BSOD SMD5630 led Strip DC12V PCB Black 300leds/5M

BSOD NewStyle 5mm Width PCB SMD5630 LED Strip DC12V User Manual

Model: SMD5630 LED Strip DC12V PCB Black 300leds/5M

1. Introduction

This manual provides detailed instructions for the safe and effective use of your BSOD NewStyle 5mm Width PCB SMD5630 LED Strip. Please read this manual thoroughly before installation and operation, and retain it for future reference.

2. Safety Information

- Ensure the power supply is disconnected before installation or maintenance.
- Only use a compatible **DC 12V** power supply. Using an incorrect voltage will damage the LED strip.
- The LED strip is rated **IP65 waterproof**, meaning it is protected against dust and low-pressure water jets. It is suitable for outdoor use but should not be submerged in water.
- Do not bend the LED strip sharply or apply excessive force, as this may damage the internal circuitry.
- When cutting the LED strip, only cut along the designated cut marks (typically every 5cm, indicated by copper pads). Ensure power is off before cutting.
- Avoid direct eye exposure to the illuminated LEDs for prolonged periods.

3. Package Contents

The package includes:

- 1 x BSOD NewStyle SMD5630 LED Strip (5 meters)

Note: A DC 12V power adapter and any necessary connectors are sold separately and are required for operation.

4. Product Features

- **High Brightness:** Utilizes Superb 5630 SMD LEDs for high intensity and reliability.

- **Energy Efficient:** Features low power consumption.
- **Flexible Design:** Ribbon design allows for curving around bends, ensuring smooth and even light distribution.
- **Easy Installation:** Equipped with 3M adhesive tape backing for secure attachment to various dry, flat surfaces.
- **Waterproof:** IP65 rating provides protection against dust and water splashes.
- **Optimal Light Quality:** High lumens with narrow spectrum and good monochromaticity.

Image 1: The BSOD SMD5630 LED strip coiled on its reel, showcasing its flexible design and individual LED components.

5. Specifications

Item Type	SMD5630 LED Strip
Power Source	DC
Voltage	12V
PCB Width	5mm
PCB Color	Black
Number of LEDs	300 LEDs / 5m (60 LEDs/meter)
Waterproof Rating	IP65
Power Consumption	11.52W/meter
Lumen Output	25lm/LED
View Angle	120° ~ 140°
UPC	600748764112
ASIN	B017LR46FE

Image 2: A close-up view of the SMD5630 LEDs on the strip, highlighting the individual light sources and the PCB.

6. Setup and Installation

6.1 Preparation

- Unroll the LED strip completely before testing or installation to prevent overheating.
- Ensure the installation surface is clean, dry, and smooth for optimal adhesive performance.
- Gather necessary tools: DC 12V power supply, connectors (if cutting), scissors (if cutting).

6.2 Cutting the LED Strip (Optional)

If a shorter length is required, the LED strip can be cut at designated marks. These marks are typically indicated by a scissor icon or copper pads every 5cm.

1. Ensure the LED strip is disconnected from all power sources.
2. Locate the designated cut marks.
3. Carefully cut along the center of the copper pads using sharp scissors.
4. After cutting, ensure proper sealing of the cut end if the strip is to be used in a damp or outdoor environment to maintain its IP65 rating.

6.3 Connecting to Power

1. Connect the positive (+) wire (red) from the LED strip to the positive terminal of your DC 12V power supply.
2. Connect the negative (-) wire (black) from the LED strip to the negative terminal of your DC 12V power supply.
3. Ensure all connections are secure and properly insulated.

Image 3: The LED strip with its pre-attached red and black power wires, ready for connection to a 12V DC power supply.

6.4 Mounting the LED Strip

1. Peel off the protective backing from the 3M adhesive tape on the back of the LED strip.
2. Carefully press the LED strip onto the desired clean, dry, and smooth surface. Apply firm, even pressure along the entire length to ensure good adhesion.
3. For long-term or outdoor installations, consider using additional mounting clips or silicone adhesive for enhanced security, especially on textured or uneven surfaces.

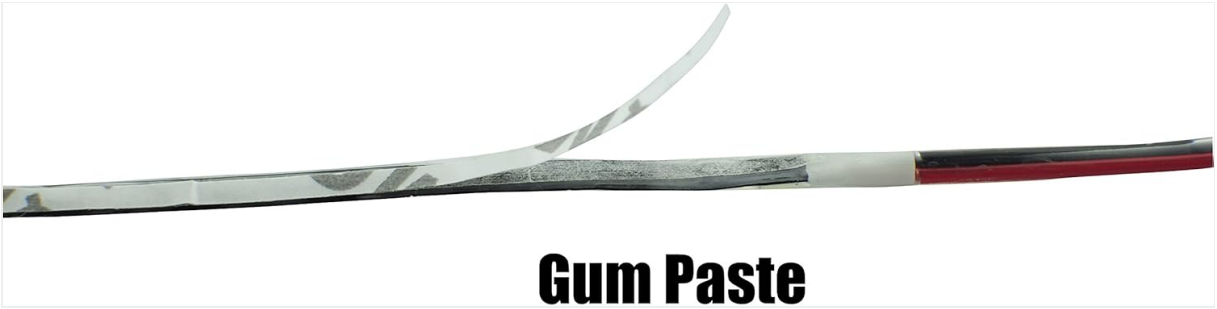

Image 4: A detailed view of the 3M adhesive backing on the LED strip, illustrating how it is peeled for mounting.

7. Operating Instructions

Once the LED strip is securely installed and connected to a compatible DC 12V power supply:

- Plug in the DC 12V power supply to an electrical outlet. The LED strip should illuminate.
- To turn off the LED strip, unplug the power supply or use an inline switch if one has been installed.
- For dimming or color control (if applicable), an external LED dimmer or controller compatible with 12V DC single-color LED strips is required (not included).

8. Maintenance

- **Cleaning:** Gently wipe the LED strip with a soft, dry cloth. For stubborn dirt, a slightly damp cloth can be used, ensuring the strip is completely dry before reconnecting power. Do not use harsh chemicals or abrasive cleaners.
- **Connection Check:** Periodically inspect all electrical connections for tightness and signs of corrosion, especially in outdoor or damp environments.
- **Waterproofing Integrity:** For IP65 rated strips, regularly check the integrity of the protective coating, especially at cut ends or connection points, to ensure continued water resistance.
- **Adhesive Check:** Over time, adhesive may weaken. If the strip begins to peel, re-secure it with additional adhesive or mounting clips.

9. Troubleshooting

Problem	Possible Cause	Solution
LED strip does not light up.	No power, incorrect voltage, loose connection, damaged strip.	◦ Check if the power supply is plugged in and functional. ◦ Verify the power supply is 12V DC. ◦ Inspect all connections for tightness. ◦ If a section is cut, ensure proper connection to the power source. ◦ Test a small section of the strip if possible to isolate damage.
Lights are dim or flickering.	Insufficient power, voltage drop, faulty power supply.	◦ Ensure the power supply has sufficient wattage for the length of the strip. ◦ Check for long wire runs that may cause voltage drop; use thicker gauge wires if necessary. ◦ Test with a different 12V DC power supply.
Adhesive is not holding.	Surface not clean/dry, surface texture, environmental factors.	◦ Clean and dry the surface thoroughly before re-application. ◦ Use additional mounting clips or a stronger adhesive for textured or outdoor surfaces.

10. Warranty and Support

Warranty information for this product is not explicitly detailed in the provided product data. For specific warranty terms and conditions, please refer to the seller's policy or contact BSOD customer support directly.
For further assistance or technical support, please visit the BSOD Store on Amazon or contact your retailer.