

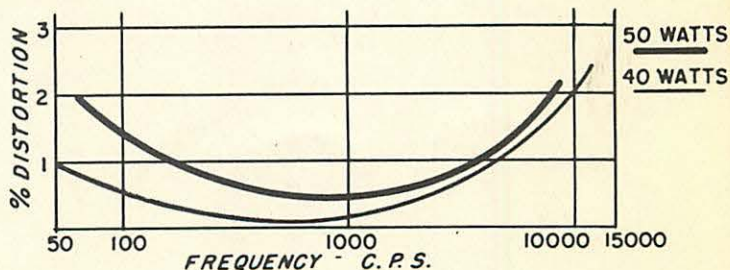
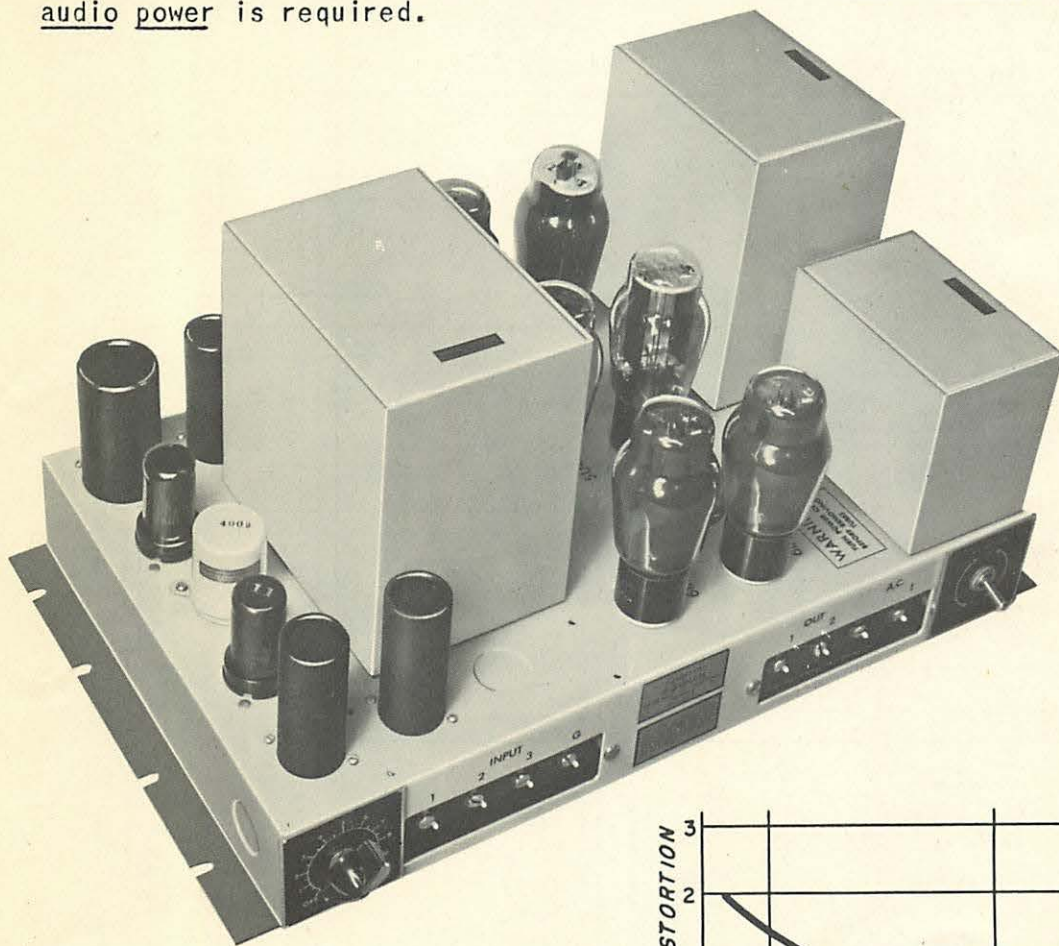
50 WATT POWER AMPLIFIER

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.

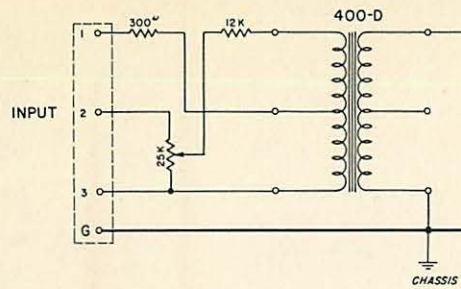
LANGEVIN MANUFACTURING CORPORATION • 37 WEST 65th STREET, NEW YORK 23, N. Y.

Langevin



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TYPE 101 - - 3101 SERIES

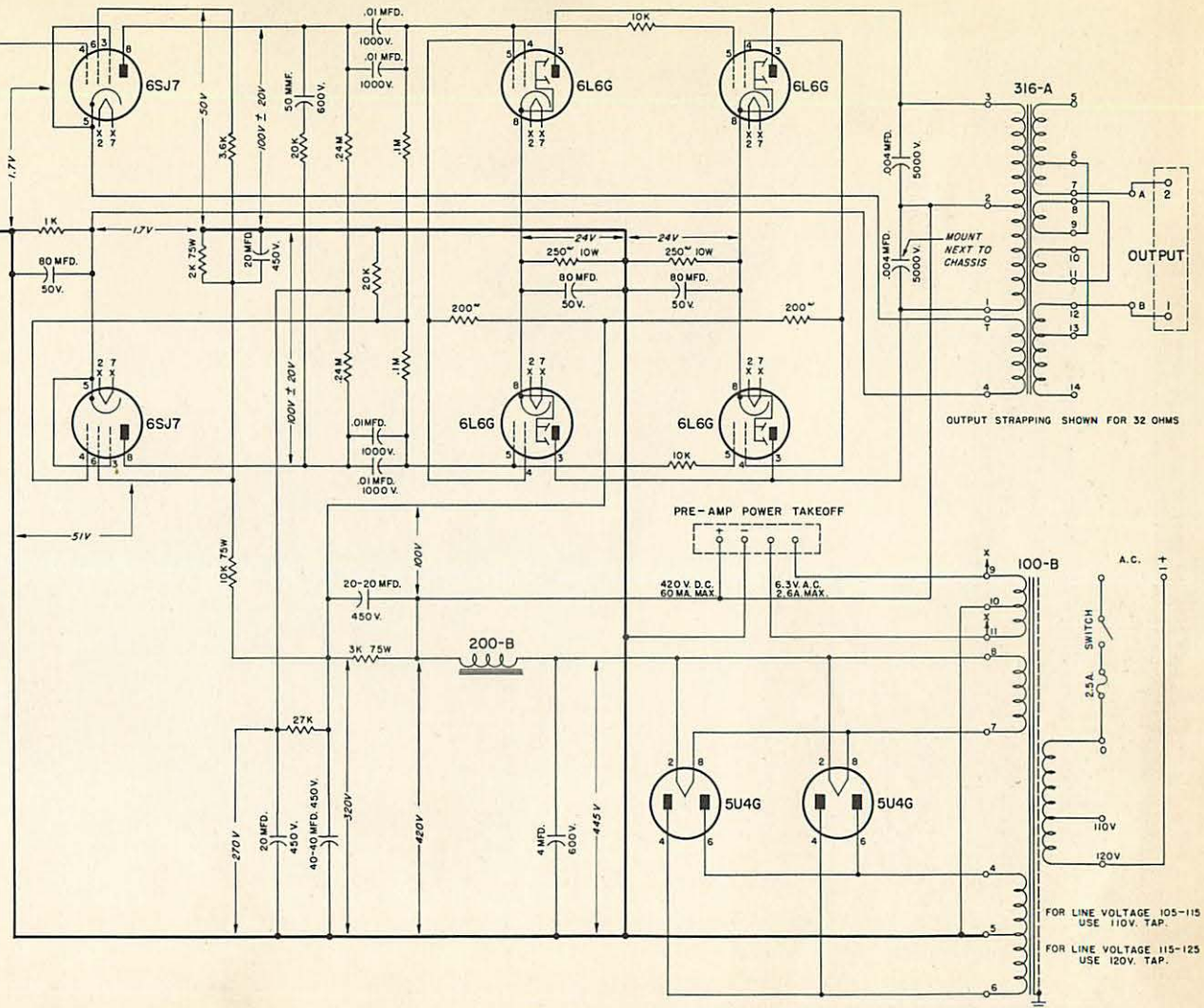


INPUT CONNECTIONS						
USE	NOMINAL IMPEDANCE	WORKING RANGE	INTERNAL IMPEDANCE	GAIN OF AMP.	TERMINALS # 3 COMMON (SEE NOTE)	VOL. CONTROL IN CIRCUIT
HIGH GAIN	600 ^Ω	0-1000 ^Ω	1500 ^Ω	60 DB	1-3	NO
BRIDGING	25000 ^Ω	0-25000 ^Ω	25000 ^Ω	45 DB	2-3	YES

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

OUTPUT STRAPPING	
NOMINAL LOAD IMPEDANCE	STRAP TERMINALS
600 ^Ω	5-9, 8-11, 10-14
150 ^Ω	5-9, 7-11, 8-12, 10-14
32 ^Ω	6-9, 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	OHM
K	1000 OHMS
M	1000000 OHMS



FOR LINE VOLTAGE 105-115 USE 110V. TAP.
FOR LINE VOLTAGE 115-125 USE 120V. TAP.

MICROPHONE PRE-AMPLIFIER MODIFICATIONS

An additional stage of amplification for microphones and phono pick-ups can be added to the Type 101-D amplifier. Two different modification groups are available...one to adapt the 101-D for use with *low impedance microphones or phono pick-ups*, the other to adapt it for *high impedance microphones*. Each modification group consists of a pre-amplifier, volume control, and all necessary brackets, hardware and an escutcheon plate.

Figure 1 illustrates a pre-amplifier mounted on the 101-D amplifier. When Modification Group Type 22-A is added (for low impedance devices) the combination is known as Langevin Type 3101-F; when Modification Group Type 23-A is added (for high impedance microphones) the combination is the Langevin Type 3101-H.

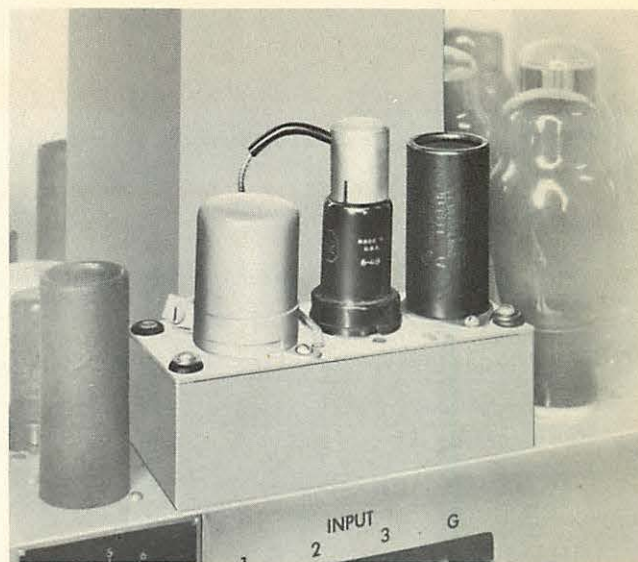


Figure 1

MOUNTING DETAILS

The Type 101 amplifier can be either shelf or wall mounted using a Type 201-A cabinet (see figure 2), or it can be mounted in a standard 19" equipment rack (see figure 3).

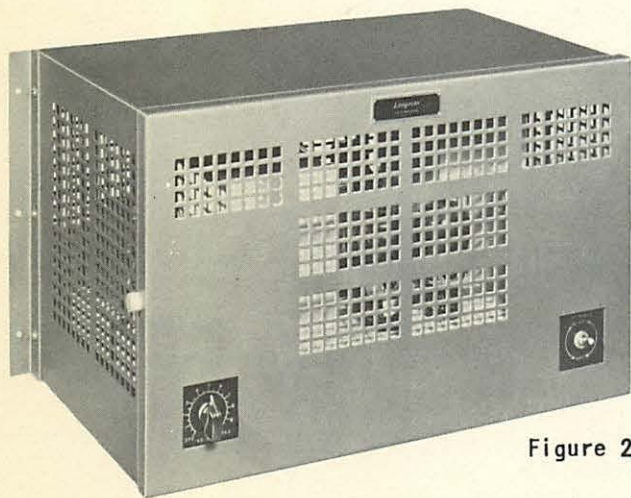


Figure 2

Cabinet Mounting

Type 201-A wall or shelf mounting cabinet is available for mounting the Type 101-D amplifier. This cabinet is constructed of 16 gauge steel, is bonderized, and finished in baked-on grey enamel. Knockouts are provided for wiring conduits, and proper ventilation is assured by grill work on three sides. The cabinet is equipped with a detachable front cover, secured by two knurled thumb screws. Brackets are supplied for mounting the Type 201-A cabinet to wall, ceiling or shelf surfaces.

Rack Mounting

When it is desired to mount the Type 101-D amplifier in a standard 19" equipment rack, Modification Group Type 7-A is required. This modification (see figure 3) provides a specially drilled mat panel, escutcheon plate and brackets for remounting the amplifier volume control and power switch, so they will be accessible from the front of the equipment rack.

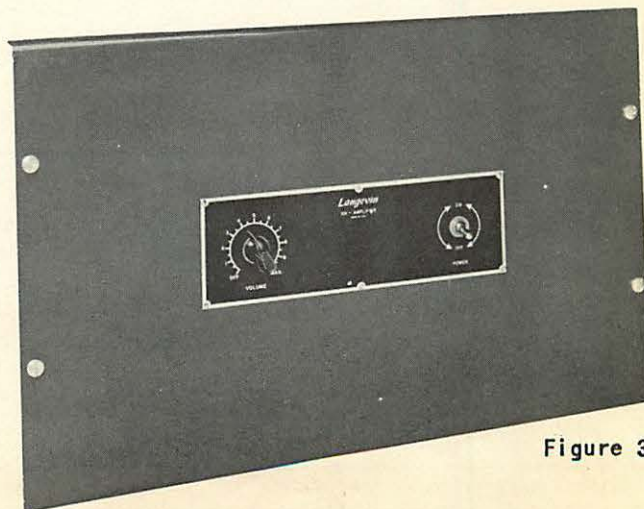


Figure 3

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 ± 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 - 6L6G; 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: ± 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: ± 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.

