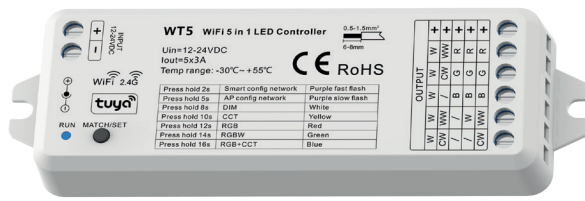




BTCONTR

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



CONTROLLER



POWER SUPPLY

FC CE RoHS EMC LVD RED

Features

- 5 in 1 function, used for control RGB, RGBW, RGB+CCT, color temperature or single color LED fixture.
- DC power socket input
- Tuya 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.
- Voice control, support amazon ECHO and TmallGenie smart speaker (only with Tuya Bluetooth gateway not included).
- User need set light type by press key before Tuya APP network connection.
- Each BTCONTR controller work as Bluetooth-RF converter, then use Tuya APP to control one or more RF LED controller
- Light on/off fade time 3s selectable.
- Power supply included

Controller Parameters

NOT USED

Input and Output	
Input voltage	12-24VDC
Input current	1.5.5A
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	1000Hz (default)

Safety and EMC	
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard(LVD)	EN 62368-1:2020+A11:2020
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Certification	CE,EMC,LVD,RED

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

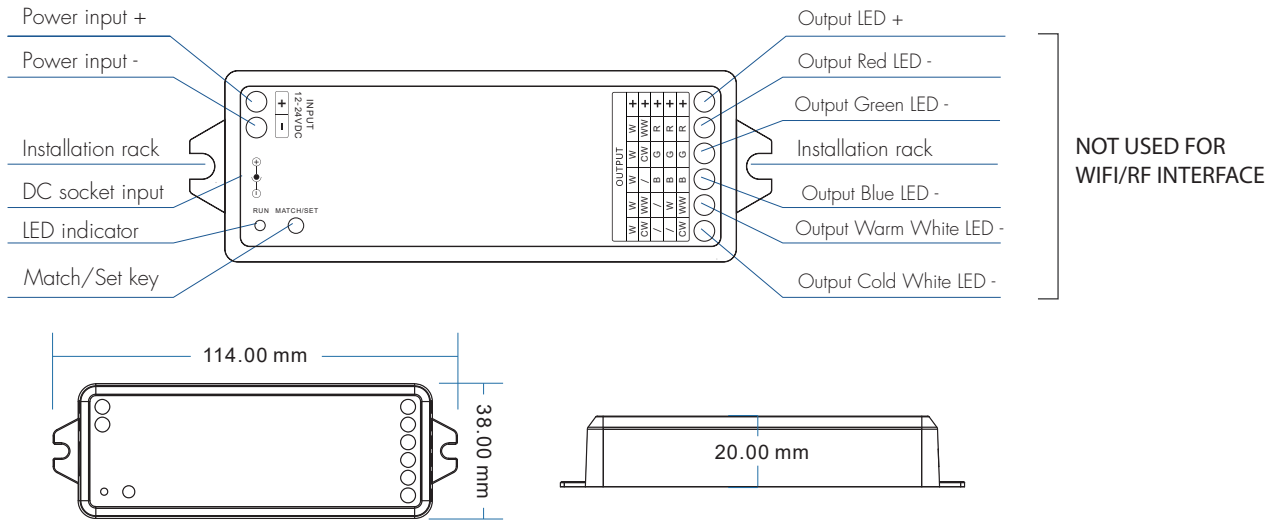
Protection	
Protection	Reverse polarity Over-heat Short circuit

Power supply parameters

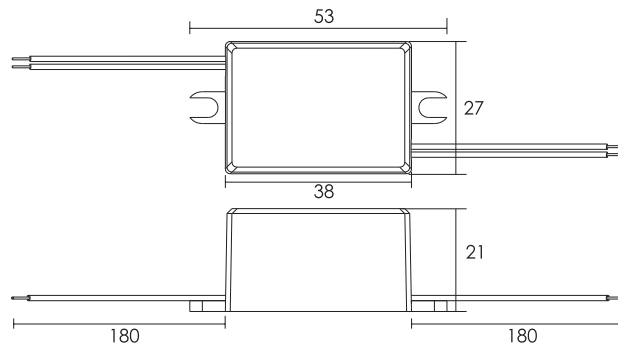
Input voltage (V)	Max. output (W)	Output voltage (V)	Output current (A)	Power factor (λ)	Efficiency full load (%)	No-load power (W)	Ambient temperature ta (°C)	Max. casing temperature tc (°C)	Isolation	Dimensions LxWxH (mm)	Weight (g)
100-240	4	24	0-0.17	0.40C	78	<0.3	-20...+50	80	SELV	53x27x21	40

Mechanical Structures and Installations

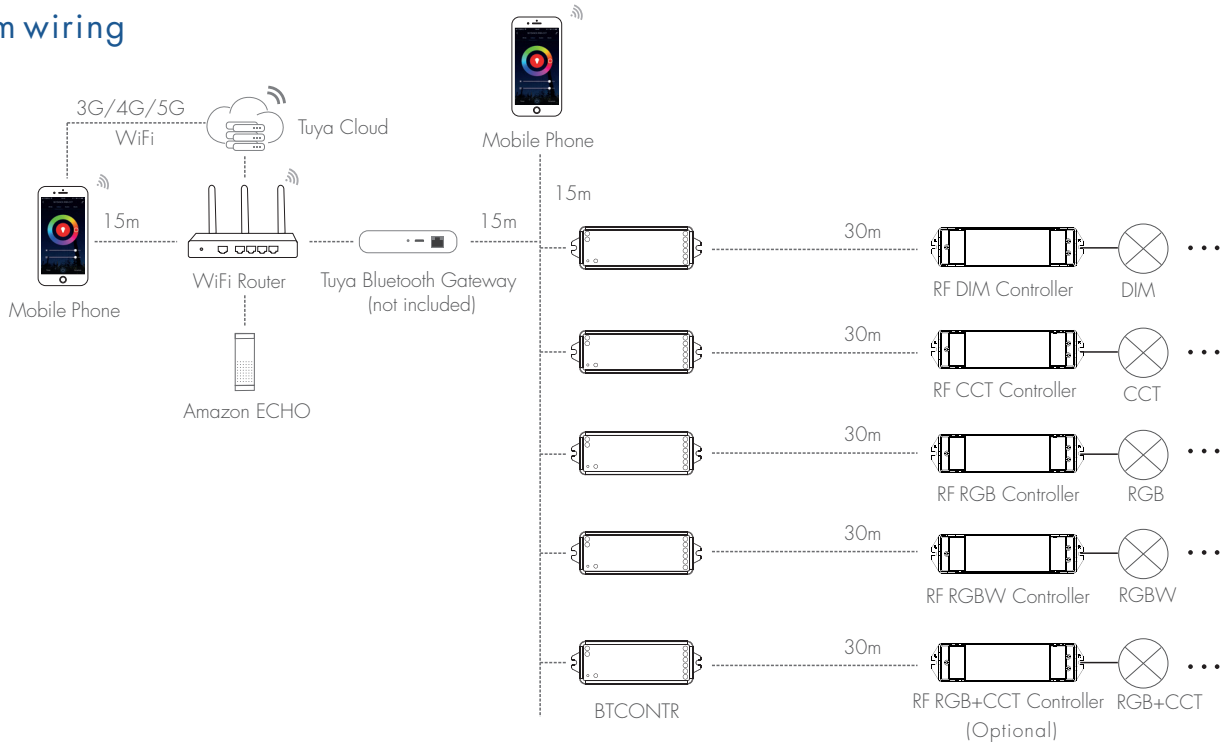
Controller



Power supply



System wiring



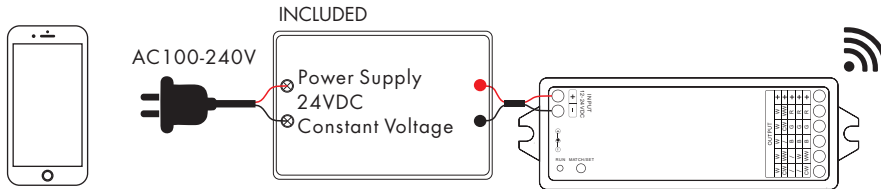
- Wired connection
- Wireless connection

Note:

- 1 The above distance is measured in spacious (no obstacle) environment, Please refer to the actual test distance before installation.
- 2 User can also use the Tuya Bluetooth gateway (not included) to realize remote control and voice control.
3. Tuya Bluetooth Gateway (not included) is also recommended in the case that more than 20 BTCONTR must be controlled simultaneously from the same mobile phone.
4. A single BTCONTR can control more RF LED controllers (up to 100 devices).

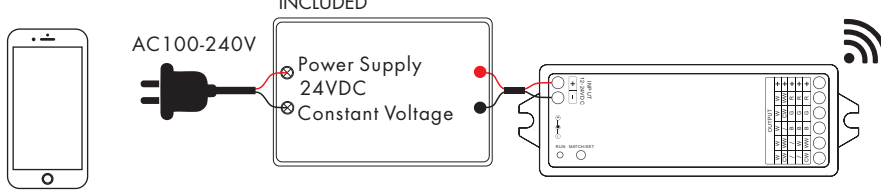
Wiring Diagram

• For RGB+CCT



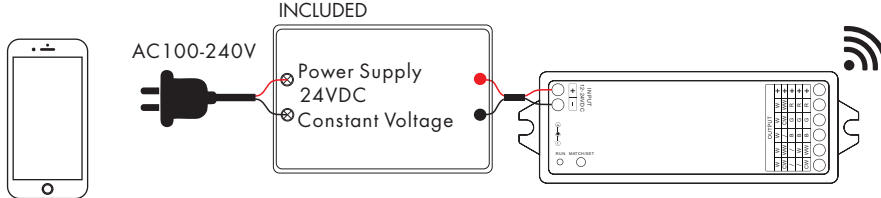
Press and hold match/set key for 16s, until the RUN LED indicator turn blue, then release, the controller will become RGB+CCT type, then do smart config by tuya APP

• For RGBW



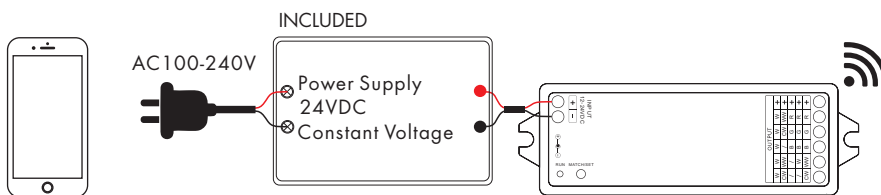
Press and hold match/set key for 14s, until the RUN LED indicator turn green, then release, the controller will become RGBW type, then do smart config by tuya APP

• For RGB



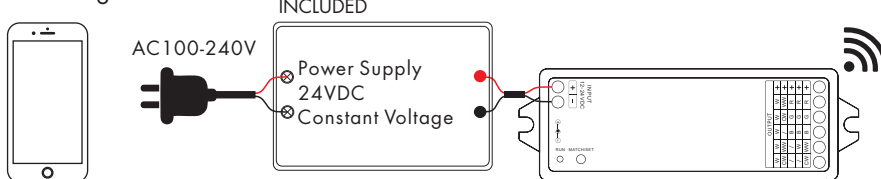
Press and hold match/set key for 12s, until the RUN LED indicator turn red, then release, the controller will become RGB type, then do smart config by tuya APP

• 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

• 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

Note:

1. For RGB+CCT or CCT light type, continuous power on and off will change 3 levels color temperature (WW, NW and CW) in sequence.
2. 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.

Tuya APP network connection

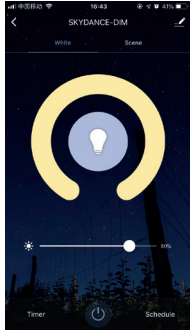
Press and hold Match/Set key for 2s, or push twice Match/Set key fastly, or when press and hold Match/Set key for 8-16s to set 5 kinds light type:
Clear previous network connection, enter Smart config mode, the purple LED indicator flash fastly.

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

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

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 RGB+CCT device (or other DIM, CCT, RGB or RGBW).

Tuya APP interface

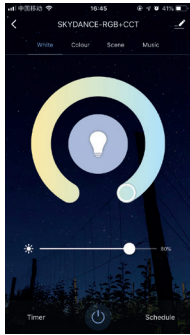


White interface

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.

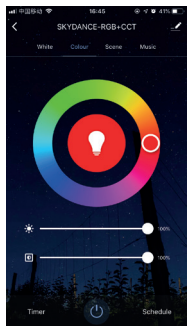
For RGBW type:
Touch brightness slide, adjust white channel brightness.



Color temperature interface

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

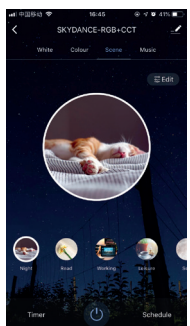
For RGB+CCT type:
Touch color wheel to adjust color temperature, RGB will turn off automatically.
Touch brightness slide to adjust white brightness.



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).

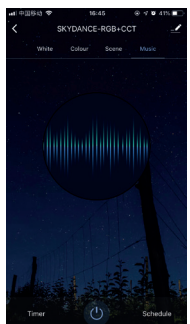
For RGB+CCT type:
Touch color wheel to adjust static RGB color, WW/CW will turn off automatically.
Touch brightness slide to adjust color brightness.
Touch saturation slide to adjust color saturation, namely gradient from the current color to white (RGB mixed).



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 microphone (not included) 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 (only with Tuya Bluetooth gateway not included).

BTCONTR work as Bluetooth-RF converter to match RF LED controller

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, repeat 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, repeat again. Immediately short press on/off key 5 times on the Tuya APP. The light blinks 5 times means match was deleted.