ULTRA-X40[™]



ULTRA-X40[™], ULTRA-X42[™]



SPECIFICATIONS

ACOUSTICAL ¹	ULTRA-X40	ULTRA-X42
Operating Frequency Range ²	55 Hz – 19.5 kHz	55 Hz – 19.5 kHz
Frequency Response ³	56 Hz – 19 kHz ± 4 dB	58 Hz – 18 kHz ± 4 dB
Phase Response	90 Hz – 19.5 kHz ±45°	90 Hz – 19.5 kHz ±45°
Maximum SPL ⁴	138 dB	140 dB
Linear Peak SPL⁵	132.5 dB with 18 dB crest factor (M-noise), 130 dB (Pink Noise), 131 dB (B-noise)	134 dB with 18.5 dB crest factor (M-noise), 132 dB (Pink Noise), 134 dB (B-noise)
COVERAGE		
	Rotatable horn: 110° x 50°	Rotatable horn: 70° x 50°
TRANSDUCERS		
Low Frequency	Two 8-inch cone drivers; 4 Ω nominal impedance	
High Frequency	One 3-inch diaphragm compression driver connected to a rotatable horn; 8 Ω nominal impedance	

SPECIFICATIONS, CONT'D.

AUDIO INPUT		
Туре	Differential, electronically balanced	
Maximum Common Mode Range	±15 V DC, clamped to earth for voltage transient protection	
Connectors	XLR 3-pin female input with male loop output	
Input Impedance	$10 \text{ k}\Omega$ differential between pins 2 and 3	
Wiring	Pin 1: Chassis/earth through 1 kΩ, 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies Pin 2: Signal + Pin 3: Signal – Case: Earth ground and chassis	
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	three-channel, Class-D	
Total Output Power ⁶	1950 W peak	
THD, IM, TIM	<0.02%	
Cooling	Convection	
AC POWER		
Connector	powerCON 20 input with loop output	
Automatic Voltage Selection	90–265 V AC, 50–60 Hz	
Safety Rated Voltage Range	100–240 V AC, 50–60 Hz	
Turn-on and Turn-off Points	90 V AC turn-on, no turn-off; internal fuse protection above 265 V AC	
CURRENT DRAW		
Idle Current	0.27 A rms (115 V AC); 0.25 A rms (230 V AC); 0.29 A rms (100 V AC)	
Maximum Long-Term Continuous Current (>10 sec)	1.9 A rms (115 V AC); 1.0 A rms (230 V AC); 2.2 A rms (100 V AC)	
Burst Current (<1 sec) ⁷	3.1 A rms (115 V AC); 1.5 A rms (230 V AC); 3.4 A rms (100 V AC)	
Maximum Instantaneous Peak Current	6.9 A peak (115 V AC); 3.4 A peak (230 V AC); 7.9 A peak (100 V AC)	
Inrush Current	<20 A peak	
MONITORING		
Telemetry	Loudspeaker telemetry transmitted via the Ethernet port, displayed in software	
PHYSICAL		
Dimensions	W: 12.51 in (318 mm) x H: 22.31 in (567 mm) x D: 14 in (356 mm); D with handles: 15.38 in (391 mm)	
Weight	52 lb (23.6 kg)	
Enclosure	Premium multi-ply birch with slightly textured black finish	
Protective Grille	Powder-coated, round-perforated steel	
Rigging 11 integrated M8 threaded points; 35 mm Pole Mount with M20 thread; optional accessories f various rigging options.		

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. Free-field, measured with 1/3 octave frequency resolution at 4 m.
- 4. Maximum SPL is the peak measured in free-field at 4 m referred to 1 m using noise.
- 5. Linear Peak SPL is measured in free-field 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 (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.

- 6. Peak power based on the maximum unclipped peak voltage the amplifier will produce into the nominal load impedance.
- 7. 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.



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