Single Color LED Dimmer

R217 / R217-S

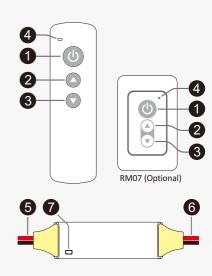
User's Manual

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- RF Remote Operation
- Smooth Change Effect
- Compact Design
- Full Protection
- Waterproof Option
- Multi Remote Option
- Easy Remote Pairing

Rayrun

Introduction

Thank you for purchasing our product. R217 series LED dimmer is designed to drive constant voltage LED products in voltage range of DC5V-24V. It contains a main control unit and a RF wireless remote controller. User can turn on/off or adjust LED brightness conveniently via the remote controller.



Functions

1. Turn on/off

Press this key to switch on or off the controller. Press and hold this key will force to switch off the controller. The controller will memorize the on/off status and restore the on/off status and brightness level on each power on moment.

2. Increase Brightness

Press this key to increase the output LED brightness. Press and hold this key will continuously increase the brightness.

3. Decrease Brightness

Press this key to decrease the output LED brightness. Press and hold this key will continuously decrease the brightness. When controller is off, hold press this key will turn on the controller and jump to minimum brightness.

4. Remote Controller Indicator

This indicator will blink when remote controller works.

Installing

5. Power Supply

The controller unit can work from DC 5V to 24V. The red power cable should be connected to power positive and black to negative. Please make sure the power supply voltage is same as the LED load and the power is capable for the load wattage.

6. LED Output

The controller unit supports constant voltage driving LED products. The red cable should be connected to LED positive and black cable to negative. The red cable is internal connected to power supply positive in controller unit.

The controller unit has output overload protection function, please check whether the output is short circuit or over loaded if the controller stop working.

Operation

7. 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 received. Long single yellow flash: reach brightness limit.

Red flash: overload protected.
Yellow flash: overheat protected.

8. Using Remote

Please pull out the battery insulating tape before using. The remote controller use CR2032 cell battery, it can last for 2 years for regular usage. For proper receiving remote signal, please do not install the controller in closed metal parts.

9. Pairing New Remote

The remote and main unit is 1 to 1 paired as default. Further more, one main unit can be paired to 5 remote controllers and every remote can be paired to any main unit.

Please do following steps to pair a new remote:

- 1. Plug off the power of main unit and plug in again after more than 5 seconds.
- 2. Press remote 'on/off' and 'decreasing brightness' key together in 5 seconds after main unit powered on.

 After this operation, the controller's indicator will flash white for 3 times to display the new remote is accepted. The latest paired 5 remote controllers can be recognized.

10. Optional Wall Switch Remote

The controller can also work with the optional wall switch type remote controller RM07. This remote controller has the same function and usage as the default hand hold remote controller. It can be sticked on the wall for fixed place operation.

Specification

Model	R217	R217-S
Brightness Grade	7 levels	
PWM Grade	256 levels	
Min. Brightness Shortcut	Yes	
On/off status memorize	Yes	
Overload protection	Yes	
Overheat protection	Yes	
Working Voltage	DC 5-24V	
Remote frequency	433.92MHz	
Remote control distance	>15m at open area	
Rated Output Current	15A	
IP Grade	IP-63	IP-68

Advanced Features

11. Waterproof

R217 model is standard version which can be used in dry environment. R217-S is a IP68 waterproof version, which can be used in wet environment or under water within depth of 30 meters.

Note: The remote receiving sensitivity will decrease when controller installed in wet place or under water, please setup the controller when the main unit is dry.

12. Protection

R217 series led dimmer has full protection function for output short circuit, overload, and overheat. The indicator will flash red at overload or short circuit protection and flash yellow at over heat. The controller will automatically recover from protection when working status is good.

Please ensure the LED load is in rated range, not shorted and the controller unit is in a good heat dissipation environment to avoid protection.

FCC Caution.

§ 15.19 Labelling requirements.

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.

§ 15.21 Information to user.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

§ 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.