RGB/RGBW 4 DIAL LED CONTROLLER WITH DIGITAL DISPLAY

| MODEL NO: PSCONN-4CHDIALRGBW

IP20   Remote Controlled   CE   CE EMC   CE LVD   RoHs
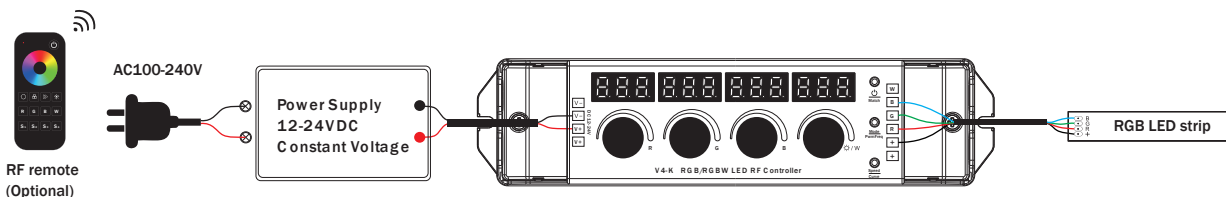
FEATURES & BENEFITS

- RGB & RGBW constant voltage LED RF controller, can also be used as a RGB & RGBW RF remote.

- 4 Dial Dimming, digital numeric display and easy key operation.

- Match with Professional Range RF 2.4G single zone or multiple zone RGB & RGBW remote control (optional).

- 256 levels 0-100% dimming smoothly without any flash.

- Bult in 10 dynamic modes, include jump or gradual change style.

- PWM frequency 1000/2000/4000/8000Hz selectable.

- Logarithmic or linear dimming curve selectable.

TECHNICAL INFORMATION

Specifications

Input & Output		
	Input Voltage	12 - 24V DC
	Input Current	16.5A
	Output Voltage	4 x (12-24)V DC
	Output Current	4 Channel, 4A per channel
	Output Power	4 x (48-96)W
	Output Type	Constant Voltage

Dimming Data		
	Input Signal	Dial + Key + RF 2.4GHz
	Control Distance	30m (barrier free)
	Dimming Grayscale	256 levels
	Dimming Range	0 - 100%
	Dimming Curve	Logarithmic or Linear
	PWM Frequency	1000/2000/4000/8000Hz

Environment		
	Operational Temp.	ta: -30°C to +55°C
	Case Temp.	tc: +85°C
	IP Rating	IP20

Safety & 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

Warranty & Protection		
	Warranty	5 Years
	Protection	Reverse Polarity

MECHANICAL DIAGRAM

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

AC100-240V

Power Supply
12-24VDC
Constant Voltage

RGB LED strip

RF remote
(Optional)

● Work as RGBW LED controller

AC100-240V

Power Supply
12-24VDC
Constant Voltage

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RF remote
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● Work as RGB/RGBW RF remote

AC100-240V

Power Supply
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RGB/RGBW
LED RF Controller
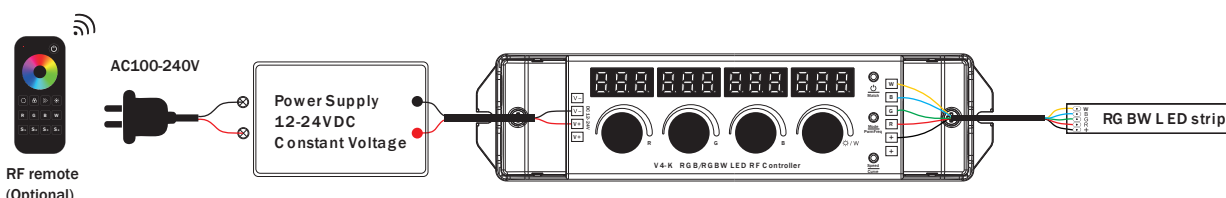
RGB/RGBW
LED RF Controller
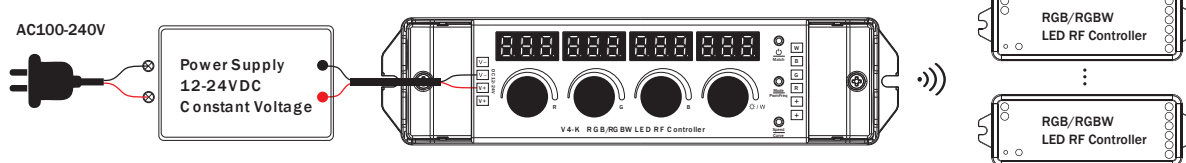
OPERATION

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

Match

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 "RL0", 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".

Mode PwmFreq

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.

Speed Curve

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 cur, 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.

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 DIAL CONTROLLER AS 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
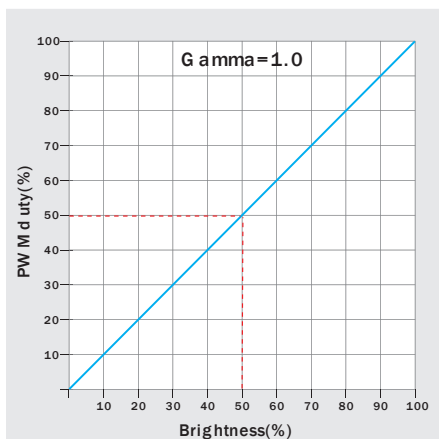means all matched RF remotes were deleted.

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

Gamma=1.0

PWM duty(%) vs Brightness(%)

Logarithmic dimming curve

Gamma=1.6

PWM duty(%) vs Brightness(%)