



Specifications and Instructions

Model MM15TLS Re-entrant Loudspeaker

Special Features

- Underwriters' Laboratories Listed, Section 2731 of NFPA Standard 72A
- Wide Frequency Response
- Low Distortion
- Flush Ceiling/Wall Mount with Recessed Adjustable Spiral Lock Mounting Ring
- 2" Voice Coil, Alnico V Magnet, 15-Watt Compression Driver
- Cast Aluminum Body
- 70V and 25V Transformer
- Field Replaceable Parts

The University Sound Model MM15TLS Re-entrant Loudspeaker is a high-efficiency, heavy-duty, weatherproof speaker that is extremely adaptable for paging applications in all extremes of environment. The MM15TLS is U.L. Listed with NFPA Standard 72A, Section 2731, for use in life/safety and communication systems.

Designed for flush mounting in either walls or ceilings, the MM15TLS excels in areas where high speech intelligibility and alarm signal transmission is required. The MM15TLS features a unique adjustable spiral lock and mounting ring that provides fast installation and hookup to either 25V or 70V lines.

High rise buildings generally require numerous loudspeakers in a single system, depending on the size of the building. To facilitate maintenance, University provides with each unit an exploded view of the loudspeaker assembly, with parts list and parts identification for quick field replacement. The head diaphragm assembly and the 70V and 25V transformer are off-the-shelf items that are normally all that is required to ensure backup in most systems.



Specifications

Type:	Round re-entrant horn
Frequency Response:	450 Hz to 15 kHz 700 Hz to 5 kHz (see Figure 1)
Power-Handling Capacity:	15 watts pink noise above 500 Hz
Impedance Taps:	325/500/1000/2000/4000/8000 ohms, selectable for 70.7V line 63/125/250/500/900 ohms, selectable for 25V line
Wattage Taps:	15/10/5/2.5/1.25/0.65 watts, selectable for 70.7V or 25V lines
Dispersion Angle:	150° (see Figure 2)
Pressure Sensitivity:	116 dB SPL with 15 watts of pink noise, band-limited from 500 Hz to 3000 Hz and measured at 4' equivalent (Ref.: 0.0002 dyne/cm ²)
Horn and Housing Material:	Heavy cast aluminum body, horn of drawn aluminum, transformer housing and plaster ring of zinc-plated steel construction
Diaphragm Material:	Phenolic-impregnated cloth
Mounting:	Flush mounting in ceilings/walls
Finish:	Front of high gloss white enamel
Dimensions:	7¼" (18.4 cm) diameter 5⅞" (13.8 cm) deep
Weight:	5¼ lbs. (2.4 kg)

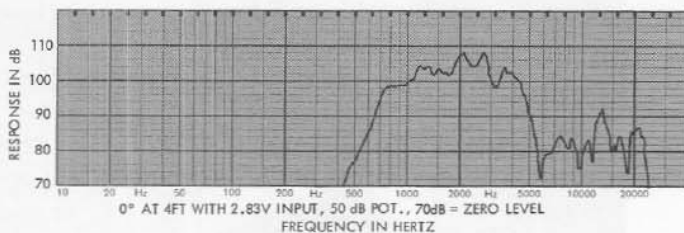
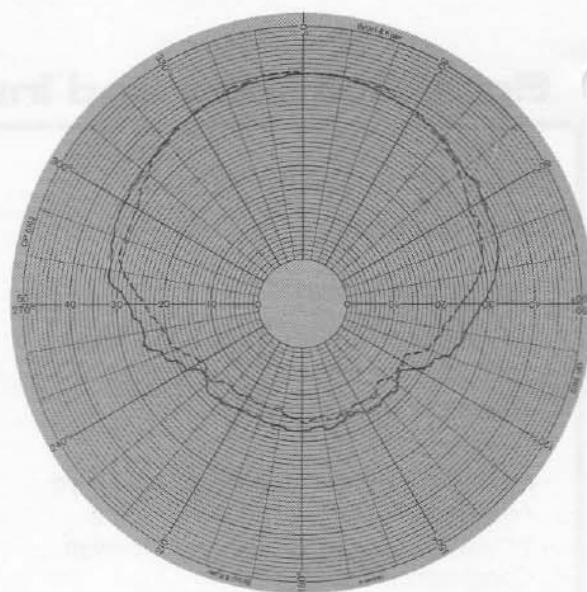


Figure 1. Frequency Response



— Full range pink noise, A weighted per USA Standard for Sound Level Meters (S 1.4, 1961), IEC Publication 179.

- - - Band-limited pink noise from 1500 Hz to 3000 Hz

Figure 2. Polar Pattern

Architect's and Engineer's Specifications

The loudspeaker shall be University Sound Model MM15TLS or equal, U.L. Listed with NFPA, Standard 72A, Section 2731, for application in life/safety and communication systems. It shall be provided with a round flush ceiling/wall mount with adjustable spiral lock and mounting ring. It shall be of the re-entrant type, with heavy cast aluminum body, aluminum drawn horn, and zinc-plated steel construction transformer housing and plaster ring. The loudspeaker shall meet the following criteria. Frequency response, 700 Hz to 5000 Hz. Power-handling capacity, 15 watts pink noise above 500 Hz.

The MM15TLS shall include a built-in 70V and 25V line transformer. Impedance taps shall be 325/500/1000/2000/4000/8000 ohms, selectable for 70.7V line, and 63/125/250/500/900 ohms, selectable for 25V line. Wattage taps shall be 15/10/5/2.5/1.25/0.65 watts, selectable for 70.7V or 25V lines. Pressure sensitivity, 116 dB SPL when measured at 4' on axis with 15 watts input of pink noise, band-limited from 500 Hz to 3000 Hz (Ref.: 0.0002 dyne/cm²). Dispersion angle, 150°. Dimensions, 7¼" diameter by 5¼" deep. Weight, 5¼ lbs.

Full Warranty

University Sound warrants all products to be free from defects in materials and workmanship for the following period from the date of resale by an authorized University Sound distributor.

A. Electronic Products	Two (2) Years
B. Speakers and Microphones	Five (5) Years
C. Underwater Products	One (1) Year
D. Musical Sound	One (1) Year

University Sound will at its option replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use. For warranty repair the product must be accompanied by a copy of the original sales contract or other evidence of purchase and returned via prepaid transportation to our

factory. (Parcel Post not suggested) Upon receipt, examination of the returned product must disclose in our judgment a defect in materials or workmanship. Any properly functioning accessory should not be returned to our factory. University Sound shall not be liable for any loss, damage or return of any such accessories. This warranty does not extend to any product which has been subject to misuse, neglect, accident, improper installation or has been modified or repaired in any manner which University Sound believes may affect the reliability of the product, or where the serial number has been removed or defaced. This warranty is given in lieu of any other warranty expressed or implied including the implied warranty of merchantability except to the extent that applicable law prevents disclaimer of the implied warranty of merchantability and fitness and does not cover consequential damages.



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