3-Button WiFi & RF RGB LED Controller

Model No.: VD3(WT)

3 channel constant voltage / Tuya APP cloud control / Voice control / 3-button / Wireless remote control / Step-less dimming
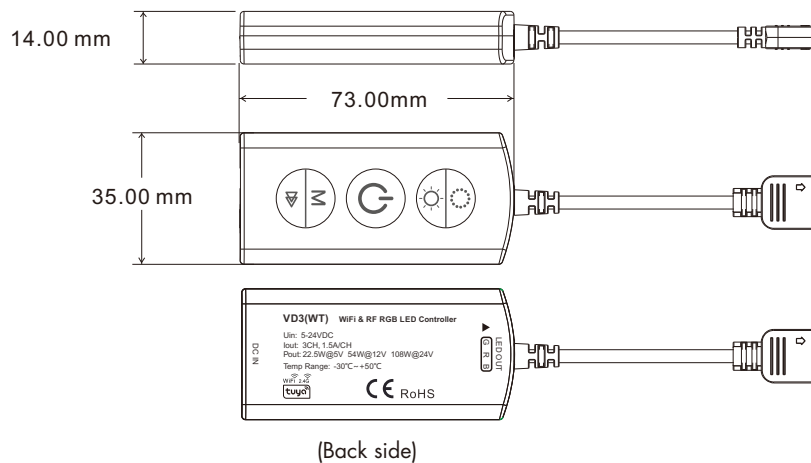
CE RoHS emc RED

Features

- WiFi & RF 3 channel constant voltage RGB LED controller.
- Tuya APP cloud control, support on/off, RGB color, 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 smart speakers.
- 3 buttons operation with on/off, mode and color adjustment.
- Match with 2.4G single zone or multiple zone RGB remote control optional.
- 256 levels 0-100% dimming smoothly without any flash.
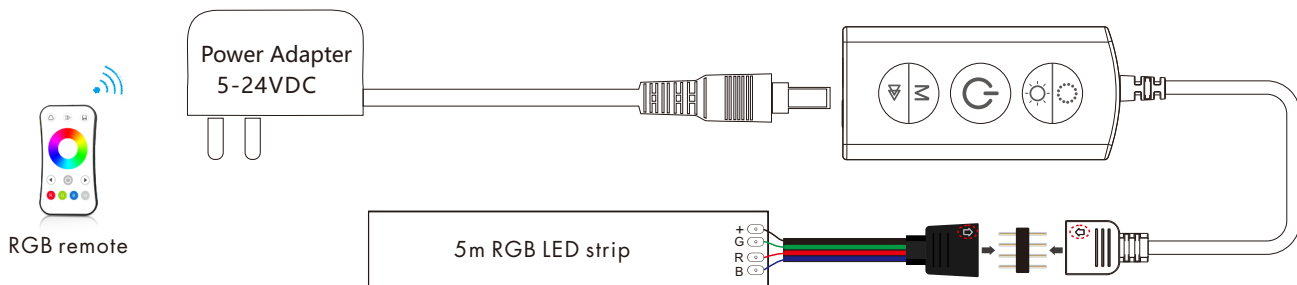- Built in 10 dynamic modes, include jump or gradual change style.

Technical Parameters

Input and Output			Dimming data			Safety and EMC		
Input voltage	5-24VDC		Input signal	Tuya APP + RF 2.4GHz + 3 button		EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3	
Output voltage	5-24VDC		Control distance	30m(Barrier-free space)			ETSI EN 301 489-17 V3.2.4	
Output current	3CH, 1.5A/CH		Dimming level	256 levels		Safety standard	EN 62368-1:2020+A11:2020	
Output power	22.5W@5V 54W@12V 108W@24V		Dimming range	0-100%		Radio Equipment(RED)	ETSI EN 300 328 V2.2.2	
			Dimming curve	Logarithmic		Certification	CE,EMC,RED	
Environment			PWM Frequency	2KHz (default)		Package		
Operation temperature	Ta: -30℃ ~ +50℃		Warranty	5 years		Size	W114 x L38 x H26mm	
Case temperature (Max.)	Tc: +85℃		Protection	Over-heat		Gross weight	0.013kg	

Dimension

14.00 mm

73.00mm

35.00 mm

VD3(WT) WiFi & RF RGB LED Controller
Uin: 5-24VDC
Iout: 3CH, 1.5A/CH
Pout:22.5W@5V 54W@12V 108W@24V
Temp Range: -30℃~+50℃
WiFi 2.4G
tuya CE RoHS

(Back side)

Wiring Diagram

Power Adapter
5-24VDC

RGB remote

5m RGB LED strip
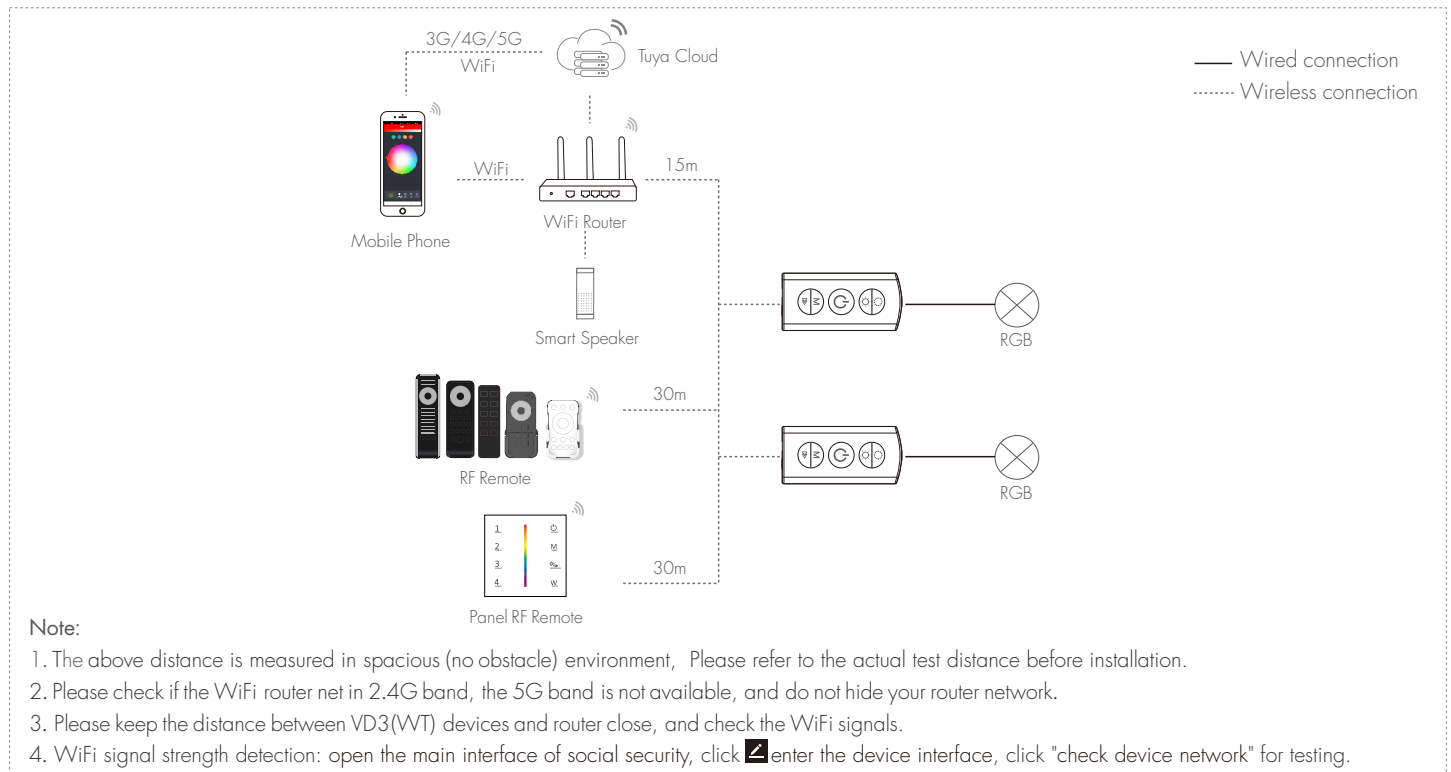
Note:

1. Press and hold the ⏻ and M button for 2s, output LED flashes 3 times, the light on/off fade time will change between 3s and 0.5s.

2. Press and hold the ☼, ⏻ and M button for 2s, output LED flashes multiple times, switch between "GRB" (flashes 1 times), "RGB" (flashes 2 times), "BRG" (flashes 3 times) and "BGR" (flashes 4 times) output sequences, default is GRB.

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 VD3(WT) devices and router close, and check the WiFi signals.
4. WiFi signal strength detection: open the main interface of social security, click ✎ enter the device interface, click "check device network" for testing.

Button function

⊙ : Short press to change 24 static RGB color, long press for 1-6s to adjust 256 levels brightness continuously.

⏻ : Turn on or off light.

M ▶▶ : Short press to change 10 dynamic mode, long press 2s to adjust speed, 10 levels.

Dynamic mode list :

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

Tuya APP network connection

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

Press and hold ⏻ and ⊙ button for 2s:
clear previous network connection, enter Smart config mode, the output LED flash fastly.

Press and hold ⏻ and ⊙ button for 5s:
Clear previous network connection, enter AP config mode, the output LED 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 output LED will stop flash,
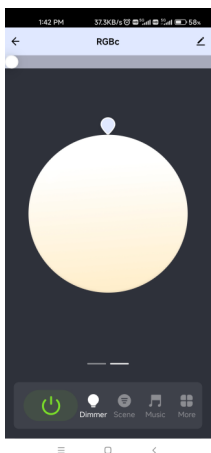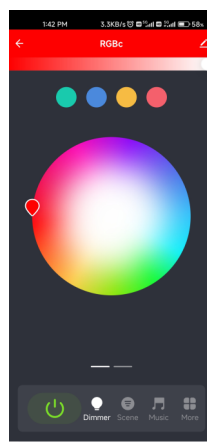and in Tuya APP, you can find RGBc device .
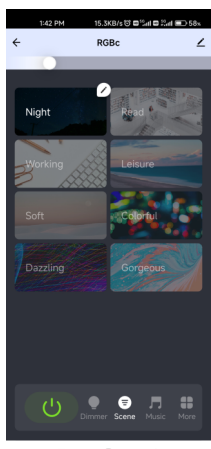

Smart life APP

Tuya APP

Tuya APP interface

White interface

Touch brightness slide, get RGB mixed white firstly, then to adjust white brightness.
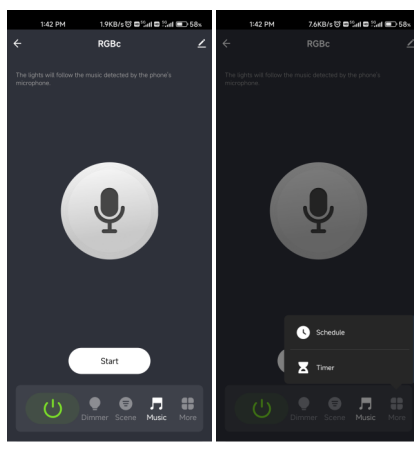
Colour interface

Touch color circle to adjust static RGB color. Touch brightness slide to adjust color brightness.

Scene interface

The 1-4 scene is static color. the inner color of these scene can be editable.

The 5-8 scene is dynamic mode, 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 Schedule key can add multiple timers to turn on or turn off light according to different time periods.

The Timer key can turn on or turn off light in the next 24 hours.

Match Remote Control (two match ways)

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

Use ⊙ and M▷ button

Match:
Long press ⊙ and M▷ button 2s, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.

Delete:
Press and hold ⊙ and M▷ button for 5s to delete all match, The output LED blinks 5 times means all matched remotes were deleted.

Use Power Restart

Match:
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The output LED blinks 3 times means match is successful.

Delete:
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The output LED blinks 5 times means all matched remotes were deleted.

Dimming curve

Gamma=1.6