Manuals+ — User Manuals Simplified.

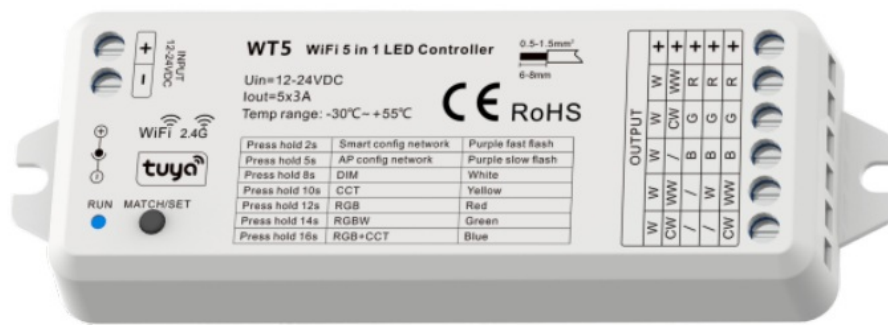# Power LITE FLS-RC-WIFI and RF 5 in1 LED Controller User Guide

Contents

◆ POWER-LITE®

Power LITE FLS-RC-WIFI and RF 5 in1 LED Controller

Product Information

The WiFi & RF 5 in1 LED Controller is a versatile product that allows you to control your LED lights through a Tuya APP cloud control, voice control, wireless remote control, or RF LED dimming driver synchronously. The controller has 5 channels for controlling 1-5 colors and a DC power socket input. It has a constant voltage output type and comes with safety and EMC certifications. The controller has a warranty of 5 years and protection against reverse polarity, over-heat, and short circuit.

Features

- LVD RED
- Controller or RF LED dimming driver synchronously

Product 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^{12}) 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 OC ~ +55 OC
- **Case temperature (Max.):** T c: +85OC
- **IP rating:** IP20

Mechanical Structures and Installations:

The controller has a power input + and power input -, installation rack, DC socket input, LED indicator, and match/set key. The output has LED +, output red LED, output green LED, output blue LED, output warm white LED, and output cold white LED.

Warranty and Protection

- **Warranty:** 5 years
- **Protection:** Reverse polarity, Over-heat, Short circuit

Product Usage Instructions

1. Connect the power input + and power input – to the 12-24VDC power supply.
2. Connect the LED strips to the output LED +, output red LED, output green LED, output blue LED, output warm white LED, and output cold white LED.
3. If using RGB+CCT LED strips, press and hold the match/set key for 16s until the RUN LED indicator turns 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.
4. If using RGBW LED strips, press and hold the match/set key for 14s until the RUN LED indicator turns 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.
5. If using RGB LED strips, connect them to the output LED +, output red LED, output green LED, and output blue LED.
6. Download Tuya APP and connect the controller to your WiFi router (2.4GHz band only).
7. You can now control your LED lights through the Tuya APP cloud control, voice control, wireless remote control, or RF LED dimming driver synchronously.

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 WIFI Receiver 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

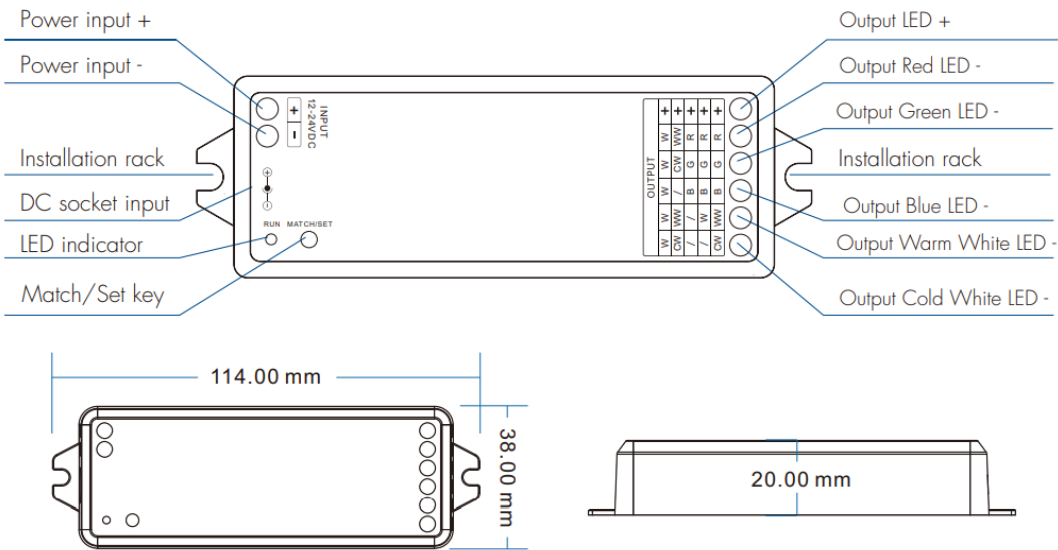| Input and Output	
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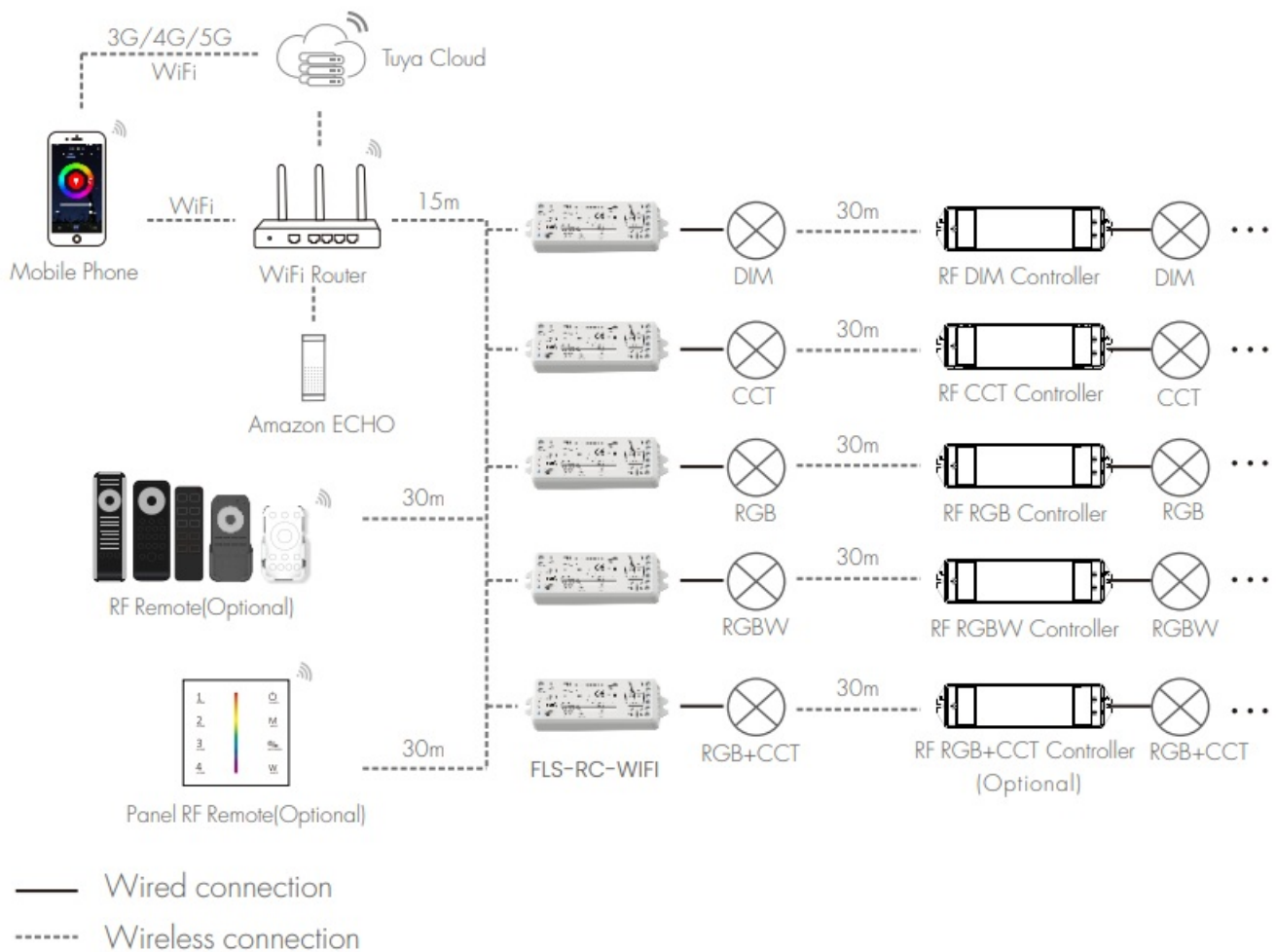| Safety and EMC	
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Environment	
Operation temperature	Ta: -30 OC ~ +55 OC
Case temperature (Max.)	T c: +85OC
IP rating	IP20

Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity Over-heat Short circuit

Mechanical Structures and Installations

Power input +
Power input -
Installation rack
DC socket input
LED indicator
Match/Set key

INPUT 12-24VDC
RUN   MATCH/SET

OUTPUT

Output LED +
Output Red LED -
Output Green LED -
Installation rack
Output Blue LED -
Output Warm White LED -
Output Cold White LED -

114.00 mm

38.00 mm

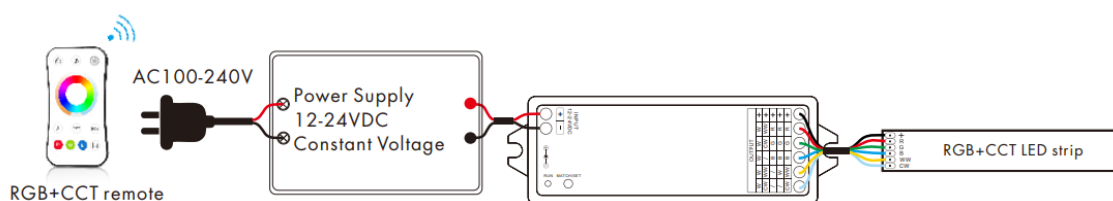20.00 mm

System wiring

Note:

1. The above distance is measured in spacious (no obstacle) environment,
   Please refer to the actual test distance before installation.
2. Please check if the WiFi router net in 2.4G band, the 5G band is not available, and do not hide your router network.
3. Please keep the distance between FLS-RC-WIFI devices and router close, and check the WiFi signals.\

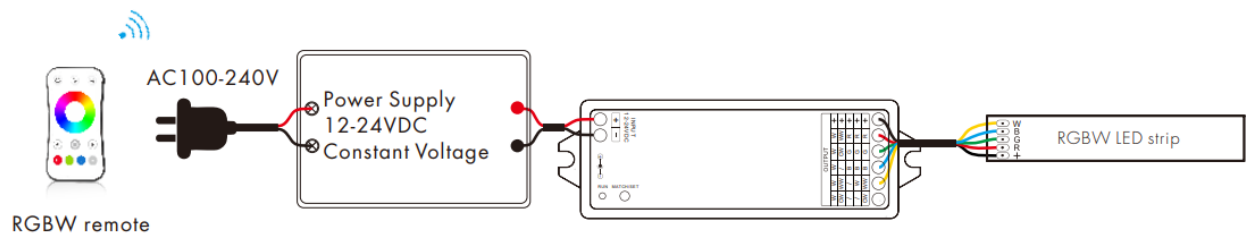## Wiring Diagram

- **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.
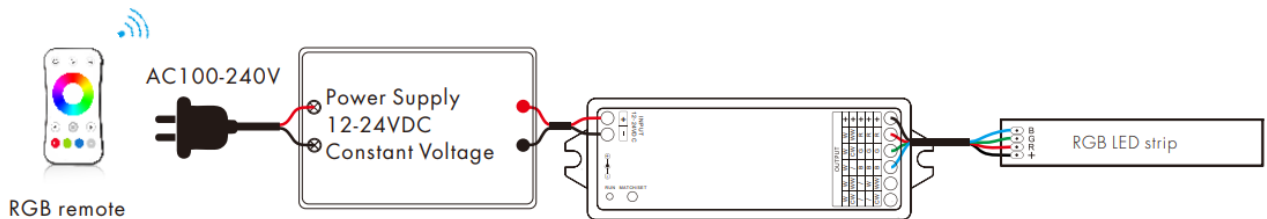

- **For RGBW**

  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
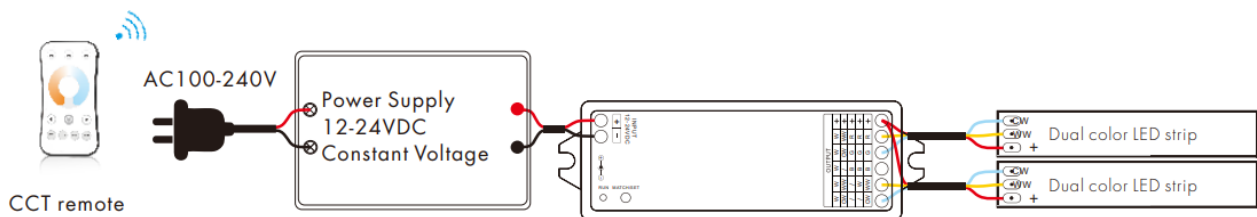
remote.

RGBW 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.
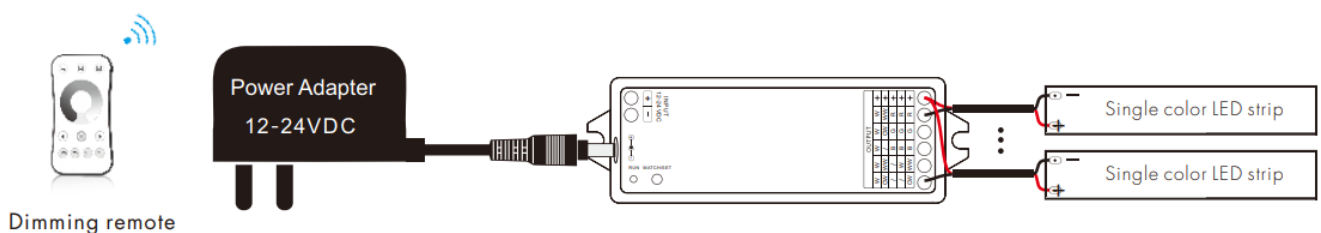

RGB remote

- **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.

CCT 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.

Dimming remote

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:**
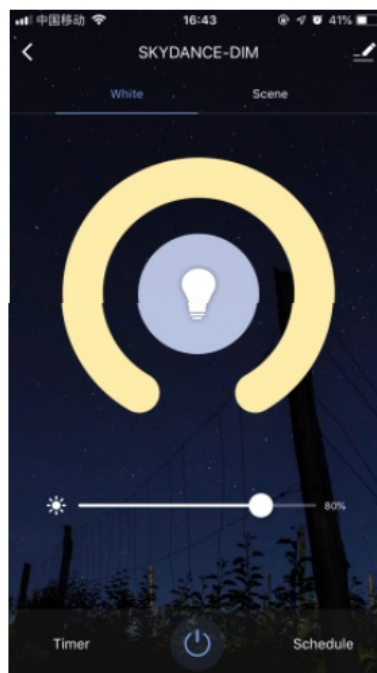
      Touch brightness slide to adjust brightness.
    - **For RGB type:**

      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**
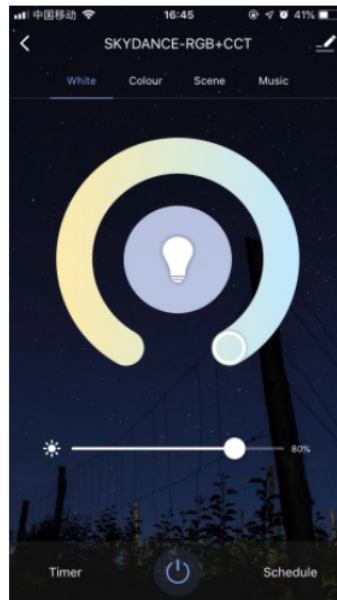   - **For CCT type:**
        - Touch color wheel to adjust color temperature.
        - Touch brightness slide to adjust brightness.
    - **For RGB+CCT type:**

      Touch color wheel to adjust color temperature, RGB will turn off automatically. Touch brightness slide to adjust white brightness.
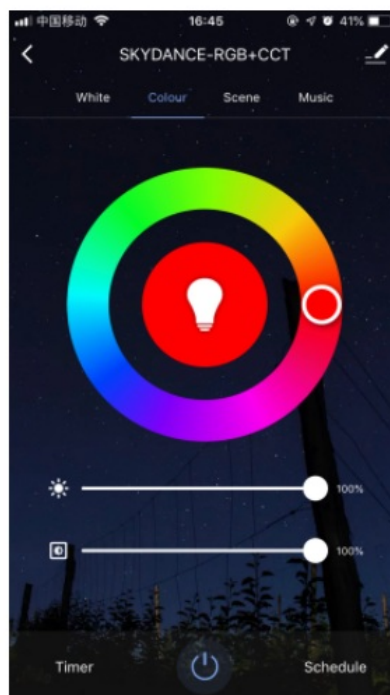
- **Colour interface**
  - **For RGB or RGBW type:**
    - Touch color wheel to adjust static RGB color.
    - Touch brightness slide to adjust color brightness.
    - Touch saturation slide to adjust color saturation, namely gradient from the current color to white(RGB mixed).
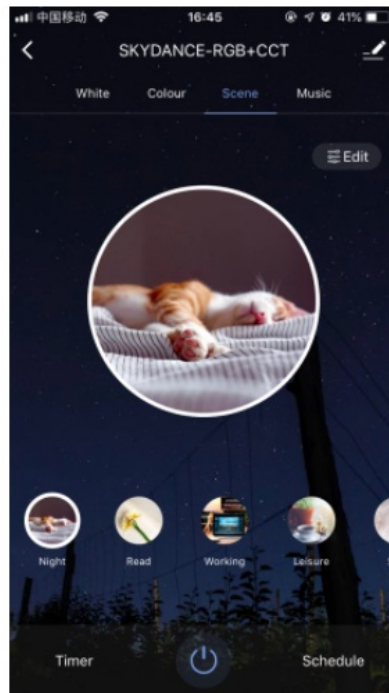 - **For RGB+CCT type:**
    - Touch color wheel to adjust static RGB color, WW/CW will turn off automatically. Touch brightness slide to adjust color brightness.
    - Touch saturation slide to adjust color saturation, namely gradient from the current color to white (RGB mixed).
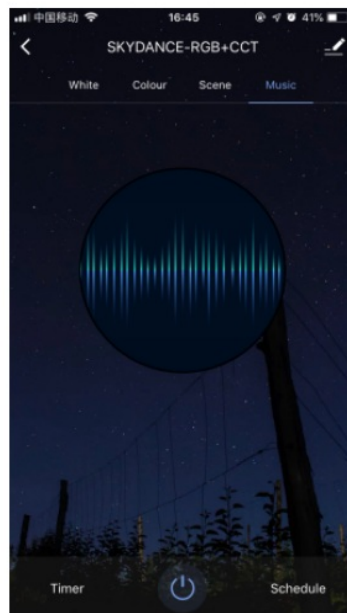

- **Scene interface**
  - The 1-4 scene is static color for all light type. the inner color of these scene can be editable.
  - The 5-8 scene is dynamic mode for RGB, RGBW, RGB+CCT type, such as green fade in and fade out,

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.

WIFI RECEIVER match remote control (Optional)

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

- **Use the WIFI Receiver's Match key**
  - **Match:**
    Short press match key of FLS-RC-WIFI, 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 FLS-RC-WIFI 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 FLS-RC-WIFI, 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 FLS-RC-WIFI, 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.

WIFI RECEIVER can 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 match was 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 match was 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 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

Documents / Resources

Power LITE FLS-RC-WIFI and RF 5 in1 LED Controller [pdf] User Guide
FLS-RC-WIFI and RF 5 in1 LED Controller, FLS-RC-WIFI, and RF 5 in1 LED Controller, 5 in1 LED Controller, LED Controller, Controller