

- Single channel constant voltage LED Rotary dimmer.
- 5 levels speed of light fade-in and fade-out effect can be set.
- 0-100% dimming smoothly without any flash.
- Logarithmic or linear dimming curve selectable.
- PWM frequency 500Hz, 2KHz, 8KHz or 16KHz selectable.
- Reverse protection.

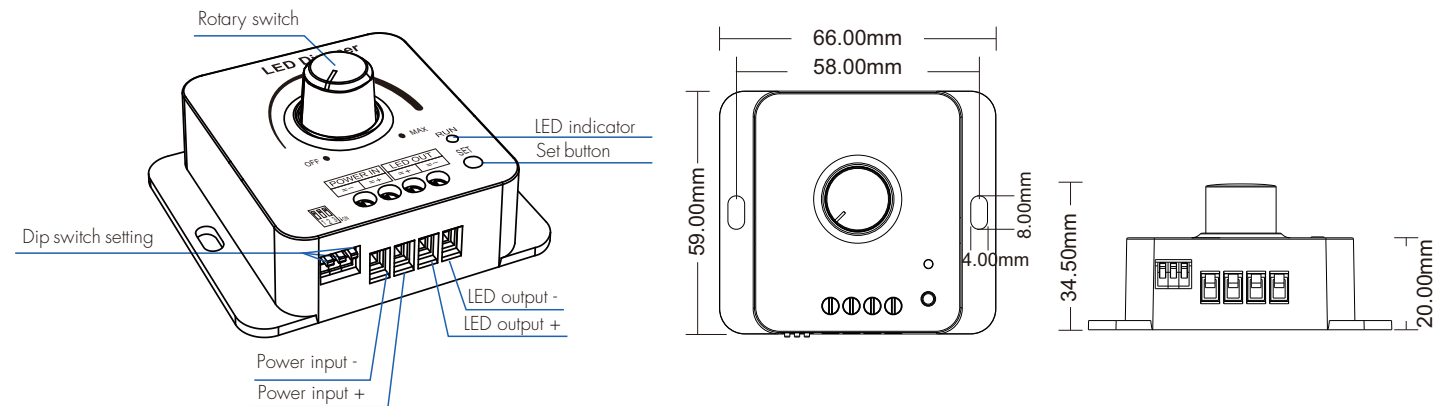


CE RoHS

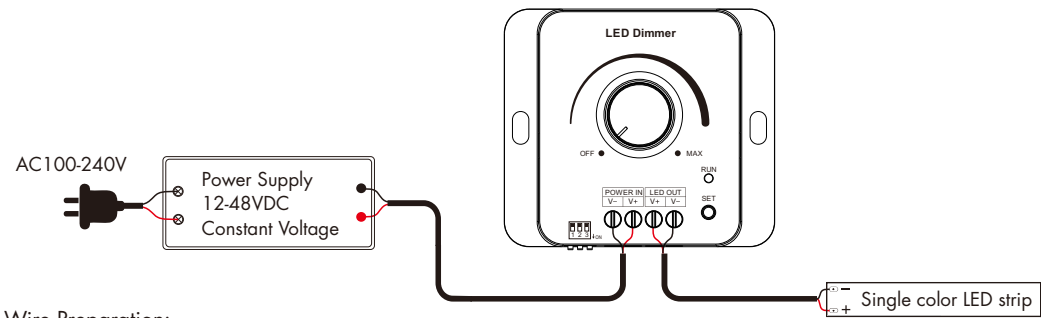
Technical Parameters

| Input and Output |                                       | Dimming data       |                          | Safety and EMC          |                           |
|------------------|---------------------------------------|--------------------|--------------------------|-------------------------|---------------------------|
| Input voltage    | 12-48VDC                              | Input signal       | Rotary knob              | EMC standard            | EN IEC 55015/EN IEC 61547 |
| Input current    | 8.5A                                  | Dimming gray scale | 256levels                | Safety standard         | EN 61347-1/-2             |
| Output voltage   | 12-48VDC                              | Dimming range      | 0 - 100%                 | Certification           | CE RoHS                   |
| Output current   | 8A@12-24V<br>6A@36-48V                | Dimming curve      | Logarithmic or linear    | Environment             |                           |
| Output power     | 96W@12V 192W@24V<br>216W@36V 288W@48V | PWM Frequency      | 500Hz, 2KHz, 8KHz, 16KHz |                         |                           |
| Output type      | Constant voltage                      | Package            |                          | Operation temperature   | Ta: -20℃ ~ +55℃           |
| Warranty         | 5 years                               | Size               | L70 x W60 x H40mm        | Case temperature (Max.) | Tc: +85℃                  |
| Warranty         |                                       | Gross weight       | 0.058kg                  | IP rating               | IP20                      |

Mechanical Structures and Installations

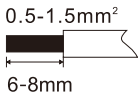


Wiring Diagram



Wire Preparation:

1. The wiring can be solid or stranded with a cross-sectional area of 0.5 to 1.5 mm<sup>2</sup>.  
Conventional 1mm<sup>2</sup> can withstand 10A output current.
2. When wiring is installed, the terminals must be tightened.  
If they are not tightened, the contact point resistance will be too high  
and the terminals will easily burn due to heat when used at full load for a long time.



**Note:** The output power of a constant voltage power supply should be at least 1.2 times that of the output load (light strip), otherwise the full power output of the load can easily cause automatic flickering or shaking of the light.

Dimming Operation

Rotary dimming

Clockwise rotation increases brightness, counterclockwise rotation decreases brightness or turn off light.

Set fade-in and fade-out dynamic effect

Short press the SET button to switch 5 levels fade speed in sequence.

- 1 second fade speed, the LED indicator blinks 1 time;
- 2 second fade speed, the LED indicator blinks 2 time;
- 5 second fade speed, the LED indicator blinks 3 time;
- 10 second fade speed, the LED indicator blinks 4 time;
- 30 second fade speed, the LED indicator blinks 5 time.

Note:

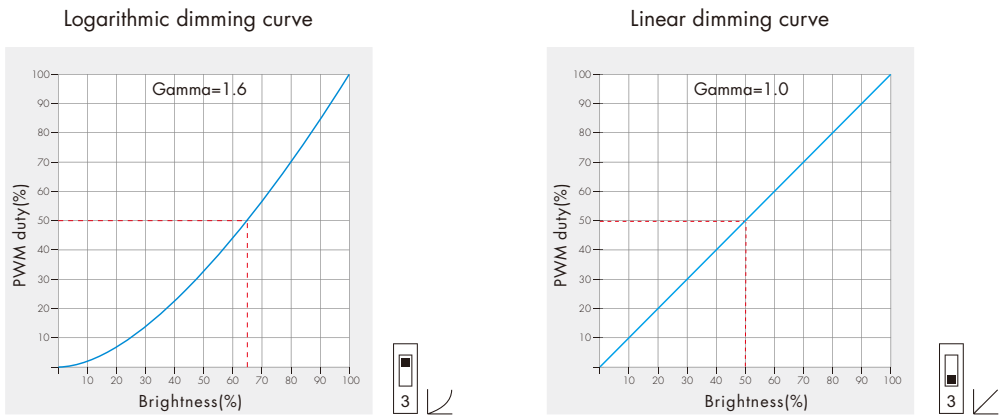
- 1. In the fade-in and fade-out state, when adjust the brightness with the rotary switch, automatically exit the fade-in and fade-out state.
- 2. Each time rotate knob adjust the brightness and then set the fade-in and fade-out effect, the fade speed start from 1 second by default.
- 3. In the fade-in and fade-out state, if the knob adjustment is darker (<10%), the brightness will automatically increase to 10%.

PWM Frequency Setting

|       |      |      |             |
|-------|------|------|-------------|
|       |      |      |             |
| 500Hz | 2KHz | 8KHz | 16KHz       |
| 8A    | 8A   | 6A   | 4A (12-24V) |
| 6A    | 6A   | 4A   | 3A (36-48V) |

We can select four PWM frequency: 500Hz, 2KHz, 8KHz or 16KHz.  
Higher PWM frequency, will cause lower output current, higher power noise,  
but more suitable for camera(No flickers for video).

Dimming Curve Setting



Installation Precautions

- 1. The distance between the products should be  $\geq 20\text{cm}$ , so as not to affect lifespan of the products due to poor heat dissipation.
- 2. The product shall not be installed close to the switching power supply with an interval of  $\geq 20\text{cm}$  to avoid radiation interference of the switching power supply.