

# WiFi & RF 5 in1 LED Controller



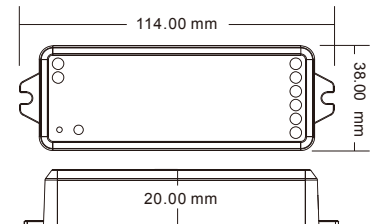
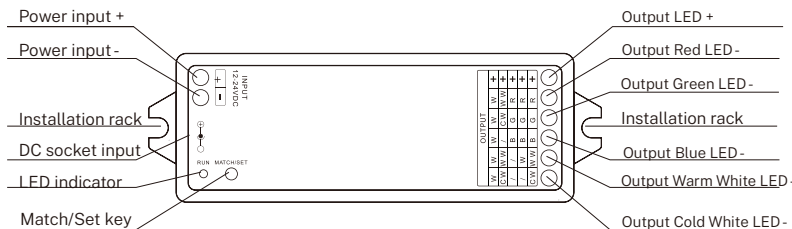
## Features

- 5-in-1 function, used to control RGB, RGBW, RGB+CCT, colour temperature, or single colour LED strips.
- DC power socket input and 5-channel constant voltage output.
- Smart life APP cloud control; supports on/off, RGB colour, colour temperature and brightness adjustment, delayed turn on/off, timer, scene editing, and music play functions.
- Voice control; supports Amazon Alexa, Google Assistant.
- Compatible with optional RF 2.4G remote control.
- You must set the light type before connecting it to the Smartlife app. The same applies to the RF Remote.
- Each WT5 controller can also operate as a Wi-Fi-to-RF gateway, allowing the SmartLife app to control one or multiple RF LED controllers or RF LED dimming drivers simultaneously.
- Light on/off fade time of 3s selectable.

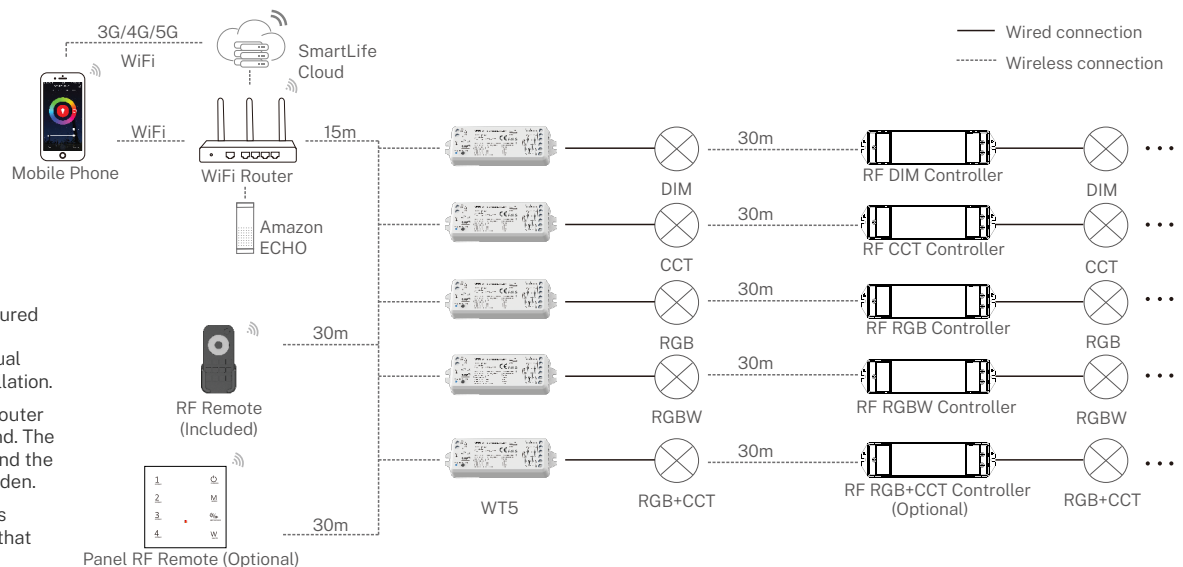
## Technical Specifications

| Input and Output |                    | Dimming Data            |                                | Safety and EMC          |  |
|------------------|--------------------|-------------------------|--------------------------------|-------------------------|--|
| Input Voltage    | 12-24VDC           | Input Signal            | Tuya APP + RF 2.4GHz           | EMC Standard (EMC)      | ETSI EN 301 489-1 V2.2.3                         |
| Input Current    | 15.5A              | Control Distance        | 30m (barrier-free space)       | Safety Standard (LVD)   | ETSI EN 301 489-17 V3.2.4                        |
| Output Voltage   | 5 × (12-24)VDC     | Dimming Grey Scale      | 4096 (2 <sup>12</sup> ) levels | Radio Equipment (RED)   | EN 62368-1:2020+A11:2020                         |
| Output Current   | 5CH, 3A/CH         | Dimming Range           | 0-100%                         | Certification           | ETSI EN 300 328 V2.2.2                           |
| Output Power     | 5 × 36-72W         | Dimming Curve           | Logarithmic                    |                         | CE, EMC, LVD, RED                                |
| Output Type      | Constant voltage   | PWM Frequency           | 1000Hz (default)               |                         |  |
| Package Contents |                    | Environment             |                                | Warranty and Protection |  |
| Size             | L120 × W43 × H35mm | Operating Temperature   | -30°C ~ +55°C                  | Warranty                | 5 Years  |
| Gross Weight     | 0.055kg            | Case Temperature (Max.) | Tc: +85°C                      | Protection              | Reverse Polarity<br>Overheating<br>Short Circuit |

## Mechanical Structures and Installations



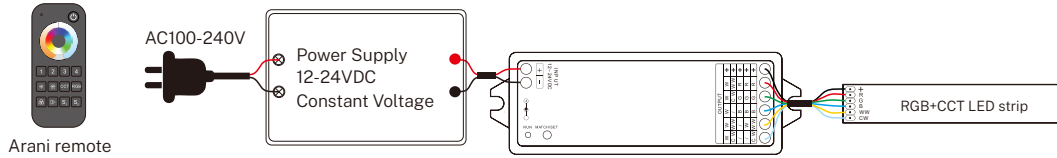
## System wiring



## Wiring Diagram

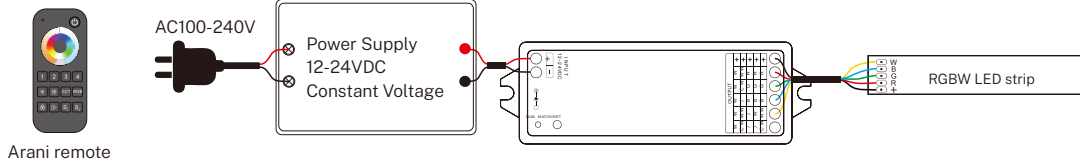


For RGB+CCT



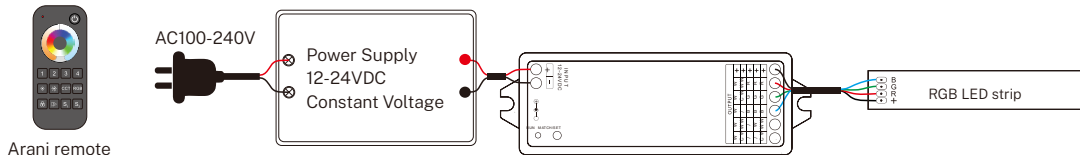
Press and hold the Match/Set key for 16 seconds until the RUN LED indicator turns blue, then release it. The controller will switch to RGB+CCT mode. You can then configure it using the SmartLife app or briefly press the Match key to pair it with an RGB+CCT RF remote.

For RGBW



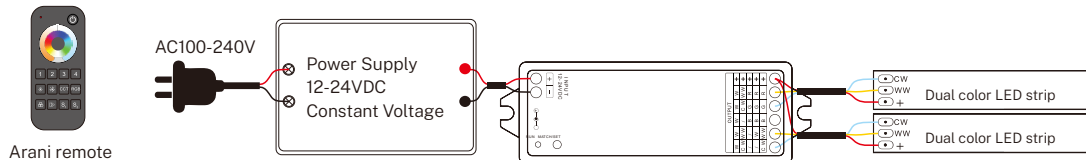
Press and hold the Match/Set key for 14 seconds until the RUN LED indicator turns green, then release it. The controller will switch to RGBW mode. You can then configure it using the SmartLife app or briefly press the Match key to pair it with an RGBW RF remote.

For RGB



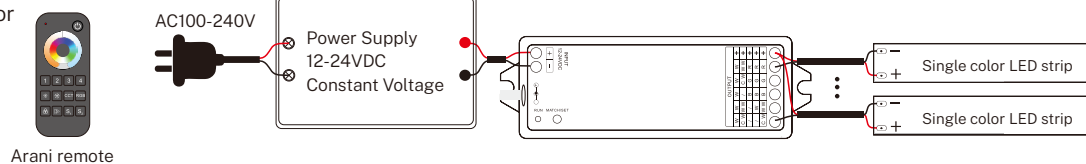
Press and hold the Match/Set key for 12 seconds until the RUN LED indicator turns red, then release it. The controller will switch to RGB mode. You can then configure it using the SmartLife app or briefly press the Match key to pair it with an RGB RF remote.

For dual color CCT



Press and hold the Match/Set key for 10 seconds until the RUN LED indicator turns yellow, then release it. The controller will switch to CCT mode. You can then configure it using the SmartLife app or briefly press the Match key to pair it with a CCT RF remote.

For single color



Press and hold the Match/Set key for 8 seconds until the RUN LED indicator turns white, then release it. The controller will switch to DIM mode. You can then configure it using the SmartLife app or briefly press the Match key to pair it with an RF dimming remote.

Note:

1. The power input can be supplied by either a constant voltage power supply or a power adapter.
2. Press and hold the Match/Set key for 2 seconds to cycle through the five light types in sequence.
3. For RGB+CCT or CCT light types, repeatedly switching the power off and on will cycle through three color temperature levels in sequence: WW, NW, and CW.
4. Turn the power off, then back on, and repeat as needed.
5. Immediately press the Match key three times to switch the light on/off transition time between 3 seconds and 0.5 seconds.

## SMARTLIFE APP NETWORK CONNECTION



Android



iOS

Download and Open the App

Search for "SmartLife" in the App Store, or scan the QR code to download the app.

After installation, register and log in.

### App Pairing / Network Configuration

#### Method 1

Quickly press the Match/Set key twice.

Alternatively, when pressing and holding the Match/Set key for 8 to 16 seconds to select the light type, the previous network will be cleared automatically and the controller will enter Wi-Fi configuration mode. The LED indicator will flash rapidly, and the output LED will flash 10 times.

#### Method 2

Press and hold the Match/Set key for 2 seconds to cycle through the five light types in sequence.

Please note that this operation does not automatically clear the previous network connection.

#### Method 3

Press and hold the Match/Set key for 5 seconds to clear the previous network connection and enter Wi-Fi configuration mode. The LED indicator will flash rapidly.

#### Method 4

Switch the power ON and OFF five consecutive times to clear the previous network connection and enter Wi-Fi configuration mode. The output LED will flash 10 times.

### Successful Network Connection

If the SmartLife app network connection is successful, the RUN LED indicator will stop flashing and turn to the color corresponding to the selected light type:

|                   |                    |                 |                    |                      |
|-------------------|--------------------|-----------------|--------------------|----------------------|
| <b>White:</b> DIM | <b>Yellow:</b> CCT | <b>Red:</b> RGB | <b>Green:</b> RGBW | <b>Blue:</b> RGB+CCT |
|-------------------|--------------------|-----------------|--------------------|----------------------|

In the SmartLife app, the displayed device type will depend on the selected light mode: RGB+CCT, DIM, CCT, RGB, or RGBW.

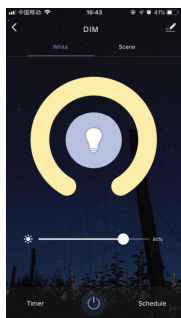
### Bluetooth Control

When controlling the light with the SmartLife app, if the Wi-Fi connection is weak, the light can still be controlled through Bluetooth within Bluetooth range.

Note:

The light cannot be controlled directly via Bluetooth unless Wi-Fi configuration has been completed first.

### APP interface



#### White Interface

##### For DIM mode:

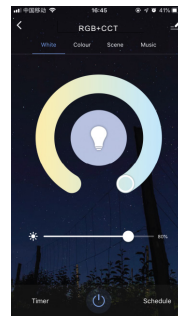
Touch the brightness slider to adjust the brightness.

##### For RGB mode:

Touch the brightness slider to first obtain RGB mixed white, then adjust the white brightness.

##### For RGBW mode:

Touch the brightness slider to adjust the white channel brightness.



#### Colour Temperature Interface

##### For CCT mode:

Touch the color wheel to adjust the color temperature. Touch the brightness slider to adjust the brightness.

##### For RGB+CCT mode:

Touch the color wheel to adjust the color temperature. The RGB channels will turn off automatically. Touch the brightness slider to adjust the white brightness.



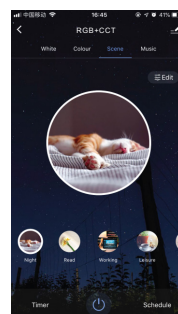
#### Colour interface

##### For RGB or RGBW mode:

Touch the color wheel to adjust the static RGB color. Touch the brightness slider to adjust the color brightness. Touch the saturation slider to adjust the color saturation, creating a gradual transition from the current color to white (RGB mixed).

##### For RGB+CCT mode:

Touch the color wheel to adjust the static RGB color. The WW/CW channels will turn off automatically. Touch the brightness slider to adjust the color brightness. Touch the saturation slider to adjust the color saturation, creating a gradual transition from the current color to white (RGB mixed).



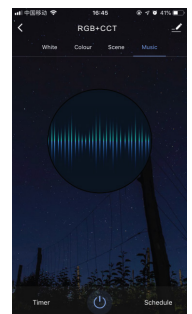
#### Scene interface

Scenes 1 to 4 are static color scenes for all light types. The color assigned to each of these scenes can be edited.

Scenes 5 to 8 are dynamic modes for RGB, RGBW, and RGB+CCT light types, such as green fade in/out, RGB jump, 6-color jump, and 6-color smooth transition.

#### Music, Timer, Schedule

The music play function can use a smartphone music player or microphone as the music signal input. The Timer function can turn the light on or off within the next 24 hours. The Schedule function can add multiple timers to turn the light on or off according to different time periods.



## WT5 Pair Remote Control (Optional)



Choose the appropriate pairing or unpairing method from the two options below:

### Use the WT5's Pair key

#### Pair:

Short press the pair key on the WT5, then immediately press the on/off key (single zone remote) or zone key (multiple zone remote) on the remote. The LED indicator flashing quickly a few times means pairing is successful.

#### Delete:

Press and hold the pair key on the WT5 for 20s. The LED indicator flashing quickly a few times means all paired remotes have been deleted.

### Power On/Off Pairing

#### Match:

Switch off the power of the WT5, then switch the power back on, and repeat again. Immediately short press the on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinking 3 times means pairing is successful.

#### Delete:

Switch off the power of the WT5, then switch the power back on, and repeat again. Immediately short press the on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinking 5 times means all paired remotes have been deleted.

## WT5 as a Wi-Fi-to-RF Converter for RF LED Controllers or Dimming Drivers (Optional)

Choose the appropriate pairing or unpairing method from the two options below:

### Use the controller's Pair key

#### Match:

Short press the pair key on the controller, then immediately press the on/off key on the Tuya APP. The LED indicator flashing quickly a few times means pairing is successful.

#### Delete:

Press and hold the pair key on the controller for 5s. The LED indicator flashing quickly a few times means the pairing has been deleted.

### Power On/Off Pairing

#### Match:

Switch off the power of the controller, then switch the power back on, and repeat again. Immediately short press the on/off key 3 times on the Tuya APP. The light blinking 3 times means pairing is successful.

#### Delete:

Switch off the power of the controller, then switch the power back on, and repeat again. Immediately short press the on/off key 5 times on the Tuya APP. The light blinking 5 times means the pairing has been deleted.

## 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 colour jump             | 8   | Green fade in and out |
| 4   | 6 colour 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 colour jump            | 8   | Green fade in and out |
| 4   | 6 colour smooth          | 9   | Blue fade in and out  |
| 5   | Color temperature smooth | 10  | White fade in and out |