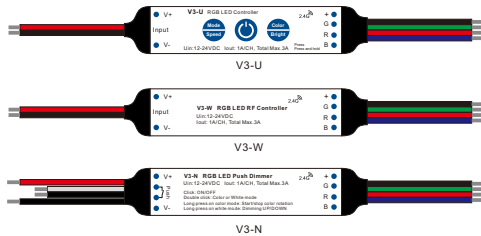# RGB LED Mini RF Controller

Model No.: V3-U, V3-W, V3-N

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

V3-U

V3-W

V3-N

FC C CE RoHS emc LVD RED

Features

● 3 channel constant voltage RGB LED mini RF controller.
● 1A per channel, output connect with 5 meters RGB 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.
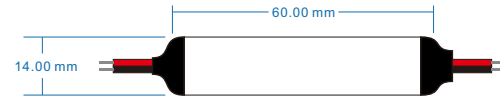● Synchronize on multiple number of controllers.

Model	Photo	Power Connector	LED Connector	Function
V3-U		Red/Black Cable 10cm	4-color Flat Cable 10cm	3 key RF remote With RF synchronization
V3-U(CJ)		Red/Black Cable 10cm	4-pin Flat Female Jack	3 key RF remote With RF synchronization
V3-U(DJ)		5.5mm DC Female Jack	4-pin Flat Female Jack	3 key RF remote With RF synchronization
V3-W		Red/Black Cable 10cm	4-color Flat Cable 10cm	Only RF remote With RF synchronization
V3-W(CJ)		Red/Black Cable 10cm	4-pin Flat Female Jack	Only RF remote With RF synchronization
V3-W(DJ)		5.5mm DC Female Jack	4-pin Flat Female Jack	Only RF remote With RF synchronization
V3-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℃~+55℃
Case temperature (Max.)	Tc:+85℃
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

● V3-U

Power Supply 12-24VDC Constant Voltage

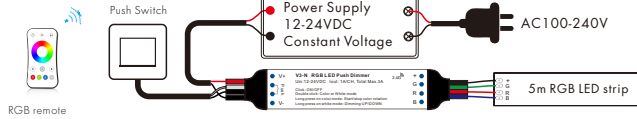AC100-240V

RGB remote

5m RGB LED strip
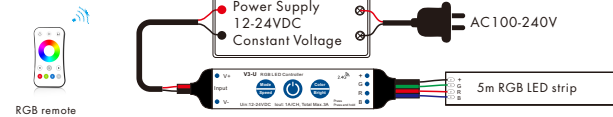
Key function:

⏻ Turn on or off light.

Mode Speed Short press change 10 dynamic mode, long press 2s adjust speed, 10 levels.

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

● V1-W

RGB remote

● V3-N

RGB remote
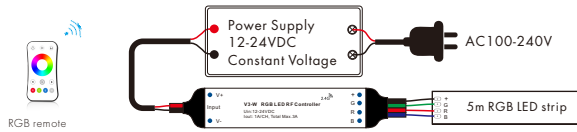
Push Dim function:

Click	ON/OFF
Double Click	Change from color mode to white mode (RGB mixed) and vice-versa
Long press(>1s) from OFF	If on color mode change rotation speed; If on white mode dimming UP/DOWN
Long press(>1s) from ON	If on color mode start/stop color rotation; If on white mode 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 V3-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 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 (V3-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.
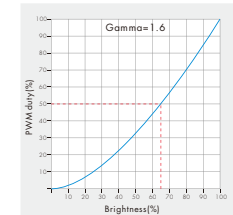
2. Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4.

RF remote

RGB 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

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 wires.	1. Reconnect R/G/B 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.