

# TYPE 5208 POWER SUPPLY

## INSTRUCTIONS

### DESCRIPTION:

The Langevin #5208 Power Supply is a plug-in vacuum tube rectifier type that supplies plate and filament power for the Langevin #5116 or #5117 and similar amplifiers. It is fed by a 105-125 volt 60 cps source.

#### *Electrical Characteristics*

TUBE COMPLEMENT: One #5Z4 vacuum tube.

POWER REQUIREMENTS: 105-125 volts, 60 c.p.s. 95 va.

FILAMENT SUPPLY: 6.3 volts @ 2.1 amps, continuous (with center tap on plug pin)

PLATE SUPPLY:	MA Output	Low Taps	High Taps
	0	388	420
	50 ma	287	320
	3/4 load = 68 ma	275	305
	Full load = 91 ma	260	295

RIPPLE VOLTAGE: Less than 10 millivolts at full load. Less at smaller loads.

#### *Mechanical Characteristics*

SIZE: Length 10 $\frac{1}{4}$ " - Width, 2  $\frac{5}{8}$ " - Height, 3"

WEIGHT: 6 lbs. 5 ounces.

SHIPPING WEIGHT: Domestic - 6 lbs. 13 oz.

FINISH: Light grey baked enamel over 20 gauge, bonderized (rust-proofed) steel.

DWG. NO 12830

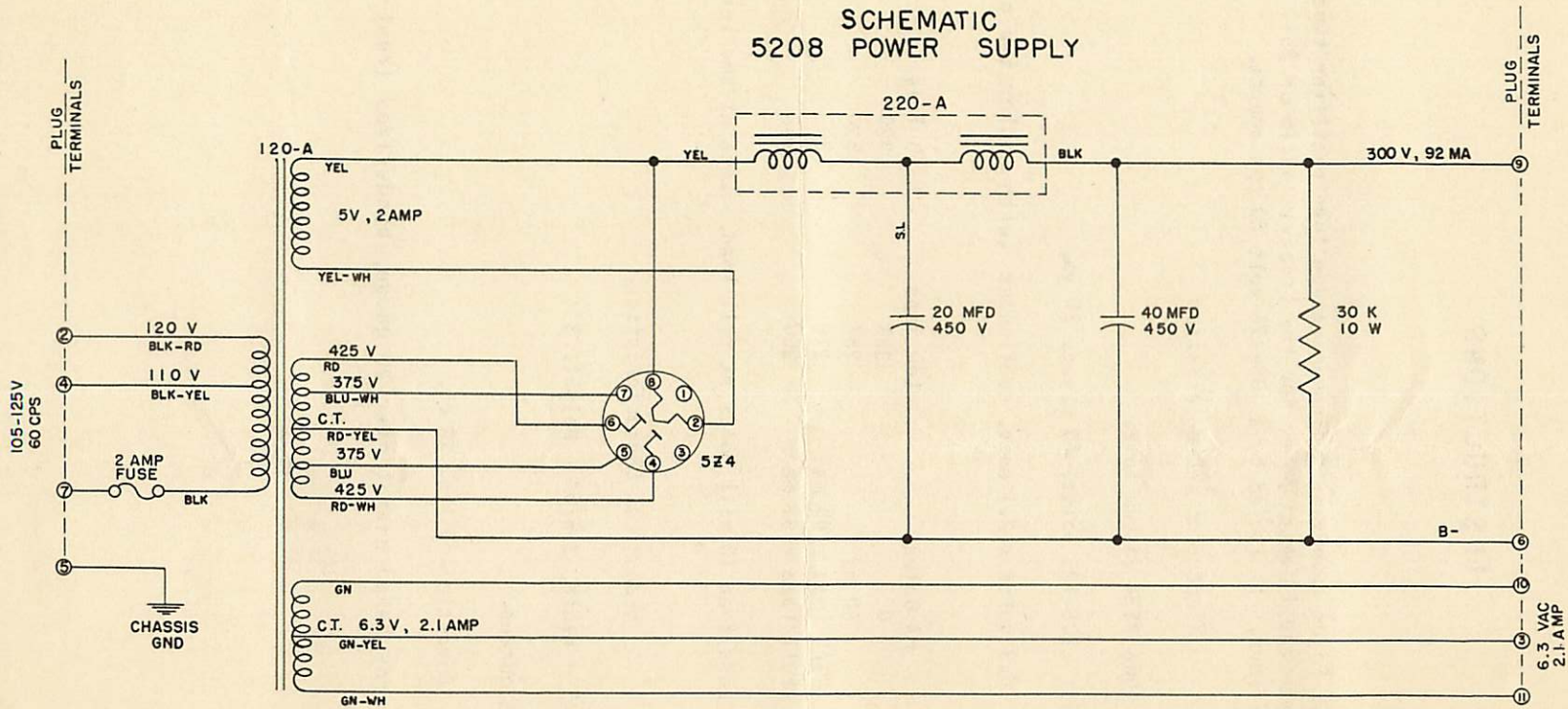
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**Langevin**



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# SCHEMATIC 5208 POWER SUPPLY



### External Connections On Tray Receptacle

1. Spare
2. A. C. Power (with pin 7) for 120 v. 60 cps input.
3. Filament center tap. strap to pin 6.
4. A. C. Power (with pin 7) for 110 v. 60 cps input.
5. Chassis ground.
6. B- and meter.
7. A. C. Power (fused leg)
8. Spare
9. B+, 300 v. D. C.
- 10, 11. Filament supply (6.3 V. A. C., 2.1 amperes)

### Caution

Weston 506 special meter is a sensitive current device requiring due care.

### Grounding

Connect the rack ground to pin number 5 on the tray receptacle. It is seldom expedient to "Chassis-Ground" the negative side of the high voltage at the power supply. When several amplifiers are used in a system, it is generally advisable to apply this ground at only one amplifier in the system.

### Filament Center Tap

Filament C.T. is brought out to plug pin #3, to allow application of external bias supply to the filament leads. When external bias is not used, it is important to strap pin #3 to pin #6.

### Fused Circuit

The #5208 Power Supply is fused in the primary of the power transformer. The fuse can be replaced without unplugging the supply.

### Typical Loads

The Langevin type #5208 Power Supply was designed to provide plate and filament power to the #5116 or #5117 amplifiers. It can be used to supply power to the LMC #116-B and #117-A amplifiers and for similar high quality preamp and program amplifiers.

The following combinations of #5116 and #5117 amplifiers are typical.

No. of #5116 Preamps	No. of #5117 Program Amps.	No. of #5117 Monitor Amps.
2	0	1
1	2	0
10	0	0
5	1	0

### Mounting Accessories

All Langevin Plug-In-Amplifiers and Power Supplies mount in trays equipped with a female receptacle. These trays mount on a 5010 frame which occupies just  $3\frac{1}{2}$ " of standard rack height. The 5208 Power Supply requires a 5017 mounting tray; the 5206 Power Supply requires a 5019 mounting tray. The 5010 frame will accommodate six #5208 Power Supplies or two #5206 Power Supplies. Also, one #5206 with three #5208 Supplies can be mounted on the #5010 frame.

For minimizing hum pickup, amplifiers require reasonable physical isolation from the Power Supply. The preamplifier positions should be chosen with special care.

Mounting accessories are not supplied with Amplifiers and Power Supplies; these should be ordered separately.