

GODIYMODULES Vacuum Tube Preamplifier Switching Power Supply Transformer

User Manual: Vacuum Tube Preamplifier Switching Power Supply Transformer

Brand: GODIYMODULES | Model: Switching Power Supply Transformer

INTRODUCTION

This manual provides essential information for the safe and effective use of your GODIYMODULES Vacuum Tube Preamplifier Switching Power Supply Transformer. This power supply is designed to provide stable filament (6.3V 5A) and high voltage (300V 300mA) outputs from an AC input range of 100-265V. It is suitable for various vacuum tube applications, including medium-power single-ended amplifiers (e.g., FU-7, 6P3P, EL34) and low-power push-pull machines (e.g., 6P1, 6P14, 6V6, 6P6P, 6L6). The unit features independent filament and high voltage outputs and includes built-in over-current, over-voltage, and short-circuit protection for reliable operation.

PACKAGE CONTENTS

- 1 x Vacuum Tube Preamplifier Switching Power Supply Transformer

SPECIFICATIONS

| | |
|------------------------|--|
| Input Voltage | AC 100-265V |
| Filament Output | 6.3V 5A (designed for 8A margin) |
| High Voltage Output | 300V 300mA (designed for 350mA margin) |
| Dimensions (L x W x H) | 10.3 cm x 6.6 cm x 3.5 cm (4.06 x 2.6 x 1.38 inches) |
| Item Weight | 9.3 ounces |
| Protection Features | Over-current, Over-voltage, Short-circuit |

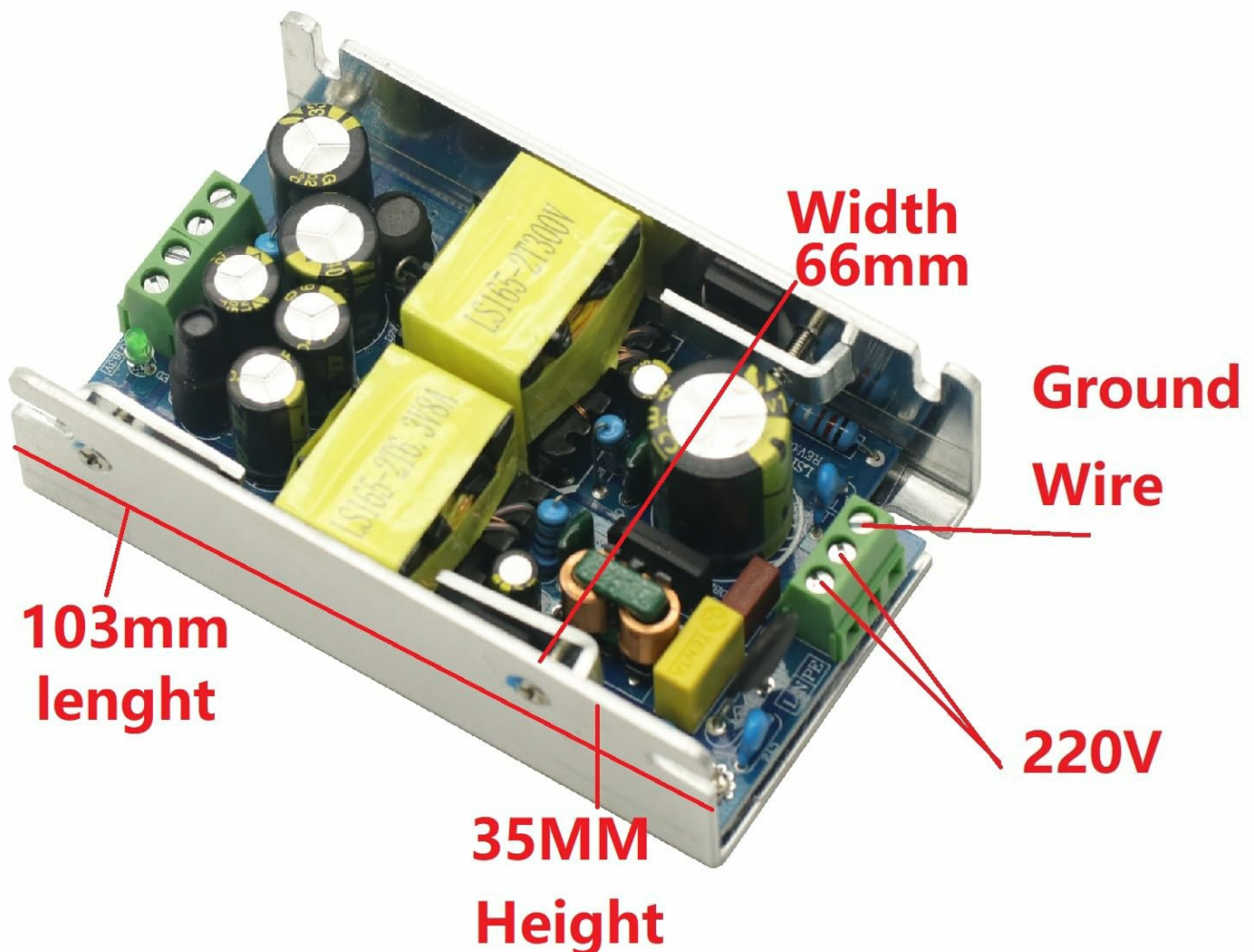
SAFETY INFORMATION

- Always disconnect power before making any connections or adjustments.
- This device operates with high voltages. Exercise extreme caution to avoid electric shock.
- Ensure proper ventilation to prevent overheating. Do not operate in a sealed enclosure without adequate airflow.
- Do not attempt to modify the power supply. Refer all servicing to qualified personnel.

- Keep out of reach of children.

SETUP INSTRUCTIONS

1. **Mounting:** Securely mount the power supply in your chassis. Consider the dimensions (10.3 cm length, 6.6 cm width, 3.5 cm height) and ensure it is installed close to a metal chassis for assisted heat dissipation, especially for power consumption exceeding 80W.
2. **Input Power Connection:** Connect your AC 100-265V power source to the designated input terminals. Ensure correct polarity if applicable, though AC input is typically non-polarized.
3. **Filament Output Connection:** Connect your vacuum tube's filament (heater) circuit to the 6.3V 5A output terminals. The filament output is independent.
4. **High Voltage Output Connection:** Connect your vacuum tube's anode (plate) circuit to the 300V 300mA high voltage output terminals. This output is also independent.
5. **Rectifier Filter Note:** The power supply has its own built-in rectifier filter. If integrating into an existing circuit, remove any original filter capacitors and inductors to avoid redundancy or potential issues.
6. **Ventilation:** Ensure the installation provides sufficient ventilation. Avoid placing the unit in a very small, sealed enclosure, as this can lead to overheating.



and connection points for 220V input and ground wire. This illustrates the physical layout and connection terminals.

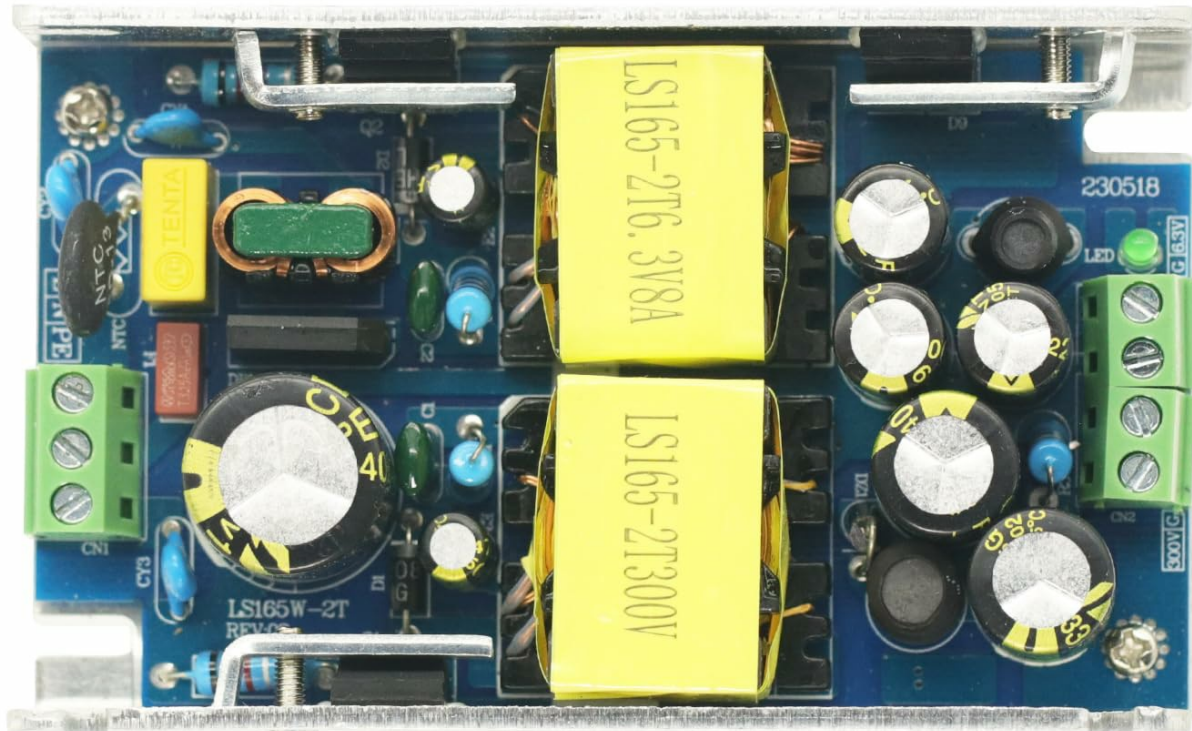


Image: Top-down view of the power supply circuit board, showing the two yellow transformers, capacitors, and terminal blocks for connections.

OPERATING INSTRUCTIONS

1. **Power On:** Once all connections are secure and verified, apply AC power to the unit.
2. **Warm-up Delay:** The high voltage output will typically become active after a delay of approximately 30 seconds from power-on. This is a normal operational characteristic.
3. **Tube Compatibility:** This power supply is compatible with a range of vacuum tubes, including FU-7, 6P3P, EL34 for medium-power single-ended configurations, and 6P1, 6P14, 6V6, 6P6P, 6L6 for low-power push-pull configurations. It can also support other small power single-ended tubes.
4. **Audio Performance:** When properly integrated, this power supply contributes to a robust bass, clear midrange, and detailed treble, with an ultra-low noise floor.

MAINTENANCE

- **Cleaning:** Keep the unit free from dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners.

- **Ventilation:** Regularly check that ventilation openings are not obstructed to ensure proper heat dissipation.
- **Connections:** Periodically inspect all electrical connections to ensure they remain tight and secure.
- **Environmental Conditions:** Operate the power supply within its specified temperature and humidity ranges.

TROUBLESHOOTING

- **No Output Voltage:**
 - Verify the AC input power is connected and active (100-265V).
 - Check all output connections for proper wiring and shorts.
 - Allow approximately 30 seconds after power-on for the high voltage output to stabilize.
 - The unit has over-current, over-voltage, and short-circuit protection. If a fault occurs, the unit may shut down. Disconnect power, resolve the fault, and then reapply power.
- **Lower Than Expected High Voltage Output:**
 - Ensure the load current does not exceed the specified 300mA. Exceeding this limit can cause voltage sag or trigger protection.
 - Verify the input voltage is within the 100-265V range.
 - Allow the unit to warm up fully, as voltage may stabilize after some operating time.
- **Overheating:**
 - Ensure adequate ventilation. The power supply requires sufficient airflow, especially when operating above 80W.
 - Confirm the unit is mounted to a metal chassis to assist with heat dissipation.
 - Reduce the load if it consistently operates at its maximum specified current.

WARRANTY AND SUPPORT

For warranty information or technical support, please contact GODIYMODULES directly through their official channels or the retailer from whom the product was purchased. Please have your purchase details and product model information available when contacting support.