

KS-16754 AMPLIFIER

IDENTIFICATION, INSTALLATION, CONNECTIONS, AND MAINTENANCE

1.00 IDENTIFICATION

1.01 The KS-16754 amplifier is a general purpose transistor amplifier designed for relay rack mounting. Fig. 1 shows list 1 amplifier. List 2 amplifier is similar in appearance except that it does not have the automatic output-level control circuit card.

1.02 The amplifiers may be used with various key equipments and station systems where 1/2-watt audio output is desired. Input impedance taps for the list 1 amplifier are 1.5, 600, and 2400 ohms. The list 2 amplifier also has a 10,000-ohm bridging impedance with a 0.2-uf blocking capacitor. Output of the list 1 amplifier is for 3.2- and 12-ohm impedance loads. The list 2 has 3.2- and 600-ohm output impedance taps.

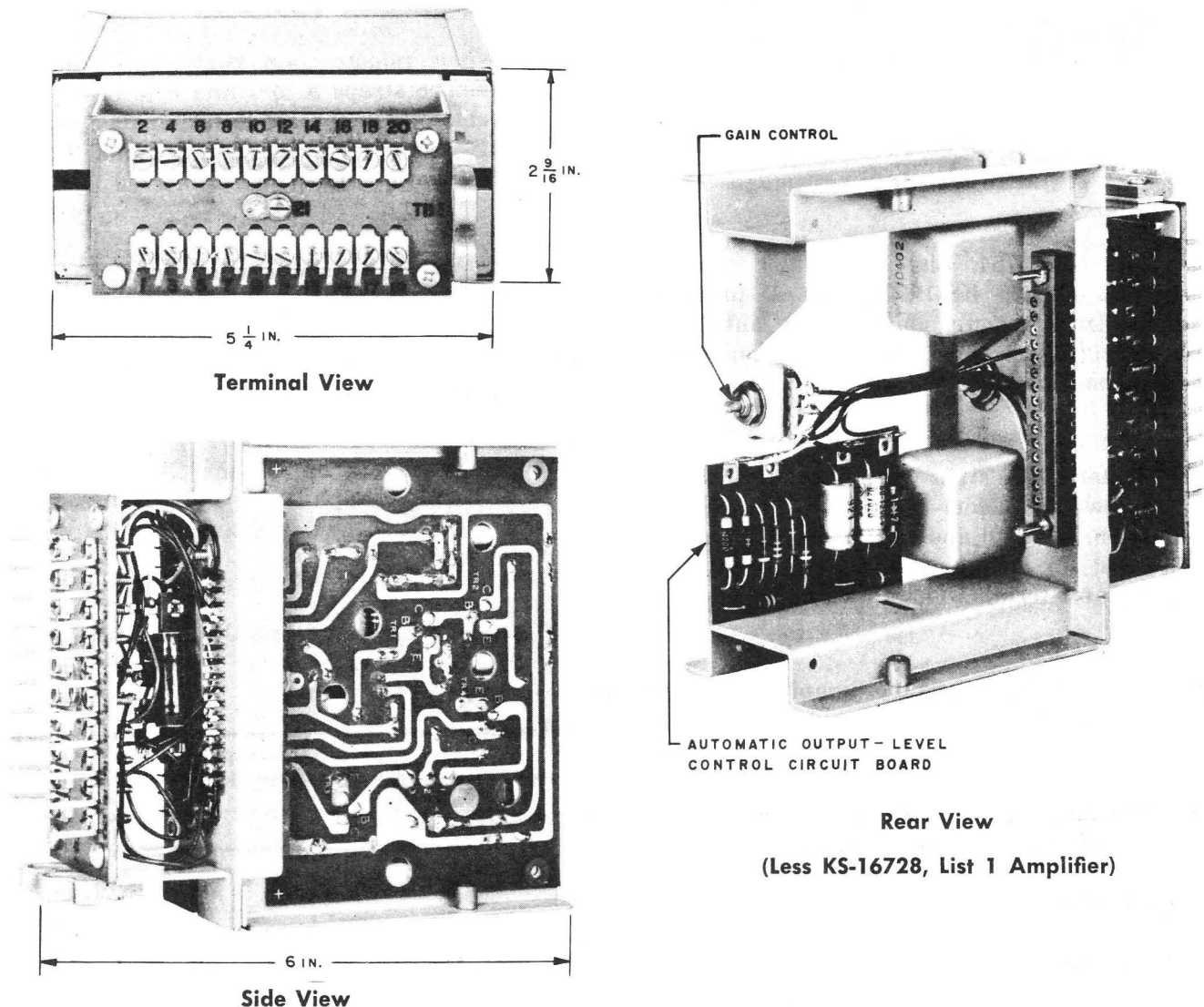


Fig. 1 — KS-16754, List 1 Amplifier

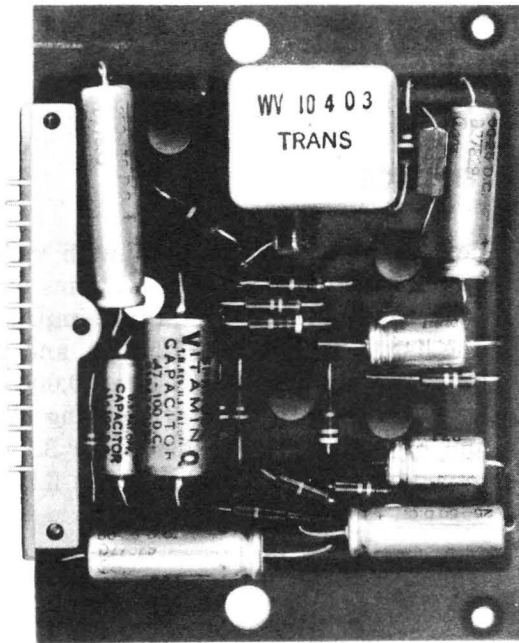


Fig. 2 — KS-16728, List 1 Amplifier

1.03 The KS-16754, List 1 amplifier consists of a plug-in KS-16728, List 1 amplifier (Fig. 2), transformers, gain control, automatic output-level control, cover (list 1 only), and other miscellaneous components.

1.04 A terminal strip with 20 combination screw- and solder-type terminals provides termination for input and output line, for battery supply, and for strapping various options. Terminal 21 is for termination of ground wire.

1.05 Over-all dimensions of the unit are 2-9/16 by 5-1/4 by 6 inches.

1.06 The amplifier is designed to operate from one of the following voltage sources:

- 24 volts dc.
- 48 volts dc.
- 115 volts 60 cycles by use of the J87202 power supply.

2.00 INSTALLATION AND CONNECTIONS

The KS-16754 amplifier may be installed on a 23-inch relay rack or cabinet mounting.

- Use two apparatus mounting bars (P-41K451 per ED-69404-01) to secure amplifier to relay rack. Up to eight amplifiers may be installed on one set of mounting bars.
- Connect battery and input and output lines to terminal strip with station wire or cable. Refer to connection data in Fig. 3.
- Strap the terminal strip for 24, 48, or a combination of 12 and 30 volts dc (see Fig. 3).
- When remote gain control is required, remove straps 5 to 7 and 6 to 8. Connect remote gain control to terminals 7, 8, and 12, with adjustable arm to terminal 7. Such installations must be engineered locally.

3.00 POWER SUPPLY

3.01 Power may be obtained from central office, PBX, or some other station power supply.

3.02 Power supply J87202 may be used for the KS-16754 amplifier. It is a small compact unit which will provide 12 and 30 volts dc for one amplifier.

3.03 Connect power supply J87202 to the amplifier as follows:

Terminal Strip	
J87202 Power Supply	Amplifier Terminal
H	9 (30 volt dc)
L	16 (12 volt dc)
C	12 (Common)

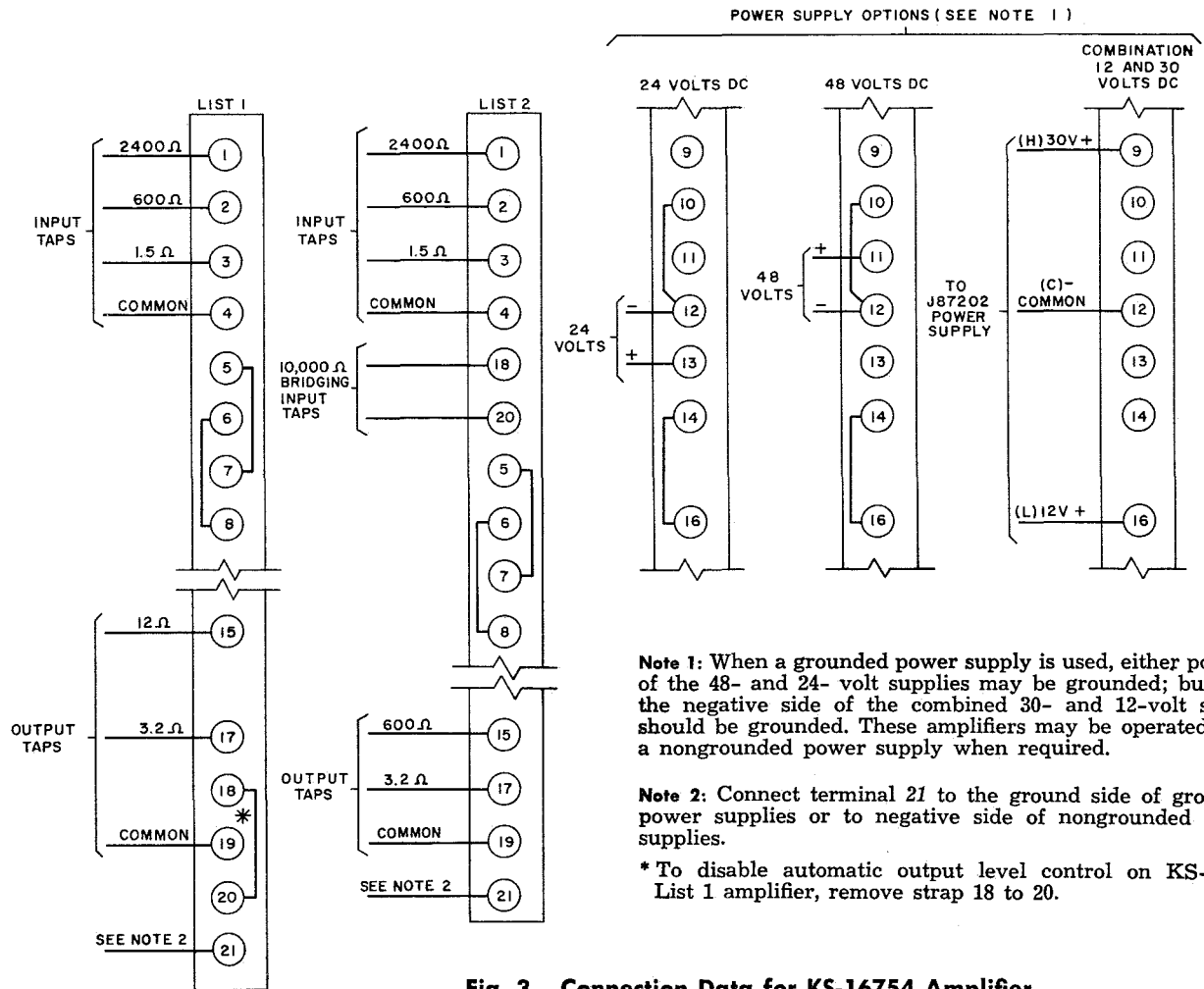


Fig. 3 — Connection Data for KS-16754 Amplifier

4.00 TEST AND ADJUSTMENTS

Proceed as follows:

- Test the KS-16754 amplifier with a signal applied to the input. Monitor the incoming line with a test receiver. Level of signal should be comparable to that in the receiver of a telephone set.
- Using a KS-6854 screwdriver or equivalent, adjust gain control for desired output. Turn gain control clockwise to increase gain; turn counterclockwise to decrease gain.

5.00 MAINTENANCE

Use the following procedure:

- If output of amplifier fails, check power supply and input signal.
- Check setting of gain control. Full counterclockwise position will cut off input signal completely. Readjust if necessary.
- If power supply, input signal, and gain control are satisfactory, replace the KS-16728, List 1 plug-in amplifier. This is done by removing cover and pulling circuit board out of pin-jack socket.
- If unit fails after replacement of KS-16728, List 1 amplifier, replace complete KS-16754 amplifier unit.