

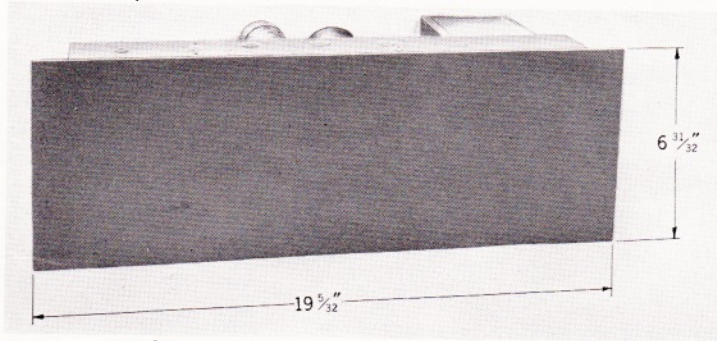
MONITOR

AMPLIFIER

AMPLIFIER

124A

Western Electric



for

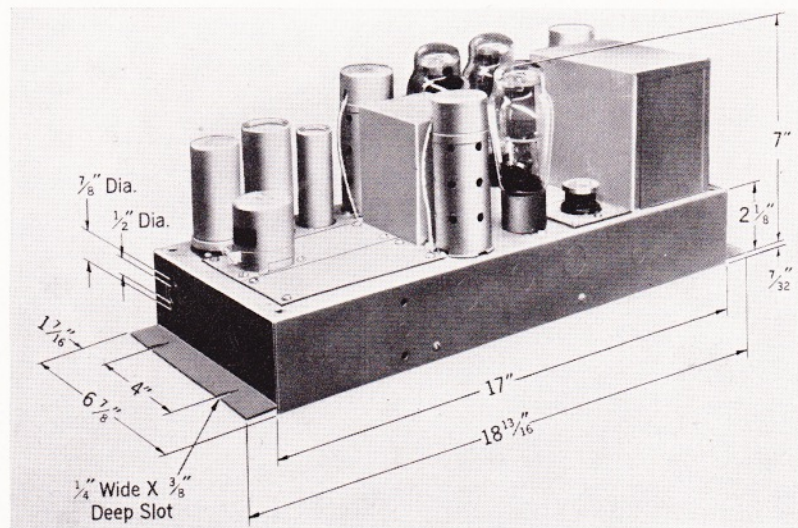
SPEECH INPUT
SYSTEMS

THE 124A AMPLIFIER is intended primarily for use as a high quality monitoring and audition loud speaker amplifier when a gain control in the amplifier is not required. When such a gain control is necessary, the 124E is recommended. The frequency characteristics of the amplifier, signal to noise ratio and power handling capability, conform fully to the requirements of radio broadcast frequency modulation systems. The frequency response is uniform over a range of from 30 to 15,000 cycles and at full power output of twenty watts, the dynamic range between signal and noise is about 80 db.

Designed for specially quiet operation, the 124A may be placed in a loud speaker cabinet without radiating interfering sounds either from the chassis or from the walls of the cabinet.

The 124A Amplifier was designed to radiate the minimum field from the power coil and retard coil, thus facilitating its use in high gain assemblies.

Western Electric



In addition to its primary use as a loud speaker amplifier, the 124A finds successful application as a high level booster and general purpose amplifier.

Other noteworthy features are:

Tapped output coil for operating into load impedances from 1 to 1000 ohms — because of the variety of terminations provided any of the current loud speaker combinations may be matched in impedance without loss of power or introduction of harmonic.

Choice of the use of Western Electric or commercially available vacuum tubes.

20-watt output available, simply by changing connections and *using Western Electric vacuum tubes*. No additional apparatus required.

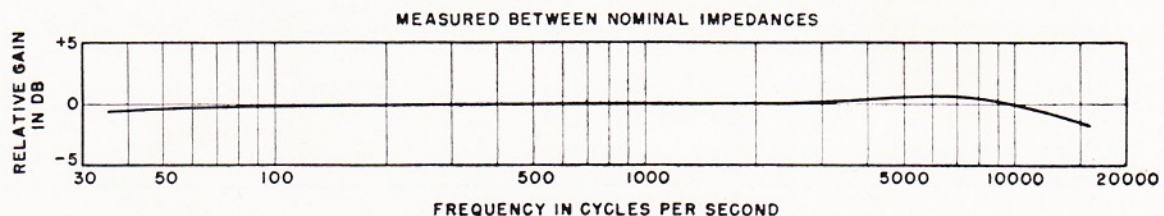
Input coil especially shielded and rotatable to a position of minimum noise pick-up.

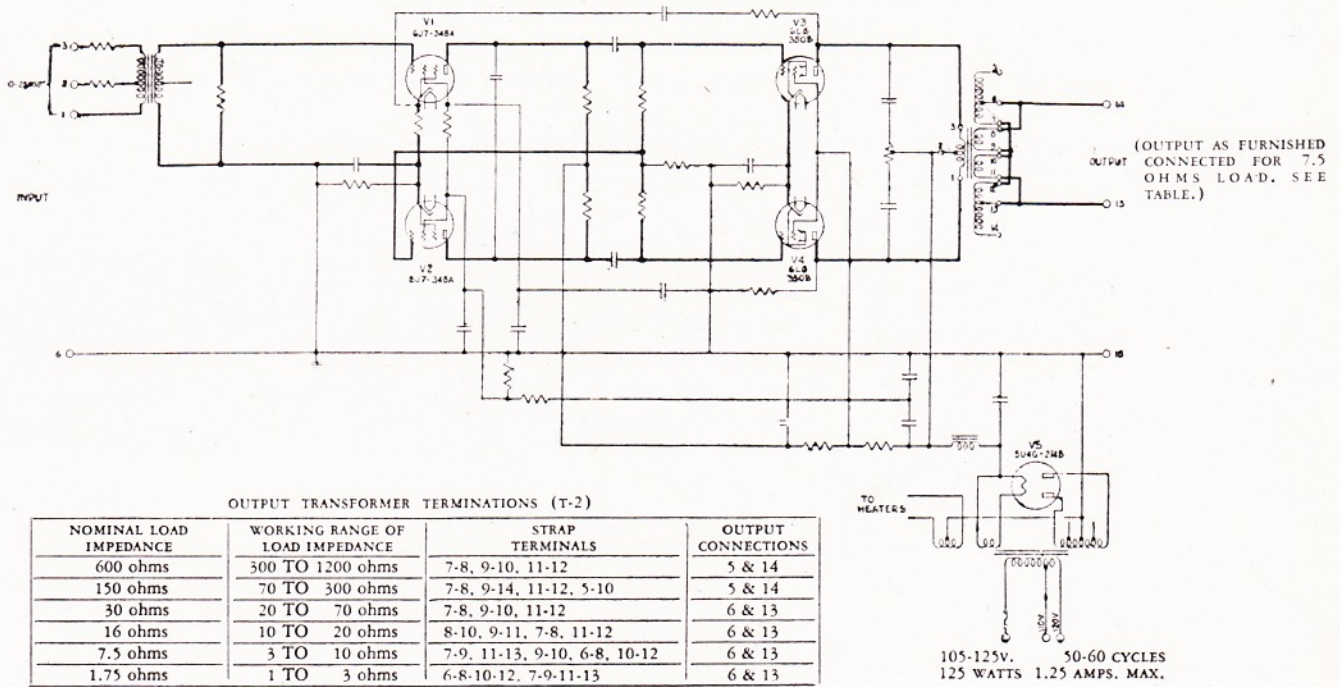
Provided with stabilized feedback as a particular aid in reducing hang-over or boominess in loud speakers.

Wired with *glass fibre* insulated wire, thus reducing the amount of inflammable material on the customer's premises.

Fused with a slo-blow type of fuse to absorb power surges due to momentary flash-over in tubes or condensers under trouble conditions.

Push-pull operation throughout.





Schematic of 124A Amplifier

TYPICAL ELECTRICAL CHARACTERISTICS

- Gain 50 db — Bridging Input — Terminals 1 & 3.
63 db — High Gain Input — Terminals 1 & 2.
Measured between nominal source and load impedances.
- Gain Control None.
- Source Impedance Bridging Input, 0-25,000 ohms — 600 ohms nominal.
High Gain Input, 0-1000 ohms — 600 ohms nominal.
- Internal Input Impedance Bridging Input, 40,000 ohms.
High Gain Input, 1000 ohms.
- Load Impedance 1-1000 ohms.
Nominal load impedances — 600, 150, 30, 16, 7.5 or 1.75 ohms.
See strapping data on schematic.
- Internal Output Impedance $\frac{3}{4}$ of nominal load impedance.
- Output Power 12 watts (2.0 total harmonics at 400 cycles) into nominal load impedance. May be reconnected for 20 watts at 5% harmonic content if Western Electric tubes are used.

TYPICAL ELECTRICAL CHARACTERISTICS — Continued

Output Noise	Unweighted, -37 db relative to .001 watt at full gain.
Maximum Input Level	-8 vu, Bridging Input, -25 vu, High Gain Input as read on volume indicator calibrated for 600 ohm load, connected across input terminals.
Power Supply	105-125 volts, 50-60 cycles — Using 12 watt output, 1.1 amperes, 105 watts — Using 20 watt output, 1.25 amperes, 125 watts — Fused with 1.25 amp. Buss Fustat on chassis — No power switch furnished.
Heat Dissipation	Approximately 100 watts.

MECHANICAL CHARACTERISTICS

Weight	20 pounds.
Mounting	Horizontal or vertical mounting on a standard relay rack, or set flat on mat in bottom of loudspeaker cabinet.
Vacuum Tubes	Western Electric or Commercially Available 2-348A or 2-6J7 or 6J7G 2-350B or 2-6L6 or 6L6G 1-274B or 1-5T4 or 5U4G
Finish	Chassis, Aluminum Lacquer. Mat, Black Japan — Specify Code 124A-3 Aluminum Gray — Specify Code 124A-15

Connections — All external connections are normally made to terminals under the chassis, and knockouts are provided in the ends of the chassis to admit the wires. Additional knockouts are provided in the sides of the chassis where sockets may be installed if plug and socket connections are desired.

DISTRIBUTOR IN THE UNITED STATES

Graybar
ELECTRIC COMPANY

Executive Offices: 420 Lexington Avenue, New York 17, N. Y.

Offices in more than 80 principal cities

A NATIONAL ELECTRIC SERVICE

DISTRIBUTOR FOR CANADA AND NEWFOUNDLAND

Northern Electric Company
LIMITED
General Offices: 1620 Notre Dame Street, W. Plant: 1261 Shearer Street,
Montreal, P. Q., Canada

TWENTY-THREE BRANCHES FROM COAST TO COAST