

NC DC 6V 2A Power Supply Adapter

NC DC 6V 2A Power Supply Adapter Instruction Manual

Model: DC 6V 2A Power Supply Adapter

1. PRODUCT OVERVIEW

This manual provides essential information for the safe and efficient use of your NC DC 6V 2A Power Supply Adapter. This adapter converts alternating current (AC) from a wall outlet to direct current (DC) suitable for various electronic devices requiring 6V DC power up to 2 Amperes.



Image 1.1: NC DC 6V 2A Power Supply Adapter, showing the main unit and DC barrel connector.

2. KEY FEATURES AND PARAMETERS

- **Input:** 100-240V AC, 50/60 Hz
- **Output:** DC 6V, 2A (2000mA) Max
- **Output Wattage:** 12W Max
- **DC Plug Connector Size:** 5.5mm x 2.5mm (compatible with 5.5mm x 2.1mm)
- **Power Polarity:** Center positive (+)

- **Cord Length:** Approximately 1.42 meters (4.6 feet)
- **Safety Features:** Overpower Protection, Overvoltage Protection, Overcurrent Protection, Short-circuit Protection



This is an AC to DC power adapter. Unlike a battery charger, it provides continuous power, and the LED indicator does not change color. Do not use it to charge batteries or devices with built-in batteries (such as computers, mobile phones), as this may cause issues or damage the device.

The DC plug tip size is 5.5mm x 2.5mm/2.1mm; polarity: inner positive (+)/outer negative (-). It is not suitable for devices with inner negative (-)/outer positive polarity(+), such as electronic keyboards and pedal-type devices.

Do not use it for high-precision devices, as there may be minor voltage fluctuations and some electrical noise.

For devices with the same voltage requirement, an adapter with higher current output can be compatible with devices requiring lower current. However, an adapter with lower output current cannot support devices requiring higher current.

Image 2.1: Infographic detailing the key electrical parameters of the power adapter.

3. SETUP AND CONNECTION

1. **Verify Device Compatibility:** Before connecting, ensure your device requires a 6V DC power input and its current draw does not exceed 2 Amperes (2000mA). The adapter is suitable for devices requiring less than 12W.
2. **Check DC Plug Size:** Confirm that your device's DC input jack matches the adapter's plug size (5.5mm x 2.5mm or 5.5mm x 2.1mm compatible).
3. **Confirm Polarity:** This adapter features a center-positive (+) polarity. Ensure your device also requires center-positive polarity. Incorrect polarity can damage your device. The inner diameter is positive (+), and the outer diameter is negative (-).
4. **Connect to Device:** Insert the DC barrel connector into your device's power input jack.
5. **Connect to Power Outlet:** Plug the AC adapter into a standard 100-240V AC wall outlet.

Application

For most DC 6V (0-2000mA) device



It's a power supply adapter, not a charger.

It is perfect for 6V DC devices at Max 2A, 12W

Can't charge device with build-in Lithium battery.

DC Output Barrel Size is 5.5mm x 2.5mm/2.1mm

The body Output Tip polarity is Center Side is Positive [+], The Outside is Negative [-]



Router



Speaker



CCTV Camera



Mini fan

Image 3.1: Visual guide for checking DC plug size and polarity compatibility.

6V 2A DC Power Supply Adapter

The max use should be $\leq 80\%$ of the full load

We recommend you to use 6V 2A 12W

Power Supply to Power devices $\leq 9W$



Image 3.2: Diagram illustrating the physical dimensions and polarity of the adapter's DC plug.

4. OPERATING INSTRUCTIONS

Once properly connected, the adapter will supply continuous 6V DC power to your device. This is a power supply adapter, not a battery charger. It provides continuous power, and the LED indicator (if present) does not change color based on charge status.

For optimal performance and longevity, it is recommended to use the adapter at no more than 80% of its full load capacity. For a 6V 2A (12W) adapter, this means powering devices that require up to approximately 9W.

5. APPLICATIONS

This DC 6V 2A power supply adapter is suitable for a wide range of low-power 6V DC devices, including but not limited to:

- Mini-TVs
- Mobile DVD players
- TV boxes
- Wireless audio and video equipment
- MP3/MP4 players

- Small table lamps
- Routers and network switches
- Game consoles
- Telephones
- Lights
- CCTV Cameras and monitoring equipment
- Humidifiers
- Electrical toys
- Mini fans
- Trail cameras

Note: Always verify the voltage, current, plug size, and polarity requirements of your specific device before connecting.

6. IMPORTANT CONSIDERATIONS AND WARNINGS

- **Compatibility Check:** Always verify the DC socket type, power consumption (must not exceed the adapter's maximum output), and polarity of your device before ordering or connecting. Failure to do so may cause problems or damage to the device.
- **Indoor Use Only:** This adapter is not waterproof. Do not use it outdoors or in wet environments.
- **Not a Battery Charger:** This is an AC to DC power adapter, providing continuous power. It is not designed to charge batteries or devices with built-in batteries (e.g., computers, mobile phones), as this may cause issues or damage the device.
- **Polarity Mismatch:** The DC plug tip size is 5.5mm x 2.5mm/2.1mm with inner positive (+)/outer negative (-) polarity. It is not suitable for devices with inner negative (-)/outer positive polarity (+), such as some electronic keyboards and pedal-type devices.
- **High-Precision Devices:** Do not use this adapter for high-precision devices, as there may be minor voltage fluctuations and some electrical noise.
- **Current Output:** An adapter with a higher current output can be compatible with devices requiring lower current (e.g., a 2A adapter can power a 1A device). However, an adapter with a lower output current cannot support devices requiring higher current (e.g., a 1A adapter cannot power a 2A device). Overloading the adapter can cause it to shut off or be damaged.

7. TROUBLESHOOTING

- **Device Not Powering On:**
 - Ensure the adapter is securely plugged into both the wall outlet and the device.
 - Verify that the device requires 6V DC power.
 - Check the DC plug size and ensure it fits snugly.
 - Confirm the polarity of your device matches the adapter's center-positive (+) polarity.
 - Ensure the device's current draw does not exceed 2 Amperes (2000mA). An overloaded adapter may shut down or fail to provide power.
 - Test the adapter with another compatible device if possible, or test the device with another known-good 6V adapter.
- **Adapter Feels Warm:**
 - It is normal for the adapter to feel slightly warm during operation.

- If it becomes excessively hot, immediately unplug it from the wall and the device. This could indicate an overload or a fault. Recheck device compatibility and current draw.
- **Intermittent Power:**
 - Check for loose connections at both the wall outlet and the device.
 - Inspect the power cord for any visible damage.
 - Ensure the device is not drawing current close to or exceeding the adapter's maximum output, which can cause the adapter's internal protection to trigger intermittently.

8. SPECIFICATIONS

Parameter	Value
Input Voltage	100-240V AC, 50/60 Hz
Output Voltage	DC 6V
Output Current	2 Amperes (2000mA) Max
Output Wattage	12 Watts Max
DC Plug Connector Size	5.5mm x 2.5mm (compatible with 5.5mm x 2.1mm)
Power Polarity	Center Positive (+)
Cord Length	Approximately 1.42 meters (4.6 feet)
Product Dimensions	2.99 x 2.56 x 1.06 inches (7.6cm x 6.5cm x 2.7cm)
Item Weight	2.82 ounces
Color	Black
Special Feature	Short Circuit Protection
Included Components	1pcs DC 6V 2A Power Supply

9. WARRANTY AND SUPPORT

For any issues or questions regarding your NC DC 6V 2A Power Supply Adapter, please contact the seller directly via email. Support is typically available to resolve problems within 24 hours.
Please refer to your purchase documentation for specific warranty terms and contact information.