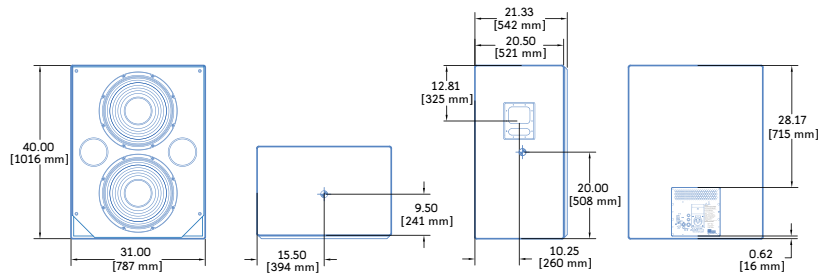




X-800 : High-Power Studio Subwoofer



Dimensions	31.00" w x 40.00" h x 21.33" d (787 mm x 1016 mm x 542 mm)
Weight	221 lbs (100.24 kg)
Enclosure	Premium birch plywood
Finish	Smooth medium-gloss black; optional textured finish

The Meyer Sound X-800 high-power studio subwoofer is designed primarily to provide additional low-frequency headroom in applications requiring very high monitoring levels coupled with extreme low-frequency transients. An excellent supplement to any high-level studio monitor, the X-800 also provides an ideal complement to Meyer Sound's X-10 linear control room monitor.

The X-800 houses two Meyer Sound long-excursion 18-inch drivers in a tuned, vented cabinet. The X-800 output rolls off well below 250 Hz, avoiding any adverse comb filtering effects that could be generated by the proximity of the dual drivers. A laser-trimmed differential input with high common-mode rejection enables long line-level signal runs using shielded, twisted-pair cable. As with all Meyer Sound self-powered products, onboard processing includes phase and frequency response correction filters and driver protection circuitry.

An integral two-channel class AB/H amplifier with complementary MOSFET output stages supplies a total peak output of 1240 watts. Each amplifier channel features TruPower® limiting technology to maximize loudspeaker reliability, minimize power compression and extend component life. An Intelligent AC™ power supply affords automatic voltage selection, EMI filtering, soft current turn-on and surge suppression.

When used with the X-10, the X-800 is not intended to extend frequency response, as the X-10 is a full-range system. Rather, the X-800 extends low-frequency headroom by approximately 10 dB in the range from 25 Hz to the crossover point.

The companion X-01 crossover module optimizes overall system response and allows connection of single or dual subs for stereo or 5.1 surround operation. Crossover points are selectable at 120, 100 and 80 Hz, and a single switch allows quick changeover

from "pure" X-10 monitoring to subwoofer augmentation. A separate .1 channel input allows the system to be switched between stereo and 5.1 operation from the front panel; this switch can also be controlled remotely from the console. Though the sensitivity of the X-800/X-01 matches the X-10, the X-01 provides ±6 dB of gain to compensate for loading conditions.

The X-800 subwoofer's premium birch plywood cabinet is coated with a smooth medium-gloss black finish to match the X-10. It is optionally available in a durable textured finish, complete with four rubber feet on each bottom corner and matching vertical stacking. A removable protective cloth covered wooden frame is attached to the front. Custom colors are available.

Meyer Sound's RMS™ remote monitoring system provides comprehensive system monitoring over a Windows-based network.

FEATURES & BENEFITS

- High peak power yields excellent transient reproduction
- Extended low frequency response down to 20 Hz
- Extremely low distortion for ultimate low-frequency clarity
- Exceptionally reliable and durable

APPLICATIONS

- Control room monitoring
- Large-scale surround mixing
- High-end playback systems
- Soundtrack recording and mixing
- Theatrical reproduction

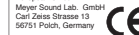
X-800 SPECIFICATIONS

ACOUSTICAL	<p>Operating Frequency Range¹ 20 Hz – 200 Hz</p> <p>Frequency Response² 23 Hz – 160 Hz ±4 dB</p> <p>Phase Response 32 Hz to 175 Hz ±30°</p> <p>Maximum Peak SPL³ 136 dB</p> <p>Dynamic Range >110 dB</p>
COVERAGE	360° (single unit); varies with number of units and configuration
TRANSDUCERS	<p>Low Frequency Two 18" cone drivers</p> <p>Nominal impedance: 8 Ω</p> <p>Voice coil size: 3"</p> <p>Power-handling capability: 600 AES W⁴</p>
AUDIO INPUT	<p>Type Differential, electronically balanced</p> <p>Maximum Common Mode Range ±15 V DC, clamped to earth for voltage transient protection</p> <p>Connectors Female XLR input and male XLR loop output or VEAM all-in-one (integrates AC, audio and network)</p> <p>Input Impedance 10 kΩ differential between pin 2 and 3</p> <p>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</p> <p>DC Blocking None on input; DC blocked through signal processing</p> <p>CMRR >50 dB, typically 80 dB (50 Hz – 500 Hz)</p> <p>RF Filter Common mode 425 kHz; Differential mode 142 kHz</p> <p>TIM Filter Integral to signal processing (< 80 kHz)</p> <p>Input Level Audio source must be capable of producing a minimum of +20 dB V (10 V rms, 14 V pk) into 600 Ω in order to produce maximum peak SPL over the operating bandwidth of the loudspeaker</p> <p>Nominal Input Sensitivity 0 dB V (1 V rms, 1.4 V pk) continuous is typically the onset of limiting for noise and music</p>
AMPLIFIER	<p>Type Complementary power MOSFET output stages (class AB/H)</p> <p>Output Power⁵ 1240 W (620 W/channel)</p> <p>THD, IM, TIM <0.02 %</p> <p>Load Capacity 8 Ω minimum impedance each channel</p> <p>Cooling Forced air cooling, 2 fans (one ultrahigh-speed reserve fan)</p>
AC POWER	<p>Connector 250 V AC NEMA L6-20 inlet or IEC 309 male inlet, or VEAM Automatic Voltage Selection</p> <p>Safety Agency Rated Operating Range 95 V AC – 125 V AC; 208 V AC – 235 V AC; 50/60 Hz</p> <p>Turn-on and Turn-off Points 85 V AC – 134 V AC; 165 V AC – 264 V AC; 50/60 Hz</p> <p>Current Draw:</p> <p>Idle Current 0.640 A rms (115 V AC); 0.320 A rms (230 V AC); 0.850 A rms (100 V AC)</p> <p>Max Long-Term Continuous Current (>10 sec) 8 A rms (115 V AC); 4 A rms (230 V AC); 10 A rms (100 V AC)</p> <p>Burst Current (<1 sec) 15 A rms (115 V AC); 8 A rms (230 V AC); 18 A rms (100 V AC)</p> <p>Ultimate Short-Term Peak Current Draw 22 A pk (115 V AC); 11 A pk (230 V AC); 25 A pk (100 V AC)</p> <p>Inrush Current <7 A (115 V AC & 230 V AC); 10 A pk (100 V AC)</p>
RMS NETWORK	Equipped for two-conductor twisted-pair network, reporting all operating parameters of amplifiers to system operator's host computer.

NOTES:

1. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
2. Free field, measured with one-third octave frequency resolution at 4 meters. Upper frequency depends on crossover settings on X-01.
3. Measured with music at 1 meter.
4. Power handling is measured under AES standard conditions: transducer driven continuously for two hours with band-limited noise signal having a 6 dB peak-average ratio.
5. Amplifier wattage rating is based on the maximum unclipped burst sine-wave rms voltage the amplifier will produce into the nominal load impedance. Both Channels 70 V rms (100 V pk) into 8 ohms.

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ARCHITECT SPECIFICATIONS

The loudspeaker shall be a self-powered, sub-bass system. The transducers shall consist of two 18-inch cone drivers (3-inch voice coil) each rated to handle 600 AES* watts.

The loudspeaker shall incorporate internal processing electronics and a two-channel amplifier. Each amplifier channel shall be class AB/H with complementary MOSFET output stages. Burst capability shall be 1240 watts total with nominal 8-ohm resistive load. Distortion (THD, IM, TIM) shall not exceed 0.02%. Protection circuits shall include TruPower limiting. The audio input shall be electronically balanced with a 10 kΩ impedance and accept a nominal 0 dBV (1 V rms) signal (20 dBV to produce maximum SPL). Connectors shall be XLR type male and female or VEAM all-in-one. RF filtering shall be provided, and CMRR shall be greater than 50 dB (50 – 500 Hz).

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: Operating frequency range shall be 20 Hz to 200 Hz. Phase response shall be ±30° from 35 Hz to 120 Hz. Maximum peak SPL shall be 136 dB at 1 meter.

The internal power supply shall perform automatic voltage selection, EMI filtering, soft current turn-on and surge suppression. Powering requirements shall be nominal 100 V, 110 V or 230 V AC line current at 50 Hz or 60 Hz. UL and CE operating voltage ranges shall be 95 to 125 V AC and 208 to 235 V AC. Current draw during burst shall be 15 A rms at 115 V AC, 8 A rms at 230 V AC and 18 A rms at 100 V AC. Current inrush during soft turn-on shall not exceed 7 A at 115 V AC. AC power connectors shall be L6-20, IEC 309 male or VEAM all-in-one.

The loudspeaker shall optionally incorporate the electronics module for Meyer Sound's RMS remote monitoring system.

Loudspeaker components shall be mounted in a premium birch plywood enclosure with a smooth medium-gloss black finish (optional textured finish available). Dimensions shall be 31.00" wide x 40.00" high x 21.33" deep (787 mm x 1016 mm x 542 mm). Weight shall be 221 lbs (100.24 kg).

The loudspeaker shall be the Meyer Sound X-800 high-power studio subwoofer.

*Driven continuously for two hours with band-limited noise signal having a 6 dB peak-average ratio.