## Dual Color LED Controller

- 4096 levels 0-100\% dimming smoothly without any flash.
- Match with all RF 2.4G single zone or multiple zone dual color or remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30 m control distance.
- Synchronize on multiple number of controllers.
- Fade in and out effect selectable.
- Can be set 3 levels color temperature (WW, NW and CW) selectable by continuous power off and on operation.

- Connect with external push switch to achieve on/off and 0-100\% dimming function.
- Over-load / Short circuit protection, recover automatically.


## C $\in$ RoHS emc LVD RED

2 Channel / Step-less dimming / Wireless remote control / Auto-transmitting / Synchronize/ Push Dim / Multiple protection

## Technical Parameters

| Input and Output |  | Dimming data |  | Safety and EMC |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Input voltage | 12-48VDC | Input signal | RF $2.4 \mathrm{GHz}+$ Push Dim |  | ETSI EN 301 489-1 V2.2.3 |
| Input current | 16.5A | Control distance | 30 m (Barrier-free space) |  | ETSI EN 301 489-17 V3.2.4 |
| Output voltage | 2x/12-48/VDC | Dimming gray scale | 4096 (2^12) levels | Safery standard(IVD) | EN 62368-1:2020+A11:2020 |
| Output current | $2 \mathrm{CH}, 8 \mathrm{~A} / \mathrm{CH}$ | Dimming range | 0-100\% | Radio Equipment(RED) | ETSI EN 300328 V2.2.2 |
| Output power | $2 \times 196-384) \mathrm{W}$ | Dimming curve | Linear | Cerrification | CE,EMC,LVD, RED |
| Output type | Constant voltage | PWM frequency | 2 KHz (default) | Environment |  |
|  |  | Package |  | Operation temperature | Ta: $-30^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| Warranty |  | Size | $\mathrm{L} 178 \times \mathrm{W} 50 \times \mathrm{H} 38 \mathrm{~mm}$ | Case temperature (Max.) | Tc: $+85^{\circ} \mathrm{C}$ |
| Warranty | 5 years | Gross weight | 0.126 kg | Prating | IP20 |

## 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 Match key

Match:
Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.
The LED indicator fast flash a few times means match is successful.

Delete:
Press and hold match key for 5 s to delete all match,
The LED indicator fast flash a few 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.

Push Switch
 Conventional $1 \mathrm{~mm}^{2}$ can withstand 10 A 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: 1. Long press the match key for 15 s to enable the continuous switch off-on two times rapidly to switch 3 levels color temperature function (This feature is disabled by factory default). Long press the match key for 10 s to restore the factory setting.
2. 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.
Light on/off fade time
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 3 s ,
the indicator light of LED controller blinks 3 times.
Long press match key 10 s , restore factory default parameter, the light on/off time restores to 0.5 s .

## Push Dim

| Click | ON/OFF |
| :--- | :--- |
| Long press(> 1 s) from OFF | Color temperature UP/DOWN <br> (turn off and turn on to return dimming) |
| Long press(> 1 s) from ON | Dimming UP/DOWN |

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching(momentary) wall switchs.
If more than one controller are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to $100 \%$. This means there is no need for any additional synchrony wire in larger installations.
We recommend the number of controllers connected to a push switch does not exceed 25 pieces, The maximum length of the wires from push to controller should be no more than 20 meters.

## Dual color control

WW=Warm white LED CW=Cool white LED Each channel can supply up to $192 \mathrm{~W}(@ 24 \mathrm{~V})$ and white balance can be controlled as such:

| Color temperature | Cool white | Neutral white | Warm white |
| :---: | :---: | :---: | :---: |
| Power distribution | $\mathrm{WW}=0 \mathrm{~W}, \mathrm{CW}=192 \mathrm{~W}$ | $\mathrm{WW}=96 \mathrm{~W}, \mathrm{CW}=96 \mathrm{~W}$ | $\mathrm{WW}=192 \mathrm{~W}, \mathrm{CW}=0 \mathrm{~W}$ |



## Installation Precautions

1. The products shall not be stacked, the distance should be $\geq 20 \mathrm{~cm}$, 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 $\geq 20 \mathrm{~cm}$ to avoid radiation interference of the switching power supply.
3. The installation height shall be $\geq 1 \mathrm{~m}$ from the floor 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 $\geq 20 \mathrm{~cm}$ to avoid signal attenuation and shorten the remote distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of $\geq 20 \mathrm{~cm}$ to avoid signal interference.
