

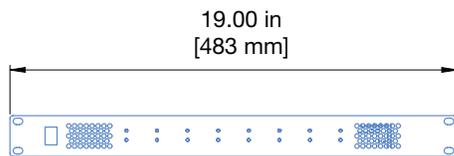
MPS-488HP Power Supply



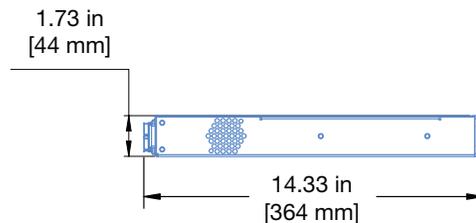
Rear View of MPS-488HP_P with Phoenix output connectors (with RMS option)



Rear View of MPS-488HP_E with EN3 output connectors (with RMS option)



MPS-488HP_P Rear View (with RMS)



MPS-488HP_E Rear View (no RMS)

The MPS-488HP IntelligentDC power supply delivers power and balanced audio to up to eight Meyer Sound loudspeakers that require an external DC power supply. Housed in a 1RU, standard 19-inch rack mount enclosure, the MPS-488HP can be used with a number of products that feature IntelligentDC technology, such as the MM-4XP miniature loudspeaker, the MM-10XP miniature subwoofer, or the HMS-10 surround loudspeaker.

Meyer Sound's externally powered loudspeakers are equipped with onboard amplification and signal-processing circuits that store DC power and tolerate voltage drops (up to 30 percent), thereby accommodating light-gauge cables and lengthy cable runs. Powering loudspeakers from an external source eliminates the need for wiring conduits while still preserving the advantages of self-powered systems.

The MPS-488HP receives eight channels of balanced audio from its XLR female input connectors and routes the audio, along with DC power, to its eight output connectors. Input channels feature toggle switches that route inputs to corresponding channel outputs only, or to adjacent, contiguous channel outputs. For example, channel input 1 can be routed to channel outputs 1 and 2 and channel input 3 can be routed to channel outputs 3 and 4. Another example is to route channel input 1 to channel outputs 1-4 and channel input 5 to channel outputs 5-8.

The MPS-488HP's eight channel outputs are equipped with current limiting that protects each channel from short circuits and

unexpected voltages. The power supply's outputs are available as either Phoenix 5-pin male connectors on the MPS-488HP_P model, or SwitchCraft® EN3 5-pin female connectors on the MPS-488HP_E model. Outputs can deliver DC power to loudspeakers at cable lengths up to 150 feet or 300 feet (depending on the loudspeaker model) with just 1 dB of loss in peak SPL using 18 AWG wire.

The use of composite multiconductor cables (such as Belden® 1502) allows a single cable to carry both audio and DC power from the MPS-488HP to the loudspeakers. Longer cable lengths are possible for moderate applications that do not drive the loudspeakers to maximum output, as well as for installations with heavier gauge wires.

The unit's front panel has two LEDs per channel output that provide useful feedback on the status of the system. The blue voltage LEDs indicate when voltage is present for each channel output. The green load current LEDs indicate when a loudspeaker is connected to a channel output, glow brighter as the signal level increases, and blink when a short circuit is encountered.

The RMS™ remote monitoring system module is available as a factory-installed option. It reports the voltage and current readings for each output channel from a host computer running Compass® Control Software via an RMServer™ hardware unit (sold separately).

SPECIFICATIONS

FRONT PANEL	
LEDs per channel	Eight blue LEDs to indicate presence of output voltage Eight green LEDs to indicate load current
REAR PANEL	
Audio Input	Eight XLR 3-pin female connectors Seven Link Switches
Channel Output	On MPS-488HP _P model, eight Phoenix 5-pin male connectors On MPS-488HP _E model, eight EN3 5-pin female connectors
Output Wiring	Two pins for DC power, three pins for balanced audio Pin 1: 48 V DC - (chassis/earth ground) Pin 2: 48 V DC + Pin 3: Audio shield/chassis/earth ground Pin 4: Signal - Pin 5: Signal +
Output Voltage ¹	48 V DC per channel (with intelligent circuit protection against surges and shorts)
AC POWER	
AC Connector	powerCON 20
Voltage Selection	Automatic
Safety Rated Voltage Range	100–240 V AC; 50–60 Hz; 830 W maximum
CURRENT DRAW ²	
Idle Current	1.23 A rms (120 V AC); 0.74 A rms (230 V AC); 1.53 A rms (100 V AC)
Maximum Long-Term Continuous Current (> 10 sec)	8.39 A rms (120 V AC); 4.44 A rms (230 V AC); 10.37 A rms (100 V AC)
Burst Current (< 1 sec)	11.98 A rms (120 V AC); 6.87 A rms (230 V AC); 12.19 A rms (100 V AC)
Maximum Instantaneous Peak Current	14.84 A peak (120 V AC); 10.59 A peak (230 V AC); 15.71 A peak (100 V AC)
Inrush Current	20.0 A peak (120 V AC); 20.0 A peak (230 V AC); 20.0 A peak (100 V AC)
RMS NETWORK (OPTIONAL) ³	
	Two-conductor, twisted-pair network that reports the voltage and current readings for each output channel.
PHYSICAL	
Dimensions	1RU in height; W: 19.00 in (483 mm) x H: 1.73 in (44 mm) x D: 14.33 in (364 mm)
Weight	15.5 lb (7 kg)
ENVIRONMENTAL	
Operating Temperature	0 °C to +45 °C
Non-operating Temperature	-40 °C to +75 °C
Humidity	To 95% at 35 °C
Operating Altitude	To 5,000 m (16,400 ft)
Non-operating Altitude	To 6,300 m (20,670 ft)
Shock	30 g 11 msec half-sine on each of 6 sides
Vibration	10–55 Hz (0.010 m peak-to-peak excursion)

NOTES

1. Supports NEC Class 2 wiring.
2. Current draw measured at 48 V DC; current draw ratings are for eight connected HMS-10 loudspeakers.
3. RMS module available as factory-installed option. Requires RMServer hardware unit sold separately.

FEATURES AND BENEFITS

- Power multiple Meyer Sound loudspeakers that require an external IntelligentDC power supply
- Route DC power and balanced audio to loudspeakers with single, composite cables
- Channel outputs available as either Phoenix 5-pin male or EN3 5-pin female
- Front panel LEDs provide system feedback on voltage and load current levels
- Toggle switches provide channel routing flexibility
- Remote monitoring of output voltage and load current parameters with RMS (a factory-installed option)

APPLICATIONS

- Conference rooms
- Theaters
- Constellation systems
- Cinema and television post-production facilities
- High-end private theaters

ARCHITECTURAL SPECIFICATIONS

The MPS-488HP 48 V DC external power supply shall power a maximum of eight loudspeakers. The switched mode, regulated power supply shall also route up to eight channels of balanced audio to the loudspeakers. Balanced audio shall be received from eight XLR female connectors.

Channel outputs shall be either Phoenix 5-pin male (MPS-488HPp) or EN3 5-pin female (MPS-488HPe) connectors and deliver both DC power and balanced audio to the loudspeakers on a single composite cable.

Audio inputs shall be routed to corresponding channel outputs, as well as to adjacent channel outputs, with seven rear panel link switches.

Front panel LEDs shall provide feedback on output voltage and load current for each channel. A blue voltage LED shall indicate when voltage is present for each channel output. A green load current LED shall indicate when a loudspeaker is connected to a channel output, glow brighter as the signal level increases, and blink if a short circuit is detected.

Each output channel shall be equipped with current limiting that protects the channels from short circuits and unexpected voltages. Its AC inlet shall be a PowerCON locking connector to prevent unwanted power disconnections.

The external power supply shall be optionally available with Meyer Sound's RMS remote monitoring module, which provides output channel monitoring from a host computer running Compass Control Software via an RMServer hardware unit.

The MPS-488HP shall be housed in a 1RU, standard 19-inch rack mount enclosure. Dimensions shall be: W: 19.00 in (483 mm) x H: 1.73 in (44 mm) x D: 13.57 in (345 mm).

Weight shall be 15.5 lb (7 kg).

The external power supply shall be the Meyer Sound MPS-488HP.