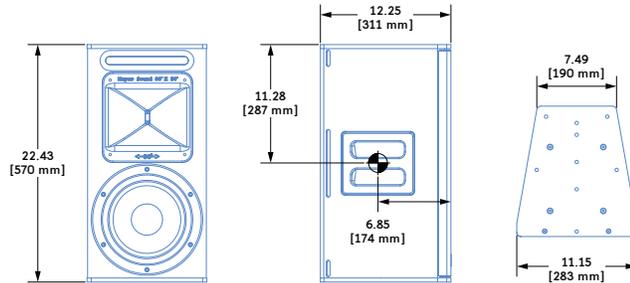


UPJ-1XP Compact VariO™ Loudspeaker



- Dimensions** 11.15" w x 22.43" h x 12.25" d
(283 mm x 570 mm x 311 mm)
- Weight** 43 lbs (19.5 kg)
- Enclosure** Premium birch plywood
- Finish** Black textured
- Protective Grille** Powder-coated, hex-stamped steel with black mesh screen
- Rigging** Aluminum end plates with M8 threaded attachment points for mounting and flying with QuickFly and standard rigging options

The UPJ-1XP, with IntelligentDC technology, offers the same sonic signature, robust peak power output, and rotatable VariO horn as the UPJ-1P but with the added flexibility of external DC power and lengthy cable runs without AC conduits. The UPJ-1XP was designed for flexibility. With its extraordinary size-to-power ratio and generous rigging options, the compact UPJ-1XP is well suited for use as a single, primary loudspeaker or as part of multicabinet horizontal or vertical arrays. Applications include AV presentations, small- to medium-sized sound reinforcement systems, fill, delay, effects, and distributed systems. The loudspeaker's 80-degree by 50-degree VariO horn is easily rotated to obtain optimum horizontal or vertical coverage for any installation.

Designed and manufactured at Meyer Sound's factory in Berkeley, California, the UPJ-1XP's transducers include one 10-inch cone driver and one 3-inch diaphragm compression driver. The

proprietary drivers are powered by an onboard 2-channel, class D power amplifier that delivers 300 W of total burst power.

With IntelligentDC technology, the UPJ-1XP 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 UPJ-1XP's amplifier and signal-processing circuits store DC power and tolerate voltage drops, thereby accommodating light-gauge cables and lengthy cable runs.

The UPJ-1XP 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 UPJ-1XP 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 UPJ-1XP cabinet is coated with a black textured finish and includes heavy-duty, corrosion-resistant 6061-T6 aluminum end plates with threaded M8 attachment points for basic eyebolt rigging and third-party pole assemblies. QuickFly® rigging options include the MAAM-UPJ array adapter (also made from 6061-T6 aluminum), MUB-UPJ U-bracket, and MYA-UPJ mounting yoke assembly. Cabinets are available from the factory without handles. Other options include weather protection and custom colors for fixed installations and installations with specific cosmetic requirements.

FEATURES & BENEFITS

- IntelligentDC technology affords the flexibility of lengthy cable runs without AC conduits
- Exceptional fidelity and extended high-frequency performance
- Extraordinarily flat amplitude and phase responses for tonal accuracy and precise imaging
- Constant-Q horn affords uniform response throughout coverage area
- VariO horn allows loudspeakers to be oriented horizontally or vertically
- With QuickFly rigging can be mounted as a single cabinet or flown in multicabinet horizontal and vertical arrays

APPLICATIONS

- Portable and installed AV systems
- Theatrical sound reinforcement
- Compact voice reinforcement systems
- Conference centers, presentations, ballrooms, and houses of worship

UPJ-1XP SPECIFICATIONS

ACOUSTICAL	
Operating Frequency Range ¹	55 Hz – 20 kHz
Frequency Response ²	66 Hz – 18 kHz ±4 dB
Phase Response	750 Hz – 18 kHz ±45 degrees
Maximum Peak SPL ³	128 dB
Dynamic Range	>110 dB
COVERAGE	
	80 x 50 degrees or 50 x 80 degrees (rotatable horn)
CROSSOVER⁴	
	2000 Hz
TRANSDUCERS	
Low Frequency	One 10-inch cone driver
High Frequency	One 3-inch diaphragm compression driver
CONNECTOR OPTIONS	
	Phoenix SwitchCraft ECO-M
Wiring:	5-Pin Male EN3 5-Pin Male 7-Pin Male ⁵
DC Power (-)	Pin 1 Pin 1 Pin 1
DC Power (+)	Pin 2 Pin 2 Pin 2
Audio Shield, Chassis/Earth ⁶	Pin 3 Pin 3 Pin S (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	0.0 dBV (1.0 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	2-channel, class D
Output Power ⁷	300 W total
THD, IM, TIM	<.02%
Load	4 ohms low channels, 16 ohms 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. Pins 3 and 4 not used in ECO-M connector.
6. Audio shield, chassis/earth through 1 kOhm, 1000 pF, 15 V clamped network to provide virtual ground lift at audio frequencies.
7. 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).



UPJ-1XP – 04.134.009.02 A

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ARCHITECT SPECIFICATIONS

The loudspeaker shall be a self-powered, full-range system. Its transducers shall include one 10-inch cone driver and one 3-inch diaphragm compression driver.

The loudspeaker system shall incorporate internal processing and a 2-channel amplifier, one channel for each driver. Processing functions shall include equalization, phase correction, signal division, and driver protection. The crossover point shall be 2.0 kHz. Amplifier burst output power shall be 300 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 resolution: operating frequency range, 55 Hz to 20 kHz; phase response, 750 Hz to 18 kHz ±45 degrees; maximum peak

SPL, 128 dB at 1 meter. Coverage (-6 dB points) shall be 80 degrees by 50 degrees, horizontal or vertical dependent on horn orientation.

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 0.0 dBV (1.0 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. Integral high-strength, 6061-T6 aluminum end plates with threaded M8 metric holes shall accommodate Meyer Sound proprietary rigging hardware and third-party accessories. Dimensions shall be 11.15 inches wide x 22.43 inches high x 12.25 inches deep (283 mm x 570 mm x 311 mm). Weight shall be 43 lbs (19.5 kg).

The loudspeaker shall be the Meyer Sound UPJ-1XP.