Bluetooth & RF 5 in 1 LED Controller

- 5 in 1 function, used for control RGB, RGBW, RGB+CCT, color temperature or single color LED strip.
- 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.
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu voice assistant.
- 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 VVB5 controller can also work as Bluetooth-RF converter, then use Tuya smart APP to control one or more RF LED controller or RF LED dimming driver synchronously.
- Light on/off fade time 3s selectable.

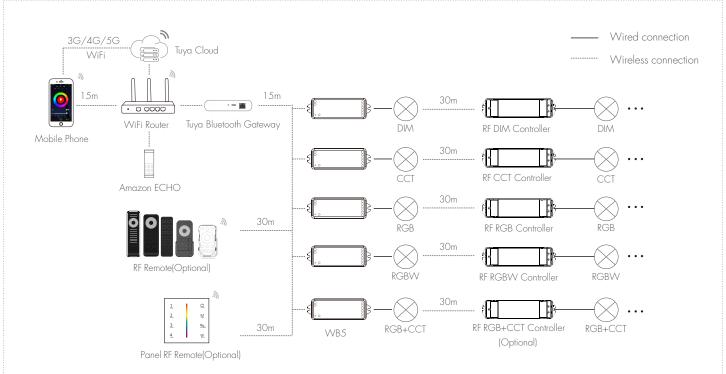




Technical Parameters

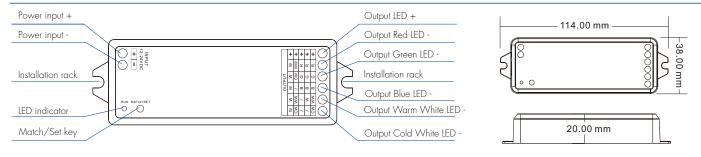
Input and Output		Dimming data		Safety and EMC		
Input voltage	12-24VDC	Input signal	Bluetooth + RF 2.4GHz	EMC standard	EN IEC 55015/EN IEC 61547	
Input current	1.5A	Control distance	30m(Barrier-free space)		ETSI EN 301 489-1/-3/-17	
Output voltage	5 x (12-24)VDC	Dimming gray scale	4096 (2^12) levels	Safety standard	EN 61347-1/-2	
Output current	5CH, 3A/CH	Dimming range	0-100%	Radio Equipment	ETSI EN 300 440 ETSI EN 300 328	
Output power	5 x (36-72)W	Dimming curve	Logarithmic	Certification	FCC UL CE RoHS	
Output type	Constant voltage	PWM frequency	PWM frequency 1000Hz (default)		Warranty and Protection	
Environment		Package		Warranty	5 years	
Operation temperature	Ta: -30°C ~ +55°C	Size	L120 x W43 x H27mm	Protection	Reverse polarity Over-heat Short circuit	
		Gross weight	0.055kg			

System Wiring



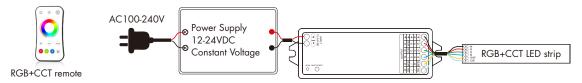
- Note:
- 1. The above distance is measured in spacious (no obstacle) environment, please refer to the actual test distance before installation.
- 2. Users can also use the Tuya Bluetooth gateway to realize remote control and voice control.

Mechanical Structures and Installations



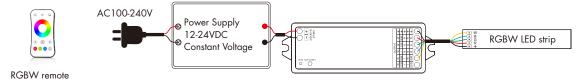
Wiring Diagram

• For RGB+CCT



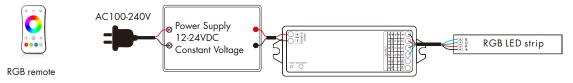
Press and hold match/set key for 16s, until the RUN LED indicator turn blue, then release, the controller will become RGB+CCT type, then do smart config by Tuya smart APP, or short press match key to match with RGB+CCT RF remote.

• For RGBW



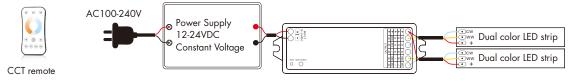
Press and hold match/set key for 14s, until the RUN LED indicator turn green, then release, the controller will become RGBW type, then do smart config by Tuya smart APP, or short press match key to match with RGBW RF remote.

• For RGB

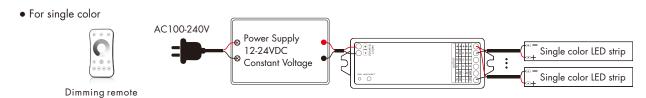


Press and hold match/set key for 12s, until the RUN LED indicator turn red, then release, the controller will become RGB type, then do smart config by Tuya smart APP, or short press match key to match with RGB RF remote.

• 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 APP, or short press match key to match with CCT RF remote.



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. Press and hold Match/Set key for 2s, switch 5 kinds light type in sequence.
- 2. For RGB+CCT or CCT light type, continuous power on and off will change 3 levels color temperature (WW, NW and CW) in sequence.
- 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 Smart APP Network Connection

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, 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 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 smart 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 smart APP, you can find BT-RGB+CCT device (or other DIM, CCT, RGB or RGBW).

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, 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 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.

WB5 Match Remote Control (Optional)

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 WB5, 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 WB5 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 WB5, 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 WB5, 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.

WB5 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 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.

Match:

Use Power Restart

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.

RGB 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	

Statement

FCC ID Statement:

Mobile

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.