24.50 mm

RGBW/RGB/CCT/Dimming 4 Channel LED RF Controller

Model No.: V4-X

4 Channels/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize/Multiple protection

Features

- 4 channel PWM constant voltage output, Max 8A per channel.
- 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/RGBW 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.
- Over-load / Short circuit protection, recover automatically.



FC C (E RoHS emc LVD RED

Technical Parameters

| Input and Output | | |
|------------------|---|--|
| Input voltage | 12-48VDC | |
| Input current | 32.5A@12/24V 20.5A@36/48V | |
| Output voltage | 4 x (12-48)VDC | |
| Output current | 4x8A@12/24V 4x5A@36/48V | |
| Output power | 4x96W@12V 4x192W@24V 4x180W@36V 4x240W@48V | |
| Output type | Constant voltage | |

| Dimming data | | |
|--------------------|-------------------------|--|
| Input signal | RF 2.4GHz | |
| Control distance | 15m(Barrier-free space) | |
| Dimming gray scale | 4096 (2^12) levels | |
| Dimming range | O-100% | |
| Dimming curve | Logarithmic | |
| PWM Frequency | 500Hz (default) | |

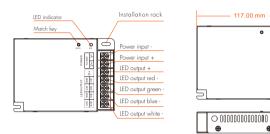
| Safety and EMC | |
|----------------------|--------------------|
| EMC standard (EMC) | EN301 489,EN 62479 |
| Safety standard(LVD) | EN60950 |
| Radio Equipment(RED) | EN300 328 |
| Certification | CE,EMC,LVD,RED |

| 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 Over-load Short circuit | | |

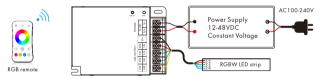
| Weight | |
|--------------|---------|
| Net weight | 0.284kg |
| Gross weight | 0.304kg |

Mechanical Structures and Installations



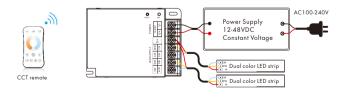
Wiring Diagram

• V4-X for RGB/RGBW



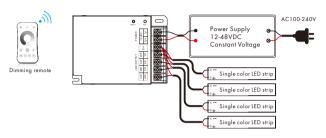
Note: If connect with RGB LED strip, please long press match key for 15s, the controller will become RGB type.

• V4-X for dual color



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• V4-X for single color



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, then switch on power again, immediately, short press on/off key (single zone remate) or zone key (multiple zone remate) 3 times on the remate. 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/RGBW 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

CH1,CH3=Warm white LED CH2.CH4=Cool white LED

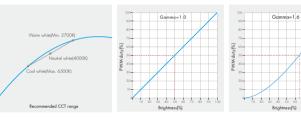
Each channel can supply up to 192W(@24V) and white balance can be controlled as such:

| Color temperature | Cool white | Neutral white | Warm white |
|--------------------|-----------------|-----------------|-----------------|
| Power distribution | CH1=0W,CH2=192W | CH1=96W,CH2=96W | CH1=192W,CH2=0W |
| rower distribution | CH3=0W,CH4=192W | CH3=96W,CH4=96W | CH3=192W,CH4=0W |

Linear dual color tuning

Dimming curve for CCT

Dimming curve for RGBW/RGB/DIM



Malfunctions analysis & troubleshooting

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

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