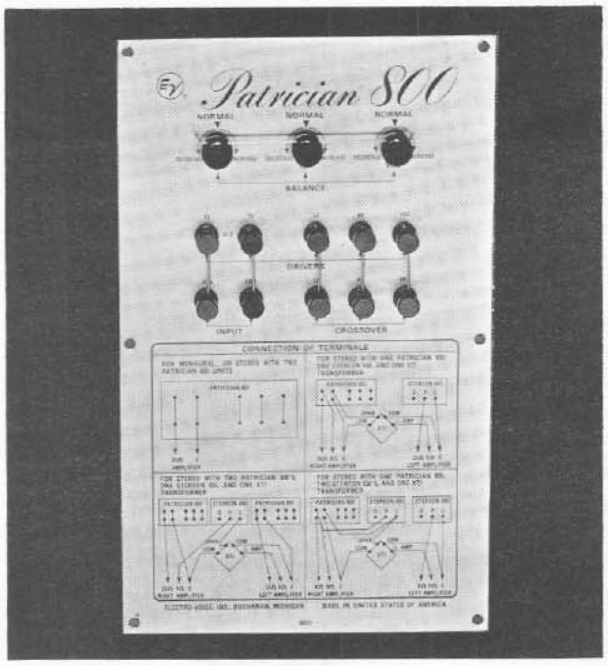
CROSSOVER NETWORKS, X1020, X1835, X2835

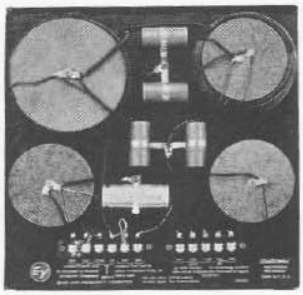


X1835

FEATURES

- 12 db per octave attenuation
- Highest quality components

X2835



X1020

SPECIFICATIONS

	Model X1835	Model X2835	Model X1020
Crossover Frequencies:	100, 800, 3500 cps	250, 800, 3500 cps	100 or 200 cps
Impedance:	16 ohms	16 ohms	16 ohms
Attenuation:	12 db per octave	12 db per octave	12 db per octave
Level Controls:	3	3	
Dimensions			
Height:	17"	15-3/4"	11"
Width:	9-1/2"	7-3/4"	11-3/4"
Depth (Total):	3-3/4"	3-1/4"	2-3/4"
Depth (Behind front surface of mounting panel)	2-3/4"	2-1/4"	2-3/4"
Shipping Weight:	10 lbs.	9 lbs.	11 lbs.
Warranty:	The Electro-Voice Models X1835, X2835, and X1020 are guaranteed against defects in original workmanship and materials.		

DESCRIPTION

The Electro-Voice X1835, X2835, and X1020 are high-Q, low insertion loss, frequency discriminating filters designed for systems having a characteristic 16-ohm impedance. Attenuation in these deluxe Electro-Voice networks takes place at the rate of 12 db per octave.

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 70 watts peak. Since the average level of program material in home listening rarely exceeds two watts, the safety margin inherent in the design of the units is a large one.

MODEL X1835

Designed specifically for the Electro-Voice Patrician 800, the X1835 is a complete crossover and level control for a deluxe four-way loudspeaker system. Three L pads control output of mid-bass, treble, and very high frequency drivers. Recommended components for use with the X1835 are the Electro-Voice 30W, SP12D, T250 with 8HD, and T350. Furnished with the crossover is a complete wiring harness for connection of the associated driver components. (See Fig. 1) The leads in the harness are coded as follows: the unmarked lead feeds the 30W; the lead marked with one black band feeds the SP12D; the lead with two black bands is for connection of the T250 and the lead marked with three bands feeds the T350. Note that the

SP12D should be wired out of phase with the remaining driver components. The red SP12D lead should be connected to the red speaker terminal and the black lead to the black terminal. Lead and speaker terminal colors are not matched when connecting the other three drivers.

MODEL X2835

The Model X2835 has been designed for use in high quality four-way systems such as the Electro-Voice Georgian 400. All necessary crossover points and level controls are provided. Output of mid-bass, treble, and VHF drivers is controlled by separate L pads. Recommended complementary drivers are the Electro-Voice 18WK, SP8B, T25A with 8HD, and T350. A complete wiring harness is provided (See Fig. 2) which consists of an uncoded lead for the 18WK, a lead marked with one black band for the SP8B, a lead coded with two black bands for the T25A, and a lead with three bands for the T350. When connecting these leads to the drivers, the T25A and SP8B are wired "in phase" with the red leads going to red speaker terminals. Colors of the T350 and 15WK terminals should not be matched with the connecting leads.

MODEL X1020

The Model X1020 is intended specifically for use with the Model 30W very low frequency driver. The X1020 and the 30W together may be considered a building block kit for use in improving the low frequency response of any existing loudspeaker system. Crossover to the 30W may be at 100 or 200 cps, depending upon the low-frequency capabilities of the existing system. Thus a system which has limited low frequency response but is otherwise satisfactory may be tremendously improved.

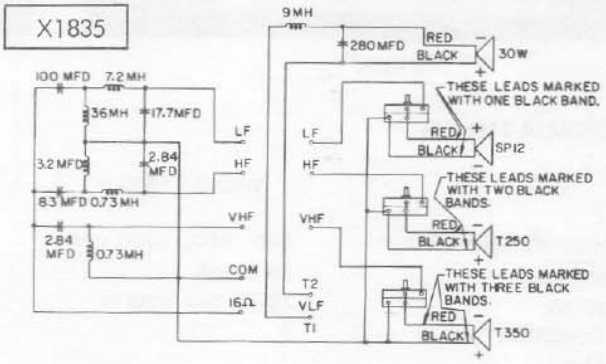
The X1020 should be connected as shown in the wiring schematic (See Fig. 3). Note that the crossover frequency of 100 or 200 cps is selected at the screw terminals on the input and output. Wires from the amplifier Common and 16-ohm output terminals are connected to the crossover "COM" and "IN" terminals respectively. The spade lug attached to the "COM" input terminal is connected to the 100 or 200 cycle tap, depending upon the crossover frequency desired. The spade lug from the "IN" terminal is likewise connected to one of the other pair of terminals. One lead from the 30W and one lead from the next driver in the system are connected to terminals representing the crossover frequency desired on the output terminal strip. Observe the color coding described in the schematic diagram. The remaining black and red leads from the two speakers are connected to the Common terminal. A total of four screw terminals assist in determining crossover frequency. Make certain all four are either 100 cps or 200 cps.

PHASING

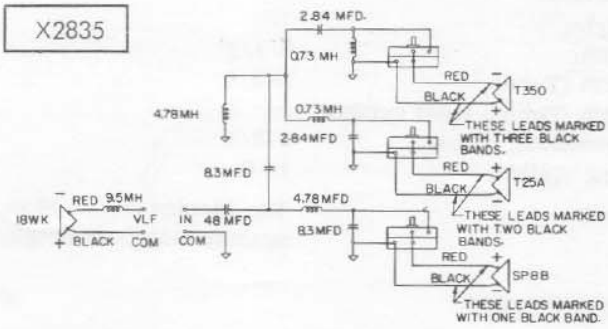
The phasing and color coding information given in the wiring instructions and schematic diagrams represents the normal wiring configuration for each of the three crossovers. Note that the woofer is normally wired out of phase with the next driver in the system to compensate for a 180° electrical phase reversal which occurs in the crossover itself. Thus the schematic diagrams are correct in illustrating the woofer connected out of phase. In certain instances, however, due to an unusual enclosure configuration, etc., it may be necessary to reverse the woofer connections. If in doubt regarding the proper connections for your system, simply listen to the system while reversing the woofer leads. That connection providing the most apparent low frequency response is correct.

Complete instructions and information on the use of Electro-Voice drivers and systems are included with individual Electro-Voice driver units and enclosures.

X1835



X2835



X1020