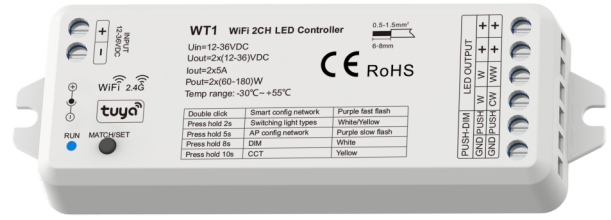# WiFi & RF 2CH LED Controller

Model No.: WT1

Tuya APP cloud control/Voice control/2 Channels/Push-Dim/DC power socket input/Wireless remote control

Features

- Used for control single color or color temperature LED strip.
- DC power socket input and 2 channel constant voltage output.
- Tuya smart APP cloud control, support on/off, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit function.
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu smart speakers.
- Match with RF 2.4G remote control optional.
- User need set light type by press key before Tuya smart APP network connection and match RF remote of the same light type.
- Each WT1 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.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
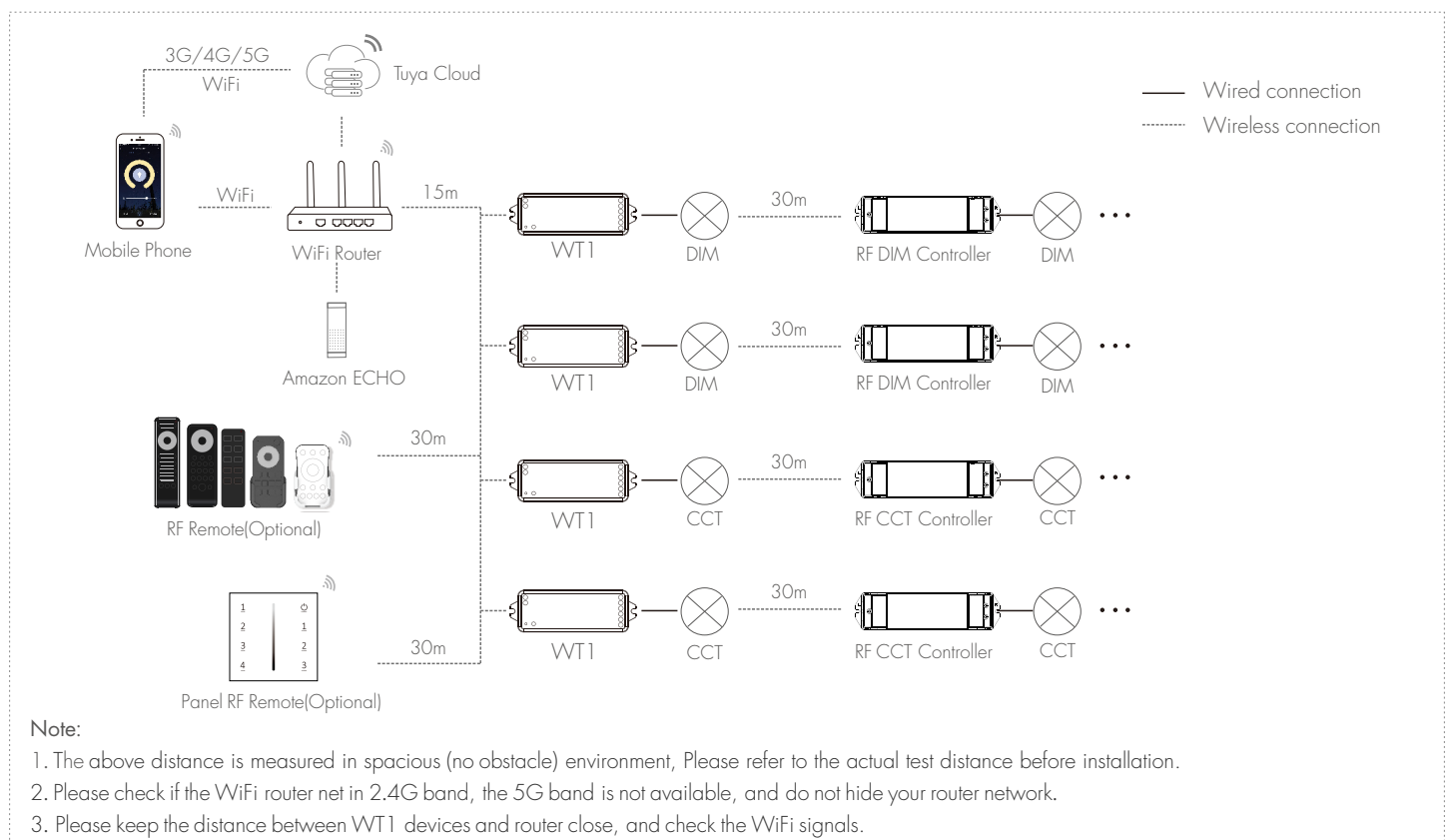- Light on/off fade time 3s selectable.

CE RoHS emc RED

Technical Parameters

Input and Output

Input voltage	12-36VDC
Input current	10.5A
Output voltage	2 x (12-36)VDC
Output current	2CH,5A/CH
Output power	2 x (60-180)W
Output type	Constant voltage

Environment

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

Dimming data

Input signal	Tuya APP + RF 2.4GHz + Push Dim
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	0 -100%
Dimming curve	Logarithmic
PWM frequency	2000Hz (default)

Package

Size	L120 x W43 x H27mm
Gross weight	0.073kg

Safety and EMC

EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard	EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017
Radio Equipment (RED)	ETSI EN 300 328 V2.2.2
Certification	CE,EMC,RED

Warranty and Protection

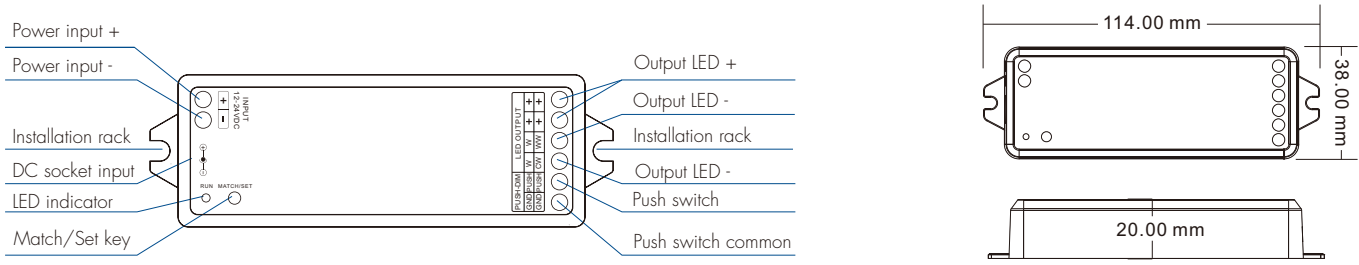|	
Warranty	5 years
Protection	Reverse polarity Over-heat Short circuit

System Wiring
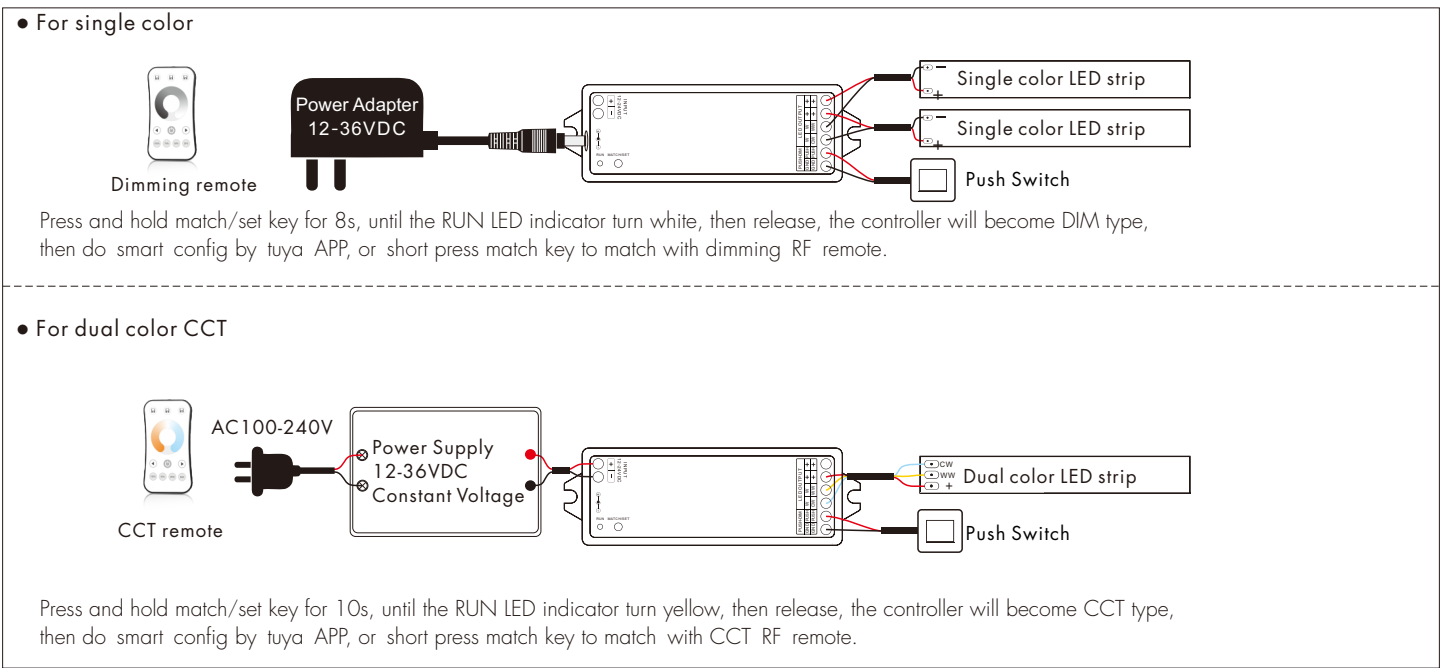

Note:

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 WT1 devices and router close, and check the WiFi signals.

Mechanical Structures and Installations

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

Output LED +
Output LED -
Installation rack
Output LED -
Push switch
Push switch common

114.00 mm
38.00 mm
20.00 mm

Wiring Diagram

● For single color

Dimming remote
Power Adapter 12-36VDC
Single color LED strip
Single color LED strip
Push Switch

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.

● For dual color CCT

CCT remote
AC100-240V
Power Supply 12-36VDC Constant Voltage
Dual color LED strip
Push Switch

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.

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

Push Dim

	Click	ON/OFF
DIM Single color	Double Click	Turn on at 100% or 10%(night light) and vice-versa
	Long press(>1s) from OFF	Dimming UP/DOWN
	Long press(>1s) from ON	Dimming UP/DOWN
CCT Dual Color	Click	ON/OFF
	Double Click	Turn on at 100% or 10%(night light) and vice-versa
	Long press(>1s) from OFF	Color temperature UP/DOWN (turn off and turn on to return dimming)
	Long press(>1s) from ON	Dimming UP/DOWN

Tuya Smart APP Network Connection

Please download the corresponding tuya/smart life app according to your region.

Push twice Match/Set key fastly, or when press and hold Match/Set key for 8 or10s to set 2 kinds light type:
Clear previous network connection, enter Smart config mode, the purple LED indicator flash fastly,
the output LED will flash 10 times.

Press and hold Match/Set key for 2s:
Switch 2 kinds light type in sequence, notice this operation does not automatically clear previous network connection.
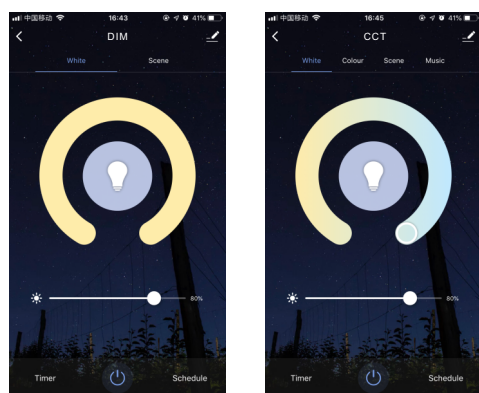
Press and hold Match/Set key for 5s:
Clear previous network connection, enter AP config mode, the purple LED indicator flash slowly. If smart config failed, please try AP config.

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 smart APP network connection succeed, the RUN LED indicator will stop flash purple, and turn corresponding light type color (White: DIM, Yellow: CCT. and in Tuya smart APP, you can find DIM or CCT device.

Smart life APP   Tuya Smart

Tuya Smart APP Interface

DIM
CCT

DIM:
Touch brightness slide to adjust brightness.

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

WT1 Match Remote Control (Optional)

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

Use the WT1's Match key

Match:
Short press match key of WT1,
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 WT1 for 15s to delete all match,
The LED indicator fast flash a few times means all matched remotes
were deleted.

Use Power Restart

Match:
Switch off the power of WT1, 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 remote.
The light blinks 3 times means match is successful.

Delete:
Switch off the power of WT1, 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.

WT1 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, 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.