

Single Color LED Controller Kit

Model No.: V1 + R11

1 channels constant voltage/Touch color slide/Stepless dimming/Wireless remote 30m distance



CE RoHS LVD RED

Features

- Remote control or connected with external push switch to achieve on/off and dimming function
- Ultra sensitive brightness adjustment touch slide
- Smooth dimming and switch without any flickering
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance
- Synchronize on multiple number of controllers
- Light on/off fade time 3s selectable
- Magnet on the back which can be easily stuck on back holder or any metal surfaces

Technical Parameters

| LED Receiver's Input and Output | |
|---------------------------------|------------------------------------|
| Input voltage | 5-36VDC |
| Input current | 8.5A |
| Output voltage | 5-36VDC |
| Output current | 1CH,8A |
| Output power | 40W/96W/192W/288W (5V/12V/24V/36V) |
| Output type | Constant voltage |

| Dimming data | |
|---------------|-------------|
| Dimming level | 4096 levels |
| Dimming range | 0-100% |
| Dimming curve | Logarithmic |
| PWM Frequency | 2000Hz |

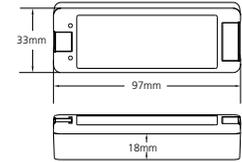
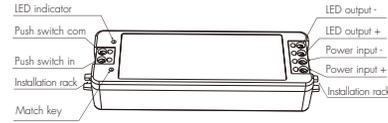
| Warranty and Protection | |
|-------------------------|------------------|
| Warranty | 5 years |
| Protection | Reverse Polarity |

| LED Remote's Input and Output | |
|-------------------------------|--------------|
| Output signal | RF(2.4GHz) |
| Working voltage | 3VDC(CR2032) |
| Working current | < 5mA |
| Standby current | < 10µA |
| Standby time | 1 year |
| Remote distance | 30m |

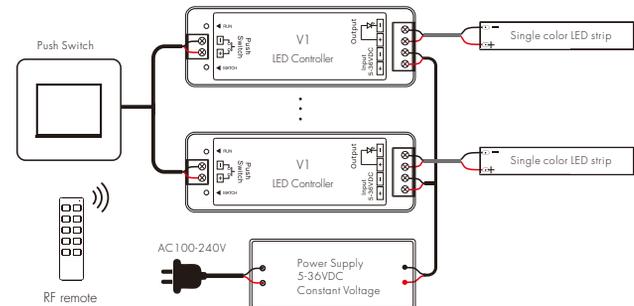
| Safety and EMC | |
|----------------------|---|
| EMC standard (EMC) | ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4 |
| Safety standard(LVD) | EN 62368-1:2020+A11:2020 |
| Radio Equipment(RED) | ETSI EN 300 328 V2.2.2 |
| Certification | CE,EMC,LVD,RED |

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

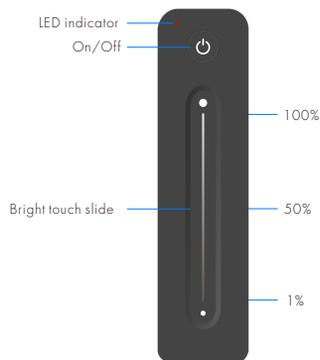
Mechanical Structures and Installations



Wiring Diagram



Key function



- * To extend battery life, no operation after 20 seconds, the touch slide will enter sleep state.
- * If the light is on, long press on/off key exceed 1 second, then touch slide to dimming.
- * If the light is off, short press on/off key to turn on light, then touch slide to dimming.

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:

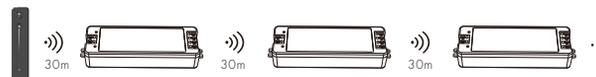
Switch off the power, then switch on power, repeat again. Immediately short press on/off key 3 times on the remote. The light blinks 3 times means match is successful.

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.

Application notes

All the receivers are matched with one RF remote.



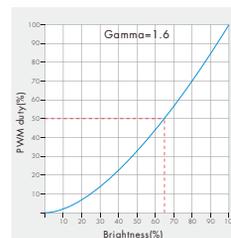
RF remote

Auto-transmitting: One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be extended.

Auto-synchronization: Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote.

Receiver placement may offer up to 30m communication distance. However, we recommend for indoor applications that receiver placements should be no further apart than 1.5m.

Dimming Curve



Light on/off fade time

Long press match key 5s, then short press match key 3 times, the light on/off time will be set to 3s, the indicator light blink 3 times.

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

Malfunctions Analysis & Troubleshooting

| Malfunctions | Causes | Troubleshooting |
|--|--|---|
| No light | <ol style="list-style-type: none"> 1. No power. 2. Wrong connection or insecure. | <ol style="list-style-type: none"> 1. Check the power. 2. Check the connection. |
| Uneven intensity between front and rear, with voltage drop | <ol style="list-style-type: none"> 1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability. | <ol style="list-style-type: none"> 1. Reduce cable or loop supply. 2. Change wider wire. 3. Replace higher power supply. 4. Add power repeater. |
| No response from the remote | <ol style="list-style-type: none"> 1. The battery has no power. 2. Beyond controllable distance. 3. The controller did not match the remote. | <ol style="list-style-type: none"> 1. Replace battery. 2. Reduce remote distance. 3. Re-match the remote. |