

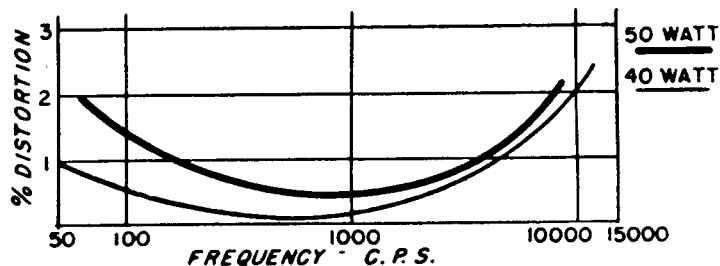
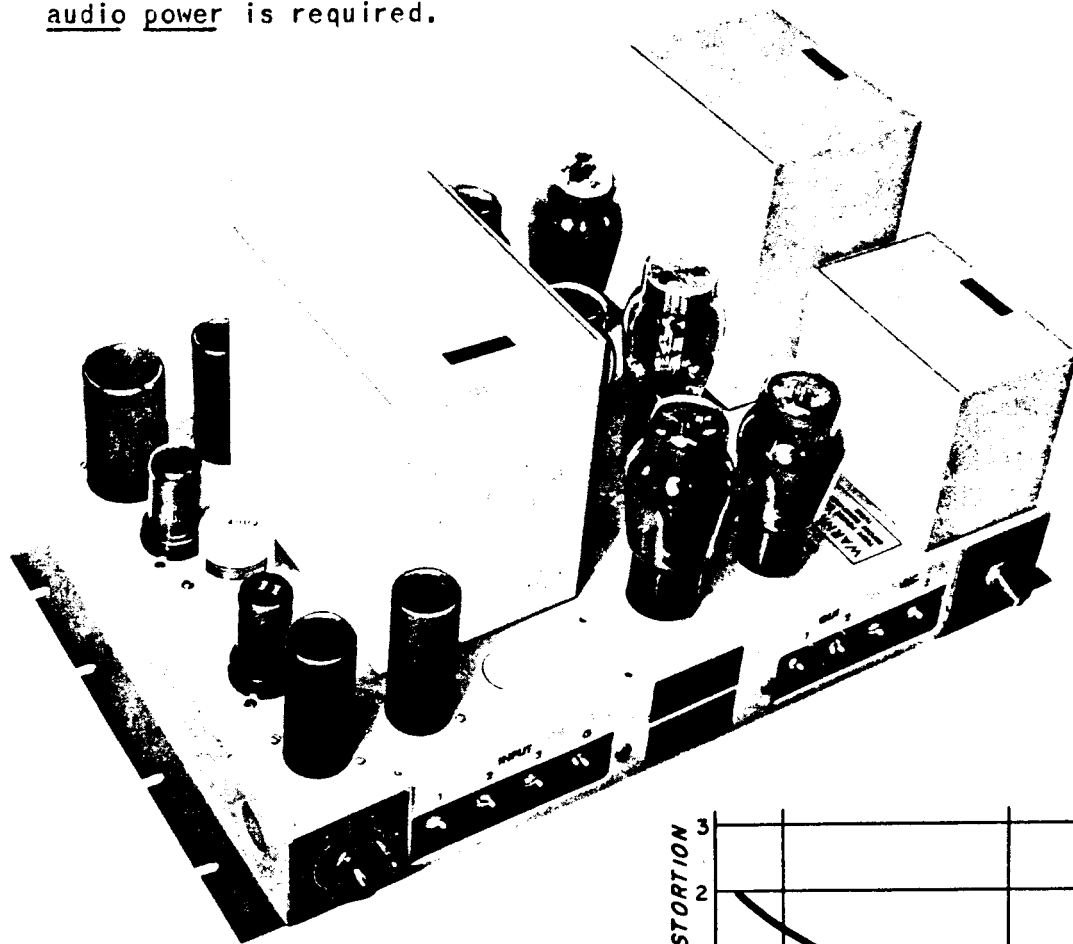
# 50 WATT POWER AMPLIFIER

BY *Langevin*

SOUND SYSTEMS EQUIPMENT

TYPE 101--3101 SERIES

The Langevin Type 101-D amplifier meets the need for a "year-in, year-out" dependable 50 watt power amplifier for use as the basic unit in high quality sound systems. This amplifier has proven its dependability in many large outdoor installations, such as race tracks, stadia and outdoor pageants, as well as in indoor installations where full, steady, dependable, audio power is required.



Input connections are available to either match or bridge 600 Ohm sources. Because of the high internal input impedance of the bridging connections, many of these amplifiers can be bridged across a program buss to provide large amounts of audio power.

LANGEVIN MANUFACTURING CORPORATION • 37 WEST 65th STREET, NEW YORK 23, N. Y.

*Langevin*



The equipment herein described is licensed under U. S. patents of the A.T. & T. Co. and the Western Electric Company.

# TYPE 101--3101 SERIES

## ELECTRICAL SPECIFICATIONS

### Type 101-D

Source Impedance: Match 600 Ohms; Bridge 1 to 25,000 Ohms.

Load Impedance: Working Range, 1 to 1000 Ohms; Nominal values, 2, 8, 15, 32, 150, 600 Ohms.

Power Output: 50 watts (+47 VU) with less than 3% total RMS Harmonic Distortion from 100 to 8000 Cps.

Maximum Gain: 60 db matching 600 Ohms; 45 db bridging connection.

Output Noise: Unweighted, 80 db below full output level (+47 VU) (-33 DBM).

Frequency Characteristic: Within  $\pm 1$  db from 30 to 15,000 cycles.

External Power Requirements: 105 to 125 Volts AC, 50/60 cycles; 215 VA maximum power consumption at 125 volts.

Volume Control: 25,000 Ohm volume control in bridging input only provides continuous adjustment over 40 db range.

Tube Complement: 2 - 6SJ7; 4 - 6L5G; 2 - 5U4G.

### Type 3101-F

Additional specifications for 50 watt amplifier with pre-amplifier input for *low* impedance microphones and phonograph pickups.

Source Impedance: 30 or 250 Ohms.

Maximum Gain: Approximately 105 db.

Output Noise: 57 db below full output (+47 VU), (-10 DBM).

Frequency Characteristic:  $\pm 1.5$  db from 50 to 10,000 cycles.

Volume Control: Electronic...varies resistance in cathode circuit of 1612 tube...can be used in remote positions.

Additional Tube Complement: 1 - 1612 or selected 6L7.

### Type 3101-H

Additional specifications for 50 watt amplifier with pre-amplifier input for *high* impedance microphones.

Source Impedance: 1 Megohm.

Maximum Gain: 4 Millivolts required for full output (+47 VU).

Output Noise: 57 db below full output (+47 VU), (-10 DBM).

Frequency Characteristic:  $\pm 1.5$  db from 50 to 10,000 cycles.

Volume Control: Electronic...varies resistance in cathode circuit of 1612 tube...can be used in remote positions.

Additional Tube Complement: 1 - 1612 or selected 6L7.

## MECHANICAL CHARACTERISTICS

Length: 18 13/16" (fits standard 19" equipment rack); Width: 10 1/4" (occupies 12 1/4" of standard rack space); Height: 8 3/4".

Weight: Approximately 45 lbs. Shipping Weight: Approximately 54 lbs.

Finish: Light grey, baked-on enamel over 16 gauge, zincplated, bonderized steel.



# TYPE 101--3101 SERIES

**INPUT CONNECTIONS**

USE	NOMINAL IMPEDANCE	WORKING RANGE	INTERNAL GAIN	TERMINALS	VOL. CONTROL
HIGH GAIN	600 Ω	0-1000 Ω	1800	80 DB	1-3
BRIDGING	25000 Ω	0-25000 Ω	25000	45 DB	2-3

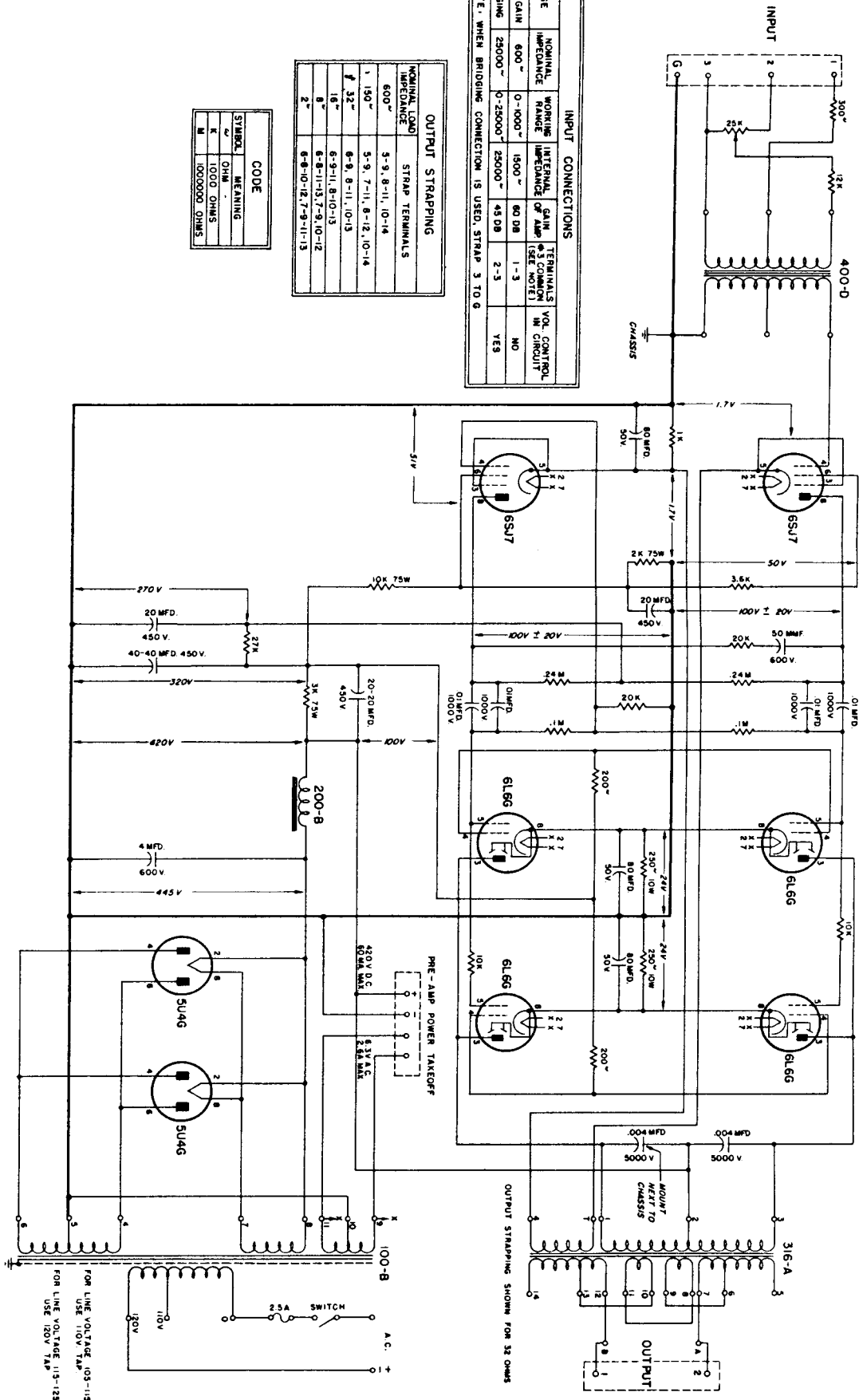
NOTE: WHEN BRIDGING CONNECTION IS USED, STRAP 3 TO 6

**OUTPUT STRAPPING**

NOMINAL LOAD IMPEDANCE	STRAP TERMINALS
600 Ω	5-9, 8-11, 10-14
1 150 Ω	5-9, 7-11, 8-12, 10-14
f 32 Ω	6-8, 8-11, 10-13
16 Ω	6-9-11, 8-10-13
8 Ω	6-8-11-13, 7-9-10-12
2 Ω	6-8-10-12, 7-9-11-13

**CODE**

SYMBOL	MEANING
Ω	OHMS
K	1000 OHMS
M	1000000 OHMS



FOR LINE VOLTAGE 105-115 USE 110V TAP  
FOR LINE VOLTAGE 120V USE 120V TAP