

# MSL-6 Q&A

*The Meyer Sound MSL-6 is a powerful, high-Q loudspeaker system for long-throw sound reinforcement applications.*

*The MSL-6 comprises three high-frequency horn drivers (2" throat, 4" diaphragm diameter) and two horn-loaded 12" cone low-frequency drivers in a vented cabinet. An integral electronics package houses a four-channel 2480 watt power amplifier, an active crossover with optimized pole-zero alignment filters, Meyer exclusive TruPower™ Limiting driver protection, Intelligent AC™ voltage selection and RMS™ Remote Monitoring System network circuitry. The MSL-6 features a frequency response of 65 Hz to 16 kHz  $\pm 4$  dB with  $\pm 30^\circ$  phase response from 250 Hz to 12 kHz, and delivers 145 dB peak SPL at one meter.*

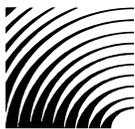


## **WHAT ARE THE INTENDED APPLICATIONS FOR THE MSL-6?**

The MSL-6 is optimized for high-quality long-throw reinforcement. Used singly or arrayed for increased coverage, the MSL-6 is well suited for voice reinforcement applications such as paging and announcing in sports arenas or center clusters in large-scale music reinforcement systems. The MSL-6 may also be augmented with mid-bass and/or subwoofer loudspeakers to form full-range main PA arrays.

## **WHAT ADVANTAGES DOES THE MSL-6 BRING TO LONG-THROW APPLICATIONS?**

The MSL-6 features a unique high-frequency section comprising a horizontal array of three horns, the outer two of which are amplified independently of the inner one. Optimized alignment circuitry applies amplitude and phase adjustments to the outer horns, enabling the high-frequency array to act like a single horn and substantially eliminating the interference patterns that plague conventional designs. The net effect is that the MSL-6 behaves like a true point source within its coverage angle, yet it offers tightly controlled  $25^\circ$  vertical coverage and seamless horizontal arraying capabilities. This powerful combination of features affords sound system designers the ability to build vertical arrays of up to three rows of cabinets with little overlap between coverage areas, minimizing interference and controlling destructive reverberation in large, enclosed venues.



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#### **HOW SHOULD THE MSL-6 BE ARRAYED?**

The MSL-6 is designed for tight-packed horizontal arraying, and so accommodates a simple, modular approach. Each cabinet added to the horizontal array increases the coverage by 30°, and a maximum of twelve cabinets may be used for 360° coverage. Vertical arrays are formed by hanging cabinets above one another, horns up in all cases, and angling the cabinets in increments of 20-25° to form a curved array.

#### **WHAT MEYER PRODUCTS IS THE MSL-6 DESIGNED TO WORK WITH?**

For music reinforcement, the MSL-6 may be augmented with DS-2P Powered Mid-Bass Loudspeakers to enhance mid-bass projection, and PSW-2 or PSW-4 Powered Subwoofers for low-frequency reproduction. In very long-throw applications where response above 10 kHz is critical, the SB-1 Sound Beam may be added to provide high-frequency fill. Because the MSL-6 vertical coverage is very tightly controlled, down-fill speakers will normally be required; an ideal choice for down-fills is the Meyer MSL-4.

#### **WHAT PROVISIONS ARE THERE FOR RIGGING THE MSL-6?**

The MSL-6 cabinet incorporates six pivoting lift rings on the top and bottom of the cabinet, and each ring has a 1500 lb. load capacity with a 5:1 safety factor. Additionally, the cabinet is extensively braced with internal steel members. Note that these rigging load ratings assume a straight, tensile pull on a cabinet in as-new condition, and may need to be de-rated if those conditions are not met.

#### **IS THE MSL-6 WEATHER-PROTECTED?**

A weather-protected version, which features additional protective treatments to the cabinet, drivers and electronic components, is available; inquire of your Meyer Sound sales representative. A rain hood can also be fitted to protect the electronics section and connecting cables. Only the weather-protected version of the MSL-6 should be used for outdoor applications where there is expected long-term exposure to the elements.

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has devoted itself to  
designing, manufacturing,  
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that deliver superb sonic  
reproduction. Every part of  
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