

# PSR

## PSR1212 Digital Matrix Mixer

**ClearOne.**

A highly-advanced 12 x 12 digital matrix mixer featuring ClearOne's sophisticated audio processing technologies. The PSR1212 provides microphone mixing and routing, and is the ideal solution for sound reinforcement and room combining applications in a wide variety of venues.



## SOPHISTICATED AUDIO PROCESSING AND MIC MIXING POWER

### APPLICATIONS

Hotels and Convention Centers  
Auditoriums  
Stadiums  
Conference Rooms  
Houses of Worship  
Theaters

### ADVANTAGES

#### Superior Audio Performance & Coverage

- + 12x12 matrix with level control at the cross points
- + Eight-channel automatic microphone mixer with four line inputs
- + Eight audio processing buses can be placed anywhere within the matrix mixer audio path; each bus has 15 filters
- + Eight input channels are programmable for input gain, configurable audio processing, muting and automatic mixer
- + Internal room-combining capabilities
- + Customizable microphone inputs – gate on and off as desired
- + Automatic level control

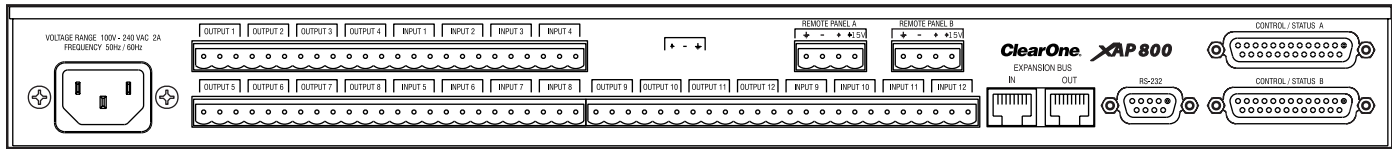
#### Configuration Flexibility

- + 32 programmable presets allow for instant configuration changes and quick adaptability to a variety of sound reinforcement and room-combining applications
- + Enables grouping of mics across four automatic mic mixers within a single PSR1212
- + Program, operate and diagnose with a connected PC or other serial remote control
- + Any combination of inputs can be routed to any combination of outputs

#### System Control

- + Digital audio and control bus allows up to eight PSR1212s to be connected and controlled as a single unit
- + All interconnected devices can be accessed, controlled and programmed via a single RS-232 connection
- + Basic operational functions can be controlled remotely with the optional ClearOne Select Control Panel or Volume Control Panel
- + Macro scripting language enables sophisticated control without the need for an expensive external control system

> PSR1212 BACK PANEL



> SPECIFICATIONS



**Audio Performance**

Conditions: Unless otherwise specified all measurements are performed with a 22 Hz to 22 kHz BW limit (no weighting).  
 Frequency Response: 20 Hz to 20 kHz  $\pm$  1dB  
 Noise (EIN): -126 dBu, 20 kHz BW, max gain,  $R_s=150 \Omega$   
 THD+N: < 0.02%  
 SNR: 80 dB re 0 dBu, (A-weighted)  
 Dynamic Range: 100 dB (A-weighted)  
 Crosstalk < -91 dB re 20 dBu @ 20 kHz channel to channel

**Assignable Processing Blocks**

Filters:  
 All pass  
 Low pass  
 High pass  
 Low shelving  
 High shelving  
 Parametric EQ  
 Notch  
 CD Horn  
 Crossovers:  
 Bessel  
 Butterworth  
 Linkwitz-Riley  
 Compressor  
 Delay adjustable up to 500ms

**Matrix Mixing Parameters**

32 x 32 matrix  
 12 analog in/out  
 12 expansion bus in/out  
 8 assignable processing blocks in/out

**Auto Mixer Parameters**

Number of Open Microphones (NOM)  
 PA Adaptive Mode  
 First Mic Priority Mode  
 Last Mic Mode  
 Maximum # of Mics Mode  
 Ambient Level  
 Gate Threshold Adjust  
 Off Attenuation Adjust  
 Hold Time  
 Decay Rate

**Microphone Input Configuration**

Input Gain Adjust  
 Mic or Line Level  
 Phantom Power on/off  
 Filters  
     All Pass  
     Low Pass  
     High Pass  
     Notch  
     PEQ  
 Mute on/off  
 Chairman Override on/off  
 AGC on/off  
 Auto Gate/Manual Gate  
 Adaptive Ambient on/off

**Expansion Bus In/Out**

Proprietary Network  
 RJ-45 (2), 115.2 kbps, 110 k $\Omega$  impedance  
 Category five twisted-pair cable  
 80' (24 meters) maximum cable length between any two PSR1212s, XAP 800s or XAP 400s

**RS-232**

DB-9 female  
 9,600 /19,200/38,400 (default)/57,600 baud rate; 8 bits, 1 stop, no parity  
 Hardware flow control on (default)/off

**Control / Status**

DB25 female A/B (2)  
 Inputs A/B: active low (pull to ground)  
 Outputs A/B: Open collector, 40 VDC max, 40 mA each  
 +5 VDC pins (2) (300 mA over-current protected)

**Remote Panels A/B**

4-pin push-on terminal block  
 RS-485 proprietary protocol  
 Cat five twisted-pair cable  
 1 pair data, 1 pair power and ground  
 +15 VDC (300 mA over-current protected)

**Mic/Line inputs 1-8**

Push-on terminal block, balanced, bridging  
 Impedance: 5 k $\Omega$   
 Nominal Level: adjustable -55 dBu, -25 dBu, 0 dBu  
 Maximum Level: -35 dBu, -5 dBu, +20 dBu  
 Phantom Power: 24 V, selectable

**Line Inputs 9-12**

Push-on terminal block, balanced  
 Impedance: > 10 k $\Omega$   
 Nominal Level: 0 dBu  
 Maximum Level: 20 dBu

**Outputs 1-12**

Push-on terminal block, balanced  
 Impedance: 50  $\Omega$   
 Nominal Level: 0 dBu  
 Maximum Level: 20 dBu

**Approvals**

FCC, CSA, IC, CE, NOM, ACA, SABS, JATE

**Set-up Software**

G-Ware™

**Power Input Range**

Auto-adjusting  
 100-240 VAC; 50/60 Hz

**Power Consumption**

30 W typical

**Operating Temperature**

32-100° F/0-38° C

**Humidity**

15% to 80%, non-condensing

**Dimensions (LxDxH)**

17.25" x 10.25" x 1.25"  
 43.8 x 26 x 4.5 cm

**Weight**

7 lb/4.5 kg dry  
 12 lb/5.9 kg shipping

**Optional Accessories**

Select Control Panel  
 Volume Control Panel

**Part Number**

910-155-01 PSR1212 Digital Matrix Mixer

> CLEARONE LOCATIONS

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