

Outdoor String Light Power Supply Manual

Model: ABT-SL-2401A

Input: AC 100–240V, 50/60Hz

Output: DC 24V, Max. 1A

Rated Power: 24W Max.

Suitable Product: Low-voltage outdoor LED string lights

Waterproof Rating: IP44

1. Product Description

This product is an outdoor string light power supply / LED driver controller designed to convert AC input power into low-voltage DC output for compatible outdoor LED string lights.

Depending on the model, the product support remote control, App control, timer control, dimming, color changing, or other lighting functions.

Use this product only with the matching LED string light set supplied or approved by the manufacturer.

2. Safety Instructions

Read all instructions carefully before installation and use.

2.1 Use only with compatible low-voltage LED string lights.

2.2 Do not exceed the rated output voltage, current, or power of this product.

2.3 Do not connect this product to non-compatible lighting products or modified lighting systems.

2.4 Disconnect power before installation, cleaning, maintenance, or moving the product.

2.5 Do not open, disassemble, repair, or modify the power supply by yourself.

2.6 Do not use the product if the power cord, plug, output connector, housing, or cable is damaged.

2.7 Keep the power supply away from fire, high heat, corrosive gas, and sharp objects.

2.8 Do not immerse the power supply, plug, or connector in water.

2.9 When used outdoors, connect the product to a properly protected outdoor outlet.

2.10 Make sure all connectors are firmly attached before plugging the product into the AC outlet.

2.11 Do not cover the power supply during operation. Keep enough space around it for heat dissipation.

2.12 Keep children away from the power supply and electrical connections.

2.13 This product is not a toy.

2.14 Use the product only for its intended purpose.

3. Installation Instructions

3.1 Unpack the product and check that all parts are complete and undamaged.

3.2 Make sure the AC power is turned off or unplugged before connection.

3.3 Connect the output connector of the power supply to the LED string light input connector.

3.4 Tighten or secure the connector properly, if the connector has a locking nut or waterproof cap.

3.5 Place or mount the power supply in a stable position.

3.6 Keep the power supply above ground level and avoid areas where water may accumulate.

3.7 Plug the AC plug into a suitable AC outlet.

3.8 Turn on the product and check whether the lights operate normally.

Do not pull the cable strongly during installation. Do not install the product where the cable may be pinched, cut, or damaged.

4. Operation

4.1 Power On / Off

Plug the product into a suitable AC outlet to power on the connected LED string lights.

Unplug the product from the AC outlet to completely cut off power.

4.2 Remote Control Function, If Applicable

Use the supplied remote control to select lighting modes, brightness, color, timer, or other available functions.

If the remote control does not work:

4.2.1 Check whether the battery is installed correctly.

4.2.2 Remove the battery insulation sheet, if present.

4.2.3 Aim the remote control toward the receiver area.

4.2.4 Replace the battery if needed.

4.3 App Control Function, If Applicable

For models with wireless App control:

4.3.1 Download the specified App according to the product label, package, or quick guide.

4.3.2 Turn on the product.

4.3.3 Enable wireless connection on your mobile device.

4.3.4 Follow the App instructions to add or pair the device.

4.3.5 After successful pairing, use the App to control brightness, color, scene mode, timer, or other functions.

The actual App interface may vary depending on software version.

5. Cleaning and Maintenance

5.1 Unplug the product before cleaning.

5.2 Use a soft dry cloth to clean the surface.

5.3 Do not use alcohol, gasoline, chemical solvent, or abrasive cleaner.

5.4 Do not wash the power supply directly with water.

5.5 Check cables and connectors regularly.

5.6 Stop using the product immediately if any damage, overheating, abnormal smell, smoke, or malfunction occurs.

6. Storage

When the product will not be used for a long time:

6.1 Unplug it from the AC outlet.

6.2 Disconnect it from the LED string light.

6.3 Clean and dry the product before storage.

6.4 Store it in a cool, dry, and ventilated place.

6.5 Avoid heavy pressure on the cable or housing.

7. Troubleshooting

Problem	Possible Cause	Solution
Lights do not turn on	AC outlet has no power	Check the outlet or use another outlet
Lights do not turn on	Connector is loose	Reconnect and secure the connector
Lights flash abnormally	Power supply is overloaded	Use only the approved light string
Remote does not work	Battery is low or installed incorrectly	Replace or reinstall the battery
App cannot find device	wireless function is not enabled	wireless and try again
App control is unstable	Mobile device is too far away	Move closer to the controller
Product becomes hot	Poor ventilation or overload	Do not cover the product; check load rating

If the problem cannot be solved, stop using the product and contact the seller or manufacturer.

8. RF Exposure Statement

For Wireless Models Only

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and the user's body.

Do not operate this equipment together with any other antenna or transmitter unless approved by the responsible compliance party.

9. FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

10. Important Notes

10.1 The product must be installed and used according to this manual.

10.2 The manufacturer is not responsible for damage caused by improper installation, misuse, unauthorized modification, or use with non-compatible products.

10.3 Product specifications may change without prior notice due to product improvement.

10.4 The actual product appearance and functions may vary by model.