

WT5+RS10

WiFi & RF RGB+CCT LED Controller Set



integral LED®
Integral LED, NW10 0UF, UK
Iniegraf Europe BV, 2801 DG, NL

UK CA CE RoHS

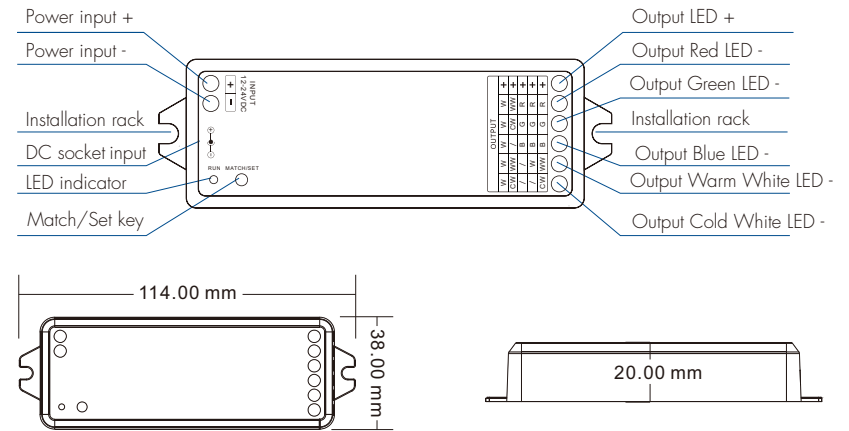
- WiFi & RF 5 in 1 controller , 8 Zone 8 Scene RF remote + Tuya smart APP cloud control.
- Tuya smart APP cloud control, support on/off, RGB color, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit and music play function.
- RS10 remote control configuration with ultra sensitive 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

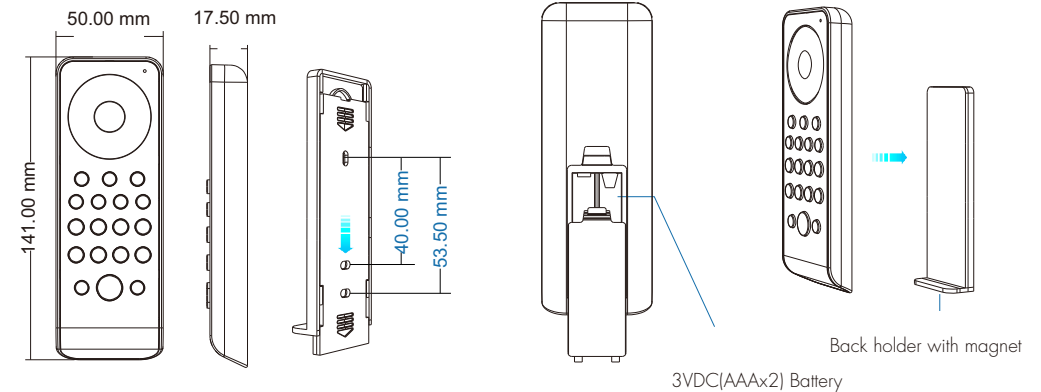
LED Remote		LED Controller	
Output signal	RF(2.4GHz)	Input voltage	12-24VDC
Work voltage	3VDC(AAAx2)	Input Current	15.5A
Work current	<5mA	Output voltage	5 x {12-24}VDC
Standby current	< 10μA	Output current	5CH,3A/CH
Standby time	1 year	Output power	5 x {36-72}W
Remote distance	30m(Barrier-free space)	Output type	Constant voltage
Size	L141xW50xH17.5mm	Size	L114xW38xH20mm
Dimming data		Environment	
Input signal	WiFi + RF 2.4GHz	Operation temperature	Ta: -30 °C ~ +55 °C
Control distance	30m(Barrier-free space)	Case temperature (Max.)	Tc: +85 °C
Dimming gray scale	4096 (2^12) levels	Package	
Dimming range	0-100%	Size	L146xW98xH28mm
Dimming curve	Logarithmic	Gross weight	0.215Kg
PWM frequency	1000Hz (default)	Warranty	
Safety and EMC		Warranty	5 years
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		

Mechanical Structures and Installations

Controller:



Remote:



To fix the remote, three options are offered for selection:

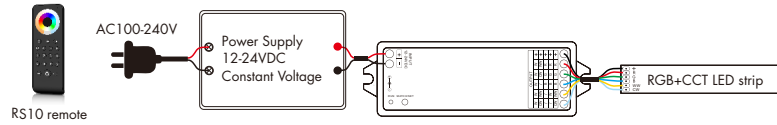
- Option 1: can be adsorbed directly onto metal surfaces.
- Option 2: fix the remote' back holder on the wall with two screws.
- Option 3: adhere the remote' back holder to the wall with pastar.

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.

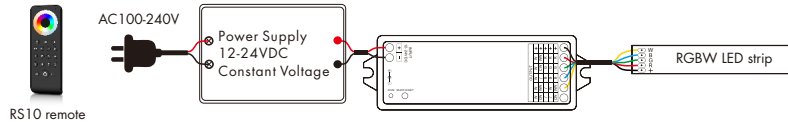
Wiring Diagram

• For RGB+CCT



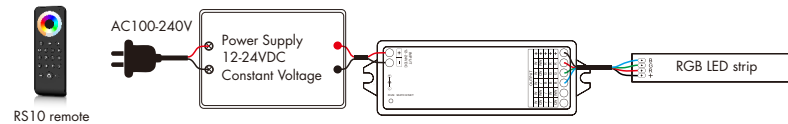
Press and hold match/set key for 16s, until the RUN LED indicator turn blue, then release, the controller will become RGB+CCT type, then do smart config by Tuya smart APP, or short press match key to match with RGB+CCT RF remote.

• For RGBW



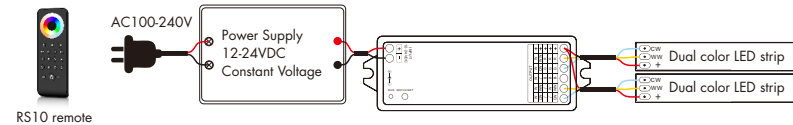
Press and hold match/set key for 14s, until the RUN LED indicator turn green, then release, the controller will become RGBW type, then do smart config by Tuya smart APP, or short press match key to match with RGBW RF remote.

• For RGB



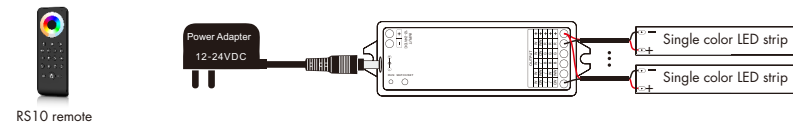
Press and hold match/set key for 12s, until the RUN LED indicator turn red, then release, the controller will become RGB type, then do smart config by Tuya smart APP, or short press match key to match with RGB RF remote.

• 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 smart 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 smart APP, or short press match key to match with dimming 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.

Match RS10 Remote 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 RS10 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 RS10 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

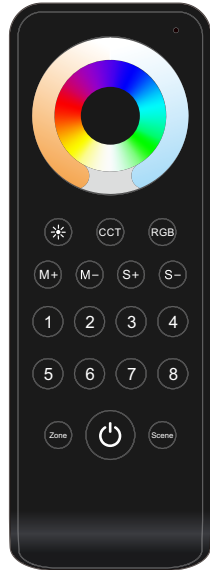
Match:

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

Remote Key Function

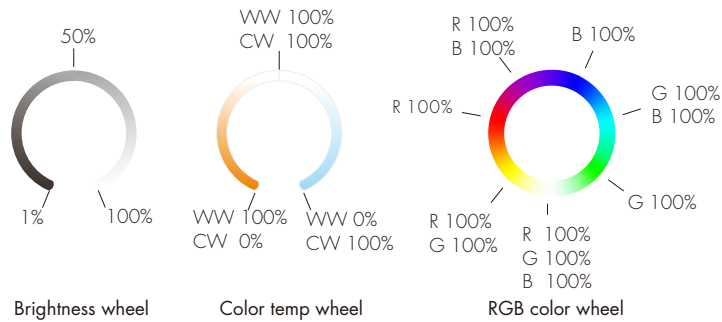


Each zone can match single color, dual color(WW/CW), RGB, RGBW, or RGB+CCT(WW/CW) RF LED controller.

- 1 2 3 4 5 6 7 8 + * : Single color
- 1 2 3 4 5 6 7 8 + CCT : Dual color(WW/CW)
- 1 2 3 4 5 6 7 8 + RGB : RGB
- 1 2 3 4 5 6 7 8 + M+ : RGBW
- 1 2 3 4 5 6 7 8 + S+ : RGB+CCT

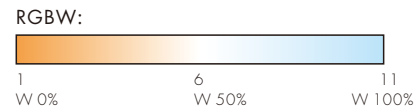
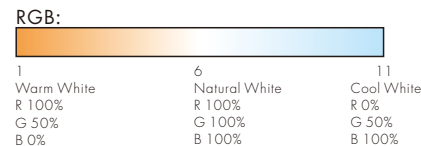
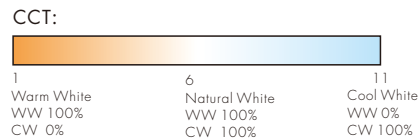
For example, long press 1 + RGB key for 2s will set zone 1 as RGB light type.
When remote type change OK, the green indicator go on a long time.
Long press + * , CCT , RGB , M+ or S+ any of key for 2s will set all 8 zones to the same light type correspondingly.

: Touch to change current zone brightness, color temperature or RGB color.
Press BRT, CCT or RGB key to switch between brightness wheel, color temp wheel or RGB color wheel.

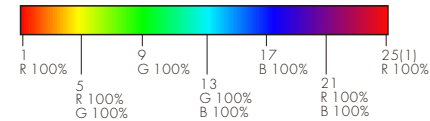


When it is brightness wheel, touch to change brightness.
When it is color temp wheel, touch to change color temperature.
When it is RGB color wheel, touch to change RGB color.

- * : Adjust brightness, at the same time, multi-color wheel become brightness wheel.
short press 10 levels, long press 2s get max or min brightness.
- CCT : Adjust color temperature, at the same time, multi-color wheel become color temp wheel.
For dual color or RGB+CCT(WW/CW), adjust color temperature by WW/CW channel, short press 11 levels, long press adjust WW+CW brightness continuously.
For RGB, adjust color temperature by mix R/G/B channel, 11 levels.
For RGBW, adjust color temperature by adjust W channel brightness, 11 levels.



- RGB : Short press get 24 kinds static RGB color, at the same time, multi-color wheel become RGB color wheel.

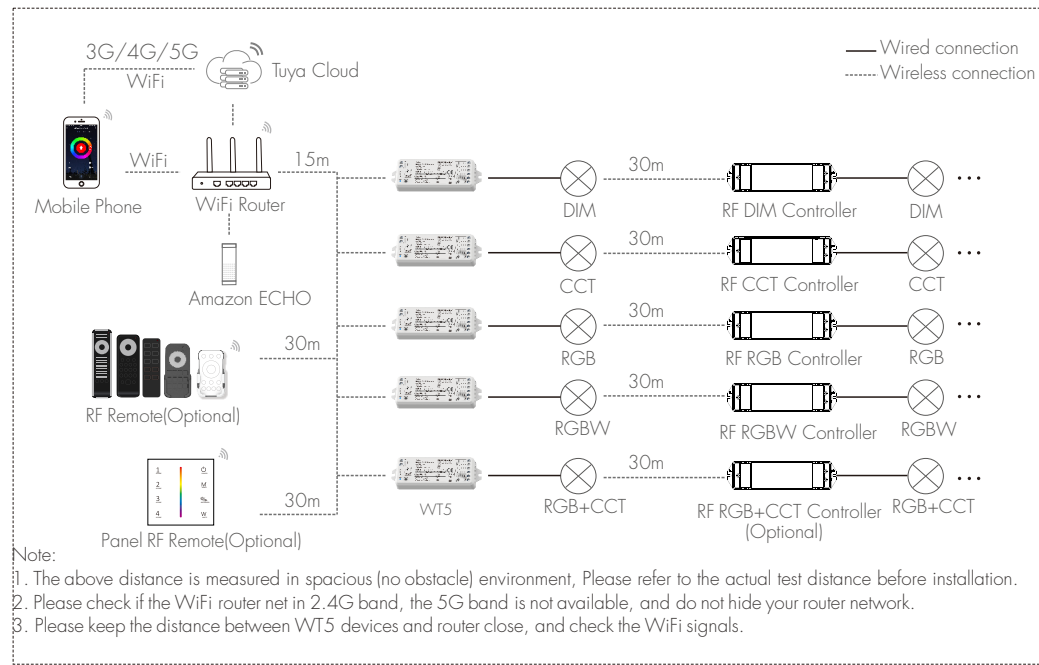


- M+ M- : Short press switch dynamic mode built in controller, long press 2s Mode+ run mode cycle, long press 2s Mode- run the first mode.
- S+ S- : For dynamic RGB mode, adjust dynamic mode speed, short press 10 levels, long press 2s get the fastest / slowest speed.
For static RGB color, adjust saturation, namely change current static RGB color to mixed white slowly, short press 11 levels, long press 1-6s for continuous 256 levels adjustment.
- 1 2 3 4 : When 1-8 key is zone function, Short press select and turn on zone light, long press 2s turn off zone light.
- 5 6 7 8 : When 1-8 key is scene function, Short press recall the scene, long press 2s save current light state into 1-8. The LED indicator display green longer when save OK. 8 zone recall or save synchronously.
- Zone : Short press to select zone 1-8 sequentially, at the same time set 1-8 key as zone function key. The LED indicator will display blue or red when 1-8 key is zone on/off operation.
- Scene : Short press to recall scene 1-8 sequentially, at the same time set 1-8 key as scene function key. The LED indicator will display green when 1-8 key is scene recall/save operation.
- : Short press turn on/off all zone or scene light.

RGB color light +W white light settings:

When the remote control is used for RGBW light control it can be operated by long pressing and M- key for 2s at the same time, to set both RGB color light and W white light can be turned on at the same time or can not be turned on at the same time two ways.
When the green indicator blinks 2 times, set the RGB color light and W white light can not be turned on at the same time.
That is, when the RGB color light is on, the white light automatically turn off, and when the white light is on, the RGB color light automatically turn off.
When the green indicator blinks 4 times, set the RGB color light and W white light are turned on at the same time(factory default)

System Wiring



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.

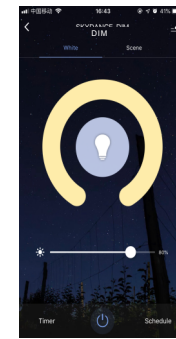
Repeat power on and off for 5 consecutive times, also clear previous network connection, enter WiFi config mode, the output LED will flash 10 times.

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:

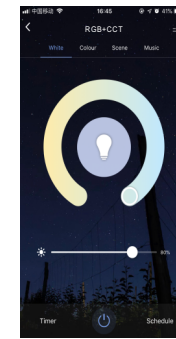
Touch brightness slide to adjust brightness.

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.

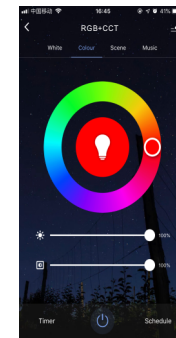
Touch brightness slide to adjust brightness.

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.

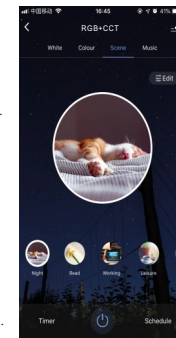
Touch saturation slide to adjust color saturation, namely gradient from the current color to white (RGB mixed).

For RGB+CCT type:

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

Touch brightness slide to adjust color brightness.

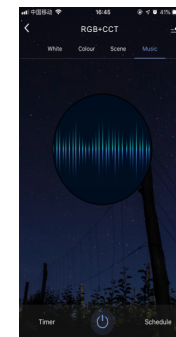
Touch saturation slide to adjust color saturation, namely gradient from the current color to white (RGB mixed).



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 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

Installation Precautions

1. The products shall not be stacked, the distance should be $\geq 20\text{cm}$, 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 $\geq 20\text{cm}$ to avoid radiation interference of the switching power supply.
3. The installation height shall be $\geq 1\text{m}$ 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 $\geq 20\text{cm}$ 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 $\geq 20\text{cm}$ to avoid signal interference.

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.