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 emc 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.
- 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 and Output	
Input voltage	12-24VDC
Input current	25.5A
Output voltage	5 x (12-24)VDC
Output current	5CH,5A/CH
Output power	5 x (60-120)W
Output type	Constant voltage

Environment

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

Warranty and Protection

Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity Short circuit

Dimming data

Dimming data	
Input signal	RF 2.4GHz + Push Dim
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	1000Hz (default)

Safety and EMC

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

Weight	
Net weight	0.116kg
Gross weight	0.150kg

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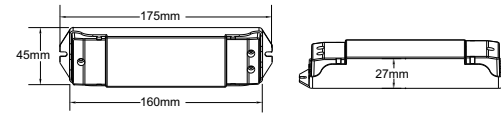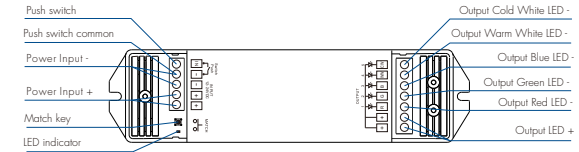
Wiring Diagram
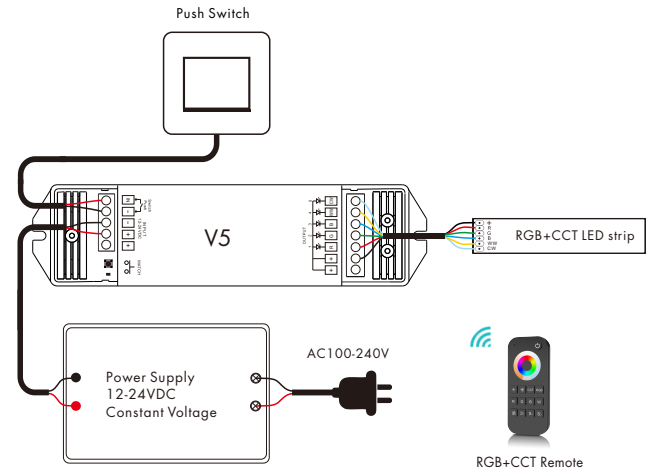
Note: Long press match key for 10s, RGB and CCT light can not be on at the same time.
Long press match key for 15s, RGB and CCT light can be on at the same time.
above operation will also restore the factory setting.

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.

Available remote controller

R17	R8-5	RT5	RT10	T15
1 zone remote	4 zone remote	1 zone remote	4 zone remote	4 zone remote

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

Color rotation:

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

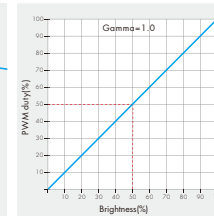CH4=Warm white LED
CH5=Cool white LED
Each channel can supply up to 120W(@24V) and white balance can be controlled as such:

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

Warm white(Min. 2700K)

Neutral white(4000K)

Cool white(Max. 6500K)

Recommended CCT range
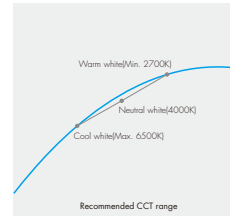
Dimming curve for CCT

Gamma=1.0

Dimming curve for RGB

Gamma=1.6
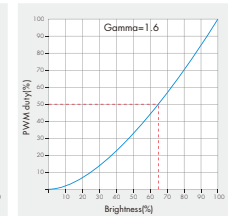
Malfunctions analysis & troubleshooting

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/WW/CW wires.	1. Reconnect R/G/B/WW/CW 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.