

SPECIFICATIONS

Frequency Response:

175-6,000 Hz (see Figure 1)

Power Handling:

8 hours, 6-dB crest factor:

15 watts (250-5,000 Hz pink noise)

Impedance:

8 ohms

Sound Pressure Level at 1 Meter,

1 Watt Input Average, Pink Noise

Band-Limited from 400 to 5,000 Hz:

103 dB

Horizontal Beamwidth (see Figure 3):

63° @ 2 kHz

Vertical Beamwidth (see Figure 3):

85° @ 2 kHz

Directivity Factor R_0 (Q):

12.0 @ 2 kHz

Usable Low-Frequency Limit:

150 Hz

Construction:

Low-frequency horn of reinforced fiberglass and high-frequency horn of diecast aluminum, with overall white finish

Voice-Coil Diameter,

High Frequency: 1.90 cm (0.75 in.)

Low Frequency: 2.54 cm (1.0 in.)

Magnet Weight,

High Frequency: 0.28 kg (0.60 lb)

Low Frequency: 0.11 kg (0.25 lb)

Magnet Material,

High Frequency: Alnico

Low Frequency: Strontium ferrite

Flux Density,

High Frequency: 0.8 Tesla

Low Frequency: 1.0 Tesla

Dimensions,

Height:

23.2 cm (9.1 in.)

Width:

32.5 cm (12.8 in.)

Depth:

27.0 cm (10.6 in.)

Net Weight,

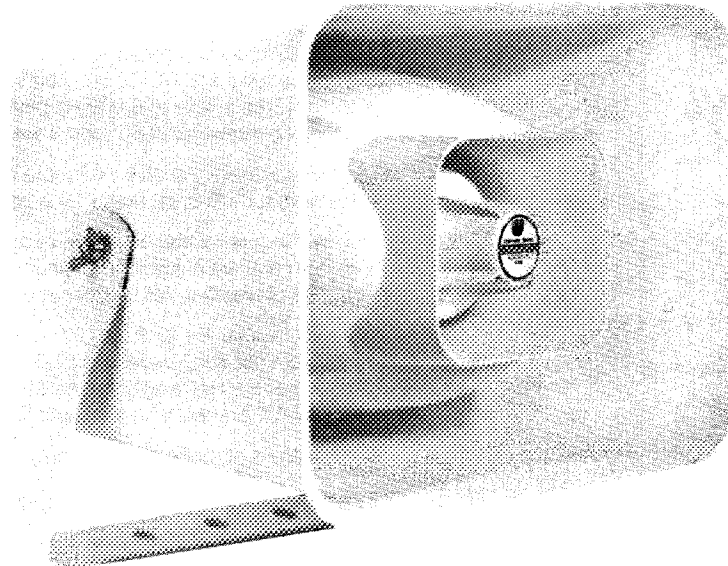
MLC: 4.7 kg (10.4 lb)

MLCT: 4.9 kg (10.9 lb)

Shipping Weight,

MLC: 4.9 kg (10.8 lb)

MLCT: 5.1 kg (11.3 lb)



DESCRIPTION

The University Sound MLC and MLCT are conservatively rated 15-watt outdoor speaker systems for use in music and paging applications.

The systems feature a compression driver and folded high-frequency horn coupled through a crossover network together with a horn-loaded woofer.

The transformer model (MLCT) includes connections for 25-V and 70.7-V distributed systems and a screwdriver-operated power tap select switch.

A nominal 65° horizontal by 85° vertical coverage pattern together with a low-frequency cutoff of 150 Hz provides excellent articulation in demanding applications.

The MLC (MLCT) is constructed of molded reinforced fiberglass and diecast aluminum. An adjustable steel "U" bracket is provided for easy installation.

These speaker systems are especially suited for use at outdoor areas where high-fidelity music and voice reproduction are desired.

INSTALLATION

The MLC/MLCT are provided with an adjustable "U" bracket for mounting and orientation. The "U" bracket contains holes for securing the unit to the desired mounting surface. The holes will clear a 1/2-in. bolt or lag screw. To mount the units to a mounting surface, simply loosen the bracket-securing wingnuts one or two turns and swivel the horn into the desired position. Then tighten the wingnuts, using hand pressure only.

TRANSFORMER MODEL (MLCT)

A transformer and power selector switch are installed in the outer housing.

The level of the MLCT may be adjusted by moving the switch setting (see Table I); clockwise increases the power. Since the same switch and transformer are used for either the 70.7-volt or 25-volt line, it is important to connect to the correct color-coded wires. When connecting speakers to a 70.7-volt distribution line, the MLCT's black wire (70.7 V) and white wire (common) are used. For 25 V distribution systems, the red wire (25 V) and white wire (common) should be used.

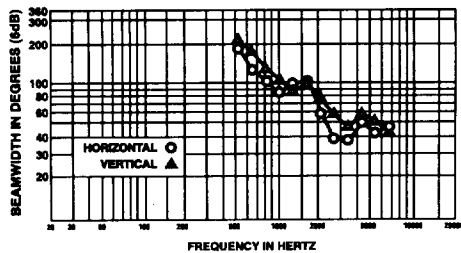


FIGURE 1
MLC Frequency Response
(1 watt at 1 meter)

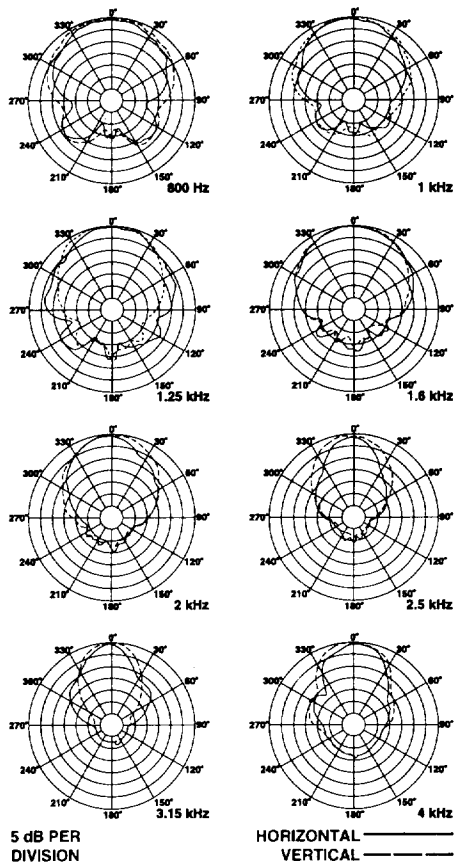


FIGURE 2
MLC Polar Response

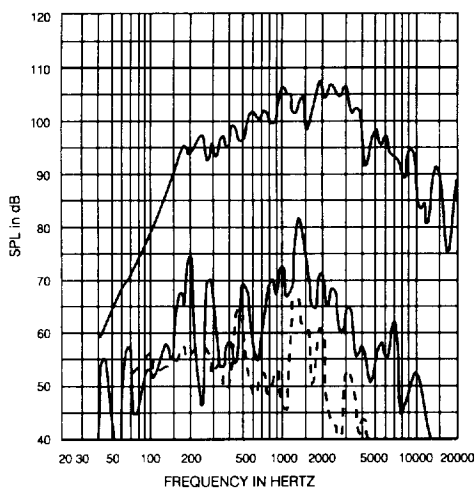


FIGURE 3
MLC Beamwidth vs. Frequency

POWER	IMPEDANCE	
	70.7-Volt Lines	25-Volt Lines
15 W	350Ω	45Ω
10 W	500Ω	63Ω
5 W	1,000Ω	125Ω
2.5 W	2,000Ω	250Ω
1.25 W	4,000Ω	500Ω
0.65 W	8,000Ω	1,000Ω

TABLE I — Impedance Values for Power Tap Settings

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The speaker systems shall be two-way with a compression driver and folded high-frequency horn, coupled through a crossover network to a horn-loaded woofer.

The axial frequency response will extend from 175 to 6,000 Hz, and the horn shall exhibit a low-frequency cutoff of 150 Hz. Sound pressure level will be 103 dB (1 W/1 m) with a 400- to 5,000-Hz pink-noise signal applied, and the horn will produce a horizontal beamwidth of 60° and a vertical beamwidth of 85° at 2 kHz.

The loudspeaker(s) shall be capable of handling a 15-watt, 250- to 5,000-Hz pink-noise signal with a 6-dB crest factor for a period of eight hours.

The low-frequency horn shall be made from reinforced fiberglass and the high-frequency horn from diecast aluminum, finished in white. All components shall be resistant to extremes of weather, for outdoor use.

Dimensions shall be 23.2 cm (9.1 in.) high by 32.5 cm (12.8 in.) wide and 27.0 cm (10.6 in.) deep. Net weight for the MLC is 4.7 kg (10.4 lb), and 4.9 kg (10.9 lb) for the MLCT. A "U" bracket with wingnuts for vertical swivel adjustment is provided.

The speakers shall be the University Sound MLC and MLCT.

ADDITIONAL SPECIFICATIONS FOR THE MLCT

The MLCT series shall additionally include an integral line-matching transformer.

Secondary impedance shall be 8 ohms nominal. Primary power taps shall be 15, 10, 5, 2.5, 1.25 and .65 watts on the 70.7- and 25-volt settings.

WARRANTY (LIMITED)

University Sound Speakers and Speaker Systems (excluding active electronics) are guaranteed for five years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to University Sound. Unit will be returned prepaid. Warranty does not extend to finish, appearance items, burned coils, or malfunction due to abuse or operation under other than specified conditions, including cone and/or coil damage resulting from improperly designed enclosures, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than University Sound will void this guarantee. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For warranty repair and service information on University Sound products, contact: University Sound, 10500 West Reno, Oklahoma City, Oklahoma 73128 (405/324-5311 or 800/444-9516); Attention: Customer Service Department.

For technical assistance, contact the Technical Services Representative at University Sound.

Repair locations:

Speaker products including LR Line radiators, PI Series speakers, CDP848AT, CDP850T, Musicaster100, FC100, Interface Series, MC Series, SP Series, and TK60: University Sound, 600 Cecil Street, Buchanan, MI 49107; Attention: Service Department.

All other paging speakers and speaker products: University Sound, Inc., 10500 West Reno, Oklahoma City, OK 73128; Attention: Service Department.

Specifications subject to change without notice.

