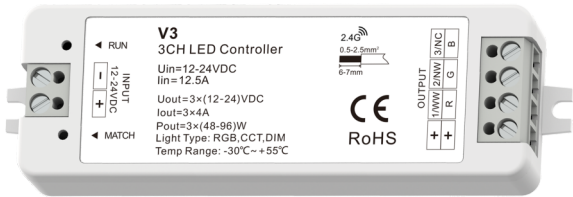


RGB/CCT/Dimming 3 Channel LED RF Controller

- Match with RF 2.4G single zone or multiple zone single color, dual color and RGB/RGBW remote control.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- When using with RGB light, built in 10 dynamic mode, include jump or gradual change style.
- 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.



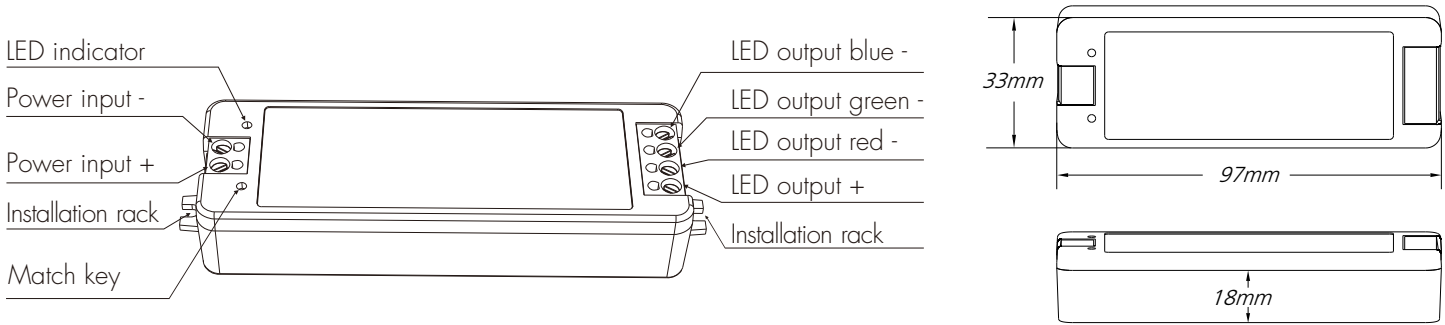
CE RoHS LVD RED

3 Channels / Step-less dimming / Wireless remote control / Auto-transmitting / Synchronize

Technical Parameters

| Input and Output | | Dimming data | | Safety and EMC | |
|------------------|------------------|-------------------------|-------------------------|----------------------|---------------------------|
| Input voltage | 12-24VDC | Input signal | RF 2.4GHz | EMC standard (EMC) | ETSI EN 301 489-1 V2.2.3 |
| Input current | 12.5A | Control distance | 30m(Barrier-free space) | | ETSI EN 301 489-17 V3.2.4 |
| Output voltage | 3 x (12-24)VDC | Dimming gray scale | 4096 (2^12) levels | Safety standard(LVD) | EN 62368-1:2020+A11:2020 |
| Output current | 3CH,4A/CH | Dimming range | 0 -100% | Radio Equipment(RED) | ETSI EN 300 328 V2.2.2 |
| Output power | 144-288W(12-24V) | Dimming curve | Logarithmic | Certification | CE,EMC,LVD,RED |
| Output type | Constant voltage | PWM frequency | 1000Hz (default) | Package | |
| Warranty | | Environment | | Size | L1 14 x W38 x H26mm |
| Warranty | 5 years | Operation temperature | Ta: -30℃ ~ +55℃ | Gross weight | 0.049kg |
| | | Case temperature (Max.) | Tc: +85℃ | | |

Mechanical Structures and Installations



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 (single zone remote)
or zone key (multiple zone remote) on the remote.
The LED indicator fast flash a few times means match is successful.

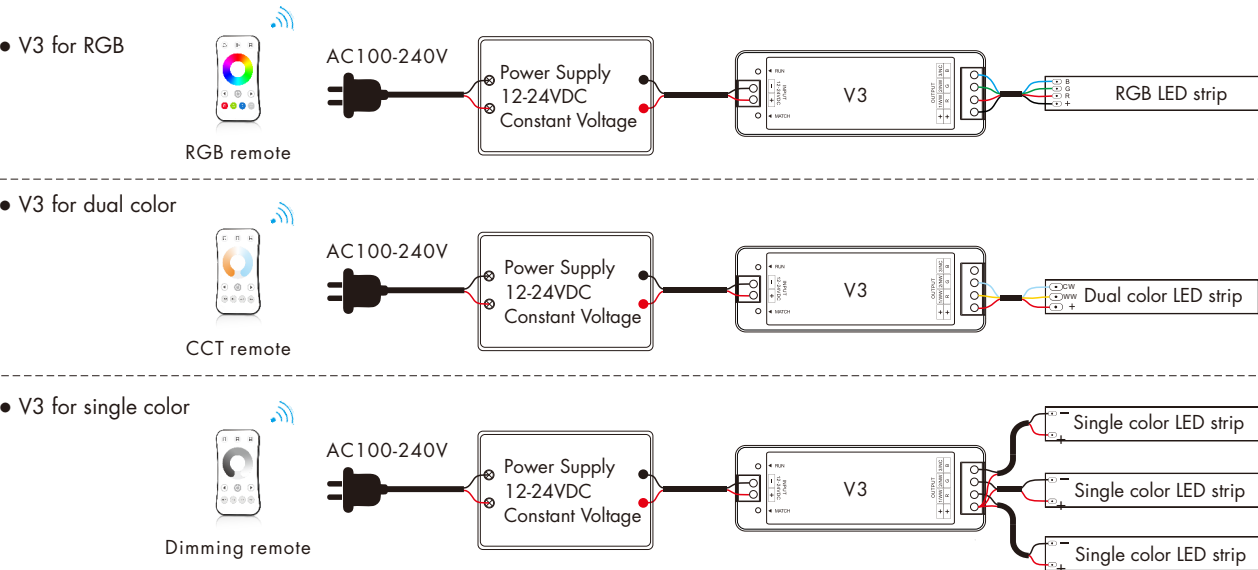
Delete:
Press and hold match key for 5s to delete all match,
The LED indicator fast flash a few times means all matched remotes
were deleted.

Use Power Restart

Match:
Switch off the power of the receiver, then switch on power, repeat 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 of the receiver, then switch on power, repeat 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.

Wiring Diagram



Wire Preparation:

1. The wiring can be solid or stranded with a cross-sectional area of 0.5 to 2.5 mm².
Conventional 1mm² can withstand 10A output current.

2. When wiring is installed, the terminals must be tightened.
If they are not tightened, the contact point resistance will be too high and the terminals will easily burn due to heat when used at full load for a long time.
- Note:

The output power of a constant voltage power supply should be at least 1.2 times that of the output load (light strip), otherwise the full power output of the load can easily cause automatic flickering or shaking of the light.

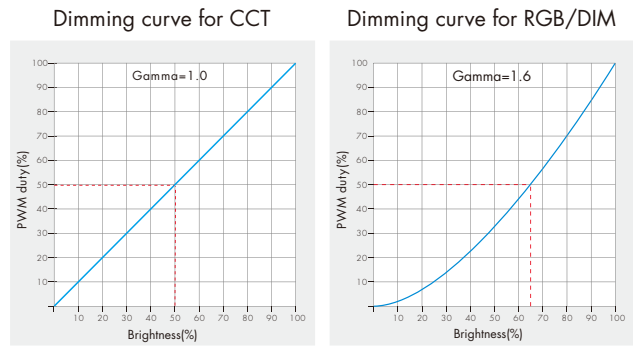
RGB Dynamic mode list

| No. | Name | No. | Name |
|-----|---------------------------|-----|-----------------------|
| 1 | RGB jump | 6 | RGB fade in and out |
| 2 | RGB smooth | 7 | Red fade in and out |
| 3 | 6 color jump | 8 | Green fade in and out |
| 4 | 6 color smooth | 9 | Blue fade in and out |
| 5 | Yellow cyan purple smooth | 10 | White fade in and out |

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.

Dimming Curve



Dual color control

CH1=Warm white LED CH2=Cool white LED

Each channel can supply up to 96W(@24V)
and white balance can be controlled as such:

| | | | |
|--------------------|----------------|-----------------|----------------|
| Color temperature | Cool white | Neutral white | Warm white |
| Power distribution | CH1=0W,CH2=96W | CH1=48W,CH2=48W | CH1=96W,CH2=0W |

Malfunctions analysis & troubleshooting

| Malfunctions | Causes | Troubleshooting |
|---|--|---|
| No light | 1. No power. 2. Wrong connection or insecure. | 1. Check the power. 2. Check the connection. |
| Wrong color | 1. Wrong connection of R/G/B wires. | 1. Reconnect R/G/B wires. |
| 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. |

Installation Precautions

1. The products shall not be stacked, the distance should be $\geq 20\text{cm}$, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of $\geq 20\text{cm}$ to avoid radiation interference of the switching power supply.
3. The installation height shall be $\geq 1\text{m}$ from the floor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects, with an interval of $\geq 20\text{cm}$ to avoid signal attenuation and shorten the remote distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of $\geq 20\text{cm}$ to avoid signal interference.