DATA SHEET PM4100 PREAMPLIFIER



The PM4100 is a multi-functional stereo preamplifier controlled via the network or RS-232 connection. The PM4100 is equipped with four stereo inputs, 4 GPIO, and one stereo output. It integrates easily with a variety of control systems and the USB input enables direct audio connection and volume control from a computer. The PM4100 can be powered by either PoE or 12V DC. It's audio performance, ease-of-use, and versatile feature set makes the PM4100 ideal for a variety of professional audio applications.

FEATURES

- · Four unbalanced stereo inputs
- One balanced stereo output
- 2 bi-directional RS-232 ports for third party control with feedback
- 4 GPIO for control of relays, switches, and sensors
- Possible to mix Input 1 with the current selected input
- 3 band equalizer for bass, mid and treble control

- · Auto standby mode
- PoE powered (IEEE 802.3at Class 2, 7W) for simple, single CAT5e/CAT6 cable installation
- When powered by PoE the 12V DC output supplies power for external devices such as control systems
- · CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' five-year warranty

ARCHITECTS & ENGINEERS SPECIFICATIONS

The preamplifier shall provide 4 unbalanced input connections for receiving line level analog audio signals via RCA connectors. The preamplifier shall provide 2 balanced output connections for the transmission of line level analog audio signals via Euroblock connectors. The preamplifier shall provide 1 balanced output connection for the transmission of line level analog audio signals via Euroblock connector. The preamplifier shall include 2 RS-232 connections for control data transmission into or out of the preamplifier and such operation shall be externally programmable. The preamplifier shall include 4 GPIO connections for the control of relays, switches, and sensors and such operation shall be externally programmable. The preamplifier shall be powered either by PoE (IEEE 802.3at Class 2, 7W) or 12V DC. The preamplifier shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The preamplifier shall be Biamp® PM4100.



PM4100 SPECIFICATIONS

Network Connection:RJ-45 with Ethernet (CAT5e or better)

INPUTS

Number of Inputs:4 (stereo)Connector:RCAInput Impedance: $< 100 k\Omega$ Max Input Level:2 VrmsInput Gain (adjustable): $\pm 12 dB$ Wake on Signal:Adjustable level

OUTPUTS

Connector: 5-pin, 0.3-inch Euroblock

USB

Connector: USB 2.0 Type-B Bit Depth: 16-bit Sample Rate: 48kHz

GPIO

Number of Ports:

Connector: 5-pin, 0.3-inch Euroblock **Type:** Open drain

Input Trigger Low: < 1V DC
Input Trigger High: > 4V DC

 Isolated Output:
 No

 Max Voltage:
 24V DC

 Max Current:
 0.5 A

RS-232 / IR

Number of Ports: 2 (bidirectional)

Connector: 3-pin, 0.3-inch Euroblock

Baud Rate: 1200 - 115200 bit/sec

Data Bits: 7, 8

Parity: Even, Odd, None Stop Bits: 1, 2

IR Frequency Range: 400 Hz to 500 kHz

Power

 Main:
 12V DC 5W

 PoE:
 IEEE 802.3at Class 2, 7W

Cooling: Convection

Overall Dimensions

 Height:
 1.5 inches (37 mm)

 Width:
 8.6 inches (218 mm)

 Depth:
 2.8 inches (70 mm)

 Weight:
 1.1 lbs (0.5 kg)

Environmental

Ambient Operating

Temperature Range: 32 - 86 $^{\circ}$ F (0 - 30 $^{\circ}$ C) **Humidity:** 10-90% relative humidity (non-condensing) **Altitude:** 0-6,600 ft (0-2000m) MSL

Compliance:

FCC Part 15B (USA) UL listed (USA and Canada) CE Marked (Europe) RoHS Directive (Europe)

PM4100 REAR PANEL



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