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COOLM YU1206

COOLM 12V 6A Power Supply Adapter User Manual

Model: YU1206

1. PRODUCT OVERVIEW

The COOLM 12V 6A Power Supply Adapter is a versatile AC-to-DC power converter designed to provide stable 12V DC power for various electronic devices. It features a wide input voltage range (100-240V AC) and delivers up to 6 Amps of current, with a maximum wattage of 72W. This adapter is equipped with a standard 5.5mm x 2.5mm DC plug, compatible with 5.5mm x 2.1mm DC ports, making it suitable for a broad range of applications including LED strip lighting, wireless routers, CCTV security cameras, and LCD monitors.



Image 1.1: The COOLM 12V 6A Power Supply Adapter, showing the main unit and its detachable AC power cord and DC output cable.

1.1 What's in the Box

- 1 x 12V 6A Power Supply Adapter
- 1 x AC Power Cord

1.2 Key Applications

This power adapter is commonly used for:

- LED signage and LED strip lights (12V 3528 5050)
- CCTV security surveillance cameras and DVRs
- Wireless routers and ADSL modems
- LCD monitors and webcams
- External hard drives and audio mixing/recording equipment
- Other 12V devices requiring less than 72W of power

APPLICATION



Image 1.2: Visual representation of common applications for the power adapter, such as LED strip lighting, security cameras, and LCD monitors.

2. SPECIFICATIONS

Feature	Specification
Input Voltage	100 - 240V AC, 50/60Hz
Output Voltage	DC 12V
Output Current	6A (Max)
Max Wattage	72W
DC Jack Converter	5.5mm x 2.5mm (Compatible with 5.5mm x 2.1mm DC Port)

Feature	Specification
DC Cable Length	Approximately 3.6 FT (110 cm)
AC Power Cord Length	Approximately 3.9 FT (120 cm)
Product Dimensions	4.92 x 2.17 x 1.18 inches
Item Weight	13.4 ounces
Model Number	YU1206
Special Features	Overload Protection, Short Circuit Protection, Over-voltage Protection, Over-temperature Protection, Constant Voltage, Automatic Recovery Functions

3. SETUP AND CONNECTION

Before connecting the power adapter, ensure that your device's power requirements match the adapter's output specifications. Incorrect voltage or current can damage your device.

3.1 Compatibility Check

To ensure proper functionality and prevent damage, three conditions must be met:

- Adapter Connector Match:** The DC jack (5.5mm x 2.5mm) of the adapter must match your device's input port. This adapter is also compatible with 5.5mm x 2.1mm DC ports.
- Output Voltage Match:** The adapter's output voltage (DC 12V) must be identical to your device's rated input voltage, or within its acceptable voltage range.
- Output Current Sufficiency:** The adapter's output current (6A) must be equal to or greater than your device's current requirement to provide sufficient power. If your device requires less than 6A (e.g., 3A, 4A, 5A), this adapter will work as the amperage is not forced.



Image 3.1: Illustration of the DC jack dimensions (5.5mm x 2.5mm) and positive polarity, crucial for ensuring compatibility with your device.

3.2 Connection Steps

1. Connect the DC output plug of the power adapter to the DC input port of your electronic device.
2. Connect the AC power cord to the 3-pin power connector on the power adapter.
3. Plug the AC power cord into a standard 100-240V AC wall outlet.
4. Verify that the blue LED indicator on the power adapter illuminates, indicating power is being supplied.



Image 3.2: The power adapter featuring a blue LED indicator, which confirms the unit is receiving power and operating.

4. OPERATING INSTRUCTIONS

Once properly connected, the power adapter operates automatically. It provides a stable 12V DC output to your connected device. The blue LED indicator on the adapter signifies that it is powered on and functioning correctly. The adapter is designed for high efficiency and low operating temperature, ensuring reliable performance during continuous use. Its soft-start current feature effectively reduces the impact on the AC input during startup.

5. SAFETY INFORMATION AND PROTECTIONS

The COOLM 12V 6A Power Supply Adapter incorporates multiple safety features to protect both the adapter and your connected devices. It is certified by CE, FCC, and RoHS standards, ensuring compliance with safety and environmental regulations.

5.1 Built-in Protections

- **Over-Current Protection:** Automatically cuts off power if the output current exceeds safe limits.
- **Over-Voltage Protection:** Prevents damage from excessive voltage output.
- **Over-Temperature Protection:** Automatically shuts down if the internal temperature becomes too high.
- **Short Circuit Protection:** Safeguards against damage caused by short circuits in the connected device or cable.
- **Automatic Recovery Functions:** The adapter is designed to recover automatically once fault conditions are removed.

Safety & Multi-Protect



Over-Current
Protection



Over-Temp
Protection



Over-Voltage
Protection



Short Circuit
Protection



- ★ Reinforce Outer Shell
- ★ 3-Pins Power Connector
- ★ Plug And Play, Easy To Use

Image 5.1: Overview of the adapter's comprehensive safety features, including protection against over-current, over-temperature, over-voltage, and short circuits.

5.2 Design and Materials

The adapter features a robust design for durability and safety:

- **ABS Fireproof Material:** The outer shell is constructed from ABS fireproof material for enhanced safety.

- **Efficient Anti-interference Magnetic Ring:** Helps to reduce electromagnetic interference, ensuring stable power delivery.
- **Rustproof Housing:** Designed for high temperature resistance and longevity.
- **Internal Components:** Utilizes a Glass Fiber PCB Board, high-quality transformer, 120uf capacitor, Third Generation Smart IC Chip, and 200 turns copper wire wound for reliable performance.



Image 5.2: Details of the adapter's construction, including its ABS fireproof casing and the anti-interference magnetic ring on the cable.

Glass Fiber PCB Board EMC Circuit System

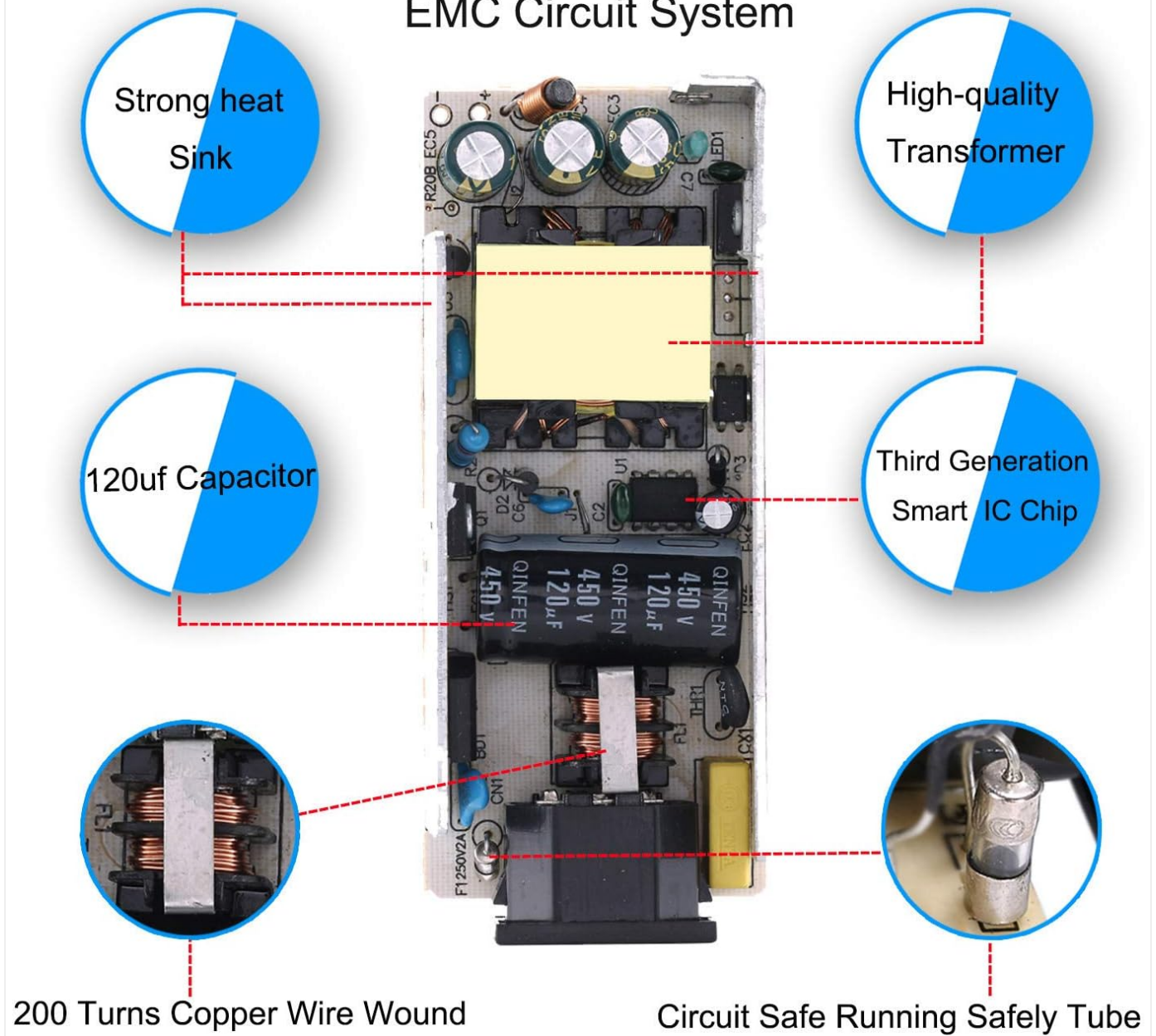


Image 5.3: An internal diagram showcasing the high-quality components used in the adapter, such as the strong heat sink, high-quality transformer, 120uf capacitor, and smart IC chip.

6. MAINTENANCE

The COOLM 12V 6A Power Supply Adapter is designed for durability and requires minimal maintenance. Follow these guidelines to ensure its longevity:

- **Keep Dry:** Avoid exposing the adapter to water or high humidity, as this can cause electrical damage.
- **Clean Gently:** Use a soft, dry cloth to clean the exterior of the adapter. Do not use liquid cleaners or aerosols.
- **Proper Ventilation:** Ensure the adapter is placed in a well-ventilated area to prevent overheating, especially during prolonged use.
- **Avoid Physical Damage:** Do not drop, bend, or apply excessive force to the adapter or its cables. Inspect cables regularly for any signs of wear or damage.
- **Unplug When Not in Use:** For extended periods of non-use, it is advisable to unplug the adapter from the wall outlet.

7. TROUBLESHOOTING

If you encounter issues with your COOLM 12V 6A Power Supply Adapter, consider the following troubleshooting steps:

- **No Power Output / Device Not Turning On:**

- Ensure the AC power cord is securely plugged into both the adapter and the wall outlet.
- Check if the blue LED indicator on the adapter is illuminated. If not, try a different wall outlet.
- Verify that the DC plug is fully inserted into your device's input port.
- Confirm that your device's power requirements (voltage and current) are compatible with the adapter's specifications (12V, 6A max).
- Test the adapter with another compatible device, if available, to determine if the issue is with the adapter or the original device.

- **Adapter Getting Hot:**

- A slight warmth is normal during operation. However, if the adapter feels excessively hot, ensure it has adequate ventilation and is not covered.
- Verify that the connected device does not draw more than 6A (72W) of power, as overloading can cause overheating.

- **Intermittent Power / Device Flickering:**

- Check all cable connections for looseness.
- Inspect the DC cable and plug for any visible damage or bends.
- Ensure the connected device is not drawing power close to or exceeding the adapter's maximum capacity.

If these steps do not resolve the issue, please contact COOLM customer support for further assistance.

8. WARRANTY AND SUPPORT

COOLM is committed to providing quality power products and excellent customer service. While specific warranty details are not provided in this manual, most COOLM products come with a standard manufacturer's warranty covering defects in materials and workmanship.

For warranty claims, technical support, or any inquiries regarding your 12V 6A Power Supply Adapter, please refer to the contact information provided with your purchase or visit the official COOLM website. When contacting support, please have your product model number (YU1206) and purchase details ready.

Notice: Please check the specifications of your appliance, power input and output voltage, and current parameters and DC interface before purchasing or using the adapter. If you have any doubts, contact us for clarification.

