

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model LR7 Line Radiator represents a new concept in controlled sound projection. The curved speaker array*, utilizing nine 5 x 7-inch cone speakers, and two T35 compression-diffraction tweeters, eliminated many of the problems of feedback, reverberation and "spotty" coverage often encountered in P.A. installations. A controlled pattern bass reflex design provides extended low-frequency response, while maintaining precise dispersion characteristics.

The LR7 is ideally suited for churches, theaters, and auditoriums where it is necessary to cover a large audience with a minimum number of speakers. It may be mounted high above the microphone to eliminate difficult feedback problems and fill the room uniformly with sound, while retaining close control of the pattern of sound being projected.

INSTALLATION

The LR7 can be easily installed using the universal bracket supplied. Placement directly above the microphone and generally as high as possible is recommended for most uniform audience coverage. Some adjustment of vertical angle may be necessary after mounting. The closely controlled vertical distribution of sound thus assists in eliminating the possibility of feedback and reverberation.

Figure 1 illustrates several of the many possible methods of mounting the LR7. The four lag screws supplied may be used to fasten the flexible 30-inch brackets to the cabinet. The speaker may then be mounted on a wall, a ledge, an arch, or suspended from the ceiling, as necessary.

* U.S. Patent No. 3, 125, 181

NOTE: The curved back panel of the Model LR7 is constructed of 1/4-inch hardboard. It is recommended that all mounting screws or bolts be used at the top, bottom, or sides of the cabinet, as these are constructed of 1/2-inch plywood. If it is necessary to attach mounting hardware to the back panel, the screws must be confined to an area 1-1/2-inches on each side of center.

A mounting plate is included for convenient installation of constant-voltage line transformers.

SPECIFICATIONS

Frequency Response: 50 t

50 to 17,000 cps

Sound Pressure Level: 117 db

(at 4' with 50 watts input)

EIA Pressure Rating: 51 db

Power Handling Capacity

Program Material: 50 watts Peak: 100 watts

Nominal Impedance: 8 ohms

Dispersion: 600 vertical

1600 horizontal

(Line Radiator mounted with long dimension

vertical.)

Mounting: Universal bracket Size: 60-1/2" x 11" x 14"

Weight

Net: 59 lbs. Shipping: 64 lbs.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The loudspeaker shall be a curved Line Radiator, utilizing nine 5 x 7-inch oval speakers in a concave array. The loudspeakers shall be enclosed in a

ARCHITECTS' AND ENGINEERS'

for external connection of tweeters. The input terminals shall be mounted on a transformer panel. The panel shall be removable for mounting a line matching transformer. The system shall be painted a neutral beige. A grille shall be provided. The overall size shall not exceed 60-1/2" high x 11" wide x 14" deep. Frequency response shall be uniform from 50 cycles to 17,000 cps. Horizontal dispersion shall be 1600 and vertical dispersion 600. Sound pressure level at 4 feet on axis shall be 112 db, with 50 watts input. Nominal impedance shall be 8 ohms. Net weight shall be 59 lbs.

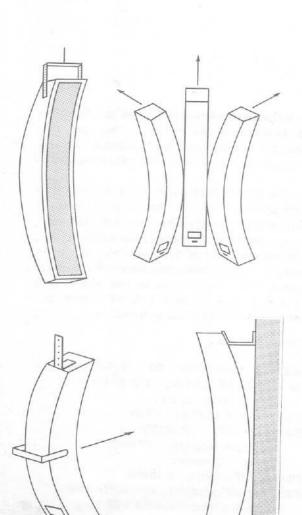


Figure A

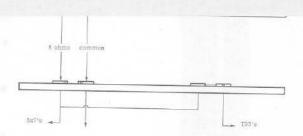


Figure 1A - Shorting Bar

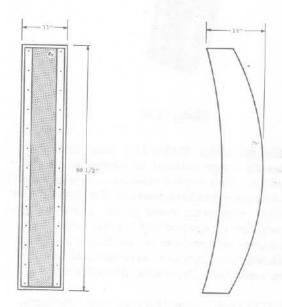


Figure 2 - Dimensions

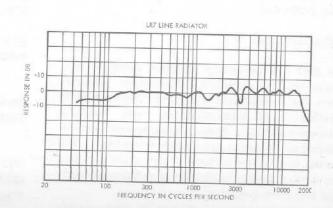


Figure 3 - Frequency Response