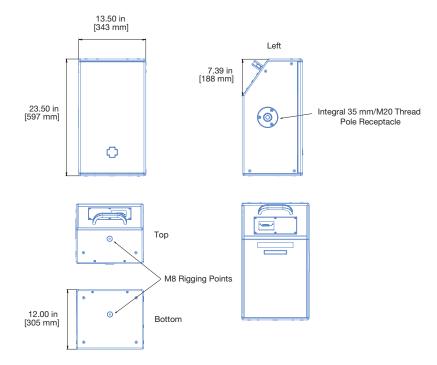
DATASHEET

USW-112XP Compact Narrow Subwoofer







The USW-112XP compact narrow subwoofer further extends the USW family. With its great power-to-size ratio, it provides big bass sound for very tight spaces. Its compact rectangular enclosure and slanted connector panel enable flush-mounting of the cabinet against wall surfaces, reducing required installation depth to 12 inches, including connectors.

The USW-112XP is ideal for installations requiring high performance and versatility along with an appealing, discreet aesthetic appearance. Designed to be the ideal companion to Meyer Sound's ULTRA-X20XP, it also complements the low frequencies in other Meyer Sound loudspeakers, such as the UP-4slim and those in the UPM family.

The USW-112XP has an operating frequency range of 35–140 Hz with a linear peak SPL of 119.5 dB, measured in half-space at 4 m and referred to 1 m using M-noise⁴. The bass reflex cabinet employs a low-velocity port based on the Meyer Sound USW-210P subwoofer design for high efficiency and low port distortion.

The cabinet houses an open-loop, Class-D power amplifier with signal processing including correction filters for phase and frequency response, and driver protection circuitry.

With IntelligentDC technology, the USW-112XP receives DC power and balanced audio from a single Phoenix[™] 5-pin connector. Powering the loudspeakers from a Meyer Sound MPS IntelligentDC external power supply eliminates the need for wiring conduits while still preserving the advantages of self-powered systems.

The Meyer Sound MPS IntelligentDC power supplies distribute DC power and balanced audio to USW-112XP loudspeakers or other

Meyer Sound IntelligentDC loudspeakers. The USW-112XP's amplifier and signal-processing circuits store DC power and tolerate voltage drops, thereby accommodating light-gauge cables and lengthy cable runs. Composite multi-conductor 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 for power. Longer cable lengths are possible with heavier gauge wires.

The two-channel MPS-482HP power supply is ideal for applications requiring a small channel count or the capability for mounting the supply remotely on a wall or ceiling, while the 8-channel MPS-488HP is suitable for larger installations. The MPS-488HP can be optionally purchased with an RMS module for connecting to Meyer Sound's remote monitoring system.

Meyer Sound builds the USW-112XP cabinet from premium birch plywood coated with a durable slightly textured black finish and includes a powder-coated, round-perforated steel grille to protect the drivers. Weather protection and custom color finishes for specific cosmetic requirements are available options.

With its versatile shape, the USW-112XP can be placed on the ground in either horizontal or vertical positions to accommodate installation requirements.

The USW-112XP comes standard with M8 mounting points at the top and bottom for use with the optional U-bracket that enables wall, ceiling, or truss mounting. It also features an integral 35 mm pole mount receptacle with M20 threads for added stability.

FEATURES AND BENEFITS

- High power-to-size ratio
- Versatile design, as it accommodates either vertical or horizontal placement
- Discreet appearance and form factor that fits into tight architectural spaces at only 12 inches deep including connectors
- Clean and low distortion output due to its proprietary high excursion driver and low air velocity port

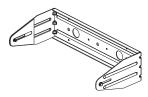
APPLICATIONS

- Multi-purpose Audio/Visual
- Corporate rental
- Houses of worship
- Conference rooms
- High-end private installations
- Retail spaces
- Theater

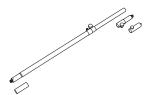
ACCESSORIES AND ASSOCIATED PRODUCTS

MUB-USW-112 U-Bracket: The MUB-USW-112 U-Bracket enables mounting of a single USW-112XP loudspeaker to a wall (in either vertical or horizontal orientations), to the ceiling or onto the floor. The kit includes two M8 bolts/washers and two M8 knobs/washers.

MPK-POLE-35MM/M20 Adjustable Pole Mount: Adjustable length 927–1524 mm (36.5–60 in) pole with assisted lift. Lower shaft fits 35 mm cups or use the removable M20 threaded lug for added stability. Additional 35 mm to 38 mm (1.5 in) adapter included. Upper shaft includes a PAS-M8 adapter sleeve to fit loudspeakers with M8 rig nuts and a PAS-M20 Adapter Sleeve to fit loudspeakers with 35 mm and M20 internal pole mounts onto 35 mm speaker stands.



MUB-USW-112P U-Bracket



MPK-POLE 35MM M20 Pole Kit

SPECIFICATIONS

ACOUSTICAL ¹	
Operating Frequency Range ²	35 Hz – 140 Hz
Frequency Response ³	36 Hz – 125 Hz ± 4 dB
Phase Response	45 Hz – 120 Hz ±30°
Linear Peak SPL ⁴	119.5 dB with > 10 dB crest factor (M-noise), 119.5 dB (Pink Noise), 121.5 dB (B-noise)
TRANSDUCER	
Low Frequency	One 12-inch cone driver; 3 Ω nominal impedance
AUDIO INPUT	
Туре	Differential, electronically balanced
Maximum Common Mode Range	±15 V DC, clamped to earth for voltage transient protection
Connector	Phoenix 5-pin male
Input Impedance	10 kΩ differential between Audio (+) and Audio (-)
	Pin 1: DC Power (-)
Wiring	Pin 2: DC Power (+) Pin 3: Audio Shield, Chassis/earth
Willing	Pin 4: Audio (-)
	Pin 5: 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 Ω to produce the maximum peak SPL over the operating bandwidth of the loudspeaker.
AMPLIFIER	
Туре	Open-loop, Class-D
Total Output Power ⁵	600 W peak
THD, IM, TIM	< 0.02%
Cooling	Convection
DC POWER	
Connector	Phoenix 5-pin male provides power and audio connection (see Wiring above)
Safety Rated Voltage Range ^{6,7}	48 V DC—Meyer Sound MPS-482HP or MPS-488HP Power Supply required (NEC ANSI/NFPA 70 Class 2 Wiring Approved)
PHYSICAL	
Dimensions	W: 13.5 in (343 mm) x H: 23.5 in (597 mm) x D: 12 in (305 mm)
Weight	43 lb (19.5 kg)
Enclosure	Premium multi-ply birch with slightly textured black finish
IP Rating	IP54 for weather-protected units with rain hood properly installed. See the USW-112XP Operating Instructions, available at meyersound.com/documents for details.
Protective Grille	Powder-coated, round-perforated steel
Rigging	Two integrated M8 threaded points; 35 mm Pole Mount with M20 thread; optional U-bracket for wall, ceiling, or truss mounting

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. Measured in half-space with 1/3 octave frequency resolution at 4 m.
- 4. **Linear Peak SPL** is measured in half-space at 4 m referred to 1 m. Loudspeaker SPL compression measured with M-noise at the onset of limiting, 2-hour duration, and 50 °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. The presence of a greater-than (>) symbol with regard to crest factor indicates it may be higher depending on EQ and boundary loading.

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. Peak power based on the maximum unclipped peak voltage the amplifier will produce into the nominal load impedance.
- 6. Tolerates voltage drops (due to long cable runs) up to 30%.
- 7. For information about the MPS-482HP or the MPS-488HP, refer to their datasheets or operating instructions, all available at meyersound.com/documents.

ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be a self-powered, sub-bass system. The transducer shall consist of one 12-inch cone driver.

The loudspeaker system shall incorporate internal processing electronics and an open-loop, class-D amplifier. Processing functions shall include driver protection, and frequency and phase correction. Peak output power shall be 600 W total with 3 Ω nominal impedance. 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 35 Hz – 140 Hz; phase response shall be 45 Hz – 120 Hz $\pm 30^{\circ}$. Linear peak SPL shall be 119.5 dB with > 10 dB crest factor, measured with M-noise, half-space at 4 m referred to 1 m.

The audio input shall be electronically balanced with a 10 k Ω impedance and shall accept a nominal 0 dBV (1 V rms) signal. The connector shall be

a 5-pin Phoenix male.

Power requirements for the loudspeaker shall be a Meyer Sound MPS IntelligentDC power supply capable of delivering 48 V DC. Meyer Sound's RMS remote monitoring system shall be optionally available via the MPS-488HP power supply.

All loudspeaker components shall be mounted in an acoustically vented trapezoidal enclosure constructed of premium multi-ply birch with a slightly textured black finish. The front protective grille shall be powder-coated, round-perforated steel. Dimensions shall be W: 13.5 in (343 mm) x H: 23.5 in (597 mm) x D: 12 in (305 mm).

Weight shall be 43 lb (19.5 kg).

The model shall be the Meyer Sound USW-112XP.

