amperes ®

precision design, absolute confidence

# Matrimix Paging

**Network ready**

**HTTP access**

**Simplified setup**

**Combo jacks**

**PMX II LAN compatible**

Introducing MxP2288, the new generation of Matrix Controller for Public Address System. It is a refined product serving the upper end of market with advanced and friendly features. It fits perfectly for commercial installation as well as residential, delivering optimum sound quality. EVAC protocols such priority paging, zone control and fail safe emergency announcement are among the essential features embedded providing reliable and long lasting installations.

**Features & Advantages:**

√ LAN ready with http access

√ 12 x 8 Matrix configuration

√ Output zone expansion in cascade mode

√ VBT controls for each output

√ Combo jack for inputs with line / mic sources

√ 32 bit ARM processor for seamless operation

√ Fail safe emergency paging via EP1200A

MatriMix PA SYSTEM

MxP 2288

MATRIMIX PAGING SYSTEM

STATUS
ACTIVITY
FAULT

PREV    ENTER MENU    NEXT

12 x 8 ETHERNET MATRIX CON

Audio Routing

Output 1

VOLUME : 50%

BASS : 0 dB

TREBLE : 0 dB

Audio Source
Disabled

Output 2

© AMPERES ELECTRONICS 2017

# www.ampereselectronics.com

CE

amperes®

## Introduction

With continuous development of Matrix controller, this third generation MxP2288 fulfils the demanding requirement of today's PA installation, both for the application in BGM as well as EVAC. It provides the flexibility of audio routings for the users with its remote panels and access through smart phones and PC. Installers too benefited from its simplified inter connections between the controller to other associated equipment.

Be it a standalone installation or a networked ( LAN ) setup, MxP2288 shall outshine others in its class, which we learnt and applied all feedbacks, making it a truly outstanding equipment worth invested in. It is suitable for both commercial and residential application.



### 12 X 8 MATRIX CONFIGURATION

8 mic / line audio sources, dedicated EP1200 Emergency Paging Panel, MR1301 Voice Message Recorder / Player, PD Series Paging Console and network audio streaming through iPX5200.
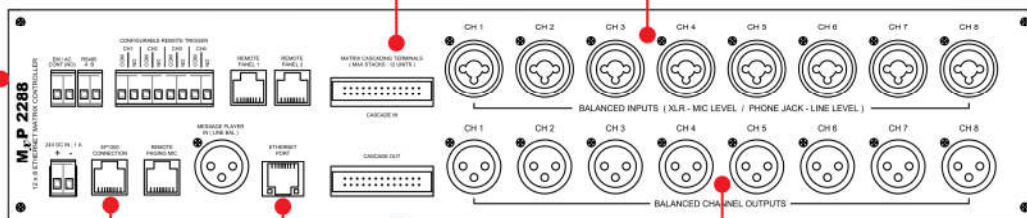
### POWERFUL PROCESSOR

Built with powerful ARM 32 bit processor, MxP2288 shall perform various tasks smoothly and would be able to cater for future upgrades in features that would be available from time to time.

### ZONE EXPANSION IN CASCADE MODE

Output zones can be expanded up to 96 zones making the overall configurations as 12 x 96. Interlinks between stacked units had been made easy with Link Cables provided, thus making overall interconnections look neat and pleasing. As each audio connection is buffered, audio distributor shall no longer be required, thus saving component count in the installation.

### FLEXIBLE AUDIO SOURCE

Combo jacks are provided for inputs section which accept either XLR or 1/4" stereo phone jacks. Audio source ( Line or Mic level ) shall not be an issue as MxP2288 accepts both levels and would provide balanced line levels at its outputs.



### FAIL SAFE OPERATION

With EP1200 connected, overall operation would operate seamlessly even if the matrix unit is digitally down or in off mode. This emergency paging bypass mode is essential to ensure important paging shall continue uninterrupted in critical moments.

### OUTPUTS WITH INDIVIDUAL VBT

Each output has its own volume, bass and treble (VBT) setup, thus enabling fine tuning the audio of each zone.

### PRIORITISED AUDIO ROUTING

While the main function of MxP2288 is offering flexible audio routing, it is also designed to perform prioritised audio broadcast, which Emergency Paging would have highest priority, followed by message broadcast from MR1301 and normal paging.
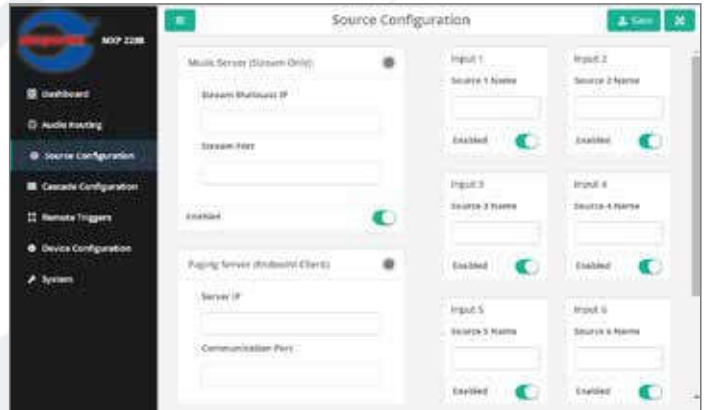
### NETWORK ( LAN ) READY

With its LAN ready feature, it can be accessed directly through web browser for configuration, channel routing and also channel VBT controls, either from a PC or via Tablet. Anywhere within the LAN ( including WIFI access), the controller is always within the command of the user.

# Technical Specifications

| | |
|---|---|
| Configuration | 12 x 8 matrix controller |
| Power source | 24V DC ; 1A |
| Inputs 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) |
| | 1 x LAN music streaming via iPX5200 |
| Input connections | Combo jack; |
| | Mic (XLR), phone (1/4" stereo phone jack) |
| Input impedance | Mic: 600 Ohm |
| | Line: 10K Ohm balanced |
| Input sensitivity | 800mVrms (line level) and 350mVrms (mic level) |
| Frequency response | 150Hz - 17 KHz (+/-3 dB at 1 KHz) with low cut |
| Total harmonic distortion (THD) | 0.10% |
| LAN audio streaming | 16 - 48 KHz PCM (Browser Streaming) |
| | 128Kb/s CBR MP3 (PMX / iPX Music Streaming) |
| Paging audio streaming | IMA ADPCM (16 KHz) |
| Digital format | PCM / ADPCM / OGG / MP3 / WMA / WAV |
| Audio output | 8 x balanced line output via XLR jacks |
| | Cascade link via flat cable |
| Tone / volume controls | Bass: +/-14 dB cut and boost (2 dB 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 | 12 units / 96 output channels |
| Trigger port | Message / Emergency Paging ( programmable ) |
| Priority controls | BGM (Local source, iPX) |
| | Paging Message |
| | Emergency Paging (highest priority) |
| Fail safe feature | Emergency paging bypass |
| E/M override contact | 3A dry contact |
| Dimensions (WxHxD) | 482 x 88 x 180 mm |
| Weight | 3.30 kg |



Browser Interface

# Application Schematic