



SKYDANCE V3-W RGB LED Mini RF Controller User Manual

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S K Y D A N C E

V3-W RGB LED Mini RF Controller



Product Information: RGB LED Mini RF Controller

- **Model No.:** V3-W
- 3 channel constant voltage/Max 75W/Step-less dimming/Wireless remote control
- Input voltage: 12-24VDC
- Output voltage: 12-24VDC
- Output power: Max. 75W
- Output type: Constant voltage
- Control distance: 30m (Barrier-free space)
- Dimming data Input signal: RF 2.4GHz
- Dimming gray scale: 4096 (2^{12}) levels
- Dimming range: 0-100%
- Dimming curve: Logarithmic
- PWM Frequency: 500Hz (default)
- Operation temperature: Ta: -30°C ~ +55°C
- Case temperature (Max.): Tc: +85°C
- IP rating: IP20
- Warranty: 5 years
- Protection: Reverse Polarity
- Certification: CE, EMC, LVD, RED

Product Usage Instructions

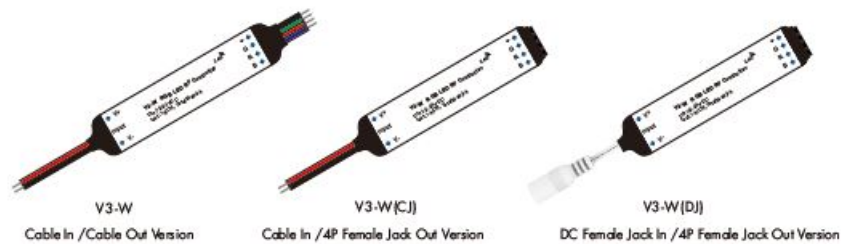
1. Connect the V+ and V- input to the power supply.
2. Connect the RGB LED strip to the output terminals of the controller.
3. Turn on the power supply.
4. Match the remote control to the controller. To match, switch off the power of the receiver, then switch on power, repeat again. Immediately short 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.
5. Select the desired color, mode, and dimming level using the wireless remote control.

- To delete a matched remote, switch off the power of the receiver, then switch on power, repeat 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.
- The controller supports various dynamic modes including RGB jump, RGB smooth, 6 color jump, 6 color smooth, yellow cyan purple smooth, RGB fade in and out, red fade in and out, green fade in and out, blue fade in and out, and white fade in and out. Select the desired mode using the remote control.
- The controller also supports step-less dimming with a logarithmic dimming curve. Adjust the brightness using the remote control.

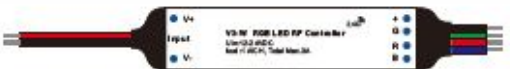
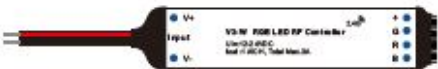
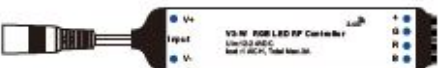
RGB LED Mini RF Controller

Model No.: V3-W

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



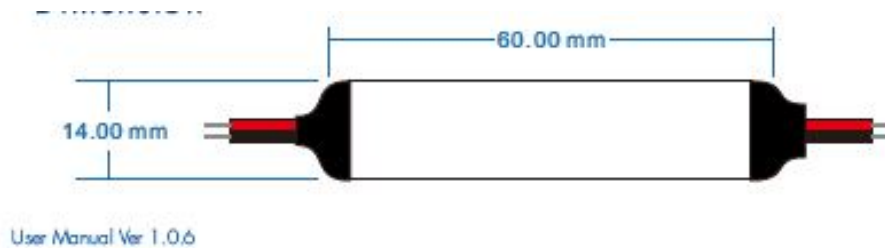
Model List

Model	Photo	Power Connector	LED Connector
V3-W		Red/Black Cable 10cm	4-color Flat Cable 10cm
V3-W(CJ)		Red/Black Cable 10cm	4-pin Flat Female Jack
V3-W(DJ)		5.5mm DC Female Jack	4-pin Flat Female Jack

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 RF 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.

Dimension



Technical Parameters

Input and Output		Dimming data	
Input voltage	12-24VDC	Input signal	RF 2.4GHz
Output voltage	12-24VDC	Control distance	30m(Barrier-free space)
Output power	Max. 75W	Dimming gray scale	4096 (2 ¹²) levels
Output type	Constant voltage	Dimming range	0-100%
Environment		Dimming curve	Logarithmic
Operation temperature	Ta: -30°C ~ +55°C	PWM Frequency	500Hz (default)
Case temperature (Max.)	Tc: +85°C	Safety and EMC	
IP rating	IP20	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Warranty and Protection		Safety standard (LVD)	EN 62368-1:2020+A11:2020
Warranty	5 years	Radio Equipment (RED)	ETSI EN 300 328 V2.2.2
Protection	Reverse Polarity	Certification	CE, EMC, LVD, RED

Wiring Diagram



Match Remote Control

Match:

Switch off the power of the receiver, then switch on power, repeat 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:

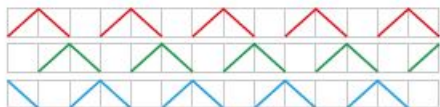
Switch off the power of the receiver, then switch on power, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

RGB Dynamic mode list

1: RGB jump



2: RGB smooth



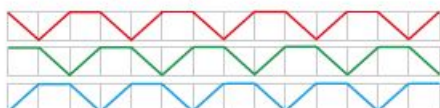
3: 6 color jump



4: 6 color smooth



5: Yellow cyan purple smooth



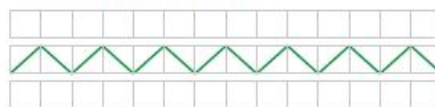
6: RGB fade in and out



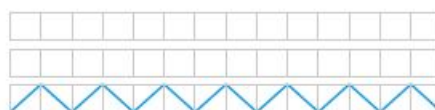
7: Red fade in and out



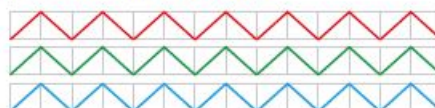
8: Green fade in and out



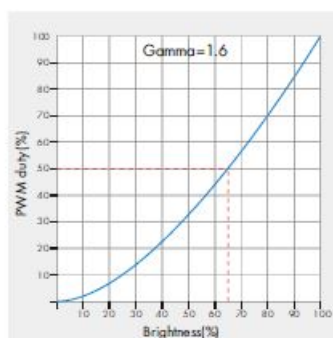
9: Blue fade in and out



10: White fade in and out



Dimming curve



Application notes



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. 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.

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



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.

User Manual Ver 1.0.6

Documents / Resources

	SKYDANCE V3-W RGB LED Mini RF Controller [pdf] User Manual V3-W RGB LED Mini RF Controller, V3-W, RGB LED Mini RF Controller, LED Mini RF Controller, Mini RF Controller, RF Controller, Controller
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