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

FC CE RoHS emc LVD RED

Features

- Used for control single color or color temperature LED strip.
- DC power socket input and 2 channel constant voltage output.
- Tuya APP cloud control, support on/off, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit 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 WT1 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.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Light on/off fade time 3s selectable.

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

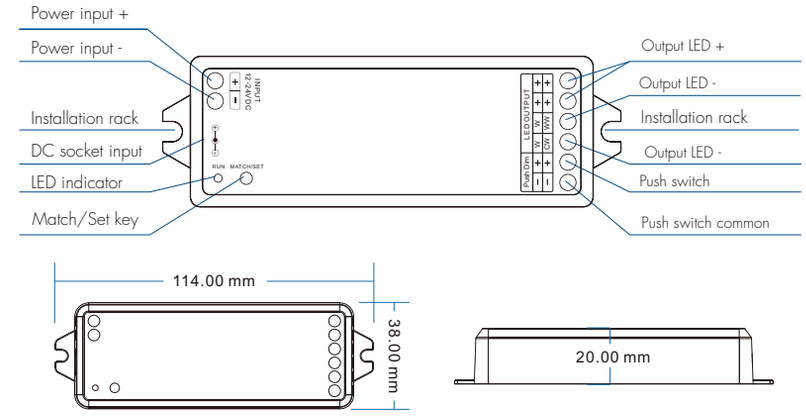
Dimming data	
Input signal	Tuya APP + RF + Push Dim
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	2000Hz (default)

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

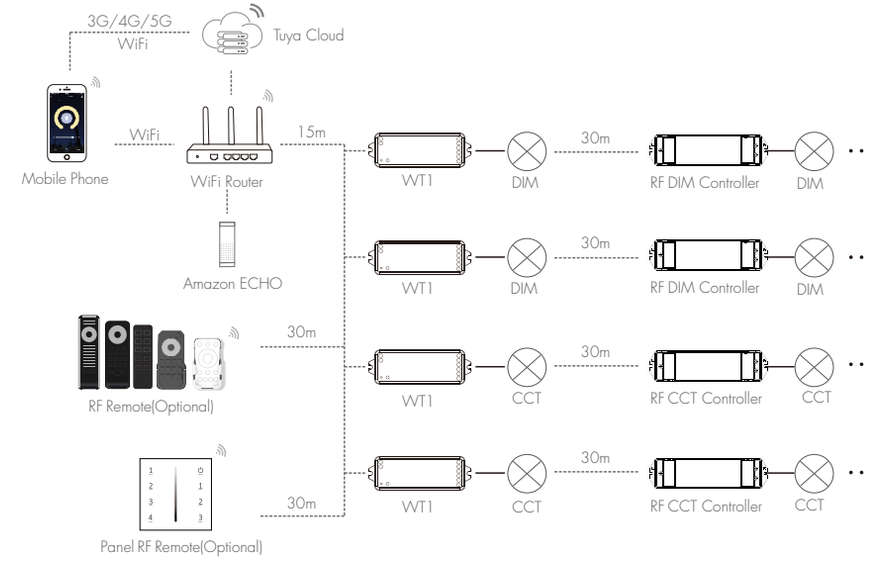
Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

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

Mechanical Structures and Installations



System wiring

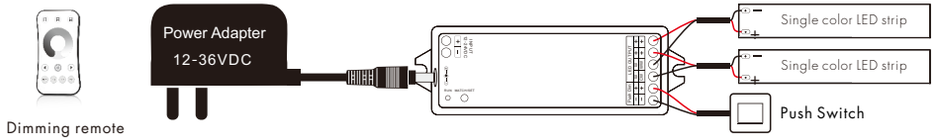


Note:

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.

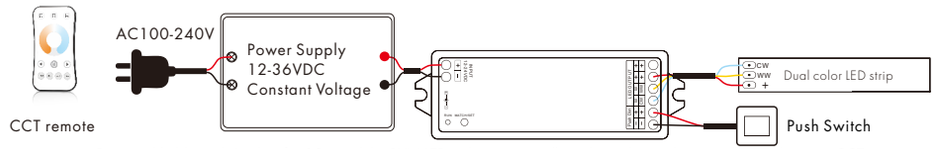
Wiring Diagram

● 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.

● 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.

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

DIM Single color	Click	ON/OFF
	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 APP network connection

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.

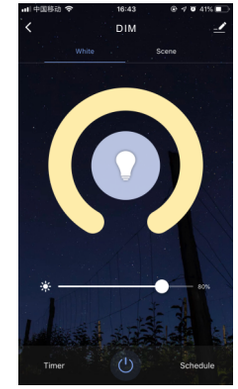
Press and hold Match/Set key for 2s:
Switch 2 kinds light type in sequence, notice this operation does not automatically clear previous network connection.

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.

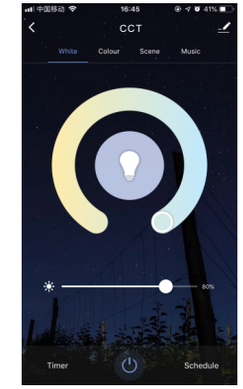
Repeat power on and off for 5 consecutive times, also clear previous network connection, enter Smart config mode,
the output LED will flash 10 times.

If Tuya 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 APP, you can find DIM or CCT device.

Tuya 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.