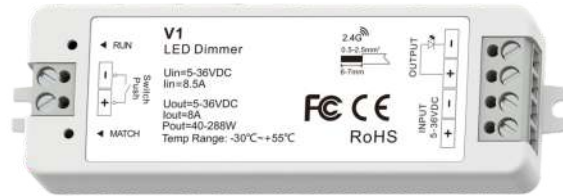


# Single Color LED Controller



Model No.: V1

1 Channel/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize/Push Dim



FC CE RoHS emc RED

## Features

- 4096 levels 0-100% dimming smoothly without any flash.
- Match with Skydance's 2.4G single zone or multiple zone dimming remote control.
- One RF controller accept up to 10 remote control.
- 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.

## Technical Parameters

| Input and Output |                                       |
|------------------|---------------------------------------|
| Input voltage    | 5-36VDC                               |
| Input current    | 8.5A                                  |
| Output voltage   | 5-36VDC                               |
| Output current   | 1CH,8A                                |
| Output power     | 40W/96W/192W/288W<br>(5V/12V/24V/36V) |
| Output type      | Constant voltage                      |

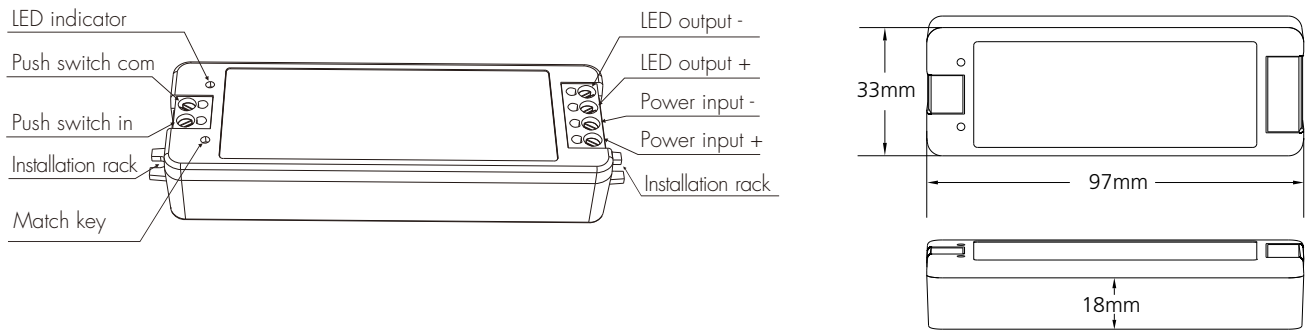
| Dimming data     |                      |
|------------------|----------------------|
| Input signal     | RF 2.4GHz + Push Dim |
| Control distance | 30m                  |
| Dimming level    | 4096 levels          |
| Dimming range    | 0-100%               |
| Dimming curve    | Logarithmic          |
| PWM Frequency    | 500Hz (default)      |

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

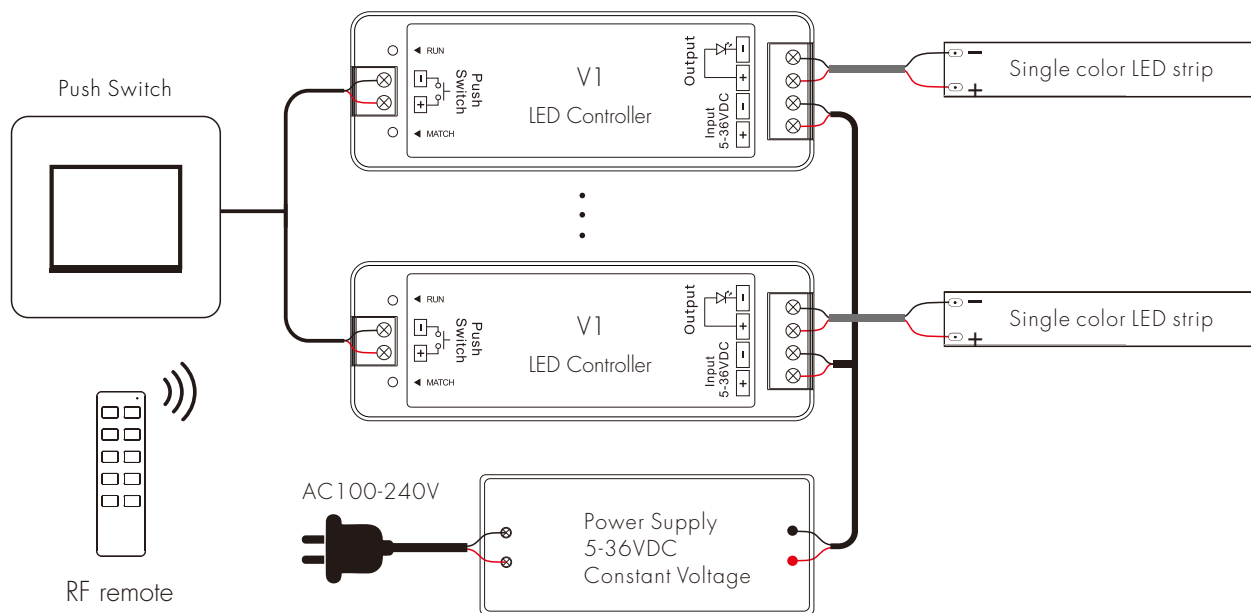
| Environment             |                     |
|-------------------------|---------------------|
| Operation temperature   | Ta: -30 °C ~ +55 °C |
| Case temperature (Max.) | Tc: +85 °C          |
| IP rating               | IP20                |

| Warranty and Protection |                  |
|-------------------------|------------------|
| Warranty                | 5 years          |
| Protection              | Reverse Polarity |

## Mechanical Structures and Installations



## Wiring Diagram



## 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.

**Delete:**  
Press and hold match key for 5s to delete all match, The light blinks 5 times means all matched remotes were deleted.

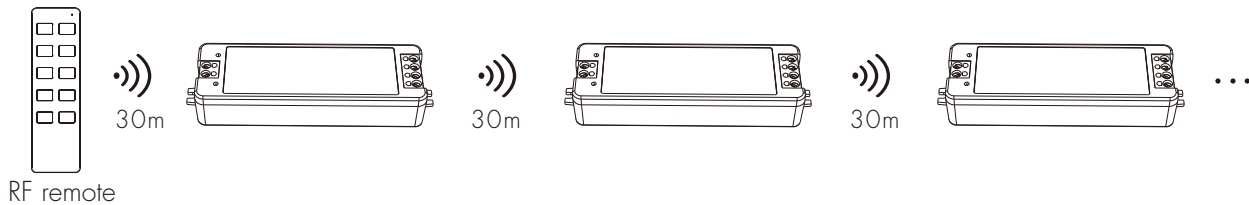
### Use Power Restart

**Match:**  
Switch off the power, then switch on power 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 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.

## Application notes

### 1. All the receivers in the same zone.



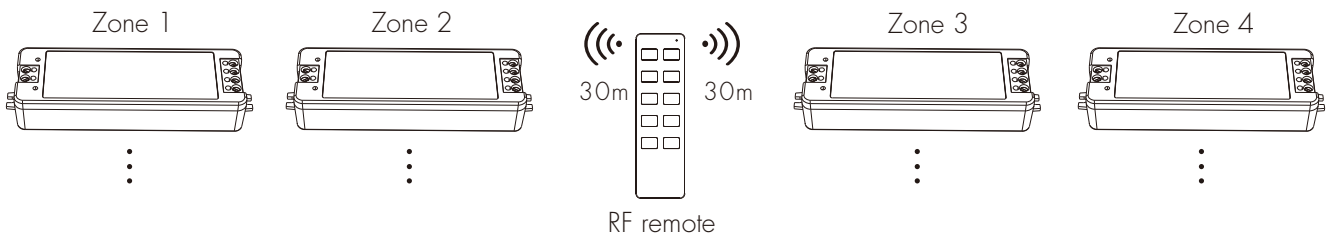
**Auto-transmitting:** One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be limitless.

**Auto-synchronization:** Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote.

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 than 15m.

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

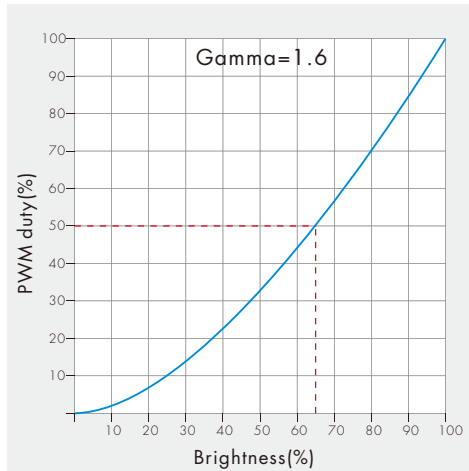


## Push Dim Function

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

- **Short press:**  
Turn on or off light.
- **Long press (1-6s):**  
Press and hold to step-less dimming,  
With every other long press, the light level goes to the opposite direction.
- **Dimming memory:**  
Light returns to the previous dimming level when switched off and on again, even at power failure.
- **Synchronization:**  
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.

## Dimming Curve



## Malfunctions Analysis & Troubleshooting

| Malfunctions   | Causes   | Troubleshooting   |
|--|--|---|
| No light   | <ol style="list-style-type: none"> <li>1. No power.</li> <li>2. Wrong connection or insecure.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Check the power.</li> <li>2. Check the connection.</li> </ol>   |
| Uneven intensity between front and rear, with voltage drop | <ol style="list-style-type: none"> <li>1. Output cable is too long.</li> <li>2. Wire diameter is too small.</li> <li>3. Overload beyond power supply capability.</li> <li>4. Overload beyond controller capability.</li> </ol> | <ol style="list-style-type: none"> <li>1. Reduce cable or loop supply.</li> <li>2. Change wider wire.</li> <li>3. Replace higher power supply.</li> <li>4. Add power repeater.</li> </ol> |
| No response from the remote                                | <ol style="list-style-type: none"> <li>1. The battery has no power.</li> <li>2. Beyond controllable distance.</li> <li>3. The controller did not match the remote.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Replace battery.</li> <li>2. Reduce remote distance.</li> <li>3. Re-match the remote.</li> </ol>  |

# WiFi & RF 5 in1 LED Controller

Model No.: WT5

Tuya APP cloud control/Voice control/5 Channels/1-5 color/DC power socket input/Wireless remote control



FC CE RoHS EMC LVD RED

## Features

- 5 in 1 function, used for control RGB, RGBW, RGB+CCT, color temperature or single color LED strip.
- DC power socket input and 5 channel constant voltage output.
- Tuya APP cloud control, support on/off, RGB color, color temperature and brightness adjust, delay turn on/off light, timer run, scene and music play function.
- Voice control, support amazon ECHO and TmallGenie smart speaker.
- Match with RF 2.4G remote control optional.
- User need set light type by press key before Tuya APP network connection and match RF remote of the same light type.
- Each WT5 controller can also work as WiFi-RF converter, then use Tuya APP to control one or more RF LED controller or RF LED dimming driver synchronously.

## Technical Parameters

### Input and Output

|                |                  |
|----------------|------------------|
| Input voltage  | 12-24VDC         |
| Input current  | 15.5A            |
| Output voltage | 5 x [12-24]VDC   |
| Output current | 5CH,3A/CH        |
| Output power   | 5 x [36-72]W     |
| Output type    | Constant voltage |

### Dimming data

|                    |                                |
|--------------------|--------------------------------|
| Input signal       | Tuya APP + RF 2.4GHz           |
| Control distance   | 30m(Barrier-free space)        |
| Dimming gray scale | 4096 (2 <sup>12</sup> ) levels |
| Dimming range      | 0-100%                         |
| Dimming curve      | Logarithmic                    |
| PWM Frequency      | 500Hz (default)                |

### Safety and EMC

|                       |                             |
|-----------------------|-----------------------------|
| EMC standard (EMC)    | EN55015,EN61547             |
| Safety standard(LVD)  | EN61347,EN62493             |
| Radio Equipment(RED)  | EN300 440,EN50663,EN301 489 |
| Certification(CE-RED) | Safety+EMC+RF               |

### Environment

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

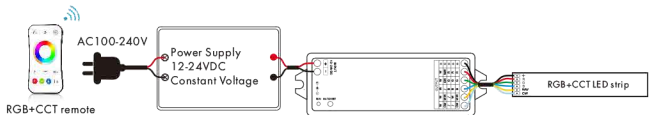
### Warranty and Protection

|            |                               |
|------------|-------------------------------|
| Warranty   | 5 years                       |
| Protection | Reverse polarity<br>Over-heat |



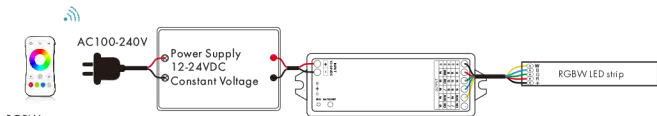
## Wiring Diagram

### • For RGB+CCT



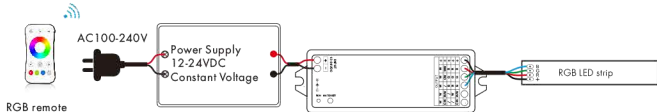
Press and hold match/set key for 16s, until the RUN LED indicator turn blue, then release, the controller will become RGB+CCT type, then do smart config by tuya APP, or short press match key to match with RGB+CCT RF remote.

### • For RGBW



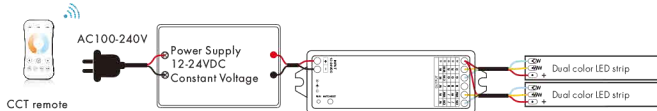
Press and hold match/set key for 14s, until the RUN LED indicator turn green, then release, the controller will become RGBW type, then do smart config by tuya APP, or short press match key to match with RGBW RF remote.

### • For RGB



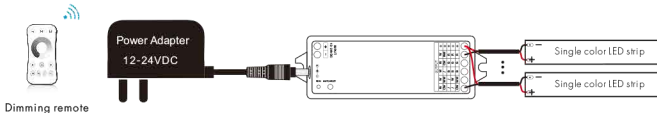
Press and hold match/set key for 12s, until the RUN LED indicator turn red, then release, the controller will become RGB type, then do smart config by tuya APP, or short press match key to match with RGB RF remote.

### • For dual color CCT



Press and hold match/set key for 10s, until the RUN LED indicator turn yellow, then release, the controller will become CCT type, then do smart config by tuya APP, or short press match key to match with CCT RF remote.

### • For single color



Press and hold match/set key for 8s, until the RUN LED indicator turn white, then release, the controller will become DIM type, then do smart config by tuya APP, or short press match key to match with dimming RF remote.

Note: User can connect constant voltage power supply or power adapter as power input.

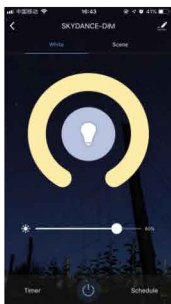
## Tuya APP network connection

Press and hold Match/Set key for 2s, or push twice Match/Set key fastly, or when press and hold Match/Set key for 8-16s to set 5 kinds light type:  
Clear previous network connection, enter Smart config mode, the purple LED indicator fast flash.

Press and hold Match/Set key for 5s:  
Clear previous network connection, enter AP config mode, the purple LED indicator fast slow.  
If smart config failed, please try AP config.

If Tuya APP network connection succeed, the RUN LED indicator will stop flash purple, and turn corresponding light type color (White: DIM, Yellow: CCT, Red: RGB, Green: RGBW, Blue: RGB+CCT).  
and in Tuya APP, you can find SKYDANCE-RGB+CCT device (or other DIM, CCT, RGB or RGBW).

## Tuya APP interface



### White interface

For DIM type:  
Touch brightness slide to adjust brightness.

For RGB type:  
Touch brightness slide, get RGB mixed white firstly, then to adjust white brightness.

For RGBW type:  
Touch brightness slide, adjust white channel brightness.



### Color temperature interface

For CCT type:  
Touch color wheel to adjust color temperature.  
Touch brightness slide to adjust brightness.

For RGB+CCT type:  
Touch color wheel to adjust color temperature, RGB will turn off automatically.  
Touch brightness slide to adjust white brightness.





## Colour interface

For RGB or RGBW type:

Touch color wheel to adjust static RGB color.

Touch brightness slide to adjust color brightness.

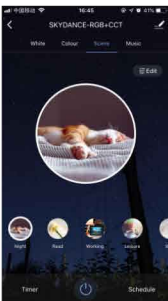
Touch saturation slide to adjust color saturation, namely gradient from the current color to white (RGB mixed).

For RGB+CCT type:

Touch color wheel to adjust static RGB color, WW/CW will turn off automatically.

Touch brightness slide to adjust color brightness.

Touch saturation slide to adjust color saturation, namely gradient from the current color to white (RGB mixed).



## Scene interface

The 1-4 scene is static color for all light type.

the inner color of these scene can be editable.

The 5-8 scene is dynamic mode for RGB, RGBW, RGB+CCT type,

such as green fade in and fade out, RGB jump, 6 color jump, 6 color smooth.



## Music, Timer, Schedule

The music play can use smart phone music player or micro-phone as music signal input.

The Timer key can turn on or turn off light in the next 24 hours.

The Schedule key can add multiple timers to turn on or turn off light according to different time periods.

## WT5 match remote control (Optional)

End user can choose the suitable match/delete ways. Two options are offered for selection:

### Use the WT5's Match key

Match:

Short press match key of WT5, immediately press on/off key (single zone remote) or zone key (multiple zone remote) on the remote. The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key of WT5 for 20s, The LED indicator fast flash a few times means all matched remotes were deleted.

### Use Power Restart

Match:

Switch off the power of WT5, then switch on power 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 WT5, then switch on power 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.

## WT5 work as WiFi-RF converter to match RF LED controller or dimming driver

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 of the controller, immediately press on/off key on the Tuya APP. The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key of the controller for 5s, The LED indicator fast flash a few times means all matched remotes were deleted.

### Use Power Restart

Match:

Switch off the power of the controller, then switch on power again, immediately short press on/off key 3 times on the Tuya APP. The light blinks 3 times means match is successful.

Delete:

Switch off the power of the controller, then switch on power again, immediately short press on/off key 5 times on the Tuya APP. The light blinks 5 times means all matched remotes were deleted.

## RGB dynamic mode list

For RGB/RGBW:

| 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 |

For RGB+CCT:

| 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   | Color temperature smooth | 10  | White fade in and out |