Sunity LED-Ctrl-ONE

Sunity RGB LED Strip Light Controller User Manual

Model: LED-Ctrl-ONE

1. INTRODUCTION

This manual provides comprehensive instructions for the setup, operation, and maintenance of your Sunity RGB LED Strip Light Controller. This device offers versatile control over your LED strip lights through a dedicated mobile application, an infrared (IR) remote control, and integrated buttons on the controller box. Key features include 16 million color options, 22 dynamic light modes, and a music synchronization function.

Figure 1: Sunity RGB LED Strip Light Controller, IR remote, and mobile application interface.

2. SAFETY INFORMATION

- Ensure the power supply used is compatible with the controller's voltage requirements (5V-24V DC). An incompatible power supply can damage the device.
- The power supply is not included with this product. Use a certified power adapter suitable for your LED strip.
- Do not expose the controller to water or excessive moisture.
- Avoid placing the controller in direct sunlight or near heat sources.
- Keep out of reach of children.

3. PACKAGE CONTENTS

- 1 x Sunity RGB LED Strip Light Controller (Model: LED-Ctrl-ONE)
- 1 x IR Remote Control (with 1 Lithium Metal battery included)

Led Strip Controller Details

2. Mode Setting:
   22 color changing modes and long press to start Music sync mode.

3. Speed/Brightness/On/Off
   A. 10 levels of Brightness
   B. 10 levels of color-changing speed
   C. Long press for On/Off

1. Compatible with:
   10mm 4-pin RGB led strip 5v-24V, 1-10 meters.

4. Static Color:
   16 static colors available.

Figure 2: Detailed view of the LED Strip Controller, highlighting its connection points and control buttons.

4. Setup Instructions

1. **Connect LED Strip:** Connect your 4-pin 10mm RGB LED strip to the controller's output port. Ensure the pins are aligned correctly. The controller is compatible with 5050, 3528, and 2835 RGB LED strips from 1m to 10m in length.

2. **Connect Power Supply:** Connect a compatible 5V-24V DC power supply (not included) to the controller's input port.

3. **Prepare IR Remote:** Remove the clear plastic insulation tab from the battery compartment of the IR remote control before first use.

4. **Install Mobile Application:** Download the "LotusLanternX" app from your device's app store. You can scan the QR code below or search directly.

Figure 3: LotusLanternX mobile application interface and download options.

Scan this QR code to download the app: App Download QR Code

5. **Bluetooth Pairing:** Open the "LotusLanternX" app on your smartphone. The app will automatically search for and connect to the controller via Bluetooth. Ensure Bluetooth is enabled on your device.

Tips for Connect & Use

1. Make sure "→" to "←"

2. Remote point towards IR receiver.

3. Power Supply not included.

4. Remove the plastic before use.

Figure 4: Connection and usage tips for the LED strip controller.

5. OPERATING INSTRUCTIONS

5.1. Mobile Application Control

The "LotusLanternX" app provides comprehensive control over your LED strip lights.

- **Color Selection:** Choose from 16 million colors using the color wheel or preset color options.
- **Light Modes:** Select from 22 dynamic light modes, including various fades, jumps, and flashes.
- **Music Sync Mode:** The built-in sensitive microphone allows the lights to synchronize with music playing in the environment. Alternatively, you can sync with music playing on your phone or via your phone's microphone.
- **Timing Function:** Schedule automatic on/off times for your LED lights.
- **Brightness/Speed Adjustment:** Adjust the brightness of static colors or the speed of dynamic modes.

Figure 5: Overview of controller features including app and remote control.

5.2. IR Remote Control

Point the IR remote directly at the controller box's IR receiver for optimal performance.

- **On/Off:** Press the **ON** or **OFF** button to power the lights.
- **Color Buttons:** Select from 16 static colors directly.
- **Mode Buttons:** Cycle through the 22 light modes.
- **Speed/Brightness:** Adjust the speed of dynamic modes or the brightness of static colors.

5.3. Controller Box Buttons

The physical buttons on the controller box provide basic control.

- **MODE Button:** Cycles through different light modes.
- **SPEED Button:** Adjusts the speed of dynamic modes or brightness of static colors.
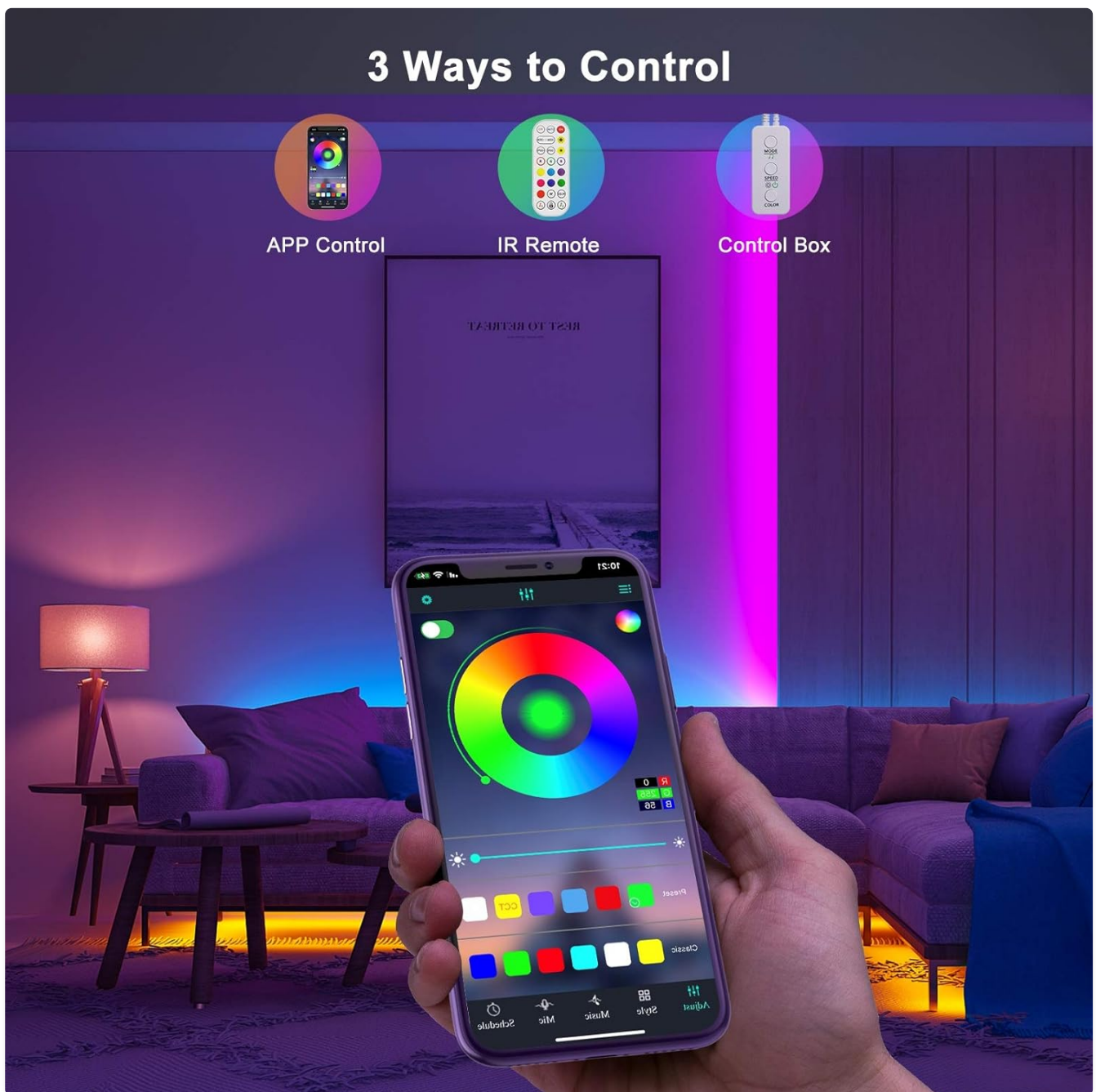- **COLOR Button:** Cycles through static colors.

Figure 6: Control options for the LED strip lights.

6. MAINTENANCE

- Clean the controller and remote with a dry, soft cloth. Do not use liquid cleaners.
- Store the device in a cool, dry place when not in use for extended periods.
- Ensure the IR receiver on the controller box is not obstructed for proper remote functionality.

7. TROUBLESHOOTING

- **Lights not turning on:**
    - Check if the power supply is properly connected and functioning.
    - Ensure the LED strip is correctly connected to the controller with proper pin alignment.

- Verify the controller is powered on via the app, remote, or control box button.

- **Remote control not working:**

    - Ensure the plastic insulation tab has been removed from the remote's battery compartment.
    - Point the remote directly at the IR receiver on the controller box.
    - Replace the remote battery if necessary.

- **Incorrect colors displayed (e.g., Red shows Green):**

    - This issue often occurs if the LED strip's color sequence (e.g., GRB, RGB, BRG) does not match the controller's default setting.
    - Use the "LotusLanternX" app to modify the pin sequence. Navigate to the "Modify Pin Sequence" option within the app settings and adjust until colors are correct.
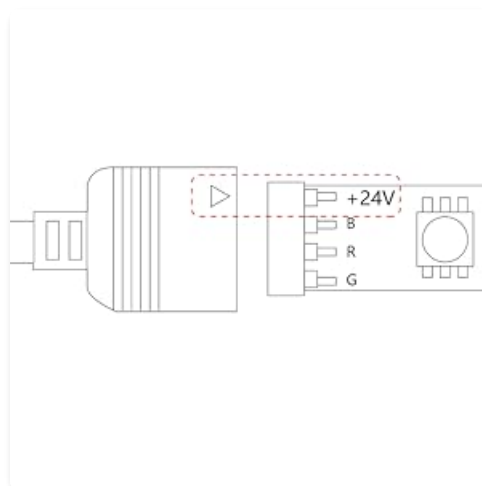

Figure 7: Solution for incorrect color display via app's pin sequence modification.

- **Bluetooth connection issues:**

    - Ensure Bluetooth is enabled on your smartphone.
    - Restart the "LotusLanternX" app.
    - Power cycle the LED controller (unplug and re-plug the power supply).
    - Ensure no other devices are actively connected to the controller via Bluetooth.

8. SPECIFICATIONS

Model Number	LED-Ctrl-ONE
Brand	Sunity
Input Voltage	5V-24V DC
Compatibility	4-pin 10mm RGB LED Strip Lights (5050, 3528, 2835)
Control Methods	APP Control (Bluetooth), IR Remote Control, Controller Box Buttons
Color Options	16 Million (APP), 16 Static (IR Remote)
Light Modes	22

Dimensions (L x W x H)	6.69 x 3.94 x 0.39 inches
Item Weight	2.11 ounces (0.06 Kilograms)
Remote Battery	1 x Lithium Metal (included)
UPC	782947792926

9. WARRANTY INFORMATION

Specific warranty details for this product are not provided in the available information. Please refer to your purchase receipt or contact the seller/retailer directly for warranty terms and conditions.

10. SUPPORT

For further assistance or technical support, please contact the seller or refer to the support resources provided by the platform where the product was purchased. Please have your model number (LED-Ctrl-ONE) and purchase details ready when seeking support.