# X-400C : Compact Cinema Subwoofer





Dimensions31.00" w x 20.65" h x 20.79" d<br/>(787 mm x 525 mm x 528 mm)Weight85 lbs (38.6 kg)EnclosurePremium birch plywood<br/>FinishProtective GrilleOptional grille frame with<br/>black cloth



Part of Meyer Sound's EXP cinema series, the X-400C compact subwoofer boosts lowfrequency headroom in cinema applications and other fixed installations. The linear, self-powered X-400C offers similar sonic characteristics as the X-800C subwoofer low-frequencies down to 20 Hz, clean, punchy transients, and excellent phase coherence though in a more compact cabinet that can be installed singly or as multiple units.

The X-400C is comprised of a single 18-inch low-frequency, long-excursion cone driver

housed in an optimally tuned, vented cabinet and powered by a single-channel amplifier. Onboard processing includes driver protection circuitry, low-pass filtering, and correction filters for flat phase and frequency responses.

The IntelligentAC<sup>™</sup> power supply affords automatic voltage selection, EMI filtering, soft current turn-on, and surge suppression.

The X-400C integrates seamlessly with other EXP cinema loudspeakers, including the Acheron screen channel loudspeakers and HMS

surround loudspeakers.

Meyer Sound's optional RMS<sup>™</sup> remote monitoring system provides comprehensive monitoring of system parameters on a Mac<sup>®</sup> or Windows<sup>®</sup>based computer.

The X-400C cabinet is constructed of premium birch plywood and coated with a low-gloss, black-textured finish. The cabinet includes attachment points for an optional grille frame with black cloth.

## FEATURES & BENEFITS

- High peak power output with excellent transient reproduction
- Extended low frequency range down to 20 Hz
- Extremely low distortion for exceptional low-frequency clarity
- Flat amplitude and phase responses for tonal accuracy
- Integrates with Acheron Studio and Acheron Designer screen channel loudspeakers
- Integrates with HMS-5, HMS-10, and HMS-12 surround loudspeakers

## APPLICATIONS

- Sound design suites
- Small theatres and custom, private theatres
- Screening rooms
- Mixing for postproduction facilities
- Immersive surround applications

# **X-400C SPECIFICATIONS**

Operating Frequency Pangal	20 Hz - 200 Hz
Operating Frequency Range	
Prequency Response	23 HZ - 100 HZ I4 dB
Maximum Doak SDI 3	32 HZ - 173 HZ ±30
Maxilluli reak SPL-	110 dB
COVERAGE	,110 dB
COTENACE	Varies with number of units and configuration
TRANSDUCER	varies with humber of units and configuration
	One 18" long-excursion cone driver
2011 11 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Nominal impedance: 4 o
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 XLR 3-pin male loop output
Input Impedance	10 kΩ differential between pins 2 and 3
Wiring	Pin 1: Chassis/earth through 220 kg. 1000 pF. 15 V clamped network
5	to provide virtual ground lift at audio frequencies
	Pin 2: Signal +
	Pin 3: Signal –
	Case: Earth ground and chassis
DC Blocking	Differential DC blocking up to the maximum common mode voltage
CMRR	>50 dB, typically 80 dB (50 Hz - 500 Hz)
RF Filter	Common mode: 425 kHz: Differential mode: 142 kHz
TIM Filter	Integral to signal processing (<80 kHz)
Nominal Input Sensitivity	0 dBV (1.0 V rms, 1.4 V peak) 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,
	14 V peak) into 600 $\Omega$ to produce the maximum peak SPL over the
	operating bandwidth of the loudspeaker
AMPLIFIER	· · · ·
Туре	Single channel
Output Power <sup>4</sup>	450 W
Total Output	900 W peak
THD, IM, TIM	<.02%
Load	4 Ω
Cooling	Convection
AC POWER	
Connector	powerCON 20 with loop output
Voltage Selection	Automatic, continuous range from 90–265 V AC
Safety Agency Rated Operating Range	100–240 V AC, 50/60 Hz
Turn-on and Turn-off Points	90 V AC on, no turn-off, only fuse-protect above 265 V AC
Current Draw: Idle Current	0.26 A rms (115 V AC); 0.16 A rms (230 V AC); 0.30 A rms (100 V AC)
Maximum Long-Term Continuous Current (>10 sec)	1.4 A rms (115 V AC); 0.7 A rms (230 V AC); 1.6 A rms (100 V AC)
Burst Current (<1 sec) <sup>5</sup>	2.7 A rms (115 V AC); 1.1 A rms (230 V AC); 3.0 A rms (100 V AC)
Maximum Instantaneous Peak Current	9 A peak (115 V AC); 6 A peak (230 V AC); 10 A peak (100 V AC)
Inrush Current	10 A peak (115 V AC); 8 A peak (230 V AC); 10 A peak (100 V AC)
KMS NETWORK (OPTIONAL)	
	- Consideration and construction of a second construction in the second construction of the second
	Equipped with two-conductor twisted-pair network, reporting

#### NOTES:

- Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
- Free field measured with 1/3-octave frequency resolution at 4 meters.
  Measured with music referred to
- Measured with music referred t 1 meter, half-space loading.
- Amplifier waltage rating based on the maximum unclipped burst sinewave rms voltage the amplifier will produce into the nominal load impedance: 42 V rms (60 V peak) into 4 ohms.
- 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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### ARCHITECT SPECIFICATIONS

The loudspeaker shall be a self-powered, sub-bass system with a single 18-inch low-frequency, longexcursion cone driver.

The loudspeaker shall incorporate internal processing electronics and a single-channel amplifier. Burst power shall be 450 watts (900 watts peak) with a nominal 4-ohm resistive load. Distortion (THD, IM, TIM) shall not exceed 0.02 percent. The audio input shall be electronically balanced with a 10 kOhm impedance and accept a nominal 0 dBV (1 V rms) signal (20 dBV to produce maximum SPL). Connectors shall be XLR 3-pin male and female. RF filtering shall be provided, and CMRR shall be greater than 50 dB (50 Hz - 500 Hz).

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: operating frequency range, 20 Hz to 200 Hz; phase response, 32 Hz to 175 Hz  $\pm$ 30 degrees; maximum peak SPL, 130 dB at 1 meter.

The internal power supply shall perform automatic voltage selection, EMI filtering, soft current turn-on, and surge suppression. Power requirements shall be nominal 100 V, 110 V or 230 V AC line current at 50 or 60 Hz. UL and CE operating voltage ranges shall be 200 to 240 V AC. The maximum long-term continuous current draw (>10 sec) shall be 1.4 A rms at 115 V AC, 0.7 A rms at 230 V AC, and 1.6 A rms at 100 V AC. Current

inrush during soft turn-on shall not exceed 10 A peak at 115 V AC, 8 A peak at 230 V AC, and 10 A peak at 110 V AC. AC power connectors shall be powerCON 20 with loop output. The loudspeaker shall optionally include an RMS remote monitoring system module.

Loudspeaker components shall be mounted in a premium birch plywood enclosure with a low-gloss, blacktextured finish. Dimensions shall be 31.00 inches wide x 20.65 inches high x 20.79 inches deep (787 mm x 525 mm x 528 mm). Weight shall be 85 lbs (38.6 kg).

The loudspeaker shall be the Meyer Sound X-400C.