iskydance V3-C RGB LED Dimmer Instructions

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Contents

RGB LED Dimmer

- 3 channel constant voltage RGB LED RF dimmer with 3-button.

- Switch and dimming color by 3 buttons.

- Match with RF 2.4G single zone or multiple zone RGB remote control optional.

- One RF controller accept up to 10 remote control.

- 4096 levels 0-100% dimming smoothly without any ash.

- Built in 10 dynamic mode, include jump or gradual change style.

- PWM frequency 500Hz, 2KHz, 8KHz or 16KHz selectable.

- Over-heat / Over-load / Short circuit protection, recover automatically

Technical Parameters

Input and Output	
Input voltage	12-24VDC
Input current	18.5A
Output voltage	3 x (12-24)VDC
Output current	3x6A@500Hz/2KHz 3x5A@8KHz/16KHz
Output power	216-432W@500Hz/2KHz 180-360W@8KHz/16KHz

Environment

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

Dimming data

Input signal: 3-button + RF 2.4GHz
Control distance: 30m(Barrier-free space)
Dimming gray scale: 4096 (2^12) levels

Dimming range: 0 -100%
Dimming curve: ogarithmic
PWM frequency: 500Hz/2KHz/8KHz/16KHz

Warranty and Protection

Warranty: 5 years
Protection: Reverse polarity Over-heat Over-load Short circuit

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
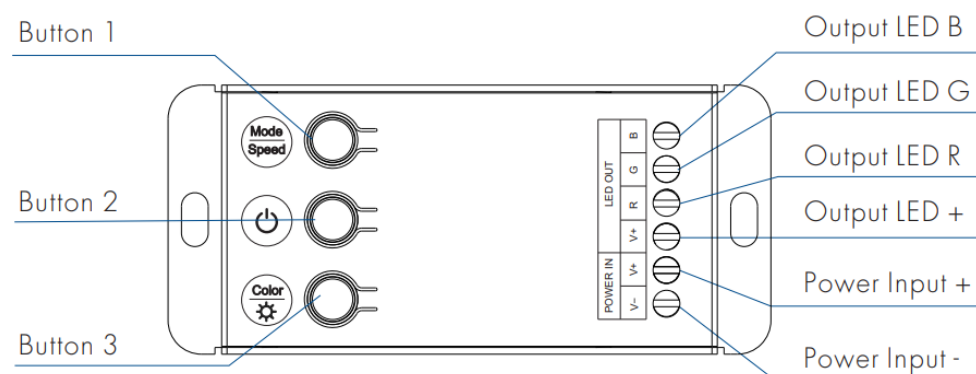**Radio Equipment(RED):** ETSI EN 300 328 V2.2.2
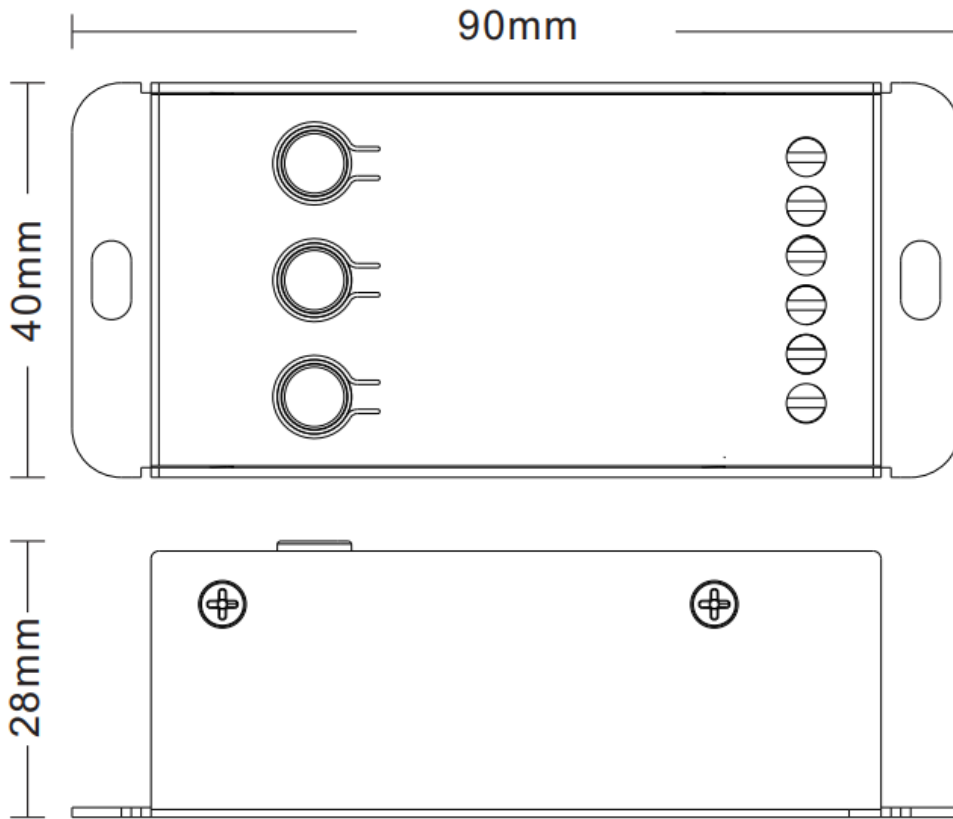**Certication:** CE,EMC,RED

Package

Size: L100 x W46 x H38mm
Gross weight: 0.081kg

Mechanical Structures and Installations

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 button

Match:

Long press button1 and button 3 for 2s, the output LED blinks 2 times, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.

The output LED blinks 3 times means match is successful.

Delete:

Press and hold button1 and button 3 for 5s to delete all match,

The output LED blinks 5 times means all matched remotes were deleted.

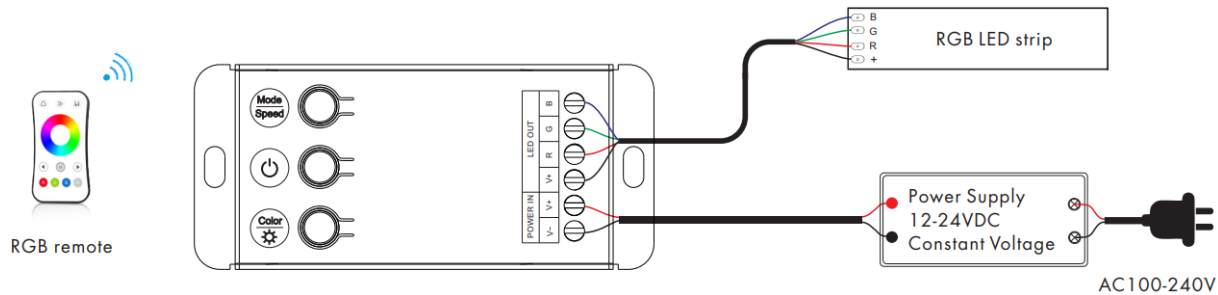**Use Power Restart**

Match:

Switch off the power, then switch on power again, repeat again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote.

The output LED blinks 3 times means match is successful.

Delete:

Switch off the power, then switch on power again, repeat again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The output LED blinks 5 times means all matched remotes were deleted.
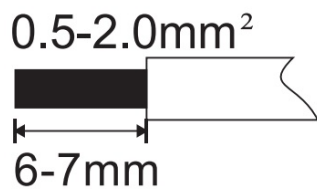
Wiring Diagram

Wire Preparation:

1. The wiring can be solid or stranded with a cross-sectional area of 0.5 to 2 mm². Conventional 1mm² can withstand 10A output current.
2. When wiring is installed, the terminals must be tightened.

If they are not tightened, the contact point resistance will be too high and the terminals will easily burn due to heat when used at full load for a long time.

Note: The output power of a constant voltage power supply should be at least 1.2 times that of the output load (light strip), otherwise the full power output of the load can easily cause automatic flickering or shaking of the light.
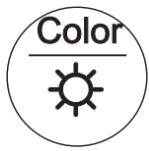
Button function

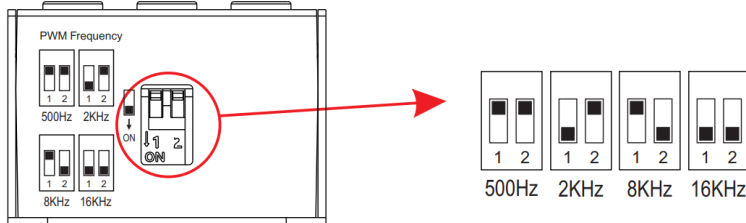Short press to change 10 dynamic mode, long press for 2s to adjust speed, 10 levels.

Turn on or off light

Short press to change 24 static RGB color, long press for 1-6s to adjust 256 levels brightness continuously
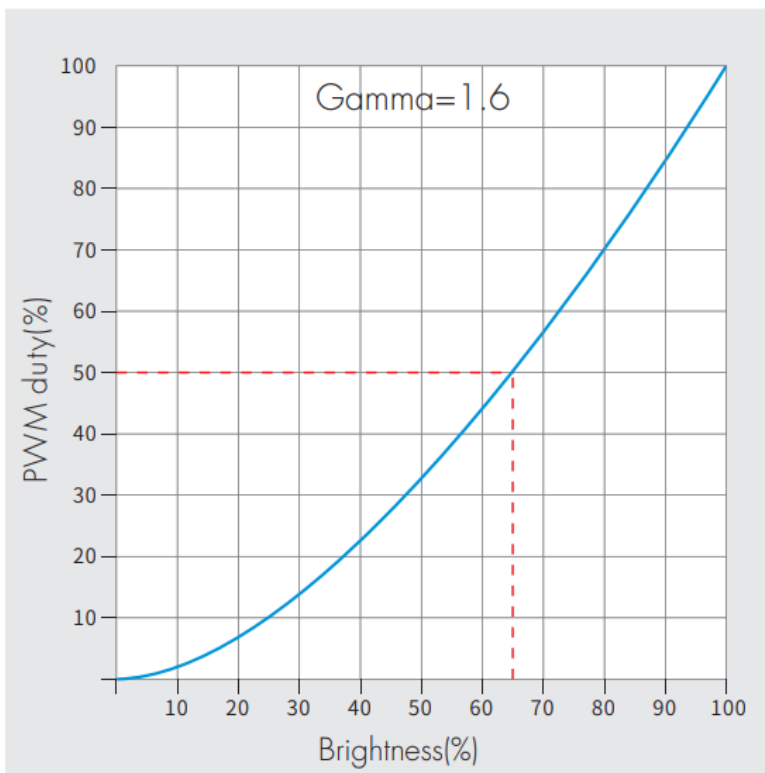
PWM frequency setting

We can select four PWM frequency: 500Hz, 2KHz, 8KHz or 16KHz. Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

Dynamic mode list

No.	Name
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

Gamma=1.6

(Graph: PWM duty(%) vs Brightness(%))

Installation Precautions

1. The products shall not be stacked, the distance should be ≥ 20cm, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of ≥ 20cm to avoid the radiation interference of the switching power supply.
3. The installation height shall be ≥ 1m from the oor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects, with an interval of ≥ 20cm to avoid signal attenuation and shorten the remote control distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of ≥ 20cm to avoid signal interference.

Documents / Resources

iskydance V3-C RGB LED Dimmer [pdf] Instructions
V3-C, V3-C RGB LED Dimmer, RGB LED Dimmer, LED Dimmer, Dimmer

References

- **User Manual**