# PUSHRF24VDC

4 Channels/Push Dim/Wireless remote control/Auto-transmitting/Synchronize/Wall junction box mounting

## Features

- RF + Push LED controller, 4 channel constant voltage output.
- Set as single color, dual color, RGB or RGBW controller by DIP switch.
- Match with 2.4G 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.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Easy to be placed in standard wall junction box behind a push switch.

FC CE RoHS EMC LVD RED

## Technical Parameters

| Input and Output | |
|---|---|
| Input voltage | 12-24VDC |
| Input current | 12.5A |
| Output voltage | 4 x (12-24)VDC |
| Output current | 4CH,3A/CH |
| Output power | 4 x (36-72)W |
| Output type | Constant voltage |

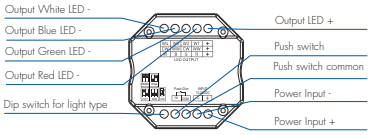
| Dimming data | |
|---|---|
| Input signal | RF 2.4GHz + Push Dim |
| Control distance | 30m(Barrier-free space) |
| Dimming gray scale | 4096 (2^12) levels |
| Dimming range | 0-100% |
| Dimming curve | Logarithmic |

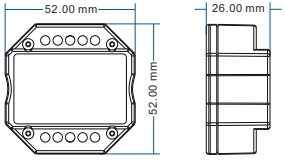
| Safety and EMC | |
|---|---|
| EMC standard (EMC) | EN301 489,EN 62479 |
| Safety standard(LVD) | EN60950 |
| Radio Equipment(RED) | EN300 328 |
| Certification | CE,EMC,LVD,RED |

| Environment | |
|---|---|
| Operation temperature | Ta: -30°C ~ +55°C |
| Case temperature (Max.) | Tc: +85°C |
| IP rating | IP20 |

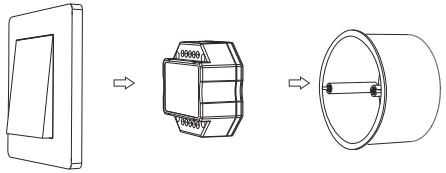
| Protection | |
|---|---|
| Protection | Reverse Polarity |

## Mechanical Structures and Installations



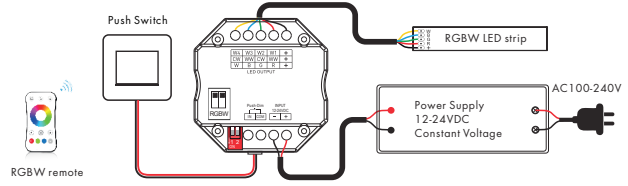




## Typical Wall Junction Box Mounting

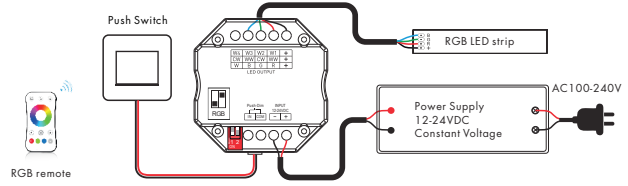


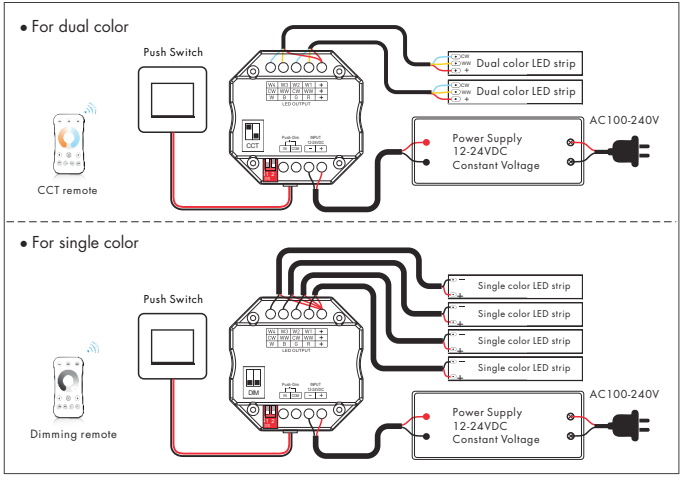
## Wiring Diagram

- For RGBW




- For RGB






## Push Dim

| | | |
|---|---|---|
| Single color | Click | ON/OFF |
| | Double Click | Turn on at 100% or 10%( night light) and vice-versa |
| | Long press(>1s) from OFF | Dimming UP/DOWN |
| | Long press(>1s) from ON | Dimming UP/DOWN |
| Dual Color | Click | ON/OFF |
| | Double Click | Turn on at 100% or 10%( night light) and vice-versa |
| | Long press(>1s) from OFF | Color temperature UP/DOWN (turn off and turn on to return dimming) |
| | Long press(>1s) from ON | Dimming UP/DOWN |
| RGB | 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;<br>If on white mode dimming UP/DOWN |
| | Long press(>1s) from ON | If on color mode start/stop color rotation;<br>If on white mode dimming UP/DOWN |
| RGBW | Click | ON/OFF |
| | Double Click | Change between color mode, white mode (W channel) and color+W mode |
| | Long press(>1s) from OFF | If on color mode change rotation speed;<br>If on white mode or color+W mode, W dimming UP/DOWN |
| | Long press(>1s) from ON | If on color mode start/stop color rotation;<br>If on white mode or color+W mode, W 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 DIP switch

Match:
Change DIP switch setting, immediately short press zone key of the remote.

### Use Power Restart

Match:
Switch off the power, then switch on power again, immediately short press zone key 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 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

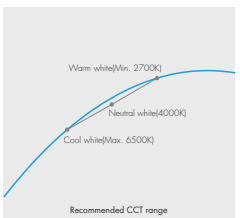
| No. | Name | No. | Name |
|---|---|---|---|
| 1 | RGB jump | 6 | RGB fade in and out |
| 2 | RGB smooth | 7 | Red fade in and out |
| 3 | 6 color jump | 8 | Green fade in and out |
| 4 | 6 color smooth | 9 | Blue fade in and out |
| 5 | Yellow cyan purple smooth | 10 | White fade in and out |

## Dual color control

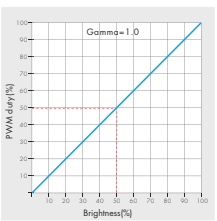
CH1,CH3=Warm white LED
CH2,CH4=Cool white LED
Each channel can supply up to 72W(@24V) and white balance can be controlled as such:

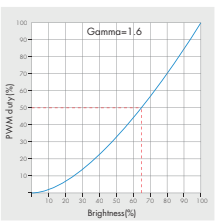
| Color temperature | Cool white | Neutral white | Warm white |
|---|---|---|---|
| Power distribution | CH1=0W,CH2=72W<br>CH3=0W,CH4=72W | CH1=36W,CH2=36W<br>CH3=36W,CH4=36W | CH1=72W,CH2=0W<br>CH3=72W,CH4=0W |

Linear dual color tuning




Dimming curve for CCT




Dimming curve for RGBW/RGB/DIM