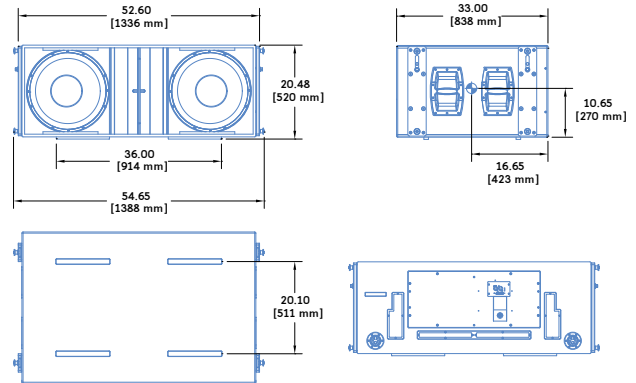


1100-LFC : Low-Frequency Control Element



Dimensions	52.60" w x 20.48" h x 33.00" d (1336 mm x 520 mm x 838 mm)
Dimension w/Rigging	54.65" w x 20.48" h x 33.00" d (1388 mm x 520 mm x 838 mm)
Weight	249 lbs (112.9 kg)
Weight w/Rigging	285 lbs (129.3 kg)
Enclosure	Multi-ply hardwood
Finish	Black textured
Protective Grille	Hex-stamped steel with black mesh screen
Rigging	Optional MRK-1100 rigging kit with captive GuideALinks for groundstacked, flown, and cardioid configurations; optional MTG-1100 top grid for flown arrays; optional MAS-1100 array spacer for lengthening arrays; optional MCF-1100 caster frame for transporting stacks of up to three units

The 1100-LFC low-frequency control element is a self-powered loudspeaker defined by its sonic linearity in reproducing low-frequency transients at high, continuous output levels with very low distortion. This ultralow distortion, coupled with exceptional headroom and optimized rigging options, makes the 1100-LFC a flexible tool for low-end directional applications for large-scale tours and installations.

To guarantee optimum performance, 1100-LFC systems must be designed with Meyer Sound's MAPP Online Pro[®] acoustical prediction software. The intuitive, cross-platform application accurately predicts directional patterns, frequency and impulse responses, and maximum peak SPL for 1100-LFC systems, ensuring that systems deliver the required coverage and SPL.

An optimally tuned, vented cabinet houses the 1100-LFC's two linear, high-excursion 18-inch cone drivers. The loudspeaker's 28 Hz to 100 Hz operating frequency range complements MILO[®], MICA[®], JM-1P and other Meyer Sound loudspeakers, allowing it to integrate seamlessly with linear arrays and curvilinear arrays.

The unit's power amplifier operates at voltages

from 208 to 235 V AC, at 50/60 Hz. TruPower[®] limiting ensures maximum driver protection, minimizing power compression while yielding high constant output under high continuous and peak power conditions. The amplifier, control electronics, and power supply are contained in a single field-replaceable module located on the rear of the cabinet.

Protective, plastic skids are included on the bottom of the 1100-LFC cabinet that securely align with the cabinet's top slots. Units can be stacked normally or reversed for cardioid configurations.

The optional MRK-1100 rigging kit, available as a factory-installed option or field upgrade, includes captive GuideALinks[™] that allow the loudspeaker to be flown from the MTG-1100 top grid. The GuideALinks, located at the front and rear of the cabinet, are easily set with convenient, pinned handles and slots. The GuideALinks also accommodate reversed units for flown cardioid arrays.

The optional MTG-1100 top grid can suspend line arrays comprised of up to 12 cabinets at a 7:1 safety factor, or up to 16 cabinets at a 5:1

safety factor. The optional MAS-1100 array spacer can be placed between cabinets to lengthen 1100-LFC arrays, improving vertical directionality. For touring and portable systems, the 1100-LFC can travel securely in stacks of three units with the optional MCF-1100 caster frame. Durable nylon covers, accommodating stacks of two or three units, are optionally available to ensure the 1100-LFC is completely road ready.

Meyer Sound's RMS[™] remote monitoring system comes standard with all 1100-LFCs and provides comprehensive monitoring of system parameters on a Windows[®]-based computer. Convenient 5-pin XLR connectors allow the use of composite cables carrying both RMS and balanced audio (3-pin XLR audio connectors are also available).

The 1100-LFC cabinet is constructed of multi-ply hardwood and coated with a black-textured finish. A hex-stamped, steel grille with acoustical black mesh protects the unit's drivers. Other options include weather protection and custom color finishes for fixed installations and applications with specific cosmetic requirements.

FEATURES & BENEFITS

- High peak power output with low-frequency clarity and excellent transient reproduction at extreme levels
- Linearity ensures low-frequency output with consistent directional properties in a variety of configurations at any level

- Tuned, vented cabinet optimized for low air velocities
- Stackable and flyable in regular and cardioid arrays
- Integrates seamlessly with MILO, MICA, JM-1P, and other Meyer Sound loudspeakers

APPLICATIONS

- Stadiums
- Arenas
- Concert halls
- High-power, controlled arrays

1100-LFC SPECIFICATIONS

ACOUSTICAL	
Operating Frequency Range¹	28 Hz – 100 Hz
Frequency Response²	30 Hz – 85 Hz ±4 dB
Phase Response	34 Hz – 82 Hz ±30°
COVERAGE	
	Varies with number of units and configuration
TRANSDUCERS	
Low Frequency	Two 18" cone drivers
AUDIO INPUT	
Type	Differential, electronically balanced
Maximum Common Mode Range	±15 V DC
Connectors³	XLR female input with XLR male loop output
Input Impedance	10 kΩ differential between pins 2 and 3
Wiring⁴	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 – Pin 4: RMS Pin 5: RMS 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 of +20 dBV (10 V rms, 14 V peak) into 600 Ω to produce the maximum peak SPL over the operating bandwidth of the loudspeaker
AMPLIFIER	
Type	2-channel complementary MOSFET output stages (Class AB/H bridged)
Cooling	Forced air cooling
AC POWER	
Connectors	PowerCon32
Safety Agency Rated Operating Range	208–235 V AC, 50/60 Hz
Turn-on and Turn-off Points	165–264 V AC
Current Draw:	
Idle Current	0.6 A rms (230 V AC)
Maximum Long-Term Continuous Current (>10 sec)	10.5 A rms (230 V AC)
Burst Current (<1 sec)⁵	18 A rms (230 V AC)
Ultimate Short-Term Peak Current	53 A peak (230 V AC)
Inrush Current	<30 A peak (230 V AC)
RMS NETWORK	
	Equipped with 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. Measured half-space with 1/3 octave frequency resolution at 4 meters.
3. Audio connectors available as 3-pin or 5-pin XLR connectors. 5-pin XLR connectors accommodate both balanced and RMS signals.
4. Pins 4 and 5 for RMS only included with 5-pin XLR connectors.
5. 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.



1100-LFC — 04.220.004.02 A2

Copyright © 2012
Meyer Sound Laboratories Inc.
All rights reserved

MEYER SOUND LABORATORIES INC.
2832 San Pablo Avenue
Berkeley, CA 94702

T: +1 510 486.1166
F: +1 510 486.8356

techsupport@meyersound.com
www.meyersound.com

ARCHITECT SPECIFICATIONS

The loudspeaker shall be a linear, low-distortion, self-powered, low-frequency control element and shall be capable of flown, groundstacked, and cardioid configurations. Its transducers shall include two 18-inch cone drivers.

The loudspeaker shall incorporate internal processing and a 2-channel Class AB/H amplifier with complementary MOSFET output stages. Protection circuits shall include TruPower limiting. The audio input shall be electronically balanced with a 10 kΩ impedance and accept a nominal 0 dBV (1.0 V rms) signal (+20 dBV to produce maximum SPL). Audio connectors shall be 3-pin XLR, female and male, accommodating balanced audio, or 5-pin XLR, accommodating both balanced audio and RMS. 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, 28 Hz to 100 Hz; frequency response, 30 Hz to 85 Hz ±4 dB; phase response, 34 Hz to 82 Hz ±30 degrees.

The internal power supply shall perform EMI filtering, soft current turn-on, and surge suppression. Power requirements shall be nominal 230 V AC line current at 50 or 60 Hz. UL and CE operating voltage range shall be 208 to 235 V AC. Current draw during burst shall be 18 A rms at 230 V AC. Current inrush during soft turn-on shall not exceed 30 A at 230 V AC. The

AC power connector shall be a PowerCon32. The loudspeaker shall include an RMS remote monitoring system module.

Components shall be mounted in an optimally tuned, vented enclosure constructed of multi-ply hardwood and coated with a black-textured finish. Dimensions shall be 52.60" wide x 20.48" high x 33.00" deep (1336 mm x 520 mm x 838 mm). Dimension with optional rigging shall be 54.65" wide x 20.48" high x 33.00" deep (1388 mm x 520 mm x 838 mm). Weight shall be 249 lbs (112.9 kg). Weight with optional rigging shall be 285 lbs (129.3 kg).

The loudspeaker shall be the Meyer Sound 1100-LFC.