The UPJ-1P combines the advantages of self-powered systems with the placement and arraying flexibility afforded by a VariO™ rotatable horn. Though remarkably compact and lightweight, the UPJ-1P produces a robust peak power output of 128 dB SPL at 1 meter, making it suitable for use either singly as a primary loudspeaker or in multi-cabinet horizontal or vertical arrays. Applications include A/V presentations, small- to medium-sized main sound reinforcement systems, fill, delay, effects, under-balcony or under-canopy coverage and distributed systems.

The UPJ-1P was bred for flexibility: whether oriented vertically or horizontally, it can provide narrow, targeted coverage or wide coverage, with a simple turn of the VariO rotatable horn, changing its 80° x 50° coverage pattern between the horizontal and vertical planes. In size and weight, the UPJ-1P fits into the UltraSeries between the UPM and UPA. With a 10-inch low-frequency neodymium magnet cone driver and a 0.75-inch exit, 3-inch diaphragm compression driver in the high-frequency section, the UPJ-1P delivers uncompromising quality and coverage.

Sophisticated amplification and protection circuitry produces consistent and predictable results in any system design. A proprietary Meyer Sound two-channel, class AB/bridged power amplifier with complementary MOSFET output stages provides a total output of 300 watts. The incoming audio signal is processed through an electronic crossover and correction filters for flat phase and frequency response, as well as for driver protection. Each channel has peak and rms limiters that prevent driver over-excitation and regulate voice coil temperature. Limiter activity is easy to monitor with the limit LEDs on the rear panel.

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. The UPJ-1P is compatible with the RMS™ remote monitoring system, which offers comprehensive monitoring of system parameters on a Windows®-based network.

The UPJ-1P’s end plates are made of heavy-duty, high-strength, corrosion-resistant 6061-T6 aluminum. Strategically placed metric M8 threaded points allow simple mounting using eyebolts or directly to third-party pole assemblies. QuickFly rigging options including the MAA-UPJ array adapter (also made from 6061-T6 aluminum), MLB-UPJ L-brackets and MYA-UPJ mounting yoke assembly provide unprecedented mounting, flying and arraying flexibility. Options include weather protection, custom color finishes, and cabinets with no handles for fixed applications requiring specific cosmetics.

### FEATURES & BENEFITS
- Exceptional fidelity and extended high frequency performance
- Surprising power capability in a compact package
- Extraordinarily flat amplitude and phase response for tonal accuracy and precise imaging
- Constant-Q horn affords uniform response throughout the coverage area
- Predictable array performance ensures system design flexibility
- VariO horn allows loudspeakers to be oriented horizontally or vertically
- Portable and installed audio-visual systems
- Theatrical sound reinforcement
- Frontfill and under balcony
- Conference centers, presentations, ballrooms and houses of worship

### APPLICATIONS
- Portable and installed audio-visual systems
- Theatrical sound reinforcement
- Frontfill and under balcony
- Conference centers, presentations, ballrooms and houses of worship
**UPJ-1P Specifications**

### Acoustical

- **Operating Frequency Range**: 55 Hz to 20 kHz
- **Frequency Response**: Free Field
  - Low Frequency: 66 Hz to 18 kHz ±4 dB
  - High Frequency: 750 Hz to 18 kHz ±45°
- **Maximum Peak SPL**: 128 dB
- **Dynamic Range**: -110 dB

### Coverage

- **Crossover**: 80° x 50°
- **Crossover Point**: 2 kHz

### Transducers

- **Low Frequency**
  - One 10” cone driver with neodymium magnet
  - Nominal impedance: 4 Ω
  - Power-handling capability: 400 W (AES)
- **High Frequency**
  - One 3” compression driver
  - Nominal impedance: 16 Ω
  - Power-handling capability: 100 W (AES)

### Audio Input

- **Type**: Differential, electronically balanced
- **Maximum Common Mode Range**: ±15 V DC
- **Input Impedance**: Female XLR input with male XLR loop output
- **DC Blocking**: 425 kHz
- **Common Mode**: 425 kHz
- **RMS Network (Optional)**
  - Type: Two-channel complementary MOSFET output stages (class AB/bridged)
- **Output Power**: 300 W total
- **THD, IM, TIM**: <0.02%
- **Input Level**: 4 Ω low channel, 16 Ω high channel
- **Cooling**: Forced air cooling over amplifier heatsink
- **PowerCon with looping output**
- **Voltage Selection**: Automatic
- **Safety Agency Rated Operating Range**: 100 V AC to 240 V AC, 50/60 Hz
- **Turn-on and Turn-off Points**:
  - 90 V to 264 V AC, 50/60 Hz
  - 0.41 A rms (115 V AC), 0.33 A rms (230 V AC), 0.42 A rms (100 V AC)
- **Current Draw**: Idle Current
  - 5.4 A rms (125 V AC), 5.5 A rms (230 V AC), 5.8 A rms (100 V AC)
- **Max Long-Term Continuous Current**: 17 A pk (115 V AC), 15 A pk (230 V AC)
- **Ultimate Short-Term Peak Current Draw**: 17 A pk (115 V AC), 15 A pk (230 V AC), 20 A pk (100 V AC)
- **RMS Network (Optional)**
  - Equipped for two-conductor twisted-pair network, reporting all amplifier operating parameters to system operator’s host computer.

### Notes:

1. Recommended maximum operating frequency range. Response depends upon loading conditions and room acoustics.
2. Measured with 1/3 octave frequency resolution at 4 meters.
3. Measured with music at 1 meter.
4. The UPJ 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. The driver is coupled to an 80° x 50° constant-directivity horn.
7. Power handling is measured under AES standard conditions. Transformer driven continuously for two hours with band-limited noise signal having a 6 dB peak-average ratio.
8. Two additional input module options are available with polarity reversal switch and an attenuator (0 dB to -18 dB), one looping and one with two inputs, for mono summing.
9. Amplifier wattage rating based on the maximum unipolar burst sine-wave rms voltage the amplifier will produce into the nominal load impedance. Low and high channels 30 V rms (42 V pk).
10. No automatic turn-off voltages. Voltages below 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.

### Architect Specifications

The loudspeaker shall be a self-powered, full-range system. The transducers shall consist of a 10-inch diameter cone driver and a 3-inch diaphragm compression driver on a 80° x 50° horn. The horn shall allow rotation to provide the wider coverage pattern in either the horizontal or vertical plane relative to the cabinet’s vertical axis.

The loudspeaker system shall incorporate internal processing electronics and a two-channel amplifier. Processing functions shall include equalization, phase correction, signal division, and driver protection for the high- and low-frequency sections. The acoustic crossover point shall be 2 kHz. Each amplifier channel shall be class AB/bridged with complementary MOSFET output stages. Burst capability shall be 300 watts total into a nominal load of 4-ohms low channel and 16-ohms high channel. 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**: ±4° from 750 Hz to 18 kHz. Maximum SPL shall be 128 dB at 1 meter. Coverage (~6 dB points) shall be 80° x 50°, horizontal or vertical dependent upon loading conditions.

The audio input shall be electronically balanced with a 10 ko impedance and accept a nominal 0 dBW (1 V rms, 1 V pk) input signal. Connectors shall be XLR (A-3) type with male input and female loop-through output. RF filtering shall be provided, and CMRR shall be greater than 50 dB differential between pins 2 and 3.

The internal power supply shall provide automatic voltage selection, EMI filtering, soft current turn-on and surge suppression. Powering requirements shall be nominal 100 V, 115 V or 230 V AC line current at 50 Hz or 60 Hz frequency. Current draw during burst (~1 sec) shall be 5 A at 115 V, 2.5 A at 230 V and 5.8 A at 100 V. Current inrush during soft turn-on shall not exceed 15 A at 115 V.

AC power connector shall be a locking connector with looping output.

The loudspeaker system shall provide facilities for installing Meyer Sound’s optional RMS remote monitoring system.

All loudspeaker components shall be mounted in an acoustically vented trapezoidal enclosure constructed of premium birch plywood with a hard black textured finish. The front protective grille shall be powder-coated hex-stamped steel. Dimensions shall be 11.15” wide x 22.43” high x 12.25” deep (283 mm x 570 mm x 286 mm). Weight shall be 46 lbs (20.87 kg). Integral high-strength, 6061-T6 aluminum top plates with threaded M8 metric holes shall accommodate Meyer Sound proprietary rigging hardware and third-party accessories.

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