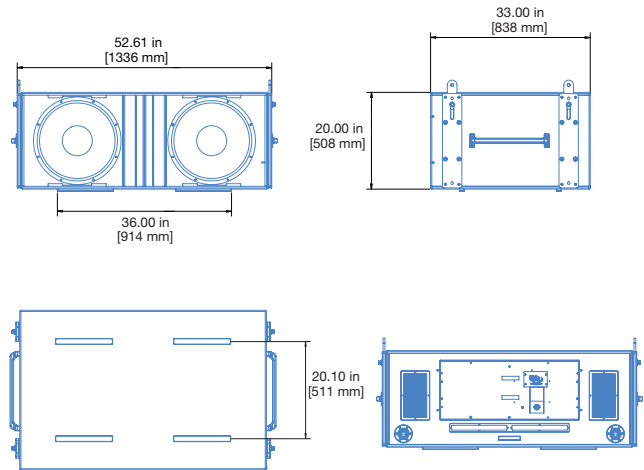


VLFC Very Low-Frequency Control Element



(Shown with optional QuickFly® rigging)



(Dimensions shown for Rigging version)

The VLFC very low-frequency control element is a self-powered loudspeaker defined by its sonic linearity and unique ability to reproduce extremely low-frequency signals at high continuous levels with very low distortion. This very low frequency response, coupled with exceptional headroom and optimized rigging options, makes the VLFC an incredible tool for applications requiring very low frequencies to enhance the audience experience.

The VLFC is ideal for any application that would benefit from the impact of sub-sonic feeling—from large-scale tours to special effects in cinema to theme parks.

An optimally tuned, vented cabinet houses the VLFC’s two 18 in long-excursion low-resonance cone drivers. A two-channel Class AB/H bridged amplifier with complementary MOSFET output stages supplies ample continuous and peak power to the drivers.

The VLFC’s 13 Hz to 30 Hz operating frequency response complements Meyer Sound’s 1100-LFC and other subwoofers in the lowest octaves even below the typical 20 Hz limit.

Meyer Sound’s design includes protective plastic skirts on the bottom of the VLFC cabinet that securely align with the cabinet’s top slots. Stack units normally or reversed for cardioid configurations.

Using the same footprint of the 1100-LFC, the VLFC integrates seamlessly with existing infrastructure. The optional MRK-1100 rigging kit, available as a factory-installed option or a field upgrade, includes captive GuideALinks™ that allow the loudspeaker to be flown from the MTG-1100 top grid. Convenient pinned handles and slots make the GuideALinks, located at the front and rear of the cabinet, easy to set.

The GuideALinks also accommodate reversed units for flown cardioid arrays. The MTG-1100 top grid supports suspension of line arrays comprising up to 16 cabinets at a 5:1 safety factor. For touring and portable systems, the optional MCF-1100 caster frame supports secure travel with the VLFC in stacks of up to three units.

The RMS™ remote monitoring system provides comprehensive, real-time information about loudspeaker parameters from a Mac® or Windows®-based computer running Compass® control software via the RMS™ interface.

Meyer Sound constructs the VLFC cabinet out of premium multi-ply birch and coats it with a slightly textured black finish. A powder-coated, 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 AND BENEFITS

- Sub-sonic frequency response and linearity bring new possibilities for enhanced impact system design
- Easily integrates with 1100-LFCs
- High peak power output yields excellent transient reproduction of very low frequencies and extreme operating levels
- Stackable and flyable with other VLFCs and 1100-LFCs in regular and cardioid arrays

APPLICATIONS

- Stadiums and arenas
- Cinema and post-production
- Theme parks
- Research

ACCESSORIES

MRK-1100 Rigging Kit: Allows the VLFC to be flown from the MTG-1100 grid; includes four captive GuideALinks and eight quick-release pins.

MTG-1100 Top Grid: With some restrictions, flies up to 16 1100-LFCs/VLFCs at a 5:1 safety factor; accommodates a variety of pickup configurations with six pickup points; includes attachment points to accommodate brackets and adapters for lasers and inclinometers. Always use MAPP to verify rigging load ratings.

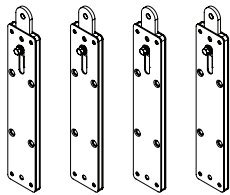
MVP Motor Vee Plate: Fine tunes the horizontal aim of arrays; compatible with MTG-LEO-M, MTG-LYON, MTG-1100, and MG-LEOPARD/900 grids.

MAS-1100 Array Spacer: Placed between cabinets in 1100-LFC/VLFC arrays to lengthen the array and improve vertical directionality; includes four captive GuideALinks and eight quick-release pins.

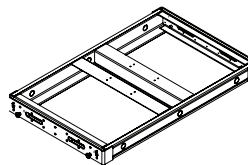
MCF-1100 Caster Frame: Safely transports up to three 1100-LFC/VLFC cabinets, making it easy to assemble and disassemble arrays in blocks of three cabinets. (The MCF-1100 does not include quick-release pins, because it is secured with the quick-release pins included with the loudspeaker.)

Galileo GALAXY Network Platform: The Galileo GALAXY Network Platform provides state-of-the-art audio control technology for loudspeaker systems with multiple zones. With immaculate sonic performance, it provides a powerful tool set for corrective room equalization and creative fine-tuning for a full range of applications. In addition, GALAXY devices' improved Delay Integration lets you combine VLFCs with different Meyer Sound loudspeakers.

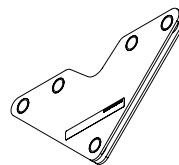
MDM-5000 Distribution Module: MDM-5000 units conveniently power 1100-LFC/VLFC systems, routing up to six channels of AC power, balanced audio and RMS signals to the loudspeakers.



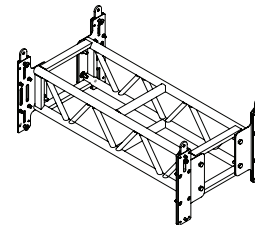
MRK-1100 Rigging Kit



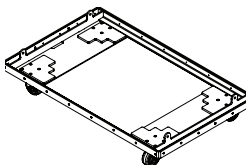
MTG-1100 Top Grid



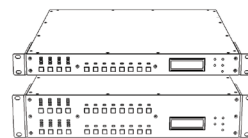
MVP Motor Vee Plate



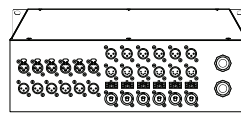
MAS-1100 Array Spacer



MCF-1100 Caster Frame



Galileo GALAXY Network Platform



MDM-5000 Distribution Module

SPECIFICATIONS

ACOUSTICAL ¹	
Operating Frequency Range ²	13–35 Hz
Frequency Response ³	13–30 Hz \pm 4 dB
Phase Response	13–30 Hz \pm 30°
Linear Peak SPL ⁴	125.5 dB with crest factor >10.5 dB (M-noise) , 125.5 dB (Pink noise)
COVERAGE	
	360° (single unit); varies with number of units and configuration
TRANSDUCERS	
Low Frequency	Two 18-inch long-excursion low-resonance cone drivers; 8 Ω nominal impedance
AUDIO INPUT	
Type	Differential, electronically balanced
Maximum Common Mode Range	\pm 15 V DC, clamped to earth for voltage transient protection
Connectors	XLR 5-pin female input with male loop output; XLR 3-pin female connectors available to accommodate only balanced audio (no RMS signals)
Input Impedance	10 k Ω differential between pins 2 and 3
Wiring ⁵	Pin 1: Chassis/earth through 220 k Ω , 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
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 +20 dBV (10 V rms) 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)
Total Output Power ⁶	5600 W peak
THD, IM, TIM	< 0.02%
Cooling	Three ultra high-speed primary fans; three ultra high-speed reserve fans
AC POWER	
Connectors	powerCON 32 input
Automatic Voltage Selection	208–235 V AC, 50/60 Hz
Safety Rated Voltage Range	208–235 V AC, 50/60 Hz
Turn-on and Turn-off Points	165 V AC turn-on; 264 V AC turn-off
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) ⁷	18 A rms (230 V AC)
Maximum Instantaneous Peak Current	53 A peak (230 V AC)
Inrush Current	< 30 A peak
RMS NETWORK	
	Equipped with 2-conductor, twisted-pair network, reporting all amplifier operating parameters to host computer

SPECIFICATIONS, CONT'D.

PHYSICAL	
Dimensions without Rigging	W: 54.65 in (1388 mm) x H: 20.48 in (520 mm) x D: 33 in (838 mm)
Dimensions with Rigging	W: 54.65 in (1388 mm) x H: 20.48 in (520 mm) x D: 33 in (838 mm)
Weight without Rigging	298 lb (135.2 kg)
Weight with Rigging	332 lb (150.7 kg)
Enclosure	Premium multi-ply birch with slightly textured black finish;
Protective Grille	Powder-coated, hex-stamped steel with acoustical black mesh
Rigging	Optional MRK-1100 rigging kit with captive GuideALinks secured with 0.5 in x 1.25 in quick release pins. Rigging supports ground-stacked, flown, and cardioid configurations

NOTES

- Loudspeaker system predictions for coverage and SPL are available in Meyer Sound's MAPP System Design Tool.
- Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
- 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, (10Hz–22.5kHz) 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.
- Pins 4 and 5 (RMS) only included with XLR 5-pin connector that accommodates both balanced audio and RMS signals.
- Peak power based on the maximum unclipped voltage the amplifier will produce into the nominal load impedance.
- 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.

ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be a linear, low-distortion, self-powered, very low-frequency control element and shall be capable of flown, groundstacked, and cardioid configurations. Its transducers shall include two 18-inch long-excursion low-resonance 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 peak SPL). Audio connectors shall be 3-pin XLR, female and male, accommodating balanced audio, or 5-pin XLR, accommodating both balanced audio and RMS.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: operating frequency range shall be 13–35 Hz; frequency response shall be 13 Hz–30 Hz ±4 dB (measured in half-space with pink noise at 4 m, 1/3-octave frequency resolution); phase response shall be 13–30 Hz ±30°; linear peak SPL shall be 125.5 dB with

crest factor >10.5 dB, measured in half-space with M-noise at 4 m referred to 1 m.

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 208–235 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 premium multi-ply birch and coated with a slightly textured black finish. Dimensions and without optional rigging shall be 54.65 in (1388 mm) wide x 20.48 in (520 mm) high x 33.00 in (838 mm) deep. Weight shall be 298 lb (135.2 kg). Weight with optional rigging shall be 332 lb (150.7 kg).

The loudspeaker shall be the Meyer Sound VLFC.