Important: Read all instructions prior to installation.

RGBW LED Controller with Wireless RF Remote

Parts Included

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED Controller</td>
<td>1</td>
</tr>
<tr>
<td>CR2025 Battery</td>
<td>1</td>
</tr>
<tr>
<td>Wireless Remote</td>
<td>1</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic Mode</td>
<td>34 modes</td>
</tr>
<tr>
<td>Static Color</td>
<td>30 colors</td>
</tr>
<tr>
<td>PWM Grade</td>
<td>256 steps</td>
</tr>
<tr>
<td>White Brightness Grade</td>
<td>10 levels</td>
</tr>
<tr>
<td>Color Brightness Grade</td>
<td>5 levels</td>
</tr>
<tr>
<td>Speed Grade</td>
<td>10 levels</td>
</tr>
<tr>
<td>Direct Color Select</td>
<td>6 direct keys</td>
</tr>
<tr>
<td>Overload protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Overheat protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Working Voltage</td>
<td>DC 6-24V</td>
</tr>
<tr>
<td>Battery</td>
<td>3V CR2025</td>
</tr>
<tr>
<td>Remote frequency</td>
<td>433.92MHz</td>
</tr>
<tr>
<td>Remote control distance</td>
<td>&gt;15m at open area</td>
</tr>
<tr>
<td>Rate Output Current</td>
<td>3x2.5A + 4A</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP68</td>
</tr>
<tr>
<td>FCC ID</td>
<td>2ACJPRM06</td>
</tr>
</tbody>
</table>

Installing

8. Power Supply Wiring

The red power cable should be connected to power positive and black to negative. The controller unit can work from DC 6V to 24V. Please make sure the power supply voltage is same as the LED load and the power supply is adequate for the circuit.

9. LED Outup Wiring

This controller supports constant voltage driving LED products with a common anode connection. The black cable on the ouput side is the common anode, it connects to the power supply positive inside the controller. The white, green, red and blue cable runs the driving signal of relevant LED color, please connect the color cable to the cathode of relevant color LED loads and the black cable to the common anode.

10. Status Indicator

The is a full color status indicator. It displays all working statuses of the controller. It indicates different events as following:
- Blue: normal working.
- Short single white flash: new command executed.
- Long single white flash: reach mode or color cycle edge.
- Long single yellow flash: reach speed or brightness limit.
- Red flash: overload protected.
- Yellow flash: overheat protected.

Functions

1. Turn On/Standby

Press ‘I’ key to turn on unit or press ‘O’ key to turn off. At power on, unit will automatically turn on and restore the previous settings.

2. White Mode

These two keys control white LED working mode. Press 'WHITE ONLY' key, all RGB colors will turn off and only white LED lights up. Press 'WHITE OFF' key, the white LED will turn off and RGB LED remains on it's previous status.

3. White Brightness

Adjust white LED brightness. Press the right side key to increase white LED brightness and the left side key to decrease white LED brightness.

4. Static RGB Color Selection

These keys control the RGB static color.
- a) Pressing the color printed keys will set the RGB LEDs to correspond color light as the key. There are 6 shortcut color keys to make direct color selection.
- b) Press ‘COLOR+’ and ‘COLOR-’ to scroll over all preset static colors, including the 6 shortcut key colors.

5. Color Brightness

Adjust RGB color brightness. Press the right side key to increase RGB LED brightness and the left side key to decrease RGB LED brightness.

6. RGB Dynamic Modes Control

These keys control the RGB dynamic modes.
- a) Press ‘MODE+’ and ‘MODE-’ key to select preset dynamic modes.
- b) Press ‘SPEED+’ and ‘SPEED-’ to control the dynamic mode running speed.

7. Remote Controller Indicator

The blue indicator will blink when remote control is transmitting a command. The remote controller works at radio frequency. The remote controller's use is not restricted by normal obstructions such as walls, doors, etc.
Important: Read all instructions prior to installation.

RGB LED Controller with Wireless RF Remote

Operation

11. Using Remote
Please remove the battery insulator before using. The remote uses a 3V CR2025 battery. The RF wireless remote signal can pass through most materials. For proper receiving of the remote signal, please do not install the controller in metal enclosures.

11. Pairing New Remote
The remote and the controller is 1 to 1 paired as default. Further more, one master unit can be paired to 5 remote controllers and every remote can be paired to any master unit.

Please do the following steps to pair the new remote to the controller.
1) Turn off the power of the main unit and turn back on after 5 seconds.
2) Press remote ‘ON’ and ‘White Bright +’ key together in 5 seconds after power is restored, and then press ‘RED’ key in for another 5 seconds.

After this operation, the main unit indicator will flash white for 3 times to display the command is accepted, the main unit now recognizes the new remote. Only 5 latest paired remote controllers can be recognized by the controller.

Advanced Features

12. Waterproof
The MCBRF-RGBW LED controller is fully waterproof with IP68 standard, and can be used under water within a depth of 30 meters.

Note: The remote receiving sensitivity will decrease when controller is installed in a wet environment.

13. Protection
This controller has full protection function for output short circuit, overload, and overheat. The controller will automatically recover from protection when working status is good.

Please ensure the LED loads are in rated range, outputs are not shorted and the controller unit is in a good heat dissipation environment.

FCC 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, and (2) This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.