





## SPECIFICATIONS

ACOUSTICAL <sup>1</sup>	
Operating Frequency Range <sup>2</sup>	35 Hz – 125 Hz
Frequency Response <sup>3</sup>	37 Hz – 110 Hz ±4 dB
Phase Response	43 Hz – 110 Hz ±30°
Linear Peak SPL <sup>4</sup>	<b>130.5 dB with crest factor &gt;9 dB (M-noise)</b> , 130.5 dB (pink noise), 132 dB (B-noise)
COVERAGE	
	360° (single unit); varies with number of units and configuration
TRANSDUCERS	
Low Frequency	One 15-inch, dual-coil, long-excursion cone driver; 2 Ω nominal impedance
AUDIO INPUT	
Type	Differential, electronically balanced
Maximum Common Mode Range	±15 V DC, clamped to earth for voltage transient protection
Connectors	XLR 3-pin female with male loop. Optional 5-pin connectors to accommodate both balanced audio and RMS signals
Input Impedance	10 kΩ differential between pins 2 and 3
Wiring <sup>5</sup>	Pin 1: Chassis/earth through 1 kΩ, 1000 pF, 15 V clamped network to provide virtual ground lift at audio frequencies Pin 2: Signal (+) Pin 3: Signal (-) Pin 4: RMS Pin 5: RMS Case: Earth ground and chassis
Nominal Input Sensitivity	6.0 dBV (2.0 V rms) continuous is typically the onset of limiting for noise and music
Input Level	Audio source must be capable of producing +20 dBV (10 V rms) into 600 Ω to produce the maximum peak SPL over the operating bandwidth of the loudspeaker
AMPLIFIER	
Type	2-channel, open-loop, class D
Total Output Power <sup>6</sup>	3100 W peak
THD, IM, TIM	< 0.02%
Cooling	Convection
AC POWER	
Connectors	powerCON 20 input with loop output
Automatic Voltage Selection	90–265 V AC; 50–60 Hz
Safety Agency Rated Voltage Range	100–240 V AC, 50–60 Hz
Turn-on and Turn-off points	Turn-on: 90 V AC; Turn-off: none; internal fuse protection above 265 V AC
CURRENT DRAW	
Idle	0.39 A rms (115 V AC), 0.38 A rms (230 V AC), 0.42 A rms (100 V AC)
Maximum Long-Term Continuous	5.3 A rms (115 V AC), 2.7 A rms (230 V AC), 6.2 A rms (100 V AC)
Burst (<1 sec) <sup>7</sup>	9.2 A rms (115 V AC), 4.4 A rms (230 V AC), 10.7 A rms (100 V AC)
Maximum Instantaneous Peak	15.3 A peak (115 V AC), 7.8 A peak (230 V AC), 18 A peak (100 V AC)
Inrush Current	< 20.0 A peak
RMS NETWORK (OPTIONAL)	
	Two-conductor, twisted-pair network, capable of reporting all operating parameters of amplifiers to system operator's host computer.

## SPECIFICATIONS, CONT'D.

PHYSICAL	
Dimensions without Rigging	W: 21.80 in (554 mm) x H: 20.30 in (515 mm) x D: 20.88 in (530 mm)
Dimensions with Rigging	W: 21.55 in (547 mm) x H: 20.43 in (519 mm) x D: 20.88 in (530 mm)
Weight without Rigging	89 lbs (40.3 kg)
Weight with Rigging	105 lbs (47.6 kg)
Enclosure	Premium multi-ply birch with slightly textured black finish
Protective Grille	Powder-coated, hex-stamped steel with acoustical black mesh
Rigging	Optional MRK-750 rigging kit with end frames and captive GuideALinks secured with 0.25 in x 0.53 in quick release pins that allow 0°, 1.5°, 3.25°, or 4.75° splay angles; detachable side handles. Rigging allows ground-stacked, flown, and cardioid configurations
Pole Mount	U.S. version: 1.5 in (38 mm) E.U. version: 1.375 in (35 mm and M20 thread at the bottom)

## NOTES

- Loudspeaker system predictions for coverage and SPL are available in Meyer Sound's MAPP System Design Tool.
- Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
- Measured in half-space with pink noise at 4 m, 1/3-octave frequency resolution.
- 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-degree C ambient temperature is <2 dB.

**M-noise** is a full bandwidth, (10Hz–22.5kHz) 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.

- Pins 4 and 5 (RMS) only included with XLR 5-pin connector that accommodates both balanced audio and RMS signals.
- Peak power based on the maximum unclipped voltage the amplifier will produce into the nominal load impedance.
- AC power cabling must be of sufficient gauge so that under burst current rms conditions, cable transmission losses do not cause the loudspeaker's voltage to drop below the specified operating range.

## ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be a compact, self-powered, linear, low-distortion, low-frequency control element and shall be capable of flown, ground-stacked, and cardioid configurations. Its transducer shall be one 15-inch, dual-coil, long-excursion cone driver with 2 Ω nominal impedance.

The loudspeaker shall incorporate internal processing and a 2-channel, open-loop, class D amplifier. Processing shall include equalization, phase correction, and driver protection. Performance specifications for a typical production unit shall be as follows: operating frequency range shall be 35–125 Hz; frequency range shall be 37–110 Hz ±4 dB (measured in half-space with pink noise at 4 m, 1/3-octave frequency resolution); phase response shall be 43 Hz–110 Hz ±30°; linear peak SPL shall be 130.5 dB with crest factor >9 dB, measured in half-space with M-noise at 4 m referred to 1 m.

Audio connectors shall be XLR3-pin, female with male loop, accommodating balanced audio, or XLR 5-pin, accommodating both balanced audio and RMS.

The internal power supply shall perform EMI filtering, soft current turn-on, and surge suppression. Power requirements shall be nominal 100, 110, or 230 V AC line current at 50–60 Hz. UL and CE operating voltage range shall be 100–240 V AC at 50–60 Hz. AC power connectors for input and loop

output shall be powerCON 20.

Maximum long-term continuous current draw shall be 5.3 A rms at 115 V AC, 2.7 A rms at 230 V AC, and 6.2 A rms at 100 V AC.

The loudspeaker shall accommodate an optional RMS remote monitoring system module.

Components shall be mounted in an optimally tuned, vented enclosure constructed of premium multi-ply birch with a slightly textured black finish. Optional rigging for the enclosure shall include end frames with captive GuideALinks for linking units in vertical arrays with 0°, 1.5°, 3.25°, or 4.75° splay angles. The front protective grille shall be powder-coated, hex-stamped steel with acoustical black mesh.

Dimensions shall be 21.80 inches (554 mm) wide x 20.30 inches (515 mm) high x 20.88 inches (530 mm) deep. Dimensions with optional rigging shall be 21.55 inches (547 mm) wide x 20.43 inches (519 mm) high x 20.88 inches (530 mm) deep. Weight shall be 89 lbs (40.3 kg). Weight with optional rigging shall be 105 lbs (47.6 kg).

The loudspeaker shall be the Meyer Sound 750-LFC