

- PLUG-IN CONSTRUCTION
- 24 VOLT
- 3 AMPERE
- "REMOTE" SENSING OF OUTPUT VOLTAGE
- OVERLOAD PROTECTION

## PS222

### POWER SUPPLY TRANSISTOR TYPE

#### GENERAL DESCRIPTION

The PS222 Power Supply is a solid-state regulated unit primarily intended for the powering of transistor-type audio amplifiers. Output is 24 volts at a maximum current of 3 amperes. The full-load ripple output is less than  $1 \times 10^{-3}$  V rms.

The power mains which feed the PS222 may be either 105-125 volts or 210-250 volts. Power mains frequency may range from 50 Hz to 400 Hz.

Dependability has been stressed in the design of the PS222. All components are operated below their ratings.

A protective circuit is incorporated in this unit which reduces output to zero in event of an overload or short circuit, preventing any damage to supply or amplifiers.

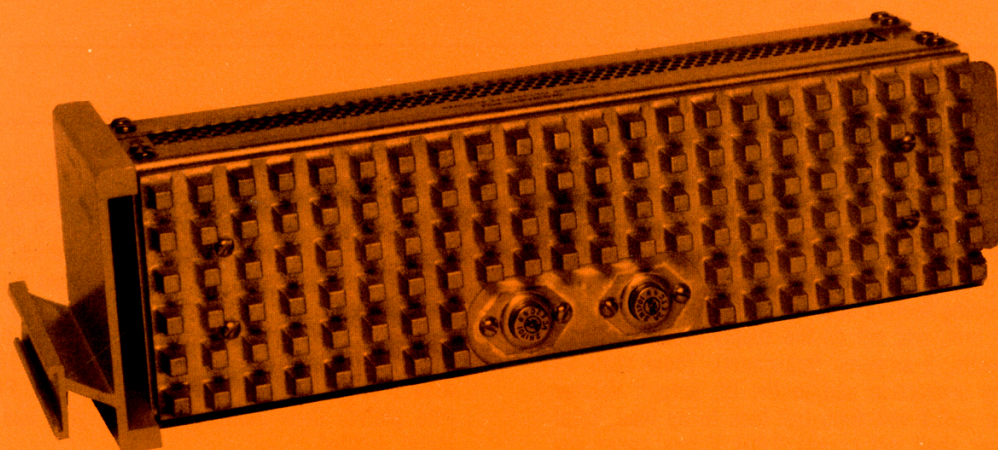
The power transformer is of the balanced-coil "hum-bucking" type in order to minimize its radiated field. It is equipped with an electrostatic shield between primary and secondary windings. Insulation is Class S silicone.

Inductors are not used . . . ripple reduction and regulation of output are achieved by series-resistance transistors driven by error amplifiers.

The "remote sensing" feature allows the PS222 to correct for voltage error which may exist AT THE LOAD. This feature may be strapped out of the circuit if not required.

# Langevin

## AUDIO EQUIPMENT

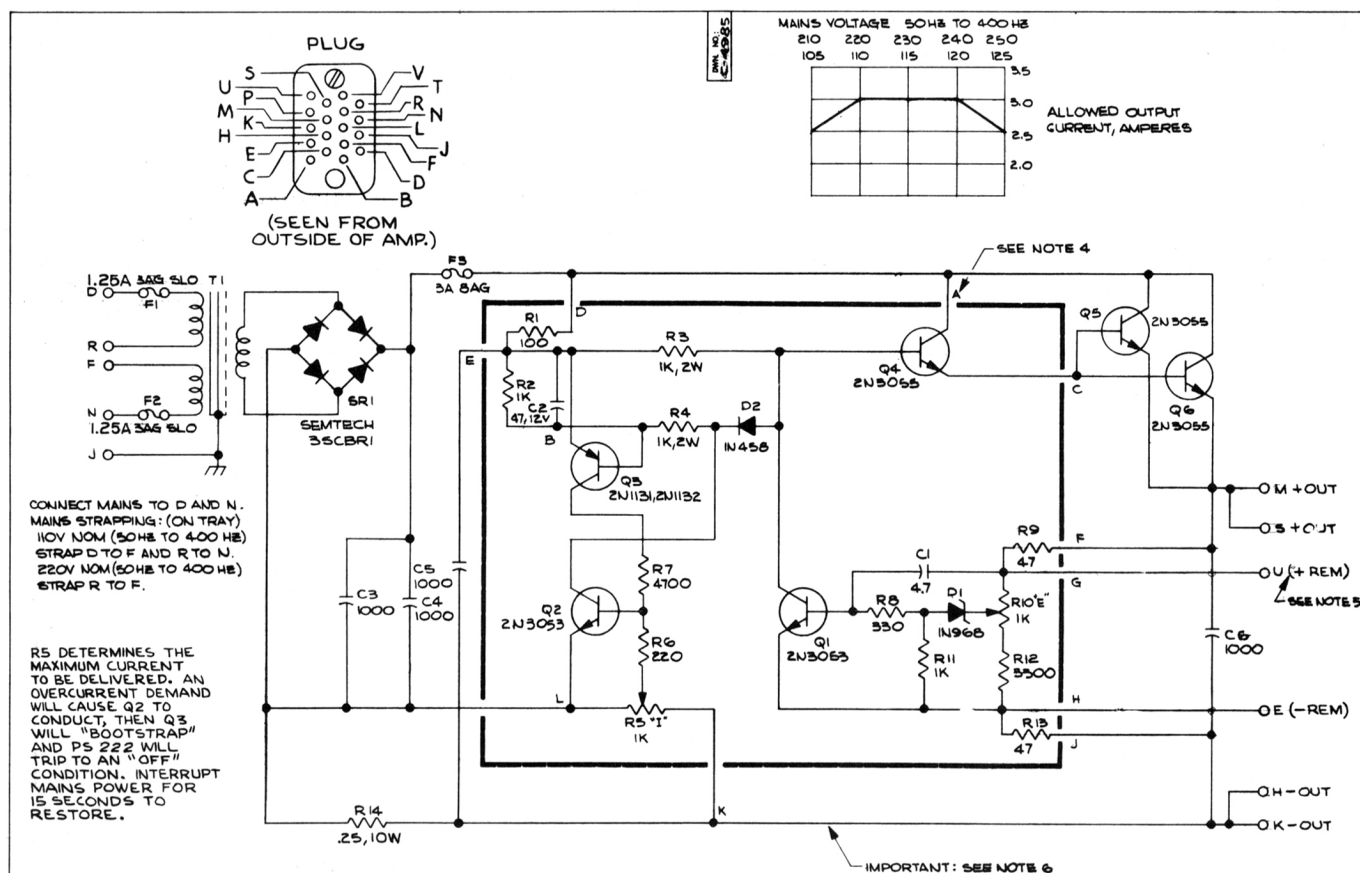


## SPECIFICATIONS

<b>Output Voltage:</b>	24 volts. This may be adjusted to exactly 24 volts by use of a screwdriver-set control on side of chassis.
<b>Output Current:</b>	3 amperes, maximum
<b>Regulation:</b>	Output voltage will not vary more than 0.1 volt from no load to full load
<b>Overload Protection:</b>	Application of overload or short circuit will cause output voltage to drop to zero. Reset by removing mains power for approximately 15 seconds
<b>Ripple:</b>	AC components in output voltage will not exceed 0.001 volt rms at any load

<b>Mains:</b>	Mains voltage may be 105-125 volts or 210-250 volts, at user's option. Mains frequency may be 50 Hz to 400 Hz. Demand from mains is approximately 150 VA
<b>Size:</b>	Approximately 3 $\frac{3}{8}$ " high x 4 $\frac{3}{16}$ " wide x 12 $\frac{5}{8}$ " long not including plug pins

**NOTE:** The performance figures given above are the GUARANTEED figures. A typical unit may be expected to have approximately 0.0003 volt rms ripple at full load and 0.00025 volt rms ripple at no load. Regulation for a no-load to a full-load condition is usually about 0.02 volt.



## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The power supply shall be Langevin PS222. It shall have a two-coil balanced input transformer with electrostatic shielding between primary and secondary. It shall operate from 105-125/210-250 volt 50-400 Hz mains. Strapping for mains voltage and the remote sensing feature shall be on the tray or cabinet which receives the unit, and not on the supply proper. DC output shall be 24 volts, 3 amperes (maximum). There shall be fuses in the mains connection and in the DC output. Voltage regulation shall be  $\pm 0.1$  volt from full load to no load. Total ripple in the output shall not exceed 0.001 V rms under any

condition of load. A remote sensing feature shall allow the voltage error correction to be referenced at point of load. Unit shall incorporate a protection circuit which will trip off the supply in event of short circuit or overload which may be reset by removing mains power for approximately 15 seconds. All active components shall be solid-state, and no electron tubes shall be used. Size shall be approximately 3 $\frac{3}{8}$ " high x 4 $\frac{3}{16}$ " wide x 12 $\frac{5}{8}$ " long not including plug pins. Plug pins shall be gold plated. Color scheme shall be grey and cadmium-plated metal, iridized.

## ACCESSORIES

**Mounting Tray TRY7**

(For installation of single PS222 supply)

**Rack Cabinet RC76**

(For installation of as many as four PS222 supplies or four intermixed AM17 and PS222 units).