BTF-LIGHTING 24V3A

BTF-LIGHTING 24V 3A 72W Power Supply Adapter Instruction Manual

1. Introduction

This manual provides essential information for the safe and effective use of your BTF-LIGHTING 24V 3A 72W Power Supply Adapter. This adapter is designed to convert AC input voltage (100-240V) to a stable 24V DC output, suitable for various low-voltage electronic devices requiring up to 72W of power.

Please read these instructions carefully before installation and operation to ensure proper functionality and to prevent damage to the product or connected devices.

2. Safety Information

The BTF-LIGHTING 24V 3A 72W Power Supply Adapter is ETL Certified, ensuring compliance with North American safety standards. It incorporates multiple protection features for reliable operation.

- **Over Current Protection:** Prevents damage from excessive current draw.
- **Over Voltage Protection:** Safeguards against input voltage fluctuations.
- **Overload Protection:** Protects the adapter and connected devices from exceeding the maximum power rating.
- **Short Circuit Protection:** Automatically cuts off power in case of a short circuit.
- **Over-temperature Protection:** Prevents overheating of the unit.

Additional certifications include CE, FCC, UKCA, and RoHS, further guaranteeing quality and safety.



Image: The power supply adapter showcasing its multiple safety features and ETL certification.

Important Safety Notes:

- For indoor use only (IP30 rating). Do not expose to water or high humidity.
- Ensure the total power requirement of connected devices does not exceed 72W.
- Verify compatibility: This adapter is non-dimmable and suitable only for 24V electronic devices.
- Do not attempt to open or modify the power supply.
- Keep out of reach of children.

3. Product Overview

3.1 What's in the Box

- 1x ETL Certified 24V 3A Power Supply Adapter

3.2 Key Features

- Input: 100V-240V AC, 50/60Hz
- Output: 24V DC, up to 3 Amps (72W Max)
- Standard DC Output Plug: 5.5mm x 2.1mm barrel jack
- Includes a female DC barrel connector for flexible wiring
- Compact and durable design with flame-retardant material
- Plug and Play functionality for easy installation



Image: Detailed view of the adapter's components and features.

4. Specifications

Feature	Specification

Feature	Specification
Model Number	24V3A
Input Voltage	100-240V AC, 50/60Hz
Output Voltage	24V DC
Output Current	3 Amps (Max)
Output Wattage	72 Watts (Max)
DC Output Jack Size	5.5mm x 2.1mm
Product Dimensions	5.4 x 2.5 x 2.2 inches (approx. 13.7 x 6.35 x 5.6 cm)
Item Weight	7 ounces (approx. 198 grams)
Operating Environment	Indoor Use Only (IP30)
Certifications	ETL, CE, FCC, UKCA, RoHS



Image: Electrical specifications of the 24V 3A power supply.



Image: Physical dimensions of the power supply adapter and its DC connector.

5. Setup

The BTF-LIGHTING power supply adapter is designed for simple 'Plug and Play' installation, requiring no complex wiring or soldering.

5.1 Connection Methods

You can connect your 24V electronic device to the power supply using one of two common methods:

1. **Direct DC Barrel Connection:** If your device has a compatible 5.5mm x 2.1mm female DC jack, simply plug the adapter's male DC barrel connector directly into your device.
2. **Screw Terminal Connection:** For devices requiring bare wire connections, use the included female DC barrel connector with screw terminals. Connect the positive (+) and negative (-) wires from your device to the corresponding terminals on the connector. Ensure screws are tightened securely after inserting wires.

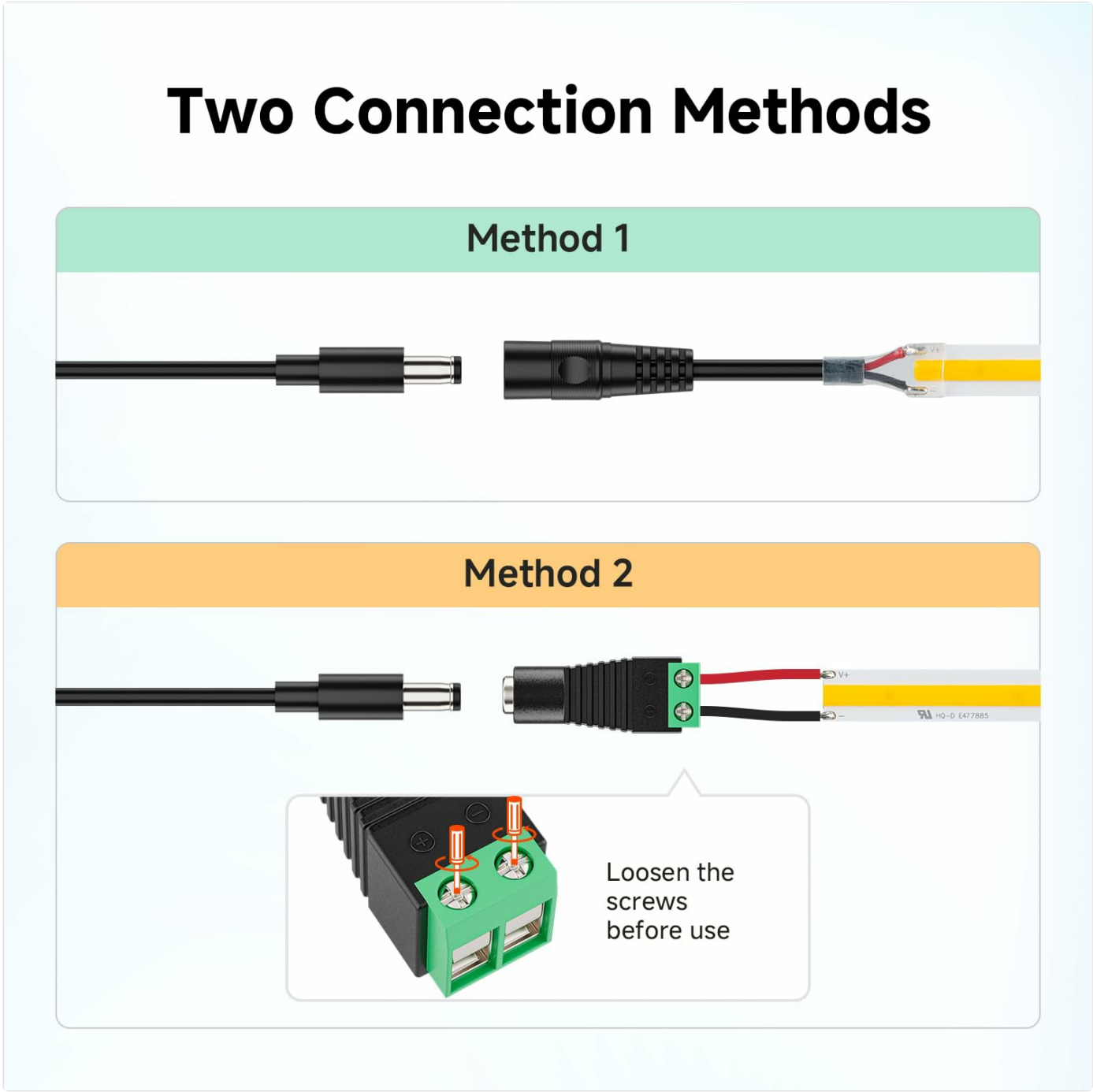


Image: Visual guide for direct and screw terminal connection methods.

5.2 Compatibility

This power supply is compatible with a wide range of 24V electronic devices that require up to 72W of power and utilize a 5.5mm x 2.1mm DC input. Common applications include:

- DC24V LED strip lights (e.g., WS2815, SK6812, WS2805, WS2814, 5050SMD, FCOB, COB RGB/RGBW)
- LED strings and matrices
- CCTV cameras and security systems
- Routers
- Other 24V electronic devices with compatible power requirements and connector type.

Always verify the voltage (24V) and power (≤72W) requirements of your device before connecting to ensure compatibility.



Image: Examples of devices compatible with the power supply.

6. Operating Instructions

1. Ensure the power supply is disconnected from the wall outlet.
2. Connect the DC output plug of the power supply to your 24V electronic device. If using the screw terminal connector, ensure polarity is correct (+ to + and - to -).
3. Plug the power supply into a standard 100-240V AC wall outlet.
4. Your device should now receive power.
5. To disconnect, first unplug the power supply from the wall outlet, then disconnect it from your device.

7. Maintenance

- Keep the power supply clean and free from dust. Use a dry, soft cloth for cleaning.

- Avoid placing the power supply in direct sunlight or near heat sources.
- Do not block ventilation openings, if any, to ensure proper heat dissipation.
- Regularly inspect the power cord and connectors for any signs of damage. Discontinue use if damage is found.

8. Troubleshooting

If you encounter issues with your power supply, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
No power to device	1. Power supply not plugged in 2. Wall outlet not active 3. Loose connection 4. Device malfunction 5. Power supply failure	1. Ensure power supply is securely plugged into a live outlet. 2. Test the outlet with another device. 3. Check all connections (DC plug, screw terminals) for tightness. 4. Test your device with another compatible power source. 5. Contact customer support if the power supply is suspected to be faulty.
Device receives dim or insufficient power	1. Device power requirement exceeds 72W 2. Loose connection or damaged cable 3. Power supply degradation	1. Verify your device's power requirements. If it exceeds 72W, a higher wattage adapter is needed. 2. Inspect cables and connections for damage or looseness. 3. If the power supply is old or has been subjected to stress, it may be failing. Consider replacement.
Power supply gets excessively hot	1. Overload 2. Poor ventilation 3. Internal fault	1. Ensure total wattage of connected devices is below 72W. 2. Place the power supply in a well-ventilated area, away from heat sources. 3. Discontinue use immediately and contact customer support if overheating persists without overload.

9. Warranty Information

BTF-LIGHTING products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the product packaging or contact BTF-LIGHTING customer support. Keep your purchase receipt as proof of purchase for any warranty claims.

10. Customer Support

If you have any questions, require technical assistance, or need to report an issue with your BTF-LIGHTING 24V 3A 72W Power Supply Adapter, please contact the BTF-LIGHTING customer support team. Contact information can typically be found on the product packaging or the official BTF-LIGHTING website.

When contacting support, please have your product model number (24V3A) and purchase details ready.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question