

HANDBOOK

FOR

AMPLIFIER

TYPE 3

—
TRIMAX TYPE A54A

TRIMAX TRANSFORMERS PTY. LTD.
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CONTENTS

2	SPECIFICATION
3	CHASSIS LAYOUT
4	COMPONENT STRIP LAYOUT
5	CIRCUIT DIAGRAM & PARTS LIST

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GENERAL:

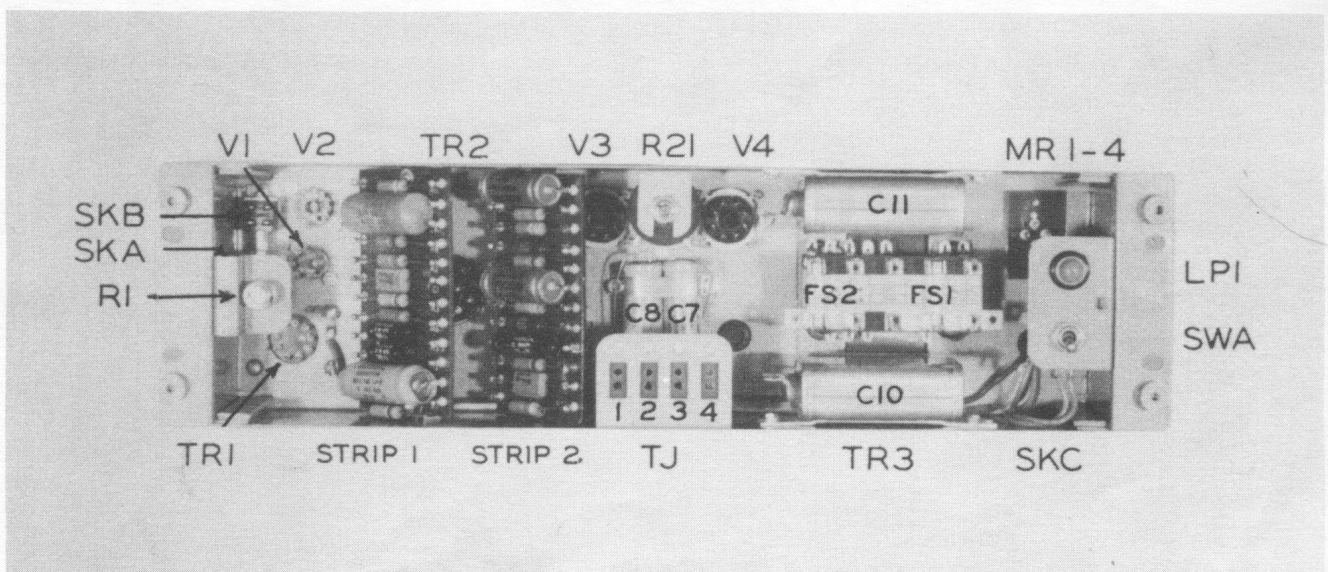
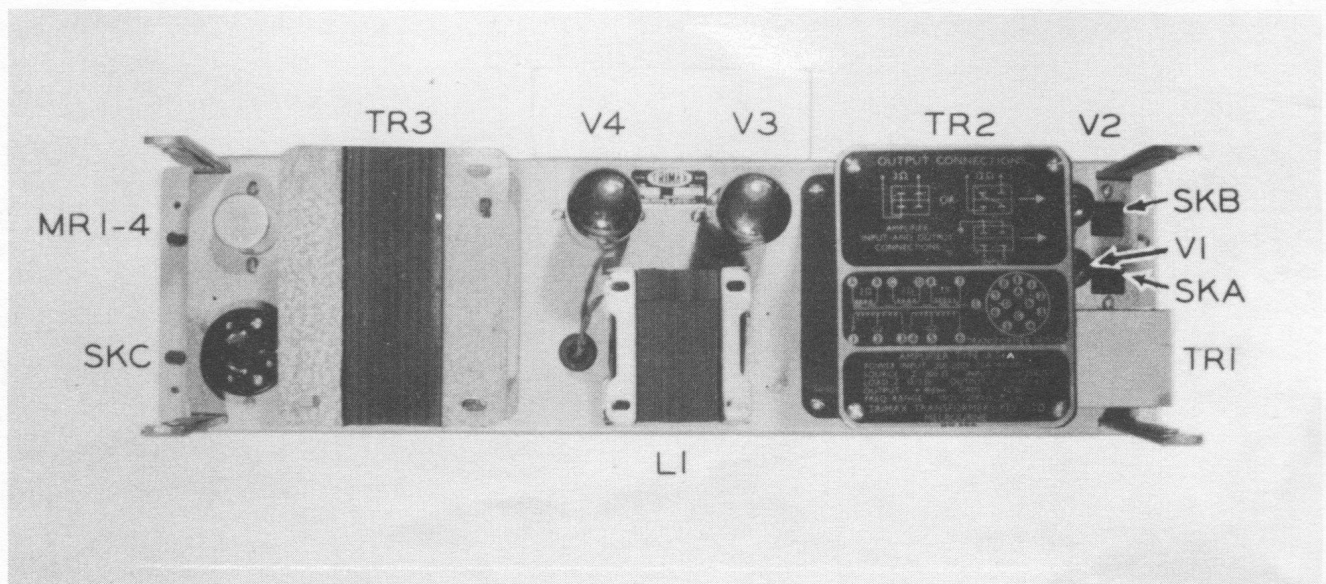
August, 1959.

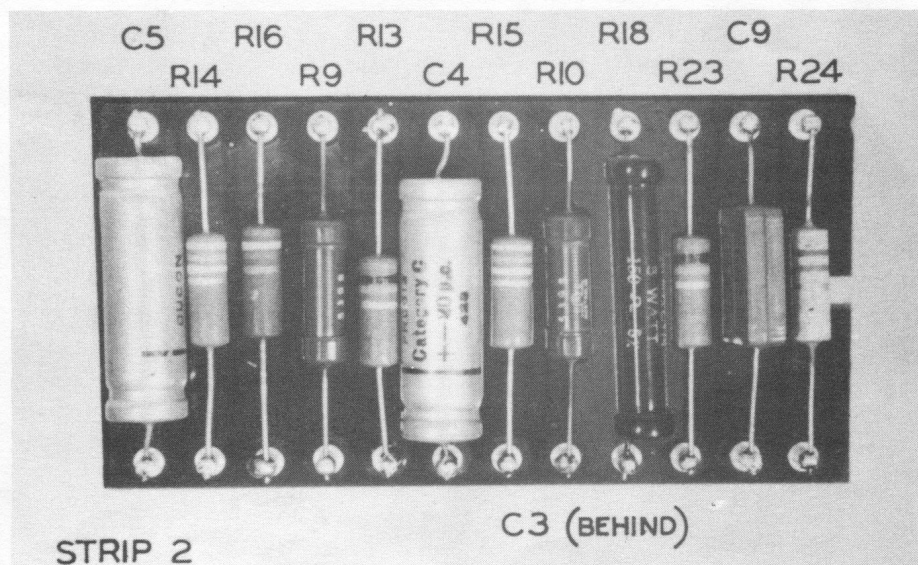
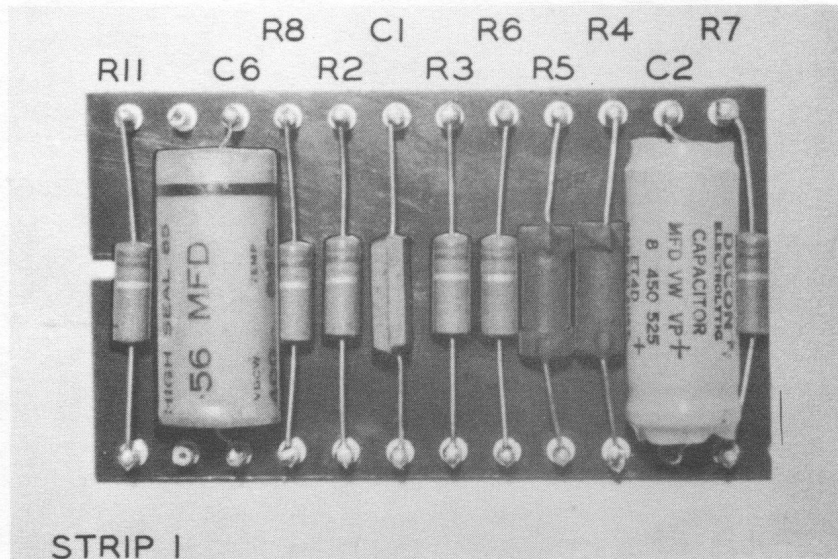
The Trimax Amplifier Type A54A is a high quality amplifier designed to drive a wide range monitor loudspeaker, or to act as a distribution amplifier for a large number of lines. Two output impedances are available - 12 ohm or 3 ohm. The input is suitable for bridging a terminated 600 ohm line. The type A54A differs from the old type A54, in the use of silicon diodes in place of the thermionic rectifier, to reduce heat and improve reliability.

PHYSICAL DESCRIPTION : The unit is designed for standard rack mounting, and occupies three rack units ($5\frac{1}{4}$ "). Input, output, and power connections are by means of plugs and sockets.

PERFORMANCE:

<u>Gain</u>	: 42 db continuously variable by means of input potentiometer.
<u>Frequency Response</u>	: $\pm .5$ db from 20 cycles to 20 Kc. ± 1 db from 15 cycles to 30 Kc.
<u>Stability</u>	: The frequency response does not vary by more than 1.5 db outside the limits stated above when the output termination is varied from open circuit to 600 ohms resistance, or 50 ohms in parallel with 0.2 mfd., and the amplifier is free from oscillations under these conditions.
<u>Source Impedance</u>	: 300 ohms.
<u>Input Impedance</u>	: Greater than 25,000 ohms.
<u>Load Impedance</u>	: 12 ohms or 3 ohms, changeable by output plug wiring.
<u>Output Impedance</u>	: Less than 1.5 ohms and .4 ohms respectively.
<u>Noise</u>	: Equivalent noise input to the amplifier is less than -80 dbm with the gain control in its maximum position.
<u>Power Output</u>	: Nominally 12 watts at less than .25% distortion at 1 Kc. A power output of approximately 20 watts is obtainable for 1% distortion.
<u>Power Input</u>	: 200-250 volts, 40-100 cycles, selected by fuse position. Primary current approximately .5 amp.
<u>Cathode Metering</u>	: Metering jacks are provided for each tube giving approximately $\frac{1}{2}$ scale reading on a 1 mA 1,000 ohms per volt meter.
<u>Output Tubes Balance</u>	: A potentiometer R21 is provided for balancing the D.C. current of the output tubes.





C3 (BEHIND)

