RGB/CCT/Dimming 3 Channel LED RF Controller

Model No.: PR RGB2 3x10A 3v1

3 Channels/10A per channel/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize

FC Ⓒ CE RoHS emc LVD RED

Features

● 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 15m control distance.
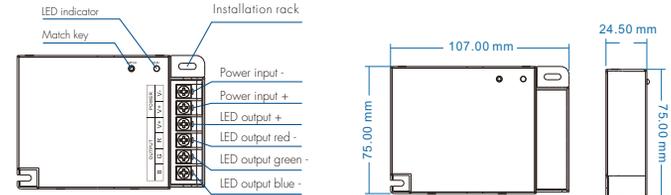● Synchronize on multiple number of controllers.

Technical Parameters

Input and Output

Input voltage	12-36VDC
Input current	30.5A
Output voltage	3 x (12-36)VDC
Output current	3CH,10A/CH
Output power	360-1080W(12-36V)
Output type	Constant voltage

Environment

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

Warranty and Protection

Warranty	2 years
Protection	Reverse Polarity

Dimming data

Input signal	RF 2.4GHz
Control distance	15m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	750Hz (default)

Safety and EMC

EMC standard (EMC)	EN301 489,EN 62479
Safety standard(LVD)	EN60950
Radio Equipment(RED)	EN300 328
Certification	CE,EMC,LVD,RED

Weight

Net weight	0.240kg
Gross weight	0.259kg

Mechanical Structures and Installations

LED indicator
Match key
Installation rack
Power input -
Power input +
LED output +
LED output red -
LED output green -
LED output blue -

107.00 mm
24.50 mm
75.00 mm
75.00 mm

Wiring Diagram

● for RGB

RGB remote
Power Supply 12-36VDC Constant Voltage
AC100-240V
RGB LED strip

● for dual color

CCT remote
Power Supply 12-36VDC Constant Voltage
AC100-240V
Dual color LED strip

● for single color

Dimming remote
Power Supply 12-36VDC Constant Voltage
AC100-240V
Single color LED strip
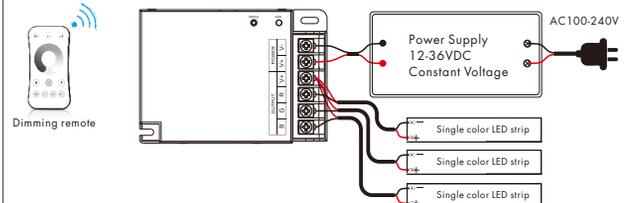Single color LED strip
Single color LED strip

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) of 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, then switch on power 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.
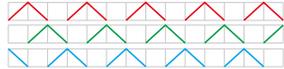
Delete:
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.
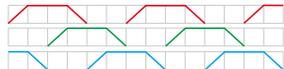
RGB Dynamic mode list
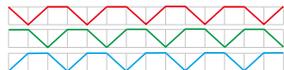
1: RGB jump

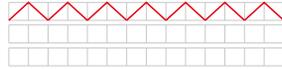2: RGB smooth

3: 6 color jump

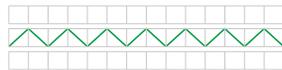4: 6 color smooth

5: Yellow cyan purple smooth

6: RGB fade in and out
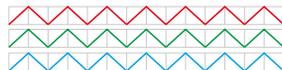
7: Red fade in and out

8: Green fade in and out

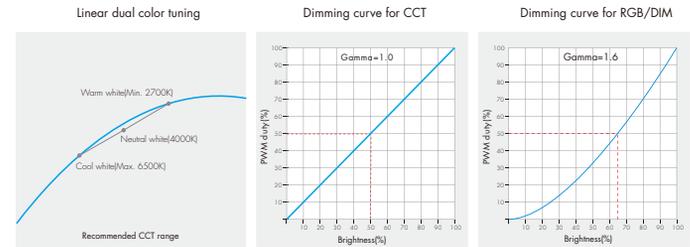9: Blue fade in and out

10: White fade in and out

Dual color control

CH1=Warm white LED
CH2=Cool white LED
Each channel can supply up to 240W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1=0W,CH2=240W	CH1=120W,CH2=120W	CH1=240W,CH2=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/DIM

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 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.