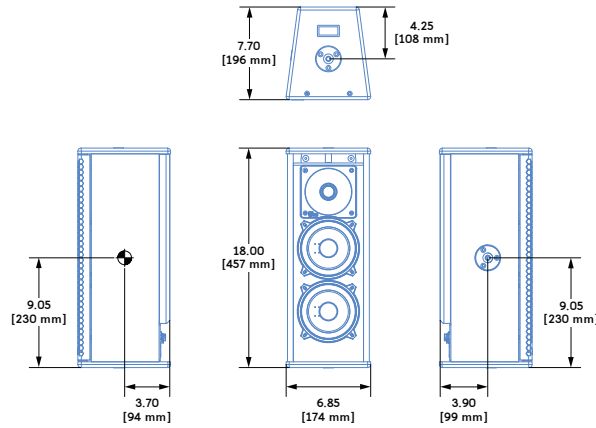


UPM-2XP UltraCompact Narrow-Coverage Loudspeaker



Dimensions 6.85" w x 18.00" h x 7.70" d
(174 mm x 457 mm x 196 mm)

Weight 17 lbs (7.7 kg)

Enclosure Premium birch plywood

Finish Black textured

Protective Grille Powder-coated, hex-stamped steel with black mesh screen

Rigging Three 3/18"-16 or metric M10 nut plates

The UPM-2XP, with IntelligentDC technology, is a compact, externally-powered, narrow-coverage loudspeaker for professional sound reinforcement. It offers the same high sound pressure levels, low distortion, and uniform directional control as the UPM-1P but with the added flexibility of external DC power and lengthy cable runs without AC conduits. The UPM-1XP is ideally suited for narrow-coverage applications requiring a small, inconspicuous cabinet where AC cabling is not feasible.

As a standalone loudspeaker, the UPM-2XP can be used for vocal reinforcement, frontfill coverage, or delay coverage for under-balcony applications. For full-range systems, the UPM-1XP can be paired with Meyer Sound's UMS-1XP ultracompact subwoofer with IntelligentDC technology.

The UPM-2XP's high-frequency section includes a 1-inch metal dome tweeter on a constant-directivity, high-frequency horn with a 45-degree beamwidth. The low/mid-frequency section

includes two 5-inch cone transducers that work in parallel at low frequencies — delivering a combined acoustic output — with one of the drivers rolling off above 320 Hz to prevent interference in the crossover region due to comb filtering effects. The proprietary drivers, which are manufactured at Meyer Sound's factory in Berkeley, California, are powered by three channels of onboard power amplification that include an active crossover, driver protection, and frequency and phase correction circuitry.

With IntelligentDC technology, the UPM-2XP receives DC power and balanced audio from a single loudspeaker connector, available as Phoenix™ 5-pin male, sealed SwitchCraft® EN3™ 5-pin male, or sealed ECO-M 7-pin male. Powering the unit from an external source eliminates the need for wiring conduits while still preserving the advantages of self-powered systems. The UPM-2XP's amplifier and signal-processing circuits store DC power and tolerate voltage drops, thereby accommodating light-gauge cables and lengthy cable runs.

The UPM-2XP requires an external MPS-488HP IntelligentDC power supply. The single-space 19-inch rack unit distributes DC power and balanced audio to up to eight UPM-2XP loudspeakers, or other Meyer Sound IntelligentDC loudspeakers. Composite multiconductor cables, such as Belden® 1502 or equivalent, can deliver both DC power and balanced audio to loudspeakers at cable lengths up to 150 feet with just 1 dB of loss in peak SPL using 18 AWG wire. Longer cable runs are possible with heavier gauges. Meyer Sound's RMS remote monitoring system is optionally available for the MPS-488HP.

The UPM-2XP cabinet is coated with a black textured finish and includes three threaded, recessed nut plates (3/8"-16 or metric M10). Optional rigging hardware includes the MYA-UPM mounting yoke, MUB-UPM U-bracket, and MSA-UPM stand adapter. Other UPM-1XP options include weather protection and custom color finishes for fixed installations and installations with specific cosmetic requirements.

FEATURES & BENEFITS

- IntelligentDC technology affords the flexibility of lengthy cable runs without AC conduits
- Extraordinary fidelity and power capability in an ultracompact package
- Metal dome tweeter delivers a smooth high-frequency response

- Narrow, symmetrical pattern provides precise coverage control
- Unique crossover design eliminates combing and yields a consistent midrange response
- Exceptional SPL to size ratio

APPLICATIONS

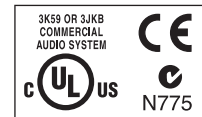
- Frontfill and under-balcony fill coverage
- Theatrical sound reinforcement
- Portable and installed AV systems
- Effects for theatre
- Compact voice reinforcement systems

UPM-2XP SPECIFICATIONS

ACOUSTICAL	
Operating Frequency Range ¹	80 Hz – 20 kHz
Frequency Response ²	85 Hz – 19 kHz ±4 dB
Phase Response	300 Hz – 18 kHz ±60 degrees
Maximum Peak SPL ³	123 dB
Dynamic Range	>110 dB
COVERAGE	
Horizontal	45 degrees
Vertical	45 degrees
CROSSOVER⁴	
	2300 Hz
TRANSDUCERS	
Low Frequency ⁵	Two 5-inch cone drivers
High Frequency	One 1-inch metal dome tweeter
CONNECTOR OPTIONS	
	Phoenix SwitchCraft ECO-M
Wiring:	5-Pin Male EN3 5-Pin Male 7-Pin Male ⁶
DC Power (-)	Pin 1 Pin 1 Pin 1
DC Power (+)	Pin 2 Pin 2 Pin 2
Audio Shield, Chassis/Earth ⁷	Pin 3 Pin 3 Pin 5 (Shield)
Audio (-)	Pin 4 Pin 4 Pin 5
Audio (+)	Pin 5 Pin 5 Pin 6
AUDIO INPUT	
Type	Differential, electronically balanced
Maximum Common Mode Range	±15 V DC, clamped to earth for voltage transient protection
Input Impedance	10 kOhm differential between positive (+) and negative (-) audio pins
DC Blocking	Differential DC blocking up to the maximum common mode voltage
CMRR	>50 dB, typically 80 dB (50 Hz – 500 Hz)
RF Filter	Common mode: 425 kHz; Differential mode: 142 kHz
TIM Filter	<80 kHz, integral to signal processing
Nominal Input Sensitivity	-8.0 dBV (0.4 V rms) continuous average is typically the onset of limiting for noise and music
Input Level	Audio source must be capable of producing +20 dBV (10 V rms, 14 V peak) into 600 ohms to produce the maximum peak SPL over the operating bandwidth of the loudspeaker
AMPLIFIER	
Type	3-channel, class D
Output Power ⁸	350 W total
THD, IM, TIM	<.02%
Load	8 Ω low channels, 8 Ω high channel
Cooling	Convection
DC POWER	
Voltage Requirement	48 V DC
<i>Meyer Sound Power Supply Required</i> For information and specifications on the MPS-488HP IntelligentDC external power supply, refer to its datasheet.	

NOTES:

1. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
2. Free field, measured with 1/3-octave frequency resolution at 4 meters.
3. Free field, measured with music, referred to 1 meter.
4. At this frequency, the transducers produce equal sound pressure levels.
5. Both low-frequency drivers active below 320 Hz. From 320 Hz to the 1300 Hz crossover point, only one low-frequency driver, the one closest to the high-frequency driver, is active, to maintain optimal polar and off-axis frequency response characteristics.
6. Pins 3 and 4 not used in ECO-M connector.
7. Audio shield, chassis/earth through 1 kOhm, 1000 pF, 15 V clamped network to provide virtual ground lift at audio frequencies.
8. Amplifier wattage rating based on the maximum unclipped burst sine wave rms voltage the amplifier will produce for at least 0.5 seconds into the nominal load impedance: low and high channels, 30 V rms (42 V peak).



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MEYER SOUND LABORATORIES INC.
2832 San Pablo Avenue
Berkeley, CA 94702

+1 510 486.1166

techsupport@meyersound.com
www.meyersound.com

ARCHITECT SPECIFICATIONS

The loudspeaker shall be a self-powered, full-range system. Its transducers shall include two 5-inch cone drivers and one 1-inch metal dome tweeter.

The loudspeaker system shall incorporate internal processing and a 3-channel amplifier, one channel for each driver. Processing functions shall include equalization, phase correction, signal division, and driver protection. The crossover point shall be 2.3 kHz. Amplifier burst output power shall be 350 W total. Distortion (THD, IM, TIM) shall not exceed 0.02%.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolu-

tion: operating frequency range, 80 Hz to 20 kHz; phase response, 300 Hz to 18 kHz ±60 degrees; maximum peak SPL, 123 dB at 1 meter. Coverage shall be 45-degree horizontal by 45-degree vertical.

The loudspeaker shall receive DC power and balanced audio from a single input connector, available as Phoenix 5-pin male, sealed EN3 5-pin male, or sealed ECO-M 7-pin male (two pins for DC power, three pins for balanced audio). The audio input shall be electronically balanced with a 10 kOhm impedance and accept a nominal -8.0 dBV (0.4 V rms) input signal. DC blocking and RF filtering shall be provided, and CMRR shall be greater than 50 dB and typically 80 dB (50 Hz to 500 Hz).

Power requirements for the loudspeaker shall be a Meyer Sound MPS-488HP IntelligentDC power supply capable of delivering 48 V DC.

All components shall be mounted in an acoustically vented trapezoidal enclosure constructed of premium birch plywood with a black textured finish. The protective grille shall be powder-coated, hex-stamped steel with black mesh screen. Rigging shall be three 3/8"-16 or M10 nut plates. Dimensions shall be 6.85 inches wide x 18.00 inches high x 7.70 inches deep (174 mm x 457 mm x 196 mm). Weight shall be 17 lbs (7.7 kg).

The loudspeaker shall be the Meyer Sound UPM-2XP.