

Rotary LED Dimmer

Model No.: V1-K

Rotary dimming/Numeric display/Max 20A/Four PWM frequency/Linear or logarithmic dimming/Multiple protection

Features

- Rotary dimmer with digital numeric display, visible dimming level.
- Match with 2.4G single zone RT1 or multiple zone RT6 dimming remote control optional.
- 0-100% dimming smoothly without any flash.
- High load current up to 20A.
- Logarithmic or linear dimming curve selectable.
- PWM frequency 250Hz, 500Hz, 2kHz or 8kHz selectable.
- Over-heat / Overload / Short circuit protection, recover automatically.



CE RoHS 

Technical Parameters

Input and Output	
Input voltage	12-24VDC
Input current	20A
Output voltage	12-24VDC
Output current	1CH, 20A Max.
Output power	240W/480W Max. @ (12V/24V) 250Hz PWM
Output type	Constant voltage

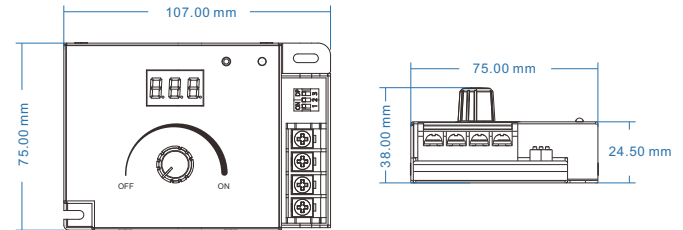
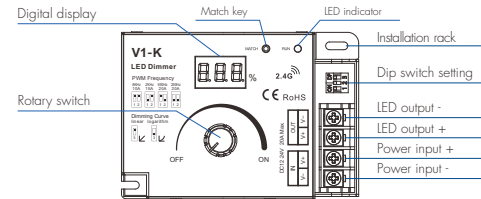
Dimming data	
Input signal	Rotary knob + RF 2.4GHz
Control distance	15m(Barrier-free space)
Dimming gray scale	100 levels
Dimming range	0-100%
Dimming curve	Logarithmic or linear
PWM Frequency	250Hz, 500Hz, 2kHz, 8kHz

Safety and EMC	
EMC standard (EMC)	EN301 489, EN 62479
Safety standard(LVD)	EN60950
Certification	CE, EMC

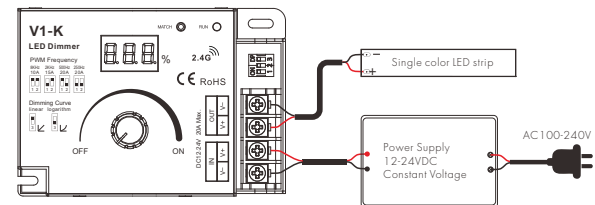
Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity Over-heat Over-load Short circuit

Mechanical Structures and Installations



Wiring Diagram



Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use Match key

Match:

Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zone remote) on the remote.

The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key for 5s to delete all match, The LED indicator fast flash a few times means all matched remotes were deleted.

Use Power Restart

Match:

Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

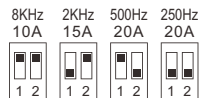
Delete:

Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power. 2. Wrong connection or insecure.	1. Check the power. 2. Check the connection.
Uneven intensity between front and rear, with voltage drop	1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability.	1. Reduce cable or loop supply. 2. Change wider wire. 3. Replace higher power supply. 4. Add power repeater.

PWM frequency setting

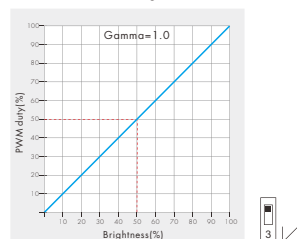


We can select four PWM frequency: 250Hz, 500Hz, 2kHz or 8kHz.

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



Logarithmic dimming curve

