UPJunior

ultracompact VariO loudspeaker

thinking sound

Meyer® Sound

UPJunior

UltraCompact VariO loudspeaker

The self-powered UPJunior combines clear, powerful sound with a rotatable horn, a very small footprint, and a full spectrum of mounting and rigging options to provide a utility loudspeaker that's ready to go anywhere you need it.

Though remarkably compact and lightweight (only 28 pounds/12.7 kilograms), UPJunior delivers a robust peak power output of 126 dB SPL at 1 meter, making it suitable for use either as a single, primary loudspeaker or within multicabinet horizontal and vertical arrays. Applications include AV presentations and small- to medium-size main sound reinforcement systems, as well as in fill, delay, effects, under-balcony coverage, and distributed systems. UPJunior even makes an excellent small stage monitor when used with the optional MAAM-UPJunior array adapter plates. In larger systems, UPJunior is ideal for providing sound to areas not reached by the main system, or perhaps to immerse an audience in a multichannel sound field.

> *"The UPJunior was developed based on the success and popularity of UPJ-1P. By putting the same powerful technology into a smaller package, we're giving our customers another tool that can be used in many different applications where its smaller profile will keep it from obstructing sight lines and allow it to fit into very tight spaces."*
>
> **– John Meyer**

FEATURES & BENEFITS

- Rotatable VariO horn provides versatile coverage options, whether loudspeakers are oriented horizontally or vertically
- Exceptional fidelity and power-to-size ratio
- Extraordinarily flat amplitude and phase response for tonal accuracy and precise imaging
- Constant-Q horn affords uniform response throughout coverage area
- Predictable and consistent performance ensures system design flexibility

APPLICATIONS

- Portable and installed audio-visual systems
- Theatrical sound reinforcement
- Frontfill and under-balcony coverage
- Conference centers, presentations, ballrooms and houses of worship
- Stage monitoring (with optional MAAM adapter)

UPJunior was designed for flexibility. Whether oriented vertically or horizontally, its VariO horn allows quick rotation for obtaining the optimum horizontal and vertical coverage patterns in any situation. With its rotatable horn, small size, and QuickFly rigging, there's hardly anywhere UPJunior can't be placed.

UPJunior integrates seamlessly with other Meyer Sound products, including the UltraSeries, UPM-1P, UPM-2P, UPJ-1P, and UPA-1P loudspeakers. For smaller, full-range systems, UPJunior works well with the UMS-1P or M1D-Sub ultracompact subwoofers. In applications requiring greater low-frequency support, the 600-HP high-power subwoofer can be used.

It's a sizable list of capabilities for a small speaker. But that's UPJunior: the small loudspeaker that makes a big difference.

Meyer Sound's VariO horn can be easily rotated in the field by removing only eight screws. The ability to reconfigure UPJunior's coverage lets users get the best coverage in nearly any situation.

COMPONENTS

UPJunior is a two-way system employing components designed and manufactured by Meyer Sound in Berkeley, Calif. Meyer Sound's rigorous quality assurance guarantees the performance and consistency of each UPJunior.

UPJunior's low/mid-frequency section employs an 8-inch neodymium magnet cone driver with a 1.5-inch voice coil, while the high-frequency section utilizes an efficient 0.75-inch exit, 2-inch diaphragm compression driver. The high-frequency driver is mounted on a rotatable, 80-degree-by-50-degree VariO horn for maximum flexibility in obtaining desired coverage.

THE SELF-POWERED ADVANTAGE

Having manufactured self-powered sound reinforcement loudspeakers since 1995, Meyer Sound has pioneered and refined this technology to produce systems that are powerful and reliable. Self-powered systems eliminate heavy, expensive, amplifier racks and large loudspeaker cables, thereby lowering costs. With no need to calibrate gain and crossover settings, self-powered systems are easy to use and go from the truck to fully rigged and back in minutes.

UPJunior incorporates a proprietary two-channel, class AB/bridged power amplifier and sophisticated control circuitry housed within the cabinet, dramatically simplifying setup and installation. UPJunior's integrated amplifier delivers 300 watts of total burst power, while the onboard processing includes an electronic crossover, phase and frequency response correction filters, and driver protection circuitry, including peak and rms limiters on each channel that prevent driver overexcursion and regulate the temperature of the voice coil. Limiter activity is easy to monitor with high-color limit LEDs on UPJunior's rear panel.

The optional RMS remote monitoring system module continuously reports the status of all key system parameters from a remote computer running Windows OS. Other options for UPJunior include weather protection and custom color finishes for applications requiring specific cosmetics.

The modular, field-replaceable amplifier/processing package also incorporates Meyer Sound's Intelligent AC power supply, which automatically adjusts for any line voltage worldwide and provides both soft turn-on and transient protection.

Meyer Sound self-powered systems enclose their complex crossovers, protection circuitry, and power amplifiers entirely within the enclosure, resulting in the greatest ease of setup and use.

QUICKFLY RIGGING PUTS UPJUNIOR WHEREVER YOU NEED IT

Meyer Sound's patented QuickFly rigging is as versatile and easy to use as the UPJunior itself. Designed for maximum safety and strength, UPJunior's QuickFly mounting options enable UPJunior to be used singly or in arrays of two or three, and mounted on ceilings (such as for under-balcony applications), floors, walls, or trusses; used as a stage monitor; or, with the use of a third-party adapter, pole mounted.

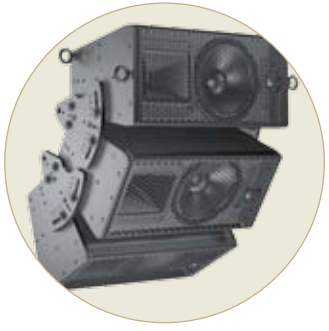
Mounting and rigging options make use of UPJunior's integral top and bottom aluminum end plates (made of heavy duty, high-strength, corrosion-resistant 6061-T6 aluminum) with threaded M8 attachment points.

Combining its VariO horn with its QuickFly hardware, UPJunior is capable of an unparalleled degree of utility, enabling smooth coverage to be attained in even the trickiest situations.

MAAM-UPJunior Array Adapter Plate

The MAAM-UPJunior array adapter plate enables a variety of vertical and horizontal array configurations using two or three UPJunior cabinets. The MAAM-UPJunior has holes for accepting eyebolts or a shackle for maximum flexibility in mounting and rigging, and allows the separation between two cabinets in an array to be set to any angle from 10 to 80 degrees. The MAAM-UPJunior is also used when laying the cabinet horizontally for use as a stage monitor.

MAAM-UPJunior enables any angle between 10 and 80 degrees to be set between two UPJunior cabinets.



With MAAM-UPJunior, up to three UPJunior cabinets can be arrayed vertically or horizontally.

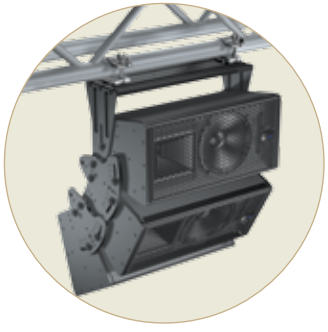
MAAM-UPJunior lets UPJunior be used as a stage monitor.

MUB-UPJunior U-bracket

The MUB–UPJunior U–bracket can be used for mounting UPJunior on floors, walls, ceilings, or truss.

UPJunior can be easily mounted on a ceiling or floor with the MUB–UPJunior for applications such as under–balcony coverage.

The MUB–UPJunior allows UPJunior to be mounted on walls for fill or surround applications.



MUB–UPJunior can be suspended from truss for a variety of fill applications.

Pole Mounting UPJunior

UPJunior cabinets can be easily pole–mounted using a third–party adapter. Pole mounting a single UPJunior onto a UMS–1P ultracompact subwoofer is as simple as fitting an MPS–UMS pole stand into the integral pole mount receptacle in the UMS–1P, then mounting a UPJunior (with third–party adapter) onto it.

Use pole mounted UPJuniors for portable and small–scale applications.

MYA-UPJunior Mounting Yoke Assembly

The MYA–UPJunior cradle–style mounting yoke suspends a single UPJunior loudspeaker and allows a wide range of horizontal and vertical adjustment.

UPJunior is easily pole mounted on the UMS–1P subwoofer.

The UPA–1P is the self–powered version of the landmark loudspeaker that introduced the trapezoidal cabinet and processor control of loudspeakers.

The UPJ–1P introduced the rotatable VariO horn and flexible mounting found in UPJunior.

The UPM–1P is often used for fill applications, spot coverage, and as a main loudspeaker in small systems.

MEYER SOUND'S ULTRASERIES LOUDSPEAKERS

UPJunior is a member of Meyer Sound's UltraSeries. The UltraSeries is where it all began for Meyer Sound with the introduction of the UM–1 UltraMonitor, followed shortly thereafter by the UPA–1. The UPA–1 was a milestone in sound reinforcement, leading to its being honored as an inaugural inductee into the TECnology Hall of Fame. The trapezoidal shape of the UPA–1 cabinet was a breakthrough important enough to be recognized by the U.S. Patent and Trademark Office, which issued Meyer Sound one of its first patents for the innovation. The trapezoidal shape, which allows cabinets to be easily arrayed, is now standard in the industry. The UPA–1 and UM–1 were also the first processor–controlled loudspeakers, another Meyer Sound advance that is now commonplace.

The 1997 release of the UPA–1P marked yet one more major step forward: the first high–output, self–powered system in a compact package. The appearance of the UPA–1P spurred numerous imitations by other manufacturers, but Meyer Sound remains the only manufacturer fully committed to self–powered systems. More than 12 years after it first pioneered self–powering, Meyer Sound's singular experience and substantial investment in research are clearly demonstrated in the performance and consistency of its over 40 self–powered loudspeakers.

SPECIFICATIONS

ACOUSTICAL	
Operating frequency range[1]	70 Hz – 20 kHz
Frequency response[2]	76 Hz – 18 kHz ±4 dB
Phase response	250 Hz – 18 kHz ±45˚
Maximum peak SPL[3]	126 dB
Dynamic range	›110 dB
Coverage[4]	80˚ x 50˚
Acoustical crossover[5]	3.5 kHz
TRANSDUCERS	
Low frequency	One 8” cone driver with neodymium magnet
	Nominal impedance: 4 Ω
	Voice coil size: 1.5”
	Power handling capability: 300 W (AES)[6]
High frequency[7]	One 2” compression driver
	Nominal impedance: 12 Ω
	Voice coil size: 2”
	Diaphragm size: 2”
	Exit size: 0.75”
	Power handling capability: 100 W (AES)[6]
AUDIO INPUT	
Type	Differential, electronically balanced
Max. common mode range	±15 V DC, clamped to earth for voltage transient protection
Connectors	Female XLR input with male XLR loop output
Input impedance	10 kΩ differential between pins 2 and 3
Wiring	Pin 1: Chassis/earth through 220 kΩ, 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies
	Pin 2: Signal +
	Pin 3: Signal – (optional polarity reversal switch)[8]
	Case: Earth ground and chassis
DC Blocking	Differential DC blocking on input up to max. 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 dB V (1 V rms, 1.4 V peak) continuous coverage 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 Ω in order to produce maximum peak SPL over the operating bandwidth of the loudspeaker
AMPLIFIERS	
Amplifier type	Two-channel complementary power MOSFET output stages (class AB/bridged)
Output power[9]	300 W total
THD, IM TIM	‹ .02%
Load capacity	4 Ω low channel; 12 Ω high channel
Cooling	Forced air cooling over amplifier heatsink

1 *Recommended maximum operating frequency range. Response depends upon loading conditions and room acoustics.*

2 *Measured free field with 1/3-octave frequency resolution at 4 meters.*

3 *Measured with music referred to 1 meter.*

4 *The UPJunior horn can be rotated to provide an 80˚ x 50˚ coverage pattern in either the horizontal or vertical plane.*

5 *At this frequency, the transducers produce equal sound pressure levels.*

6 *Power handling measured using AES standards: transducer driven continuously for two hours with band limited noise signal having a 6 dB peak-average ratio.*

7 *High frequency driver is coupled to an 80˚ x 50˚ constant-directivity horn.*

8 *An optional input module is available that includes a polarity reversal switch and attenuator (0-18 dB).*

9 *Wattage rating is based on the maximum unclipped burst sine-wave rms voltage the amplifier will produce into the nominal load impedance — low and high channels 30 V rms (42 V peak) into load impedance.*

AC POWER

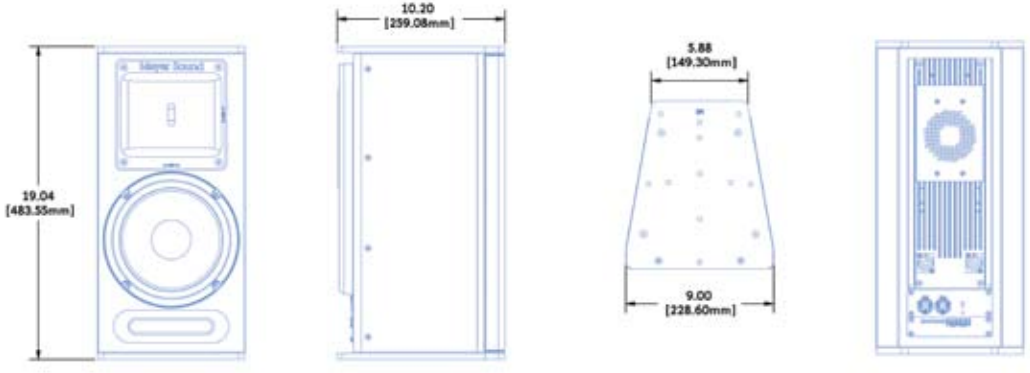
AC power connector	PowerCon with looping output
Voltage selection	Automatic
Safety agency rated operating voltage	100 V AC – 240 V AC, 50/60 Hz
Turn on/turn off points[10]	90 V AC – 264 V AC, 50/60 Hz

CURRENT DRAW[11]

Idle current	0.448 A rms (115 V AC), 0.285 A rms (230 V AC), 0.497 A rms (100 V AC)
Max. long-term continuous current (>10 sec)	2.55 A rms (115 V AC), 1.55 A rms (230 V AC), 2.75 A rms (100 V AC)
Burst current (<1 sec)	2.9 A rms (115 V AC), 1.7 A rms (230 V AC), 3.2 A rms (100 V AC)
Ultimate short-term peak current draw	12.0 A peak (115 V AC), 9.0 A peak (230 V AC), 13.0 A peak (100 V AC)
Inrush current	15.0 A peak (115 V AC), 13.0 A peak (230 V AC), 15.0 A peak (100 V AC)

PHYSICAL

Enclosure	Premium birch plywood
Finish	Black textured
Protective grille	Powder-coated hex-stamped steel
Rigging	QuickFly rigging options
Dimensions	9.00 w x 19.04 h x 10.20 d (228.60 mm x 483.55 mm x 259.08 mm)
Weight	28 lbs (12.70 kg)



10 *No automatic turn-off voltages. Voltages above 265 V AC are fuse protected but may cause permanent damage to the power supply. Voltages below 90 V AC may result in intermittent operation.*

11 *Current draw for a single loudspeaker. Loop out not used.*

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