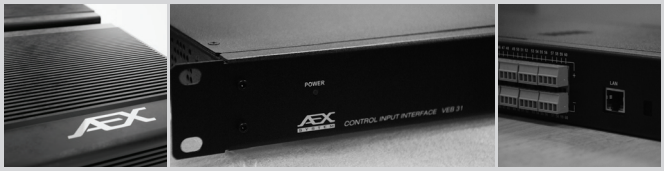
VEB Series
Network PA System



The VECTUS VEB Series Network PA System is the latest TCP/IP based PA System offering from AEX SYSTEM. The system runs on AEX SYSTEM's tried and tested TCP/IP network communication protocol that provides a platform for audio and control data routing over standard Ethernet (LAN) infrastructure. The system is fully scalable and capable of supporting up to 64 simultaneous audio channels, making it suitable for a simple application up to the most complex of public address systems.

Supporting a distributed architecture also makes the VEB Series an indispensable solution for mixed development projects that consist of multiple blocks and multiple sub PA Systems that require site-wide integration. With a failsafe mode, the VEB also ensures emergency evacuation functionality even with major failure to the Ethernet (LAN) infrastructure.

The VEB Series also features advance touch screen Network paging consoles with extremely user friendly graphic user interface. These network paging consoles can even be connected and used via WIFI infrastructure allowing the consoles to be portable for added practicality.

VEB 12-IPC | Network System Manager Unit

The Network System Manager unit is designed to provide overall system governance of the VEB Network PA System. The unit will provide the user interface for system initialization steps, zone configuration and audio pattern routings. The Network System Manager can also act as a time scheduler for pre-recorded messages as well as a background music source with up to 3 channels of background music.In compliance to emergency evacuation requirements, the unit will store the evacuation messages and provide event logging, announcement logging and fault monitoring of all critical components within the system. In the event of the VEB 12-IPC failure, the VEB 43-10 paging consoles shall still be able to fully function and make announcements.

Technical Specifications

	VEB 12-IPC
Network Interface	10/100Mbit Ethernet
Indicators	Power
Power Requirement	220~240Vac mains 50/60Hz
Dimension (W x H x D)	483 x 86 x 200 mm

VEB 13-IPC | Network Audio Streaming Manager Unit

The Network Audio Streaming Manager Unit allows the user to stream 8 simultaneous channels of audio into the network over a single Ethernet connection. These audio channels can be retrieved by the VEB Network Audio Extracts. Each channel will have its own playlist created by the user. These playlists are configurable by from the GUI. This is an ideal solution for applications that require multiple audio channels like hotel, shopping complexes, supermarkets, theme parks, etc.

Technical Specifications

	VEB 13-IPC
Network Interface	10/100Mbit Ethernet
Indicators	Power
Power Requirement	220~240Vac mains 50/60Hz
Dimension (W x H x D)	483 x 86 x 200 mm

VEB 14-IPC | Dual Redundancy Network System Manager Unit

The Dual Redundancy Network System Manager unit is designed to provide overall system governance of the VEB Network PA System. The unit will provide the user interface for system initialization steps such as; VEB unit nodes search, VEB units address configuration, zone configuration and audio pattern routings. The Network System Manager can also act as a time scheduler with pre-recorded messages as well as a background music source with up to 3 channels of background music streaming. In compliance with emergency evacuation requirements, the unit will store the evacuation messages and provide event logging, announcement logging and fault monitoring of all critical components within the system. The VEB 14-IPC, however, supports a Dual Redundancy configuration, whereby 2 units of VEB 14-IPC can be installed in a single system. This fully hot standby redundancy solution is suitable for projects that require the utmost in system integrity and zero downtime.

Technical Specifications

	VEB 14-IPC
Network Interface	10/100Mbit Ethernet
Indicators	Power
Power Requirement	220~240Vac mains 50/60Hz
Dimension (W x H x D)	483 x 86 x 200 mm

VEB 42 | Emergency Paging Panel

VEB 42-EM | Emergency Paging Extension Panel

The Emergency Paging Panel is rack mount unit providing emergency responders/firemen personnel to conduct evacuation in any given project. Each Emergency Paging Panel comes with a handheld microphone and user friendly robust zone selection buttons. The Emergency Paging Panel complies with evacuation safety standards with its entire connection path to critical equipment in the system fully monitored. The Emergency Paging Panel will primarily communicate with the entire system via the LAN, however in the event of a failure of the LAN infrastructure, the system will revert to an analogue failsafe mode and still allow paging throughout the system. The Emergency Paging Panel comes with 24 zones selection button, should more zone selection button be required the unit can be cascaded with the VEB 42-EM Emergency Paging Extension Panel.

Technical Specifications

	VEB 42
Network Interface	10/100 Mbps Ethernet TCP/IP
No. of zone selection buttons	24nos. Push to activate buttons
Communication	UART R-COMM to VEB 42
Indicators	POWER, Fault indicator, Emergency Mode activated, SIREN in progress, TALK
Power Requirements	24Vdc (Regulated), 0.5 A
Dimensions (W x H x D)	483 x 86 x 200 mm

Technical Specifications

	VEB 42-EM
Network Interface	N/A
No. of zone selection buttons	24nos. Push to activate buttons
Communication	UART R-COMM to VEB 42
Indicators	POWER
Power Requirements	24Vdc (Regulated), 0.3A
Dimensions (W x H x D)	483 x 86 x 200 mm

VEB 43-10 | Network Paging Console

The Network Paging Console for the VEB Series is a state of the art touchscreen based paging console unit. It allows the user to operate the system and make paging announcements via a user friendly GUI. Being a network enabled console, the unit can be connected or relocated anywhere within the project without additional cabling cost or hassle – simply just connect it to any available LAN Network port

Technical Specifications

	VEB 43-10
Port Interface	Rj45 10/100 Mbps Ethernet TCP/IP Connectivity Stereo/Mono (Stream)
Touchscreen Dimension	10 inch
Microphone	Non-removable gooseneck condenser capsule Unidirectional microphone with windshield
Chime	2 Tone Ascending and 2 Tone Descending. (User customizable)
S/N Ratio	>75dB @ 1KHz
Power Requirements	12 Vdc, 2.5 A
Dimension (W x H x D)	195 x 65 x 190 mm (Mic only)

VEB 44 & VEB 44EM | Network Paging Console

This is a network paging console that allow user to make announcement in the buildings from any network point. Its buttons can be programmed to assign zone or group of zones to it. The main unit VEB 44 consist of 8 zone buttons and the extension VEB 44EM consist of 12 zone buttons. This console can be used with or without the VEB 21-IPC Network System Manager.

Technical Specifications

	VEB 44 & VEB 44EM
Network	10/100Mbit Ethernet
Microphone	Non-removable condenser gooseneck microphone with windshield
Main Console	8 zone buttons
Extension Console	12 zone buttons
Power Requirement	24Vdc, 2A Power Adaptor
Dimension (W x H x D) VES 44	105 x 51.2 x 249.4 mm
VES 44EM	105 x 51.2 x 249.4 mm

VEB 21 | Network Paging Station

The VEB 21 converts a normal workstation PC into a full fledged Paging Station with additional features that never before could an ordinary paging console do. The operator now could make zone selection either from a graphical map or floor plan to assist the operator visually or from the GUI layout, similar to a paging console for button selection. The Text Streaming feature allows announcements to be entered in text, real-time or pre-stored. The text will then be synthesised into human voice and broadcasted. Text streaming assures that all announcements made are consistent in voice, pronunciation, rate of speech and loudness. VT 61 paging gooseneck microphone to be connected to the audio input of the PC is available for use with the VEB 21.

VEB 404-S | 4-Channel Network Audio Insert

The VEB 404-S accepts 4 stereo channels of analogue audio, encodes and streams all channels out simultaneously via standard Ethernet (LAN). The unit will serve as a background music source audio insert for most projects allowing CD players, FM tuners and the likes to be stream to any destination zone within the project. The user can utilize the Network System Manager to manage and control the routing pattern according to the user requirements remotely.

Technical Specifications

	VEB 404-S
Input Sensitivity	4 Channels 0dBV (Stereo) RJ45 Connector
Audio Format	CD Quality BGM Audio Codec
Network Interface	4nos. 10/100 Mbps Ethernet TCP/IP Port
Indicators	Power, 4nos. Input Signal and 4nos. Line In Control
Control Input	4nos. Dry Contact trigger for input activation
Power Requirements	24 Vdc (Regulated), 0.1 A
Dimensions (W x H x D)	483 x 44 x 150 mm

VEB 601-S | Single Channel Network Audio Extract

The VEB 601-S extracts a single channel of audio from the network and converts it back to analogue audio. This audio can then be fed into AEX SYSTEM's range of power amplifier models. Each unit has a unique IP address allowing the unit to receive audio from the desired source. Gain control can be remotely controlled using the Network System Manager via the network.

Technical Specifications

	VEB 601-S
Audio Output Level	0dBV (600Ω Balanced) RJ45 Connector
Audio Format	CD Quality BGM Audio Codec
Network Interface	10/100 Mbps Ethernet TCP/IP
Indicators	Power, 1nos. Analog Link Indicator, 1nos. ATT OVR
Control Output	1nos. ATT OVR (Attenuator Override) Control output 1nos. Control Output (user programmable)
Power Requirements	24 Vdc (Regulated), 0.3 A
Dimensions (W x H x D)	215 x 44 x 150 mm

VEB 604-S | 4-Channel Network Audio Extract

The VEB 604-S extracts 4 channels of audio from the network and converts it back to analogue audio. This audio can then be then be fed into AEX SYSTEM's range of power amplifier models. Each of the 4 channels on the unit has a unique IP address allowing the unit to receive its own dedicated audio from desired sources available. Individual gain control can be remotely controlled using the Network System Manager via the network.

Technical Specifications

	VEB 604-S
Audio Output Level	4 Channels 0dBV (Stereo) RJ45 Connector
Audio Format	CD Quality BGM Audio Codec
Network Interface	4nos. 10/100 Mbps Ethernet TCP/IP Port
Indicators	Power, 1nos. Analog Link Indicator, 4nos. ATT OVR
Control Output	4nos. ATT OVR (Attenuator Override) Control output 4nos. Control Output (user programmable)
Power Requirements	24 Vdc (Regulated), 0.75 A
Dimensions (W x H x D)	483 x 44 x 150 mm

VEB 6010PD-L | 100W Network Audio Amplifier

The VEB 6010PD-L 100W Network Audio Amplifier unit receives and decodes IP audio streams with a built-in 100W class-D Low Impedance audio amplifier. The unit is designed to work with the VEB 12-IPC Network System Manager as part of the VEB Series range of products. The unit reproduces high quality audio for music and paging announcements.

Technical Specifications

	VEB 6010PD-L
Network Interface	10/100Mbit Ethernet
Indicators	Power
Power Requirement	24Vdc, 5A Power Adaptor
Dimension (W x H x D)	169 x 52 x 174 mm

VEB 6010PM-L | 100W Network Power Mixer

The VEB 6010PM-L 100W Network Powered Mixer receives and decodes IP audio streams. The unit features a built-in 100W digital amplifier and is designed to power low impedance speaker systems . The VEB 6010PM-L also has provision for one local Auxiliary and two Mic input to be connected directly to the unit. This makes the unit highly suitable for classrooms, conference rooms and small lecture hall applications where a local PA system is required. Once connected over the LAN, it forms a comprehensive VEB Series network audio solution that can be managed from the VEB 12-IPC Control System Manager.

Technical Specifications

	VEB 6010PM-L
Network Interface	10/100Mbit Ethernet
Indicators	Power
Power Requirement	24Vdc, 5A Power Adaptor
Dimension (W x H x D)	169 x 52 x 174 mm

VLS 12 | Network Matrix Expander

The Network Matrix Expander allows the increase of outputs within a PA System. These output can easily be created in accordance to the client's requirements and controlled to be switched ON or OFF (during announcements and music routing) directly via the LAN using the Network System Manager, Network Paging Console or the Network Paging Station. Each Network Matrix Expander is capable of providing 12 outputs and multiple unit can be used within a project for large scale applications.

Technical Specifications

	VLS 12
Network Interface	10/100 Mbps Ethernet TCP/IP
Indicators	Power, 12nos. Output status indicator (ON/OFF)
Number of output	12nos.
Max Current Handling per output.	12A per output (1200W)
Power Requirements	24 Vdc (Regulated), 0.42 A
Dimensions (W x H x D)	483 x 44 x 150 mm

VEB 31 | Control Input Interface

The VEB 31 provides a means of interfacing with other third party equipment and sensors that are not network compliant. The unit is capable of receiving 60 opto-coupler contact closures which can be programmed to trigger a number of functions in the system such as an automated fire evacuation broadcast.

Technical Specifications

	VEB 31
Network Interface	10/100Mbit Ethernet
Indicators	Power
Control Input	60nos. Opto-coupler Control Input Sensors
Power Requirement	24 Vdc (Regulated), 0.3 A
Dimension (W x H x D)	483 x 44 x 150 mm

VEB 32 | Control Output Interface

The VEB 32 provides a means of interfacing and triggering other third party equipment that are not network compliant. The unit provides 60 opto-coupler output trigger, which can be used to trigger external relays and devices.

Technical Specifications

	VEB 32
Network Interface	10/100Mbit Ethernet
Indicators	Power
Control Input	60nos. Opto-coupler Control Input Sensors
Power Requirement	24 Vdc (Regulated), 0.7 A
Dimension (W x H x D)	483 x 44 x 150 mm

VAC 04 | Network Automatic Amplifier Changeover Unit

VAC 08 | Network Automatic Amplifier Changeover Unit

The VAC 04 and VAC 08 Network Automatic Amplifier Changeover unit provides monitoring and surveillance of power amplifiers within a project via the LAN. The unit is capable of monitoring up to 4 units (VAC 04) and 8 units (VAC 08) of power amplifiers for faults. Upon fault detection the unit will automatically changeover the faulty amplifier to a standby amplifier and at the same time report the fault to the Network System Manager and Network Paging Console.

Technical Specifications

	VAC 04
Network Interface	10/100 Mbps Ethernet TCP/IP
No. of channels per unit	4 Channels Duty, 1 Standby
Max. power handling per channel	1200W
Indicators	Power, 5 Bi-Colour indicators for 4 Duty and 1 Standby amplifier status
Power Requirements	24Vdc (Regulated), 0.5 A
Dimensions (W x H x D)	483 x 44 x 150 mm

Technical Specifications

	VAC 08
Network Interface	10/100 Mbps Ethernet TCP/IP
No. of zone selection buttons	8 Channels Duty, 1 Standby
Max. power handling per channel	1200W
Indicators	Power, 9 Bi-Colour indicators for 8 Duty and 1 Standby amplifier status
Power Requirements	24 Vdc (Regulated), 0.55 A
Dimensions (W x H x D)	483 x 44 x 150 mm

VEB 81 | SIP Audio Gateway

The VEB 81 provides a means of interfacing the VEB Series PA System with other third party SIP-enabled systems. An example of such integration would be with an IP Telephony/Intercom system. With the VEB 81 installed, it would allow any of the IP based handset units to select any of the PA System zones and make announcements through the handset unit.

Technical Specifications

	VEB 81
Network Interface	10/100 Mbps Ethernet TCP/IP
Indicators	Power
Power Requirements	220 ~ 240 Vac, 50/60 Hz, 11 W

VEB 82 | WIFI Audio Gateway

The VEB 82 WIFI Audio Gateway provides a means for remote devices such as the VEB 43 Network Paging Console to make access the PA System and make announcements via WIFI infrastructure. The VEB 82 WIFI Audio Gateway would also allow Android and iOS based portable devices with AEX System's proprietary VEB App to access and control the PA System wirelessly. The VEB 82 is capable of supporting up to 5 devices simultaneously at any given time.

Technical Specifications

	VEB 82
Network Interface	10/100 Mbps Ethernet TCP/IP
No. of simultaneous client devices	Max. 5
Indicators	Power
Power Requirements	220 ~ 240 Vac, 50/60 Hz, 11 W

VEB 83 | Internet Audio Gateway

The VEB 83 Internet Audio Gateway allows access and control to the VEB Series PA System in remote locations via the internet. With the VEB 83 installed as part of the VEB Series PA System in a remote site, the user will be able to access the system and make announcements via the internet utilizing the VEB 21 Network Paging Station. Multiple sites with PA system could be integrated as a total system utilizing the VEB 83.

Technical Specifications

	VEB 83
Network Interface	10/100 Mbps Ethernet TCP/IP
Indicators	Power
Power Requirements	220 ~ 240 Vac, 50/60 Hz, 11 W