5 Channel RGB+CCT LED RF Controller

Model No.: V5

5 Channels/Step-less dimming/Wireless remote control/Push Dim/Auto-transmitting/Synchronize



Features

FC C CE RoHS and RED

- Match with RF 2.4G single zone or multiple zone RGB+CCT remote control.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- 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.

Dimming data

- Synchronize on multiple number of controllers.
- Light on/off fade time 3s selectable.
- Connect with external push switch to achieve on/off and 0-100% dimming function.

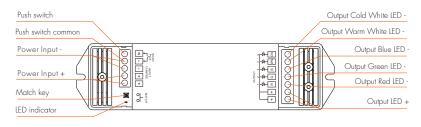
Technical Parameters

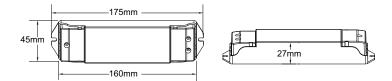
| Input and Output | | |
|-------------------------|--|--|
| Input voltage | 12-48VDC | |
| Input current | 25.5A | |
| Output voltage | 5 x (12-48)VDC | |
| Output current | 5A/CH@12-24V 4A/CH@36-48V | |
| Output power | 5×60 @12V 5×120@24V 4×144@36V 4×192@48V | |
| Output type | Constant voltage | |
| 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 Short circuit | |

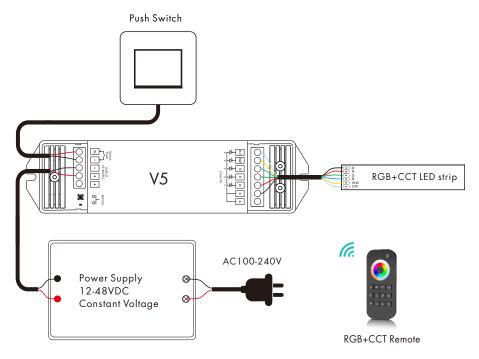
| Input signal | RF 2.4GHz + Push Dim |
|----------------------|---|
| Control distance | 30m(Barrier-free space) |
| Dimming gray scale | 4096 (2^12) levels |
| Dimming range | 0 - 1 00% |
| Dimming curve | Logarithmic |
| PWM Frequency | 1000Hz (default) |
| | |
| Safety and EMC | |
| EMC standard (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 |
| Weight | |
| Net weight | 0.116kg |
| Gross weight | 0.150kg |

Mechanical Structures and Installations





Wiring Diagram



Note: Long press match key for 10s, RGB and CCT light can not be on at the same time. Long press match key for 15s, RGB and CCT light can be on at the same time. above operation will also restore the factory setting.

Dimming curve for RGB

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

Use Power Restart

Switch off the power of the receiver, then switch on power.

Immediately short press on/off key (single zone remote)

or zone key (multiple zone remote) 3 times on the remote.

Switch off the power of the receiver, then switch on power.

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

1 2 3 4

T15

4 zone remote

The light blinks 3 times means match is successful.

Match:

Delete:

deleted.

Repeat again.

Repeat again.

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.

Available remote controller



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.

Push Dim

| Click | ON/OFF |
|--------------------------|---|
| Double Click | Change from color mode to tunable white mode and vice-versa |
| Long press(>1s) from OFF | If on color mode change rotation speed; If on tunable white mode color temperature UP/DOWN (turn off and turn on to return dimming) |
| Long press(>1s) from ON | If on color mode start/stop color rotation; If on tunable white mode dimming UP/DOWN |



We can select 4 rotation speed: 10 flash/s means 6 seconds color rotation 5 flash/s means 30 seconds color rotation 2 flash/s means 1 minute color rotation 1 flash/s means 6 minutes color rotation

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 | Color temperature smooth | 10 | White fade in and out |

Dual color control

CH4=Warm white LED

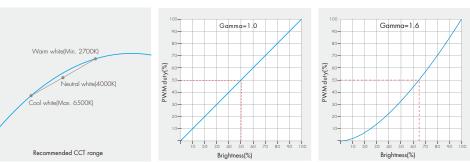
CH5=Cool white LED

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 | CH4=0W,CH5=120W | CH4=120W,CH5=120W | CH4=120W,CH5=0W |

Linear dual color tuning

Dimming curve for CCT



Malfunctions analysis & troubleshooting

| Malfunctions | Causes | Troubleshooting |
|---|--|---|
| No light | No power. Wrong connection or insecure. | 1. Check the power. 2. Check the connection. |
| Wrong color | 1. Wrong connection of R/G/B/WW/CW wires. | 1. Reconnect R/G/B / WW / CW wires. |
| Uneven intensity between front and rear,with voltage drop | Output cable is too long. Wire diameter is too small. Overload beyond power supply capability. Overload beyond controller capability. | Reduce cable or loop supply. Change wider wire. Replace higher power supply. Add power repeater. |
| No response from the remote | The battery has no power. Beyond controllable distance. The controller did not match the remote. | Replace battery. Reduce remote distance. Re-match the remote. |