

PANTHER: Linear Line Array Loudspeaker



The loudspeaker shall be a self-powered, linear, low-distortion, line array loudspeaker. Its transducers shall include two 3-inch diaphragm compression drivers coupled to a constant-directivity horn through a patented ribbon emulation manifold, and two 12-inch long-excursion cone drivers.

The loudspeaker shall incorporate internal processing and a 4-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 XLR 3-pin Neutrik True Outdoor Protection (TOP), female and male. The digital audio input format shall be Milan AVB and the connector shall be a Neutrik etherCON TOP.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution:

For all models, the operating frequency range shall be 55 Hz – 16 kHz.

PANTHER-L: The maximum sound level shall be 150.5 dB, measured in free-field at 4 m referred to 1 m using noise. In accordance with AES75-2022, the following maximum linear sound levels shall be measured in free-field at 4 m, referred to 1 m: 127.5 dBZ, 144.5 dBZpk, and 125.5 dBA with an input level of +8.3 dBV.

PANTHER-M: The maximum sound level shall be 150.5, measured in free-field at 4 m referred to 1 m using noise. In accordance with AES75-2022, the following maximum linear sound levels shall be measured in free-field at 4 m, referred to 1 m: 126.5 dBZ, 144 dBZpk, and 125 dBA with an input level of +6.8 dBV.

PANTHER-W: The maximum sound level shall be 149.5, measured in free-field at 4 m referred to 1 m using noise. In accordance with AES75-2022, the following maximum linear sound levels shall be measured in free-field at 4 m, referred to 1 m: 126.5 dBZ, 142.5 dBZpk, and 123 dBA with an input level of +6.4 dBV.

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 1100 W maximum long-term continuous (>10 seconds), 2200 W burst (<1 second). The AC power connector shall be a Neutrik powerCON TRUE1 True Outdoor Protection (TOP). The loudspeaker shall include networking capabilities for monitoring.

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 front protective grille shall be powder-coated stamped steel. Dimensions shall be 38.15 in (969 mm) wide, 14.85 in (377 mm) high, and 22.25 in (565 mm) deep. Weight shall be 150 lbs (68 kg). The IP rating shall be IP55 when connected cables are terminated with Neutrik TOP connectors or when the connector sealing caps are in place.

The loudspeaker shall be the Meyer Sound PANTHER.

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