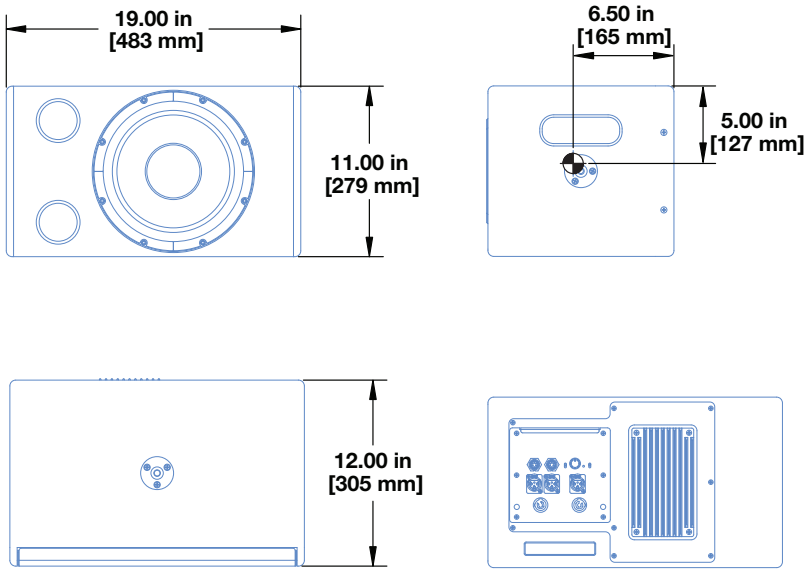
MM-10™ Miniature Subwoofer



SPECIFICATIONS (ALL MODELS)

ACOUSTICAL[1]	
Operating Frequency Range[2]	33 Hz – 228 Hz
Frequency Response[3]	35 Hz – 208 Hz ±4 dB
Phase Response	38 Hz – 138 Hz ±45°
Linear Peak SPL[4]	**118.5 dB with crest factor > 11 dB (M-noise),** 117.5 dB (Pink noise), 120.5dB (B-noise)
COVERAGE	
	360°
TRANSDUCERS	
Low Frequency	One 10 inch cone driver with 2-inch voice coil; 4 Ω nominal impedance
AUDIO INPUT	
Type	Differential, electronically balanced
Maximum Common Mode Range	±5 V DC
Input Impedance	10 kΩ electronically balanced
Nominal Input Sensitivity	–2.0 dBV (0.8 V rms) continuous is typically the onset of limiting for noise and music
Input Level	Audio source must be capable of producing +16 dBV (6.3 V rms) into 600 Ω to produce the maximum peak SPL over the operating bandwidth of the loudspeaker.
AMPLIFIER	
Type	Class-D
Total Output Power[5]	440 W peak
THD, IM, TIM	< 0.02%
Cooling	Convection

PHYSICAL	
Dimensions	W: 19 in (483 mm) x H: 11 in (279 mm) x D: 12 in (305 mm)
MM-10XP Weight	26.7 lb (12.11 kg)
MM-10AC Weight	28.2 lb (12.79 kg)
MM-10ACX Weight	30.8 lb (13.97 kg)
Enclosure	Premium multi-ply birch with slightly textured black finish
Protective Grille	Powder-coated, hex-stamped steel with black mesh screen
Rigging	Top and side nut plates available with 3/8-inch or M10 threads. The optional MUB-MM10 U-bracket enables mounting of the MM-10 on walls and ceilings at adjustable angles.
COMPLIANCE	
Safety Agency Certifications	Standard for Audio/video, information, and communication technology equipment: • IEC/UL/CSA 62368-1 3rd and IEC/BS/EN/ 62368-1 2nd • UL 2043 tested Suitable for use in air handling spaces (MM-10XP model only)
EMC Certification	CE and FCC Part 15 Emission Class B emission limits applied.

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, measure with 1/3-octave frequency resolution at 4 meters.
4. 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, (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. Peak power based on the maximum unclipped peak voltage the amplifier will produce into the nominal load impedance.
5. Peak power based on the maximum unclipped voltage the amplifier will produce into the nominal load impedance.

MM-10XP SPECIFICATIONS

REAR PANEL	
Audio/Power Connector	Phoenix 5-pin male or EN3 5-pin male (two pins for DC power, three pins for balanced audio)
Wiring	Pin 1: DC power negative (–) Pin 2: DC power positive (+) Pin 3: Balanced audio shield, chassis/earth Pin 4: Balanced audio (–) Pin 5: Balanced audio (+)
Input Polarity Switch	Reverses audio input polarity between pins 4 and 5
LED	Displays loudspeaker status
DC POWER	
Safety Agency Rated Operating Range[6]	48 V DC
CURRENT DRAW	
Idle Current	0.16 A rms
Maximum Long-Term Continuous Current (>10 sec)	0.90 A rms
Burst Current (<1 sec)	2.5 A rms
Maximum Instantaneous Peak Current	3.0 A peak
Inrush Current	< 7.0 A peak
Meyer Sound MPS IntelligentDC Power Supply Required	Visit meyersound.com/documents for specifications

MM-10AC SPECIFICATIONS

REAR PANEL	
Audio Connector[7]	3-pin XLR female input with XLR male loop output
Wiring	Pin 1: Chassis/earth through 220 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
Input Polarity Switch	Reverses audio input polarity between pins 2 and 3
AC Power Connector	powerCON 20 input with loop output
LED	Displays loudspeaker status
AC POWER	
Automatic Voltage Selection	90–265 V AC
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[8]	
Idle Current	0.13 A rms (115 V AC); 0.13 A rms (230 V AC); 0.14 A rms (100 V AC)
Maximum Long-Term Continuous Current (>10 sec)	0.40 A rms (115 V AC); 0.25 A rms (230 V AC); 0.46 A rms (100 V AC)
Burst Current (<1 sec)	0.9 A rms (115 V AC); 0.4 A rms (230 V AC); 1.1 A rms (100 V AC)
Maximum Instantaneous Peak Current	2.0 A peak (115 V AC); 1.4 A peak (230 V AC); 2.3 A peak (100 V AC)
Inrush Current	4.0 A peak (115 V AC); 2.4 A peak (230 V AC); 4.0 A peak (100 V AC)

MM-10ACX SPECIFICATIONS

REAR PANEL	
Audio Connector	3-pin XLR female input
Wiring	Pin 1: Chassis/earth through 220 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
Input Polarity Switch	Reverses audio input polarity between pins 2 and 3 (subwoofer only)
Input Select Switch[9]	Determines whether the subwoofer receives it source signal from the subwoofer input or satellite inputs (summed)
Gain Knob[10]	Adjusts the subwoofer signal from completely attenuated to +10 dB
AC Power Connector	powerCON 20 input with loop output
Satellite Loudspeaker Connectors[11]	Two XLR female inputs; Two Phoenix 5-pin male or EN3 5-pin female outputs (two pins for DC power, three pins for balanced audio)
LED	Displays loudspeaker status
AC POWER	
Automatic Voltage Selection	90–265 V AC
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 (SUBWOOFER ONLY)[12]	
Idle Current	0.21 A rms (115 V AC); 0.20 A rms (230 V AC); 0.23 A rms (100 V AC)
Maximum Long-Term Continuous Current (>10 sec)	0.48 A rms (115 V AC); 0.31 A rms (230 V AC); 0.55 A rms (100 V AC)
Burst Current (<1 sec)	1.1 A rms (115 V AC); 0.6 A rms (230 V AC); 1.3 A rms (100 V AC)
Maximum Instantaneous Peak Current	2.2 A peak (115 V AC); 1.6 A peak (230 V AC); 2.5 A peak (100 V AC)
Inrush Current	6.6 A peak (115 V AC); 3.7 A peak (230 V AC); 7.2 A peak (100 V AC)
CURRENT DRAW (WITH TWO MM-4XP)[13]	
Idle Current	0.32 A rms (115 V AC); 0.26 A rms (230 V AC); 0.36 A rms (100 V AC)
Maximum Long-Term Continuous Current (>10 sec)	0.90 A rms (115 V AC); 0.51 A rms (230 V AC); 1.02 A rms (100 V AC)
Burst Current (<1 sec)	2.5 A rms (115 V AC); 1.3 A rms (230 V AC); 3.0 A rms (100 V AC)
Maximum Instantaneous Peak Current	4.5 A peak (115 V AC); 2.8 A peak (230 V AC); 5.0 A peak (100 V AC)
Inrush Current	7.6 A peak (115 V AC); 4.4 A peak (230 V AC); 8.4 A peak (100 V AC)

NOTES

6. Tolerates voltage drops up to 30% with long cable runs.
7. Audio loop output only included on the MM-10AC model.
8. Current draw values for a single MM-10AC. AC Loop output not used.
9. Input Select switch only included on the MM-10ACX model.
10. Gain knob only included on the MM-10ACX model.
11. Satellite loudspeaker connectors only included on the MM-10ACX model.
12. Current draw values for one MM-10ACX with no satellite loudspeakers connected. AC Loop output not used.
13. Current draw values for one MM-10ACX with two MM-4XP satellite loudspeakers connected. AC Loop output not used.

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MM-10 Datasheet
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