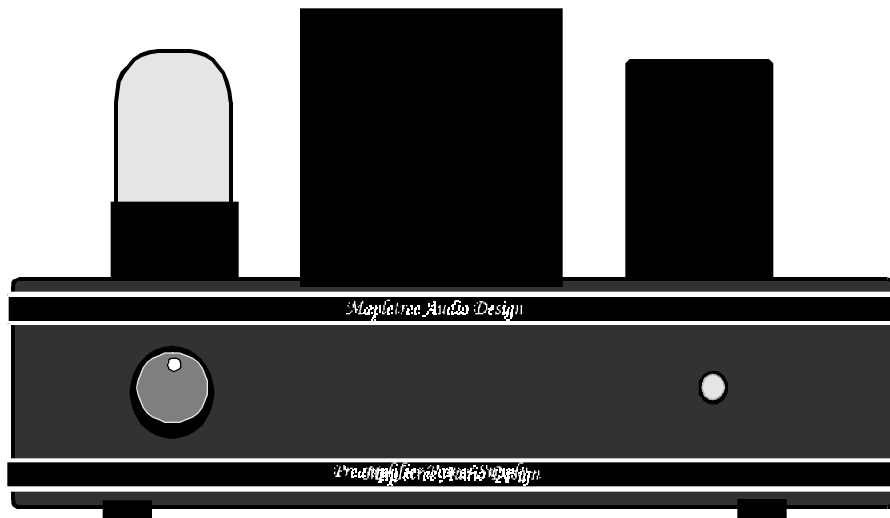




PS 1t Preamplifier Power Supply



User's Manual

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Mapletree Audio Design
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Introduction

The Mapletree Audio Design *PS It* power supply provides +12 VDC (regulated) heater supply voltage and +250 VDC B+ plate supply voltage at a current of 15 mA (see specifications). It utilizes a slow start cathode type rectifier tube (6X5GT) which avoids over-voltage conditions at turn-on. The conservatively rated power transformers and increased filter capacitance yield a very low noise, cool running supply with high reliability.

Power Supply Connections

Use of a separate power supply chassis with a phono/line preamplifier allows separation between the two units and eliminates induced hum originating from power supply circuitry and components. The MAD *PS It* power supply is suitable for both the *Ultra 4A*, or *Line 2A* preamplifiers. The power connections to the preamplifier chassis are made through a special 3-conductor power cord that plugs into jacks located on the rear panels of the power supply and preamplifier chassis. The power supply common connection for the output jack is connected to both the chassis and the ac line ground pin.

CAUTION: Do not operate a power supply when it is not connected to the preamp. Damage of components may result.

Once the interconnecting power cord is securely attached between the power supply and preamp and the line cord is plugged in, the rocker switch is used to activate the power supply. The green pilot lamp on the front panel indicates that the unit is on. It takes about 30 seconds for the tubes to reach operating temperature ready for use. During operation, is it normal for the power supply chassis and power transformer to become warm to the touch.

The power supply is protected by a 1 A/250 V fast-acting fuse which can be accessed by unscrewing the fuse holder on the rear panel of the power supply. Under normal conditions, it should not be necessary to replace the fuse. If power fails to come on, you can check the fuse and replace if necessary. If the fuse blows a second time, you should not try to operate the unit. Contact Mapletree Audio Design for information regarding service.

Specifications

Input: 115-125 VAC, 50-60 Hz (or 220-240 VAC, 50 Hz), 12 W

Heater voltage: +12 VDC regulated @ 1 A max

Plate voltage: +250 VDC $\pm 15\%$ @ 25 mA max

Warranty

Assembled MAD components are warranted for 2 years to the original purchaser for failure of parts (excluding tubes) and workmanship. Tubes are warranted for 90 days exclusive of shipping cost. Service, including parts and labor (but excluding shipping), is free within the warranty period.

Parts List

Reference No.	Description
BR1	2A/200V diode bridge
C1a,b	Dual 100uF-100uF/500V electrolytic capacitor
C2	4700uF/25V electrolytic capacitor
D1	1N4007 diode
D2	10 mA LED
FU1	1A/250V fast action fuse
J1	4-pin chassis jack
J2	IEC ac line receptacle
IC1	7812 voltage regulator
R1	7.5K 3W 5% metal film resistor
R2	240K 1W carbon composition resistor
R3	2.2K 0.6W 1% metal film resistor
R4	1.8 Ohm 2W 5% metal film or wire wound resistor
SW1	SPST power switch (250 V rated)
TR1	14 V/1.44 A filament transformer
TR2	250-0-250 V/50 mA, 6.3 V/2.5 A power transformer
V1	6X5GT rectifier tube

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