4 Knob RGB/RGBW LED RF Controller

Model No.: V4-K

4 Channels /Wireless remote control/Four PWM frequency/Linear or logarithmic dimming/Numeric display

Features

- RGB/RGBW constant voltage LED RF controller, can also be used as a RGB/RGBW RF remote.
- 4 knob dimming, digital numeric display and easy key operation.
- Match with RF 2.4G single zone or multiple zone RGB/RGBW remote control optional.
- 256 levels 0-100% dimming smoothly without any flash.
- Built in 10 dynamic mode, include jump or gradual change style.
- PWM frequency 1000/2000/4000/8000Hz selectable.
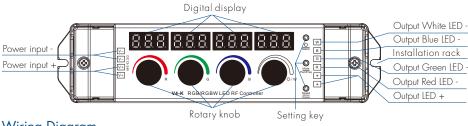- Logarithmic or linear dimming curve selectable.
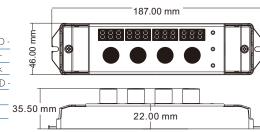

CE RoHS emc RED

Technical Parameters

Input and Output	
Input voltage	12-24VDC
Input current	16.5A
Output voltage	4 x (12-24)VDC
Output current	4CH,4A/CH
Output power	4 x (48-96)W
Output type	Constant voltage

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

Dimming data	
Input signal	Knob + Key + RF 2.4GHz
Control distance	30m(Barrier-free space)
Dimming gray scale	256 levels
Dimming range	0-100%
Dimming curve	Logarithmic or linear
PWM Frequency	1000/2000/4000/8000Hz

Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity

Safety and EMC	
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard	EN 62368-1:2020+A11:2020
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Certification	CE,EMC,RED

Package	
Size	L190 x W50 x H38mm
Gross weight	0.154kg

Mechanical Structures and Installations

Digital display

Power input -
Power input +

Output White LED -
Output Blue LED -
Installation rack
Output Green LED -
Output Red LED -
Output LED +

Rotary knob   Setting key

187.00 mm
46.00 mm
35.50 mm
22.00 mm

Wiring Diagram

- Work as RGB LED controller

RF remote (Optional)
AC100-240V
Power Supply 12-24VDC Constant Voltage
RGB LED strip

- Work as RGBW LED controller

RF remote (Optional)
AC100-240V
Power Supply 12-24VDC Constant Voltage
RGBW LED strip

- Work as RGB/RGBW RF remote

AC100-240V
Power Supply 12-24VDC Constant Voltage
RGB/RGBW LED RF Controller
RGB/RGBW LED RF Controller

Operation

4 knob dimming

Red Brightness
(000-255)

Green Brightness
(000-255)

Blue Brightness
(000-255)

RGB: Total Brightness(000-100)
RGBW: White Brightness (000-255)

3 key setting

Short press: Turn on or turn off the light. When light is off, display "OFF".
Long press 5s: Enter RF remote matching state, display "RLS", within 5s, press on/off key or zone key of the RGBW RF remote, display "RLO", match is successful.
Long press 10s: Until display "RLE", delete all matched RF remote.
Long press 15s: Restore factory default parameter(Default RGBW mode), display"RES".

(Match icon)

Short press: Switch between 10 dynamic change mode (P01~P10).
Long press 5s: Prepare for setup output PWM frequence, then short press mode key to switch between 1000Hz("F10"), 2000Hz("F20"), 4000Hz("F40") or 8000Hz("F80"). Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).
Long press Mode key for 2s or timeout 10s, quit output PWM frequence setting.

(Mode PwmFreq icon)

Short press: Set mode speed, switch between 1-10 level speed (S-1, S-9, S-F).
Long press 5s: Prepare for setup output brightness curve, then short press speed key to switch between linear curve("C-L") or logarithmic curve("C-E").
Long press Speed key for 2s or timeout 10s, quit output brightness curve setting.

(Speed Curve icon)

RGB/RGBW light setting: Press and hold the "Match" and "Speed" key for 2s to switch between RGB or RGBW light type.
The rightmost digital tube show "CH3" (RGB) or "CH4"(RGBW) momently.

RGB/RGBW dynamic mode list

No.	Name	No.	Name
P01	RGB jump	P06	RGB fade in and out
P02	RGB smooth	P07	Red fade in and out
P03	6 color jump	P08	Green fade in and out
P04	6 color smooth	P09	Blue fade in and out
P05	Yellow cyan purple smooth	P10	White fade in and out

4 Knob Controller Work as RGB/RGBW RF remote

This 4 knob controller work as RGB/RGBW RF remote can match with one or multiple RGB/RGBW LED RF controller.
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 of receiver,
immediately press on/off key on the knob controller.
The LED indicator fast flash a few times means match is successful.

Delete:
Press and hold match key of the receiver for 5s to delete all match,
The LED indicator fast flash a few times
means all matched RF remotes were deleted.
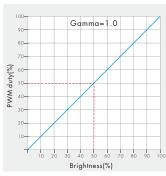
Use Power Restart

Match:
Switch off the power of the receiver, then switch on power, repeat again.
Immediately short press on/off key 3 times on the knob controller.
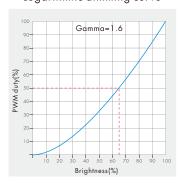The light blinks 3 times means match is successful.

Delete:
Switch off the power of the receiver, then switch on power, repeat again.
Immediately short press on/off key 5 times on the knob controller.
The light blinks 5 times means all matched remotes were deleted.

Dimming curve setting

Linear dimming curve

Logarithmic dimming curve