

750-LFC Compact Low-Frequency Control Element



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750-LFC Operating Instructions, PN 05.271.005.01 C2

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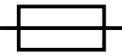
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## IMPORTANT SAFETY INSTRUCTIONS

These symbols indicate important safety or operating features in this booklet and on the frame or chassis:

### SYMBOLS USED

|   |   |   |   |   |
|---|---|---|---|---|
|  |  |  |  |  |
| <b>Dangerous voltages:<br/>risk of electric shock</b>                             | <b>Important operating<br/>instructions</b>                                       | <b>Replaceable Fuse</b>   | <b>Protective earth ground</b>  | <b>Hot surface: do not<br/>touch</b>  |
| <b>Gefährliche<br/>Spannungen:<br/>Stromschlaggefahr</b>                          | <b>Hinweis auf wichtige<br/>Punkte der<br/>Betriebsanleitung</b>                  | <b>Austauschbare<br/>Sicherung</b>  | <b>Schutzerde</b>   | <b>Heiße Oberfläche:<br/>nicht berühren</b>   |
| <b>Pour indiquer les<br/>risques<br/>résultant de tensions<br/>dangereuses</b>    | <b>Instructions d'utilisation<br/>importantes</b>                                 | <b>Fusible remplaçable</b>  | <b>Terre de protection</b>  | <b>Surface chaude:<br/>ne pas toucher</b>   |
| <b>Para indicar voltajes<br/>peligrosos</b>                                       | <b>Instrucciones<br/>importantes<br/>de funcionamiento y/o<br/>Mantenimiento</b>  | <b>Fusible reemplazable</b>   | <b>Toma de tierra de<br/>protección</b>   | <b>Superficie caliente:<br/>no tocar</b>  |

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with Meyer Sound's installation instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. The AC mains plug or appliance coupler shall remain readily accessible for operation.
11. Only use attachments/accessories specified by Meyer Sound.
12. Use only with the caster rails or rigging specified by Meyer Sound, or sold with the apparatus. Handles are for carrying only.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. If equipped with an external fuse holder, the replaceable fuse is the only user-serviceable item. When replacing the fuse, only use the same type and the same value.
15. Refer all other servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug has been damaged; liquid has been spilled or objects have fallen into the apparatus; rain or moisture has entered the apparatus; the apparatus has been dropped; or when for undetermined reasons the apparatus does not operate normally.

 **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not install the apparatus in wet or humid locations without using weather protection equipment from Meyer Sound.

 **WARNING:** Class I apparatus shall be connected to a mains socket outlet with a protective earthing connection.

 **CAUTION:** Disconnect the mains plug before disconnecting the power cord from the loudspeaker.

## English

- To reduce the risk of electric shock, disconnect the apparatus from the AC mains before installing audio cable. Reconnect the power cord only after making all signal connections.
- Connect the apparatus to a two-pole, three-wire grounding mains receptacle. The receptacle must be connected to a fuse or circuit breaker. Connection to any other type of receptacle poses a shock hazard and may violate local electrical codes.
- Do not install the apparatus in wet or humid locations without using weather protection equipment from Meyer Sound.
- Do not allow water or any foreign object to get inside the apparatus. Do not put objects containing liquid on or near the unit.
- To reduce the risk of overheating the apparatus, avoid exposing it to direct sunlight. Do not install the unit near heat-emitting appliances, such as a room heater or stove.
- If equipped with an external fuse holder, the replaceable fuse is the only item that can be serviced by the user. When replacing the fuse, only use the same type and value.
- This apparatus contains potentially hazardous voltages. Do not attempt to disassemble the unit. The only user-serviceable part is the fuse. All other repairs should be performed only by factory-trained service personnel.

## Deutsch

- Zur Minimierung der Gefahr eines elektrischen Schlages trennen Sie das Produkt vor dem Anschluss von Audio- und/oder Steuerleitungen vom Stromnetz. Das Netzkabel darf erst nach Herstellung aller Signalverbindungen wieder eingesteckt werden.
- Das Produkt an eine vorschriftsgemäss installierte dreipolige Netzsteckdose (Phase, Neutraleiter, Schutzleiter) anschließen. Die Steckdose muss vorschriftsgemäß mit einer Sicherung oder einem Leitungsschutzschalter abgesichert sein. Das Anschließen des Produkts an eine anders ausgeführte Stromversorgung kann gegen Vorschriften verstossen und zu Stromunfällen führen.
- Das Produkt nicht an einem Ort aufstellen, an dem es direkter Wassereinwirkung oder übermäßig hoher Luftfeuchtigkeit ausgesetzt werden könnte, solange es sich nicht um ein Produkt handelt, dass mit der Meyer Sound Weather Protection Option ausgestattet ist.
- Vermeiden Sie das Eindringen von Wasser oder Fremdkörpern in das Innere des Produkts. Stellen Sie keine Objekte, die Flüssigkeit enthalten, auf oder neben dem Produkt ab.
- Um ein Überhitzen des Produkts zu verhindern, halten Sie das Gerät von direkter Sonneneinstrahlung fern und stellen Sie es nicht in der Nähe von wärmeabstrahlenden Geräten (z.B. Heizgerät oder Herd) auf.

- Bei Ausstattung mit einem externen Sicherungshalter ist die austauschbare Sicherung das einzige Gerät, das vom Benutzer gewartet werden kann. Verwenden Sie beim Austausch der Sicherung nur den gleichen Typ und Wert.
- Dieses Gerät enthält möglicherweise gefährliche Spannungen. Versuchen Sie nicht, das Gerät zu zerlegen. Der einzige vom Benutzer zu wartende Teil ist die Sicherung. Alle anderen Reparaturen dürfen nur von im Werk geschultem Servicepersonal ausgeführt werden.

## Français

- Pour éviter tout risque d'électrocution, débranchez l'enceinte de la prise secteur avant de mettre en place le câble audio. Ne rebranchez le cordon secteur qu'après avoir procédé à toutes les connexions de signal audio
- Brancher l'appareil sur une prise secteur à trois fils et deux pôles avec mise à la terre. La prise doit être reliée à un fusible ou à un disjoncteur. Le branchement à tout autre type de prise présente un risque de choc électrique et peut enfreindre les codes locaux de l'électricité.
- N'installez pas l'enceinte dans des endroits humides ou en présence d'eau sans utiliser d'équipements de protection adéquats fournis par Meyer Sound.
- Ne laissez pas d'eau ou d'objet étranger, quel qu'il soit, pénétrer à l'intérieur de l'enceinte. Ne posez pas d'objet contenant du liquide sur ou à proximité de l'enceinte.
- Pour réduire les risques de surchauffe, évitez d'exposer directement l'enceinte aux rayons du soleil. Ne l'installez pas à proximité de sources de chaleur, radiateur ou four par exemple.
- S'il est équipé d'un porte-fusible externe, le fusible remplaçable est le seul élément qui peut être réparé par l'utilisateur. Lors du remplacement du fusible, n'utilisez que le même type et la même valeur.
- Cet appareil contient des tensions potentiellement dangereuses. N'essayez pas de démonter l'appareil. Le fusible est la seule pièce réparable par l'utilisateur. Toutes les autres réparations doivent être effectuées uniquement par du personnel de maintenance formé en usine.

## Español

- Para reducir el riesgo de descarga eléctrica, desconecte el aparato de la red eléctrica antes de instalar el cable de audio. Vuelva a conectar el cable de alimentación sólo después de realizar todas las conexiones de señal.
- Conecte el aparato a una toma de corriente de tres hilos y dos polos con conexión a tierra. El receptáculo debe estar conectado a un fusible o disyuntor. La conexión a cualquier otro tipo de receptáculo representa un riesgo de descarga eléctrica y puede violar los códigos eléctricos locales.

- No instale el aparato en lugares húmedos o mojados sin usar el equipo de protección contra intemperie de Meyer Sound.
- No permita que penetre agua u otros objetos extraños en el interior del aparato. No coloque objetos que contengan líquido sobre o cerca de la unidad.
- Para reducir el riesgo de sobrecalentamiento del aparato, evite exponerlo a la luz solar directa. No instale la unidad cerca de aparatos que emitan calor, como un calefactor o una estufa
- Si está equipado con un portafusibles externo, el fusible reemplazable es el único elemento que puede ser reparado por el usuario. Cuando reemplace el fusible, use solamente el mismo tipo y valor.
- Este aparato contiene voltajes potencialmente peligrosos. No intente desmontar la unidad. La única pieza que el usuario puede reparar es el fusible. Todas las demás reparaciones deben ser realizadas únicamente por personal de servicio capacitado de fábrica.



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## CHAPTER 1: INTRODUCTION

### HOW TO USE THIS MANUAL

Make sure to read these instructions in their entirety before configuring a Meyer Sound loudspeaker system. In particular, pay close attention to material related to safety issues.

As you read these instructions, you will encounter the following icons for notes, tips, and cautions:

 **NOTE:** A note identifies an important or useful piece of information relating to the topic under discussion.

 **TIP:** A tip offers a helpful tip relevant to the topic at hand.

 **CAUTION:** A caution gives notice that an action may have serious consequences and could cause harm to equipment or personnel, or could cause delays or other problems.

Information and specifications are subject to change. Updates and supplementary information are available at [meyersound.com](http://meyersound.com).

Meyer Sound Technical Support is available at:

- **Tel:** +1 510 486.1166
- **Tel:** +1 510 486.0657 (after hours support)
- **Web:** [meyersound.com/support](http://meyersound.com/support)

### 750-LFC COMPACT LOW-FREQUENCY CONTROL ELEMENT

Meyer Sound's 750-LFC very 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.



Figure 1: 750-LFC Compact Low-Frequency Control Element

The 750-LFC subwoofer effectively complements LINA arrays in the lower end of the spectrum with exceptional low frequency headroom. With an incredible power-to-size-ratio for such a compact cabinet, the 750-LFC is the LINA loudspeaker's ideal and extremely versatile companion.

In addition to pairing with LINA systems, the 750-LFC integrates easily with other Meyer Sound loudspeaker systems, including LEOPARD, ULTRA-X40 and other UltraSeries loudspeakers.

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 onboard amplifier and control circuitry.

LINA and 750-LFC loudspeakers can be driven by Meyer Sound's Galileo GALAXY Network Platform, which provides matrix routing, alignment, and processing for array components. LINA and 750-LFC loudspeakers also work with Meyer Sound's RMS remote monitoring system, which enables comprehensive monitoring of system parameters from a Mac® or Windows®-based computer.



**NOTE:** To guarantee optimum performance, use Meyer Sound's MAPP software to design systems with the 750-LFC.



Figure 2: 750-LFC/LINA array (left) and groundstack (right)

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 cabinet's captive GuideALinks allow it to be flown from the MG-MINA/LINA/750-LFC multipurpose grid in LINA/750-LFC arrays without any transition frame between the 750-LFC and LINA loudspeakers (Figure 2, left). The MG-MINA/LINA/750-LFC grid can also be used to create a wider base for groundstacks (Figure 2, right).

750-LFC loudspeakers can be flown separately as a subwoofer array with variable splay angles from 0° to 5°. It is also possible to configure the 750-LFC loudspeaker in cardioid arrays to reduce output behind the loudspeakers.

Optional MCF-750 caster frames are available for transporting the 750-LFC loudspeaker in stacks. The caster frame comes in two versions (for loudspeakers equipped with the rigging kit or not). Please specify the appropriate caster frame version when placing an order.

The 750-LFC integral pole-mount facilitates placement of one or two LINA loudspeakers on top of a pole using the MUB-LINA (Figure 3) or MYA-LINA yoke. In addition, the pole mount can be used to pair the 750-LFC with the ULTRA-X40 and other UltraSeries loudspeakers.



Figure 3: Pole-mounts: 750-LFC/LINA (left), 750-LFC/ULTRA-X40 (right)

## NATIVE MODE

LINA and 750-LFC loudspeakers are optimized for use in certain flown and groundstacked configurations without any array compensation or other signal processing. This capability, called *Native mode*, allows LINA/750-LFC systems to be deployed quickly with excellent results, without equalization, tuning, or use of presets.

To use LINA and 750-LFC loudspeakers in Native mode, send an identical, unmodified signal to each element in the array. The simplest method is by looping the same, unprocessed source signal through all array elements.

The following coplanar configurations can be used in Native mode (without any signal processing):

- Flown mixed arrays of LINA and 750-LFC loudspeakers (Figure 4)
- Flown separate arrays of LINA and 750-LFC loudspeakers (Figure 5)
- Mixed groundstacks of LINA and 750-LFC loudspeakers (Figure 2, right and Figure 6)
- LINA or ULTRA-X40 loudspeakers pole-mounted on top of a 750-LFC loudspeaker (Figure 3 and Figure 7)

In addition, 750-LFC and ULTRA-X40 loudspeakers are optimized for use together in groundstacked configurations without any array compensation or other signal processing.

## OPTIMAL MID-HIGH LOUDSPEAKER TO SUB-WOOFER RATIO

The ideal ratio of mid-high loudspeakers to 750-LFC loudspeakers depends on the following:

- Loudspeaker model
- System configuration
- Frequency content of source material
- Headroom required for low frequencies

For LINA applications, the ratios shown in Figure 4, Figure 5, and Figure 6 yield good results.

For ULTRA-X40 applications, the ratio shown in Figure 7 yields good results.

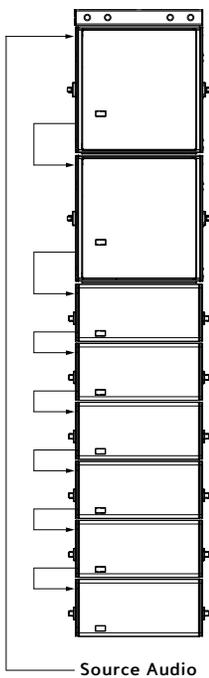


Figure 4: Flown Mixed Array (ratio 3:1)

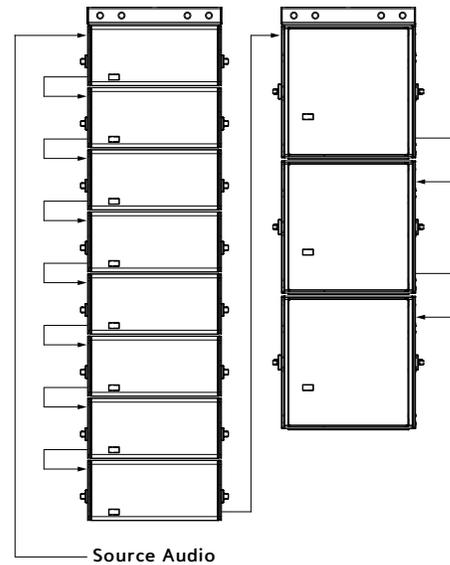


Figure 5: Flown Separate Arrays (ratio 8:3)

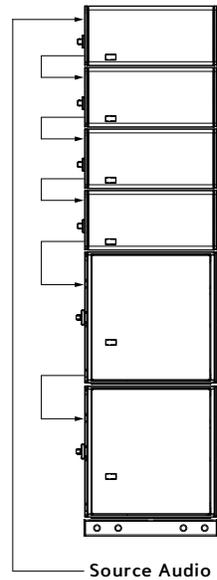


Figure 6: Mixed Groundstack (ratio 2:1)

**CAUTION:** Make sure that all cables for looped loudspeakers are wired correctly (Pin 1 to Pin 1, Pin 2 to Pin 2, etc.) to prevent the polarity from being reversed. If one or more loudspeakers in a system have reversed polarity, frequency response and coverage will be significantly degraded.

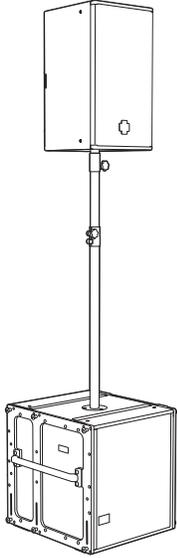


Figure 7: ULTRA-X40 pole-mounted on 750-LFC (ratio 1:1)

 **NOTE:** Native mode should not be used with more advanced configurations, such as those where LINA and 750-LFC loudspeakers are not coplanar, or those requiring delay offsets to align subsystems or to create directional low-frequency control. These systems require additional processing.

 **NOTE:** For Native mode to work properly, the source signal must be correctly configured with the appropriate gain structure.

## CHAPTER 2: POWER REQUIREMENTS

The 750-LFC design combines advanced loudspeaker technology with equally advanced power capabilities. Understanding power distribution, voltage and current requirements, and electrical safety guidelines is critical to the safe operation of the 750-LFC.

### AC POWER DISTRIBUTION

All components in an audio system (self-powered loudspeakers, mixing consoles, and processors) must be properly connected to an AC power distribution system, ensuring that AC line polarity is preserved and that all grounding points are connected to a single node or common point using the same cable gauge (or larger) as the neutral and line cables.

**CAUTION:** Make sure the voltage received by the 750-LFC loudspeaker remains within its 90–264 V AC operating range. In addition, the ground line must always be used for safety reasons and the line-to-ground voltage should never exceed 250 V AC (typically 120 V AC from line to ground).

**CAUTION:** Before applying AC power to any Meyer Sound self-powered loudspeaker, make sure that the voltage potential difference between the neutral and earth-ground lines is less than 5 V AC when using single-phase AC wiring.

**NOTE:** Improper grounding of connections between loudspeakers and the rest of the audio system may produce noise or hum, or cause serious damage to the input and output stages of the system's electronic components.

### 120 V AC, 3-Phase Wye System (Single Line)

#### Line-Neutral-Earth/Ground

Figure 8 illustrates a basic 120 V AC, 3-phase Wye distribution system with the loudspeaker load distributed across all three phases, each loudspeaker connected to a single line, and common neutral and earth/ground lines. This system delivers 120 V AC to each loudspeaker.

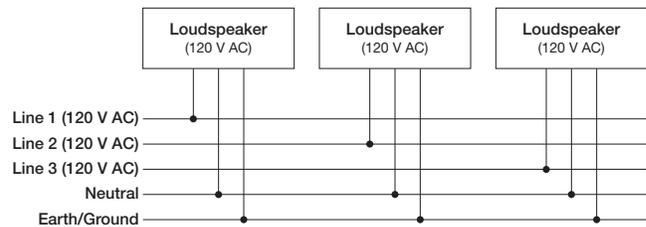


Figure 8: 120 V AC, 3-Phase Wye System (Single Line to Loudspeakers)

### 120 V AC, 3-Phase Wye System (Two Lines)

#### Line-Line-Earth/Ground

Figure 9 illustrates a 120 V AC, 3-phase Wye distribution system with each loudspeaker connected to two lines and a common earth/ground line. This configuration is possible because the 750-LFC loudspeaker tolerates elevated voltages from the ground line and does not require a neutral line. This system delivers 208 V AC to each loudspeaker.

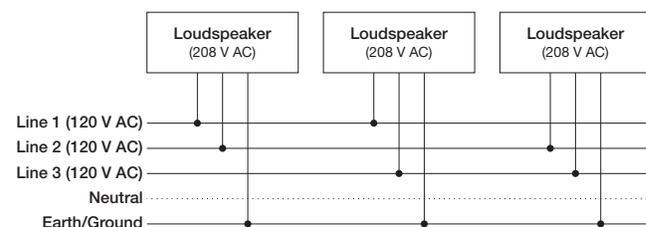


Figure 9: 120 V AC, 3-Phase Wye System (Two Lines to Loudspeakers)

**TIP:** The 120 V AC, 3-phase Wye system with two lines is recommended because it allows loudspeakers to draw less current than with single-line systems, thereby reducing voltage drop due to cable resistance.

## 230 V AC, 3-Phase Wye System (Single Line)

### Line-Neutral-Earth/Ground

Figure 10 illustrates a basic 230 V AC, 3-phase Wye distribution system with the loudspeaker load distributed across all three phases, each loudspeaker connected to a single line, and common neutral and earth/ground lines. This system delivers 230 V AC to each loudspeaker.

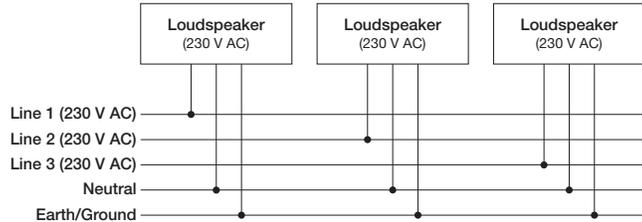


Figure 10: 230 V AC, 3-Phase Wye System (Single Line to Loudspeakers)

**CAUTION:** For 230 V AC 3-phase systems, never use a Wye connection. Connecting two lines to the AC input of the 750-LFC loudspeaker exceeds the allowable upper voltage range (275 V AC) and will damage the loudspeaker.

## AC CONNECTORS

The 750-LFC user panel includes two powerCON 20 connectors, one for AC Input (blue) and one for AC Loop Output (gray).



AC Input (Left) and AC Loop Output (Right) Connectors

### AC Input (Blue)

The blue AC Input connector supplies power to the 750-LFC. The 3-conductor powerCON 20 is rated at 20 A and uses a locking connector that prevents accidental disconnections. A 10-foot AC power cable, rated at 15 A, is included with each loudspeaker. If replacement of the included AC power cable is necessary, make sure to use a cable with the appropriate power plug (on the other end) for the area in which you will operate the unit. The 750-LFC loudspeaker requires a grounded outlet. To operate safely and effectively, it is extremely important that the entire system be properly grounded.

The AC Input connector also supplies power to any additional loudspeakers connected to the gray Loop Output connector of the 750-LFC.

**CAUTION:** When looping AC power for loudspeakers, do not exceed the current capability of the AC Input connector (20 A) or the included AC power cable (15 A). Consider the total current draw for all loudspeakers on the circuit, including the first loudspeaker (see Table 1).

### AC Loop Output (Gray)

The gray AC Loop Output connector allows multiple 750-LFC loudspeakers to be looped and powered from a single power source. The 3-conductor powerCON 20 is rated at 20 A and uses a locking connector that prevents accidental disconnections. For applications that require multiple 750-LFC loudspeakers, connect the AC Loop Output of the first loudspeaker to the AC Input of the second loudspeaker and so forth.

The maximum number of loudspeakers that can be looped from the AC Loop Output connector is determined by the voltage of the power source, the current draw of the looped loudspeakers, the circuit breaker rating, and the rating of the AC power cable connected to the first 750-LFC loudspeaker.

Table 1: Maximum 750-LFCs that Can Be Looped with AC Power

| Circuit Breaker/<br>Connector Rating | 115 V AC              | 230 V AC              | 100 V AC              |
|--------------------------------------|-----------------------|-----------------------|-----------------------|
| 15 A                                 | 1 looped<br>(2 total) | 4 looped<br>(5 total) | 1 looped<br>(2 total) |
| 20 A                                 | 2 looped<br>(3 total) | 6 looped<br>(7 total) | 2 looped<br>(3 total) |

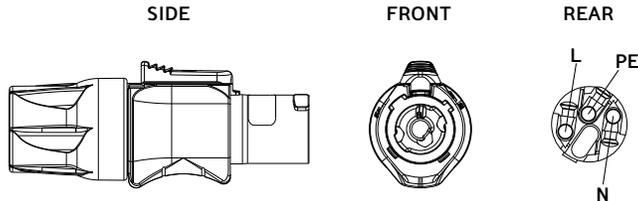
**NOTE:** Current draw for the 750-LFC loudspeaker is dynamic and fluctuates as operating levels change. The indicated number of loudspeakers that can be looped assumes that operating levels are normal and not such that loudspeakers are constantly limiting.

The 750-LFC loudspeaker ships with a gray powerCON 20 cable mount connector, rated at 20 A, for assembling AC looping cables. Assembled AC looping cables are also available from Meyer Sound [PN 28.115.032.03: 3.2 ft (1 m), 13 AWG (2.5 mm<sup>2</sup>)].

## WIRING AC POWER CABLES

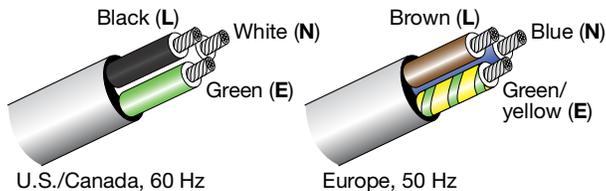
The pins on the gray powerCON 20 cable mount connector are labeled as follows:

- L (Line)
- N (Neutral)
- PE (Protective Earth or Ground)



Gray powerCON 20 Cable Mount Connector

How AC power cables are wired is determined by the type of AC power distribution system used (see “AC Power Distribution” on page 13). When wiring AC power cables for single-line systems, use one of the following wiring schemes:



### AC Wiring Scheme

| Wire Color          |                  | Attach to Terminal                  |
|---------------------|------------------|-------------------------------------|
| U.S. / Canada 60 Hz | European 50 Hz   |                                     |
| Black               | Brown            | Hot or live (L)                     |
| White               | Blue             | Neutral (N)                         |
| Green               | Green and Yellow | Protective earth / ground (E or PE) |

**CAUTION:** When wiring AC power cables and distribution systems, it is important to preserve AC line polarity and connect the earth ground on both ends of the cable. The 750-LFC loudspeaker requires a grounded connection. Always use a grounded outlet and plug. It is extremely important that the system be properly grounded to operate safely and properly. Do not ground-lift the AC cable.

## 750-LFC VOLTAGE REQUIREMENTS

The 750-LFC loudspeaker operates as intended when receiving AC voltage within the following range:

- 90–264 V AC, 50–60 Hz

If the voltage drops below 90 V, the loudspeaker uses stored power to continue operating temporarily; the loudspeaker powers off if the voltage does not return to its operating range.

If the voltage rises above 275 V, the power supply could become damaged.

**CAUTION:** The power source for the 750-LFC loudspeaker should always operate within the required operating range, at least a few volts from the upper and lower ranges. This ensures that AC voltage variations from the service entry—or peak voltage drops due to cable runs—will not cause the loudspeaker’s amplifier to cycle on and off or cause damage to the power supply.

## 750-LFC CURRENT REQUIREMENTS

Current draw for loudspeakers is dynamic and fluctuates as operating levels change. Because different cables and circuit breakers heat up at varying rates, it is important to understand the following types of current ratings and how they affect circuit breaker and cable specifications.

- **Idle Current** — The maximum rms current during idle periods.
- **Maximum Long-Term Continuous Current** — The maximum rms current during a period of at least 10 seconds. The maximum long-term continuous current is used to calculate temperature increases for cables, to ensure that the size and gauge of the cables conform to electrical code standards. The current rating is also used as a rating for slow-reacting thermal breakers, which are recommended for loudspeaker power distribution. In addition, the maximum long-term continuous current can be used to calculate the AC looping capability for 750-LFC loudspeakers.
- **Burst Current** — The maximum rms current during a period of around 1 second. The burst current is used as a rating for magnetic breakers. It is also used for calculating the peak voltage drop in long AC cable runs according to the following formula:  

$$V_{pk}(\text{drop}) = I_{pk} \times R(\text{cable total})$$
- **Maximum Instantaneous Peak Current** — A rating for fast-reacting magnetic breakers.

You can use the following table as a guide to select cable gauges and circuit breaker ratings for the system's operating voltage.

#### 750-LFC Current Draw

| Current Draw                 | 115 V AC    | 230 V AC   | 100 V AC    |
|------------------------------|-------------|------------|-------------|
| Idle                         | 0.39 A rms  | 0.38 A rms | 0.42 A rms  |
| Maximum Long-Term Continuous | 5.3 A rms   | 2.7 A rms  | 6.2 A rms   |
| Burst                        | 9.2 A rms   | 4.4 A rms  | 10.7 A rms  |
| Maximum Instantaneous Peak   | 15.3 A peak | 7.8 A peak | 18.0 A peak |

The minimum electrical service amperage required by a loudspeaker system is the sum of the maximum long-term continuous current for all loudspeakers. An additional 30 percent above the minimum amperage is recommended to prevent peak voltage drops at the service entry.



**NOTE:** For best performance, the AC cable voltage drop should not exceed 10 V (10 percent at 115 V and 5 percent at 230 V).

Make sure that even with AC voltage drops, the voltage always remains within the loudspeaker's operating range.

## INTELLIGENT AC POWER SUPPLY

The 750-LFC loudspeaker's Intelligent AC power supply automatically:

- Selects the correct operating voltage, allowing for international use without manually setting voltage switches
- Eliminates high inrush currents with soft-start power up
- Suppresses high-voltage transients up to several kilovolts
- Filters common mode and differential mode radio frequencies (EMI)
- Sustains operation temporarily during low-voltage periods

## Powering on the 750-LFC Loudspeaker

When powering on the 750-LFC loudspeaker, the following startup events take place over several seconds.

1. Audio output is muted.
2. Voltage is detected and the power supply mode is automatically adjusted as necessary.
3. The power supply ramps up.

4. On the user panel, the **On/Status** LED flashes multiple colors successively.
5. The **On/Status** LED turns solid green, indicating the loudspeaker is ready to output audio.

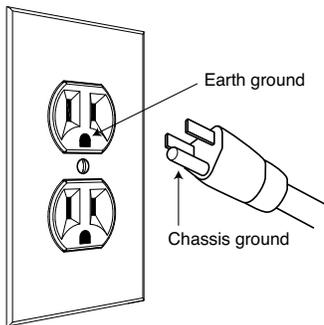


**CAUTION:** If the **On/Status** LED does not turn solid green, or the 750-LFC loudspeaker does not output audio after 10 seconds, remove AC power immediately and verify that the voltage is within the required range. If the problem persists, contact Meyer Sound Technical Support.

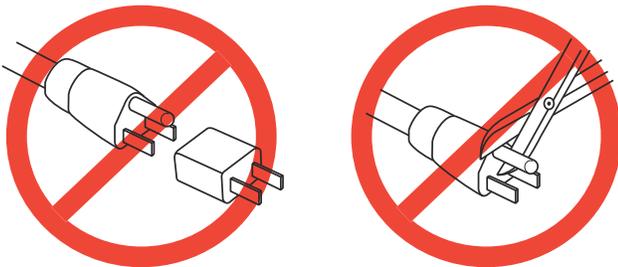
## ELECTRICAL SAFETY GUIDELINES

Make sure to observe the following important electrical and safety guidelines.

- The powerCON 20 connector should not be engaged or disengaged when under load or live.
- The 750-LFC loudspeaker requires a grounded outlet. Always use a grounded outlet and plug.



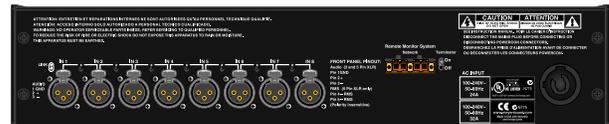
- Do not use a ground-lifting adapter or cut the AC cable ground pin.



- Do not exceed the current capability of the 20 A AC Input connector for the loudspeaker. When looping loudspeakers, consider the total current draw for all loudspeakers on the circuit, including the first loudspeaker.
- Make sure the AC power cable for the loudspeaker has the appropriate power plug (on the other end) for the area in which you will operate the loudspeaker. In addition, the AC power cable must be rated for the total current draw of all loudspeakers looped from the power source.
- Do not operate the unit if the power cable is frayed or broken.
- Keep all liquids away from 750-LFC loudspeakers to avoid hazards from electrical shock.
- Use the cable rings (see “Cable Rings” on page 20) on the rear of the 750-LFC cabinet to reduce strain on the AC power cable (and audio cables). Do not use the cable rings for any other purpose.

## MDM-832 DISTRIBUTION MODULE

The optional MDM-832 Distribution Module simplifies installation by using regular or composite cables to route AC power, balanced audio, and RMS to multiple LINA and 750-LFC units. This approach reduces setup and tear-down time for portable systems, and cable clutter for fixed installations.



Meyer Sound offers the MDM Load Calculator program that estimates AC power and AC load. This program helps users design the AC distribution system using the MDM-832 (or the larger MDM-5000) distribution modules.

The MDM Load Calculator program and the MDM-832 Operating Instructions (which includes information for the MDM-832 and MDM-5000) are available for download on the Meyer Sound website:

[meyersound.com/product/mdm/#software](https://meyersound.com/product/mdm/#software)



## CHAPTER 3: AMPLIFICATION AND AUDIO

The 750-LFC loudspeaker’s driver is powered by a proprietary two-channel, open-loop, class D amplifier. The audio signal is processed with correction filters for flat phase and frequency response, and by driver protection circuitry. Each channel has peak and rms limiters that prevent driver over-excursion and regulate voice coil temperatures.



Figure 11: 750-LFC User Panel (XLR 5-pin version)

The 750-LFC user panel includes Input and Loop output connectors for audio, **Limit** and **On/Status** LEDs, and RMS connectors and controls (see Chapter 5, “RMS Remote Monitoring System”).

 **NOTE:** The RMS capability is optional, so if it is desired, please specify this feature when placing an order.

### AUDIO CONNECTORS

The 750-LFC is available with XLR 3-pin (Figure 12) or 5-pin (Figure 13) connectors for audio Input and audio Loop output. XLR 5-pin connectors accommodate both balanced audio and RMS signals.



Figure 12: XLR 3-Pin Audio Connectors, Input and Loop Output



Figure 13: XLR 5-Pin Audio Connectors, Input and Loop Output

### Audio Input (XLR 3-Pin or 5-Pin Female)

The XLR 3-pin or 5-pin female input connector accepts balanced audio signals with an input impedance of 10 k $\Omega$ . The connector uses the following wiring scheme:

- **Pin 1** — 1 k $\Omega$  to chassis and earth ground (ESD clamped)
- **Pin 2** — Signal (+)
- **Pin 3** — Signal (-)
- **Pin 4** — RMS (polarity insensitive)
- **Pin 5** — RMS (polarity insensitive)
- **Case** — Earth (AC) ground and chassis

 **NOTE:** Pins 4 and 5 (RMS) are included only with XLR 5-pin connectors.

Pins 2 and 3 carry the input as a differential signal. Pin 1 is connected to earth through a 1 k $\Omega$ , 1000 pF, 15 V clamped network. This circuitry provides virtual ground lift for audio frequencies while allowing unwanted signals to bleed to ground. Make sure to use balanced XLR audio cables with pins 1–3 connected on both ends. Telescopic grounding is not recommended and shorting an input connector pin to the case may cause a ground loop, resulting in hum.

 **TIP:** If unwanted noise or hiss is produced by the loudspeaker, disconnect its input cable. If the noise stops, there is most likely nothing wrong with the loudspeaker. To locate the source of the noise, check the audio cable, source audio, and AC power.

### Audio Loop Output (XLR 3-Pin or 5-Pin Male)

The XLR 3-pin or 5-pin male Loop output connector allows multiple loudspeakers to be looped from a single audio source. The Loop output connector uses the same wiring scheme as the Input connector (see “Audio Input (XLR 3-Pin or 5-Pin Female)” above). For applications that require multiple 750-LFC loudspeakers, connect the Loop output of the first loudspeaker to the Input of the second loudspeaker and so forth.

 **NOTE:** The Loop output connector is wired in parallel to the Input connector and transmits the unbuffered source signal even when the loudspeaker is powered off.

### Calculating Load Impedance for Looped Audio Signals

To avoid distortion when looping multiple loudspeakers, make sure the source device can drive the total load impedance of the looped loudspeakers. In addition, the source device must be capable of delivering approximately 20 dBV (10 V rms into 600  $\Omega$ ) to yield the maximum SPL over the operating bandwidth of the loudspeakers.

To calculate the load impedance for the looped loudspeakers, divide 10 k $\Omega$  (the input impedance for a single loudspeaker) by the number of looped loudspeakers. For example, the load impedance for ten 750-LFC loudspeakers is 1000  $\Omega$  (10 k $\Omega$  /10). To drive this number of looped loudspeakers, the source device should have an output impedance of 100  $\Omega$  or less. This same rule applies when looping 750-LFC units with other Meyer Sound self-powered loudspeakers.

 **NOTE:** Most source devices are capable of driving loads no smaller than 10 times their output impedance.



**TIP:** Audio outputs from Meyer Sound’s Galileo GALAXY Network Platform are rated at 50  $\Omega$ . This rating allows each output to drive up to 20 Meyer Sound (10 k $\Omega$ ) loudspeakers without distortion.



**CAUTION:** Make sure that all cables for looped loudspeakers are wired correctly (Pin 1 to Pin 1, Pin 2 to Pin 2, and so forth) to prevent the polarity from being reversed. If one or more loudspeakers in a system have reversed polarity, frequency response and coverage will be significantly degraded.

### CABLE RINGS

Two cable rings (Figure 14) are provided on the rear of the 750-LFC cabinet. Power and audio cables should be tied off to the rings to reduce strain on the cables and prevent damage to them during installation.

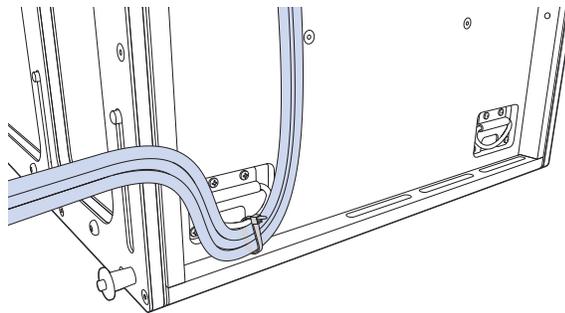


Figure 14: Cables Tied Off to Cable Ring



**CAUTION:** 750-LFC cable rings should only be used to reduce strain on cables. The cable rings should not be used for any other purpose.

### TRUPOWER LIMITING

The 750-LFC loudspeaker employs Meyer Sound’s advanced TruPower® limiting. Conventional limiters assume a constant loudspeaker impedance and set the limiting threshold by measuring voltage alone. This method is inaccurate, because loudspeaker impedances change as frequency content in the source material changes, and as thermal values for the loudspeaker’s voice coil and magnet vary. Consequently, conventional limiters often begin limiting prematurely, which reduces system headroom and dynamic range.

In contrast, TruPower limiting calculates varying loudspeaker impedances by measuring both current and voltage to compute the actual power dissipation in the voice coil. This approach improves performance, both before and during limiting, by allowing the driver to produce the maximum SPL across its entire frequency range, while also retaining signal peaks. TruPower limiting also eliminates power compression at high levels over lengthy periods, which helps regulate voice coil temperatures, thereby extending the life of the driver.

## LF Limit LED

The 750-LFC low-frequency driver is powered by two amplifier channels, one for each voice coil, which are routed to a single limiter. When a safe power level is exceeded in either channel, limiting is engaged for both channels and the LF **Limit** LED (Figure 15) lights on the user panel (the HF **Limit** LED is disabled for the 750-LFC).

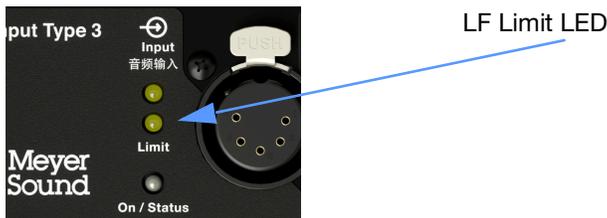


Figure 15: 750-LFC Limit LEDs (HF LED Disabled)

When engaged, the limiter not only protects the driver but also prevents signal peaks from causing excessive distortion in the amplifier channels, thereby preserving headroom and maintaining smooth frequency response at high levels. When levels return to normal—below the limiter threshold—limiting ceases.

The 750-LFC loudspeaker performs within its acoustical specifications at normal temperatures when the LF **Limit** LED is unlit, or when the LED is lit for 2 seconds or less and then turns off for at least 1 second. If the LED remains lit for longer than 3 seconds, the loudspeaker enters hard limiting where:

- Increases to the input level have no effect
- Distortion increases due to clipping
- Drivers are subjected to excessive heat and excursion, thereby compromising their lifespan

**CAUTION:** The **Limit** LED indicates when a safe, optimum level is exceeded. If a 750-LFC loudspeaker system begins to limit before reaching the desired SPL, consider adding more units to the system.

## AMPLIFIER COOLING SYSTEM

The 750-LFC loudspeaker employs natural convection in its cooling system. The amplifier's heat sink provides natural convection cooling from the air flowing near its fins. When exposed to high ambient temperatures or when driven continuously at high output levels, an ultra low-noise, variable-speed fan circulates air internally to keep the 750-LFC cabinet at a safe operating temperature.

**CAUTION:** To prevent the 750-LFC unit from overheating, allow at least 6 inches behind the loudspeaker for proper ventilation. During extreme operation, the 750-LFC loudspeaker's heat sink can reach temperatures up to 80° C (176° F). Wait 15 minutes for the unit to cool before touching.

## ON/STATUS LED

During normal operation, when the 750-LFC is powered on, the **On/Status** LED is solid green. If the loudspeaker encounters a hardware fault, or the unit begins to overheat, the LED flashes red. In some instances, the loudspeaker will continue to output audio while the LED flashes red, though with a reduction in the limiter thresholds (and gain) to protect the loudspeaker.

If a loudspeaker is overheating (for RMS-equipped loudspeakers, you can verify this situation in Compass RMS), a reduction in SPL may be necessary. If, after a reduction in SPL and an appropriate cooling period the **On/Status** LED continues to flash red (does not return to solid green), contact Meyer Sound Technical Support.

If the **On/Status** LED flashes red and the loudspeaker does not output audio, contact Meyer Sound Technical Support immediately.

**CAUTION:** If a 750-LFC loudspeaker system consistently overheats before reaching the desired SPL, consider adding more units to the system.

**NOTE:** During startup, the **On/Status** LED flashes multiple colors successively. For more information about the power on sequence, see “Intelligent AC Power Supply” on page 16.

**TIP:** When the 750-LFC loudspeaker is connected to an RMS network, the Compass RMS software provides additional feedback on the loudspeaker's hardware status and operating temperature. For more information, see Chapter 5, “RMS Remote Monitoring System.”



## CHAPTER 4: QUICKFLY RIGGING

### IMPORTANT SAFETY CONSIDERATIONS!

When installing Meyer Sound loudspeakers and subwoofers, the following precautions should always be observed:

- All Meyer Sound products must be used in accordance with local, state, federal, and industry regulations. It is the owner's and user's responsibility to evaluate the reliability of any rigging method for their application. Rigging should only be carried out by experienced professionals.
- Use mounting and rigging hardware that has been rated to meet or exceed the weight being hung.
- Make sure to attach mounting hardware to the building's structural components (roof truss), and not just to the wall surface.
- Make sure bolts and eyebolts are tightened securely. Meyer Sound recommends using Loctite® on all threaded fasteners.
- Inspect mounting and rigging hardware regularly. Immediately replace any worn or damaged components.

### 750-LFC RIGGING OPTIONS

Table 2 summarizes the available rigging options for the 750-LFC loudspeaker. For complete information about rigging hardware, including dimensions, weight, configuration, and load ratings, refer to the MG-MINA/LINA/750-LFC Assembly Guide (PN 05.207.101.02) available at [meyersound.com/documents](http://meyersound.com/documents).

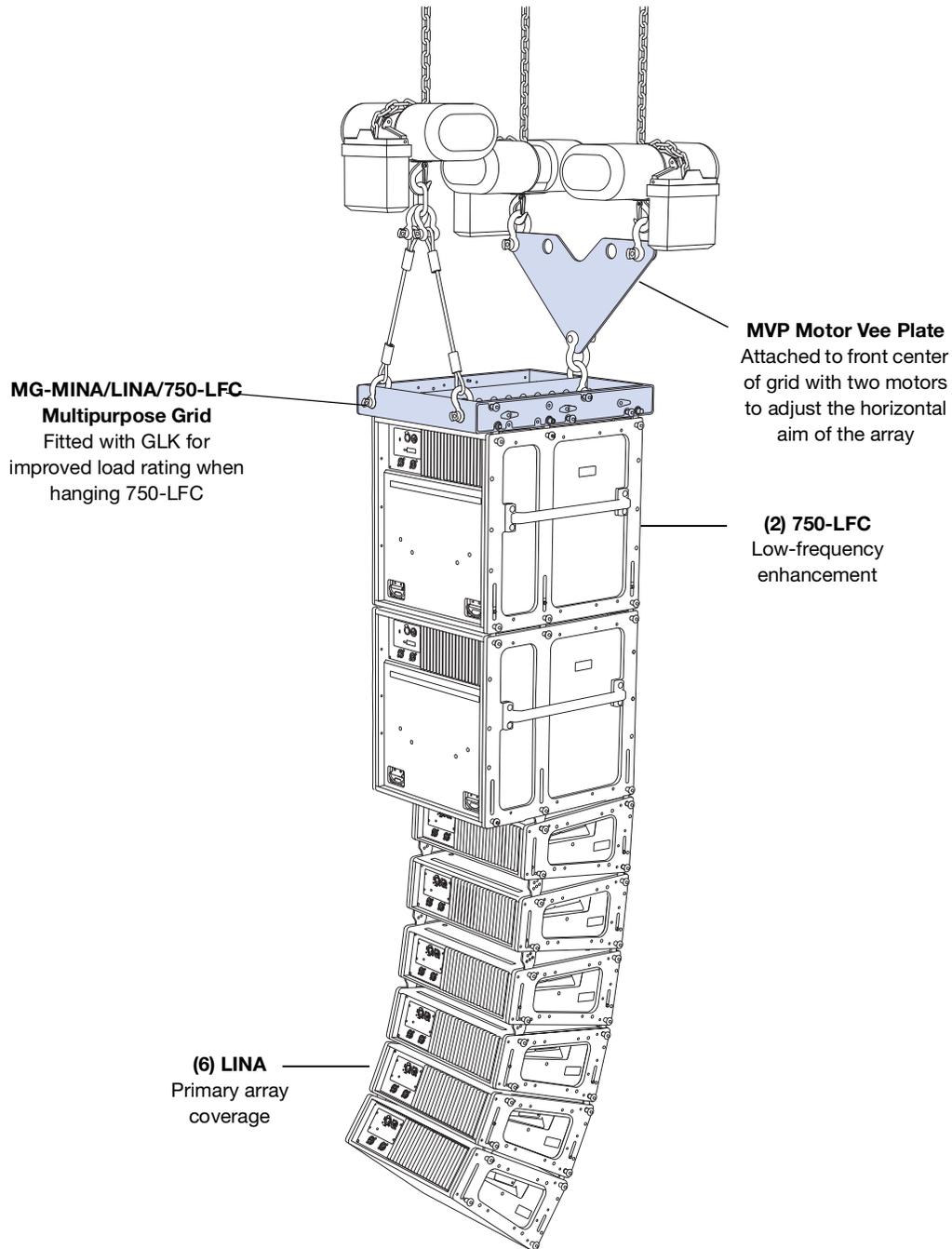
**Table 2: 750-LFC Rigging Options**

| Model   | Weight             | Features  | Required Quick-Release Pins   | Required Shackles    |
|---|--------------------|---|---|----------------------|
| <b>MRK-750</b> rigging kit<br>PN 40.271.009.01  | 25 lb<br>(11.3 kg) | Upgrade kit to allow the 750-LFC loudspeaker to be flown and groundstacked with the MG-MINA/LINA/750-LFC grid; includes hardware for the upgrade, captive GuideALinks and quick-release pins.   | 0.25 in x 0.53 in, (black button)<br>PN 134.039<br>qty 10 included                      | —                    |
| <b>MG-MINA/LINA/750-LFC</b> multipurpose grid assembly kit<br>(PN 40.207.101.01)                  | 39 lb<br>(17.7 kg) | With some restrictions, flies up to 16 LINA cabinets at a 5:1 safety factor and BGV C1 with some angle restrictions (additional load ratings are possible—use MAPP to verify load ratings); supports mixed arrays of LINA and 750-LFC loudspeakers without transition hardware; accommodates a variety of pickup configurations with four corner and 11 center pickup points; can also be used for groundstacking.  | 0.25 in x 0.90 in (black button with 6-inch lanyard),<br>PN 134.036,<br>qty 8 included  | 5/8-inch or 3/4-inch |
| <b>MG-MINA/LINA/750-LFC</b> multipurpose grid with GLK-750-LFC assembly kit<br>(PN 40.207.101.02) | 39 lb<br>(17.7 kg) | With some restrictions, flies up to 16 LINA cabinets at a 5:1 safety factor and BGV C1 with some angle restrictions (additional load ratings are possible—use MAPP to verify load ratings); supports mixed arrays of LINA and 750-LFC loudspeakers without transition hardware; accommodates a variety of pickup configurations with four corner and 11 center pickup points; can also be used for groundstacking; includes MG-MINA to 750-LFC Grid Link (GLK-750-LFC). | 0.25 in x 0.90 in (black button with 6-inch lanyard),<br>PN 134.036,<br>qty 10 included | 5/8-inch or 3/4-inch |
| <b>GLK-750-LFC</b> grid link upgrade kit<br>PN 40.207.301.01                                      | 2 lb<br>(0.9 kg)   | Includes two grid links to upgrade existing MG-MINA/LINA grids (PN 40.207.101.01). These 2 rear links effectively increase the load rating for the grid when attaching 750-LFC loudspeakers. Always use MAPP to verify load ratings.  | 0.25 in x 0.90 in (black button with 6 in lanyard),<br>PN 134.036,<br>qty 2 included    | —                    |
| <b>MVP</b> motor Vee plate kit<br>PN 40.215.184.01  | 20 lb<br>(9.1 kg)  | Fine tunes the horizontal aim of arrays; compatible with MTG-LEO-M, MTG-LYON, MTG-1100, MG-LEOPARD/900, and MG-MINA/LINA/750-LFC grids.   | —   | 3/4-inch or 7/8-inch |
| <b>PBF-LINA</b> pull-back frame kit<br>PN 40.271.080.01   | 4 lb<br>(1.8 kg)   | Attaches to the bottom of LINA and 750-LFC arrays (to the bottom cabinet) and provides pull-back for extreme array downtilt   | 0.25 in x 0.90 in (black button with 6-inch lanyard),<br>PN 134.036,<br>qty 2 included  | 1/2-inch             |

**Table 2: 750-LFC Rigging Options**

|   |                      |   |  |   |
|---|----------------------|---|--|---|
| <b>MCF-750 (rigging)</b><br>caster frame kit<br>PN 40.271.070.02            | 34 lb<br>(15.4 kg)   | Safely transports up to three 750-LFC cabinets. This caster frame is for cabinets equipped with MRK-750 rigging.  | 0.25 in x 0.90 in (black button with 6-inch lanyard),<br>PN 134.036,<br>qty 4 included | — |
| <b>MCF-750 (no rigging)</b><br>caster frame kit<br>PN 40.271.070.03         | 28.7 lb<br>(13.0 kg) | Safely transports up to three 750-LFC cabinets. This caster frame is for cabinets without rigging.  | no pins  | — |
| <b>MSA-STAND Adapter Cup 35MM</b><br>(PN 40.086.013.01)                     | 0.3 lb<br>(0.14 kg)  | This compact cup-type adapter can be used to mount an ULTRA Series Mounting Yoke on a pole to allow for easy panning and tilting of an ULTRA Series loudspeaker.  | —  | — |
| <b>35MM Pole Stand Adapter</b><br>assembly kit<br>PN 40.010.971.01          | 0.36 lb<br>(0.16 kg) | This large base stand adapter can be used to mount the MYA-MINA/LINA Yoke or MUB-MINA/LINA on a pole to allow easy tilting of a MINA or LINA loudspeaker.   | —  | — |
| <b>MPK-POLE-35MM-M20 Adjustable Pole Mount</b><br>kit<br>(PN 40.010.973.01) | 8 lb<br>(3.62 kg)    | Adjustable length 927–1524 mm (36.5–60 in), 35 mm (1.375 in) pole with assisted lift. Lower shaft fits 35 mm cups or use the removable M20 threaded lug for added stability. Upper shaft includes a PAS-M20 Adapter Sleeve to fit loudspeakers with 35 mm and M20 internal pole mounts onto a 35 mm speaker stand. (Can also buy the PAS-M20 Adapter Sleeve separately). Additional 35 mm to 38 mm (1.5 in) adapter included. Also includes a 35 mm pole socket mount cup with M20 thread for the 750-LFC pole mount; using this cup provides a more stable connection. | —  | — |

## Rigging Example, Mixed Array with 750-LFCs and LINAs



## GROUNDSTACKING 750-LFC LOUDSPEAKERS (WITHOUT GRID)

750-LFC loudspeakers can be groundstacked up to three units high, with or without the MRK-750 rigging kit. Protective plastic skids that align with the slots on the cabinet top are included on the bottom of the 750-LFC cabinet. Units can be stacked normally or reversed for cardioid configurations. When groundstacking 750-LFC loudspeakers, make sure the skids for each unit align with the slots in the cabinet tops. When equipped with the MRK-750 rigging kit, the 750-LFC loudspeaker can be groundstacked on the MG-MINA/LINA/750-LFC grid with LINA loudspeakers for mixed groundstacks. (See the MG-MINA/LINA/750-LFC Rigging Assembly Guide, PN 05.207.101.02, available at [meyersound.com/documents](http://meyersound.com/documents).)

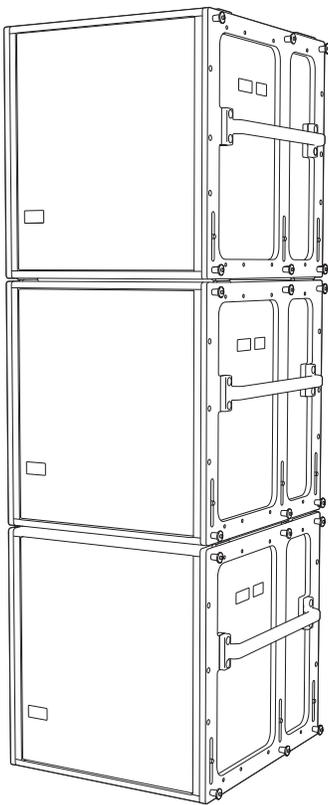


Figure 16: 750-LFC Groundstack (With Rigging)

**CAUTION:** As a safety precaution and to avoid tipping, a maximum of three cabinets is supported for groundstacked 750-LFC loudspeakers.

**NOTE:** 750-LFC need not be equipped with the MRK-750 rigging kit for secure groundstacking of up to three cabinets.

## 750-LFC CARDIOID ARRAYS

The 750-LFC loudspeaker can be configured in cardioid arrays to reduce undesirable low frequency leakage behind the loudspeakers. The loudspeaker's linearity ensures that cardioid patterns behave accurately even at very high levels. Cardioid arrays are achieved by placing three units coplanar to each other (in either a groundstacked or flown array) with one unit facing the opposite direction (Figure 17). Apply signal processing to the rear-facing unit with polarity opposite of the front-facing units and add an additional delay of 2.9 ms relative to the front-facing units. This configuration yields output from the rear-facing unit that cancels output normally present behind the array from the front-facing loudspeakers.

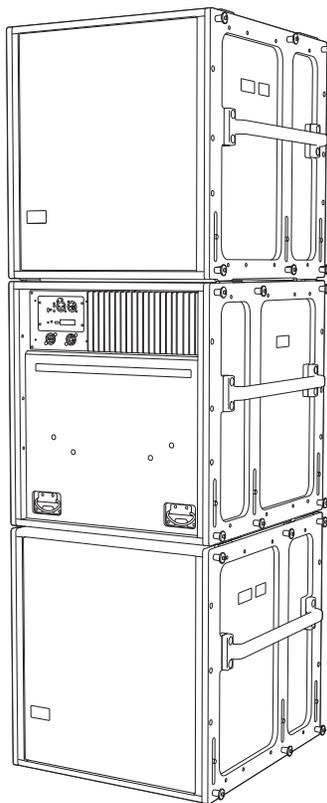


Figure 17: 750-LFC Cardioid Groundstack (With Rigging)

**NOTE:** 750-LFC loudspeakers need not be equipped with the MRK-750 rigging kit for groundstacked cardioid configurations of up to three cabinets.

**NOTE:** 750-LFC cardioid arrays can also be flown from the MG-MINA/LINA/750-LFC multipurpose grid. For more information, see the MG-MINA/LINA/750-LFC Rigging Assembly Guide, PN 05.207.101.02, available at [meyersound.com/documents](http://meyersound.com/documents)

 **NOTE:** To achieve an accurate cardioid pattern, you must use Meyer Sound's MAPP prediction software. Use MAPP to calculate the appropriate ratio of forward- to rear-facing loudspeakers, as well as the processor settings for polarity. A myriad of possible cardioid and directional configurations can be calculated and predicted with MAPP. For more information, contact Meyer Sound Technical Support.

## MRK-750 RIGGING KIT

The optional MRK-750 rigging kit allows the 750-LFC loudspeaker to be flown and groundstacked with the MG-MINA/LINA/750-LFC multipurpose grid. The kit also allows 750-LFC loudspeakers to be flown and groundstacked with LINA loudspeakers with no transition hardware. The rigging kit is available as a factory-installed option or as a field upgrade and uses rugged GuideALinks and intuitive quick-release pins to securely link adjacent loudspeakers in flown and groundstacked array configurations.

 **NOTE:** For more information about the MRK-750 rigging kit, including its kit contents, weight, and installation instructions, refer to the MG-MINA/LINA/750-LFC Assembly Guide (PN 05.207.101.02) available at [meyersound.com/documents](http://meyersound.com/documents).

## 750-LFC GUIDEALINKS

When equipped with the MRK-750 rigging kit, the 750-LFC cabinet includes six captive GuideALinks and six mating link slots that link to adjacent units in flown and groundstacked arrays. Located at the bottom of the cabinet, GuideALinks drop down and into the link slots of the cabinet below it. GuideALinks extend and retract with knobs and are secured with two quick-release pins: one each in the top and bottom cabinets. GuideALinks accommodate reversed units for cardioid arrays. The MRK-750 rigging kit includes ten loudspeaker quick-release pins (0.25 in x 0.53 in, black button, PN 134.039).

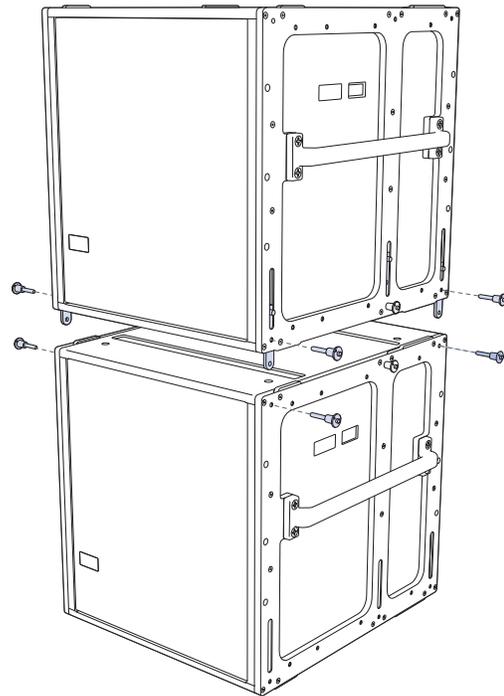


Figure 18: 750-LFC loudspeakers with MRK-750 Rigging Kit, GuideALinks and Quick-Release Pins

## GLK-750 GRID LINK KIT

The original MG-MINA grid (PN 40.207.101.01) includes only the front and the middle links that allow flying MINA or LINA loudspeakers from it. Meyer Sound recommends NOT using the middle link to attach the 750-LFC. Using the middle link halves the load-rating compared to using the front and rear attachment points.

Instead, Meyer Sound recommends using the updated version MG-MINA/LINA/750-LFC (PN 40.207.101.02) to hang 750-LFC loudspeakers. Existing grids can also be updated with the GLK-750-LFC grid link upgrade kit (PN 40.207.301.01), which includes the two rear links, installation hardware, and installation instructions (PN 17.207.301.01). Using the rear links, instead of the middle, effectively increases the load rating for the grid when attaching 750-LFC loudspeakers.

**CAUTION:** Always use MAPP to verify load ratings. Under no circumstance should all six links be used at the same time, as this approach will not add any load capability. In fact, the load capacity will decrease by about half of that provided by the rear links because it cannot be determined which links are actually under tension.

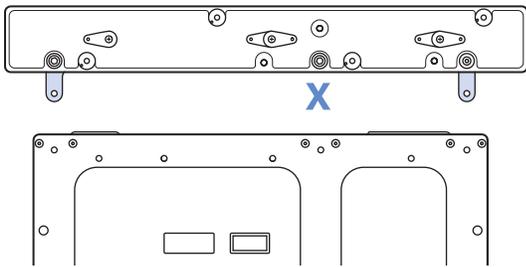


Figure 19: MG-MINA/LINA/750-LFC rigging grid

The 750-LFC cabinet's GuideALinks accommodate both 750-LFC and LINA loudspeakers without transition hardware. The front and rear GuideALinks are used when flying the 750-LFC below the MG-MINA/LINA/750-LFC grid, or when flying it below another 750-LFC (Figure 20). The configuration of the 750-LFC loudspeaker's GuideALinks, front and rear, determines its splay angle. The four corner link slots on the top of the 750-LFC cabinet accept GuideALinks from flown 750-LFC loudspeakers. The front and middle link slots accept LINA GuideALinks when flying LINA loudspeakers below the 750-LFC (Figure 20). The configuration of LINA loudspeaker's GuideALinks, front and rear, determines its splay angle.

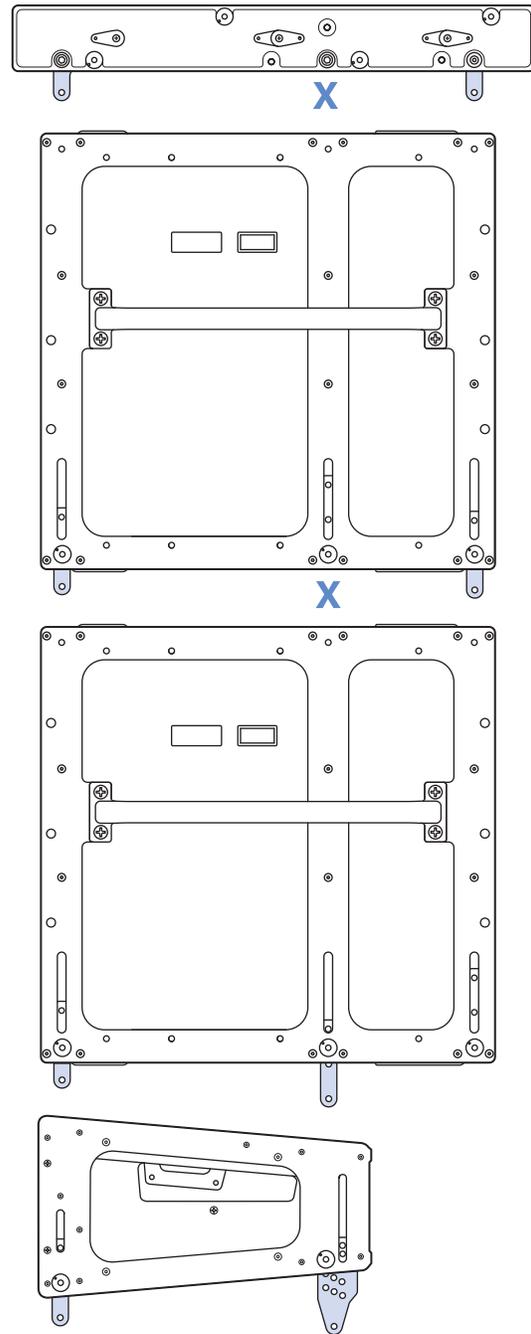


Figure 20: Flown MG-MINA/LINA/750-LFC, 750-LFC and LINA with GuideALink Attachments

The 750-LFC cabinet's front and middle links insert into slots in the MG-MINA/LINA/750-LFC grid when groundstacking the 750-LFC. The 750-LFC cabinet's front and middle GuideALinks slots are used when stacking LINA loudspeakers on top of the 750-LFC (Figure 21).

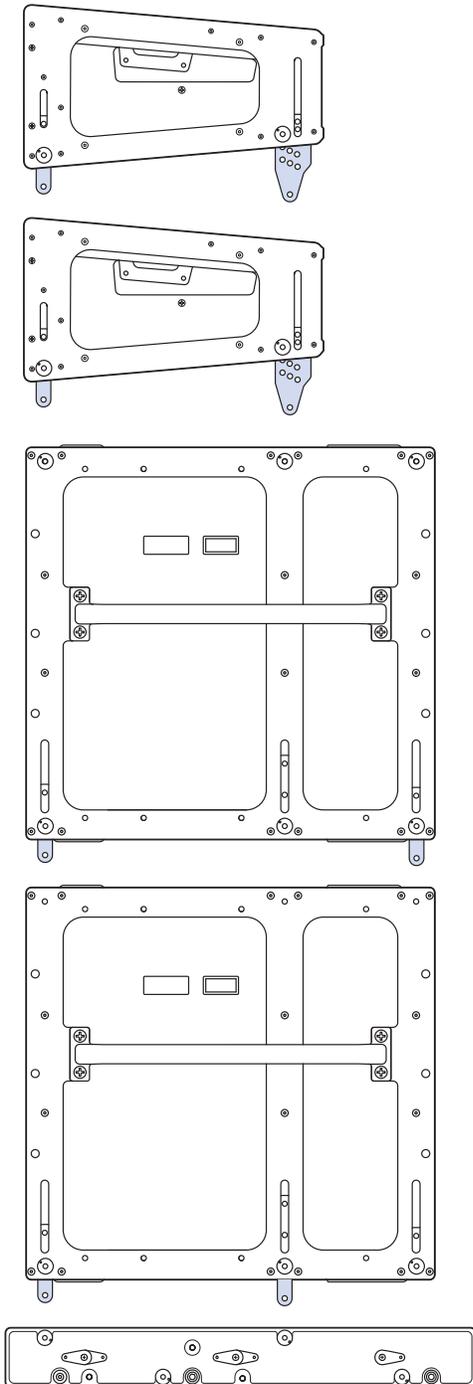


Figure 21: Groundstacked LINA and 750-LFC with GuideALink Attachments

**CAUTION:** Do not use the 750-LFC loudspeaker's middle GuideALinks when flying the 750-LFC below the MG-MINA/LINA/750-LFC grid or when flying below another 750-LFC. Always use the front and rear GuideALinks when flying the 750-LFC.

### 750-LFC Splay Angles

The front and rear GuideALinks attach at angles of 0°, 1.5°, 3.25° or 4.75°, allowing for curved 750-LFC arrays. Because the cabinet's front and rear GuideALinks are symmetrical, the curved arrays can also include cardioid configurations.

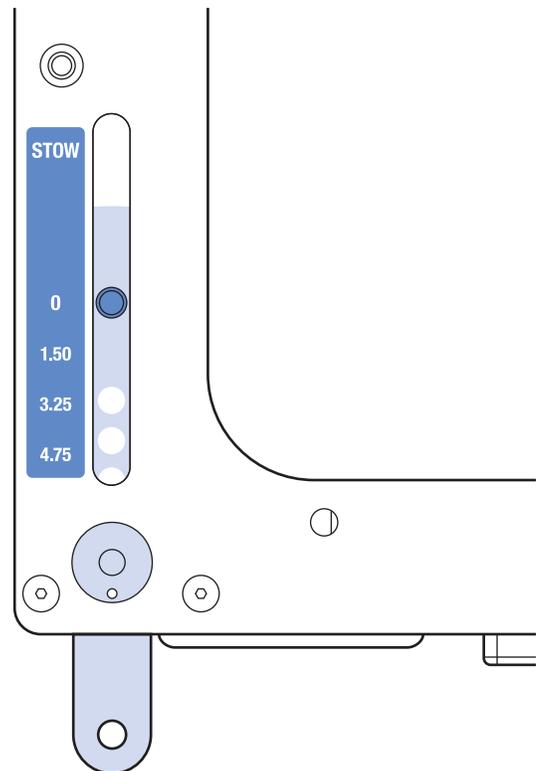


Figure 22: 750-LFC Front GuideALinks Label

The labels next to the front and rear GuideALinks indicate the splay angle between cabinets (when the opposing links are set to 0°). As the links are moved down, the splay angle increases. To stow the GuideALinks, move them all the way up to STOW and pin them.

**NOTE:** Curved 750-LFC arrays do not provide directionality for low-frequency content. The curved array capability of the 750-LFC is provided

to minimize unwanted high frequency reflections from adjacent mid-high arrays and to aesthetically mimic the curvature in adjacent mid-high arrays.

## POLE-MOUNT RECEPTACLE

All 750-LFC cabinets come standard with an integral pole-mount receptacle that allows the subwoofer to be easily paired with ULTRA Series loudspeakers. You can mount Meyer Sound loudspeakers on top of the 750-LFC with a heavy-duty pole and pole-stand adapter.

The 750-LFC pole-mount receptacle comes in two sizes:

- **U.S. version:** 1 1/2 in (38 mm)
- **E.U. version:** 1 3/8 in (35 mm, M20 thread at the bottom)

Meyer Sound offers accessories for this purpose:

- 35MM Pole Stand Adapter (PN 40.010.971.01)
- MSA-STAND Adapter Cup 35MM (PN 40.086.013.01)
- MPK-POLE-35MM-M20 Adjustable Pole Mount (PN 40.010.973.01)

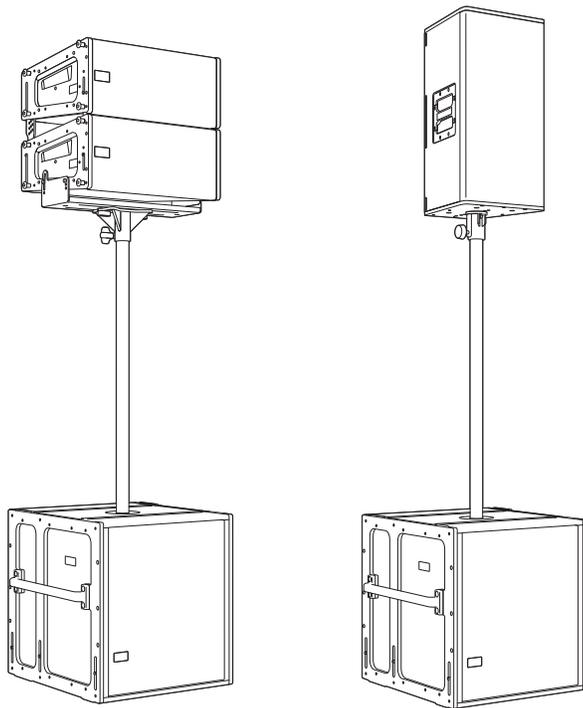


Figure 23: Pole and Pole-Mount Adapter: 750-LFC with 2 LINA, MUB-MINA/LINA U-bracket, and 35MM Pole Stand Adapter (left); 750-LFC with Ultra Series speaker on MSA-STAND Adapter Cup 35MM (right)

The following Meyer Sound loudspeakers can be mounted on top of the 750-LFC cabinet. Make sure that the pole and pole-mount adapter can support the weight of the mounted loudspeakers and that they are installed according to the manufacturer's instructions.

- One ULTRA-X40/42 loudspeaker (55 lb, 25 kg)
- One MINA or LINA loudspeaker with MUB-MINA/LINA U-bracket (47 lb, 21.3 kg)
- Two MINA or LINA loudspeakers with MUB-MINA/LINA U-bracket (90 lb, 40.8 kg).
- One UPA-1P or UPA-2P loudspeaker (77 lb, 34.9 kg)
- One UPJ-1P loudspeaker (46 lb, 20.9 kg)
- One UPJunior loudspeaker (28 lb, 12.7 kg)
- Two UPJunior loudspeakers with MUB-UPJunior U-bracket and MAAM-UPJunior array adapter (70 lb, 31.8 kg)

**CAUTION:** Make sure the pole and pole-mount adapter can support the total weight of the mounted loudspeakers. In particular, heavier loudspeakers are less stable on taller pole mounts. Observe all safety precautions specified by the pole manufacturer.

**TIP:** For more details about the MPK-POLE-35MM-M20 Adjustable Pole Mount Kit, see the ULTRA-X40/42 Operating Instructions manual available at [meyersound.com/documents](http://meyersound.com/documents).

## MCF-750 CASTER FRAME

The MCF-750 caster frame safely transports up to three 750-LFC loudspeakers, making it easy to assemble and disassemble arrays in blocks of three cabinets. There are two versions available: one for MRK-750-equipped cabinets (PN 40.271.070.02), the other for cabinets without rigging (PN 40.271.070.03). The caster frame's sturdy construction allows it to be conveniently moved with forklifts (when cabinets are equipped with the MRK-750 rigging kit only). The MCF-750 can also be used to support 750-LFC loudspeakers in groundstacked configurations.

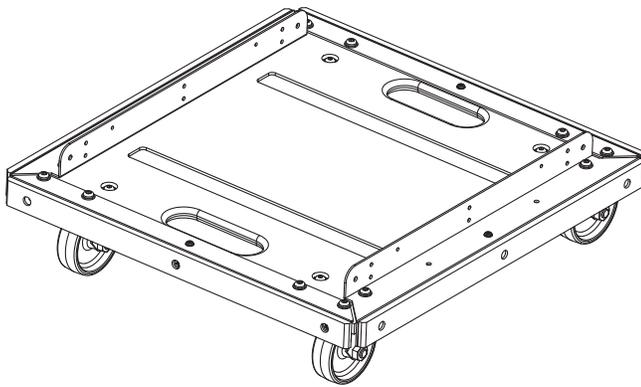


Figure 24: MCF-750 Caster Frame for cabinets without rigging

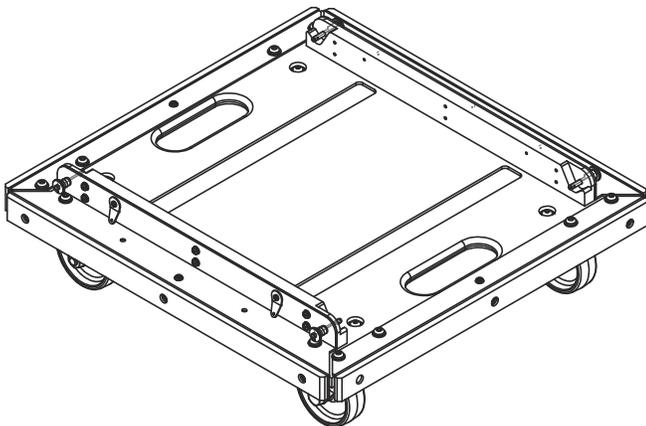


Figure 25: MCF-750 Caster Frame for cabinets with rigging

The caster frame for 750-LFC cabinets equipped with the MRK-750 rigging includes four fixed, 0° link slots that attach to the cabinet at the bottom of the stack and are secured with the quick-release pins (0.25 in x 0.90 in, black button with 6-inch lanyard, PN 134.036) included with the 750-LFC.

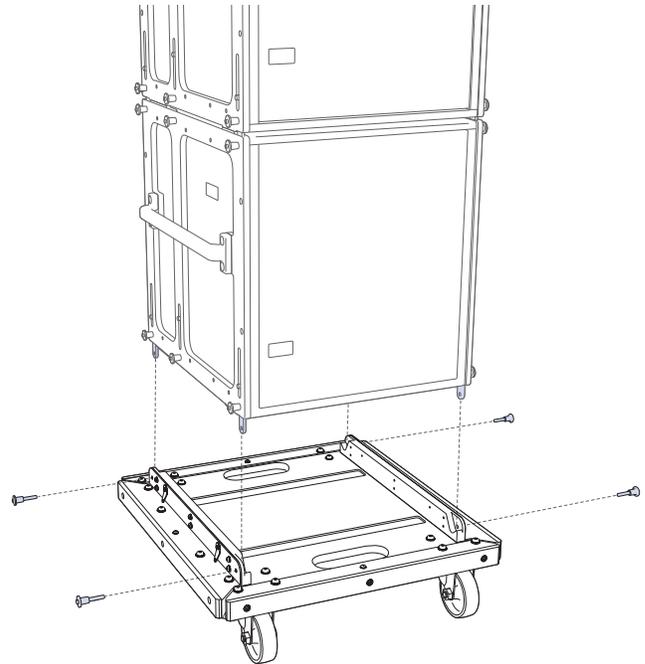


Figure 26: MCF-750 Caster Frame with 750-LFC Stack, Exploded View



**NOTE:** Two versions of the MCF-750 caster frame are available from the factory—configured for cabinets with the MRK-750 rigging kit (PN 40.271.070.02) or without (PN 40.271.070.03).

750-LFC cabinets need not be equipped with the MRK-750 rigging kit for transport with the caster frame. The loudspeaker skids ensure that cabinets stack cleanly on the caster frame. However, to avoid tipping, straps (not included) should be used when transporting cabinets that have not been fitted with the MRK-750 rigging kit.

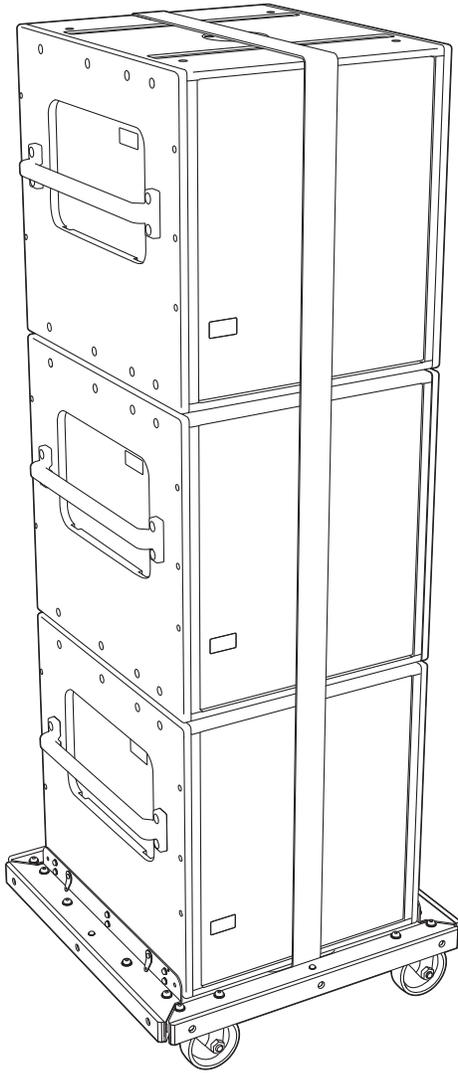


Figure 27: MCF-750 Caster Frame, (3) 750-LFCs (without Rigging), using straps (Not Included)

750-LFC cabinets equipped with the MRK-750 rigging kit provide for more secure transport, because the bottom cabinet can be linked and pinned to the caster frame. The three cabinets can be linked and pinned together as well.

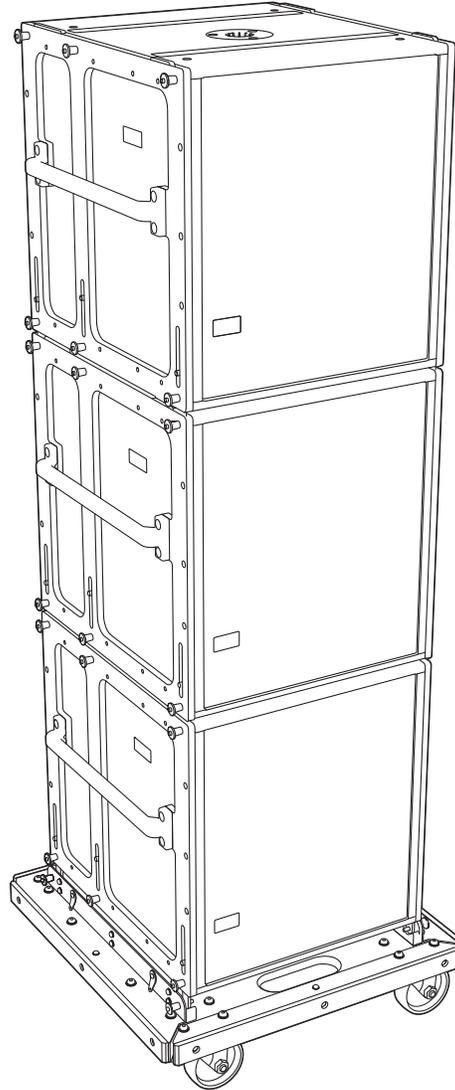


Figure 28: MCF-750 Caster Frame, (3) 750-LFCs (with Rigging)



**TIP:** Durable nylon pullover covers, sized for stacks of 2 units or 3 units, are available to protect 750-LFC cabinets during transport.

Special wraparound covers are also available to accommodate stacks with grids on top.



**TIP:** The MG-MINA/LINA/750-LFC grid can travel installed on top of 750-LFC stacks on the MCF-750 caster frame.

## SAFETY GUIDELINES FOR THE MCF-750 CASTER FRAME

- Do not stack more than three cabinets on the MCF-750 caster frame.
- Use straps when transporting 750-LFC loudspeakers that have not been fitted with the MRK-750 rigging kit.
- To avoid tipping, transport stacks with loudspeakers linked and locked at 0-degree splay angles.
- Forklifts should only be used to move the MCF-750 caster frame when cabinets have been outfitted with the MRK-750 rigging kit and the cabinets have been securely linked.
- When lifting a stack with a forklift, always keep the forks wide and close to the caster frame's wheels. Failing to do so may bend the caster frame or cause the stack to tip.
- When groundstacking 750-LFC loudspeakers with the caster frame, make sure that all four caster wheels are blocked to prevent the stack from rolling away.



**CAUTION:** The caster frame must be removed before flying a loudspeaker array.

### DIMENSIONS: MCF-750 CASTER FRAME WITH RIGGING

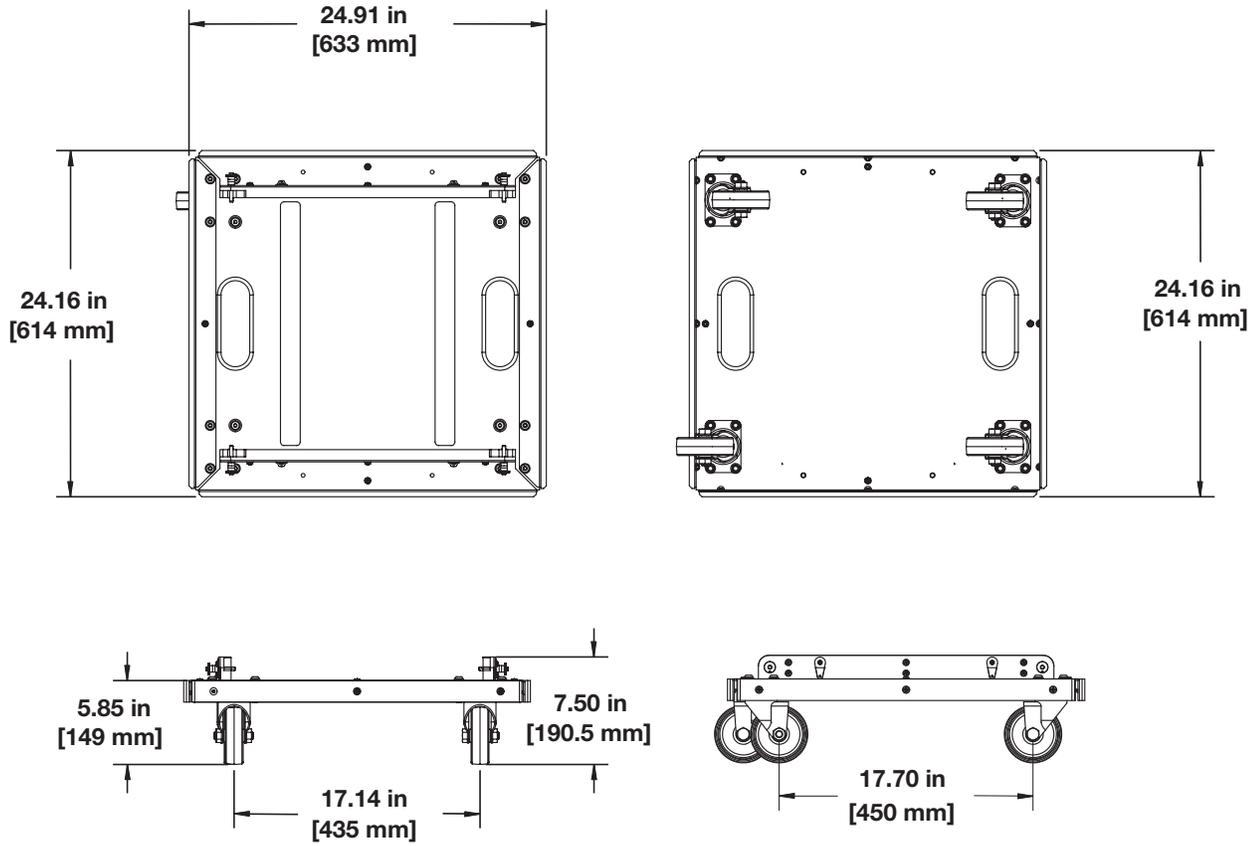


Figure 29: MCF-750 Caster Frame Dimensions (for cabinets with rigging)

MCF-750 Caster Frame with Rigging Weight: 34 lbs (15.4 kg)

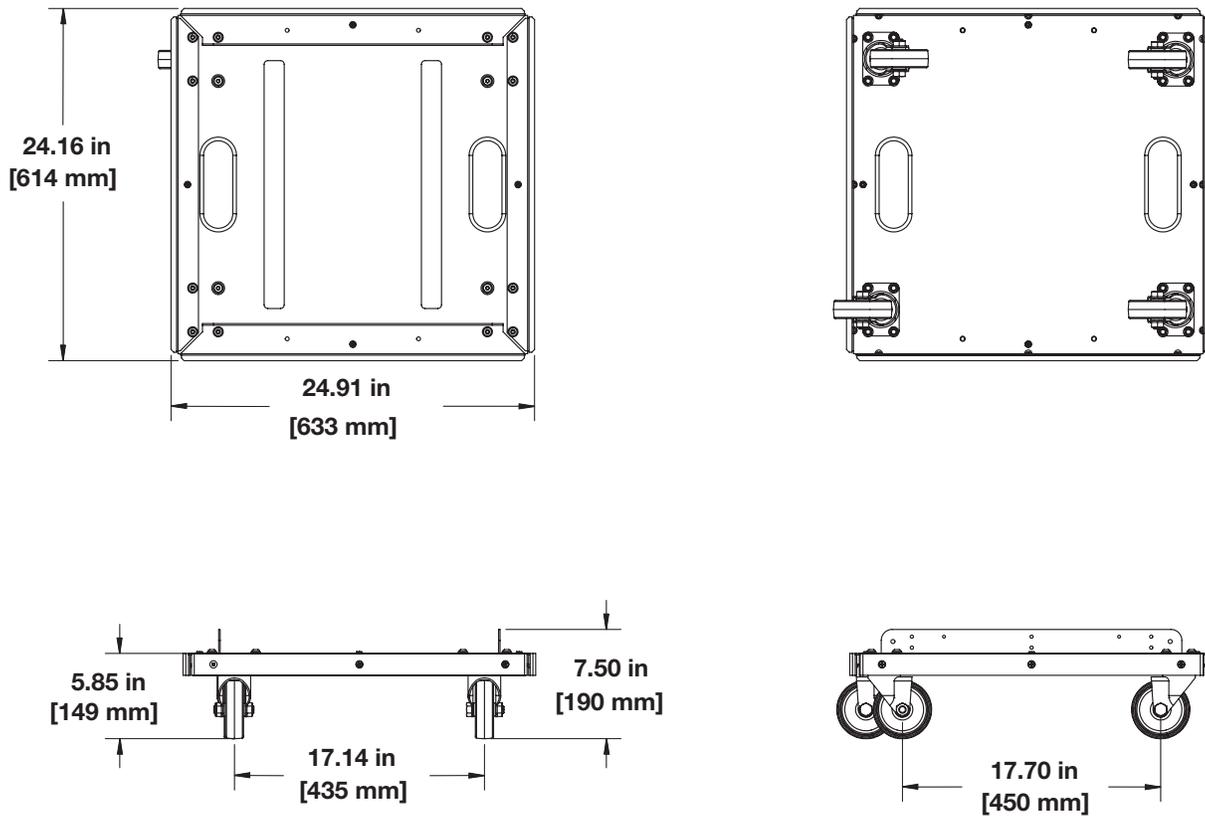
**DIMENSIONS: MCF-750 CASTER FRAME WITHOUT RIGGING**

Figure 30: MCF-750 Caster Frame Dimensions (for cabinets without rigging)

MCF-750 Caster Frame without Rigging Weight: 28.7 lbs (13.0 kg)



## CHAPTER 5: RMS REMOTE MONITORING SYSTEM

750-LFC optionally includes an RMS remote monitoring system module, allowing the loudspeaker to be connected to an RMS network. RMS reports, in real time, the status and power usage of multiple Meyer Sound loudspeakers from a Mac or Windows-based computer. The RMServer communicates with Meyer Sound loudspeakers equipped with RMS modules. RMServer is a compact, Ethernet-based hardware unit with two FT-10 RMS data ports. RMServer stores system configurations internally, eliminating most manual data entry. Systems can be monitored from a computer at front-of-house or backstage, or from a laptop anywhere within the venue over WiFi.

 **NOTE:** For the latest RMS system requirements, visit [meyersound.com/products](http://meyersound.com/products).

 **NOTE:** RMS does not control AC power.

### COMPASS RMS SOFTWARE

Compass RMS software provides extensive system status and performance data for each loudspeaker, including amplifier voltage, limiting activity, power output, fan and driver status, and mute and solo capability. Loudspeakers are added to the RMS network and assigned a node name during a one-time discovery procedure. When loudspeakers are identified on the RMS network, they appear in Compass RMS as icons that can be customized to suit your needs (Figure 31).



Figure 31: Compass RMS Window

Individual loudspeakers can be physically identified with the Wink option in RMS, which lights the Wink LED on the RMS module of that particular loudspeaker. Conversely, a loudspeaker can be identified in Compass RMS by pressing the Identify button on the loudspeaker's RMS module.

Loudspeaker icons can be arranged in Compass RMS and saved as pages to represent how the loudspeakers have been deployed in the system. Multiple pages can be saved and recalled for specific performances and venues.

### RMS MODULE

The 750-LFC RMS user panel (Figure 32) includes an Identify button, Remote Mute switch, Wink/Activity LED, and two Network connectors.

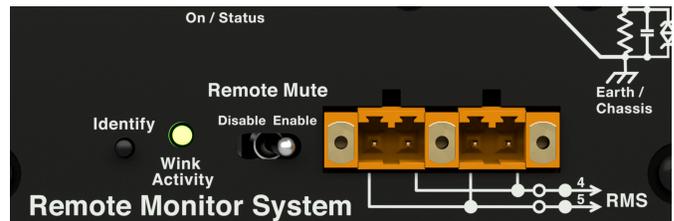


Figure 32: 750-LFC RMS Module

 **NOTE:** The Identify button and Wink/Activity LED on the RMS user panel are used exclusively by RMS and have no effect on the acoustical or electrical activity of the loudspeaker.

### Identify Button

The Identify button serves the following functions:

- If the loudspeaker has not yet been discovered on the RMS network (Wink/Activity LED not lit), press the Identify button to allow Compass RMS to discover it.
- To remove the loudspeaker from the RMS network, press and hold the Identify button during startup (see “Resetting the RMS Module” on page 38).
- To *wink* a discovered loudspeaker, press the Identify button. The Wink LED on the loudspeaker icon in Compass RMS lights up and the Wink/Activity LED on the loudspeaker's RMS user panel turns solid green. Press the Identify button again to unwink the loudspeaker.

 **TIP:** The loudspeaker can also be winked by clicking the Wink button on the loudspeaker icon in Compass RMS.

### Wink/Activity LED (Green)

The green Wink/Activity LED indicates the status of the loudspeaker:

- During startup, the LED flashes green 10 times.
- If the loudspeaker has not yet been discovered on the RMS network, the LED is not lit after startup.
- If the loudspeaker has been successfully discovered on the RMS network, the LED flashes green continuously and flashes more rapidly with increased data activity.
- When the loudspeaker is winked, either by clicking the Wink button in Compass RMS or by pressing the Identify button on the RMS user panel, the LED is solid green. The LED remains solid green until the loudspeaker is unwinked.

 **TIP:** The Wink function is useful for identifying the physical loudspeaker corresponding to a loudspeaker icon in Compass RMS.

## Remote Mute Switch

The recessed Remote Mute switch on the 750-LFC RMS module (Figure 33) determines whether Compass RMS can control muting and soloing of the loudspeaker. The 750-LFC ships from the factory with the switch enabled.



Figure 33: Remote Mute Switch

- **Disable:** When the Remote Mute switch is set to Disable (to the left), the loudspeaker cannot be muted or soloed from Compass RMS.
- **Enable:** When the Remote Mute switch is set to Enable (to the right), the loudspeaker can be muted and soloed from Compass RMS.

 **NOTE:** Compass RMS has a preference that can be set to disable Mute and Solo functions, eliminating any possibility of accidentally muting loudspeakers.

## RMS Network Connectors

The Weidmuller 2-conductor, locking connectors transfer data to and from the RMS network. Two connectors are provided to allow for easy connection of multiple (daisy-chained) loudspeakers on the network. Included with each RMS-equipped loudspeaker are RMS cable connectors and mounting blocks for constructing RMS cables. The mounting blocks allow the Weidmuller connectors to be securely attached to the RMS module with screws.

## NEURON ID FOR RMS MODULE

Each RMS module has a unique 12-character Neuron ID (NID) that identifies the loudspeaker on the network. The NID is automatically detected by RMServer but can also be entered manually, if necessary, when configuring RMS systems in Compass RMS without loudspeakers present. The NID label is located on the RMS user panel near the orange Network connectors.

## RESETTING THE RMS MODULE

You can use the Identify button to reset the 750-LFC RMS module when powering on the loudspeaker. This action will cause the module to be removed from the RMS network.

To reset the RMS module:

1. Power down the loudspeaker.
2. Press and hold the Identify button.
3. While continuing to hold down the Identify button, power on the loudspeaker.
4. After the Wink/Status LED flashes on and off, release the Identify button. The RMS module is reset and the loudspeaker is removed from the RMS network.

## CHAPTER 6: SYSTEM DESIGN AND INTEGRATION TOOLS

This chapter introduces MAPP, Meyer Sound's patented system design tool and the Galileo GALAXY Network Platform.

### MAPP SYSTEM DESIGN TOOL

The MAPP System Design Tool (Figure 34) is a powerful, cross-platform application for accurately predicting the coverage pattern, frequency response, phase response, impulse response, and SPL capability of individual or arrayed Meyer Sound loudspeakers.

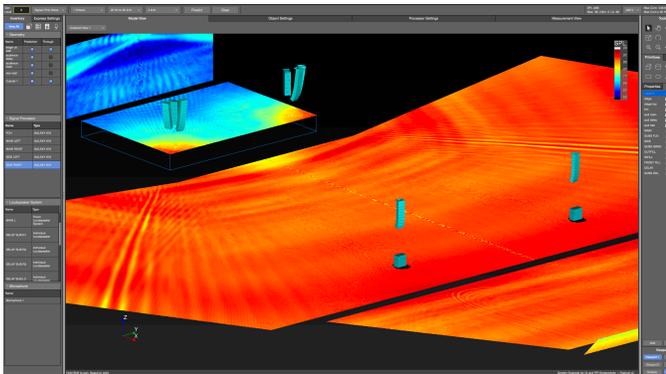


Figure 34: MAPP System Design Tool

Whether planning for fixed installations or for tours with multiple venues, use MAPP to accurately predict the appropriate loudspeaker deployment for each job, complete with coverage data, system delay and equalization settings, rigging information, and detailed design illustrations. MAPP's accurate, high-resolution predictions ensure that systems will perform as intended, thereby eliminating unexpected coverage problems and minimizing onsite adjustments.

The key to the accuracy of MAPP's predictions is Meyer Sound's exhaustive database of loudspeaker measurements. Performance predictions for each loudspeaker are based on 3-dimensional, 65,000+ 1/48th-octave-band measurements taken in the Meyer Sound anechoic chamber. The extraordinary consistency between Meyer Sound loudspeakers guarantees that predictions from MAPP will closely match their actual performance.

MAPP software allows for configuration of Meyer Sound loudspeaker systems and definition of the environment in which they operate, including air temperature, pressure, humidity, and the location of prediction surfaces. Importing both CAD (.DXF) and Sketchup (.SKP) files containing detailed venue information to act as an anchor model to the prediction surfaces and a visual aid to facilitate prediction data interpretation is also possible.



**TIP:** See [meyersound.com/products](https://meyersound.com/products) for more information about and support for MAPP.

### MAPP Capabilities

With MAPP, the user can:

- Simulate different loudspeaker configurations to refine system designs and determine the best coverage for intended audience areas
- Model loudspeaker interactions to locate constructive and destructive interferences so that loudspeakers can be re-aimed and repositioned as necessary
- Place microphones anywhere in the Model View space and predict loudspeaker frequency response, phase response, and sound pressure levels at each microphone position
- Determine delay settings for fill loudspeakers using the Inverse Fast Fourier Transform and phase response feature
- Preview the results of signal processing to determine optimum settings for the best system response
- Automatically calculate load information for arrays to determine necessary minimum rigging capacity, front-to-back weight distribution, and center of gravity location
- Generate and export system images and system PDF reports for client presentations
- Synchronize GALAXY processor output channel settings in real time with virtual or real GALAXY units, allowing in-the-field changes to be predicted during system alignments.

## **GALILEO GALAXY NETWORK PLATFORM**

The Galileo GALAXY Network Platform is a sophisticated loudspeaker management tool for controlling all Meyer Sound speaker types. The GALAXY loudspeaker processor extends a high level of audio control in driving and aligning loudspeaker systems with multiple zones. It provides a powerful tool set for corrective equalization (EQ) and creative fine-tuning for a full range of applications from touring to cinema.

Users can readily program the GALAXY processor using Compass software running on a host computer or via the Compass Go application for the iPad. Connecting MAPP to the GALAXY processor will also allow the user to push output channel settings created in MAPP as a starting point. Compass Control Software includes custom-designed settings for each family of speakers, as well as to integrate families together. For example, the Product Integration feature matches the phase characteristics between Meyer speaker families to ensure the most coherent summation.

Processing tools for inputs and outputs include delay, parametric EQ and U-Shaping EQ. Output processing also includes polarity reversal, Low-Mid Beam control (LMBC), atmospheric correction, and All Pass filters.

The built-in summing and delay matrices allow a user to easily assign gain and delay values, respectively, at each cross point. This capability greatly facilitates using one loudspeaker to satisfy multiple purposes.

Front panel controls let a user intuitively and quickly operate a GALAXY processor without a computer during live use.

The GALAXY 408, GALAXY 816 and GALAXY 816-AES3 processor versions have the same audio processing capability with different I/O. See [www.meyersound.com](http://www.meyersound.com) to locate their datasheets for more information.

## APPENDIX A: RAIN HOODS

Weather-protected 750-LFCs include a rain hood for indoor/outdoor touring and sheltered outdoor installations. Meyer Sound offers two rainhood models: a fixed rigid rainhood for permanent installations and a collapsible hood for portable applications. Please specify your rainhood preference when placing the order.

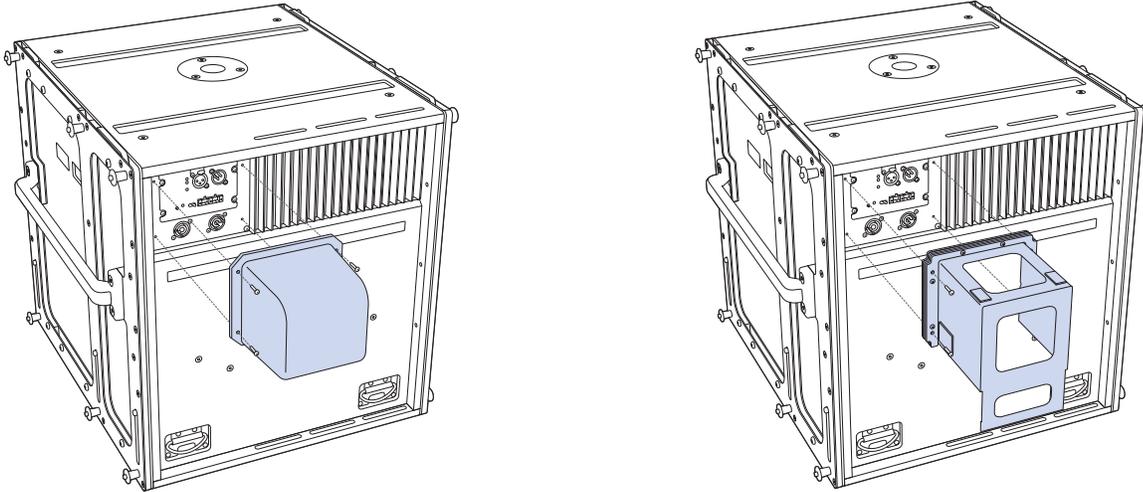


Figure 35: 750-LFC with Rigid Rain Hood (left) and Collapsible Rain Hood (right)

### 750-LFC RIGID RAIN HOOD

The 750-LFC rigid removable rain hood is easily attached and removed with the included four screws.

To attach the 750-LFC rigid rain hood:

1. Attach any required cables to the 750-LFC loudspeaker.
2. Attach the rain hood to the user panel, and secure it to the center of the panel with the four pan head Phillips 6/32 x 0.38-inch stainless steel screws provided.
3. Make sure to tighten the screws to create a good seal against the user panel. Meyer Sound recommends using a torque value of 10–12 in-lbs (1.1–1.4 N·m).

### 750-LFC COLLAPSIBLE RAIN HOOD

The 750-LFC collapsible rain hood is installed on the unit when shipped. Four screws secure its frame permanently.

To use the 750-LFC Collapsible rain hood:

1. Detach the Velcro straps and extend the rainhood
2. Extend the lower flap for splash protection.
3. Attach any required cables to the 750-LFC.

The clear windows let you easily locate the connectors on the user panel.

4. To stow the rainhood, reverse the steps.



**CAUTION:** The weather-protected 750-LFC must be mounted with a 0-degree tilt, or preferably with a slight downtilt. This shields the driver from the elements and does not accumulate water.



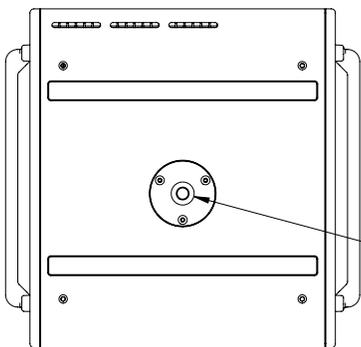
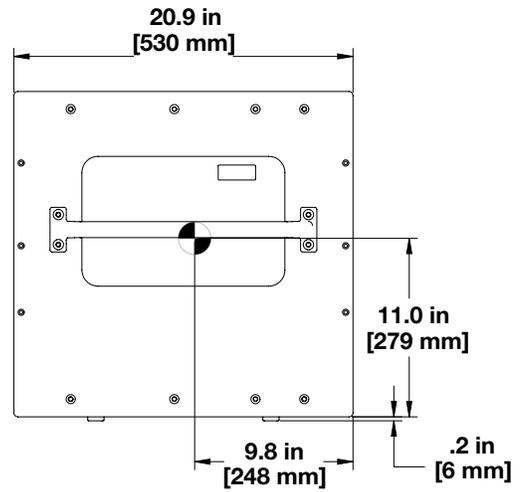
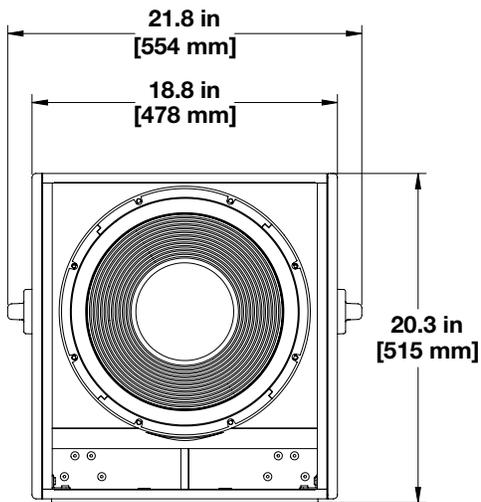
## APPENDIX B: 750-LFC SPECIFICATIONS

Loudspeaker system predictions for coverage and SPL are available in Meyer Sound's MAPP prediction software, which can be found on the Meyer Sound website: [meyersound.com/products](http://meyersound.com/products).

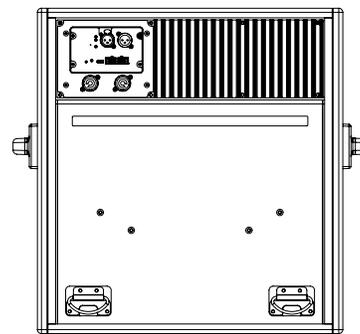
| ACOUSTICAL                |  |
|---------------------------|--|
| Operating Frequency Range | 35 Hz – 125 Hz<br><b>Note:</b> Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.   |
| Frequency Response        | 37 – 110 Hz (±4 dB)<br><b>Note:</b> Measured in half-space with pink noise at 4 m, 1/3-octave frequency resolution.  |
| Phase Response            | 43 Hz – 110 Hz ±30 degrees   |
| Linear Peak SPL           | <b>130.5 dB with crest factor &gt;9 dB (M-noise)</b> , 130.5 dB (Pink-Noise), 132 dB (B-Noise)<br><b>Note:</b> Linear Peak SPL is measured in half-space at 4 m referred to 1 m. Loudspeaker SPL compression measured at the onset of limiting, 2-hour duration, and 50° C ambient temperature is <2 dB.<br><b>M-noise</b> 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.<br><b>Pink noise</b> is a full bandwidth test signal with a peak-to-RMS ratio of 12.5 dB.<br><b>B-noise</b> is a Meyer Sound test signal that ensures measurements reflect system behavior when reproducing the most common input spectrum, and verify there is still headroom over pink 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 kΩ differential between pins 2 and 3  |
| Wiring                    | Pin 1: Chassis/earth through 1 kΩ, 1000 pF, 15 V clamped network to provide virtual ground lift at audio frequencies<br>Pin 2: Signal (+)<br>Pin 3: Signal (-)<br>Pin 4: RMS (polarity insensitive)<br>Pin 5: RMS (polarity insensitive)<br>Case: Earth ground and chassis<br><b>Note:</b> Pins 4 and 5 (RMS) included only with XLR 5-pin connectors.   |
| 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  |

| <b>AMPLIFIER</b>  |   |                     |                     |
|---|---|---------------------|---------------------|
| Type  | Two-channel, open-loop, class D   |                     |                     |
| Total Output Power  | 3100 W peak<br><b>Note:</b> Peak power based on the maximum unclipped voltage the amplifier will produce into the nominal load impedance.   |                     |                     |
| THD, IM, TIM  | <0.02%  |                     |                     |
| Cooling   | Convection  |                     |                     |
| <b>AC POWER</b>   |   |                     |                     |
| Connectors  | powerCON 20 input with loop output  |                     |                     |
| Automatic Voltage Selection   | 90–265 V AC; 50–60 Hz   |                     |                     |
| Safety Rated Voltage Range  | 100–240 V AC, 50–60 Hz  |                     |                     |
| Turn-on/off Points  | Turn-on: 90 V AC; Turn-off: none; internal fuse protection above 265 V AC   |                     |                     |
| <b>Current Draw</b>   | <b>115 V AC</b>   | <b>230 V AC</b>     | <b>100 V AC</b>     |
| Idle  | 0.39 A rms  | 0.38 A rms          | 0.42 A rms          |
| Maximum Long-Term Continuous  | 5.3 A rms   | 2.7 A rms           | 6.2 A rms           |
| Burst   | 9.2 A rms   | 4.4 A rms           | 10.7 A rms          |
| Maximum Instantaneous Peak  | 15.3 A peak   | 7.8 A peak          | 18 A peak           |
| Inrush  | <20.0 A peak  |                     |                     |
| <b>RMS NETWORK (OPTIONAL)</b>   |   |                     |                     |
|   | Two-conductor, twisted-pair network, capable of reporting all operating parameters of amplifiers to system operator's host computer.  |                     |                     |
| <b>PHYSICAL</b>   |   |                     |                     |
| Dimensions  | 21.80 in (554 mm) W   | 20.30 in (515 mm) H | 20.88 in (530 mm) D |
| Dimensions (with rigging)   | 21.55 in (547 mm) W   | 20.43 in (519 mm) H | 20.88 in (530 mm) D |
| Weight  | 89 lb (40.3 kg)   |                     |                     |
| Weight (with rigging)   | 105 lb (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°, and 4.75° splay angles); detachable side handles. Rigging allows ground-stacked, flown, and cardioid configurations |                     |                     |
| Pole Mount  | U.S. version: 1 1/2 in (38 mm)<br>E.U. version: 1 3/8 in (35 mm and M20 thread at the bottom)   |                     |                     |
| <b>ENVIRONMENTAL</b>  |   |                     |                     |
| Operating Temperature   | 0° C to +45° C  |                     |                     |
| Non Operating Temperature   | –40° C to +75° C  |                     |                     |
| Humidity  | To 95% at 45° C (non-condensing)  |                     |                     |
| Operating Altitude  | To 5,000 m (16,404 ft)  |                     |                     |
| Non Operating Altitude  | To 12,000 m (39,000 ft)   |                     |                     |
| Shock   | 30 g 11 msec half-sine on each of 6 sides   |                     |                     |
| Vibration   | 10 Hz – 55 Hz (0.010 m peak-to-peak excursion)  |                     |                     |
|  |   |                     |                     |

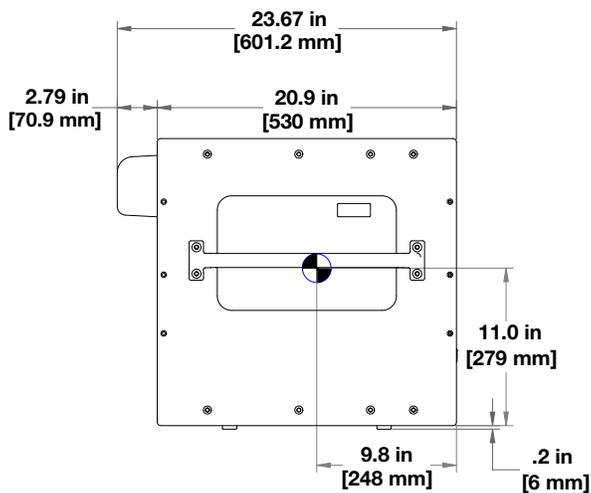
### 750-LFC WITHOUT RIGGING DIMENSIONS



$\phi$  1 1/2 in  $\phi$  [38 mm] U.S.  
 $\phi$  1 3/8 in  $\phi$  [35 mm] E.U.  
 M20 thread at the bottom

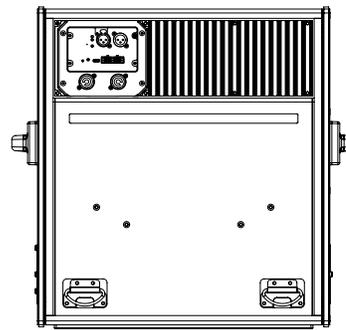
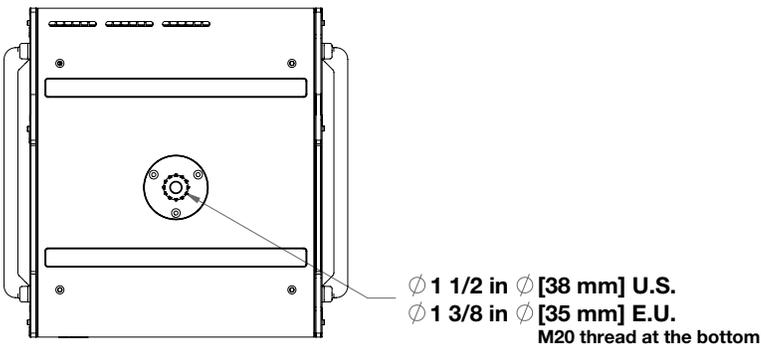
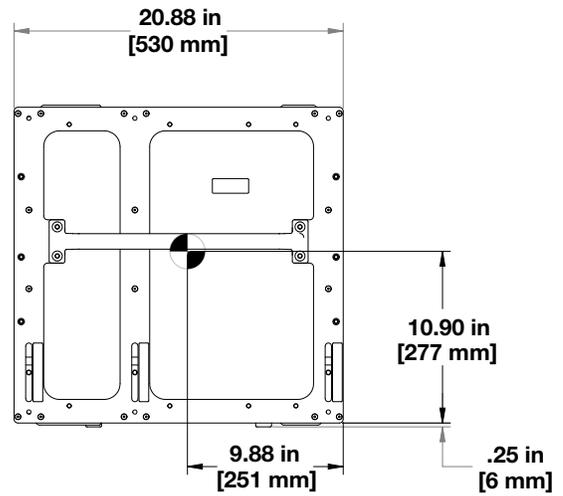
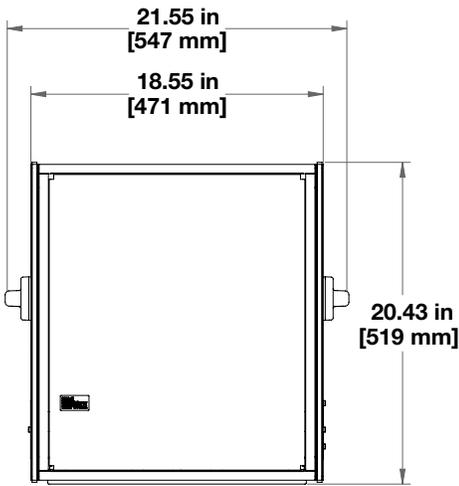


750-LFC dimensions without rigging

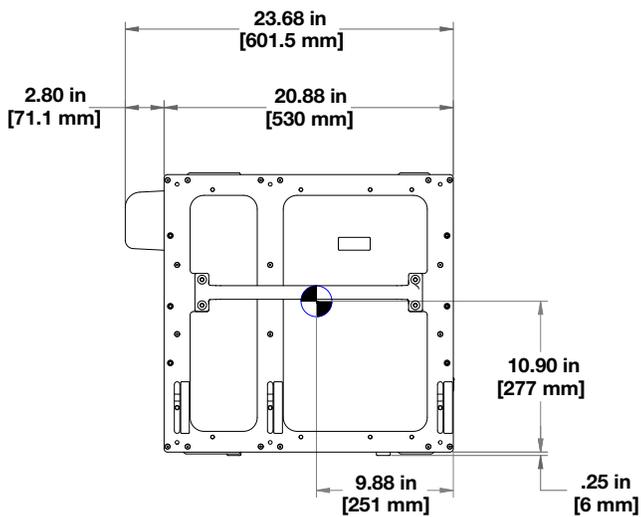


750-LFC dimensions without rigging and with rain hood installed

## 750-LFC WITH RIGGING DIMENSIONS



750-LFC dimensions with rigging



750-LFC dimensions with rigging and rain hood installed

**Federal Communications Commission (FCC) Statement**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Industry Canada Compliance Statement**

This Class A digital apparatus complies with Canadian ICES-003.

**Avis De Conformité à La Réglementation D'industrie Canada**

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

**EN 55032 (CISPR 32) Statement**

Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference











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750-LFC Operating Instructions  
PN 05.271.005.01 C2