MPS-488HP: IntelligentDC power supply delivers power and balanced audio to up to eight Meyer Sound loudspeakers that require an external DC power supply. The single-space 19-inch rack MPS-488HP can be used with a number of products that feature IntelligentDC technology, such as: 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 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-488HP 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 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
- 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**: Pin 1: 48 V DC. Pin 2: 48 V DC +. Pin 3: Chassis/earth through 220 kΩ, 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies. Pin 4: Signal –.
- **Output Voltage +**: 48 V DC per channel (with intelligent circuit protection against surges and shorts).

### AC Power
- **PowerCon**: Automatic.
- **Voltage Selection**: 100–240 V AC, 50/60 Hz; 830 W maximum.

### Current Draw
1. **(Eight MM-4XP Loudspeakers)**
   - **Idle Current**: 0.73 A rms (115 V AC); 0.60 A rms (230 V AC); 0.82 A rms (100 V AC)
   - **Burst Current**: 2.19 A rms (115 V AC); 0.99 A rms (230 V AC); 2.48 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)

2. **(Eight UP-4XP Subwoofers)**
   - **Idle Current**: 1.02 A rms (115 V AC); 0.68 A rms (230 V AC); 1.18 A rms (100 V AC)
   - **Burst Current**: 4.15 A rms (115 V AC); 2.03 A rms (230 V AC); 4.83 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)

3. **(Eight HMS-10L Loudspeakers)**
   - **Idle Current**: 1.23 A rms (115 V AC); 0.74 A rms (230 V AC); 1.53 A rms (100 V AC)
   - **Burst Current**: 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)

4. **(Eight MM-10XP Subwoofers)**
   - **Idle Current**: 0.74 A rms (115 V AC); 0.54 A rms (230 V AC); 0.81 A rms (100 V AC)
   - **Burst Current**: 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 Network
- **Two-conductor twisted-pair network, reporting output voltage and load current parameters to system operator’s host computer**

### Physical
- **Dimensions**: 1RU high.
- **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.

### 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 1357 mm (344.78 mm) in depth, and weighing just 15.5 lbs (6.6 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.