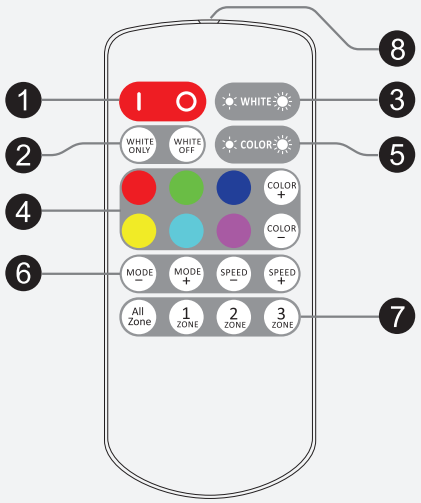
UltraLux®

Controller for RGBW LED lighting

P6RGBWM
P6RGBWS

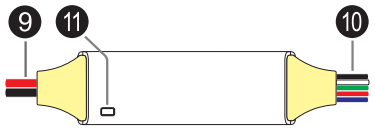
User's Manual

- RGBW 4-ch Output
- Wireless Sychronizing
- Multi-Zone Control
- Full Protection
- Waterproof Option
- RF Remote Controller
- Ultra Slim Design
- Easy Group Setting



9. Power Supply

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 is capable for the load wattage.



10. LED Output

Master/slave unit supports constant voltage driving LED products with common anode connection. The black cable on the output side is the common node, 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 cables to the cathode of relevant color LED loads and the black cable to the common node.

11. Status Indicator

This is a full color status indicator. It displays all working status 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.

12. Using Remote

Please pull out the battery insulate tape before using. The RF wireless remote signal can pass through some nonmetal barrier. For proper receiving remote signal, please do not install the controller in closed metal parts.

13. Pairing New Remote

The remote and the master are 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 following steps to pair new remote:
1). Plug off the power of P6RGBWM and plug in again after 5 seconds.
2). Press remote 'ON' and 'White Bright +' key simultaneously in 5 seconds after the unit powered on, and then press 'RED' key in another 5 seconds.
After this operation, the indicator will flash white for 3 times to display the command is accepted, the master unit now recognizes the new remote. Only 5 latest paired remote controllers can be recognized.

14. Program Slave Controller

The slave controller is programmed to use Zone1, 2 or 3 on the remote. There's no quantity limit in each zone.
Do the following steps to program slave controller to master:
1). Ensure the master controller is turned on and that the remote is paired to it.
2). Plug off the power of the slave unit for at least 5 seconds.

Functions

1. Turn On/ Standby

Press 'I' key to turn on unit or press 'O' key to turn off. At power on moment, unit will automatically restore to previous status before power cut.

2. White Mode

These two keys control white LED working mode. Press 'WHITE ONLY' key, all RGB color will be shutdown and only white LED lights up. Press 'WHITE OFF' key, the white LED will turn off and RGB LED remain 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.

4. Static RGB Color Selection

These keys control the RGB static color.
a) Press 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.

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. Zone Control

Select the target zone controlled by remote. The master unit is always zone 1 and the slave unit can be programmed to any zones. The remote will control the corresponding zone(s) after the specific zone key is pressed once. For every power up for the master unit, the zone is restored to 'All Zone'.

8. Remote Controller Indicator

This blue indicator will blink when remote controller works. The remote controller works at radio frequency, the signal can pass through barrier, so it's not necessary to aim at the controller when operate the remote.

Installing

Master/slave units can be programmed to a group and operate in different zones. P6RGBWM is a master controller which receives remote control signal and sends out wireless commands to P6RGBWS. P6RGBWS is slave controller and can only be programed to P6RGBWM master controller for group working. For proper wireless working, the slave unit should be in a good wireless receiving range from the master.

3). Plug the power back into the slave unit then within 5 seconds briefly press the 'ON' and 'White +' keys simultaneously, the indicator should then begin flashing blue. Next press the zone key you wish to use (zone1,2 or 3), the indicator will give 3 white flashes to show programming was successful.

Advanced Features

15. Waterproof

P6RGBWM and P6RGBWS are fully waterproof with IP68 standard.
Note: The remote receiving and master to slave communication sensitivity will decrease when controller installed in wet environment.

16. Protection

The controllers have 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 to avoid protection.

Specification

Model	P6RGBWM (master)	P6RGBWS (slave)
Dynamic mode	34 modes	
Static Color	30 colors	
PWM Grade	256 steps	
White Brightness Grade	10 levels	
Color Brightness Grade	5 levels	
Speed Grade	10 levels	
Direct Color Select	6 direct keys	None
Overload protection	Yes	
Overheat protection	Yes	
Working Voltage	DC 6-24V	
Remote frequency	433.92MHz	None
Synchronization frequency	2.4GHz ISM band	
Remote control distance	>15m at open area	None
Master/Slave sync.	>15m at open area	
Zone Control	3 zones, infinite P6RGBWS in each zone.	
Rated Output Current	3x2.5A + 4A	
IP Grade	IP-68	IP-68