

ARCHITECTURAL SPECIFICATION — USW-121P

The loudspeaker shall be a linear, low-distortion, self-powered, sub-bass system. Its transducer shall be a single 21-inch long-excursion cone driver.

The loudspeaker shall incorporate internal processing and a 2-channel class-D amplifier. Protection circuits shall include TruPower limiting. The analog audio input shall be electronically balanced with a 10 k Ω impedance and accept a nominal 0 dBV (1.0 V rms) signal. Analog audio connectors shall be 3-pin XLR Neutrik True Outdoor Protection (TOP) connectors, both female and male. The digital audio input format shall be AES67, and the connectors shall be Neutrik etherCON TOP.

Performance specifications for a typical production unit shall be as follows:

- **Operating Frequency Range** — 20 Hz – 125 Hz (-10dB) measured in halfspace with pink noise at 4 m, 1/3 octave frequency resolution
- **Phase Response** — 28-110 Hz \pm 30 degrees
- **AES75 Maximum Linear Sound Levels** — 136 dBZpk, 125 dBZ, at an RMS input level of +4.4 dBV for analog and -17.8 dBFS for digital, measured in half-space at 4 meters, referenced to 1 meter

The internal power supply shall perform EMI filtering, soft current turn-on, and surge suppression. Power requirements shall be nominal 200 – 240 V AC, 50–60 Hz. Power shall be 800 W maximum long-term continuous (>10 seconds), 2400 W burst (<1 second). The AC power connector shall be a Neutrik powerCON TRUE1 True Outdoor Protection (TOP). The loudspeaker shall include a telemetry monitoring function via an Ethernet network.

Components shall be mounted in an optimally tuned, vented enclosure constructed of premium multi-ply birch and coated with a slightly textured black finish. The optional front protective grille shall be powder-coated stamped steel. The IP rating shall be IP55 when the OT version is specified and connected cables are terminated with Neutrik TOP connectors or when the connector sealing caps are in place.

Dimensions shall be 52.00 in (1321 mm) wide, 27.50 in (698 mm) high, and 24.50 in (622 mm) deep.

Weight shall be 198 lb (89.8 kg).

The loudspeaker shall be the Meyer Sound Laboratories USW-121P.