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› BTF-LIGHTING RC07RFB & C01RF RF 2.4GHz Wireless Tuya Controller Kit for Single Color LED Strip Lights

BTF-LIGHTING RC07RFB-1XC01RFUS

BTF-LIGHTING RC07RFB & C01RF RF 2.4GHz Wireless Tuya Controller Kit Instruction Manual

Model: RC07RFB-1XC01RFUS

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your BTF-LIGHTING RC07RFB RF 2.4GHz Wireless Remote and C01RF Tuya Controller Kit. This kit is designed to control single-color PWM LED strip lights, offering smooth dimming and convenient control options. Please read this manual thoroughly before use to ensure proper functionality and safety.

2. SAFETY INFORMATION

- Ensure the power supply voltage matches the LED strip and controller requirements (DC5V/12V/24V).
- Do not exceed the maximum current ratings: 5A for Port1 and 12A for Port2.
- This product is designed for indoor use only and is not water-resistant.
- Disconnect power before any installation or wiring changes.
- Keep the device away from direct sunlight, high temperatures, and moisture.
- Do not attempt to repair or modify the device yourself. Contact qualified personnel for service.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 × RC07RFB Remote
- 1 × C01RF Tuya Controller
- 1 × Magnetic Back Holder
- 1 × RC07RFB Manual
- 1 × C01RF Manual

Note: Tuya Gateway and 3A batteries are not included and must be purchased separately.

4. PRODUCT FEATURES

- **Compatible Lights:** Supports PWM single-color LED strips (e.g., 5050, 3528, 2835, COB, Neon).
- **2.4GHz Wireless Transmission:** The RC07RFB remote offers a control range up to 98ft (30m).
- **Brightness Adjustment:** Sensitive touch-slide control for 1% to 100% dimming.
- **Magnetic Wall-Mount:** Remote features a magnetic design for convenient storage.
- **Voltage Compatibility:** Works with DC5V/12V/24V LED strips and power supplies.
- **Tuya Smart Integration:** Compatible with GW01W Wi-Fi+Bluetooth Dual Mode Tuya gateway (sold separately) for Smart Life/Tuya Smart APP control and third-party voice control (Alexa, Google Home).

5. SPECIFICATIONS

Feature	Description
Brand	BTF-LIGHTING
Model	RC07RFB-1XC01RFUS
Color	Single Color
Input Voltage	DC5V/12V/24V
Max Current (Port1)	5A
Max Current (Port2)	12A
Wireless Technology	2.4GHz RF
Control Method	Remote, Tuya App (with gateway)
Indoor/Outdoor Usage	Indoor
Water Resistance Level	Not Water Resistant

6. SETUP AND INSTALLATION

6.1 Wiring Diagram

Follow the diagram below to correctly connect the power supply, C01RF controller, and LED strip. Ensure all connections are secure before applying power.

Wiring Diagram

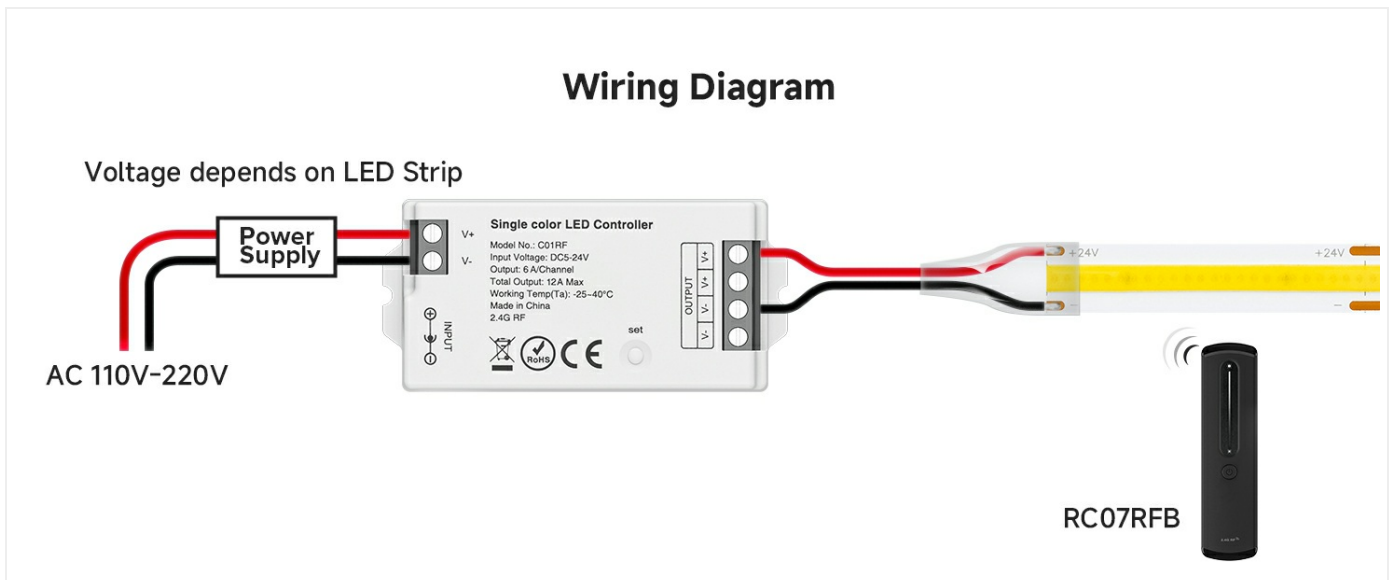


Figure 6.1: Wiring Diagram for C01RF Controller and Single Color LED Strip.

6.2 Remote Mounting Options

The RC07RFB remote can be mounted using one of three methods:

1. **Method 1: Install with screws.** Use the provided magnetic back holder and screws to secure it to a wall.
2. **Method 2: Install with double-sided tape.** Attach the magnetic back holder using strong double-sided adhesive tape.
3. **Method 3: Magnetic attraction.** The remote can directly attach to any metal surface due to its magnetic design.

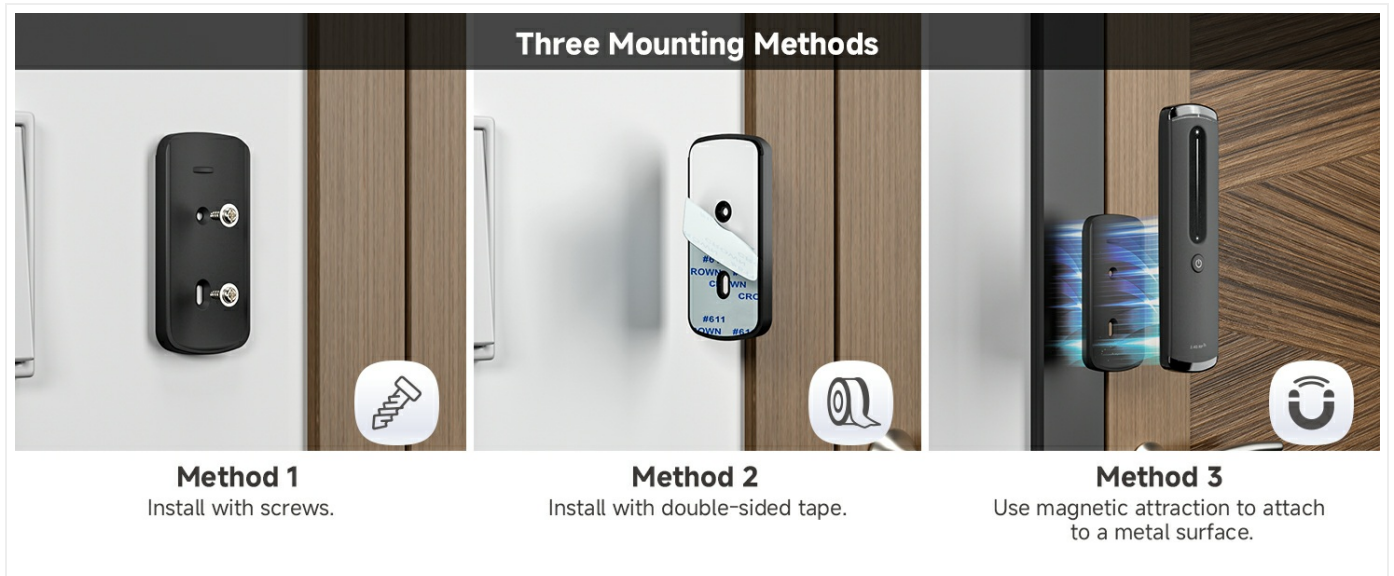


Figure 6.2: Remote Control Mounting Methods.

7. OPERATING INSTRUCTIONS

7.1 RC07RFB Remote Control

The RC07RFB remote features a touch-sensitive slider for brightness control and a power button.

RC07RFB 2.4GHz 1-Zone Single Color RF Remote



Figure 7.1: RC07RFB Remote Control Features.

- **ON/OFF Button:** Short-press to turn the LED strip lights on or off.
- **Brightness Slider:** Touch or slide your finger along the slider to adjust the brightness from 1% to 100%. The indicator light will show red when in brightness adjustment mode.

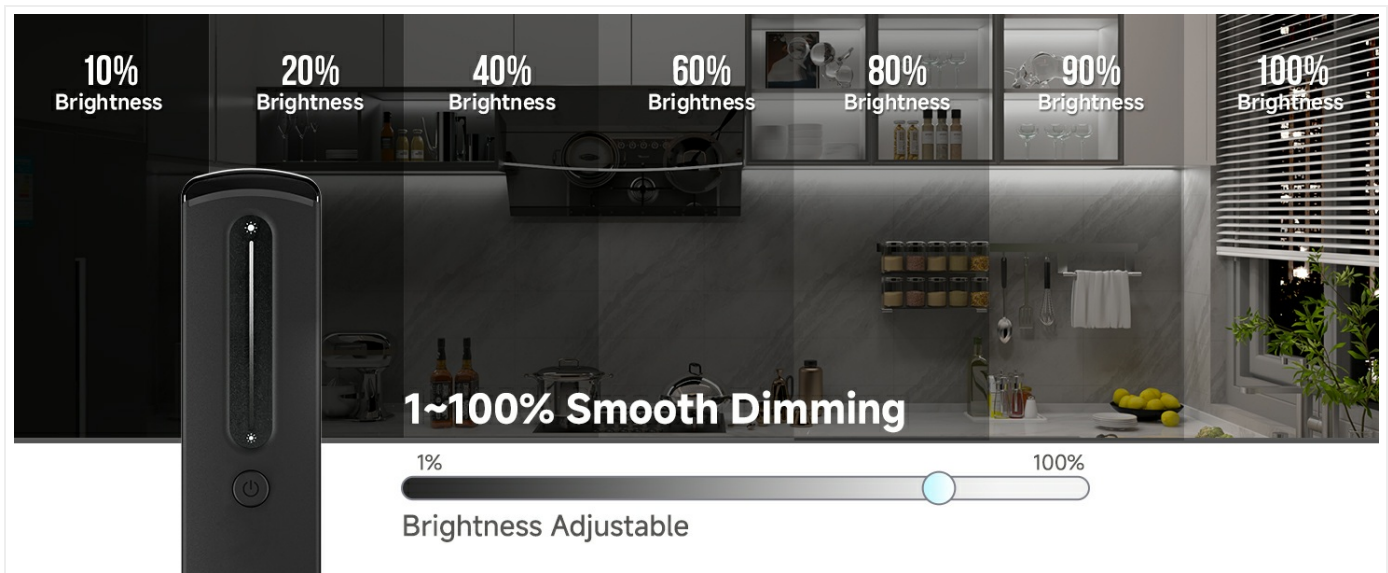


Figure 7.2: Smooth Brightness Dimming.

7.2 App Control (Requires Tuya Gateway)

To enable app control and voice assistant integration, a GW01W Wi-Fi+Bluetooth Dual Mode Tuya gateway is required (sold separately). Once connected to the gateway, you can control your LED strip lights via the Smart Life or Tuya Smart APP, and integrate with third-party voice control systems like Alexa and Google Home.

Video 7.1: Demonstration of the RC07RFB & C01RF Controller Kit in action, showcasing its features and usage.

8. PAIRING INSTRUCTIONS

To pair the RC07RFB remote with the C01RF controller:

1. Ensure the C01RF controller is powered on and connected to the LED strip.
2. On the C01RF controller, locate the 'SET' button.
3. Press and hold the 'SET' button on the controller for approximately 3 seconds until the connected LED strip flashes.

4. Within 10 seconds, short-press the ON/OFF button on the RC07RFB remote.
5. The LED strip will flash again, indicating successful pairing.

To unpair, repeat steps 1-3, then short-press the ON/OFF button on the remote 5 times quickly. The LED strip will flash to confirm unpairing.

9. ADVANCED FEATURES

9.1 Multi-Controller Control

One RC07RFB remote can control numerous C01RF controllers. Each C01RF controller can be controlled by up to five RC07RFB remotes simultaneously.

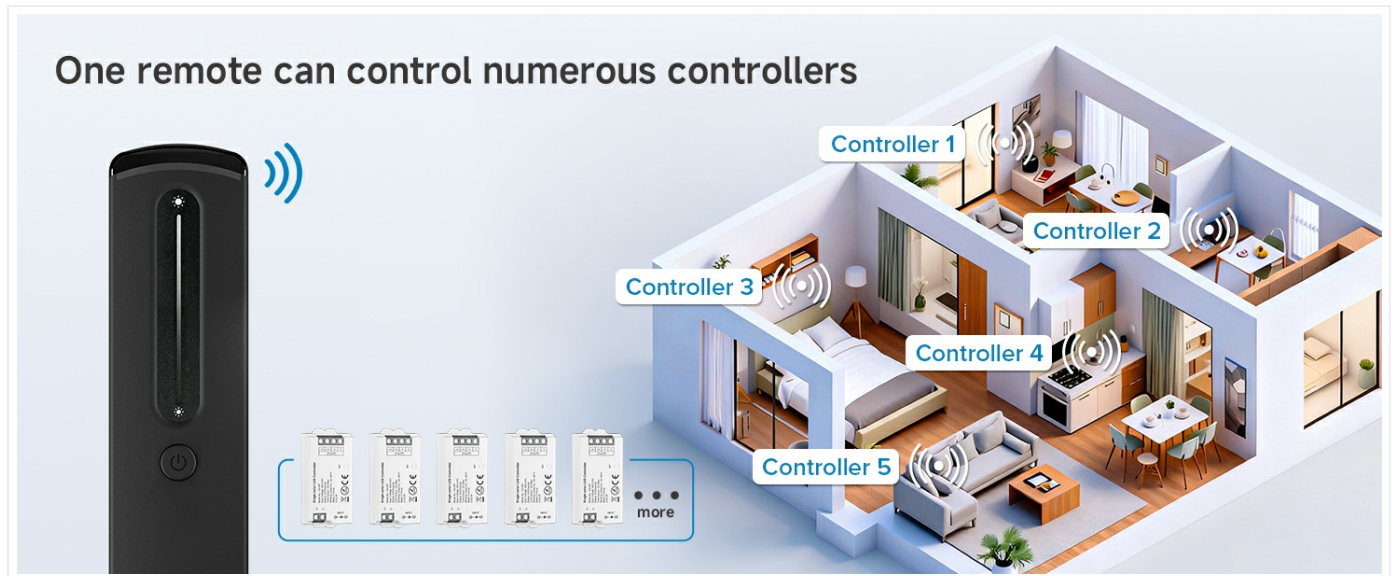


Figure 9.1: One Remote Controlling Multiple Controllers.

9.2 Auto-Transmitting Function

The C01RF controller features an auto-transmitting function. One controller can transmit signals from the remote control to another controller within 30 meters, as long as there is another strip controller within that range. This extends the effective control distance.

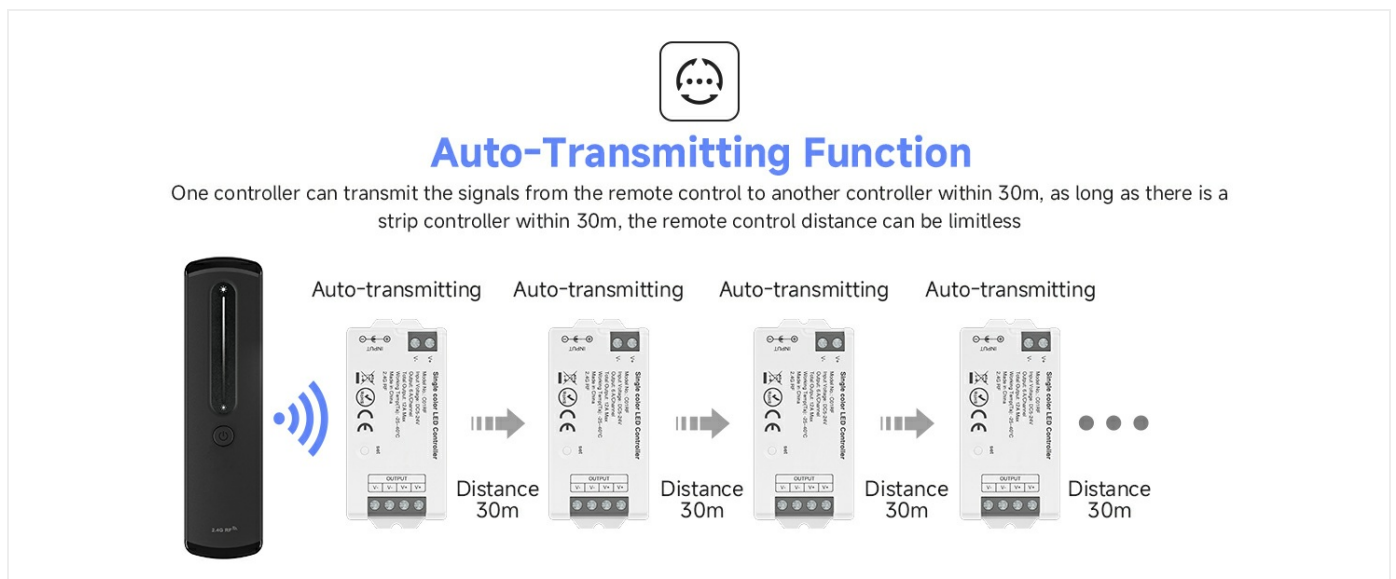


Figure 9.2: Auto-Transmitting Function.

10. TROUBLESHOOTING

- **Lights not responding:** Check power connections to the controller and LED strip. Ensure the remote has working batteries. Re-pair the remote and controller if necessary.
- **Intermittent control:** Ensure the remote is within the 30m range of the controller or another auto-transmitting controller. Check for potential 2.4GHz interference from other devices.
- **Dimming not smooth:** Verify that the LED strip is a compatible PWM single-color type. Ensure the power supply is stable.
- **App control not working:** Confirm the Tuya Gateway (GW01W) is properly set up and connected to your Wi-Fi network. Ensure the C01RF controller is successfully added to the Smart Life/Tuya Smart APP.

11. MAINTENANCE

To ensure the longevity and optimal performance of your controller kit:

- Clean the remote and controller with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- Avoid exposing the devices to extreme temperatures or humidity.
- Replace remote batteries when performance degrades.

12. WARRANTY AND SUPPORT

BTF-LIGHTING products come with a standard manufacturer's warranty. For specific warranty details, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official BTF-LIGHTING website. Please retain your proof of purchase for warranty claims.

