

PS4 Power Supply with Ultra Fast Rectifiers

The Hybrid Phono Drive and Hybrid Linestage Power Supply is an unregulated supply consisting of a laminated transformer with end bells, or now available with a toroid transformer, and a circuit board providing rectified B+ and filament voltages of 300Vdc and 8Vdc respectively. The 8 volt filament is regulated down to 6 volts onboard the phono and linestage boards. The circuit board consists of filament bridge rectifier, ultra fast B+ rectifier diodes, dropping resistor (optional), filter capacitance for both voltage rails and the transformer primary circuit is fused. The dropping resistor can be jumpered when using this supply with our PS-3 voltage regulator stage. Without the dropping resistor, the PS-4 puts out about 350Vdc.

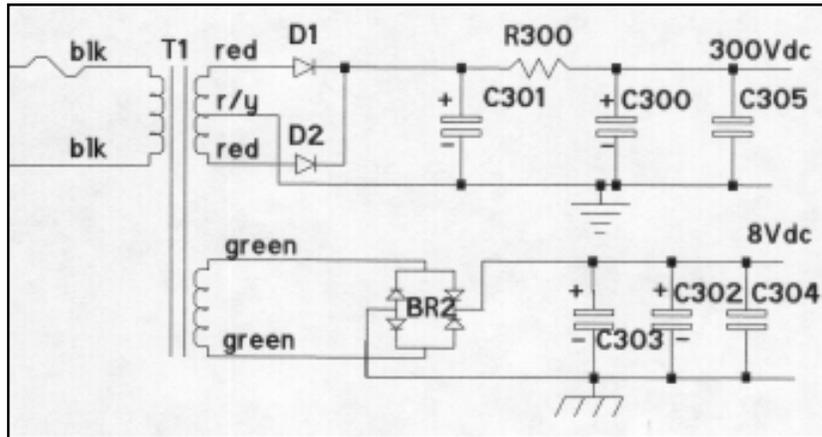
Parts List

R300	Select	Select or use jumper wires
C300, C301	220uF/400V	Panasonic low impedance electrolytics
C302, C303	3300uF/35V	Panasonic low impedance electrolytics
C304	0.1uF/160V	WIMA polypropylene capacitor
C305	0.1uF/400V	WIMA polypropylene capacitor
D1,D2	8A/600V	Ultrafast Rectifier Diodes
BR2	4A/200V	Bridge Rectifier
T1		Laminated Transformer
Misc		Circuit Board, fuse, fuseclips, 18ga. Teflon hookup wire

Recommended Assembly Sequence

We recommend you follow the assembly sequence outlined below. Before starting check your kit for all components.

- 1) Install and solder resistors and diodes (note polarity of diodes).
- 2) Install and solder Wima bypass caps C304 and C305
- 3) Install and solder the bridge rectifier BR2.
- 4) Install and solder the electrolytic capacitors (note polarity).
- 5) Install fuse clips and fuse.
- 7) Attach transformer wires to the circuit board as outlined below (note the toroid transformer can be wired for both 115/230Vac).

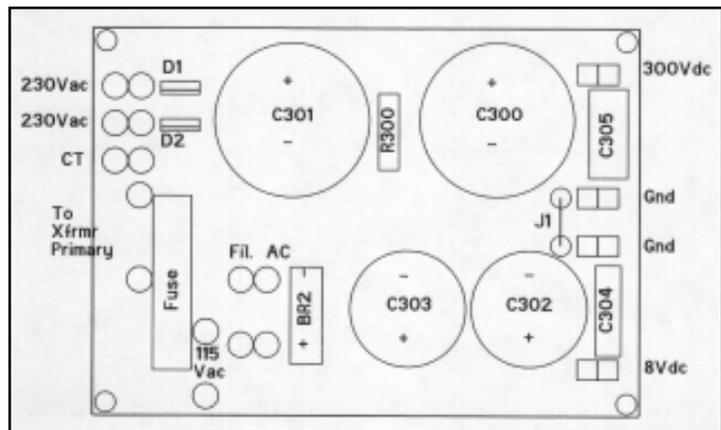


PS4 Schematic Diagram

PS4 Checkout and Test

Inspect all solder joints under a bright light. Look for voids, bad joints and solder bridges. Power-up the PS4 before connecting to your circuit. Check the B+ and filament output voltages with a voltmeter to insure correct operation.

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PS4 Stuffing Diagram (Board Dimensions 3" x 4.25")