

LED Rotary Dimmer RGBW - User Manual



Item no.: LC-010-014

1. Product Description

It is a universal high-performance power controller for entire color changing which adopted PWM (Pulse-Width-Modulation) controlling technology. Controls all common anode constant voltage RGBW LED light, such as RGBW full color LED module, LED strip, LED SMD tape, etc.

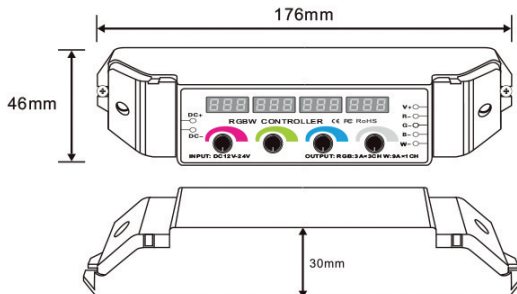
2. Specifications

Input Voltage	DC12V-DC24VDC
Max. Output Power	3 x 3A (RGB) + 1x9A (W) (216W/12V) or (432W/24V)
Product Dimensions (L x W x H)	176 x 46 x 30mm
Weight	210g

3. Description

With the 4 separate rotary knobs you can adjust any colour. Each of the 4 rotary knobs can be set between 0 and 100% (set value 0 upto 255) smooth adjustable.

4. Dimensions



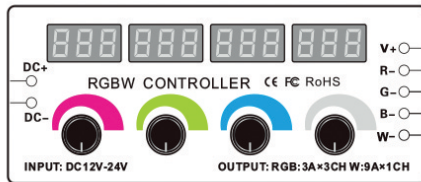
Over-current protection, Short-circuit protection

When it is overload or short-circuits, the controller automatically stop output, LED display twinkles and shows: "ERR", as below:



By turning the buttons on the controller, the controller automatically switches to the color adjustment mode and the desired color can be adjusted by turning the knobs from a scale of 0-255.

By using LED PWM repeaters, the output power of the dimmer can be extended as desired. The last set value is recalled after power return.



Color Adjustment Static Red



Color Adjustment Static Grun



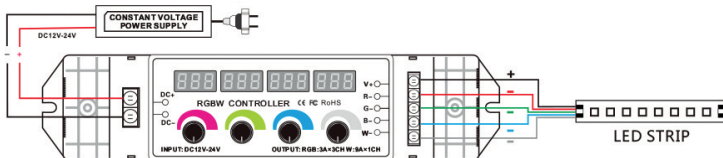
Color Adjustment Static Blue



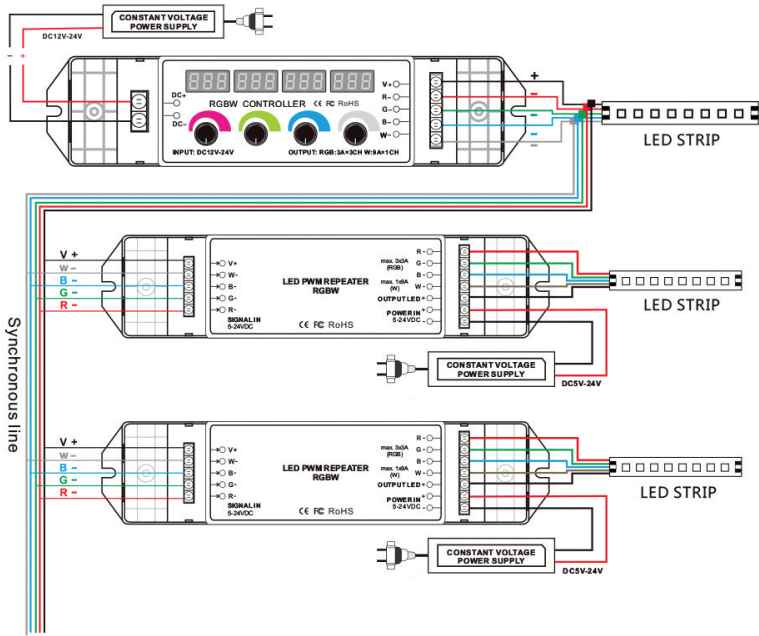
Color Adjustment Static White

5. Wiring Diagram

Wiring Diagram of the RGBW Rotary Dimmer in combination with the LED RGBW Flexstrip



Wiring Diagram with more LED Strips including PWM Repeater



6. Remark

The current source must be a DC constant voltage source. This should never be fully utilized and should be operated with approx. 20% power reserve.

Malfunction	Causation	Solution
No Light	1. No power from the socket	1. Check the socket
	2. Reverse connection of power +/-	2. Modify the connection
	3. Wrong or loose connection	3. Check connection
Wrong color	4. RGBW wrong wiring	4. Re-wire RGBW
Brightness of the LED is not even	5. Output wire too long, voltage drops	5. Reduce cable length or use loop connection
	6. Wire diameter too slim, voltage drops	6. Calculate the current and change to a wider wire cross-section
	7. Power Suply overloads	7. Change to another large power supply
	8. Controller overload	8. Add a power repeater

7. Safety Warnings

- 7.1. To avoid installed the product in minefield, strong magnetic field and high voltage area.
- 7.2. To ensure the wiring is correct and firm avoiding short circuit damages to components and cause fire.
- 7.3. Please install the product in a well ventilated area to ensure appropriate temperature environment.
- 7.4. The product must be worked with DC constant voltage power supply.
Please check the consistence of input power with the product, if the output voltage of the power comply with that of the product.
- 7.5. Connect the wire with the power on is forbidden. Ensure proper wiring first then check to ensure no short-circuit, then power on.
- 7.6. Don't repair it by yourself whenever an error occur. Contact the supplier for any inquiry.