

RA-1573-A AMPLIFIER

TECHNICAL INFORMATION BULLETIN

Westrex

RA-1573-A AMPLIFIER

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Westrex Corporation

HOLLYWOOD DIVISION

SUCCESSOR TO E. R. P. DIVISION
Western Electric Company
INCORPORATED

TECHNICAL INFORMATION BULLETIN

OPERATING AND MAINTENANCE INSTRUCTIONS

FOR

RA-1573-A AMPLIFIER

1.0 Use

The RA-1573-A Amplifier is a low-gain amplifier intended for general-purpose use in a sound recording or rerecording system.

2.0 Illustrations

Figure 1 Top View of RA-1573-A Amplifier

Figure 2 Schematic Circuit

Figure 3 Wiring Diagram

3.0 General Data

3.1 Electrical

Input

Impedance: 600 ohms balanced or unbalanced

Output

Impedance: (1) 50 ohms unbalanced.

(2) 600 ohms unbalanced.

Frequency

Response: Flat within ± 0.25 db from 40-12,000 cps.

Distortion: Less than 1.25% from 40 cps to 15 kc at +28 dbm output.
Less than 0.75% from 40 cps to 15 kc at +20 dbm output.

Gain: 20 db ± 1 db.

Output Noise:

Approximately -97 dbm.

Power

Requirements:

22 ma., 275 volts dc.

0.3 amperes, 12.6 volts dc.

By replacing 12BH7 tube with a 12AU7 and with proper strapping at connector, the power requirement is:

13 ma., 275 volts dc.

0.15 amperes, 12.6 volts dc.

Under these conditions the maximum output is +20 dbm.

3.2 Mechanical Characteristics

Mounting: Horizontal or vertical, secured by two Camloc fasteners.

Connections: All circuits are through an Amphenol 16-pin, Blue Ribbon connector mounted on the amplifier. The mating receptacle is coiled, Amphenol 26-190-16.

Dimensions: 8 $\frac{5}{8}$ " long; 2 $\frac{5}{8}$ " wide; 5 $\frac{1}{2}$ " high.

Weight: Approximately 4 lbs.

RA-1573-A AMPLIFIER

4.0 Description

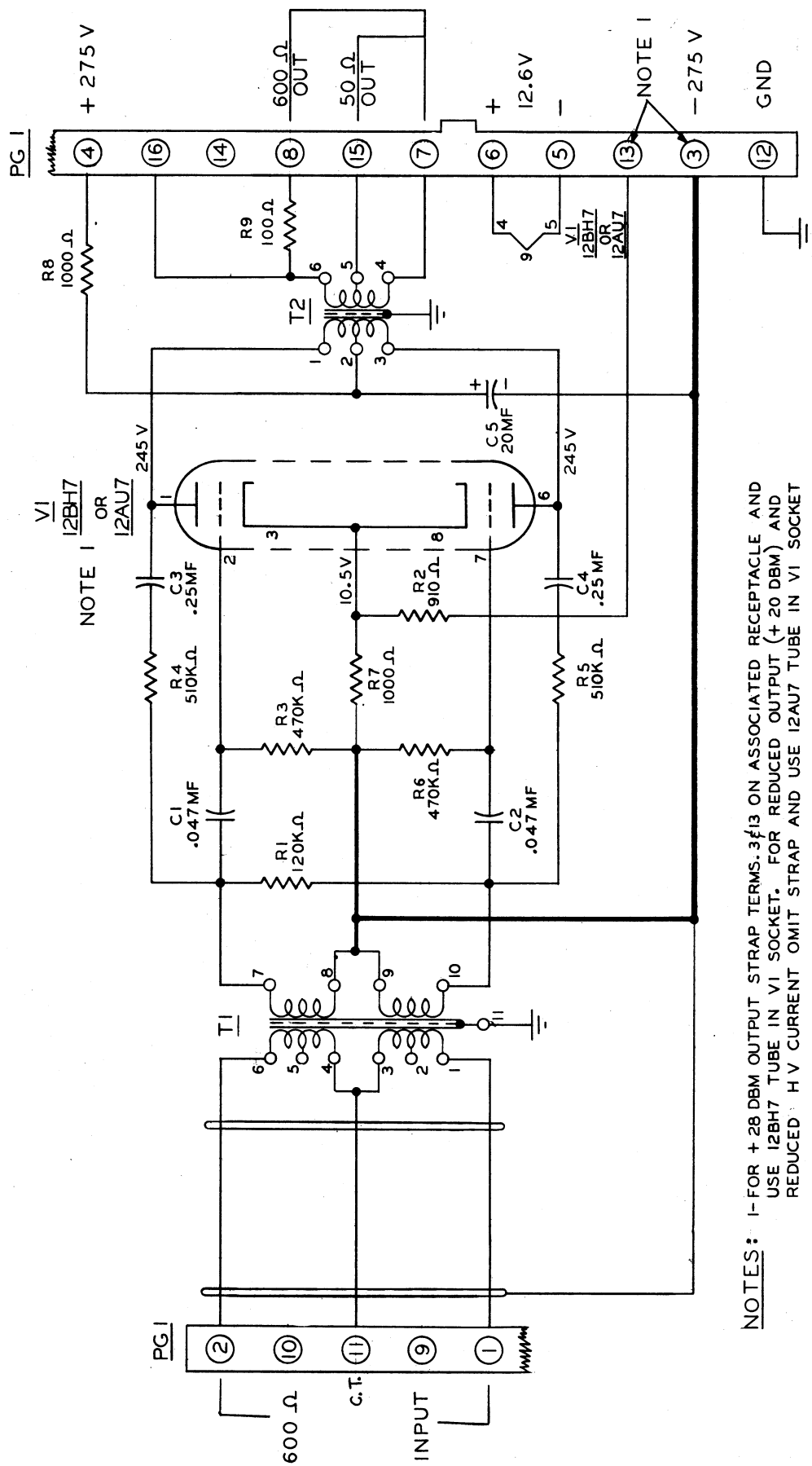
The RA-1573-A Amplifier contains one triode push-pull stage with internal feedback. A large output transformer is used which makes the distortion characteristic essentially independent of current unbalance between the two halves of the push-pull amplifier stage. Figure 1 is a top view of the amplifier.

Figure 2 shows the schematic circuit and Figure 3 shows the wiring diagram of the amplifier. Referring to Figure 2, terminals 3 and 13 on the plug are strapped and a 12BH7 tube is used

for a maximum output of +28 dbm. The amplifier may be used with reduced plate and filament current if the maximum output is not to exceed +20 dbm, by replacing the 12BH7 tube with a 12AU7 and removing the strap between terminals 3 and 13. An a-c filament supply may be used with a corresponding increase in output noise level.

5.0 Maintenance

The nominal point-to-ground voltages shown in Figure 2 will be useful in isolating the cause of difficulties in the amplifier.



NOTES: 1- FOR +28 DBM OUTPUT STRAP TERMS. 3/13 ON ASSOCIATED RECEPTACLE AND USE 12BH7 TUBE IN V1 SOCKET. FOR REDUCED OUTPUT (+20 DBM) AND REDUCED H V CURRENT OMIT STRAP AND USE 12AU7 TUBE IN V1 SOCKET

Figure 2 Schematic Circuit

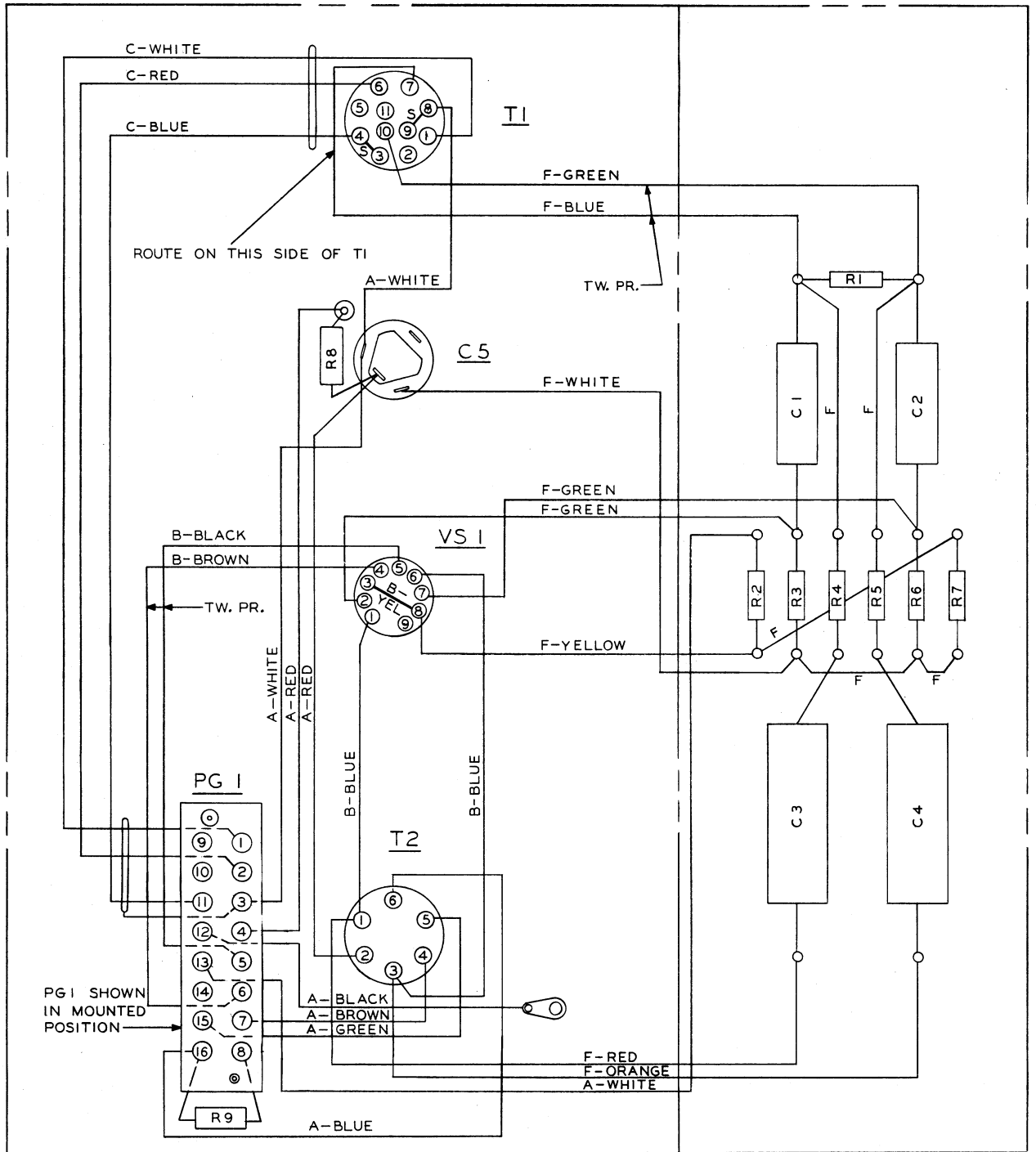


Figure 3 Wiring Diagram