The Model CX-70 is a new type of P.A. amplifier incorporating Binaural Amplification and the Electronic Tone Corrector. It has 6 input channels for 4 high impedance type microphones and 2 phonograph pickups. There are two separate 35 watt output channels, tapped for both voice coil and 500 ohm lines.

POWER RATING: - 105-125 volts AC 60 cycles, consumes 290 watts.

TUBES USED: - Total 17, - 4-6F7G, 2-6G7C, 2-6F5, 2-6F6G, 4-6L6G and 3-5X4G. Close fitting tube shields are supplied for the 4-6F7G and 2-6G7C tubes and top shields are provided for the 2-6F5 tubes.

CONNECTIONS: Phonograph: - There are two low gain input channels for use with high impedance types of phono pickups. A shielded wire should be used between each phono pickup and the amplifier in order to prevent the introduction of foreign sounds. Connect the shield or negative wire from phono pickup #1 to input terminal #1 and the positive wire to terminal #2. The shield or negative wire from pickup #2 connects to terminal #3 and its positive wire goes to terminal #4.

Microphone: - High impedance types of microphones, such as Velotron, Velocity, Crystal, Dynamic and others may be connected to each of the four screw type microphone connectors. Polarizing voltage is automatically supplied for the Velotron.

CAUTION - When a Crystal Microphone is used this voltage should be shorted out by a wire joining terminal #5 on the voltage input strip with the terminal whose number corresponds to the number of the microphone channel to which the Crystal microphone is attached. A shielded microphone cable is essential between each microphone and the amplifier. Female connectors are supplied with the amplifier and should be fitted to the end of the microphone cable.

OUTPUT: - Speakers having their own field supply or PM types should be used. Either speaker voice coils or 500 ohm lines may be connected to the output terminal strips in accordance with the impedance in ohms as shown on the diagram. Use wire size #18 between amplifier and speakers. If the distance is over 100 feet #16 or #14 wire should be used to prevent loss of volume and quality of tone. Separate speakers or speaker lines are to be connected to the two output circuits.

CAUTION - Never turn up the Binaural Control on an output channel unless suitable speakers are connected to that channel, to do so may permanently injure the output transformer.

FUSE: - A 5 ampere fuse is located under a metal cover on the lower chassis. If the fuse blows, examine wiring and equipment for possible short circuit or other trouble before attempting to operate system again.

NOTE: - The four shielded tubes on the left of the amplifier are connected in series with the pilot lamp. This is a 6.3 volt .150 ampere bayonet base lamp and has a Brown Bead that can be seen welded to the stem. It is both a pilot light and a protective fuse for these tubes. If any of these tubes or pilot lamp should burn out, the others in this same group will fall to light. If ordinary .250 ampere pilot bulbs are used for replacement they will not act as protective fuses and they will not light brightly. On very loud signals the pilot light may flicker because of the extra current passed by the output tubes but this is normal.

REMARKS - If any hum is noticed when using the microphone, reverse the line polarity by pulling out the AC line plug, giving it a half turn, and reinserting. Hum may be caused by faulty tubes. If hum is noticed with correct line polarity, check all tubes carefully. In some cases, an external ground may be necessary. Terminal #1 of input or #1 of output may be used to ground the system.