

# PSR

## PSR1212 Digital Matrix Mixer

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.

**ClearOne.**



## 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

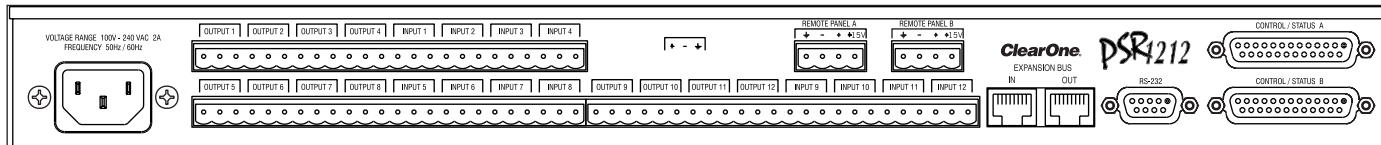
- + 32 programmable presets allow for instant configuration changes and quick adaptability to a variety of sound reinforcement and room-combining applications
- + Enables grouping of mics across four automatic mic mixers within a single PSR1212
- + Program, operate and diagnose with a connected PC or 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

HDCConference

> 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 ±1dB  
 Noise (EIN): -126 dBu, 20 kHz BW, max gain, Rs=150 Ω  
 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 kΩ 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 kΩ
- 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, bridging
- Impedance: >10 kΩ
- Nominal Level: 0 dBu
- Maximum Level: 20 dBu

**Outputs 1-12**

- Push-on terminal block, balanced
- Impedance: 50 Ω
- 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

**Headquarters:**  
 Salt Lake City, UT USA  
 5225 Wiley Post Way  
 Suite 500  
 Salt Lake City, UT 84116  
 Tel: 801-975-7200  
 800-945-7730  
 Fax: 801-977-0087  
 sales@clearone.com

**Latin America**  
 Tel: 801-974-3621  
 global@clearone.com

**EMEA**  
 Tel: 44 (0) 1189 036 053  
 global@clearone.com

**Hong Kong**  
 Tel: 801-303-3388  
 global@clearone.com