

# Superlightingled V4-WPS 12-36V RF IP67 Waterproof LED Controller User Manual

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# **SUPERLIGHTINGLED**

Superlightingled V4-WPS 12-36V RF IP67 Waterproof LED Controller



#### **Product Information**

• Model No.: V4-WPS

• Product Name: 4-Channel Constant Voltage LED Waterproof RF Controller

# **Features**

- Waterproof 4-channel constant voltage LED RF controller with IP67 rating, suitable for outdoor and damp environments.
- Match with RF 2.4G single zone or multiple zone single color, dual color and RGB/RGBW remote control.
- One RF controller accepts up to 10 remote controls.
- 4096 levels 0-100% dimming smoothly without any flash.
- Built-in 10 dynamic modes when used with RGB/RGBW light, including jump or gradual change style.
- Auto-transmitting function: Controller automatically transmits signals to another controller with a 30m control distance.
- Synchronize on multiple controllers.
- Fade in and out effect selectable.

# **Technical Parameters**

• Input and Output: Input voltage: 12-36VDC,

• Input current: 20.5A, Output voltage: 4 x (12-36)VDC, Output

• current: 4CH,5A/CH,

Output power: 4x(60-180W),
Output type: Constant voltage

• Warranty: 5 years

• Dimming data: Input signal: RF 2.4GHz, Control

• distance: 30m (Barrier-free space), Dimming grayscale: 4096 (2^12)

• levels, Dimming range: 0 -100%, Dimming curve: Logarithmic, PWM

• frequency: 1000Hz (default)

• Package Size: L165 x W98 x H72mm

• Gross weight: 0.492kg

#### Safety and EMC:

• EMC standard (EMC): ETSI EN 301 489-1 V2.2.3

• Safety standard(LVD): ETSI EN 301 489-17 V3.2.4, EN 62368-1:2020+A11:2020

• Radio Equipment(RED) Certification: ETSI EN 300 328 V2.2.2, CE, EMC, LVD, RED

#### **Environment:**

• Operation temperature: -30°C ~ +55°C

• Case temperature (Max.): +85°C

• IP rating: IP67

#### **Mechanical Structures and Installations:**

Please refer to the wiring diagram and instructions provided in the user manual.

# **Product Usage Instructions**

#### V4-WPS for RGB/RGBW:

- 1. Connect the power input wires (Brown V+, Blue V-) to a power supply with a voltage range of 12-36VDC.
- 2. Connect the LED output wires according to the wiring diagram provided.
- 3. If connecting with an RGB LED strip, long press the match key for 15 seconds to switch the controller to RGB mode. The light will blink 5 times.
- 4. Use an RGB/RGBW remote control to control the LED strip.
- 5. The power supply should be AC100-240V.

#### V4-WPS for dual color:

- 1. Connect the power input wires (Brown V+, Blue V-) to a power supply with a voltage range of 12-36VDC.
- 2. Connect the LED output wires according to the wiring diagram provided.
- 3. Use a CCT remote control to control the dual-color LED strip.
- 4. The power supply should be AC100-240V.

# V4-WPS for single color:

- 1. Connect the power input wires (Brown V+, Blue V-) to a power supply with a voltage range of 12-36VDC.
- 2. Connect the LED output wires according to the wiring diagram provided.
- 3. Use a dimming remote control to control the single-color LED strip.
- 4. The power supply should be AC100-240V.
- 5. The controller's match key can be used to match or delete remote controls.
- 6. To match a remote control, short press the match key and immediately press the on/off key (for single zone

- remote) or zone key (for multiple zone remote) of the remote.
- 7. To delete all matched remotes, press and hold the match key for 5 seconds. The light will blink 3 times to indicate that all matched remotes have been deleted.

Note: Please refer to the user manual for further instructions and safety precautions.

#### **Features**

- Waterproof 4 channel constant voltage LED RF controller with IP67 rating, suitable for outdoor and damp environment.
- Match with RF 2.4G single zone or multiple zone single color, dual color and RGB/RGBW remote control.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- When using with RGB/RGBW light, 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.
- Fade in and out effect selectable.

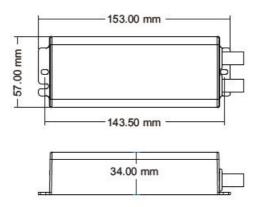
#### **Technical Parameters**

| Input and Output |                  |  |
|------------------|------------------|--|
| Input voltage    | 12-36VDC         |  |
| Input current    | 20.5A            |  |
| Output voltage   | 4 x (12-36)VDC   |  |
| Output current   | 4CH,5A/CH        |  |
| Output power     | 4x(60-180W)      |  |
| Output type      | Constant voltage |  |
| Warranty         |                  |  |
| Warranty         | 5 years          |  |
|                  |                  |  |

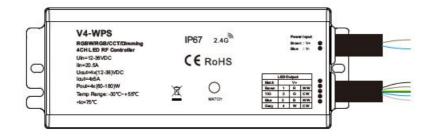
| Dimming data       |                         |  |
|--------------------|-------------------------|--|
| Input signal       | RF 2.4GHz               |  |
| Control distance   | 30m(Barrier-free space) |  |
| Dimming gray scale | 4096 (2^12) levels      |  |
| Dimming range      | 0 -100%                 |  |
| Dimming curve      | Logarithmic             |  |
| PWM frequency      | 1000Hz (default)        |  |
| Package            |                         |  |
| Size               | L165 x W98 x H72mm      |  |
| Gross weight       | 0.492kg                 |  |

| Safety and EMC          |   |  |
|-------------------------|---|--|
| EMC standard (EMC)      | ETSI EN 301 489-1 V2.2.3<br>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                                |  |
| Certiication            | CE,EMC,LVD,RED  |  |
| Environment             |   |  |
| Operation temperature   | Ta: -30 OC ~ +55OC                                    |  |
| Case temperature (Max.) | T c:+85OC   |  |
| IP rating               | IP67  |  |

# **DIMENSION**

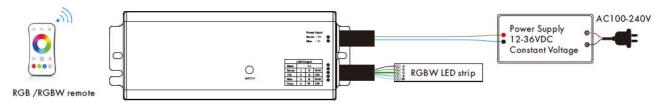


# **Mechanical Structures and Installations**



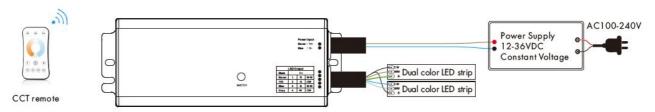
# **Wiring Diagram**

# • V4-WPS for RGB/RGBW

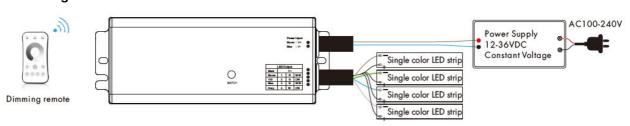


 Note: If connect with RGB LED strip, please long press match key for 15s, the controller will become RGB type, the light blinks 5 times.

# • V4-WPS for dual color



# · V4-WPS for single color



# 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 Match key

- **Match:** Short press match key, immediately press on/offkey (single zone remote) or zone key (multiple zone remote) of the remote.
- **Delete:** Press and hold match key for 5s to delete all match, The light blinks 3 times means all matched remotes were deleted.

#### **Use Power Restart**

- Match: Switch off the power, 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, 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/RGBW 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 |

#### Fade in and Fade out Setting

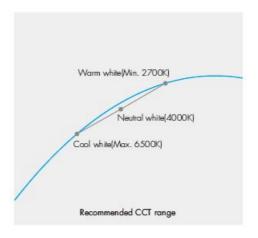
Long press match key 5s, then short press match key 3 times, the lighting effect will be set to the fade in and fade out in 3s. Long press match key 10s, restore factory default parameter, the light blinks 10 times, the light on/off time restores to 0.5s.

#### **Dual color control**

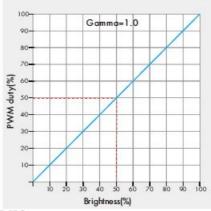
CH1,CH3=Warm white LED CH2,CH4=Cool white LED Each channel can supply up to 120W(@24V) and white balance can be controlled as such:

| Color temperature  | Cool white          | Neutral white       | Warm white          |
|--------------------|---------------------|---------------------|---------------------|
| Power distribution | CH1=0W,CH2=120W CH3 | CH1=60W,CH2=60W CH3 | CH1=120W,CH2=0W CH3 |
|                    | =0W,CH4=120W        | =60W,CH4=60W        | =120W,CH4=0W        |

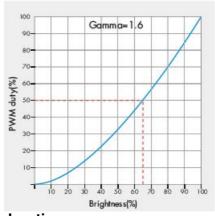
#### Linear dual color tuning



# **Dimming curve for CCT**



# Dimming curve for RGBW/RGB/DIM



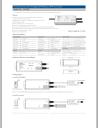
Malfunctions analysis & troubleshooting

| Malfunctions  | Causes                                      | Troubleshooting                 |
|---|---|---------------------------------|
|   | 1. No power.                                | Check the power.                |
| No light  | 2. Wrong connection or insecure.            | 2. Check the connection.        |
| Wrong color   | 1. Wrong connection of R/G/B/W wires.       | 1. Reconnect R/G/B/W wires.     |
| Uneven intensity betw<br>een front and rear,wit<br>h voltage drop | Output cable is too long.                   | Reduce cable or loop supply.    |
|   | 2. Wire diameter is too small.              | 2. Change wider wire.           |
|   | 3. Overload beyond power supply capability. | 3. Replace higher power supply. |
|   | 4. Overload beyond controller capability.   | 4. Add power repeater.          |
| No response from the remote                                       | The battery has no power.                   | Replace battery.                |
|   | 2. Beyond controllable distance.            | 2. Reduce remote distance.      |
|   | 3. The controller did not match the remote. | 3. Re-match the remote.         |

Model No.: V4-WPS

IP67 waterproof/4 Channels/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize

# **Documents / Resources**



<u>Superlightingled V4-WPS 12-36V RF IP67 Waterproof LED Controller</u> [pdf] User Manual V4-WPS 12-36V RF IP67 Waterproof LED Controller, V4-WPS, 12-36V RF IP67 Waterproof LED Controller, Waterproof LED Controller, LED Controller, C ontroller

Manuals+,