

# 5 Channel RGB+CCT LED RF Controller

- 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.

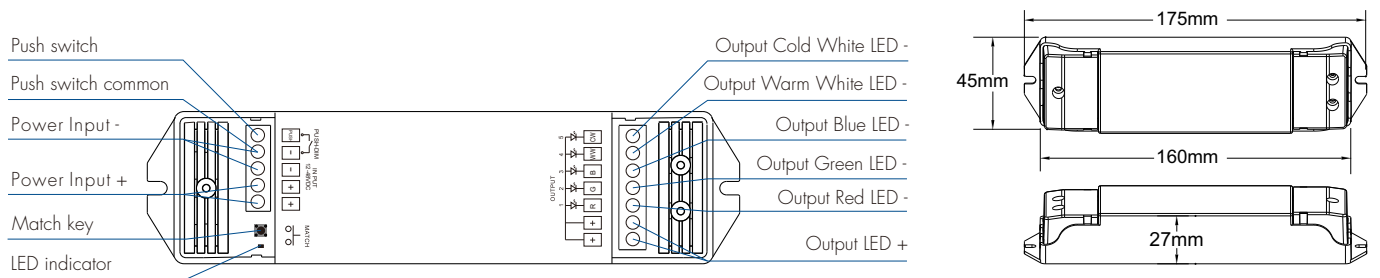


CE RoHS emc RED

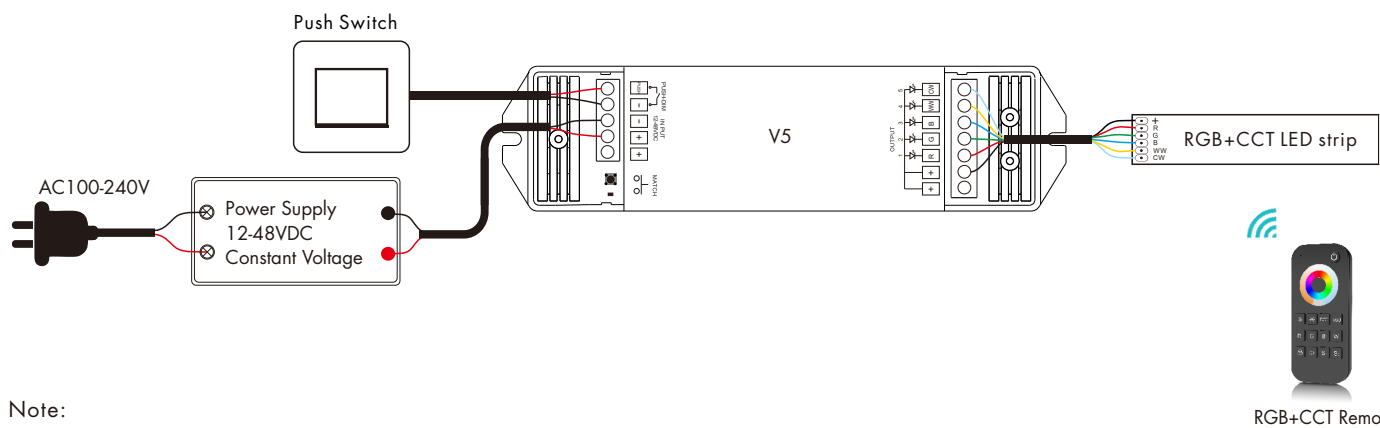
## Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	RF 2.4GHz + Push Dim	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3
Input current	25.5A	Control distance	30m(Barrier-free space)	EMC standard (EMC)	ETSI EN 301 489-17 V3.2.4
Output voltage	5 x (12-48)VDC	Dimming gray scale	4096 (2 <sup>12</sup> ) levels	Safety standard	EN 62368-1:2020+A11:2020
Output current	5A/CH@12-24V 4A/CH@36-48V	Dimming range	0-100%	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Output power	5 x 60 @12V 5 x 120@24V 5 x 144@36V 5 x 192@48V	Dimming curve	Logarithmic	Certification	CE,EMC,RED
Output type	Constant voltage	PWM Frequency	1000Hz (default)	<b>Package</b>	
<b>Warranty</b>		<b>Environment</b>		Size	L178 x W150 x H38mm
Warranty	5 years	Operation temperature	Ta: -30 °C ~ +55 °C	Gross weight	0.150kg
Protection	Reverse polarity, Short circuit	Case temperature (Max.)	Tc: +85 °C		
		IP rating	IP20		

## Mechanical Structures and Installations



## Wiring Diagram



**Note:**

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, RGB and CCT light can not be on at the same time, the light on/off time restore to 0.5s (restore factory default).  
 Long press match key 15s, RGB and CCT light can be on at the same time.

## 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.

## 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	Yellow cyan purple 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

## 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.

## 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.