User Guide
Rotary Panel LED Dimmer

The rotary dimmer KV / KC is a single color LED controller with constant voltage or constant current output, which offers both switch and smooth brightness dimming functions by push or rotate the knob. Smooth dimming range from 0.1%-100% without any flickering can be very comfortable for human eyes. It is easy to install the wall switch into existing standard size wall boxes.
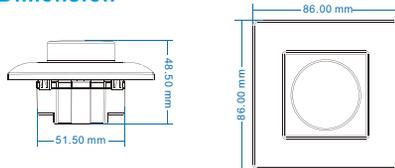
Feature

● One channel constant voltage or constant current output.
● Rotate knob to change brightness, support push and long push operation.
● Smooth dimming and switch without any flickering.
● Great compatibility with a variety of dimming RF remote.
● Adopt 2.4GHz wireless technology, remote distance up to 30m.
● Work with WiFi-relay controller after install APP on IOS and Android system.

Technical parameter

Model	Input voltage	Output voltage	Output current	Output power	Output type
KV	12-48VDC	12-48VDC	6A	72-288W	Constant voltage
KC	12-48VDC	5-46VDC	300,400,500,600, 700,800,900,1050mA (DIP switch select)	3-48W	Constant current

Dimension

Match guide

There are two kinds of method to match the rotary panel dimmer with the RF remote.

● **Use Knob**

1. Match: Turn on light, turn off, immediately push the knob for 5s,
   within 5s, press on/off key or zone key of the RF remote.
2. Delete: Turn on light, turn off, immediately push the knob for 10s, delete all matched RF remote.
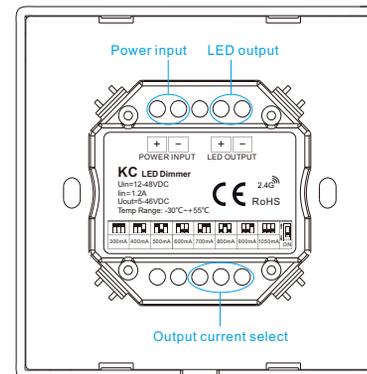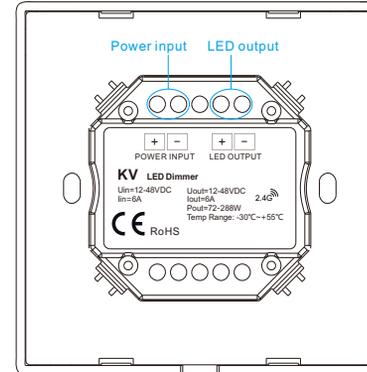3. Multiple zone RF remote only use zone key to match each zone receiver.

● **Use Power-up**

1. Match: Switch off the power, then switch on power again,
   short press on/off key or zone key 3 times on the RF remote quickly within 5s after power on,
   the link is done once the light blinks 3 times.
2. Delete: Switch off the power, then switch on power again,
   short press on/off key or zone key 5 times on the RF remote quickly within 5s after power on,
   the unlink is done once the light blinks 5 times.
3. Multiple zone remote only use zone key to match each zone receiver.
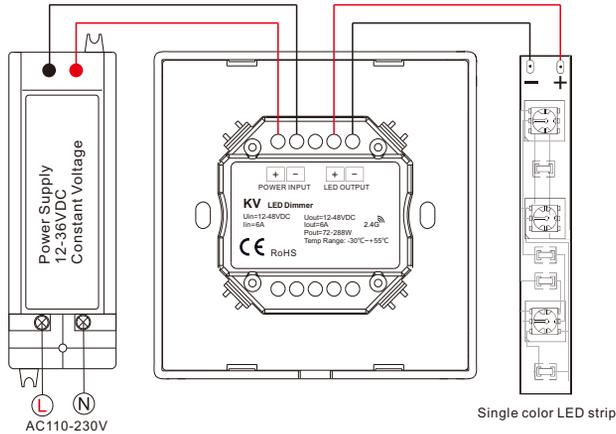
Knob function

● **Push**: Turn on or off light.
After turn on light:
● **Rotate**: Rotate knob to adjust brightness, 2.5 turns, 50 levels.
● **Long push(1-5s)**: Continuous 256 levels brightness adjustment.
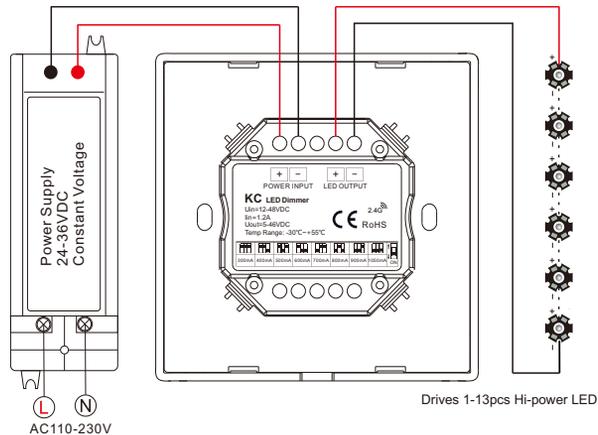
Interface specification

Wiring diagram

● **KV connect with single color LED strip**

Power Supply
12-36VDC
Constant Voltage

AC110-230V

KV LED Dimmer
Uin=12-48VDC   Uout=12-48VDC
Iin=6A   Iout=6A   2.4G
                  Pout=72-288W
CE RoHS   Temp Range: -30℃~+55℃

POWER INPUT   LED OUTPUT

Single color LED strip

● **KC connect with Hi-power LED**

Power Supply
24-36VDC
Constant Voltage

AC110-230V

KC LED Dimmer
Uin=12-48VDC
Iin=1.2A   2.4G
Uout=5-46VDC
Temp Range: -30℃~+55℃   RoHS

POWER INPUT   LED OUTPUT

Drives 1-13pcs Hi-power LED
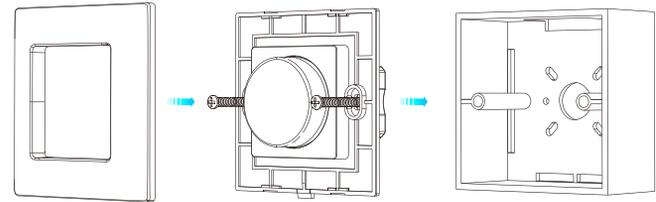
Power supply select guide

For KV, LED power supply voltage and power select :
● 12V lamp, Input 12V power supply, can load 0~72W,
● 24V lamp, Input 24V power supply, can load 0~144W,
● 36V lamp, Input 36V power supply, can load 0~216W,
● 48V lamp, Input 36V power supply, can load 0~288W,
  The power supply power must larger than load power 20%.

For KC, LED power supply voltage select:
● Input 48V power supply, can series connect 1~13pcs LED,
● Input 36V power supply, can series connect 1~10pcs LED,
● Input 24V power supply, can series connect 1~6pcs LED.
● Input 12V power supply, can series connect 1~3pcs LED.

Installation diagram

Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power. 2. Wrong connection or insecure.	1. Check the power. 2. Check the connection.
No response from the remote	1. The battery has no power. 2. Beyond controllable distance. 3. The controller did not match the remote.	1. Replace battery. 2. Reduce remote distance. 3. Re-match the remote.

Safety information

1. The product shall be installed and serviced by a qualified person.
2. The product is non-waterproof. Please avoid the sun and rain.
3. Good heat dissipation will prolong the working life of the controller, Please ensure good ventilation.
4. Please check if the output voltage of any power supplies used comply with the working voltage of the product.
5. Ensure all wire connections and polarities are correct and secure before applying power to avoid any damages to the LED lights.
6. If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.