V1-KC

Rotary LED Dimmer

- 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.



C € RoHS

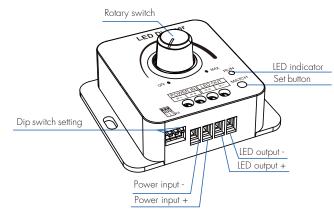
Technical Parameters

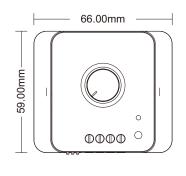
Input and Output	
Input voltage	12-48VDC
Input current	8.5A
Output voltage	12-48VDC
Output current	8A@12-24V 6A@36-48V
Output power	96W@12V 192W@24V 216W@36V 288W@48V
Output type	Constant voltage
Warranty	
Warranty	5 years

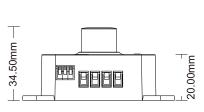
Dimming data	
Input signal	Rotary knob
Dimming gray scale	256levels
Dimming range	0-100%
Dimming curve	Logarithmic or linear
PWM Frequency	500Hz, 2KHz, 8KHz, 16KHz
Package	
Size	L70 x W60 x H40mm
Gross weight	0.058kg

Safety and EMC	
EMC standard	EN IEC 55015/EN IEC 61547
Safety standard	EN 61347-1/-2 EN 62493
Certification	CE RoHS
Environment	
Operation temperature	Ta: -20°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

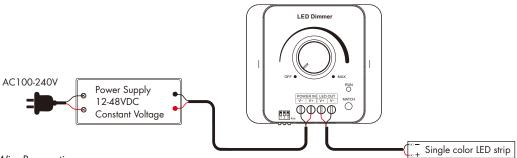
Mechanical Structures and Installations







Wiring Diagram



Wire Preparation:

- The wiring can be solid or stranded with a cross-sectional area of 0.5 to 1.5 mm².
 Conventional 1 mm² 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.

DIM

Dimming Operation

Rotary dimming

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

Set fade-in and fade-out dynamic effect

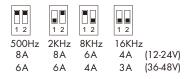
Short press the SET button to switch 5 levels fade speed in sequence.

- 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%.

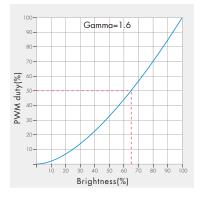
PWM Frequency Setting



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

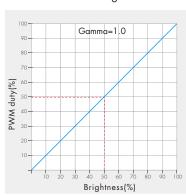
Dimming Curve Setting







Linear dimming curve





Installation Precautions

- 1. The distance between the products should be ≥ 20cm, 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 ≥ 20cm to avoid radiation interference of the switching power supply.