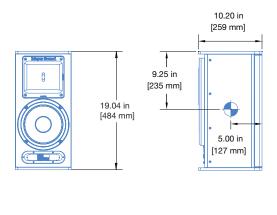
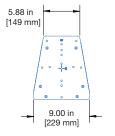
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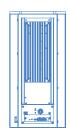
# **UPJunior-XP** UltraCompact VariO™ Loudspeaker











The UPJunior-XP, with IntelligentDC technology, offers the same sonic signature, robust peak power output, and rotatable VariO horn as the UPJunior but with the added flexibility of external DC power. Externally powering the loudspeakers facilitates long cable runs that do not require AC conduits. Meyer Sound designed the UPJunior-XP for flexibility. With its extraordinary size-to-power ratio and generous rigging options, the ultracompact UPJunior-XP is well suited for use as a single, primary loudspeaker or as part of multicabinet horizontal or vertical arrays.

Applications include audio-visual presentations, small- to medium-sized sound reinforcement systems, fill, delay, effects, and under-balcony coverage. The loudspeaker's 80° by 50° VariO horn rotates easily, so as to provide optimum horizontal or vertical coverage for any installation.

Designed and manufactured at Meyer Sound's factory in Berkeley, California, the UPJunior-XP's transducers include one 8-inch cone driver and one 2-inch diaphragm compression driver. An onboard two-channel, class D amplifier powers the proprietary drivers, delivering 580 W of total burst power.

With IntelligentDC technology, the UPJunior-XP 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 UPJunior-XP's amplifier and signal-processing circuits store

DC power and tolerate voltage drops, thereby accommodating light-gauge cables and lengthy cable runs.

The UPJunior-XP requires a Meyer Sound IntelligentDC external power supply. For larger installations, the single-space rack-mount MPS-488HP IntelligentDC power supply unit distributes DC power and balanced audio to up to eight UPJunior-XP loudspeakers or other Meyer Sound Intelligent DC loudspeakers. For smaller installations, the MPS-482HP IntelligentDC power supply offers two channels of audio and DC power.

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 gauge wires. The optional RMS™ remote monitoring system provides comprehensive monitoring of loudspeaker parameters from a Mac® or Windows®-based computer running Compass® control software.

Meyer Sound coats the UPJunior-XP cabinet with a slightly textured black finish and includes heavy-duty, corrosion-resistant 6061-T6 aluminum end plates with threaded M8 attachment points for basic eyebolt rigging or third-party pole assemblies. QuickFly® rigging options include the MAAM-UPJunior array adapter (also made from 6061-T6 aluminum), MUB-UPJunior U-bracket, and MYA-UPJunior mounting yoke assembly. Other options include weather protection and custom colors for fixed installations and installations with specific cosmetic requirements.

### **FEATURES AND BENEFITS**

- IntelligentDC technology allows the flexibility of lengthy cable runs without AC conduits
- Compact package delivers outstanding power capability
- · VariO horn enables versatile coverage options, whether orienting loudspeakers horizontally or vertically
- Extraordinarily flat amplitude and phase response provide tonal accuracy and precise imaging
- Constant-Q horn delivers uniform response throughout the coverage area
- QuickFly rigging facilitates mounting as a single cabinet or flying within arrays

#### **APPLICATIONS**

- Portable and installed audio-visual systems
- Theatrical sound reinforcement
- Front and under-balcony fill coverage
- Conference centers, presentations, ballrooms, and houses of worship

### **ACCESSORIES AND ASSOCIATED PRODUCTS**

MAAM-UPJunior Array Adapter: Facilitates installation of multiple UPJunior-XPs in both horizontal and vertical arrays.

MYA-UPJunior Mounting Yoke Assembly: Cradle-style mounting yoke that suspends a single UPJunior-XP loudspeaker and supports a wide range of horizontal and vertical adjustments.

MUB-UPJunior U-Bracket: Allows the UPJunior-XP to be mounted on any flat surface at adjustable angles.

**35MM Pole Stand Adapter:** This large base stand adapter mounts the loudspeaker on a 35 mm pole. In addition, this adapter can be used to mount the MYA-UPJunior yoke on a pole to allow easy panning and tilting.

MSA-STAND Adapter Cup 35MM: This compact cup-type adapter mounts the UPJunior loudspeaker on a 35 mm pole. In addition, this adapter can be used to mount the MYA-UPJunior yoke on a pole to allow easy panning and tilting of the UPJunior.

**Galileo GALAXY Network Platform:** The Galileo GALAXY Network Platform provides state-of-the-art audio control technology for loudspeaker systems with multiple zones. With immaculate sonic performance, it provides a powerful tool set for corrective room equalization and creative fine-tuning for a full range of applications.

MPS-488HP External Power Supply: Rack-mount unit that delivers balanced audio and high-current DC power to up to eight loudspeakers; versions available with either Phoenix or EN3 channel output connectors.

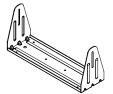
MPS-482HP External Power Supply: 1RU 1/2 width rack unit that delivers balanced audio and high-current DC power to up to two audio channels; rack mount or use available options to mount on ceiling, wall, pole or truss configurations.



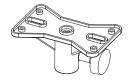
**MAAM-UPJunior Array Adapter** 



MYA-UPJunior Mounting Yoke Assembly



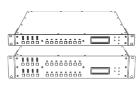
**MUB-UPJunior U-Bracket** 



35MM Pole Stand Adapter



MSA-STAND Adapter Cup 35MM



**GALAXY Network Platform** 



MPS-482HP External Power Supply



MPS-482HP External Power Supply

## **SPECIFICATIONS**

ACOUSTICAL <sup>1</sup>			
Operating Frequency Range <sup>2</sup>	70 Hz – 20 kHz		
Frequency Response <sup>3</sup>	76 Hz – 18 kHz ±4 dB		
Phase Response	250 Hz – 18 kHz ±45°		
Linear Peak SPL <sup>4</sup>	<b>123.5 dB with 18.5 dB crest factor (M-noise),</b> 121.5 dB (Pink noise), 121 dB (B-noise)		
COVERAGE			
	80° x 50° or 50° x 80° (rotatable horn)		
TRANSDUCERS			
Low Frequency	One 8-inch cone driver with neodymium magnet; 4 $\Omega$ nominal impedance		
High Frequency	One 2-inch compression driver; 12 $\Omega$ nominal impedance		
AUDIO INPUT			
Туре	Differential, electronically balanced		
Maximum Common Mode Range	±15 V DC, clamped to earth for voltage transient protection		
Connectors	Phoenix 5-pin Male; SwitchCraft 5-pin Male; ECO-M 7-pin Male (two pins for 48 V DC power, three pins for balanced audio)		
Input Impedance	10 kΩ differential between positive (+) and negative (-) audio pins		
Wiring <sup>6</sup>	Phoenix 5-pin Male Pin 1: DC Power (-) Pin 2: DC Power (+) Pin 3: Chassis/earth through 1 kΩ, 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies Pin 4: Audio (-) Pin 5: Audio (+)	SwitchCraft EN3 5-pin Male Pin 1: DC Power (-) Pin 2: DC Power (+) Pin 3: Chassis/earth through 1 kΩ, 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies Pin 4: Audio (-) Pin 5: Audio (+)	ECO-M 7-pin Male <sup>5</sup> Pin 1: DC Power (-) Pin 2: DC Power (+) Pin S: Chassis/earth through 1 kΩ, 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies Pin 5: Audio (-) Pin 6: Audio (+)
Nominal Input Sensitivity	0 dBV (1.0 V rms) continuous is typically the onset of limiting for noise and music		
Input Level	Audio source must be capable of producing of $+20$ dBV (10 V rms) into $600~\Omega$ to produce the maximum peak SPL over the operating bandwidth of the loudspeaker.		
AMPLIFIER			
Туре	2-channel, Class-D		
Total Output Power <sup>6</sup>	580 W peak		
THD, IM, TIM	< 0.02%		
Cooling	Convection		
DC POWER Connector	Phoenix 5-pin Male; SwitchCraft 5-pin Male; ECO-M 7-pin Male (two pins for 48 V DC power, three pins for balanced audio)		
Safety Rated Voltage Range	48 V DC		
RMS NETWORK (OPTIONAL)			
	Equipped with two-conductor twi to system operator's host compu	isted-pair network, reporting all op ter.	erating parameters of amplifiers

### SPECIFICATIONS, CONT'D.

PHYSICAL		
Dimensions	W: 9.00 in (229 mm) x H: 19.04 in (484 mm) x D: 10.20 in (259 mm)	
Weight	26 lb (11.8 kg)	
Enclosure	Premium multi-ply birch, slightly textured black finish	
Protective Grille	Powder-coated, hex-stamped steel with acoustical black mesh	
Rigging	Aluminum end plates for mounting/flying cabinets with QuickFly and standard rigging options; met M8 threaded points used for all UPJunior rigging	

### **NOTES**

- 1. Loudspeaker system predictions for coverage and SPL are available in Meyer Sound's MAPP System Design Tool.
- 2. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
- 3. Free-field, measured with 1/3 octave frequency resolution at 4 m.
- 4. **Linear Peak SPL** is measured in free-field at 4 m referred to 1 m. Loudspeaker SPL compression measured with M-noise at the onset of limiting, 2-hour duration, and 50-degree C ambient temperature is < 2 dB.

**M-noise** is a full bandwidth (10 Hz–22.5 kHz) test signal developed by Meyer Sound to better measure the loudspeaker's music performance. It has a constant instantaneous peak level in octave bands, a crest factor that increases with frequency, and a full bandwidth Peak to RMS ratio of 18 dB.

Pink noise is a full bandwidth test signal with Peak to RMS ratio of 12.5 dB.

**B-noise** is a Meyer Sound test signal used to ensure measurements reflect system behavior when reproducing the most common input spectrum, and to verify there is still headroom over pink noise.

- 5. Pins 3 and 4 not used in ECO-M connector.
- 6. Peak power based on the maximum unclipped peak voltage the amplifier will produce into the nominal load impedance.

### ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be a self-powered, full-range system. Its transducers shall include one 8-inch cone driver and one 2-inch diaphragm compression driver.

The loudspeaker system shall incorporate internal processing and a two-channel amplifier—one channel for each driver. Processing functions shall include equalization, phase correction, signal division, and driver protection. Amplifier burst output power shall be 580 W total. Distortion (THD, IM, TIM) shall not exceed 0.02%.

Performance specifications for a typical production unit shall be as follows: operating frequency range shall be 70 Hz–20 kHz; phase response shall be 250 Hz–18 kHz  $\pm$ 45 degrees; linear peak SPL shall be 123.5 dB with 18.5 dB crest factor, measured with M-noise, free-field at 4 m referred to 1 m; coverage (-6 dB points) shall be 80° by 50°, 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 k $\Omega$  impedance and accept a nominal 0.0 dBV (1.0 V rms) input signal.

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

All components shall be mounted in an acoustically vented trapezoidal enclosure constructed of premium multi-ply birch with a slightly textured black finish. The protective grille shall be powder-coated, hex-stamped steel with acoustical 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 W: 9.00 in (229 mm) x H: 19.04 in (484 mm) x D: 10.20 in (259 mm). Weight shall be 26 lb (11.8 kg).

The loudspeaker shall be the Meyer Sound UPJunior-XP.

