



DESCRIPTION

Designed to complement Electro-Voice full-range speakers, the T35 VHF driver provides smooth, extended-high-frequency response with efficient performance. An integral diffraction horn couples the diaphragm to the air, and assures the widest possible sound dispersion. This uniform distribution of sound energy is especially important in stereo reproduction to allow the largest possible listening area.

Exclusive Sonophase throat design is incorporated in the T35 VHF driver. Figure 2 shows the cross section of a conventional high-frequency driver. Response is flat up to 4 or 5 kc, after which destructive interference results from inability of the diaphragm to act as a piston. Increasingly higher frequencies cause the phase of sound produced at the diaphragm periphery to shift with respect to sound produced by the diaphragm center - this being due to diaphragm deformation (See Figure 3). In the Sonophase design, Figure 4, sound from the central portion of the diaphragm is delayed by the longer path length, restoring proper phase relationship and level as the frequency increases. The importance of the Sonophase throat design is paramount above 12 kc, where sound must be taken from the center of the diaphragm and the periphery simultaneously; in this design this is accomplished without destructive interference or cancellation within the sound chamber. At lower frequencies, where the diaphragm is a piston, and no phase shift is required in the path configuration, the longer central path length does not appreciably change the phase, due to the longer wave lengths involved.

The single-wound self-supporting voice coil is epoxy-bonded to a phenolic impregnated diaphragm. This extremely rugged assembly will withstand high power levels, and yet is light enough to follow precisely the complex VHF wave forms.

FEATURES

- Flat response throughout range
- Low distortion and high efficiency
- Diffraction horn for evenly distributed sound

SPECIFICATIONS

Frequency Response:	3500 - 20,000 cps
Nominal Impedance:	16 ohms
Power Handling Capacity	
Program:	20 watts
Peak:	40 watts
Voice Coil Diameter:	1 inch
Magnet:	6.8 oz. Alnico V
Recommended Crossover	
Frequency:	3500 cps
EIA Sensitivity Rating:	57 db
Horn Dimensions:	5-1/4 inches high by 2 inches wide
Pot Diameter:	2-1/4 inches
Overall Depth:	3-5/32 inches
Net Weight:	2-1/4 pounds
Baffle Opening:	1-11/16 inches by 4-7/32 inches
Mounting:	Four 3/16 inch holes on 1-1/2 inch and 4-3/4 inch centers

INSTALLATION

Cut a rectangular hole 1-11/16 inches by 4-7/32 inches. Mounting holes should be centered on the corners of a 1-1/2 inch by 4-3/4 inch rectangle. The driver may be secured by woodscrews from the rear, or nuts and bolts through the mounting panel.

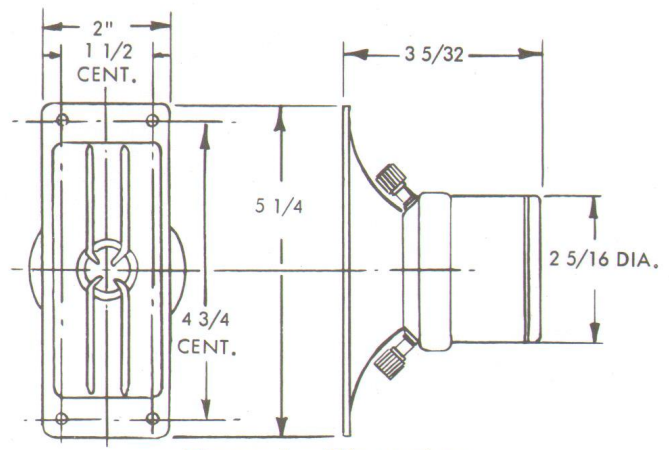


Figure 1 - Dimensions

Use #22 or larger wire to connect the T35 as shown in Figure 3. Lamp or "zip" cord is perfectly satisfactory for this application. A 3500 cycle, 16 ohm crossover, such as the E-V X36, should always be employed with the T35 to ensure proper operation and prevent the entrance of lower frequencies which could damage the driver voice coil. An AT37 level control will normally be required to match the efficiency of the T35 to that of the other speaker components.

OPERATION

The best guide to proper setting of the level 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. Acoustically "hard" or "live" rooms normally will require an attenuated setting of the level control to compensate for the greater amount of high-frequency reflection. In "soft" or "dead" rooms, with carpeting, draperies, and soft furniture, a more advanced setting of the high-frequency control will normally be required.

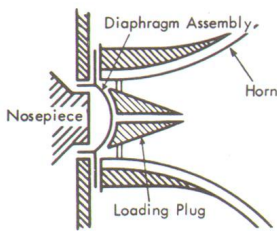


Figure 2
Sonophase drawing

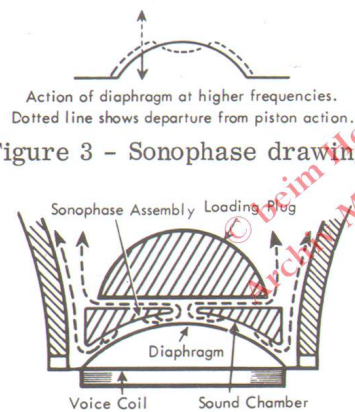


Figure 3 - Sonophase drawing

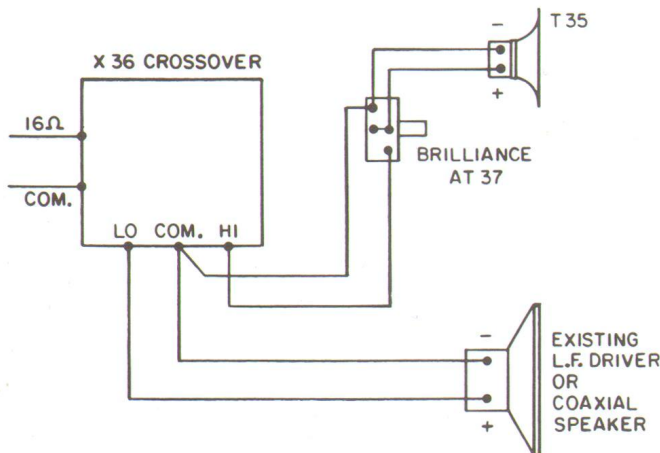


Figure 5A - Two-way system wiring

CAUTION NOTES

Test Precautions: A sustained tone from an oscillator, such as is used for test purposes, may be employed on a T35, only if the frequency is above 3500 cycles and the power does not exceed 10 watts rms. Naturally, sustained signals of this kind are never remotely approached in program material.

Precautions in Tape Machine Operation: If the speed of a tape machine is advanced beyond the normal speed, high-frequency power is increased at the rate of 6 db per octave over normal for each doubling of tape speed. On fast forward or rewind, super-sonic energy of great magnitude may be generated even though the head gate is open. Always reduce volume during this process even though the signal is inaudible. This is especially important in fast editing procedures, where frequently the gate is opened only partially so that the tape traverse can be cued audibly.

CUSTOMER SERVICE

The T35 is packed to provide protection well in excess of shipping requirements of the Interstate Commerce Commission. If shipping damage does occur, contact the carrier or the dealer from whom the unit was purchased and request inspection and instructions.

WARRANTY

The T35 is guaranteed against defects in original workmanship and materials. Should it 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 should become necessary, write to the Shipping Department requesting return authorization and shipping instructions.

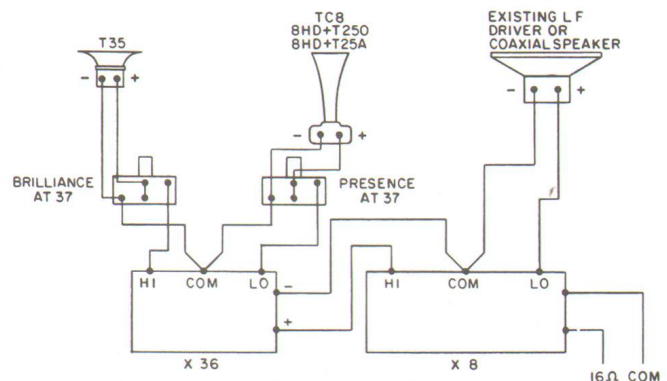


Figure 5B - Three-way system drawing

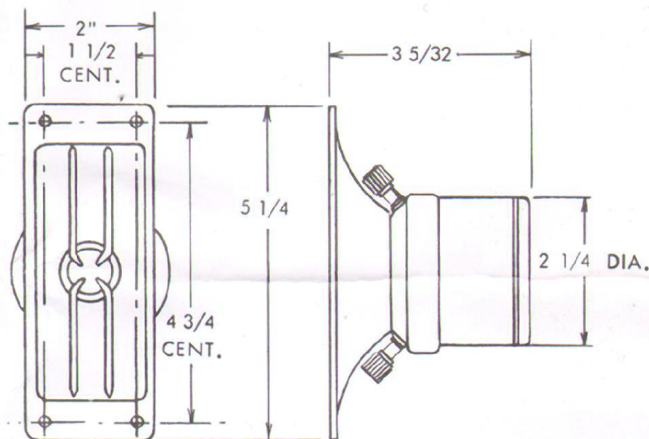
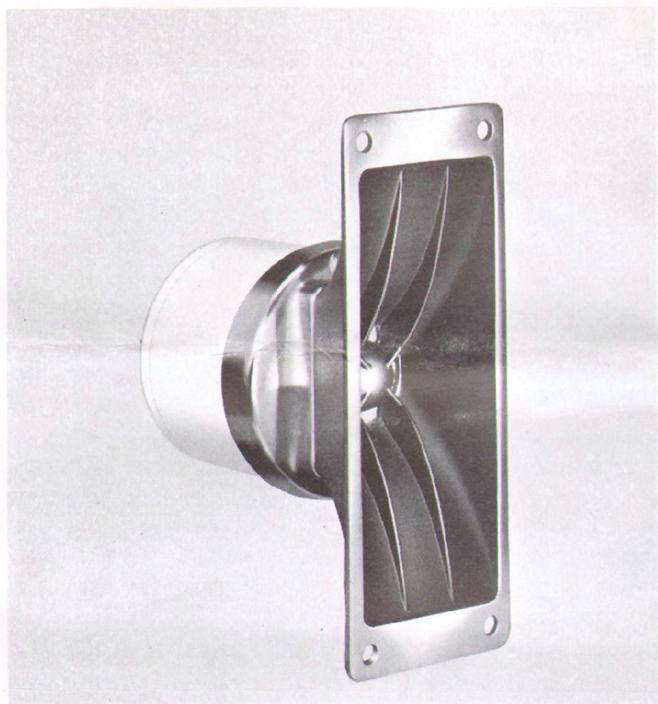


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SPECIFICATIONS

Frequency Response:	3500-20,000 Hz
Nominal Impedance:	8 ohms
Power Handling Capacity, Program:	20 watts
Peak:	40 watts
Voice Coil Diameter:	1 inch
Magnet:	6.8 oz. Alnico V
Recommended Crossover Frequency:	3500 Hz
EIA Sensitivity Rating:	57 db
Horn Dimensions:	5/4" high by 2" wide
Pot Diameter:	2-1/4 inches
Overall Depth:	3-5/32 inches
Net Weight:	2-1/4 pounds
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Use No. 22 or larger wire to connect the T35 as shown in Figure 5. Lamp or "zip" cord is perfectly satisfactory for this application. A 3500 Hertz crossover, such as the E-V X36, should always be employed with the T35 to ensure proper operation and prevent the entrance of lower frequencies which could damage the driver voice coil. An AT37 level control will normally be required to match the efficiency of the T35 to that of the other speaker components.

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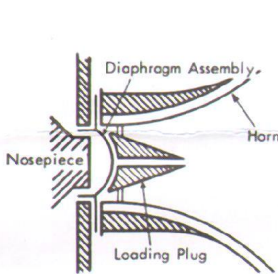


Figure 2
Sonophase drawing

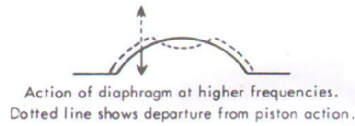


Figure 3 - Sonophase drawing

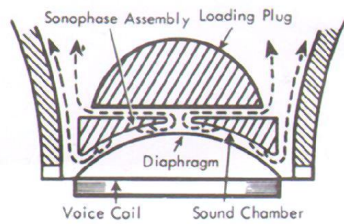


Figure 4 - Sonophase drawing

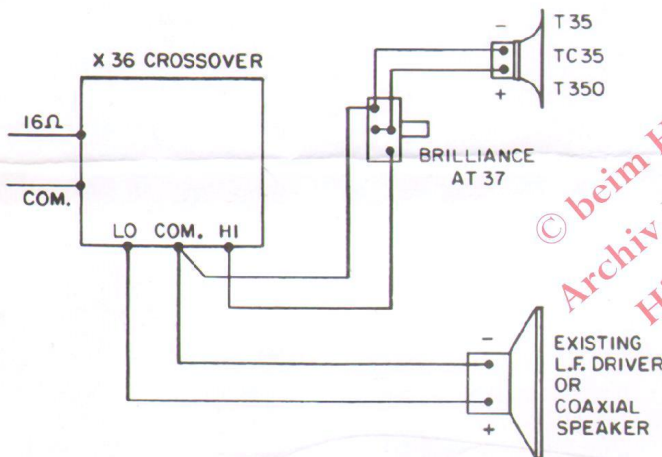


Figure 5A - Two-way system wiring

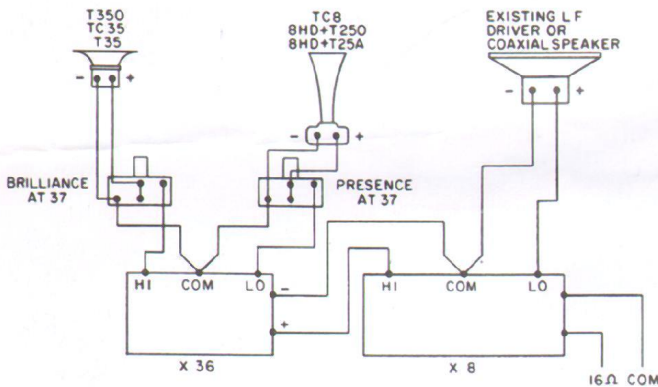


Figure 5B - Three-way system drawing

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GUARANTEE

Electro-Voice high fidelity speakers, speaker systems, and accessories 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 the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not cover finish or appearance items or malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

For correct shipping address, instructions on return of Electro-Voice products for repair, and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone 616/695-6831).

Electro-Voice also maintains complete facilities for non-warranty service of E-V products.