

OPERATING INSTRUCTIONS



TYPE 1269-A POWER SUPPLY



Figure 1. Type 1269-A Power Supply.

TYPE 1269-A POWER SUPPLY

1 PURPOSE.

The Type 1269-A Power Supply (Figure 1) is a general-purpose source of plate and heater power for laboratory equipment and in particular for the General Radio Types 1208-C, 1209-C, 1209-CL, 1211-C, 1215-C, and 1361-A Oscillators, to which it attaches directly. Connection to other instruments requiring about 300 volts dc at 50 ma maximum and 6.3 volts ac at 3 amperes maximum can be made by means of a mating connector supplied

2 DESCRIPTION.

The Type 1269-A Power Supply is housed in a convertible-bench cabinet. On the front panel are the on-off switch and the indicator light. The output connector is on the right-hand side, the input power cord on the left-hand side.

3 OPERATING CHARACTERISTICS.

The Type 1269-A Power Supply provides about 300 volts dc at a maximum load of 50 milliamperes. With no load the output is about 405 volts dc. A 6.3-volt 3-ampere ac heater supply is also provided. If the ac load is limited to 1.5 amperes, as much as 65 milliamperes can be drawn from the 300-volt supply (at about 285 volts). Ripple is less than 80 millivolts ac at full load.

Both the 6.3-volt ac and the 300-volt dc supplies are isolated from ground and from each other to permit greater latitude in external connections.

4 INSTALLATION.

4.1 ELECTRICAL CONNECTIONS. Connect the Type 1269-A to an ac line of 115 or 230 volts (as indicated on the left-hand side near the power cord), 50 to 60 cps. The power supply will operate rf Unit Oscillators satisfactorily from a 400-cycle line, as well.

To give greater latitude in external connections, both the 6.3-volt and 300-volt supplies are isolated from ground.

4.2 BENCH MOUNTING. The Type 1269-A Power Supply can be rigidly attached to a Type 1208-C, 1209-C, 1209-CL, 1211-C, or 1215-C by means of the narrow adaptor plate and associated screws supplied with the power supply and the clip attached to the oscillator L bracket.

To attach the units, proceed as follows:

a. Temporarily remove the upper and lower right-hand corner panel screws from the front panel of the power supply. Use these screws to attach the adaptor plate to the power supply, with the left-hand long end of the adaptor plate placed over the right-hand end of the front panel.

b. Remove the front and rear left feet from the oscillator. Using one of the screws removed, attach the clip to the oscillator L bracket in the left rear foot mounting location. Note that this hole in this location is tapped 10-32 to receive the mounting screw. Do not replace the feet.

c. Attach the oscillator to the power supply by fastening the upper and lower right-hand corners of the adaptor plate to the corresponding tapped holes in the upper and lower left-hand corners of the oscillator panel. Attach the clip at the left-hand rear of the oscillator to the matching hole in the right-hand side panel of the power supply. The necessary screws and nut are supplied with the power supply.

The Type 1269-A Power Supply can also be rigidly attached to the left-hand side of a Type 1361-A Oscillator. The power cables are coiled between the cabinets and the end frames. To attach the units proceed as follows:

1. Remove the dust covers from both instruments by unscrewing the two thumbscrews at the rear of each cover and removing the covers.

2. Remove the rubber feet from the right-hand side of the power supply and from the left-hand side of the oscillator.

3. Coil the power cables and plug them in as required.

4. Slip the long 10-32 screws supplied with the power supply through the matching holes near the rear on the side plates of the instruments, starting them through the oscillator side and engaging the nuts on the power-supply side.

5. Secure the front panels of the oscillator and power supply by means of the small adaptor plate supplied with the power supply. The screws that secure the power-supply panel to its right-hand end frame, and the oscillator panel to its left-hand end frame, are temporarily removed while the adaptor plate is put in place, and then the screws are reinstalled.

4.3 RELAY-RACK MOUNTING. To rack-mount the Type 1269-A Power Supply attached to one of the oscillators mentioned above, a Type 480-P412 Adaptor Plate Set is required. After attaching the power supply to the left-hand side of the oscillator as described in paragraph 4.2, install one adaptor plate on the left-hand side of the combined unit, and the other on the right-hand side. The screws required are supplied with the Adaptor Plate Set.

4.4 ELECTRICAL CONNECTIONS. Electrical connection to one of the General Radio oscillators listed in paragraph 1 is included in the

instructions of paragraph 4.2. For connection to other instruments, use the four-prong connector supplied.

5 OPERATION.

The on-off panel switch is the only control. To turn power on, place this switch in the upper position. The indicator lamp should light when power is turned on.

6 SERVICE AND MAINTENANCE.

6.1 WARRANTY. We warrant that each new instrument sold by us is free from defects in material and workmanship, and that, properly used, it will perform in full accordance with applicable specifications for a period of two years after original shipment. Any instrument or component that is found within the two-year period not to meet these standards after examination by our factory, district office, or authorized repair agency personnel, will be repaired, or, at our option, replaced without charge, except for tubes or batteries that have given normal service.

6.2 SERVICE. The two-year warranty stated above attests the quality of materials and workmanship in our products. When difficulties do occur, our service engineers will assist in any way possible. If the difficulty cannot be eliminated, please write or phone our Service Department (see rear cover), giving full information of the trouble and of the trouble and of steps taken to remedy it. Be sure to mention the serial and type numbers of the instrument.

Before returning an instrument to General Radio for service, please write to our Service Department or nearest district office, requesting a Returned Material Tag. Use of this tag will ensure proper handling and identification. For instruments not covered by the warranty, a purchase order should be forwarded to avoid unnecessary delay.

6.3 REMOVAL OF DUST COVER. To remove the cover, loosen the two fluted locking screws on the back of the instrument. These will unlock on the first turn, but should be loosened the maximum amount before the cover is removed. Pull the cover off the instrument.

When replacing the cover, be sure that it engages in the slots on the back of the panel before you tighten the locking screws.

6.4 FUSE REPLACEMENT. The Type 1269-A Power Supply uses two Slo-Blo line fuses, accessible for replacement when the dust cover is removed. Sizes are 0.6 ampere for 115-volt input, 0.3 ampere for 230-volt lines.

6.5 CONVERSION TO DIFFERENT LINE VOLTAGE. The power supply can easily be converted from 115-volt to 230-volt input or vice versa by reconnection of the power-transformer primary, as shown in Figure 2. When making this change, always insert proper-sized fuses. Appropriate measures should be taken so that the legend indicates the new input voltage. On instruments changed from 230 to 115 volts, this simply means removal of the 230-nameplate; a 115-v legend is marked beneath. For instruments changed to 230 volts, a nameplate (Type 5590-1664) may be ordered from General Radio.

SPECIFICATIONS

Output (at 115- or 230-volt input): 300 volts dc ($\pm 5\%$) at 50 ma, 6.3 volts ac at 3 amperes (with ac load at 1.5 amperes or less, maximum dc load is 65 ma, about 285 volts dc).

Regulation: At no load, dc output is 380 volts.

Ripple: Less than 80 mv rms (120 cps) at full load.

Input: 105 to 125 (or 210 to 250) volts, 50 tp 60 cps, 50 watts full load at 115 (or 230) volts. Can also be operated from a 110- to 125-v, 400-cycle supply for applications where a 400-cycle, 6.3-v output can be tolerated.

Connectors: Line cord permanently attached to instrument. Standard 4-terminal receptacle mounted on cabinet side for convenient connection to rf Unit oscillators.

Accessories Supplied: Mating plug for the 4-terminal receptacle.

Cabinet: Convertible - bench.

Dimensions: Width 4 1/4, height 7 5/8, depth 9 1/4 inches (110 by 195 by 235 mm) over-all, not including power cord.

Net Weight: 5 3/4 pounds (2.7 kg).

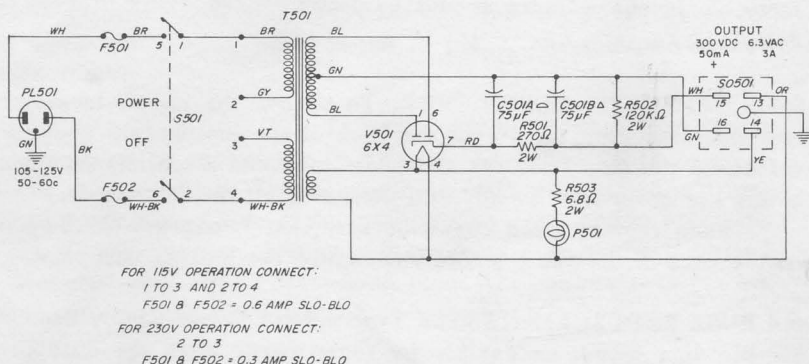


Figure 2. Schematic Diagram.

PARTS LIST

REF NO.	DESCRIPTION	PART NUMBER
R501	RESISTOR, Composition $270\Omega \pm 10\%$	6120-1279
R502	RESISTOR, Composition $120K\Omega \pm 10\%$	6120-4129
R503	RESISTOR, Wire-wound $6.8\Omega \pm 10\%$	Part of 7510-1930
C501A	CAPACITOR, Electrolytic Block $75\mu f$ 450dcwv	4460-1900
C501B		
F501	FUSE 115v: 0.6amp	5330-1100
	230v: 0.3amp	5330-0800
F502	FUSE 115v: 0.6amp	5330-1100
	230v: 0.3amp	5330-0800
P501	PILOT LAMP	5600-0700
PL501	POWER CABLE	4200-1800
S501	SWITCH	7910-1300
SO501	SOCKET	4230-0700
T501	TRANSFORMER	1269-2000
V501	TUBE, Type 6X4	8360-8100

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