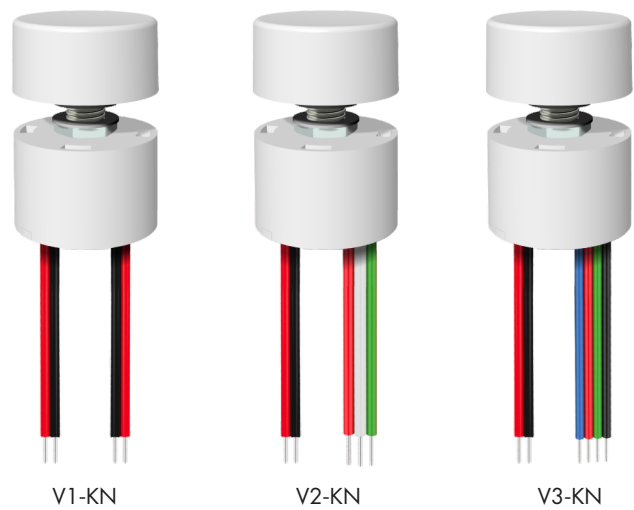


Knob Dimming Constant Voltage LED Controller

- Single color, dual color temperature or RGB constant voltage LED knob dimmer.
- Knob support on/off, brightness, color temperature, RGB color and fade speed adjustment.
- 4096 level 0-100% smooth dimming, no flicker.
- Anti-reverse connection protection.
- Nut way fixed mounting, can be mounted on a variety of different materials 1-6mm thick plate.

CE RoHS

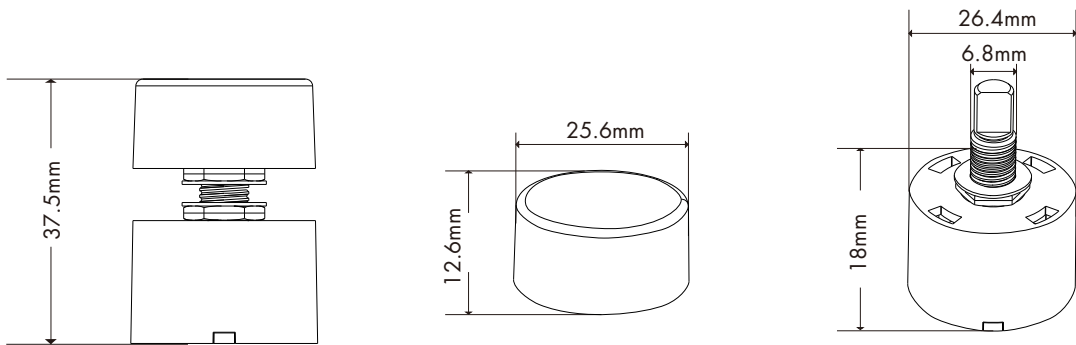


Technical Parameters

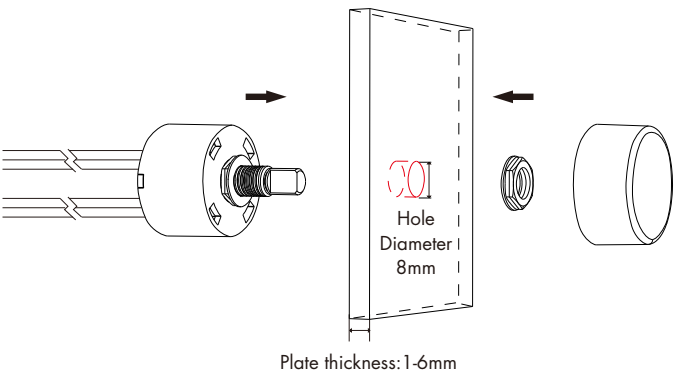
Input and Output				Safety and EMC		Environment	
Model	V1-KN	V2-KN	V3-KN	EMC standard	EN IEC 55015:2019+A11:2020 EN 61547:2009 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019	Operation temperature	Ta: -30°C ~ +50°C
Input voltage	5-24VDC	5-24VDC	5-24VDC			Case temperature (Max.)	Tc: +80°C
Output voltage	5-24VDC	5-24VDC	5-24VDC			IP rating	IP 20
Output current	3A/CH	1.5A/CH	1A/CH	Safety standard	EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017	Warranty and Protection	
Output power	15-72W	7.5-36W	15-72W	Certification	CE		
PWM Frequency	2000Hz	2000Hz	2000Hz	Package			
Light type	Single color	Color temperature	RGB	Size	L80xW45xH30mm	Warranty	5 years
				Gross weight	0.030kg	Protection	Reverse polarity

Mechanical Structures and Installations

Size:



Installation:



- Installation steps:
1. Pre-drill an 8mm diameter hole in the plate.
 2. Pull out the dimmer knob cap, remove the nut, and push the dimmer screw post through the plate, then tighten the nut to fix the dimmer and press the knob cap on the dimmer.

Model	Wiring diagram	Knob function
V1-KN		Short press: Turn on/off the light. Double click: Switch between 10% or 100% brightness. Rotate: Adjust brightness, dimming range 5-100% (1 circle, 20 levels). Long press for 2s: Enter fade-in and fade-out mode. Multiple long presses to switch 5 levels fade speed (1s, 2s, 5s, 10s, 30s) in sequence. Every 2s to switch one level, the output LED flash once. Rotating the knob will automatically exit the fade mode.
V2-KN		Short press: Turn on/off the light. Double-click: Switch between 3 level color temperatures. (cool white - normal white - warm white) in sequence. At the same time, enter the knob adjusting color temperature state. After 5s of no operation, it will automatically return to the knob adjusting brightness state. Rotate: Adjust brightness (1 circle, 20 levels) under the knob adjusting brightness state. Adjust color temperature (1 circle, 21 levels) under the knob adjusting color temperature state. Default knob adjust brightness. Long press for 2s: Enter the color temperature fade mode. Multiple long presses to switch 5 levels fade speed (1s, 2s, 5s, 10s, 30s) in sequence. Every 2s to switch one level, the output LED flash once. Double-click or rotate the knob, it will automatically exit color temperature fade mode.
V3-KN		Short press: Turn on/off the light. Double click: Switch between color light or mixed white light (mixed white light default current color + 50% saturation). At the same time enter the state of adjusting the color (red - yellow - green - cyan - blue - violet) or color saturation by rotating knob. After 5s of no operation, it will automatically return to the knob adjusting brightness state. Rotate: Adjust brightness (1 circle, 20 levels) under the knob adjusting brightness state; Adjust RGB color (3 circles, 60 levels) under knob adjusting color state; Adjust color saturation (1 circle, 21 levels) under the knob adjusting color saturation state. Default knob adjust brightness. Long press for 2s: Enter color fade mode. Multiple long presses to switch 5 levels fade speed (1s, 2s, 5s, 10s, 30s) in sequence. Every 2s to switch one level, the output LED flash once. Double click or rotate the knob will automatically exit the color fade mode.

Attention:

1. Default rotate the knob to adjust the brightness.
2. Rotate the knob counterclockwise to adjust the brightness until the light is turned off, then short press the knob again, the light will automatically return to 5% brightness.
3. Every time you enter the dynamic fade mode, the default fade speed will start from 1s.

Dimming Curve

