

MP-B88Pro

DIGITAL SOUND PROCESSOR

Professional DSP platform for flexible audio routing, processing and system control.

- **Required space:** 1U (width and depth and height: 18.91" x 9.5" x 1.72" / 48.02 cm x 24.13 cm x 4.37 cm). Depth does not include reserved space for power plugs, terminals. A minimum of 3 inches of additional space is required for connections on the rear panel. The reserved depth depends on the wire used and the connection mode.
- **Electrical:** maximum universal input power for AC 220V 50Hz.
- **Operating environment:** The recommended maximum operating environment temperature is 30°C / 86 °F, ensuring that there is no barrier on the left and right sides of the equipment (at least 5.08 cm,

Product visual: front-panel drawing reproduced from the supplied MP-B88Pro user manual.

PRODUCT OVERVIEW

The MP-B88Pro is a professional digital sound processor using computer-controlled DSP routing and processing. The DSP Controller provides configurable processing, preset management and peripheral control, with support for analog microphone/line inputs, analog outputs, USB audio, Ethernet and serial/GPIO interfaces.

KEY FEATURES

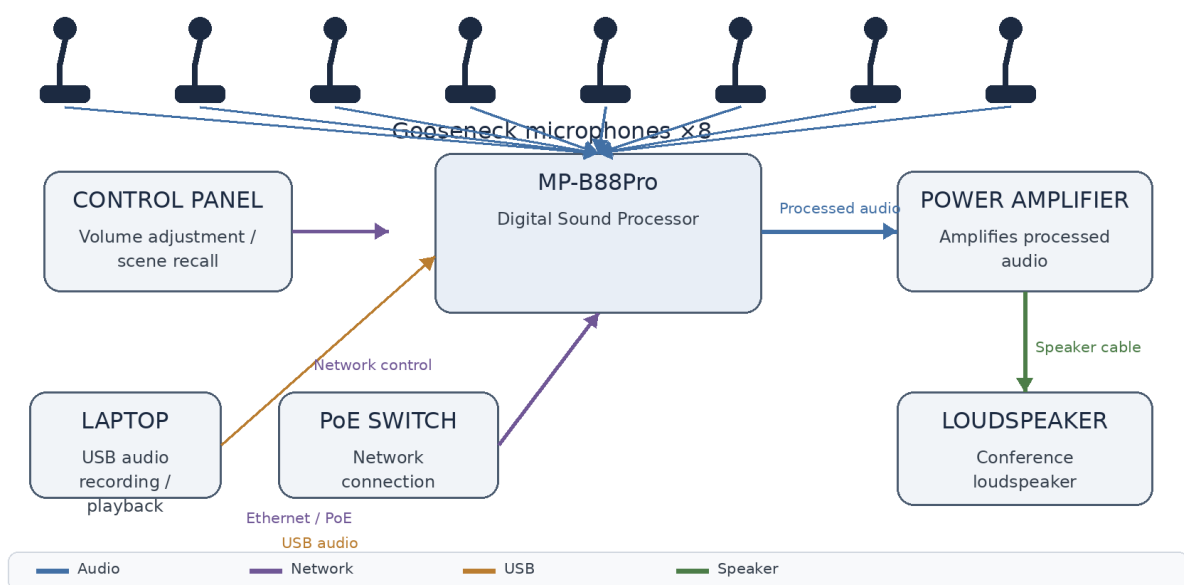
Advanced DSP Processing ADI SHARC 21489 with 32-/40-bit floating-point processing.	Flexible Presets Up to 16 presets with configurable processing modules and order.	Professional I/O Up to 16 balanced analog inputs and 16 balanced analog outputs.
Microphone Support Input gain up to 48 dB with +48 VDC phantom power.	Rich Audio Processing EQ, compressor/limiter, AGC, automixer, AEC, noise suppression, matrix and delay.	Network & Serial Control Ethernet, RS232, RS485 and 4 × GPIO control ports.

TYPICAL SYSTEM APPLICATION

Conference sound expansion system. The manual shows microphones feeding the DSP processor, USB audio from a computer, network control through PoE switches, processed audio to a power amplifier, and amplified output to loudspeakers. The control panel provides volume adjustment and scene recall.

MP-B88Pro — CONFERENCE SOUND EXPANSION SYSTEM

Clear signal flow based on the system application shown in the supplied user manual



Clear redraw of the manual's Typical System Application; terminology and signal relationships follow the supplied source.

TECHNICAL SPECIFICATIONS

Processor	ADI SHARC 21489
Sampling / Quantization	48 kHz / 24 bit
Analog Inputs	Up to 16 fixed balanced analog inputs; microphone or line level
Analog Outputs	Up to 16 fixed balanced analog outputs
Input Gain	0 / 6 / 12 / 18 / 24 / 30 / 36 / 42 / 48 dB
Phantom Power	+48 VDC, 10 mA max
Frequency Response	20 Hz – 20 kHz, ± 0.5 dB
Maximum Level	+18 dBu
THD+N	0.002% @ 4 dBu
Input Dynamic Range	110 dB
Output Dynamic Range	112 dB
Channel Isolation	108 dB @ 1 kHz
Input Impedance	5.4 k Ω (balanced)
Output Impedance	600 Ω (balanced)
Latency	<3 ms
Control I/O	Ethernet, RS232, RS485, 4 $\times$ GPIO, USB sound card
Power	AC 220 V, 50 Hz
Dimensions	482 $\times$ 200 $\times$ 45 mm
Rack Space	1U
Shipping Weight	3–4 kg

REAR PANEL & INTERFACES

DSP Digital Audio Processor Document V1.5

6.Rear Panel



1. AC Power • 2. Ethernet • 3. Reset • 4. RS232 • 5. USB Sound Card • 6. Analog Output • 7. Analog Input • 8. GPIO • 9. RS485

PROCESSING & CONTROL

Input Source • Expander • Compressor/Limiter • Automatic Gain Control • Parametric Equalizer • Feedback Suppression • AutoMixer • Acoustic Echo Cancellation • Noise Suppression • Matrix • High Pass / Low Pass Filter • Delay • Output • USB Sound Card • Dante network audio control

Source: MP-B88Pro Digital Sound Processor User Manual, Document V1.5. Product specifications, interface descriptions and system application are based on the supplied manual.