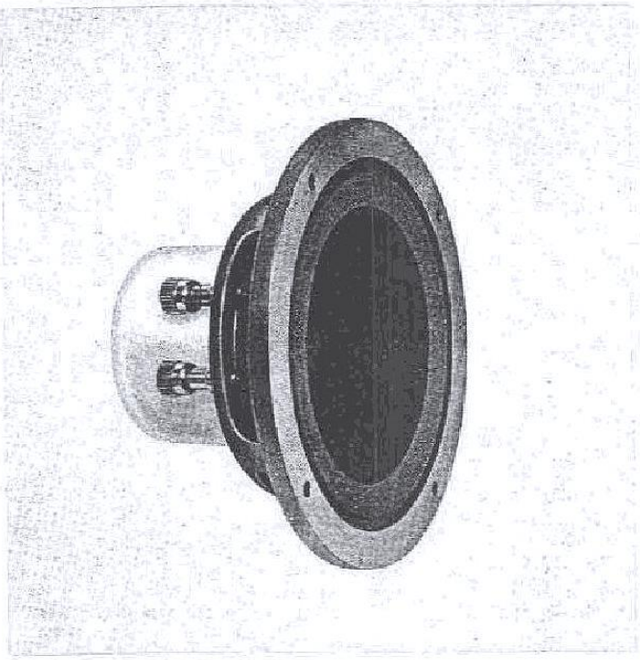
# TC8 5-INCH CONE MID-RANGE



## FEATURES

- Flat response throughout mid-frequency range
- Double wound voice coil
- Viscous damped cloth suspension
- Die-cast frame

## SPECIFICATIONS

| | |
|---|---|
| Frequency Response: | 600 to 15,000 cps |
| Nominal Impedance: | 8 ohms |
| Power Handling Capacity: | 20 watts program |
| Voice Coil Diameter: | 3/4" |
| Magnet: | 6.8 oz. Alnico V |
| Recommended Crossover Frequencies: | 800 and 3500 cps |
| EIA Sensitivity Rating: | 45 db |
| Dimensions: | Diameter, 4-7/8"<br>Depth, 2-11/16" |
| Net Weight: | 1 lb., 13 oz. |
| Shipping Weight: | 2 lbs. |
| Finish: | Gold and Ivory |
| Baffle Opening: | 3-15/16" diameter |
| Mounting: | 4 1/8" holes equally spaced on 4-7/16" diameter circle |

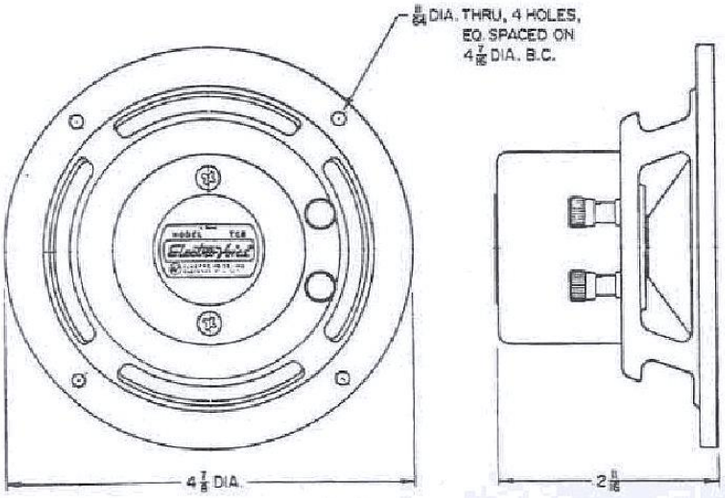



Figure 1 - Dimensions

## DESCRIPTION

Recognizing the widespread need for a quality mid-frequency reproducer with dimensions and efficiency rating compatible with compact loudspeaker systems, Electro-Voice has designed the Model TC8 cone-type mid-range driver. Carefully engineered, the TC8 exhibits quality features normally encountered only in larger and costlier reproducers.

The foundation of the TC8's outstanding performance in the 800 to 3500 cps range is its precision high pressure die-cast frame, which assures permanent alignment of the magnetic structure and moving assembly. Careful attention to detail is also reflected in the double-layer voice coil of pure copper which takes maximum advantage of the magnetic energy in the voice coil gap. The voice coil is wound on a Fiberglas form to ensure maximum rigidity and concentricity. A viscous damped cloth suspension provides optimum compliance and cone damping for smooth, peak-free response throughout the vital "presence" range.

The many quality features and superb listening characteristics of the TC8 make it an ideal mid-range driver for use in new systems or as an addition to existing ones. Nowhere else in the audible spectrum is uniform, flat response more important than it is in the mid-range or "presence" frequencies between 800 and 3500 cps. This is especially true in stereophonic reproduction, where a difference in output of only 3 db between the two channels will cause apparent displacement of the source. The TC8 offers smooth, musical response and uniform dispersion which easily meet these requirements.



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## INSTALLATION

Certain Electro-Voice enclosures, such as the current Regency and Marquis designs, include provisions for mounting the TC8. Where this is the case, the instructions furnished with the enclosure should be followed.

When the TC8 is used in other enclosures, it will be necessary to provide a cutout of 3-15/16 inches diameter.

It is also necessary to provide a separate enclosure for the TC8 to prevent its modulation by strong pressure waves from the woofer in the system. The recommended enclosure, which need be only slightly larger than the loudspeaker itself, is shown in Figure 2, below.

The mounting gasket and TC8 should be carefully aligned over the mounting holes and secured in place with four No. 6 screws, washers and nuts.

The interior of the separate TC8 enclosure should be lined with approximately 1/2" of Fiberglas and may then be secured around the TC8 using bolts, nuts and washers or ordinary wood screws. Leads should be brought out through the hole in the rear of the small enclosure, and the hole sealed with putty or cement.

In highly efficient systems, such as the Electro-Voice Regency 400, it is often desirable to employ a pair of TC8's, connected in series. This provides more effective efficiency matching between the components of the system and, in addition, makes possible a superior impedance match between the mid-range driver and other standard Electro-Voice loudspeakers. In this case, the TC8 enclosure must be twice the size shown in Figure 2. The length will be doubled, width and depth remaining as illustrated. The red terminal of one TC8 is connected to the black terminal of the other. The red terminal and black terminal which remain are wired as described in the paragraph below.

## CONNECTIONS

The TC8 terminals are identified by red and black washers under the connecting terminals. These should be wired as shown in Figure 3. For proper phasing, the lead from the black terminal on the TC8 should be connected to the Common crossover terminal, unless specified otherwise in specific system instructions. No. 18 "zip" or lamp cord is recommended for all system wiring.

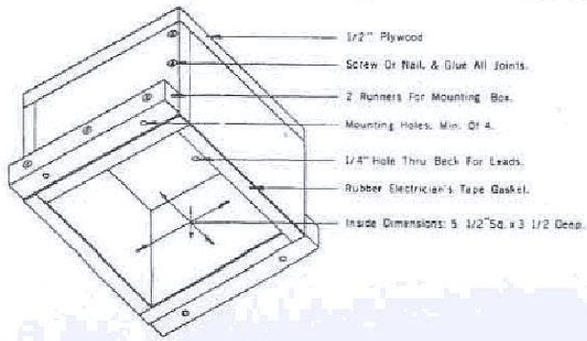


Figure 2 - Diagram of recommended inner enclosure

## OPERATION

It will be necessary to employ a level control, or attenuator, to permit adjustment of the TC8's output to match other components in the system. An L-pad such as the Electro-Voice Model AT37 is recommended. This control should be wired as shown in Figure 3 and mounted in a 3/8" hole on the enclosure back panel.

The best guide to proper setting of the control is a familiarity with the sound of live music. Most listeners will find it easy to balance the various components of the system to conform to their personal tastes. Advancement of the mid-frequency level control will increase the sound output of the TC8 and provide a "front row" effect.

## SERVICE

Your TC8 is packed to provide protection well in excess of shipping requirements of the Interstate Commerce Commission. In the rare event shipping damage does occur, contact the carrier, requesting inspection and instructions, or the dealer from whom the unit was purchased. The identification number of your TC8 is noted on the warranty registration card. This number should be recorded and used in any correspondence regarding your loudspeaker. The warranty registration card should be filled out and mailed to the factory within 10 days after your purchase.

Your TC8 is guaranteed indefinitely against defects in original workmanship and materials. Should your loudspeaker become damaged or develop faulty operation from unusual conditions of use, Electro-Voice maintains a complete Service Department, to return equipment to factory-new condition. If attention becomes necessary, please write the Service Department, requesting return authorization and shipping instructions.

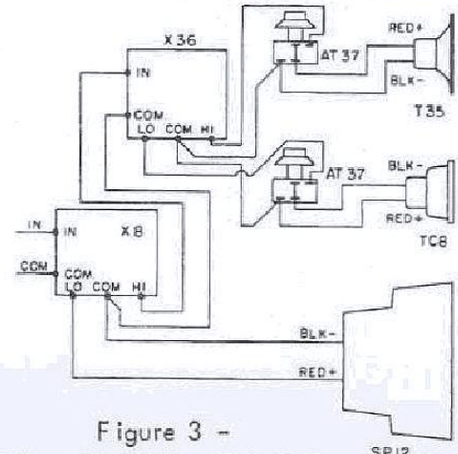


Figure 3 - Schematic of 3-way System