RGBZONE FB0747

RGBZONE DC 5V USB LED Controller with 21-Key RF Wireless Remote Control

Model: FB0747

1. INTRODUCTION

This manual provides instructions for the RGBZONE DC 5V USB LED Controller, designed for use with WS2811, WS2812, and WS2812B dream color LED strip lights. The controller features a 21-key RF wireless remote for convenient operation.

Package Contents

- 1 x RF LED Controller
- 1 x RF Remote Control
- 1 x User Manual (this document)

Image 1.1: RGBZONE DC 5V USB LED Controller and 21-Key RF Wireless Remote Control.

2. SPECIFICATIONS

Feature	Detail
Model Number	FB0747
Input Voltage	DC 5V (USB powered)
Output Voltage	DC 5V (matches input voltage)
Control Method	RF Wireless Remote Control (21-Key)
Compatible LED Types	WS2811, WS2812, WS2812B (3-PIN single signal IC chip LED products)
Unsupported LED Types	SK6812 RGBW, regular RGB LED without driver IC
Maximum Control Pixels	2048 pixels (factory default 300 pixels)
Remote Control Distance	Up to 65ft (15-20 meters)

Power Consumption	Controller itself: <30W (for connected lights)
Included Components	Controller, Remote, User Manual
Remote Battery	1 x CR2025 3V Lithium Metal battery (included)

3. SETUP AND CONNECTION

Follow these steps to connect your RGBZONE LED controller to your LED strip lights and power source.

Connection Diagram

1. Connect the 3-PIN JST connector from the controller to your compatible 3-PIN LED strip light. Ensure correct polarity.
2. Connect the USB plug of the controller to a DC 5V power source (e.g., USB power adapter, computer USB port, power bank).
3. Ensure the LED strip also operates on DC 5V. The controller does not regulate voltage.

Image 3.1: Connection diagram for the LED controller, power adapter, and LED strip.

Plug Type Identification

The controller uses a 3-PIN plug for the LED strip connection and a USB plug for power input.

Image 3.2: Identification of the 3-PIN and USB plug types.

4. OPERATION

The 21-key RF wireless remote control allows you to manage various lighting modes and settings.

Remote Control Functions

Before first use, remove the plastic sheet from the remote control's battery compartment.

EXTRA LONG
CONNECTING CABLE

Total:1M/3.28FT

Image 4.1: 21-Key RF Wireless Remote Control layout and functions.

- **On/Off:** Power on/off the LED strip. (Auto saves settings when off)
- **AUTO:** Activates auto-play mode, cycling through various effects.
- **S+/S-:** Adjusts the speed of dynamic modes (10 levels).
- **M+/M-:** Switches between 366 different color modes.
- **Brightness +/-:** Adjusts the brightness level (32 levels).
- **Color Buttons:** Selects static monochrome colors.

Adjusting Color Order (RGB/GRB/BRG)

If the colors displayed by the LED strip do not match the remote control buttons (e.g., pressing Red lights up Green), you need to adjust the color order.

1. Connect the LED strip and power supply. Press the **Off** button to turn off the LED strip.
2. Press the **AUTO** button to enter the setup menu. The first three lights of the LED strip will display the current RGB sequence.
3. Press the **M-** button to adjust the RGB sequence until the first three lights display Red, Green, and Blue in

order.

4. Press the **Off** button to save the new color order.

Image 4.2: Steps to adjust the LED strip color order.

1-to-1 Pairing Setup

By default, one remote can control multiple receivers. To set up 1-to-1 pairing (one remote controls only one receiver):

- To enable 1-to-1 pairing: Press the **Green** color button for 5 seconds. The remote will now only control the paired receiver.
- To cancel 1-to-1 pairing (return to controlling multiple receivers): Press the ⬜ color button for 5 seconds. All remote controls can then control the receiver.

Image 4.3: Remote control pairing instructions.

Product Demonstration Video

Your browser does not support the video tag.

Video 4.1: This video demonstrates the various color modes and effects achievable with the RGBZONE DC 5V USB LED Controller and its remote control, showcasing dynamic color changes and static selections.

5. COMPATIBILITY

The RGBZONE DC 5V USB LED Controller is designed for specific types of addressable LED strip lights.

Supported LED Strip Types

- WS2811 LED lights
- WS2812 LED lights
- WS2812B LED lights

This controller supports all 3-PIN single signal IC chip LED products.

Image 5.1: Examples of compatible LED strip lights.

Unsupported LED Strip Types

- SK6812 RGBW LED lights
- Regular RGB LED lights without a driver IC

6. TROUBLESHOOTING

Color Mismatch

If the LED strip displays incorrect colors when a specific color button is pressed on the remote (e.g., pressing Green results in Red light), refer to the "Adjusting Color Order" section (Section 4) to correct the RGB

sequence.

Controller Overheating

If the controller becomes very hot during use, it may indicate an overload. The product itself can carry power for LED strips up to 30W. If your LED strip's power consumption exceeds this, provide the light strips with a separate power supply or use amplifiers. This prevents controller overload and potential damage.

Pixel Control Limit

The controller supports a maximum of 2048 pixels. The factory default setting is 300 pixels. If you are using a longer strip with more pixels, you may need to adjust the pixel count setting. Consult the manufacturer's support for detailed instructions on adjusting the pixel count beyond the default.
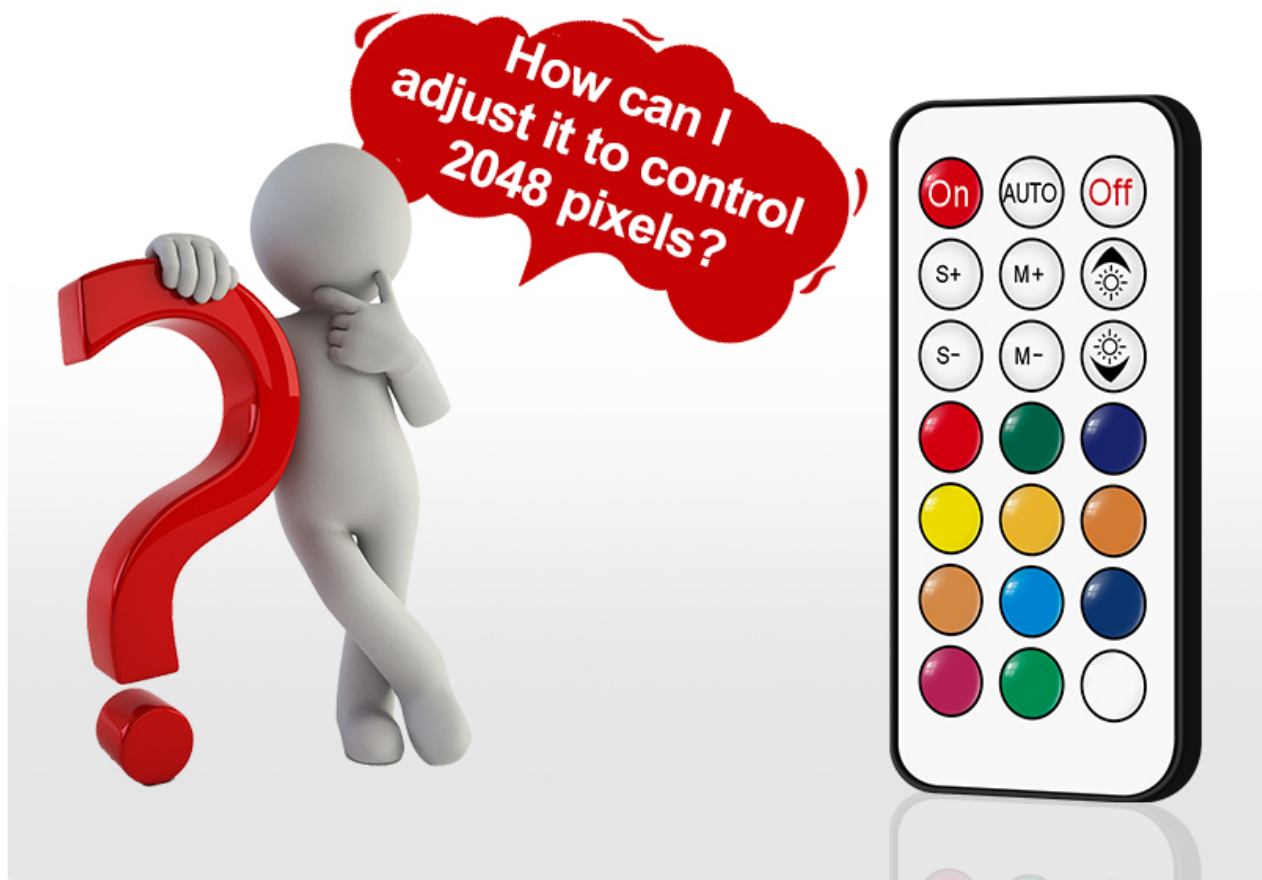

Image 6.1: Query regarding pixel control adjustment.

7. SAFETY GUIDELINES

- **Power Supply:** Always use a DC 5V power supply that matches the voltage requirements of your LED strip. The controller does not convert voltage. Input 5V = Output 5V.
- **Overload Prevention:** Do not exceed the maximum power capacity of the controller (30W for connected lights). For higher power LED strips, use a separate power supply or amplifiers.
- **Indoor Use:** This product is intended for indoor use only.
- **Battery Handling:** The remote control contains a CR2025 3V Lithium Metal coin cell battery. Ensure proper insertion and removal. Keep batteries out of reach of children.
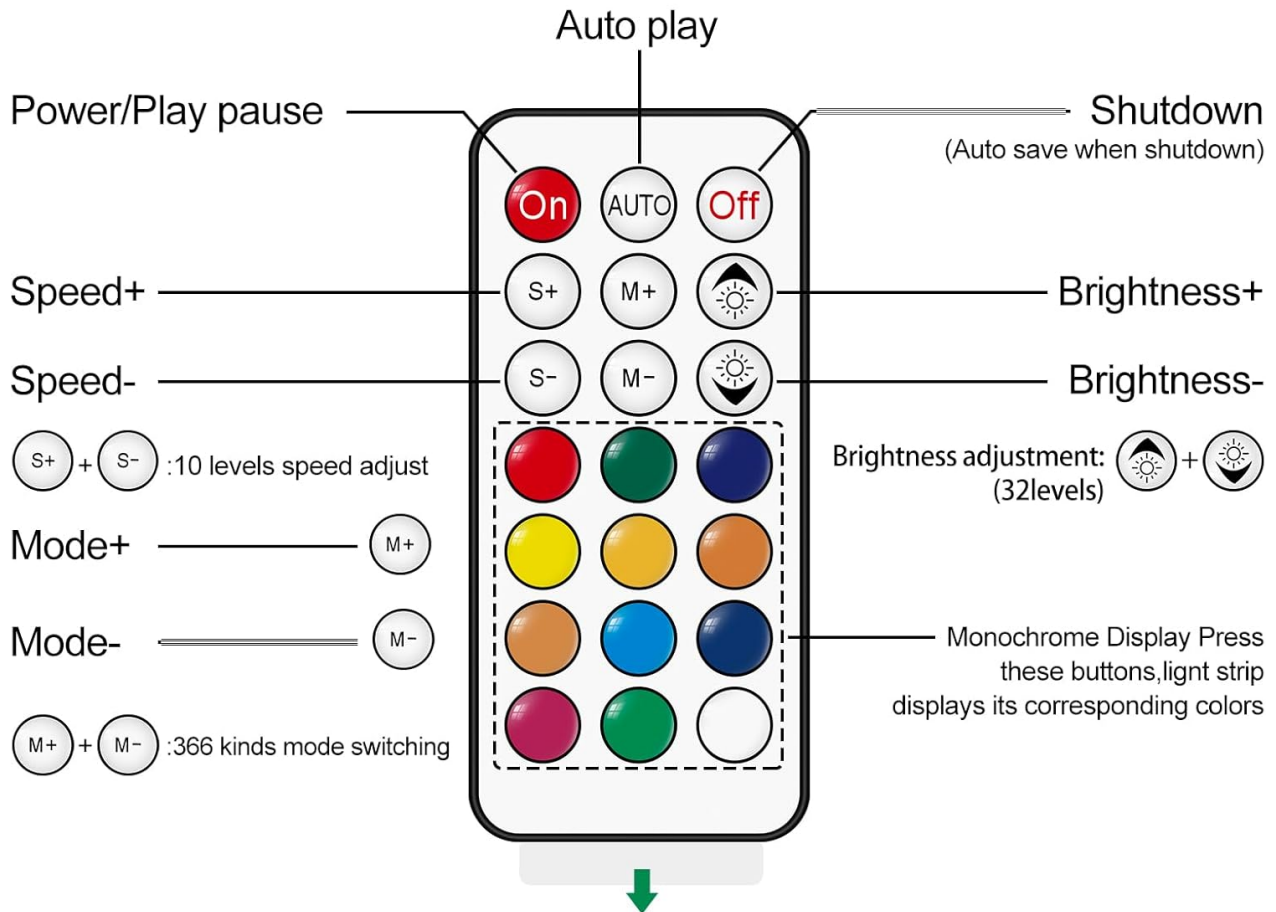
Remote Battery Removal

To remove or replace the CR2025 battery in the remote control:

1. Locate the battery tray on the side or back of the remote.
2. Push the small tab or lever inwards to release the tray.
3. Gently pull the tray outwards to slide out the battery.
4. Replace with a new CR2025 3V battery, ensuring correct polarity, and slide the tray back into place until it clicks.

21-KEY RF REMOTE
WIRELESS REMOTE CONTROLLER

Auto play

Power/Play pause — On

Shutdown
(Auto save when shutdown)

AUTO   Off

Speed+ — S+   M+   Brightness+

Speed- — S-   M-   Brightness-

(S+)+(S-) :10 levels speed adjust

Brightness adjustment: + (32levels)

Mode+ — M+

Mode- — M-

Monochrome Display Press these buttons,lignt strip displays its corresponding colors

(M+)+(M-) :366 kinds mode switching

Pull out the plastic sheet when using the remote control.

Image 7.1: Instructions for removing the remote control battery.

8. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the product packaging or contact RGBZONE customer service through the retailer where the product was purchased. Keep your purchase receipt for warranty claims.