

Datasheet — 750-LFC

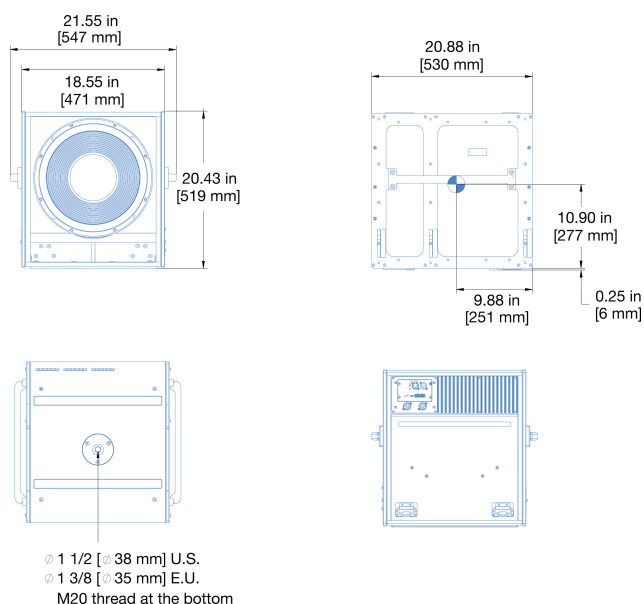
COMPACT LOW-FREQUENCY CONTROL ELEMENT

Download PDF — PN: 04.271.004.02 A2[https://docs.meyersound.com/pdf/750-lfc_ds_a2.pdf]



[https://docs.meyersound.com/pdf/750-lfc_ds_a2.pdf]





750-LFC Arrayed Loudspeakers and Individual Loudspeaker Dimensions

Meyer Sound's 750-LFC compact low-frequency control element reproduces low frequencies at high, continuous output levels with extremely low distortion. The 750-LFC offers the same sonic linearity as Meyer Sound's 900-LFC low-frequency control element in a smaller, lighter cabinet, making it ideal for building scalable systems to suit portable applications or fixed installations of any size.

A newly designed class D amplifier affords unprecedented efficiency to the 750-LFC, significantly lowering distortion while reducing power consumption and operating temperature. A single, field-replaceable module contains the on board amplifier and control circuitry.

In addition to pairing with LINA™ systems, the 750-LFC integrates easily with other Meyer Sound loudspeaker systems, including the LEOPARD™ and ULTRA Series loudspeakers.

Meyer Sound's Galileo® GALAXY Network Platforms, which provide matrix routing, alignment, and processing for array components, can drive LINA and 750-LFC loudspeakers. To guarantee optimum performance, use Meyer Sound's MAPP™ System Design Tool to design systems with the 750-LFC.

LINA and 750-LFC loudspeakers work with Meyer Sound's RMS™ remote monitoring system, which provides comprehensive monitoring of system parameters from a Mac® or Windows®-based

computer.

The 750-LFC is available with or without Meyer Sound's QuickFly® rigging. When equipped with the optional MRK-750 rigging kit, the 750-LFC's captive GuideALinks™ allow it to be flown from the MG-MINA/LINA multipurpose grid in LINA arrays without any transition frame between the 750-LFC and LINA.

Fly 750-LFCs separately as a subwoofer array with variable splay angles of 0°, 1.5°, 3.25°, or 4.75°, or configure the 750-LFC in cardioid arrays to reduce output behind the loudspeakers.

Ground stack arrays without a transition frame between the 750-LFC and LINA by equipping the 750-LFC with the optional MRK-750 rigging kit. Create a wider base for ground-stacks with the optional MG-MINA/LINA grid.

The optional MCF-750 caster frame and protective covers allow for the transportation of both versions of the 750-LFC in stacks.

The 750-LFC integral pole mount supports easy placement of one or two LINAs on top using the available MUB-MINA/LINA U Bracket or the MYA-MINA/LINA yoke. Alternatively, use the pole mount to pair the 750-LFC with ULTRA Series loudspeakers.

FEATURES AND BENEFITS

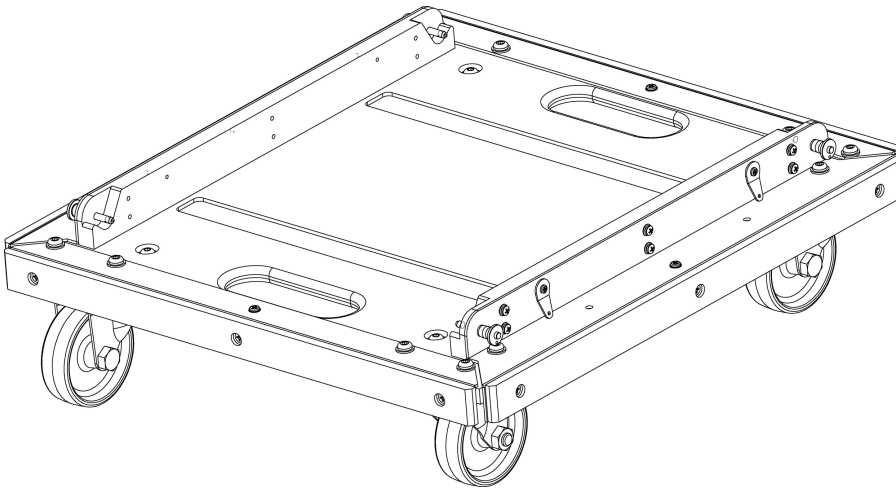
- Compact cabinet with small footprint and extraordinary power-to-size ratio
- High peak power output with extremely low distortion
- Exceptional linearity, transient reproduction, and low-frequency clarity
- Self-powered design for simplified setup and increased reliability
- Stackable and flyable in regular and cardioid arrays with splay options
- Integral pole-mount receptacle to facilitate pairing with LINA or ULTRA Series loudspeakers

APPLICATIONS

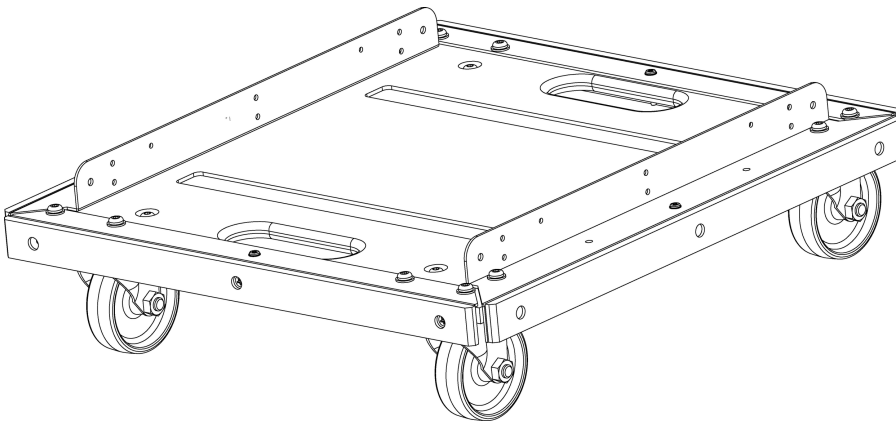
- Scalable low-frequency control for touring or corporate applications, or fixed installations
- Clubs, theaters, houses of worship, corporate AV, and theme parks
- Low-frequency complement for LINA, LEOPARD and ULTRA systems

ACCESSORIES AND ASSOCIATED PRODUCTS

MCF 750 Caster Frame — Heavy duty caster frame for safely transporting up to three 750-LFC cabinets. Available in two versions for cabinets fitted/not fitted with MRK-750 rigging. Durable nylon covers for stacks of two and three units are also available to ensure the 750-LFC is completely road-ready.

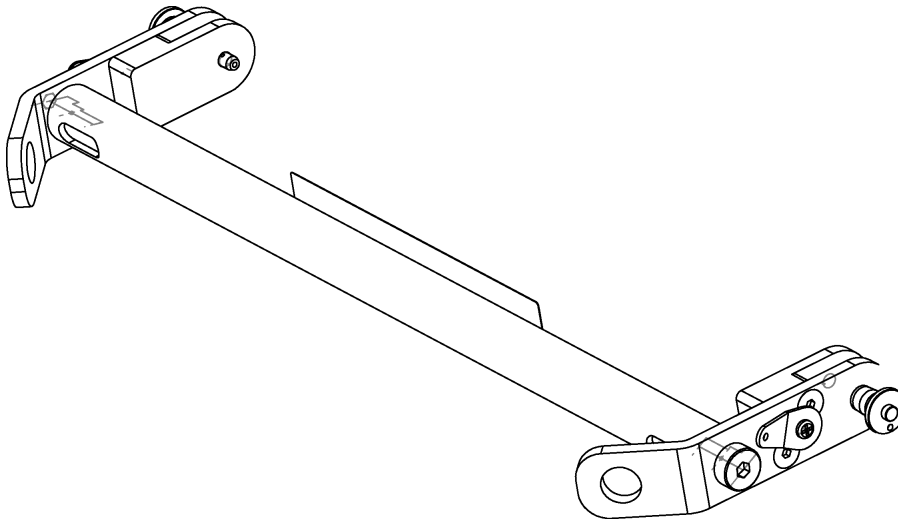


MCF 750 Caster Frame — Rigging



MCF 750 Caster Frame — No Rigging

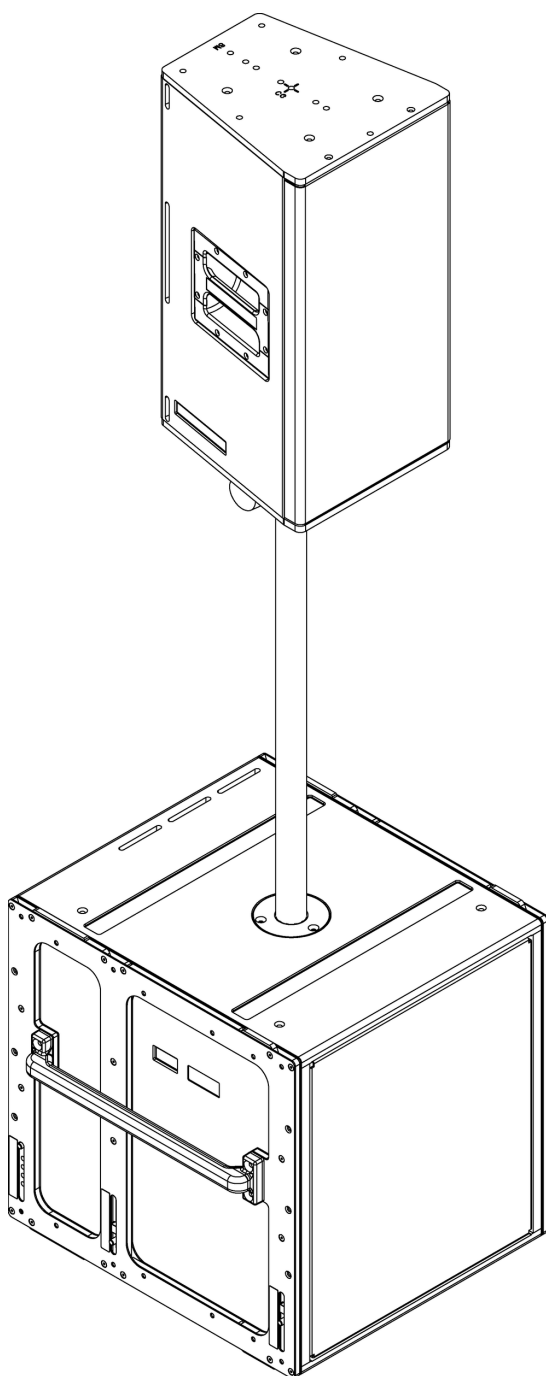
PBF-LINA Pull Back Frame — Attaches to the bottom cabinet of LINA and 750-LFC arrays and provides pull-back for extreme array downtilt.



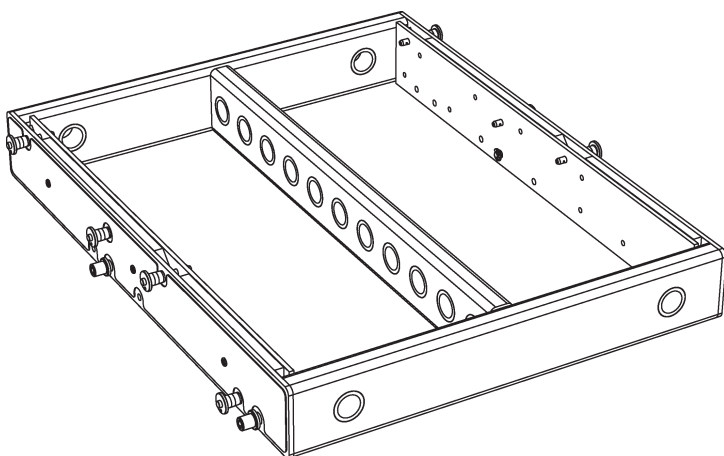
PBF-LINA Pull Back Frame

MPK-POLE — Allows mounting of Meyer Sound loudspeakers on top of the 750-LFC using the heavy-duty integral pole mount. Constructed from steel and available in two models:

- **MPK-POLE 35—adjustable:** (32–55 in long) 35 mm pole; includes a 38 mm adapter
- **MPK-POLE 35MM/M20—fixed:** (47 in long) 35 mm pole with M20 slug on one end; ideal pole for the EU version

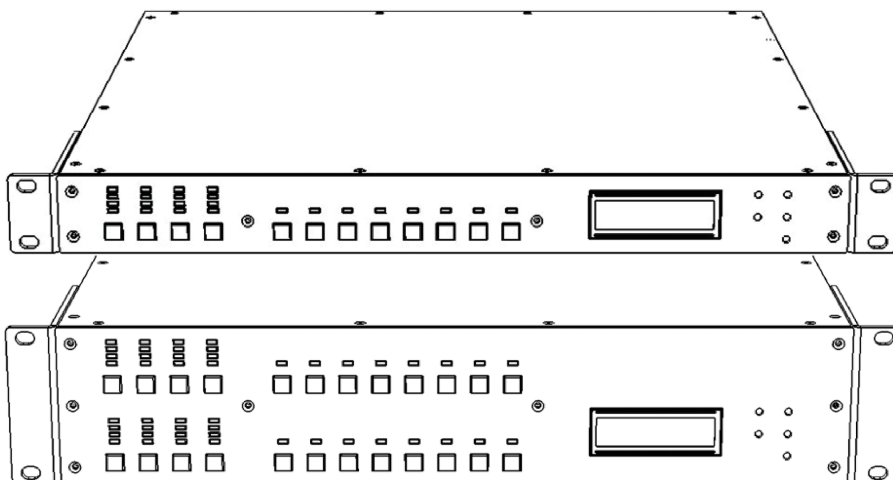
***MPK-POLE***

MG-MINA/LINA/750-LFC Multipurpose Grid — Supports arrays of 750-LFCs or mixed arrays of 750-LFCs and LINAs without transition hardware; accommodates a variety of pickup configurations with four corner and 11 center pickup points (includes the two rear links from the GLK-750-LFC Grid Link Upgrade Kit); can also use for ground stacking. Always use MAPP to verify rigging load ratings.



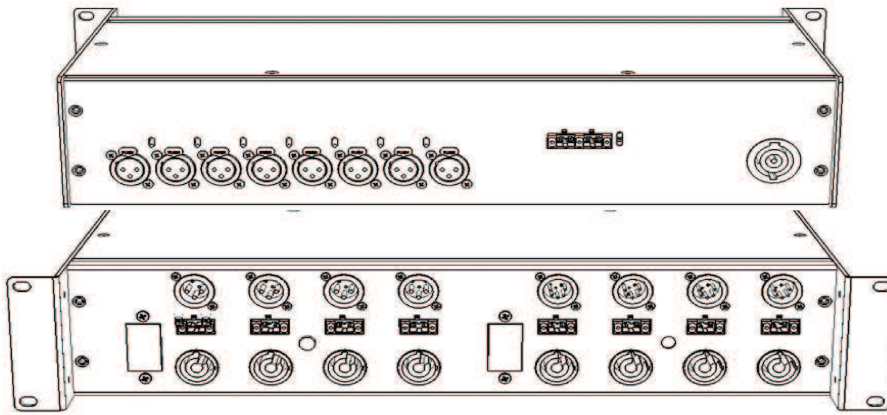
MG-MINA/LINA/750-LFC Multipurpose Grid

Galileo GALAXY Network Platform — The Galileo GALAXY Network Platform provides state-of-the-art loudspeaker management 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 allows the user to combine LINA and 750-LFC with different Meyer Sound loudspeakers.



Galileo GALAXY Network Platform

MDM-832 Distribution Module — MDM-832 units conveniently power LINA/750-LFC array systems, routing up to eight channels of AC power, balanced audio and RMS signals to the loudspeakers. For bigger systems, the MDM-5000 Distribution Module is also available.



MDM-832 Distribution Module

GLK-750-LFC Grid Link Upgrade Kit (not pictured) — Includes the two rear links and installation hardware. Using the rear links instead of the middle links on the MG-MINA/LINA grid effectively increases the load rating for the grid when attached to 750-LFCs.

SPECIFICATIONS

ACOUSTICAL ¹	
Operating Frequency Range ²	35 Hz – 125 Hz
Frequency Response ³	37 Hz – 110 Hz ±4 dB
Phase Response	43 Hz – 110 Hz ±30°
Linear Peak SPL ⁴	130.5 dB with crest factor >9 dB (M-noise) , 130.5 dB (pink noise), 132 dB (B-noise)
COVERAGE	
	360° (single unit); varies with number of units and configuration
TRANSDUCERS	
Low Frequency	One 15-inch, dual-coil, long-excursion cone driver; 2 Ω nominal impedance

AUDIO INPUT	
Type	Differential, electronically balanced
Maximum Common Mode Range	± 15 V DC, clamped to earth for voltage transient protection
Connectors	XLR 3-pin female with male loop. Optional 5-pin connectors to accommodate both balanced audio and RMS signals
Input Impedance	10 k Ω differential between pins 2 and 3
Wiring ⁵	Pin 1: Chassis/earth through 1 kΩ, 1000 pF, 15 V clamped 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	6.0 dBV (2.0 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, open-loop, class D
Total Output Power ⁶	3100 W peak
THD, IM, TIM	< 0.02%
Cooling	Convection

AC POWER	
Connectors	powerCON 20 input with loop output
Automatic Voltage Selection	90–265 V AC; 50–60 Hz
Safety Agency Rated Voltage Range	100–240 V AC, 50–60 Hz
Turn-on and Turn-off points	Turn-on: 90 V AC; Turn-off: none; internal fuse protection above 265 V AC
CURRENT DRAW	
Idle	0.39 A rms (115 V AC), 0.38 A rms (230 V AC), 0.42 A rms (100 V AC)
Maximum Long-Term Continuous	5.3 A rms (115 V AC), 2.7 A rms (230 V AC), 6.2 A rms (100 V AC)
Burst (<1 sec) ⁷	9.2 A rms (115 V AC), 4.4 A rms (230 V AC), 10.7 A rms (100 V AC)
Maximum Instantaneous Peak	15.3 A peak (115 V AC), 7.8 A peak (230 V AC), 18 A peak (100 V AC)
Inrush Current	< 20.0 A peak
RMS NETWORK (OPTIONAL)	
	Two-conductor, twisted-pair network, capable of reporting all operating parameters of amplifiers to system operator's host computer.
PHYSICAL	
Dimensions without Rigging	W: 21.80 in (554 mm) x H: 20.30 in (515 mm) x D: 20.88 in (530 mm)

Dimensions with Rigging	W: 21.55 in (547 mm) x H: 20.43 in (519 mm) x D: 20.88 in (530 mm)
Weight without Rigging	89 lbs (40.3 kg)
Weight with Rigging	105 lbs (47.6 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-750 rigging kit with end frames and captive GuideALinks secured with 0.25 in x 0.53 in quick release pins that allow 0°, 1.5°, 3.25°, or 4.75° splay angles; detachable side handles. Rigging allows ground-stacked, flown, and cardioid configurations
Pole Mount	U.S. version: 1.5 in (38 mm) E.U. version: 1.375 in (35 mm and M20 thread at the bottom)

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. Measured in half-space with pink noise at 4 m, 1/3-octave frequency resolution.
4. **Linear Peak SPL** is measured in free-field at 4 m referred to 1 m. Loudspeaker SPL compression measured with M-noise at the onset of limiting, 2-hour duration, and 50°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.

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.

5. Pins 4 and 5 (RMS) only included with XLR 5-pin connector that accommodates both balanced audio and RMS signals.
6. Peak power based on the maximum unclipped peak voltage the amplifier will produce into the nominal load impedance.
7. 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 compact, self-powered, linear, low-distortion, low-frequency control element and shall be capable of flown, ground-stacked, and cardioid configurations. Its transducer shall be one 15-inch, dual-coil, long-excursion cone driver with 2 Ω nominal impedance.

The loudspeaker shall incorporate internal processing and a 2-channel, open-loop, class D amplifier. Processing shall include equalization, phase correction, and driver protection.

Performance specifications for a typical production unit shall be as follows: operating frequency range shall be 35–125 Hz; frequency range shall be 37–110 Hz ± 4 dB (measured in half-space with pink noise at 4 m, 1/3-octave frequency resolution); phase response shall be 43 Hz–110 Hz $\pm 30^\circ$; linear peak SPL shall be 130.5 dB with crest factor >9 dB, measured in half-space with M-noise at 4 m referred to 1 m.

Audio connectors shall be XLR 3-pin, female with male loop, accommodating balanced audio, or XLR 5-pin, accommodating both balanced audio and RMS.

© 2025 Meyer Sound Laboratories, Incorporated