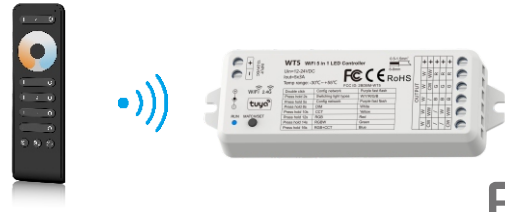# WT5+RS2

WiFi & RF Dual Color LED Controller Set

WiFi+RF

FC CE RoHS

- WiFi &RF 5 in 1 controller , touch wheel RF remote + Tuya smart APP cloud control.
- Tuya smart APP cloud control, support on/off, RGB color, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit and music play function.
- RS2 remote control configuration with ultra sensitive dual color adjustment touch wheel, support to magnet on the back which can be stuck on back holder.
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu voice assistant.
- Each WT5 controller can also work as WiFi-RF converter, then use Tuya smart APP to control one or more RF LED controller or RF LED dimming driver synchronously.
- User need set light type by press WT5's key before Tuya smart APP network connection and match RF remote of the same light type.
- Light on/off fade time 3s selectable.

Technical Parameters

LED Remote

Output signal	RF(2.4GHz)
Work voltage	3VDC(AAAx2)
Work current	<5mA
Standby current	< 10µA
Standby time	1 year
Remote distance	30m(Barrier-free space)
Size	L155×W43×H17.5mm

Dimming data

Input signal	WiFi + 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	1000Hz (default)

Safety and EMC

EMC standard	EN IEC 55015/EN IEC 61547 ETSI EN 301 489-1/-3/-17
Safety standard	EN 61347-1/-2
Radio Equipment	ETSI EN 300 440 ETSI EN 300 328
Certification	CE RoHS FCC

LED Controller

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
Size	L114×W38×H20mm

Environment

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

Package

Size	L160×W91×H28mm
Gross weight	0.214Kg

Warranty

Warranty	5 years

Mechanical Structures and Installations

Controller:

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

Remote:

43.00 mm

17.50 mm

155.00 mm

40.00 mm

53.50 mm

Back holder with magnet

3VDC(AAAx2) Battery
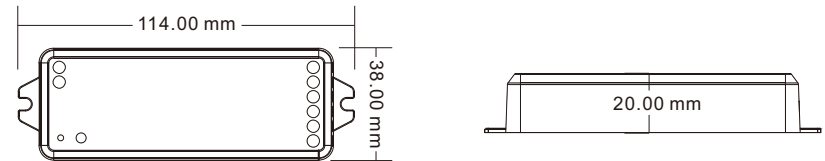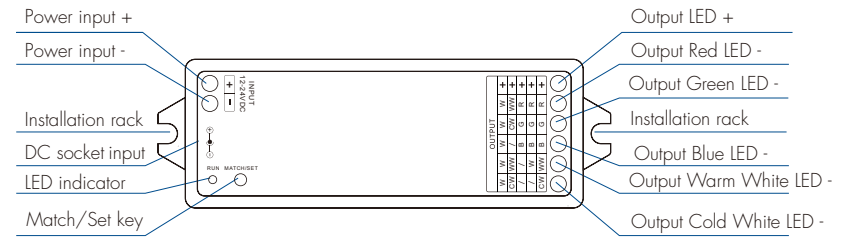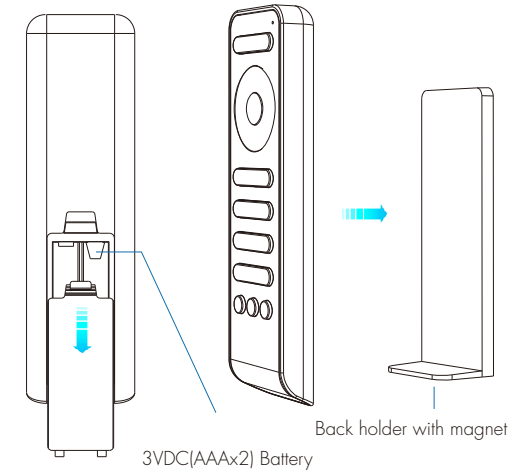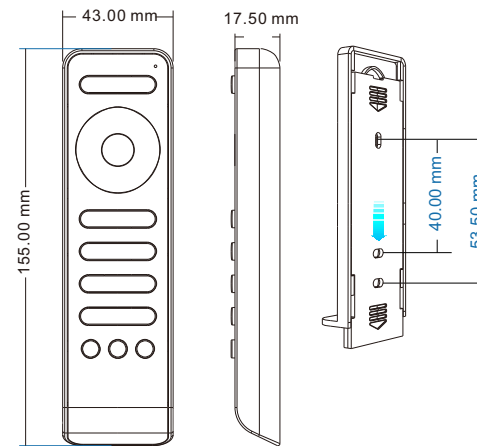
To fix the remote, three options are offered for selection:

Option 1: can be adsorbed directly onto metal surfaces.

Option 2: fix the remote' back holder on the wall with two screws.

Option 3: adhere the remote' back holder to the wall with paster.

Operation

- When turn on light, the indicator display blue. when turn off light, the indicator display red.
- When touch the color wheel, the indicator will display the same color.
- When press or touch operation is invalid (If the light is off), the indicator display red.
- To extend battery life, no touch or press key operation after a few seconds, the touch wheel will enter sleep state, you need press any key to make touch wheel quit sleep state.

Wiring Diagram

RS2 Remote
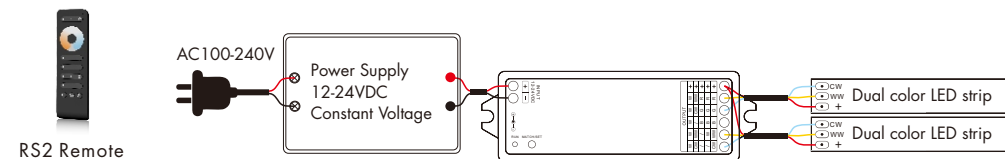
Press and hold match/set key for 10s, until the RUN LED indicator turn yellow, then release, the controller will become CCT type, then do smart config by Tuya smart APP, or short press match key to match with CCT RF remote.

Note:
1. User can connect constant voltage power supply or power adapter as power input.
2. Press and hold Match/Set key for 2s, switch 5 kinds light type in sequence.
3. For RGB+CCT or CCT light type, continuous power on and off will change 3 levels color temperature (WW, NW and CW) in sequence.
4. Switch off the power, then switch on power, repeat again.
   Immediately short press match key 3 times, the light on/off time will change between 3s and 0.5s.

Remote Key Function

Turn on all 4 zone light.

Turn off all 4 zone light.

Touch color temperature wheel.
(Short press multiple zone on key fastly, will select multiple zone, then touch wheel to adjust color temperature synchronously.)

Turn on 1/2/3/4 zone light
(Long press zone on key increase zone brightness.)

Turn off 1/2/3/4 zone light (Long press zone off key decrease zone brightness.)

3 scene memory, short press recall the scene, long press 2s save current color into S1/2/3. The LED indicator display green when save OK. 4 zone recall or save synchronously.

Match RS2Remote Control (two match ways)

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 RS2 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, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the RS2 remote. The light blinks 3 times means match is successful.

Delete:
Switch off the power of WT5, 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.

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 smart APP. The LED indicator fast flash a few times means match is successful.
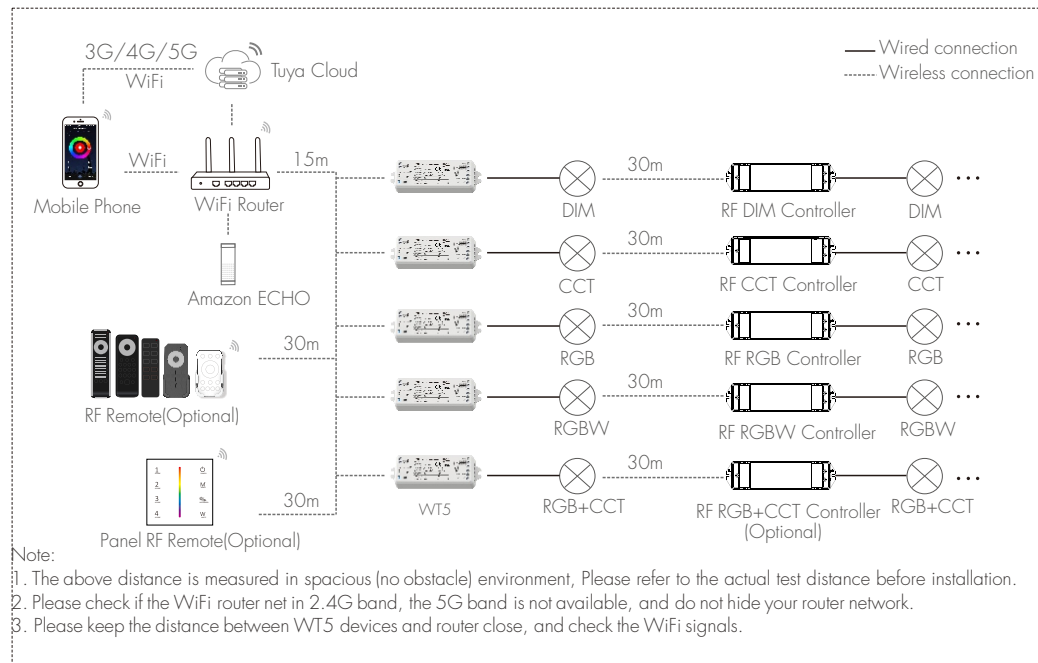
Delete:
Press and hold match key of the controller for 5s, The LED indicator fast flash a few times means match was deleted.

Use Power Restart

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

Delete:
Switch off the power of the controller, then switch on power, repeat again.mmediately short press on/off key 5 times on the Tuya smart APP. The light blinks 5 times means match was deleted.

System Wiring

3G/4G/5G WiFi — Tuya Cloud

Mobile Phone
WiFi Router
Amazon ECHO
RF Remote(Optional)
Panel RF Remote(Optional)

WiFi 15m

— Wired connection
------ Wireless connection

30m DIM — RF DIM Controller — DIM ···
30m CCT — RF CCT Controller — CCT ···
30m RGB — RF RGB Controller — RGB ···
30m RGBW — RF RGBW Controller — RGBW ···
30m RGB+CCT — RF RGB+CCT Controller (Optional) — RGB+CCT ···

WT5 30m 30m

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 WT5 devices and router close, and check the WiFi signals.

Tuya Smart APP Network Connection

● Download and open APP
Search for "Tuya Smart/Smart Life APP" in the app store,
or scan the QR code on the right to download the APP.
Register and login after installation.

● APP Pairing Network

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 WiFi config mode, the LED indicator flash fastly,
the output LED will flash 10 times.

Press and hold Match/Set key for 2s:
Switch 5 kinds light type in sequence, notice this operation does not automatically clear previous network connection.

Press and hold Match/Set key for 5s:
Clear previous network connection, enter WiFi config mode, the LED indicator flash fastly.

Repeat power on and off for 5 consecutive times, also clear previous network connection, enter WiFi config mode,
the output LED will flash 10 times.

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

When controlling the light with Tuya Smart/Smart Life APP, if the network connection is poor,
you can control the light with Bluetooth connection within the Bluetooth control range.
Note: The light can not be directly controlled by Bluetooth without WiFi configuration.

Tuya Smart APP Interface
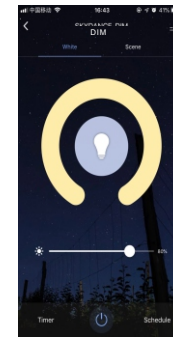
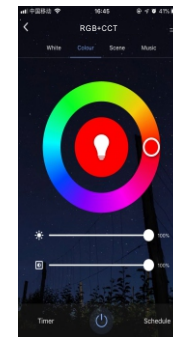
White interface

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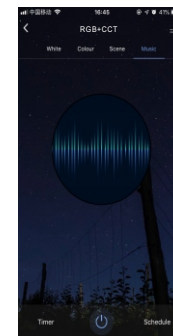Touch brightness slide to adjust color brightness.
Touch saturation slide to adjust color saturation,
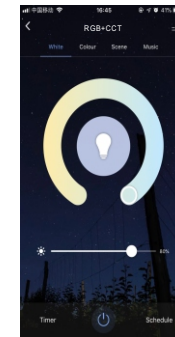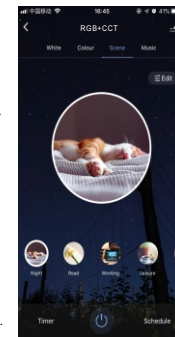namely gradient from the current color to white
(RGB mixed).

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.

Installation Precautions

1. The products shall not be stacked, the distance should be ≥ 20cm, 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 ≥ 20cm to avoid radiation interference of the switching power supply.
3. The installation height shall be ≥ 1m 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 ≥ 20cm 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 ≥ 20cm to avoid signal interference.

Statement

FCC ID Statement:
Mobile
RF Exposure Information
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Safety information

1. Read all instructions carefully before you begin this installation.
2. When installing battery, pay attention to the battery positive and negative polarity.
   A long time without the remote control, remove the battery.
   When remote distance becomes smaller and insensitive, replace the battery.
3. If no response from the receiver, please re-match the remote.
4. Gently handle remote, beware of falling.
5. For indoor and dry location use only.