

# LED PUSH Dimmer RGBW - User Manual



Item no.: LC-011-004

## 1. Product Introduction

With this dimming module, it is possible to drive LED RGBW modules, which a constant voltage input and a common positive (CA) possess.

This is done using 2 standard switches (push or switch dim function).

Here, the phase or the positive pole of the supply voltage is sampled and the neutral conductor respectively the negative terminal of the supply voltage additionally connected.

The following functions are possible:

- Switching on / off and up / down dimming
- Selection of a RGB color
- Speed setting when gradient
- by means of jumpers 1 of 4 predefined color gradients can be assigned

## 2. Performance Parameter

Input Voltage	12-24VDC
Max. Output Current	RGB:3x3A + W:1x9A
Max. Output Power	216W (12V) / 432W (24V)
Grey Scale	4096 pro Kanal
PWM Frequency	4 Kanäle mit Konstanzspannung (CA) und PWM ~980 Hz
Dimensions (L x W x H in mm)	176 x 46 x 30mm
Weight	100g

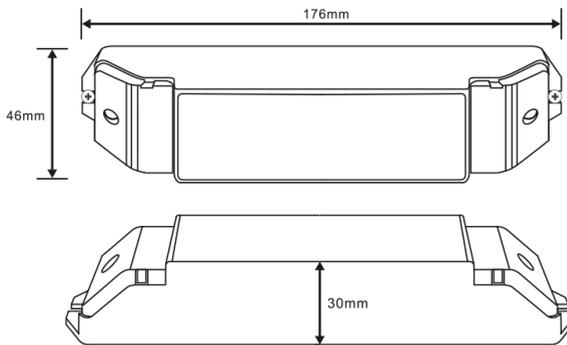
## 3. Basic Features

- 3.1. Automatically adapts to DC12V-24V.
- 3.2. 4 output channels, each channel 4096 grey scale, Lamplight soft and stable, without flicker
- 3.3. Static and color changing modes selectable.
- 3.4. Power loss memory function.
- 3.5. Over current protection, short circuit protection.

## 4. Safety warnings

- 4.1. To avoid installed the product in minefield, strong magnetic field and high voltage area.
- 4.2. To ensure the wiring is correct and firm avoiding short circuit damages to components and cause fire.
- 4.3. Please install the product in a well ventilated area to ensure appropriate temperature environment.
- 4.4. 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.
- 4.5. Connect the wire with the power on is forbidden. Ensure proper wiring first then check to ensure no short-circuit, then power on.
- 4.6. Don't repair it by yourself whenever an error occur. The manual is only suitable for this model; any update is subject to change without prior notice.

## 5. Dimensions



## 6. Operating Instructions

6.1. It must connect with two push buttons; the first push button controls the RGB channel:

- 1) Short press(within 0.5s), switch on and off the RGB light.
- 2) press the button 2 times shortly(within 0.5s+0.5s), changes program between static color and color changing. It would flash two times when the mode is changed.
- 3) In static color program, long press to change the color, long press again to opposite direction; 5 seconds for one step.
- 4) In changing program, long press to increase the speed, long press again to decrease the speed. Speed changes from 0.5 sec to 120 sec for one step.  
It divides into 10 levels, from 0 to 9:  
0=0.5s,1=1s,2=2s,3=3s,4=5s,5=10s,6=15s,7=30s,8=60s,9=120s,  
It would flash two times when each of the speed level is changed.
- 5) When the light is off, long press to turn on the light and dim up, long press again to dim down. It takes 5 sec to dim from the lowest to the highest brightness.(Within 5s after your long press, it reminds in diming status, longer than 5s, it would not in diming status)  
Static color mode changing sequence (fading):  
Blue, magenta, red, orange, yellow, green, cyan, white

6) Static color mode changing sequence (fading):  
 Blue, magenta, red, orange, yellow, green, cyan, white

It has two jumpers you can choose between 4 different color changing programs, the jumpers are only for the color changing mode, not for static color.

DIP1	DIP2	MODE	Color change sequence(fading)
ON	ON	RGB	red, orange, yellow, green, cyan, blue, magenta
OFF	ON	RGBW	blue, magenta, red, orange, yellow, green, cyan, white
ON	OFF	warm color	red, orange, red, purple
OFF	OFF	cold color	cyan, blue, white

When gradient RGBW the white LED will be used for the color white and will be not mixed from the RGB colors. This ensures that a better white color receives the gradient.

This is the only program in which the white LED is included and therefore not driven entirely independent of the gradient can be. You must, with this jumper, again leave the gradient mode and return to the static mode to control the white LED separately.

For all other 3 gradients (RGB, warm or cold gradient), the white LED can be driven by means of the 2nd key not change state even if you start a gradient or select a fixed color.

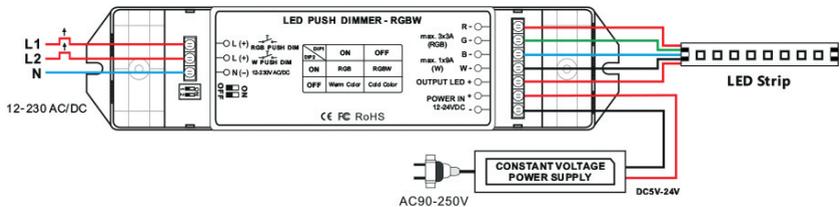
6.2. In RGBW mode, it takes the white color from the white LED and not the white color mixed by RGB colors

The second push button controls the W channel:  
 PUSH DIM Description:

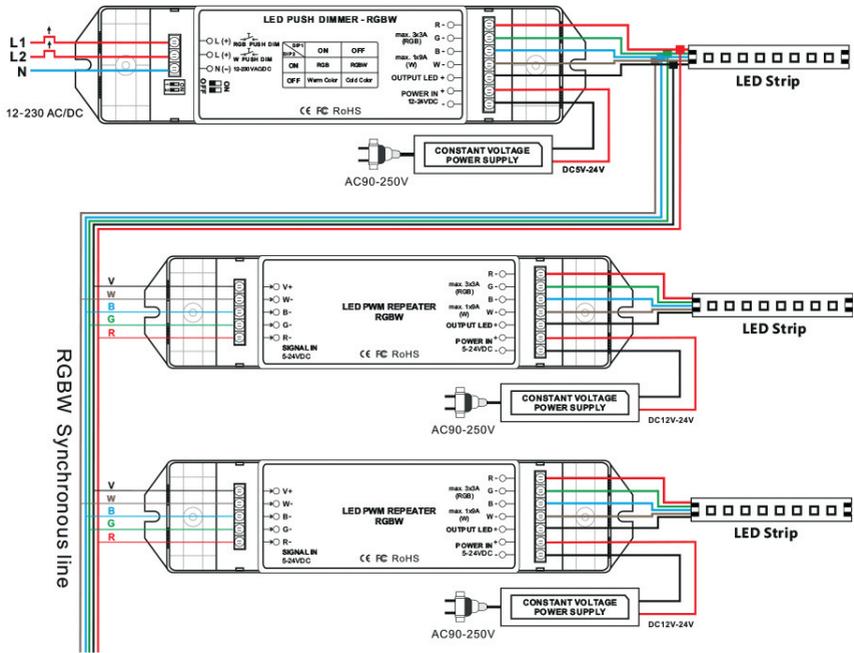
- 1) Short press PUSH DIM button (less than 0.5S), to control the light ON/OFF.
- 2) Long press PUSH DIM button (more than 0.5S), adjust the light brightness; After each adjustment, the changing goes opposite.
- 3) When the light is OFF, long press PUSH DIM button, the light turn ON and dim.

## 7. Conjunction Diagram

### 7.1. RGBW Push Dimmer



## 7.2. RGBW Push Dimmer in Connection with PWM Repeater RGBW :



## 8. Remarks

- 8.1. Power source must be DC constant voltage type of power supply. Due to the efficient output in some power supplies are only 80% of total, so please select at least 20% higher output power supply than the consumption of LED lights.