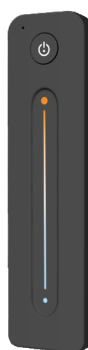# V2+R12

Dual Color LED Controller Kit

● Ultra sensitive color temperature touch slide.

● Smooth dimming and switch without any flickering.

● Light on/off fade time 3s selectable.

● Magnet on the back which can be easily stuck on back holder or any metal surfaces.
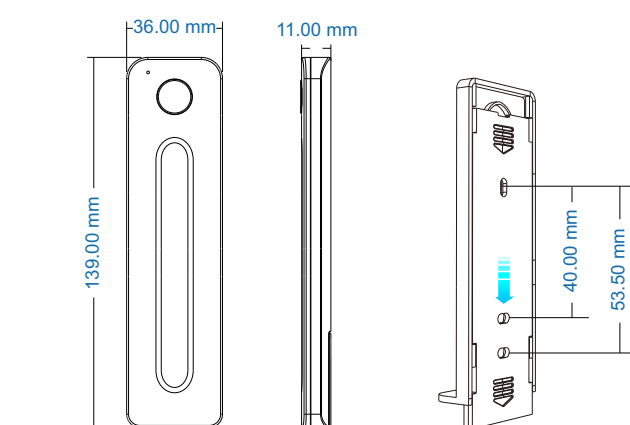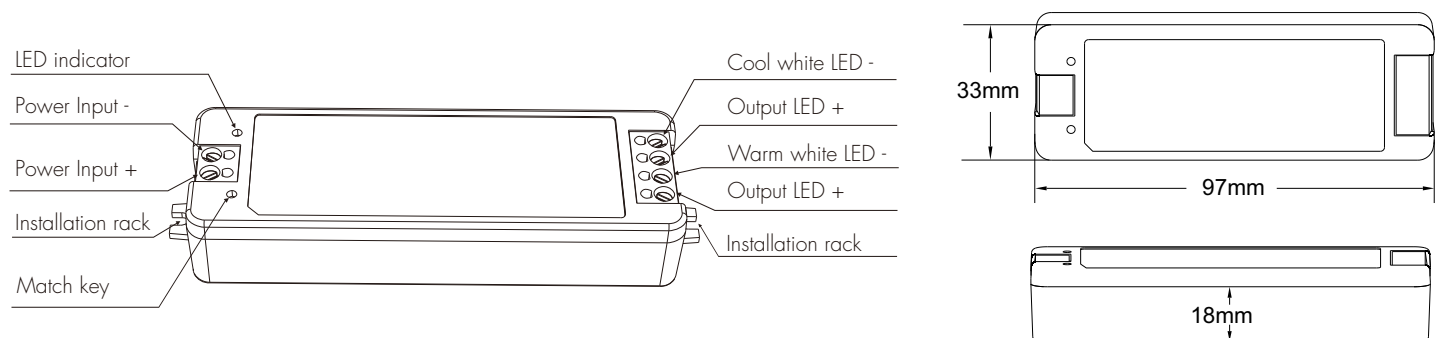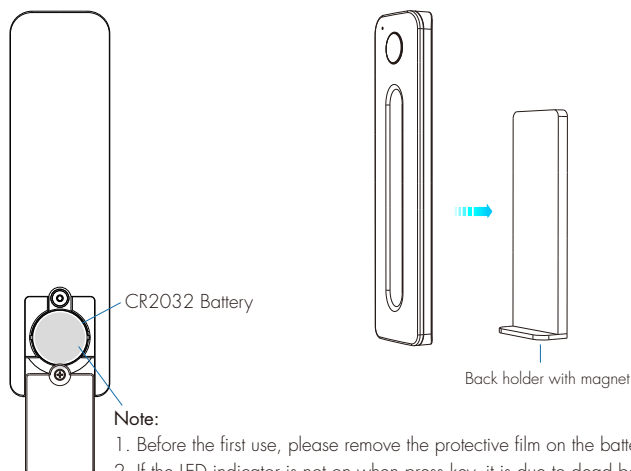
FC CE RoHS RED IC

Technical Parameters

LED Receiver's Input and Output		LED Remote's Input and Output		Safety and EMC	
Input voltage	12-24VDC	Output signal	RF 2.4GHz	EMC standard	EN 55015 EN IEC 61547:2023 ETSI EN 301 489-1 ETSI EN 301 489-3 ETSI EN 301 489-17 EN 55032EN 55035
Input current	10.5A	Working voltage	3VDC(CR2032)		
Output voltage	2x(12-24)VDC	Working current	<5mA	Safety standard	EN 61347-2-11 EN 61347-1
Output current	2CH,5A/CH	Standby current	<10µA		
Output power	2x(60-120)W	Standby time	1 year	Radio Equipment	EN 62479:2010 EN 50663:2017 ETSI EN 300 440 ETSI EN 300 328
Output type	Constant voltage	Remote distance	30m(Barrier-free space)		
Dimming data		**Warranty and Protection**		Certification	CE RED
Dimming level	4096 (2^12) levels	Warranty	5 years	**Environment**	
Dimming range	0-100%	Protection	Reverse polarity Short circuit	Operation temperature	Ta: -30°C ~ +55°C
Dimming curve	Logarithmic			Case temperature (Max.)	Tc: +85°C
PWM Frequency	2000Hz (default)			IP rating	IP20

Mechanical Structures and Installations

- LED indicator
- Power Input -
- Power Input +
- Installation rack
- Match key
- Cool white LED -
- Output LED +
- Warm white LED -
- Output LED +
- Installation rack

33mm

97mm

18mm

36.00 mm

11.00 mm

139.00 mm
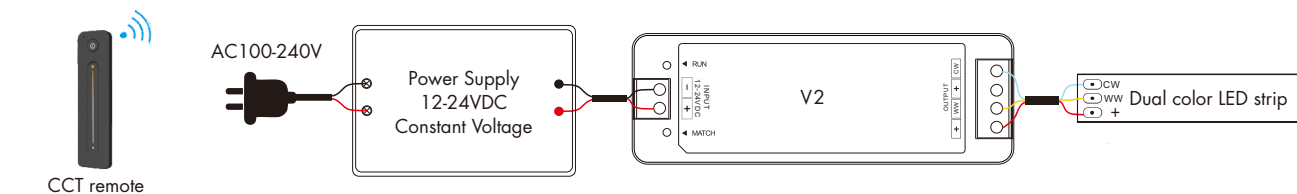
40.00 mm

53.50 mm

CR2032 Battery

Back holder with magnet

To fix the remote, three options are offered for selection:
Option 1. Can be adsorbed directly onto metal surfaces.
Option 2. Fix the remote' back holder on the wall with two screws.
Option 3. Adhere the remote' back holder to the wall with paster.
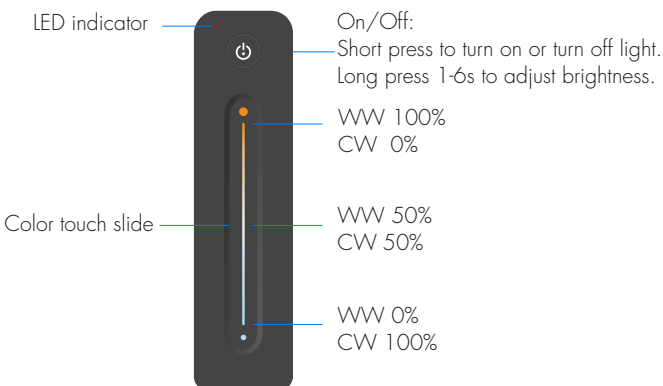
Note:
1. Before the first use, please remove the protective film on the battery.
2. If the LED indicator is not on when press key, it is due to dead battery or bad contact caused by multiple plugging, please replace the battery, or raise the battery shrapnel with a screw driver.

Wiring Diagram

CCT remote

AC100-240V

Power Supply 12-24VDC Constant Voltage

V2

CW / WW Dual color LED strip

Note:
- Long press the match key for 15s to enable the continuous switch off-on two times rapidly to switch 3 levels color temperature function (This feature is disabled by factory default).
  Long press the match key for 10s to restore the factory setting.
- Power failure memory: after setting the light state for 5s, the current light state will be saved automatically, the light state will not be changed when re-powering.

Key Function

LED indicator

Color touch slide

On/Off:
Short press to turn on or turn off light.
Long press 1-6s to adjust brightness.

WW 100%
CW 0%

WW 50%
CW 50%

WW 0%
CW 100%

Match Remote Control (two match ways)

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

Use the controller's Match key
Match:
Short press match key,
immediately press on/off key of the remote.

Delete:
Press and hold match key for 5s to delete all match,
The light blinks 5 times means all matched remotes were deleted.

Use Power Restart
Match:
Switch off the power, then switch on power, repeat again.
Immediately short press on/off key 3 times on the remote.
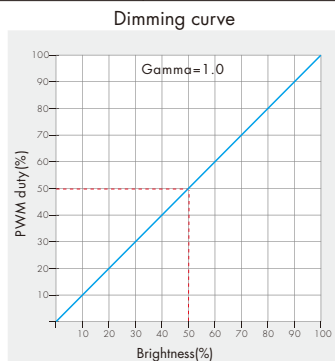The light blinks 3 times means match is successful.

Delete:
Switch off the power, then switch on power, repeat again,
Immediately short press on/off key 5 times on the remote.
The light blinks 5 times means all matched remotes were deleted.

Dual Color Control

WW=Warm white LED   CW=Cool white LED
Each channel can supply up to 120W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	WW=0W,CW=120W	WW=60W,CW=60W	WW=120W,CW=0W

Linear dual color tuning

Warm white(Min. 2700K)
Neutral white(4000K)
Cool white(Max. 6500K)
Recommended CCT range

Dimming curve

Gamma=1.0
PWM duty(%)
Brightness(%)

Light on/off Fade Time

Long press match key 5s, then short press match key 3 times, the lighting effect will be set to the fade in and fade out in 3s, the indicator light of LED controller blinks 3 times.

Long press match key 10s, restore factory default parameter, the light on/off time restores to 0.5s.

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.
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.