

SHNITPWR SNT-0312-60

SHNITPWR 60W Universal Adjustable Power Supply (Model SNT-0312-60) User Manual

Comprehensive Guide for Setup, Operation, and Maintenance

1. INTRODUCTION AND OVERVIEW

The SHNITPWR 60W Universal Adjustable Power Supply is designed to provide a versatile power solution for a wide range of small electronic devices. This AC to DC adapter features an adjustable output voltage from 3V to 12V and a maximum current of 5A, with a total power output of 60W. It includes 14 interchangeable DC tips and a polarity converter cable, enhancing its compatibility. The integrated LCD display shows the real-time output voltage, allowing for precise adjustments and helping to prevent damage to your devices from incorrect voltage settings.

2. SAFETY INFORMATION

- **Important Note:** This product is an AC to DC adapter, **NOT a charger**. It is not intended for charging electronic devices with batteries, such as laptops.
- Always confirm the correct voltage, current, power port type, and polarity required by your device before connecting the power supply. Using an incorrect voltage or polarity can cause irreversible damage to your device.
- It is recommended to operate the power supply at less than 80% of its full load capacity (i.e., less than 4A for 12V output) to ensure optimal performance and extend its service life. Overloading can lead to overheating and reduced lifespan.
- The power supply incorporates multiple safety protection systems: automatic over-voltage cut-off, over-current cut-off, over-temperature cut-off, and short-circuit cut-off.
- For indoor use only. Keep the device away from water, moisture, and high temperatures.
- Do not disassemble or attempt to repair the unit yourself. Refer to qualified service personnel for any repairs.

3. PACKAGE CONTENTS

Upon opening the package, please verify that all the following items are included:

- 1 x SHNITPWR 60W Universal Adjustable Power Supply (Model SNT-0312-60)
- 1 x Original 5.5x2.5mm DC Tip (attached to the power supply cable)
- 14 x Additional Interchangeable DC Tips (various sizes and types, including Micro-USB, Type-C, and DC terminal connector)
- 1 x Polarity Converter Cable
- 1 x User Manual



Figure 3.1: Package contents including the power supply, 14 DC tips, and polarity converter cable.

4. PRODUCT FEATURES

- **Input and Output:** Input: AC 100-240V, 50/60Hz. Output: DC 3-12V Adjustable, Max 5A 60W. This allows for a wide range of voltage settings (e.g., 3V, 3.5V, 4V, 4.5V, 5V, 5.5V, 6V, 6.5V, 7V, 7.5V, 8V, 8.5V, 9V, 9.5V, 10V, 10.5V, 11V, 11.5V, 12V) and any current less than 5A.
- **LCD Display:** An integrated LCD screen displays the real-time output voltage, ensuring accurate voltage selection for your devices.
- **Upgraded Design:** Features an improved adjustment knob for more even voltage regulation, an 'off' gear to power down without unplugging, and a polarity converter cable for broader device compatibility.
- **Versatile DC Tips:** Includes an original 5.5x2.5mm tip and 14 additional tips: 6.5x4.4mm+Pin, 5.5x2.1mm, 5.5x3.0mm+Pin, 5.0x2.5mm, 6.3x3.0mm, 5.5x1.7mm, 4.8x1.7mm, 4.0x1.7mm, 3.5x1.35mm, 3.0x1.1mm,

2.5x0.7mm, Micro-USB, Type-C, and a DC terminal connector for DIY projects.

- **Wide Application Range:** Suitable for many 3-12V small household electronics such as LED strips, under-cabinet lights, TV boxes, smart speakers, wireless routers, essential oil diffusers, USB fans, WiFi cameras, USB hubs, hard disk boxes, DC motors, DC pumps, digital photo frames, and DVR NVR surveillance systems.
- **Safety Protections:** Built-in automatic over-voltage, over-current, over-temperature, and short-circuit protection systems ensure safe operation.



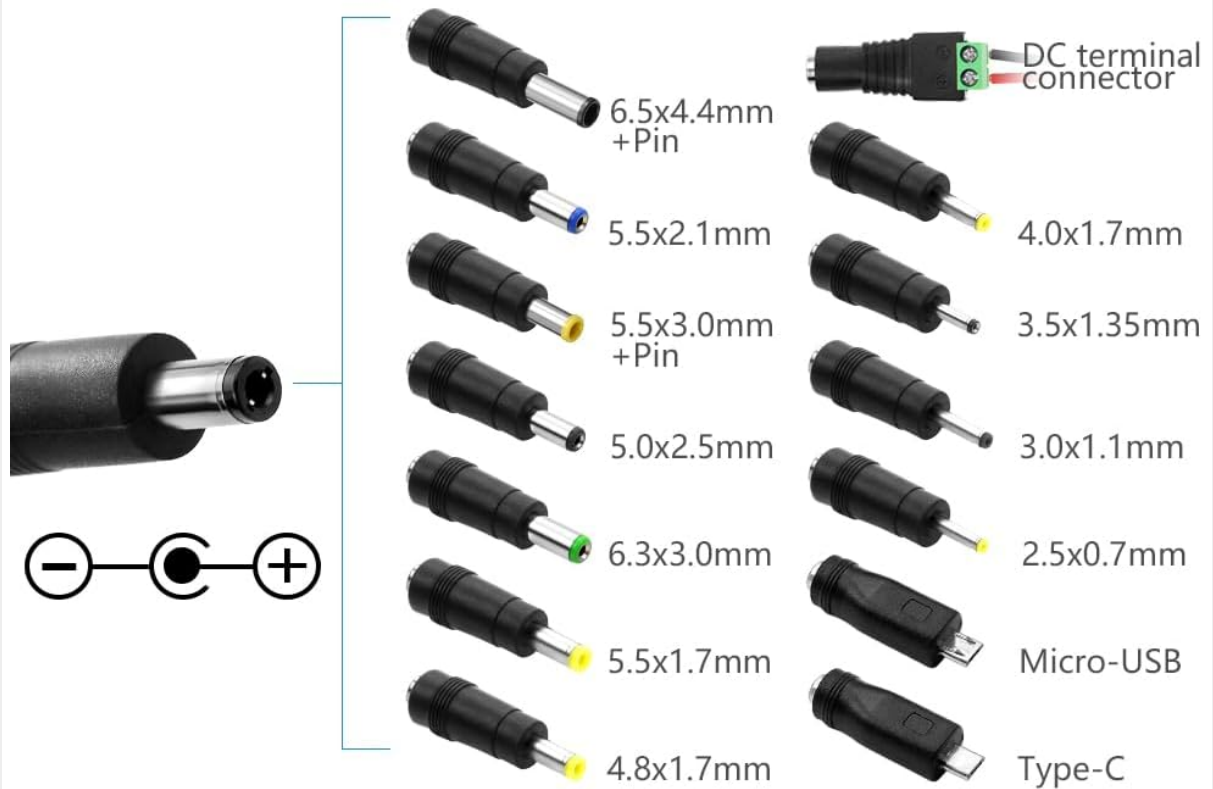
Figure 4.1: The SHNITPWR adjustable power supply showing its voltage display and adjustment knob.

Compact and light design



Figure 4.2: Product dimensions and a selection of included DC tips.

14x DC Tips and Polarity Converter



Reverse polarity converter



This is a reverse polarity converter, not extension wire, used to reverse the internal positive to negative and the external negative to positive. Please confirm the polarity before use. Wrong polarity will cause short circuit and damage your device.

Figure 4.3: The full set of 14 interchangeable DC tips and the polarity converter cable.

BUILT SAFETY PROTECTIONS

Designed with Safety in mind



Short circuit protection



Electromagnetic wave protection



Overcurrent protection



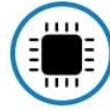
Over temperature protection



Over voltage protection



24 months warranty



Quality microchip



CE, FCC, RoHS certified

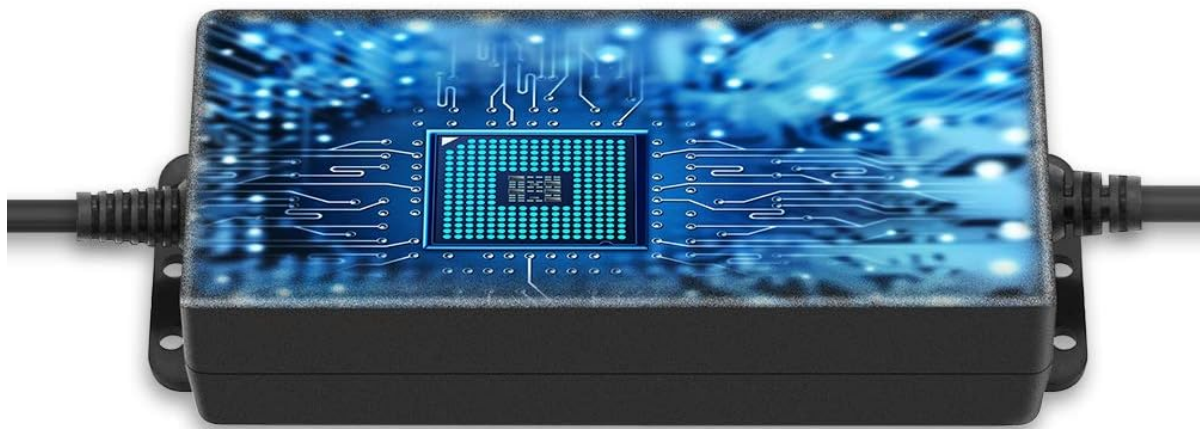


Figure 4.4: Overview of the built-in safety protections.

Video 4.1: Demonstrates the SHNITPWR 3-12V 5A 60W Adjustable Power Supply, showcasing its components, voltage adjustment, and various application scenarios.

5. SETUP INSTRUCTIONS

- 1. Identify Device Requirements:** Before connecting, confirm your device's required voltage (V), current (A), power port size, and polarity (center positive or center negative). This information is usually found on the device itself, its original power adapter, or in its user manual.
- 2. Select the Correct DC Tip:** Choose the appropriate DC tip from the provided 14 options that matches your device's power port. If your device requires a specific polarity that differs from the default center positive of the power supply, use the included polarity converter cable.
- 3. Connect the Tip:** Firmly attach the selected DC tip to the power supply's output cable. If needed, connect the polarity converter cable between the power supply cable and the chosen DC tip.
- 4. Plug into Wall Outlet:** Insert the AC input plug of the power supply into a standard 100-240V AC wall outlet. The LCD display on the power supply will illuminate.
- 5. Adjust Voltage:** Rotate the voltage adjustment knob on the power supply until the LCD display shows the exact voltage required by your device. **Do this before connecting to your device.**
- 6. Connect to Device:** Once the correct voltage is set, insert the DC tip into your device's power input port.



Figure 5.1: Various applications of the universal power supply, including LED strips, routers, and humidifiers.

Video 5.1: A demonstration of unboxing, adjusting voltage, and connecting the SHNITPWR 60W Universal Power Supply to a device.

6. OPERATING INSTRUCTIONS

1. **Power On/Off:** The power supply can be turned on or off by rotating the adjustment knob to the 'off' position. This eliminates the need to unplug the unit from the wall for simple power cycling.
2. **Voltage Adjustment:** To change the output voltage, rotate the knob clockwise to increase the voltage and counter-clockwise to decrease it. The LCD display will update in real-time. Always adjust the voltage to the desired level *before* connecting it to your electronic device.
3. **Tip Replacement:** To replace a DC tip, simply pull the current tip off the power supply cable and push the new tip firmly into place. Ensure a secure connection.
4. **Polarity Conversion:** If your device requires center negative polarity, connect the polarity converter cable between the power supply's output cable and the chosen DC tip. This will reverse the polarity from center positive to center negative.

Professional Advice

The max use should be **≤ 80%** of the full loads. Otherwise, it will get super hot and its service life will be greatly shortened.



Figure 6.1: Reminder to use the power supply at less than 80% of its full load capacity.

7. MAINTENANCE

- Keep the power supply clean and free from dust. Use a soft, dry cloth for cleaning.
- Store the unit in a cool, dry place when not in use. Avoid extreme temperatures and direct sunlight.
- Regularly inspect the cables and connectors for any signs of damage, such as fraying or bent pins. Replace if damaged.
- Ensure proper ventilation around the power supply during operation to prevent overheating.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device not powering on	Incorrect voltage setting Incorrect DC tip or polarity Loose connection Device fault	Verify device voltage requirements and adjust the power supply accordingly. Ensure the correct DC tip is used and polarity matches the device. Check all connections are secure. Test the device with its original power supply if available.

Problem	Possible Cause	Solution
Power supply overheating	Overload Poor ventilation	Reduce the load on the power supply (ensure it's below 80% of max capacity). Ensure the power supply is in a well-ventilated area, not covered.
Voltage adjustment is difficult or imprecise	Analog knob sensitivity	Adjust the knob slowly and carefully. The LCD display provides precise feedback.
Power supply shows unexpected high voltage readings momentarily	Initial power-on surge or instability	Always set the desired voltage before connecting to your device. Allow the display to stabilize before use.

9. SPECIFICATIONS

Specification	Value
Brand	SHNITPWR
Model	SNT-0312-60
Input Voltage	AC 100-240V
Input Frequency	50/60Hz
Output Voltage	DC 3-12V (Adjustable)
Max Output Current	5A
Max Output Power	60W
DC Tips Included	14 (various sizes) + 1 original 5.5x2.5mm
Polarity Converter	Included
Safety Certifications	CE, FCC, RoHS
Item Weight	300 Grams

10. WARRANTY AND SUPPORT

This SHNITPWR product comes with a 24-month warranty from the date of purchase, covering manufacturing defects. For technical support, warranty claims, or any questions regarding the product, please contact SHNITPWR customer service through the retailer where the product was purchased or refer to the contact information provided in the product packaging. Please retain your proof of purchase for warranty validation.