

Bluetooth & RF 2CH LED Controller

Model No.: WB1

Tuya APP cloud control/2 Channels/PushDim/DC power socket input/Wireless remote control



CE RoHS EMC LVD RED

Features

- Used for control single color or color temperature LED strip.
- DC power socket input and 5 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 and music play 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 WB1 controller can also work as Bluetooth-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)

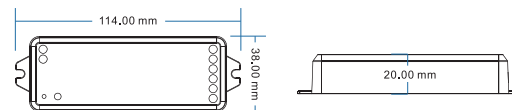
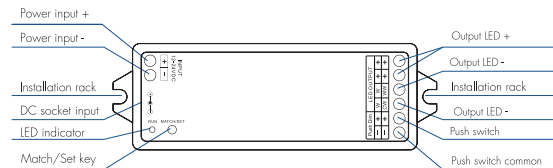
Safety and EMC	
EMC standard [EMC]	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard [LVD]	EN 62368-1:2020+A11:2020
Radio Equipment [RED]	ETSI EN 300 328 V2.2.2
Certification	CE, EMC, LVD, RED

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

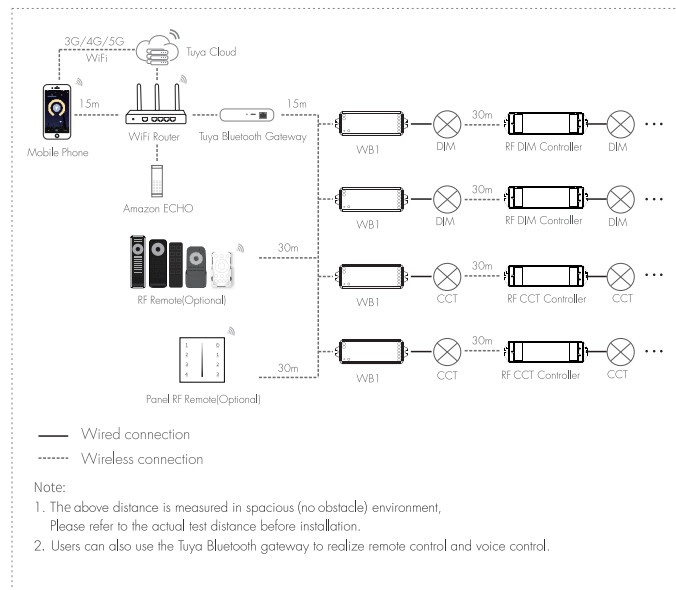
Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity Overheat Short circuit

Mechanical Structures and Installations

WB1 Bluetooth & RF 2CH LED Controller

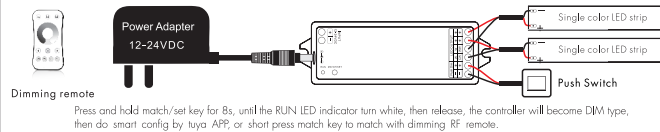


System wiring

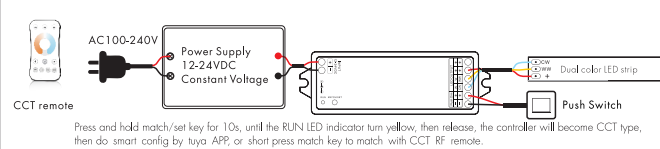


Wiring Diagram

• For single color



• For dual color CCT



- Note: 1. User can connect constant voltage power supply or power adapter as power input.
 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.
 3. For CCT light, continuous power on and off 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

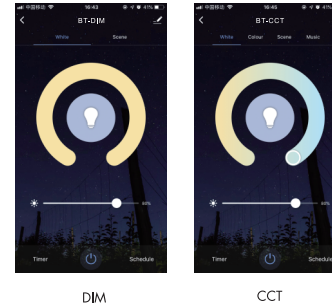
Tuya APP network connection

Press and hold Match/Set key for 5s, or push twice Match/Set key fastly, or when press and hold Match/Set key for 8 or 10s to set 2 kinds light type:
 Clear previous network connection, enter config mode, the purple LED indicator fast flash, the output LED will flash 10 times.

Repeat power on and off for 5 consecutive times, also clear previous network connection, enter 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 BT-DIM or BT-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.

WB1 match remote control (Optional)

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

Use the WB1's Match key

Match:
 Short press match key of WB1,
 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 WB1 for 1.5s,
 The LED indicator fast flash a few times
 means all matched remotes were deleted.

Use Power Restart

Match:
 Switch off the power of WB1, 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 WB1, 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.

WB1 work as Bluetooth-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.