MSL-6 Self-Powered Loudspeaker

FEATURES



Integrated control electronics and amplifiers



High Power



High-Q horn affords narrow coverage for long throw distances



Active crossover with optimized pole-zero filter combinations



TruPower™ Limiting(TPL)



Intelligent AC[™] System



Compatible with the Remote Monitoring System™ (RMS)



Extremely low distortion

Superior engineering for the art and science of sound.



The MSL-6, Meyer Sound's largest self-powered speaker, is ideally suited for large-scale vocal public address applications as a stand-alone system, and for musical sound reinforcement in combination with Meyer self-powered subwoofers and/or the DS-2P mid-bass speaker. The MSL-6 features a 25° vertical coverage angle, permitting long-throw arrays with up to three vertical rows with minimal overlap between coverage areas.

The center and outer high frequency horns utilize separate amplifier and control electronics to achieve a 30° horizontal coverage angle for a single MSL-6. Tight-packing two units together yields a 60° coverage angle. Since the MSL-6 is intended for tight packing only, array design is simple and modular: each additional unit increases the horizontal coverage by 30°. The maximum horizontal array size is twelve units, resulting in a circular array with 360°coverage.

The MSL-6 contains amplifier and control electronics for two 12" low frequency cone drivers and three high frequency horn drivers (2" throat, 4" diaphragm) in a compact trapezoidal cabinet. Each 12" driver is independently amplified and contained in a horn-loaded vented enclosure. This



The MSL-6 has twelve pivoting lift rings (six on top, six on bottom), each with a maximum working load capacity of 1500 lb (5:1 safety factor). Despite the inclusion of amplifier and control electronics, the MSL-6 is 14" shorter, and 25 lbs. lighter than the MSL-5. The MSL-6 cabinet is reinforced internally with steel girders.

The MSL-6 employs
TruPower limiting (TPL), the
first limiting technique that
accurately calculates the power
dissipation within the speaker.
TPL accounts for varying
speaker impedance by
measuring current, in addition
to voltage, to compute the

power dissipation and voice coil temperature.

TPL improves system performance before and during limiting by allowing the speaker to deliver its highest SPL across its entire frequency range. TPL also eliminates long-term power compression when the MSL-6 is operated at high levels for prolonged periods and extends the lifetime of amplifier and driver components.

The MSL-6 can be equipped to operate with the Remote Monitoring System (RMS) network and software application. RMS displays signal and power levels, driver and cooling fan status, limiter activity, and amplifier temperature for all speakers in the network on a Windows based PC.



MSL-6 SPECIFICATIONS

ACOUSTICAL¹
Phase Response ±4 dB 65 Hz - 16 kHz
Phase Response ±30° 250 Hz - 12 kHz
Maximum SPL²
Dynamic Range >110 dB

COVERAGE

Frequency Response ±4 dB 65 Hz - 16 kHz
±30° 250 Hz - 12 kHz
145 dB @ 1 meter
>110 dB

Horizontal: 30°; Vertical: 25°

TRANSDUCERS Low Frequency Two 12" diameter MS-12 cone (3" voice coil)

High Frequency Three 2" throat, 4" diaphragm MS-2001A compression drivers

HF DC Protection Three 20 mf capacitors

Acoustical Crossover Range 500 Hz - 1 kHz

AMPLIFIERS Type Complementary power MOSFET output stages class AB/H

Burst Capability³ 2480 Watts (620 Watts/channel)

THD, IM, TIM < .02 %

AUDIO INPUT

Type 10 kΩ impedance, electronically balanced

Connector XLR (A-3) male and female **Nominal Input Level** +4 dBu (1.23 Vrms)

AC POWER Connector 250 V NEMA L6-20P (twistlock) inlet or IEC 309 male inlet⁴

Automatic voltage selection 95 – 125 V / 208 – 235 V; 50 Hz/60 Hz⁵

Operational voltage range Turn on: 85 VAC; Turn off: 134 VAC; 50/60 Hz

Turn on: 165 VAC; Turn off: 264 VAC; 50/60 Hz

 Max Continuous RMS Current (>10 sec)
 115 V: 14 A
 230 V: 7 A
 100 V: 16 A

 Burst RMS Current (<1 sec)</td>
 115 V: 26 A
 230 V: 13 A
 100 V: 30 A

Max Peak Current During Burst 115 V: 36 Apk 230 V: 18 Apk 100 V: 42 Apk

Soft Current Turn-on Inrush current < 12 A @115 V

PHYSICAL Dimensions Height: 42.75" Width: 42.52" Depth: 32.28"

Weight 475 lb. (216 kg) / Shipping: 513 lb. (257 kg)

Protective Grill Two-piece, damped, hex-punched metal screen, grey foam covering

Enclosure 12-ply hardwood

Finish black textured, charcoal grey carpet, or weather-protected

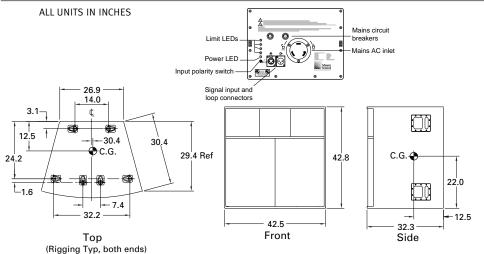
Rigging Twelve pivoting lift rings (6 on top and bottom); working load for each ring is 1500 lb with straight tensile pull. Safety factor

is 5:1. Entire cabinet is reinforced with steel girders.

Notes

- ${\bf 1.} \ \ {\bf Measured} \ \ {\bf at} \ \ {\bf 3} \ \ {\bf non-axis, free field \ conditions, pink \ noise \ input, third-octave \ bands.$
- 2. Interpolated to 1 m.
- 3. Nominal 8Ω resistive load, pink noise, 100 V $\,$ peak.
- 4. Other connectors available. For European installations, an IEC 309 connector (16A) can be installed.
- 5. The unit is rated at 88-125V and 182-235V, 50/60 Hz, to satisfy EC standards for -10% to 6% AC line voltage.

PHYSICAL DIMENSIONS



Meyer Sound Laboratories has devoted itself to designing, manufacturing, and refining components that deliver superb sonic reproduction. Every part of every component is designed and built to exacting specifications and undergoes rigorous, comprehensive testing in the laboratories.

Research remains an integral, driving force behind all production.

Meyer strives for sound quality that is predictable and neutral over an extended lifetime and across an extended range.





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