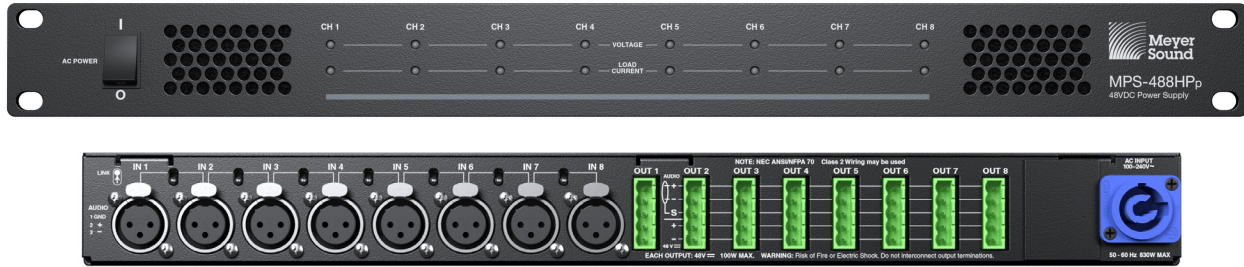
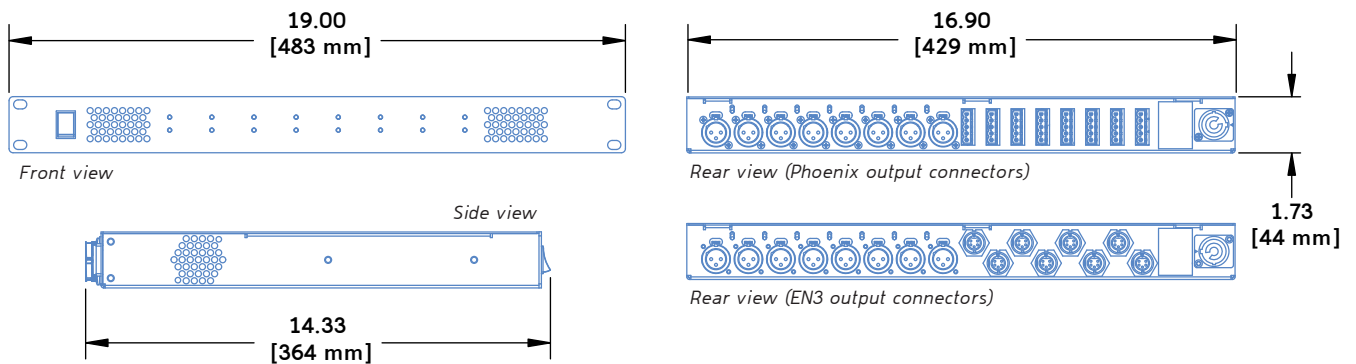


MPS-488HP : Power Supply



MPS-488HPp shown with Phoenix output connectors; MPS-488HPe also available with EN3 output connectors



The MPS-488HP external power supply delivers DC power and balanced audio to up to eight Meyer Sound loudspeakers that require an external 48 V DC power supply. The single-space 19-inch rack MPS-488HP can be used with the UP-4XP ultracompact loudspeaker, MM-4XP miniature loudspeaker, MM-10XP miniature subwoofer, and 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 48 V of 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. You can also simply route all eight channel inputs in parallel to their corresponding channel outputs.

The MPS-488HP's eight channel outputs are equipped with sophisticated microprocessor-controlled 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-488HPp model, or SwitchCraft® EN3 5-pin female connectors on the MPS-488HPe 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 don't drive the loudspeakers to maximum output, as well as for installations with heavier wire gauges.

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.

Available as a factory-installed option is the RMS™ remote monitoring system module, which provides loudspeaker muting and monitoring of output voltage and load current parameters from a Windows®-based computer.

FEATURES & BENEFITS

- Power multiple Meyer Sound loudspeakers that require a 48 V DC external 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
- Remote monitoring of output voltage and load current parameters with RMS (a factory-installed option)

APPLICATIONS

- Portable and compact systems that employ MM-10XPs, MM-4XPs, MM-4XPDs, and UP-4XPs
- Cinema installations with HMS-10 surround loudspeakers

MPS-488HP SPECIFICATIONS

FRONT PANEL	
LEDs	Eight LEDs to indicate output voltage Eight LEDs to indicate load current
REAR PANEL	
Audio Inputs	Eight XLR 3-pin female connectors Link switches to route to outputs
Channel Outputs	On MPS-488HP model, eight Phoenix 5-pin connectors On MPS-488HPe model, eight EN3 5-pin connectors
Output Wiring	Two pins for DC power, three pins for balanced audio Pin 1: 48 V DC - Pin 2: 48 V DC + Pin 3: Chassis/earth through 220 k Ω , 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies Pin 4: Signal - Pin 5: Signal +
Output Voltage¹	48 V DC per channel (with intelligent circuit protection against surges and shorts)
AC POWER	
Ac Connector	PowerCon
Voltage Selection	Automatic
Safety Agency Rated Operating Range	100-240 V AC; 50/60 Hz; 830 W maximum
CURRENT DRAW^{2, 3}	
<i>(Eight MM-4XP Loudspeakers)</i>	
Idle Current	0.73 A rms (115 V AC); 0.60 A rms (230 V AC); 0.82 A rms (100 V AC)
Max. Long-Term Continuous Current (>10 sec)	2.19 A rms (115 V AC); 0.99 A rms (230 V AC); 2.48 A rms (100 V AC)
Burst Current (<1 sec)	5.94 A rms (115 V AC); 2.98 A rms (230 V AC); 6.62 A rms (100 V AC)
Ultimate Short-Term Peak Current Draw	6.87 A peak (115 V AC); 5.32 A peak (230 V AC); 9.10 A peak (100 V AC)
Inrush Current	20.0 A peak (115 V AC); 20.0 A peak (230 V AC); 20.0 A peak (100 V AC)
<i>(Eight UP-4XP Loudspeakers)</i>	
Idle Current	1.02 A rms (115 V AC); 0.68 A rms (230 V AC); 1.18 A rms (100 V AC)
Max. Long-Term Continuous Current (>10 sec)	4.15 A rms (115 V AC); 2.03 A rms (230 V AC); 4.83 A rms (100 V AC)
Burst Current (<1 sec)	6.24 A rms (115 V AC); 2.32 A rms (230 V AC); 6.29 A rms (100 V AC)
Ultimate Short-Term Peak Current Draw	10.18 A peak (115 V AC); 5.46 A peak (230 V AC); 9.49 A peak (100 V AC)
Inrush Current	20.0 A peak (115 V AC); 20.0 A peak (230 V AC); 20.0 A peak (100 V AC)
<i>(Eight HMS-10 Loudspeakers)</i>	
Idle Current	1.23 A rms (115 V AC); 0.74 A rms (230 V AC); 1.53 A rms (100 V AC)
Max. Long-Term Continuous Current (>10 sec)	8.39 A rms (115 V AC); 4.44 A rms (230 V AC); 10.37 A rms (100 V AC)
Burst Current (<1 sec)	11.98 A rms (115 V AC); 6.87 A rms (230 V AC); 12.19 A rms (100 V AC)
Ultimate Short-Term Peak Current Draw	14.84 A peak (115 V AC); 10.59 A peak (230 V AC); 15.71 A peak (100 V AC)
Inrush Current	20.0 A peak (115 V AC); 20.0 A peak (230 V AC); 20.0 A peak (100 V AC)
<i>(Eight MM-10XP Subwoofers)</i>	
Idle Current	0.74 A rms (115 V AC); 0.54 A rms (230 V AC); 0.81 A rms (100 V AC)
Max. Long-Term Continuous Current (>10 sec)	3.08 A rms (115 V AC); 1.49 A rms (230 V AC); 3.46 A rms (100 V AC)
Burst Current (<1 sec)	5.48 A rms (115 V AC); 3.21 A rms (230 V AC); 5.57 A rms (100 V AC)
Ultimate Short-Term Peak Current Draw	9.56 A peak (115 V AC); 4.96 A peak (230 V AC); 10.28 A peak (100 V AC)
Inrush Current	20.0 A peak (115 V AC); 20.0 A peak (230 V AC); 20.0 A peak (100 V AC)
RMS NETWORK⁴	
	Two-conductor twisted-pair network, reporting output voltage and load current parameters to system operator's host computer
PHYSICAL	
Dimensions	1RU high 19.00" w x 1.73" h x 13.57" d (482.60 mm x 43.94 mm x 348.78 mm)
Weight	15.5 lbs (6.6 kg)

NOTES:

1. Supports NEC Class 2 wiring.
2. Current draw measured at 48 V DC.
3. Current draw ratings for eight connected loudspeakers.
4. RMS module available as factory-installed option.



NRTL LISTED for
NEC ANSI/NFPA 70
Class 2 Wiring on
48 V DC Output

MPS-488HP — 04.205.004.02 A

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ARCHITECT SPECIFICATIONS

The 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 or EN3 5-pin female 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 rear panel link switches.

Front panel LEDs shall provide feedback on output voltage and load current for each channel. Each output channel shall be equipped with microprocessor-controlled current limiting that protects the channels from short circuits and unexpected voltages.

The external power supply shall be available with Meyer Sound's RMS remote monitoring system, providing

loudspeaker muting and monitoring of output voltage and load current from a host computer.

The unit shall be housed in a one-space, standard 19-inch rack mount cabinet, measuring 13.57" (344.78 mm) in depth, and weighing just 15.5 lbs (16.6 kg). Its AC inlet shall be a PowerCon locking connector to prevent unwanted power disconnections.

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