

VE- PVXM10

VOICE ALARM CONTROLLER



OVERVIEW

The Voice Alarm Controller unit is control unit of the voice alarm system. It is the basis Functionality of the Voice Alarm System and full system supervision, Loudspeaker line impedance supervision, a supervised Emergency microphone on the front panel and a Supervised message manager, inbuilt Bluetooth.



The system is configured using Alphanumerical Display and Keypad advanced functions.

The messages can be merged to allow even more flexible use of pre-recorded announcements and evacuation Messages. The controller can be used as a stand-alone System with up to 8 zones, or expanded to up to 120 zones using additional 8-zone routers. Up to eight call stations can be connected. Interconnections are made using standard green connectors and shielded CAT-5 cable.

A built-in 15 W amplifier provides the power for the 100volt line Driver. Additional four Amplifiers can be added to provide four -channel operation. The audio output uses standard analog audio 100 V/1volt line switching with converter for full compatibility with the family of public address equipment. An LED meter monitors the output.

Configuration Display and keypad is provided Association for each slave and each trigger, Auto register, manual registration of the slave unit. Load sharing amplifier selection, message Setting, slave Browsing etc.

- Message manager
- 8-zone outputs
- 8 -Trigger input and emergency control inputs
- 8-Dry contact output
- Inbuilt Bluetooth, USB, SD card Audio Player

FUNCTIONS

The controller has two BGM source inputs and a Bluetooth / Aux input with configurable priority. A total of 8 priority levels can be specified for trigger inputs. Emergency Microphone have higher priority, call stations and for optimum system flexibility.

The powerful 15 W output section has 1 transformer-isolated 100 V constant-voltage outputs for driving 100 V line Driver. The 100 V- technique reduces line losses on longer distances and provides easy parallel connection of multiple Slave.

Up to 255 messages can be stored in the internal 16 MB flash ROM, without a need for battery backup. Each message can have any length within the total available capacity. Messages can Configuration with the help of Display and keypad.

Uploaded from a PC via into the memory, after which the unit operates without a PC connection. The standard WAV-format is used for the messages, and sample rates of 8 kHz up to 24 kHz with 16-bit word length (linear PCM) are supported. This gives up to 17 minutes of recording time with CD-quality signal-to-noise ratio.

The unit has 8 contact trigger inputs for emergency (EMG) calls. Each can be configured for a message consisting of a sequence of up to eight wave files. In this way some wave files may be used in various combinations with other messages, optimizing flexibility and the amount of storage space used. Multiple messages can be merged to form one integrated message. A zone selection, together with this sequence can be configured for each trigger input.

Interconnections Front

- Alert message button
- Alarm message button
- 20x4 LCD display
- 4x4 keypad
- Microphone socket
- USB, SD card input
- Alert message button
- Alarm message button
- 20x4 LCD display
- 4x4 keypad



Interconnections Back

- 8 loudspeaker outputs
- 4 External amplifier input
- 4 Amplifier output (1 V)
- Backup power input
- 8 trigger inputs
- 24 VDC Battery input
- Call station connectors
- 8 Dry contact output (NO-NC-C)
- 12Vdc logic output
- Aux BGM inputs
- Connector to message uploading
- Connector to PVXR10 (router) 9911832643

Controls and indicators Front

- LED power meter
- 1 BGM source selection buttons
- 8 system indication LEDs
- 1 Ack state buttons
- 1 Reset state buttons
- 8 zone status LED pairs
- 8 zone select buttons
- 1 BGM zone volume control knobs
- 1 BGM source status LEDs
- All-call button
- EMG state button

Back

- Power switch
- Power cord
- Microphone volume control knob
- Digital message volume control knob



PARTS INCLUDED	
Quantity	Component
1	PVXM10 Voice Alarm Controller
1	Power cord
1	Set of 19" mounting brackets
1	Installation and User Instructions

ELECTRICAL SPECIFICATION	
Mains power supply	
Voltage	230/115VAC, ±15%, 50/60 Hz
Current inrush	8 A
Max power consumption	600 VA
Battery power supply	
Voltage	24 VDC, +15% / -15%
Current max	14 A
Performance	
Output power (rms/maximum)	240W/360W
Power reduction on backup power	-1 dB
Frequency response	60 Hz to 18 kHz (+1/-3 dB at -10 dB ref. rated output)
Distortion	<1% at rated output power, 1 kHz
Bass control	-8/+8 dB at 100 Hz
Treble control	-8/+8 dB at 10 kHz
Mic/line input	
	1 x
Connector	RCA,
Sensitivity	1 mV (mic), 1 V (line)
Impedance	>1 k ohm (mic); >5 k ohm (line)
S/N (flat at max volume)	>63 dB (mic); >70 dB (line)
S/N (flat at min volume/muted)	>75 dB
CMRR	>40 dB (50 Hz – 20 kHz)
Headroom	>25 dB
Speech filter	-3 dB at 315 Hz, high-pass, 6 dB/oct
Limiter	Automatic
Line input	
	(BGM and call station)
Connector	Cinch, stereo converted to mono, unbalanced
Sensitivity	200 mV
Impedance	22k ohm
S/N (flat at max volume)	>70 dB
S/N (flat at min volume/ muted)	>75 dB
Headroom	>25 dB

Trigger Inputs	
Connectors	5.08mm-P
Activation	Programmable
Supervision	On EMG inputs, programmable
Supervision method	parallel resistor
100 V input	
Connector	5.08mm-P
Power handling capacity	4800 W
Tape output	
	1 x
Connector	Cinch, 2 x mono
Nominal level	350 mV
Impedance	<1 k ohm
Loudspeaker outputs	
Connectors	5.08mm-P
100 V output	1000 W rated per zone
BGM zone output Attenuation	70 / 50 /35 /25 / 18 / 13 V for 0 / -3 / -6 / -9 / -12 / -15 dB 120/60/30/15/8/4W
Output Contacts	
Connector Type	5.08mm-P
Rating	250 V, 7A, voltage free
Emergency active relay	NO/COM/NC
Call active relay	NO/COM/NC
Fault relay	NO / COM / NC normally energized (failsafe)
General purpose relays	NO / COM

POWER CONSUMPTION	
Mains operation	
Max power	550 W
Pilot tone*	136 W
Idle	60 W
24 VDC operation	
Max power	14.0 A (336 W)
-3 dB	12.5 A (300 W)
-6 dB	9.5 A (228 W)
Pilot tone*	2.5 A (60 W)
Idle	0.9 A (22 W)

* 20 kHz -20dB with maximum loudspeaker load

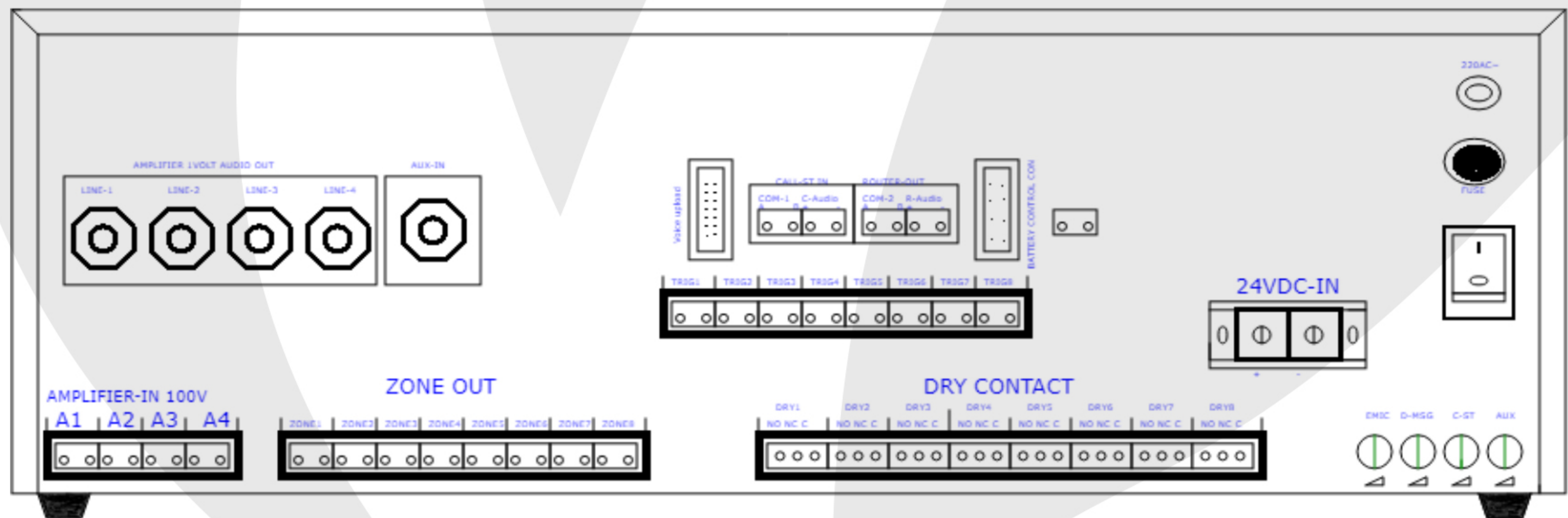
ENVIRONMENTAL SPECIFICATION	
Operating temperature	-10 °C to +55 °C (14 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%
Acoustic noise level of fan	<48 dB SPL at 1 m (max output)

MESSAGES	
Data format	WAV-file, 16-bit PCM, mono
Supported sample rates (fs)	16 / 12 / 11.025 / 8 kHz
Frequency response	
at fs=24kHz	100 Hz to 11 kHz (+1/-3 dB)
at fs=22.05kHz	100 Hz to 10 kHz (+1/-3 dB)
at fs=16kHz	100 Hz to 7.3 kHz (+1/-3 dB)
at fs=12kHz	100 Hz to 5.5 kHz (+1/-3 dB)
at fs=11.025kHz	100 Hz to 5 kHz (+1/-3 dB)
at fs=8kHz	100 Hz to 3.6 kHz (+1/-3 dB)
Distortion	<0.1% at 1 kHz
S/N (flat at max volume)	>80 dB
Memory capacity	16 MB Flash ROM
Recording / playback time	1000 seconds at fs = 8 kHz 333 seconds at fs = 24 kHz
Number of messages	255 max
Supervision Flash ROM	Continuous checksum control
Data retention time	>10 years

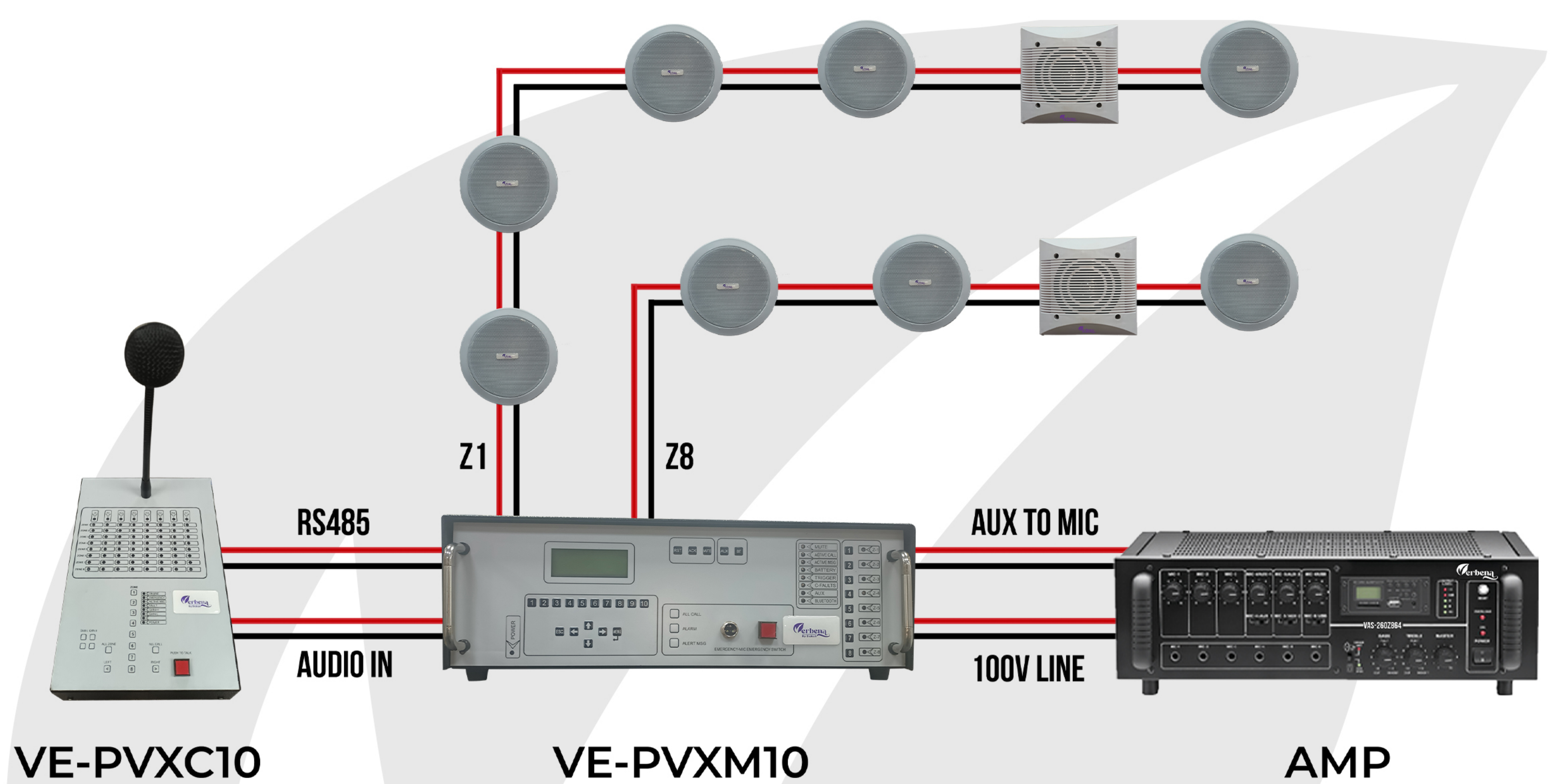
ENVIRONMENTAL SPECIFICATION	
Dimensions (MM)	470 X 300 X 155
Weight	4.5 Kg
Mounting	19" rack
Color	Front White and Back Black

ORDERING INFORMATION	
Product Name- Voice Alarm Controller (PVXM10)	

INSTALLATION/CONFIGURATION NOTES



WIRING SCHEMATIC DIAGRAM



Disclaimer

This document is just for a general overview & is not intended to be used for installation purpose. Data contained in documentation should be consulted with a fire-safety professional before specifying or using the product. All the specification are subject to change without prior notice.