

Musicaster

Musicaster II

The Electro-Voice Musicasters are compact, wide-range, integrated loudspeaker systems particularly suited to voice and music reproduction. Phenomenal bass response in units so small is achieved through optimum design of the folded-horn in the aluminum housing. High frequencies are smoothly and efficiently radiated from the exclusive Electro-Voice Radax dual-cone driver assembly. In addition, the Musicaster II utilizes a Super Sonax very high frequency driver to provide a smooth extension of highs, plus improved dispersion above 3500 cps.

Rugged construction of the Musicasters is achieved through the use of a one-piece aluminum housing. The result of the most advanced engineering and production techniques, this die casting is the world's largest of its type.

### FEATURES

- Weatherproof for indoor or outdoor use
- Wide range for best musical reproduction
- Balanced sound for clear speech projection
- Rugged aluminum housing for years of use
- Portable for maximum versatility

All parts of the Musicasters are weatherproofed and fungus-proofed for reliable operation under any conditions. The Musicasters may be used indoors or out, in homes, offices or industrial applications. Built-in feet are ideal for portable applications and the mounting bracket easily converts to a carrying handle for this light but powerful system. The speaker may also be permanently mounted in any position for best sound coverage.

In the Musicasters careful design has achieved superb musical balance without loss of clarity or intelligibility of speech. This is important particularly where the system may be used for both paging and music distribution. The Radax cone design virtually eliminates the danger of failure due to accidental high-frequency feedback, and feedback problems are reduced because of the smooth peak-free response.

The Musicasters are ideal for schools, churches, auditoriums, meeting halls, restaurants, super markets and offices, as well as a portable home high-fidelity loudspeaker on the patio, in the family room and throughout the house. At square dances, rallies, picnics and outdoor concerts the Electro-Voice Musicasters will perform reliably, delivering wide-range music and crisp, clear speech.

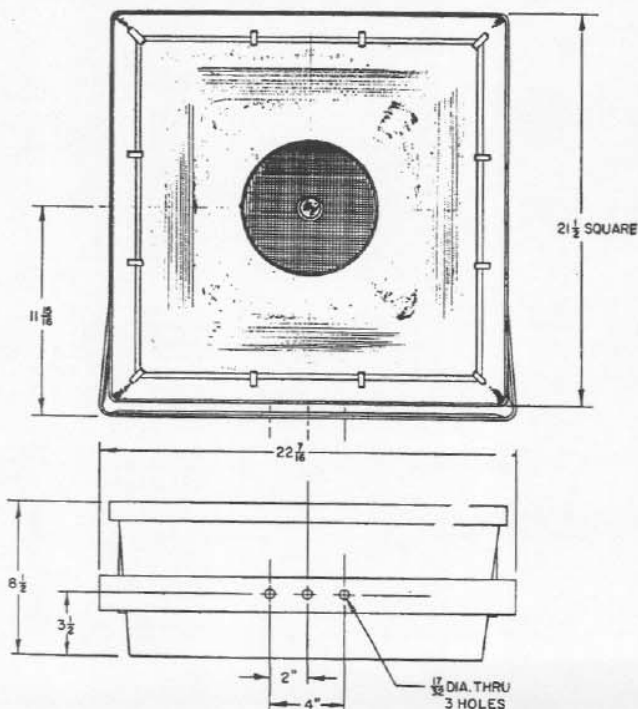


Fig. 1 — Dimensions

### SPECIFICATIONS

	MUSICASTER	MUSICASTER II
Frequency Response:	60 to 13,000 cps	60 to 18,000 cps
Dispersion:	120 degrees	120 degrees
EIA Pressure Rating:	48 db	48 db
Sound Pressure Level:	110 db (500 to 1500 cps at 4' on axis with 30 watts input)	Same
Power Handling Capacity:	30 watts Program Material 60 watts Peak	Same
Nominal Impedance:	8 ohms	8 ohms
Mechanical Crossover:	3500 cps	Same
Electrical Crossover:	None	3500 cps
Mounting:	Universal "U" Bracket (integral die-cast feet for placement in any flat surface also provided)	Same
Size:	21 1/2" H x 21 1/2" W x 8 1/2" D (not including bracket)	Same
Weight:	31 lbs. net 34 lbs. shipping	33 lbs. net 36 lbs. shipping
Accessories:	Model MB-1 Surface Mounting Bracket	Same

MUSICASTER AND MUSICASTER II  
HIGH FIDELITY WEATHERPROOF  
LOUDSPEAKERS

## INSTALLATION INSTRUCTIONS

Loosen the hex bolts on either side to adjust the "U" mounting bracket to the desired position. For permanent mounting the bracket should be completely removed and mounted in position. The Musicaster can then be replaced on the bracket. This procedure will prove simplest, particularly when the system may be difficult to reach, for it will not be necessary to support the weight of the entire system while positioning and attaching the bracket. For portable applications the mounting bracket may be adjusted to an upright position to serve as a handy carrying handle. The Musicaster should be carefully directed toward the area to be covered by sound. Be careful to avoid locating microphones generally in front of the speaker, to reduce the possibility of feedback. If used indoors sound should not be allowed to bounce off highly reflective walls into the microphone.

Best sound coverage will be obtained within a 120 degree angle from the loudspeaker, with both vertical and horizontal coverage identical. Improved bass response may be achieved by locating the Musicaster adjacent to a wall, or preferably in a corner. Corner mounting allows the walls to act as extensions of the folded horn, and insures even sound coverage. Two or more Musicasters may be placed side-by-side for increased bass response.

Because the Musicaster is completely weatherproofed, it may be mounted at any angle. For surface mounting on flat walls the Model 573 Mounting Bracket provides a neat, unobtrusive and rugged installation. The "U" bracket is removed and the Musicaster is inverted. The heavy Surface Mounting Bracket fits snugly against the wall and is invisible in most installations.

**WIRING**—The Musicaster has a nominal impedance of 8 ohms. When two or more units are connected in parallel, for proper phasing all the terminals coded T1 should be connected to one side of the line and all the T2 terminals should be connected to the opposite side. For series operation, the T1 terminal of one unit should be connected to the T2 terminal of the next and so forth.

**MULTIPLE SPEAKER CONNECTIONS**—Figure 3 shows how two or more Musicasters may be connected in series. The individual impedances are additive; thus, the total impedance for the circuits shown is 16 ohms and should be matched to a 16-ohm tap on the output transformer if one is provided. Figure 4 discloses the solution to the problem in case only 4 and 8-ohm taps are provided. When using two Musicasters in this case, they should be paralleled, thus permitting a 4-ohm load impedance to be connected to the 4-ohm tap on the output transformer with a perfect match.

Quite frequently it is necessary to series-parallel a large number of speakers in order to arrive at a proper amount of total impedance to equal the impedance tap available on the output transformer. When two or more sections or groups of speakers are connected in parallel, totaling different impedances for each group, the following formula may be employed to determine the proper tap to use on the output transformer:

FORMULA:

$$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots + \frac{1}{R_N}$$

Where  $R_T$  = total impedance  
 $R_1, R_2, \dots, R_N$  = individual impedances of various units or groups of units

Interior studs allow mounting of any standard matching transformer, for use with a 70.7-volt line distribution system. The twelve screws holding the perimeter of the back panel as well as the two central screws must be removed to pro-

vide access to the internal area. The transformer should be mounted with #8-32 thread cutting screws. Be certain the transformers of all speakers are wired uniformly to assure correct phasing during installation.

## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The outer housing shall be of one-piece rectangular diecast aluminum construction. The back panel shall be weather-proof oil-tempered pressed board construction. A "U" type mounting bracket suitable for use as a portable carrying handle shall be provided. Integral diecast feet shall be cast into the housing to allow the system to be placed on a flat surface. A protective screen shall be provided to shield the loudspeaker. The speaker shall be weatherproofed and fungus-proofed. The cone speaker shall be 8 ohms nominal impedance and 8 inches nominal diameter. It shall be of the dual-cone Radax design. In the Musicaster II a compression type tweeter shall be provided utilizing a diffraction horn above 3500 cps. Terminals shall be phased. The frequency response of the Musicaster shall be 60 to 13,000 cps.; frequency response of the Musicaster II, 60 to 18,000 cps. The dispersion of both models shall be 120 degrees. The EIA pressure level rating shall be 48 db. The sound pressure level from 500 to 1500 cps at 4 feet on axis with 30 watts input shall be 110 db. Power handling capacity shall be 30 watts of program material or 60 watts peak. Size shall not exceed 21½" H x 21½" W x 8½" D. Net weight shall be 31 lbs. for the Musicaster, 33 lbs. for the Musicaster II. Internal studs shall be provided for mounting of a standard matching transformer. An accessory surface mounting bracket shall be available. Electro-Voice Musicaster and Electro-Voice Musicaster II are specified.

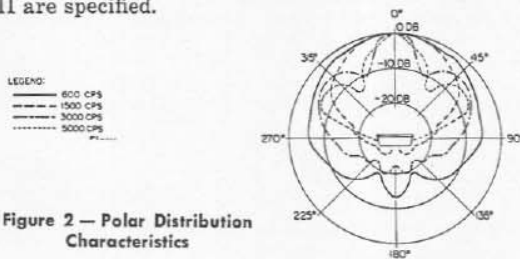


Figure 2 — Polar Distribution Characteristics

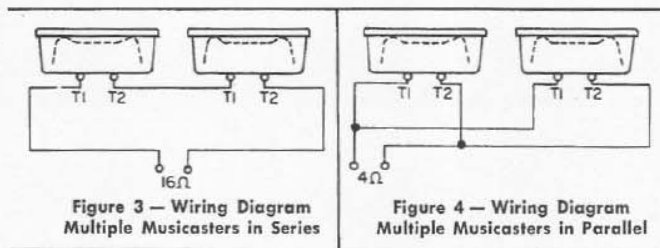


Figure 3 — Wiring Diagram Multiple Musicasters in Series

Figure 4 — Wiring Diagram Multiple Musicasters in Parallel

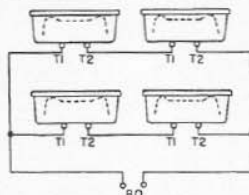


Figure 5 — Wiring Diagram Multiple Musicasters in Series Parallel

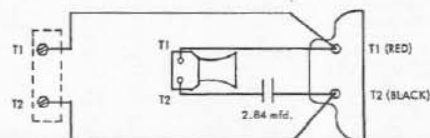
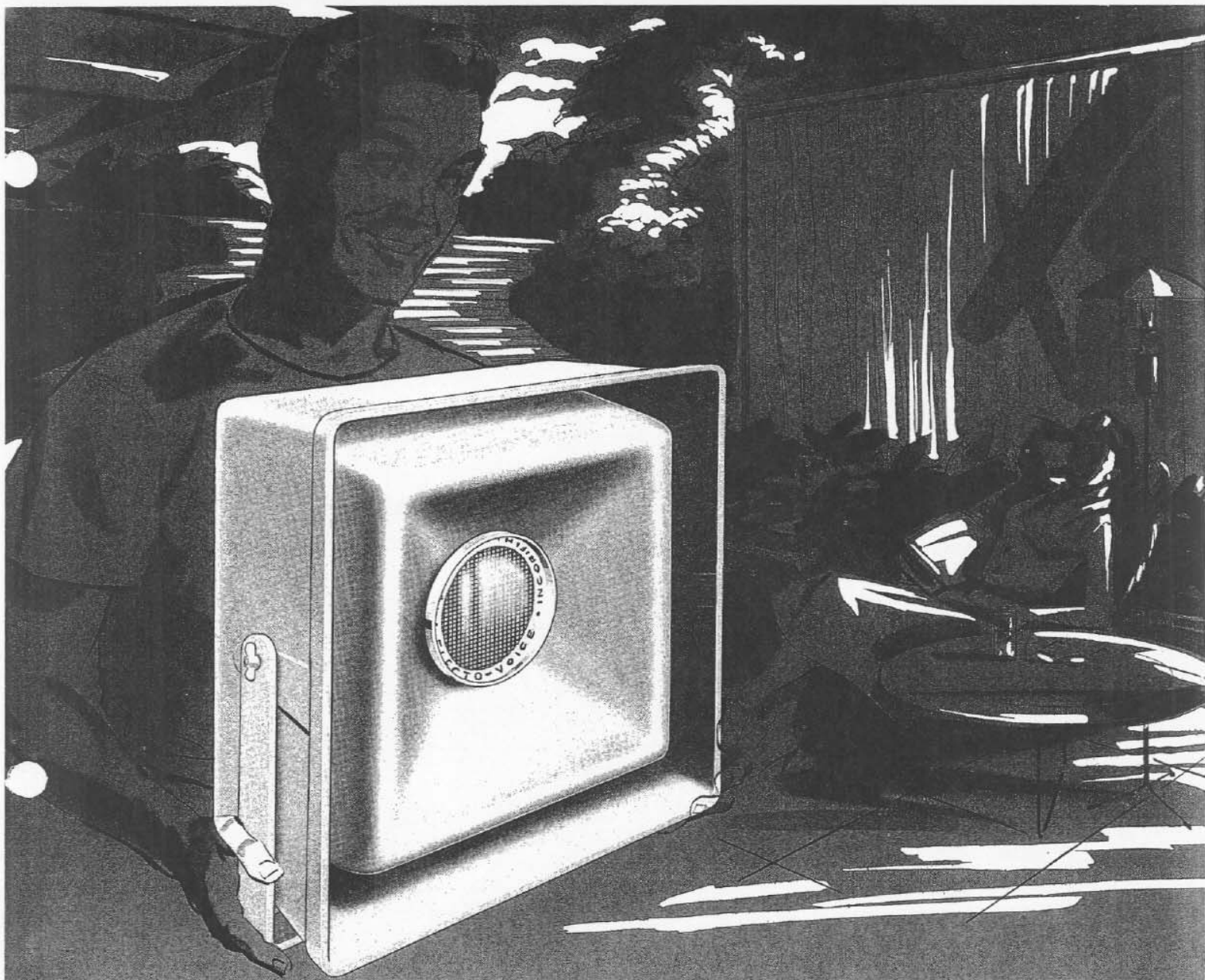


Figure 6 — Wiring Diagram for Musicaster II



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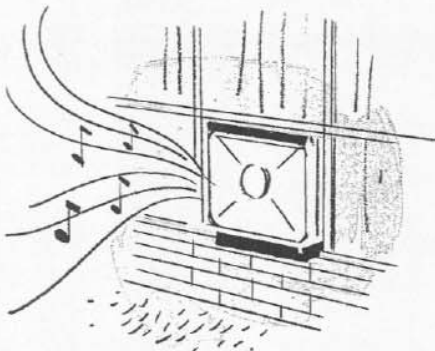
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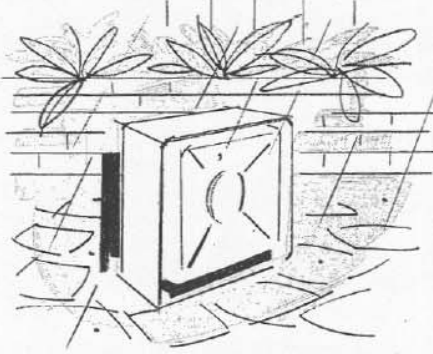
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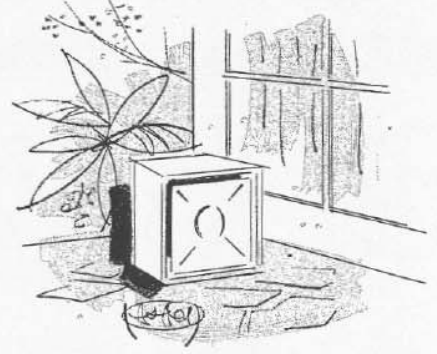
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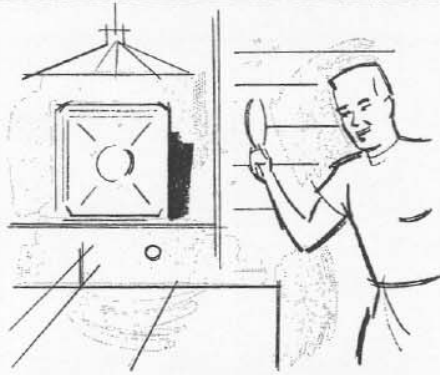


- EASY TO INSTALL... simply place  
it where you want it.

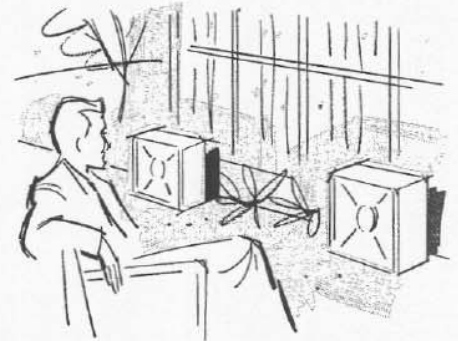
SEE HOW THE E-V MUSICASTER ADAPTS TO YOUR SCHEME OF LIVING...



- PORTABLE... wonderfully light  
and easy to carry.



- RUGGED DIE-CAST CONSTRUCTION  
ideal for patio or rumpus-room activities.

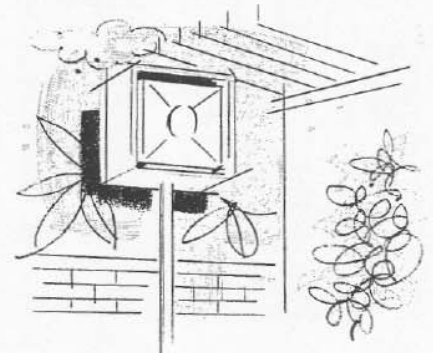


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TECHNICAL SPECIFICATIONS

Frequency Response: 60 to 16,000 cps	Power Handling Capacity: 30 watts continuous duty	Depth: 8½"
Impedance: 8 ohms	Height: 21½"	Weight: 24 lbs.
Sound Pressure Level: 121 db	Width: 21½"	Finish: Baked enamel



- PUBLIC ADDRESS SYSTEM... use  
it as a family paging unit.

*Electro-Voice*

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