

MATRIX & CONVENTIONAL SYSTEM

Crispy Sound, Befitting Your Clear Voice

Amperes has systems to fit your installations, fits both your budget or essential needs. From a simple PA to a more complex system to meet requirement of authorities, we have something that can perform the tasks of delivering quality audio. As life is precious, our EVAC announcement system stands ready to broadcast essential messages in timely manner through series of control equipments.



EVM8810

1000W 100V Controller / Master



EVS8820

1000W 100V Slave Extension



EVM8810 Rear View



EVS8820 Rear View



Introducing an integrated voice alarm controller from Amperes. It is suitable for small scale installations of up to 24 zones, which is compact and containing all components essential for EVAC and BGM system. As such, it is not only providing substantial savings on rack space but also overall costings of building up a small system with individual components.

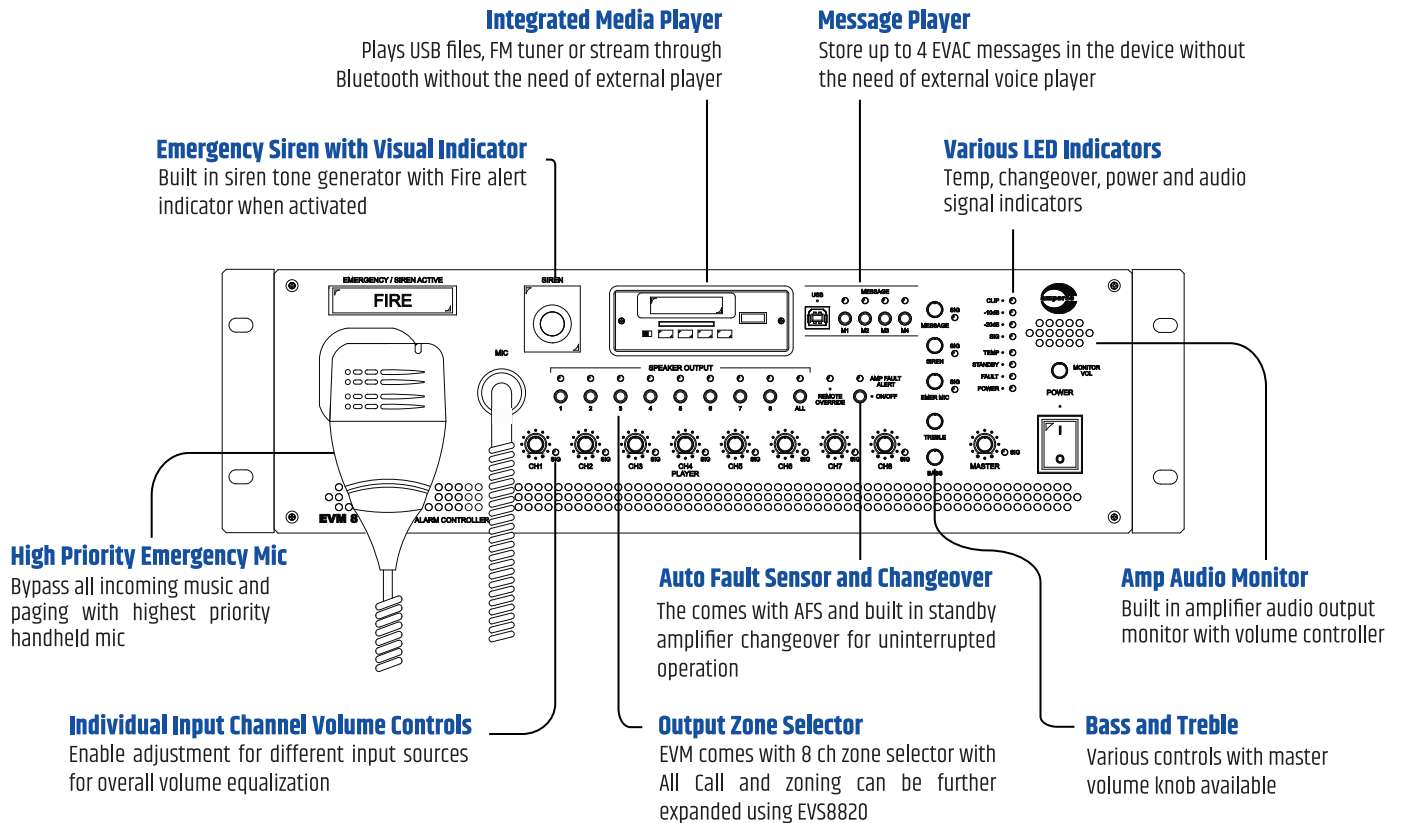
The core of the system is the **EVM8810** which is a master unit which has built in 1000W 100V with 8 zones of speaker lines. If the overall installation requires more than 8 zones, the output channels can be further expanded by using **EVS8820**. Additional 2 extensions can be added to make overall installation to be 24 zones.



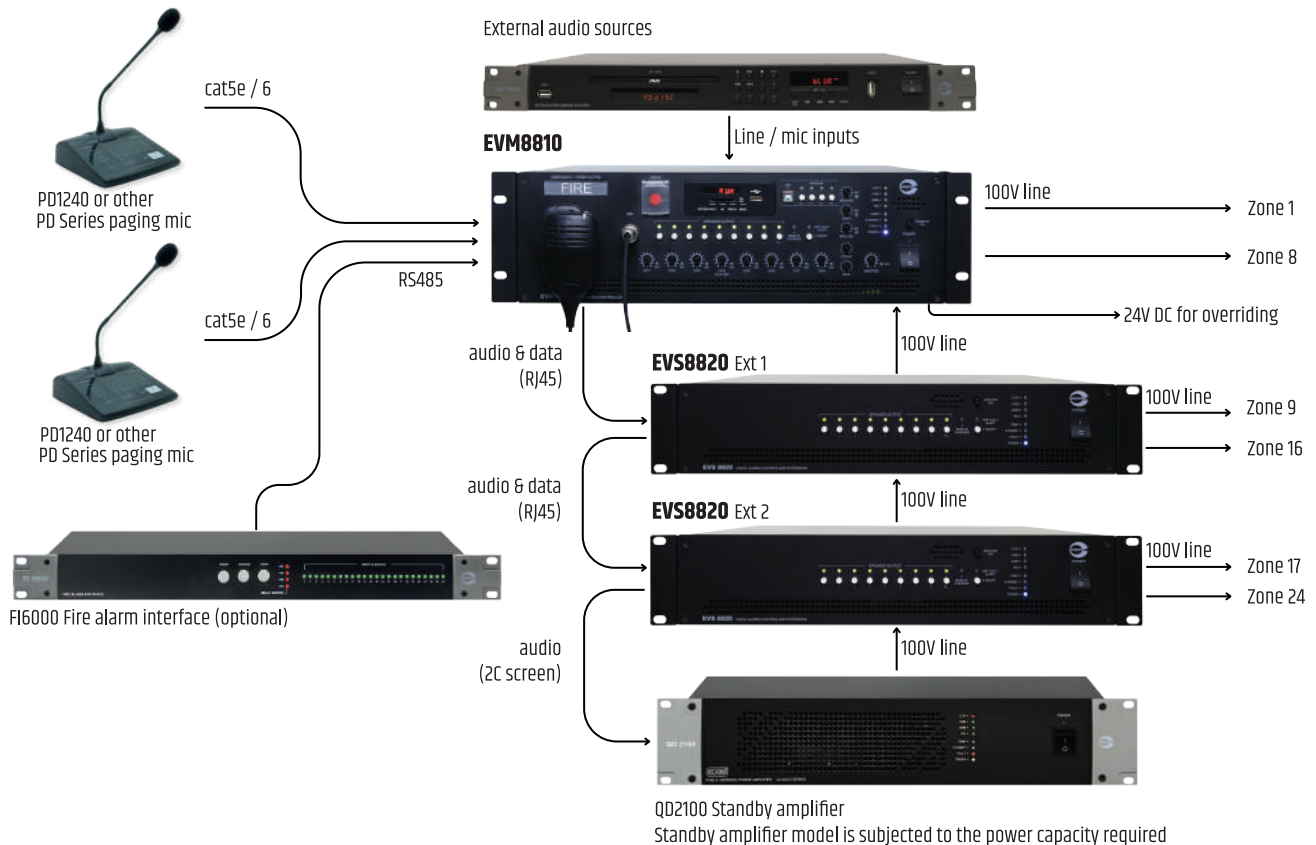
- **Integrated** voice alarm controller with media player for USB MP3, FM tuner and Bluetooth
- BGM playback - priority paging sequence in **compliance** with fire regulations / BS / EN54 standards
- **Auto amplifier fault sensor (AFS)** which monitor the amp circuit with built in standby amplifier changeover
- **Cascadable** to 24 zones for larger setup
- **Flexible addressing** which allows integration with existing Amperes PA setup
- 4 **EVAC message** memory banks with remote and front panel button playback
- **Compatible** with any Amperes PD series of paging microphone, PT1801 MKII, F16000 and external EP1200
- **Zone expansion** with TD6400 if only single EVM8810 is used without the need of extra EVS8820
- **Relay contacts** available for external volume controllers overriding when emergency paging / message activated



Features in Summary



Application Concept



Technical Specifications

	EVM8810	EVS8820
POWER REQUIREMENTS		
Power supply	220 - 240 V AC : 50 / 60 Hz	
Power rating (W at 100V line)	1000W at 100 V line output	
Power consumption (full load) : 240V ac	1500 VA (6.1A)	
Standby current at 240V ac	0.5 A	0.4 A
INPUTS		
Input channels	Ch 1 to 6 Mic / Line balanced, RCA x 2 Handheld PTT mic, message bank x 4 Siren, PD paging mic x 2 ports, USB / MP3 / FM / BT External EP mic port	Link line level : 0 dBu
Input sensitivity / impedance	Mic : 40 mA / 10k Ohm Line : 1.2 V / 10k Ohm	Line : 1.2 V / 10k Ohm
Input signal at standby	Switchable auto detect / always ON	
Frequency response	20 - 18 kHz (+/- 3 dB @ 1 kHz, 0 dBu)	
THD (+ Noise)	< 1%	
Standby amplifier changeover	Built in changeover relay	
OUTPUTS		
Zone output	8 zones (front switch and remote paging with All Call)	
Audio output	Master line output, balanced 0 dBu	
Audio link to slave	Line balanced 0 dBu	
Emergency dry contact	3A ; NO relay	
Tone controls	Bass (100 Hz), Treble (10 kHz), 15 dB slope	
Output audio monitoring	Front speaker with volume controls	
CONTROLS / COMMUNICATION		
Controls	Individual channels, message, siren, emergency mic, bass & treble, master volume	Output volume
Communication control	RS485 ; 19.2 kbps	
Cascade / link	RJ45 port (line audio and RS485 data)	
Cascade quantity	3 nos (total 24 zones)	
Indicators	Signal, temperature, fault, power, message, and zone selection	Signal, temperature, fault, power, and zone selection
Priority sequence (low to high)	BGM, paging mic, siren, message, remote	n/a
Protections	Thermal, short circuit, overload and AC fuses	
Cooling system	Auto temperature controls	
Cut off temperature	75°C	
PHYSICAL		
Dimensions (W x H x D)	482 x 132 x 420 mm	482 x 88 x 420 mm
Weight	10.8 kg	9.3 kg

Packing Information

EVM8810 :

Carton size : 555 (L) x 555 (W) x 230 (H) mm

Gross weight : 12.90 kg

1 unit per carton

EVS8820 :

Carton size : 555 (L) x 545 (W) x 190 (H) mm

Gross weight : 11 kg

1 unit per carton



MxP2288 RP1104 EX1103

12 x 8 Matrix Controller, Remote Control Panel

MATRIX SYSTEM



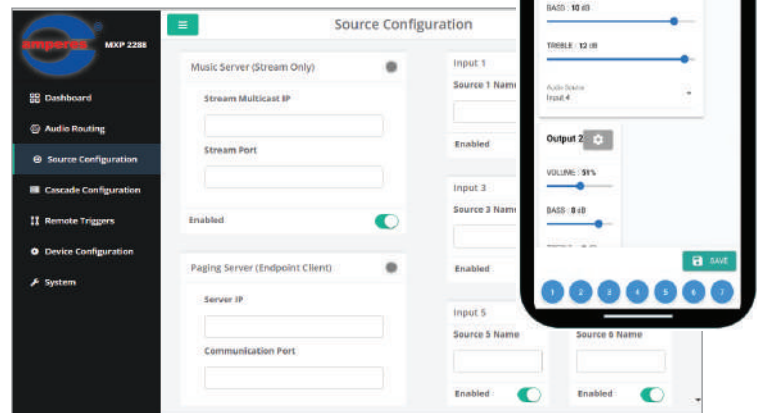
MxP2288 features 12 inputs with 8 outputs matrix, suitable for both PA installations in EVAC and BGM setups that requires flexible input to output routings. I.e. Commercial or residential applications.

With host of features such as remote access controls. LAN connectivity and android mobile apps, MxP2288 shall be the equipment of choice for flexibility in audio selection.

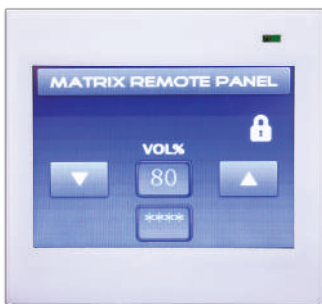


Web setting UI and android apps available for controls

- **12 x 8 matrix configurations** with dedicated EP1200, MR1301 and PD paging mic connections
- Expandable to **24 zones** with cascading of 3 units
- **Prioritized emergency broadcast** with fail safe paging for EP1200
- **Flexible** audio source input jacks
- **LAN connectivity** with Android apps for mobile controls
- Remote control panel RP1104 for **remote source** and **VBT controls**



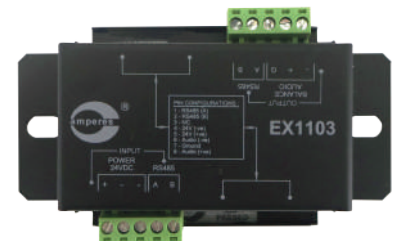
RP1104 Remote Zone Control Panel



A remote zone controller with sensor touch buttons which allows the user to select input music source, volume and tones. It shall be installed near to related zones and connected to the MxP2288 controller via Cat5e / 6 UTP cable.

Power source	24V DC via MxP2288
Power consumption	100 mA
LCD panel	3.5" resistive touch screen
Communication	RS485 ; 19.2 kbps
Controls	Volume / BGM source / tone controls
Cabling	Cat 5e / 6
Distance	Up to 500m
Dimensions (W x H)	86 x 86 mm
Colour	White
Weight	100 g

EX1103 Paging Mic Extender



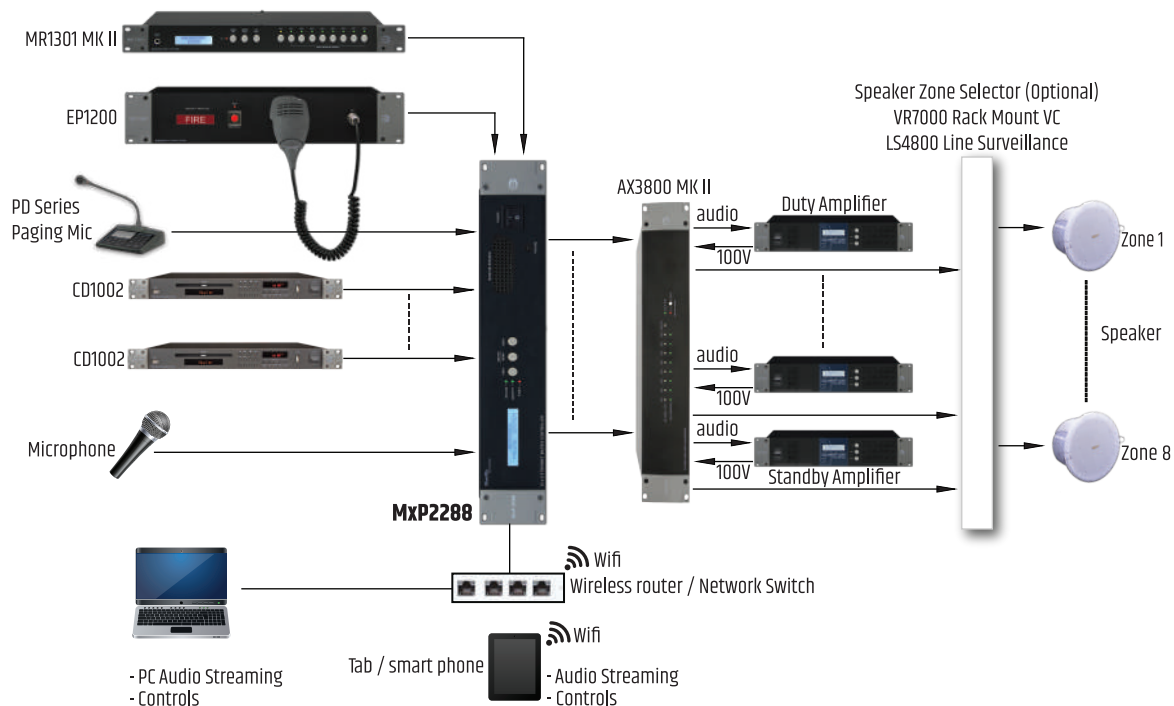
EX1103 is used when cables run from multiple paging mics return to controller or when more than one mic is connected in series before returning to MxP2288



Technical Specifications

Configuration	12 x 8 matrix controller
Power source	24V DC ; 1A
Input channels	8 mic / line level balanced signal via combo jacks 1 x emergency mic panel (EP1200), 1 x message player (MR1301), 1 x paging mic (PD series)
Input connections	Combo jack; Mic (XLR), phone (1/4" stereo phone jack)
Input impedance	Mic: 600 Ohm / Line: 10K Ohm balanced
Input sensitivity	800 mV rms (line level) and 350 mV rms (mic level)
Frequency response	150Hz - 17 KHz (+/- 3 dB at 1 KHz) with low cut
Total harmonic distortion (THD)	< 1 %
Paging audio streaming	IMA ADPCM (16 KHz)
Digital format	PCM / ADPCM / OGG / MP3 / WMA / WAV
Chime	4 tone up and 4 tone down
Audio output	8 x balanced line output via XLR jacks / Cascade link via flat cable
Tone / volume controls	Bass: +/- 14 dB cut and boost (2dB step) Treble: +/- 14 dB cut and boost (2dB step) Volume: 0 dB to -78.75 dB (1.25 dB step)
Audio gain (max)	+4 dB
Output audio monitoring	Via front 3W speaker
Communication control	RS485; 19.2 Kbps
User interface	Direct web interface via LAN for PC and WIFI for TAB and PHONE
Remote controls	Via PC / Tablet / Smartphone
Unit cascade control	3 units / 24 outputs channels (recommended max unit for full matrix)
Trigger port	Message / Emergency Paging (programmable)
Priority controls	BGM (Local source, IPX) / Paging Message / Emergency Paging (highest priority)
Fall safe feature	Emergency paging bypass
E/M override contact	3A dry contact
Dimensions (W x H x D)	482 x 88 x 180 mm
Weight	3.30 kg

Application Schematic



Packing Information

Carton size : 555 (L) x 295 (W) x 165 (H) mm
 Gross weight : 4.10 kg
 1 unit per carton



MM8804

8X4 DSP Matrix Controller

MATRIX SYSTEM

NEW Preliminary Information



MM8804 is a new matrix mixer / controller designed to cater for installation such as place of worships (mosques, churches etc), club house, restaurants etc, in which the user needs flexibility to mix incoming sources and broadcast to different areas with different settings of audio characteristics.

Example, a mosque with various types of speakers (column, horns) with various locations within the building will need audio calibration for type of speakers, acoustic environment and the needs for delay.

- **8 in / 4 Out** Matrix controller
- Built in Digital Signal Processor (**DSP**)
- Individual channel **volume, EQ, delay** controls
- **Web interface** for setup and controls by PC or Smartphone
- **Wifi and LAN** cable connectivity
- **24V DC** back up

Technical Specifications

Operating voltage	220 - 240 V AC : 50/60 Hz, 24V DC back up
Power consumption (240V AC)	4.8W ; 20 mA
Current consumption (24V DC)	4.6W ; 190 mA
Configuration	8 in / 4 outputs
Input channels	8 mic / line balanced with flexible priority selection
Input connections	Mini Phoenix jack
Input impedance	10 k Ohm
Priority	Dry contact
Output channels	4 outputs : balanced line 1.25 V rms (0 DBU)
Output level / impedance	600 Ohm
Controls	Front panel / web interface
Control parameters	Tone, volume, delay, 31 band EQ
User interface	Web browser Google Chrome V90+ preferred
Connectivity	LAN cable, WIFI
THD + N at rated power	< 1 %
S/N ratio	>60 %
Frequency response	20 - 20 kHz •
Operating temperature / humidity	-10 to 60 C
Dimensions (WxHxD)	482 x 44 x 180 mm
Weight	2.5 kg

Note:
The specifications are preliminary data and subjected to change upon final release of the product.

Packing Information

Carton size : 555 (L) x 295 (W) x 95 (H) mm
Gross weight : 3.0 kg
1 unit per carton

