RGBW LED Mini RF Controller
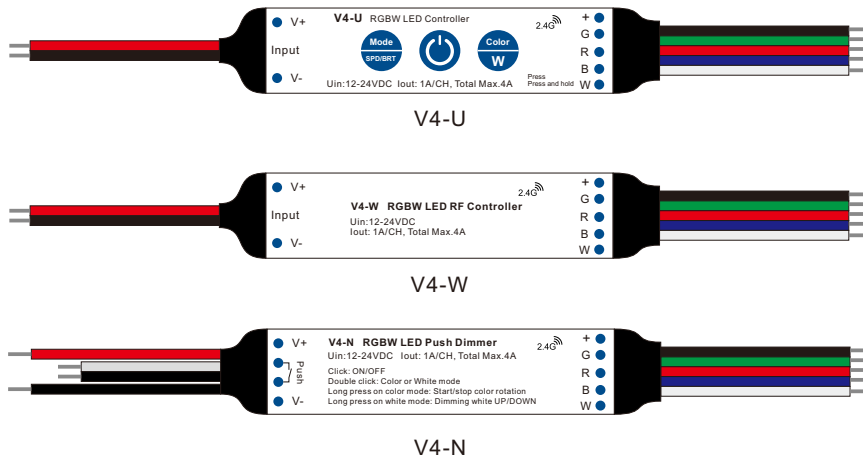
Model No.: V4-U, V4-W, V4-N

SKYDANCE

4 channel constant voltage/Max 75W/Step-less dimming/Wireless remote control

V4-U

V4-W

V4-N

FC C CE RoHS emc LVD RED

Features

● 4 channel constant voltage RGBW LED mini RF controller.
● 1A per channel, output connect with 5 meters RGBW LED strip, max output power 75W.
● Match with Skydance's 2.4G single zone or multiple zone RGB/RGBW 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.

Model	Photo	Power Connector	LED Connector	Function
V4-U		Red/Black Cable 10cm	4-color Flat Cable 10cm	3 key RF remote Without RF synchronization
V4-U(CJ)		Red/Black Cable 10cm	4-pin Flat Female Jack	3 key RF remote Without RF synchronization
V4-U(DJ)		5.5mm DC Female Jack	4-pin Flat Female Jack	3 key RF remote Without RF synchronization
V4-W		Red/Black Cable 10cm	4-color Flat Cable 10cm	Only RF remote With RF synchronization
V4-W(CJ)		Red/Black Cable 10cm	4-pin Flat Female Jack	Only RF remote With RF synchronization
V4-W(DJ)		5.5mm DC Female Jack	4-pin Flat Female Jack	Only RF remote With RF synchronization
V4-N		Red/Black Cable 10cm	4-color Flat Cable 10cm	Push-Dim RF remote Without RF synchronization

Technical Parameters

Input and Output

Input voltage	12-24VDC
Output voltage	12-24VDC
Output power	Max. 75W
Output type	Constant voltage

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

Dimming data

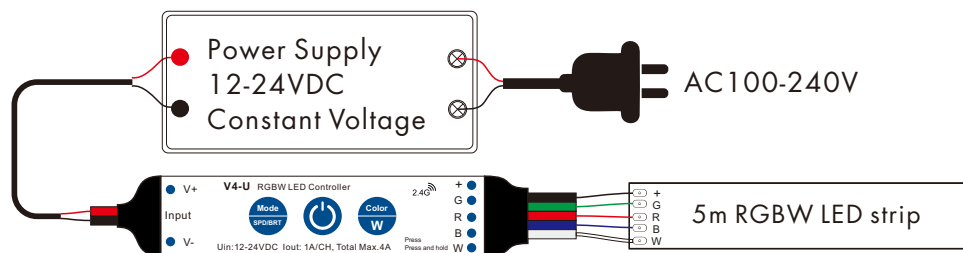|	
Input signal	RF 2.4GHz
Control distance	30m
Dimming level	4096 levels
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	500Hz (default)

Safety and EMC

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

Dimension

60.00 mm

14.00 mm

Wiring Diagram

● V4-U

RGBW remote

Power Supply 12-24VDC Constant Voltage

AC100-240V

V4-U RGBW LED Controller

2.4G

V+
Input
V-

Mode SPD/BRT

Color W

Uin:12-24VDC Iout: 1A/CH, Total Max.4A

Press Press and hold

+
G
R
B
W

+
G
R
B
W

5m RGBW LED strip
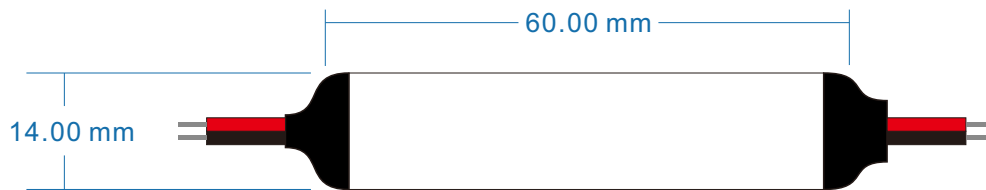
Key function:

 Turn on or off light.

Mode SPD/BRT — Short press change 10 dynamic mode,
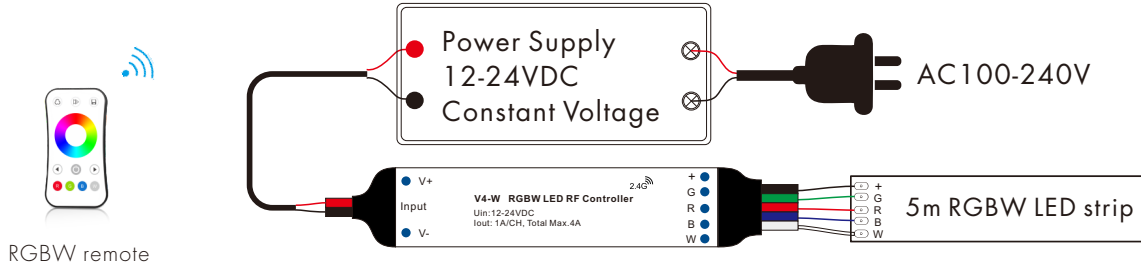For dynamic mode, long press 2s adjust speed,10 levels.
For static RGB color, long press 1-6s for continuous 256 levels brightness adjustment.

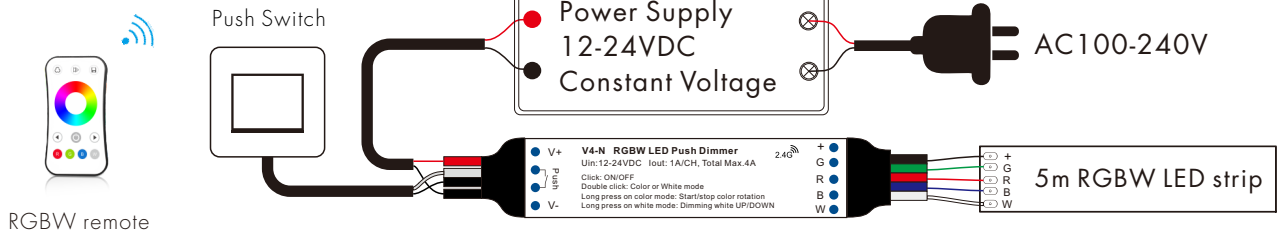**Color W** — Short press change 24 static RGB color,
long press 1-6s for continuous 256 levels W brightness adjustment.

● V4-W

RGBW remote

Power Supply
12-24VDC
Constant Voltage

AC100-240V

V4-W RGBW LED RF Controller
Uin:12-24VDC
Iout: 1A/CH, Total Max.4A

Input

V+

V-

+
G
R
B
W

5m RGBW LED strip

● V4-N

RGBW remote

Push Switch

Power Supply
12-24VDC
Constant Voltage

AC100-240V

V4-N RGBW LED Push Dimmer
Uin:12-24VDC   Iout: 1A/CH, Total Max.4A
Click: ON/OFF
Double click: Color or White mode
Long press on color mode: Start/stop color rotation
Long press on white mode: Dimming white UP/DOWN

Push

V+

V-

+
G
R
B
W

5m RGBW LED strip

Push Dim function:

Click	ON/OFF
Double Click	Change between color mode, white mode (W channel) and color+W mode
Long press(>1s) from OFF	If on color mode change rotation speed; If on white mode or color+W mode, W dimming UP/DOWN
Long press(>1s) from ON	If on color mode start/stop color rotation; If on white mode or color+W mode, W 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.

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 Power key (Only for V4-U)

Match:

Long press power key 2s, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.

Delete:

Press and hold power key for 10s to delete all match, The light blinks 5 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 rf remote. The light blinks 5 times means all matched remotes were deleted.

Application notes

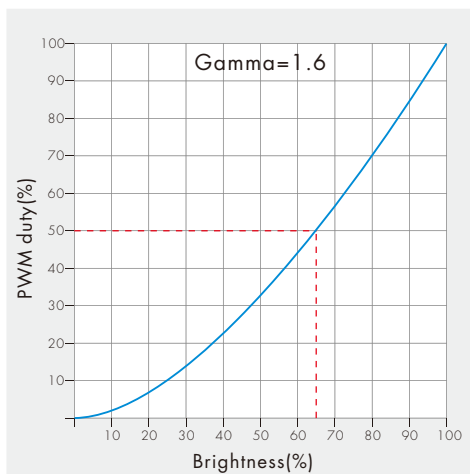1. All the receivers in the same zone.
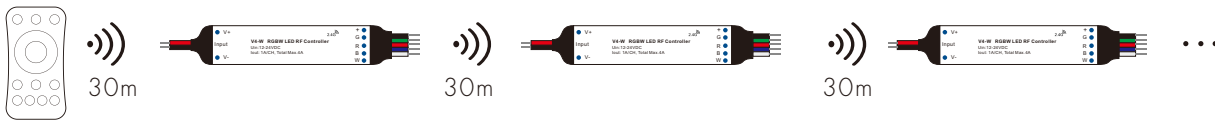
RF remote

Auto-transmitting: One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be limitless.

Auto-synchronization: Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote, under same dynamic mode and with same speed (V4-U,V4-N without auto-syncchronization function). Receiver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range. We recommend for indoor applications that receiver placements should be no further apart than15m.

2. Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4.

Dimming Curve

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/W wires.	1. Reconnect R/G/B/W wires.
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.