No.63-A AMPLIFIER

AMPLIFIER
No. 63A

Instructions for Use

The No. 63A Amplifier illustrated above and shown schematically in Figure 1 is a single-stage AC operated amplifier designed to amplify the output of a carbon transmitter, condenser transmitter amplifier or of a mixing panel into which several transmitters are operated, to a level suitable for the input of the main amplifier, such as the Western Electric No. 59A or No. 59B Amplifier, in public address systems.

The gain of the amplifier is approximately 30 db. One No. 262A Vacuum Tube is employed in its operation. The amplifier is designed to obtain plate energy from a high voltage rectifier such as may be included in the main amplifier, or a battery which will supply 4.5 milliamperes at 360 volts.

The amplifier is designed to operate from an impedance of 200 ohms and has an output impedance of 200 ohms, so that it may be connected directly to the input of the main amplifier of the system. The primary winding of the input transformer is provided with a mid-tap for operation from a double button carbon transmitter. A milliammeter is connected in the plate circuit of the amplifier to indicate the plate current of the No. 262A Vacuum Tube.

the terminals similarly marked on the main amplifier terminal strip. In general, the "−360 V." and "GND" terminals of the No. 63A Amplifier should be strapped together. If the amplifier is excessively noisy, it may be found that less noise is obtained by removing the connection between the "−360 V." and "GND" terminals.

A diagram showing the connections between a No. 59 Type Amplifier and a No. 63A Amplifier is shown in Figure 3.

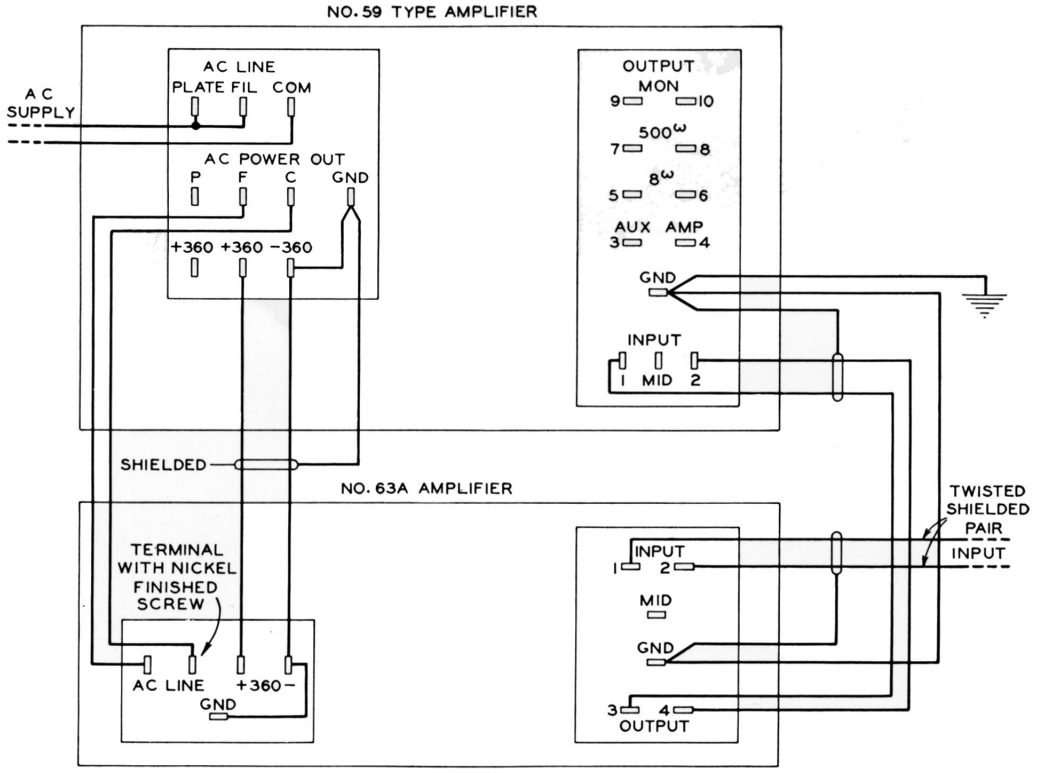

Fig. 3—Diagram of Connections Between No. 59 Type and No. 63A Amplifiers

When the No. 63A Amplifier is used in a system having one or more No. 59 Type and No. 57A Amplifiers, it may be desirable to control the AC power to a number of amplifiers by means of the power switch on one No. 59 Type Amplifier, or by a remote switch or relay circuit which provides the proper sequence. Facilities for controlling power to a number of amplifiers are provided on the No. 59A and No. 59B Amplifiers by means of six terminals marked "C", "P", "F" and "COM", "FIL" and "PL". To use this arrangement, the AC power source should be connected to the "AC LINE" terminals marked "COM" and "FIL" of the No. 59A or No. 59B Amplifier which is to act as the control point. The terminals marked "AC LINE" in the No. 63A Amplifier should be connected to the "C" and "F" terminals of the No. 59 Type Amplifier which is to act as the control point, with the terminal having a nickel finished screw in the No. 63A Amplifier connected to the terminal marked "C" in the No. 59 Type Amplifier.