

USER MANUAL

RGB LED Light with APP and RF Remote Control

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Input: DC 5V-48V

Control: Smartphone APP / RF Remote Control

Version: V1.0

FCC ID: 2BYAI-AG01

Important: The remote control battery is not included. Please install the required battery according to the marking inside the battery compartment before use.

1. Product Overview

This RGB LED Light is a DC 5V-48V powered addressable RGB light bar system. It supports smartphone APP control and handheld RF remote control. Users can adjust color, brightness, lighting modes and power on/off according to the selected lighting effect.

The LED light bar uses a serial data input/output design. The PCB interface is marked with **5V+**, **GND**, **DI** and **DO**. The LED data signal enters from **DI** and can cascade to the next light bar from **DO** when supported by the product kit.

2. Package Contents

- RGB LED light bar(s)
- Connector hub / connection accessories, depending on the kit version
- USB power cable / controller
- Handheld RF remote control, battery not included
- User manual

Note: Package contents may vary by product version and sales package. Please refer to the actual product received.

3. Product Specifications

Item	Specification
Product Name	RGB LED Light with APP and Remote Control
Input Voltage	DC 5V-48V
Power Supply	DC 5V-48V power source
Control Method	Smartphone APP control
Wireless Function	2.4 GHz Bluetooth APP control
LED Type	5V+, GND, DI, DO
PCB Interface	Color selection, brightness adjustment, dynamic
Main Functions	modes, on/off control
Application Environment	Indoor dry location
Battery	Remote control battery not included

4. Product Structure

- **Light Bar:** Emits RGB lighting effects through the diffusion cover.
- **Connector / Hub:** Connects multiple light bars according to the product design.
- **Controller:** Receives APP and remote control commands and outputs serial LED data.
- **USB Cable:** Provides DC 5V-48V power input.
- **Remote Control:** Provides quick operation for on/off, color, brightness and mode selection.

5. Installation and Connection

1. Place the light bars and connectors on a clean, flat surface before installation.
2. Connect each light bar firmly to the connector or hub. Make sure the connector is fully inserted.
3. Confirm the wiring direction before powering on. **5V+** must connect to **5V+**, **GND** must connect to **GND**, the controller data output must enter the LED bar through **DI**, and **DO** is used for data cascade to the next light bar when applicable.
4. Connect the USB cable to a suitable DC 5V-48V power source.
5. After power is connected, use the APP or the remote control to turn on and operate the light.

Warning: Do not connect this product directly to AC mains power or to a power source higher than 48V DC. Disconnect power before changing the connection layout.

6. APP Control Instructions

1. Scan the QR code on the package or search for the APP name provided by the supplier. Install the APP on your smartphone.
2. Enable Bluetooth on the smartphone. Some phones may also require permission for location or nearby devices for Bluetooth scanning.
3. Connect the RGB LED light to the DC 5V-48V power source and keep the light close to the phone during first connection.
4. Open the APP, search for the RGB LED device, then tap to connect.
5. Use the APP interface to select colors, adjust brightness, choose lighting modes and switch the light on or off.

Note: APP name and pairing steps may vary by controller version. Please follow the QR code or APP guide provided with the actual product.

7. Remote Control Instructions

Install the required battery into the remote control before use. The battery is not included. Operate the remote control within the effective receiving range of the controller.

Button	Function
ON	Turn on the light
OFF	Turn off the light
AUTO	Run automatic lighting mode
R / G / B	Select red, green or blue color quickly
Color Buttons	Select preset colors
Brightness + / -	Increase or decrease brightness
M+ / M-	Switch to next or previous mode
S+ / S-	Increase or decrease dynamic mode speed, if supported

8. Operation Notes

- Use only a DC 5V-48V power source with sufficient output current for the number of connected light bars.
- If more light bars are connected, the required current will increase. Low power output may cause dim light, flickering or abnormal colors.

- Do not bend, cut, puncture or modify the light bar unless the product is specifically designed for that purpose.
- Keep the controller and connectors dry and away from high temperature areas.
- Disconnect the USB power before cleaning or rearranging the product.

9. Troubleshooting

Problem	Solution
No light after power on	Check whether the USB power source is working. Confirm the USB cable and connector are firmly connected.
APP cannot find the device	Enable Bluetooth and required phone permissions. Keep the phone near the controller. Power off and power on the light, then search again.
Remote control does not work	Install or replace the remote battery. Check that the controller is powered on and within the remote control range.
Only part of the light works	Check the connection direction. Confirm DI and DO are connected correctly and all connectors are fully inserted.
Light flickers or color is abnormal	Use a DC 5V-48V power source with sufficient current. Reduce brightness or reduce the number of connected light bars.
Cannot change modes	Reconnect the APP or use the remote control mode buttons. Restart the controller if needed.

10. Cleaning and Maintenance

- Turn off and unplug the product before cleaning.
- Clean the surface with a soft dry cloth.
- Do not use corrosive chemicals, solvents or abrasive tools.
- Store the product in a cool and dry place when not in use.

11. Safety Instructions

- This product is designed for DC 5V-48V input only.
- Do not expose the product to water, rain or wet environments unless a separate waterproof rating is provided by the manufacturer.
- Do not disassemble, repair or modify the controller, cable or LED light bar by yourself.
- Keep the product away from open flames, heaters and high temperature surfaces.
- Keep small accessories and batteries away from children.
- Stop using the product immediately if the cable, connector or controller is damaged.

12. FCC Compliance Statement

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

(2) this device must accept any interference received, including interference that may cause unde operation.

Any 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.

FCC Radiation Exposure Statement

This device meets the FCC requirements for RF exposure. The device is designed for normal indoor use and complies with applicable FCC exposure limits.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body

13. Disposal and Warranty

Dispose of the product according to local electronic waste regulations. Warranty service and return policy should follow the seller's after-sales terms.

14. Manufacturer Information

Manufacturer: Jiangmen Aoguang Lighting Technology Co., Ltd.

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