O.Y.L. TECHNOLOGY SDN. BHD.

Security
&
Home Automation System

AXI LED

USER MANUAL

(REV. 1.0)

CE

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PREFACE

Thank you for selecting the new **AX1** system. This manual will explain to you on how to operate your **AX1** alarm and home automation system. This system is made up of a control panel, keypads, integrated switch module and telephone voice module. Specific areas of detections are called zones. Zones can be programmed to have different characteristics. Some zones may be 24-hour zones; they remain armed even when the alarm system is in disarm mode. (This setting is done during the installer programming as per user's request). In addition, some zones can be programmed by the users to allow zone bypassing. When you bypass a zone, the zone is temporarily removed from the alarm system. But always remember that bypassed zones are not protected.

How your AX1 alarm and home automation system works?

When a detection device is triggered, the zone indicator will light up. If the alarm system is armed, the control panel responds by reporting an alarm condition. The control of the system can be done either through keypad or telephone. If the alarm system is triggered, the signal can be transmitted to a central monitoring station (CMS). (Provided the **AX1** system is connected to CMS)

For safety purposes, the operation of the **AX1** system requires the users to enter the personal identification number (PIN). User is advised to disable the installer access whenever necessary. (i.e. after the commissioning and servicing of alarm system.)

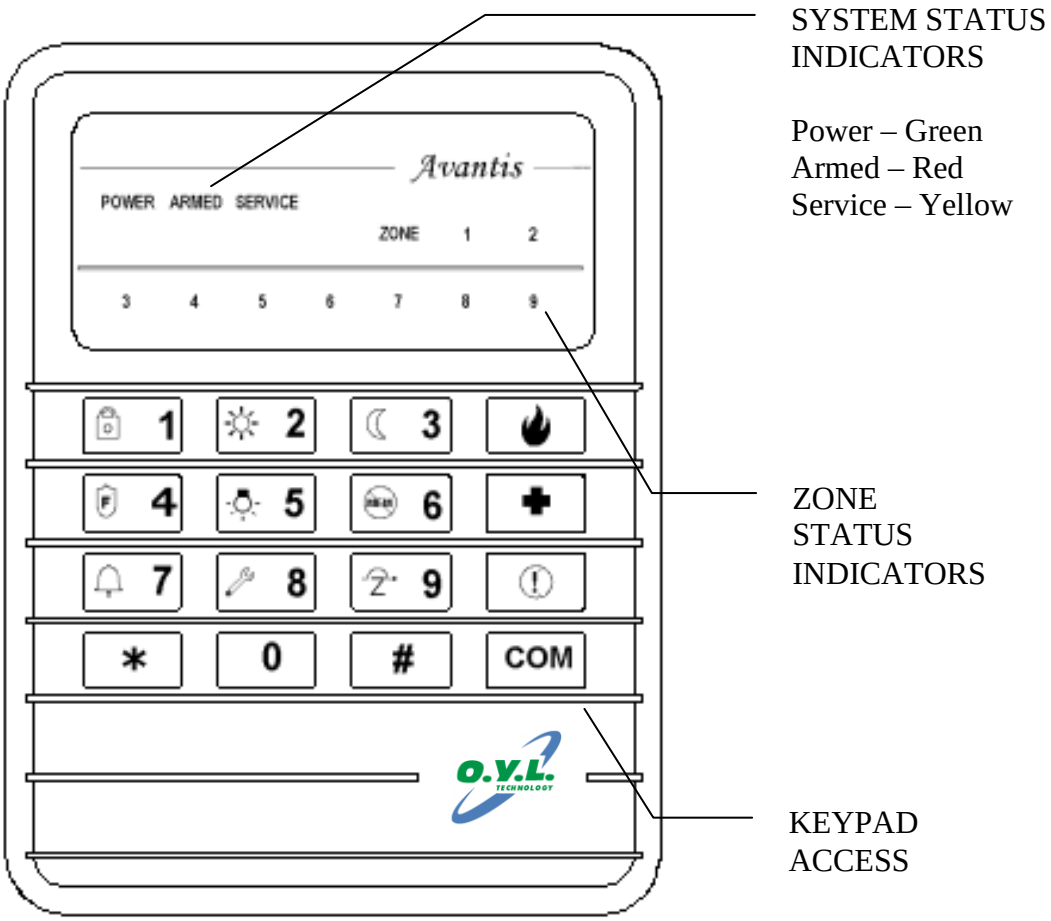
FEATURES

AX1 LED

1. 8 fully programmable zones
2. Expandable up to 8 output controls (with feedback capability)
3. Supports up to 4 LED keypads
4. 1 Real time ARM/DISARM timer on Daily Basis only.
5. 4 Real time ON/OFF timer on daily basis
6. 7 user codes & 1 guest code
7. 3 Soft Zones (Emergency/Fire/Panic)
8. 2 Programming Mode- Installer Programming and User Programming
9. 5 User Arming type (Auto home arming/ Day arming/ Away arming/ Force arming/ Night arming)
10. Real time clock function
11. Programmable Entry/Exit Delay Time
12. 4 bell types (Steady/ Pulse/ Chirp/ Silent)
13. 3 zone types [End-of-line (EOL) / Normally Open (NO) / Normally Close (NC)]
14. Adjustable loop response sensitivity
15. Resetable auxiliary power supply upon Alarm Clearing
16. Key Switch function (Latch/ Momentary)
17. Dedicated Tamper zone
18. AC power supply monitoring
19. Low battery indication
20. Short circuit indication & protection
21. Bell Loss indication
22. Bell Test function
23. Telephone line loss detection
24. Programmable Event Reporting Code
25. Telephone Voice Module
26. RS485 ready (to support longer distance communication)
27. Report events to 4 phone numbers with 4 account numbers
28. Ademco® Contact ID CMS reporting format
29. Voice reporting format (direct to user) or tone reporting format
30. Interactive Voice menu or tone beepers during user call in
31. Support Remote programming via touch tone telephone
32. Programmable event trigger

33. Fast Key on Keypad for Easy menu access
34. Duress code
35. Walk test function
36. Double Call-in Feature for Fax Machine telephone line sharing
37. 16 Event Trigger Outputs with programmable countdown timer

LED KEYPAD OUTLOOK



Key Indication

1 Auto-Home Arming / Testing	2 Day Arming / Keypad Setting	3 Night Arming / View Timer	Fire
4 Force Arming	5 Home Automation	6 Clear Alarm Memory	Emergency
7 Door Chime on/off	8 View Trouble	9 Zone Bypass Mode	Panic
* Cancel	0	# Enter	COM Command

ARMING MODE

Arming Type	Zone Status	Information	When To Use
Auto home Arming	Normal Status	To arm the system with delay time in order for the user to exit the house To arm the system in delay time with the interior zone bypassed provided that the user does not leave the premises	**When user leaves the house and no one is at home.**
Day Arming	Normal Status	The perimeter zone is armed instantly while the user stays at home The interior zones are automatically bypassed	**When user is at home.**
Away Arming	Normal Status	To arm the system instantly through telephone when the user are away from the house. The interior zones are not bypassed	**When user are outside.**
Force Arming	Normal Status or Abnormal Status	To force arm the system instantly regardless of the zone status. The interior zones are not bypassed	**When there are zone still open & user is at home.**
Night Arming	Normal Status	The perimeter zone is armed instantly while user stays at home. The interior zones are automatically bypassed. The delay zones become instant zones.	**When everyone come back to home & user want to sleep.**

NOTE:

Zone refers to the designated areas that are protected by the AX1 system. **Zone status** refers to the condition of the area. Normal status means door, window or detectors are in good/close condition. While abnormal status means the door/window may have been opened or the detector is not functioning.

SOUND INDICATION

Sound Indication	Description
Acceptance / Acknowledgement tone	2 fast beeps
Error tone	Continuous buzz for about 2 seconds
Entry delay	Continuous beeping, fast beep for the last 10 sec
Exit delay	Continuous slow beep, fast beep for the last 10 sec
Door chime	Continuous tone for about 2 seconds
Alarm	Chirp (1 second ON/ 4 seconds OFF) Pulse (2 seconds ON/ 2 seconds OFF) Continuous Tone Silent

LIGHT INDICATION

No	Description	Power	Armed	Service	Zones
1	Normal Mode	*	OFF	***	Pending
2	Arming	*	ON	***	Pending
3	Home Automation Mode	Flash	OFF	Flash	Pending
4	User Programming Mode	Flash	Flash	Flash	Pending
5	AC power failure	OFF	**	ON	Pending
6	Trouble occurs	*	**	ON	Pending
7	View Trouble Mode	*	**	Flash	ON according to the type of trouble
8	Zone Status (Triggered) (Bypassed) (Alarmed)	 * * *	 ** ** **	 *** *** ***	 ON Flash Fast flash
9	Tamper zone triggered	*	Fast flash	***	All zone's LEDs Fast flash
10	Telephone line loss alarm triggered	*	Fast flash	Fast flash	Pending
11	Walk test	*	Flash	Flash	Pending

AX1 LED Keypad Display's Reference Table

NOTE:

* : When AC power **ON**, LED is **ON**; When AC power failure, LED is **OFF**

** : When armed, LED = **ON**
When Emergency/Fire/Panic, LED = **Flash**
When disarmed, LED = **OFF**

*** : When trouble occurs, LED is **ON**; when no trouble occurs, LED is **OFF**

Flash : 0.5 second **ON**, 0.5 second **OFF**
Fast flash : 0.1 second **ON**, 0.1 second **OF**F

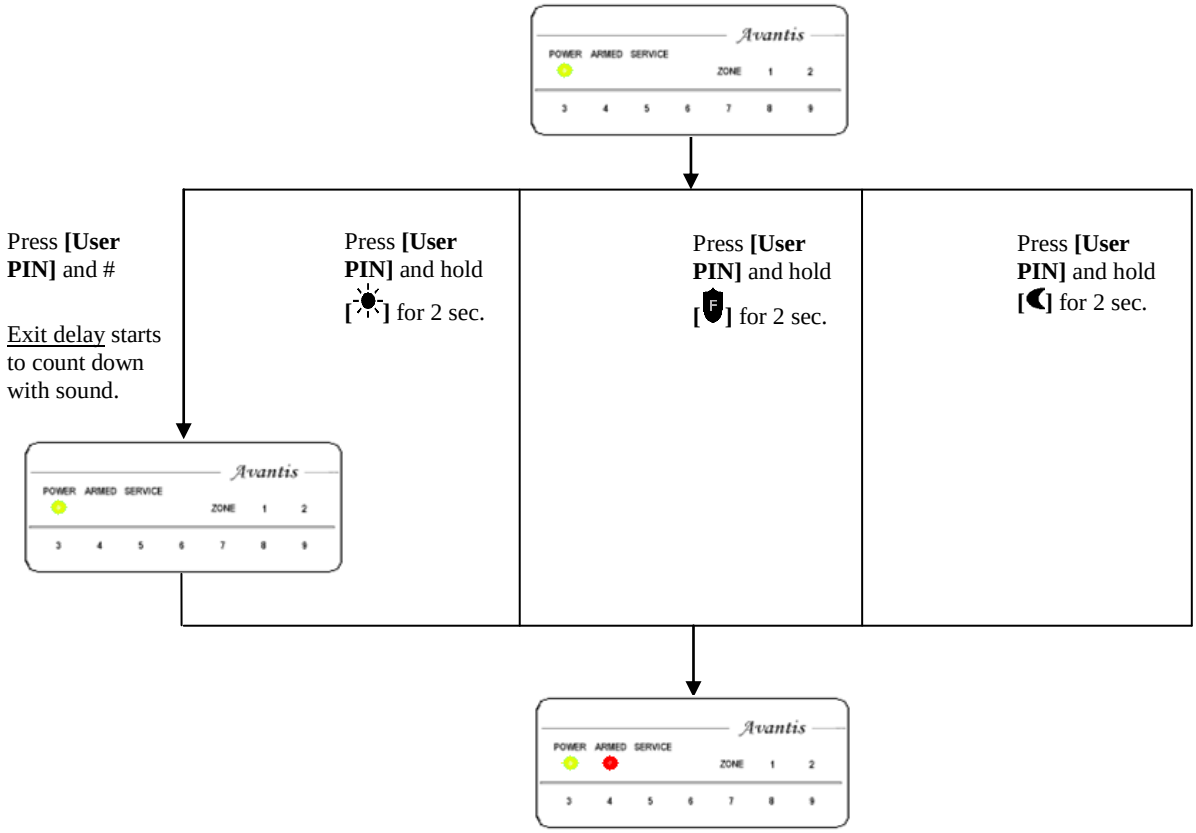
KEYPAD NAVIGATION KEY FUNCTION

[COM] Key : Command
[#] Key : Enter
[*] Key : Cancel

[CHAPTER 1] ALARM SYSTEM CONTROL

1.0 USING LED KEYPAD

1.0.1 ARMING



System is now **armed**.

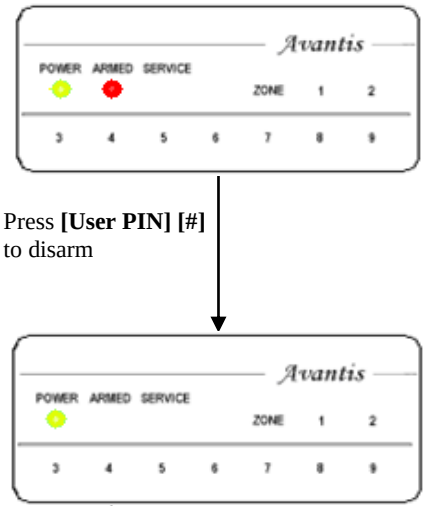
1.0.1.1 QUICK ARMING

Command	Information
Press and hold the button **[🔒]** for 2 seconds	**Auto Home Arming**
Press and hold the button **[☀]** for 2 seconds	**Day Arming**
Press and hold the button **[☾]** for 2 seconds	**Night Arming**
Press and hold the button **[F]** for 2 seconds	**Force Arming**

1.0.2 DISARMING

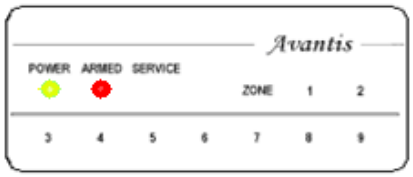
1.0.2.1 IN ARMED/ALARM MODE

Command	Information
• To disarm the system, press **[User PIN] [#]**.	• The keypad will beep twice upon confirmation. Otherwise, the error tone will sound if PIN numbers are entered wrongly. • The **ARMED** light will go ***OFF*** once the system is disarmed.



1.0.3 ALARM REPORT

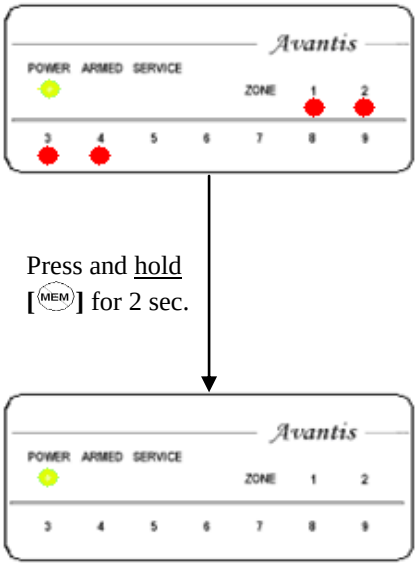
When **alarm** occurs, the strobe lights and the bells will be turned ***ON***. If the system is **disarmed**, it could only turn ***OFF*** the bell but not the strobe light. Zone LED fast flashes indicate that the designated zone has been triggered by alarm.



During the state of **alarm**, only PIN entry is allowed. In other words, only **DISARM** is allowed.

1.0.4 CLEAR ALARM MEMORY

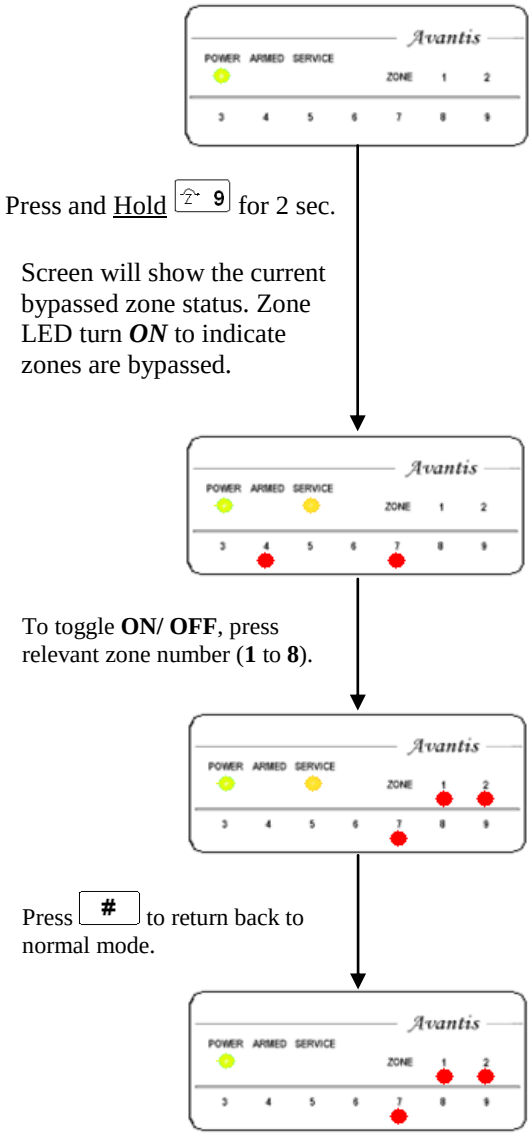
When **alarm** occurs, the strobe lights and the bells will be turned on. If the system is disarmed, it could only turn off the bell but not the strobe light. Thus, the user needs to clear the alarm memory to turn ***OFF*** the strobe light. Besides that, once the alarm memory is cleared, the auxiliary power supply 1 will be reset for 3 seconds before restoring it again.



Alarm **Cleared**

1.0.5 BYPASSING ZONE

Bypassing a **zone** means removal of one or more protection zones from the system. In order to perform bypassing, the system must be in **normal mode**. Once the system is disarmed, the entire zone will be **unbypassed**.



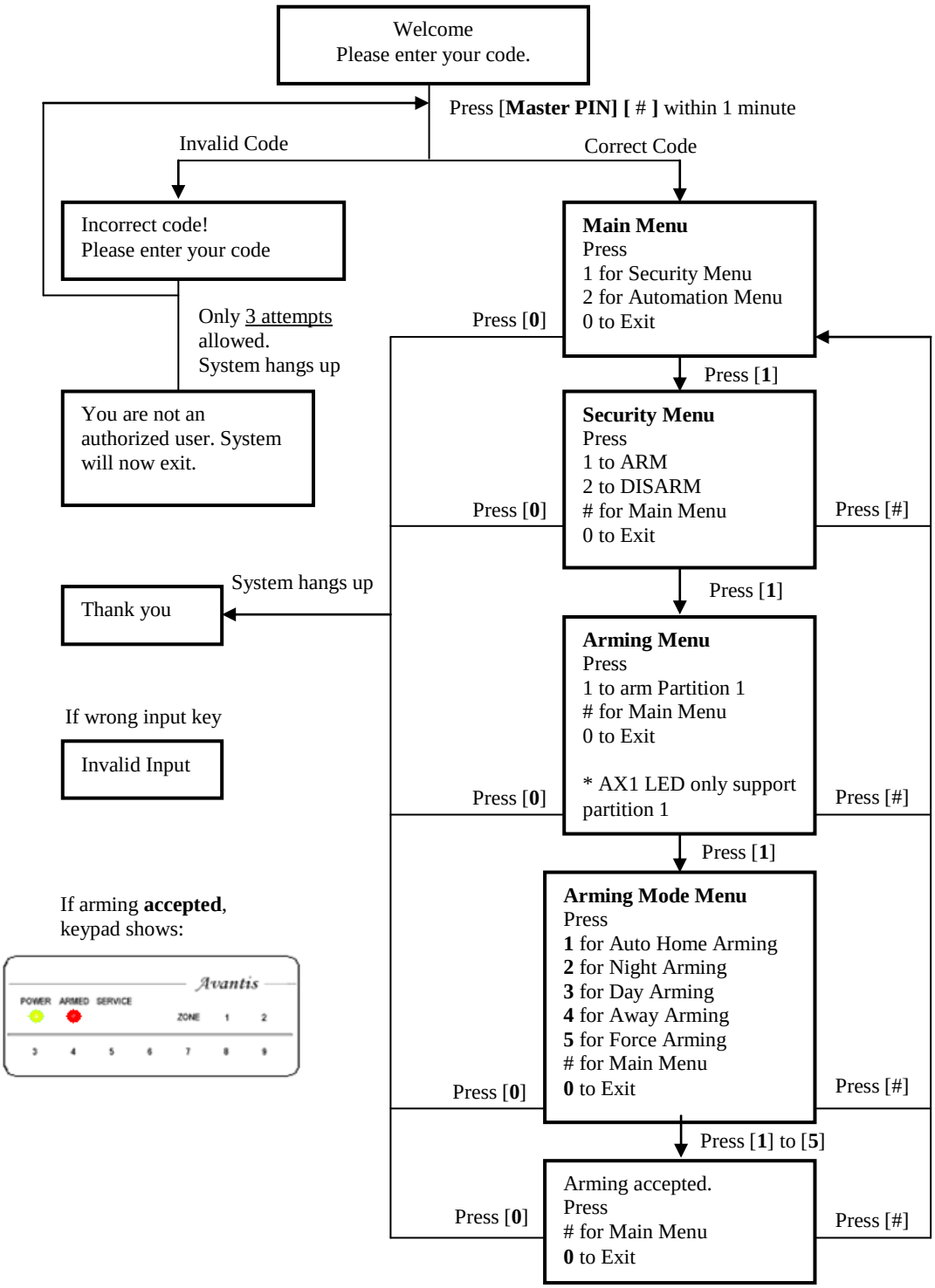
1.0.5.1 QUICK BYPASSING ZONE

Command	Information
Press and hold 9 for 2 seconds	**Bypassing zone**

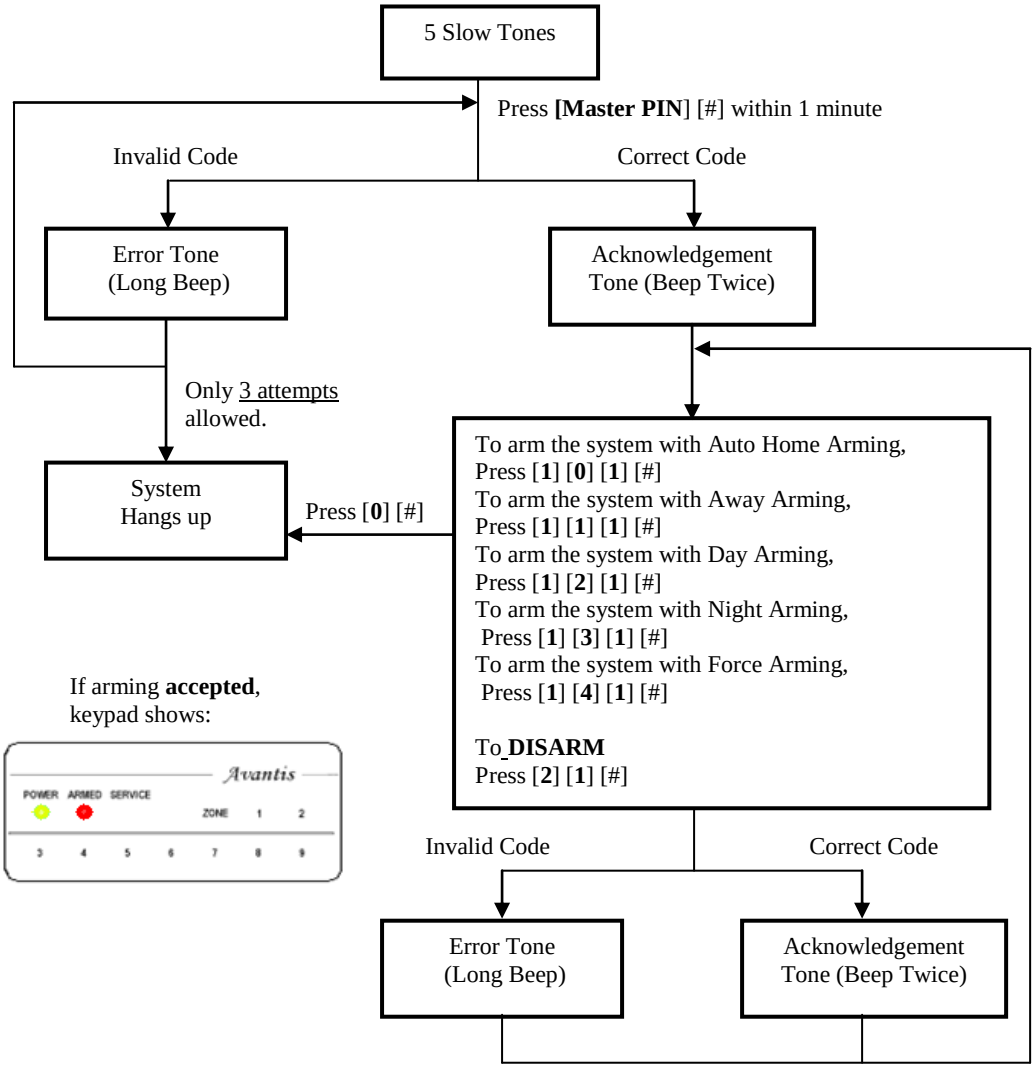
1.1 ARM/DISARM USING TELEPHONE

The AX1 alarm system is designed with the feature which allow system control by using telephone, there are two methods. Firstly is using voice guided if voice module is installed into the system and secondly is guided by beeper.

1.1.1 ARM/DISARM WITH VOICE ACTIVE



1.1.2 ARM/DISARM WITH BEEPER (Without voice module)



CHAPTER 2: HOME AUTOMATION CONTROL

2.0 INTRODUCTION

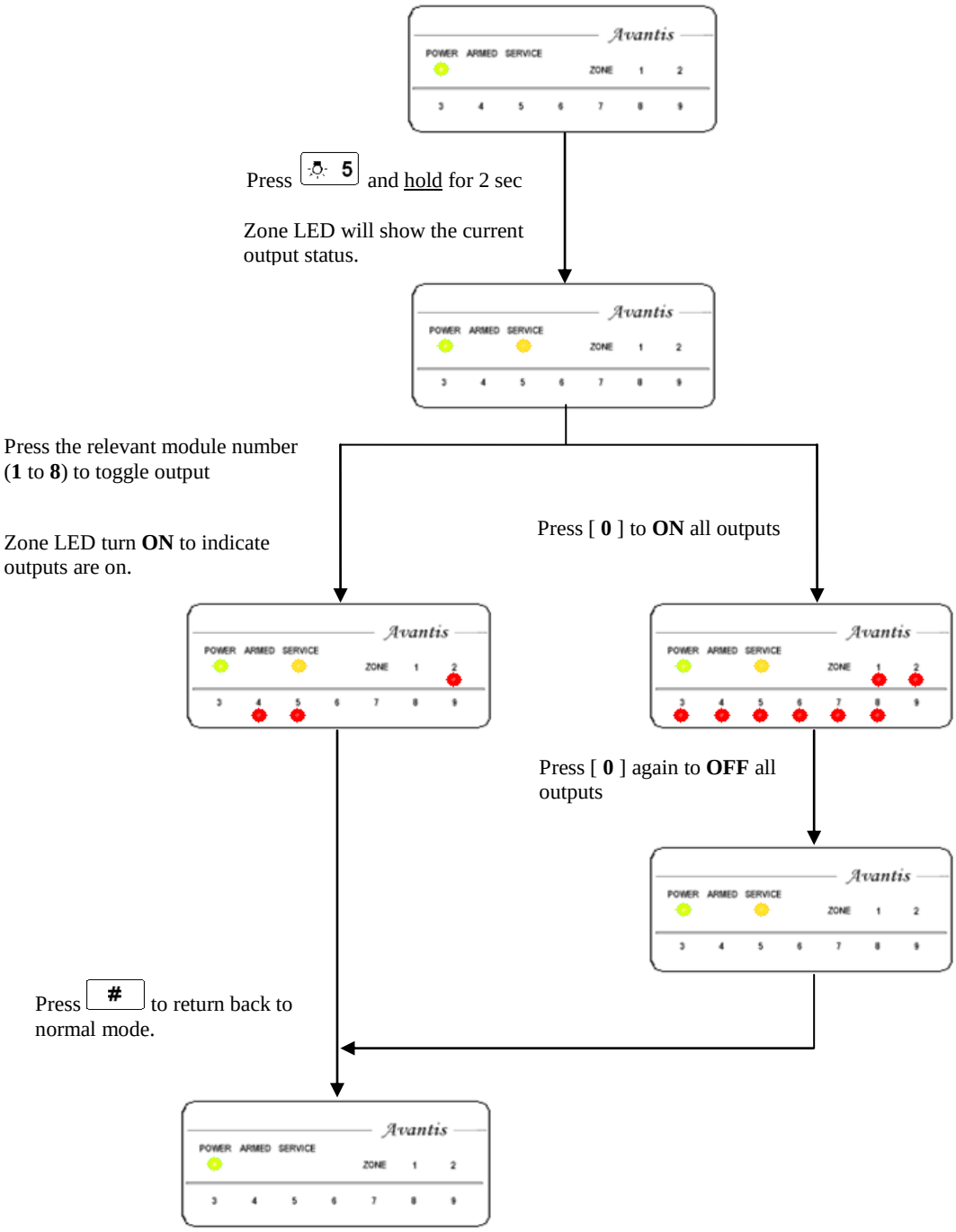
The system can support up to 8 outputs and can be controlled during system in normal and armed state only. The outputs can be electrical appliances such as air-conditioners, fans or lights. The outputs can be configured as event-triggered outputs or normal outputs which are controlled either by LED keypad, real time clock timer or telephone remote control.

Recommended air conditioner with memory backup or last state memory in Malaysia is as below:

- Wall Mounted Split Air Conditioner (Brand : Acson)
  Model: AWM101 – (1.0 HP)
  AWM151 – (1.5 HP)
  AWM201 – (2.0 HP)
  AWM251 – (2.5 HP)
  AWM301 – (3.0 HP)

- Ceiling Cassette Split Air Conditioner (Brand : Acson)
  Model: ACK15B – (1.5 HP)
  ACK20B – (2.0 HP)
  ACK25B – (2.5 HP)
  ACK30B – (3.0 HP)

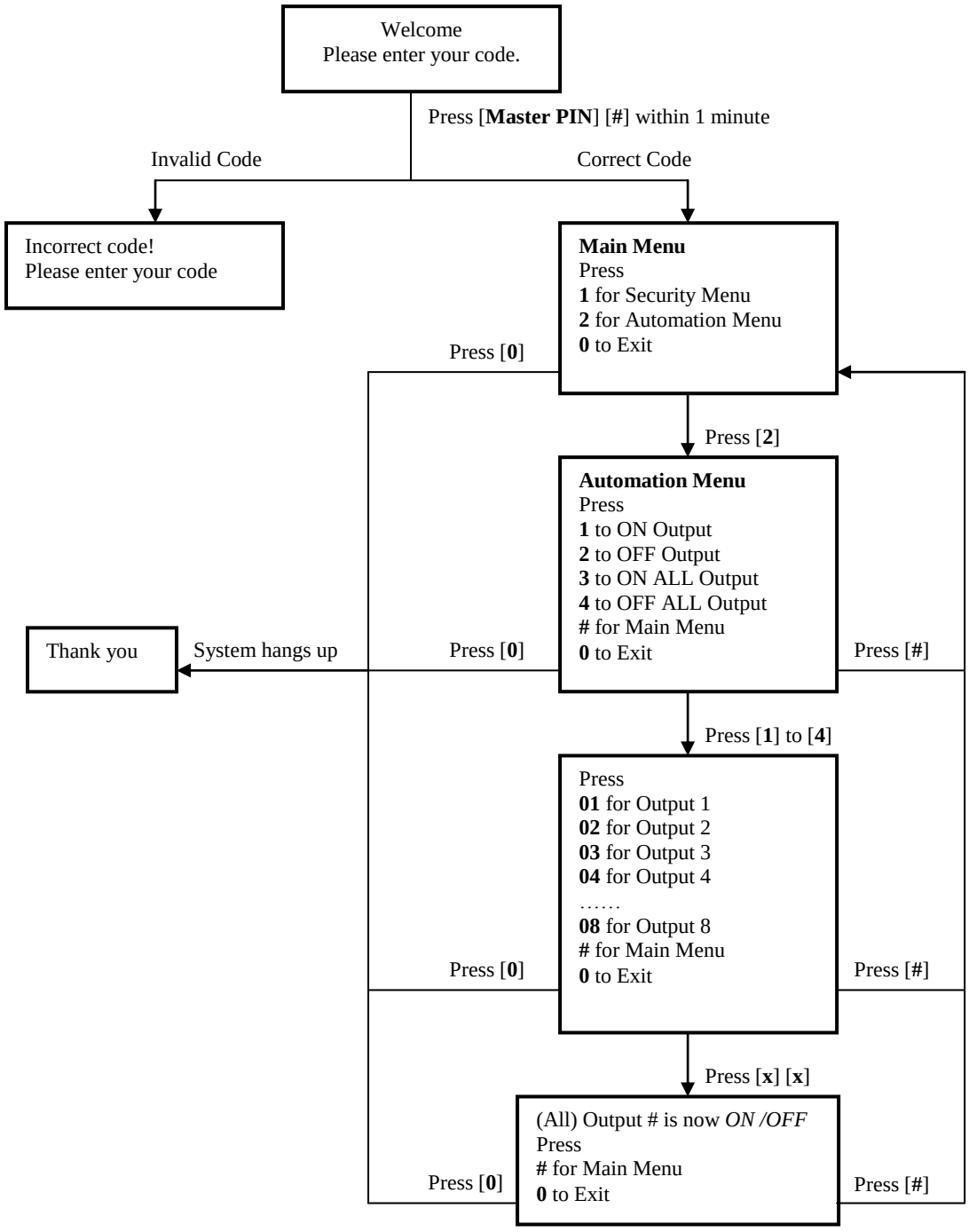
2.1 HOME AUTOMATION CONTROL USING LED KEYPAD



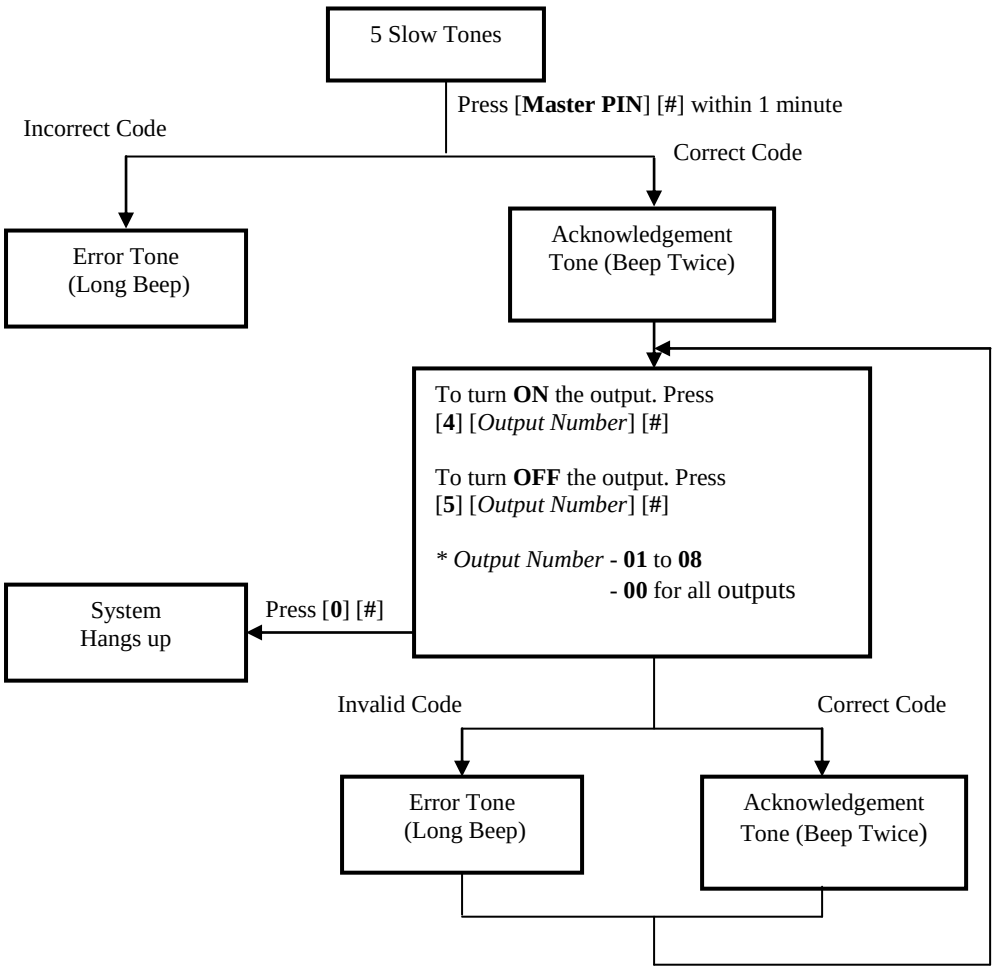
2.2 HOME AUTOMATION CONTROL USING TELEPHONE

For home automation control by using telephone, there are two methods. One is using voice guided if voice module is installed into the system and secondly is guided by beepers.

2.2.1 WITH VOICE ACTIVE



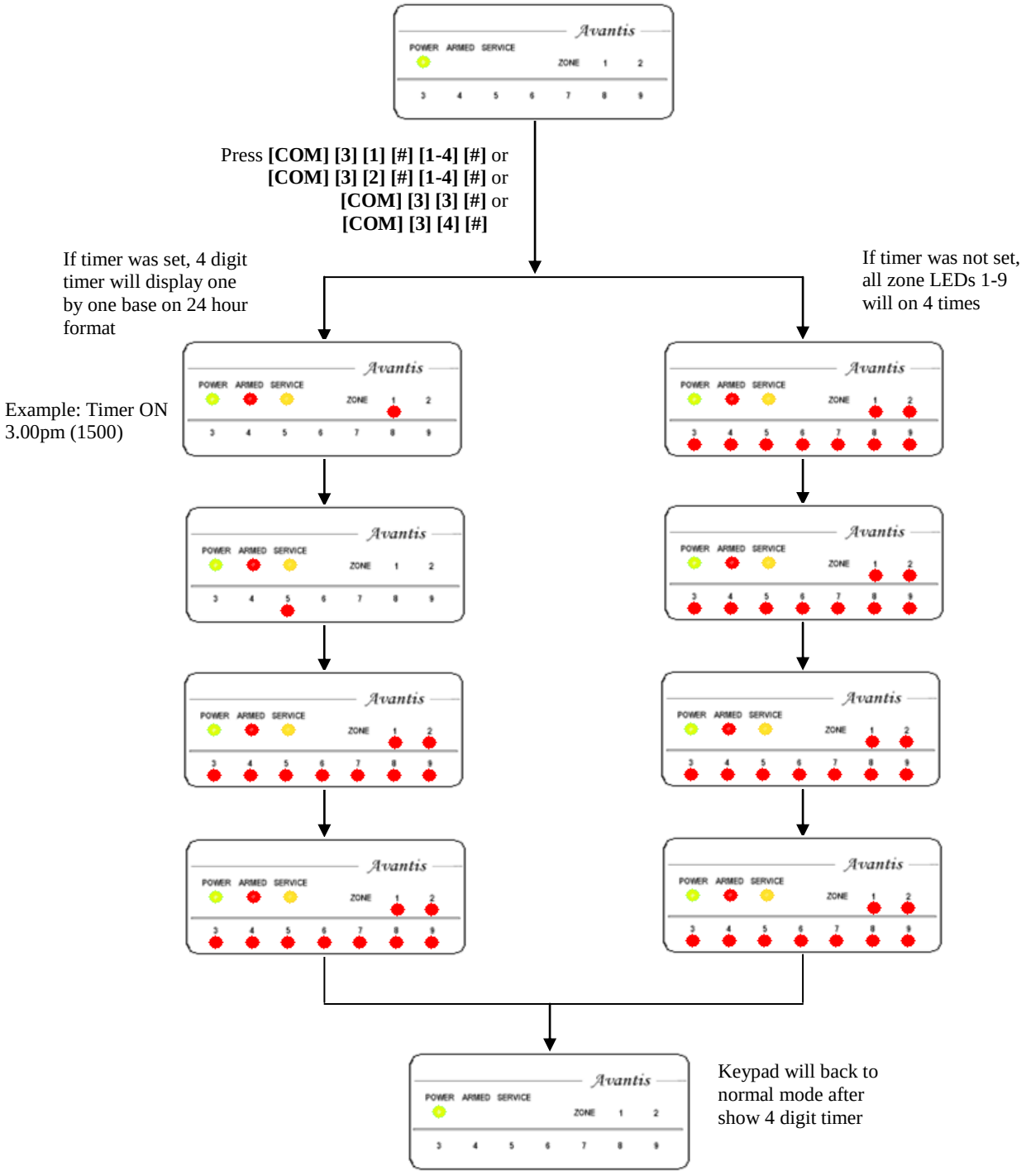
2.2.2 WITH BEEPER (Without Voice Module)



CHAPTER 3: VIEW TIMER MODE

This feature enable user to view the timer that has been set earlier for Home Automation ON/OFF and also Auto ARM/ DISARM.

Command	Information
• Press **[COM] [3] [1] [#] [1 – 4] [#]**	• Home automation ON timer
• Press **[COM] [3] [2] [#] [1 – 4] [#]**	• Home automation OFF timer
• Press **[COM] [3] [3] [#]**	• Auto ARM timer
• Press **[COM] [3] [4] [#]**	• Auto DISARM timer



CHAPTER 4: USER PROGRAMMING

Only user who has Master PIN can access to user programming mode. If there's any mistake made while programming or if the control panel rejects the command, keypad will sound an error tone and user has to re-enter the command again. There are 10 menus in user programming

- Edit Master PIN, User PIN and Guest PIN
  - Master user can edit their existing Master PIN from this menu.
  - User can edit or delete their existing PIN or create new PIN for other users from this menu.
  - User can edit their access level from this menu.
  - Guest can edit or delete their existing PIN from this menu.
  - Guest can edit their access level and guest hour from this menu.
  - The guest PIN is only valid when the guest time has not expired.
  - User 1 – Master PIN, User 2 to 7 – User PIN, User 8 – Guest PIN
  - Same PIN cannot be repeated to different user or guest.
  - PINs can be set to 4 to 6 digits.
- Edit Duress Code
  - User can edit or delete their existing duress code from this menu.
  - **CODE must be set in 4 digit, else error tone sound.**
- Edit IO Module *ON* Timer
  - This feature is to set the timer to turn *ON* the outputs automatically.
  - Timer set must be in a 24 hour format.
  - The system support 4 IO timers, so user can set 4 different time to turn *ON* the outputs.
  - Keypad will arm if IO *ON* setting time reach.
- Edit IO Module *OFF* Timer
  - This feature is to set the timer to turn *OFF* the outputs automatically.
  - Timer set must be in a 24 hour format.
  - The system support 4 IO timers, so user can set 4 different time to turn *OFF* the outputs.
- Edit Real Time Clock
  - User can edit the real time clock from this menu.
  - Time set must be in a 24 hour format.
- Edit Auto Arm Timer
  - This feature enable user to set timer to auto Arm the system.
  - Time set must be in a 24 hour format.
- Edit Auto Disarm Timer
  - This feature enable user to set timer to auto Disarm the system.
  - Time set must be in a 24 hour format.
- Installer Access
  - Enabling or disabling the installer access.

- Installer access will be disabling automatically every 3 hours.

- Fast Key Access
  - Enabling or disabling the fast key access.
- Phone line loss detection
  - Enabling or disabling the phone line loss detection.

When in normal mode, press **[Master PIN] [COM] [#]** to enter user programming mode.

To return to normal mode, press **[COM] [#]**.

4.0 PIN CODE EDIT

4.0.1 MASTER USER

Command	Information
Step 1: Press **[1] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit User's PIN"** option.
Step 2: Enter the user number : **[1] [#]**	• User 1 = Master user
Step 3: Press the new PIN : **[4 - 6 digits PIN] [#]**	• Zone light will be ***ON*** one by one to indicate that the **PIN** has been entered.
Step 4: Repeat the new PIN: **[4 - 6 digits PIN] [#]**	• Zone light will be ***ON*** one by one to indicate that the **PIN** has been entered. • The keypad will beep twice for valid entry.

Note:

- PIN "000000" is not allowed to be used as password.
- Master PIN default value: "**111111**"

4.0.2 USER

Command	Information
Step 1: Press **[1] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit User's PIN"** option.
Step 2: Enter the user number : **[2 - 7] [#]**	• User 2 - 7 = Normal user
Step 3: Press the new PIN : **[4 - 6 digits PIN] [#]**	• Zone light will be ***ON*** one by one to indicate that the **PIN** has been entered.
Step 4: Repeat the new PIN: **[4 - 6 digits PIN] [#]**	• Zone light will be ***ON*** one by one to indicate that the **PIN** has been entered. • The keypad will beep twice for valid entry.
Step 5: Enter access level : **[Toggle key 1-4] [#]**	• Press key 1 to key 4 to set user access level. • Key [**1**] –Arm and Disarm On (1)/ Off (0) Key [**2**] – Arm (1)/ Disarm (0) Key [**3**] – Bypass Enable (1)/ Disable (0) Key [**4**] – Open/ Close Report (1)/ Disable (0) *By pressing Key **1- 4** will **toggle** its status to ***ON /OFF*** • The keypad will beep twice for valid entry.

Note:

- PIN "000000" is not allowed to be used as password.
- After enter the user number, press [#]. Press [**0**] [#] to delete PIN.
- The Master user should change the PIN for user 1 to 8 after the installation. Even though the user PIN is not used, the user should clear the PIN for those users by key with new PIN as "**0**".

4.0.3 GUEST

Command	Information
Step 1: Press **[1] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit User's PIN"** option.
Step 2: Enter the user number : **[8] [#]**	• User 8 = Guest user
Step 3: Press the new PIN : **[4 - 6 digits PIN] [#]**	• Zone light will be ***ON*** one by one to indicate that the **PIN** has been entered.
Step 4: Repeat the new PIN : **[4 - 6 digits PIN] [#]**	• Zone light will be ***ON*** one by one to indicate that the **PIN** has been entered. • The keypad will beep twice for valid entry.
Step 5: Enter access level : **[Toggle key 1-4] [#]**	• Press key 1 to key 4 to set user access level. • Key [**1**] –Arm and Disarm On (1)/ Off (0) Key [**2**] – Arm (1)/ Disarm (0) Key [**3**] – Bypass Enable (1)/ Disable (0) Key [**4**] – Open/ Close Report (1)/ Disable (0) *By pressing Key **1- 4** will **toggle** its status to ***ON /OFF*** • The keypad will beep twice for valid entry.
Step 6: Enter Guest Time : **[0 - 15] [#]**	• Valid entry is 0 - 15 for number of days. • The keypad will beep twice for valid entry.

Note:
- Pin "000000" is not allowed to be used as password.
- After enter the user number, press [#]. Press [**0**] [#] to delete PIN.

4.0.4 DURESS

Command	Information
Step 1: Press **[2] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit Duress's Code"** option.
Step 2: Enter the Duress Code : **[4 digits Code] [#]**	• Zone light will be ***ON*** one by one to indicate that the **PIN** has been entered. • The keypad will beep twice for valid entry.

Note:
- **Duress Code** default value: "**2222**"

4.0.5 TIMER

4.0.5.1 IO ON

Command	Information
Step 1: Press **[3] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit IO ON Timer"** option.
Step 2: Enter the Timer Number: **[Timer number] [#]**	• Timer 1 to Timer 4
Step 3: Enter the IO ON Time: **[_] [_] [_] [_] [#]**	• Please enter international time according to **the 24-hour format.** • E.g. "1400" for 2pm • Zone light will be ***ON*** one by one to indicate that the time has been entered. • Enter "**0**" will delete the I/O Module ON Timer. • The keypad will beep twice for valid entry.

4.0.5.2 IO OFF

Command	Information
Step 1: Press **[4] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit IO OFF Timer"** option.
Step 2: Enter the Timer Number : **[Timer number] [#]**	• Timer 1 to Timer 4
Step 3: Enter the IO ON Time: **[_] [_] [_] [_] [#]**	• Please enter international time according to **the 24-hour format.** • E.g. "1400" for 2pm • Zone light will be ***ON*** one by one to indicate that the time has been entered. • Enter "**0**" will delete the I/O Module OFF Timer. • The keypad will beep twice for valid entry.

4.0.5.3 ARM

Command	Information
Step 1: Press **[6] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit Auto Arm Timer"** option.
Step 2: Enter the Auto Arm Time: **[_] [_] [_] [_] [#]**	• Please enter international time according to **the 24-hour format.** • E.g. "1400" for 2pm • Zone light will be ***ON*** one by one to indicate that the time has been entered. • Enter "**0**" will delete the Auto Arm Timer. • The keypad will beep twice for valid entry.

4.0.5.4 DISARM

Command	Information
Step 1: Press **[7] [#]**	• Zone 1 light will be **ON** to indicate that the command has been accepted and the users are in **"Edit Auto Disarm Timer"** option.
Step 2: Enter the Auto DisarmTime: **[_] [_] [_] [_] [#]**	• Please enter international time according to **the 24-hour format.** • E.g. "1400" for 2pm • Zone light will be ***ON*** one by one to indicate that the time has been entered. • Enter "**0**" will delete the Auto Disarm Timer. • The keypad will beep twice for valid entry.

4.0.6 CLOCK

Command	Information
Step 1: Press **[5] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Edit Real Time Clock"** option.
Step 2: Edit Real Time Clcok: **[_] [_] [_] [_] [#]**	• Please enter international time according to **the 24-hour format.** • E.g. "1400" for 2pm • Zone light will be ***ON*** one by one to indicate that the **real time clock** has been entered. • The keypad will beep twice for valid entry.

4.0.7 INSTALLER ACCESS

Command	Information
Step 1: Press **[8] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Installer Access"** option.
Step 2: Press key **[1]** to **toggle** the ***ON/OFF*** (Enable/Disable) of Installer Access	• Zone light 1 will toggle ***ON/OFF*** according to Installer Access setting status.
Step 3: Press **[#]**	• Keypad will beep twice for valid entry

Note:

- Initially Installer Access will be toggling ***ON*** (Enable).
- Installer access will be disabling automatically after 3 hours.
- Indication **Light *ON*** means features **ENABLED**, ***OFF*** means **DISABLED.**
- Due to security reason, user is advised to disable installer access once the system is hand over. User should keep installer accessibility barred all the time unless requested by installer during commissioning or servicing.

4.0.8 FAST KEY ACCESS

Command	Information
Step 1: Press **[9] [#]**	• Zone 1 light will be ***ON*** to indicate that the command has been accepted and the users are in **"Fat Key Access"** option.
Step 2: Press key **[1]** to **toggle** the ***ON/OFF*** (Enable/Disable) of Fast Key Access	• Zone light 1 will toggle ***ON/OFF*** according to Fast Key Access setting status.
Step 3: Press **[#]**	• Keypad will beep twice for valid entry

Note:

- Initially Fast Key access will be toggling ***ON*** (Enable).
- When Fast Key **disable**, arming mode and bypass mode **only** can be access by **PIN code**.
- Fast Key setting is an individual keypad setting.
- Indication **Light *ON*** means features **ENABLED**, ***OFF*** means **DISABLED**.

4.0.9 PHONE LINE LOSS DETECTION

Command	Information
Step 1: Press **[10] [#]**	• Zone 1 light will be **ON** to indicate that the command has been accepted and the users are in **"Phone Line Loss Detection"** option.
Step 2: Press key **[1]** to **toggle** the ***ON/OFF*** (Enable/disable) of Phone Line Loss Detection	• Zone light 1 will toggle **ON/OFF** according to Phone Line Loss Detection setting status.
Step 3: Press **[#]**	• Keypad will beep twice for valid entry

Note:

- Initially phone line loss detection will be toggling ***OFF*** (Disable).
- When phone line loss detection **enable** and phone communication option **enable** in installer programming, alarm will be trigger if phone line **cut off**.
- Indication **Light *ON*** means features **ENABLED**, ***OFF*** means **DISABLED**.

CHAPTER 5: KEYPAD SETTINGS

In order to access the keypad setting, the system must be in **normal** mode.

Command	Information
Door Chime Press [7] and hold for 2 sec	This options will **toggle** the door chime to ***ON/OFF***
Keypad Back Light Press **[COM] [2] [1] [#]**	This options will **toggle** the keypad back light to ***ON/OFF***
Arm Tone Press **[COM] [2] [2] [#]**	This options will **toggle** the arm tone to ***ON/OFF***
Pre-warn Tone Press **[COM] [2] [3] [#]**	This options will **toggle** the pre-warn tone to ***ON/OFF***
Key press Tone Press **[COM] [2] [4] [#]**	This options will **toggle** the key press tone to ***ON/OFF***
Toggle ON/OFF for ***all keypads setting*** Press **[COM] [2] [5] [#]**	This option will **toggle** all keypad settings all at one time. Under this command, all keypad settings **(** Door Chime, Back light, Arm Tone, Pre-warn Tone, Key press Tone**)** will act as a "group" to ***ON/OFF***.

Note:

- Initially keypad setting will be all toggling ***ON*** (Enable).
- Keypad will beep twice for valid entry.

CHAPTER 6: WHEN THERE IS AN EMERGENCY

6.0 EMERGENCY ALARM

In order to access this function, the system must be in normal mode

Command	Information
If there is a '**FIRE**' Press [🔥] for 2 seconds	• Alarm will be triggered • **ARMED LED** will **flash** indicate soft zone alarm trigger. • A message will be sent to the Central Monitoring Station (**CMS**) • An alert tone or voice reporting will be sent through telephone
If there is a '**EMERGENCY**' Press [✚] for 2 seconds	
If there is a '**PANIC**' Press [①] for 2 seconds	

To ***OFF*** the emergency alarm alert, press **[USER PIN] [#]**

6.1 DURESS ALARM (CALLING FOR HELP)

In the event where the user is forced by an intruder or robber to disarm the alarm system, user can disarm the alarm system by using **Duress Code**. By pressing Duress Code, user can access the menu to disarm the system. At the same time, a silent signal will be sent to any designated telephone number or central monitoring station (**CMS**) to call for help.(* Provided the system is connected to CMS). The siren and strobe will not be activated. To set the duress code, refer to **section 4.0.4**

6.2 TAMPERED AND PHONE LINE LOSS ALARM

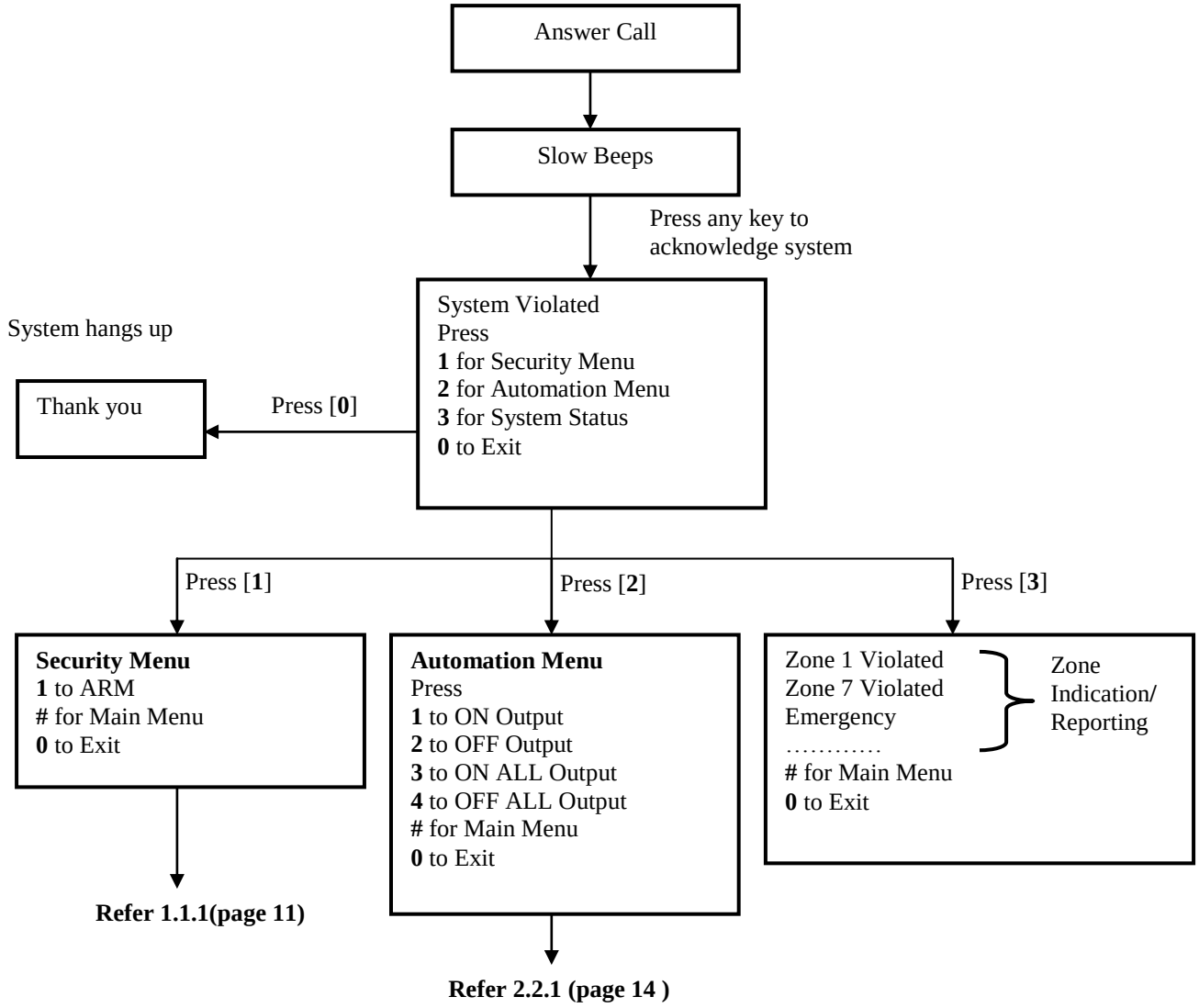
Reporting / Zone indication	Description
Tampered Alarm	ARMED and all zone LED will **fast Blink** to indicate the alarm was triggered by the tamper switch.
Phone Line Loss Alarm	ARMED and SERVICE LED will **fast Blink** to indicate the alarm was triggered by the phone line loss.

6.3 SYSTEM ALERT TO USER THROUGH TELEPHONE

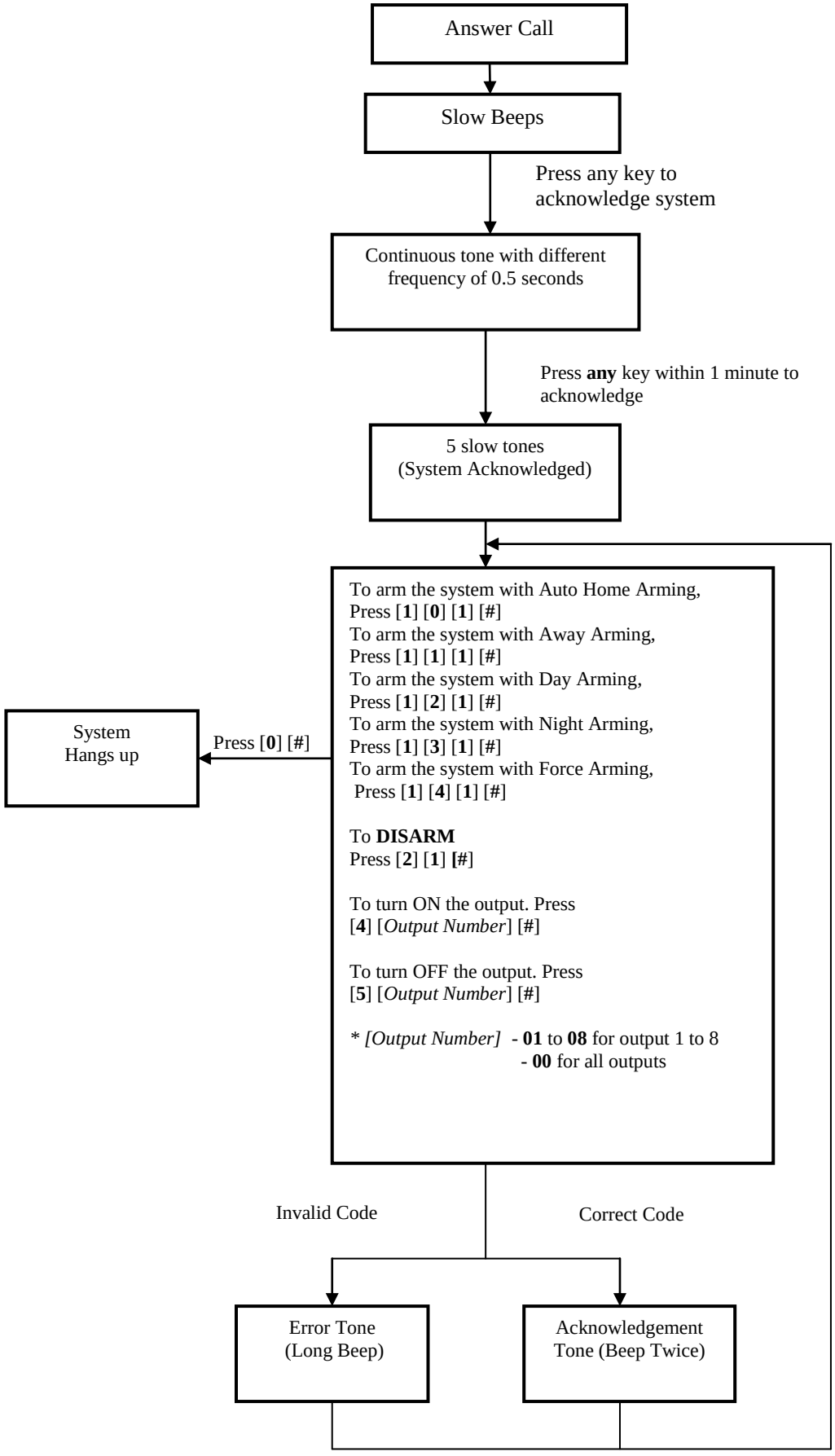
In case of any intrusion or emergency, this system will acknowledge users with an alarm report. The panel will contact the user through fixed telephone or mobile line. If the user is unable to reply the phone call, this system will call the user again. The default dialing attempts are 5 times. After 30 minutes, the system will call again. The number of repetition calls after 30 minutes depend on the redial attempt set in the installer programming. The reporting comes in **two** reporting method – no voice or **beeper reporting** and **voice reporting** (if voice module is installed).
System will report the status of the system to user when an event happened accordingly to the list below:

Reporting / Zone indication	Description
Zone xx Violated	Zone has been violated
Zone xx Restored	Alarm in zone xx has been restored
Emergency	Emergency occurring
Fire	Fire occurring
Panic	Panic occurring
Help	Duress Code has been entered
AC Loss	AC loss
AC Restore	AC restored
Trouble	Trouble due to battery problem and bell problem
Zone Bypass	Zone has been bypassed
Zone Bypass Restore	Zone has been unbypassed
Tamper	Tamper occurring
System Armed	System has been armed
System Disarmed	System has been disarmed

6.3.1 WITH VOICE ACTIVE



6.3.2 WITH BEEPER (Without Voice Module)



CHAPTER 7: SYSTEM CHECKING

7.0 TROUBLE VIEW

System must be in normal or armed mode in order to view trouble. Control panel will monitor a number of possible trouble conditions. If one of these conditions occurs, the **SERVICE** light will turn ***ON*** and remain ***ON*** until trouble free and/or it receives clearance instruction from the users. There are only **8 conditions** available designated by indication lights (1 to 8, indication light 9 will remain *OFF* all the time).

7.1.1 QUICK TROUBLE VIEW

Command	Information
To **view** the trouble condition: Press [8] and hold for 2 sec	• The service light will ***FLASH*** to indicate that keypad is under View Trouble Mode. • Designated zone light is used to reflect the type of problem. **(**Refer to table below**)**
To **Exit** View Trouble mode Press **[#]**	• The service light will be ***ON*** if the trouble conditions still remain. • The designated zone light will be restored back to the actual zone's status.

Trouble	Display	Causes
DC Loss (Low Battery)	Zone 1 LED turn on	Backup battery in weak or backup battery is not available.
Bell Strobe Siren Loss	Zone 2 LED turn on	Either bell, strobe or siren is loss.
External Communication Error	Zone 3 LED turn on	Unable to call out either due to no reply by user during reporting.
Internal Communication Error	Zone 4 LED turn on	LED keypad and IO Expander cannot communicate with control panel due to main panel or connection failure.
Short Circuit	Zone 5 LED turn on	One or more of the part in AP1, AP2, AP3, BELL, SL, SIREN port is short circuit.
Tamper	Zone 6 LED turn on	Tamper occurred and has not been cleared by alarm memory clear
Phone Line Loss	Zone 7 LED turn on	No phone line connected to the system
AC Loss	Zone 8 LED turn on	No power supply detected

7.1 TESTING SYSTEM

Users are advised to test the system frequently. System must be tested at least **once every three months**. If the system is not functioning accordingly, please contact the nearest dealer for technical assistance. In order to test , system must be on normal mode. There are **4 types** of tests: walk test, bell test, CMS test and battery test.

7.1.1 LOCAL SYSTEM TEST (WALK TEST)

Command	Information
Initiate **Walk Test** Press **[COM] [1] [1] [#]**	• Walk test allow on-site testing for each zone of the system • The keypad will beep twice upon confirmation • The **SERVICE** and **ARMED** light will **FLASH** to indicate that the system is currently under the *Walk Test.* • Each time zone faulted, corresponding zone light will **fast flash** and keypad will chime until system exit walk test.
To **exit**, press **any** key.	• The keypad will beep twice upon confirmation. Back to normal mode.

7.1.2 BELL TEST

Command	Information
Test bell or siren Press **[COM] [1] [2] [#]**	• Once command has been acknowledged, the keypad and bell will sound continuously for 3 seconds.

7.1.3 MANUAL TEST REPORTING FOR CMS

Command	Information
Manual **test** reporting for **CMS** Press **[COM] [1] [3] [#]**	• The keypad will beep twice upon confirmation. Panel will generate message to CMS.

7.1.4 BATTERY TEST

Command	Information
Test back-up **battery** Press **[COM] [1] [4] [#]**	• Battery test takes few seconds • The keypad will beep twice or reject tone as a result. • The indication of low battery can be seen from View System Trouble Mode.

GLOSSARY

Arming/Disarm
To ARM is to ***ON*** the alarm system and to DISARM is to ***OFF*** the alarm system

Battery
A back up power source to provide protection for a limited time in the event of a power failure

Bypass
Removal of one or more protection zones from the system

Central Monitoring Station (CMS)
Central control station to receive the alarm message from AX1 system

Chime
A beeping tune from the keypad to indicate sensor is activated

Duress Code
In the event that you are forced by an intruder to disarm your system, you disarm the system with the Duress Code which will cause the system to disarm and simultaneously send a silent distress signal to the central monitoring station (CMS). Default duress code is **2222.**

Entry Delay
The amount of time that you are allowed to enter the premises when the system is armed.

Exit Delay
The amount of time that you are allowed to leave the premises when the system is arming.

Guest PIN
A temporary four to six digit code which is used to arm and disarm the system from the keypad

User PIN
A four to six digit code which is used to arm and disarm the system from the keypad

Master PIN
A four to six digit code which can be used to program, reprogram and erase user codes, as well as arming and disarm the system from the keypad. The Master PIN is also equivalent to user 1 PIN. Default Master PIN is **111111**.

Zone
An area which is protected by a security device. Your front door may be designated as Zone 1, while the living room motion detectors maybe designated as Zone 2. Refer to the Zone Label on your keypad for the Zone Identification of your system. The designated zone number is set during installer programming.

LIMITATIONS

Even though AX1 is an advanced security system, it does not 100% guarantee protections against burglary, fire or other losses. Any alarm system whether commercial or residential is subject to compromise or failure-to-warn for a variety of reasons. These include:

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.
- Intrusion detectors, smoke detectors and many sensing devices will not operate without power. Devices powered by AC will not work if there is no AC power supply for any reason and their back up batteries are missing, dead or improperly installed.
- Alarm warning devices such as sirens or bells may not alert people or wake up sleeper if they are located on the other side of closed or partly closed door.
- Telephone lines needed to transmit alarm from the premise to a central monitoring station may be out or temporarily out of service. Telephone station lines are subjected to compromise by sophisticated method of attack.
- Smoke detector used in conjunction with the alarm system may not sense fires that start where smoke cannot reach the detector such as wall, roof or the other side of the door. Smoke detector also may not sense a fire on another level of residence or carelessness and safety hazards like smoking in the bed, violent explosions, escaping gas, improper storage of flammable material, overloaded electrical circuits, and children playing with matches.
- The most common cause of an alarm system not functioning properly when an intrusion or fire occurs is inadequate maintenance. Therefore, your system should be tested weekly to ensure all sensors are working properly.
- Installing an alarm system may make you eligible for lower insurance rates but an alarm system is not substitute for insurance. Homeowners, property owners and renters should continue to insure their lives and properties.

Note: Specifications subject to change without prior notice.

SYSTEM INFORMATION

MASTER USER:
ADDRESS:
TELEPHONE NUMBER:
DATE :
REMARKS :

Telephone Number 1

Receiver Number 1	
Receiver Type	*User / CMS*
Receiver Pattern	*Permanent / Backup*
CMS Account Number 1	

Telephone Number 2

Receiver Number 2	
Receiver Type	*User / CMS*
Receiver Pattern	*Permanent / Backup*
CMS Account Number 2	

Telephone Number 3

Receiver Number 3	
Receiver Type	*User / CMS*
Receiver Pattern	*Permanent / Backup*
CMS Account Number 3	

Telephone Number 4

Receiver Number 4	
Receiver Type	*User / CMS*
Receiver Pattern	*Permanent / Backup*
CMS Account Number 4	

Telephony Settings

Dial Attempt	times
Redial Attempt	times
Number of Rings before answer	rings

Zone Settings

Zone	Zone Type	Zone Chime	Output Map	Description
1	Light/Interior/Instant/Delay/24 Hours	Yes/No		
2	Light/Interior/Instant/Delay/24 Hours	Yes/No		
3	Light/Interior/Instant/Delay/24 Hours	Yes/No		
4	Light/Interior/Instant/Delay/24 Hours	Yes/No		
5	Light/Interior/Instant/Delay/24 Hours	Yes/No		
6	Light/Interior/Instant/Delay/24 Hours	Yes/No		
7	Light/Interior/Instant/Delay/24 Hours	Yes/No		
8	Light/Interior/Instant/Delay/24 Hours	Yes/No		

Output Settings

Output	Output Description
1	
2	
3	
4	
5	
6	
7	
8	

Output Timers

Timer	Timer ON	Timer OFF	Output No.
Timer 1	Date: Time:	Date: Time:	
Timer 2	Date: Time:	Date: Time:	
Timer 3	Date: Time:	Date: Time:	
Timer 4	Date: Time:	Date: Time:	

Arm/Disarm Timers

Timer	Timer ARM	Timer DISARM
Timer 1	Date: Time:	Date: Time:

System Timers

Entry Delay Timer	Seconds
Exit Delay Timer	Seconds
Bell Audible Time	Minutes

QUICK REFERENCE

1) To arm the house & other Fast Key Functions

Key press	Option	Remark
1 and hold 2s	**Auto Home Arming mode**	When you leave the house
2 and hold 2s	**Day Arming Mode**	When you are at home day time
3 and hold 2s	**Night Arming Mode**	When you goto Sleep
4 and hold 2s	**Force Arming**	When there are zone still open
5 and hold 2s	**Automation Mode**	Control Lighting Menu
6 and hold 2s	**Clear alarm memory**	Stop Strobe light
7 and hold 2s	**Chime mode**	To off zone sound in keypad
8 and hold 2s	**Service mode**	To check system for service
9 and hold 2s	**Bypass zone**	To ignore this zone from security
and hold 2s	**Emergency Alarm**	To trigger Emergency alarm
and hold 2s	**Fire Alarm**	To trigger Fire alarm
and hold 2s	**Panic Alarm**	To trigger Panic alarm

2) To Disarm the house

1. **[** PIN CODE **]** + **[#]**

3) To stop the bell, siren and strobe light when alarm trigger

1. **[** PIN CODE **]** + **[#]**
2. Check the alarm report for violated zone.
3. Clear alarm by pressing **[6]** and hold for 2 second to resume to normal status (Strobe light will turn off)

3) When the system call to report

1. Pick up the call
2. Press **any** key to acknowledge system.
3. Press "**3**" to listen to system reporting.
4. Follow the interactive menu.
5. Once done with the reporting and control, press **[0]** + **[#]** to hang up

4) When you call in to the system

1. Wait for the ring count
2. Once system accept the call, press **[**MASTER PIN CODE**]** + **[#]**
3. Follow the interactive menu
4. Once done the control, press **[0]** + **[#]** to hang up