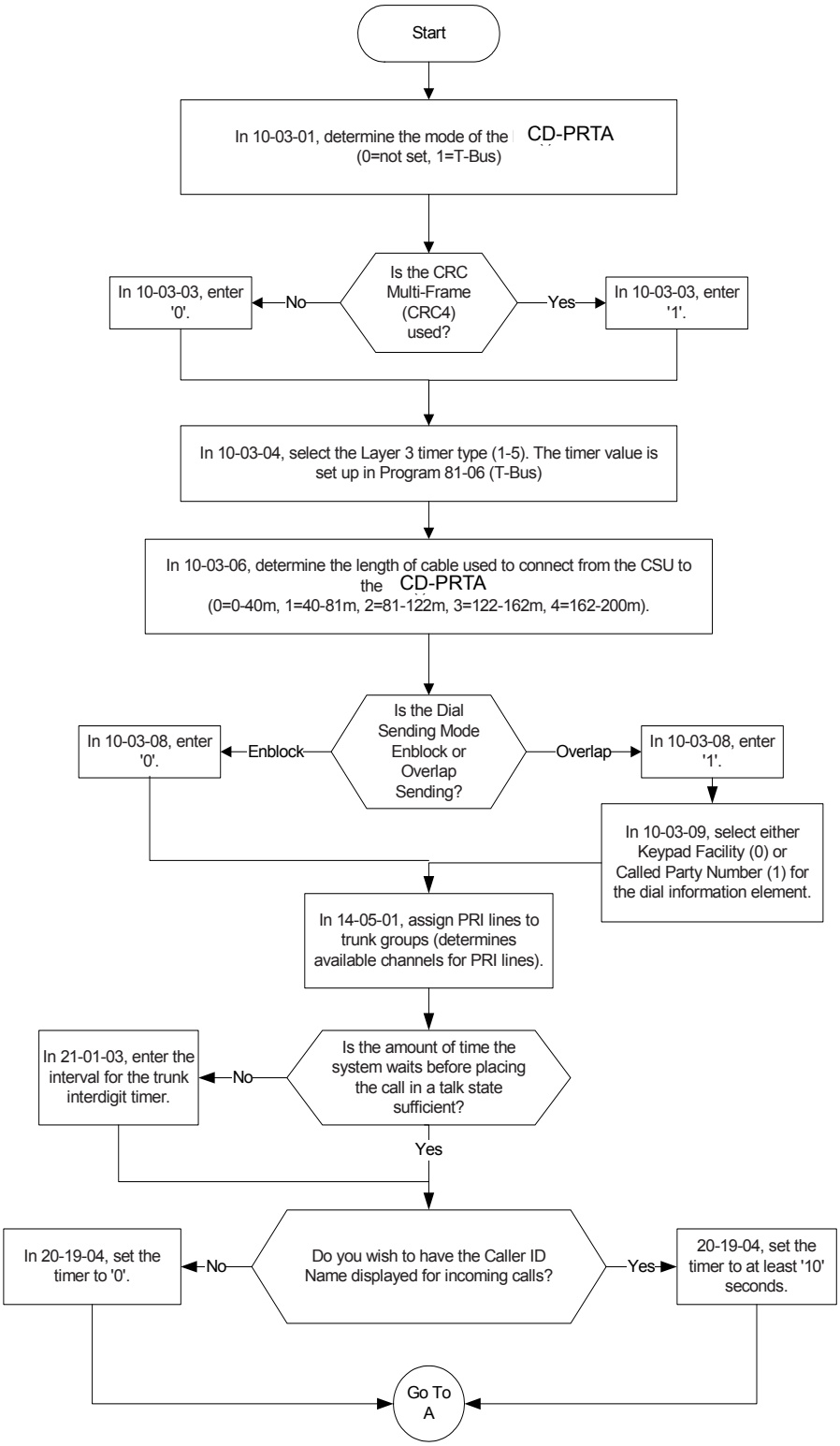
Program Number	Program Name	Description/Comments	Assigned Data
15-02-29	**Multiline Telephone Basic Data Setup – PB Back Tone Level**	This program option can be used to adjust the PB Back Tone level when calling an ISDN line.	1~63 (-15.5dB ~ +15.5dB) (default = 32) 0db
15-07-01	**Programmable Function Keys**	Assign a function key for Caller ID Block for ISDN (63) if required.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-02	**Class of Service Options (Incoming Call Service) – Caller ID Display**	Turns Off (0) or On (1) the Caller ID display at an extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-03	**Class of Service Options (Incoming Call Service) – Sub Address Identification**	Define whether an extension displays the Caller Sub-Address, 0 = Deny, 1 = Allow.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-11	**Class of Service Options (Hold/ Transfer Service) – Auto On-Hook Transfer**	In an extensions Class of Service, turn Off (0) or On (1) an extension ability to transfer when the user hangs up.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-14	**Class of Service Options (Hold/ Transfer Service) – Trunk-to-Trunk Transfer Restriction**	Turns Off (0) or On (1) the Trunk-to-Trunk Transfer Restriction. If enabled, Trunk-to-Trunk Transfer is not possible.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-21	**Class of Service Options (Hold/ Transfer Service) – Restriction for Tandem Trunking on Hang Up**	Allow (0) an extension user's ability to set up a tandem call automatically when they hang up.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)
20-19-04	**System Options for Caller ID – Wait Facility IE Timer**	This is the time an ISDN trunks uses to determine how long the system waits for the Caller ID name from the Telco.	0~64800 seconds (default = 10)

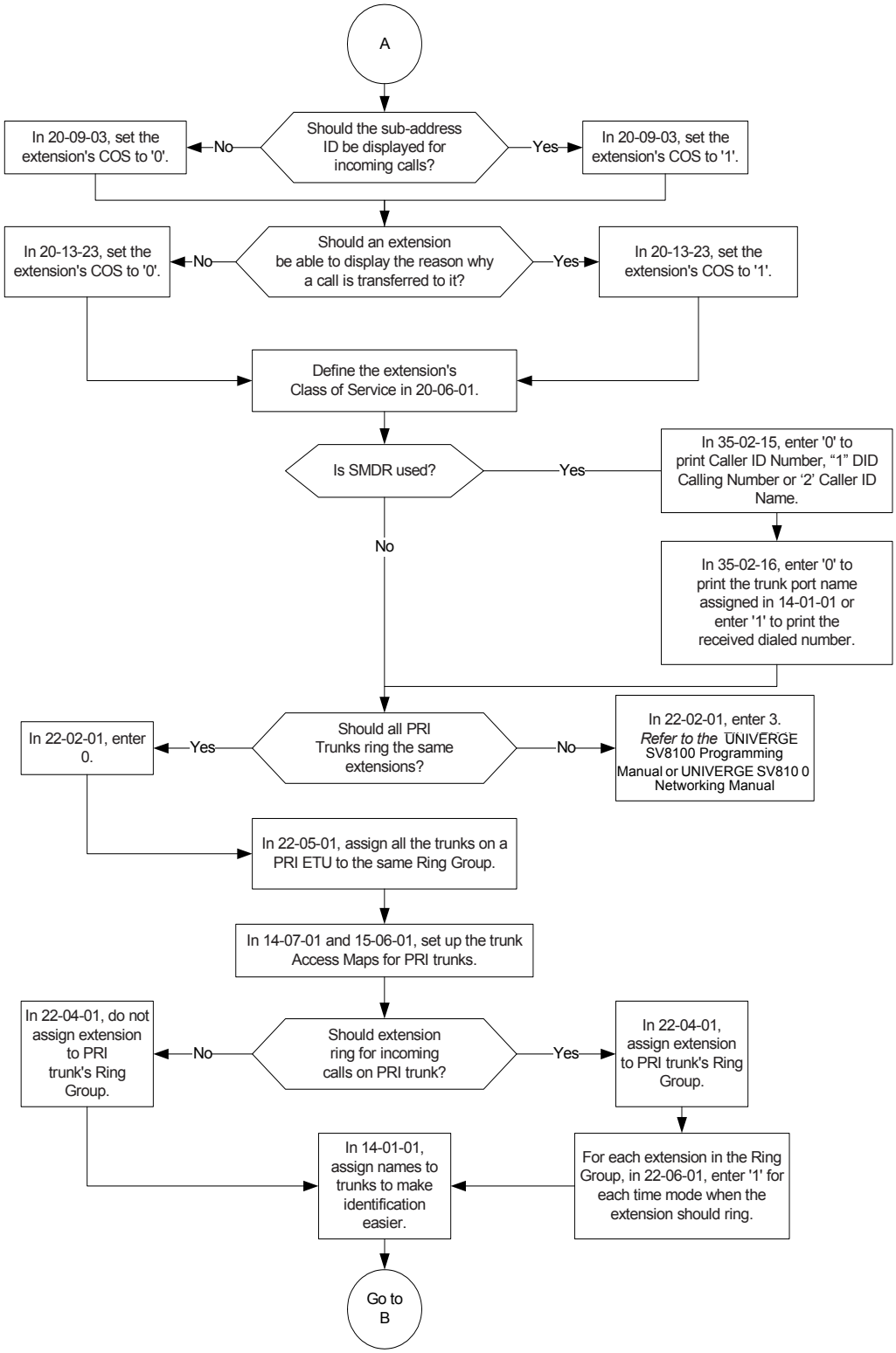
Program Number	Program Name	Description/Comments	Assigned Data
20-25-14	**ISDN Options – No response Release Send**	Operation mode setting for when second T303 timer expires.	0 = Off 1 = On (default = 0)

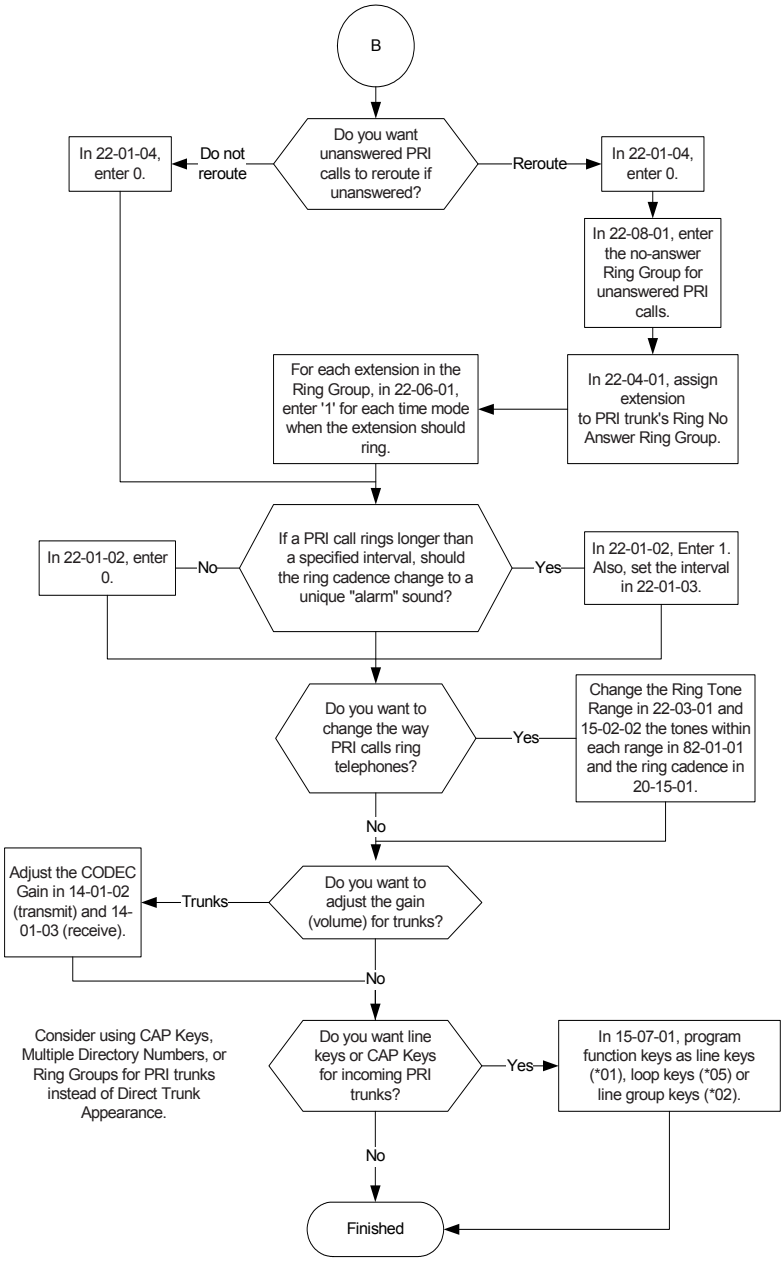
Operation

None

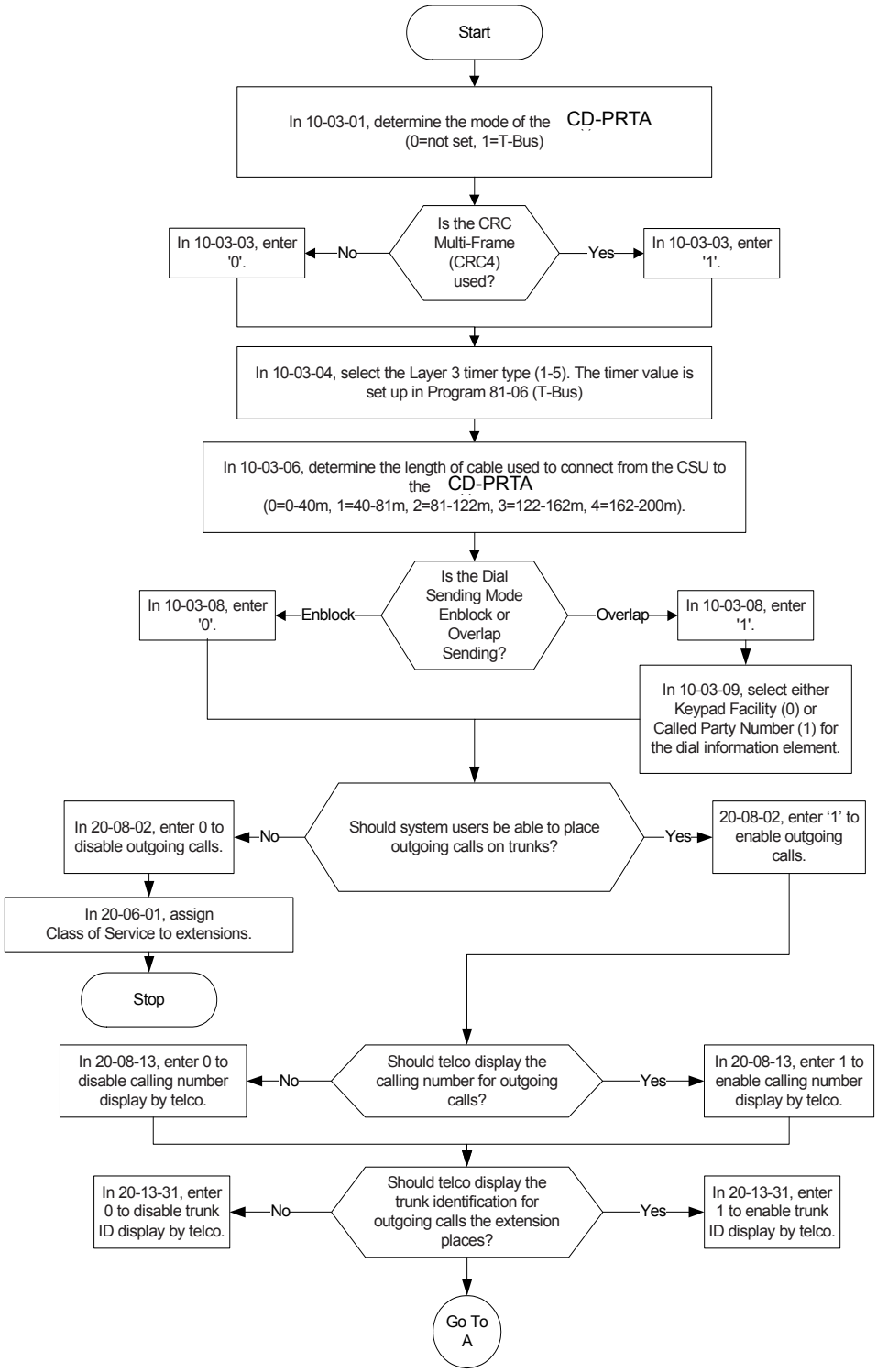
Programming Flowchart for ISDN-PRI – Answering Calls

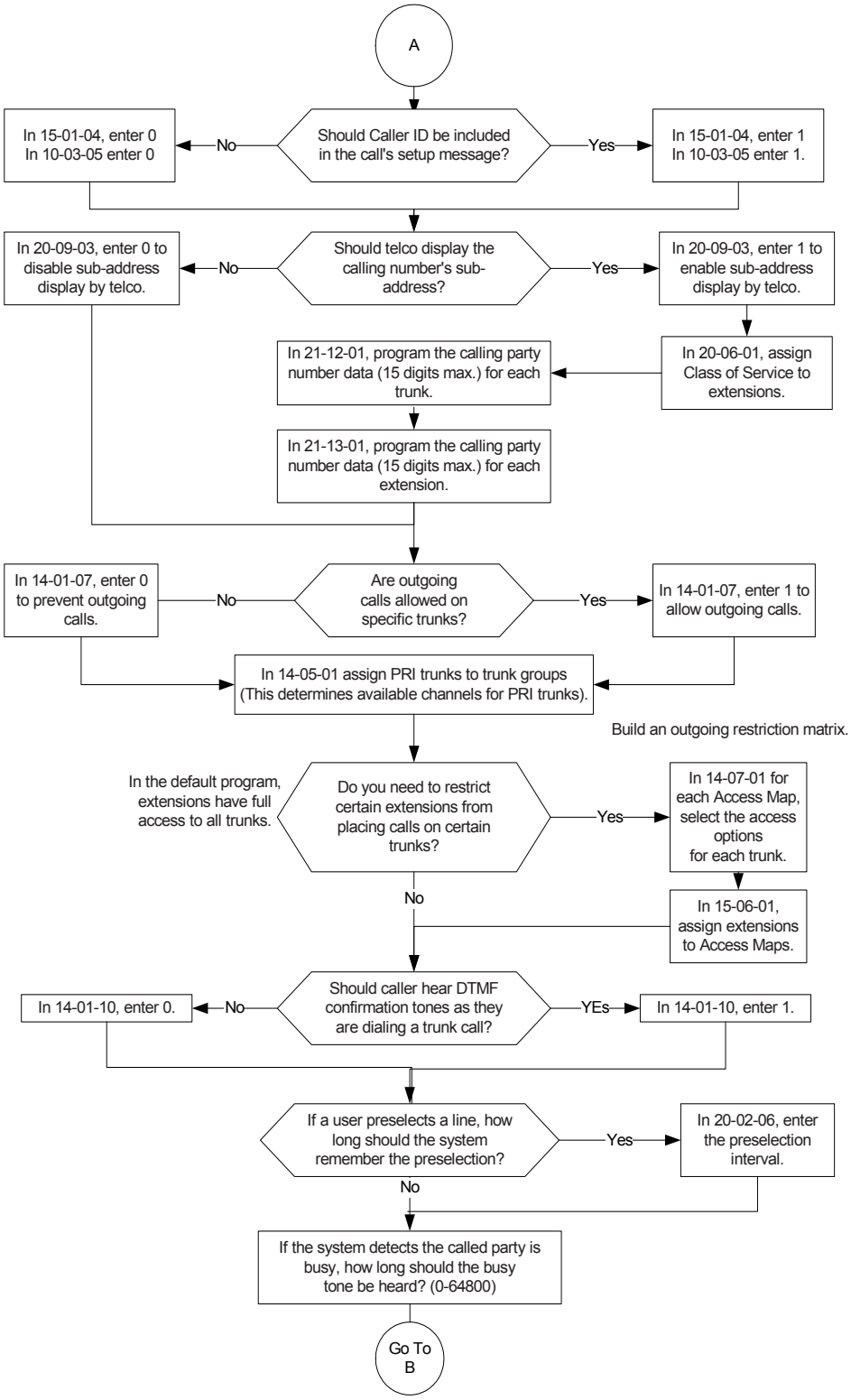


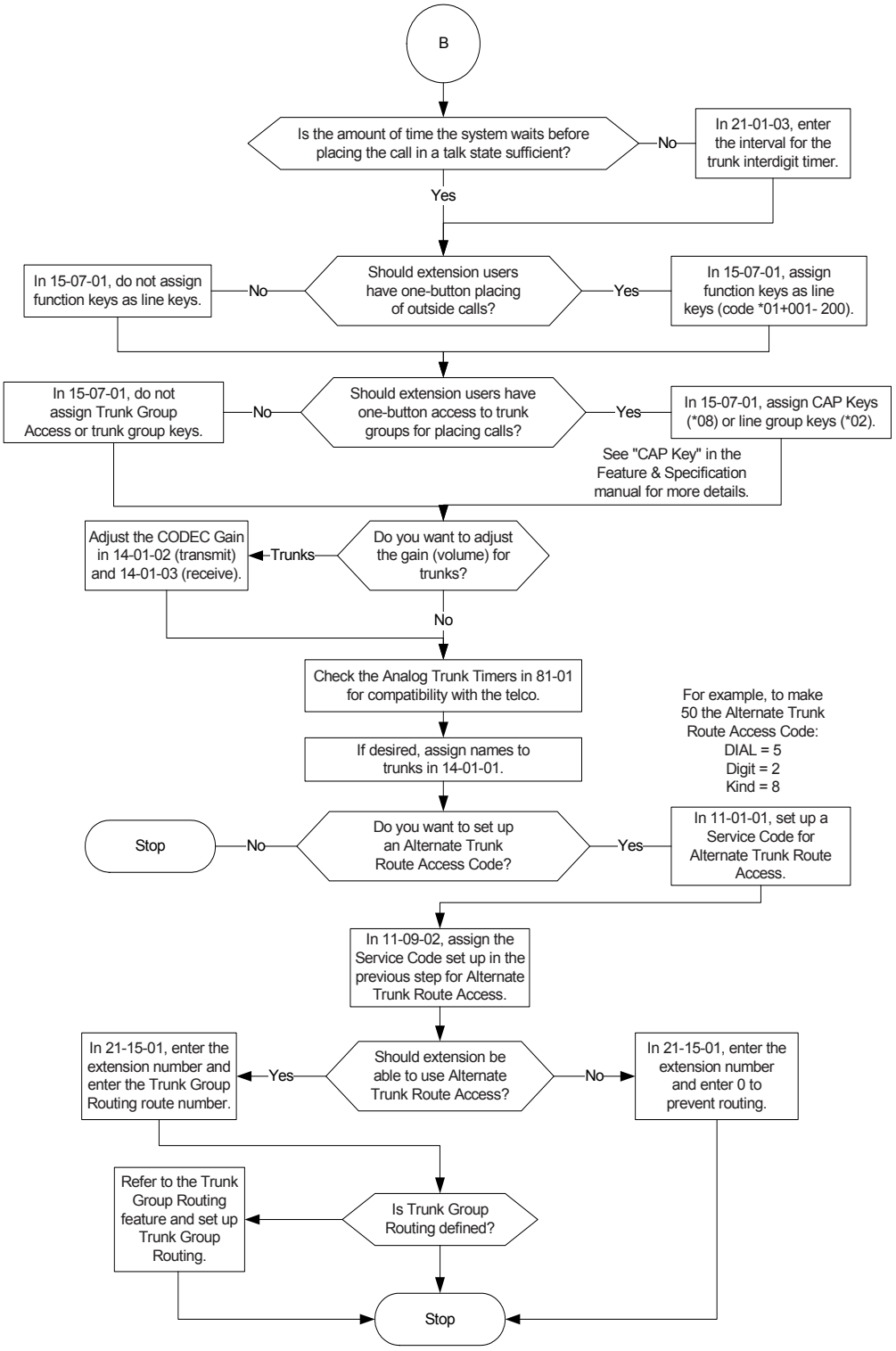

A
Should the sub-address ID be displayed for incoming calls?
No
In 20-09-03, set the extension's COS to '0'.
Yes
In 20-09-03, set the extension's COS to '1'.
Should an extension be able to display the reason why a call is transferred to it?
No
In 20-13-23, set the extension's COS to '0'.
Yes
In 20-13-23, set the extension's COS to '1'.
Define the extension's Class of Service in 20-06-01.
Is SMDR used?
Yes
In 35-02-15, enter '0' to print Caller ID Number, "1" DID Calling Number or '2' Caller ID Name.
No
In 35-02-16, enter '0' to print the trunk port name assigned in 14-01-01 or enter '1' to print the received dialed number.
Should all PRI Trunks ring the same extensions?
Yes
In 22-02-01, enter 0.
No
In 22-02-01, enter 3. Refer to the UNIVERGE SV8100 Programming Manual or UNIVERGE SV810 0 Networking Manual
In 22-05-01, assign all the trunks on a PRI ETU to the same Ring Group.
In 14-07-01 and 15-06-01, set up the trunk Access Maps for PRI trunks.
Should extension ring for incoming calls on PRI trunk?
No
In 22-04-01, do not assign extension to PRI trunk's Ring Group.
Yes
In 22-04-01, assign extension to PRI trunk's Ring Group.
In 14-01-01, assign names to trunks to make identification easier.
For each extension in the Ring Group, in 22-06-01, enter '1' for each time mode when the extension should ring.
Go to B


B
Do you want unanswered PRI calls to reroute if unanswered?
Do not reroute
In 22-01-04, enter 0.
Reroute
In 22-01-04, enter 0.
In 22-08-01, enter the no-answer Ring Group for unanswered PRI calls.
In 22-04-01, assign extension to PRI trunk's Ring No Answer Ring Group.
For each extension in the Ring Group, in 22-06-01, enter '1' for each time mode when the extension should ring.
If a PRI call rings longer than a specified interval, should the ring cadence change to a unique "alarm" sound?
No
In 22-01-02, enter 0.
Yes
In 22-01-02, Enter 1. Also, set the interval in 22-01-03.
Do you want to change the way PRI calls ring telephones?
Yes
Change the Ring Tone Range in 22-03-01 and 15-02-02 the tones within each range in 82-01-01 and the ring cadence in 20-15-01.
No
Do you want to adjust the gain (volume) for trunks?
Trunks
Adjust the CODEC Gain in 14-01-02 (transmit) and 14-01-03 (receive).
No
Do you want line keys or CAP Keys for incoming PRI trunks?
Yes
In 15-07-01, program function keys as line keys (*01), loop keys (*05) or line group keys (*02).
Consider using CAP Keys, Multiple Directory Numbers, or Ring Groups for PRI trunks instead of Direct Trunk Appearance.
No
Finished

Programming Flowchart of ISDN-PRI – Placing Calls




A
Should Caller ID be included in the call's setup message?
No
In 15-01-04, enter 0
In 10-03-05 enter 0
Yes
In 15-01-04, enter 1
In 10-03-05 enter 1.
Should telco display the calling number's sub-address?
No
In 20-09-03, enter 0 to disable sub-address display by telco.
Yes
In 20-09-03, enter 1 to enable sub-address display by telco.
In 20-06-01, assign Class of Service to extensions.
In 21-12-01, program the calling party number data (15 digits max.) for each trunk.
In 21-13-01, program the calling party number data (15 digits max.) for each extension.
Are outgoing calls allowed on specific trunks?
No
In 14-01-07, enter 0 to prevent outgoing calls.
Yes
In 14-01-07, enter 1 to allow outgoing calls.
In 14-05-01 assign PRI trunks to trunk groups (This determines available channels for PRI trunks).
Build an outgoing restriction matrix.
In the default program, extensions have full access to all trunks.
Do you need to restrict certain extensions from placing calls on certain trunks?
Yes
In 14-07-01 for each Access Map, select the access options for each trunk.
In 15-06-01, assign extensions to Access Maps.
No
Should caller hear DTMF confirmation tones as they are dialing a trunk call?
No
In 14-01-10, enter 0.
YEs
In 14-01-10, enter 1.
If a user preselects a line, how long should the system remember the preselection?
Yes
In 20-02-06, enter the preselection interval.
No
If the system detects the called party is busy, how long should the busy tone be heard? (0-64800)
Go To B


B
Is the amount of time the system waits before placing the call in a talk state sufficient?
No
In 21-01-03, enter the interval for the trunk interdigit timer.
Yes
In 15-07-01, do not assign function keys as line keys.
No
Should extension users have one-button placing of outside calls?
Yes
In 15-07-01, assign function keys as line keys (code *01+001- 200).
In 15-07-01, do not assign Trunk Group Access or trunk group keys.
No
Should extension users have one-button access to trunk groups for placing calls?
Yes
In 15-07-01, assign CAP Keys (*08) or line group keys (*02).
See "CAP Key" in the Feature & Specification manual for more details.
Adjust the CODEC Gain in 14-01-02 (transmit) and 14-01-03 (receive).
Trunks
Do you want to adjust the gain (volume) for trunks?
No
Check the Analog Trunk Timers in 81-01 for compatibility with the telco.
If desired, assign names to trunks in 14-01-01.
For example, to make 50 the Alternate Trunk Route Access Code:
DIAL = 5
Digit = 2
Kind = 8
Stop
No
Do you want to set up an Alternate Trunk Route Access Code?
Yes
In 11-01-01, set up a Service Code for Alternate Trunk Route Access.
In 11-09-02, assign the Service Code set up in the previous step for Alternate Trunk Route Access.
In 21-15-01, enter the extension number and enter the Trunk Group Routing route number.
Yes
Should extension be able to use Alternate Trunk Route Access?
No
In 21-15-01, enter the extension number and enter 0 to prevent routing.
Refer to the Trunk Group Routing feature and set up Trunk Group Routing.
Is Trunk Group Routing defined?
Stop

Last Number Redial

Description

Last Number Redial allows an extension user to quickly redial the last number dialed. For example, a user may quickly recall a busy or unanswered number without manually dialing the digits.

Last Number Redial saves in system memory the last 24 digits a user dials. The number can be any combination of digits 0~9, **#** and *. The system remembers the digits regardless of whether the call was answered, unanswered or busy. The system normally uses the same trunk group as for the initial call. However, the extension user can preselect a specific trunk if desired.

When pressing the Redial key, the display indicates REDIAL [**#**] / SYS. The user can then press **#** to redial the number displayed, or enter an System Speed Dialing bin number to be dialed. Pressing the Redial key repeatedly will scroll through the last 10 numbers dialed.

Conditions

- Redial List requires the use of a display telephone. Non-display and single line telephones can not use this feature.
- When using Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.

Default Setting

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Automatic Route Selection

Repeat Redial

Save Number Dialed

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-12	**Service Code Setup (for Service Access) – Last Number Dial**	Assign a service code (816) to use Last Number Dial.	MLT, SLT (default = 816)
11-12-17	**Service Code Setup (for Service Access) – Clear Last Number Dialing Data**	Assign a service code (876) to clear the Last Number Dial.	MLT, SLT (default = 876)
15-02-13	**Multiline Telephone Basic Data Setup – Redial List Mode**	Select the type of numbers that are stored in the Redial List – Internal and External numbers (0) or External only (1).	0 = ICM/Trunk (Extension/Trunk Mode) 1 = Trunk Mode (default = 1)
20-08-05	**Class of Service Options (Outgoing Call Service) – Dial Number Preview (Preset Dial)**	Turns Off (0) or On (1) an extension ability to use Dial Number Preview. This program also turns Off or On the Last Number Redial function.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To redial your last call:

1. Without lifting the handset, press **Redial**.

   . *The last dialed number is displayed.*

2. To redial the last number, press **#**.

   - OR -

   Search for the desired number from the Redial List by pressing **Redial** or VOLUME s or VOLUME t keys.

3. Lift the handset or press **Speaker** to place the call.

. *The system automatically selects a trunk from the same group as your original call and dials the last number dialed.*

- OR -

1. At the multiline terminal, press **Speaker** or lift the handset (optional).

   . *The system automatically selects a trunk from the same group as your original call.*

2. Press **Redial**.

   - OR -

   At the single line telephone, lift the handset.

3. Dial **816**.

   . *The system automatically selects a trunk from the same group as your original call and dials the last number dialed.*

To check the number saved for Last Number Redial:

1. Press **Redial**.

   . *The stored number displays for six seconds. The stored number dials out if you:*
   - *Lift the handset,*
   - *Press an idle line key,*
     - *or -*
   - *Press **Speaker**.*

2. Press the **Exit** key.

To erase the stored number:

1. At the multiline terminal, press **Speaker** or lift handset.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **876**.

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LCR-Least Cost Routing

Description

Least Cost Routing allows the SV8100 system to automatically select the indirect carrier defined by routing table within the system. An indirect carrier is accessed via the PSTN lines connected to the SV8100 (these are the direct carrier lines), a special access code is used to select the indirect carrier, all dialled digits are passed to the indirect carrier for routing of the call to the destination.The routing tables list the leading digits of numbers dialled by the users and the associated indirect carrier access code. It is possible to route calls to more than one indirect carrier.

Conditions

- The PSTN number .accepted by the indirect carrier may vary, consult the carrier for details. Special attention must be given to Emergency calls (Police/Fire/Ambulance etc.), if you route emergency calls to an indirect carrier you must confirm that they will accept this type of call. It is normal practice to have an ‘override code’ that the users can dial to route the call to a chosen carrier (direct or indirect) in the event of faults with the carrier.
- F-Route/ARS operation takes place on the digits dialled by the user, before the trunk is seized. LCR will use the digits sent to line i.e after translation by F-Route/ARS.
- Toll Restriction takes place on the digits dialled by the user. Toll Restriction check will take place after any F-Route/ARS operation and before the LCR operation..
- Local area calls can not be routed via an indirect carrier that also has Cost Centre Codes enabled.This is due to the order that the digits are dialled out by the SV8100.Local calls can be routed via an indirect carrier if Cost Centre Codes are not required.

Default Setting

Disabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Cost Centre Code

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-23	**LCR Service**	Set this item to 1 to enable least cost routing.	Dial Digits (16 digits maximum) (default = No Setting)
26-01-04	**LCR Mode Option**	The operation of dialled numbers beginning with a digit 1 can changed by Program 26-01-04. Set to UK operation - numbers beginning with digit 1 will use Program 26-08-01 for manual override operation Set to Not UK operation -numbers beginning with digit 1 will use Program 26-02-01 i.e not use for manual override operation. Outgoing calls via an LCR enabled trunk will check each dialled digit against the entries of Program 26-02-01. If the digits dialled do not match an entry the call will use the default carrier set by Program 26-05 Carrier table1.	0 = UK Mode 1 = Not UK Mode (default = 0)
26-02-01	**Dial analyse Table**	.	Dial Digits (16 digits maximum) (default = No setting)
26-02-06	**LCR Carrier Table**	Select the Carrier Table tobe used for dial edit. Table 1 is a special table - this table will be automatically usedfor all numbers that begin with “0” and which do not correspond with the entry in Program 26-02-01.	0-25 (default = 0)
26-05-01	**Delete Digits**	Enter the quantity of leading digits that need to be deleted	0-16 (default = 0)
26-05-02	**Access Code**	Enter the Access Code and Option to route to the Indirect Carrier	Max 16 digits (0-9, *, #, P, @) P = Pause @ = Change to DTMF or wait for Connect (default = No setting)
26-05-03	**Authorization table number**	Enter the table number that contains the correct Authorisation code	0-10 (0= No Authorisation code) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
26-05-04	**Cost Centre Code**	Optionally enter a cost centre code.	0 = Not Used 1 = Used (default = 0)
26-06-01	**Authorization Code Table**	To define the optional Authorisation code (or PIN code) required by the Indirect Carrier. The Authorisation code is inserted if set in Program 26-05-03.	Max 10 digits (0-9, *, #) (default = No Setting)
26-07-01	**Cost Centre Codes**	To define the optional cost centre code required by the Indirect Carrier. The cost centre code is set for each extension. The cost centre code is inserted if set in Program 26-05-04.	Max 6 digits (0-9, *, #) (default = No Setting)
26-08-01	**Manual Override Access Code Table**	This code is dialled by the user to bypass the automatic selection.	Max 4 digits (0-9, *, #) (default = No Setting)
26-09-01	**Manual Override Exemption Table**	To define the numbers that must not be sent via an indirect carrier when the user dials a Manual Override Access Code. The exemptions are normally Emergency Services that may not be supported by the indirect carrier.	Max 4 digits (0-9, *, #) Do not include the Access Code. (default = 999,112)

Note 1) Change to DTMF Operation

In Program 26-05-02 the @ symbol will have different operation for Analogue trunks or ISDN trunks.

Analogue Trunks

At the point in the dialled digits where the @ appears the SV8100 will revert to DTMF dialling. This is only required when the analogue trunk is set the Loop Disconnect dialling in Program 14-02-01.

ISDN Trunks

At the point in the dialled digits where the @ appears the SV8100 will stop dialling and wait for the CONNECT from the indirect carrier. The SV8100 will then continue to dial DTMF in the B-channel. The DTMF digits will be received by the indirect carrier for routing.
This is only required for indirect carriers that have a two stage setup process where the Access code is dialled in the D-channel to the direct carrier and all other digits are dialled as DTMF in the B-channel to the indirect carrier.

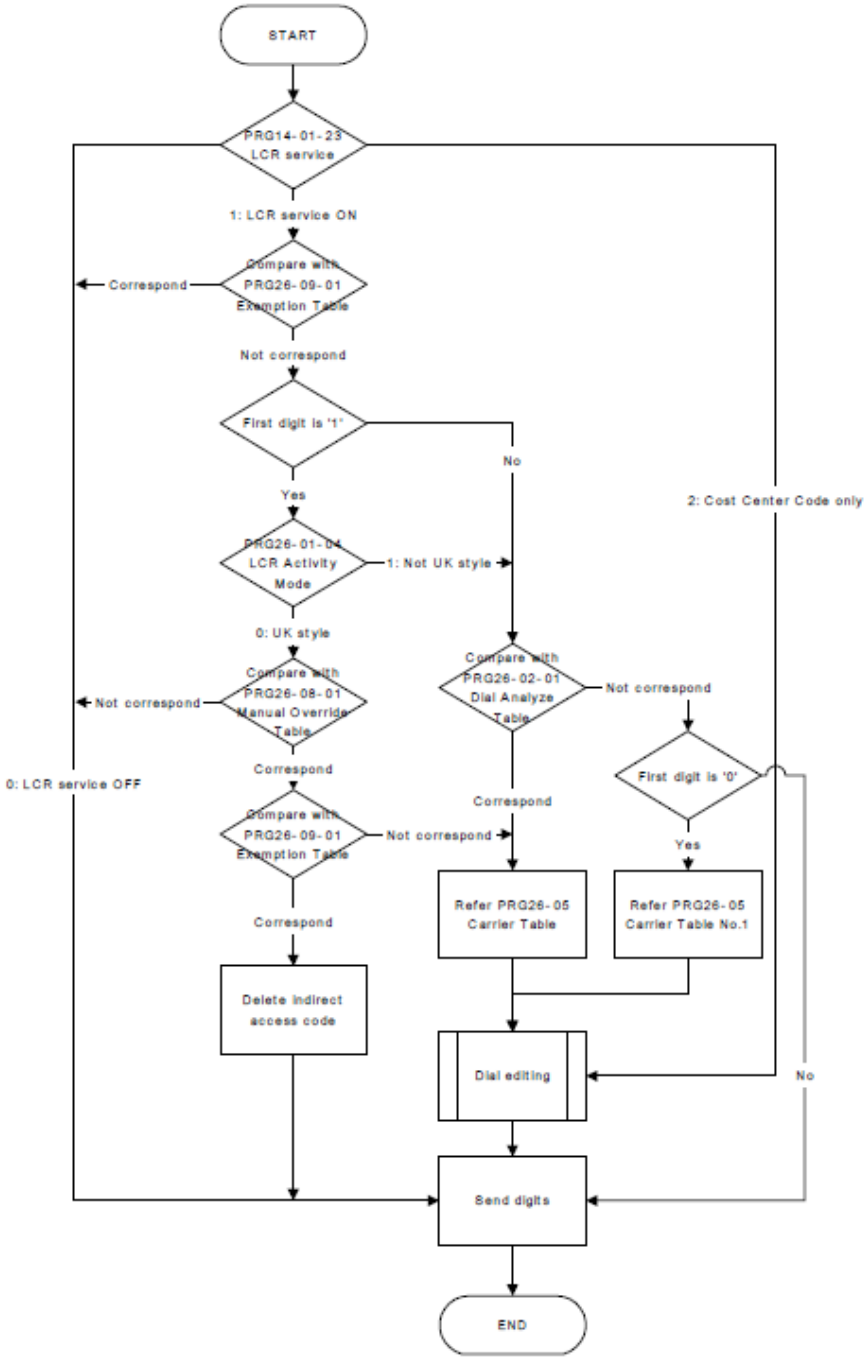
Note 2) Order of LCR Routing Digits

When a user dials a number that is routed by LCR the individual LCR elements will be dialled to line as shown below.

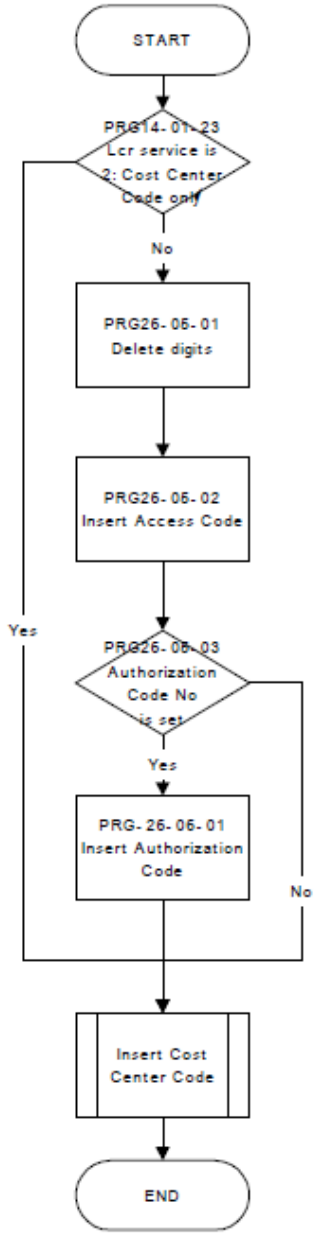
<Access Code> <Authorisation Code> <CCC> <Delete leading digits> <Dialled digits>

Operation

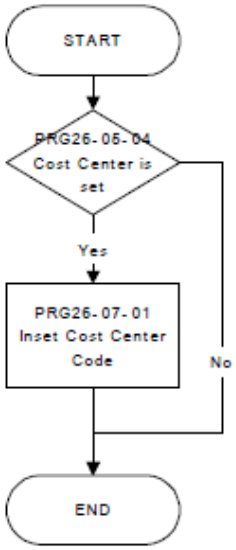
LCR Operation Flow Diagram



LCR Dial LCR Dial Editing



LCR Cost Centre Code



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Line Preference

Description

Line Preference determines how a multiline terminal user places and answers calls. There are two types of Line Preference: Incoming Line Preference and Outgoing Line Preference.

Incoming Line Preference

Incoming Line Preference establishes how a multiline terminal user answers calls. When a call rings the multiline terminal, lifting the handset answers either the ringing call (for Ringing Line Preference) or seizes an idle line (for Idle Line Preference). The idle line can provide either Intercom or trunk dial tone (see Outgoing Line Preference below). Ringing Line Preference helps users whose primary function is to answer calls (such as a receptionist). Idle Line Preference is an aid to users whose primary function is to place calls (such as a telemarketer).

Outgoing Line Preference

Outgoing Line Preference sets how a multiline terminal user places calls. If a multiline terminal has Outgoing Intercom Line Preference, the user hears Intercom dial tone when they lift the handset. If a multiline terminal has Outgoing Trunk Line Preference, the user hears trunk dial tone when they lift the handset. Outgoing Line Preference also determines what happens at extensions with Idle Line Preference. The user hears either trunk (dial 9) or Intercom dial tone.

Auto-Answer of Non-Ringing Lines

With Auto-Answer of Non-Ringing Lines, an extension user can automatically answer trunk calls that ring other extensions (not their own). This would help a user that has to answer calls for co-workers that are away from their desks. When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming. The extension user's own ringing calls, however, always have priority over calls ringing other co-worker's extensions.

Conditions

- If a multiline terminal extension has more than one call ringing its line keys, Ringing Line Preference answers the calls on a first-in first-answered basis.
- DILs do not affect Incoming Line Preference operation.
- Trunks ring extensions according to Ring Group programming.
- If an extension gets trunk dial tone when the user lifts the handset, the system uses the dial 9 routing to select the trunk. This bypasses ARS.

Default Setting

Enabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Direct Inward Line (DIL)

Ring Groups

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-05-01	**Trunk Group – Trunk Group Number**	For Auto-Answer of Non-Ringing Lines, assign trunks to trunk groups. This is part of Trunk Group Routing programming.	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order)
14-06-01	**Trunk Group Routing – Priority Order Number**	Used to set the priority order number 1~4.	0 = Not Specify 1~100 : Trunk Group Number 1001~1100 : 1000 + Route Table Number Default: Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified)

Program Number	Program Name	Description/Comments	Assigned Data
14-07-01	**Trunk Access Map Setup**	For Outgoing Line Preference and Auto-Answer of Non-Ringing Lines, set up the Trunk Access Maps.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~200 = Trunk Ports 1~200 assigned with option 0 (No access).
15-01-02	**Basic Extension Data Setup – Outgoing Trunk Line Preference**	Turn On (1) or Off (0) Outgoing Trunk Line Preference for extensions.	0 = Off 1 = On (default = 0)
15-02-10	**Multiline Telephone Basic Data Setup – Ringing Line Preference for Trunk Calls**	Enable Idle (0) or Ringing (1) Line Preference for trunk calls. Program 22-01-01 sets Intercom (0) or trunk (1) call priority.	0 = Idle 1 = Ringing (default = 1)
15-06-01	**Trunk Access Map for Extensions**	For Outgoing Line Preference and Auto-Answer of Non-Ringing Lines, assign trunk Access Maps to extensions.	Trunk Access Maps: 1~200 (default = 1)
20-10-07	**Class of Service Options (Answer Service) – Automatic Off-Hook Answer**	Turns Off (0) or On (1) an extension to use Universal Auto Answer (no service code required).	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
22-01-01	**System Options for Incoming Calls – Incoming Call Priority**	Use this option to determine if Intercom calls or trunk calls have answer priority when both are ringing simultaneously.	0 = Intercom call priority 1 = Trunk call priority (default = 1)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to ring groups. Auto-Answer for Non-Ringing Lines only works for trunks that do not ring an extension.	Maximum eight digits Default: Extensions 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	Assign trunks to ring groups. Auto-Answer for Non-Ringing Lines only works for trunks that do not ring an extension.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)
23-03-01	**Universal Answer/Auto Answer**	Use this program to let an extension user automatically answer trunk calls that ring other extensions. When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming (defined in Program 14-06).	Maximum eight digits Day/Night Mode 1~8 Route Table Number 0~100 (default = 0)

Operation

Ringing Trunk or intercom (ICM) call:

Lift the handset or press **Speaker**.

. *The setting assigned for Program 15-02-10 and Program 22-01-01 determines which call is answered first.*

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Long Conversation Cutoff

Description

For incoming and outgoing central office calls, each trunk can be programmed to disconnect after a defined time. The timer begins when the trunk is seized and disconnects the call after the time expires.

When used with the Warning Tone for Long Conversation feature, the system can provide a warning tone on outgoing trunks calls before the call is disconnected.

Conditions

- Long Conversation Cutoff can disconnect incoming and outgoing CO calls after a set time.
- Long conversation cutoff is controlled separately for DISA and Tie Lines.
- Using the Warning Tone for Long Conversation feature allows users on outgoing calls to hear a warning tone prior to the call disconnecting.

Default Setting

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward System Access (DISA)

Multiple Trunk Types

Warning Tone for Long Conversation

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-14	**Basic Trunk Data Setup – Long Conversation Cutoff**	Enable (1) or disable (0) a trunk ability to disconnect incoming and outgoing central office calls automatically.	0 = Disable 1 = Enable (default = 0)
14-01-15	**Basic Trunk Data Setup – Long Conversation Alarm Before Cut Off**	Enable (1) or disable (0) the Long Conversation Alarm for each trunk.	0 = Disable 1 = Enable (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-02	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Incoming)**	Turns Off (0) or On (1) an extension ability to use Long Conversation Cutoff for incoming calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-03	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Outgoing)**	Turns Off (0) or On (1) an extension ability to use Long Conversation Cutoff for outgoing calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-21-03	**System Options for Long Conversation – Long Conversation Cutoff for Incoming Call**	Enter the time the system waits before disconnecting incoming trunks (0~64800 seconds).	0~64800 (seconds) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
20-21-04	**System Options for Long Conversation – Long Conversation Cutoff for Outgoing Call**	Enter the time the system waits before disconnecting outgoing trunks (0~64800 seconds).	0~64800 (seconds) (default = 0)

Operation

This feature is automatic once it is programmed.

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Loop Keys

Description

Loop keys are uniquely programmed function keys that simplify placing and answering trunk calls. There are three types of loop keys: Incoming Only, Outgoing Only and Both Ways.

● **Incoming Only Loop Keys**
Incoming Only loop keys are for answering trunk calls. An extension can have an incoming loop key for a specific trunk group (fixed) or a “catch all” loop key for any trunk group (switched). Fixed loop keys allow an extension user to tell the type of call by the ringing key. Switched loop keys are ideal for an extension with a large number of feature keys. In addition, switched loop keys are a destination for any trunk not on a line key or fixed loop key. Incoming Only loop keys also receive Transferred trunk calls.

● **Outgoing Only Loop Keys**
Outgoing Only loop keys are for placing trunk calls. An extension can have outgoing loop keys for a specific trunk group or for ARS access. When a user presses the loop key, they get dial tone from the first available trunk in the group (or from ARS if programmed). Outgoing Only loop keys help ensure that an extension will always have a key available for placing calls.

● **Both Ways Loop Keys**
Both Ways loop keys combine the functions of both Incoming Only and Outgoing Only loop keys. Both Ways loop keys work well for extension users that handle a moderate amount of calls and don’t separate keys for incoming and outgoing calls. Both Ways loop keys also receive Transferred trunk calls.

An extension can have many loop keys - of any type. You can program an operator, for example, with four loop keys for incoming calls and four for outgoing calls.

Once a loop key call is set up, the user can handle it like any other trunk call. For example, the user can place the call on Hold, Transfer it to a co-worker or send it to a Park Orbit.

An incoming call will ring the first available loop key, beginning with the lowest numbered key. If keys 1-3 are loop keys, for example, the first incoming call rings key 1. If key 1 is busy, the next call rings key 2. If keys 1 and 2 are busy, the next call rings key 3. If all three keys are busy, additional incoming calls queue for the first available key. The terminal display will show “WAITING - LOOP KEY” if the user presses a loop key when there are additional calls waiting.

Conditions

None

Default Setting

Disabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Automatic Route Selection (ARS) / Central Office Calls, Answering / Central Office Calls, Placing

Program incoming and outgoing access and routing options.

Off Hook Signaling

If enabled, a user hears Call Waiting beeps if additional calls are waiting behind a loop key.

Programmable Function Keys

If you have a line and loop key for the same trunk, the line key has precedence. An incoming call rings the line key, not the loop key. When you press the loop key for an outgoing call, the line key lights.

Ring Groups

Trunks ring terminals according to their Ring Group assignments (Programs 22-04 and 22-05).

Direct Inward Dialing (DID) / Direct Inward Line (DIL) / Direct Inward System Access (DISA) / Tie Lines

Transferred DID, DIL, DISA and tie line calls do not require ring group programming.

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-05-01	**Trunk Group – Trunk Group Number**	Assign trunks to trunk groups. In general, loop keys access trunks within specific trunk groups.	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order)
14-07-01	**Trunk Access Map Setup**	Set up the Trunk Access Maps. For example, if an extension's loop key is for incoming and outgoing, make sure the Trunk Access Map allows incoming and outgoing access. Also see Program 15-06 below.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Map 2~200 = Trunk Ports 1~200 assigned with option 0 (No access).
15-06-01	**Trunk Access Map for Extensions**	Assign Trunk Access Maps to extensions. Also see Program 14-07 above.	Trunk Access Maps: 1~200 (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Program function keys as trunk group/loop keys (*02 or *05). For additional data, enter 0 (incoming only), 1 (outgoing only) or 2 (both ways). Use Programs 15-13-01 or 15-13-02 to define the trunk groups used.	Line Key 1~48 0~99 (Normal Function Code 851 by default) $^{Q}00$ ~ $^{Q}99$ (Appearance Function Code) (Service Code 852 by default)
15-13-01	**Loop Keys - Outgoing Option**	Assign trunk groups for outgoing loop keys (0=ARS, Trunk Groups 1-100). Selecting “0” for ARS should only be used when ARS is enabled in Program 26-01-01 or it could cause the loop key to lock up.	0-100 (0 = Assigns the Loop Key for ARS, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)
15-13-02	**Loop Keys - Incoming Option**	Assign trunk groups for incoming loop keys	0-100 (0 = Assigns the Loop Key to all trunk groups) 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)
20-07-10	**Class of Service Options (Administrator Level) – Programmable Function Key Programming (Appearance Level)**	If an extension should be able to use Programmable Functions Keys to program a loop key, enable this option in the user’s Class of Service (1-15).	0 = Off 1 = On (default = 1 for COS 01~15)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to Ring Groups. An incoming loop key will ring only for those trunks programmed to ring. Also see Program 22-05.	Maximum eight digits Default: Extensions 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	Assign trunks to Ring Groups. An incoming loop key will ring only for those trunks programmed to ring. Also see Program 22-04 above.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)

Operation

To place a call on a loop key:

1. Press outgoing or both ways loop key.
   - *You hear dial tone and the key lights green.*
2. Dial number.

To answer a call on a loop key:

Listen for ringing a look for a flashing loop key.

1. Press loop key.
   - *The key lights green and you connect to the call.*
   - *If there are additional calls waiting to be answered, your display shows:*
   - *[WAITING - LOOP KEY]*

To program a loop key:

1. Press the SPK key.
2. Dial 852.
3. Press the key you want to program as a loop key.
4. Dial *05.
5. Dial the loop key type:
   - 0 = Incoming only
   - 1 = Outgoing only
   - 2 = Both ways (incoming and outgoing)
6. Dial the loop key routing option for incoming, outgoing, or incoming and outgoing calls:
   - ● 000 = Trunk Group Routing or ARS (if installed)
   - ● 001-200 = Trunk Groups
   - *If you selected option 2 in step 5 above, enter the incoming Trunk Group followed by the outgoing Trunk Group.*
7. Press SPK to hang up.

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Maintenance

Description

The SV8100 provides several features to help maintain the SV8100 database, for backup, and system analysis.

- System Backup/Restore Files
- PCPro / WebPro / UserPro
- Remote Maintenance
- Alarm Reports
- System Log/DIM
- Self Test
- Traffic Reports
- Blade Software Block

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System Backup/Recovery

SV8100 programming allows up to 5 backup/restore points to be saved. These files are saved in the flash memory on the CD-CP00. This data is used for recovering data if required.

Database Maintenance Using PCPro/WebPro

In addition to the TelPro (keyset) programming, the SV8100 provides the ability to use a PC to access SV8100 programming. The Windows-based PCPro and the HTML-based WebPro allows you to:

❍ ***Edit the terminal programming options from a remote location.***

The PCPro application requires changes to be uploaded to the SV8100 before they take affect. The WebPro application applies the changes as soon as the APPLY or OK icon is clicked.

❍ ***Access SV8100 maintenance functions (like reports and tests) as well as:***

- Slot Control (possible with terminal programming or WebPro access) Allows the blade slots to be deleted or reset
- Trunk Control (possible with terminal or PCPro programming or WebPro access) Allows the trunks to be blocked so no new additional calls can be made on the blade
- Extension Control (possible with terminal programming or WebPro access) Allows hard or soft reset for each extension
- System Reset (possible with terminal programming or WebPro access) Allows the

SV8100 to be reset

In addition, PCPro allows you to:

- ***Save your programming to your PC's hard disk - then upload it via a LAN (Local Area Network) or USB connection.***
- ***Download the existing programming in the SV8100 via a LAN or USB connection - and save it to your PC's hard disk.***
- ***Set up a default database with the settings you use most often.***

Create a unique database for each SV8100 you have installed. Since you save the site-specific data to your PC's hard disk, you can easily retrieve a customer's programming if something goes wrong.

Programming access may be restricted based on the type of program entry used and if other users are connected to the SV8100 for programming purposes.

- PC Pro: Only one user allowed access to the SV8100 programming at a time.
- WebPro: Up to 4 WebPro or TelPro users can be connected at the same time.
- TelPro: Up to 4 TelPro or WebPro users can be connected at the same time.

Refer to the SV8100 Programming Manual, for details on accessing the SV8100 using TelPro or, with PCPro or WebPro, check the PCPro/WebPro Installation Manual for additional details.

UserPro: End-User Programming with Web Browser

A programming option is available to allow a user to adjust only the user level SV8100 programs. Similar to the WebPro application, a user would connect with an internet browser to the SV8100. Two password levels are supported, based on the user name and password used at the sign-in, which determine the programs which can be accessed.

Mode 1 is the UA (User Programming Administrator) mode. This level allows all of the user-programmable options to be changed. The password access for this level is set up in **Program 90-02-01 : Setting the Programming Password**.

Mode 2 is the UB (User Programming) mode. This level allows a user to change only the SV8100 data pertaining to their extension. The password access for this level is set up in **Program 90-28-01: User Programming Password Setup** and is defined for each extension user required.

Remote Maintenance

This feature requires the installation of a PZ-ME50 on the CD-CP00.

The Remote Maintenance feature allows an administrator to update a remote SV8100 using either software downloaded from a connected server or from a PC connected via PCPro.
This can either be performed manually or by a SV8100 timer.
When updating the software for remote SV8100s, the main SV8100 software must first be updated.

The remote SV8100s can then be updated using the LAN connection to the main SV8100 or it can be updated using the PCPro application.

Extension Data Swap Function Added

The SV8100 provides the ability to swap an extension's programming to another extension number. The following extension-based programs will be swapped:

Refer to Secure Set Relocation feature below for additional options.

Program No.	Program Name
11-02	Extension Numbering
15-01	Extension Basic Data Setup (include Virtual Extension)
15-02	Multi-Line Terminal Basic Data Setup
15-03	Single Line Terminal Basic Data Setup
15-06	Trunk Access Map for Extension
15-07	Programmable Function Key
15-08	Incoming Virtual Extension Ring Tone Setup
15-09	Virtual Extension Ring Assignment
15-10	Incoming Virtual Extension Ring Tone Order Setup
15-11	Virtual Extension Delayed Ring Assignment
15-12	Conversation Recording Destination for Extension
20-06	Class of Service for Extension
21-02	Trunk Group Routing for Extensions
21-04	Toll Restriction Class for Extensions
21-07	Toll Restriction Override Password Setup
21-11	Hotline Assignment
23-02	Call Pickup Group
23-03	Ringing Line Preference
23-04	Ringing Line Preference for Virtual Extensions
24-03	Park Group Assignment
31-02	Internal Paging Group Assignment

Keep the following items in mind when using the Extension Data Swap function:

- *Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).*
- *The extensions to be swapped must be idle while the swap is performed, or an "Invalid" error message will be received.*
- *Data for virtual extension's cannot be swapped.*
- *When a swap is performed, the following actions are executed for the swapped extensions.*
  - *- Camp On Clear (Program 11-12-05)*
  - *- Common Cancel (Program 11-12-37)*
  - *- Last Number Redial Clear (Program 11-12-17)*
  - *- Saved Number Clear (Program 11-12-18)*
  - *- Incoming History data is deleted.*

- *Using Program 92-04-01 will also swap the order in which these extensions are displayed inall extension-related programs. This means that the SV8100 will no longer display all the extension numbers from low to high. For example, if port 2 and 6 were swapped, when viewing the extensions in 15-02-01, the extensions will display in the following order: 301, 306, 303, 304, 305, 302.*
- *When swapping IP extensions, the terminals will automatically reset once swapped.*

Extension Data Swap by Service Code / Secure Set Relocation

The SV8100 provides the ability to swap an extension's programming to another extension number using **Program 92-04-01 : Extension Data Swap**.

The extension data can be swapped using a service code as well. With this option, the user must enter a 4-digit password (fixed at 4 digits) in order to complete the swap.

The following extension-based programs will be swapped:

Program No.	Program Name
11-02	Extension Numbering
12-05	Night Mode Group Assignment for Extensions
13-03	Abbreviated Dialing Group Assignment for Extensions
15-01	Extension Basic Data Setup (include Virtual Extension)
15-02	Multi-Line Terminal Basic Data Setup
15-03	Single Line Terminal Basic Data Setup
15-06	Trunk Access Map for Extension
15-07	Programmable Function Key
15-08	Incoming Virtual Extension Ring Tone Setup
15-09	Virtual Extension Ring Assignment
15-10	Incoming Virtual Extension Ring Tone Order Setup
15-11	Virtual Extension Delayed Ring Assignment
15-12	Conversation Recording Destination for Extension
15-13	Loop Keys
15-14	Programming One-Touch Keys
20-06	Class of Service for Extension
21-02	Trunk Group Routing for Extensions
21-04	Toll Restriction Class for Extensions
21-07	Toll Restriction Override Password Setup
21-10	Dial Block Restriction Class Per Extensions
21-11	Hotline Assignment
21-13	ISDN Calling Party Number Setup for Extensions
21-15	Individual Trunk Group Routing for Extensions
21-18	IP Trunk Calling Party Number Setup for Extensions
21-19	IP Trunk (SIP) Calling Party Number Setup for Extensions
21-20	SIP Trunk Call Discernment Setup for Extensions
22-04	Incoming Extension Ring Group Assignment
22-06	Normal Incoming Ring Mode
23-02	Call Pickup Group
23-03	Ringing Line Preference

23-04	Ringing Line Preference for Virtual Extensions
24-03	Park Group Assignment
24-06	Fixed Call Forwarding
24-07	Fixed Call Forwarding Off-Premise
26-04	ARS Class of Service
26-07	Cost Centre Code
31-02	Internal Paging Group Assignment
41-02	ACD Group and Agent Assignments
41-17	ACD Login Mode Setup
42-02	Hotel/Motel Terminal Setup
92-05	Password for Extension Data Swap

Secure Set Relocation Conditions

- *Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).*
- *The extensions to be swapped must be idle while the swap is performed, or an "Invalid" error message will be received.*
- *Data for virtual extension's cannot be swapped.*
- *When a swap is performed, the following actions are executed for the swapped extensions.*
  - *- Camp On Clear (Program 11-12-05)*
  - *- Common Cancel (Program 11-12-37)*
  - *- Last Number Redial Clear (Program 11-12-17)*
  - *- Saved Number Clear (Program 11-12-18)*
  - *- Incoming History data is deleted.*
- *Using this option will also swap the order in which these extensions are displayed in all extension related programs. This means that the SV8100 will no longer display all the extension numbers from low to high. For example, if port 2 and 6 were swapped, when viewing the extensions in 15-02-01, the extensions will display in the following order: 301, 306, 303, 304, 305, 302.*
- *When swapping IP extensions, the terminals will automatically reset once swapped.*

Alarm Reports

Refer to the Alarm Reports (page 1-21) for information on this feature.

Conditions

There are two versions of SV8100 software files - one when no PZ-ME50 is installed on the CD-CP00 and one with the PZ-ME50 installed. The SV8100 will prevent the incorrect version of software from being loaded into the SV8100 (i.e., with no PZ-ME50 installed, you will not be able to load the PZ-ME50 version of software).

Default Setting

Enabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

NetLink

The alarm reports will provide the system ID number (SID) and the alarms reports can be shared between networked system when a secondary link is used to another system. However, if this link is broken, the ability to refer to the primary system's alarm report is lost.

Guide to Feature Programming

System Maintenance

Program Number	Program Name	Description/Comments	Assigned Data
10-12-01	**CD-CP00 Network Setup – IP Address**	Assign the IP Address of the CD-CP00.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.254.255.254 192.0.0.1 ~ 223.255.255.254 (default = 192.168.0.10)

Program Number	Program Name	Description/Comments	Assigned Data
11-11-13	**Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for Multiline Terminal**	Used to customize the service code used to select the display language for a multiline terminal.	MLT (default = 778)
11-15-01	**Service Code Setup, Administrative (for Special Access) – Remote Maintenance**	Set the service code used in the dial-up number when using the USB port for PCPro or Web-Pro	(default = 830)
11-15-03	**Service Code Setup, Administrative (for Special Access) – Backup Data Save**	This service code is used for back up the programmed data on the SRAM and Call History to the Flash ROM. While saving the database, it may cause system lock up.	MLT **#** * **#** 9
20-01-12	**System Options - TelPro/WebPro Automatic Logout Timer**	For each extension, determine how long the SV8100 waits (1-86400 seconds) with no communication between the user and the SV8100 before logging the user out of programming. This option affect both terminal programming and WebPro	1-86400sec (default = 900(15 min.))
90-02-01	**Setting the Programming Password**	Set the user name and password level. User levels range from 1-8.	Max.10 characters
90-03-01	**Save Data**	Save the programmed data on the SRAM and Flash ROM to a USB thumb drive installed on the CD-CP00.	Dial 1 + Transfer key
90-04-01	**Load Data**	Load the saved SV8100 data from a USB thumb drive installed on the CCPU to the SRAMand Flash ROM in the SV8100.	Dial 1 + Transfer key
90-05-01	**Slot Control**	Reset (Menu 2), delete/uninstall (Menu 1), circuit boards (slots 1-24) as needed through either terminal programming or WebPro access.	System ID: 00-50 Slot No.0-24 Menu1: Delete Menu2: Reset

Program Number	Program Name	Description/Comments	Assigned Data
90-06-01	**Trunk Control**	Busy Out (0) lets you block a blade from placing outgoing calls. Once busied out, none of the ports on the blade can be used for new calls. Existing calls, however, are not disconnected. Release the Busy Out state by entering “1” for the trunk. This option is available through terminal programming, PCPro or WebPro access.	Trunk Port No.1-200 Menu0: Set busy Out Menu1: Reset Busy Out (default = 1)
90-07-01	**Extension Control**	Perform a hardware (1) or software (2) reset on a particular extension as needed through either terminal programming or WebPro access.	Menu1: Hardware Reset Menu2: Software Reset Extension Number: Up to 8 digits
90-08-01	**System Reset**	Perform a SV8100 reset as needed through either terminal programming or WebPro access.	Dial 1 + Transfer key
90-26	**Program Access Level Setup**	Define the password access level (1-4) required to change a SV8100 program.	Program No.1001- 2 = IN level 3 = SA level 4 = SB level

Extension Data Swap/Secure Set Relocation

Program Number	Program Name	Description/Comments	Assigned Data
11-15-12	**Service Code Setup, Administrative (for Special Access) - Extension Data Swap**	Define the service code (up to 8 digits) to be used with the Extension Data Swap feature. By default, there is no entry.	Up to 8 digits (default = No setting)
20-13-42	**Class of Service Options (Supplementary Service) - Extension Data Swap**	Determine if the Extension Data Swap feature is allowed for a user’s COS with the defined service code and password. This program can be used to enable (1) or disable (0) this option for an extension user.	0 = Off 1 = On (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
92-04-01	**Extension Data Swap**	Enter the two extension numbers which should be swapped. After pressing Transfer, the SV8100 data for the programs listed in the table above will be swapped. Any user-defined programming stored in the SRAM will not be swapped (for example, Call Forward set up, Selectable Display Messaging, etc.).	Up to 8 digits (default = No setting)
92-05-01	**Password for Extension Data Swap**	Extension Data Swap feature using a service code (Entries: 0 - 9, *, # [	Fixed at 4 digits])

Operation

To check your extension's data (Keyset Only):

1. Press **Help key**.
2. Press **your extension number**.

Your display shows your terminal's extension number, port number and extension Department Group.You can also check any other extension numbers information by pressing Help + the extension number.

3. Press Exit key to return the normal time/date display.

To perform an extension swap using Secure Set Relocation:

1. From one of the terminals which is to be swapped, dial the Extension Data Swap service code (defined in Program 11-15-12).

   If the password is not set in Program 92-05, a warning tone is heard.If VRS is installed in the SV8100, the message "The number you have dialed is not in service" is heard.

2. Dial the 4 digit password.

   The password is displayed as * (asterisk). If an incorrect password is entered, a warning tone is heard.

3. Dial the extension number which is to be swapped.

   If an incorrect number is dialed, a warning tone is heard.

4. A confirmation tone is heard if the swap is completed.
   If it is not possible to swap the extension data, a warning tone is heard.

Meet Me Conference

Description

With Meet Me Conference, an extension user can set up a Conference with their current call and up to 32 other internal or external parties. Each party joins the Conference by dialing a Meet Me Conference code. Meet Me Conference lets extension users have a telephone meeting – without leaving the office.

The CD-CP00 provides two blocks of 32 conference circuits, allowing each block to have any number of internal or external parties conferenced up to the block limit of 32.

Conditions

None

Default Setting

Enabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Conference

Meet Me Paging

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-07-01	Conversation Record Circuits	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)
15-07-01	Programmable Function Keys	Assign function keys for Conference (code 07).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	Class of Service for Extensions	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-10-06	Class of Service Options (Answer Service) – Meet-Me Conference and Paging	Turns Off (0) or On (1) an extension to use Meet-Me Conference and Paging.	0 = Off 1 = On (default = 1 for COS 1~15)
31-01-04	System Options for Internal/ External Paging – Privacy Release Time	Set the Privacy Release Time. After the user initiates Meet Me Conference, the system waits this interval for the Paged party to join the conversation.	0~64800 (seconds) (default = 90 seconds)

. *For additional programming for Paging, refer to the Paging External and Paging Internal features.*

Operation

Meet Me External Conference

To make a Meet Me External Conference:

Multiline Terminal

1. While on a call, press **Conf**.

2. Dial **751** and the Combined Paging Zone code **1~8** (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press **Conf** twice.
5. Repeat steps 1~4 for each co-worker you want to add.

Single Line Telephone

1. While on a call, hookflash and dial **826**.
2. Dial **803** and the External Paging zone code (**1~8** or **0** for All Call).

   - OR -

   Dial **751** and the Combined Paging Zone code **1~8** (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press hookflash twice.
5. Repeat steps 1~4 for each co-worker you want to add.

To join a Meet Me External Conference:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At a single line telephone, lift the handset.
2. Dial **865**.
3. Dial the announced External Paging Zone code (**0~8**).

   . *You connect to the other parties.*

Meet Me Internal Conference

To make a Meet Me Internal Conference:

Multiline Terminal

1. While on a call, press **Conf**.
2. Dial **751** and the Combined Paging Zone code **1~8** (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press **Conf** twice.

5. Repeat steps 1~4 for each co-worker you want to add.

Single Line Telephone

1. While on a call, hookflash and dial **826**.
2. Dial **751** and the Combined Paging Zone code **1~8** (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).
3. Announce the zone.
4. When a co-worker answers your page, press hookflash twice.
5. Repeat steps 1~4 for each co-worker you want to add.

To join a Meet Me Internal Conference:

1. At the multiline terminal, press **Speaker** (or lift the handset).

   - OR -

   At the single line telephone, lift the handset.

2. Dial **863** (if your extension is in the zone called).

   - OR -

   Dial **864** and the zone number (if your extension is not in the zone called).

   - OR -

   Press the Meet Me Conference/Paging Pickup key (PRG 15-07 or 23) if your extension is in the zone called.

Meet Me Paging

Description

Meet Me Paging allows an extension user to Page a co-worker and privately meet with them on a Page zone. The Paging zone is busy to other users while the meeting takes place. While the co-workers meet on the zone, no one else can hear the conversation, join in or make an announcement using that zone. Meet Me Paging is a good way to talk to a co-worker when their location is unknown. If the co-worker can hear the Page, they can join in the conversation.

Conditions

- With Meet Me Paging Transfer, a user can page a co-worker and have the call automatically transfer when the co-worker answers the page.
- An extension access to internal and external page zones affects the Meet Me Paging feature.
- Internal and External Paging keys simplify Meet Me Paging operation.

Default Setting

Enabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

External zone paging requires a PGD(2)-U10 ADP be installed in the system.

Related Features

Meet Me Conference

Meet Me Paging Transfer

Paging, External

Paging, Internal

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-21	**Service Code Setup (for Service Access) – Meet-Me Answer to Specified Internal Paging Group**	Use to customize the Service Codes used for meet-me answer to specified internal paging group service access.	MLT, SLT (default = 864)
11-12-22	**Service Code Setup (for Service Access) – Meet-Me Answer to External Paging**	Use to customize the Service Codes used for meet-me answer to external paging service access.	MLT, SLT (default = 865)
11-12-23	**Service Code Setup (for Service Access) – Meet-Me Answer in Same Paging Group**	Use to customize the Service Codes used for meet-me answer in same paging group service access.	MLT, SLT (default = 863)
15-07-01	**Programmable Function Keys**	Assign function keys for External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) or Meet Me Conference/ Paging Pickup (code 23).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-10-06	**Class of Service Options (Answer Service) – Meet-Me Conference and Paging**	Turns Off (0) or On (1) an extension to use Meet-Me Conference and Paging.	0 = Off 1 = On (default = 1 for COS 1~15)
31-02-01	**Internal Paging Group Assignment – Internal Paging Group Number**	Assign extensions to Internal Paging Groups (i.e., Page Zones).	0~64 (0 = No Setting) Default: All Stations = 0

Program Number	Program Name	Description/Comments	Assigned Data
31-02-02	**Internal Paging Group Assignment – Internal All Call Paging Receiving**	Allow or deny All Call Internal Paging for each extension. If allowed, extension can place and receive All Call Internal Paging announcements. If prevented, extensions can only make (not receive) All Call Internal Paging announcements. If combined, Paging zones should be restricted as well, change the internal page zone group in Program 31-07-01 to 0.	0 = Off 1 = On (default = 0)

. *For additional programming information on Paging, refer to the Paging, External and Paging, Internal features.*

Operation

Meet Me External Page

To make a Meet Me External Page:

1. At multiline terminal, press **Speaker** or pick up the handset.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **803** and the External Paging Zone code (1~8 or 0 for All Call).

   - OR -

   Dial **751** and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).

3. Announce the zone.

   - OR -

1. At the multiline terminal, press the **External Paging Zone** key (Program 15-07 or SC 851: 19 + zone).

2. Announce the zone.

To join a Meet Me External Page:

1. At the multiline terminal, press **Speaker** or pick up the handset.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **865**.

3. Dial the announced External Paging Zone (0~8).

   . *You connect to the other party.*

Meet Me Internal Page

To make a Meet Me Internal Page:

1. At the multiline terminal, press **Speaker** or pick up the handset.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **801** and dial the Internal Paging Zone code (0~9, 00~32 or 00~64).

   - OR -

   Dial **751** and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).

3. Announce the zone.

   - OR -

1. At the multiline terminal, press the **External Paging Zone** key (Program 15-07 or SC 851: 19 + zone).

2. Announce the zone.

To join a Meet Me Internal Page:

1. At the multiline terminal, press **Speaker** or pick up the handset.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **863** (if your extension is in the zone called).

   - OR -

   Dial **864** and the zone number (if your extension is not in the zone called).

   - OR -

   Press the Meet Me Conference/Paging Pickup key (Program 15-07 or SC 851: 23) if your extension is in the zone called.

Meet Me Paging Transfer

Description

If a user wants to Transfer a call to a co-worker but they do not know where the co-worker is, they can use Meet Me Paging Transfer. With Meet Me Paging Transfer, the user can Page the co-worker and have the call automatically Transfer when the co-worker answers the Page. Since Meet Me Paging Transfer works with both Internal and External Paging, a call can be quickly extended to a co-worker anywhere in the facility.

Conditions

- An extension user can set up a conference with their current call and up to 31 other inside parties.
- An extension user can Page a co-worker and meet with them on a page zone.
- With External Paging, an extension user can broadcast an announcement over paging equipment connected to external paging zones.
- Internal Paging lets extension users broadcast announcements to other multiline terminals.
- Function keys simplify Meet Me Paging Transfer operation.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

External zone paging requires a PGD(2)-U10 ADP be installed in the system.

Related Features

Meet Me Conference

Meet Me Paging

Paging, External

Paging, Internal

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-21-04	**CD-CP00 Hardware Setup – External Source I/O Selection on CD-CP00**	Define what the I/O ports on the CD-CP00 are used for.	0 = External MOH (CN8)/ External Speaker(CN9) 1 = BGM source (CN8)/ External Speaker(CN9) 2 = External MOH (CN8)/BGM source (CN9) . *Relations between CN number and Relay number are as follows:* CN8 = Relay2 CN9 = Relay1 (default = 0)
11-12-21	**Service Code Setup (for Service Access) – Meet-Me Answer to Specified Internal Paging Group**	Use to customize the Service Codes used for meet-me answer to specified internal paging group service access.	MLT, SLT (default = 864)
11-12-22	**Service Code Setup (for Service Access) – Meet-Me Answer to External Paging**	Use to customize the Service Codes used for meet-me answer to external paging service access.	MLT, SLT (default = 865)
11-12-23	**Service Code Setup (for Service Access) – Meet-Me Answer in Same Paging Group**	Use to customize the Service Codes used for meet-me answer in same paging group service access.	MLT, SLT (default = 863)

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign function keys for External Zone Paging (code 19 + zone), External All Call Paging (code 20), Internal Zone Paging (code 21 + zone) or Meet Me Conference/ Paging Pickup (code 23).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-10-06	**Class of Service Options (Answer Service) – Meet-Me Conference and Paging**	Turns Off (0) or On (1) an extension to use Meet-Me Conference and Paging.	0 = Off 1 = On (default = 1 for COS 1~15)
31-02-01	**Internal Paging Group Assignment – Internal Paging Group Number**	Assign extensions to Internal Paging Groups (i.e., Page Zones).	0~64 (0 = No Setting) Default: All Stations = 0
31-02-02	**Internal Paging Group Assignment – Internal All Call Paging Receiving**	Allow or prevent All Call Internal Paging for each extension. If allowed, extension can place and receive All Call Internal Paging announcements. If prevented, extensions can only make (not receive) All Call Internal Paging announcements. If combined, Paging zones should be restricted as well, change the internal page zone group in Program 31-07-01 to 0.	0 = Off 1 = On (default = 0)
31-03-01	**Internal Paging Group Settings – Internal Paging Group Name**	Assign name to Internal Paging Groups (i.e., Page Zones). The system shows the name you program on the telephone display.	Up to 12 characters Refer to table in Programming Manual.

. *For additional programming information on Paging, refer to the Paging, External and Paging, Internal features.*

Operation

Meet Me External Paging Transfer

To make a Meet Me External Paging Transfer:

1. At the multiline terminal, while on a call, press **Hold**.

   - OR -

   At the single line telephone, while on a call, hookflash.

2. Press the **External Paging Zone** key (Program 15-07 or SC 851: 19 + zone or 20 for all external zones).

   - OR -

   Dial **803** and the External Paging Zone code (1~8 or 0 for All Call).

   - OR -

   Dial **751** and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).

3. Announce the call.

4. From a multiline terminal, when the paged party answers, press **Transfer** or the **Transfer** softkey.

   - OR -

   From a single line telephone, when the paged party answers, hang up.

   . *The party is transferred.*

To join a Meet Me External Paging Transfer:

1. At the multiline terminal, press **Speaker** or pick up handset.

   - OR -

   At single line telephone, lift the handset.

2. Dial **865**.

3. Dial the announced External Paging Zone (0~8).

   . *The Paging party is connected.*

4. Stay on the line.

   From a multiline terminal, press **Transfer** or the **Transfer** softkey.

   - OR -

   From a single line telephone, hang up.

   . *The party is transferred.*

Meet Me Internal Paging Transfer

To make a Meet Me Internal Paging Transfer:

1. At multiline terminal, while on a call, press **Hold**.

   - OR -

   At the single line telephone, while on a call, hookflash.

2. Press **Internal Paging Zone** key (Program 15-07 or SC 851: 21 + zone or 22 for all internal zones).

   - OR -

   Dial **801** and the Internal Paging Zone code (0~9 or 00~64).

   - OR -

   Dial **751** and the Combined Paging Zone code 1~8 (for Internal/External Zones 1~8) or 0 (for Internal/External All Call).

3. Announce the call.

4. From a multiline terminal, when the paged party answers, press **Transfer** or the **Transfer** softkey.

   - OR -

   From a single line telephone, when the paged party answers, hang up.

   . *The party is transferred.*

To join a Meet Me Internal Paging Transfer:

1. At the multiline terminal, press **Speaker** or pick up handset.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **863** (if your extension is in the zone called).

   - OR -

   Dial **864** and the zone number (if your extension is not in the zone called).

   - OR -

   Press the Meet Me Conference/Paging Pickup key (Program 15-07 or SC 851: 23) if your extension is in the zone called.

3. Stay on the line.

   From a multiline terminal, when the paged party answers, press **Transfer** or the **Transfer** softkey.

   - OR -

   From a single line telephone, when the paged party answers, hang up.

   . *The party is transferred.*

Memo Dial

Description

While on an outside call, Memo Dial lets a multiline terminal user store an important number for easy redialing later on. The telephone can be like a notepad. For example, a user could dial Directory Assistance and ask for a client's telephone number. When Directory Assistance plays back the requested number, the caller can use Memo Dial to jot the number down in the telephone memory. They can quickly call the Memo Dial number after hanging up.

When a user enters a Memo Dial number, the dialed digits do not output over the trunk. Dialing Memo Dial digits does not interfere with a call in progress.

Conditions

- When Memo Dial calls out, it outdials the entire stored number. Memo Dial does not automatically strip out trunk or PBX access codes if entered as part of the stored number.
- Only one number can be stored at a time.
- If a number is already stored in Memo Dial and you are on an internal or external call and the Dial Memo Key is pressed, the number is erased.
- A user's outgoing dialing options affect how a Memo Dial call is placed.
- Memo Dial is not available at single line telephones.

Default Setting

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Central Office Calls, Placing

Last Number Redial

Save Number Dialed

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign a function key for Memo Dial (code 31).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Operation

To store a number while you are on a call:

1. While on a call, press Memo Dial key (Program 15-07 or SC 851: 31).
2. Dial number you want to store.
3. Press Memo Dial key again and continue with conversation.

To call a stored Memo Dial number:

1. Do not lift the handset.
2. Press the Memo Dial key (Program 15-07 or SC 851: 31).
3. Press **Speaker**.

   . *The stored number dials out only if you store a trunk access code before the number.*

   - OR -

   Press the **line** key.

   . *The stored number dials out.*

To check to see the stored Memo Dial number:

1. Do not lift the handset.
2. Press **Memo Dial** key (Program 15-07 or SC 851: 31).

   . *The stored number displays.*

To cancel (erase) a stored Memo Dial number:

1. Press **Speaker**.
2. Press the **Memo Dial** key (Program 15-07 or SC 851: 31).

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Message Waiting

Description

An extension user can leave a Message Waiting indication at a busy or unanswered extension requesting a return call. The indication is a flashing MW lamp at the called extension and a steadily lit MW lamp on the calling extension. Answering the Message Waiting automatically calls the extension which left the indication. Message Waiting ensures that a user does not have to recall an unanswered extension. It also ensures that a user does not miss calls when their extension is busy or unattended. Additionally, Message Waiting lets extension users:

- ***View and selectively answer messages left at their extension (display multiline terminal only)***
- ***Cancel all messages left at their extension***
- ***Cancel messages they left at other extensions***

An extension user can leave Messages Waiting at any number of extensions. Also, any number of extensions can leave a Message Waiting at the same extension. A periodic VRS announcement may remind users that they have Messages Waiting.

Message Key will Operate as Voice Mail Key

The system enhances a telephone Message key function when connected to a system which has voice mail installed. When an extension receives a voice mail, the Message key can be used to check the number of messages in voice mail, as well as call the voice mail to listen to the messages. If no Voice Mail Programmable Function Key is defined (Program 15-07-01, code 77), the telephone Message Waiting LED flashes to indicate new messages.

This option is not available with a networked voice mail – the voice mail must be local.

Refer to the Voice Mail Integration (Analog) on page 1-955 feature for the feature operation.

LED Color Indication

The software allows you to select whether the Message Wait LED located at the top of the multiline terminal flashes green (0) or red (1) when a Message Wait indication is flashing. By default, this option is set to flash red.

. *If this LED is also used for voice mail indications (no Programmable Function Key programmed for voice mail), and there are both voice mail messages and Message Wait indications, the color set for Message Wait overrides the color used for voice mail indications (red).*

Conditions

- Reminder messages require a DSP daughter board for VRS messages.
- Analog ports from APA or APR adapters do not provide Message Waiting lamping.
- When a user responds to a Message Waiting, the system does not cancel the Message Waiting indication if the called party uses Handsfree Answerback. The system cancels the indication only if the called party lifts the handset or presses Speaker.
- With the Hotel/Motel set up, an employee with a multiline terminal can send a Message Waiting to a room telephone if allowed in system programming.
- A Message Waiting key simplifies this feature operation.
- Telephone-to-telephone Message Waiting works when the voice mail is installed.
- The MW (Message Waiting) LED may be used to indicate voice mail messages if no extension number is assigned to the voice mail key in system programming.
- If the following programs are changed while the phone is online, a reset of the feature is required before the setting takes effect.
    - Program 15-02-35 Message Waiting Lamp Cycle for Calling Extension
    - Program 15-02-36 Message Waiting Lamp Cycle for Called Extension
    - Program 15-02-37 Voice Mail Message Wait Lamp Color
    - Program 15-02-38 Voice Mail Message Wait Lamp Cycle
        - *For example, if a message waiting was set before any of these programs were changed, the lamp remains the same until the message waiting is set again.*
- If both Voice Mail Message and Message Wait indication is set, the color set for Message Wait overrides the color used for Voice Mail Message indication.

Default Setting

Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Handsfree Answerback/Forced Intercom Ringing

Hotel/Motel

Programmable Function Keys

InMail

Voice Response System (VRS)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-10-16	**Service Code Setup (for System Administrator) – Leaving Message Waiting (Requires CPU to be licensed for Hotel/Motel)**	Use to customize the leave message waiting Service Codes (requires CD-CP00 to be licensed for Hotel/Motel).	MLT (default = 726)
11-11-09	**Service Code Setup (for Setup/ Entry Operation) – Answer Message Waiting**	Use to customize the answer message waiting service code.	MLT, SLT (default = 841)
11-11-10	**Service Code Setup (for Setup/ Entry Operation) – Cancel All Messages Waiting**	Used to customize the Cancel All Messages Waiting service code.	MLT, SLT (default = 873)
11-11-11	**Service Code Setup (for Setup/ Entry Operation) – Cancel Message Waiting**	Use to cancel message waiting used for registration and setup.	MLT, SLT (default = 871)
11-16-07	**Single Digit Service Code Setup – Message Waiting**	Customize the message waiting Service Codes used to set message waiting when a busy or ring back signal is heard.	(default not assigned)
15-02-28	**Multiline Telephone Basic Data Setup – Message Waiting Lamp Color**	Determine whether an extension Message Waiting Lamp lights Green (0) or Red (1) when a message is received.	0 = Green 1 = Red (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-02-35	**Multiline Telephone Basic Data Setup – Message Waiting Lamp Cycle for Calling Extension**	Select the cycle method that the Large LED flashes when the extension has set Message Waiting.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 7)
15-02-36	**Multiline Telephone Basic Data Setup – Message Waiting Lamp Cycle for Called Extension**	Select the cycle method that the Large LED flashes when the extension has Message Waiting set to the extension.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 3)
15-02-37	**Multiline Telephone Basic Data Setup – Voice Mail Message Wait Lamp Color**	This option allows you to select the Message Waiting flash pattern for the station that set the Message Waiting reminder.	0 = Green 1 = Red (default = 1)
15-02-38	**Multiline Telephone Basic Data Setup – Voice Mail Message Wait Lamp Cycle**	Select the cycle method that the Large LED flashes when the extension has a VM Message Waiting set to the extension.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 3)
15-07-01	**Programmable Function Keys**	Assign a function key for Message Waiting (code 38).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-07	**Class of Service Options (Supplementary Service) – Message Waiting**	Turns Off (0) or On (1) an extension ability to leave Message Waiting.	0 = Off 1 = On (default = 1 for COS 1~15)
80-01-01 (48)	**Service Tone Setup – Repeat Count**	Set repeat count for tone 16 Lockout.	default = 0 (endless).

Program Number	Program Name	Description/Comments	Assigned Data
80-01-02 (48)	**Service Tone Setup – Basic Tone Number**	Use to customize Service Tones.	(default = 0)

Operation

To leave a Message Waiting:

1. Call busy or unanswered extension.
2. Press the **Message Waiting** key (Program 15-07 or SC 851: 38).
3. Hang up.

. *With multiline terminal telephones, the Message Waiting LED lights.*

To answer a Message Waiting:

. *When you have a message, your Message Waiting LED flashes fast for multiline terminals.*

1. At the multiline terminal, press **Speaker** and dial **841**.

   - OR -

   Press the **Message Waiting** key (Program 15-07 or SC 851: 38).

   - OR -

   At the single line telephone, lift the handset and dial **841**.

   . *If the called extension does not answer, dial 0 or press your **Message Waiting** key to automatically leave them a message.*

   . *Normally, your Message Waiting LED goes out. If it continues to flash, you have new messages in your Voice Mail mailbox or a new General Message. See "To check your messages" below.*

To cancel all your Messages Waiting:

. *This includes messages you have left for other extensions and messages other extension have left for you.*

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **873**.
3. Hang up.

To cancel the Messages Waiting you have left at a specific extension:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **871**.

3. Dial the number of the extension you do not want to have your messages.

4. Hang up.

To check your messages:

1. Press **Help**.

2. Dial **841**.

   . *You can have any combination of the message types in the table below on your telephone.*

If you see. . .	You have. . .
VOICE MESSAGE **n MESSAGE**	New messages in your Voice Mail mailbox.
CHECK MESSAGE **VRS GENERAL MESSAGE**	A General message in Voice Mail that has not been heard.
CHECK MESSAGE **(name)**	Message Waiting requests left at your telephone by your co-workers.

3. Press VOL s or VOL t to scroll through your display.

4. When you find the message you want to answer, press **Speaker**. You either:
   - Go to your Voice Mail mailbox.
   - Listen to the new General Message.
   - Automatically call the extension that left you a Message Waiting.

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Microphone Cutoff

Description

Microphone Cutoff lets a multiline terminal user turn off their telephone handsfree or handset microphone at any time. When activated, Microphone Mute prevents the caller from hearing conversations in the user's work area. The user may turn off the microphone while their telephone is idle, busy on a call or ringing. The microphone stays off until the user turns it back on.

Conditions

- Microphone Cutoff does not operate if the user calls another extension and the called extension responds without lifting the handset or pressing Speaker.
- When using the Handset Transmission Cutoff key during an intercom call with the handset on-hook, you hear three beep tones and the LED is lit solid. This also occurs when on an outside call.
- When using the Handset Transmission Cutoff key during an intercom call with the handset off-hook, you hear three beep tones through the handset and the Handset Transmission Cutoff and MIC keys flash. This also occurs when on an outside call.
- When Handset Transmission Cutoff is activated and the handset is off-hook, pressing Speaker and returning the handset to the cradle turns off the Handset Transmission Cutoff key. Three beep tones are heard over the telephone speaker.

Default Setting

Enabled (using MIC key)

System Availability

Terminals

Any Multiline Terminal

Required Component(s)

None

Related Features

Handsfree Answerback/Forced Intercom Ringing

Handset Mute

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	If an extension needs handset microphone cutoff, program a Handset Transmission Cutoff key (code 40). To program a MIC Cutoff key, use code 02 as the entry. The MIC Cutoff key mutes conversation on a handsfree call, but the Handset Transmission Cutoff key mutes the handset transmission on a non-handsfree call.	For Line Keys: 1~48 0 ~ 99 (Normal Function Code) (default = Service Code 851)* 00* ~ *99 (Appearance Function Code) (default = Service Code 852)
20-02-11	**System Options for Multiline Telephones – Handsfree Microphone Control**	Use this option to control the setting for multiline terminal handsfree microphone after being disconnected and reconnected. If set to 0, the microphone is always off when the terminal is reconnected. If set to 1, the microphone remains in the same state it was in when the terminal is reconnected.	0 = Off 1 = On (default = 1)

Operation

To mute your telephone handset or Handsfree microphone while on a call:

1. Press **MIC**.

   . *This only turns off the Handsfree microphone.*

   - OR -

   Press the **Microphone Cutoff** key (Program 15-07 or SC 851: 40).

. *This turns off both the handset and Handsfree microphone.*

To turn your telephone microphone back on:

1. Press **MIC**.

   . *Use **MIC** only if you pressed it initially to turn off your Handsfree microphone.*

   - OR -

   Press the **Microphone Cutoff** key (Program 15-07 or SC 851: 40).

   . *Use the **Microphone Cutoff** key only if you pressed it initially to turn off your handset or Handsfree microphone.*

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Mobile Extension

Description

A mobile extension is an external telephone (preferably a mobile phone) linked to the UNIVERGE SV8100 via a Proxy Port to operate as an internal SLT extension. The extension sends DTMF signals to the system allowing access to the system features. A registered Mobile Extension uses 1 analog port (ports are reserved in groups of 4), however, **no** PCB support (analog or digital) is required. The Mobile Extension port must be an unequipped extension port on the UNIVERGE SV8100 system - no physical keyset is required on the SV8100 system.

. *A mobile extension cannot be used as a voice mail port.*

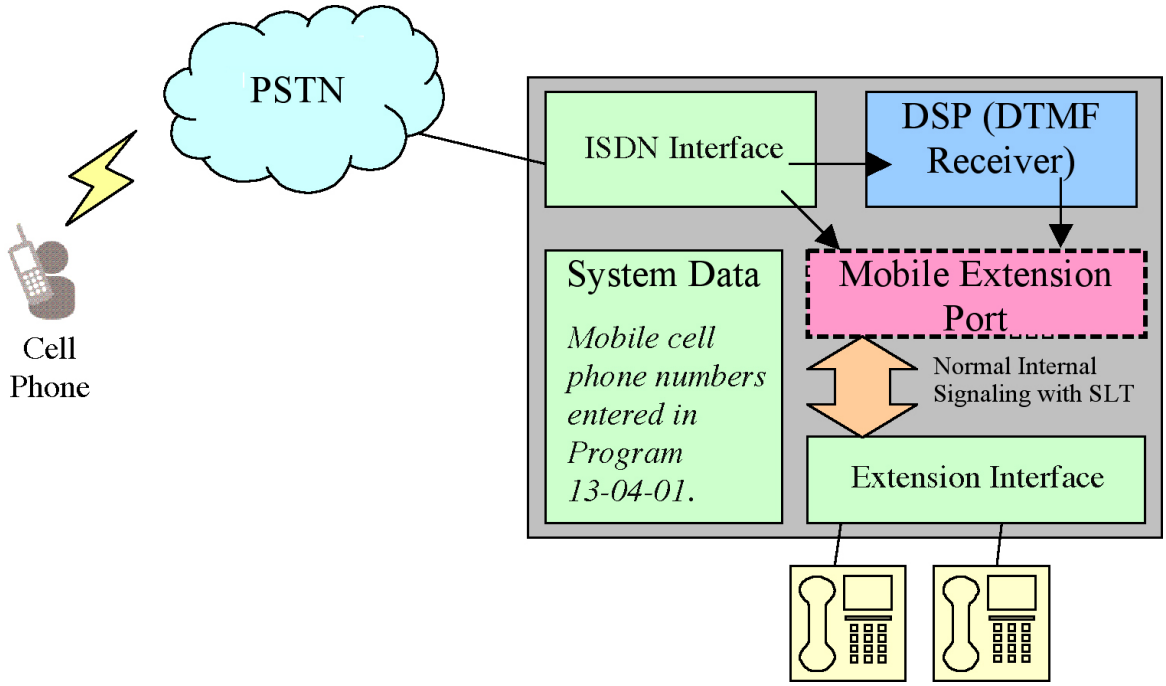

Figure 1-11 Mobile Extension Layout

This feature can currently be used with ISDN PRI trunks or SIP trunks.

. *It is recommended to use this feature with an ISDN PCB (PRI or BRI), however, analog trunks can be used as well.*

. *To provide a proper disconnect, Disconnect Supervision is required for the trunks used for this feature.*

The Mobile extension internal extension number (Proxy Port) is linked to a speed dial bin to provide integration.

. *If all external trunks are busy when a call is made to the mobile extension, ringback tone is presented giving the impression the phone is ringing.*

A DID is directed to the Mobile Extension internal extension number (Proxy Port), and to provide internal dial tone to the Mobile Extension, the incoming CLI of the Mobile Extension must match the number in the Speed Dial bin. Once internal dial tone is presented, the operation is similar to an SLT user lifting the handset.

In the absence of DIDs, the VRS can be used to transfer the Mobile Extension call to the Mobile Extension extension number. This provides internal dial tone when the CLI is presented and matches the number in the associated Speed Dial bin.

Alternatively, if CLI routing is enabled, the relevant Speed Dial bin could be transferred to the Mobile Extension proxy port which would then provide internal dial tone.

The number of Mobile Extensions per system is limited by the following CD-CP00 rules:

- ***64-Port Basic CD-CP00:***

  Number of Mobile Extension ports = 25% of physical ports (8 ports allows for 2 Mobile Extension entries).

  This restriction is based on the number of ports which could be required to call the mobile extension (for example: 1 port for an SV8100 keyset, 1 port for the Mobile Extension, and 1 or 2 trunk ports – depending on whether the call being sent to the Mobile Extension is an intercom call or an outside caller).

- ***256-Port CD-CP00:***

  Unlimited (limited only by available unequipped extension ports)

- ***Max Port CD-CP00:***

  Unlimited (limited only by available unequipped extension ports)

When the limit is reached, the Mobile Extensions can be added in programming, but give the indication of an invalid dial entry when called.

Features

The features available from a Mobile Extension are listed below. As the Mobile Extension is based on an SLT port, the service codes used are as per an SLT port. Any feature not listed should be assumed to be not supported:

- ***Hold***
- ***Transfer***
- ***Incoming Ring Group member***
- ***Department Group member***

- ***DID***
- ***Toll Restriction***
- ***Class of Service***
- ***DSS Keys***

  Though DSS keys are available for the Mobile Extension, they cannot provide an exact indication of busy status if, for example, the Mobile Extension is active on a call not linked to the UNIVERGE SV8100.

The following service codes are supported:

Table 1-13 Supported Service Codes

Type Incoming Feature	Program	Code	Set By Mobile Extension	Set to Mobile Extension
Night Mode Switching	11-10-01	818	**Yes**	
Night Mode Switching for Other Group	11-10-12	718	**Yes**	
Call Forward – All	11-11-01	848	**Yes**	**Yes**
Call Forward – Busy	11-11-02	843	**Yes**	**Yes**
Call Forward – No Answer	11-11-03	845	**Yes**	**Yes**
Call Forward – Busy/No Answer	11-11-04	844	**Yes**	**Yes**
Call Forward – Both Ring	11-11-05	842	**Yes**	**Yes**
Call Forward – Follow-Me	11-11-07	846	**Yes**	**Yes**
Do Not Disturb	11-11-08	847	**Yes**	
Answer Message Waiting	11-11-09	841	**Yes**	
Cancel All Messages Waiting	11-11-10	873	**Yes**	
Automatic Transfer Setup for Each Extension Group	11-11-25	702	**Yes**	
Automatic Transfer Cancellation for Each Extension Group	11-11-26	703	**Yes**	
Delayed Transfer for Every Extension Group	11-11-28	705	**Yes**	
Delayed Transfer Cancellation for Each Extension Group	11-11-29	706	**Yes**	
DND Setup for Each Extension Group	11-11-30	707	**Yes**	
DND Cancellation for Each Extension Group	11-11-31	708	**Yes**	
Pilot Group Withdrawing	11-11-35	750	**Yes**	
Station Speed Dial Number Entry	11-11-39	855	**Yes**	

Table 1-13 Supported Service Codes (Continued)

Type Incoming Feature	Program	Code	Set By Mobile Extension	Set to Mobile Extension
Auto Attendant	11-11-44	790	**Yes**	
Bypass Call	11-12-01	807	**Yes**	**Yes**
Conference	11-12-02	826	**Yes**	
Override (Off-Hook Signalling)	11-12-03	809	**Yes**	
Set Camp-On	11-12-04	850	**Yes**	**Yes**
Cancel Camp-On	11-12-05	870	**Yes**	**Yes**
Switching of Voice Call and Signal Call	11-12-06	812	**Yes**	
Step Call	11-12-07	808	**Yes**	**Yes**
Barge-In	11-12-08	810	**Yes**	**Yes**
Change to STG (Department Group) All Ring	11-12-09	780	**Yes**	
Station Speed Dialling	11-12-10	813	**Yes**	
Group Speed Dialling	11-12-11	814	**Yes**	
Trunk Group Access	11-12-14	804	**Yes**	
Specified Trunk Access	11-12-15	805	**Yes**	
Trunk Access Via Networking	11-12-16	866	**Yes**	
Internal Group Paging (Mobile Extension cannot be a member of a paging group)	11-12-19	801	**Yes**	
External Paging	11-12-20	803	**Yes**	
Meet-Me Answer to Specified Internal Paging Group	11-12-21	864	**Yes**	
Meet-Me Answer to External Paging	11-12-22	865	**Yes**	
Meet-Me Answer in Same Paging Group (although Mobile Extension cannot be paged)	11-12-23	863	**Yes**	**Yes**
Combined Paging	11-12-24	751	**Yes**	
Direct Call Pickup – Own Group	11-12-25	856	**Yes**	**Yes**
Call Pickup for Specified Group	11-12-26	868	**Yes**	**Yes**
Call Pickup	11-12-27	867	**Yes**	**Yes**
Call Pickup for Another Group	11-12-28	869	**Yes**	**Yes**
Direct Extension Call Pickup	11-12-29	715	**Yes**	
Park Hold	11-12-31	831	**Yes**	

Table 1-13 Supported Service Codes (Continued)

Type Incoming Feature	Program	Code	Set By Mobile Extension	Set to Mobile Extension
Answer for Park Hold	11-12-32	861	**Yes**	
Group Hold	11-12-33	832	**Yes**	
Answer for Group Hold	11-12-34	862	**Yes**	
Personal (Extension) Park	11-12-35	773	**Yes**	
Door Box Access (Door Box can also ring the Mobile Extension. *# operates relay)	11-12-36	802	**Yes**	
Common Canceling Service Code	11-12-37	720	**Yes**	
General Purpose Indication	11-12-38	883	**Yes**	
Station Speed Dialing	11-12-40	761	**Yes**	
Voice Over	11-12-41	890	**Yes**	
Flash on Trunk lines	11-12-42	806	**Yes**	
Enabled On Hook when Holding (SLT)	11-12-45	849	**Yes**	
Answer On Hook when Holding (SLT)	11-12-46	859	**Yes**	
Call Waiting Answer/Split Answer	11-12-47	894	**Yes**	
Account Code	11-12-48	891	**Yes**	
General Purpose Relay	11-12-50	880	**Yes**	
VM Access (VM8000 InMail and VMS)	11-12-51	717	**Yes**	
Live Recording at SLT	11-12-53	754	**Yes**	
VRS Routing for ANI/DNIS	11-12-54	882	**Yes**	
Tandem Trunking	11-12-57	753	**Yes**	
Transfer into Conference	11-12-58	Not Assigned	**Yes**	
Set DND for Other Extension	11-14-03	729	**Yes**	**Yes**
Cancel DND for Other Extension	11-14-04	730	**Yes**	**Yes**
Set Wake Up Call for Own Extension	11-14-05	731	**Yes**	
Cancel Wake Up Call for Own Extension	11-14-06	732	**Yes**	
Set Wake Up Call for Other Extension	11-14-07	733	**Yes**	**Yes**
Cancel Wake Up Call for Other Extension	11-14-08	734	**Yes**	**Yes**
Set Room to Room Call Restriction	11-14-09	735	**Yes**	**Yes**

Table 1-13 Supported Service Codes (Continued)

Type Incoming Feature	Program	Code	Set By Mobile Extension	Set to Mobile Extension
Cancel Room to Room Call Restriction (Hotel)	11-14-10	736	**Yes**	**Yes**
Change Toll Restriction Class for Other Extension	11-14-11	737	**Yes**	**Yes**
Check-in	11-14-12	738	**Yes**	**Yes**
Check-out	11-14-13	739	**Yes**	**Yes**
Room Status Change for Own Extension	11-14-14	740	**Yes**	
Room Status Change for Other Extension	11-14-15	741	**Yes**	**Yes**
Room Status Output	11-14-16	742	**Yes**	
Hotel Room Monitor	11-14-17	775	**Yes**	**Yes**

Although some features may be available to the Mobile Extension, it may be advisable to disable them in Class of Service. There are also features that should be disabled in any case.

The features ***to be disabled/not used*** for Mobile Extension include:

- ***ACD***
- ***TAPI (including applications such as PC Attendant, PC Assistant, etc.)***
- ***H.323 Trunks***
- ***Analog Trunks***
- ***Port Swap***
- ***Hotline***
- ***General Message***
- ***Message Waiting***
- ***Headset Mode for SLT***
- ***Flexible Transfer/Virtual Loop Back***
- ***Tandem Ringing***
- ***Park over CCIS***
- ***Virtual extension key as Call Coverage Key for mobile extension***
- ***Automatic Conversation Record for trunks***

Conditions

- It is recommended that this feature uses ISDN platform (as these trunks provide answer supervision).
- The analog line must provide CLI information to allow the Mobile Extension to dial into the system to access features.
- For the ***extension*** DTMF, the minimum Detect Level for the DTMF Tone (Program 80-03-03) must be set to allow a minimum detection level of -25dBm. This entry is dependent on the Detect Level selected in Program 80-03-01.
- The Mobile Extension uses the * to perform a flash, so any service codes which begin with * must be changed (Programs 11-10, 11-11, 11-12, 11-13).
- To provide a proper disconnect, Disconnect Supervision is required for the trunks used for this feature.
- When an entry is made in Program 15-22-01 for a Mobile Extension, ports are reserved for Mobile Extension usage in groups of 4.
- To keep consecutive port numbering for blades, you may wish to consider starting Mobile Extensions at the upper extension port range.
- The incoming Caller-ID for a call that is forwarded to a mobile extension will not be presented to the Mobile Extension.
- When using Mobile Extension in a NetLink Network, the ISDN/PRI must be utilized in the Primary System.

Default Setting

No Mobile Extensions are configured.

System Availability

Terminals

Any Multiline Terminal

Required Component(s)

None

Related Features

Speed Dial – System/Group/Station

Caller ID

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-02-01	**Extension Numbering**	The Mobile Extension port must be an unequipped extension port on the SV8100 system. This extension port is directed to an Abbreviated Dial bin.	Up to eight digits 1 200 2 201 3 202 ~ ~ 300 499 301 500 ~ ~ 512 5211
11-10	**Service Code Setup (for System Administrator)**	Used to customize the System Administrator service codes.	Please refer to the SV8100 Programming Manual for more information on this program.
11-11	**Service Code Setup (for Setup/ Entry Operation)**	Used to customize the service code for Setup and Entry.	Please refer to the SV8100 Programming Manual for more information on this program.
11-12	**Service Code Setup (for Service Access)**	Used to customize the service codes for Service Access.	Please refer to the SV8100 Programming Manual for more information on this program.
11-13	**Service Code Setup (for ACD)**	Used to customize the service codes for ACD.	Please refer to the SV8100 Programming Manual for more information on this program.

Program Number	Program Name	Description/Comments	Assigned Data
13-04-01	**Speed Dialing Number and Name – Speed Dialing Data**	For the bin number defined in Program 15-22-01 for the Mobile Extension, enter the external number of the Mobile Extension. This must exactly match the Caller ID number of the Mobile Extension or the user cannot access the internal features.	1~9, 0, *, **#** Pause (Press line key 1) Recall/Flash (Press line key 2) @ = Code to wait for answer supervision in ISDN (Press line key 3) (maximum 24 digits) (default not assigned)
15-22-01	**Mobile Extension Setup – Mobile Extension Target Setup**	For each Mobile Extension number, select the Abbreviated Dial bin number to be associated with it.	0~1999 (0 = No setting 1~1999 = target of mobile extension) (default = 0)
15-22-02	**Mobile Extension Setup – Connect Confirmation**	As the Mobile Extension can be a GSM phone, it is necessary to be certain a person and not, for example, a GSM voice mail has answered the call. This is achieved by returning Music on Hold/ring tone to the Mobile Extension on answer, after which the Mobile Extension user presses * to connect the call. For each Mobile Extension number, select whether the user needs to use DTMF confirmation before a call is answered. Until the * is pressed, the call is treated as not being answered.	0 = Always 1 = On analog line 2 = Never (default = 0)
15-22-03	**Mobile Extension Setup – Trunk Access Code**	Select if the Normal (0) or Individual (1) Trunk access is used when making the call to the mobile number.	0 = Use normal trunk access code (Program 11-09-01) 1 = Use individual trunk access code (Program 11-09-02) (default = 0)
20-03-04	**System Options for Single Line Telephones – Dial Sending Start Time for SLT or ARS**	When an extension user dials a Mobile Extension number, the system uses this timer to determine how long the system waits before dialing the number.	0~64800 seconds (default = 3)
20-09-02	**Class of Service (Incoming Call Service) – Caller ID Display**	Turns Off (0) or On (1) the Caller ID display at an extension.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
22-11-01	**DID Translation Number Conversion – Received Number**	Define the digits received by the system for the telephone number on which a Mobile Extension user calls into the system.	(maximum eight digits) (default: Conv. Table:1-100 = Rec'd No. 00 -99, Conv.Table:101- 2000 = Rec'd No. are not assigned.
22-11-02	**DID Translation Number Conversion – Target Number**	For the DID number defined in Program 22-11-01, enter the extension number for the Mobile Extension user.	(maximum 24 digits) (default: Conv. Table:1-100 = Target No. 200- 299, Conv.Table:101- 2000 = Target No. are not assigned.
80-01-01	**Service Tone Setup – Tone 44, External Dial Tone**	It is necessary to adjust the DID/ DISA dial tone (tone 44) to a Repeat Count of 250 (by default, this is set to 0). The system must be reset for this change to take affect.	0~255 (0 = until On-Hook)
80-01-01	**Service Tone Setup – Tone 57, Off-Hook Beep Tone - Headset Earpiece ringing Tone**	If required, use this option to change the tone heard when a Mobile Extension user goes off hook to answer a call prior to pressing *. The system must be reset for this change to take affect.	Refer the SV8100 Programming Manual for details.
80-03-01	**DTMF Tone Receiver Setup – Detect Level**	Select the Detect Level to be used for DTMF Tone detection. For the extension DTMF, this entry must allow for a detection of -25dBm. Set the minimum detection level in Program 80-03-03. The system must be reset for this change to take affect.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1~5 = 0

Program Number	Program Name	Description/Comments	Assigned Data
80-03-03	**DTMF Tone Receiver Setup – Min. Detect Level**	For the extension DTMF, the minimum Detect Level (0-15) for the DTMF Tone must be set to allow a minimum detection level of -25dBm. This entry is dependent on the Detect Level selected in Program 80-03-01. For example, if Detect Level 0 were selected in Program 80-03-01, the entry in this option would be 15 for -25dBm. The system must be reset for this change to take affect.	0~15 detect level 0: –10dBm(0) to –25dBm(15) detect level 1: –15dBm(0) to –30dBm(15) detect level 2: –20dBm(0) to –35dBm(15) detect level 3: –25dBm(0) to –40dBm(15) detect level 4: –30dBm(0) to –45dBm(15) detect level 5: –35dBm(0) to –50dBm(15) detect level 6: –40dBm(0) to –55dBm(15) detect level 7: -45dBm(0) to -60dBm(15) detect level 8: -50dBm(0) to -65dBm(15) detect level 9: -55dBm(0) to -70dBm(15) detect level 10: -60dBm(0) to -75dBm(15) detect level 11: -65dBm(0) to -80dBm(15) detect level 12: -70dBm(0) to -85dBm(15) detect level 13: -75dBm(0) to -90dBm(15) detect level 14: -80dBm(0) to -95dBm(15) detect level 15: -85dBm(0) to -100dBm(15) default: Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3~5 = 10 (-20dBm)

Operation

With any feature, if the Mobile Extension user presses *, an existing call is placed in hold. Pressing * a second time or the timeout of the inter-digit timer returns the call to conversation mode.

Using Analog Lines with the Mobile Extension

Analog lines can be used for integration with the Mobile Extension using either DILs or VRS Auto Attendant to access the Mobile Extension Proxy Port. However, it must be noted that the ***0** Hang Up code must be used prior to terminating any call (e.g., transfer, hang up etc.) as analog trunks do not provide Disconnect Supervision.

Placing an Intercom Call to a Mobile Extension

1. Lift the handset or press **SPK**.
2. Dial the extension number assigned to the Mobile Extension.

   If the Mobile Extension is turned off, incoming calls hear a message indicating the user is not available. The setting in the DTMF Confirmation programming (Program 15-22-02) determines how the call is handled.

   Program 15-22-02 set to 0 or 1 (DTMF Confirmation Required):
   The caller is retrieved by the UNIVERGE SV8100 and follows the no-answer programming (ring another extensions, forward to UNIVERGE SV8100 voice mail, etc.)

   Program 15-22-02 set to 2 (No DTMF Confirmation Required):
   The caller is forwarded to the external extension voice mail, if available.

Outside Party Dialing the Mobile Extension

1. Dial the DID or DIL telephone number for the Mobile Extension.

   System programming (DID=22-11-01 or DIL=22-07-01) must be defined.

   If the Mobile Extension is turned off, incoming callers hear a message indicating the user is not available. The setting in the DTMF Confirmation programming (Program 15-22-02) determines how the call is handled.

   Program 15-22-02 set to 0 or 1 (DTMF Confirmation Required):
   The caller is retrieved by the SV8100 and follows the no-answer programming (ring another extension, forward to SV8100 voice mail, etc.)

   Program 15-22-02 set to 2 (No DTMF Confirmation Required):
   The caller is forwarded to the external extension voice mail, if available.

Placing a Call from the Mobile Extension

1. Dial the DID or DIL telephone number for the Mobile Extension.

   If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and 15-22), internal dial tone is heard by the Mobile Extension user.
2. Dial the desired Intercom number or dial the trunk access code to place an outgoing call.

Answering a Call on the Mobile Extension

1. Answer the ringing call.
2. If Program 15-22-02 is set to 0 or 1, the Mobile Extension user hears Music on Hold/ring tone. Press * (within 10 seconds) to answer the call.
   This step is required when using analog trunks for the Mobile Extension feature.

Sending a Flash from the Mobile Extension

1. While on a conversation, a hook flash is returned by dialing ***#** from the Mobile Extension.

Internal Dial Tone After Hang Up

1. When a call is finished, disconnect the call and receive internal dial tone by dialing ***0**.

Placing/Retrieving a Call on Hold from the Mobile Extension

1. While on a call, press * #.
2. To retrieve the held call, with system dial tone, press * #.

Swapping Between Two Held Calls from the Mobile Extension

1. While on a call, press * #.
   The first call is placed on Hold.
2. Place second call, then place on Hold by pressing * #.
   The second call is placed on Hold and the first call is picked up.
3. The Mobile Extension can connect the two held calls with Automatic On-Hook Transfer if Program 20-11-11 is enabled by dialing * 0.

Transferring a call from the Mobile Extension

1. With an active call, press * #.
2. Dial the extension number to which the call is to be transferred.
3. Dial * 0.
4. Hang up.

Call Forwarding

When setting Call Forwarding from the Mobile Extension, the service code(s) must be redefined in Programs 11-10-18, 11-11-06 and 11-11-40 and also must be defined in Programs 11-11-01 - 11-11-05 and 11-11-07.

To activate or cancel Call Forwarding to/from the Mobile Extension:

1. ***When activating Call Forwarding From the Mobile Extension:***
   Dial the DID or DIL telephone number for the Mobile Extension.

   If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and 15-22), internal dial tone is heard by the Mobile Extension user.

   -OR-

   When activating Call Forwarding to the Mobile Extension:
   Press CALL key or lift the handset.

2. Dial the service code defined in Program 11-11-06.

3. Dial Call Forwarding condition:
   1 = Personal Answering Machine Emulation (then skip to step 5).
   2 = Busy or not answered
   4 = Immediate
   6 = Not answered
   7 = Immediate with simultaneous ringing (not for Voice Mail)
   0 = Cancel

4. Dial destination extension or Voice Mail master number.

5. Dial Call Forwarding type:
   2 = All calls
   3 = Outside calls only
   4 = Intercom calls only
   When you enable Call Forwarding, stutter dial tone is heard on the ICM dial tone of the Mobile extension or, on a keyset DND flashes slowly.

To activate Call Forward Follow Me:

1. ***When activating Call Forwarding From the Mobile Extension:***
   Dial the DID or DIL telephone number for the Mobile Extension.

   If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and 15-22), internal dial tone is heard by the Mobile Extension user.

   -OR-

   When activating Call Forwarding to the Mobile Extension:
   Press SPK or lift the handset.

2. Dial the service code defined in Program 11-11-07.

3. Dial 3 + Dial your own extension number (i.e., the source).

4. Dial Call Forwarding Type:
   2 = All Calls
   3 = Outside calls only
   4 = Intercom calls only

5. Hang up.

To cancel Call Forward Follow Me:

1. ***When activating Call Forwarding From the Mobile Extension:***
   Dial the DID or DIL telephone number for the Mobile Extension.
   If the Caller ID of the Mobile Extension matches the Speed Dial bin entry (Program 13-04 and Program 15-22), internal dial tone is heard by the Mobile Extension user.

   -OR-

   When activating Call Forwarding to the Mobile Extension:
   Press SPK or lift the handset.

2. Dial the service code defined in Program 11-11-07.

3. Dial 0.

4. Hang up.

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Music on Hold

Description

Music on Hold (MOH) sends music to calls on Hold and parked calls. The music lets the caller know that the call is waiting, not forgotten. Without Music on Hold, the system provides silence to these types of calls. The Music on Hold source can be internal (tone) or from an external customer-provided music source (i.e., tape deck, receiver, etc.). The customer-provided source can connect to a PGD(2)-U10 ADP analog port or to a connector on the CD-CP00.

Option Available for Using System Tone

The Music on Hold feature has been enhanced to allow callers to hear a system tone instead of playing the internal or external music.

. *In accordance with European. copyright law, a license may be required if radio, television broadcasts or music other than material not in the public domain are transmitted through the Music on Hold feature of telecommunications systems. NEC Philips Unified Solutions hereby disclaim any liability arising out of the failure to obtain such a license.*

Conditions

- A maximum of 97 Music on Hold sources are possible; 96 from PGD(2)-U10 ports and one from the side of the chassis.
- External music on hold source for internal calls is only provided via audio input on the CD-CP00. Program 10-04-01 is to be set for 1 = External Source.
- No music is provided to internal calls on hold via the ACI input.
- Use the combination of Program 10-04, Program 10-21, Program 10-38 and Program 14-08.
- The PGD(2)-U10 ADP can connect to a CD-8DLCA, CD-16DLCA, or CD-LTA.

  . *A maximum of 56 PGD(2)-U10 ADP units can be installed in an UNIVERGE SV8100 system. Refer to the UNIVERGE SV8100 System Hardware Manual for more information.*

Default Setting

Disabled

System Availability

Terminals

None

Required Component(s)

PGD(2)-U10 ADP

Related Features

None

Guide to Feature Programming

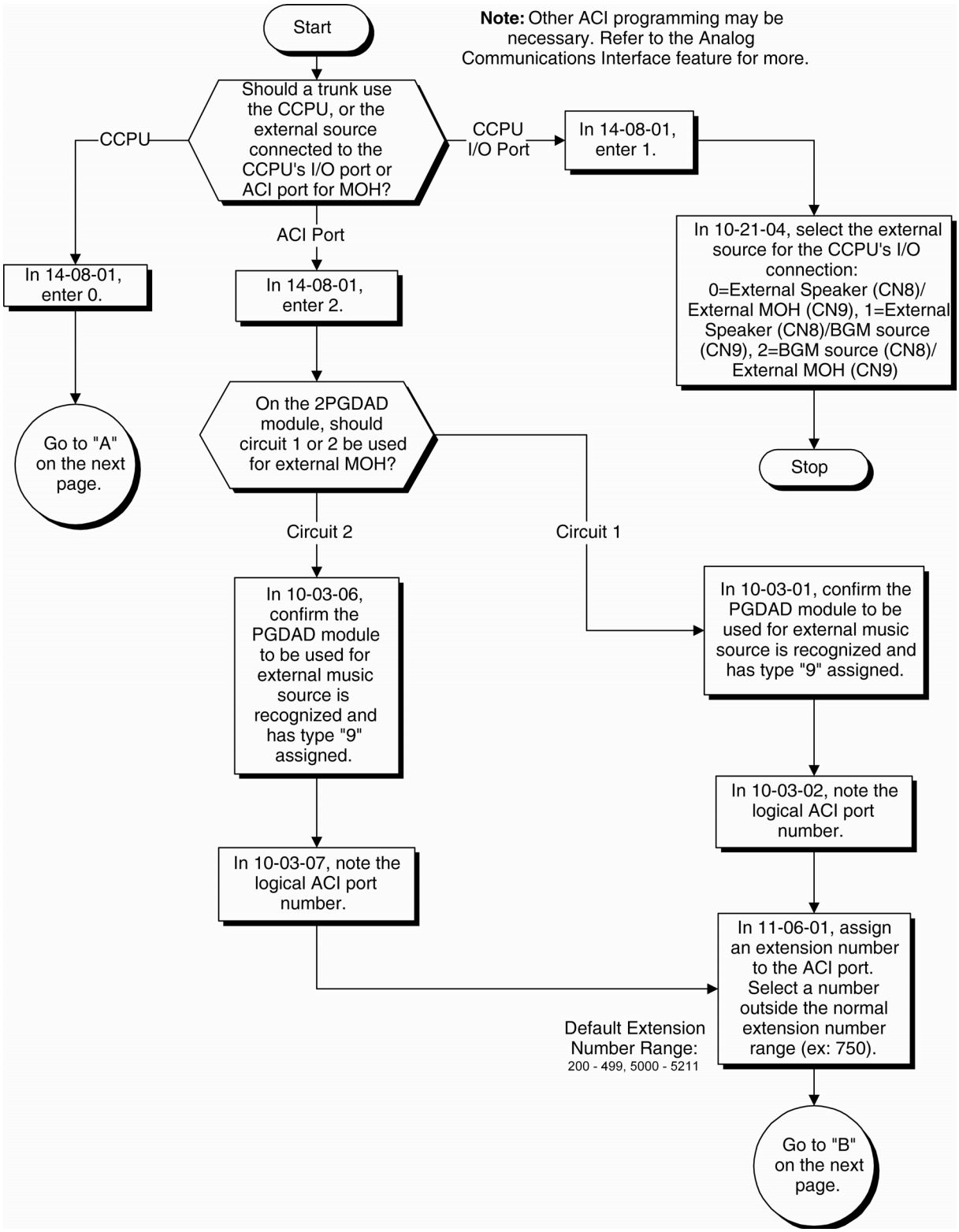
Program Number	Program Name	Description/Comments	Assigned Data
10-04-01	**Music on Hold Setup – Music on Hold Source Selection**	Determine whether the system should use No Tone (0), External (1) Music Source, or Internal Service Tone (2). If set to 1, Program 14-08-01 must be set to 0 or 1.	0 = No Tone 1 = External MOH 2 = Service Tone 3 = Internal MOH (default = 0)
10-04-02	**Music on Hold Setup – Music on Hold Tone Selection**	When Program 10-04-01 is set to 1 (Internal), define the music that is played for Music on Hold.	[In case Item 1 is 0] 1 = Download File1 2 = Download File2 3 = Download File3 [In case Item 1 is 1, 2, or 3] 1~100 = VRS Message Number (default not assigned)
10-04-03	**Music on Hold Setup – Audio Gain Setup**	Set the Music on Hold audio gain (1~63).	1~63 (-15.5 +15.5dB) [default = 32 (0dB)]
10-21-04	**CD-CP00 Hardware Setup – External Source I/O Selection on CD-CP00**	Define what the I/O ports on the CD-CP00 are used for.	0 = External MOH (CN8)/ External Speaker(CN9) 1 = BGM source (CN8)/ External Speaker(CN9) 2 = External MOH (CN8)/BGM source (CN9) . *Relations between CN number and Relay number are as follows:* CN8 = Relay2 CN9 = Relay1 (default = 0)
14-08-01	**Music on Hold Source for Trunks – MOH Type**	For each trunk, set the Music on Hold source.	0 = Internal/External MOH 1 = Customer Provided Source Connected to BGM Port 2 = Customer Provided Source Connected to ACI Port (default = 0)

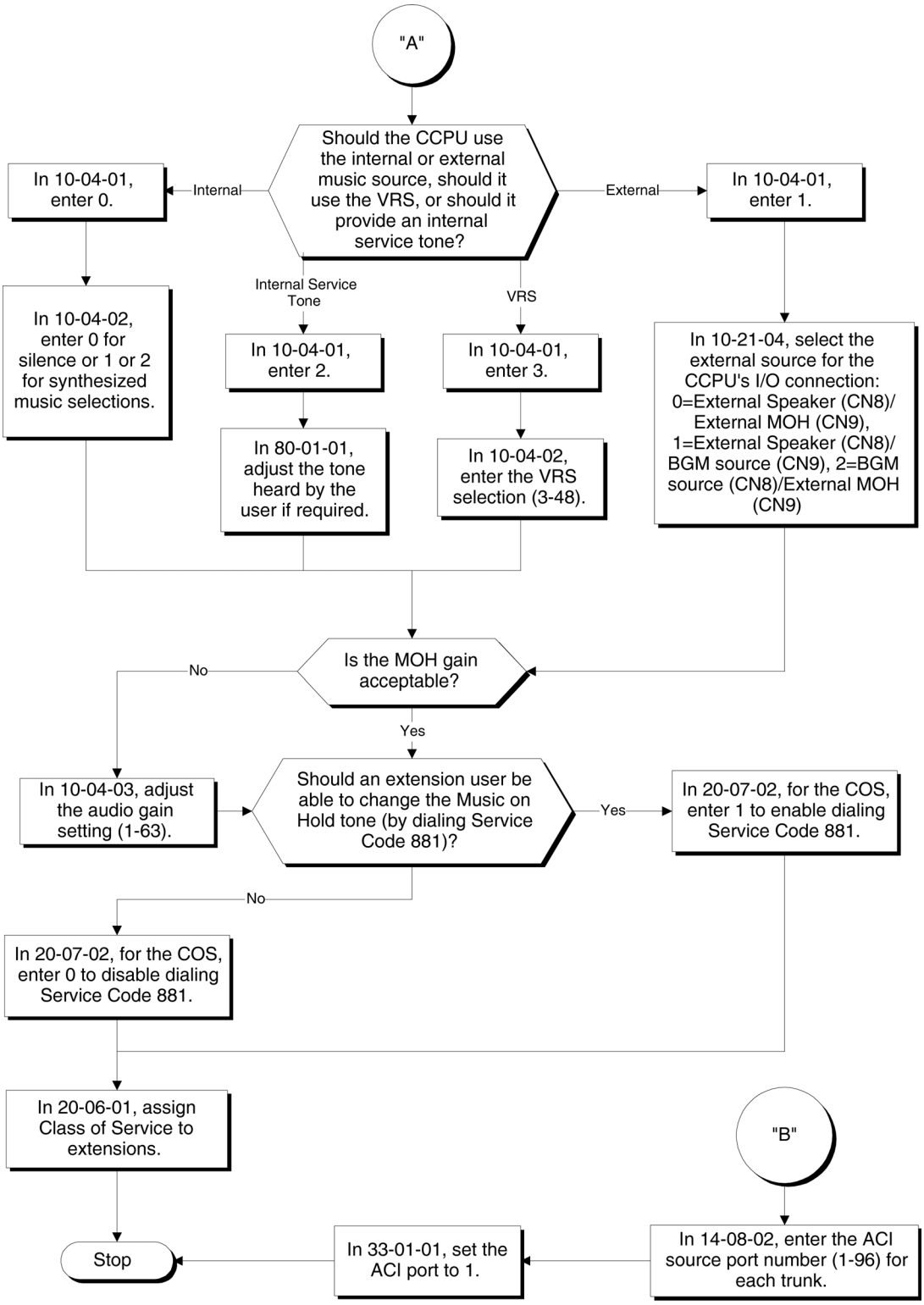
Program Number	Program Name	Description/Comments	Assigned Data
14-08-02	**Music on Hold Source Port Number – Source Port Number**	If the MOH type is 2 in Program 14-08-01, for each trunk enter the ACI source port number (1~96).	Source port 0-96 (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-02	**Class of Service Options (Administrator Level) – Changing the Music on Hold Tone**	Turn off or on an extension ability to change the Music on Hold tone.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
22-11-09	**DID Translation Number Conversion – Music On Hold Source**	For each DID Translation Table entry (1~2000), specify the source of music to be used for DID trunks.	0 = IC/MOH Port 1 = BGM Port 2 = ACI Port (default = 0)
22-11-10	**DID Translation Number Conversion – ACI Music Source Port**	For each DID Translation Table entry (1~2000), if item 2 is selected in Program 22-11-09, specify the port to be used for the source of music heard on DID trunks.	When a sound source type is 2 in above : (0~96) (default = 0)
80-01-01	**Service Tone Setup – Music On Hold Tone (Service Tone 64)**	Used to customize the repeat count for the musing on hold tone if Program 10-01-01 is set to 2.	0~255 (0=Until On-Hook) (Default 0)
80-01-02	**Basic Tone Number**	Used to customize the basic tone number for the musing on hold tone if Program 10-01-01 is set to 2.	1~33 (0 = No Tone) (33=Default Time Slot)
80-01-03	**Duration Count**	Used to customize the duration count for the musing on hold tone if Program 10-01-01 is set to 2.	1~255 (100~25500ms)
80-01-04	**Gain Level (dB)**	Used to customize the Gain Level for the musing on hold tone if Program 10-01-01 is set to 2.	1~63 (-15.5 ~ +15.5)

When Using a PGD(2)-U10 ADP:

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup (DLCA PKG Setup) – Terminal Type (B1)**	If a PGD(2)-U10 ADP is used for the external music source, the module is automatically assigned type 9 if the jumper straps in the module were set prior to connecting it to the system. If another type was assigned, disconnect the PGD(2)-U10 ADP from the system, delete the type setting, and, with the jumper straps positioned correctly in the PGD(2)-U10 ADP, reconnect the module to the system. Refer to the UNIVERGE SV8100 System Hardware Manual for the jumper strap settings.	0 = Not set 1 = Multiline Terminal 2 = SLT Adapter 3 = Bluetooth Cordless Handset 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Doorbox) 9 = PGD (ACI) 10 = DSS Console 11 = -- Not Used -- (default = 0)
11-06-01	**ACI Extension Numbering**	Each ACI port must be assigned an extension number. Use this program to assign the extension numbers to ACI software ports. Select a number outside of the normal extension number range.	ACI Ports: 1~96 (default not assigned)
11-08-01	**ACI Group Pilot Number**	Assign pilot numbers to ACI groups. When a user dials the pilot number, they reach an available ACI software port within the group.	ACI Groups: 1~16 (default not assigned)
33-01-01	**ACI Port Type Setup**	Set each ACI software ports for input (1) or input/output (2). Use input ports for Music on Hold sources. Use output ports for External Paging/Ringer Control.	ACI Ports: 1~96 ACI Types: 0 = None 1 = MOH/BGM (Input) 2 = External Audio Port (Input/Output (default = 0)
33-02-01	**ACI Department Calling Group**	Assign ACI software ports to an ACI Department Group. This lets ACI callers connect to ACI software ports by dialing the group pilot number (set in Program 11-08).	ACI Ports: 1~96 ACI Groups: 1~16 Default: ACI Port/Group/Priority 01/ 1/ 1 02/ 1/ 2 : / :/ : 96/ 1/ 96 . *Refer to Analog Communications Interface (ACI) on page 1-33 for additional information.*

Program Number	Program Name	Description/Comments	Assigned Data
80-01-02	**Service Tone Setup – Basic Tone Number**	The following features require that the system tones listed below be changed to match the table. After changing these settings the chassis must be reset for the changes to take effect. m Call Screening m Call Holding m Busy Greeting m Await Answer Transfer	1~33 (0 = No Tone) (33=Default Time Slot) .


Start
Note: Other ACI programming may be necessary. Refer to the Analog Communications Interface feature for more.
Should a trunk use the CCPU, or the external source connected to the CCPU's I/O port or ACI port for MOH?
CCPU
CCPU I/O Port
ACI Port
In 14-08-01, enter 1.
In 10-21-04, select the external source for the CCPU's I/O connection: 0=External Speaker (CN8)/ External MOH (CN9), 1=External Speaker (CN8)/BGM source (CN9), 2=BGM source (CN8)/ External MOH (CN9)
Stop
In 14-08-01, enter 0.
In 14-08-01, enter 2.
Go to "A" on the next page.
On the 2PGDAD module, should circuit 1 or 2 be used for external MOH?
Circuit 2
Circuit 1
In 10-03-06, confirm the PGDAD module to be used for external music source is recognized and has type "9" assigned.
In 10-03-01, confirm the PGDAD module to be used for external music source is recognized and has type "9" assigned.
In 10-03-02, note the logical ACI port number.
In 10-03-07, note the logical ACI port number.
In 11-06-01, assign an extension number to the ACI port. Select a number outside the normal extension number range (ex: 750).
Default Extension Number Range:
200 - 499, 5000 - 5211
Go to "B" on the next page.


"A"
Should the CCPU use the internal or external music source, should it use the VRS, or should it provide an internal service tone?
Internal
In 10-04-01, enter 0.
External
In 10-04-01, enter 1.
Internal Service Tone
VRS
In 10-04-02, enter 0 for silence or 1 or 2 for synthesized music selections.
In 10-04-01, enter 2.
In 10-04-01, enter 3.
In 10-21-04, select the external source for the CCPU's I/O connection: 0=External Speaker (CN8)/ External MOH (CN9), 1=External Speaker (CN8)/ BGM source (CN9), 2=BGM source (CN8)/External MOH (CN9)
In 80-01-01, adjust the tone heard by the user if required.
In 10-04-02, enter the VRS selection (3-48).
Is the MOH gain acceptable?
No
Yes
In 10-04-03, adjust the audio gain setting (1-63).
Should an extension user be able to change the Music on Hold tone (by dialing Service Code 881)?
Yes
In 20-07-02, for the COS, enter 1 to enable dialing Service Code 881.
No
In 20-07-02, for the COS, enter 0 to disable dialing Service Code 881.
In 20-06-01, assign Class of Service to extensions.
"B"
Stop
In 33-01-01, set the ACI port to 1.
In 14-08-02, enter the ACI source port number (1-96) for each trunk.

Operation

None

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Name Storing

Description

Extensions and trunks can have names instead of just circuit numbers. These names show on a multiline terminal display when the user places or answers calls. Extension and trunk names make it easier to identify callers. The user does not have to refer to a directory when processing calls. A name can have up to 12 digits, consisting of alphanumeric characters, punctuation marks and spaces.

Additional Characters Available

When using the Name Storing feature, the system now provides additional characters which can be used. These characters are available with any option which allows Name Storing - Speed Dial – System/Group/Station, One-Touch Keys, Extension Name, Trunk Naming.

Conditions

- Display telephones use extension names for Directory Dialing.
- Single line extensions cannot program names.
- If a name is not assigned to the Extension/Virtual Extension, it does not show in the Extension Directory.
- Extension Directory only shows telephones/virtual extensions that have a name assigned in Program 15-01-01.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals with Display

Required Component(s)

None

Related Features

Directory Dialing

Single Line Telephones

Speed Dial – System/Group/Station

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-22	**Service Code Setup (for Setup/ Entry Operation) – Extension Name Programming**	Used to customize the service code used to edit Extension Name Programming.	MLT (default = 800)
14-01-01	**Basic Trunk Data Setup – Trunk Name**	Set the names for trunks. The trunk name displays on a multiline terminal for incoming and outgoing calls.	Up to 12 Characters Line 001 Line 002 Line 003 : Line 200
15-01-01	**Basic Extension Data Setup – Extension Name**	Define the extension/virtual extension name.	Up to 12 characters Default: STA 200 = Ext 200 STA 201 = Ext 201, etc.
20-09-02	**Class of Service Options (Incoming Call Service) – Caller ID Display**	Turns Off (0) or On (1) the Caller ID display at an extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-21	**Class of Service Options (Supplementary Service) – Extension Name**	Turns Off (0) or On (1) an extension user ability to program its name.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-47	**Class of Service Options (Supplementary Service) – Station Number Display**	Determine if a station Number will be displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-48	**Class of Service Options (Supplementary Service) – Station Name Display**	Determine if a station Number will be displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-51	**Class of Service Options (Supplementary Service) – Number and Name appear in the Directory**	Determine if an extension name and number will be listed (On) or unlisted (Off) in the directory.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

Refer to Table 1-14 Keys for Entering Names for and explanation for using the keypad to enter names.

Table 1-14 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ` { | } Æ ¨ Á À Â Ã Ç É Ê ì ó**
2	Enter characters: **A-C, a-c, 2**.
3	Enter characters: **D-F, d-f, 3**.
4	Enter characters: **G-I, g-i, 4**.
5	Enter characters: **J-L, j-l, 5**.
6	Enter characters: **M-O, m-o, 6**.
7	Enter characters: **P-S, p-s, 7**.
8	Enter characters: **T-V, t-v, 8**.
9	Enter characters: **W-Z, w-z, 9**.
0	Enter characters: 0 ! “ **#** $ % & ’ ( ) ô Õ ú ä ö ü α ε θ
*****	Enter characters: * + , - . / : ; < = > ? **B E σ S** ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed – ex: TOM). Pressing **#** again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
CONF	Clear the character entry one character at a time.
HOLD	Clear all the entries from the point of the flashing cursor and to the right.

Night Service

Description

Night Service lets system users activate one of the Night Service modes. Night Service redirects calls to their night mode destination, as determined by Assigned and Universal Night Answer programming. A user typically activates Night Service after normal working hours, when most employees are unavailable to answer calls.

- There are eight Service Modes. At default, the mode names are assigned as follows:
  - Mode 1 = No setting
  - Mode 2 = Night
  - Mode 3 = Midnight
  - Mode 4 = Rest
  - Mode 5 = Day2
  - Mode 6 = Night2
  - Mode 7 = Midnight2
  - Mode 8 = Rest2

There are 32 Service Patterns/Groups available.

Assigned Night Answer (ANA)

With Assigned Night Answer (ANA), Night Service has calls ring extensions directly. Assigned Night Answer provides an answering point for Night Service calls. For certain applications, this may be more appropriate than Universal Night Answer. For example, you could program trunks to ring the security station telephone during off hours.

For more information on assigning trunks to ring extensions, refer to Direct Inward Line (DIL) on page 1-359.

Universal Night Answer (UNA)

Universal Night Answer makes incoming calls ring over the External Paging speakers. With UNA, an employee can go to a telephone and press the flashing line key or use “Universal Answer” to pick up the call. Only ring groups calls can be used with Universal Night Answer. For more on setting up Universal Answer, refer to Central Office Calls, Answering on page 1-215.

You may also be able to use Transfer to UNA. An extension user can transfer their call to UNA (i.e., External Paging at night). Once transferred, the call rings the External Paging speakers like any other UNA call and can be picked up at any extension. You can also set up Transfer to UNA through the Voice Response System (VRS). This lets outside callers, answered by the VRS, dial a code to have their call ring External Paging.

Automatic Night Service

The system allows or denies Automatic Night Service. If allowed, the calls route according to the service patterns programmed. The Night Service programming is stored in the RAM memory. This means that if the system is not using the Automatic Night Service, for a power failure in night mode, when the power is restored, the system continues to be in night mode.

Programmable Function Key Can Toggle Night Modes

The software allows a Night Service Programmable Function Key (Program 15-07-01 or SC 751: 09 + 0) to toggle night modes. You can determine in programming (Program 12-08-01) how many modes through which the user toggles. Note that the additional data for the Programmable Function Key must be set to 0 for the toggle function to work.

Conditions

- Almost all features are affected by Night Mode except for the following:
  - Dial Tone Detection
  - External Alarm Sensors
  - Flexible System Numbering
  - Pulse to Tone conversion
  - SMDR
  - Volume Control
- Virtual Extension keys do not support Day/Night Mode (09) Programmable Function keys.
- Universal Night Answer will only work when Call is sent to a ring group.
- There are separate Access Map and Ring Group programming entries for each Night Service mode (modes 1~8). Also, Universal Answer allows an extension user to pick up a Universal Night Answer (UNA) call.
- Mode Keys can be assigned as required for DSS Consoles.
- With Universal Night Answer, outside calls can ring External Paging Zones.
- Programmable Function Keys simplify activating Night Service.
- The relay circuits (5~8) are on the PGD(2)-U10 ADP are programmed and used for General Purpose Relays.

- When programming Night Service function keys, multiple keys must be used for switching between each Night Service Mode.

Default Setting

System is always in the Mode 1

System Availability

Terminals

Not Applicable

Required Component(s)

None

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Station Selection (DSS) Console

Paging, External

Programmable Function Keys

Ring Groups

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-10-01	**Service Code Setup (for System Administrator) – Night Mode Switching**	Customize the service code (818) to be used for day/night mode switching.	MLT,SLT (default = 818)
11-10-12	**Service Code Setup (for System Administrator) – Night Mode Switching for Other Group**	Customize the service code (718) to be used for Day/Night mode switching for another Night service group.	MLT (default = 718)
11-12-43	**Service Code Setup (for Service Access) – Answer No-Ring Line (Universal Answer)**	Customize the service code (872) to be used to manually answer a Universal Night Answer.	MLT, SLT (default = 872)
11-12-50	**Service Code Setup (for Service Access) – General Purpose Relay**	Define the service code to be used for turning the general purpose relay on and off.	MLT, SLT (default = 880)
12-01-01	**Night Mode Function Setup – Manual Night Mode Switching**	Turn Off (0) or On (1) any extensions from activating Manual Night Service.	0 = Off 1 = On (default = 1)
12-01-02	**Night Mode Function Setup – Automatic Night Mode Switching**	According to a preset schedule, enable (1) or disable (0) Automatic Night Service for the system. Make sure to set the Service Patterns in Program 12-02-01, Program 12-02-02 and Program 12-02-03.	0 = Off 1 = On (default = 1)
12-02-01	**Automatic Night Service – Start Time**	For each Night Service Group, enter up to 20 start times for each Time Pattern (1~10). The first pattern start time (Pattern 1) should begin at 00:00 (midnight).	0000~2359 Please refer to the SV8100 Programming manual for default settings.
12-02-02	**Automatic Night Service – End Time**	For each Night Service Group (01~32), enter up to 20 end times (0000~2359) for each Time Pattern (1~10).	0000~2359 Please refer to the SV8100 Programming manual for default settings.
12-02-03	**Automatic Night Service – Operation Mode**	For each Night Service Group (01~32), define the Night Service Mode (1~8) for up to 20 start/end times for each Time Pattern (1~10).	1~8 Please refer to the SV8100 Programming manual for default settings.

Program Number	Program Name	Description/Comments	Assigned Data
12-03-01	**Weekly Night Service Switching**	Assign one of the 10 Time Patterns programmed in Program 12-02-01 to each day of the week.	Night Mode Service Group Numbers: 01~32 Time Schedule Pattern Number: 1~10 Day of Week: 01 = Sunday (default = Time Pattern 2) 02 = Monday (default = Time Pattern 1) 03 = Tuesday (default = Time Pattern 1) 04 = Wednesday (default = Time Pattern 1) 05 = Thursday (default = Time Pattern 1) 06 = Friday (default = Time Pattern 1) 07 = Saturday (default = Time Pattern 2)S
12-04-01	**Holiday Night Service Switching**	Assign one of the 10 Time Patterns to holidays.	Days and Months: 0101~1231 (e.g. 0101 = Jan. 1; 1231 = Dec. 31) Time Pattern Number: 0~10 (0 = No Setting) (default not assigned)
12-05-01	**Night Mode Group Assignment for Extensions**	Assign a Day/Night Mode Group (01~32), for each extension.	Night Mode Service Group Number: 01~32 (default = 1)
12-06-01	**Night Mode Group Assignment for Trunks**	Assign a Day/Night Mode Group (01~32), for each trunk port (1~200).	Trunk Port Number: 001~200 Night Mode Service Group Number: 01~32 (default Night Mode Service Group Number = 1)

Program Number	Program Name	Description/Comments	Assigned Data
12-07-01	**Text Data for Night Mode**	Create an original text message which is displayed on an LCD of multiline terminal in each Night Mode.	Night Mode Service Group Number: 01~32 Day/Night Mode: 1~8 Text Message: Maximum 12 Characters (alphabetic or numeric) Default Text Messages for Day/Night Modes: Mode 1 = No Setting Mode 2 = <Night> Mode 3 = <Midnight> Mode 4 = <Rest> Mode 5 = <Day2> Mode 6 = <Night2> Mode 7 = <Midnight2> Mode 8 = <Rest2>
12-08-01	**Night Mode Service Range**	For each Night Mode Group (01~32), determine how many night modes a user toggles through when the Night Mode key is pressed.	Night Mode Service Group Number: 01~32 Range: 2~8 (default Range = 2)

Program Number	Program Name	Description/Comments	Assigned Data
14-07-01	**Trunk Access Map Setup**	To allow for Universal Night Answer (UNA) answering, set up the Trunk Access Maps (1~200). For UNA, extension must have incoming access to trunk ringing the External Paging speakers.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Maps 2~200 = Trunk Ports 1~200 assigned with option 0 (No access).
15-06-01	**Trunk Access Map for Extensions**	For Universal Night Answer (UNA) answering, assign Trunk Access Maps (1~200) to extensions. Make one entry for each Night Service mode.	Trunk Access Maps: 1~200 (default = 1)
15-07-01	**Programmable Function Keys**	Assign Night Service function keys (09) to extensions and set the key for the proper mode (Day, Night, Rest, etc.). If the additional data is set to 0, the toggle mode is assigned.	For Line Keys: 1~48 0 ~ 99 (Normal Function Code) (default = Service Code 851) *00 ~ *99 (Appearance Function Code) (default = Service Code 852)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-01	**Class of Service Options (Administrator Level) – Manual Night Service Enabled**	Turns Off (0) or On (1) an extension for manually Switching the Night Mode (Service Code 718). This option must be enabled for an extension to be able to display the Night indication.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-10-07	**Class of Service Options (Answer Service) – Automatic Off-Hook Answer**	Turns Off (0) or On (1) an extension to use Universal Auto Answer (no service code required).	0 = Off 1 = On (default = 1 for COS 1~15)
22-02-01	**Incoming Call Trunk Setup**	Assign the incoming trunk type for each trunk. There is one item for each Night Service Mode (1~8).	0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	To have trunks ring extensions during the different Night Service modes (for ANA), assign extensions to Ring Groups. For each extension in the Ring Groups (1~100), indicate in Program 22-06-01 if trunk should ring (1) or not ring (0).	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	To have trunks ring extensions for ANA, assign trunks to Ring Groups (1~100), You make a different entry for each Night Service mode.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
22-08-01	**DIL/IRG No Answer Destination**	If a Universal Answer call rings longer than the DIL No Answer Time (Program 22-01-04), it routes to the Ring Group specified in this option.	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 0)
31-05-01	**Universal Night Answer/Ring Over Page**	For each Night Service Mode, assign which trunks should ring which External Paging Zones.	0 = No Ringing (No) 1 = Ringing (Yes) (default = 0)

Operation

To activate Night Service by dialing codes:

1. At a Multiline Terminal, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **818**. To change a different group's mode, dial **818** + the group number (01~32).

3. Dial the Night Service Code:
   1 = Day 1 Mode
   2 = Night 1 Mode
   3 = Midnight 1 Mode
   4 = Rest 1 Mode
   5 = Day 2 Mode
   6 = Night 2 Mode
   7 = Midnight 2 Mode
   8 = Rest 2 Mode

4. Press **Speaker** or hang up.

To activate Night Service by using programmable keys:

1. Press **Night Service** key (Program 15-07-01 or SC 751:09 + Mode code number below).
   1 = Day 1 Mode
   2 = Night 1 Mode
   3 = Midnight 1 Mode
   4 = Rest 1 Mode
   5 = Day 2 Mode
   6 = Night 2 Mode
   7 = Midnight 2 Mode
   8 = Rest 2 Mode

To transfer a call to the Universal Answer External Page zones:

1. Place the CO call on hold and dial the Transfer to Trunk Ring Group code (assigned in Program 11-15-09).
   . *You hear a confirmation tone.*
2. Hang up.
   . *The call rings over the External Paging, enabling anyone to answer the call.*

Off-Hook Signaling

Description

Off-Hook ringing alerts a Multiline Terminal user that an incoming outside call is ringing to that station during another call. Off-Hook Signaling helps important callers get through, without waiting in line for the called extension to become free. The system provides the following Off-Hook Signaling options:

- **Called Extension Block**

  The called extension Class of Service may block incoming Off-Hook Signaling attempts. This is beneficial to users that do not want interruptions while on a call.

- **Automatic Signaling**

  Calling a busy extension automatically initiates Off-Hook Signaling. This option is useful to receptionists, operators and others that must quickly process calls. This is set in the called extension Class of Service.

- **Manual Signaling**

  After reaching a busy extension, manual signaling gives the caller the choice of using Off-Hook Signaling or activating other features. Extensions without automatic signaling have manual signaling. The users can dial a service code or press a Programmable Function Key to send Off-Hook Signaling to the called telephone.

- **Selectable Off-Hook Signaling Mode**

  The Off-Hook Signal can be muted ringing, no off-hook ringing or a beep in the handset - based on the caller's programming.

- **Off-Hook Ringing**

  Use this option to enable or disable an extension Off-Hook Signaling for incoming calls. If enabled, Off-Hook Signaling occurs normally. If disabled, calls queue behind the extension busy line appearance and the user gets no Off-Hook Signaling indication. The second line appearance stays idle. The caller hears ringback tone while their call waits. This is set in the called extension Class of Service.

- **DID Call Waiting**

  An extension can optionally have DID calls camp-on with Off-Hook/Call Wait signaling, without Off-Hook/Call Wait signaling or no signaling. This is set in the called extension Class of Service.

- **Block Manual Off-Hook Signals**

  This Class of Service option enables/disables a busy extension ability to block off-hook

signals manually sent from a co-worker. If disabled (not blocked), callers can dial * at busy or busy/ring to signal the extension. If enabled (blocked), nothing happens when the caller dials * to off-hook signal.

- **Block Camp-On**

  If an extension has Block Camp-On enabled, callers to the extension cannot dial 2 to Camp-On after hearing busy or busy/ring. If the extension has Block Camp-On disabled, callers are not prevented from dialing 2 to Camp-On after hearing busy or busy/ring. This is set in the called extension Class of Service.

Conditions

- An extension user cannot Camp-On to a busy extension or leave a callback if Off-Hook Signaling has already gone through. Off-Hook Signaling allows an extension to block a caller's ability to dial **#** to camp-on.
- You cannot send off-hook signals to an extension busy on a Handsfree (Speakerphone) call. The called extension large LED flashes fast, with no ringing.
- The setting of Program 20-13-06 affects the BLF display for Hotline and Reverse Voice Over. Refer to Hotline and Reverse Voice Over features for additional information.
- You cannot send off-hook signals to an extension that is already receiving a voice announcement.
- An extension user can store the Off-Hook Signaling Service Code (709) under a One-Touch Key to provide quick Off-Hook Signaling access.
- An extension set as Operator in Program 20-17-01 does not follow settings in Program 20-13-05, Program 20-13-06 or Program 20-09-07 and always receives Off-Hook Signaling.
- Program 20-09-07 and 20-13-06 must be set to 1 in Class of Service for a normal extension to receive automatic Off-Hook Signaling.

Default Setting

Enabled

System Availability

Terminals

All Multiline and Single Line Terminals

Required Component(s)

None

Related Features

Callback

Call Waiting/Camp-On

Direct Inward Dialing (DID)

Handsfree and Monitor

Hotline

Intercom

One-Touch Calling

Programmable Function Keys

Reverse Voice Over

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-03	**Service Code Setup (for Service Access) – Override (Off-Hook Signaling)**	Assign a service code (809 by default) to be used for Off-Hook Signaling Override.	MLT, SLT (default =809)
11-16-04	**Single Digit Service Code Setup – Intercom Off-Hook Signaling**	Assign a one-digit service code to be used for Off-Hook Signaling.	(default not assigned)
15-02-12	**Multiline Telephone Basic Data Setup – Off-Hook Ringing**	For each extension, set Off-Hook Ringing type: 0 (muted), 1 (none), 3 (beep in speaker), 4 (beep in handset), 5 (Speaker & Handset Beep). DID, DNIS and DIL trunks can use any of the four options - normal/ring group trunks can only use options “0” or “1”.	0 = Muted Off-Hook Ringing 1 = No Off-Hook Ringing 2 = Not Used 3 = Beep in Speaker (SP) 4 = Beep in Handset (HS) 5 = Speaker & Handset Beep (default = 0)
15-07-01	**Programmable Function Keys**	Assign a function key for Off-Hook Signaling (code 33).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy. . *Must be set to 1 to enable automatic Off-Hook Signaling*.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook Signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to automatically (1) or manually (0) receive Off-Hook Signals.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-34	**Class of Service Options (Supplementary Service) – Block Manual Off-Hook Signaling**	Turn Off (0) or On (1) an extension ability to block off-hook signals manually sent from a co-worker.	0 = Off 1 = On (default = 0 for COS 1~15)
20-18-06	**Service Tone Timers – Interval of Call Waiting Tone**	Use this timer to set the time between Off-Hook Signaling alerts.	0~64800 (seconds) (default = 10 seconds)
80-01-01 (39)	**Service Tone Setup – Repeat Count**	Customize the system basic tones and system service tones. You need to reset for the changes to take affect.	
80-01-02 (39)	**Service Tone Setup – Basic Tone Number**	The following features require that the system tones listed below be changed to match the table. After changing these settings the chassis must be reset for the changes to take effect. ❍ Call Screening ❍ Call Holding ❍ Busy Greeting ❍ Await Answer Transfer	

Operation

To send Off-Hook signals to an extension busy on a call:

. *Your extension may send off-hook signals automatically.*

1. Dial service code.

   - OR -

   Press **Off-Hook Signaling** key (Program 15-07 or SC 851: 33).

   . *You hear ringback.*

   . *To have your call voice-announce, dial 1.*

Receiving Off-Hook Signaling on a single line telephone while engaged on an internal or external call:

1. When Off-Hook Signaling is heard in the receiver, press the **Flash** Key to answer the call. The first call is placed on hold.

2. Press the **Flash Key** again to toggle between the two calls.

   . *If the single line phone hangs up with the active call, the other call on hold rings back to the single line.*

One-Touch Calling

Description

One-Touch Calling gives a multiline terminal user one-button access to extensions, trunks, speed dial bins and selected system features. This saves users time when accessing co-workers, clients and features they use most often. Instead of dialing a series of codes, the user need only press the One-Touch key. An extension user can have One-Touch keys programmed for:

- **Direct Station Selection – one-button access to extensions**
- **Station Speed Dial – one-button access to stored numbers (up to 24 digits long)**
- **Speed Dial – System/Group/Station – one-button access to stored speed dialing numbers**
- **Trunk Calling – one-button access to trunks or trunk groups**
- **Service Codes – one-button access to specific Service Codes**

An extension user can chain dial with One-Touch Keys. For example, a user can store the number for a company Automated Attendant in key 1 and employee extension numbers in keys 2~5. The user presses key 1 to call the company, then one of keys 2~5 to ring the employee to which they want to speak.

An extension user or system administrator can optionally store a Flash command under a One-Touch key. This is helpful for One-Touch Keys used as Station Speed Dial bins. The stored Flash may be helpful to access features of the connected Telco, PBX or Centrex.

Conditions

- One-Touch keys provide a Busy Lamp Field (BLF).
- When a multiline terminal user is on a call, they can transfer to another station by pressing a DSS key for that station. It is not necessary to press Transfer to transfer to another station using a DSS key.

  . *When a multiline terminal user is on a call, they must press transfer to transfer a call off site with a DSS key.*

  . *When a multiline terminal user is on a call, they must press transfer to transfer a call to a destination that is not a station (ACD/Voice Mail/Department group pilot, etc.).*
- Pauses can be entered in the dial string of a DSS/One Touch button. The pause is entered as P in the dial string and causes the system to wait three seconds before sending the rest of the digits that follow the P (pause). Multiple pauses can be entered.
- The @ can be entered in the dial string of a DSS/One Touch button. The @ only applies to ISDN and Intercom calls. When using the @, the system waits for the destination to answer

(answer supervision), and then sends the rest of the digits.

- Entering a P (pause) in a DSS/One Touch dial string can be used for CO calls, Intercom calls, or after the @ for ISDN calls.
- ARS with Max Digits is not supported when entering the @ or a P (pause) in the dial string of a DSS/One Touch button.

Default Setting

None

System Availability

Terminals

All Multiline Terminals and DSS Consoles

Required Component(s)

None

Related Features

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Define a Programmable Function Key for One-Touch Calling by defining the key as a DSS/ One-Touch key (01).	For Line Keys: 1~48 0 ~ 99 (Normal Function Code) (default = Service Code 851)* 00* ~ *99 (Appearance Function Code) (default = Service Code 852)
11-11-17	**Service Code Setup (for Setup/ Entry Operation) – Programmable Function Key Programming (2-Digit Service Codes)**	Use this option to set the service code (default 851) to assign 2-digit function codes to the Function keys.	MLT (default = 851)
20-13-18	**Class of Service Options (Supplementary Service) – Programmable Function Key Programming (General Level)**	Turns Off (0) or On (1) an extension user ability to program General function keys using Service Code 851 (by default). (Refer to Program 20-07-10 for Service Code 852.)	0 = Off 1 = On (default = 1 for COS 1~15)
30-03-01	**DSS Console Key Assignment**	Customize DSS Console keys to function as DSS keys, Service Code keys, Programmable Function Keys, and One-Touch Calling keys. When programming a feature within a One-Touch Key, refer to the feature description for additional programming options.	Key Number 001~114 0~99 (General Functional Level) 97 = Door Box Access key (additional data: 1~8 Door Box No.) * 00 ~ * 99 (Appearance Functional Level)

Operation

Programmable Function Keys

To define a Programmable Function Key as a One-Touch Key:

1. Dial the service code for Function Key Programming (Program 11-11-17, 851 by default).
2. Press the key to be defined.

3. Dial **01** (DSS/One-Touch Key Operation).
4. For Direct Station Selection (Extension):
   a. Dial extension number you want assigned to that key.
   b. Press **Hold**.
   c. Press **Speaker**.

   For Personal Speed Dial:
   a. Dial the general trunk access code (**9**).

      - OR -

      Dial the Specific Trunk Service Code (**805**) plus the trunk number (e.g., 005).

      - OR -

      Dial the Trunk Group Service Code (**804**) plus the trunk group number (e.g., 1).
   b. Dial the number you want to store.
      - *The total of the digits stored in steps 3 and 4 cannot exceed 24.*
      - *Valid entries are 0~9,* ***#*** *and* *******. To enter a pause, press* ***MIC****. To store a Flash, press* ***Redial****.*
   c. Press **Hold**.
   d. Press **Speaker**.

   For Speed Dial – System/Group:
   a. Dial **813** to store a Speed Dial – System dialing number.

      - OR -

      Dial **814** to store a Speed Dial – Group dialing number.
   b. Dial Speed Dial number storage code (e.g., 001).
   c. Press **Hold**.
   d. Press **Speaker**.

For Central Office Calls, Placing (Trunk Calling):

a. a. Dial the general trunk access code (**9**).

- OR -

Dial the specific Trunk Service Code (**805**) plus the trunk number (e.g., 005).

- OR -

Dial the Trunk Group Service Code (**804**) plus the trunk group number (e.g., 1).

b. Dial the telephone number to be stored.

c. Press **Hold**.

d. Press **Speaker**.

For Service Codes:

a. Dial the Service Code you want stored.

. *For example, if you want a One-Touch Key to automatically clear your Last Number Redial, enter 776.*

b. Press **Hold**.

c. Press **Speaker**.

Checking the One-Touch Keys

To check the function of a One-Touch key:

1. Press the **Help** key.
2. Press the **One-Touch** key.

. *The stored function displays.*

. *Repeat this step to check additional keys.*

3. Press the **Exit** key.

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Operator

Description

When an extension user dials 0, calls are routed to a main system operator. The operator can answer and route outside calls or locate employees using the Page feature.

A maximum of eight operators is available.

Conditions

- Attendant extensions can have up to 32 incoming calls queued before additional callers hear busy tone.
- The operator extension cannot be a virtual extension.
- When dialing 0 from InMail across CCIS and CCISoIP, it follows Program 47-13-01 Key 10.
- When dialing 0 from the in-skin Voice Mail across CCIS and CCISoIP, it follows what is in the operator set up.
- Extensions and trunks can be assigned to an operator group. A call to an operator that is busy rolls to the next operator in the operator group.

Default Setting

No operators are assigned.

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Attendant Call Queuing

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-01-01	**System Options – Operator Access Mode**	Use this program to set up priority of a call when calling an operator telephone (0 = Step, 1 = Circular).	0 = Step 1 = Circular (default = 0)
20-17-01	**Operator Extension – Operator's Extension Number**	Designate an extension an operator. When an extension user dials 0 or 9 (defined by Program 11-01, Type 5), calls go to the operator selected in this program. If you do not assign an extension in Program 90-11-01, system alarms appear on the extension assigned in this option.	Up to eight digits (default not assigned)
20-35-01	**Extension's Operator Setting**	Assign an extension to an operator group.	(Input: 0~15)
20-36-01	**Trunk's Operator Setting**	Allows the user to select Operator Group per trunk.	(Input: 0~15) (0 = Not assigned) (default = 0)
20-37-01	**Operator Extension Group Setup**	Define the initial operator extension in the operator group.	Up to eight Digits (default not assigned)
20-38-01	**Operator Group Setting**	Use this program to set up priority of a call when calling an operator telephone.	0 = Step 1 = Circular (default = 0)

Operation

Refer to the individual features for operation.

(OPX) Off-Premise Extension

Description

Off-Premise Extension allows a single line telephone, located remotely from the main installation site, to access the system features with the same abilities as an on-premise single line telephone.

Conditions

- Each CD-4DIOPB provides four off-premise circuits.
- The maximum loop resistance between a CD-4DIOPB and an Off-Premise Extension Single Line Telephone is 1600 ohms (including single line telephone set resistance).
- The CD-4DIOPB has a built-in ringer (RSG). This blade supports Synchronous Ringing and detects Dial Pulse/DTMF tones.
- The CD-4DIOPB does not support an interface to a Voice Mail unit.

Default Setting

None

System Availability

Terminals

Single Line Telephones

Required Component(s)

CD-4DIOPB

Related Features

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup**	Use program 10-03-XX to setup and confirm the basic configuration data for each blade. This program represents different data depending on the blade installed in the slot. Please refer the SV8100 Programming Manual for a more detailed description of this program.	The assigned data varies depending on the blade installed in the slot. Please refer to the SV8100 Programming Manual for a more detailed description of the 10-03-XX programs.
10-09-01	**DTMF and Dial Tone Circuit Setup**	Allocate the circuits on the CD-CP00 ETUs for either DTMF receiving or dial tone detection. Program 14-01-13 Basic Trunk Data Setup – Loop Supervision Enable (1) loop supervision for each trunk that should be able to use Call Forwarding – Centrex.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
15-03-01	**Single Line Telephone Basic Data Setup – SLT Signaling Type**	For each UNIVERGE SV8100 voice mail extension, this option must be set to 0.	0 = DP 1 = DTMF (default = 1)
15-03-03	**Single Line Telephone Basic Data Setup – Terminal Type**	Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special (default = 0)
15-03-05	**Single Line Telephone Basic Data Setup – Trunk Polarity Reverse**	Do Not Change Default Entry as DTMF issues may arise with voice mail.	0 = Off 1 = On (default = 0)
15-03-06	**Single Line Telephone Basic Data Setup – Extension Polarity Reverse**	Do Not Change Default Entry as DTMF issues may arise with voice mail.	0 = Disable (Off) 1 = Enable (On) (default = 0)
15-03-07	**Single Line Telephone Basic Data Setup – Enabled On-Hook When Holding (SLT)**	Used to enable or disable Enabled On-Hook When Holding for SLT.	0 = No 1 = Yes (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
15-03-08	**Single Line Telephone Basic Data Setup – Answer On-Hook when Holding (SLT)**	Used to enable or disable Answer On-Hook when Holding for SLT.	0 = Disable (No) 1 = Yes (Enable) (default = 1)
15-03-09	**Single Line Telephone Basic Data Setup – Caller ID Function - For External Module**	Enable (1) or disable (0) the Caller ID FSK signal for an external Caller ID module or a 3rd party vendor telephone with Caller ID display. **Important:** If voice mail is used, this setting must be disabled for the system integration codes to be correct. . *With a 2500 set (no Caller ID) installed, this must be set to 0 for incoming callers to have a talk path.*	0 = Disable 1 = Enable (default = 0)
15-03-10	**Single Line Telephone Basic Data Setup – Caller ID Name**	Determine if an extension user telephone should display the Caller ID name.	0 = Disable 1 = Enable (default = 1)
15-03-11	**Single Line Telephone Basic Data Setup – Caller ID Type**	Determine whether the Caller ID type is FSK or DTMF.	0 = FSK 1 = DTMF (default = 0)
15-03-14	**Single Line Telephone Basic Data Setup – Forwarded Caller ID Display Mode**	Determine what the display shows when a multiline terminal receives a forwarded outside call.	0 = Calling Extension Number (Calling) 1 = External Caller ID (Forward) (default = 0)
20-03-01	**System Options for Single Line Telephones – SLT Call Waiting Answer Mode**	For a busy single line telephone, set the mode used to answer a camped-on trunk call. For ESL sets, enabling this option (1) allows the user to dial Service Code for Voice Mail Conversation Record.	0 = Hookflash (Hooking) 1 = Hookflash + Service Code 654 (default = 0)
20-03-02	**System Options for Single Line Telephones – Ignore Received DP Dial on DTMF SLT Port**	Use this option to define whether the system should receive dial pulse and DTMF signals (0) or ignore dial pulse and only accept DTMF signals (1).	0 = Do Not Ignore (No) 1 = Ignore (Yes) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
20-03-03	**System Options for Single Line Telephones – SLT DTMF Dial to Trunk Lines**	❍ **Type 0:** The system keeps the digits dialed by the single line telephone on a trunk in a buffer. After all the digits are received, the system sends all the digits to the trunk. If the time space between digits is longer than the time in Item 4, the system considers all digits received. ❍ **Type 1:** The system passes the received digits from the single line telephone to the trunk immediately. If the single line telephone has a Last Number Dial key without a pause, this key may not be able to use the Last Number Dial key with the Type 1 setting.	0 = Receive all dialed data, before sending (All) 1 = Direct through out (Direct) (default = 0)
20-03-04	**System Options for Single Line Telephones – Dial Sending Start Time for SLT or ARS**	When ARS or an analog extension user accesses a trunk and dials an outside call, the system waits this interval before outdialing the first digit (0~64800 seconds).	0~64800 (seconds) (default = 3 seconds)
20-03-05	**System Options for Single Line Telephones – SLT Operation Mode**	Used to set the operation mode for SLT terminals.	0 = Normal Mode 1 = Extended Mode1 2 = Extended Mode2 (default = 0)
20-03-06	**System Options for Single Line Telephones – Headset Ringing Start Time (for SLT)**	Define the headset ringing start time. After this time expires from the time when a single line telephone is off-hook, the system sets the single line telephone to headset ringing mode.	0~64800 seconds (default = 5)
20-03-07	**System Options for Single Line Telephones – Trunk Call Dial Forced Sending Start Time (Forced Dial)**	Used to define the Trunk Call Dial Forced Sending Start Time (Forced Dial) for single line telephones.	0~64800 seconds (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) the extension ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-15-01	**Ring Cycle Setup – Normal Incoming Call on Trunk**	Used to define the ring cycle for INcoming Internal calls.	Ringing Cycle = 1~13 (default = 3)
20-15-03	**Ring Cycle Setup – Incoming Internal Call**	Use to define the incoming internal call ringing cycles for each ring type.	Ringing Cycle = 1~13 (default = 8)
20-15-05	**Ring Cycle Setup – DID/DDI**	Used to define the ring cycle for DID/DDI calls.	Ringing Cycle = 1~13 (default = 8)
80-03-01	**DTMF Tone Receiver Setup – Detect Level**	Use Items 11~32 to set the criteria for dial tone detection for outgoing ARS calls.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1~5 = 0
80-03-02	**DTMF Tone Receiver Setup – Start Delay Time**	Use this option to define the start delay time for DTMF Tone Receiver.	0~255 (0.25 ms ~ 64 ms) default: Type 1~5 = 0

Program Number	Program Name	Description/Comments	Assigned Data
80-03-03	**DTMF Tone Receiver Setup – Min. Detect Level**	Use this option to define the minimum detection level for DTMF Tone Receiver.	0~15 detect level 0: –10dBm(0) to –25dBm(15) detect level 1: –15dBm(0) to –30dBm(15) detect level 2: –20dBm(0) to –35dBm(15) detect level 3: –25dBm(0) to –40dBm(15) detect level 4: –30dBm(0) to –45dBm(15) detect level 5: –35dBm(0) to –50dBm(15) detect level 6: –40dBm(0) to –55dBm(15) detect level 7: -45dBm(0) to -60dBm(15) detect level 8: -50dBm(0) to -65dBm(15) detect level 9: -55dBm(0) to -70dBm(15) detect level 10: -60dBm(0) to -75dBm(15) detect level 11: -65dBm(0) to -80dBm(15) detect level 12: -70dBm(0) to -85dBm(15) detect level 13: -75dBm(0) to -90dBm(15) detect level 14: -80dBm(0) to -95dBm(15) detect level 15: -85dBm(0) to -100dBm(15) default: Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3~5 = 10 (-20dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-04	**DTMF Tone Receiver Setup – Max. Detect Level**	Use this option to define the maximum detection level for DTMF Tone Receiver.	0~15 detect level 0: 0dBm(0) to –15dBm(15) detect level 1: –5dBm(0) to –20dBm(15) detect level 2: –10dBm(0) to –25dBm(15) detect level 3: –15dBm(0) to –30dBm(15) detect level 4: –20dBm(0) to –35dBm(15) detect level 5: –25dBm(0) to –40dBm(15) detect level 6: –30dBm(0) to –45dBm(15) detect level 7: -35dBm(0) to -50dBm(15) detect level 8: -40dBm(0) to -55dBm(15) detect level 9: -45dBm(0) to -60dBm(15) detect level 10: -50dBm(0) to -65dBm(15) detect level 11: -55dBm(0) to -70dBm(15) detect level 12: -60dBm(0) to -75dBm(15) detect level 13: -65dBm(0) to -80dBm(15) detect level 14: -70dBm(0) to -85dBm(15) detect level 15: -75dBm(0) to -90dBm(15) default: Type 1~5 = 2 (-2dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-05	**DTMF Tone Receiver Setup – Forward Twist Level**	Use this option to define the forward twist level for DTMF Tone Receiver.	0~9 (1dB ~ 10dB) default: Type 1 = 5 (6dBm) Type 2 = 5 (6dBm) Type 3 = 5 (6dBm) Type 4 = 5 (6dBm) Type 5 = 5 (6dBm)
80-03-06	**DTMF Tone Receiver Setup – Backwards Twist Level**	Use this option to define the backwards twist level for DTMF Tone Receiver.	0~9 (1dB ~ 10dB) default: Type 1 = 0 (1dBm) Type 2 = 0 (1dBm) Type 3 = 0 (1dBm) Type 4 = 0 (1dBm) Type 5 = 0 (1dBm)
80-03-07	**DTMF Tone Receiver Setup – ON Detect Time**	Use this option to define the On detection time for DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) default: Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)
80-03-08	**DTMF Tone Receiver Setup – OFF Detect Time**	Use this option to define the Off detection time for DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) default: Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)
80-04-04	**Call Progress Tone Detector Setup – No Tone Time**	Use to define the no tone time for the Call Progress Tone Detector.	0~255 (30+30-7680ms) default: Type 1 (DT) – 132 (3990ms) Type 2 (BT) – 132 (3990ms) Type 3 (RBT) – 132 (3990ms) Type 4, Type 5 – 0

Refer to Single Line Telephones on page 1-777 for related programming.

Operation

Normal call handling procedures for single line telephones apply.

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Paging, External

Description

With External Paging, a user can broadcast announcements over paging equipment connected to external Paging zones. When a user pages on of these external zones, the system broadcasts the announcement over the speakers. Like Internal Paging, External Paging allows a user to locate another employee or make an announcement without calling each extension individually.

The UNIVERGE SV8100 system allows up to eight External Paging zones, or a common zone output provided by the CPU (Speaker #9). All other speakers (#1~8) require a port on a PGD(2)-U10 ADP, with a maximum of two external paging circuits per module. You must have four PGD(2)-U10 ADPs to get the eight external zones. In addition, each external zone has an associated relay contact. When a user pages to a zone, the corresponding contact activates (closes). This provides for Paging amplifier control.

Combined Paging

Use Combined Paging when you want to simultaneously Page into an internal and corresponding external zone. For example, you can Page your company warehouse and outside loading dock at the same time. Combined Paging is available for zones 1~8 and All Call. Refer to Paging, Internal on page 1-681 for more on setting up Combined Paging. In addition, you can program a Function Key as a Combined Paging key. Using the External Page Function Key, when an All Call External Page Function Key is programmed, it includes both the external zones and the assigned internal zone(s). If the internal page zone is busy or there are no extensions in a page group, the announcement is made on the external zones only.

Conditions

- The UNIVERGE SV8100 provides a common zone output provided by the chassis. For more than one external page zone, External Paging requires PGD(2)-U10 ADPs and customer-provided paging equipment.
- Talkback paging requires the use of a PGD(2)-U10 ADP. The UNIVERGE SV8100 common zone output provided by the chassis does not allow talkback.
- A common zone output is provided by the chassis and is considered Zone #9 when programming.
- A Class of Service option is available in system programming to prevent display telephones from showing incoming paging information. This allows the system to save processor time and speed up system operation.

- DID and DIL trunks do not ring external page speakers. Only trunks defined as normal in Program 22-02-01 ring external page speakers.
- Paging keys can be assign on Programmable Function Keys and Direct Station Selection (DSS) Consoles to simplify External Paging operation.
- If a PGD(2)-U10 ADP circuit has a Door Box connected, you cannot use that circuit for External Paging.
- To have outside calls ring External Paging Zones at night, refer to the Night Service feature and Program 31-05.
- The PGD(2)-U10 ADP can only be connected to a DLC.
- A maximum number of PGD(2)-U10 ADP is 56 and refer to the Hardware Manual for more information which describes how many of the 56 can be for paging, door box or Music on Hold (MOH).
- Phones that have an APR/APA installed will not pass voice to a trunk used for paging until the interdigit timer expires (Program 21-01-03).

Default Setting

No External Paging defined.

System Availability

Terminals

All Stations

Required Component(s)

- CD-8DLCA, CD-16DLCA or CD-LTA for PGD(2)-U10 ADP
- PGD(2)-U10 ADP for Zone Paging
- 1- or 2-way amplifier and speakers (locally provided)

Related Features

Central Office Calls, Placing

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Direct Station Selection (DSS) Console

Door Box

Night Service

Paging, Internal

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-05-01	**General Purpose Relay Setup – Slot No. Physical Port of DLCA Sensor Circuit No.**	Define which relay circuits (5~8) on the PGD(2)-U10 ADP are used for General Purpose Relays.	Slot No: 0~24 DCLA Port: 0~16 Relay No: 0, 5~8 . *After each entry, pressing the Transfer Key advances to the next entry.* (default = 0 - 0 - 0)
10-21-04	**CD-CP00 Hardware Setup – External Source I/O Selection on CD-CP00**	Define what the I/O ports on the CD-CP00 are used for.	0 = External MOH (CN8)/ External Speaker(CN9) 1 = BGM source (CN8)/ External Speaker(CN9) 2 = External MOH (CN8)/BGM source (CN9) . *Relations between CN number and Relay number are as follows:* CN8 = Relay2 CN9 = Relay1 (default = 0)
11-12-50	**Service Code Setup (For Service Access) – General Purpose Relay**	Specify the service code to be used for toggling the relay open and closed.	MLT, SLT (default = 880)
15-07-01	**Programmable Function Keys**	Assign function keys for External Paging zones (19 + zone) and External All Call Page (20). If required, define a function key for a multiline terminal to use the general purpose relay (51).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-29	**Class of Service Options (Supplementary Service) – Paging Display**	Turns Off (0) or On (1) an extension user ability to display paging information.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
31-01-02	**System Options for Internal/ External Paging – Page Announcement Duration**	Set the maximum allowable duration for a Paging announcement.	0~64800 (seconds) (default = 1200 seconds)
31-03-01	**Internal Paging Group Settings – Internal Paging Group Name**	Assign name to Internal Paging Groups (i.e., Page Zones). The system shows the name you program on the telephone display.	Up to 12 characters Refer to Programming Manual for table.
31-04-01	**External Paging Zone Group**	Assign each External Paging Speaker to an External Paging Group (1~8) used for accessing the zone. If zones 1~8 are not connected to PGD(2)-U10 ADP, set these unused zones to External Paging Group 0.	External Paging Speaker/Zones: 1~9 Speaker 1 [PGD(2)-U10] = 1 (Group 1) Speaker 2 [PGD(2)-U10] = 2 (Group 2) Speaker 3 [PGD(2)-U10] = 3 (Group 3) Speaker 4 [PGD(2)-U10] = 4 (Group 4) Speaker 5 [PGD(2)-U10] = 5 (Group 5) Speaker 6 [PGD(2)-U10] = 6 (Group 6) Speaker 7 [PGD(2)-U10] = 7 (Group 7) Speaker 8 [PGD(2)-U10] = 8 (Group 8) Speaker 9 (CD-CP00) = 1 (Group 1)
31-05-01	**Universal Night Answer/Ring Over Page**	Assign Universal Night Answer ringing to each External Paging zone. For each trunk port, make a separate entry for each External Paging Speaker.	External Paging Speaker/Zones: 1~9 0 = No Ringing (No) 1 = Ringing (Yes) (default = 0)
31-06-01	**External Speaker Control – Broadcast Splash Tone before Paging (Paging Start Tone)**	Use this option to enable or disable splash tone before Paging over an external zone. If enabled, the system broadcasts a splash tone before the External Paging announcement.	0 = No Tone (None) 1 = Splash Tone 2 = Chime Tone (default = 2)
31-06-02	**External Speaker Control – Broadcast Splash Tone after Paging (Paging End Time)**	Assign option for each External Paging Speaker (1~9).	0 = No Tone (None) 1 = Splash Tone 2 = Chime Tone (default = 2)
31-06-04	**External Speaker Control – CODEC Transmit Gain Setup**	Use to define the CODEC transmitting gain settings for the external speaker using an amplifier.	1~63 (-15.5 ~ +15.5dB) (default = 32)

Program Number	Program Name	Description/Comments	Assigned Data
31-06-05	**External Speaker Control – CODEC Receive Gain Setup**	Select the CODEC gain types (1~32) for each External Page Speaker.	External Paging Speaker/Zone: 1~9 1~63 (-15.5 ~ +15.5dB) (default = 32)
31-07-01	**Combined Paging Assignments**	Assign an External Paging Group (0~8) to an Internal Paging Zone (0 = All Call, Zones 1~64) for Combined Paging. When an extension user makes a Combined Page, they simultaneously broadcast into both the External and Internal Zone.	0~64 (0 = All internal paging) (default = 1)
31-08-01	**BGM on External Paging – BGM**	Assign the Background Music option for each External Paging Speaker. If enabled (1), the system plays Background Music over the zone when it is idle.	External Paging Speaker/Zone: 1~9 0 = Disable 1 = Enable (default = 0)

Operation

To Page into an external zone:

1. Press External Paging key (Program 15-07 or SC 851: 19 for External Paging zones or 20 for External All Call Paging).
2. Make announcement.

- OR -

1. At the multiline terminal, press **Speaker** or pick up the handset.

- OR -

At single line telephone, lift the handset.

2. Dial **803** and the External Paging Zone code (1~8 or 0 for All Call).

- OR -

Dial **751** and the Combined Paging Group code (1~8 or 0 for Internal/External All Call).

. *Display indicates the Combined Paging as an External Page.*

. *If the Internal Page Zone is busy or if there are no extensions in a page group, the page may be announced as an External Page only.*

3. Make an announcement.

4. Dial **803** and the External Paging Zone code (1~8 or 0 for All Call).

   - OR -

   Dial **751** and the Combined Paging Group code (1~8 or 0 for Internal/External All Call).

   . *Display indicates the Combined Paging as an External Page.*

   . *If the Internal Page Zone is busy or if there are no extensions in a page group, the page may be announced as an External Page only.*

5. Make an announcement.

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Paging, Internal

Description

Internal Paging lets extension users broadcast announcements to other multiline terminal users. When a user makes a Zone Paging announcement, the announcement broadcasts to all idle extensions in the zone dialed. With All Call Paging, the announcement broadcasts to all idle extensions programmed to receive All Call Paging. An extension can be a member of only one Internal Paging Zone. Like External Paging, Internal Paging allows a user to locate another employee or make an announcement without calling each extension individually.

Combined Paging

Use Combined Paging when you want to simultaneously Page into an internal and corresponding external zone. For example, you can Page your company warehouse and outside loading dock at the same time. Combined Paging is available for Paging zones 1~8 and All Call. Optionally, you can change the Combined Paging assignments. For example, you can associate External Paging Zone 1 with Internal Paging Zone 4. You can program a Function Key as a Combined Paging key. When an All Call External Page Function Key is programmed, it includes both the external zones and the assigned internal zone(s). If the internal page zone is busy or there are no extensions in a page group, the announcement is made on the external zones only.

Conditions

- Internal Paging does not require a PGD(2)-U10 ADP.
- You can assign up to 50 extensions to an Internal or All Call Paging Group.
- A system must have at least one extension port idle to make an Internal Page. If no extension port is idle, the extension performing the Page hears a busy signal.
- There are 64 available Internal Paging Groups (Zones).
- A Class of Service option is available in system programming to prevent display telephones from showing incoming internal paging information. This allows the system to save processor time and speed up system operation.
- An extension user can broadcast an announcement over an External Paging Zone.
- Function keys simplify Internal Paging operation.
- You must assign an extension to be in a two-digit zone in Program 31-02-01 before you can assign a function key using the 851 service code as a two-digit Internal Group Paging Zone key.
- If Auto Hold in Program 15-02-07 is set to Cut(1), when a user presses the page key while on a trunk call, the trunk call is put on hold.

- A single line telephone can initiate an Internal Zone page, but cannot receive an Internal Zone Page.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Single Line Telephones

Required Component(s)

None

Related Features

Meet Me Paging

Meet Me Paging Transfer

Paging, External

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-19	**Service Code Setup (for Service Access) – Internal Group Paging**	Service code setup.	MLT, SLT (default = 801)
11-12-24	**Service Code Setup (for Service Access) – Combined Paging**	Combined paging, internal/ external access code. Service code setup.	MLT, SLT (default = 751)
15-07-01	**Programmable Function Keys**	Assign function keys for Internal Paging Zones (code 21 + page zone) and Internal All Call Paging (code 22).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-29	**Class of Service Options (Supplementary Service) – Paging Display**	Turns Off (0) or On (1) an extension user ability to display paging information.	0 = Off 1 = On (default = 1 for COS 1~15)
31-01-01	**System Options for Internal/ External Paging – All Call Paging Zone Name**	Assign a name to the All Call Internal Paging Zone. The name shows on the display of the telephone making the announcement.	Up to 12 Characters (default = Group All)
31-01-02	**System Options for Internal/ External Paging – Page Announcement Duration**	Set the maximum allowable duration for a Paging announcement (External Paging only).	0~64800 (seconds) (default = 1200 seconds)
31-02-01	**Internal Paging Group Assignment – Internal Paging Group Number**	Assign extensions to Internal Paging Zones. An extension must be assigned to a 2-digit zone in order to access any of the 2-digit zones.	Internal Page Zones: 0, 1~9, 00, 01~64 0~64 (0 = No Setting) Default: All Stations = 0

Program Number	Program Name	Description/Comments	Assigned Data
31-02-02	**Internal Paging Group Assignment – Internal All Call Paging Receiving**	Turn On (1) or Off (0) All Call Internal Paging for each extension. If allowed, extensions can make and receive All Call Internal Paging announcements. If prevented, extension can only make All Call Internal Paging announcements.	0 = Off 1 = On (default = 0)
31-03-01	**Internal Paging Group Settings – Internal Paging Group Name**	Program names for the Internal Paging Zones.	Up to 12 Characters 01 = Group 1 02 = Group 2 : 64 = Group 64
31-07-01	**Combined Paging Assignments**	For each External Paging Group (1~8 and 0 for All Call), assign a corresponding Internal Zone for Combined Paging.	Internal Page Zones: 0, 1~9, 00, 01~64 0~64 (0 = All internal paging) (default = 1)

Operation

To make an Internal Page announcement:

Multiline Terminal

1. Press the zone **Internal Paging** key (Program 15-07 or SC 851: 21 + 0 or 1~9 or 01~64 for zones (0 or 00 for All Call).

- OR -

1. Press **Speaker** or lift the handset.

2. Dial **801** and the Paging Zone number (0~9 or 00~64).

   . *Dialing 0 or 00 calls All Call Internal Paging.*

   - OR -

   Dial **751** and the Combined Paging Group code 1~8 or 0 (for Internal/External All Call).

   . *Display indicates the Combined Paging as an External Page.*

   . *If the Internal Page Zone is busy or if there are no extensions in a page group, the page is announced as an External Page only.*

3. Make an announcement.

4. Press **Speaker** to hang up.

Single Line Telephone

1. Lift the handset.

2. Dial **801** and the Paging Zone number (0~9 or 00~64).

   . *Dialing 0 or 00 calls All Call Internal Paging.*

   . *Dial *1 and the Combined Paging Group code 1~8 or 0 (for Internal/External All Call).*

3. Make an announcement.

4. Hang up.

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Park

Description

Park places a call in a waiting state (called a Park Orbit) so that an extension user may pick it up. There are two types of Park: System and Personal. Use System Park when you want to have the call wait in a system orbit. Personal Park allows a user to Park a call at their extension so a co-worker can pick it up. After parking a call in orbit, a user can Page the person receiving the call and hang up. The paged party dials a code or presses a programmed Park key to pick up the call. With Park, it is not necessary to locate a person to handle their calls. A call parked for too long recalls the extension that initially parked it, however the call remains in the park orbit until it is answered. There are 64 Park Orbits (1~64) available for use.

Extended Park

An extension Class of Service determines whether it uses the normal Park Orbit Recall time or the Extended Park Orbit Recall time. The timers are set in system programming. When an extension with Extended Park Recall Class of Service option parks a call, it recalls after the Extended Park Orbit Recall time. When an extension with the Normal Park Orbit Recall Class of Service option parks a call, it recalls after the normal Park Orbit Recall time, however the call remains in the park orbit until it is answered.

Programmable Function Key and Service Code Available for Personal Park

The Personal Park feature is enhanced by using a Programmable Function Key or service code (3-digit or 1-digit) to place a call in Personal Park. This option is available for multiline terminals, single line sets, and UNIVERGE SV8100 Wireless telephones and can be used for analog or ISDN trunks.

Conditions

- An extension user can park a call in any Park Orbit. However, an extension user can pick up only a call Parked by a member of their own Park group (see Program 24-03).
- When a 2-button telephone user parks a call, they must wait the Interdigit Time (normally 10 seconds) before trying to retrieve it.
- An extension can have only one Personal Park key.
- When the terminal that has a call in Personal Park is unplugged, the Personal Park is released and the held caller is placed on Non-Exclusive Hold.
- The following table indicates what condition the service codes and Programmable Function key can be used.

Status	Using 3-Digit Service Code	Using 1-Digit Service Code	Using Personal Park Key
Speaking	Not Available	Not Available	Available
ICM Dial Tone or Busy Tone	Available	Not Available	Available
Calling Another Extension	Not Available	Available (with outside call on hold and when called extension does not answer)	Available
Receiving a Personal Park Recall	Not Available	Not Available	Available

- A user can display the Caller ID of a call in Park if Caller ID is enabled (1) in Program 20-09-02.
- Park keys can be assigned on DSS consoles.
- Calls on virtual extension keys cannot be put in Personal Park if Program 15-18-01 is set to Land on the key (1).
- Function keys simplify Park operation.
- Calls on Virtual Extension keys cannot be Call Parked.
- One Touch keys programmed for Park Hold Service Code cannot be used to park calls without using Hold or Transfer.
- Call Park – Step Call is supported in the local system only.
- A parked call cannot be retrieved from Hold Dial Tone (Second dial tone).

Default Setting

Enabled

System Availability

Terminals

AI Terminals

Required Component(s)

None

Related Features

Caller ID

Direct Station Selection (DSS) Console

Hold

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-31	**Service Code Setup (for Service Access) – Park Hold**	Set the service code which should be used for placing a call in Park.	MLT, SLT (default: 831)
11-12-32	**Service Code Setup (for Service Access) – Answer for Park Hold**	Set the service code which should be used for answering a call in Park.	MLT, SLT (default: 861)
11-12-35	**Service Code Setup (for Service Access) – Station Park Hold**	Set the service code to be used for placing a call in a Personal Park.	MLT, SLT (default = 773)
11-16-11	**Single Digit Service Code Setup – Station Park Hold**	Customize the one-digit service code to be used when placing a call in Personal Park.	(default not assigned)
15-02-08	**Multiline Telephone Basic Data Setup – Automatic Handsfree**	Use this option to set whether pressing a One-Touch key preselects the key or goes off-hook to access the key.	0 = Preselect 1 = One-Touch (Automatic Handsfree) (default = 1)
15-07-01	**Programmable Function Keys**	Assign a keys as a Park Orbit key (code *04 plus Park orbit number [01~64]) or as a Personal Park key.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-18-01	**Virtual Extension Key Enhanced Options – Virtual Extension Key Operation Mode**	This program sets whether an incoming call to a Virtual Extension resides on the Virtual Extension key once answered (1) or appears on a CO Appearance Line key (0). This setting applies to Multiline Terminals, single line telephones and virtual extension numbers.	0 = Release 1 = Land On the Key (default = 0)
15-18-02	**Virtual Extension Key Enhanced Options – Display Mode when pacing a call on Virtual Extension Key**	Defines if calls to or from a Virtual Extension Key display the Virtual Extension Key name or the name of the extension it resides on.	0 = Secondary Extension Name 1 = Actual Station Name (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-11-19	**Class of Service Options (Hold/ Transfer Service) – Hold/ Extended Park**	Determine whether an extension Class of Service should allow normal or extended Park (0 = Normal, 1 = Extended).	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-24	**Class of Service Options (Hold/ Transfer Service) – Trunk Park Hold Mode**	Set the hold type when a trunk call is put on hold by an extension.	0 = Non Exclusive Hold (Off) 1 = Exclusive Hold (On) (default = 0 for COS 1~15)
20-11-25	**Class of Service Options (Hold/ Transfer Service) – Transfer Park Call**	Turn on or off an extensions ability to transfer a parked call.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-26	**Class of Service Options (Hold/ Transfer Service) – Station Park Hold Mode**	Turn off or on an extension's ability to place a call at a co-worker's extension using Personal Park .	0 = Off 1 = On (default = 0 for COS 1 - 15)
20-11-27	**Class of Service Options (Hold/ Transfer Service) – Call Park Automatically Search**	Use this option to turn On (1) or Off (0) using the Call Park Automatically Search option.	0 = Off 1 = On (default = 1 for COS 1~15)
24-01-02	**System Options for Hold – Hold Recall Callback Time**	A trunk recalling from Hold or Park rings an extension for this time. After this time the system invokes the Hold recall time again. Cycling between Hold recall time and callback time and normal or extended (Recall) Park Hold time continues until a user answers the call.	0~64800 (seconds) (default = 30)
24-01-06	**System Options for Hold – Park Hold Time - Normal**	Set the Park Hold Time. A call left parked longer than this time recalls the extension that initially parked it.	0~64800 (seconds) (default = 90 seconds)
24-01-07	**System Options for Hold – Park Hold Time - Extended (Recall)**	Set the Extended Park Hold Time. A call left parked longer than this time recalls the extension that initially parked it.	0~64800 (seconds) (default = 300 seconds)
24-03-01	**Park Group – Park Group Number**	Assign an extension to a Park Group (01~64). An extension user can pick up only a call parked by a member of their own Park Group.	1~64 (default = 1)

Operation

To Park a call in a system orbit:

. *You can Park Intercom or trunk calls.*

1. Press the **Park** key (Program 15-07 or SC 852: *04 + orbit).
   . *The Park key LED lights.*
   . *If you hear busy tone, the orbit is busy. Try another orbit.*
2. Use Paging to announce call.
3. Press **Speaker** to hang up.
   . *If not picked up, the call recalls to you.*

- OR -

1. At the multiline terminal or 2-button telephone, press **Hold**.

- OR -

At a single line telephone, hookflash.

2. Dial **831** and the Park orbit (01~64).
   . *If you hear busy tone, the orbit is busy. Try another orbit.*
   . *If you hear a busy tone, the orbit is busy. Dial 831* if enabled in Program 20-11-27 (Call Park AutoSearching) to search for an idle park location in ascending order.*
3. Use Paging to announce the call.
4. Press **Speaker** to hang up.
   . *If not picked up, the call recalls to you.*
   . *The parked call recalls after the Park Hold Time (Program 24-01-06). The call rings the extension to which it recalled for the Hold Recall Callback Time (Program 24-01-02). The call then goes on Hold for the Park Hold Time, then recalls again for the Hold Recall Callback Time. The call continues to cycle between Hold and recall until the extension user answers the call or the outside party hangs up.*

To pick up a parked call:

1. Lift the handset.
2. Press the **Park** key (Program 15-07 or SC 852: *04 + orbit).

- OR -

1. At the multiline terminal or 2-button telephone, press **Speaker**.

- OR -

At single line telephone, lift the handset.

2. Dial **861** and the Park orbit (01~64).

To park a call at your extension:

1. Do not hang up.
2. Press the **Personal Park** key (Program 15-07 or SC 852: *07).

   - OR -

   Press **Hold** and dial **773**.

   - OR -

   Press **Hold** and the **Personal Park** key (Program 15-07 or SC 852: *07).

   . *At a* single line telephone*, hookflash instead of pressing HOLD.*

   . *A confirmation tone is heard and the call is parked at your extension. If the extension has a Personal Park key, the key flashes.*

   . *The Personal Park single-digit service code (Program 11-16-11) cannot be used in this operation.*
3. Page your co-worker to pick up the call.
4. Press **Speaker** to hang up (or hang up at the single line telephone).

   . *If not picked up, the call recalls to you.*

To Park an outside call at your extension after trying to call a co-worker:

1. While on a call, press **Hold**.
2. Dial a co-worker's extension number.

   . *The co-worker does not answer.*
3. Press the **Personal Park** key (Program 15-07 or SC 852: *07).

   - OR -

   Dial the Personal Park single digit code (Program 11-16-11).

   . *The Intercom call to the co-worker is dropped. A confirmation tone is heard and the outside call is parked at your extension.*

   . *If the co-worker answers the call, the outside call rings back after the intercom call is completed. The call can then be placed in Personal park if desired.*

To pick up a call parked at your extension:

1. Press the **Personal Park** key (Program 15-07 or SC 852: *07).

   - OR -

   Press **Speaker** and dial **773**.

   . *At a single line telephone, skip pressing* ***Speaker****.*

   . *The Personal Park single-digit service code (Program 11-16-11) cannot be used in this operation.*

   . *If it recalls the extension, pressing the* ***Personal Park*** *key or flashing* ***Speaker*** *answers the call.*

To answer a call parked at a co-worker's extension:

1. Press **Speaker**, dial **715** plus the co-worker's extension number.

   . *At a single line telephone, skip pressing **Speaker**.*

To display Caller ID for a call in Park:

. *With Program 15-02-08 set to 0 (preselect) for this feature.*

1. With Program 15-02-08 set to 0 (preselect) and a call in Park, press the **Park** key. (Program 15-07 or SC 852: *04).

   - OR -

   With Program 15-02-08 set to 1 (One-Touch), and a call in Park, press **Feature**, then the **Park** key (Program 15-07 or SC 852: *04).

Call Park – Step Call:

To Park a call in the first available system orbit:

. *You can Park Intercom or trunk calls.*

1. Press **Hold** or **Transfer**.
2. Dial **831**.

   . *If you hear a busy tone, the orbit is busy. Proceed to step 3.*

3. Dial *.

   . *Program 20-11-27 must be enabled in the Multiline Terminals Class of Service.*

4. Press **Speaker** to hang up.

   . *If not picked up, the call will recall to you.*

   - OR -

1. Press **Hold** or **Transfer**.
2. Press the DSS/BLF key programmed as **#6***(The Park location will be displayed in the LCD).
3. Press **Speaker** to hang up.

Power Failure Transfer

Description

Power Failure Transfer ensures that a customer has access to the Central Office network during a power outage. The CO/PBX tip and ring are automatically transferred to a DTH or ITH terminal multiline terminal with a PSA-L adapter installed.

Conditions

- The PSA-L is not supported on DTL-2E-1 terminals.
- The single line telephones that are installed must provide dialing signal accepted by the outside exchange (Dial Pulse or Dual Tone Multifrequency).
- Multiline telephones with PSA-L adapter or single line telephones cross-connected at the MDF can be used for this feature.
- Single Line or PSA-L equipped multiline telephones and outside lines connected during power failure are fixed one-to-one.
- Single line telephones must be equipped with a ground start button for use with Ground Start Trunks.
- System features cannot be activated from single line telephone or multiline telephone with PSA-L adapter when Power Failure Transfer is in operation.
- When power is restored to the system one of the following happens dependant on whether a single line telephone or multiline telephone with PSA-L adapter is used:

  Single Line Telephones

  Power Failure Transfer is cancelled. Calls in progress on Power Failure Transfer lines are disconnected.

  Multiline Telephones with PSA-L Adapter

  Calls in progress continue but the display does not show the date, time and system softkeys. When the user hangs up, the phone automatically switches to Digital mode and the display returns to normal.
- Refer to the UNIVERGE SV8100 System Hardware Manual for the MDF Pin Numbers and PFT Connections (Power Failure Transfer Relay 1).
- The PSA-L adapter can be set to send DTMF or DP.
- The PSA-L is supported on Loop Start Trunks only.

- A Power Fail circuit is required. The CD-4COTA has Power Failure circuits on the first two ports.
- The PZ-4COTx blade does not contain any Power Fail or Fax Branch Exchange circuits.

Default Setting

None

System Availability

Terminals

Multiline Telephones

Required Component(s)

PSA-L Handset Adapter

CD-4COTA

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-02-09	**Analog Trunk Data Setup – Busy Tone Detection**	Use to set the basic options for each analog trunk port.	0 = Disable 1 = Enable (default = 0)
14-02-14	**Analog Trunk Data Setup – Loop Start/Ground Start**	Use to set the basic options for each analog trunk port.	0 = Loop Start (Loop) 1 = Ground Start (Ground) (default = 0)

Operation

None

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Prime Line Selection

Description

Prime Line Selection allows a multiline terminal user to place or answer a call over a specific trunk by just lifting the handset. The user does not have to first press keys or dial codes. This simplifies handling calls on a frequently used trunk.

Prime Line Selection has the following two modes of operation:

- Outgoing Prime Line Preference

  Lifting the handset seizes the Prime Line. Outgoing Prime Line Preference would help a telemarketer who always needs a free line to call prospective clients. The telemarketer just lifts the handset and the Prime Line is always available. (Outgoing Prime Line Preference may be affected by Incoming Prime Line Preference – refer to the Programming section of this feature.)

- Incoming Prime Line Preference

  When the Prime Line rings the extension, lifting the handset answers the call. Incoming Prime Line Preference could benefit the Service Department dispatcher who must quickly answer customer's service calls and then dispatch repair technicians. When a customer calls in, the dispatcher lifts the handset to get their call. (Incoming Prime Line Preference can optionally seize an idle line appearance – refer to the Programming section of this feature.)

Conditions

- Prime Line Selection can be assigned for single line telephones, however, the telephones cannot access ICM dial tone.
- Prime Line Selection directly interacts with line preference.

Default Setting

Disabled

System Availability

Terminals

Any Station

Required Component(s)

None

Related Features

Central Office Calls, Placing

Direct Inward Dialing (DID)

Direct Inward Line (DIL)

Direct Inward System Access (DISA)

Line Preference

Guide to Feature Programming Operation

Program Number	Program Name	Description/Comments	Assigned Data
14-05-01	**Trunk Group – Trunk Group Number**	Assign Prime Line to a separate trunk group for outgoing Prime Line selection. (Also refer to Program 14-06 and Program 21-02.)	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order.)
14-06-01	**Trunk Group Routing – Priority Order Number**	Used to set the priority order number 1~4.	0 = Not Specify 1~100 : Trunk Group Number 1001~1100 : 1000 + Route Table Number Default: Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified)

Program Number	Program Name	Description/Comments	Assigned Data
14-07-01	**Trunk Access Map Setup – Trunk Port Number**	For outgoing Prime Line selection, assign each Prime Line trunk to a different Access Map and deny outbound access to all trunks except the Prime Line trunk.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold) Access Maps 2~200 = Trunk Ports 1~200 assigned with option 0 (No access).
15-01-02	**Basic Extension Data Setup – Outgoing Trunk Line Preference**	Turn On (1) or Off (0) Outgoing Trunk Line Preference for extensions.	0 = Off 1 = On (default = 0)
15-02-10	**Multiline Telephone Basic Data Setup – Ringing Line Preference for Trunk Calls**	Enter 1 if lifting the handset should answer ringing Prime Line; enter 0 to seize idle line appearance.	0 = Idle (Off) 1 = Ringing (On) (default = 1)
15-06-01	**Trunk Access Map for Extensions**	Set assignment so extension(s) can have access to Prime Line. Deny outbound access to extensions that should not have Prime Line.	Trunk Access Maps: 1~200 (default = 1)
21-02-01	**Trunk Group Routing for Extensions**	Assign extension(s) to a Prime Line route for outgoing Prime Line access.	Trunk Groups: 1~100 Day/Night Mode: 1~8 Route Table Number: 0~100 (0 = No Setting) (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
22-01-01	**System Options for Incoming Calls – Incoming Call Priority**	Use this option to determine if Intercom calls or trunk calls have answer priority when both are ringing simultaneously.	0 = Intercom call priority 1 = Trunk call priority (default = 1)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extension(s) to a ring group that consists of a Prime Line.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	Assign a Prime Line to a ring group.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)

Operation

To place a call on your Prime Line:

1. Lift the handset.

   . *You hear dial tone on your Prime Line.*

To answer a call on your Prime Line:

1. Lift the handset.

   . *Depending on your Line Preference programming, you either answer the Prime Line or get dial tone on the idle line appearance.*

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Private Line

Description

A Private Line is a trunk reserved for a multiline terminal for placing and answering calls. A user with a Private Line always knows when important calls are for them. Additionally, the user has their own trunk for placing calls that is not available to others in the system.

Conditions

- Incoming Only – The multiline terminal has a Private Line only for incoming calls. The user cannot place calls on the Private Line.
- Outgoing Only – The multiline terminal has a Private Line only for outgoing calls. The Private Line does not ring for incoming calls.
- Both Ways – The multiline terminal has a Private Line for both incoming and outgoing calls.
- Private Lines do not follow Call Forwarding if not Direct Inward Line (DIL).
- Other programmed options for outgoing calls also affect a Prime Line.
- Calls to extensions with DND active do not follow Call Forwarding programming. Direct Inward Line (DIL) calls ring an idle Department Group member, then follow Program 22-08 then Program 22-05.
- An extension user can have Line Preference options applied to their Private Line.
- A Private Line can also be a Prime Line.
- You should always program a line key for each Private Line.
- Private Lines are available on single line telephones.
- Private Lines follow normal Toll Restriction.
- An extension user can transfer their Private Line. If other users have hold access, the destination can answer the transferred Private Line and place it on Hold.
- NEC does not recommend assigning ringdown to a private line.

Default Setting

Disabled

System Availability

Terminals

AI Stations

Required Component(s)

None

Related Features

Call Forwarding

Central Office Calls, Placing

Do Not Disturb

Line Preference

Prime Line Selection

Programmable Function Keys

Single Line Telephones

Toll Restriction

Transfer

InMail

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-09	**Basic Trunk Data Setup – Private Line**	Determine if a trunk should be used as a normal (0) or private (1) line. . *A Private Line reserves a trunk for a multiline terminal for placing and answering calls. A user with a Private Line always knows when important calls are for them. Additionally, the user has their own trunk for placing calls that is not available to others in the system.*	0 = Disable Private Line (Normal) 1 = Enable Private Line (Private Line) (default = 0)
14-07-01	**Trunk Access Map Setup – Trunk Port Number**	Assign Private Line to the Private Line Access Map (refer to Program 15-06 in this section). Use option 5 for Incoming, option 7 for Both Ways and option 4 for Outgoing. In all other Access Maps, assign option 3 to the Private Line.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Maps 2~200 = Trunk Ports 1~200 assigned with option 0 (No access).

Program Number	Program Name	Description/Comments	Assigned Data
15-06-01	**Trunk Access Map for Extensions**	Assign extension to have Private Line to an unused Private Line Access Map.	Trunks 1~200 (default = 1)
15-07-01	**Programmable Function Keys**	Make sure extension has a line key (e.g., 012) for the Private Line.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
21-02-01	**Trunk Group Routing for Extensions**	Change the routing as needed.	1~100 (Trunk Groups) 0~100 (0 = No Setting) (default = 1)
22-02-01	**Incoming Call Trunk Setup**	Set the Trunk Service to Type 4 if routing unanswered Private Lines to voice mail or 0 if not routing to voice mail.	Ring Groups: 1~100 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extension to Private Line ring group. Set the ringing in Program 22-06 – use option 1 for Incoming or Both Way Private Lines. Use option 0 for Outgoing Private Lines. Do not assign any other extensions to the Private Line ring group.	Maximum eight digits Default: Extension 200 (first ports) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	Assign Private Line to an unused Private Line ring group (i.e., a ring group just for the Private Line).	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)
22-07-01	**DIL Assignment**	If routing unanswered Private Lines to voice mail, assign DILs to the extensions.	Extension Number (maximum eight digits) (default not assigned)

Operation

To place a call on your Private Line:

1. Press **Private Line** key and then press **Speaker** or lift the handset.
2. Dial the number.

To answer a call on your Private Line:

1. Press **Private Line** key and then press **Speaker** or lift handset.

To place a call from your Multiline Terminal on you Private Line:

1. Press the **Private Line** key, then press **Speaker** or lift the handset.
2. Dial the number.

To answer a call from your Multiline Terminal on your Private Line:

1. Press **Private Line** key or press **Speaker** or lift handset.

To place a call on your Private line from a single line telephone:

1. Pick up handset.

   . *Private Line dial tone is heard.*
2. Dial the number.

To answer a call on you Private Line from a single line telephone:

1. Lift the handset.

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Programmable Function Keys

Description

Each multiline terminal has Programmable Function Keys. Programmable Function Keys simplify placing calls, answering calls and using certain features. You can customize the function of a multiline terminal programmable keys from each multiline terminal. Depending on your telephone style, you can have up to 32 Programmable Function keys.

Conditions

- When a key is programmed using service code 852, that key cannot be programmed with a function using the 851 code until the key is undefined (000). For example with a Park Key programmed by dialing 852 + *04 must be undefined by dialing 000 before it can be programmed as a Voice Over key by dialing 851 + 48.
- Using Program 92-01 to copy a multiline terminal Programmable Function Keys, copies all the keys whether or not they exist on the telephone to which the programming is being copied. This may cause confusion when trying to define a key which is already defined but which does not exist on the telephone (displays as DUPLICATE DATA). It is recommend to either clear these non-existent keys or to copy only from an extension which has the same or fewer number of keys than the extension to which the programming is being copied.
- When using Program 15-07-01 to program a D16(LD)-R ADM, regardless of the type of multiline terminal connected, *start programming the D16(LD)-R ADM keys at key number 17.* Service codes 851 and 852 can also be used to program these keys.
- Speed Dialing and One-Touch Calling also offer quick access to calls and features.
- Programming a 60-button console requires separate programming.
- If the feature key is not listed below, the LCD shows ALL-BLANK. (Program 15-07-01 Line Key Assign).

Function Number	Function	Display
00	None	[All Blank]
01	DSS/One-Touch	DSS (xxxxxxxx xxxxxxxx = Extension Number
02	Microphone Key (ON/OFF)	MIC
03	DND Key	DND
04	BGM (ON/OFF)	BGM
05	Headset	HSET
07	Conference Key	CONF
10	Call Forward – Immediate	CFA
11	Call Forward – Busy	CFB

Function Number	Function	Display
12	Call Forward – No Answer	CFNA
13	Call Forward – Busy/No Answer	CFBNA
14	Call Forward – Both Ring	CFBOTH
15	Follow Me	FLWME

- *If a key is programmed as a DSS/One-Touch key for a station that is set for Call Forward All Calls or Do Not Disturb, the DSS/One-Touch key flashes.*
- *Refer to the UNIVERGE SV8100 Programming Manual for a complete list of Function Numbers.*

- One-Touch keys programmed for Park Hold Service Code cannot be used to park calls without using Hold or Transfer.
- Pauses can be entered in the dial string of a DSS/One Touch button. The pause is entered as P in the dial string and causes the system to wait three seconds before sending the rest of the digits that follow the P (pause). Multiple pauses can be entered.
- The @ can be entered in the dial string of a DSS/One Touch button. The @ only applies to ISDN and Intercom calls. When using the @, the system waits for the destination to answer (answer supervision), and then sends the rest of the digits.
- Entering a P (pause) in a DSS/One Touch dial string can be used for CO calls, Intercom calls, or after the @ for ISDN calls.
- DSS/One-Touch keys can be used for one-touch transfer.
- DSS keys can distinguish whether the telephone is set for DND/Call Forward All Calls of if the telephone is off-hook.
- When a Ring Group call rings a station, a BLF Indication for this station shows idle or busy based on Class of Service option (20-13-49).
- All features programmed under one touch keys are still subject to class of service restrictions.
- If you change the extension assigned to a port in Program 11-02, the line key programming does not follow. However, if you move the extension using the Station Relocation Feature, the line key programming does follow.
- In order for a station to retrieve a held ICM call, the station must have an ICM key assigned in 15-07 (*00).

Default Setting

The first eight keys on a telephone are line keys (e.g., key 1 = line 001). The remaining keys are unassigned.

System Availability

Terminals

All Multiline Terminals

Required Component(s)

D16(LD)-R ADM

Related Features

Direct Station Selection (DSS) Console

One-Touch Calling

Speed Dial – System/Group/Station

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign the functions of a multiline terminal Programmable Function Keys. When using Program 15-07-01 to program *the function keys 17~32 on the D16(LD)-R ADM start with key 17*. Service codes 851 and 852 can also be used to program these keys.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-20-01	**LCD Line Key Name Assignment**	Used to define the Line Key Name for line keys on DESILESS terminals.	Up to eight digits Up to 13 characters Key Number: 01~16 (for 16LD TEL) 17~32 (for 16LD ADM) Default: LK01 LINE 1 : : LK08 LINE 6 LK09 All Blank : : LK32 All Blank
20-06-01	**Class of Service for Extensions**	Assign Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-10	**Class of Service Options (Administrator Level) – Programmable Function Key Programming (Appearance Level)**	Turns Off (0) or On (1) the ability for an extension to program the Appearance function keys using Service Code 852. . *When programming a feature as a Programmable Function Key, refer to Program 15-07-01 in the UNIVERGE SV8100 Programming Manual.*	0 = Off 1 = On (default = 1 for COS 01~15)
20-13-18	**Class of Service for Options (Supplementary Service) – Programmable Function Key Programming (General Level)**	Turns Off (0) or On (1) an extension user ability to program General function keys using Service Code 851 (by default). (Refer to Program 20-07-10 for Service Code 852.)	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-49	**Class of Service for Options (Supplementary Service) – BLF Indication on CO Incoming State**	Turn on (1) or Off (0) the BLF Indication on CO Incoming State.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To change a 2-digit programmable key:

1. Press **Speaker**.
2. Dial **851** for 2-digit codes.
3. Press the key you want to program.
4. Enter the 2-digit key function, any additional information needed for the key and press **Hold**.
   - *For available functions codes refer to Program 15-07 in the UNIVERGE SV8100 Programing Manual.*
   - *To undefine a key, enter 00.*

To change a 3-digit programmable key:

1. Press **Speaker**.
2. Dial **852** for 3-digit codes.
3. Press the key you want to program.
4. Enter the 3-digit key function and any additional information needed for the key.
   - *For available functions codes, refer to Program 15-07 in the UNIVERGE SV8100 Programing Manual.*
   - *To undefine a key, enter 000.*
   - *When a key is programmed using service code 852, that key cannot be programmed with a function using the 851 code until the key is undefined (000). For example with a Park Key programmed by dialing 852 + *04 must be undefined by dialing 000 before it can be programmed as a Voice Over key by dialing 851 + 48.*

To check the function of a programmable key:

1. Press the **Help** key.
2. Press the programmable key.
   - *The programmed function displays.*

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Pulse to Tone Conversion

Description

An extension can use Pulse to Tone Conversion on trunk calls. Pulse to Tone Conversion lets a user change their extension dialing mode while placing a call. For systems in a Dial Pulse area, this permits users to access dial-up OCCs (Other Common Carriers – such as MCI) from their DP area. The user can, for example:

- Place a call to an OCC over a DP trunk.
- Depending on programming:

  Manually implement Pulse to Tone Conversion

  - OR -

  Wait 10 seconds.
- Dial the OCC security code and desired number. The system dials the digits after the conversion as DTMF.

Conditions

Pulse to Tone Conversion is valid only for Dial Pulse trunks (Program 14-02-01, options 0 or 1).

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

CD-4COTA, PZ-4COTE

- OR -

CD-4ODTB

- OR -

CD-CCTA

Related Features

Central Office Calls, Placing

Multiple Trunk Types

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-02-01	**Analog Trunk Data setup – Signaling Type (DP/DTMF)**	At default, Program 14-02-01 is set to 2 (DTMF).	0=Dial Pulse (10 PPS) 1=Dial Pulse (20 PPS) 2=DTMF (default = 2)
14-02-07	**Analog Trunk Data Setup – DP to DTMF Conversion Options**	For each trunk, set the type of DP to DTMF Conversion required: automatic (0), automatic and manual (1), or manual (2).	0 = Automatic 1 = Automatic and Manual 2 = Manual (default = 2)

Operation

To convert your telephone dialing to tone after placing your call on a pulse line:

1. Place a call over pulse line.
2. Dial **#** to switch the DP trunk to DTMF dialing.

Redial Function

Description

Users can press Redial to cycle through the last 10 outside numbers dialed. Pressing **#** redials the number displayed. Users can also press Redial and dial a System Speed Dial bin number to access System Speed Dial.

Conditions

- Redial List requires a display telephone.
- This feature is not supported on multiline cordless phones.
- UNIVERGE SV8100 telephones only support redial using Softkey or Navigation key.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Last Number Redial

Speed Dial – System/Group/Station

Programming

None

Operation

To redial the last number dialed:

For Aspire Telephones Only:

1. Press **Redial**.
   REDIAL [#] / SYS is displayed along with the last dialed number.
2. Press the **up** or **down** arrow to view the number to dial.

For SV8100 Telephones Only:

1. Press the left **Navigation** key.
   REDIAL [#] / SYS is displayed along with the last dialed number.
2. Press the **up** or **down** arrow to view the number to dial.
3. Press # or press Speaker or lift the handset or press an idle trunk key.

- OR -

For SV8100 and Aspire Telephones:

1. Press the **List** softkey
2. Press **Redial**.
   REDIAL -01 is displayed along with the last dialed number.
3. Press the up and down arrow to view the number to dial.
4. Press the **#** key or press **Speaker** or lift the handset or press and idle trunk key.

To scroll through the last 10 outside numbers dialed:

1. Press **Redial**. Each time the Redial key is pressed, it displays the next most recently dialed number.
2. When the desired number is displayed, press the **#** key or press **Speaker** or lift the handset.

- OR -

1. Press the **List** softkey

2. Press **Redial**.
3. Press the up and down arrow to view the number to dial.
4. Press **#** or press **Speaker** or lift the handset.

To access a System Speed Dial bin:

For Aspire Telephones Only:

1. Press **Redial**.
   REDIAL [#] / SYS is displayed along with the last dialed number.
2. Dial the System Speed Dial bin number.
   The number stored in that bin is displayed for your preview.
3. Press the **#** key or press **Speaker** or lift the handset or press an idle trunk key.

- OR -

For SV8100 Telephones Only:

1. Press the left **Navigation** key.
   REDIAL [#] / SYS is displayed along with the last dialed number.
2. Dial the System Speed Dial bin number.
   The number stored in that bin is displayed for your preview.
3. Press **#** or press **Speaker** or lift the handset or press and idle trunk key.

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Repeat Redial

Description

If a multiline terminal user places a trunk call that is busy or unanswered, they can have Repeat Redial try it again later on. The user does not continually have to try the number again – hoping it goes through. Repeat Redial automatically retries it until the called party answers (the number of retries is based on system programming).

Conditions

- Lifting the handset during a callout cycle cancels Repeat Redial.
- Other programmed options for outgoing calls can affect how a Repeat Redial call is placed. Refer to Central Office Calls, Placing options as needed.
- For systems with Automatic Route Selection (ARS), ARS selects the trunk for the Repeat Redial call.
- Single line telephones cannot use Repeat Redial.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Automatic Route Selection

Central Office Calls, Placing

Last Number Redial

Save Number Dialed

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign a function key for Repeat Redial (code 29).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-07	**Class of Service Options (Outgoing Call Service) – Repeat Redial**	Turns Off (0) or On (1) an extension to use Repeat Redial.	0 = Off 1 = On (default = 1 for COS 1~15)
21-08-01	**Repeat Dial Setup – Repeat Redial Count**	Set how many times Repeat Redial automatically repeats if the call does not go through.	0~255 (default = 3)
21-08-02	**Repeat Dial Setup – Repeat Redial Interval Time**	Set the interval between Repeat Redial attempts.	0~64800 (seconds) (default = 60)

Program Number	Program Name	Description/Comments	Assigned Data
21-08-03	**Repeat Dial Setup – Repeat Dial Calling Timer**	Set how long the system waits for the called party to answer after a Repeat Redial. If the called party does not answer in this time, the system hangs up and tries again (after the Repeat Redial Interval Time). For unanswered calls, the total time between retries is the sum of Program 21-08-02 and Program 21-08-03.	0~64800 (seconds) (default = 30)
21-08-04	**Repeat Dial Setup – Time for Send Busy Tone for ISDN Trunk**	Sets the time (sec) to send out Busy Tone with an ISDN line, when called party is busy.	0~64800 (seconds) (default = 0)

Operation

To use Repeat Redial (if the outside party you call is unavailable or busy):

1. Place a trunk call.

   . *Listen for busy tone or ring no answer.*

2. Press **Feature** + **Redial**.

   - OR -

   Press the **Repeat Redial** key (Program 15-07 or SC 851: 29).

   . *Repeat Redial key flashes while you wait for the system to redial.*

3. Press **Speaker** to hang up.

   . *The system periodically redials the call.*

4. Lift the handset when called party answers.

   . *When using trunks with answer supervision the Repeat Redial feature automatically cancels.*

To cancel Repeat Redial:

1. Press **Feature**.

2. Press **Redial**.

   - OR -

1. Press **Repeat Redial** key (Program 15-07 or SC 851: 29).
   (Also refer to Last Number Redial on page 1-539.)

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Reverse Voice Over

Description

While on a call, Reverse Voice Over lets a busy multiline terminal user make a private Intercom call to an idle co-worker. The idle co-worker can be at a multiline terminal or single line telephone. The busy user just presses a programmed Reverse Voice Over key to make a private call to a specified co-worker. The initial caller cannot hear the Reverse Voice Over conversation. The private Intercom call continues until the Reverse Voice Over caller presses the key again. The initial call can be an outside call or an Intercom call.

Reverse Voice Over could help a salesman, for example, when placing a call to an important client. The salesman can talk with the client and give special instructions to a secretary – without interrupting the initial call.

When the multiline terminal is idle, the Reverse Voice Over key functions the same as a Hotline or One-Touch key. A multiline terminal Reverse Voice Over key also shows at a glance the status of the associated extension:

When the key is. . .	The associated extension is. . .
Off	Idle
On	Busy or call ringing
Fast Flash	In Do Not Disturb

. *When the destination extension is idle, the Reverse Voice Over provides one button calling to the associated extension (like a Hotline key). An extension user cannot, however, use the Reverse Voice Over key to Transfer calls by one-touch operation.*

Conditions

- An extension can have Reverse Voice Over keys for more than one extension (limited only by the number of available function keys).
- When the destination extension is in Do Not Disturb, a Reverse Voice Over placed to an extension always rings, regardless of how Handsfree Answerback/Forced Intercom Ringing is set at the destination.
- When the destination extension is not in Do Not Disturb, Reverse Voice Over follows Handsfree Answerback/Forced Intercom Ringing programming.
- Reverse Voice Over requires a uniquely programmed function key.
- Reverse Voice Over is not available from single line telephones, but a single line can be a

Reverse Voice Over destination.

- If an extension user places a Reverse Voice Over to a busy destination extension, the system sets up a Voice Over. The Voice Over continues until the Reverse Voice Over key is pressed again.
- When a Reverse Voice Over call is placed to a destination station, while the originator is on a CO call, the Reverse Voice Over is dropped if the destination station is involved in another call and this call is terminated.

Default Setting

Disabled

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Do Not Disturb

Handsfree Answerback/Forced Intercom Ringing

Hotline

One-Touch Calling

Programmable Function Keys

Single Line Telephones

Voice Over

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign a function key for Reverse Voice Over (code 47 + destination extension). Assign a function key for Voice Over to the destination extension (code 48). This will allow the user at the destination to switch between calls if they where busy when the Reverse Voice Over was initiated.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (COS) to each extension (1~15).	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension to Manually (0) or Automatically (1) receive Off-Hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

When on a call:

To place a Reverse Voice Over call:

1. Press your **Reverse Voice Over** key (Program 15-07 or SC 851: 47 + destination extension).

   . *Your Reverse Voice Over key lights steadily (red) and you can talk with the programmed Reverse Voice Over destination.*

To receive a Reverse Voice Over Call while busy:

1. Press the **Voice Over** key (Program 15-07 or SC 851: 48).

   . *The voice over key allows you to switch back and forth between the initial call and the Reverse Voice Over Call.*

To return to your initial caller:

1. Press the **Reverse Voice Over** key again.

   . *If the co-worker you call hangs up, you return to the initial call automatically.*

When the telephone is idle:

To place a call to your Reverse Voice Over destination:

1. Press your **Reverse Voice Over** key (Program 15-07 or SC 851: 47 + destination extension).

   . *You can optionally lift the handset after this step for privacy.*

Ring Groups

Description

Ring Groups determine how trunks ring extensions. Generally, trunks ring extensions only if Ring Group programming allows. For example, to make a trunk ring an extension:

- Assign the trunk and the extension to the same Ring Group.
- In the extension Ring Group programming, assign ringing for the trunk.

Any number of extensions and trunks can be in a specific group. The system allows:

- Ring Groups = 1~100
- In-Skin Voice Mail = 102
- Centralized Voice Mail = 103

If an extension has a line key for the trunk, Ring Group calls ring the line key. If the extension does not have a line key, the trunk rings the line appearance key. If an extension has a key for a trunk that is not in its ring group, the trunk follows Access Map programming.

Conditions

- DIL trunks disregard ring group programming until DIL overflow.

Default Setting

All trunks are in Ring Group 1. The first 16 extensions ring for trunk calls and all other extensions only flash.

System Availability

Terminals

All Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

Automatic Call Distribution (ACD)

Automatic Route Selection

Direct Inward Line (DIL)

Direct Inward Dialing (DID)

Direct Inward System Access (DISA)

ISDN Compatibility

Night Service

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign function keys as line (code *01 + trunk number).	Trunks: 1~200 Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-13-49	**Class of Service Options (Supplementary Service) – BLF Indication on CO Incoming State**	Turn On (1) or Off (0) BLF Indication on CO Incoming State.	1 = On 0 = Off (default = 0 for COS 01~15)
15-13-01	**Loop Keys - Outgoing Option**	Assign trunk groups for outgoing loop keys (0=ARS, Trunk Groups 1-100). Selecting “0” for ARS should only be used when ARS is enabled in Program 26-01-01 or it could cause the loop key to lock up.	0-100 (0 = Assigns the Loop Key for ARS, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)

Program Number	Program Name	Description/Comments	Assigned Data
15-13-02	**Loop Keys - Incoming Option**	Assign trunk groups for incoming loop keys	0-100 (0 = Assigns the Loop Key to all trunk groups) 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)
22-01-04	**System Options for Incoming Calls – DIL No Answer Recall Time**	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0~64800 (seconds) (default = 0 seconds)
22-02-01	**Incoming Call Trunk Setup**	Assign the incoming trunk type (0) for each trunk. There is one item for each Night Service Mode. . *This option must be set to 0 for Ring Groups to work.*	Day/Night Mode: 1~8 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to ring groups.	Maximum eight digits Default: Extensions 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	Assign trunks to ring groups.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 1)
22-06-01	**Normal Incoming Ring Mode**	Define whether or not an extension should ring for the Normal Incoming Ring Mode.	0 = No Ring 1 = Ring (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
22-08-01	**DIL/IRG No Answer Destination**	For DIL Delayed Ringing, assign the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time (Program 22-01-04) expires. DIL Delayed Ringing can also reroute outside calls ringing a Ring Group In-Skin/External Voice Mail, or Centralized Voice Mail.	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 0)
22-11-05/ 06	**DID Translation Table - Transfer Target 1 & 2**	For each DID Translation Table, assign the destination for DID Intercept. The destination can be a Ring Group, In-Skin/External Voice Mail, Centralized Voice Mail, Depsrtment Group, VRS, DISA or Abdial.	0 (No Setting) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) 103 (centralised voice mail) 201~264 (Department Group from 16-01), 400 (VRS), 401 (DISA), 501-599 (DISA-VRS Message), 1000~1999 ([0~999] Speed Dial Bin)
22-12-01	**DID Intercept Ring Group**	For each DID Translation Table, assign the destination for DID Intercept. The destination can be a Ring Group, In-Skin/External Voice Mail, or Centralized Voice Mail. For each table, make a separate entry for each Night Service mode.	0 (No Setting) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)
25-03-01	**VRS/DISA Transfer Ring Group With Incorrect Dialing**	Set the transfer destination for each DISA and Automated Attendant (OPA) trunk. The destination can be a Ring Group or Voice Mail. Make a separate entry for each Night Service mode. . *For incoming calls, Ring Group programming (Program 22-04/Program 22-05) overrides Access Map programming (Program 14-07/Program 15-06).*	Ring Groups: 1~100 Trunk Ports: 001~200 Day/Night Mode: 1~8 0 (Disconnect) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)

Use the charts below to program the following example:

For this extension . . .[1]			
301	Trunk 1 Rings	Trunk 2 Flashes	Trunk 3 Flashes
302	Trunk 1 Flashes	Trunk 2 Rings	Trunk 3 Flashes
303	Trunk 1 Flashes	Trunk 2 Flashes	Trunk 3 Rings

[1] Trunks ring the same in the day as at night.

Program 22-04 : Incoming Extension Ring Group Assignment			
Ring Group[1]>	1	2	3
Trunk 1	X	-	-
Trunk 2	-	X	-
Trunk 3	-	-	X

X = Trunk assigned to indicated Ring Group

[1] Make the same PRG 22-04 entry for all Night Service modes.

Program 22-05 : Incoming Trunk Ring Group Assignment			
Ring Group >	1	2	3
Ext. 301	1	0[1]	0[1]
Ext. 302	0[1]	1	0[1]
Ext. 303	0[1]	0[1]	1

1 = Extension rings

0 = Extension does not ring

[1] To allow extension user to answer flashing line, be sure to give extension incoming access to the trunk in Program 14-07 and Program 15-06.

Operation

Refer to Central Office Calls, Answering on page 1-215.

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Ringdown Extension (Hotline), Internal/External

Description

With a Ringdown Extension, a user can call another extension, outside number, or Speed Dialing number by just lifting the handset. The call automatically goes through – there is no need for the user to dial digits or press additional keys. Ringdown Extensions are frequently used for lobby telephones, where the caller just lifts the handset to get the information desk or off-site Reservation Desk.

After the Ringdown Extension user lifts the handset, ringdown occurs after a programmable time. Depending on the setting of this time, the extension user may be able to place other calls before the ringdown goes through.

This feature can also be used as an off-hook alarm application. For example, if a patient in a care facility fails to return the handset to the cradle, it routes to a care givers station after a programmed time.

This feature is sometimes known as a Hotline.

Conditions

- Ringdown extension has no effect on an extension current (active) call.
- The Ringdown Extension user can lift the handset or press Speaker to initiate ringdown.
- If the Ringdown/Hotline destination is a speed dial bin, the appropriate service code must precede the bin number.
- Ringdown Extension can use Speed Dial – System/Group/Station numbers (and follow their trunk routing) as the destination number.
- Ringdown Extension follows Call Forwarding. For example, the ringdown destination can forward their calls. When the Ringdown Extension user lifts the handset, ringdown automatically calls the extension to which calls are forwarded.
- If the Ringdown Extension user hears busy tone when they lift the handset, they can Camp-On to the destination, leave a Callback or activate Off-Hook Signaling.
- The ringdown destination user can activate Do Not Disturb. When the Ringdown Extension user lifts the handset, they hear DND. If enabled, the Ringdown Extension user can override the destination DND.
- If the destination extension has Handsfree Answerback enabled, the call voice announces. If the destination extension has Forced Intercom Ringing enabled, the call rings.
- A Virtual Extension can be a ringdown destination. This would allow a front door key to be programmed on every extension.
- Delayed Ringdown can occur by setting the Hotline Start Timer. However, Ringdown does

not occur if the Hotline Start Timer is set longer than the Extension Dial Tone Timer.

- The @ code is used to make an outbound call automatically forward to a DISA Trunk or to VM Auto Attendant. This code can be used only on ISDN outbound calls. Internal calls and analog outbound calls are not supported.

Default Setting

Disabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Callback

Call Forwarding

Call Waiting/Camp-On

Do Not Disturb

Handsfree Answerback/Forced Intercom Ringing

Off-Hook Signaling

Speed Dial – System/Group/Station

Virtual Extensions

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-08-01	**Class of Service Options (Outgoing Call Service) – Intercom Calls**	Turns Off or On Intercom calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-09	**Class of Service Options (Outgoing Call Service) – Hotline/Extension Ringdown**	Turn Off or On Hotline (Ringdown). If disable in Class of Service, the settings in Program 21-11 below have no effect.	0 = Off 1 = On (default = 0 for COS 1~15)
21-01-09	**System Options for Outgoing Calls – Ringdown Extension Timer (Hotline Start)**	After the user lifts the handset, the extension automatically calls the ringdown destination after this interval (0~64800 seconds). A setting of 0 immediately rings the programmed extension. Any other setting delays the ringdown the number of seconds programmed.	0~64800 seconds (default = 5 seconds)
21-11-01	**Extension Ringdown (Hotline) Assignment**	Program the ringdown (Hotline) source and destination (target) number, up to 24 digits (512 Hotline assignments). Remember to include the trunk access code (usually 9) in front of the number when dialing outside numbers. When programming Speed Dial – System numbers as the destination, the entry should be 753 + bin number (the service code for Speed Dialing and the Speed Dial bin number).	0, *, #, Pause, Hook Flash, @ (Code to wait for answer supervision) (maximum 24 digits) (default not assigned)

Operation

To place a call if your extension has ringdown programmed:

1. Lift the handset.

- *If you want to place a trunk call, press a line key before lifting the handset.*
- *Depending on the setting of your ringdown timer, you may be able to dial an Intercom call before your ringdown goes through.*
- *If the destination has Handsfree Answerback enabled, your call voice announces. If the destination has Forced Intercom Ringing enabled, your call rings.*

To answer a call if you are another extension ringdown destination:

1. Speak toward telephone to answer incoming voice announcement.

   - OR -

   Lift the handset or press **Speaker** to answer ringing Intercom call.

Room Monitor

Description

Room Monitor lets an extension user listen to the sounds in a co-workers area. For example, the receptionist could listen for sounds in the warehouse when it is left unattended. To use Room Monitor, the initiating extension ***and*** the receiving extension must activate it.

When using multiline terminals for monitoring, an extension user can Monitor only one extension at a time. However, many extensions can Monitor the same extension at the same time. However, only one single line telephone can monitor another single line telephone at a time.

Room Monitor for Single Lines

This option enables you to monitor the room status through your single line telephones. Between multiline terminals, the monitored room status is picked up by the telephone microphone and the activity is heard through the speaker of the monitoring multiline terminal. Between single line telephones, at the station to be monitored, a user goes off-hook and dials a service code and the extension number of the monitoring telephone. At the monitoring station, a user goes off-hook and dials a service code and the extension number of the monitored telephone. The activity of the area where the monitored telephone is placed can then be heard at the monitoring telephone. This service is available until the handset of the monitored telephone is placed on-hook.

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Conditions

- Room Monitor is for listening only. It does not allow for conversation between the monitoring and monitored extensions.
- An extension user cannot monitor an Attendant.
- A multiline terminal user cannot monitor a single line telephone and a single line telephone cannot monitor a multiline terminals.
- Room Monitor for single line telephones can be used with the Hotel/Motel feature.

- For a multiline terminal, Room Monitor requires uniquely programmed function keys.

Default Setting

Disabled

System Availability

Terminals

Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

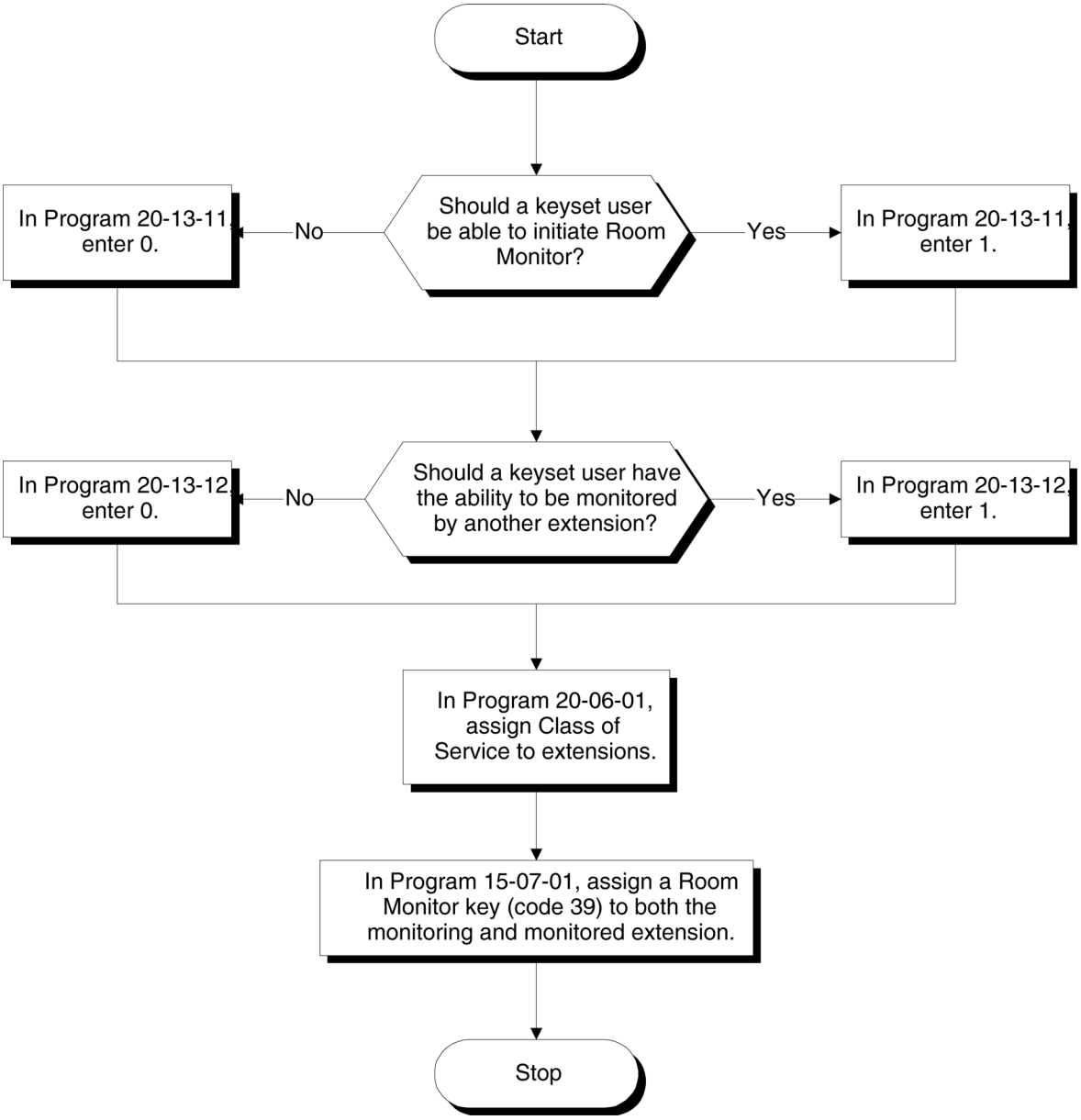
Hotel/Motel

Programmable Function Keys

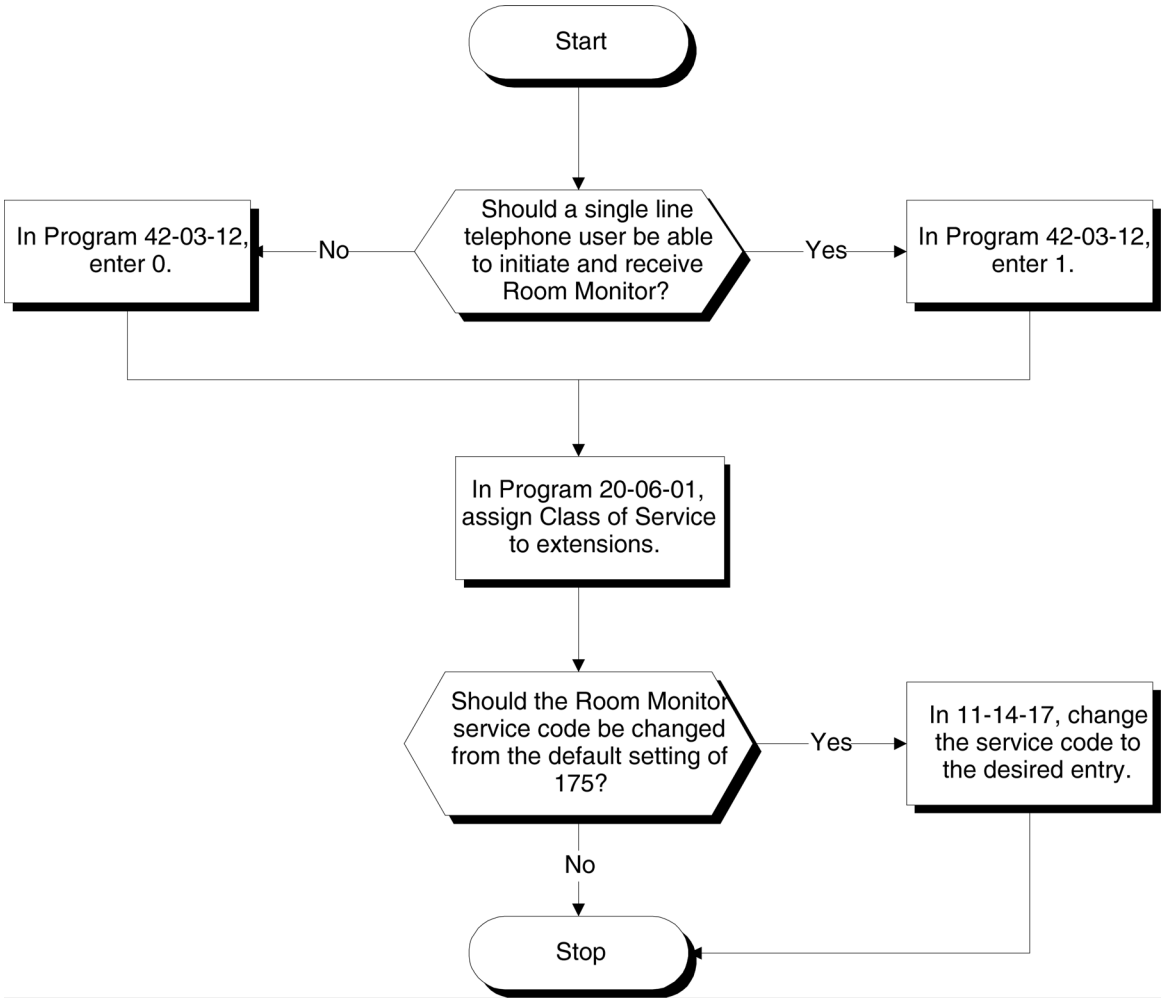
Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-14-17	**Service Code Setup (for Hotel) – Hotel Room Monitor**	Customize the service code (770 by default) to be used for Room Monitor.	MLT, SLT (default = 770)
15-07-01	**Programmable Function Keys**	Assign a function key as a Room Monitor key (code 39) for both the extension being monitored and the extension initiating Room Monitor.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-11	**Class of Service Options (Supplementary Service) – Room Monitor, Initiating Extension**	Turns Off (0) or On (1) an extension user ability to Room Monitor other extensions.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-12	**Class of Service Options (Supplementary Service) – Room Monitor, Extension Being Monitored**	Turns Off (0) or On (1) an extension ability to be monitored by other extensions.	0 = Off 1 = On (default = 0 for COS 1~15)
42-03-12	**Class of Service Options (Hotel/ Motel) – SLT Room Monitor**	Enable (1) or disable (0) a single line telephone ability to use Room Monitor.	0 = Off 1 = On (default = 0 for COS 1~15)

Multiline Room Monitoring



Single Line Telephone Room Monitoring



Operation

. *You must activate Room Monitor at the extension initiating the monitor and at the extension you want to monitor. You can only listen to one extension at a time.*

Multiline Terminals:

To activate Room Monitor from an idle Multiline Terminal (initiating extension):

1. Press the **Room Monitor** key (Program 15-07 or SC 851: 39).

2. Dial the number of extension you want to monitor.

. *You can place and answer other calls while Room Monitor is active.*

To activate Room Monitor from an idle Multiline Terminal (extension to be monitored):

1. Press **Room Monitor** key (Program 15-07 or SC 851: 39).
2. Dial the number of the extension where you are located.

. *For example, if you are at extension 206, dial 206.*

. *You can place and answer other calls while Room Monitor is active.*

To cancel Room Monitor (at either extension):

1. Press the **Room Monitor** key at both the initiating extension and the monitored extension.

Single Line Telephones:

To activate Room Monitor (at the initiating extension):

1. Lift the handset at the telephone which is monitoring another telephone.
2. Dial **770**.
3. Dial **2**.
4. Dial number of extension number, which will be monitored.

. *You cannot place or answer other calls while Room Monitor is active.*

To activate Room Monitor (at the extension to be monitored):

1. Lift the handset at the telephone to be monitored.
2. Dial **770**.
3. Dial **1**.
4. Dial number of the extension number, which is monitoring the telephone.
5. Place the handset on the desk, placing the handset transmitter towards the room.

. *You cannot place or answer other calls while Room Monitor is active.*

To cancel Room Monitor (at either extension):

1. Hang up the handsets for both the monitored and the monitoring telephones.

Save Number Dialed

Description

Save Number Dialed allows an extension user to save their last outside number dialed and easily redial it later on. For example, an extension user can recall a busy or unanswered number without manually dialing the digits. The system retains the saved number until the user stores a new one in its place or clears the stored one.

Save Number Dialed saves in system memory a dialed number up to 24 digits. The number can be any combination of digits 0~9, **#** and *. The system remembers the digits regardless of whether the call was answered, unanswered or busy. The system normally uses the same trunk group as for the initial call. However, the extension user can preselect a specific trunk if desired.

S

Conditions

- For systems with Automatic Route Selection, ARS selects the trunk for the call unless the user preselects.
- Function keys simplify Save Number Dialed operation.

Default Setting

Enabled

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Automatic Route Selection

Central Office Calls, Placing

Dial Tone Detection

Last Number Redial

Programmable Function Keys

Repeat Redial

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-13	**Service Code Setup (for Service Access) – Saved Number Dial**	Customize the service code to be used for dialing a saved number.	MLT, SLT (default = 815)
11-12-18	**Service Code Setup (for Service Access) – Clear Saved Number Dialing Data**	Define the service code for Clear Save Number Dialing List if it is not acceptable.	MLT, SLT (default = 885)
15-07-01	**Programmable Function Keys**	Assign a function key as a Save key (code 30).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Operation

To save the outside number you just dialed (up to 24 digits):

. *Use this feature before hanging up.*

Multiline Terminal

1. Press the **Save Number Dialed** key (Program 15-07 or SC 851: 30).

Single Line Telephone

1. Hookflash.
2. Dial **715**.

To redial a saved number:

Multiline Terminal

1. Press an idle trunk line key.
   . *This selects a specific trunk for the call.*
2. Press the **Save Number Dialed** key (Program 15-07 or SC 851: 30).
   . *The stored number dials out.*

- OR -

1. Press **Speaker**.
2. Dial **815**.

- OR -

Press **Save Number Dialed** key (Program 15-07 or SC 851: 30).

. *Save Number Dialed automatically selects a trunk from the same group as your original call.*

. *The stored number dials out.*

Single Line Telephone

1. Go off-hook.
2. Dial **815**.

To view the number you have saved from a multiline terminal with a display:

1. Press the **Save Number Dialed** key (Program 15-07 or SC 851: 30).
   - *The stored number displays for 10 seconds.*
   - *The stored number dials out if you:*
     - *Lift the handset,*
     - *Press an idle line key,*
     - *Press the Speaker key.*
2. Press the **Exit** key.

To clear your saved number:

Multiline Terminal

1. Press **Speaker**.
2. Dial **885**.
3. Press **Speaker** to hang up.

Single Line Telephone

1. Lift the handset and dial **885**.
2. Hang up.

Secondary Incoming Extension

Description

Secondary Incoming Extensions (SIE) are incoming appearance keys of actual stations assigned in the system. SIE keys are assigned to programmable function keys and can appear on an individual station, or multiple stations. Incoming internal calls, ringing DIL/Tie/DID/CO Transfer calls, or call forwarded calls can be picked up from an SIE.

Conditions

- Calls can be originated from a Secondary Incoming Extension, but the actual station is unable to place or answer calls.
- Off-Hook ringing is provided with calls ringing into Secondary Incoming Extensions.
- Secondary Incoming Extensions are forwarded when the actual station is set for call forwarding.
- SIE keys can appear on an individual station, or multiple stations.
- A station can have more than one SIE key assigned.
- Up to 32 calls can be queued waiting on an SIE key.
- When a Secondary Incoming Extension call is received and answered while the user is on an outside line, the first call can be automatically put on hold.
- If a trunk call rings a Secondary Incoming Extension, to answer the call, the station must be programmed with the direct trunk appearance key or an available SIE must be programmed to allow the call to come off the SIE key and appear on the line key.
- The same SIE key cannot be programmed on multiple programmable function keys on the same Multiline Terminal.
- An SIE key does not ring during an Intercom Voice call to the actual station.
- If multiple SIE/VE keys are ringing on a station at the same time, the SIE/VE key on the lowest Line Key is answered first.

Default Setting

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Waiting/Camp-On

Virtual Extensions

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-04-01	**Virtual Extension Numbering**	Assign virtual extension numbers.	Up to eight digits Default not assigned
15-01-01	**Basic Extension Data Setup – Extension Name**	Define the extension/virtual extension name.	Up to 12 characters Default: STA 200 = Ext 200, STA 201 = Ext 201, etc.
15-02-07	**Multiline Telephone Basic Data Setup – Automatic Hold for CO lines**	When talking on a CO call and another CO line key is pressed, the original trunk is placed on Hold (0) or Disconnected (1).	0 = Hold 1 = Disconnect (Cut) (default = 1)
15-02-21	**Multiline Telephone Basic Data Setup – Virtual Extension Access Mode (When idle Virtual Extension key pressed)**	Determine whether a Virtual Extension should function as a DSS key, a Virtual Extension. When DSS (0) is selected, the key functions as a DSS key to the extension and for incoming calls to that extension. When Outgoing (1) is selected, the key functions as a virtual extension and can be used for incoming and outgoing calls. When Ignore (2) is selected, the key can receive incoming calls only.	Virtual Extension Key Mode 0 = DSS 1 = OTG (Outgoing) 2 = Ignore (default = 2)
15-02-30	**Multiline Telephone Basic Data Setup – Toll Restriction Class**	Select the Toll Restriction Class to be used when placing a call from a virtual extension.	0 = Vir. Ext. (Virtual Extension Class) 1 = Real Ext. (Real Extension Class) (default = 1)
15-07-01	**Programmable Function Keys**	Assign the SIE key to the Multiline extension.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	When an extension or a virtual extension is assigned to the function key on the key telephone, select the ring tone when receiving a call on that key.	ICM Tone Pattern, 0 = Pattern 1 1 = Pattern 2 2 = Pattern 3 3 = Pattern 4 4 = Incoming Ring Tone Extension (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-09-01	**Virtual Extension Ring Assignment**	Use to assign the ringing options for an extension Virtual Extension Key or Virtual Extension Group Answer Key which is defined in Program 15-07.	Mode 1: 0 = No Ringing 1 = Ring (default = 0)
15-10-01	**Incoming Virtual Extension Ring Tone Order Setup**	When two or more virtual extensions are set on a function key on the telephone, and the tone pattern by which the sound of each extension differs, the priority of ring sound is set up.	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Extension Ring Tone Order 1 Pattern 0 = Pattern 1 (default) Order 2 Pattern 1 = Pattern 2 (default) Order 3 Pattern 2 = Pattern 3 (default) Order 4 Pattern 3 = Pattern 4 (default)
15-11-01	**Virtual Extension Delayed Ring Assignment**	Use to assign the delayed ringing options for an extension Virtual Extension or Virtual Extension Group Answer keys (defined in Program 15-09).	KY01 Mode 1: 0 = Immediate Ring 1 = Delayed Ring (default = 0)
15-18-01	**Virtual Extension Key Enhanced Options – Virtual Extension Key Operation Mode**	Define key operation mode when the Virtual Extension key is pressed with it showing an incoming call.	0 = Release (Release to Line Appearance) 1 = Land On the Key (default = 0)
15-18-02	**Virtual Extension Key Enhanced Options – Display mode when placing a call on Virtual Extension Key**	Defines if calls to or from a Virtual Extension Key display the Virtual Extension Key name or the name of the extension it resides on.	0 = Secondary Extension Name 1 = Actual Station Name (default = 0)
20-04-03	**System Options for Virtual Extensions – SIE/Virtual Extension Delay Interval**	SIE Keys/Virtual Extensions set for Delayed Ringing (see Program 15-11) ring the extension after this interval.	0~64800 (default = 10 seconds)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-10	**Class of Service Options (Administrator Level) – Programmable Function Key Programming (Appearance Level)**	Turns Off (0) or On (1) the ability for an extension to program the Appearance function keys using Service Code 852.	0 = Off 1 = On (default = 1 for COS 01~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-10-08	**Class of Service Options (Answer Service) – Virtual Extension Off-Hook Answer**	Turns Off (0) or On (1) an extension ability to answer an incoming call on a Secondary Incoming Extension (SIE)/ Virtual Extension simply by lifting the handset.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-27	**Class of Service Options (Supplementary Service) – Busy on Seizing Virtual Extension**	If set to **1**, you can call a busy extension which is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to off for this option to work.	0 = Off 1 = On (default = 0 for COS 1~15)
21-01-15	**System Options for Outgoing Calls – Outgoing Disable on Incoming Line (Toll Restriction)**	Enable or disable the Outgoing Disable on Incoming Line feature.	0 = Disable 1 = Enable (default = 0)
23-04-01	**Ringing Line Preference for Virtual Extensions**	When an extension has a virtual extension assigned to a Programmable Function Key, this program determines the priority for automatically answering the ringing calls when the handset is lifted. If 0 or 00 is selected, when the user lifts the handset, the user answers a ringing call from any group.	00~64 (0 or 00=Don't Care) (default = 00)

Operation

To answer a call ringing a SIE key:

1. Press the flashing **SIE** key.

To program a SIE key on a phone:

1. Press **Speaker**.
2. Dial **852**.
3. Press the key you want to program.
4. Dial ***03**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold** once for Immediate Ring, (skip to step 8 for Delayed Ring).

7. Dial the mode number in which the key rings.
8. Press hold a second time for Delayed Ring, or Skip to step 10.
9. Dial the mode number in which the key delays ringing.
10. Press **Speaker**.

Secretary Call (Buzzer)

Description

Secretary Call lets two co-workers alert each other without disturbing their work. To have Secretary Call, both co-workers must have multiline terminals with Secretary Call buzzer keys. When a user presses their buzzer key, the system alerts the called extension by sending a splash tone and flashing the called extension buzzer key. The called user can respond by placing an intercom call to the calling party.

The called extension buzzer key continues to flash and the splash tone is heard until either user cancels the Secretary Call. A secretary could use this feature, for example, to get a message through to the boss in an important meeting. After being alerted, the boss could call the secretary when it is most convenient.

An extension can have Secretary Call keys for any number of extensions, limited only by the available number of programmable keys.

Conditions

- Secretary Call is not available to single line telephone users.
- Secretary Call does not set up an Intercom call.
- When assigning Secretary Call, a user enters the associated extension numbers, not port numbers.
- Secretary Call requires a uniquely programmed function key.

Default Setting

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign function keys for Secretary Call buzzer (code 41 + the destination extension number). Both co-workers must have buzzer keys for each other.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Operation

To buzz your secretary or boss:

1. Do not lift the handset.
2. Press the buzzer key (Program 15-07 or SC 851: 41 + secretary extension).
   - *Your boss or secretary hears ringing.*
   - *Your buzzer key lights steadily.*
   - *Your boss's or secretary's buzzer key flashes fast.*
   - *The telephone continues to ring until the Secretary Call key is pressed.*

To check to see who left you a Secretary Call:

1. Do not lift the handset.
2. Press the **Help** key.
3. Press the **Secretary Call** key that flashed.
4. Press the **Exit** key.

To answer your Secretary Call indication:

1. Place an Intercom call to the extension that called you.

To cancel a Secretary Call you left at another extension:

1. Press the lit **Secretary Call** key.

To cancel a Secretary Call left at your extension:

1. Do not lift the handset.
2. Press the flashing **Secretary Call** key.

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Secretary Call Pickup

Description

Secretary Call Pickup lets a multiline terminal user easily reroute calls intended for a co-worker to themselves. By pressing a Secretary Call Pickup key, the user can have all calls to a co-worker's telephone ring or voice-announce theirs instead. Secretary Call Pickup is a simplified type of Call Forward with Follow Me for employees that work closely together. This feature could be helpful to customer service representatives that must frequently cover each other's clients. When a representative leaves their desk, an associate could press the Secretary Call Pickup key to intercept all their calls.

An extension can have Secretary Call Pickup keys for any number of extensions, limited only by the available number of programmable keys.

Conditions

- Secretary Call Pickup is not available to single line telephone users.
- An extension user can also have Call Forwarding with Follow Me reroute a co-worker's calls to themselves.
- A multiline terminal can have a Secretary Call Pickup key for a single line telephone.
- This feature should not be used by ACD agents.

Default Setting

Disabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Forwarding with Follow Me

Programmable Function Keys

Secretary Call (Buzzer)

Single Line Telephones

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign function keys for Secretary Call Pickup (42 + boss ext). Unlike Secretary Call, you do not have to program a corresponding key at the source and destination extensions.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Operation

To activate Secretary Call Pickup:

1. Press your **Secretary Call Pickup** key (Program 15-07 or SC 851: 42 + boss extension).
   - *Your Secretary Call Pickup key lights and the boss's telephone display shows "BOSS FWD>>".*
   - *Calls intended for covered extension ring your telephone instead.*

To cancel Secretary Call Pickup:

1. Press your lit **Secretary Call Pickup** key (Program 15-07 or SC 851: 42 + boss extension).

To check a key Secretary Call Pickup assignment:

1. Press the **Help** key.
2. Press your **Secretary Call Pickup** key (Program 15-07 or SC 851: 42 + boss's extension).
3. Press the **Exit** key.

Selectable Display Messaging

Description

An extension user can select a preprogrammed Selectable Display Message for their extension. Display multiline terminal callers see the selected message when they call the user's extension. Selectable Display Messaging provides personalized messaging. For example, an extension user could select the message GONE FOR THE DAY. Any display multiline terminal user calling the extension may hear a DND signal and then see the message. See table below for a list of the standard messages.

An extension user can add digits for date, time or telephone number after messages 1~8 and 10 (up to 24 characters). For example, an extension user could select the message ON VACATION UNTIL and then enter the date. Callers see the original message followed by the appended date. They could then tell when the user is coming back from vacation. The system allows all telephones to use the Selectable Display Messaging feature at the same time.

All telephones are able to use Selectable Display Messaging at one time.

The default messages are:

Table 1-15 Selectable Display Messaging Defaults

No.	Message	Change "#" to...
1	IN MEETING UNTIL **##:##**	Time (when meeting done)
2	MEETING ROOM - **########**	Room Name or extension
3	COME BACK **##:##**	Time (when returning)
4	PLEASE CALL **##########**	11 digits (telephone number)
5	BUSY CALL AFTER **##:##**	Time (when returning)
6	OUT FOR LUNCH BACK **##:##**	Time (when returning)
7	BUSINESS TRIP BACK **##/##**	Date (when returning)
8	BUSINESS TRIP **##########**	10 digits (where reached)
9	GONE FOR THE DAY	
10	ON VACATION UNTIL **##/##**	Date (when returning)
11~20	MESSAGE 11~20	

Conditions

- The **#** cannot be used in a Message.
- When Selectable Display Messaging is set as DND All, all other DND modes are canceled

when Selectable Display Messaging is canceled.

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals with Display

Required Component(s)

None

Related Features

Do Not Disturb

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-14	**Service Code Setup (for Setup/ Entry Operation) – Text Message Setting**	Define the service code to be used when setting a text message.	MLT (default = 836)
15-07-01	**Programmable Function Keys**	Assign a function key for Text Message (code 18). The Text Message key automatically selects the message used when programming the key.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-01-02	**System Options – Text Message Mode**	Select whether and intercom caller should hear busy (1) or ring through (0) for extensions which have Selectable Display Messaging set. . *Any extension previously set with Selectable Display Messaging must cancel the feature and reactivate for a change in this option to take affect.*	0 = Call mode 1 = No Answer/ Busy mode (default = 0)
20-02-07	**System Options for Multiline Telephones – Time and Date Display Mode**	Set the System Time and Date display mode. The time that displays in Selectable Display Messages follows this setting.	1~8 Type 1 = (12 hour) 10 MAR TUE 3:15PM Type 2 = (12 hour) 3:15PM MAR 10 TUE Type 3 = (12 hour) 3-10 TUE 3:15 PM Type 4 = (12 hour) 3:15PM TUE 10 MAR Type 5 = (24 hour) 10 MAR TUE 15:15 Type 6 = (24 hour) 15:15 MAR 10 TUE Type 7 = (24 hour) 3-10 TUE 15:15 Type 8 = (24 hour) 15:15 TUE 10 MAR (default = 3)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-13-19	**Class of Service Options (Supplementary Service) – Selectable Display Messaging (Text Messaging)**	Turns Off (0) or On (1) an extension user ability to use Selectable Display Messaging.	0 = Off 1 = On (default = 1 for COS 1~15)
20-16-01	**Selectable Display Messages**	Program the Selectable Display Messages (1~20). Refer to the chart below for character entry.	24 characters Default: Refer to Table 1-15 Selectable Display Messaging Defaults on page 1-763

Table 1-16 Selectable Display Message – Character Entry Chart

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ‘ { | } > <**
2	Enter characters: **A-C**, **a-c**, **2**.
3	Enter characters: **D-F**, **a-f**, **3**.
4	Enter characters: **G-I**, **g-i**, **4**.
5	Enter characters: **J-L**, **j-l**, **5**.
6	Enter characters: **M-O**, **m-o**, **6**.
7	Enter characters: **P-S**, **p-s**, **7**.
8	Enter characters: **T-V**, **t-v**, **8**.
9	Enter characters: **W-Z**, **w-z**, **9**.
0	Enter characters: **0 ! “ # $ % & <space> ( )**
*	Enter characters: *** + , - . / : ; < = > ?**
#	Accepts a numeric entry from the user when setting a display message. e.g., time or date. Back at **##:##**
Conf	Clear the character entry one character at a time.
Hold	Clear all the entries from the point of the flashing cursor and to the right.

Operation

To select a message:

1. Press **Speaker**
2. Dial **836**

-OR-

Press the Text Message key (Program 15-07 or SC 851: 18) + enter digits to append (if needed) + Speaker to hang up. Skip the remaining steps.

3. Enter message number
4. + enter digits to append (if needed) + Speaker to hang up. Skip the remaining steps.
5. (Optional for messages 1~8 and 10.)
   Dial the digits you want to append to the message.
   - *You can append messages 1~8 and 10 with digits (e.g., the time when you will be back). Enter the time in 24-hour format.*
6. Press **Speaker** to hang up.
   - *Intercom calls to extensions with Selectable Display Messaging set receive a DND signal and receive the display message on their telephone display instead of ringing the extension based on the setting in Program 20-01-02.*
   - *To allow calls to ring through and have the message displayed on the calling extension display, cancel DND by pressing DND + 0.*

To cancel a message:

1. Press **Speaker** and the **Text Message** key (Program 15-07 or SC 851: 18).
2. Press **Speaker** to hang up.

Selectable Ring Tones

Description

An extension user can change the way trunks or internal calls ring their telephone. Selectable Ring Tones allow an extension user to set up unique ringing for their calls. This is important in a crowded work area where several telephones are close together. Because their telephone has a characteristic ring, the user always can tell when their telephone is ringing.

Conditions

None

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Distinctive Ringing, Tones and Flash Patterns

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-20	**Service Code Setup (for Setup/ Entry Operation) – Change Incoming CO and ICM Ring Tones**	If required, change the service code used for changing the incoming ring tones heard for CO and ICM calls.	MLT (default = 820)
11-11-21	**Service Code Setup (for Setup/ Entry Operation) – Check Incoming Ring Tones**	If required, change the service code used for checking how the incoming ring tones sound.	MLT (default = 811)
15-02-02	**MultiLine Telephone Basic Data Setup – Trunk Ring Tone**	Use this option to set the tone (pitch) of the incoming trunk ring for the extension port you are programming.	1 = High 2 = Medium 3 = Low 4 = Ring Tone 1 5 = Ring Tone 2 6 = Ring Tone 3 7 = Ring Tone 4 8 = Ring Tone 5 (default = 2)
15-02-03	**Multiline Telephone Basic Data Setup – Extension Ring Tone**	Use this option to set the tone (pitch) of the incoming extension call ring for the extension port you are programming. Also refer to program 15-08.	1 = High 2 = Medium 3 = Low 4 = Ring Tone 1 5 = Ring Tone 2 6 = Ring Tone 3 7 = Ring Tone 4 8 = Ring Tone 5 (default = 8)
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	When an extension or a virtual extension is assigned to the function key on the key telephone, select the ring tone when receiving a call on that key.	ICM Tone Pattern, 0 = Pattern 1 1 = Pattern 2 2 = Pattern 3 3 = Pattern 4 4 = Incoming Ring Tone Extension (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-10-01	**Incoming Virtual Extension Ring Tone Order Setup**	When two or more virtual extensions are set on a function key on the telephone, and the tone pattern by which the sound of each extension differs, the priority of ring sound is set up.	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Extension Ring Tone Order 1 Pattern 0 = Pattern 1 (default) Order 2 Pattern 1 = Pattern 2 (default) Order 3 Pattern 2 = Pattern 3 (default) Order 4 Pattern 3 = Pattern 4 (default)
22-03-01	**Trunk Ring Tone Range**	Select the ring tone range for the trunk. The trunk uses a ring tone in the range selected when it rings an extension. Four ring tones are available.	0~8 (Ring Tone Pattern 1~4) (Melody 1~ Melody 5) (default = 0)

1 = High 5 = Ring Tone 2

2 = Mid Range 6 = Ring Tone 3

3 = Low 7 = Ring Tone 4

4 = Ring Tone 1 8 = Ring Tone 5

1 = High 5 = Ring Tone 2

2 = Mid Range 6 = Ring Tone 3

3 = Low 7 = Ring Tone 4

4 = Ring Tone 1 8 = Ring Tone 5

Operation

To change your extension incoming ring tones:

1. Press **Speaker**.
2. Dial **820**.

3. Dial **1** to set Intercom ring; **2** to set trunk ring.
4. Dial code for the desired ring pattern (**1~8**).
5. Press **Speaker** to hang up.

To listen to the incoming ring choices:

1. Press idle **Speaker**.
2. Dial **811**.
3. Dial **1** to listen to Intercom ring; **2** to listen to trunk ring.
4. *For Intercom Ring:*
   Dial the code for the ring pattern you want to hear (**1~8**).

   - OR -

   For Trunk Ring:
   Dial code for the ring pattern you want to hear (Ring 1~3, Melody 4~8). If you select Ring 1~3, a second screen prompts for the tone pattern (1~4).
5. Press **Speaker** to hang up.

Serial Call

Description

Serial Call transfers a call so it automatically returns to the transferring extension. Serial Calling saves transferring steps between users. For example, a Customer Service Representative (CSR) has a client on the telephone who needs technical advice. The CSR wants to send the call to Technical Service, but needs to advise the client of certain costs when Technical Service is done. Rather than transferring the call back and forth, the CSR can use Serial Call to Technical Service and announce, "I have Ted on the telephone. I need to talk to him again. Just hang up when you're done and I'll get him back."

Conditions

- The transferring extension can remain off-hook to auto-receive the callback or hang up and it rings back to them.
- Serial Call requires a uniquely programmed function key (Program 15-07 or SC 851: 43) or assigning the Transfer key as Call Back in (Program 15-02-05=1).
- Serial Call is not available to single line telephones.
- Serial Call can be activated only during a supervised transfer.

Default Setting

Disabled

System Availability

Terminals

Multiline Terminals

Required Component(s)

None

Related Features

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-02-05	**Multiline Telephone Basic Data Setup – Transfer Key Operation Mode**	Use this option to set the operating mode of the extension Transfer key. The keys can be for Call Transfer, Serial Calling or Flash. When selecting the Flash option (selection 2), refer also to Program 81-01-14.	0 = Transfer 1 = Call back 2 = Hook (default = 0)
15-07-01	**Programmable Function Keys**	Assign a programmable key as a Serial Call key (code 43).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Operation

To place a Serial Call to a co-worker:

1. Place or answer a call.
2. Press **Hold** or **Transfer**.
3. Dial co-worker's extension number.

   . *Co-worker must lift the handset to respond to your announcement.*
4. Press the Serial Call key (Program 15-07 or SC 851: 43).

   -OR-
5. Press Transfer key if Program 15-02-05 is set to Call Back (Serial Call).
6. When MLT Display shows WAIT TRF extension can hang up.

   . *When your co-worker hangs up the call, the system makes an automatic live transfer back to your extension.*

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Single Line Telephones

Description

The system is compatible with Dial Pulse and DTMF analog single line telephones (SLTs). You can install single line telephones as On-Premise or Off-Premise extensions. Single line telephone users can dial codes to access many of the features available to multiline terminal users. With single line telephones, you can have your system simulate PBX type operation.

There are 368 single line telephones available (note that this number may be restricted due to system power requirements).

When installing single line telephones you must have:

- A port on an LCA blade for each single line telephone installed.
- If you have DTMF sets, at least one block reserved on the CD-CP00 for analog extension DTMF reception.

DTMF Dial Out Timer Added

A program is added for DTMF dialing, Program 20-03-07 : System Options for Single Line Telephones - Trunk Call Dial Forced Sending Start Time (Forced Dial). When Program 20-03-03 : System Options for Single Line Telephones – SLT DTMF Dial to Trunk Lines is set to 0 (receive all digits before sending), the system follows the timers in Program 20-03-04 and Program 20-03-07.

The timer in Program 20-03-04 System Options for Single Line Telephones – Dial Sending Start Time for SLT or ARS resets when the user dials another digit.

The timer in Program 20-03-07 System Options for Single Line Telephones – Trunk Call Dial Forced Sending Start Time (Forced Dial) does not reset when a digit is dialed. The user must finish dialing all the digits before this timer expires (entries: 0~64800 seconds, default: 0).

Conditions

- Dial Pulse single line telephones cannot access any features that require the user to dial **#** or *.
- A single line telephone can initiate an Internal Zone page, but cannot receive an Internal Zone Page.
- When a Ring Group call rings a single line station, the BLF indication shows busy.
- Stutter Dial Tone is supported to Single Line Telephones for Voice Mail Message Waiting.

Default Setting

Single line telephones function as soon as they are installed and properly programmed.

System Availability

Terminals

DTR-1-1

DTH-1HM-1

DTH-1-1

DTP-1-2

DTP-1HM-2

DTR-1R-2

Required Component(s)

Any LCA Blade

Related Features

Single line telephone users have access to the following features:

- Speed Dialing
- Automatic Route Selection
- Call Forwarding with Follow Me
- Callback
- Conference
- Directed Call Pickup
- Flash
- Hold
- Last Number Redial
- Meet Me Paging
- Night Service
- PBX Compatibility
- Selectable Display Messages
- Trunk Queuing and Camp-On
- Warning Tone for Long Conversation
- Account Codes
- Barge-In
- Call Forwarding/DND Override
- Central Office Calls, Answering
- Department Calling
- Do Not Disturb
- Forced Trunk Disconnect
- Intercom
- Line Preference
- Meet Me Paging Transfer
- Off-Hook Signaling
- Ringdown Extension
- Toll Restriction
- Voice Mail
- Alarm
- Call Forwarding
- Call Waiting/Camp-On
- Central Office Calls, Placing
- Department Step Calling
- Door Box
- Group Call Pickup
- Handsfree Answerback/Forced Intercom Ringing
- Meet Me Conference
- Message Waiting
- Paging
- Save Number Dialed
- Transfer
- Voice Over

Data Communications

APA and APR modules can be used with multiline terminals to provide an analog port.

Refer to the individual features for additional descriptive, programming and operational information.

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup (DLCA PKG Setup) – Terminal Type (B1)**	Program all on-premise single line telephones with circuit type 2. Set the DIOPU trunk to type 1 when trunks should be defined for off-premise extension (OPX) use.	0 = Not set 1 = Multiline Terminal 2 = SLT Adapter 3 = Bluetooth Cordless Handset 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Doorbox) 9 = PGD (ACI) 10 = DSS Console 11 = -- Not Used -- (default = 0)
10-03-03	**ETU Setup (LCA PKG Setup) – Transmit Gain Level (S-Level)**	Use to setup and confirm the Basic Configuration data for each blade.	1~63 (-15.5 +15.5dB) [default = 32 (0dB)]
10-03-04	**ETU Setup (LCA PKG Setup) – Receive Gain Level (R-Level)**	Assign transmit and receive levels for single line telephones.	1~63 (-15.5 +15.5dB) [default = 32 (0dB)]
10-09-01	**DTMF and Dial Tone Circuit Setup**	If the system has DTMF single line extensions, allocate at least one circuit for analog extension DTMF reception (entry 0 or 1). Use the following as a guide when allocating DTMF receivers: ❍ In light traffic sites, allocate one DTMF receiver for every 10 devices that use them. ❍ In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
15-03-01	**Single Line Telephone Basic Data Setup – SLT Signaling Type**	Enter 0 if single line telephone is a dial pulse. Enter 1 if single line telephone is DTMF. . *In-Skin Voice Mail and InMail set to 0.*	0 = DP 1 = DTMF (default = 1)
15-03-03	**Single Line Telephone Basic Data Setup – Terminal Type**	Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-03-05	**Single Line Telephone Basic Data Setup – Trunk Polarity Reverse**	Do Not Change Default Entry as DTMF issues may arise with voice mail.	0 = Off 1 = On (default = 0)
15-03-06	**Single Line Telephone Basic Data Setup – Extension Polarity Reverse**	Do Not Change Default Entry as DTMF issues may arise with voice mail.	0 = Disable (Off) 1 = Enable (On) (default = 0)
15-03-07	**Single Line Telephone Basic Data Setup – Enabled On-Hook When Holding (SLT)**	Used to enable or disable Enabled On-Hook When Holding for SLT terminals.	0 = No 1 = Yes (default = 1)
15-03-08	**Single Line Telephone Basic Data Setup – Answer On-Hook when Holding (SLT)**	Used to enable or disable Answer ON-Hook when Holding for SLT terminals.	0 = Disable (No) 1 = Yes (Enable) (default = 1)
15-03-09	**Single Line Telephone Basic Data Setup – Caller ID Function - For External Module**	Enable (1) or disable (0) the Caller ID FSK signal for an external Caller ID module or a 3rd party vendor telephone with Caller ID display. Important: If voice mail is used, this setting must be disabled for the system integration codes to be correct. With a DTMF set (no Caller ID) installed, this must be set to 0 for incoming callers to have a talk path.	0 = Disable 1 = Enable (default = 0)
15-03-10	**Single Line Telephone Basic Data Setup – Caller ID Name**	Determine if an extension user telephone should display the Caller ID name.	0 = Disable 1 = Enable (default = 1)
15-03-11	**Single Line Telephone Basic Data Setup – Caller ID Type**	Determine whether the Caller ID type is FSK or DTMF.	0 = FSK 1 = DTMF (default = 0)
15-03-14	**Single Line Telephone Basic Data Setup – Forwarded Caller ID Display Mode**	Determine what the display shows when a multiline terminal receives a forwarded outside call.	0 = Calling Extension Number (Calling) 1 = External Caller ID (Forward) (default = 0)
20-03-01	**System Options for Single Line Telephones – SLT Call Waiting Answer Mode**	For a busy single line telephone, set the mode used to answer a camped-on trunk call. For ESL sets, enabling this option (1) allows the user to dial Service Code for Voice Mail Conversation Record.	0 = Hookflash (Hooking) 1 = Hookflash + Service Code 654 (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
20-03-02	**System Options for Single Line Telephones – Ignore Received DP Dial on DTMF SLT Port**	Use this option to define whether the system should receive dial pulse and DTMF signals (0) or ignore dial pulse and only accept DTMF signals (1).	0 = Do not ignore (No) 1 = Ignore (Yes) (default = 0)
20-03-03	**System Options for Single Line Telephones – SLT DTMF Dial to Trunk Lines**	Set the SLT phones to (0). Collect all digits before sending or (1), send out immediately after receiving. When using a third-party external paging device, set this option to 1. In addition, set Program 20-03-04 to 1.	0 = Receive all digits, before sending (All) 1 = Direct through out (Direct) (default = 0)
20-03-04	**System Options for Single Line Telephones – Dial Sending Start Time for SLT or ARS**	Set the time before the first digit is sent out. When using a third-party external paging device, set this option to 1. In addition, set Program 20-03-03 to 1.	0~64800 (seconds) (default = 3 seconds)
20-03-05	**System Options for Single Line Telephones – SLT Operation Mode**	Used to define the Operation Mode for SLT terminals.	0 = Normal Mode 1 = Extended Mode1 2 = Extended Mode2 (default = 0)
20-03-06	**System Options for Single Line Telephones – Headset Ringing Start Time**	Define the headset ringing start time. After this time expires from the time when a single line telephone is off-hook, the system sets the single line telephone to headset ringing mode.	0~64800 seconds (default = 5 seconds)
20-03-07	**System Options for Single Line Telephones – Trunk Call Dial Forced Sending Start Time (Forced Dial)**	Used to define the Trunk Call Dial Forced Sending Start Time.	0~64800 seconds (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a unique Class of Service for Dual OPX telephones only when using Continued Dialing.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) an extension user ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-15-01	**Ring Cycle Setup – Normal Incoming Call on Trunk**	Define the ringing cycle (1~13) for normal incoming trunk calls (DIL, ring group, etc.).	Ringing Cycle = 1~13 (default = 3)

Program Number	Program Name	Description/Comments	Assigned Data
20-15-03	**Ring Cycle Setup – Incoming Internal Call**	Define the ringing cycle (1~13) for ICM calls.	Ringing Cycle = 1~13 (default = 8)
20-15-05	**Ring Cycle Setup – DID/DDI**	Define the ringing cycle (1~13) for DID calls.	Ringing Cycle = 1~13 (default = 8)
80-03-01	**DTMF Tone Receiver Setup – Detect Level**	Use Items 11~32 to set the criteria for dial tone detection for outgoing ARS calls.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1~5 = 0
80-03-02	**DTMF Tone Receiver Setup – Start delay time**	Use this option to define the start delay time for DTMF Tone Receiver.	0~255 (0.25 ms ~ 64 ms) default: Type 1~5 = 0

Program Number	Program Name	Description/Comments	Assigned Data
80-03-03	**DTMF Tone Receiver Setup – Min. detect level**	Use this option to define the minimum detection level for DTMF Tone Receiver.	0~15 detect level 0: –10dBm(0) to –25dBm(15) detect level 1: –15dBm(0) to –30dBm(15) detect level 2: –20dBm(0) to –35dBm(15) detect level 3: –25dBm(0) to –40dBm(15) detect level 4: –30dBm(0) to –45dBm(15) detect level 5: –35dBm(0) to –50dBm(15) detect level 6: –40dBm(0) to –55dBm(15) detect level 7: -45dBm(0) to -60dBm(15) detect level 8: -50dBm(0) to -65dBm(15) detect level 9: -55dBm(0) to -70dBm(15) detect level 10: -60dBm(0) to -75dBm(15) detect level 11: -65dBm(0) to -80dBm(15) detect level 12: -70dBm(0) to -85dBm(15) detect level 13: -75dBm(0) to -90dBm(15) detect level 14: -80dBm(0) to -95dBm(15) detect level 15: -85dBm(0) to -100dBm(15) default: Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3~5 = 10 (-20dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-04	**DTMF Tone Receiver Setup – Max. detect level**	Use this option to define the maximum detection level for DTMF Tone Receiver.	0~15 detect level 0: 0dBm(0) to –15dBm(15) detect level 1: –5dBm(0) to –20dBm(15) detect level 2: –10dBm(0) to –25dBm(15) detect level 3: –15dBm(0) to –30dBm(15) detect level 4: –20dBm(0) to –35dBm(15) detect level 5: –25dBm(0) to –40dBm(15) detect level 6: –30dBm(0) to –45dBm(15) detect level 7: -35dBm(0) to -50dBm(15) detect level 8: -40dBm(0) to -55dBm(15) detect level 9: -45dBm(0) to -60dBm(15) detect level 10: -50dBm(0) to -65dBm(15) detect level 11: -55dBm(0) to -70dBm(15) detect level 12: -60dBm(0) to -75dBm(15) detect level 13: -65dBm(0) to -80dBm(15) detect level 14: -70dBm(0) to -85dBm(15) detect level 15: -75dBm(0) to -90dBm(15) default: Type 1~5 = 2 (-2dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-05	**DTMF Tone Receiver Setup – Forward twist level**	Use this option to define the forward twist level for DTMF Tone Receiver.	0~9 (1dB ~ 10dB) default: Type 1 = 5 (6dBm) Type 2 = 5 (6dBm) Type 3 = 5 (6dBm) Type 4 = 5 (6dBm) Type 5 = 5 (6dBm)
80-03-06	**DTMF Tone Receiver Setup – Backward twist level**	Use this option to define the backwards twist level for DTMF Tone Receiver.	0~9 (1dB ~ 10dB) default: Type 1 = 0 (1dBm) Type 2 = 0 (1dBm) Type 3 = 0 (1dBm) Type 4 = 0 (1dBm) Type 5 = 0 (1dBm)
80-03-07	**DTMF Tone Receiver Setup – ON detect time**	Use this option to define the On dectection time for DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) default: Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)
80-03-08	**DTMF Tone Receiver Setup – OFF detect time**	Use this option to define the Off dectection time for DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) default: Type 1 = 1 (30ms) Type 2 = 1 (30ms) Type 3 = 1 (30ms) Type 4 = 1 (30ms) Type 5 = 1 (30ms)
80-04-01	**Call Progress Tone Detector Setup – Detection Level**	If required, modify the criteria for dial tone detection and call progress tone detection for the DTMF tones received at a single line telephone.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1 (DT) – 0 (-25dBm) Type 2 (BT) – 0 (-25dBm) Type 3 (RBT) – 0 (-25dBm) Type 4, Type 5 – 0

Program Number	Program Name	Description/Comments	Assigned Data
80-04-04	**Call Progress Tone Detector Setup – No tone time**	Use this option to set No Tone Time.	0~255 (30+30-7680ms) default: Type 1 (DT) – 132 (3990ms) Type 2 (BT) – 132 (3990ms) Type 3 (RBT) – 132 (3990ms) Type 4, Type 5 – 0

Operation

Refer to the individual features listed in the Related Features section above in this feature.

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SLT Adapter

Description

The SLT (Single Line Telephone) Adapter allows a port of an CD-8DLCA, PZ-8DLCB, CD-16DLCA or CD-LTA to support a single line telephone. A single line telephone can be connected to the DLC port using the SLT Adapter and 2-wire cable. Eight SLTII(1)-U( ) ADP Single Line Telephone Adapters can be installed in the UNIVERGE SV8100 system.

Conditions

- A maximum of 368 SLTII(1)-U( ) ADPs can be used in the UNIVERGE SV8100 system.
- Dial Pulse and Dual-Tone Multifrequency Single Line Telephones are supported.
- The SLTII(1)-U( ) ADP does not support voice mail.
- Message Waiting LED is not supported.
- A single line telephone connected to an SLTII(1)-U( ) ADP cannot perform a Trunk-to-Trunk Transfer or support a 1-terminal to 2-outside party conference call.

Default Setting

None

System Availability

Terminals

Single Line Telephones

Required Component(s)

SLTII(1)-U( ) ADP

Related Features

Ancillary Device Connection

Cordless Telephone Connection

Single Line Telephones

Guide to Feature Programming

. *The items highlighted in gray are read only and cannot be changed.*

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup (DLCA PKG Setup) – Terminal Type (B1)**	The system automatically assigns the terminal type (2) for the port which has a SLT Adapter installed.	0 = Not set 1 = Multiline Terminal 2 = SLT Adapter 3 = Bluetooth Cordless Handset 6 = PGD (Paging) 7 = PGD (Tone Ringer) 8 = PGD (Doorbox) 9 = PGD (ACI) 10 = DSS Console 11 = -- Not Used -- (default = 0)
10-03-02	**ETU Setup (DLCA PKG Setup) – Logical Port Number (B1)**	Use to confirm the Basic Configuration data for logical port number (B1).	0 = Not set 1 = Multiline Terminal (1~256) 2 = SLT Adapter (1~256) 6 = PGD(2)-U10 ADP (Paging) (1~8) 7 = PGD(2)-U10 ADP (for Tone Ringer) (1~8) 8 = PGD(2)-U10 ADP (for Door Box) (1~8) 9 = PGD(2)-U10 ADP (for ACI) (1~96) 10 = DSS (1~32) 11 = -- Not Used -- (default = 0)
11-02-01	**Extension Numbering**	Assign extension numbers to extension ports.	Up to eight digits 1 200 2 201 3 202 ~ ~ 300 499 301 5000 ~ ~ 512 5211

Program Number	Program Name	Description/Comments	Assigned Data
20-07-01	**Class of Service Options (Administrator Level) – Manual Night Service Enabled**	Turns Off (0) or On (1) an extension for manually Switching the Night Mode (Service Code 718). This option must be enabled for an extension to be able to display the Night indication.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-02	**Class of Service Options (Administrator Level) – Changing the Music on Hold Tone**	Turn off or on an extension ability to change the Music on Hold tone.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-03	**Class of Service Options (Administrator Level) – Time Setting**	Turn off or on an extension ability to set the Time via Service Code 728.	0 = Off 1 = On (default = 1 for COS 1~15)
20-07-04	**Class of Service Options (Administrator Level) – Storing Speed Dialing Entries**	Turns Off (0) or On (1) an extension to store System or Group Speed Dialing numbers.	0 = Off 1 = On (default = 1 for COS 1~15)
20-07-05	**Class of Service Options (Administrator Level) – Set/ Cancel Automatic Trunk-to-Trunk Transfer**	Turn On (1) or Off (0) the ability of an extension to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-10	**Class of Service Options (Administrator Level) – Programmable Function Key Programming (Appearance Level)**	Turns Off (0) or On (1) the ability for an extension to program the Appearance function keys using Service Code 852.	0 = Off 1 = On (default = 1 for COS 01~15)
20-07-11	**Class of Service Options (Administrator Level) – Forced Trunk Disconnect (analog trunk only)**	Turns Off (0) or On (1) an extension to use Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-12	**Class of Service Options (Administrator Level) – Trunk Port Disable**	Turn Off (0) or On (1) the extension ability to use the Trunk Port Disable feature.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-13	**Class of Service Options (Administrator Level) – VRS Record (VRS Msg Operation)**	Turns Off (0) or On (1) an extension ability to record, erase and listen to VRS messages.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-14	**Class of Service Options (Administrator Level) – VRS General Message Play**	Turns an extension Off (0) or On (1) to dial 4 or Service Code 611 to listen to the General Message.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-07-15	**Class of Service Options (Administrator Level) – VRS General Message Record/Delete**	Turns Off (0) or On (1) an extension for dialing Service Code 612 and record, listen to, or erase the General Message.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-18	**Class of Service Options (Administrator Level) – SMDR Printout Accumulated Extension Data**	Used to define if the Accumulated Extension Data is included in the SMDR printout for each COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-19	**Class of Service Options (Administrator Level) – SMDR Printout Department Group (STG) Data**	Used to define if the Department Group (STG) Data is included in the SMDR printout for each COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-20	**Class of Service Options (Administrator Level) – SMDR Printout Accumulated Account Code Data**	Used to define if the Accumulated Account Code Data is included in the SMDR printout for each COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-23	**Class of Service Options (Administrator Level) – CO Message Waiting Indication Callback Number Programming**	Enable or Disable an extension ability to receive CO Message Waiting Indication.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-24	**Class of Service Options (Administrator Level) – Set/ Cancel Private Call Refuse**	Enable or Disable an extension ability to set or cancel Private Call Refuse.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-25	**Class of Service Options (Administrator Level) – Set/ Cancel Caller ID Refuse**	Enable or Disable an extension ability to set or cancel Caller ID Refuse.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-26	**Class of Service Options (Administrator Level) – Dial-In Mode Switch**	Enable or Disable an extension ability to set or cancel dial-in mode switch.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-27	**Class of Service Options (Administrator Level) – Do-Not-Call Administrator**	Enable or Disable an extension ability to set or cancel do not call administrator.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-01	**Class of Service Options (Outgoing Call Service) – Intercom Calls**	Turns Off or On Intercom calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-02	**Class of Service Options (Outgoing Call Service) – Trunk Outgoing Calls**	Turns off (0) or on (1) outgoing trunk calling for the extension.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-08-03	**Class of Service Options (Outgoing Call Service) – System Speed Dialing**	Turns Off (0) or On (1) an extension ability to make outbound calls using system speed dial numbers.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-04	**Class of Service Options (Outgoing Call Service) – Group Speed Dialing**	Turns Off (0) or On (1) an extension ability to make outbound calls using group speed dial numbers.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-05	**Class of Service Options (Outgoing Call Service) – Dial Number Preview (Preset Dial)**	Turn off or on an extension ability to use Dial Number Preview.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-06	**Class of Service Options (Outgoing Call Service) – Toll Restriction Override**	Turn off or on Toll Restricting Override (Service Code 663).	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-07	**Class of Service Options (Outgoing Call Service) – Repeat Redial**	Turns Off (0) or On (1) an extension to use Repeat Redial.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-08	**Class of Service Options (Outgoing Call Service) – Toll Restriction Dial Block**	Turn off or on an extension ability to use Dial Block.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-09	**Class of Service Options (Outgoing Call Service) – Hotline/Extension Ringdown**	Turn off or on Ringdown Extension for extensions with this COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-10	**Class of Service Options (Outgoing Call Service) – Signal/ Voice Call**	Turns Off or On an extension allowing it to force Handsfree Answerback or Forced Intercom Ringing for outgoing Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-11	**Class of Service Options (Outgoing Call Service) – Protect for the Call Mode Switching from Caller**	When an extension is set to ring mode for ICM calls, enabling this option prevents callers from changing the call to voice announce mode.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-12	**Class of Service Options (Outgoing Call Service) – Department Group Step Calling**	Turn off or on an extension ability to use Department Group Step Calling.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-13	**Class of Service Options (Outgoing Call Service) – ISDN CLIP**	Determine if the ISDN calling line identity presentation and screening indicators are to be allowed.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-08-14	**Class of Service Options (Outgoing Call Service) – Call Address Information**	Used to enable or disable Call Address Information for each COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-15	**Class of Service Options (Outgoing Call Service) – Block Outgoing Caller ID**	Turn Off (0) or On (1) a user Class of Service from automatically blocking outgoing Caller ID information when a call is placed. If block is enabled, the system automatically inserts the Caller ID block code (defined in Program 14-01-21) before the user dialed digits (this requires Program 14-02-10 to be enabled). If block is disabled, the system outdials the call just as it was dialed by the user.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-16	**Class of Service Options (Outgoing Call Service) – Display E911 Dialed Extension Name and Number**	Turn off or on an extension ability to display the name and number of the extension that dialed 911.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-17	**Class of Service Options (Outgoing Call Service) – ARS Override of Trunk Access Map**	Turn off or on an extension ability to override the trunk access map programming for outgoing calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-19	**Class of Service Options (Outgoing Call Service) – Hotline for SPK**	Turn off or on an extensions' ability to activate hotline or ringdown when pressing the Speaker key.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-20	**Class of Service Options (Outgoing Call Service) – Hot Key Pad**	Turn On (1) or Off (0) the ability of an extension to make a call by just dialing the number without first going off hook.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-21	**Class of Service Options (Outgoing Call Service) – Automatic Trunk Seizing by Pressing Speaker Key**	Enable or Disable the ability of an extension to automatically access Trunk Route when going off hook via the Speaker key.	0 = Off 1 = On (default = 0 for COS 1~15)
20-08-22	**Class of Service Options (Outgoing Call Service) – Voice Over to busy Virtual Extension**	Enable or Disable the ability of an extension to make Voice Over to Busy Virtual Extension.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-02	**Class of Service Options (Incoming Call Service) – Caller ID Display**	Turns Off (0) or On (1) the Caller ID display at an extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-03	**Class of Service Options (Incoming Call Service) – Sub Address Identification**	Define whether an extension displays the Caller Sub-Address.	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-04	**Class of Service Options (Incoming Call Service) – Notification for Incoming Call List Existence**	Determine whether or not the CHECK LIST message is displayed to indicate a missed call.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-05	**Class of Service Options (Incoming Call Service) – Signal/ Voice Call**	Turn off or on an extension ability to enable Handsfree Answerback or Forced Intercom Ringing for their incoming Intercom calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-09-06	**Class of Service Options (Incoming Call Service) – Incoming Time Display**	If this option is set to 1, the Incoming Call Time is displayed on the multiline terminal LCD while the telephone is ringing.	0 = Off 1 = On (default = 0 for COS 01~15)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn off (0) or on (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-08	**Class of Service Options (Incoming Call Service) – Calling Party Information**	Turn off or on and extension ability to display calling party information on CCIS calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-01	**Class of Service Options (Answer Service) – Group Call Pickup (Within Group)**	Turn off or on Group Call Pickup for calls ringing an extension Pickup Group as well as ring group calls (Service Code ***#**).	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-10-02	**Class of Service Options (Answer Service) – Group Call Pickup (Another Group)**	Turn off or on Group Call Pickup for calls ringing outside a group (Service Code 769).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-03	**Class of Service Options (Answer Service) – Group Call Pickup for Specific Group**	Turn off or on Group Call Pickup for a specific group using service code 768.	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-04	**Class of Service Options (Answer Service) – Telephone Call Pickup**	Turn off or on an extension ability to pick up a call ringing into a Pickup Group (Service Codes * #).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-05	**Class of Service Options (Answer Service) – Directed Call Pickup for Own Group**	Turn off or on Directed Call Pickup for calls ringing an extension Pickup Group (Service Code 756).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-06	**Class of Service Options (Answer Service) – Meet-Me Conference and Paging**	Turns Off (0) or On (1) an extension to use Meet-Me Conference and Paging.	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-07	**Class of Service Options (Answer Service) – Automatic Off-Hook Answer**	Turns Off (0) or On (1) an extension to use Universal Auto Answer (no service code required).	0 = Off 1 = On (default = 1 for COS 1~15)
20-10-08	**Class of Service Options (Answer Service) – Virtual Extension Off-Hook Answer**	Turns Off (0) or On (1) an extension ability to answer an incoming call on a Secondary Incoming Extension (SIE)/ Virtual Extension simply by lifting the handset.	0 = Off 1 = On (default = 0 for COS 01~15)
20-10-09	**Class of Service Options (Answer Service) – Call Pickup Callback**	Turn off or on an extensions ability to us Call Pickup to Pick up Callback calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-10-10	**Class of Service Options (Answer Service) – Answer Preset**	Used to enable or disable Answer Preset for each COS.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-01	**Class of Service Options (Hold/ Transfer Service) – Call Forward All**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forward Immediate.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-02	**Class of Service Options (Hold/ Transfer Service) – Call Forward When Busy**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Busy.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-03	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding When Unanswered**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Unanswered.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-04	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding (Both Ringing)**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding with Both Ringing.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-05	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding with Follow Me**	In an extension's Class of Service, turn On (1) or Off (0) an extensions ability to set Call Forward with Follow Me.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-06	**Class of Service Options (Hold/ Transfer Service) – Unscreened Transfer (Ring Inward Transfer)**	Turns Off (0) or On (1) an extension ability to use Unscreened Transfer.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-07	**Class of Service Options (Hold/ Transfer Service) – Transfer Without Holding**	Turn Off or On an extension ability to use Transfer Without Holding.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-08	**Class of Service Options (Hold/ Transfer Service) – Transfer Information Display**	Turn off or on an extension incoming Transfer pre-answer display.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-09	**Class of Service Options (Hold/ Transfer Service) – Group Hold Initiate**	Turn off or on an extension ability to initiate a Group Hold.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-10	**Class of Service Options (Hold/ Transfer Service) – Group Hold Answer**	Turn off or on an extension ability to pick up a call on Group Hold.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-11	**Class of Service Options (Hold/ Transfer Service) – Automatic On-Hook Transfer**	Turn Off (0) or On (1) an extension ability to use Automatic On-Hook Transfer.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-12	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding Off-Premise (External Call Forwarding)**	In an extensions Class of Service, turn On (1) or Off (0) setting up Call Forwarding Off-Premise at the extension.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-13	**Class of Service Options (Hold/ Transfer Service) – Operator Transfer After Hold Callback**	Turn off or on an extension ability to have a call which recalls from hold transfer to the operator.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-14	**Class of Service Options (Hold/ Transfer Service) – Trunk-to-Trunk Transfer Restriction**	Turns Off (0) or On (1) the Trunk-to-Trunk Transfer Restriction. If enabled, Trunk-to-Trunk Transfer is not possible.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-15	**Class of Service Options (Hold/ Transfer Service) – VRS Personal Greeting (Message Greeting)**	Turn off or on an extension ability to dial Service Code *4 7 to record, listen to or erase the Personal Greeting Message.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-16	**Class of Service Options (Hold/ Transfer Service) – Call Redirect**	Turn On (1) or Off (0) a multiline terminal user's ability to transfer a call to a pre-defined destination (such as an operator, voice mail, or another extension) without answering the call.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-17	**Class of Service Options (Hold/ Transfer Service) – Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)**	Turn On (1) or Off (0) the ability of an extension in a Department Group to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-18	**Class of Service Options (Hold/ Transfer Service) – No Recall**	Allow (0) or deny (1) answered Transferred calls from recalling the originating extension.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-19	**Class of Service Options (Hold/ Transfer Service) – Hold/ Extended Park**	Determine whether an extension Class of Service should allow normal or extended Park (0 = Normal for Program 24-01-06, 1 = Extended for Program 24-01-07).	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-20	**Class of Service Options (Hold/ Transfer Service) – No Callback**	Turn off or on an extension ability to receive Callbacks.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-21	**Class of Service Options (Hold/ Transfer Service) – Restriction for Tandem Trunking on Hang Up**	Allow (0) or deny (1) an extension users's ability to set up a tandem/ conference call automatically when they hang up.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-22	**Class of Service Options (Hold/ Transfer Service) – Restrict Unsupervised Conference**	Allow or Deny an extensions ability to initiate a Trunk-to-Trunk Transfer (Tandem Trunking).	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-23	**Class of Service Options (Hold/ Transfer Service) – VE Call Forward Set/Cancel**	In an extension Class of Service, turn On (1) or Off (0) the ability to set and cancel Call Forwarding for a Virtual Extension.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-24	**Class of Service Options (Hold/ Transfer Service) – Trunk Park Hold Mode**	Set the hold type when a trunk call is put on hold by an extension.	0 = Non Exclusive Hold (Off) 1 = Exclusive Hold (On) (default = 0 for COS 1~15)
20-11-25	**Class of Service Options (Hold/ Transfer Service) – Transfer Park Call**	Turn on or off an extensions ability to transfer a parked call.	0 = Off 1 = On (default = 0 for COS 1~15)
20-12-02	**Class of Service Options (Charging Cost Service) – Advice of Charge**	ISDN-AOC This option turns off (0) or on (1) a DISA or tie trunk caller's ability to dial 9 for Trunk Group Routing or Automatic Route Selection.	0 = Off 1 = On (default = 1 for COS 1~15)
20-12-03	**Class of Service Options (Charging Cost Service) – Cost Display (TTU)**	ISDN billing information.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-01	**Class of Service Options (Supplementary Service) – Long Conversation Alarm**	Turns Off (0) or On (1) the Warning Tone for Long Conversation (not for single line telephones).	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-02	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Incoming)**	Turn off or on an extension ability to use Long Conversation Cutoff for incoming calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-03	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Outgoing)**	Turn off or on an extension ability to use Long Conversation Cutoff for outgoing calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-04	**Class of Service Options (Supplementary Service) – Call Forward/DND Override (Bypass Call)**	Turn On or Off the ability to use Call Forwarding/DND Override.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook Signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-07	**Class of Service Options (Supplementary Service) – Message Waiting**	Turns Off (0) or On (1) an extension ability to leave Message Waiting.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-08	**Class of Service Options (Supplementary Service) – Conference**	Turn off or on an extension ability to initiate a conference or Meet Me Conference.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-09	**Class of Service Options (Supplementary Service) – Privacy Release**	Turn off or on an extension ability to initiate a Voice Call Conference.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	In an extension Class of Service, enable the Barge-In Speech Mode (0) or Monitor Mode (1) at the initiating extension (i.e., Barge-In initiator).	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-11	**Class of Service Options (Supplementary Service) – Room Monitor, Initiating Extension**	Turns Off (0) or On (1) an extension user ability to Room Monitor other extensions.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-12	**Class of Service Options (Supplementary Service) – Room Monitor, Extension Being Monitored**	Turns Off (0) or On (1) an extension ability to be monitored.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) the extension ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-14	**Class of Service Options (Supplementary Service) – Department Calling (PLT No Called Extension)**	Turns off or on an extension user ability to call a Department Group Pilot.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-15	**Class of Service Options (Supplementary Service) – Barge-In, Initiate**	Turns off (0) or on (1) an extension user ability to barge-in on other's calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-16	**Class of Service Options (Supplementary Service) – Barge-In, Receive**	In an extension Class of Service, turn On (1) or Off (0) Barge-In at the receiving extension (i.e., Barge-In receive).	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-17	**Class of Service Options (Supplementary Service) – Barge-In Tone/Display (Intrusion Tone)**	In an extension Class of Service, turn On (1) or Off (0) the Barge-In (Intrusion) Tone. If disabled, this also turns off the Barge-In display at the called extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-18	**Class of Service Options (Supplementary Service) – Programmable Function Key Programming (General Level)**	Turns Off (0) or On (1) an extension user ability to program General function keys using Service Code 851 (by default). (Refer to Program 20-07-10 for Service Code 852.)	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-19	**Class of Service Options (Supplementary Service) – Selectable Display Messaging (Text Messaging)**	Turns Off (0) or On (1) an extension user ability to use Selectable Display Messaging.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-20	**Class of Service Options (Supplementary Service) – Account Code/Toll Restriction Operator Alert (Restricted Operation Transfer)**	Turn off or on operator alert when an extension improperly enters an Account Code or violates Toll Restriction.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-21	**Class of Service Options (Supplementary Service) – Extension Name**	Turns Off (0) or On (1) an extension user ability to program its name.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-22	**Class of Service Options (Supplementary Service) – Busy Status Display (Called Party Status)**	Turns Off or On the ability to display the detailed state of the called party.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-24	**Class of Service Options (Supplementary Service) – Privacy Release by Pressing Line Key**	Turn off or on the user ability to press a line key to barge into an outside call. The Barge-In feature must be enabled if this option is to be used.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-26	**Class of Service Options (Supplementary Service) – Group Listen**	Turn off or on an extension ability to use Group Listen.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-27	**Class of Service Options (Supplementary Service) – Busy on Seizing Virtual Extension**	If set to 1, a busy extension can be called, while someone is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to off for this option to work.	1 = On 0 = Off (default = 1 for COS 01~15)
20-13-28	**Class of Service Options (Supplementary Service) – Allow Class of Service to be Changed**	Turn off or on the ability of an extension COS to be changed via Service Code 677.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-29	**Class of Service Options (Supplementary Service) – Paging Display**	Turns Off (0) or On (1) an extension user ability to display paging information.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-30	**Class of Service Options (Supplementary Service) – Background Music**	For extension Class of Service, allow (1) or deny (0) an extension from turning Background Music on and off.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-31	**Class of Service Options (Supplementary Service) – Connected Line Identification (COLP)**	Use to define the supplementary feature availability for each extension Class of Service (COS).	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-32	**Class of Service Options (Supplementary Service) – Deny Multiple Barge-Ins**	In an extension Class of Service, allow (1) or deny (0) the extension ability to have multiple users Barge-In to their conversation.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-33	**Class of Service Options (Supplementary Service) – ACD Supervisor's Position Enhancement**	This option must be on for the operator to use service codes in Program 11-13-10 through Program 11-13-13.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-34	**Class of Service Options (Supplementary Service) – Block Manual Off-Hook Signaling**	Turn Off (0) or On (1) an extension ability to block off-hook signals manually sent from a co-worker.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-35	**Class of Service Options (Supplementary Service) – Block Camp-On**	Use this option to turn On (1) or Off (0) extension ability to block callers from dialing **#** to camp-on.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-36	**Class of Service Options (Supplementary Service) – Call Duration Timer Display**	In an extension Class of Service, turn On (1) or Off (0) a Call Timer for the extension.	0 = Off 1 = On (default = 1 for COS 01~15)
20-13-38	**Class of Service Options (Supplementary Service) – Headset Ringing**	In an extension Class of Service, turn off or on an extension ability to use the Headset ringing.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-39	**Class of Service Options (Supplementary Service) – ACD Queue Status Display**	Turn off or on the ACD Queue Status Display for an extension Class of Service. Any extension which has this option enabled also hears the queue alarm.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-40	**Class of Service Options (Supplementary Service) – Do Not Disturb**	Turn Off or On an extension user ability to set or cancel Do Not Disturb.	0 = Disable 1 = Enable (default = 1 for COS 1~15)
20-13-41	**Class of Service Options (Supplementary Service) – Voice Mail Message Indication on DSS**	Turn Off (0) or On (1) the Voice Mail Message Indication for an extension on a DSS console.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-42	**Class of Service Options (Supplementary Service) – Extension Data Swap Enabling**	Turn off or on an extensions ability to use the Station Relocation feature.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-44	**Class of Service Options (Supplementary Service) – Live Monitor Enabling**	Turn off or on an extensions ability to use Live Monitor.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-45	**Class of Service Options (Supplementary Service) – MIC Key Mode While Call Monitoring**	Set per class of service, when in Call Monitoring Mode determines if the monitored parties receives the barge in alert tone when Coaching Mode is enabled.	0 = Enable 1 = Disable (default = 0 for COS 1~15)
20-13-47	**Class of Service Options (Supplementary Service) – Station Number Display**	Determine if a station Number will be displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-48	**Class of Service Options (Supplementary Service) – Station Number Display**	Determine if a station Name will be displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-49	**Class of Service Options (Supplementary Service) – BLF Indication on CO Incoming State**	Determine if a BLF of the station will light when a Normal CO call is ringing the phone.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-50	**Class of Service Options (Supplementary Service) – AIC Agent Display Which Call is from**	Determine if the station logged in via AIC codes will show which queue the call is coming from.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-51	**Class of Service Options (Supplementary Service) – Number and Name Appear in the Directory**	Determine if an extension name and number will be listed (On) or unlisted (Off) in the directory.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-14-01	**Class of Service Options for DISA/E&M – First Digit Absorption (Delete First Digit Dialed)**	For Tie Lines, enable or disable the ability to absorb (ignore) the first incoming digit. Use this to make the tie trunk compatible with 3- and 4-digit Tie Line service. This option does not apply to DISA.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-02	**Class of Service Options for DISA/E&M – Trunk Group Routing/ARS Access**	This option enables or disables a DISA or tie trunk caller's ability to dial 9 for Trunk Group Routing or Automatic Route Selection.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-03	**Class of Service Options for DISA/E&M – Trunk Group Access**	This option enables or disables a DISA or tie trunk caller's ability to access trunk groups for outside calls (Service Code 704).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-04	**Class of Service Options for DISA/E&M – Outgoing System Speed Dialing**	This option enables or disables a DISA or tie trunk caller's ability to use the System Speed Dialing.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-05	**Class of Service Options for DISA/E&M – Operator Calling**	This option enables or disables a DISA or tie trunk caller's ability to dial 0 for the telephone system operator.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-06	**Class of Service Options for DISA/E&M – Internal Paging**	This option enables or disables a DISA or tie trunk caller's ability to use the telephone system Internal Paging.	0 =Off 1 = On (default = 0 for COS 1~15)
20-14-07	**Class of Service Options for DISA/E&M – External Paging**	This option enables or disables a DISA or tie trunk caller's ability to use the telephone system External Paging.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-08	**Class of Service Options for DISA/E&M – Direct Trunk Access**	This option enables or disables a DISA or tie trunk caller's ability to use Direct Trunk Access (Service Code 715).	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-09	**Class of Service Options for DISA/E&M – Forced Trunk Disconnect <Not for ISDN T-point>**	This option enables or disables a tie trunk caller's ability to use Forced Trunk Disconnect (Service Code *26). This option is not available to DISA callers.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-10	**Class of Service Options for DISA/E&M – Call Forward Setting by Remote via DISA**	Enable or disable a DISA callers ability to use the Call Forward service codes (Program 11-11-01 through Program 11-11-05).	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-14-11	**Class of Service Options for DISA/E&M – DISA/Tie Trunk Barge-In**	In an extension Class of Service, enable (1) or disable (0) a DISA or tie trunk user from using the Barge-In feature.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-12	**Class of Service Options for DISA/E&M – Retrieve Park Hold**	Turn off or on the ability for a DISA caller to retrieve parked or held calls.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To originate internal calls:

1. Lift the handset, and wait for internal dial tone.
2. Dial the applicable internal number.
3. Talk when called party answers.

To originate outside calls:

1. Lift the handset, and wait for dial tone.
2. Dial Trunk Access Code (default: 9).
3. Dial the number of outside party.
4. Talk when the called party answers.

To answer outside or internal calls:

Lift the handset, and talk.

To transfer an outside call or internal call with a call in progress:

1. Press the hookswitch momentarily, and wait for second dial tone.
2. Dial the station number where call is to be transferred.
3. Hang up.

To perform a Trunk-to-Trunk Transfer with an outside call in progress:

1. Provide hookflash. The call is placed on Exclusive Hold. Receive internal dial tone.

2. Dial the Trunk Access Code for the applicable trunk.
3. Dial the applicable number.
4. Hang up.

To initiate a conference with a call in progress:

1. Provide hookflash and dial **826**.
2. Dial the applicable number and wait for the party to answer.
3. Provide hookflash and repeat the second step to add parties to the conference.

- OR -

1. Provide hookflash twice to set up the conference.

To access the feature:

1. Lift the handset, and wait for internal dial tone.
2. Dial the applicable Feature Access Code.

Softkeys

Description

Each display telephone provides interactive softkeys for intuitive feature access. It is no longer necessary to remember feature codes to access the telephone advanced features because the function of the softkeys change as the user processes calls.

Additional options allow you to fine tune the multiline terminal volume levels for handset receive and transmit, speaker volume, ringer and handset volume, and headset volume levels. You can also customize the point at which the built-in speakerphone switches from transmit to receive; a boon for noisy environments. The display telephones also have a contrast control for the LCD display.

Conditions

- If a feature is restricted by an extension Class of Service, though the Softkey menu still displays the option, the user cannot set the feature.
- Using the Directory Dialing Softkeys, Recall can toggle the language display from English to Japanese.
- The feature must be active to change the volume (e.g., telephone must be ringing, page being heard, etc.). Pressing the volume keys when the telephone is idle adjusts the display contrast.

Default Setting

Display shows time/date/extension/Softkey menu information.

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Directory Dialing

Volume Controls

Guide to Feature Programming

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Program Number	Program Name	Description/Comments	Assigned Data
11-11-13	**Service Code Setup (for Setup/ Entry Operation) – Display Language Selection for Multiline Terminal**	Used to customize the service code used to select the display language for a multiline terminal.	MLT (default = 778)
15-02-01	**Multiline Telephone Basic Data Setup – Display Language Selection** (To select options 8~10, press either 8 or Recall, then press line keys 1~3. Key 1 is option 8, Key 2 is option 9, and Key 3 is option 10.)	Used to set the display language for a multiline terminal.	0 = Japanese 1 = English 2 = German 3 = French 4 = Italian 5 = Spanish 6 = Dutch 7 = Portuguese 8 = Norwegian 9 = Danish 10 = Swedish 11 = Turkish 12 = Latin American Spanish 13 = Romanian 14 = Polish (default = 1)

Operation

None

Speed Dial – System/Group/Station

Description

Speed Dialing gives an extension user quick access to frequently called numbers. This saves time, for example, when calling a client with whom they deal often. Instead of dialing a long telephone number, the extension user just dials the Speed Dialing code.

There are three types of Speed Dialing: System, Group and Station. All co-workers can share the System Speed Dialing numbers. All co-worker's in the same Speed Dialing Group can share the Group Speed Dialing numbers. Station Speed Dialing numbers are available only at a user's own extension. The system has 2000 Speed Dialing bins that you can allocate between System and Group Speed Dialing and a maximum of 65 Speed Dialing Groups are available. Each extension has 10 Station Speed Dial bins.

Each Speed Dialing bin can store a number with up to 24 digits.

When placing an Speed Dialing call, the system normally routes the call through Trunk Group Routing or ARS (whichever is enabled). Or, the user can preselect a specific trunk for the call. In addition, the system can optionally force System Speed Dialing numbers to route over a specific Trunk Group. User preselection always overrides the system routing.

System Bins Limited to 1000 with Speaker Key or 813 Service Code

Though there are 2000 Speed Dialing bins available in the system, once programmed, these bins can currently be dialed only using the Directory Dial feature (Press Directory key + SYS softkey + use arrow keys to locate number or enter the Speed Dial bin name + Speaker to place call.)

The Speaker key and service code 813 operations are not available for any 4-digit Speed Dial System bin number.

DSS Console Chaining

DSS Console chaining allows an extension user with a DSS Console to chain to an Speed Dialing number stored under a DSS Console key. The stored number dials out (chains) to the initial call. This can, for example, simplify dialing when calling a company with an Automated Attendant. You can program the bin for the company number under one DSS Console key (e.g., 81300) and the client's extension number under the other (e.g., 81301). The DSS Console user presses the first key to call the company, waits for the Automated Attendant to answer, then presses the second key to call the client (extension 400). See the Programming section below for additional details.

The DSS Console user can also chain to an Speed Dialing number dialed manually, from a Programmable Function Key or a One-Touch Key.

Storing a Flash

To enhance compatibility with connected Centrex and PBX lines, Speed Dialing bin can have a stored Flash command. For example, storing 9 Flash 926 5400 causes the system to dial 9, flash the line and then dial 926 5400. The Flash can be stored by the user from their telephone or by the system administrator during system programming.

Using a Programmable Function Key

To streamline frequently-called numbers, a Speed Dialing Programmable Function Key can also store a Speed Dialing bin number. When the extension user presses the key, the telephone automatically dials out the stored number. This provides true one-touch calling via a telephone function keys.

Conditions

- Speed Dial bins can contain stored Account Codes. To prevent them from being displayed use PRG 20-07-04.
- ARS selects the trunk for the call unless the user preselects.
- A user can implement Speed Dial only if their extension has outgoing access to trunks.
- An extension can have a One-Touch Key for Speed Dial operation.
- If you enter a PBX trunk access code in a Speed Dial bin, the system automatically inserts a pause after the bin.
- Single line telephones can only dial System and Group Speed Dial numbers.
- Toll Restriction may prevent a user from using a stored Speed Dial number.
- Unless a user preselects a trunk, Trunk Group Routing selects the trunk Speed Dial uses for trunk calls.
- If the Speed Dial bin does not have a name assigned it does not show when scrolling through the directory of speed dials.
- If Program 13-01-01 is set to 1 (Intercom Access mode), system speed dial bins require inserting a trunk access code.

Default Settings

Available (No Speed Dialing bins are assigned).

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Account Code Entry

Automatic Route Selection

Central Office Calls, Placing

Code Restriction

Dial Tone Detection

One-Touch Calling

PBX Compatibility

Programmable Function Keys

Single Line Telephones

Trunk Group Routing

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-09-01	**DTMF and Dial Tone Circuit Setup**	If dial tone detection is enabled, be sure to allocate at least one circuit for dial tone detection (Type 0 or 2).	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
11-10-04	**Service Code Setup (for System Administrator) – Storing Common Speed Dialing Numbers**	Used to customize the service code used for storing Common Speed Dialing Numbers.	MLT (default = 853)
11-10-05	**Service Code Setup (for System Administrator) – Storing Group Speed Dialing Numbers**	Used to customize the service code used for storing group speed dialing numbers.	MLT (default = 854)
11-11-39	**Service Code Setup (for Setup/ Entry Operation) – Station Speed Dial Number Entry**	Used to customize the service code used for entering station speed dial numbers.	MLT, SLT (default = 855)
11-12-10	**Service Code Setup (for Service Access) – Common/Station Speed Dialing**	Assign Service code for accessing System Speed Dial bins (default 813).	MLT, SLT (default = 813)
11-12-11	**Service Code Setup (for Service Access) – Group Speed Dialing**	Used to customize the service code for group speed dialing.	MLT, SLT (default = 814)
11-12-40	**Service Code Setup (for Service Access) - Station Speed Dialling**	Assign Service code for accessing System Speed Dial bins (default 761).	MLT, SLT (default = 761)
13-01-01	**Speed Dialing Option Setup – Speed Dialing Auto Outgoing Call Mode**	Designate trunk or intercom outgoing mode, (default: 0, trunk).	0 = Trunk Outgoing Mode 1 = Intercom Outgoing Mode (default = 0)
13-01-03	**Speed Dialing Option Setup – Number of Common Speed Dialing Bins**	Designate the bins the system uses for System Speed Dialing.	0~2000 0 = No Common Speed Dialing (default = 1000)

Program Number	Program Name	Description/Comments	Assigned Data
13-02-01	**Group Speed Dialing Bins**	Designates the starting bin number the system uses for Group Speed Dialing.	01~64 (default not assigned)
13-03-01	**Speed Dialing Group Assignment for Extensions**	For Group Speed Dialing, assign extensions to Speed Dialing groups (1~64).	01~64 (default = 1)
13-04-01	**Speed Dialing Number and Name – Speed Dialing Data**	Enter the System and Group Speed Dialing numbers and names.	1~9, 0, *, **#** Pause (Press line key 1) Recall/Flash (Press line key 2) @ = Code to wait for answer supervision in ISDN (Press line key 3) (maximum 24 digits) (default not assigned)
13-04-02	**Speed Dialing Number and Name – Name**	Assign a name to each System Speed Dial bin.	Maximum 12 Characters (Use dial pad to enter name) (default not assigned)
13-04-03	**Speed Dialing Number and Name – Transfer Mode**	When the incoming caller ID matches the number programmed in the speed dial bin, this setting determines the destination of the call.	0 = Not Used 1 = Internal Dial 2 = Incoming Ring Group (IRG) (default = 0)
13-04-04	**Speed Dialing Number and Name – Transfer Destination Number**	When the incoming caller ID matches the number programmed in the speed dial bin, this setting determines the destination of the call.	If Transfer mode is (Refer to 13-04-03): 1 = Internal Dial Mode 1~9, 0, *, **#**, P, R, @ (Maximum 24 Characters) 2 = Incoming Ring Group 0 ~ 100 (IRG Number) P=Pause R=Recall @= Additional Digits when using ISDN functionality (default not assigned)
13-04-05	**Speed Dialing Number and Name – Incoming Ring Pattern**	Define the ring tone for the caller ID routed call.	Incoming Ring Pattern 0 = Normal Pattern 1 ~ 4 = Tone Pattern (1~4) 5 ~ 9 = Scale Pattern (1~5) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
13-05-01	**Speed Dialing Trunk Group – Trunk Group Number**	For each System Speed Dialing number, enter the routing option Trunk Group Number (1~100) to dial out on.	0~100 (default not assigned)
14-02-06	**Analog Trunk Data Setup – Pause at 1st digit after Line Seize in Manual Dial Mode**	Enable/disable the system ability to pause after dialing the first digit.	0 = No Pause (No) 1 = Pause (Yes) (default = 1)
15-02-04	**Multiline Telephone Basic Data setup – Redial (Speed Dial) Control**	Assign the extension Redial key for either Common (0) or Group (1) Speed Dialing.	0 = Common and Individual Speed Dialing 1 = Group Speed Dialing (default = 0)
15-07-01	**Programmable Function Keys**	Assign a function key for System Speed Dialing (27) or Group Speed Dialing (28). You can program the key as either a general Speed Dialing key or you can choose to store a bin number with the function key. This key would then always dial the associated bin number. If storing a bin number along with the code, do not store 0, 00 or 000. To bypass entering a bin number, press **Hold** (**Hold** is also required if programming the function key using the service code 851).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-14-01	**Programmable One-Touch Keys – Station Speed Dial Data**	Assign the extensions Speed Dial number (1~10).	1~0, *, **#**, Pause, Hookflash, @ (Code for Answer-Wait) Up to 24 digits (default not assigned)
15-14-02	**Programmable One-Touch Keys – Station Speed Dial Name**	Assign the name associated with the extension Speed Dial Bin (1~10).	Name (default not assigned)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-04	**Class of Service Options (Administrator Level) – Storing Speed Dialing Entries**	Turns Off (0) or On (1) an extension to store System or Group Speed Dialing numbers.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-08-03	**COS Options (Outgoing Call Service) – System Speed Dialing**	Turns Off (0) or On (1) an extension ability to make outbound calls using system speed dial numbers.	0 = Off 1 = On (default = 1 for COS 1~15)
20-08-04	**COS Options (Outgoing Call Service) – Group Speed Dialing**	Turns Off (0) or On (1) an extension ability to make outbound calls using group speed dial numbers.	0 = Off 1 = On (default = 1 for COS 1~15)
30-03-01	**DSS Console Key Assignment**	For DSS Console Chaining, assign an Speed Dialing Service Code (or) plus a 2-digit bin number to a DSS Console key.	Key Number 001~114 0~99 (General Functional Level) 97 = Door Box Access key (additional data: 1~8 Door Box No.) * 00 ~ * 99 (Appearance Functional Level)
80-03-01	**DTMF Tone Receiver Setup – Detect Level**	Use to define the detect levels for the DTMF Tone Receiver.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm (default: Type 1~5 = 0)
80-03-02	**DTMF Tone Receiver Setup – Start delay time**	Use to define the start delay times for the DTMF Tone Receiver.	0~255 (0.25 ms ~ 64 ms) (default: Type 1~5 = 0)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-03	**DTMF Tone Receiver Setup – Min. detect level**	Use to define the minimum detect levels for the DTMF Tone Receiver.	0~15 detect level 0: –10dBm(0) to –25dBm(15) detect level 1: –15dBm(0) to –30dBm(15) detect level 2: –20dBm(0) to –35dBm(15) detect level 3: –25dBm(0) to –40dBm(15) detect level 4: –30dBm(0) to –45dBm(15) detect level 5: –35dBm(0) to –50dBm(15) detect level 6: –40dBm(0) to –55dBm(15) detect level 7: -45dBm(0) to -60dBm(15) detect level 8: -50dBm(0) to -65dBm(15) detect level 9: -55dBm(0) to -70dBm(15) detect level 10: -60dBm(0) to -75dBm(15) detect level 11: -65dBm(0) to -80dBm(15) detect level 12: -70dBm(0) to -85dBm(15) detect level 13: -75dBm(0) to -90dBm(15) detect level 14: -80dBm(0) to -95dBm(15) detect level 15: -85dBm(0) to -100dBm(15) default: Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3~5 = 10 (-20dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-04	**DTMF Tone Receiver Setup – Max. detect level**	Use to define the maximum detect levels for the DTMF Tone Receiver.	0~15 detect level 0: 0dBm(0) to –15dBm(15) detect level 1: –5dBm(0) to –20dBm(15) detect level 2: –10dBm(0) to –25dBm(15) detect level 3: –15dBm(0) to –30dBm(15) detect level 4: –20dBm(0) to –35dBm(15) detect level 5: –25dBm(0) to –40dBm(15) detect level 6: –30dBm(0) to –45dBm(15) detect level 7: -35dBm(0) to -50dBm(15) detect level 8: -40dBm(0) to -55dBm(15) detect level 9: -45dBm(0) to -60dBm(15) detect level 10: -50dBm(0) to -65dBm(15) detect level 11: -55dBm(0) to -70dBm(15) detect level 12: -60dBm(0) to -75dBm(15) detect level 13: -65dBm(0) to -80dBm(15) detect level 14: -70dBm(0) to -85dBm(15) detect level 15: -75dBm(0) to -90dBm(15) default: Type 1~5 = 2 (-2dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-05	**DTMF Tone Receiver Setup – Forward twist level**	Use to define the forward twist levels for the DTMF Tone Receiver.	0~9 (1dB ~ 10dB) [default: Type 1~5 = 5 (6dBm)]
80-03-06	**DTMF Tone Receiver Setup – Backward twist level**	Use to define the backward twist levels for the DTMF Tone Receiver.	0~9 (1dB ~ 10dB) [default: Type 1~5 = 0 (1dBm)]
80-03-07	**DTMF Tone Receiver Setup – ON detect time**	Use to define the on detect times for the DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) [default: Type 1~5 = 1 (30ms)]
80-03-08	**DTMF Tone Receiver Setup – OFF detect time**	Use to define the off detect timer for the DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) [default: Type 1~5 = 1 (30ms)]
80-04-01	**Call Progress Tone Detector Setup – Detection Level**	Use to define the detection levels for the Call Progress Tone Detector.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1 (DT) – 0 (-25dBm) Type 2 (BT) – 0 (-25dBm) Type 3 (RBT) – 0 (-25dBm) Type 4, Type 5 – 0
80-04-02	**Call Progress Tone Detector Setup – Min. Detection Level**	Use to define the minimum detection levels for the Call Progress Tone Detector.	0~15 detect level 0 : –15dBm (0) to –30dBm(15) detect level 1 : –30dBm (0) to –45dBm(15) detect level 2 : –40dBm (0) to –55dBm(15) default: Type 1 (DT) – 15 (-25dBm) Type 2 (BT) – 15 (-25dBm) Type 3 (RBT) – 15 (-25dBm) Type 4, Type 5 – 0

Program Number	Program Name	Description/Comments	Assigned Data
80-04-03	**Call Progress Tone Detector Setup – S/N Ratio**	Use to define the S/N ratio for the Call Progress Tone Detector.	0~4 (0dB ~ -20dB) default: Type 1 (DT) – 4 (-20dB) Type 2 (BT) – 4 (-20dB) Type 3 (RBT) – 4 (-20dB) Type 4, Type 5 – 0
80-04-04	**Call Progress Tone Detector Setup – No tone time**	Use to define the no tone time for the Call Progress Tone Detector.	0~255 (30+30-7680ms) default: Type 1 (DT) – 132 (3990ms) Type 2 (BT) – 132 (3990ms) Type 3 (RBT) – 132 (3990ms) Type 4, Type 5 – 0
80-04-05	**Call Progress Tone Detector Setup – Pulse Count**	Use to define the pulse count for the Call Progress Tone Detector.	1~255 default: Type 1 (DT) – 1 Type 2 (BT) – 1 Type 3 (RBT) – 1 Type 4, Type 5 – 0
80-04-06	**Call Progress Tone Detector Setup – ON minimum time**	Use to define the on minimum time for the Call Progress Tone Detector.	1~255 (30+30-7680ms) default: Type 1 (DT) – 63 (300ms) Type 2 (BT) – 9 (300ms) Type 3 (RBT) – 25 (780ms) Type 4, Type 5 – 0
80-04-07	**Call Progress Tone Detector Setup – ON maximum time**	Use to define the on maximum time for the Call Progress Tone Detector.	0~255 (30+30-7680ms) default: Type 1 (DT) – 0 Type 2 (BT) – 14 (450ms) [ET] Type 3 (RBT) – 40 1230ms) Type 4, Type 5 – 0

Program Number	Program Name	Description/Comments	Assigned Data
80-04-08	**Call Progress Tone Detector Setup – OFF minimum time**	Use to define the off minimum time for the Call Progress Tone Detector.	1~255 (30+30-7680ms) default: Type 1 (DT) – 1 (60ms) Type 2 (BT) – 9 (300ms) Type 3 (RBT) – 52 (2520ms) Type 4, Type 5 – 0
80-04-09	**Call Progress Tone Detector Setup – OFF maximum time**	Use to define the off maximum time for the Call Progress Tone Detector.	0~255 (30+30-7680ms) default: Type 1 (DT) – 1 (60ms) Type 2 (BT) – 14 (450ms) Type 3 (RBT) – 80 (3480ms) Type 4, Type 5 – 0

Operation

To store an Speed Dialing number (display telephones only):

1. Press **Speaker**.
2. Dial **853** (for system) or **854** (for group).
3. Dial system or group storage code.
   . *Initially, there are 1000 System Speed Dialing codes. There are Group Speed Dialing codes only if you define them in programming.*
4. Dial telephone number you want to store (up to 24 digits).
   . *Valid entries are **0~9**, **#** and *. To enter a pause, press **Transfer**. To store a Flash, press **Recall**.*
   . *Enter @ for await answer before sending following digits on ISDN.*
5. Press **Hold**.
6. Enter the name associated with the Speed Dialing number.

Table 1-17 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: **1 @ [¥] ^ _ ` { | } Æ ¨ Á À Â Ã Ç É Ê ì ó**
2	Enter characters: **A-C, a-c, 2**.
3	Enter characters: **D-F, d-f, 3**.
4	Enter characters: **G-I, g-i, 4**.
5	Enter characters: **J-L, j-l, 5**.
6	Enter characters: **M-O, m-o, 6**.
7	Enter characters: **P-S, p-s, 7**.
8	Enter characters: **T-V, t-v, 8**.
9	Enter characters: **W-Z, w-z, 9**.
0	Enter characters: 0 ! “ **#** $ % & ’ ( ) ô Õ ú ä ö ü α ε θ
*	Enter characters: * + , - . / : ; < = > ? **B E σ S** ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed – ex: TOM). Pressing **#** again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
Feature	Clear the character entry one character at a time.
HOLD	Clear all the entries from the point of the flashing cursor and to the right.

7. Press **Hold**.
8. Press **Speaker** to hang up or repeat steps 3~7 to program another System or Group Speed Dial bin.

To dial a System Speed Dialing number:

1. Go off-hook.
2. Press **Redial**.

3. Dial the System Speed Dialing storage code.

   . *Unless you preselect, Trunk Group Routing selects the trunk for the call. The system may optionally select a specific Trunk Group for the call.*

   . *If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.*

To store a System Speed Dialing number under a Programmable Function Key:

1. At multiline terminal, press **Speaker**.
2. Dial **851**.
3. Press the key where the number is to be stored.
4. Dial **27**.
5. Dial System Speed Dial Bin number to put under the key.
6. Press **Speaker** to hang up.

To dial a System Speed Dialing number under a Programmable Function Key:

1. At the multiline terminal, press **Speaker**.
2. Press the key, which has the stored number to be dialed.

   . *The number seizes an outside line and dials out.*

To dial a Group Speed Dialing number:

1. Go off-hook.
2. Press **Redial**.

   - OR -

3. Press the **Group Speed Dialing** key (Program 15-07-01 or SC 851: 28).

   . *To preselect, press a line key in step 1 (instead of **Speaker**) before pressing **Redial** or **Speed Dialing** key.*

4. Dial the Group Speed Dialing code.

   . *The stored number dials out.*

   . *Unless you preselect, Trunk Group Routing selects the trunk for the call.*

   . *If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.*

To check your stored Speed Dialing numbers (display telephone only):

1. Press the **Help** key.

2. For System Speed Dialing, press **Redial**.
   Dial the Speed Dialing Code (e.g., common code **001**).

   . *If the entire stored number is too long for your telephone display, press* * *to see the rest of the number.*

   - OR -

   For Group Speed Dialing, press the **Group Speed Dialing** key.

   - OR -

   For System Speed Dialing key, press the **System Speed Dialing** key.

3. Press the **Exit** key.

   . *To display additional numbers, repeat from step 1.*

To store a Station Speed Dialing number (display telephones only):

1. Press **Speaker**.
2. Dial **855**.
3. Dial the Station Speed Dial buffer number to be programmed (**0~9**).

   1 = Station Speed Dial buffer 1
   2 = Station Speed Dial buffer 2
   " " " " " "
   0 = Station Speed Dial buffer 10

4. Dial the telephone number you want to store (up to 24 digits).

   . *Valid entries are 0~9,* **#** *and* *. *To enter a pause, press MIC. To store a Flash, press Recall.*

5. Press **Hold**.
6. Enter the name associated with the Speed Dialing number (display telephones only).

Key for Entering Names	
Use this keypad digit . . .	**When you want to. . .**
1	Enter characters: **1 @ [¥] ^ _ ` { | } → ← Á À Â Ã Ç É Ê ì ó**
2	Enter characters: **A-C, a-c, 2**.
3	Enter characters: **D-F, d-f, 3**.
4	Enter characters: **G-I, g-i, 4**.
5	Enter characters: **J-L, j-l, 5**.
6	Enter characters: **M-O, m-o, 6**.
7	Enter characters: **P-S, p-s, 7**.
8	Enter characters: **T-V, t-v, 8**.

Key for Entering Names (Continued)	
Use this keypad digit . . .	**When you want to. . .**
9	Enter characters: **W-Z, w-z, 9**.
0	Enter characters: **0 ! “ # $ % & ’ ( ) ô õ ú ä ö ü α ε θ**
*	Enter characters: * + , - . / : ; < = > ? **B E** σ **S** ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed – ex: TOM). Pressing **#** again = Space.
Conf	Clears the character entry one character at a time (used when entering the name).
Exit	Clears all the entries from the point of the flashing cursor and to the right (used when entering the number, this clears both the number and name).

7. Press **Hold**.
8. Press **Speaker** to hang up.

To store a Station Speed Dialing number (Single Line Telephones only):

1. Lift the Handset.
2. Dial **855**.
3. Dial the Station Speed Dial buffer number to be programmed (0~9).
   1 = Station Speed Dial Buffer 1
   2 = Station Speed Dial Buffer 2
   3 = Station Speed Dial Buffer 3
   4 = Station Speed Dial Buffer 4
   5 = Station Speed Dial Buffer 5
   6 = Station Speed Dial Buffer 6
   7 = Station Speed Dial Buffer 7
   8 = Station Speed Dial Buffer 8
   9 = Station Speed Dial Buffer 9
   0 = Station Speed Dial Buffer 10
4. Dial the telephone number you want to store (up to 24 digits).
   . *Valid entries are 0~9,* **#** *and* *.
   . *A Single line set cannot program a pause or flash in a spd bin.*
5. Hang up.

To dial a Station Speed Dialing number (Multiline Terminal):

1. Press **Speaker**.
2. Dial **761** (default Service Code).

   - OR -

   Press the **System Speed Dialing** key (Service Code 851: 27).

   . *To preselect, press a line key in step 1 (instead of Speaker).*
3. Dial the Station Speed Dial buffer number (**0 ~9**).

   1 = Station Speed Dial buffer 1
   2 = Station Speed Dial buffer 2
   : : : : : : :
   0 = Station Speed Dial buffer 10

   . *The stored number dials out.*

   . *Unless you preselect, Trunk Group Routing selects the trunk for the call. The system may optionally select a specific Trunk Group for the call.*

   . *If you have a DSS Console, you may be able to press a DSS Console key to chain to a stored number.*

To dial a Station Speed Dialing number (Single Line Telephone):

1. Lift the Handset.
2. Station Speed Dial 761
   Group Speed Dial 814
   System Speed Dial 813
3. Dial the Speed Dial Memory Location.
   Station Speed Dial 0~9
   Group Speed Dial xxx (none at default)
   System Speed Dial 000~999
4. Converse.

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Station Hunt

Description

After calling a busy extension, a call immediately hunts to the next available member of the Hunt Group (Department Group). The caller does not have to hang up and place another Intercom call if the first extension called is unavailable.

Conditions

- If required, use this option to change the Department Step Calling Single Digit Service Code (default code not assigned).
- A function key for Department Step Calling can be assigned (code 36).
- In Program 20-08-12, enable (1) or disable (0) an extension user ability to use Department Step Calling.

Default Setting

Not Enabled

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Department Calling

Department Step Calling

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-16-01	**1 Digit Service Code Setup - Step Call**	Assign a single digit for step call	SLT/MLT Default not assigned
16-01-03	**Department Group Basic Data Setup – Department Routing When Busy (Auto Step Call)**	Assign if a call to busy station hunts (1) or not hunts (0) to the next available member of the Hunt Group (Department Group). . *Refer Department Calling on page 1-311 to set up the Department Group.*	0 = Normal (Intercom caller to busy department member hears busy) 1 = Circular (Intercom callers to busy department member routes to idle member) (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	In an extension Class of Service, turn On (1) or Off (0) Call Queuing to the extension. This must be set to (0) for Station Hunting to work.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	In an extension Class of Service, allows a busy extension to manually (0) or automatically (1) receive off-hook signals. This must be set to (0) for Station Hunting to work.	0 = Off 1 = On (default = 0 for COS 1~15)

Operation

To make a Step Call:

1. Place a call to a busy extension.

Station Message Detail Recording

Description

Station Message Detail Recording (SMDR) provides a record of the system trunk calls. Typically, the record outputs to a customer-provided printer, terminal or SMDR data collection device. SMDR allows you to monitor the usage at each extension and trunk. This makes charge-back and traffic management easier.

SMDR provides the following options:

- **Abandoned Call Reporting**

  The SMDR report includes calls that rang into the system but were unanswered (i.e., abandoned). SMDR can include all abandoned calls or only those abandoned calls that rang longer than the specified duration. The Abandoned Call Report helps you keep track of lost business.

- **Blocked Call Reporting**

  When Toll Restriction blocks a call, you can have SMDR print the blocked call information. Or, you can have SMDR exclude these types of calls. With Blocked Call Reporting, you can better customize Toll Restriction for the site application.

- **Customized Date Format**

  The SMDR header can show the report date in one of three formats: American, European or Japanese. Set the format for your preference.

- **Transferred Call Tracking**

  SMDR shows each extension share of a transferred call. If an outside call is transferred among four extensions, SMDR shows how long each of the callers stayed on the call.

- **Data Call Tracking**

  Data Call Tracking can log the system internal data calls. Since SMDR normally logs external (trunk) data calls, Data Call Tracking lets you get a complete picture of data terminal activity.

- **Digit Counting**

  With Digit Counting, SMDR can selectively keep track of toll calls. For example, if the digit count is nine, SMDR does not include toll calls in the home area code. Digit Counting permits SMDR to include only the calls you want to monitor.

- **Digit Masking**

  Digit Masking lets you X out portions of the number dialed on the SMDR report. A digit mask of seven, for example, masks out all exchange codes (NNXs) and local addresses. Digit Masking makes it easier to keep track of calling patterns, without having to interpret each individual number. You can also use Digit Masking to block out access and security codes.

- **Duration Monitoring**

  SMDR can include calls of any duration, or only those that last longer than the interval you specify. If you want to keep track of all trunk activity, use a short duration. To keep track of only significant usage, use a longer duration.

- **Extension Exclusion**

  You can selectively exclude extensions from the SMDR report. This ensures privacy for high-profile callers. For example, the company attorney negotiating a merger may not want his calls to show up on an in-house report.

- **PBX Call Reporting**

  If your system is behind a PBX, you can have SMDR monitor all traffic into the PBX or just calls placed over PBX trunks. The SMDR record can include all PBX calls (including calls to PBX extensions) or just calls that include the PBX trunk access code.

- **Trunk Exclusion**

  Use Trunk Exclusion to exclude certain trunks not subject to per-call charges (like WATS lines) from the SMDR report. This makes call accounting easier, since you review only those calls with variable costs.

- **Usage Summaries**

  SMDR can automatically print daily, weekly and monthly call activity summaries. Each summary includes the total number of regular trunk calls and ISDN trunk calls, and the costs for each type. The daily report prints every day at midnight. The weekly report prints every Sunday night at midnight. The monthly report prints at midnight on the last day of the month.

- **Extension Name or Number**

  The SMDR report can include an extension name or extension number. Choose the method that makes it easier for you to track call usage.

(The LAN port only provides information through LAN-capable programs, such as HyperTerminal. Printing of the SMDR information must be done from within that program.)

SMDR Enhanced for Caller ID

The SMDR output is enhanced to include up to 16 or 24 characters of the Caller ID name information (depending on the view option selected in Program 35-02-18). You can select to display the Caller ID number or name or the DID number. If you wish to display the Caller Name in the DIALLED NO./CLI and ACCOUNT area, select 2 in the updated Program 35-02-15 and 1 in Program 35-02-17.

If the Caller ID name is not received, the area for Caller ID Name is left blank.

Sample SMDR Report

For example, with Program 35-01-09 = 0 (Format for NA) and Program 35-02-17 = 1 (Caller ID Name), if a call is received with the Caller ID Name of NEC Infrontia Corporation (24 characters), the following SMDR record is displayed:

CLASS	TIME	DATE	LINE	DURATION	STATION	DIALLED No./CLI	ACCOUNT
POT	10:52	12/09	002	00:00:10	2001	2142623801	08754
PIN	10:52	12/09	001	00:00:20	2017	2142623802	NECinfrontia Corp.
PIN	10:53	12/09	002			2142623801	NO ANSWER

If Program 35-02-18 = 1 (Caller ID Name Output Method) is set to line feed, the SMDR displays as follows:

CLASS	TIME	DATE	LINE	DURATION	STATION	DIALLED No./CLI	ACCOUNT
POT	10:52	12/09	002	00:00:10	2001	2142623801	08754
PIN	10:52	12/09	001	00:00:20	2017	2142623802	NECinfrontia Corp.
NEXT NECinfrontia Corp.							
PIN	10:53	12/09	002			2142623801	NO ANSWER

Table 1-18 SMDR Report Definitions

Report Headings	Definitions
Call Record Number	SMDR record number (consecutive)
CLASS	Type of call (see Class Definitions below)
TIME	Time call placed or answered. (For Transferred calls, shows time user picked up Transfer.)
DATE	Date the call was made
LINE	Trunk number used for call
DURATION	How long call lasted. (For Transferred calls, shows how long user was on call after answering the Transfer.)
STATION	Extension number of call owner (i.e., extension that first placed or answered call) (For Transferred calls, there can be more than one owner – depending on how many extensions shared the call.)
DIALLED No./CLI	For outgoing calls, the number dialed or, for incoming calls, the Caller ID information
ACCOUNT	Account Code number entered by extension user
Class Definitions	
POT	Outgoing trunk call
POTA	Outgoing trunk call placed using Toll Restriction Override
PIN	Incoming trunk calls
ALB	All lines in group are busy (group number follows TIME field)
BRD	Call blocked due to Toll Restriction
PTRS	Transferred call
IVIN	BRI/PRI inbound trunk call
IVOT	Outgoing BRI/PTI trunk call
ITRS	Transferred BRI/PRI call

Table 1-19 SMDR Report Format with Program 35-02-14 Set to '0'

Character Position	Field Definition
Header Line 1	
1~60	Spaces
61~70	MM/DD/YYYY
71	Space
72~75	PAGE
76	Space
77~79	Report page number (e.g., 001)
CR & LF	Carriage return and line feed
Header Line 2	
1~5	CLASS
6	Space
7~10	TIME
11~14	Spaces
15~18	LINE
19~22	Spaces
23~30	DURATION
31~32	Spaces
33~39	STATION
40~44	Spaces
45~51	DIALLED
52	Space
53~59	No./CLI
60~63	Spaces
64~70	ACCOUNT
CR & LF	Carriage return and line feed
LF	Line feed
SMDR Record	
1~4	Call type (e.g., POT for outgoing)

Table 1-19 SMDR Report Format with Program 35-02-14 Set to '0' (Continued)

Character Position	Field Definition
5	Space
6~10	Time in 24 hour clock (HH:MM)
11	Space
12~21	LINE
22	Space
23~30	Call Duration (HH:MM:SS)
31	Space
32~41	Station number or name
42	Space
43~62	Number dialed (20 digits maximum)
63	Space
64~79	Account number or NO ANSWER

Table 1-20 SMDR Report Format with Program 35-02-14 Set to '1'

Character Position	Field Definition
Header Line 1	
1~60	Spaces
61~70	MM/DD/YYYY
71	Space
72~75	PAGE
76	Space
77~79	Report page number (e.g., 001)
CR & LF	Carriage return and line feed
Header Line 2	
1~5	CLASS
6	Space
7~10	TIME
11	Spaces

Table 1-20 SMDR Report Format with Program 35-02-14 Set to '1' (Continued)

Character Position	Field Definition
12~15	DATE
16~17	Spaces
18~21	LINE
22	Space
23~30	DURATION
31~32	Spaces
33~39	STATION
40~44	Spaces
45~51	DIALLED
52	Space
53~59	No./CLI
60~63	Spaces
64~70	ACCOUNT
CR & LF	Carriage return and line feed
LF	Line feed
SMDR Record	
1~4	Call type (e.g., POT for outgoing)
5	Space
6~10	Time in 24 hour clock (HH:MM)
11	Space
12~16	DATE
17	Space
18~21	LINE
22	Space
23~30	Call Duration (HH:MM:SS)
31	Space
32~41	Station number or name
42	Space
43~62	Number dialed (20 digits maximum)

Table 1-20 SMDR Report Format with Program 35-02-14 Set to '1' (Continued)

Character Position	Field Definition
63	Space
64~79	Account number or NO ANSWER

Table 1-21 SMDR Summary Report

```
OUTGOING CALL/COST SUMMARY
FOR DAY OF nn/nn/nn

     TOTAL NO. OF OUTGOING PSTN CALLS: 0
     TOTAL NO. OF OUTGOING ISDN CALLS:  0
     NO. OF OUTGOING PSTN CALLS COSTED: 0 COST: 0
     NO. OF OUTGOING ISDN CALLS COSTED:  0 COST: 0

OUTGOING CALL/COST
SUMMARY FOR WEEK ENDING nn/nn/nn
     TOTAL NO. OF OUTGOING PSTN CALLS: 49
     TOTAL NO. OF OUTGOING ISDN CALLS:  0
     NO. OF OUTGOING PSTN CALLS COSTED: 0 COST: 0
     NO. OF OUTGOING ISDN CALLS COSTED:  0 COST: 0

OUTGOING CALL/COST SUMMARY
FOR MONTH ENDING nn/nn/nn
     TOTAL NO. OF OUTGOING PSTN CALLS: 49
     TOTAL NO. OF OUTGOING ISDN CALLS:  0
     NO. OF OUTGOING PSTN CALLS COSTED: 0 COST: 0
     NO. OF OUTGOING ISDN CALLS COSTED:  0 COST: 0
```

Conditions

- SMDR data does not include Intercom calls.
- The SMDR call buffer stores 500 calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, the oldest record is deleted to allow the new record to be saved.
- When SMDR reports are enabled using the same port as the Traffic Reporting feature (example: 147), the SMDR blocks the Traffic reports. Unplugging the cable and plugging it back in again allows Traffic reports to print.

- SMDR requires a connection to the CD-CP00 LAN.
- If no answer is received, NO ANSWER is displayed regardless of the system programing for the Caller ID display option.
- The setting in Program 35-02-18 works regardless of the entry in Program 35-02-15 or 35-02-17.
- When Program 35-02-18 is set to 1, the first and second lines are sometimes separated. When the buffer is full, the overflowed data may not be shown.
- The special characters used in the UNIVERGE SV8100 system cannot be output to the SMDR – they are converted to _.
- To use the PBX Call Reporting option, program system for behind PBX operation.

Default Setting

Disabled

System Availability

Terminals

All Stations

Required Component(s)

Software License

Related Features

PBX Compatibility

Traffic Reports

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-12-01	**CD-CP00 Network Setup – IP Address**	Assign the IP Address.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.254.255.254 192.0.0.1 ~ 223.255.255.254 (default = 192.168.0.10)
10-20-01	**LAN Setup for External Equipment – TCP Port**	Define the TCP port (0~65535) when communicating to the SMDR (type 5).	0~65535 default: External Device 1 (CTI Server) = 0 External Device 2 (ACD MIS) = 0 External Device 4 (Networking System) = 30000 External Device 5 (SMDR Output) = 0 External Device 6 (DIM Output) = 0 External Device 11 (O&M Server) = 8010
10-20-03	**LAN Setup for External Equipment – Keep Alive Time**	Use to define the keep alive time for communicating to external equipment.	1~255 (seconds) (default = 30)
14-01-06	**Basic Trunk Data Setup – SMDR Printout**	Use this option to have the system include(1) or exclude (0) the trunk you are programming from the SMDR printout. Refer to Program 35-01 and 35-02 for SMDR printout options.	0 = No Print Out 1 = Prints Out (default = 0)
14-04-01	**Behind PBX Setup**	For ANI/DNIS, the following additional setting is recommended: Behind PBX = 0 (Stand Alone).	0 = Stand Alone (Trunk) 1 = Behind PBX (PBX) 2 = Not Used 3 = CTX assume 9 (default = 0)
15-01-03	**Basic Extension Data Setup – SMDR Printout**	For each extension, enter 1 if extension calls should appear on SMDR report. Enter 0 if extension calls should not appear on SMDR report.	0 = Do not print on SMDR report 1 = Include on SMDR report (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
20-07-18	**Class of Service Options (Administrator Level) – SMDR Printout Accumulated Extension Data**	Used to determine if Accumulated Extension Data is included in the SMDR report for each COS.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-19	**Class of Service Options (Administrator Level) – SMDR Printout Department Group (STG) Data**	Used to determine if Department Group (STG) Data is included in the SMDR report for each COS.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-20	**Class of Service Options (Administrator Level) – SMDR Printout Accumulated Account Code Data**	Used to determine if Accumulated Account Code Data is included in the SMDR report for each COS.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-13-36	**Class of Service Options (Supplementary Service) – Call Duration Timer Display**	In an extension Class of Service, turn On (1) or Off (0) a Call Timer for the extension.	0 = Off 1 = On (default = 1 for COS 01~15)
35-01-01	**SMDR Options – Output Port Type**	This option specifies the type of connection used for SMDR. The baud rate for the COM port should be set in Program 15-02-19.	0 = None 3 = LAN 4 = CTA/CTU (default = 0)
35-01-03	**SMDR Options – Header Language**	Specify the language in which the SMDR header should be printed.	0 = English 1 = German 2 = French 3 = Italian 4 = Spanish (default = 0)
35-01-04	**SMDR Options – Omit Digits**	Enter the number of digits (1~24) you want SMDR to block (i.e., X out). Enter 0 not to block any digits.	0~24 (0 = Not applied) (default = 1)
35-01-05	**SMDR Options – Minimum Digits**	Enter the minimum number of digits a user must dial (1~24) before the system includes a call on the SMDR report. Enter 0 to include all outgoing calls, regardless of the number of digits dialed.	0~24 (0 = Not applied) (default = 0)
35-01-06	**SMDR Options – Minimum Call Duration**	Enter the minimum duration of a call that prints on the SMDR report. Enter 0 to have calls of any duration print.	0~65535 (sec) (0 = All) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
35-01-07	**SMDR Options – Minimum Ring Time (For Incoming Calls)**	Enter how long an unanswered call must ring (1~65535 seconds) before SMDR logs it as No Answer). Enter 0 to allow all No Answer calls to print.	0~65535 (sec) (0 = All) (default = 0)
35-01-08	**SMDR Options – Format Selection**	This option is added to allow an increased account code field from eight to 16 when used in the U.K. This allows 16 characters of the Caller ID name to be displayed.	0 = NA Type (North America) 1 = G/J Type (Overseas/ Japan) (default = 1)
35-02-01	**SMDR Output Options – Toll Restricted Call**	SMDR can include or exclude calls blocked by Toll Restriction.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-02	**SMDR Output Options – PBX Calls**	When the system is behind a PBX, SMDR can include all calls or just calls dialed using the PBX trunk access code.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-03	**SMDR Output Options – Trunk Number or Name**	Select whether the system should display the trunk name (0) or the number (1) on SMDR reports. . *If this option is set to 0, Program 35-02-14 must be set to 0.*	0 = Name 1 = Number (default = 1)
35-02-04	**SMDR Output Options – Summary (Daily)**	Set this option to (1) to have the SMDR report provide a daily summary (at midnight every night).	0 = Not Displayed 1 = Displayed (default = 1)
35-02-05	**SMDR Output Options – Summary (Weekly)**	Set this option to (1) to have the SMDR report provide a weekly summary (every Saturday at midnight).	0 = Not Displayed 1 = Displayed (default = 1)
35-02-06	**SMDR Output Options – Summary (Monthly)**	Set this option to (1) to have the SMDR report provide a monthly summary (at midnight on the last day of the month).	0 = Not Displayed 1 = Displayed (default = 1)
35-02-07	**SMDR Output Options – Toll Charge Cost**	Set this option to (1) have the SMDR report include toll charges.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-08	**SMDR Output Options – Incoming Call**	Enable this option (1) to have the SMDR report include incoming calls. If you disable this option (0), incoming calls do not print.	0 = Not Displayed 1 = Displayed (default = 1)
35-02-09	**SMDR Output Options – Extension Number or Name**	Set this option (1) to have the SMDR report include extension numbers. Set this option (0) to have the SMDR report include extension names.	0 = Name 1 = Number (default = 0)

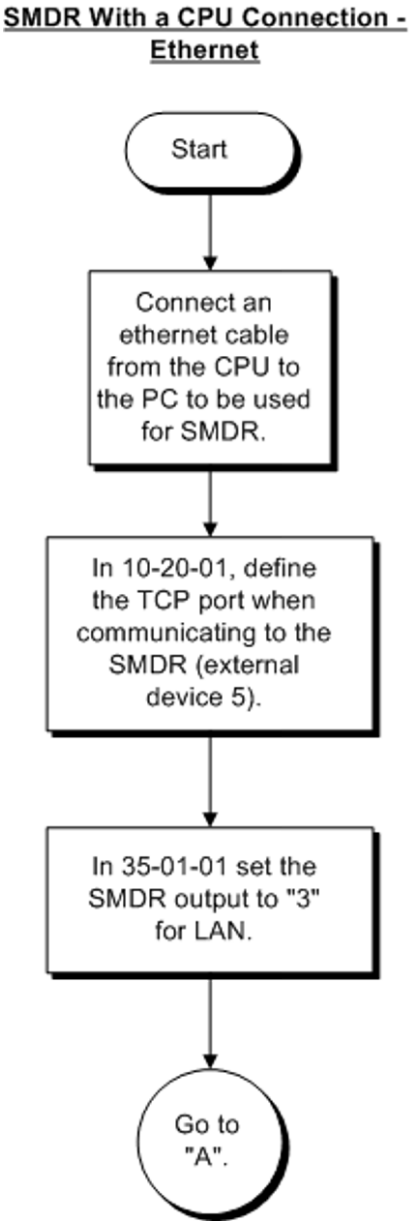
Program Number	Program Name	Description/Comments	Assigned Data
35-02-10	**SMDR Output Options – All Lines Busy (ALB) Output**	Determine if the All Lines Busy (ALB) indication should be displayed.	0 = Not Displayed 1 = Displayed (default = 0)
35-02-12	**SMDR Output Options – DID Table Name Output**	Determine if the DID table name should be displayed for incoming DID calls.	0 = Not Displayed 1 = Displayed (default = 0)
35-02-13	**SMDR Output Options – CLI Output When DID to Trunk**	Determine if the Caller ID should be displayed when the incoming DID number is transferred to an outgoing trunk.	0 = Not Displayed 1 = Displayed (default = 0)
35-02-14	**SMDR Output Options – Date**	Determine whether the date should be displayed on SMDR reports. . *This option must be set to 0 if the trunk name is set to be displayed in Program 35-02-03.*	0 = Not Displayed 1 = Displayed (default = 0)
35-02-15	**SMDR Output Options – CLI/DID Number Switching**	Enter 0 to display the Caller ID number. Determine if the Caller ID number (0), DID number (1) or Caller ID name (2) should be displayed in the SMDR output.	0 = CLI (CLIP) 1 = DID Calling Number (default = 0)
35-02-16	**SMDR Output Options – Trunk Name or Received Dialed Number**	Determine how the SMDR should print incoming calls on ANI/DNIS or DID trunks. If set to (1), ANI/DNIS trunks can print DNIS digits. For DID trunks, if the received number is not defined in Program 22-11-01, a number is not printed. If set to (0) trunk names are printed instead (as assigned in Program 14-01-01).	0 = Trunk Port Name 1 = Received Dialed Number (default = 0)
35-02-17	**SMDR Output Options – Print Account Code or Caller Name of Incoming Call**	Determine whether the Account Code (0) or Caller ID name (1) should appear in the SMDR record. By default, the Account Code is displayed. . *Program 35-01-08 must be set to 0 for this entry to be followed.*	0 = ACC 1 = CNAME (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
35-02-18	**SMDR Output Options – Print Mode for Caller Name of Incoming Call**	Select whether to display up to 16 characters of the Caller Name on the same line as the call record (0) or if a line feed should be added and up to 24 characters of the Caller Name will be displayed on the following line (1). If the line feed option is selected, the Caller Name is displayed on the next line as : NEXT Caller Name. The default entry for this option is 0. This setting works regardless of the setting in Program 35-02-15. . *With this option set to 1, if your communications program (such as Hyper Terminal) has the line wrap option enabled in the ASCII setup, an additional line break may appear above the Caller name line.*	0 = Normal 1 = Line Feed (default = 0)
35-02-19	**SMDR Output Options – Dialed Number Output Format**	Determine if the dialed number should display the first 20 digits (0) or the last 20 digits (1). This option is only available for outgoing calls.	0 = Display from the first digit 1 = Display from the last digit
35-02-20	**SMDR Output Options – External CFW Information Mode**	The extension has Call Forward set with an Abbreviated Dial number as the destination. Selecting "0" (Transfer Info) will display the extension number which **called** the extension with external Call Forward set. Selecting "1" (Incoming Info) will display the extension number which **has the external Call Forward set**. This option only applies when Call Forward is set using a service code (Program 11-11-01~11-11-07) and the destination uses an Abbreviated Dial bin. It does not include Off-Premise or Centrex transfers.	0 = Transfer Info 1 = Incoming Info
35-03-01	**SMDR Port Assignment for Trunk Group**	Assign the SMDR port for each trunk group. For each Trunk Group, select the SMDR port to which the incoming SMDR information should be sent.	Trunk Groups: 1~100 SMDR Ports: 1~8 (default = 1)

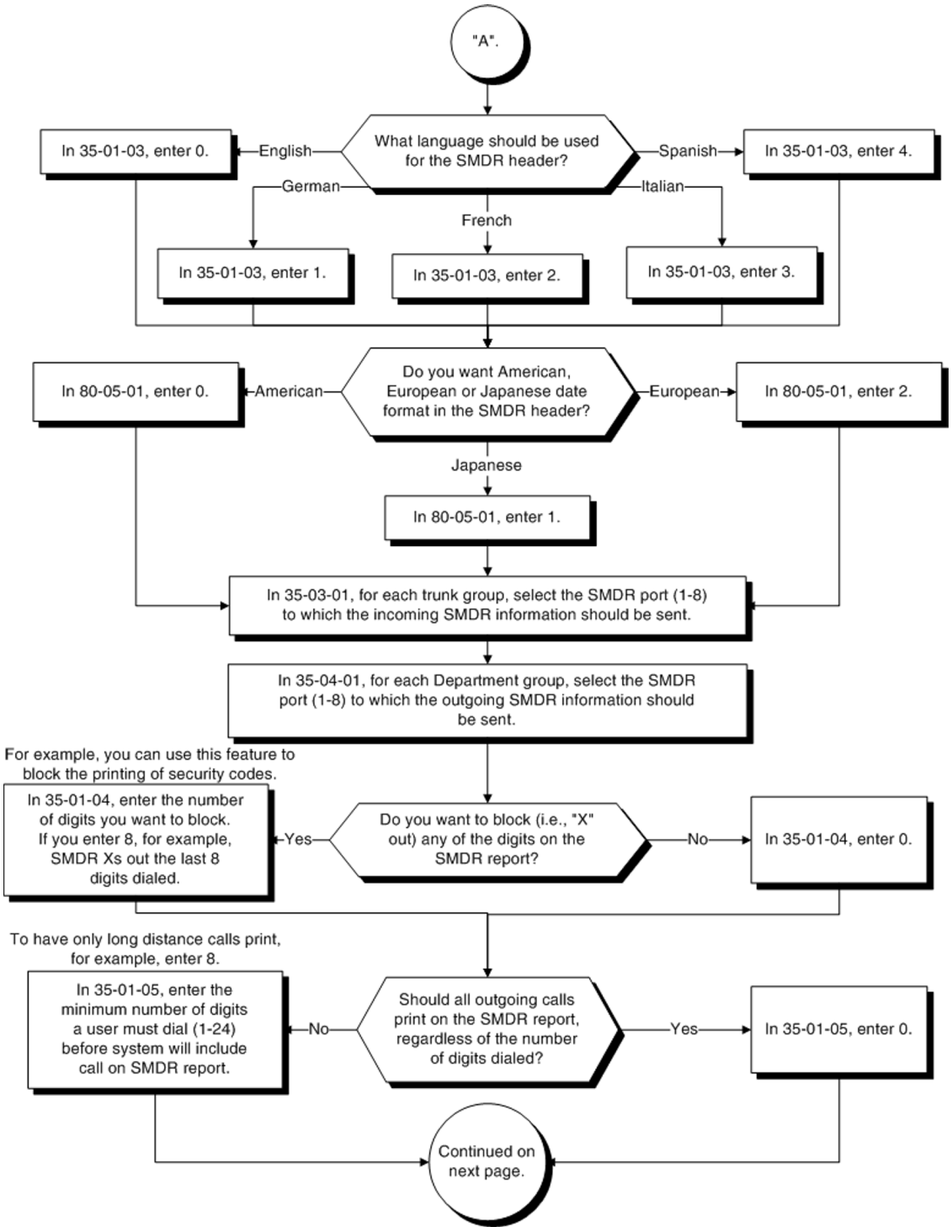
Program Number	Program Name	Description/Comments	Assigned Data
35-04-01	**SMDR Port Assignment for Department Groups**	Assign the SMDR port for each Department Group. For each Department Group, select the SMDR port to which the outgoing SMDR information should be sent.	Department Groups: 1~64 SMDR Ports: 1~8 (default = 1)
80-05-01	**Date Format for SMDR and System – Date Format**	Set the date format for SMDR.	0 = American Format (Month / Day / Year) 1 = Japanese Format (Year / Month / Day) 2 = European Format (Day / Month / Year) (default =2)

SMDR flowcharts are located on the following pages.

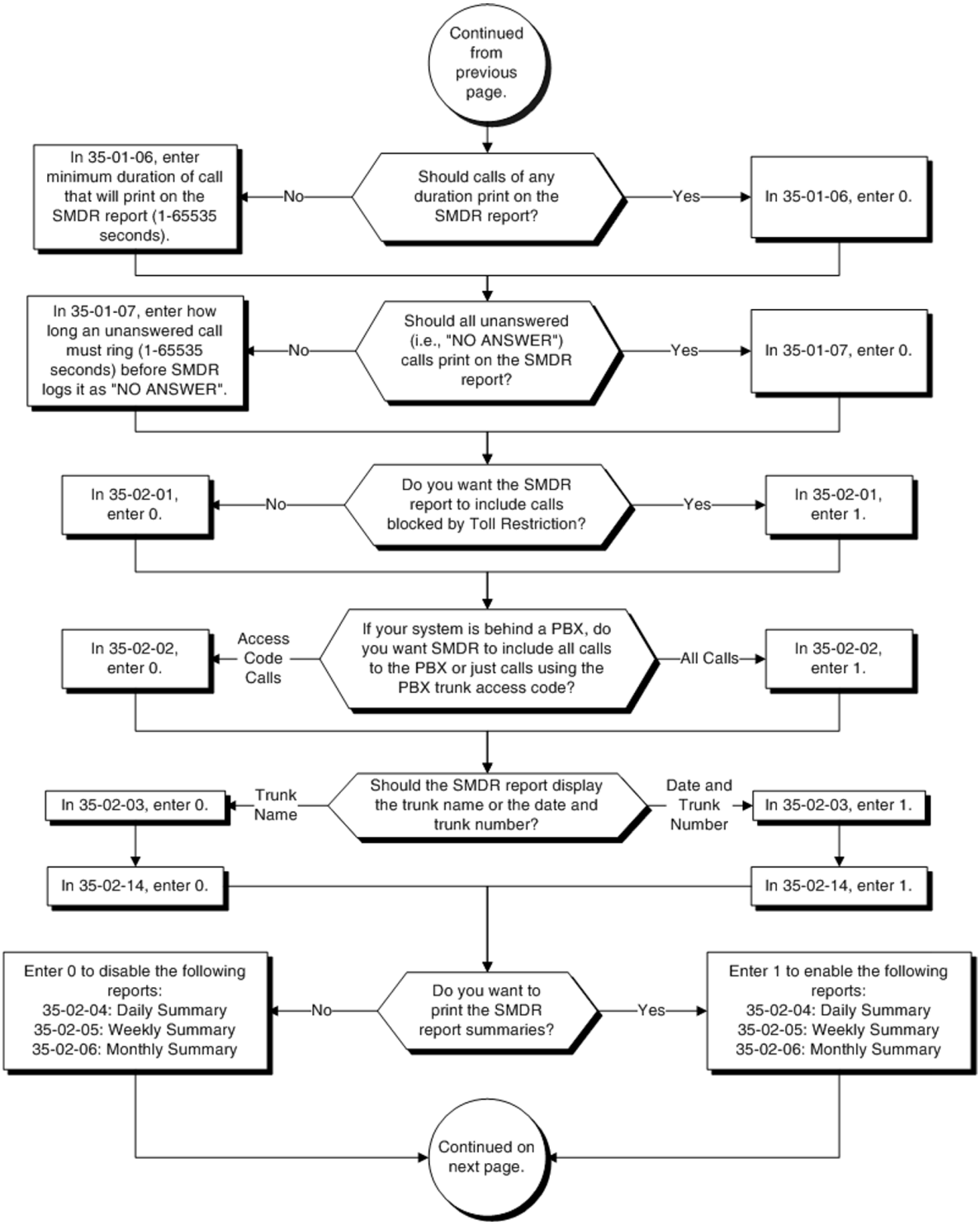
SMDR with a CD-CP00 Connection Ethernet



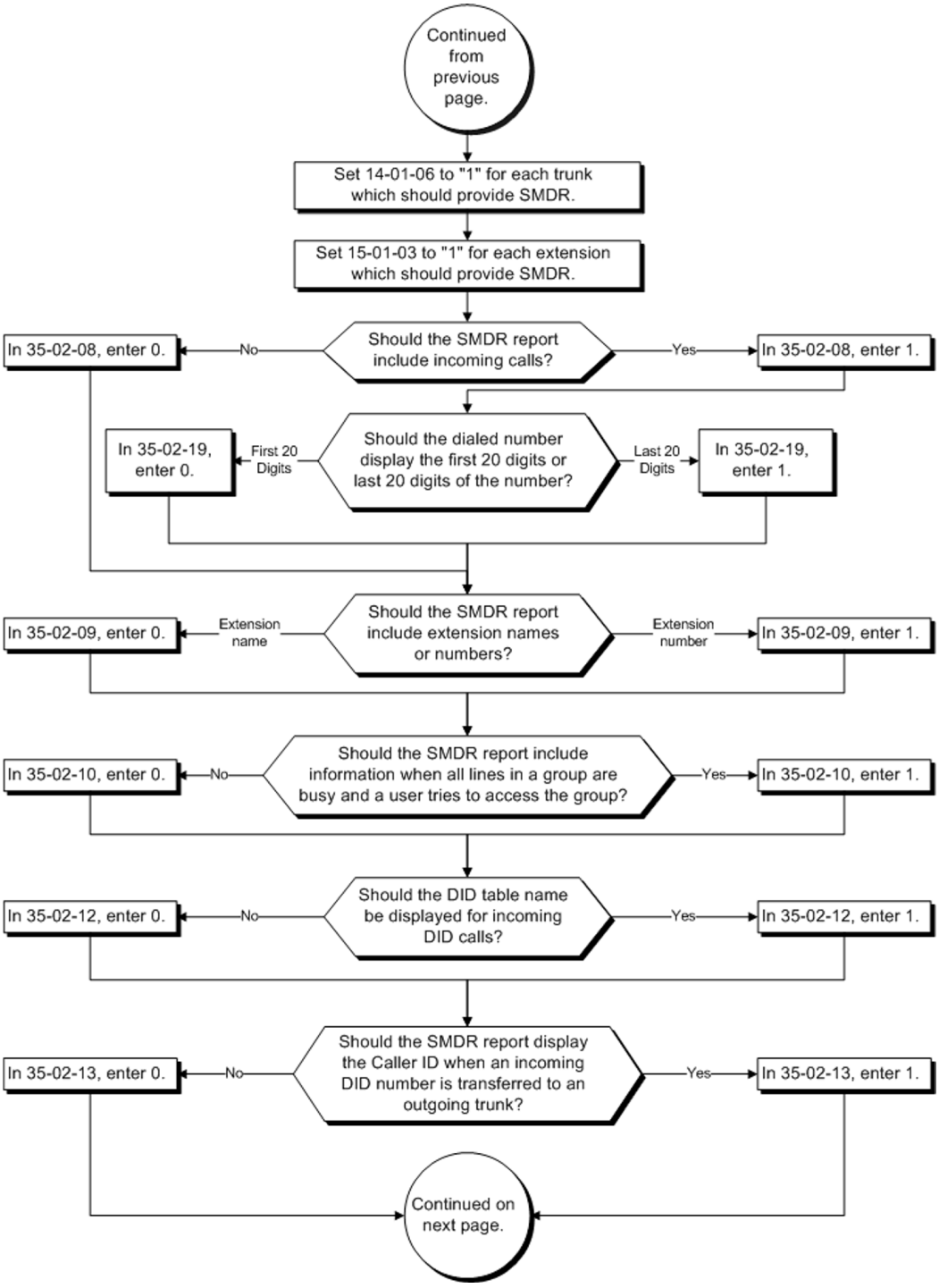
SMDR Flowchart



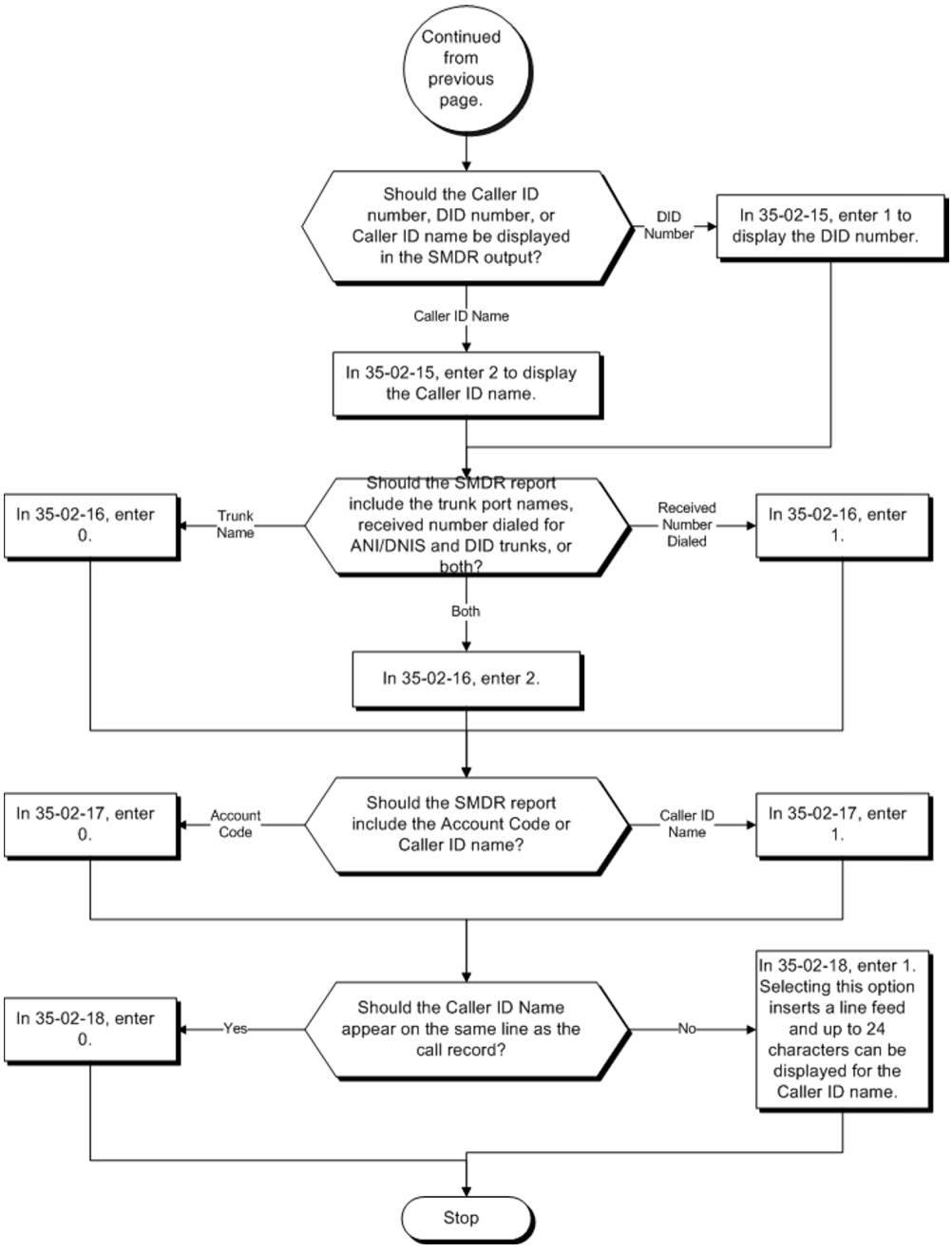
SMDR Flowchart (Continued)



SMDR Flowchart (Continued)



SMDR Flowchart (Continued)



Operation

Once installed and programmed, SMDR operation is automatic.

Station Name Assignment – User Programmable

Description

This feature allows a user to program the Station Name for their telephone extension or any extension within the system. The name is displayed on the multiline terminal LCD when an intercom or K-CCIS call is placed.

Conditions

- Display telephones use extension names for Directory Dialing.
- Single line telephone extensions cannot program names.

Default Setting

Enabled

System Availability

Terminals

All display Multiline Terminals

Required Component

None

Related Features

Directory Dialing

Name Storing

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-22	**Service Code Setup (for Setup/ Entry Operation) – Extension Name Programming**	Use to customize the extension name programming used for registration and setup.	MLT (default = 800)
15-01-01	**Basic Extension Data Setup – Extension Name**	Define the extension/virtual extension name.	Up to 12 characters Default: STA 200 = Ext 200 STA 201 = Ext 201, etc.
15-07-01	**Programmable Function Keys**	Assign an Extension Name Change key (55) to extensions.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-21	**Class of Service Options (Supplementary Service) – Extension Name**	Turns Off (0) or On (1) an extension user ability to program its name.	0 = Off 1 = On (default = 1 for COS 1~15)

Operation

To program your extension name:

1. Press **Speaker**.
2. Dial **800**.

   - OR -

   Press the **Extension Name Change** key (Program 15-07 or SC 851: 55).
3. Press **Hold**.
4. Enter the name. (Refer to Table 1-15 Selectable Display Messaging Defaults on page 1-763.)

   . *Your name can be up to 12 digits maximum.*

5. Press **Hold**.
6. Press **Speaker** to hang up.

To program any extension name:

1. Press **Speaker**.
2. Dial **800**

   - OR -

   Press the **Extension Name Change** key (Program 15-07 or SC 851: 55).
3. Enter the extension number to be named.
4. Enter a name. (Refer to Table 1-22 Keys for Entering Names.).

   . *The name can be have to 12 digits maximum.*
5. Press **Hold**.
6. Press **Speaker** to hang up.

Table 1-22 Keys for Entering Names

Use this keypad digit . . .	When you want to. . .
1	Enter characters: 1 @ [¥] ^ _ ` { | } →← ¨ Á À Â Ã Æ Ç É Ê ì ó
2	Enter characters: **A-C, a-c, 2**.
3	Enter characters: **D-F, d-f, 3**.
4	Enter characters: **G-I, g-i, 4**.
5	Enter characters: **J-L, j-l, 5**.
6	Enter characters: **M-O, m-o, 6**.
7	Enter characters: **P-S, p-s, 7**.
8	Enter characters: **T-V, t-v, 8**.
9	Enter characters: **W-Z, w-z, 9**.
0	Enter characters: 0 ! “ **#** $ % & ’ ( ) ô Õ ú å ä ö ü α ε θ β
*	Enter characters: * + , - . / : ; < = > ? **B E** σ **S** ∞ ¢ £
#	**#** = Accepts an entry (only required if two letters on the same key are needed – ex: TOM). Pressing **#** again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)

Table 1-22 Keys for Entering Names (Continued)

Use this keypad digit . . .	When you want to. . .
Conf	Clear the character entry one character at a time.
Hold	Clear all the entries from the point of the flashing cursor and to the right.

Station Relocation

Description

Station Relocation allows a station to be moved from one location to another, without having to reprogram the station data. The stations features and extension number are the same after it is moved to the new location.

Conditions

- This feature can be used to swap or relocate multiline and single line terminals.
- Single line includes SLT adaptors.
- The destination extension must be idle. If the station is not idle, busy tone is heard.
- If the Extension Swap service code is dialed from an extension that does not have an extension swap password programmed, busy tone is heard.
- If the Extension Swap service code is dialed from an extension whose Class of Service does not allow Extension Data Swap, busy tone is heard.
- If the destination extension entered is not a valid extension, busy tone is heard.
- The following user setting data is relocated with the extension. All other user setting data is not relocated or cleared.
  - DND
  - Call Forwarding
  - Memo Dial
  - Last Number Dial History
  - Saved Number Dial
  - Incoming History
  - MIC LED Status
  - VM MW LED Status

Refer to the Programming section in this feature for system programs that are swapped.

Default Setting

None

System Availability

Terminals

All Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-15-12	**Service Code Setup, Administrative (for Special Access – Extension Data Swap**	Ext. Data Swap = xxx (service code in accordance with Program 11-01).	MLT (default not assigned)
20-13-42	**Class of Service Options (Supplementary Service) – Extension Data Swap Enabling**	Turn off or on an extensions ability to use the Station Relocation feature.	0 = Off 1 = On (default = 1 for COS 1~15)
92-05-01	**Extension Data Swap Password – Password**	Fixed 4-Digits.	Fixed four digits (No setting at default) (default not assigned)

➲ **The following programs are swapped when Station Relocation is used:**

- Program 11-02 Extension Numbering
- Program 12-05 Night Mode Group Assignment for Extensions
- Program 13-03 Speed Dialing Group Assignment for Extensions
- Program 15-01 Basic Extension Data Setup
- Program 15-02 Multiline Telephone Basic Data Setup

- Program 15-03 Single Line Telephone Basic Data Setup
- Program 15-06 Trunk Access Map for Extensions
- Program 15-07 Programmable Function Keys
- Program 15-08 Incoming Virtual Extension Ring Tone Setup
- Program 15-09 Virtual Extension Ring Assignment
- Program 15-10 Incoming Virtual Extension Ring Tone Order Setup
- Program 15-11 Virtual Extension Delayed Ring Assignment
- Program 15-12 Conversation Recording Destination for Extensions
- Program 15-14 Programmable One-Touch Keys
- Program 15-20 LCD Line Key Name Assignment
- Program 16-02 Department Group Assignment for Extensions
- Program 20-06 Class of Service for Extensions
- Program 21-02 Trunk Group Routing for Extensions
- Program 21-04 Toll Restriction Class for Extensions
- Program 21-07 Toll Restriction Override Password Setup
- Program 21-10 Dial Block Restriction Class Per Extension
- Program 21-11 Extension Ringdown (Hotline) Assignment
- Program 21-13 ISDN Calling Party Number Setup for Extensions
- Program 21-15 Individual Trunk Group Routing for Extensions
- Program 21-19 IP Trunk (SIP) Calling Party Number Setup for Extension
- Program 23-02 Call Pickup Groups
- Program 23-03 Universal Answer/Auto Answer
- Program 23-04 Ringing Line Preference for Virtual Extensions
- Program 24-03 Park Group
- Program 26-04 ARS Class of Service
- Program 30-02 DSS Console Extension Assignment
- Program 31-02 Internal Paging Group Assignment
- Program 41-02 ACD Group and Agent Assignments
- Program 41-17 ACD Login Mode Setup
- Program 42-02 Hotel/Motel Telephone Setup

Operation

To exchange two terminals:

1. Pick up the handset or press **Speaker**.
2. Dial the Extension Data Swap Service Code – not assigned at default (Program 11-15-12).
3. Dial the Extension Data Swap Password – not assigned at default (Program 92-05-01).
4. Dial the extension to be swapped with or relocated to.
5. When successfully completed, confirmation tone will be heard and the display will show completed.
6. Press **Speaker** twice to exit.

Synchronous Ringing

Description

Synchronous Ringing synchronizes CO/PBX incoming ringing with the incoming ringing pattern from a Central Office.

Conditions

- When the multiline terminal is ringing at Secondary Extension (SE)/Virtual Extension (VE) key, Synchronous Ring works.
- Synchronous Ringing is not supported for Tie/DID incoming calls, Off-Hook Ringing, or CO/PBX Ring Transfers.
- If Synchronous Ringing is enabled, the VRS Preamble Message cannot be used.

Default Setting

Enabled

System Availability

Terminals

All Stations except single line telephones connected to AP(R)-R or APR-U Unit

Required Component(s)

None

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-02-17	**Analog Trunk Data Setup – Sync. Ringing**	Enable or disable per trunk.	0 = Disable(default) 1 = Enable
20-15-01	**Ring Cycle Setup – Normal Incoming Call on Trunk**	Used to define the ring cycle for Normal Incoming trunk calls.	Ringing Cycle = 1~13 (default = 3)
20-15-02	**Ring Cycle Setup – PBX, CES Incoming Call**	Used to define the ring cycle for PBX and CES incoming trunk calls.	Ringing Cycle = 1~13 (default = 8)
20-15-04	**Ring Cycle Setup – DID/DISA/ VRS**	Used to define the ring cycle for DID/DISA/VRS incoming calls.	Ringing Cycle = 1~13 (default = 8)
20-15-05	**Ring Cycle Setup – DID/DDI**	Used to define the ring cycle for DID/DDI incoming calls.	Ringing Cycle = 1~13 (default = 8)
20-15-06	**Ring Cycle Setup – Dial-In in the E&M Tie Line**	Used to define the ring cycle for Dial IN and E&M Tie line calls.	Ringing Cycle = 1~13 (default = 8)
20-15-07	**Ring Cycle Setup – Door Box Ringing for SLT**	Used to define the ringing cycle for Door Box Ringing for SLT terminals.	Ringing Cycle = 1~13 (default = 2)
20-15-08	**Ring Cycle Setup – Virtual Extension Ring**	Used to define the ringing cycle for Virtual Extensions.	Ringing Cycle = 1~13 (default = 8)
20-15-09	**Ring Cycle Setup – Callback**	Used to define the ringing cycle for callbacks.	Ringing Cycle = 1~13 (default = 4)
20-15-10	**Ring Cycle Setup – Alarm for SLT**	Used to define the ring cycle for Alarm for SLT terminals.	Ringing Cycle = 1~13 (default = 5)
20-15-11	**Ring Cycle Setup – VRS Waiting Message Incoming Call**	Used to define the ring cycle for incoming VRS Waiting messages.	Ringing Cycle = 1~13 (default = 6)
22-03-01	**Trunk Ring Tone Range – Ring Tone Pattern**	Assign Ring Tone Ranges to trunks. Trunks ring extensions according to the Ring Tone Range selected in Program 22-03-0 and the settings made with either Service Code 720 or Program 15-02-02.	0~8 (Ring Tone Pattern 1~4) (Melody 1~ Melody 5) (default = 0)

Operation

None

Tandem Ringing

Description

Tandem Ringing allows an extension user to have two telephones with one telephone number. For example, extension 205 (the master telephone) sets Tandem Ringing with extension 206. When extension 205 receives an incoming call, both extensions 205 and 206 ring. Callers would dial the master extension number (extension 205 in this example). When either the master telephone or slave telephone is in use, the other telephone cannot be used for outgoing calls or incoming calls.

The multiline terminal must be paired with either a single line telephone. It cannot be paired with another multiline terminal or a SIP terminal.

A single line telephone must be paired with another single line telephone. It cannot be paired with a multiline telephone or a SIP terminal.

Conditions

- The slave telephone cannot call the master telephone.
- Extension numbers up to eight digits can be registered on the Tandem Ringing key. Extension numbers over nine digits cannot be registered.
- If Tandem Ringing is enabled, and one of the extensions is busy, no additional calls can be received or placed from either telephone.
- Tandem Ringing can support up to 128 pairs of Tandem Ringing extensions.
- The extension user which enables Tandem Ringing is the master, while the slave telephone is the extension entered by the user while setting up the feature.
- A slave telephone ignores the settings for DND and follows the master telephone settings instead.
- Voice Call is not supported on a multiline terminal with Tandem Ringing.
- Calls placed on Hold while Tandem Ringing is active, immediately recall if the handset is placed On-hook.
- When an extension leaves a Message Waiting for a Tandem Ringing extension, both extensions indicate the message until one of the extensions returns the call.
- A slave telephone ignores the settings for Ring Groups and follows the master

telephone settings instead.

- To transfer calls between the two Tandem Ringing stations, a System Park Orbit should be used.
- A SIP terminal cannot be the Master or Slave telephone.

Default Setting

Disabled

System Availability

Terminals

Master Telephone:
Multiline Terminals (Not SIP) or Single Line telephones

Slave Telephone:
Single Line telephones

Related Features

Call Forwarding

Call Forwarding/Do Not Disturb Override

Direct Station Selection (DSS) Console

Do Not Disturb

Hold

Intercom

Message Waiting

Ring Groups

Multiple Trunk Types

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-11-41	**Service Code Setup (for Setup/ Entry Operation) – Tandem Ringing**	Define a service code to be used to set up Tandem Ringing.	MLT, SLT (default = 744)
15-07-01	**Programmable Function Keys**	Assign a function key for Tandem Ringing (code 80).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
30-03-01	**DSS Console Key Assignment**	Assign a DSS function key for Tandem Ringing (code 80).	Key Number 001~200 0~99 (General Functional Level) 97 = Door Box Access key (additional data: 1~8 Door Box No.) * 00 ~ * 99 (Appearance Functional Level)

Operation

To set up Tandem Ringing:

1. Press **Speaker** at the extension considered to be the master telephone (optional).
2. Dial **744**

   -OR-

   Press the Tandem Ringing key (Program 15-07 or SC 851: 80).
3. Dial **1** to set the feature.
4. Enter the extension number to be considered the slave telephone (the telephone that rings when the master extension rings).

   A confirmation tone is heard (if **Speaker** was used).
5. Press **Speaker** to hang up (if the key is lit).

   While the feature is active, if either the master or slave telephone is on a call, no calls can be placed or answered at the other extension until the busy telephone has hung up. Multiline

Terminals indicate TANDEM IN USE in the display and single line telephone users hear a busy signal when the handset is lifted.

To cancel Tandem Ringing:

1. Dial **744**

   -OR-

   Press the **Tandem Ringing** key (Program 15-07 or SC 851: 80).

2. Dial **0** to cancel the feature.

Tandem Trunking (Unsupervised Conference)

Description

Tandem Trunking allows an extension user to join two outside callers in a Trunk-to-Trunk Conference. The extension user can then drop out of the call, leaving the trunks in an Unsupervised Conference. The extension user that established the conference is not part of the conversation. The conference continues until either outside party hangs up. The extension user that set up the conference can end the tandem call anytime.

The number of simultaneous conference calls is limited by the number of conference circuits in the system. Due to this fact, the maximum number of conference calls cannot exceed the limits defined below:

The CD-CP00 provides two blocks of 32 conference circuits, allowing each block to have any number of conferences with any number of internal or external parties conferenced as long as the total number of conference channels used does not exceed the block limit of 32.

Tandem Trunking could help an office manager, for example, put two outside sales people in touch. The office manager could:

- Answer a call from one salesperson
- Place a call to the second salesperson
- Set up the Trunk-to-Trunk Conference
- Drop out of the call

The office manager could terminate the conference anytime.

There are four methods for Tandem Trunking:

- Method A - Tandem Trunking from Conference

  An extension user can set up Tandem Trunking (Unsupervised Conference) by dialing a 2-digit service code (753) or a uniquely programmed Transfer key.

- Method B - Tandem Trunking with Transfer Key

  This method allows an extension user to easily set up an Unsupervised Conference with a call they have placed on Hold. It uses a uniquely programmed Transfer key to set up a tandem call.

- Method C - Automatic Tandem Trunking on Hang Up

  This method allows an extension user to easily set up an Unsupervised Conference without having to place the conference call on Hold. A Class of Service option is available, which allows or denies an extension user from automatically setting up a Conference/Tandem Trunking call after hanging up the telephone.

- Method D - Automatic Tandem Trunking Setup to Speed Dial Number

  This method allows an extension user to easily set up an Unsupervised Conference with a call they have placed on Hold. A Class of Service option is available, which allows or denies an extension user from automatically setting up a Conference/Tandem Trunking call after hanging up the telephone.

Trunk Continue/Disconnect Codes Added

Software enhances the forced trunk release option with the Tandem Trunking and DISA features. Users can be allowed to use a Continue or Disconnect service code. The Continue service code extends the conversation a programmed time. If the user enters the Disconnect service code, the call is disconnected immediately.

Example:

The following example indicates how a call is handled with the system programmed as follows:

- Program 14-01-25: 1 (Continued/Discontinued Trunk-to-Trunk Conversation)
- Program 20-28-01: **#** (Conversation Continue Code)
- Program 20-28-02: No Setting (No Conversation Disconnect Code is entered)
- Program 20-28-03: 180 (Conversation Continue Time)
- Program 24-02-07: 600 (Only used with Trunk-to-Trunk Transfer Release Warning Tone)
- Program 24-02-10: 30 (Only used with Disconnect Trunk-to-Trunk)
- Program 25-07-07: 600 (Long Conversation Warning Tone Timer)
- Program 25-07-08: 30 (Long Conversation Disconnect)

1. An external call connects to an external number (either by transferring with Tandem Trunking or by DISA caller).
2. After 10 minutes (Tandem Trunking = Program 24-02-07 or DISA = Program 25-07-07), a warning tone is heard and the user dials **#** (Program 20-28-01) to extend the conversation.
3. After three minutes (Program 20-28-03), the warning tone is heard again. After 30 seconds (Tandem Trunking = Program 24-02-10 or DISA = Program 25-07-08), the call is disconnected.

Conditions

- Tandem Trunking requires either loop start trunks with disconnect supervision or ground start trunks.
- The maximum number of simultaneous trunk-to-trunk conferences allowed is determined by the Conference feature setup. Refer to the Programming section for this feature.
- The Continue/Disconnect code must be DTMF.
- With an analog trunk, the Continue/Disconnect code may work using DTMF sounds from

the opposite side trunk. With an ISDN trunk, Program 14-01-25 must be enabled to detect the Continue/Disconnect code.

- The Continue/Disconnect code is not accepted while dialing a trunk.
- Continue/Disconnect codes do not work if all receivers are busy.
- When used with the Networking feature, both systems must be programmed the same for the Continue/Disconnect codes.
- A trunk can be set up to automatically tandem trunk/forward to an outside telephone number or Speed Dial – System/Group Dialing bin.
- Other programmed options for incoming and outgoing calls can affect how calls are handled. Refer to Central Office Calls, Answering/Central Office Calls, Placing and check or program these options as needed.
- DISA calls also use the same Continue/Disconnect codes.
- After initiating an unsupervised conference, selecting one of the line keys allows you to barge-in to the conference.
- If the station that barges into an unsupervised conference hangs up, the conference is terminated.
- A Trunk-to-Trunk transfer can be established by the following operation:

  1. While talking to an outside party, press **Hold**.
  2. Access a second outside line and dial the desired number.
  3. Press **Transfer** to complete the Trunk-to-Trunk transfer.

  . *When the second call is to be transferred to another station (Not Trunk-to-Trunk), the user should press **Hold** at step 3, then dial the desired station, and press **Transfer** to complete the transfer.*

Default Setting

Disabled

System Availability

Terminals

Multiline Terminals and Single Line Telephones

Required Component(s)

None

Related Features

Call Forwarding, Off-Premise

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward System Access (DISA)

Guide to Feature Programming

Method A – Tandem Trunking from Conference

Program Number	Program Name	Description/Comments	Assigned Data
10-07-01	**Conversation Recording Circuits**	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)
11-12-57	**Service Code Setup (for Service Access) – Tandem Trunking**	If the default service code (753) for Tandem Trunking is not acceptable, change the code as required.	MLT, SLT (default = 753)
14-01-04	**Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**	Select the Transmit CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-05	**Basic Trunk Data Setup – Receive Gain Level for Conference and Transfer Calls**	Select the Receive CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 16 (-8dB)]
14-01-13	**Basic Trunk Data Setup – Trunk-to-Trunk Transfer**	For each trunk that should be able to participate in a tandem call, enter 1.	0 = Disable 1 = Enable (default = 0)
15-07-01	**Programmable Function Keys**	(Optional) Assign a function key for Transfer (code 06).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-11	**Class of Service Options (Administrator Level) – Forced Trunk Disconnect (analog trunk only)**	Turns Off (0) or On (1) an extension to use Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-14	**Class of Service Options (Hold/ Transfer Service) – Trunk-to-Trunk Transfer Restriction**	Turns Off (0) or On (1) the Trunk-to-Trunk Transfer Restriction. If enabled, Trunk-to-Trunk Transfer is not possible.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-21	**Class of Service Options (Hold/ Transfer Service) – Restriction for Tandem Trunking on Hang Up**	Deny (1) an extension user ability to set up a tandem call automatically when they hang up.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-22	**Class of Service Options (Hold/ Transfer Service) – Restricted Unsupervised Conference**	In an extensions Class of Service, Disable (0) or Enable (1) the ability to initiate an unsupervised conference.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-08	**Class of Service Options (Supplementary Service) – Conference**	In an extension Class of Service, enable (1) or disable (0) the extension ability to initiate a conference.	0 = Disable 1 = Enable (default = 1 for COS 1~15)
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	Enables the extension Barge-In Mode to be speech mode (0) or Monitor mode (1).	0 = Off 1 = On (default = 0 for COS 1~15)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	This timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer, outgoing from trunk, Tandem Trunking).	0~64800 (seconds) (default = 1800 seconds)
24-02-10	**System Options for Transfer – Disconnect Trunk-to-Trunk**	This timer starts after the Trunk-to-Trunk warning tone is heard.	0~64800 (seconds) (default = 0 seconds)
25-07-07	**System Timers for VRS/DISA – Ling Conversation Warning Tone Time**	Determine the time a DISA caller or a Tandem Trunking conversation can talk before the Long Conversation tone is heard.	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	This timer determines how long the system waits before disconnecting a call after the Long Conversation tone is heard.	0~64800 (seconds) (default = 15 seconds)

Method B – Tandem Trunking with Transfer Key

Program Number	Program Name	Description/Comments	Assigned Data
10-07-01	**Conversation Recording Circuits**	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)
14-01-04	**Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**	Select the Transmit CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-05	**Basic Trunk Data Setup – Receive Gain Level for Conference and Transfer Calls**	Select the Receive CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 16 (-8dB)]
14-01-13	**Basic Trunk Data Setup – Trunk-to-Trunk Transfer**	For each trunk, enter 1 to enable loop supervision.	0 = Disable 1 = Enable (default = 0)
15-07-01	**Programmable Function Keys**	Assign a function key for Transfer (code 06).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-11	**Class of Service Options (Administrator Level) – Forced Trunk Disconnect (analog trunk only)**	Turns Off (0) or On (1) an extension to use Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-14	**Class of Service Options (Hold/ Transfer Service) – Trunk-to-Trunk Transfer Restriction**	Turns Off (0) or On (1) the Trunk-to-Trunk Transfer Restriction. If enabled, Trunk-to-Trunk Transfer is not possible.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-21	**Class of Service Options (Hold/ Transfer Service) – Restriction for Tandem Trunking on Hang Up**	Deny (1) an extension user's ability to set up a tandem call automatically when they hang up.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	Enables the extension Barge-In Mode to be speech mode (0) or Monitor mode (1).	0 = Off 1 = On (default = 0 for COS 1~15)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	This timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer, outgoing from trunk, Tandem Trunking).	0~64800 (seconds) (default = 1800 seconds)
24-02-10	**System Options for Transfer – Disconnect Trunk-to-Trunk**	This timer starts after the Trunk-to-Trunk warning tone is heard.	0~64800 (seconds) (default = 0 seconds)
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard.	0~64800 (seconds) (default = 30 seconds)
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	Determine the time the system waits before disconnecting a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard.	0~64800 (seconds) (default = 15 seconds)

Method C – Tandem Trunking on Hang up

Program Number	Program Name	Description/Comments	Assigned Data
10-07-01	**Conversation Recording Circuits**	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
14-01-04	**Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**	Select the Transmit CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]
14-01-05	**Basic Trunk Data Setup – Receive Gain Level for Conference and Transfer Calls**	Select the Receive CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 16 (-8dB)]
14-01-13	**Basic Trunk Data Setup – Trunk-to-Trunk Transfer**	For each trunk, enter 1 to enable loop supervision.	0 = Disable 1 = Enable (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-11	**Class of Service Options (Administrator Level) – Forced Trunk Disconnect (analog trunk only)**	Turns Off (0) or On (1) an extension to use Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-11	**Class of Service Options (Hold/ Transfer Service) – Automatic On-Hook Transfer**	Turns Off (0) or On (1) the Trunk-to-Trunk Transfer Restriction. If enabled, Trunk-to-Trunk Transfer is not possible.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-14	**Class of Service Options (Hold/ Transfer Service) – Trunk-to-Trunk Transfer Restriction**	Turns Off (0) or On (1) the Trunk-to-Trunk Transfer Restriction. If enabled, Trunk-to-Trunk Transfer is not possible.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-21	**Class of Service Options (Hold/ Transfer Service) – Restriction for Tandem Trunking on Hang Up**	Allow (0) an extension user's ability to set up a tandem call automatically when they hang up.	0 = Off 1 = On (default = 0 for COS 1~15)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	This timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer, outgoing from trunk, Tandem Trunking) (0~64800 seconds).	0~64800 (seconds) (default = 1800 seconds)
24-02-10	**System Options for Transfer – Disconnect Trunk-to-Trunk**	This timer starts after the Trunk-to-Trunk warning tone is heard (0~64800 seconds).	0~64800 (seconds) (default = 0 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard (0~64800 seconds).	0~64800 (seconds) (default = 30 seconds)
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	Determine the time the system waits before disconnecting a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard (0~64800 seconds).	0~64800 (seconds) (default = 15 seconds)

Method D – Tandem Trunking to Speed Dial Number

Program Number	Program Name	Description/Comments	Assigned Data
10-07-01	**Conversation Recording Circuits**	The number of circuits assigned as Conversation Record circuits limits the number of available Conference circuits. Make sure there are circuits available for Conference.	0 = No Setting 1-16 = 2-32 Conference Resource (default = 0)
11-10-06	**Service Code Setup (for System Administrator) – Setting the Automatic Transfer for Each Trunk Line**	If the default service code (833) for enabling Automatic Tandem Trunking feature is not acceptable, change the code as required.	MLT (default = 833)
11-10-07	**Service Code Setup (for System Administrator) – Canceling the Automatic Transfer for Each Trunk Line**	If the default service code (834) for canceling Automatic Tandem Trunking feature is not acceptable, change the code as required.	MLT (default = 834)
11-10-08	**Service Code Setup (for System Administrator) – Setting the Destination for Automatic Trunk Transfer**	If the default service code (835) for setting the destination of the Automatic Tandem Trunking feature is not acceptable, change the code as required.	MLT (default = 835)

Program Number	Program Name	Description/Comments	Assigned Data
13-04-01	**Speed Dialing Number and Name – Speed Dialing Data**	Enter the number and names for the bins used to hold the Automatic Tandem Trunking destination.	1~9, 0, *, **#** Pause (Press line key 1) Recall/Flash (Press line key 2) @ = Code to wait for answer supervision in ISDN (Press line key 3) (maximum 24 digits) (default not assigned)
13-04-02	**Speed Dialing Number and Name – Name**	Assign a name to each System Speed Dial bin.	Maximum 12 Characters (Use dial pad to enter name) (default not assigned)
13-04-03	**Speed Dialing Number and Name – Transfer Mode**	Assign the transfer mode for each System Speed Dial bin.	0 = Not Used 1 = Internal Dial 2 = Incoming Ring Group (IRG) (default = 0)
13-04-04	**Speed Dialing Number and Name – Transfer Destination Number**	Use to store transfer destination number data in the Speed Dialing areas.	If Transfer mode is (Refer to 13-04-03): 1 = Internal Dial Mode 1~9, 0, *, **#**, P, R, @ (Maximum 24 Characters) 2 = Incoming Ring Group 0 ~ 100 (IRG Number) P=Pause R=Recall @= Additional Digits when using ISDN functionality (default not assigned)
13-04-05	**Speed Dialing Number and Name – Incoming Ring Pattern**	Use to store incoming ring pattern data in the Speed Dialing areas.	Incoming Ring Pattern 0 = Normal Pattern 1 ~ 4 = Tone Pattern (1~4) 5 ~ 9 = Scale Pattern (1~5) (default = 0)
14-01-04	**Basic Trunk Data Setup – Transmit Gain Level for Conference and Transfer Calls**	Select the Transmit CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 32 (0dB)]

Program Number	Program Name	Description/Comments	Assigned Data
14-01-05	**Basic Trunk Data Setup – Receive Gain Level for Conference and Transfer Calls**	Select the Receive CODEC gain level used by the trunk when it is part of an Unsupervised Conference.	1~63(-15.5dB ~ +15.5dB in 0.5dB intervals) [default = 16 (-8dB)]
14-01-13	**Basic Trunk Data Setup – Trunk-to-Trunk Transfer**	For each trunk, enter 1 to enable loop supervision.	0 = Disable 1 = Enable (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-05	**Class of Service Options (Administrator Level) – Set/ Cancel Automatic Trunk-to-Trunk Transfer**	Turn On (1) or Off (0) the ability of an extension to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 0 for COS 1~15)
20-07-11	**Class of Service Options (Administrator Level) – Forced Trunk Disconnect (analog trunk only)**	Turns Off (0) or On (1) an extension to use Forced Trunk Disconnect. This allows the extension to disconnect an Unsupervised Conference in progress.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	This timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer, outgoing from trunk, Tandem Trunking).	0~64800 (seconds) (default = 1800 seconds)
24-02-10	**System Options for Transfer – Disconnect Trunk-to-Trunk**	This timer starts after the Trunk-to-Trunk warning tone is heard.	0~64800 (seconds) (default = 0 seconds)
24-04-01	**Automatic Trunk-to-Trunk Transfer Target Setup**	Assign the Speed Dialing number (0~1999) to be used as the destination for the Trunk-to-Trunk Transfer.	Trunks: 1~200 0~1999 (default = 1999
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller or any trunk-to-trunk (such as Tandem Trunking) conversation can talk before the Long Conversation tone is heard.	0~64800 (seconds) (default = 30 seconds)
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	Determine the time the system waits before disconnecting a DISA or any trunk-to-trunk (such as Tandem Trunking) call after the Long Conversation tone is heard.	0~64800 (seconds) (default = 15 seconds)

Trunk Disconnect Continue/Disconnect Codes

Program Number	Program Name	Description/Comments	Assigned Data
14-01-25	**Basic Trunk Data Setup – Continued/Discontinued Trunk-to-Trunk Conversation**	When Program 24-02-10 is set to disconnect a trunk after the defined time, determine whether or not a user should have the ability to use the continue/ disconnect code.	Entries: 0 = Disable 1 = Enable (default = 0)
20-28-01	**Trunk to Trunk Conversation – Conversation Continue Code**	When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0~9, *, **#**) to extend the conversation length for the time defined in 20-28-03. If the Continue and Disconnect codes are programmed the same (e.g., **#**), the system follows the "Continue" operation. Using the Continue code before the warning tone is heard has no effect.	0~9, **#**, * (default not assigned)
20-28-02	**Trunk to Trunk Conversation – Conversation Disconnect Code**	When Program 14-01-25 is enabled, determine the 1-digit code the user should dial (0~9, *, **#**) to immediately disconnect their call. Using the Disconnect code before the warning tone is heard disconnects the call.	0~9, **#**, * (default not assigned)
20-28-03	**Trunk to Trunk Conversation – Conversation Continue Time**	When Program 14-01-25 is enabled, determine the time a call is extended (0~64800 seconds) when the user dials the Continue code (defined in Program 20-28-01).	0~64800 (seconds) (default = 0 seconds)
24-02-07	**System Options for Transfer – Trunk-to-Trunk Transfer Release Warning Tone**	This timer starts when a trunk begins talking with another trunk (for example: Trunk-to-Trunk Transfer/Tandem Trunking). When this timer expires, a warning tone is heard. If Program 24-02-10 is set, the conversation disconnects after that timer expires. This timer is set again when the external digit timer expires. One of the trunks used must be an analog trunk (or leased line).	Entries: 0~64800 (seconds) (default = 1800 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
24-02-10	**System Options for Transfer – Disconnect Trunk-to-Trunk**	Determine how long a conversation continues (0~64800 seconds) after the timer in Program 24-02-07 expires. If this option is set to 0, the conversation is disconnected immediately. This program has no affect if Program 24-02-07 is set to 0. One of the trunks used must be an analog trunk (or leased line).	0~64800 (seconds) (default = 0 seconds)
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time a DISA caller can talk before the Long Conversation tone is heard (0~64800 seconds). If Program 25-07-08 is set to 0, the call is disconnected after the timer expires. This timer is set again when the external digit timer expires. . *If this option is set to 0, the settings in PRG 24-02-07 and PRG 24-07-10 are followed – not PRG 25-07-07 and PRG 25-07-08.*	0~64800 (seconds) (default = 30 seconds)
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	This timer determines how long the system waits (0~64800 seconds) before disconnecting a DISA call after the Long Conversation tone is heard. This program has no affect if Program 25-07-07 is set to 0.	0~64800 (seconds) (default = 15 seconds)
80-01-02 (35)	**Service Tone Setup – Basic Tone Number**	Used to Edit the warning service tone within the system.	1~33 0 = No Tone 33 = Default Time Slot Please refer to the VS8100 Programming manual for defaults

Operation

Method A – Tandem Trunking from Conference

To set up a Tandem Call:

1. Place or answer first trunk call.

2. Press **Conf**.
3. Place or answer second trunk call.
4. To set up the tandem call, press **Conf** twice.
   . *This sets up a Conference between you and both outside parties.*
5. Press **Transfer**.

   - OR -

   Press **Hold** and dial **753** or the service code set for Unsupervised Conference/Tandem Trunking in Program 11-12-57.
   . *The line keys for the trunks blink green as long as the Unsupervised Conference continues.*

To end the Tandem Call:

1. Press either flashing **line** key.
   . *The line keys light steadily (green). You can listen (i.e., monitor) to the call or rejoin the conversation, based on the setting in Program 20-13-10.*
2. Press **Speaker** or hang up.
   . *If Program 20-13-10 is set to 0, the Conference ends and the line keys go out.*
   . *If Program 20-13-10 is set to 1, to manually disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key + 724 or the service code set of Forced Trunk Disconnect in Program 11-10-26) must be used by an extension other than the originating extension.*

Method B – Tandem Trunking with Transfer Key

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press **Hold** to place the first trunk call on hold.
3. Place a second trunk call.
4. Press **Transfer**.
   . *This sets up an Unsupervised Conference with both outside parties.*
   . *The line keys for the trunks light solid red.*
   . *To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press the line key + *3 or the service code set of Forced Trunk Disconnect in Program 11-10-26) must be used by an extension other than the originating extension.*

Single Line Telephone

To set up a Tandem Call:

1. Place or answer first trunk call.

2. Press hookflash and dial **826**.
3. Place or answer second trunk call.
4. To set up the tandem call, press hookflash and dial **753**.
5. Hang up.

. *This sets up a Conference between both outside parties.*

Method C – Tandem Trunking on Hang up

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press **Hold** to place the first trunk call on hold.
3. Place a second trunk call.
4. Hang up.

. *This sets up an Unsupervised Conference with both outside parties.*

. *The line keys for the trunks light solid red.*

. *To disconnect the Conference, use Forced Trunk Disconnect (i.e., Press line key + *3 or the service code set of Forced Trunk Disconnect in Program 11-10-26).*

Single Line Telephone

To set up a Tandem Call:

1. Place or answer first trunk call.
2. Press hookflash.
3. Place or answer second trunk call.
4. To set up the tandem call, hang up.

. *This sets up a Conference between both outside parties.*

. *To disconnect the Conference, use Forced Trunk Disconnect [i.e., Dial the trunk access code (#9 + trunk number) + *3 or the service code set of Forced Trunk Disconnect in Program 11-10-26].*

Method D – Automatic Tandem Trunking Using Speed Dialing

To set Automatic Tandem Trunking:

1. Dial service code **833** (or the service code set for Set Automatic Transfer per Trunk).
2. Dial the desired trunk number (Trunk Number: 001~200).
3. Hang up.

. *The line key for the trunk is solid red as long as the Unsupervised Conference continues.*

. To disconnect the Conference, use *Forced Trunk Disconnect (i.e., Press the line key or 805 plus the trunk number + 724).*

To cancel Automatic Tandem Trunking:

1. Dial service code **834** (or the service code set for Disable Automatic Transfer per Trunk).
2. Dial the desired trunk number (Trunk Number: 001~200).
3. Hang up.

. *To disconnect the Conference, Forced Trunk Disconnect (i.e., Press the line key or **#**9 plus the trunk number + *3 or the service code set of Forced Trunk Disconnect in Program 11-10-26).*

To set and change the destination of the Automatic Tandem Trunk call:

1. Dial service code **835** (or the service code set for Set Destination for Automatic Trunk-to-Trunk Transfer).
2. Dial the desired trunk number (Trunk Number: 001~200).
3. Dial the destination Number (trunk access code is not needed).
4. Dial the desired time mode (Time Mode: 1~8).
5. Press **Hold**.
6. Hang up.

. To disconnect the Conference, use *Forced Trunk Disconnect (i.e., Press the line key or 805 plus the trunk number + 724).*

Continue/Disconnect Codes

To use the Continue code to extend a Tandem Trunk call:

1. An external call connects to an external number either by transferring with Tandem Trunking or by DISA caller.
2. After the programmed time (Program 24-02-07), a warning tone is heard and the user dials the Continue code (Program 20-28-01) to extend the conversation.
3. After the programmed time (Program 20-28-03), the warning tone is heard again. After the programmed time (Program 24-02-10), the call is disconnected.

Tone Override

Description

The multiline terminal user that calls a busy station and receives a call waiting tone can generate a Tone Override that is heard by the originator and busy station. The busy station user can place the existing call on hold to answer the Override.

Conditions

- One Tone Override at a time can be received at a multiline terminal.
- Tone Override can be accomplished only after receiving a BUSY tone.
- Tone Override originate is allowed from a single line telephone until the PBR times out.
- Virtual Extensions do not support Tone Override.

Default Setting

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Call Waiting/Camp-On

Data Line Security

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-03	**Service Code Setup (for Service Access) – Override (Off-Hook Signaling)**	Assign a service code (809 by default) to be used for Off-Hook Signaling Override.	MLT, SLT (default = 809)
11-16-04	**Single Digit Service Code Setup – Intercom Off-Hook Signaling**	Assign a one-digit service code (not assigned by default) to be used for Off-Hook Signaling.	(default not assigned)
15-02-12	**Multiline Telephone Basic Data Setup – Off-Hook Ringing**	For each extension, set Off-Hook Ringing type: 0 (Muted), 1 (None), 3 (Beep in Speaker), 4 (Beep in Handset), 5 (Beep in Handset and Speaker).	0 = Muted Off-Hook Ringing 1 = No Off-Hook Ringing 2 = Not Used 3 = Beep in Speaker (SP) 4 = Beep in Handset (HS) 5 = Speaker & Handset Beep (default = 0)
15-07-01	**Programmable Function Keys**	Assign a function key for Off-Hook Signaling (code 33).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-09-01	**Class of Service Options (Incoming Call Service) – Second Call for DID/DISA/DIL/ E&M Override**	Turns Off (0) or On (1) the extension ability to receive a second call from a DID, DISA, DIL, or tie line caller. . *With this option set to 1, the destination extension must be busy for a second DNIS caller to ring through. If the destination extension does not have a trunk key available for the second call and a previous call is ringing the extension but has not yet been answered, the second caller hears busy regardless of this program setting.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	For each extension turn Off (0) or On (1) the extensions ability to have multiple calls queued at the extension. If Allowed, Tone Override is automatic. Refer to Program 20-13-06.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook Signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to automatically (1) or manually (0) receive Off-Hook Signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-34	**Class of Service Options (Supplementary Service) – Block Manual Off-Hook Signaling**	Turn off (0) or on (1) an extension ability to block Off-Hook signals manually sent from a co-worker.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-35	**Class of Service Options (Supplementary Service) – Block Camp On**	Use this option to turn On (1) or Off (0) extension ability to block callers from dialing **#** to camp-on.	0 = Off 1 = On (default = 0 for COS 1~15)
20-18-06	**Service Tone Timers – Interval of Call Waiting Tone**	Use this timer to set the interval between Off-Hook Signaling alerts.	0~64800 (seconds) (default = 10 seconds)
80-01-01 (39)	**Service Tone Setup – Basic Tone Number**	Used to customize the service tones in the system. Tone Override is tone 39.	
80-01-02 (39)	**Service Tone Setup – Ring Busy Tone**	Define Ring Busy Tone.	

Operation

To send Off-Hook signals to an extension busy on a call:

. *Your extension may send Off-Hook signals automatically.*

1. Dial **809** (Program 11-12-02).

   - OR -

   Press the **Off-Hook Signaling** key (Program 15-07-01 code 33).

   . *You hear Ring Busy Tone.*

   . *The called extension hears Call Alert Notification.*

To answer Tone Override:

1. Receive Tone Override.
2. Press **Hold** and talk with the party.

Traffic Reports

Description

The system provides the ability to send data to a PC connected to the UNIVERGE SV8100. The telephone call traffic data for each extension is captured for use with the Station Message Detail Recording (SMDR) feature.

Call Traffic

The total of outgoing call frequency, outgoing call duration, incoming call frequency, answer frequency, incoming call duration, ringing duration for each line and extension, and abandon call frequency for each line is logged. The total of incoming calls, answer frequency, call duration for each line and extension, and abandon call frequency of each line is logged and the data is outputted to the PC. The system totals the hour, day, week, and month for each terminal and trunk number. This information is used by the SMDR feature. The extension which is totaled is determined by system programming. The system outputs this data to the PC for the total period.

Conditions

- The SMDR call buffer stores 500 calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, the oldest record is deleted to allow the new record to be saved.
- If connected to the output device, the reports print hourly. If not connected and the data is not output at the end of the hour, the traffic data is overwritten by new incoming data.
- The traffic data is lost if power failure occurs.
- Traffic Reports require connection to the serial connector on the CD-CP00. Additional programming and a customer-provided printer are also required. Refer to the UNIVERGE SV8100 System Hardware Manual for more on setting up and connecting to the UNIVERGE SV8100 system.
- SMDR provides additional information about the system trunk calling patterns. Refer to Station Message Detail Recording on page 1-829 for more information.

Default Setting

Disabled

System Availability

Terminals

All Terminals

Required Component(s)

Software Licenses for SMDR

Traffic Total Report – Sample Report

Terminal	OTG	Duration	Cost	ICM	Answer	Duration	Ringing	Abandon
301	54	01:45:14	720	326	115	02:11:52	00:09:36	
301	92	02:37:22	1855	84	84	01:58:31	00:04:19	
LINE001	--	--	--	79	71	01:05:26	--	8

Term	Definition
Terminal	Terminal Number/Called Party Number (maximum 24 digits)
OTG	Outgoing Call Frequency/number of outgoing calls (maximum 65535 calls)
Duration	Call Duration for an Outgoing Call
Cost	Call Charge (Not Used)
ICM	Incoming Call Frequency/number of incoming calls (maximum 65535 calls)
Answer	Answer Frequency (maximum 65535 calls)
Duration	Call Duration for an Incoming Call
Ringing	Ringing Duration
Abandon	Number of Abandoned Calls (maximum 65535 calls)

Related Features

Station Message Detail Recording

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
90-20-01	**Traffic Report Data Setup – Call Traffic Output**	Determine whether or not the Call Traffic Output should be measured.	0 = Not Measured 1 = Measure (default = 0)
90-20-03	**Traffic Report Data Setup – All Line Busy Output**	All Line Busy Output.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)
90-20-04	**Traffic Report Data Setup – DTMF Receiver Busy Output**	Use to define the DTMF receiver busy output details of the traffic report.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)
90-20-05	**Traffic Report Data Setup – Dial Tone Detector Busy Output**	Use to define the dial tone detector busy output details of the traffic report.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)
90-20-06	**Traffic Report Data Setup – Caller ID Receiver Busy Output**	Use to define the caller ID receiver busy output details of the traffic report.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)
90-20-07	**Traffic Report Data Setup – Voice Mail Channel All Busy Output**	Use to define the voice mail channel all busy output details of the traffic report.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
90-20-08	**Traffic Report Data Setup – ACD Operator All Busy Output**	Use to define the ACD operator al busy output details of the traffic report.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)
90-20-09	**Traffic Report Data Setup – Attendant Channel All Busy Output**	Use to define the attendant channel all busy output details of the traffic report.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)
90-20-10	**Traffic Report Data Setup – Base Station All Busy Output**	Use to define the base station all busy output details of the traffic report.	0 = Not Detected 1~256 (Report when the data reaches the defined value) (default = 0)
90-21-01	**Traffic Report Output – Output Port Type**	Define the output port to be used for the traffic reports. The reports print hourly when connected to the output device.	0 = No Setting 3 = LAN Port CD-CP00 (default = 0)

Operation

None

Transfer

Description

Transfer permits an extension user to send an active Intercom or outside call to any other extension in the system. With Transfer, any extension user can quickly send a call to the desired co-worker. A call a user transfers automatically recalls if not picked up at the destination extension. This assures that users do not lose or inadvertently abandon their transfers. While a transferred call is ringing an extension the system can optionally play ringback tone or Music on Hold to the caller.

The system allows the following types of transfers:

- **Screened Transfer**

  The transferring user announces the call to the destination before hanging up.

- **Unscreened Transfer**

  The transferring party extends the call without an announcement.

- **Extension (Department) Groups Transfer**

  The Transferring party sends the call to a Department instead of an extension.

- **Transfer Without Holding**

  A user presses a busy line key and waits for the call to complete. The system automatically sends them the call when the internal caller hangs up.

Automatic On-Hook Transfer Operation

With Automatic On-Hook Transfer, a transfer goes through as soon as the transferring user hangs up. For example, extension 204 can answer a trunk, press Transfer, dial 205 and hang up. The system extends the call to extension 205. Without Automatic On-Hook Transfer, the call would stay on Hold at extension 204 when the user hangs up. To extend the call, the user at extension 204 would have to press the Transfer key again before hanging up.

Each method has advantages. Automatic On-Hook Transfer makes transferring calls easier. However, users have to be more aware of how they handle their calls on Hold. Without Automatic On-Hook Transfer, extending a call becomes a two-step operation – but separate from placing calls on Hold.

Prevent Recall of Transferred Call

The Class of Service program has an option that allows you to prevent a Transferred call from recalling the originating extension if the call is not answered.

Transfer Call into Conference/Existing Call

This feature allows either a multiline terminal or single line telephone user with Barge-In ability to transfer a call into an existing call. This call can be a 2-party call, a Conference call, or a Barge-In Conference. The system allows Intercom and trunk calls to be transferred into a Conference call. This allows, for example, an attendant to locate co-workers and then transfer them into an existing telephone meeting. There is no need for the attendant to locate all the parties at the same time and sequentially add them into the Conference.

Transfer to Trunk Ring Group Available

It is possible to transfer a trunk call to the trunk defined ring group (defined in Program 22-05-01: Incoming Trunk Ring Group Assignment). The trunk then rings the defined extensions for the ring group.

This also allows the transferred call to ring over the External Paging (Program 31-05: Universal Night Answer/Ring Over Page) so that an employee can answer the call from any available telephone.

To enable this feature, the system has a program option, Program 11-15-09: Service Code Setup Administrative (for Special Access) – Transfer to Trunk Ring Group Code (not assigned at default). When a call is transferred using this service code, it is transferred to the ring group destination for that incoming trunk. For example, trunk 2 is in Ring Group 4. When the call is transferred using this service code, the trunk rings all extensions programmed for Ring Group 4 or rings the External Paging Group for Ring Group 4, depending on how the system is programmed.

Program 22-04-01: Extension Ring Group Assignment and Program 22-05-01: Incoming Trunk Ring Group Assignment must be programmed to allow an extension access to the ring groups. If the call is not answered, it can overflow to the destination defined in Program 22-08-01: DIL/IRG No Answer Destination.

This service code can also be used with the VRS. This provides the caller listening to the VRS message with the ability to transfer their call and have it ring the external page. The code the caller would dial is defined in Program 25-06-02: VRS/DISA One-Digit Code Attendant Setup.

Transfer Key Can Place Call on Hold

While on a call, and the Transfer key is pressed, the call is placed on hold.

Conditions

- An existing call can be transferred into a call with Barge-In enabled.
- Unscreened Transfers from voice mail show pre-answer Caller ID information.
- With Transfer to Busy Extensions enabled (Program 24-02-01 = 1), Call Forwarding with Both Ringing offers a unique option. A transferred call waits for either the forwarding or destination extension to become free. The call goes through to the extension that first becomes available. If neither extension becomes free in the Transfer Recall Time, the call recalls the transferring extension.

. *With Transfer to Busy Extensions disabled (Program 24-02-02 = 0), you must also set Program 20-09-07 for the extensions COS to 0 to disable call queuing and Program 20-13-06 to set Automatic Off-hook Signaling to manual.*

- An existing call can be transferred into a conference call.
- Meet Me Paging Transfer allows the user to page a co-worker and have the call automatically transferred when the co-worker answers the page.
- When transferring, an extension user can press a One-Touch key instead of dialing the extension number.
- Serial calls allow for transferring a call so it automatically returns to the transferring extension when completed.
- When a multiline terminal user is on a call, they can transfer to another station by pressing a DSS key for that station. It is not necessary to press Transfer to transfer to another station with a DSS key.

  . *When a multiline terminal user is on a call, they must press transfer to transfer a call off site with a DSS key.*

- A Trunk-to-Trunk transfer can be established by the following operation:

  1. While talking to an outside party, press **Hold**.
  2. Access a second outside line and dial the desired number.
  3. Press **Transfer** to complete the Trunk-to-Trunk transfer.

  . *When the second call is to be transferred to another station (Not Trunk-to-Trunk), the user should press Hold at step 3, then dial the desired station and press Transfer to complete the transfer.*

- If station A calls Station B, and station A puts station B on hold and then calls station C, station C cannot transfer the call.

Default Setting

Enabled

System Availability

Terminals

All Multiline Stations

Required Component(s)

None

Related Features

Barge-In

Call Waiting/Camp-On

Caller ID

Call Forwarding

Conference

Meet Me Paging Transfer

One-Touch Calling

Quick Transfer to Voice Mail

Serial Call

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-58	**Service Code Setup (for Service Access) – Transfer into Conference**	Use this program to assign the code users dial to Transfer a call into a Conference call. This code is normally 724.	MLT, SLT (default = 724)
11-15-09	**Service Code Setup Administrative (for Special Access) – Transfer to Incoming Ring Group**	When a call is transferred using this service code, it is transferred to the ring group destination for that incoming trunk. For example, trunk 2 is in Ring Group 4. When the call is transferred using this service code, the trunk rings all extensions programmed for Ring Group 4 or ring the External Paging Group for Ring Group 4, depending on how the system is programmed.	(default not assigned)
15-02-05	**Multiline Telephone Basic Data Setup – Transfer Key Operation Mode**	Use this option to set the operating mode of the extension Conf key. The keys can be for Call Transfer (0), Serial Calling (1) or Flash (2).	0 = Transfer 1 = Call back 2 = Hook (default = 0)
15-02-24	**Multiline Telephone Basic Data Setup – Conference Key Mode**	This option allows an extension Conf key to be programmed for Conference or for Transfer. When set for Transfer (1), the user places a call on hold, dials the extension to which it should be transferred, the presses the Conf key. The call is then transferred. When set for Conference (0), with an active call, the user presses the Conf key, places a second call, then presses the Conf key twice. All the calls are then connected.	0 = Conference 1 = Transfer (Default = 0)
15-07-01	**Programmable Function Keys**	Extension users may want a function keys programmed for Transfer (code 06).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-02-04	**System Options for Multiline Telephones – Retrieve the Line After Transfer**	Enable (1) or disable (0) an extension ability to answer a call after it is transferred, but before it is answered.	0 = Not Holding (No Keep) 1 = Holding (Keep) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
20-03-01	**System Options for Single Line Telephones – SLT Call Waiting Answer Mode**	For a busy single line (500/2500 type) telephones, set the mode used to answer a camped-on trunk call. Modes: 0 = Press and release hookswitch to pick up waiting call 1 = Press and release hookswitch and dial Service Code 794 (Call Waiting Answer/Split Answer for SLT) to answer waiting call.	0 = Hookflash (Hooking) 1 = Hookflash + Service Code 654 (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-06	**Class of Service Options (Hold/ Transfer Service) – Unscreened Transfer (Ring Inward Transfer)**	Turns Off (0) or On (1) an extension ability to use Unscreened Transfer.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-07	**Class of Service Options (Hold/ Transfer Service) – Transfer Without Holding**	Turns Off or On an extension ability to use Transfer Without Holding.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-08	**Class of Service Options (Hold/ Transfer Service) – Transfer Information Display**	In an extension Class of Service, turn Off or On the incoming Transfer preanswer display.	0 = Off 1 = On (default = 1 for COS 01~15)
20-11-11	**Class of Service Options (Hold/ Transfer Service) – Automatic On-Hook Transfer**	In an extension Class of Service, turn On (1) or Off (0) the ability to use Automatic On-Hook Transfer. If enabled, user must press Hold and dial the extension number to Transfer the call. If disabled, a user must have a Transfer Programmable Function Key. To transfer the call, the user would press Hold, dial the extension number, then press the Transfer Programmable Function key to complete the transfer.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-11-18	**Class of Service Options (Hold/ Transfer Service) – No Recall**	Allow (0) or deny (1) unanswered Transferred calls to the COS from recalling the originating extension. . *For example, with this option set to 1 for COS 1, calls transferred by any COS to any extension with a COS of 1, do not recall.*	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-20	**Class of Service Options (Hold/ Transfer Service) – No Callback**	Turns Off or On an extension to receive callbacks.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension the ability to manually (0) or automatically (1) receive off-hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-10	**Class of Service Options (Supplementary Service) – Barge-In Monitor**	Enables the extension Barge-In Mode to be speech mode (0) or Monitor mode (1) (i.e., Barge-In initiator). This is required to transfer a call into a conference.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-15	**Class of Service Options (Supplementary Service) – Barge-In, Initiate**	Turns off (0) or on (1) an extension user ability to barge-in on other's calls.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-16	**Class of Service Options (Supplementary Service) – Barge-In, Receive**	In an extension COS, turn On (1) or Off (0) the ability to receive a Barge-In on a call.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-17	**Class of Service Options (Supplementary Service) – Barge-In Tone/Display (Intrusion Tone)**	Turn On (1) or Off (0) the Barge-In Tone. If disabled, this also turns off the Barge-In display at the called extension. As this option is for extensions and trunks do not have an option for a Barge-In Tone, the tone is sent to the trunks based on the Class of Service of the transferring extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-32	**Class of Service Options (Supplementary Service) – Deny Multiple Barge-Ins**	In an extension Class of Service, allow (1) or deny (0) the extension ability to have multiple users Barge-In to their conversation.	0 = Off 1 = On (default = 0 for COS 1~15)
20-14-11	**Class of Service Options For DISA/E&M – DISA/Tie Trunk Barge-In**	In an extension Class of Service, enable (1) or disable (0) a DISA or tie trunk user from using the Barge-In feature.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-18-07	**Service Tone Timers – Intrusion Tone Repeat Time**	After a user barges in, the system repeats the Barge-In tone after this interval. Normally, you should disable this time by entering 0. (This time also affects any other call interruption features, such as Voice Mail Conversation Recording, Voice Over, etc.)	0~64800 (seconds) (default = 0 seconds)
21-01-03	**System Options for Outgoing Calls – Trunk Interdigit Time (External)**	Program the time an extension must wait before the Barge-In feature can be used on a call (this time expires before putting a call in a talk state). This time also affects Voice Over.	0~64800 (seconds) (default = 10 seconds)
22-04-01	**Incoming Extension Ring Group Assignment**	Assign extensions to ring groups.	Maximum eight digits Default: Extensions 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-05-01	**Incoming Trunk Ring Group Assignment**	Define a trunk ring group. When transferring a DID or trunk call to the trunk defined ring group, the trunk then rings the defined extensions for the ring group.	Incoming Group Number for Day/Night Mode (1~8): 0 (No Setting) 001~100 (Incoming Group) 102 (In-Skin/ External Voice Mail or VM8000 InMail) (default = 1)
22-08-01	**DIL/IRG No Answer Destination**	Assign the DIL No Answer Ring Group to which an unanswered call should overflow.	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or VM8000 InMail) (default = 0)
24-02-01	**System Options for Transfer – Busy Transfer**	Disable (0) or enable (1) extensions to transfer calls to busy extensions. If disabled, calls transferred to busy extensions recall immediately.	0 = Disable (No) 1 = Enable (Yes) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
24-02-02	**System Options for Transfer – MOH or Ringback on Transferred Calls**	Use these options to enable (0) or disable (1) MOH on Transfer. If enabled (0), a transferred caller hears Music on Hold while their call rings the destination extension. If disabled (1), a transferred caller hears ringback while their call rings the destination extension. For this option to work with voice mail, the transferred call must be an unscreened transfer.	0 = Hold Tone 1 = Ring Back Tone (default = 0)
24-02-03	**System Options for Transfer – Delayed Call Forwarding Time**	If activated at an extension, Delayed Call Forwarding occurs after this time (0~64800 seconds). This also sets how long a Transferred call waits at an extension forwarded to Voice Mail before routing to the called extension mailbox.	0~64800 (seconds) (default = 10 seconds)
24-02-04	**System Options for Transfer – Transfer Recall Time**	Set the Transfer Recall Time (0~64800 seconds). An unanswered transferred call recalls to the extension that initially transferred it after this time. This time also sets how long a transferred call camps-on to a busy extension.	0~64800 (seconds) (default = 30 seconds)
24-02-05	**System Options for Transfer – Message Wait Ring Interval Time**	For Single Line Telephones (SLTs) without message waiting lamps, this is the time between intermittent ringing. If this value is set to 0, the system rings once. . *A release transfer to a busy Department Group only follows this time if the Department Group is set to 0 = No Queue in Program 16-01-10, if set to 1, 2 or 3 it follows the time in Program 24-02-04.*	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-06-01	**VRS/DISA One-Digit Code Attendant Setup – Next Attendant Message Number**	Set up single digit dialing through the VRS. This gives VRS callers single-key access to extensions, the company operator, Department Calling Groups and Voice Mail. For each VRS message set to answer outside calls (see Program 25-02 and Program 25-05), you specify: m The digit the VRS caller dials (0~9, *, #). (Keep in mind that if you assign destinations to digits, outside callers cannot dial system extensions, starting with that digit. m The destination reached (eight digits maximum) when the caller dials the specified digit. The destination can be an extension, a Department Calling pilot number or the Voice Mail master number. A one-digit code can be assigned for each Automated Attendant message.	0~100 (0 = No Setting) 101 = Voice MAil Answers 104 = Refer to 25-04: VRS/DISA Transfer Ring Group with No Answer/ Busy 105 = Dial the other extension (default = 0)
25-06-02	**VRS/DISA One-Digit Code Attendant Setup – Destination Number**	Define the digit to be used by a VRS caller which allows their call to be transferred to the external page.	Up to eight digits (default not assigned)
31-05-01	**Universal Night Answer/Ring Over Page**	For each trunk which should ring the external page, set the External Page zone (1~9) to allow ringing (1).	0 = No Ringing (No) 1 = Ringing (Yes) (default = 0)

Operation

Transferring Trunk Calls

To Transfer a trunk call to a co-worker's extension:

1. At the multiline terminal, press **Transfer**.

   - OR -

   At a single line telephone, hookflash.

   . *You hear Transfer dial tone.*

2. Dial the co-worker's extension number.

   . *If the extension is busy or does not answer, you can dial another extension number or press the line key to return to the call. In addition, you may be able to hang up and have the call Camp-On.*

   . *SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the SLT user has hung up the handset, the call can be retrieved by dialing 715 and the extension number to which it had been transferred.*

3. Announce the call and press **Transfer** (Program 15-07 or SC 851: 06) or hang up.

   . *If you do not have Automatic On-Hook Transfer, you must press Conf (Program 15-02-24=1) or your Transfer Programmable Function Key to Transfer the call.*

   . *If your co-worker does not want the call, press the flashing line key to return to the call.*

   . *Single line telephone users can retrieve the call by pressing hookflash. If a call has been transferred and the SLT user has hung up the handset, the call be can retrieved by dialing 715 and the extension number to which it had been transferred.*

   . *If you do not want to screen the call, hang up without making an announcement.*

To answer a call transferred to your extension:

1. Lift the handset or press **Speaker** when a co-worker announces the call.

Transferring without Holding

To Transfer without holding (multiline terminal only):

1. Lift the handset.
2. Press busy line or press **Speaker**.
3. When original caller hangs up, you are connected.

Transferring Intercom Calls

To Transfer your Intercom call:

1. At the multiline terminal, press **Hold**.

   - OR -

   At single line telephone, hookflash.

2. Dial extension to receive your call.

   . *If the extension is busy, does not answer or does not want the call, you can dial another extension number or press the lit line key to return to the call. In addition, you may be able to hang up and have the call Camp-On.*

   . *Single line telephone users can retrieve the call by pressing hookflash. If a call has been transferred and the SLT user has hung up the handset, the call can be retrieved by dialing 715 and the extension number to which it transferred.*

3. Announce your call and press **Transfer** (Program 15-07 or SC 851: 06) or hang up.

   . ***With Automatic On-Hook Transfer***
   When you hang up, the call is automatically transferred.

. ***Without Automatic On-Hook Transfer***
You must press your Transfer Programmable Function Key to Transfer the call.

To Transfer the call unscreened, press your Transfer Programmable Function Key and hang up without making an announcement.

Transferring a Call Into a Conference/Existing Call

1. While on a call, press **Transfer** and dial service code **724**.
   . *The display shows Transfer to Conf. ICM Dial.*
2. Enter the extension number of the co-worker currently on a Conference call to which the call should be transferred.
   . *To cancel the transfer, press the flashing line key to retrieve the call.*
   . *If an error tone is heard, Barge-In is not enabled for the extension and the call does not go through . Retrieve the call by pressing the flashing line key or hang up and the call recalls the extension.*
3. The transferred call is incorporated into the conference call.
   . *The callers hear the Barge-In tone if enabled in Program 20-13-17.*
   . *If a call is transferred into a Barge-In Conference (an existing 2-party call into which an extension user has used the Barge-In feature to join), the Conference becomes a regular 4-party Conference call.*
4. Hang up.

Transferring a Call to a Trunk Ring Group

1. While on a call, press **Transfer**.
2. Dial the Transfer to Ring Group service code defined in Program 11-15-09.
   . *You hear confirmation tone.*
3. Hang up.
   . *The call is transferred to the trunk ring group defined in Program 22-05-01 and all assigned extensions in the group (Program 22-04-01) ring or it rings the External Paging, enabling anyone to answer the call.*

Transferring an Intercom or Trunk Call using a DSS/One-Touch Key

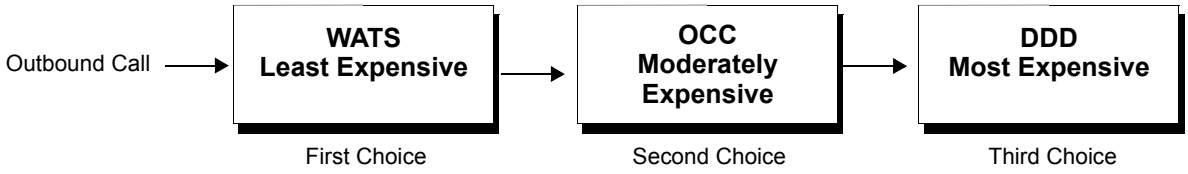
1. While on a call, press the **DSS/One-Touch** key.
2. Announce the call or hang up.

Trunk Group Routing

Description

Trunk Group Routing sets outbound call routing options for users that dial the Trunk Group Routing code (9) for trunk calls. Trunk Group Routing routes calls in the order specified by system programming. If a user dials 9 and all trunks in the first group are busy, the system may route the call to another group. When you are setting up your system, Trunk Group Routing helps you minimize the expense of toll calls. For example, if your system has outbound line groups, use Trunk Group Routing to route calls to the cheapest lines first.

There are 100 available Trunk Groups and 100 Routes.



Conditions

- DISA (Program 25-10) and Tie Lines (Program 34-03) have separate Trunk Group Routing programs.
- The system uses Trunk Group Routing programming (Program 14-06) when setting up Ringing Line Preference.
- Use trunk group programming to set the order in which users access trunks within a specific trunk group.
- Dialing 9 activates ARS, overriding trunk group routing if ARS service is turned on.
- Call Forwarding, Off-Premise is not supported when using Alternate Trunk Group Routing.

Default Setting

Enabled (All trunks are in Group 1)

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Automatic Route Selection

Central Office Calls, Placing

Direct Inward Dialing (DID)

Dial Tone Detection

Multiple Trunk Types

Programmable Function Keys

Prime Line Selection

Trunk Groups

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-01-01	**System Numbering – Service Code**	Set up a Service Code for Alternate Trunk Route Access.	Refer to Univerge SV8100 System Program Manual
11-09-01	**Trunk Access Code – Trunk Access Code**	If required, change the single-digit Trunk Access Code (normally 9). If you change this code, you must also review the settings in Program 11-01 for the new code selected.	Dial (up to four digits) (default = 9)
11-09-02	**Trunk Access Code – 2nd Trunk Route Access Code**	Assign the Service Code set up in Program 11-01 for Alternate Trunk Route Access.	Dial (up to four digits) (default not assigned)
14-05-01	**Trunk Group – Trunk Group Number**	Assign trunks to trunk groups.	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order.)
14-06-01	**Trunk Group Routing – Priority Order Number**	Used to set the priority order number 1~4.	0 = Not Specify 1~100 : (Trunk Group Number) 101~150 : (100 + Networking System Number) 1001~1100 : (1000 + Route Table Number Default: Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified).

Program Number	Program Name	Description/Comments	Assigned Data
14-07-01	**Trunk Access Map Setup – Trunk Port Number**	Access Map programming may limit Trunk Group Routing options.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold). Access Maps 2 ~200 assigned with option 0 (No access)
15-06-01	**Trunk Access Map for Extensions**	Access Map programming may limit Trunk Group Routing options.	Trunk Access Maps: 1~200 (default = 1)
15-07-01	**Programmable Function Keys**	Assign a function key for Trunk Group Routing access (code *02 + trunk group #).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
21-02-01	**Trunk Group Routing for Extensions**	Assign the trunk routes to extensions.	Trunk Group Routes: 1~100 Day/Night Mode: 1~8 Route Table Number: 0~100 (0 = No Setting) (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
21-15-01	**Individual Trunk Group Routing for Extensions**	Designate the trunk route accessed when a user dials the Alternate Trunk Route Access Code assigned in Program 11-09-02. Trunk Group Routing is set up in Program 14-06.	Trunk Group Routes: 1~100 0~100 (0 = No Setting) (default = 0)
23-03-01	**Universal Answer/Auto Answer**	Use this program to let an extension user automatically answer trunk calls that ring other extensions. When the user lifts the handset, they automatically answer the ringing calls based on Trunk Group Routing programming (defined in Program 14-06).	Maximum eight digits Day/Night Mode 1~8 Route Table Number 0~100 (default = 0)
25-10-01	**Trunk Group Routing for DISA**	Assign the Trunk Group Route chosen when a user places a DISA call into the system and dials 9. The Trunk Group Routing is defined in Program 14-06. If the system has ARS, dialing 9 accesses ARS. The route chosen is based on the DISA Class of Service, which is determined by the password the caller dials.	Trunk Group Routes: 1~100 Day/Night Mode = 1~8 Route Table Number = 0~100 (0 = No Setting) (default = 1)
25-12-01	**Alternate Trunk Group Routing for DISA**	Define the trunk route selected when a DISA caller dials the Alternate Trunk Access Code assigned in Program 11-09-02. The route selected is based on the DISA caller's Class of Service, which is in turn determined by the password the caller dials. Program 14-06 is used to set up the Trunk Group Routing.	Trunk Group Routes: 1~100 Day/Night Mode = 1~8 Route Table Number = 0~100 (0 = No Setting) (default = 0)
34-03-01	**Trunk Group Routing for E&M Tie Lines**	Use this program to assign the Trunk Group Route chosen when a user seizes a Tie Line and dials 9. Set Trunk Group Routing in Program 14-06. If the system has ARS, dialing 9 accesses ARS.	Trunk Group Routes: 1~100 0~100 (0 = Setting) (default = 1)

Operation

To place a call using Trunk Group Routing:

1. At the multiline terminal, press **Speaker**.

   - OR -

   At single line telephone, lift the handset.

2. Dial **9**.

3. Dial number.

   - OR -

1. At the multiline terminal, press **Trunk Group Routing** key (Program 15-07 or SC 852: *05).

2. Dial the number.

Trunk Groups

Description

Trunk Groups let you optimize trunk usage for incoming and outgoing calls. Each group can be accessed by an Access Code plus the group number. There are 100 available Trunk Groups and you set the access order in trunk group programming.

Conditions

- Unless a user preselects a trunk, Trunk Group programming selects the trunk Speed Dialing used for trunk calls.
- If a user dials a number that is not programmed in ARS, the system can route the call to a trunk group.
- All DID trunks of the same type should be placed in the same trunk group. These trunk groups must then be assigned to a DID Translation Table.
- Trunks ring extensions according to Ring Group programming.

Default Setting

All trunks are in group 1.

System Availability

Terminals

All Stations

Required Component(s)

None

Related Features

Automatic Route Selection

Central Office Calls, Placing

Dial Tone Detection

Direct Inward Dialing (DID)

Programmable Function Keys

Ring Groups

Speed Dial – System/Group/Station

Trunk Group Routing

Guide to Feature Programming Operation

Program Number	Program Name	Description/Comments	Assigned Data
10-09-01	**DTMF and Dial Tone Circuit Setup**	Allocate the circuits on the CD-CP00 for either DTMF receiving or dial tone detection.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
11-12-14	**Service Code Setup (for Service Access) – Trunk Group Access**	If the service code for Trunk Group Access (704 by default) is not acceptable, change it as necessary.	MLT, SLT (default = 704)
14-02-11	**Analog Trunk Data Setup – Next Trunk in Rotary if No Dial Tone**	Use this option to Disable (0) or Enabled (1) the system ability to skip over a trunk if dial tone is not detected. This pertains to calls using Speed Dial, ARS, Last Number Redial, or Save Number Dialed. It does not pertain to line keys or Direct Trunk Access calls.	0 = Disable 1 = Enable (default = 0)
14-05-01	**Trunk Group – Trunk Group Number**	Assign trunks to trunk groups.	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order.)

Program Number	Program Name	Description/Comments	Assigned Data
14-06-01	**Trunk Group Routing – Priority Order Number**	Used to set the priority order number 1~4.	0 = Not Specify 1~100 : (Trunk Group Number) 101~150: (100 + Networking System Number) 1001~1100 : (1000 + Route Table Number) Default: Route 1, Order Number 1 = 1 (Trunk Group 1) Order Numbers 2, 3, 4 = 0 (Not Specified) All Other Routes (2~100) and Order Numbers (1~4) = 0 (Not Specified).
14-07-01	**Trunk Access Map Setup – Trunk Port Number**	Assign trunks to Access Maps.	0 = No access 1 = Outgoing access only 2 = Incoming access only 3 = Access only when trunk on Hold 4 = Outgoing access and access when trunk on Hold 5 = Incoming access and access when trunk on Hold 6 = Incoming and Outgoing access 7 = Incoming access, outgoing access and access when trunk on Hold Trunk Access Maps: 1~200 Default: Access Map 1 = Trunk Ports 1~200 assigned with option 7 access (incoming and outgoing access and access when trunk is on Hold) Access Maps 2~200 = Trunk Ports 1~200 assigned with option 0 (No access).

Program Number	Program Name	Description/Comments	Assigned Data
15-06-01	**Trunk Access Map for Extensions**	Assign Access Maps to extensions.	Trunk Access Maps: 1~200 Trunks 1~200 (default = 1)
15-07-01	**Programmable Function Keys**	Assign function keys for trunk group access (code *02 + group)	Trunk Groups: 1~100 Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-13-01	**Loop Keys – Outgoing Option**		0-100 (0 = Assigns the Loop Key for ARS, 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)
15-13-02	**Loop Keys – Incoming Option**		0-100 (0 = Assigns the Loop Key to all trunk groups), 1-100 = Assigns the Loop Key to the trunk group specified) (default = 0: Programming Function Key No. - 01-32)
20-02-02	**System Options for Multiline Telephones – Trunk Group Access Key Operating Mode**	Set the operating mode of the extension trunk group keys. Operating Modes: Incoming and Outgoing Access = 0 Outgoing Access = 1 Incoming Access = 2	0 = Outgoing / Incoming 1 = Outgoing 2 = Incoming (default = 0)
20-29-01	**Timer Class for Extension – Day/ Night Mode 1~8, Class Number**	Assign the timer class to each extension. There are 16 Classes that can be assigned. You make eight entries for this Program, one for each Night Service Mode. This entry includes virtual extension numbers.	0~15 0 = Not assigned (default = 0)
20-31-04	**Timer Class Timer Assignment – Intercom Interdigits Time (Intercom I/D Timer)**	When placing Intercom calls, extension users must dial each digit in this time.	0~64800 (seconds) (default = 10 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
21-01-02	**System Options for Outgoing Calls – Intercom Interdigit Time**	When placing Intercom calls, extension users must dial each digit in this time.	0~64800 (seconds) (default = 10 seconds)
21-01-05	**System Options for Outgoing Calls – Disconnect Time When Dial Tone Not Detected**	If 14-02-11 is enabled, the system skips over a trunk if dial tone is not detected. This option pertains to calls placed using Speed Dial, ARS, Last Number Redial or Save Number dialed. It does not pertain to line key or Direct Trunk Access calls.	0~64800 (seconds) (default = 0)

Operation

To place a call over a trunk group:

1. At the multiline telephone, press **Speaker**.

   - OR -

   At the single line telephone, lift the handset.

2. Dial **804**.

3. Dial trunk group number (1~9 or 001~100).

4. Dial number.

   - OR -

1. Press the **Trunk Group** key (Program 15-07 or SC 852: *02 + group).

2. Dial the number.

To answer an incoming trunk group call:

1. Lift the handset.

2. Press the flashing Trunk Group key.

Trunk Queuing/Camp-On

Description

Trunk Queuing permits an extension user to queue (wait in line) on-hook for a busy trunk or trunk group to become free. The system recalls the queued extension as soon as the trunk is available. The user does not have to manually retry the trunk later. Trunk Queuing lets the caller know when the call can go through. If the extension user does not answer the Trunk Queuing ring, the system cancels the queue request.

With Trunk Camp-On, an extension user can queue (wait in line) *Off-Hook* for a busy trunk or trunk group to become free. The caller connects to the trunk when the trunk becomes free. As with Trunk Queuing, the user does not have to manually retry the trunk later.

Any number of extensions may simultaneously queue or Camp-On for the same trunk or trunk group. When a trunk becomes free, the system connects the extensions in the order that the requests were left.

Conditions

- With Automatic Route Selection (ARS), Trunk Queuing automatically queues for the least costly route.
- A user can camp-on or leave a callback request for an extension.
- Other programmed options for outgoing calls can affect how a call is placed. Check or program these options as needed (e.g., access line Keys, etc.).
- Using a Programmable Function Key can simplify the trunk queuing operation.

Default Setting

Enabled

Related Features

Automatic Route Selection

Call Waiting/Camp-On

Callback

Central Office Calls, Placing

Programmable Function Keys

Guide to Feature Programming

❍

Program Number	Program Name	Description/Comments	Assigned Data
11-12-04	**Service Code Setup (for Service Access) – Set Camp-On**	Customize the Service Code, which is to be used for setting Camp-On.	MLT, SLT (default = 850)
11-12-05	**Service Code Setup (for Service Access) – Cancel Camp-On**	Customize the Service Code, which is to be used for cancelling Camp-On.	MLT, SLT (default = 870)
11-16-05	**Single Digit Service Code Setup – Camp-On**	Customize the 1-digit Service Code used for setting Camp-On.	(default not assigned)
15-07-01	**Programmable Function Keys**	Assign a function key for Trunk Queuing and Trunk Camp-On (code 35).	Trunk Groups: 1~100 Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-01-08	**System Options – Trunk Queuing Callback Time**	Set the Trunk Queuing Callback Time. Trunk Queuing Callback rings an extension for this interval.	0~64800 (seconds) (default = 15 seconds)
20-01-09	**System Options – Callback/ Trunk Queuing Cancel Time**	Set the Callback/Trunk Queuing Cancel Time. The system cancels an extension Callback or Trunk Queuing request after this interval.	0~64800 (seconds) (default = 64800 seconds)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-11-07	**Class of Service Options (Hold/ Transfer Service) – Transfer Without Holding**	Turns Off or On an extension ability to use Transfer Without Holding.	0 = Off 1 = On (default = 0 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-29-01	**Timer Class for Extensions**	Assign the timer class (0~15) to each extension for each Night mode. This entry includes virtual extension number.	0~15 0 = Not assigned (default = 0)
20-31-01	**Timer Class Timer Assignment – Trunk Queuing Callback Duration Time**	Trunk Queuing Callback rings an extension for this amount of time.	0~64800 (seconds) (default = 15 seconds)
20-31-02	**Timer Class Timer Assignment – Callback / Trunk Queuing Cancel Time**	The system cancels an extension Callback or Trunk Queueing request after this amount of time.	0~64800 (seconds) (default = 64800 seconds)

Operation

To queue for a busy trunk:

1. Try to access the busy trunk.
2. Dial **850** or press **Trunk Queuing/Camp-On** key (Program 15-07 or SC 851: 35).
3. Hang up to leave a Trunk Queuing request.

   - OR -

   Wait Off-Hook to Camp-On to the trunk.

To answer when Trunk Queuing calls you back:

1. Lift the handset.

To cancel a Trunk Queueing/Camp-On request:

1. At the multiline terminal, press idle **Speaker**.

   - OR -

   At the single line telephone, lift the handset.
2. Dial **870**.
3. At the multiline terminal, press **Speaker** to hang up.

   - OR -

   At the single line telephone, hang up.

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Uniform Call Distribution (UCD)

Description

With Uniform Call Distribution (UCD), an extension user can call an idle extension in a preprogrammed UCD Group (Department Group – 64 Department Groups available) by dialing the group pilot number. For example, this would let a caller dial the Sales department just by knowing the Sales department pilot number. The caller would not have to know any of the Sales department extension numbers.

User Log Out/Log In

An extension user can log out and log in to a UCD (Department) group. By logging out, the user removes their extension from the group. Once logged out, UCD (Department Calling) bypasses their extension. When they log back in, UCD (Department Calling) routes to their extension normally. All users can dial a code to log in or log out of their UCD (Department Calling) Group. A multiline terminal can optionally have a function key programmed for one-button log in and log out.

Enhanced Hunting

UCD (Department Calling) is enhanced with expanded hunting abilities. Hunting sets the conditions under which calls to a UCD (Department Group) pilot number cycles through the members of the group. The hunting choices are:

- **Busy**

  A call to the pilot number only hunts past a busy group member to the first available extension. A call rings on an unanswered extension until it is answered, or the caller hangs up.

- **Not Answered**

  A call to the pilot number cycles through the idle members of a UCD (Department Calling) group. The call continues to cycle until it is answered or the calling party hangs up. However, if the next station in the cycle is busy when a new call comes in, the call queues to the busy agent. New calls do not hunt past a busy agent.

- **Busy or Not Answered**

  A call to the pilot number cycles through the idle members of a UCD (Department Calling) group. The call continues to cycle until it is answered or the calling party hangs up.

If all members of the UCD (Department) group are busy, an incoming or transferred call to the group pilot number queues for an available member. Each group has a queue that can hold any number of waiting calls. If a display telephone is waiting in queue, the user sees: *WAITING (group name)*. If a transferred call in queue is an outside call, and the system has a DSP daughter board installed with the VRS compact flash, the queued caller hears, *"Please hold on. All lines are busy. Your call will be answered when a line becomes free."*

The VRS can also transfer calls to UCD (Department) groups. Refer to the Voice Response System (VRS) on page 1-989 feature for more information on setting up the VRS.

The system prevents hunting to a UCD (Department) group extension if it is:

- **Busy on a call**
- **In Do Not Disturb**
- **Call Forwarded**
- **Logged Out**

Conditions

- When a DIL rings to a UCD (Department) groups, the DIL may follow overflow programming (Program 22-01-04 and Program 22-08-01).
- If an extension has Call Forwarding set, the system does not hunt to the forwarded extension.

Default Setting

Disabled

Priority Routing

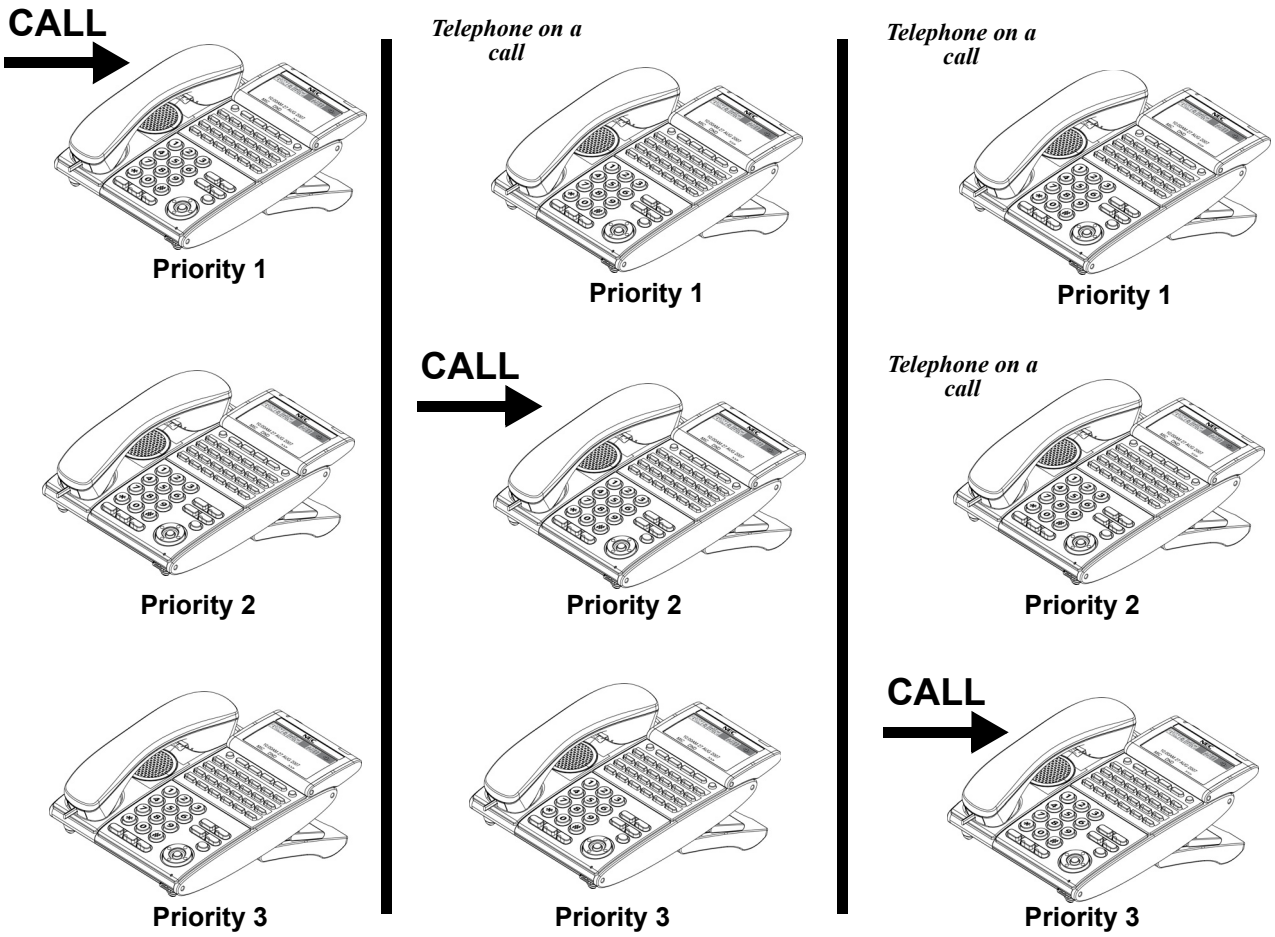

Figure 1-12 Uniform Call Distribution (UCD) Priority Call Routing

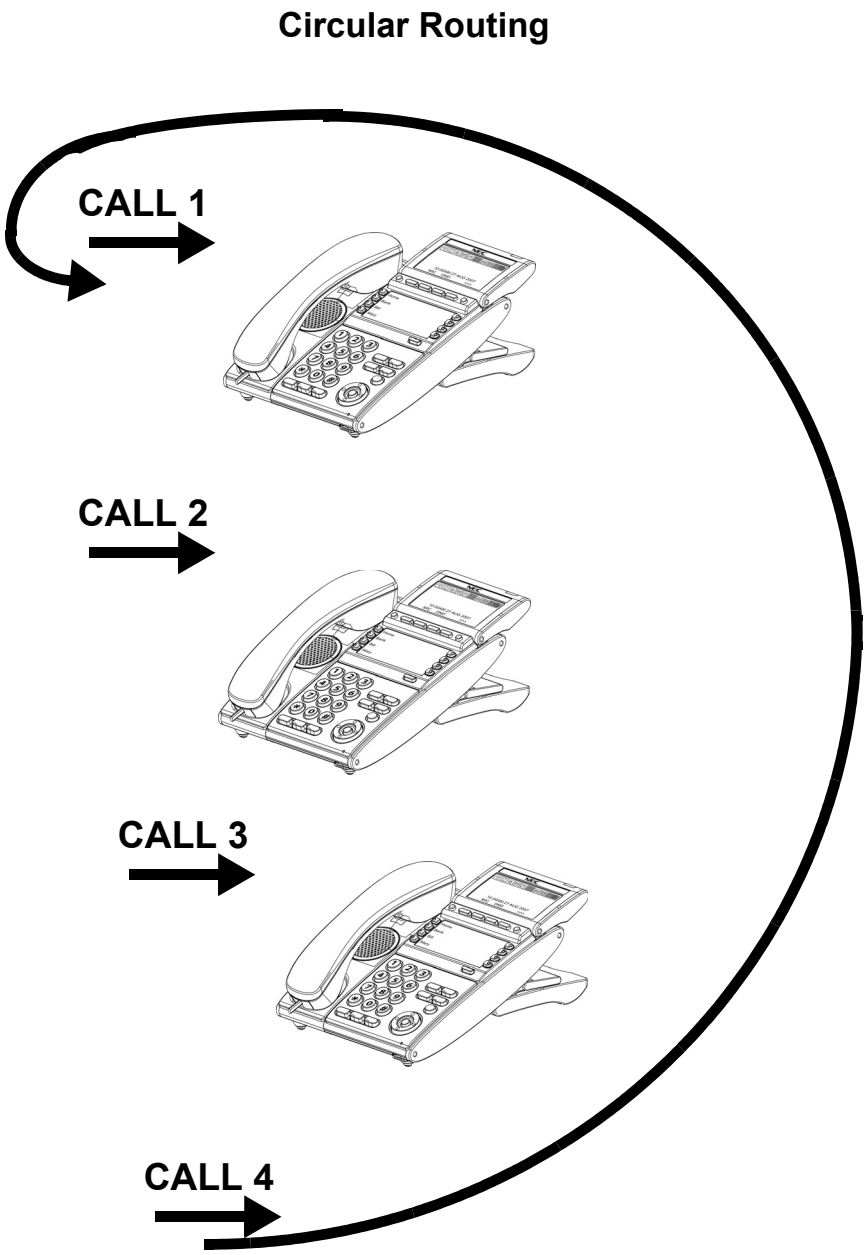

Figure 1-13 Uniform Call Distribution (UCD) Circular Routing

System Availability

Terminals

All Stations

Required Component(s)

PZ-VM21 and VRS Compact Flash (for Delay Announcements)

Related Features

Automatic Call Distribution (ACD)

Call Forwarding

Transfer

InMail

Voice Response System (VRS)

Guide to Feature Programming

. *The items highlighted in gray are read only and cannot be changed.*

Program Number	Program Name	Description/Comments	Assigned Data
11-07-01	**Department Group Pilot Numbers – Dial**	Assign pilot numbers to the Extension (Department) Groups you set up in Program 16-02-01~Program 16-02-10.	Up to eight digits (default not assigned)
15-07-01	**Programmable Function Keys**	Assign a Uniform Call Distribution key (46) so extension users can install or remove themselves from the Uniform Call Distribution Group. Additional keys can also be assigned for Department Group features Automatic Transfer (56), immediate calling destination (58), delayed calling destination (59), and DND destination (60).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
16-01-01	**Department Group Basic Data Setup – Department Name**	Assign a name to the Extension (Department) Groups.	Maximum 12 characters (default not assigned)
16-01-02	**Department Group Basic Data Setup – Department Calling Cycle**	Set the routing cycle for calls into a department (i.e., when a user dials the department pilot number). The system can ring the highest priority extension available (Priority Routing, 0) or cycle in circular order to a new idle extension for each new call (Circular Routing, 1– set to 1 for UCD).	0 = Normal Routing (Priority) 1 = Easy – UCD Routing (Circular) (default = 0)
16-01-03	**Department Group Basic Data Setup – Department Routing When Busy (Auto Step Call)**	Set how the system routes an Intercom call to a busy Department Group member. The caller can hear busy tone (0) or overflow to the first available Department Group member (1). This option is for Intercom calls to an extension, not a pilot number.	0 = Normal (Intercom caller to busy department member hears busy) 1 = Circular (Intercom callers to busy department member routes to idle member) (default = 0)
16-01-04	**Department Group Basic Data Setup – Hunting Mode**	Set if an unanswered call should hunt once stopping at the last member tried (0) or continually hunt through the idle members (1).	0 = Last extension is called and hunting is stopped 1 = Circular (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
16-01-05	**Department Group Basic Data Setup – Extension Group All Ring Mode Operation**	Set if all members of the group should ring automatically (1) or through the use of the service code (0) defined in Program 11-12-09. Selecting automatic will override the settings of Programs 16-01-03 and 16-01-04.	0 = Manual 1 = Automatic (default = 0)
16-01-06	**Department Group Basic Data Setup – STG Withdraw Mode**	Use to set the STG withdraw mode for each department group.	0 = Disable (Camp On) 1 = Enable (Overflow Mode) (default = 0)
16-01-07	**Department Group Basic Data Setup – Call Recall Restriction for STG**	Determine whether or not an unanswered call transferred to a Department Group should recall the extension from which it was transferred.	0 = Disable (Recall) 1 = Enable (No Recall) (default = 0)
16-01-09	**Department Group Basic Data Setup – Department Hunting No Answer Time**	Set how long a call rings a Department Group extension before hunting occurs.	64800 (seconds) (default = 15 seconds)
16-01-10	**Department Group Basic Data Setup – Enhanced Hunt Type**	Set the type of hunting for each Department Group: 0 = No Queuing 1 = Hunting When Busy 2 = Hunting When Not Answered 3 = Hunting When Busy or No Answer	0 = No queuing 1 = Hunting When Busy 2 = Hunting When Not Answered 3 = Hunting When Busy or No Answer (default = 0)
16-02-01	**Department Group Assignment for Extensions**	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	Department Groups 1-64 Priority 1-512 Default = All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 512 priority = 512
16-03-01	**Secondary Department Group**	Use this program to assign extensions to multiple Department Groups and set the priority assignment. Each Secondary Department Group can have up to 16 extensions assigned.	Extension Number Maximum eight digits Priority Order 0~999 (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-09-07	**Class of Service Options (Incoming Call Service) – Call Queuing**	Turn Off (0) or On (1) an extension ability to have calls queued if a call rings the extension when it is busy.	0 = Off 1 = On (default = 0 for COS 1~15)
20-11-17	**Class of Service Options (Hold/ Transfer Service) – Department Group Trunk-to-Trunk Transfer (Each Telephone Group Transfer)**	Turn On (1) or Off (0) the ability of an extension in a Department Group to use the Trunk-to-Trunk Forwarding service codes.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook Signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-14	**Class of Service Options (Supplementary Service) – Department Calling (PLT No Called Extension)**	Turns off or on an extension user ability to call a Department Group Pilot.	0 = Off 1 = On (default = 1 for COS 1~15)
22-02-01	**Incoming Call Trunk Setup**	If you want a trunk to be a DIL to a Department Group, assign Service Type 4 for each Night Service Mode. Also see Program 22-07-01.	0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-07-01	**DIL Assignment**	For each trunk assigned Service Type 4 in Program 22-02 above, assign the DIL destination as the Department Group pilot number (as assigned in Program 11-07-01). (Department: Groups 1~64).	Extension Number (maximum eight digits) (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
24-02-05	**System Options for Transfer – Message Wait Ring Interval Time**	For Single Line Telephones (SLTs) without message waiting lamps, this is the time between intermittent ringing. If this value is set to 0, the system rings once.	0~64800 (seconds) (default = 30 seconds)
24-02-08	**System Options for Transfer – Delayed Transfer Timer for All Department Groups**	Determine how long a call should ring a Department Group before transferring the call.	0~64800 (seconds) (default = 10 seconds)
24-05-01	**Department Group Transfer Target Setup**	Assign the Speed Dialing bin to each Department Group to hold the destination for the immediate automatic transfer of ICM and transferred calls to the Department Group feature.	0~1999 (default = 1999)

Operation

To call a UCD Group:

1. At the multiline terminal, press the **Speaker** key.

   - OR -

   At single line telephone, lift the handset.

2. Dial the UCD group (department) extension or pilot number.

   . *The system routes the call to the first free telephone in the (UCD group) department.*

To log out of your UCD (Department Calling) Group:

. *While you are logged out, UCD (Department Calling) cannot route calls to your extension.*

1. Press the **Speaker** key.

2. Dial **750** and **1**.

   - OR -

   Press **Uniform Call Distribution Log In** key (Program 15-07 or SC 851: 46).

   . *The key lights while you are logged out.*

To log back in to your UCD (Department Calling) Group:

. *While you log back in, Uniform Call Distribution routes calls to your extension.*

1. Press the **Speaker** key.

2. Dial **750** and **0**.

   - OR -

   Press **UCD (Department Calling) Log In** key (Program 15-07 or SC 851: 46).

   . *The key goes out when you log back in.*

Uniform Numbering Network

Description

Uniform Numbering Network allows multiple or compatible systems to be connected in a network using Tie Lines. A station user can dial a system number and a station number (open numbering) or dial the station number only (closed numbering) to access any station. When the calling and called systems are not directly connected, several Tie Lines may be accessed to route the call. Each system extends the call to the next system until the final destination is reached. Networking provides a seamless connection of multiple systems into a single “virtual” communications system using Tie Lines with a unified numbering plan. Networking allows many companies to connect their telephone systems so they appear as one. An extension user in the network can easily dial another extension or transfer a call within the Networking System. Calls are passed from network node to network node using a protocol that contains information about the source of the call, the type of call and the destination of the call.

Flexible Network Routing

Use network routes to set up single-channel networking between many separate systems – or use multiple networking channels per system for greater network performance. Data tables in the system program define the routing for each extension in each network node. These tables are easily customized to meet the requirements of each networking configuration. Users may place an intercom call or transfer a call to any extension at any location by dialing an extension number. The system analyzes each extension number received and determines how to route the call to its final destination. The feature which handles this route selection is called Flexible Routing (F-Routing). F-Routing also has the ability to select alternate routes to the destination extension if the primary destination is busy. Up to 120 routes are available for networking. Once an extension number is dialed, the system checks the routing, accesses the assigned trunk group and places the call. Each extension is assigned a route or routes that decide which trunk group to access and any modified dialed data if required.

Conditions

- Monitor the Uniform Numbering Network Access Code plan to avoid loss of Access Codes and to prevent duplicating codes.
- The distant system number can be programmed as 2~8 digits in length.
- The UNIVERGE SV8100 system has 500 ARS/F-Route Tables that can be shared by outgoing Tie lines, ISDN CO/PBX, and FT1 lines.
- When a call from/to the remote-end is made to a busy station in the UNIVERGE SV8100 system, the caller cannot set features such as Callback Message, Step Call, or Camp-On.
- A maximum of 120 Dial Analysis Tables which allows a maximum of 121 connected systems per Uniform Numbering Network.
- DID Full Digit Conversion can access the Uniform Numbering Network.

Default Setting

None

System Availability

Terminals

All Stations

Required Component(s)

CD-4ODTA or CD-PRTA

Related Features

Automatic Route Selection

Flexible System Numbering

Multiple Trunk Types

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-01-01	**System Numbering – Service Code**	Set the systems internal (Intercom) numbering plan. The numbering plan assigns the first and second digits dialed and affects the digits an extension user must dial to access other extensions and features, such as service codes and trunk codes. If the default numbering plan does not meet the site requirements, use this program to tailor the system numbering to the site. **Caution** Improperly programming this option can adversely affect system operation. Make sure you thoroughly understand the default numbering plan before proceeding. **Before changing your numbering plan, use PCPro or WebPro to make a backup copy of your system data.**	Refer to UNIVERGE SV8100 Programming Manual
11-02-01	**Extension Numbering**	Set the extension number. The extension number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01-01. This allows an employee to move to a new location (port) and retain the same extension number.	Up to eight digits 1 200 2 201 3 202 ~ ~ 300 499 301 5000 ~ ~ 512 5211
14-02-09	**Analog Trunk Data Setup – Busy Tone Detection**	Used to enable or disable busy tone detection for trunk ports.	0 = Disable (default) 1 = Enable
14-02-14	**Analog Trunk Data Setup – Loop Start/Ground Start**	Used to define a analog trunk as Loop Start or Ground Start.	0 = Loop Start (default) 1 = Ground Start
14-05-01	**Trunk Group – Trunk Group Number**	Assign trunks to trunk groups (1~100).	Trunk Group Number: 0~100 Priority Number: 1~200 (default = Trunk Group 1, with priority in ascending order.)

Program Number	Program Name	Description/Comments	Assigned Data
44-01-01	**System Options for ARS/F-Route – ARS/F-Route Time Schedule**	Set this option to '0' so that the F-Route table selected is determined only by the digits dialed without any relation to the day or time of the call.	0 = Not Used 1 = Used (default = 0)
44-02-01	**Dial Analysis Table for ARS/ F-Route Access – Dial**	Set the number of digits to be analyzed by the system for ARS routing.	Up to eight digits (Use line key 1 for a 'Don't Care' digit, @) (default not assigned)
44-02-02	**Dial Analysis Table for ARS/ F-Route Access – Service Type**	Select the Service Type (0 = No Setting, 1 = Extension Call, 2 = ARS/F-Route Table, 3 = Dial Extension Analyze Table).	0 = No Setting (None) 1 = Extension Call (Own) 2 = ARS/F-Route Table (F-Route) 3 = Dial Extension Analyze Table (Option) (default = 0)
44-02-03	**Dial Analysis Table for ARS/ F-Route Access – Additional Data**	Enter the additional data required for the service type selected in Program 44-02-02, either the number of digits to be deleted or the table number to be used.	1 = Delete Digit = 0~255 (255 : Delete All Digits) 2 = 0~500 (0 = No Setting) 3 = Dial Extension Analyze Table Number = 0~4 (0 = No Setting) (default = 0)
44-02-04	**Dial Analysis Table for ARS/ F-Route Access – Dial Tone Simulation**	If enabled (1), this option sends dial tone to the calling party once the routing is determined. This may be required if the central office at the destination does not send dial tone.	0 = Off 1 = On (default = 0)
44-03-01	**Dial Analysis Extension Table – Dial**	Set the Dial digits (24 digits maximum) 1~9, 0 Q **#**, @) to be used for the Dial Extension Analysis Table. When Program 44-02-02 is set to type "3", this program sets the dial extension analysis table. These tables are used when the analyzed digits must be more than eight digits. To enter a wild card/don't care digit, press Line Key 1 to enter an @ symbol.	Up to 24 digits Digits = 1~9, 0, Q, #, @ (Press Line Key 1 for wild character @) (default = Not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
44-03-02	**Dial Analysis Extension Table – ARS/F-Route Select Table Number (1~250)**	When dialed digits match the setting in Program 44-03-01, select the ARS/R-Route table number (0~500) to be used for the Dial Extension Analysis Table.	0~500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is checked. With Program 44-01 set to 1, Program 44-04 is checked. (default = 0)
44-03-03	**Dial Analysis Extension Table – ARS/F-Route Select Table Number (251)**	If the received digits are not identified in tables 1~250, the F-Route selection table number (0~500) defined in table 251 is used.	0~500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is checked. With Program 44-01 set to 1, Program 44-04 is checked. (default = 0)
44-03-04	**Dial Analysis Extension Table – Next Table Area Number (252)**	If the received digits do not match the digits set in tables 1~250, table number 252 is used refer to the next Extension Table Area (1~4) to be searched.	0~4 (default = 0)
44-04-01	**ARS/F-Route Selection for Time Schedule**	Assign each ARS/F-Route Selection number (1~500) to an ARS/F-Route table number for each ARS/F-Route time mode. There are eight time modes for ARS/F-Route Access.	ARS/F-Route Time Mode: 1~8 ARS/F-Route Table Number = 0~500 (default = 0)
44-05-01	**ARS/F-Route Table – Trunk Group Number**	Select the trunk group number to be used for the outgoing ARS call (1~100).	0~100, 255 0 = No Setting 255 = Extension Call (default = 0)
44-05-02	**ARS/F-Route Table – Delete Digits**	Enter the number of digits to be deleted from the dialed number [0~255 (255 = Delete all)].	0~255 (255 = Delete All) (default = 0)
44-05-03	**ARS/F-Route Table – Additional Dial Number Table**	Enter the table number (defined in Program 44-06) for additional digits to be dialed (0~1000).	0~1000 (default = 0)
44-05-04	**ARS/F-Route Table – Beep Tone**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select whether or not a beep is heard if a lower priority trunk group is used (0 = No Beep, 1 = Beep).	0 = Off 1 = On (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
44-05-05	**ARS/F-Route Table – Gain Table Number for Internal Calls**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the gain table number to be used for internal calls (0~500).	0~500 0 = No Setting (default = 0)
44-05-06	**ARS/F-Route Table – Gain Table Number for Tandem Connections**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the gain table number to be used for the tandem call (defined in Program 44-07).	0~500 0 = No Setting (default = 0)
44-05-07	**ARS/F-Route Table – ARS Class of Service**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the Class of Service to be used for ARS (0~16). An extensions ARS COS is determined in Program 26-04-01.	0~16 (default = 0)
44-05-08	**ARS/F-Route Table – Dial Treatment**	For each ARS/F-Route table (1~500) assign a priority number (1~4). Select the Dial Treatment to be used (0~15). The Dial Treatments are determined in Program 26-03-01.	0~15 (default = 0)
44-05-09	**ARS/F-Route Table – Maximum Digit**	Input the maximum number of digits to send when using the F-Route.	0~24 (default = 0)
44-05-10	**ARS/F-Route Table – CCIS over IP Destination Point Code**	For each ARS/F-Route table (1~500) assign the priority (1~4). Set the CCIS over IP Destination Point Code (0~24).	0~16367 (default = 0)
44-05-11	**ARS/F-Route Table – Network Specified Parameter Table**	For each ARS/F-Route table (1~500) assign the priority (1~4). Assign the Network Specified Parameter Table (0~16).	0~16 (default = 0)
44-06-01	**Additional Dial Table**	If an Additional Dial Number Table is entered in Program 44-05-03, define the additional dial table (1~1000) to add digits in front of the dialed ARS/F-Route number (24 digits maximum 1-9, 0 Q **#**, Pause). To enter a wild card/don't care digit, press Line Key 1 to enter a P (pause) symbol.	Up to 24 digits Enter: 1~9, 0, Q, #, Pause (press line key 1 to enter a pause) (default = Not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
44-07-01	**Gain Table for ARS/F-Route Access – Incoming Transmit**	Set the gain table to be used (1~500). If an extension dials ARS/F-Route number; The Extension Dial Gain Table is activated, which is assigned in Program 44-05. The Extension Dial Gain Table follows “Outgoing transmit” and “Outgoing receive” settings. If the incoming call is transferred to another line using ARS/F-Route; The Tandem Gain Table is activated, which is assigned in Program 44-05. The Tandem Gain Table follows the “Incoming transmit” and “Incoming receive” settings for incoming line, and “Outgoing transmit” and “Outgoing receive” settings for the outgoing line. For ARS/F-Route calls, the CODEC gains defined in Program 14-01-02 and Program 14-01-03 are not activated.	1~63 (-15.5 ~ +15.5dB) (default = 32)
44-07-02	**Gain Table for ARS/F-Route Access – Incoming Receive**		1~63 (-15.5 ~ +15.5dB) (default = 32)
44-07-03	**Gain Table for ARS/F-Route Access – Outgoing Transmit**		1~63 (-15.5 ~ +15.5dB) (default = 32)
44-07-04	**Gain Table for ARS/F-Route Access – Outgoing Receive**		1~63 (-15.5 ~ +15.5dB) (default = 32)
44-08-01	**Time Schedule for ARS/F-Route**	Define the daily pattern of the ARS/F-Route feature. ARS/F-Route has 10 time patterns. These patterns are used in Program 44-09 and Program 44-10. The daily pattern consists of 20 time settings.	Time Number: 01~20 Start Time = 0000~2359 End Time = 0000~2359 Mode: 1~8 Default = All Schedule Patterns: 0:00 – 0:00, Mode 1

Program Number	Program Name	Description/Comments	Assigned Data
44-09-01	**Weekly Schedule for ARS/ F-Route**	Define a weekly schedule for using ARS/F-Route day numbers 1~7 (1 = Sun, 7 = Sat), pattern numbers (1~10). The pattern number is defined in Program 44-08-01.	1 = Sunday (Pattern 1~10) (default Pattern = 1) 2 = Monday (Pattern 1~10) (default Pattern = 1) 3= Tuesday (Pattern 1~10) (default Pattern = 1) 4 = Wednesday (Pattern 1~10) (default Pattern = 1) 5 = Thursday (Pattern 1~10) (default Pattern = 1) 6 = Friday (Pattern 1~10) (default Pattern = 1) 7 = Saturday (Pattern 1~10) (default Pattern = 1)
44-10-01	**Holiday Schedule for ARS/ F-Route**	Define a yearly schedule for ARS/ F-Route. This schedule is used for setting special days such as national holidays (pattern numbers 1~10). The pattern number is defined in Program 44-08-01.	Date: 0101~1231 Schedule Pattern Number = 0~10 0 = No Setting (default = 0)

Operation

None

UNIVERGE Multimedia Conference Bridge

Description

Multiline Conference Bridge allows any intercom or outside caller to call the CD-PVAA blade to place a multiparty conference call. Each CD-PVAA blade supports one 8-party conference or two 4-party conferences regulated by a switch setting. Two CD-PVAA blades may be installed. DSP-based amplification provides a higher quality conference call.

Conditions

- The CD-PVAA blade can be used with any version of software on the UNIVERGE SV8100 system.
- The support PC must be connected directly to the CD-PVAA Multimedia Conference Bridge and not connected via a Hub or Router when performing any of the following functions:
  - Database Restoration
  - Application Upgrade
  - Application PAckage Upgrade
  - Service Package Upgrade
- When the CD-PVAA blade is set for two, four-party conferences, ports 1~4 can be set to the same Master Hunt Group, and ports 5~8 can be set to a different Master Hunt Group using Program 11-07-01 (Department Group Pilot Numbers) and Program 16-02-01 (Department Group Assignment for Extensions). This allows two different Pilot Numbers for each conference.
- - OR -
- If only one Pilot number is needed, put all eight ports in one hunt group using Program 16-02-01 (Department Group Assignment for Extensions). When the password is entered, the conference selected is the conference you enter.
- The supervisor must perform the Setting Procedures before the Conference Bridge can be used.
- Up to 16 Voice Mail ports are available. The CD-PVAA blade reduces this number by eight or 16 depending on license.
- Each CD-PVAA blade reduces the number of stations by eight or 16 depending on license.

Default Setting

None

System Availability

Terminals

All Multiline Terminals

Required Component(s)

CD-PVAA

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-09-01	**DTMF and Dial Tone Circuit Setup**	Assign at least one circuit for DTMF reception (type 0 or 1). Use the following as a guide when allocating DTMF receivers: ❍ In light traffic sites, allocate one DTMF receiver for every 10 devices that use them. ❍ In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
10-55-01	**Package Network Setup – IP Address**	Use to define the IP Address for the CD-ETIA.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.255255.254 192.0.0.1 ~ 223.255.255.254 (default = 172.16.1.100)
10-55-03	**Package Network Setup – Main/ Add-on**	The Main setting is to be utilized to distribute an IP Address to the blade.	0 = Main 1 = Add-on (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
10-55-04	**Package Network Setup – Sub Net Mask**	Define the subnet mask for the CD-ETIA.	128.0.0.0 192.0.0.0 224.0.0.0 240.0.0.0 248.0.0.0 252.0.0.0 254.0.0.0 255.0.0.0 255.128.0.0 255.192.0.0 255.224.0.0 255.240.0.0 255.248.0.0 255.252.0.0 255.254.0.0 255.255.0.0 255.255.128.0 255.255.192.0 255.255.224.0 255.255.240.0 255.255.248.0 255.255.252.0 255.255.254.0 255.255.255.0 255.255.255.128 255.255.255.192 255.255.255.224 255.255.255.240 255.255.255.248 255.255.255.252 255.255.255.254 255.255.255.255 (default = 255.255.0.0)
10-55-05	**Package Network Setup – Default Gateway**	Define the default gateway for the CD-ETIA.	0.0.0.0 ~ 126.255.255.254 128.0.0.1 ~ 191.255255.254 192.0.0.1 ~ 223.255.255.254 (default = 0.0.0.0)
11-02-01	**Extension Numbering**	Assign extension numbers to extension ports. The telephone programming identity follows the port number – not the extension number.	Up to eight digits 1 101 2 102 3 103 ~ ~ 99 199 100 3101 ~ ~ 512 3513

Program Number	Program Name	Description/Comments	Assigned Data
11-07-01	**Department Group Pilot Numbers – Dial**	Assign a Department Group pilot number for the CNF(8)-U ETU (eight digits max). The extensions are assigned to the group in Program 16-02-01.	Up to eight digits (default not assigned)
15-03-01	**Single Line Telephone Basic Data Setup – SLT Signaling Type**	For each SLT extension, this option must be set to 0.	0 = DP 1 = DTMF (default = 1)
15-03-03	**Single Line Telephone Basic Data Setup – Terminal Type**	Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special (default = 0)
16-01-01	**Department Group Basic Data Setup – Department Name**	Assign a name to the Extension (Department) Groups.	Maximum 12 characters (default not assigned)
16-01-02	**Department Group Basic Data Setup – Department Calling Cycle**	Set the routing cycle for calls into a department (i.e., when a user dials the department pilot number). The system can ring the highest priority extension available (Priority Routing, 0) or cycle in circular order to a new idle extension for each new call (Circular Routing, 1).	0 = Normal Routing (Priority) 1 = Easy – UCD Routing (Circular) (default = 0)
16-01-03	**Department Group Basic Data Setup – Department Routing When Busy (Auto Step Call)**	Set how the system routes an Intercom call to a busy Department Group member. The caller can hear busy tone (0) or overflow to the first available Department Group member (1). This option is for Intercom calls to an extension, not a pilot number.	0 = Normal (Intercom caller to busy department member hears busy) 1 = Circular (Intercom callers to busy department member routes to idle member) (default = 0)
16-01-04	**Department Group Basic Data Setup – Hunting Mode**	Set if an unanswered call should hunt once stopping at the last member tried (0) or continually hunt through the idle members (1).	0 = Last extension is called and hunting is stopped 1 = Circular (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
16-01-05	**Department Group Basic Data Setup – Extension Group All Ring Mode Operation**	Set if all members of the group should ring automatically (1) or through the use of the service code (0) defined in Program 11-12-09. Selecting automatic will override the settings of Programs 16-01-03 and 16-01-04.	0 = Manual 1 = Automatic (default = 0)
16-01-06	**Department Group Basic Data Setup – STG Withdraw Mode**	Use to set the STG withdraw mode for each department group.	0 = Disable (Camp On) 1 = Enable (Overflow Mode) (default = 0)
16-01-07	**Department Group Basic Data Setup – Call Recall Restriction for STG**	Determine whether or not an unanswered call transferred to a Department Group should recall the extension from which it was transferred.	0 = Disable (Recall) 1 = Enable (No Recall) (default = 0)
16-01-09	**Department Group Basic Data Setup – Department Hunting No Answer Time**	Set how long a call rings a Department Group extension before hunting occurs.	64800 (seconds) (default = 15 seconds)
16-01-10	**Department Group Basic Data Setup – Enhanced Hunt Type**	Set the type of hunting for each Extension (Department) Group.	0 = No queuing 1 = Hunting When Busy 2 = Hunting When Not Answered 3 = Hunting When Busy or No Answer (default = 0)
16-02-01	**Department Group Assignment for Extensions**	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	Department Groups 1-64 Priority 1-512 Default = All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 512 priority = 512
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) an extension user ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup**	Assign Service Type 4 to each trunk you want to ring into the Multimedia Conference Bridge as a Direct Inward Line (DIL).	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-07-01	**DIL Assignment**	Assign the master/pilot number of the Conference group from Program 11-07-01 as the DIL destination. If all Conference ports are in the same unique Extension (Department) Group (see Program 16-02 above), the DIL will ring another Conference port if its assigned port is busy.	Extension Number (maximum eight digits) (default not assigned)

Operation

Setup Procedures

To set the Supervisor Password:

1. Call the Conference Bridge extension number, and wait for the voice prompt.
2. Dial the default Supervisor Password (**0 0 0 0**), then dial #.
3. Follow the voice prompt, and enter the setting verification mode (#). Then enter system set mode.
4. Follow the voice prompt to change Supervisor Password (4~8 digits).

To set the Conference 1 and/or the Conference 2 Password:

1. Call the Conference Bridge extension number, and wait for the voice prompt.
2. Dial the default Supervisor Password (**0 0 0 0**), then dial #.
3. Skip the steps until Conference Setup mode is available for conference 1 or conference 2.

4. Follow the voice prompt, and set the conference 1 or the conference 2 password (4~8 digits).

To record new Customized Greeting:

1. Call the Conference Bridge extension number, and wait for the voice prompt.
2. Dial the default Supervisor Password (**0 0 0 0**), then dial #.
3. Skip options until the Customized Greeting option is selected.
4. Follow the voice prompt and record new a Customized Greeting.

Operating Procedures

To start a Conference Call at an internal extension:

1. Call the Conference Bridge extension number.
2. When you hear the voice prompt, enter the Conference Bridge 1 or 2 password, and dial #.
3. Start the conference.

To start a conference call using outside DID:

1. Call the DID number for the Conference Bridge.
2. When the voice prompt is heard, enter the Conference Bridge 1 or 2 password, and dial #.
3. Start the conference.

To start a conference call using outside DIT:

1. Call a trunk that is set as DIT to Conference Bridge.
2. When the voice prompt is heard, enter the Conference Bridge 1 or 2 password, and dial #.
3. Start the conference.

To start a conference call on an incoming CO call using an Automated Attendant:

1. Call a trunk that is set as an Automated Attendant.
2. Select the option for an extension connected to the Conference Bridge.
3. When the voice prompt is heard, enter the Conference Bridge 1 or 2 password, and dial #.
4. Start the conference.

To start a conference call from an incoming CO call using an Attendant:

1. Call the Attendant, and ask to be transferred to an extension connected to the Conference Bridge.
2. When the voice prompt is heard, enter the Conference Bridge 1 or 2 password, and dial #.
3. Start the conference.

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Universal Slots

Description

The UNIVERGE SV8100 has six universal slots, and up to four cabinets can be installed. The system uses the same chassis for the Controlling and Expansion and can support up to 23 Universal Slots.

Conditions

- Refer to the UNIVERGE SV8100 System Hardware Manual for more information on system capacities.
- The following Blade Calculator allows you to determine the maximum power consumption for each cabinet.

Table 1-23 Board Power Factor

Board Power Factor	
Total	**=<7**
Item	**Power Factor**
CD-CP00	1
CD-RTB	2
CD-VM00	2
CD-ETIA	2
CD-PVAA	1
PZ-32IPLA	1
PZ-64IPLA	2
PZ-128IPLA	2

Terminal Power Factor	
19 inch Metal Chassis with FAN =<80 9.5 inch Plastic Chassis without FAN =<64	
Item	**Power Factor**
DTL-24D-1 TEL	0.8
DTL-8LD-1 TEL	0.8
BHA-L UNIT	2
ADA-L UNIT	2
APR-L UNIT	2
APR UNIT	3
BCH-L UNIT	2
Power Save Adapter	1.2
8LK-L UNIT	0
DCL-60-1 CONSOLE	2
ITL-320C-1 TEL	6
ITL-24D-1 TEL	4
ITL-2E-1 TEL	4
ITL-6DE-1 TEL	4
SLT(-28V)	0.8
SLT(-48V)	2
PGD(2)-U10 ADP	2
SLT Adapter	5

Table 1-24 Maximum Number of Package Installed

Board (Power Factor)	Maximum Number of Package Installed		
	19 inch with CCPU	19 inch without CCPU	4 x 19 inch
CD-ETIA (2)	3	3	12
CD-PVAA (1)	5	6	23
CD-RTB (2)	2	2	8

Default Setting

None

System Availability

Terminals

N/A

Required Component(s)

Any Blade

Related Features

None

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-03-01	**ETU Setup**	Use Program 10-03-XX to setup and confirm the basic configuration data for each blade. This program represents different data depending on the blade installed in the slot. Please refer the SV8100 Programming Manual for a more detailed description of this program.	The assigned data varies depending on the blade installed in the slot. Please refer to the SV8100 Programming Manual for a more detailed description of the 10-03-XX programs.
90-34-01	**Firmware Information – Pkg Name**	Use to list the package type and firmware for the packages installed.	The data varies depending on the card in the slot.
90-34-02	**Firmware Information – Firmware Version Number**	Used to view the package name and firmware for each blade.	The data varies depending on the card in the slot.

Operation

None

User Programming Ability

Description

A station user can perform programming functions. Speed Group Dialing and Function Keys are just two features programmable from a station.

Conditions

- Multiline Terminals must be idle an Off-Hook and have entered the service code when programming any function.

Default Setting

None

System Availability

Terminals

All Terminals

Required Component(s)

None

Related Features

Clock/Calendar Display

Code Restriction

One-Touch Calling

Programmable Function Keys

Speed Dial – System/Group/Station

Programming

None

Operation

None

Virtual Extensions

Description

Virtual Extensions are available software extensions on the Basic and Expanded Port Packages. A Virtual Extension assigned to a line key, can appear and ring on an individual station or multiple stations and be used for outbound access.

In virtual extension mode, the key acts as a secondary extension. Up to 256 VE keys are provided.

Conditions

- The 256 available ports/Extensions are assigned on a per extension basis for Virtual EXtension key mode.
- More than one extension can share a Virtual Extension key.
- An extension can have more than one Virtual Extension key assigned.
- Up to 32 incoming calls can be queued to busy Virtual Extension key.
- You cannot have a Virtual Extension on the same telephone.
- Virtual Extensions do not support the following features:
  - Barge-In
  - Conference
  - Conference, Voice Call/Privacy Release
  - Reverse Voice Over
  - Tone Override
  - Voice Over
- When a valid system station calls a Virtual Extension appearing on another station, Voice and MW softkeys appear in the display of the calling station, but they do not operate.
- When talking on a Virtual Extension you cannot mute the handset.
- Incoming calls to a virtual extension that appear on stations that are used with the CTI applications, PC Assistant, or PC Attendant, do not show up as a second call in the CTI application.
- Calls on Virtual Extension keys cannot be call parked.
- Calls on Virtual Extension keys cannot be put in Personal Park if Program 15-

18-01 is set to Land on the key (1).

- If multiple SIE/VE keys are ringing on a station at the same time, the SIE/VE key on the lowest Line Key is answered first.
- Virtual Extension Keys assigned as code *03 do not support Voice Mail Message Indication on Line Keys.
- Busy Virtual Extensions cannot be Tone overridden.
- Class of service feature Program 20-11-20: No Call Back (transfer recall disable) is not supported for calls from a physical extension to a virtual extension.

Default Settings

None assigned.

System Availability

Terminals:

All Multiline Terminals

Required Component(s)

None

Related Features

Call Waiting/Camp-On

Secondary Incoming Extension

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-04-01	**Virtual Extension Numbering**	Assign Extension Number for the Virtual Extensions (1~256).	Up to eight digits Default not assigned
15-01-01	**Basic Extension Data Setup – Extension Name**	Define the extension/virtual extension name.	Up to 12 characters Default: STA 200 = Ext 200 STA 201 = Ext 201, etc.
15-02-21	**Multiline Telephone Basic Data Setup – Virtual Extension Access Mode (when idle Virtual Extension key pressed)**	Determine whether an extension Virtual Extension Key should be used as a DSS key to the extension and for receiving calls (0), answering incoming calls and ability to place outgoing ICM or CO calls (1), or just receiving incoming calls (2). If the key is to be used for outgoing calls, the extension number of the key must be a real extension or virtual extension number. When the extension number of the key is a real extension number, when the key is pressed, the real extension cannot be used.	Virtual Extension Key Mode 0 = DSS 1 = OTG (Outgoing) 2 = Ignore (default = 2)
15-02-30	**Multiline Telephone Basic Data Setup – Toll Restriction Class**	Assign if the phone uses the Toll Restriction class of the VE (0) or the Real Extension when making outbound calls from the VE.	0 = Vir. Ext. (Virtual Extension Class) 1 = Real Ext. (Real Extension Class) (default = 1)
15-07-01	**Programmable Function Keys**	Assign Virtual Extension function keys on Multiline telephones (code *03 + extension number).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
15-08-01	**Incoming Virtual Extension Ring Tone Setup**	When an extension or a virtual extension is assigned to the function key on the key telephone, select the ring tone when receiving a call on that key.	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Ring Tone Extension (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-09-01	**Virtual Extension Ring Assignment**	Individually program an extension Virtual Extension key(s) to either ring (1) or not ring (0).	Day Night/Mode: 1~8 Ringing: 0 = Not Ring 1 = Ring (default = 0)
15-10-01	**Virtual Incoming Extension Ring Tone Order Setup**	When two or more virtual extensions are set on a function key on the telephone, and the tone pattern by which the sound of each extension differs, the priority of ring sound is set up.	0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming Extension Ring Tone Order 1 Pattern 0 = Pattern 1 (default) Order 2 Pattern 1 = Pattern 2 (default) Order 3 Pattern 2 = Pattern 3 (default) Order 4 Pattern 3 = Pattern 4 (default)
15-11-01	**Virtual Extension Delayed Ring Assignment**	Individually program an extension Virtual Extension key(s) for Delayed Ringing (1) or Immediate Ringing (0).	KY01 Mode 1: 0 = Immediate Ring 1 = Delayed Ring (default = 0)
15-18-01	**Virtual Extension Key Enhanced Options – Virtual Extension Key Operation Mode**	Assign if a call to a VE Holds (1) on the VE or Release (0) to the phone that answered the VE.	0 = Release 1 = Land On the Key (default = 0)
15-18-02	**Virtual Extension Key Enhanced Options – Display Mode when pacing a call on Virtual Extension Key**	Defines if calls to or from a Virtual Extension Key display the Virtual Extension Key name or the name of the extension it resides on.	0 = Secondary Extension Name 1 = Actual Station Name (default = 0)
20-02-19	**Virtual Extension Mode**	Sets the mode of a virtual extension key that appears on a DSS console.	0 = No 1 = Yes (default = 0)
20-04-03	**System Options for Virtual Extensions – SIE/Virtual Extension Delay Interval**	SIE Keys/Virtual Extensions set for Delayed Ringing (see Program 15-11) ring the extension after this interval.	0~64800 (default = 10 seconds)
20-06-01	**Class of Service for Extensions**	Assign the Extension to a Class of Service.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1

Program Number	Program Name	Description/Comments	Assigned Data
20-07-10	**Class of Service Options (Administrator Level) – Programmable Function Key Programming (Appearance Level)**	Turns Off (0) or On (1) the ability for an extension to program the Appearance function keys using Service Code 852.	1 = Off 0 = On (default = 1 for COS 01~15)
20-10-08	**Class of Service Options (Answer Service) – Virtual Extension Off-Hook Answer**	Turns Off (0) or On (1) an extension ability to answer an incoming call on a Secondary Incoming Extension (SIE)/ Virtual Extension simply by lifting the handset.	0 = Off 1 = On (default = 0 for COS 01~15)
20-13-27	**Class of Service Options (Supplementary Service) – Busy on Seizing Virtual Extension**	If set to 1, you can call a busy extension which is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to off for this option to work.	0 = Off 1 = On (default = 1 for COS 01~15)
21-01-15	**System Options for Outgoing Calls – Outgoing Disable on Incoming Line (Toll Restriction)**	In the Extensions Class of Service, enable (1) or disable (0) the Outgoing Disable on Incoming Line feature.	0 = Disable 1 = Enable (default = 0)
23-04-01	**Ringing Line Preference for Virtual Extensions**	When an extension has a virtual extension on Function Key, this program determines the priority (1~4) for a Ring Group for automatically answering ringing calls when the handset is lifted. If (00) is selected for the Ring Group, when the user lifts the handset, the user can answer a ringing call from any group.	00~64 (0 or 00=Don't Care) (default = 00)

Operation

To answer a call ringing a Virtual Extension:

1. Press the flashing **Virtual Extension** key.

   - OR -

   Go off-hook.

   . *Program 20-10-08 needs to be set to on (1) for extension Class of Service.*

To place a call to a Virtual Extension:

1. Go off-hook.

2. Dial the Virtual Extension, or press the **Virtual Extension** key.

   . *The operation depends on the setting in Program 15-02-21.*

To place a call from a Virtual Extension:

1. Press the **Virtual Extension** key.

   . *The operation depends on the setting in Program 15-02-21.*

2. Place an intercom call or dial a trunk access code to seize an outside line and place your call.

To program a Virtual Extension key on a telephone:

1. Press **Speaker**.
2. Dial **852**.
3. Press the key you want to program.
4. Dial ***03**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Hold** once for Immediate Ring (skip to step 8 for Delayed Ring).
7. Dial the mode number in which the key rings.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
8. Press **Hold** for a second time for Delayed Ring, or Skip to step 10.
9. Dial the mode number in which the key delay rings.
   1 = Day 1
   2 = Night 1
   3 = Midnight 1
   4 = Rest 1
   5 = Day 2
   6 = Night 2
   7 = Midnight 2
   8 = Rest 2
10. Press **Speaker**.

Voice Mail Integration (Analog)

Description

The system provides telephone users with comprehensive Voice Mail features. Voice Mail ends the frustration and cost of missed calls, inaccurate written messages and telephone tag. This frees busy receptionists and secretaries for more productive work.

External voice mail requires available analog station ports based on the number of voice mail ports connected.

Integrated voice mail enhances the telephone system with the following features:

- **Call Forwarding to Voice Mail**

  An extension user can forward their calls to Voice Mail. Once forwarded, calls to the extension connect to that extension mailbox. The caller can leave a message in the mailbox instead of calling back later. Forwarding can occur for all calls immediately, for unanswered calls or only when the extension is busy. When a user transfers a call to an extension forwarded to Voice Mail, the call waits for the Delayed Call Forwarding time before routing to the called extension mailbox. This gives the transferring party the option of retrieving the call instead of having it go directly to the mailbox.

- **Leaving a Message**

  Voice Mail lets a multiline terminal extension user easily leave a message at an extension that is unanswered, busy or in Do Not Disturb. The caller just presses their Voice Mail key to leave a message in the called extension mailbox. There is no need to call back later.

- **Transferring to Voice Mail**

  By using Transfer to Voice Mail, a multiline terminal extension user can Transfer a call to the user's or a co-worker's mailbox. After the Transfer goes through, the caller can leave a message in the mailbox.

Voice Mail Queuing

When accessing the voice mail, the system provides a voice mail queue. If all the voice mail ports are busy, any calls trying to get to the voice mail are placed in queue. As the voice mail ports become available, the calls are connected to the voice mail in the order in which they were received.

As the Voice Mail Queue follows Department Hunting programming, the queue can hold a maximum of 10 calls. If the queue is full or if the voice mail ports are not assigned to a Department Group, the calls are handled as though no voice mail queuing feature is enabled. The calls either access voice mail if a port is available or they receive a busy signal.

The Voice Mail Queuing feature does not work with the Conversation Record feature.

MSG Key will Operate as Voice Mail Key

The system enhances a telephone MSG key function when connected to a system which has voice mail installed. When an extension receives a voice mail, the MSG key can be used to check the number of messages in voice mail, as well as call the voice mail to listen to the messages.

Analog Voice Mail Protocol Leading and Trailing Digits Assignment

The Analog Voice Mail Protocol Leading Digits (chassis to VM) and the Trailing Digits format can be changed.

The following chart illustrates the input data for PRG 45-04-01~PRG 45-04-09 (Voice Mail Digit Add Assignment) based on the setting in Program 45-01-15 (Analog Voice Mail Protocol Selection) and Program 45-01-17 (Reply Mailbox Number). If PRG 45-01-15 is set to Fixed (0) it uses the Fixed Memory Location for the Leading Digits or, if set to Program (1) it uses PRG 45-04-01~PRG 45-04-09 for the Leading Digits. If Program 45-01-17 is set to 0 (No), it does not have the calling party in the Trailing Digits.

. *The default values for Program 45-04-01~Program 45-04-09 are not assigned.*

Use the chart below to determine what leading and trailing digits will be sent to the Analog Voice Mail System.

Program	Program 45-01-15 (0 = Fixed) Program 45-01-17 (1=Yes or 0=No)	Program 45-01-15 (1 = Program) Program 45-01-17 (1=Yes)	Program 45-01-15 (1=Program) Program 45-01-17 (0=No)	Description
45-04-01 - **Remote Logon (Internal)** Up to four digits * Default not assigned	***1XXX	Up to four digits + XXX	Up to four digits + XXX	Remote Log-On (Internal) ❍ Internal call to VM from extension XXX. ❍ User has not indicated intent to enter mail box.
45-04-02 - **Direct Logon** Up to four digits * Default not assigned	**#**XXX	Up to four digits + XXX	Up to four digits + XXX	Direct Log-On ❍ Connect user to mail box for extension XXX.
45-04-03 - **Transfer Message** Up to four digits * Default not assigned	***2YYY ***2XXXYYY	Up to four digits + YYY Or Up to four digits + XXXYYY	Up to four digits + YYY	Transfer Message ❍ User is transferring a call to VM ❍ Record a message to be placed in mail box of extension YYY. Record Message for Called Extension (QVM) ❍ Record a message to be placed in mail box of extension YYY. ❍ Store source extension number XXX for automatic reply feature
45-04-04 - **Forward-All** Up to four digits * Default not assigned	***3UUUZZZ	Up to four digits + UUUZZZ	Up to four digits + ZZZ	Forward-All ❍ Extension or Trunk UUU that called extension ZZZ and was forwarded to the Voice Mail Box of extension ZZZ.

Program	Program 45-01-15 (0 = Fixed) Program 45-01-17 (1=Yes or 0=No)	Program 45-01-15 (1 = Program) Program 45-01-17 (1=Yes)	Program 45-01-15 (1=Program) Program 45-01-17 (0=No)	Description
45-04-05 - **Forward-Busy** Up to four digits * Default not assigned	***4UUUZZZ	Up to four digits + UUUZZZ	Up to four digits + ZZZ	Forward-Busy ❍ Extension or Trunk UUU that called extension ZZZ and was forwarded to the Voice Mail Box of extension ZZZ.
45-04-06 - **Forward RNA** Up to four digits * Default not assigned	***5UUUZZZ	Up to four digits + UUUZZZ	Up to four digits + ZZZ	Forward RNA ❍ Extension or Trunk UUU that called extension ZZZ and was forwarded to the Voice Mail Box of extension ZZZ.
45-04-07 - **Remote Logon** Up to four digits * Default not assigned	***6TTT	Up to four digits + TTT	Up to four digits + TTT	Remote Log-on ❍ External call to Voice Mail from Trunk TTT. ❍ Play welcome greeting and connect user to prompt.
45-04-08 - **Conversation Recording** Up to four digits * Default not assigned	***8NNN	Up to four digits + NNN	Up to four digits + NNN	Conversation Recording ❍ Record a message to be placed in voice mail box of extension NNN.
45-04-09 - **Clear Down String** Up to four digits * Default not assigned	9999	Up to four digits	Up to four digits	Clear down string. ❍ Terminate

*=If leading digits are blanks, nothing will be sent to the Analog VM as integration.

Conditions

- The periodic reminder message requires a DSP daughter board for Voice Response System (VRS).
- Ring Group calls do not follow extension call forwarding to voice mail.
- Only one Voice Mail system can be installed in an SV8100 system (Analog or Digital, but not both in same system). This restriction is because only one Department Group can be assigned for Voice Mail.
- If installing an Analog Voice Mail System, any Analog station port (SLT port) can be assigned to support the Analog Voice Mail system. With an Expanded Port Package, the SV8100 supports up to 176 Analog station ports (22 x 8 ports = 176).
- If installing a InMail system (In-Skin product), an Analog station port (SLT port) can be assigned to support the sending of DTMF tones and Disconnect Signal to support a Fax server or other like products.
- When using Programmed (45-01-15 = 1) integration and 45-04-XX is blank, no trailing digits are sent. You can allow only the trailing digits to be sent by setting 45-05-XX to 1.
- Stutter Dial Tone is supported to Single Line Telephones for Voice Mail Message Waiting.

Default Setting

Disabled

System Availability

Terminals

All Stations

Required Component(s)

CD-4LCA (4-Port Main blade)

PZ-4LCA (4-Port daughter board)

CD-8LCA (8-Port Main blade)

PZ-8LCE (8-Port daughter board)

Related Features

Barge-In

Caller ID

Direct Inward Line (DIL)

Hold

Message Waiting

One-Touch Calling

Programmable Function Keys

Transfer

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
10-09-01	**DTMF and Dial Tone Circuit Setup**	Assign at least one circuit for DTMF reception (type 0 or 1). Use the following as a guide when allocating DTMF receivers: In light traffic sites, allocate one DTMF receiver for every 10 devices that use them. In heavy traffic sites, allocate one DTMF receiver for every five devices that use them.	0 = Common Use 1 = Extension Only 2 = Trunk Only Default: Circuit/Resource 01~08 = 1 (Extensions) Circuit/Resource 09~32 = 2 (Trunks) Circuit/Resource 33~96 = 0 (Not Used) Circuit/Resource 97~160 = 0 (Common) When PZ-BS10 is installed, 97~160 are available
11-07-01	**Department Group Pilot Numbers – Dial**	Assign a Department Group pilot number for the Voice Mail (eight digits maximum). The extensions are assigned to the group in Program 16-02-01.	Up to eight digits (default not assigned)
11-11-50	**Service Code Setup (for Setup/ Entry Operation) – Set Message Waiting Indication**	Assign a Service Code (eight digits maximum) to set a Message Waiting light from an Analog Voice Mail port.	SLT Up to eight digits
11-11-51	**Service Code Setup (for Setup/ Entry Operation) – Cancel Message Waiting Indication**	Assign a Service Code (eight digits maximum) to cancel a Message Waiting light from an Analog Voice Mail port.	SLT Up to eight digits
15-02-26	**Multiline Telephone Basic Data Setup – MSG Key Operation Mode**	Determine whether an extension MSG key should function as a Message key (0) or Voice Mail key (1) (Default = 0). If set as a Message key, the user can press the key to call the voice mail only when they have new messages. If set as a Voice Mail key, it functions as a normal Voice Mail key.	0 = Message Key 1 = Voice Mail Key (default = 0)
15-02-35	**Multiline Telephone Basic Data Setup – Message Waiting Lamp Cycle for Calling Extension**	This option allows you to select the Message Waiting flash pattern for the station that set the Message Waiting reminder.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 7)

Program Number	Program Name	Description/Comments	Assigned Data
15-02-36	**Multiline Telephone Basic Data Setup – Message Waiting Lamp Cycle for Called Extension**	This option allows you to select the Message Waiting flash pattern for the station that receives the Message Waiting reminder.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 3)
15-02-37	**Multiline Telephone Basic Data Setup – Voice Mail Message Wait Lamp Color**	This option allows you to select the Message Waiting flash pattern for the station that set the Message Waiting reminder.	0 = Green 1 = Red (default = 1)
15-02-38	**Multiline Telephone Basic Data Setup – Voice Mail Message Wait Lamp Cycle**	This option allows you to select the Message Waiting flash pattern for the station that set the Message Waiting reminder.	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7 (default = 3)
15-03-01	**Single Line Telephone Basic Data Setup – SLT Signaling Type**	For each UNIVERGE SV8100 voice mail extension, this option must be set to 0.	0 = DP 1 = DTMF (default = 1)
15-03-03	**Single Line Telephone Basic Data Setup – Terminal Type**	Enter 1 for this option to allow a single line port to receive DTMF tones after the initial call setup. Enter 0 to have the port ignore DTMF tones after the initial call setup. For Voice Mail, always enter 1 (e.g., receive DTMF tones).	0 = Normal 1 = Special (default = 0)
15-03-09	**Single Line Telephone Basic Data Setup – Caller ID Function – For External Module**	This option must be set to 0 when voice mail is used or the integration code for the disconnect function is incorrect.	0 = Disable 1 = Enable (default = 0)
15-03-16	**Single Line Telephone Basic Data Setup – Special DTMF Protocol Send**	Determine whether or not to send the extension number of the phone forwarded to the extension when Program 15-03-04 is set to Special (1) and not in the VM group.	0 = No 1 = Yes (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign a Voice Mail key to an extension. You must enter the Voice Mail key code (code 77) followed by: ❍ Your own extension number if you are setting up your own Voice Mail key. ❍ A virtual extension number if you are setting up a Message Center key for a virtual extension. ❍ A co-worker's extension number if you are setting up a Message Center key for an installed extension. ❍ An uninstalled extension number if you are setting up a Message Center key for an uninstalled extension. (Optional) Assign a Voice Mail Record key to an extension (code 78). (Optional) Assign a Personal Answering Machine Emulation key (code 16). (Optional) Use a Call Redirect key (49) to allow a user to transfer a call to another extension or voice mail without answering the call.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
16-01-01	**Department Group Basic Data Setup – Department Name**	Assign a name to the Extension (Department) Groups.	Maximum 12 characters (default not assigned)
16-01-02	**Department Group Basic Data Setup – Department Calling Cycle**	Set the routing cycle for calls into a department (i.e., when a user dials the department pilot number). The system can ring the highest priority extension available (Priority Routing, 0) or cycle in circular order to a new idle extension for each new call (Circular Routing, 1).	0 = Normal Routing (Priority) 1 = Easy – UCD Routing (Circular) (default = 0)
16-01-03	**Department Group Basic Data Setup – Department Routing When Busy (Auto Step Call)**	Set how the system routes an Intercom call to a busy Department Group member. The caller can hear busy tone (0) or overflow to the first available Department Group member (1). This option is for Intercom calls to an extension, not a pilot number.	0 = Normal (Intercom caller to busy department member hears busy) 1 = Circular (Intercom callers to busy department member routes to idle member) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
16-01-04	**Department Group Basic Data Setup – Hunting Mode**	Set if an unanswered call should hunt once stopping at the last member tried (0) or continually hunt through the idle members (1).	0 = Last extension is called and hunting is stopped 1 = Circular (default = 0)
16-01-05	**Department Group Basic Data Setup – Extension Group All Ring Mode Operation**	Set if all members of the group should ring automatically (1) or through the use of the service code (0) defined in Program 11-12-09. Selecting automatic will override the settings of Programs 16-01-03 and 16-01-04.	0 = Manual 1 = Automatic (default = 0)
16-01-06	**Department Group Basic Data Setup – STG Withdraw Mode**	Use to set the STG withdraw mode for each department group.	0 = Disable (Camp On) 1 = Enable (Overflow Mode) (default = 0)
16-01-07	**Department Group Basic Data Setup – Call Recall Restriction for STG**	Determine whether or not an unanswered call transferred to a Department Group should recall the extension from which it was transferred.	0 = Disable (Recall) 1 = Enable (No Recall) (default = 0)
16-01-09	**Department Group Basic Data Setup – Department Hunting No Answer Time**	Set how long a call rings a Department Group extension before hunting occurs.	64800 (seconds) (default = 15 seconds)
16-01-10	**Department Group Basic Data Setup – Enhanced Hunt Type**	Set the type of hunting for each Extension (Department) Group.	0 = No queuing 1 = Hunting When Busy 2 = Hunting When Not Answered 3 = Hunting When Busy or No Answer (default = 0)
16-02-01	**Department Group Assignment for Extensions**	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	Department Groups 1-64 Priority 1-512 Default = All extensions in Department Group 1 with priority in port order: Port 1 priority = 1 Port 512 priority = 512
20-02-09	**System Options for Multiline Telephones – Disconnect Supervision**	Enable (1) disconnect supervision for the system.	0 = Disable 1 = Enable (default = 1)
20-03-01	**System Options for Single Line Telephones – SLT Call Waiting Answer Mode**	For a busy single line (500/2500 type) telephone, set the mode used to answer a camped-on trunk call. The default setting should be used [0 = Hookflash (Hooking)].	0 = Hookflash (Hooking) 1 = Hookflash + Service Code 654 (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to the voice mail extensions. You should use COS 14 for all time modes.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-11-01	**Class of Service Options (Hold/ Transfer Service) – Call Forward All**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forward Immediate.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-02	**Class of Service Options (Hold/ Transfer Service) – Call Forward When Busy**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Busy.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-03	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding When Unanswered**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding when Unanswered.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-04	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding (Both Ringing)**	In an extension Class of Service, turn On (1) or Off (0) the ability of an extension user to set Call Forwarding with Both Ringing.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-05	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding with Follow Me**	In an extension's Class of Service, turn On (1) or Off (0) an extensions ability to set Call Forward with Follow Me.	0 = Off 1 = On (default = 1 for COS 1~15)
20-11-12	**Class of Service Options (Hold/ Transfer Service) – Call Forwarding Off Premise (External Call Forwarding)**	In an extensions Class of Service, turn On (1) or Off (0) setting up Call Forwarding Off-Premise at the extension.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-01	**Class of Service Options (Supplementary Service) – Long Conversation Alarm**	Turns Off (0) or On (1) the Warning Tone for Long Conversation (not for single line telephones).	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-02	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Incoming)**	Turn off or on an extension ability to use Long Conversation Cutoff for incoming calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-03	**Class of Service Options (Supplementary Service) – Long Conversation Cutoff (Outgoing)**	Turn off or on an extension ability to use Long Conversation Cutoff for outgoing calls.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-04	**Class of Service Options (Supplementary Service) – Call Forward/DND Override (Bypass Call)**	Turn On or Off the ability to use Call Forwarding/DND Override.	0 = Off 1 = On (default = 1 for COS 1~15)

Program Number	Program Name	Description/Comments	Assigned Data
20-13-05	**Class of Service Options (Supplementary Service) – Intercom Off-Hook Signaling**	Turn On (1) or Off (0) the ability of an extension to receive Off-Hook signals.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension ability to manually (0) or automatically (1) receive Off-Hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-07	**Class of Service Options (Supplementary Service) – Message Waiting**	Turns Off (0) or On (1) an extension ability to leave Message Waiting.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-12	**Class of Service Options (Supplementary Service) – Room Monitor, Extension Being Monitored**	Turns Off (0) or On (1) an extension ability to be monitored.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-13	**Class of Service Options (Supplementary Service) – Continued Dialing (DTMF) Signal on ICM Call**	Turn Off (0) or On (1) an extension user ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-16	**Class of Service Options (Supplementary Service) – Barge-In, Receive**	In an extension Class of Service, turn On (1) or Off (0) Barge-In at the receiving extension (i.e., Barge-In receive).	0 = Off 1 = On (default = 1 for COS 1~15)
20-13-28	**Class of Service Options (Supplementary Service) – Allow Class of Service to be Changed**	Turn off or on the ability of an extension COS to be changed via Service Code 677.	0 = Off 1 = On (default = 0 for COS 1~15)
20-13-35	**Class of Service Options (Supplementary Service) – Block Camp On**	Use this option to turn On (1) or Off (0) extension ability to block callers from dialing **#** to camp-on.	0 = Off 1 = On (default = 0 for COS 1~15)
22-02-01	**Incoming Call Trunk Setup – Incoming Type**	Used to assign the incoming trunk type for each trunk. There is one item for each Mode. When using Trunk-to-Trunk Forwarding the trunks must be set for Normal (0).	0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
22-04-01	**Incoming Extension Ring Group Assignment**	Use this program to assign extensions (up to 32) to Ring Groups. Calls ring extensions according to Ring Group programming.	Maximum eight digits Default: Extension 200 (first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-07-01	**DIL Assignment**	Assign the destination extension for each DIL incoming trunk (001~200). . *For this selection to work, set Program 22-02-01 to 4 = DIL.*	Extension Number (maximum eight digits) (default not assigned)
22-08-01	**DIL/IRG No Answer Destination**	For Voice Mail Overflow, enter the Ring Group that unanswered DILs to Voice Mail will ring after the DIL Call Waiting time (PRG 22-01-04).	0 (No Setting) 001~100 (Incoming Ring Group) 102 (In-Skin/ External Voice Mail or InMail) (default = 0)
24-02-02	**System Options for Transfer – MOH or Ringback on Transferred Calls**	Use this option to enable (0) or disable (1) MOH on Transfer. If enabled (0), a transferred caller hears Music on Hold while their call rings the destination extension. If disabled (1), a transferred caller hears ringback while their call rings the destination extension. For this option to work with voice mail, the transferred call must be an unscreened transfer.	0 = Hold Tone 1 = Ring Back Tone (default = 0)
24-02-03	**System Options for Transfer – Delayed Call Forwarding Time**	Set the interval a transferred call waits at a forwarded extension before routing to the called extension mailbox.	0~64800 (seconds) (default = 10)

Program Number	Program Name	Description/Comments	Assigned Data
40-07-01	**Voice Prompt Language Assignment for VRS**	Use to specify the language to be used for the VRS prompts.	1 = US English 2 = UK English 3 = Australian English 4 = French Canadian 5 = Dutch 6 = Mexican Spanish 7 = Latin America Spanish 8 = Italian 9 = German 10 = Madrid Spanish 11 = Norwegian 12 = Parisian French 13 = Brazilian Portuguese 14 = Japanese 15 = Mandarin Chinese 16 = Korean 17 = Iberian Portuguese 18 = Greek 19 = Danish 20 = Swedish (default = 2)
45-01-01	**Voice Mail Integration Options – Voice Mail Department Group Number**	Assign which Extension (Department) Group number is to be assigned as the voice mail group. An entry of '0' means there is no voice mail installed.	Department Groups: 0, 1~64 0~64 0 = No Voice Mail (default = 0)
45-01-02	**Voice Mail Integration Options – Voice Mail Master Name**	Enter the Voice Mail master name up to 12 characters.	Up to 12 Characters (default = Voice Mail)
45-01-04	**Voice Mail Integration Options – Park and Page**	Enable (1) or disable (0) the system ability to process the Voice Mail Park and Page (*) commands. You should normally enable this option.	0 = Off 1 = On (default = 1)
45-01-05	**Voice Mail Integration Options – Message Wait**	Enable (1) or disable (0) the system ability to process the Voice Mail Message Wait (#) commands. You should normally *enable* this option. If enabled, be sure that the programmed Message Notification strings do not contain the code #9 for trunk access. When using an external voice mail and centrex transfer, this option should be disabled or the service code #3 in Program 11-12-42 will need to be changed.	0 = Off 1 = On (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
45-01-06	**Voice Mail Integration Options – Record Alert Tone Interval Time**	This sets the time (0~64800 seconds) between Voice Mail Conversation Record alerts.	0~64800 (seconds) (default = 30)
45-01-14	**Voice Mail Integration Options – CCIS Centralized Voice Mail Number**	Assign the pilot number to Centralized Voice Mail over CCIS Link. This is assigned only in the remote switches.	Dial (up to eight digits) (default not assigned)
45-01-15	**Voice Mail Integration Options – Analog Voice Mail Protocol Selection**	Assign whether DTMF sent to the Analog VM follows the Fixed (0) or the Programmed (1) leading digits. Program 45-04-01~09 is where the programmed digits are assigned.	0: Fixed 1: Program (default = 0)
45-01-16	**Voice Mail Integration Options – Voice Mail FAX Digit Add Assignment**	Assign the leading digits (up to four) to show in front of extension numbers sent to Analog ports assigned to 1 (Yes) in Program 15-03-16.	Up to four digits (default not assigned)
45-01-17	**Voice Mail Integration Options – Reply Mail Box Number**	Whether or not to include the mailbox number in the analog voice mail protocol.	0 = No 1 = Yes (default = 1)
45-01-18	**Voice Mail Integration Options – Trunk Number Mapping**	Assign the digits of trunk number mapping.	2~3 (default = 2)
45-04-01	**Voice Mail Digit Add Assignment – Remote Logon (Internal)**	Use to define the digits for remote logon (internal).	Up to four digits (default not assigned)
45-04-02	**Voice Mail Digit Add Assignment – Direct Logon**	Use to define the digits for direct logon.	Up to four digits (default not assigned)
45-04-03	**Voice Mail Digit Add Assignment – Transfer Message**	Use to define the digits for transfer message.	Up to four digits (default not assigned)
45-04-04	**Voice Mail Digit Add Assignment – Forward-All**	Use to define the digits for forward all.	Up to four digits (default not assigned)
45-04-05	**Voice Mail Digit Add Assignment – Forward-Busy**	Use to define the digits for forward busy.	Up to four digits (default not assigned)
45-04-06	**Voice Mail Digit Add Assignment – Forward RNA**	Use to define the digits for forward RNA.	Up to four digits (default not assigned)
45-04-07	**Voice Mail Digit Add Assignment – Remote Logon**	Use to define the digits for remote logon.	Up to four digits (default not assigned)
45-04-08	**Voice Mail Digit Add Assignment – Conversation Recording**	Use to define the digits for conversation recording.	Up to four digits (default not assigned)
45-04-09	**Voice Mail Digit Add Assignment – Clear Down String**	Use to define the digits for clear down string.	Up to four digits (default not assigned)
45-05-01	**Voice Mail Send Protocol Signal Without Additional Digits – Remote Log-On Internal**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
45-05-02	**Voice Mail Send Protocol Signal Without Additional Digits – Direct Log-On**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
45-05-03	**Voice Mail Send Protocol Signal Without Additional Digits – Transfer Message/QVM**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
45-05-04	**Voice Mail Send Protocol Signal Without Additional Digits – Forward-All**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
45-05-05	**Voice Mail Send Protocol Signal Without Additional Digits – Forward-Busy**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
45-05-06	**Voice Mail Send Protocol Signal Without Additional Digits – Forward RNA**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
45-05-07	**Voice Mail Send Protocol Signal Without Additional Digits – Remote Log-On**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
45-05-08	**Voice Mail Send Protocol Signal Without Additional Digits – Conversation Recording**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
45-05-09	**Voice Mail Send Protocol Signal Without Additional Digits – Clear Down String**	Use to send trunk number and/or station number information if integrating to Voice Mail when Program 45-04-XX is left blank and 45-01-15 is set to Program.	0:Off 1:On (default = 0)
80-03-01	**DTMF Tone Receiver Setup – Detect Level**	Used to define the Detect Level for DTMF Tone Receiver.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm (default: Type 1~5 = 0)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-02	**DTMF Tone Receiver Setup – Start delay time**	Used to customize the Start delay time for DTMF Tone Receivers.	0~255 (0.25 ms ~ 64 ms) (default: Type 1~5 = 0)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-03	**DTMF Tone Receiver Setup – Min. detect level**	Use to define the various minimum detect levels for the DTMF Tone Receiver.	0~15 detect level 0: –10dBm(0) to –25dBm(15) detect level 1: –15dBm(0) to –30dBm(15) detect level 2: –20dBm(0) to –35dBm(15) detect level 3: –25dBm(0) to –40dBm(15) detect level 4: –30dBm(0) to –45dBm(15) detect level 5: –35dBm(0) to –50dBm(15) detect level 6: –40dBm(0) to –55dBm(15) detect level 7: -45dBm(0) to -60dBm(15) detect level 8: -50dBm(0) to -65dBm(15) detect level 9: -55dBm(0) to -70dBm(15) detect level 10: -60dBm(0) to -75dBm(15) detect level 11: -65dBm(0) to -80dBm(15) detect level 12: -70dBm(0) to -85dBm(15) detect level 13: -75dBm(0) to -90dBm(15) detect level 14: -80dBm(0) to -95dBm(15) detect level 15: -85dBm(0) to -100dBm(15) default: Type 1 = 10 (-20dBm) Type 2 = 15 (-25dBm) Type 3~5 = 10 (-20dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-04	**DTMF Tone Receiver Setup – Max. detect level**	Use to define the various maximum detect levels for the DTMF Tone Receiver.	0~15 detect level 0: 0dBm(0) to –15dBm(15) detect level 1: –5dBm(0) to –20dBm(15) detect level 2: –10dBm(0) to –25dBm(15) detect level 3: –15dBm(0) to –30dBm(15) detect level 4: –20dBm(0) to –35dBm(15) detect level 5: –25dBm(0) to –40dBm(15) detect level 6: –30dBm(0) to –45dBm(15) detect level 7: -35dBm(0) to -50dBm(15) detect level 8: -40dBm(0) to -55dBm(15) detect level 9: -45dBm(0) to -60dBm(15) detect level 10: -50dBm(0) to -65dBm(15) detect level 11: -55dBm(0) to -70dBm(15) detect level 12: -60dBm(0) to -75dBm(15) detect level 13: -65dBm(0) to -80dBm(15) detect level 14: -70dBm(0) to -85dBm(15) detect level 15: -75dBm(0) to -90dBm(15) default: Type 1~5 = 2 (-2dBm)

Program Number	Program Name	Description/Comments	Assigned Data
80-03-05	**DTMF Tone Receiver Setup – Forward twist level**	Use to define the various forward twist levels for the DTMF Tone Receiver.	0~9 (1dB ~ 10dB) [default: Type 1~5 = 5 (6dBm)]
80-03-06	**DTMF Tone Receiver Setup – Backward twist level**	Use to define the various backward twist levels for the DTMF Tone Receiver.	0~9 (1dB ~ 10dB) [default: Type 1~5 = 0 (1dBm)]
80-03-07	**DTMF Tone Receiver Setup – ON detect time**	Use to define the on detect time for the DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) [default: Type 1~5 = 1 (30ms)]
80-03-08	**DTMF Tone Receiver Setup – OFF detect time**	Use to define the off detect time for the DTMF Tone Receiver.	1~255 (15+ 15 ms ~ 3825 ms) [default: Type 1~5 = 1 (30ms)]
80-04-01	**Call Progress Tone Detector Setup – Detection Level**	Use to define the detection levels for the Call Progress Tone Detector.	0 = 0dBm ~ -25dBm 1 = -5dBm ~ -30dBm 2 = -10dBm ~ -35dBm 3 = -15dBm ~ -40dBm 4 = -20dBm ~ -45dBm 5 = -25dBm ~ -50dBm 6 = -30dBm ~ -55dBm default: Type 1 (DT) – 0 (-25dBm) Type 2 (BT) – 0 (-25dBm) Type 3 (RBT) – 0 (-25dBm) Type 4, Type 5 – 0
80-04-02	**Call Progress Tone Detector Setup – Min. Detection Level**	Use to define the minimum detection levels for the Call Progress Tone Detector.	0~15 detect level 0 : –15dBm (0) to –30dBm(15) detect level 1 : –30dBm (0) to –45dBm(15) detect level 2 : –40dBm (0) to –55dBm(15) default: Type 1 (DT) – 15 (-25dBm) Type 2 (BT) – 15 (-25dBm) Type 3 (RBT) – 15 (-25dBm) Type 4, Type 5 – 0

Program Number	Program Name	Description/Comments	Assigned Data
80-04-03	**Call Progress Tone Detector Setup – S/N Ratio**	Use to define the S/N ratio for the Call Progress Tone Detector.	0~4 (0dB ~ -20dB) default: Type 1 (DT) – 4 (-20dB) Type 2 (BT) – 4 (-20dB) Type 3 (RBT) – 4 (-20dB) Type 4, Type 5 – 0
80-04-04	**Call Progress Tone Detector Setup – No Tone Time**	Use to define the no tone time for the Call Progress Tone Detector.	0~255 (30+30-7680ms) default: Type 1 (DT) – 132 (3990ms) Type 2 (BT) – 132 (3990ms) Type 3 (RBT) – 132 (3990ms) Type 4, Type 5 – 0
80-04-05	**Call Progress Tone Detector Setup – Pulse Count**	Use to define the pulse count for the Call Progress Tone Detector.	1~255 default: Type 1 (DT) – 1 Type 2 (BT) – 1 Type 3 (RBT) – 1 Type 4, Type 5 – 0
80-04-06	**Call Progress Tone Detector Setup – ON minimum time**	Use to define the on minimum time for the Call Progress Tone Detector.	1~255 (30+30-7680ms) default: Type 1 (DT) – 63 (300ms) Type 2 (BT) – 9 (300ms) Type 3 (RBT) – 25 (780ms) Type 4, Type 5 – 0
80-04-07	**Call Progress Tone Detector Setup – ON maximum time**	Use to define the on maximum time for the Call Progress Tone Detector.	0~255 (30+30-7680ms) default: Type 1 (DT) – 0 Type 2 (BT) – 14 (450ms) [ET] Type 3 (RBT) – 40 1230ms) Type 4, Type 5 – 0

Program Number	Program Name	Description/Comments	Assigned Data
80-04-08	**Call Progress Tone Detector Setup – OFF minimum time**	Use to define the off minimum time for the Call Progress Tone Detector.	1~255 (30+30-7680ms) default: Type 1 (DT) – 1 (60ms) Type 2 (BT) – 9 (300ms) Type 3 (RBT) – 52 (2520ms) Type 4, Type 5 – 0
80-04-09	**Call Progress Tone Detector Setup – OFF maximum time**	Use to define the off maximum time for the Call Progress Tone Detector.	0~255 (30+30-7680ms) default: Type 1 (DT) – 1 (60ms) Type 2 (BT) – 14 (450ms) Type 3 (RBT) – 80 (3480ms) Type 4, Type 5 – 0

Operation

Calling your Mailbox

To call your mailbox:

Multiline Terminal

1. Press your **Voice Mail** key (Program 15-07 or SC 851: 77) or the **Message** key.

   - OR -

   Press **Speaker** and dial the Voice Mail Master Number. After Voice Mail Answers, dial your mailbox number.

   . *Your mailbox number is normally the same as your extension number. You may optionally dial a co-worker's mailbox - or use this procedure to call your mailbox from a co-worker's telephone.*

2. If requested by Voice Mail, enter your security code.

   . *Ask your Voice Mail system administrator for your security code.*

   . *Normally, your Message Waiting LED goes out (if applicable). If it continues to flash, you have unanswered Message Waiting requests or a new General Message.*

Single Line Telephone

1. Lift the handset and dial **717**.

   . *If you are at a co-worker's telephone, you can dial the Voice Mail master number and your mailbox number instead. You can also use this procedure from your own telephone to call a co-worker's mailbox.*

2. If requested by Voice Mail, enter your security code.

Checking Messages

1. Press the **Message** key once.
   - *The voice mail is called.*
   - *When there are new messages, the Large LED on the telephone flashes as red.*
   - *With this option set, the MSG key can be used as a Voice Mail key for any function [calling voice mail or transfer call a to voice mail (Hold + MSG + Extension Number), etc.].*

Recording your Call

To record your active call in your mailbox:

Multiline Terminal

1. Press **Voice Mail Record** key (Program 15-07 or SC 851: code 78).
   - *You hear two beeps and your Record key flashes. The beeps periodically repeat to remind you that you are recording.*
   - *To stop recording, press the Voice Mail Record key again. You can restart and stop recording as required.*

- OR -

1. Press **Hold**.
2. Dial **754**.
   - *The system automatically reconnects you to your call.*
   - *To stop recording, place the call on hold then pick the call back up. You can restart and stop recording as required.*

Single Line Telephone

1. Hookflash.
2. Dial **754**.
   - *The system automatically reconnects you to your call.*
   - *To stop recording, hookflash twice. You can restart and stop recording as required.*

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Voice Mail Message Indication on Line Keys

Description

Voice Mail Message Indication on Line Keys indicates a new voice mail message on Line Keys or DSS/BLF keys.

Conditions

- When a DSS key of an installed extension is pressed when flashing it calls that extension.
- You have to use a VM Message key (code 77) to get the indication when there is a new message. It can also be used for installed extensions.
- VM Message key calls the VM and logs into the mail box.
- If an VM Message key for extension A is placed on extension A, the Large LED does not light on extension A for new message indication. Instead the VM Message key flashes green.
- VM message LED is a higher priority then any other status for the DSS/BLF key.
- The enabling or disabling of Voice Mail Indication on BLF enables the station with the message to show up on other telephones. It does not enable/disable stations from seeing the BLF indication.
- Virtual Extension Keys assigned as code *03 do not support Voice Mail Message Indication on Line Keys.

Default Setting

Not allowed

System Availability

Terminals

All Multiline Terminals

Required Component(s)

VM (Digital or Analog)

Related Features

Class of Service

Direct Station Selection (DSS) Console

Programmable Function Keys

InMail

Voice Mail Integration (Analog)

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-07-01	**Programmable Function Keys**	Assign DSS/BLF function keys on Multiline telephones (code 01 + extension number) or Message Key (Code 77 + mailbox number).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-13-41	**Class of Service Options (Supplementary Service) – Voice Mail Message Indication on DSS**	Turn Off (0) or On (1) the Voice Mail Message Indication for an extension on a DSS console.	0 = Off 1 = On (default = 0 for COS 1~15)
30-01-01	**DSS Console Operating Mode**	Set the mode of the system DSS Consoles. The available options are Regular (Business) Mode (0), Hotel Mode (1), ACD Monitor Mode (2) or Business/ACD Mode (3).	0 = Business Mode 1 = Hotel Mode 2 = ACD Monitor Mode 3 = Business/ACD Mode (default = 0)
30-02-01	**DSS Console Extension Assignment – Extension Number**	The extension number for the multiline terminal connected with the DSS console (up to eight digits).	Up to eight digits. (default not assigned)

Program Number	Program Name	Description/Comments	Assigned Data
30-03-01	**DSS Console Key Assignment**	Customize DSS Console keys to function as DSS keys, Service Code keys, Programmable Function Keys, and One-Touch Calling keys. The key (when defined as a DSS/One-Touch key [code 01] can have any function with up to four digits (e.g., extension number or Service Code). The function information (such as extension number or Service Code) would then be entered as additional data.	Key Number 001~200 0~99 (General Functional Level) 97 = Door Box Access key (additional data: 1~8 Door Box No.) * 00 ~ * 99 (Appearance Functional Level)
30-05-02	**DSS Console Lamp Table – Busy Extension**	Use to define the LED patterns for busy extension functions on the DSS consoles.	0~7 [default = 7 (On)]
30-05-03	**DSS Console Lamp Table – DND Extension**	Use to define the LED patterns for DND extension functions on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-04	**DSS Console Lamp Table – ACD Agent Busy**	Use to define the LED patterns for ACD agent busy functions on the DSS consoles.	0~7 [default = 7 (On)]
30-05-05	**DSS Console Lamp Table – Out of Schedule (ACD DSS)**	Use to define the LED patterns for out of schedule (ACD/DSS) functions on the DSS consoles.	0~7 [default = 0 (Off)]
30-05-06	**DSS Console Lamp Table – ACD Agent Log Out (ACD DSS)**	Use to define the LED patterns for ACD agent log out (ACD/DSS) functions on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-07	**DSS Console Lamp Table – ACD Agent Log In (ACD DSS)**	Use to define the LED patterns for ACD agent login (ACD/DSS) functions on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-08	**DSS Console Lamp Table – ACD Agent Emergency (ACD DSS)**	Use to define the LED patterns for ACD agent emergency (ACD/DSS) functions on the DSS consoles.	0~7 [default = 6 (IW)]
30-05-09	**DSS Console Lamp Table – Hotel Status Code 1 (Hotel DSS)**	Use to define the LED patterns for hotel status code 1 (hotel DSS) functions on the DSS consoles.	0~7 [default = 7 (On)]
30-05-10	**DSS Console Lamp Table – Hotel Status Code 2 (Hotel DSS)**	Use to define the LED patterns for hotel status code 2 (hotel DSS) functions on the DSS consoles.	0~7 [default = 1 (FL)]
30-05-11	**DSS Console Lamp Table – Hotel Status Code 3 (Hotel DSS)**	Use to define the LED patterns for hotel status code 3 (hotel DSS) functions on the DSS consoles.	0~7 [default = 2 (WK)]

Program Number	Program Name	Description/Comments	Assigned Data
30-05-12	**DSS Console Lamp Table – Hotel Status Code 4 (Hotel DSS)**	Use to define the LED patterns for hotel status code 4 (hotel DSS) functions on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-13	**DSS Console Lamp Table – Hotel Status Code 5 (Hotel DSS)**	Use to define the LED patterns for hotel status code 5 (hotel DSS) functions on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-14	**DSS Console Lamp Table – Hotel Status Code 6 (Hotel DSS)**	Use to define the LED patterns for hotel status code 6 (hotel DSS) functions on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-15	**DSS Console Lamp Table – Hotel Status Code 7 (Hotel DSS)**	Use to define the LED patterns for hotel status code 7 (hotel DSS) functions on the DSS consoles.	0~7 [default = 6 (IW)]
30-05-16	**DSS Console Lamp Table – Hotel Status Code 8 (Hotel DSS)**	Use to define the LED patterns for hotel status code 8 (hotel DSS) functions on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-17	**DSS Console Lamp Table – Hotel Status Code 9 (Hotel DSS)**	Use to define the LED patterns for hotel status code 9 (hotel DSS) functions on the DSS consoles.	0~7 [default = 3 (RW)]
30-05-18	**DSS Console Lamp Table – Hotel Status Code 0 (Hotel DSS)**	Use to define the LED patterns for hotel status code 0 (hotel DSS) functions on the DSS consoles.	0~7 [default = 0 (Off)]
30-05-19	**DSS Console Lamp Table – Hotel Status Code * (Hotel DSS)**	Use to define the LED patterns for hotel status code * (hotel DSS) functions on the DSS consoles.	0~7 [default = 4 (IR)]
30-05-20	**DSS Console Lamp Table – Hotel Status Code # (Hotel DSS)**	Use to define the LED patterns for hotel status code # (hotel DSS) functions on the DSS consoles.	0~7 [default = 5 (IL)]
30-05-21	**DSS Console Lamp Table – VM Message Indication**	Use to define the LED patterns for VM message indication functions on the DSS consoles.	0~7 [default = 3 (RW)]

Operation

To program a DSS/BLF key on a telephone:

1. Press **Speaker**.
2. Dial **851**.
3. Press the key you want to program.
4. Dial **01**.

5. Dial the number of the extension you want to appear on the key.
6. Press **Hold**.
7. Press **Speaker**.

To program a VM Message key on a telephone:

1. Press **Speaker**.
2. Dial **851**.
3. Press the key you want to program.
4. Dial **77**.
5. Dial the number of the extension you want to appear on the key.
6. Press **Speaker**.

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Voice Over

Description

Voice Over lets a user interrupt a busy station user that is on another call. With Voice Over, the busy extension user hears an alert tone followed by the voice of the interrupting party. The extension user receiving the Voice Over can respond to the interrupting party without being heard by the original caller. If desired, the user can easily switch between their original caller and the interrupting co-worker. The original caller and the interrupting party can never hear each other.

Example:

Voice Over could help a lawyer waiting for an urgent call. While on a call with another client, the lawyer's paralegal could announce the urgent call as soon as it comes in. The lawyer could then give the paralegal instructions how to handle the situation – all without the original client hearing the conversation.

Both multiline terminal users and SLT set users can initiate and receive a Voice Over.

To enable Voice Over, a multiline terminal can have a function key programmed for Voice Over. In addition to one- touch Voice Over operation, the key shows the Voice Over status as follows:

When the key is . . .	You are . . .
Off	Not using Voice Over
Flashing (Red)	Listening to the interrupting party
On (Green)	Responding to the interrupting party

Conditions

- While active, Voice Over uses a Conference circuit on a CD-CP00. Refer to the Conference feature for Conference circuit programming.
- Voice Over can interrupt a trunk call only if the trunk is set up for at least six seconds.
- Do not use Voice Over to a user on speakerphone as the conversation may be heard by the outside party.
- When a multiline terminal user performs Voice Over, the speech path is 1-way from the originator to the destination.
- The Voice Over Access Code can be assigned on a Programmable Function Key.
- An override tone is sent to both calling and called parties. A single line telephone user can receive Voice Over. After a Tone Override is heard, Voice Over can be set.

- When a Programmable Function Key (programmed with the Voice Over Access Code) is pressed, the LED lights while responding to the page.
- When a multiline terminal has a Handsfree Unit programmed, the Voice Over call can be received and answered handsfree.
- When Data Line Security is assigned to a station, the Voice Over to the station is disabled.
- When a multiline terminal user performs Voice Over, the speech path is 1-way from the originator to the destination.
- An extension user cannot Voice Over to another extension user in a Conference.
- If you place a call on hold and then Voice Over to a busy extension, the call on hold does not transfer to the busy party when you end the Voice Over.
- A station can receive only one Voice Over at a time.
- A multiline terminal user cannot answer a Voice Over with an internal call on hold.
- An attempt to Voice Over a station can be denied if the station is in DND (Do Not Disturb) Mode, Automatic Redial is activated, during Station Programming, during Incoming Ringing, during Internal/External Paging, during a Conference Call, during a conference call on hold, the terminal is on internal hold, or the terminal has a call on internal hold.
- When a single line telephone is on a call and Voice Over is presented, the single line telephone cannot talk back to the party that originated the Voice Over.
- Voice Over to a single line telephone is not recommended because cross talk is inherent in the side tone of analog telephones.
- Voice Over to a user on speakerphone is not recommended because the conversation may be heard by the outside party.
- Answering a Voice Over requires a uniquely programmed Voice Over key.

Default Setting

Disabled

System Availability

Terminals

Multiline and Single Line Terminals

Required Component(s)

None

Related Features

Conference

Off-Hook Signaling

Programmable Function Keys

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-12-41	**Service Code Setup (for System Access) – Voice Over**	The service code used for the Voice Over feature (default: 890). . *To use Service Code 890 for Voice Over, Program 11-16-08 (Single Digit Service Code Setup – Voice Over) must be undefined.*	MLT (default = 890)
11-16-08	**Single Digit Service Code Setup – Voice Over**	Service code used for the Voice Over feature (default: not assigned).	(default not assigned)
15-07-01	**Programmable Function Keys**	Assign a function key for Voice Over (code 48).	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)**	Allows a busy extension to manually (0) or automatically (1) receive off-hook signals.	0 = Off 1 = On (default = 0 for COS 1~15)
21-01-03	**System Options for Outgoing Calls – Trunk Interdigit Time (External)**	Program how long an extension must wait before using the Voice Over feature can be used on a call (this time expires before putting a call in a talk state). This time also affects Barge-In.	0~64800 (seconds) (default = 10 seconds)

Operation

To initiate a Voice Over to a busy extension:

1. Press **Voice Over** key (Program 15-07 or SC 851: 48)

   - OR -

   Dial **890**.

   . *You hear an alert tone and the Voice Over key flashes. You can talk to the called party after the alert tone ends.*

   . *To use Service Code 890 for Voice Over, Program 11-16-09 (Voice Mail Service Code) must be undefined.*

To respond to a Voice Over alert tone to your extension:

You can respond only if you have a Voice Over key.

1. Press the **Voice Over** key.

   . *The Voice Over key lights steadily (green) and you can talk to the interrupting party.*

   . *You cannot respond by dialing the Voice Over Service Code (6).*

To return to your original call:

1. Press the **Voice Over** key.
2. Press the **Voice Over** key again.

   . *Your Voice Over key flashes red when you are talking to your original call.*

   . *To switch between your original call and the interrupting party, just keep pressing the Voice Over key.*

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Voice Response System (VRS)

Description

The PZ-VM21 daughter board provides the option for the Voice Response System (VRS) which gives the system voice recording and playback ability. The VRS CompactFlash card provides up to 100 system messages (General Message, Automated Attendant greetings, ACD messages, and the Preamble).

- **General Message – provides a prerecorded message to which any user can listen**
- **Automated Attendant (Operator Assistance) – answers incoming calls, plays a greeting to the caller and then lets the caller directly dial a system extension**
- **ACD Messages – provides announcement and overflow messages for ACD groups**
- **Transfer to the VRS – allows any extension user to Transfer their outside call to the VRS**
- **Voice Prompting Messages – plays call and feature status messages to users**
- **Time, Date and Station Number Check – lets a multiline terminal extension user quickly hear a recording for the time, date, or the extension number**

VRS Messages

The VRS allows you to record up to 100 VRS messages. You allocate these messages for Automated Attendant greetings, the General Message, ACD messages and the Preamble message. The total storage time for all messages is approximately 16 hours(for 256MB CF)/32 hours(for 512MB CF). The maximum duration for any message is two minutes – this is not programmable. VRS messages are stored on a Compact Flash drive, and do not require battery back up.

Any on-premise extension caller can listen, record and erase VRS Messages (unless restricted in programming). DISA and DID callers can listen and record VRS messages (unless restricted in programming).

General Message

A General Message is a prerecorded message available to all callers. A General Message typically contains important company information that all employees should hear. To hear the General Message, an employee can go to any multiline terminal and press 4 (for General Message). You can restrict the ability to record the General Message in an extension Class of Service. This allows you to give recording ability to the System Administrator or Communications Manager, for example, but not any other employee. The Message Waiting LED at each telephone flashes when a new General Message is recorded. After the extension user listens to the message, the Message Waiting LED goes out.

Park and Page

When an extension user is away from their telephone, Park and Page can let them know when they have a call waiting to be answered. The Personal Greeting and Park & Page options can have up to 200 total messages (note that the Park & Page feature uses two messages). To enable Park and Page, the user records a Personal Greeting along with an additional Paging announcement. Park and Page then answers an incoming call and plays the Personal Greeting to the caller. The caller then listens to Music on Hold (if available) while the system broadcasts the prerecorded Paging announcement. When the extension user hears the Page, they can go to any telephone and use Directed Call Pickup to intercept the call. Refer to Call Forwarding on page 1-143, Paging, External on page 1-673, Paging, Internal on page 1-681, and Park on page 1-687.

Automated Attendant (Operator Assistance)

Automated Attendant automatically answers outside calls, plays a prerecorded greeting and then lets the outside callers directly dial system extensions, Department Calling Groups and Voice Mail. Automated Attendant provides immediate answering and routing of outside calls without the need for an operator or dispatcher. Automated Attendant provides:

- **Single Digit Dialing**

  Single Digit Dialing allows Automated Attendant callers to dial extensions, Department Calling Groups, and Voice Mail by pressing a single digit. For example, your Automated Attendant can greet calls with, *"Thank you for calling. To place an order, dial 1. To check on an existing order, dial 2. To speak with an operator, dial 0."* You can set up single digit dialing for each VRS Message programmed to answer outside calls via the Automated Attendant. This allows you to set up day/night/holiday greetings or unique greetings for each incoming trunk. (Keep in mind that, with a default system, if you assign destinations to digits 3, 4 and 5, outside callers cannot dial system extensions.)

- **Simultaneous Call Answering**

  With VRS installed, the Automated Attendant can answer up to 16 calls simultaneously.

- **Flexible Routing**

  The outside caller can directly dial any system extension, Department Calling Group or Voice Mail. If the caller dials a busy extension, Automated Attendant allows them to dial another extension or wait for the busy extension to become free.

- **Automatic Overflow**

  Automatic Overflow can automatically redirect a call if it cannot go through. This can happen if all VRS ports are busy, if the called extension does not answer, or if the caller misdials or waits too long to dial. (This occurs if the caller is using a dial pulse telephone.) When the call overflows, it rings a designated Ring Group or the Voice Mail system.

- **Programmable Automated Attendant Greetings**

  You can record a different greeting for each trunk answered by the Automated Attendant. The greetings can be different in the day, at night or on holidays or weekends. You can also have a special greeting if the caller misdials. You record the greetings just the way you want. For example,

"*Dial the 3-digit extension number you wish to reach, dial 500 for Sales or dial 600 for Customer Service.*" When assigning and recording Automated Attendant greetings, you can choose among the 48 VRS messages.

VRS Waiting Message

Using VRS Waiting Message, the system can automatically answer an incoming trunk call first (either a normal trunk or one designated for a department group) to let the outside caller hear a recorded message when the call is not answered in a programmed time. With this feature, the call keeps ringing at the same destination until it is answered or until other programming, takes affect.

This feature can use up to two messages for an incoming call and the duration between the messages is programmable. These messages are repeated and, between these messages, either ring back tone or Music on Hold can be played.

This feature has two different modes:

- **Permanent Mode**
  This mode sets the feature using system programming and is available for the following types of calls.
  - Normal Incoming Call
    When the call is not answered or a user presses the VRS Waiting Message function key, this feature is initiated. The waiting message is played until other no-answer program (e.g. transfer to another incoming ring group or disconnect) takes affect.
  - Designated Call for the Department Group
  - When a department group receives a call from a DID, DIL, DISA or E&M trunk and all terminals in the group are busy, the call is put in a queue and VRS Waiting Message is also initiated. The waiting message is played until other no-answer program (e.g. transfer to another incoming ring group or disconnect) takes affect or a terminal becomes available to receive the department call.
- **Manual Mode**
  This mode can be programmed by pressing the VRS Waiting Message function key from a multiline terminal to set this feature for each incoming ring group. This mode can be used for normal incoming calls only.

The following programs would be used to define the VRS Waiting Message feature and the trunk overflow:

- **11-10-20: Service Code Setup (for System Administrator) – VRS - Record/Erase Message**
- **15-07: Programmable Function Keys**
  Automatic Answer with Delay Message Setup (Function Number 52)

  . *Function Key 52 can be used to enable the VRS Waiting Message feature when Program 22-01-10 is set to 1 (Changed by Manual Operation).*

  Automatic Answer with Delay Message Start (Function Number 53)

  . *Function Key 53 can be used to play the VRS Waiting Message immediately when Function Key 53 + the ringing Trunk Appearance Key are pressed.*
- **20-07-13: Class of Service Options (Administrator Level) – VRS Record (VRS Msg Operation)**

- **20-15-11: Ring Cycle Setup – VRS Waiting Message Incoming Call**
- **22-01-04: System Options for Incoming Calls – DIL No Answer Recall Time**
- **22-01-08: System Options for Incoming Calls – DID Pilot Call No Answer Timer**
- **22-01-10: System Options for Incoming Calls – VRS Waiting Message Operation**
- **22-01-11: System Options for Incoming Calls – VRS Waiting Message Interval Time**
- **22-08-01: DIL/IRG No Answer Destination**
- **22-14-01~07: VRS Delayed Message for IRG**
- **22-15-01~07: VRS Waiting Message for Department Group**
- **25-07-02: System Timers for VRS/DISA – VRS/DISA No Answer Time**
- **25-07-03: System Timers for VRS/DISA – Disconnect after VRS/DISA retransfer to IRG**

Transfer to the VRS

Any extension user can Transfer their outside call to the VRS. This lets their caller take advantage of the Automated Attendant's extensive routing abilities. To Transfer the call, the user places the call on Hold, dials the unique VRS service code (set up in system programming : default 782), and hangs up.

Voice Prompting Messages

The VRS feature provides the system with Voice Prompting Messages. These Voice Prompting Messages tell the extension user the status or progress of their call. For example, if a user calls extension 300 when it is busy, they hear, "*Station 300 is unavailable, please dial a new station or dial 850 to wait."*

The following table shows the available Voice Prompting Messages.

Table 1-25 Voice Prompting Messages

Message No.	Message	This message will play when . . .
1-00	This is station	A user dials 6 for the extension number.
1-01	Station	A user dials 6 for the extension number.
1-02	Is busy, for callback dial	A user is calling a busy extension.
1-03	All lines are busy, for callback dial	A user dials 9 or 704 (+ trunk group) and all trunks are busy.
1-04	Please do not disturb	A user calls an extension that has enabled Do Not Disturb.
1-05	Please hold on, all lines are busy, your call will be answered when a line becomes free.	ACD message - refer to the UNIVERGE SV8100 Automatic Call Distribution Manual.
1-06	Please hold on, your call is being rerouted	Call Forwarding Off-Premise is rerouting your call.
1-07	The lowest cost line is busy, please wait for the next one.	ARS tries to reroute the user's call and the least costly route is busy.
1-08	The number you have dialed is not in service.	User dials a Service Code that Class of Service prevents.
1-09	You have a message.	An extension user has a Message Waiting to which they have not responded.
1-10	You have a message.	An extension user has a Message Waiting to which they have not responded.
1-11	Your calls have been forwarded.	An extension user has forwarded their calls.
1-12	Vacant number	An extension user has dialed an extension that does not exist.
1-13	Is unavailable	An outside caller dials an extension through the Automated Attendant and the extension is busy.
1-14	Please dial a new station	
1-15	Or dial	
1-16	To wait	
1-17	To leave your number	
1-18	Dial **#** to call you back at	

Table 1-25 Voice Prompting Messages (Continued)

Message No.	Message	This message will play when . . .
1-19	Enter your area code and telephone number	An outside caller dials an extension through the Automated Attendant and the extension is busy.
1-20	Please enter your password	
1-21	Please enter an account code	A user tries to place a trunk call and Forced Account Codes are enabled.
1-22	Please start recording	A user has dialed the code to record a VRS message.
1-23	Recording finished	A user is recording a VRS message and they have exceeded the maximum allowed recording length.
1-24	Audio file is full	There is no more space available in the VRS for storing messages.
1-25	To listen dial	A user is trying to record a VRS message and the recording already exists.
1-26	To erase dial	
1-27	To re-record dial	
1-28	To save dial	
1-29	To leave a message	
1-30	Just a moment	
1-31	Hello	
1-32	Thank you	
1-33	Good-bye	
2-00	Oh	A user dials 6 for the extension number or 8 for the time.
2-01	Dial	
2-02	Star	
2-03	Pound	
2-04	Zero	

Table 1-25 Voice Prompting Messages (Continued)

Message No.	Message	This message will play when . . .
2-05	One	A user dials 6 for the extension number, 8 for the time and date or as part of a spoken code (e.g., 714).
2-06	Two	
2-07	Three	
2-08	Four	
2-09	Five	
2-10	Six	
2-11	Seven	
2-12	Eight	
2-13	Nine	
2-14	Ten	
2-15	Eleven	
2-16	Twelve	
2-17	Thirteen	
2-18	Fourteen	
2-19	Fifteen	
2-20	Sixteen	
2-21	Seventeen	
2-22	Eighteen	
2-23	Nineteen	
2-24	Twenty	
2-25	Thirty	
2-26	Forty	
2-27	Fifty	
2-28	Sixty	
2-29	Seventy	
2-30	Eighty	
2-31	Ninety	
2-32	Hundred	

Table 1-25 Voice Prompting Messages (Continued)

Message No.	Message	This message will play when . . .
2-33	Thousand	
2-43	Message	
2-44	Messages	
2-64	January	
2-65	February	
2-66	March	
2-67	April	
2-68	May	
2-69	June	
2-70	July	
2-71	August	
2-72	September	
2-73	October	
2-74	November	
2-75	December	
2-76	Sunday	A user dials 8 for the date.
2-77	Monday	
2-78	Tuesday	
2-79	Wednesday	
2-80	Thursday	
2-81	Friday	
2-82	Saturday	
2-83	The date is	A user dials 8 for the date.
3-04	The time is	A user dials 8 for the time.
3-05	AM	
3-06	PM	

Preamble

You can use the Preamble message to set up an *Auto-Answer with Greeting* application. When a receptionist answers a call, the VRS can play a preamble message such as, “Welcome to ABC Company. How can I help you?” When the caller replies, the receptionist answers, “One moment please,” and quickly extends the call to the desired party. This ensures that all incoming calls are answered quickly, courteously and consistently.

Time, Date and Station Number Check

If the system has a DSP daughter board installed for VRS, any multiline terminal user can find out the time, date or the extension number while their telephone is idle (on-hook). The time and date check saves the user time since they do not have to look for a clock or calendar. Hearing the extension number conveniently identifies non-display multiline terminals. To find out their extension number, the user presses 6 (for **N**umber). To listen to the time and date, the user presses 8 (for **T**ime/Date).

Available with 64-Port Basic CD-CP00

The VRS feature is available with the 64-port Basic CD-CP00 (no feature Upgrade PAL chip required).

The VRS feature requires a PZ-VM21 attached to the CD-CP00 with the optional VRS flash card installed. Although the PZ-VM21 is recognized for this feature, it provides no additional tone resources (DTMF receivers, Caller ID receivers, or call progress tone detection).

Conditions

- VRS record time is fixed at two minutes and cannot be changed.
- The Automated Attendant (VRS) can answer up to 16 calls simultaneously.
- If Synchronous Ringing is enabled, the Preamble message cannot be used.

Default Setting

Disabled

System Availability

Terminals

Not applicable

Required Component(s)

PZ-VM21

Related Features

Transfer

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
11-10-20	**Service Code Setup (for System Administrator) – VRS - Record/ Erase Message**	Define the service code to use to record or erase a VRS message.	MLT, SLT (default = 716)
11-10-21	**Service Code Setup (for System Administrator) – VRS - General Message Playback**	Define the service code to use to playback the general message.	MLT, SLT (default = 711)
11-10-22	**Service Code Setup (for System Administrator) – VRS - Record or Erase General Message**	Define the service code to use to record or erase a general message on the VRS.	MLT, SLT (default = 712)
15-07-01	**Programmable Function Keys**	For the VRS Waiting Message feature, assign the VRS Incoming Call Queuing Setup key (code 52 + ring group **#**) to manually enable the feature.	Line Key 1~48 0~99 (Normal Function Code 851 by default) *00 ~ *99 (Appearance Function Code) (Service Code 852 by default)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to extensions.	Day Night/Mode: 1~8 Class of Service of Extensions (1~15) Default: All extension port = Class 1
20-07-13	**Class of Service Options (Administrator Level) – VRS Record (VRS Msg Operation)**	Turns Off (0) or On (1) an extension ability to record, erase and listen to VRS messages.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)

Program Number	Program Name	Description/Comments	Assigned Data
20-07-14	**Class of Service Options (Administrator Level) – VRS General Message Play**	Turns an extension Off (0) or On (1) to dial 4 or Service Code 611 to listen to the General Message.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-07-15	**Class of Service Options (Administrator Level) – VRS General Message Record/Delete**	Turns Off (0) or On (1) an extension for dialing Service Code 612 and record, listen to, or erase the General Message.	0 = Off 1 = On (default = 0 for COS 1~14) (default = 1 for COS 15)
20-11-15	**Class of Service Options (Hold/ Transfer Service) – VRS Personal Greeting (Message Greeting)**	In an extension Class of Service, enable (1) or disable (0) the ability to dial Service Code 616 to record, listen to or erase a Personal Greeting. This option also affects Park and Page.	0 = Disable 1 = Enable (default = 1 for COS 1~15)
20-13-23	**Class of Service Options (Supplementary Service) – Display the Reason for Transfer**	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, DND).	0 = Off 1 = On (default = 0 for COS 1~15)
20-15-11	**Ring Cycle Setup – VRS Waiting Message Incoming Call**	Set the ring cycle callers hear when the VRS Waiting Message feature is used.	Ringing Cycle = 1~13 (default = 6)
21-01-02	**System Options for Outgoing Calls – Intercom Interdigit Time**	When placing Intercom calls, users must dial each digit within this time.	0~64800 (seconds) (default = 10 seconds)
22-01-10	**System Options for Incoming Calls – VRS Waiting Message Operation**	Determine whether the VRS Waiting Message is automatically (0) or manually (1) set.	0 = Enable Always 1 = Change by Manual Operation (default = 0)
22-01-11	**System Options for Incoming Calls – VRS Waiting Message Interval Time**	For VRS Waiting Message, determine the number of seconds between the VRS messages (0~64800).	0~64800 (seconds) (default = 20 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
22-02-01	**Incoming Call Trunk Setup**	For each Night Service mode, enter 1 if trunk should be automatically answered by VRS Automated Attendant.	Trunks 1~200 0 = Normal 1 = VRS (second dial tone if no VRS installed) 2 = DISA 3 = DID 4 = DIL 5 = E&M Tie line 6 = Delayed VRS 7 = ANI/DNIS 8 = DID(DDI) Mode Switching (default = 0)
22-04-01	**Incoming Extension Ring Group Assignment**	Use this program to assign extensions (up to 32) to Ring Groups. Calls ring extensions according to Ring Group programming.	Maximum eight digits Default: Extensions 200(first port) ring for incoming Ring Group 1 calls. No other extensions ring for incoming Ring Group 1 calls.
22-14-01	**VRS Delayed Message for IRG – 1st Waiting Message Start Time**	For each Ring Group, set how long the system waits before playing the first message (0~64800 seconds). This timer is also used for VRS Waiting Message.	0~64800 (seconds) (default = 0)
22-14-02	**VRS Delayed Message for IRG – 1st Waiting Message Number**	For each Ring Group, select the message number to be played as the first message (0~48). This program is also used for VRS Waiting Message.	0~101 0 = No Message 101 = Fixed Message (default = 0)
22-14-03	**VRS Delayed Message for IRG – 1st Waiting Message Sending Count**	For each Ring Group, set the number of times the first message is played (0~255). This program is also used for VRS Waiting Message.	0~255 (time) (default = 0)
22-14-04	**VRS Delayed Message for IRG – 2nd Delayed Message Number**	For each Ring Group, select the message number to be played as the second message (0~48). This program is also used for VRS Waiting Message.	0~101 0 = No Message 101 = Fixed Message (default = 0)
22-14-05	**VRS Delayed Message for IRG – 2nd Delayed Message Sending Count**	For each Ring Group, set the number of times the second message is played (0~255). This program is also used for VRS Waiting Message.	0~255 (time) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
22-14-06	**VRS Delayed Message for IRG – Tone Kind at Message Interval**	For each Ring Group, determine what the caller hears between messages (0 = Ringback Tone, 1 = MOH, 2 = BGM). This program is also used for VRS Waiting Message.	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source (default = 0)
22-14-07	**VRS Delayed Message for IRG – Disconnect Time After the end of VRS Waiting Message**	For each Ring Group, set how long the system waits after playing the VRS message before disconnecting the call. To prevent the call from disconnecting, set this option to 0. This program is also used for VRS Waiting Message.	0 = No Disconnect 1~64800 Seconds (default = 60)
22-15-01	**VRS Delayed Message for Department Group – 1st Delayed Message Start Time**	For each Department Group, set how long the system waits before playing the first message (0~64800 seconds). This program is also used for VRS Waiting Message.	0~64800 (seconds) (default = 0)
22-15-02	**VRS Delayed Message for Department Group – 1st Delayed Message Number**	For each Department Group, select the message number to be played as the first message (0~48). This program is also used for VRS Waiting Message.	0~101 0 = No Message 101 = Fixed Message (default = 101)
22-15-03	**VRS Delayed Message for Department Group – 1st Delayed Message Sending Count**	For each Department Group, set the number of times the first message is played (0~255). This program is also used for VRS Waiting Message.	0~255 (time) (default = 0)
22-15-04	**VRS Delayed Message for Department Group – 2nd Delayed Message Number**	For each Department Group, select the message number to be played as the second message (0~48). This program is also used for VRS Waiting Message.	0~101 0 = No Message 101= Fixed Message (default = 101)
22-15-05	**VRS Delayed Message for Department Group – 2nd Delayed Message Sending Count**	For each Department Group, set the number of times the second message is played (0~255). This program is also used for VRS Waiting Message.	0~255 (time) (default = 0)
22-15-06	**VRS Delayed Message for Department Group – Tone Kind at Message Interval**	For each Department Group, determine what the caller hears between messages (0 = Ringback Tone, 1 = MOH, 2 = BGM). This program is also used for VRS Waiting Message.	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
22-15-07	**VRS Delayed Message for Department Group – Disconnect Time After the End of VRS Waiting Message**	For each Department Group, set how long the system waits after playing the VRS message before disconnecting the call (0~64800 seconds). To prevent the call from disconnecting, set this option to "0". This program is also used for VRS Waiting Message.	0 = No Disconnect 1~64800 Seconds (default = 60 seconds)
24-02-03	**System Options for Transfer – Delayed Call Forwarding Time**	Set how long a telephone rings before the call reroutes to the programmed destination.	0~64800 (seconds) (default = 10)
25-01-02	**VRS/DISA Line Basic Data Setup – DISA User ID**	Select whether or not the DISA User ID is to be used.	0 = Off 1 = On (default = 1)
25-02-01	**DID/DISA VRS Message**	For each Night Service mode, enter 1 at the "Talkie" prompt if trunk should be automatically answered by VRS and the message number the caller should hear (1~48).	0 = No Message 1 = 01~100 (VRS Messages) 2 = 01~4 (ACI Group Number) 3 = 01~64 (Extension Group Number) (default = 0)
25-03-01	**VRS/DISA Transfer Ring Group With Incorrect Dialing**	Set the destination that Automated Attendant (OPA) calls ring if the OPA caller dials an incorrect extension number. This also sets the options for DISA calls. The system allows Ring Groups or Disconnect = 0.	Ring Groups: 1~100 Trunk Ports: 001~200 Day/Night Mode: 1~8 0 (Disconnect) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)
25-04-01	**VRS/DISA Transfer Ring Group With No Answer/Busy**	Set the destination that Automated Attendant (OPA) calls ring if the OPA caller dials an extension that does not answer or is busy. This also sets the options for DISA calls. The system allows Ring Groups or Disconnect = 0.	Ring Groups: 1~100 Trunk Ports: 001~200 Day/Night Mode: 1~8 0 (Disconnect) 1~100 (Incoming Ring Group) 102 (In-Skin/External Voice Mail or InMail) (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
25-05-01	**VRS/DISA Error Message Assignment**	For each trunk that is answered by the VRS, enter the VRS message (1~48) the outside caller hears if they dial incorrectly after answer. If you enter 0, the call reroutes according to Program 25-03 and Program 25-04. Make one entry for each Night Service mode.	0~100 (0 = No Setting) (default = 0)
25-06-01	**VRS/DISA One-Digit Code Attendant Setup – Next Attendant Message Number**	Set up single digit dialing for Automated Attendant callers. For each VRS Message programmed to answer outside calls (see Program 25-02-01), specify the digit the Automated Attendant caller dials (1~9, 0, *, #). (Keep in mind that if you assign destinations to digits 3 and 4, outside callers cannot dial system extensions.)	0~100 (0 = No Setting) 101 = Voice MAil Answers 104 = Refer to 25-04: VRS/DISA Transfer Ring Group with No Answer/ Busy 105 = Dial the other extension (default = 0)
25-06-02	**VRS/DISA One-Digit Code Attendant Setup – Destination Number**	Set up single digit dialing for Automated Attendant callers. For each VRS Message programmed to answer outside calls (see Program 25-02-01), specify the destination reached (four digits maximum) when the caller dials the single digit code.	Up to eight digits (default not assigned)
25-07-02	**System Timers for VRS/DISA – VRS/DISA No Answer Time**	If an Automated Attendant caller dials an extension that does not answer, the call waits this interval before rerouting to the Ring Group specified in PRG 25-03 and PRG 25-04. This setting also affects unanswered DISA calls.	0~64800 (seconds) (default = 10 seconds)
25-07-03	**System Timers for VRS/DISA – Disconnect after VRS/DISA retransfer to IRG**	Set the timer for disconnecting a call after it is re-transferred to a ring group by VRS/DISA.	0~64800 (seconds) (default = 60 seconds)
25-08-01	**DISA User ID Setup – Password**	Set up password (six digits).	Dial (Six digits fixed) (0~9, *, #) (default not assigned)
25-13-01	**System Option for DISA – VRS Message Access Password**	Enter the password DISA callers must dial before the system allows them to record, listen to or erase VRS messages.	1~ 9, 0, *, # Six digits fixed (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
31-02-01	**Internal Paging Group Assignment – Internal Paging Group Number**	Assign extensions to Internal Paging Groups (i.e., Page Zones).	0~64 (0 = No Setting) Default: All stations = 0
31-02-02	**Internal Paging Group Assignment – Internal All Call Paging Receiving**	Enable or disable All Call Internal Paging for each extension. If allowed, extension can place and receive All Call Internal Paging announcements. If prevented, extensions can only make (not receive) All Call Internal Paging announcements. If combined, Paging zones should be restricted as well, change the internal page zone group in Program 31-07-01 to 0.	0 = Off 1 = On (default = 0)
31-04-01	**External Paging Zone Group – Paging Group Number**	Use to assign each External Paging zone to an External Paging group.	0~8 (0 = No Setting) Default: Speaker 1 [PGD(2)-U10] = 1 (Group 1) Speaker 2 [PGD(2)-U10] = 2 (Group 2) Speaker 3 [PGD(2)-U10] = 3 (Group 3) Speaker 4 [PGD(2)-U10] = 4 (Group 4) Speaker 5 [PGD(2)-U10] = 5 (Group 5) Speaker 6 [PGD(2)-U10] = 6 (Group 6) Speaker 7 [PGD(2)-U10] = 7 (Group 7) Speaker 8 [PGD(2)-U10] = 8 (Group 8) Speaker 9 (CD-CP00II) = 1 (Group 1)
31-07-01	**Combined Paging Assignments**	Assign an External Paging Group (0~8) to an Internal Paging Zone (0 = All Call, Zones 1~64) for Combined Paging. When an extension user makes a Combined Page, they simultaneously broadcast into both the External and Internal Zone.	0~64 (0 = All internal paging) (default = 1)

Program Number	Program Name	Description/Comments	Assigned Data
40-07-01	**Voice Prompt Language Assignment for VRS**	Select the language to be used for the VRS (default = 1, English). Although the system allows this option to be changed in programming, the language changes only if the PZ-VM21(with AKS VRS-( )) has the firmware which provides the newly selected language.	1 = US English 2 = UK English 3 = Australian English 4 = French Canadian 5 = Dutch 6 = Mexican Spanish 7 = Latin America Spanish 8 = Italian 9 = German 10 = Madrid Spanish 11 = Norwegian 12 = Parisian French 13 = Brazilian Portuguese 14 = Japanese 15 = Mandarin Chinese 16 = Korean 17 = Iberian Portuguese 18 = Greek 19 = Danish 20 = Swedish (default = 2)
40-10-01	**Voice Announcement Service Option – VRS Fixed Message**	Enable (1) or disable (0) the system ability to play the fixed VRS messages (such as “You have a message.”).	0 = Not Used 1 = Used (default = 1)
40-10-02	**Voice Announcement Service Option – General Message Number**	Enter the number of the VRS message you want to use for the General Message (01~48). The message you select should not be used as a VRS message.	0~100 (0=No General Message Service) (default = 0)
40-10-03	**Voice Announcement Service Option – VRS No Answer Destination**	When all VRS ports are busy, incoming DILs and DISA calls wait for the VRS No-Answer Time (Program 40-10-04) and then ring the VRS No Answer Destination Ring Group.	0~100 (Incoming Ring Group Number) (default = 0)
40-10-04	**Voice Announcement Service Option – VRS No Answer Time**	If an extension has Personal Greeting enabled and all VRS ports are busy, a DIL or DISA call to the extension waits this time for a VRS port to become free.	0~64800 seconds (default = 0)
40-10-05	**Voice Announcement Service Option – Park and Page Repeat Timer (VRS Msg Resend)**	If a Park and Page is not picked up during this time, the Paging announcement repeats.	0~64800 seconds (default = 0)

Program Number	Program Name	Description/Comments	Assigned Data
40-10-06	**Voice Announcement Service Option – Set VRS Message for Private Call Refuse (VRS Msg Private Call)**	This item assigns the VRS Message number to be used as Private Call Refuse. When Fixed message is set, VRS message guidance is: Service finished. Disconnect the line, please.	0~101 (0 = No message) (101 = Fixed message) (default = 0)
40-10-07	**Voice Announcement Service Option – Set VRS Message for Caller ID Refuse (VRS Msg CID)**	This item assigns the VRS Message number to be used as Caller ID Refuse. When Fixed Message is set, VRS message guidance is: Service finished. Disconnect the line, please.	0~101 (0 = No message) (101 = Fixed message) (default = 0)
40-11-01	**Preamble Message Assignment**	For each trunk that should have the Preamble option, enter the number of the VRS message (1~100) that is your recorded preamble message. Enter 0 for no preamble.	0~100 (0 = No Service) (default = 0)
47-03-02	**VM8000 InMail Group Mailbox Options – Master Mailbox Number**	The Master Mailbox Number is the same as the Department Group master (pilot) number. Use this option to select the Department Group master (pilot) number associated with the Master Mailbox you are programming. Digits (7 maximum, using 0~9).	Digits (eight maximum, using 0~9) No Setting (entered by pressing **Hold**) (default not assigned)

Operation

VRS Messages

To record a VRS message:

1. Press **Speaker** or lift the handset.

   - OR -

   At a single line telephone, lift the handset.

2. Dial **716**.

3. Dial **7** (**R**ecord).

4. Dial the VRS message number you want to record (01~48).

5. When you hear, “Please start recording” followed by a beep, record your message.

6. Press **#** to end recording

   - OR -

   Hang up to save the message.

To listen to a previously recorded VRS message:

1. Press **Speaker** or lift the handset.

   - OR -

   At a single line telephone, lift the handset.

2. Dial **716**.

3. Dial **5** (**L**isten).

4. Dial the VRS message number to which you want to listen (01~48).

   . *You hear the previously recorded message. If you hear a beep instead, no previous message is recorded.*

5. Press **#** to hear the message again.

   - OR -

   To hear another message, dial 5 and then enter the message number (01~48).

   - OR -

   Hang up.

To erase a previously recorded VRS message:

1. Press **Speaker** or lift the handset.

   - OR -

   At a single line telephone, lift the handset.

2. Dial **716**.

3. Dial **3** (**E**rase).

4. Dial the number of the VRS message you want to erase (01~48).

5. Press **Hold** (multiline terminal only) to cancel the procedure without erasing (and return to step 3).

   - OR -

   Hang up to erase the message.

To record, listen to or erase a VRS message if you call in using DISA:

1. Place call to the system.

   . *You hear dial tone.*

2. After the system answers, dial the DISA password (normally 000000).

   . *You hear dial tone.*

3. Dial **716** and the VRS password.

4. Dial the function you want.

   7 = **R**ecord
   5 = **L**isten
   3 = **E**rase

5. Dial the message number (01~48), record the message and press **#** to end recording.

   . *If you dialed 7 to record, you can dial* **#** *to listen to the message you just recorded.*

   . *If you dialed 5 to listen, you can dial 5 and the message number to hear it again or if you want to Record, listen to or erase another message, go back to step 4.*

General Message

To listen to the General Message:

Multiline Terminal Only

Your Message Waiting LED flashes when there is a new General Message. A voice message periodically reminds you.

1. Do not lift the handset or press **Speaker**.
2. Dial **4** (**G**eneral).

- OR -

1. Lift the handset and dial **711**.

. *You hear the General Message.*

. *Normally, your MW LED goes out. If it continues to flash, you have unanswered Message Waiting requests or new messages in your Voice Mail mailbox.*

To record, listen to or erase the General Message:

1. Press **Speaker** or lift the handset.

- OR -

At single line telephone, lift the handset.

2. Dial **712**.
3. Dial the function you want.

7 = **R**ecord
5 = **L**isten
3 = **E**rase

. *If you dialed 7 to record, press **#** to end the recording.*

. *If you dialed 5 to listen, you can dial 5 to listen to the message again.*

. *To Record the General Message again, go back to step 1.*

. *If you dialed 3 to erase the General Message, you must go to step 4 (hang up). To cancel without erasing on a multiline terminal, press HOLD instead and go back to step 1.*

4. Hang up when you are done.

Time, Date and Station Number Check

To check the extension number of any multiline terminal:

1. Do not lift the handset or press **Speaker**.
2. Dial **6** for extension number.

To check the system time and date from any multiline terminal extension:

1. Do not lift the handset or press **Speaker**.
2. Dial **8** for time and date.

Preamble

To answer a Preamble call:

1. Answer the ringing call.

   The line key turns solid red as the system plays the preamble to the caller.

2. When you hear two beeps and the line key turns green, converse with the caller.

Volume Controls

Description

Each multiline terminal user can control the volume of incoming ringing, splash tone, Paging, Background Music, Handsfree and your handset. Multiline terminals consolidate all adjustments into the volume buttons. Pressing the VOLUME s or VOLUME t adjusts the volume level for whichever feature is active (outside call, ICM, ICM ringing, paging, etc.). Pressing these keys when the telephone is idle adjusts the contrast level of the telephone display. The users should set the volumes for their most comfortable levels.

Conditions

- The contrast is not adjustable when the telephone has background music enabled.
- Multiline terminal users can further increase station ring volume by pressing the Speaker key and dialing Code 829.
- Headset volume, off-hook ringing volume, station ringing volume, and speaker volume adjustments are determined by Program 15-02-27.
- The LCD of the Electra Elite IPK and SV8100 terminals provide a volume bar indication while adjusting the following volumes or controls:
  - Speaker Volume
  - Handset/Headset Volume
  - Background Music (BGM) Volume
  - Ring Volume/Off-Hook Ring Volume
  - LCD Contrast

Default Setting

Enabled

System Availability

Terminals

All Multiline Terminals

Required Component(s)

None

Related Features

Off-Hook Signaling

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
15-02-27	**Multiline Telephone Basic Data Setup – Handset Volume**	This option determines whether a multiline terminal handset volume changes back to the system default (0) or whether it is retained at the user's setting (1) after hanging up the handset. This command also controls LCD Contrast, Off-Hook Ringing Volume, Station Ringing Volume and Speaker Volume.	0 = Back to Default (Back) 1 = Stay at previous level (Stay) (default = 1)

Operation

To adjust the volume of incoming ringing and splash tone:

1. If the telephone is idle, press **Speaker** and dial **829**. If the telephone is ringing, skip to Step 2.
2. Press VOLUME s or VOLUME t.

To adjust the volume of ringing incoming Paging announcements, Handsfree, the handset or Background Music:

1. Press VOLUME s or VOLUME t.

. *The feature must be active to change the volume. Pressing the volume keys when the telephone is idle adjusts the display contrast.*

Warning Tone for Long Conversation

Description

The system can broadcast warning tones to a trunk caller, warning the caller that he has been on the call too long. If he chooses, the caller can disregard the tones and continue talking. The outside caller does not hear the warning tones. Warning tones do not occur for Intercom calls and most incoming trunk calls. DISA trunks can also have warning tones. Warning tones are not available to analog single line telephone (SLT) users.

There are two types of warning tones: Alarm Tone 1 and Alarm Tone 2. Alarm Tone 1 is the first set of tones that occur after the user initially places a trunk call. Alarm Tone 2 broadcasts periodically after Alarm Tone 1 as a continued reminder. Each alarm tone consists of three short beeps.

If programmed, DISA calls are disconnected unless the continue code is entered by the user. With the Long Conversation Cutoff feature, incoming or outgoing central office calls can also be disconnected.

Warning Tone for DISA Callers

For DISA callers, with this feature enabled, the warning tone timer begins when an incoming DISA call places an outgoing call and either the inter-digit timer expires or the outgoing call is answered.

If an outside call is transferred to forwarded off-premise using an outside trunk, the warning tone timer begins immediately. This occurs only if either trunk involved in the call is programmed for this feature (Program 14-01-17). When transferring a trunk call off-premise, Program 14-01-13 must be enabled (set to 1).

Conditions

- Warning Tone for Long Conversation does not occur for incoming trunk calls.
- Warning Tone for Long Conversation occurs for all outgoing trunk calls, regardless of how they are placed or other outgoing restrictions.
- Warning Tone for Long Conversation can be enabled for DISA calls.
- Warning Tone for Long Conversation does not occur for Intercom calls.
- Warning Tone for Long Conversation can be used with the Long Conversation Cutoff feature for outgoing calls.
- Warning Tone is presented on a single line telephone in the ear piece.

Default Setting

Disabled

Related Features

Central Office Calls, Answering

Central Office Calls, Placing

Direct Inward System Access (DISA)

Intercom

Long Conversation Cutoff

Single Line Telephones

Code Restriction

Guide to Feature Programming

Program Number	Program Name	Description/Comments	Assigned Data
14-01-17	**Basic Trunk Data Setup – Trunk to Trunk Warning Tone for Long Conversation Alarm**	Determine whether DISA callers should hear the Warning Tone for Long Conversations (0 = Disable, 1 = Enable).	0 = Disable 1 = Enable (default = 0)
14-01-25	**Basic Trunk Data Setup – Continued/Discontinued Trunk-to-Trunk Conversation**	When Program 24-02-10 is set to disconnect a trunk after the defined time, determine whether or not a user should be able to use the continue/discontinued code.	0 = Disable 1 = Enable (default = 0)
20-06-01	**Class of Service for Extensions**	Assign a Class of Service (1~15) to an extension.	Day/Night Mode: 1~8 Class of Service for Extensions: 1~15 Defaults: All ports are set as Class 1.
20-13-01	**Class of Service Options (Supplementary Service) – Long Conversation Alarm**	Turns Off (0) or On (1) the Warning Tone for Long Conversation (not for single line telephones).	0 = Off 1 = On (default = 1 for COS 1~15)
20-21-01	**System Options for Long Conversation – Long Conversation Alarm 1**	After a user places a trunk call, the system sends the first warning tone to their extension after this time (0~64800 seconds).	0~64800 (seconds) (default = 170)

Program Number	Program Name	Description/Comments	Assigned Data
20-21-02	**System Options for Long Conversation – Long Conversation Alarm 2**	After hearing the first warning tone, the system sends additional warning tones after this time (0~64800 seconds). The warning tones continue, spaced by this time, until the user hangs up.	0~64800 (seconds) (default = 180)
20-28-01	**Trunk to Trunk Conversation – Conversation Continue Code**	Enter a single digit Continue Code for the DISA call to use to immediately disconnect or continue their outside call (0~9, * or # are accepted entries).	0~9, #, * (default not assigned)
20-28-02	**Trunk to Trunk Conversation – Conversation Disconnect Code**	Enter a single digit Disconnect for the DISA call to use to immediately disconnect or continue their outside call (0~9, * or # are accepted entries).	0~9, #, * (default not assigned)
20-28-03	**Trunk to Trunk Conversation – Conversation Continue Time**	When Program 14-01-25 is enabled, determine the time a call is extended when the user dials the Continue code (defined in Program 20-28-01).	0~64800 (seconds) (default = 0 seconds)
21-01-01	**System Options for Outgoing Calls – Seizure Trunk Line Mode**	When a trunk is selected does it select it based off the Trunk Route Priority (0) or based off the trunk that has not been used in the longest time.	0 = Priority Route 1 = Circular Route (default = 0)
21-01-03	**System Options for Outgoing Calls – Trunk Interdigit Time (External)**	The system waits for this time to expire before placing the call in a talk state (Call Timer starts after time expires, Voice Over and Barge-In are not allowed until after time expires).	0~64800 (seconds) (default = 10 seconds)
25-07-07	**System Timers for VRS/DISA – Long Conversation Warning Tone Time**	Determine the time the system should wait before the Warning Tone is heard by DISA callers (0~64800 seconds). If an outside call is transferred or forwarded off-premise using an outside trunk, this time starts immediately. This occurs if either trunk involved in the call is programmed for the Warning Tone (Program 14-01-17).	0~64800 (seconds) (default = 30 seconds)

Program Number	Program Name	Description/Comments	Assigned Data
25-07-08	**System Timers for VRS/DISA – Long Conversation Disconnect Time**	Determine how long after the Warning Tone is heard the system waits before disconnecting DISA calls – unless the Continue code is entered (Program 20-28-01).	0~64800 (seconds) (default = 15 seconds)

Operation

Warning Tone for Long Conversation is automatic if programmed.

Warning Tone for Long Conversation for DISA Callers:

1. A DISA caller dials into the system and places a call.
2. Once the Warning Tone is heard, ***To continue the call*** the DISA caller presses the programmed Continue Code.

   - OR -

   To disconnect the call, the DISA caller presses the programmed Disconnect Code.

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UNIVERGE SV8100

FEATURES AND SPECIFICATIONS MANUAL

NEC Infrontia Corporation

Issue 1.0