

DESCRIPTION AND APPLICATIONS

Electro-Voice crossover networks are high-Q, low insertion loss, frequency discriminating filters designed for use in systems having a characteristic impedance of 8 ohms. All E-V crossovers are of constant-K configuration. The basic advantage of constant-K filters is that identical values of components may be used both in series and shunt arms, thus ensuring identical characteristics on either side of the crossover frequency.

Because high-Q air-core inductors are used in these crossover networks, filter characteristics are maintained constant despite changes in average values of program level. Electro-Voice crossovers will safely handle up to 100 RMS watts. Since the average level of program material in home listening rarely exceeds 2 watts, the safety margin inherent in the design of these units is indeed a large one.

SPECIFICATIONS

	X8	X36
Crossover Frequency:	800 Hz	3500 Hz
Impedance:	8 ohms	8 ohms
Insertion Loss,		
Lo:	.75 db	.5 db
Hi:	0 db	0 db
Attenuation Rate,		
per octave:	12 db	12 db
Dimensions,		
Height:	4 1/4 inches	3 1/2 inches
Width:	4 1/2 inches	4 1/2 inches
Depth:	3-5/8 inches	3-5/8 inches
Net Weight:	4 pounds	1 1/2 pounds

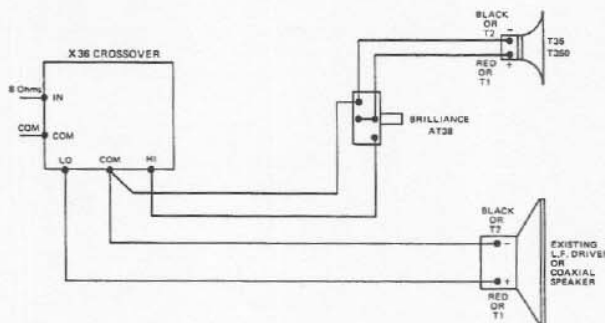


Figure 1 - Wiring of Two-Way System

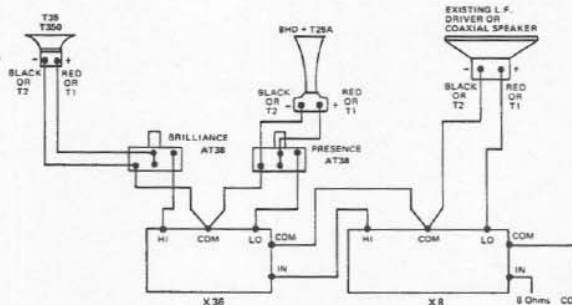


Figure 2 - Wiring of Three-Way System

TECHNICAL DATA

Typical applications of E-V networks are shown in Figures 1 and 2. Figure 1 illustrates a single crossover used to separate frequencies radiated by a VHF driver and a low-frequency or coaxial speaker. Figure 2 is typical of a three-way system in which two crossover networks are used.

Although these crossovers have been designed for use in 8-ohm systems, they may be employed in other situations. For instance, if an 8-ohm unit is used in a system in which both the input and output impedances are 16 ohms, no appreciable shift in crossover frequency will be experienced, and the insertion loss of the crossover will be reduced. In the case of reproducers with unequal impedances, the crossover should be connected to an 8-ohm source. As an example: if an 8-ohm woofer is used with a 16-ohm tweeter, the reproduction of bass will be favored. If the tweeter is an 8-ohm unit and the woofer is 16 ohms, however, then treble reproduction would be relatively louder. In either case, the high frequency level control will restore balance. The system's smoothness will also be slightly affected.

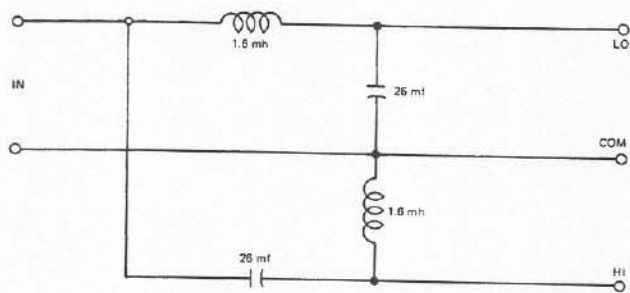


Figure 3 - Model X8 Schematic Diagram

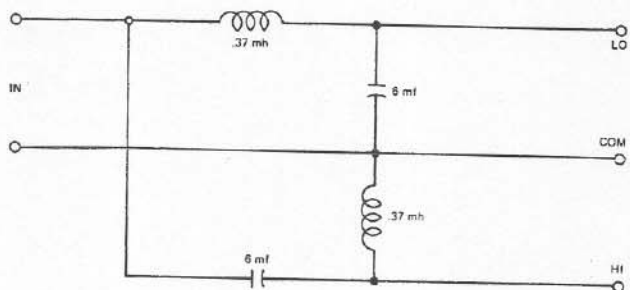


Figure 4 - Model X36 Schematic Diagram

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 and 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.

Specifications subject to change without notice.