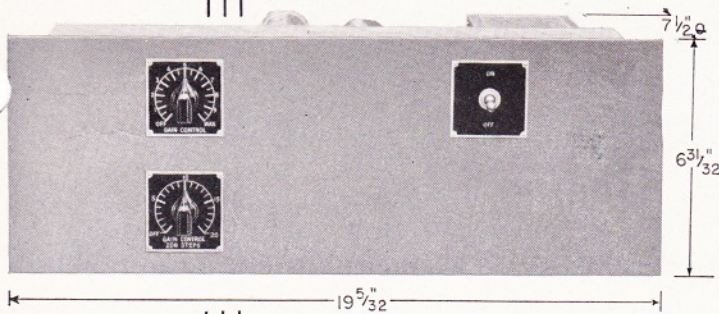


OK FOR FM

# MONITOR AND AUDITION AMPLIFIER

AMPLIFIER
124G
<i>Western Electric</i>



for

SPEECH INPUT

or

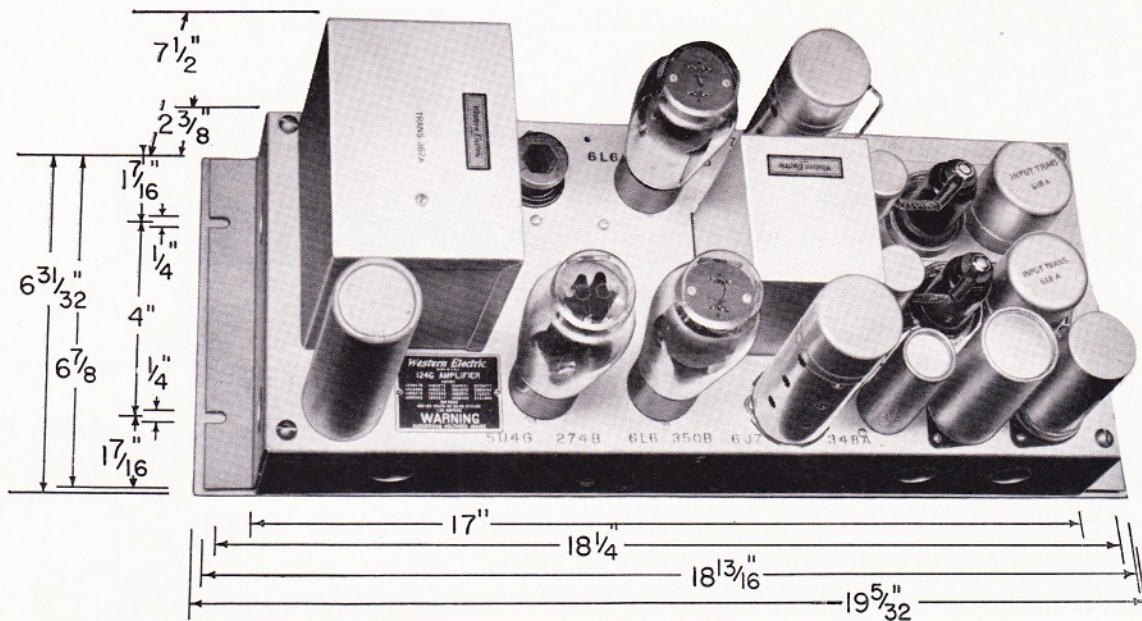
SOUND SYSTEMS

**A** FURTHER EXTENSION of an evolutionary design principle, first introduced in the Western Electric 124F Amplifier, has been carried out in the 124G Monitoring Amplifier which incorporates two *low level* input circuits in a single high gain assembly and is capable, like its predecessor, of doing a two-in-one job. The primary application of this space saving unit is as an aid in program blending, since it enables the control operator to monitor simultaneously through a booth loudspeaker program from two individual microphone or reproducer sources. By means of this same combination, the operator may interpolate comments through a loudspeaker located in an associated studio over which performers are receiving cue from a remote production unit. For smaller stations possessing a limited number of microphone inputs, the 124G Amplifier can be employed as an economical standby system, since its over-all gain and output power are sufficient to cover the entire range between input and output network levels.

As an audition amplifier, the extra input capacity of the 124G equipment, plus its pure transmission characteristics and ability to produce high listening levels without distortion, offer assurance of accurate performance under all conditions of use.

As shipped, the 124G Amplifier is connected for an output power of 12 watts,

## *Western Electric*



normally considered ample for most monitoring conditions. If more than one loudspeaker is to be driven, however, or if a high volume level is required, 20 watts can be made available by a simple change in the wiring connections.

Taps are provided in the output transformer which can be adjusted for operation into impedances ranging from 1 to 1200 ohms, so that a wide variety of loudspeaker combinations can be matched in impedance without loss of power or introduction of harmonics.

Other noteworthy features are:

**Quiet Operation** — The 124G Amplifier may be placed in a loudspeaker cabinet without radiating interfering sounds, either from the chassis or cabinet walls.

**Minimum Field Radiation** from power and retard coil, facilitating its use in high gain assemblies.

**Shielded Input Coil** — rotatable to position of minimum noise pick-up.

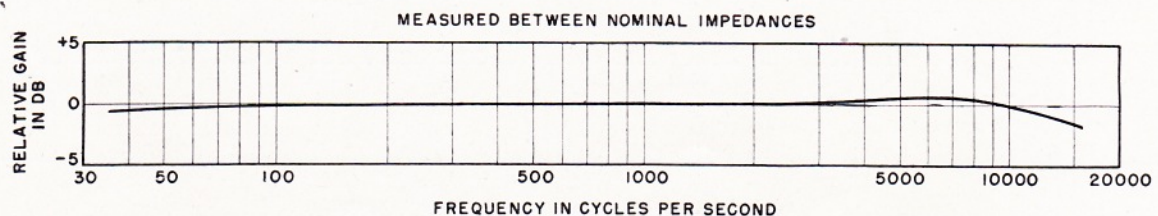
**Stabilized Feedback** — employed as a particular aid in reducing hangover or "boominess" in loudspeakers.

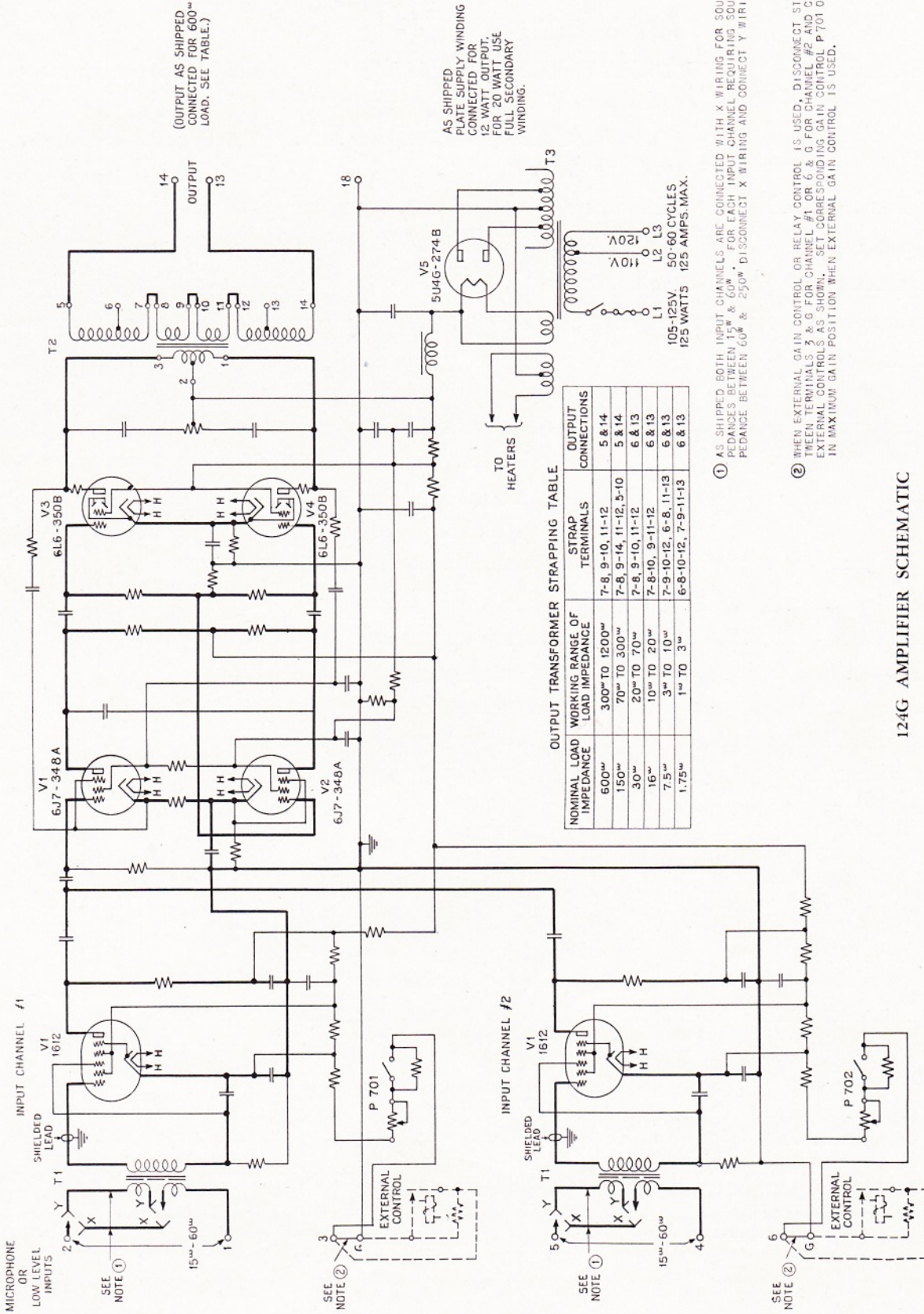
**Glass-Fiber Insulated Wiring.**

**Slo-Blow Type Fuse.**

**Push-Pull Output.**

**Self-contained Power Supply.**





124G AMPLIFIER SCHEMATIC

## TYPICAL ELECTRICAL CHARACTERISTICS

<b>Gain:</b>	104 db maximum.
<b>Gain Control:</b>	35 db continuously adjustable, with "off" position — separate control for each input. (Gain controls are on a dc bias basis and controls can be located remotely from amplifier.)
<b>Frequency Characteristic:</b>	Uniform within $\pm 1$ db over the range 35 to 15,000 cycles.
<b>Operates From:</b>	15 to 250 ohms.
<b>Operates Into:</b>	1 to 1200 ohms.
<b>Output Power:</b>	12 watts (+41 dbm*) as shipped, 20 watts (+43 dbm*) available.
<b>Output Noise:</b>	-8 dbm* unweighted, with maximum gain (approximately 50 db signal/noise).
<b>Power Supply:</b>	105-125 volts, 50-60 cycles 1.25 amperes, 125 watts.
*Reference 1 milliwatt.	

## APPARATUS DESCRIPTION

<b>Dimensions:</b>	19-5/32 inches wide, 7 inches deep and 7 inches high.
<b>Weight:</b>	20 pounds.
<b>Finish:</b>	Chassis — Light aluminum lacquer. Mat — Dark aluminum gray, coded 124G-15. Black Japan, coded 124G-3.

## VACUUM TUBES\*

The following vacuum tubes required for operating must be ordered separately:

Western Electric Tubes		Non-Western Electric Tubes	
2 — 348A	or	2 — 6J7G or 6J7	
2 — 350B	or	2 — 6L6G or 6L6	
1 — 274B	or	1 — 5U4G or 5T4	
	and	2 — 1612 or 6L7G or 6L7	

\*The amplifier should not be operated with a mixed complement of Western Electric and non-Western Electric Amplifier Tubes. This restriction does not apply to rectifier tubes, nor to the 1612 type tube.

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