

SKYDANCE V3-L WT WiFi and RF 3 in 1 LED Controller User Manual

Home » SKYDANCE » SKYDANCE V3-L WT WiFi and RF 3 in 1 LED Controller User Manual

SKYDANCE V3-L WT WiFi and RF 3 in 1

LED Controller User Manual

WiFi & RF 3 in 1 LED Controller

Model No.: V3-L(WT)

Tuya APP cloud control/Voice control/3 Channels/1-3 color/Push Dim/Four PWM frequency/Linear or logarithmic dimming



FC C (E RoHS emc LVD RED

Contents

- 1 Features
- **2 Technical Parameters**
- 3 Mechanical Structures and Installations
- 4 System wiring
- **5 Wiring Diagram**
- 6 Tuya APP network connection
- 7 Tuya APP interface
- 8 Push-Dim control
- 9 RGB dynamic mode list
- 10 PWM frequency setting
- 11 Dimming curve setting
- 12 V3-L(WT) match remote control (Optional)
- 13 V3-L(WT) work as WiFi-RF converter to match RF LED controller or dimming driver
- 14 Documents / Resources
- 15 Related Posts

Features

- 3 in 1 function, used for control RGB, color temperature or single color LED strip.
- DC12-48V input, 3 channel constant voltage output.
- Tuya 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 amazon ECHO and Tmall Genie 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 V3-L(WT) 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.
- Light on/off fade time 3s selectable.
- Connect with external push key to achieve on/off and 0-100% dimming function.
- Logarithmic or linear dimming curve selectable.
- PWM frequency 500Hz, 2KHz, 8KHz or 16KHz selectable.
- Over-heat / Over-load / Short circuit protection, recover automatically.

Technical Parameters

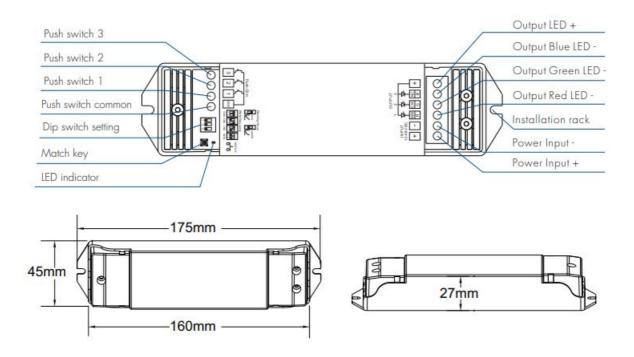
Input and Output			
Input voltage	12-48VDC		
Input current	18.5A		
Output voltage	3 x (12-48)VDC		
Output current	3CH,6A/CH		
Output power	3 x (72-288)W		
Output type	Constant voltage		
Safety and EMC			
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4		
Safety standard(LVD)	EN 62368-1:2020+A11:2020		
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		

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	O - 1 OO%		
Dimming curve	Logarithmic or linear		
PWM Frequency	500Hz, 2KHz, 8KHz, 16KHz		

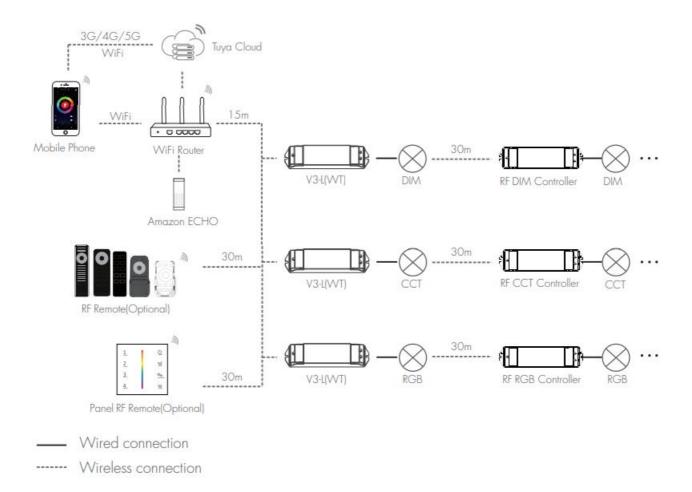
Warranty and Pro	tection
Warranty	5 years
Protection	Reverse polarity Over-heat Over-load Short circuit

Weight		
Net weight	0.108kg	
Gross weight	0.130kg	

Mechanical Structures and Installations



System wiring



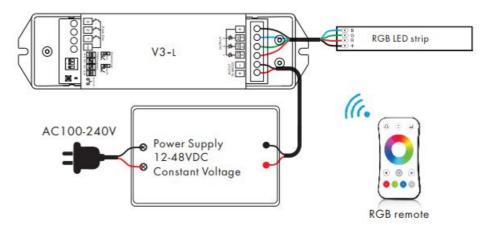
Note:

- 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 routernetin2.4Gband, the5Gband is not available, and don't hide your router network.

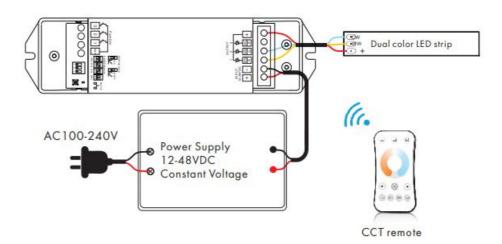
3. PleasekeepthedistancebetweenV3-L(WT) device and router close, and check the WiFi signals.

Wiring Diagram

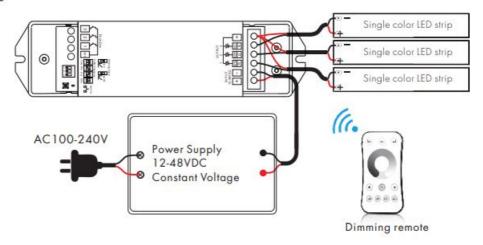
• V3-L(WT) for RGB



• V3-L(WT) for dual color



• V3-L(WT) for single color



Note:

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

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.

Tuya APP network connection

Press and hold Match key for 2s, or push twice Match key fatly, or when press and hold Match key + 1-3 Push key for 2s to set 3 kinds light type: Clear previous network connection, enter Smart config mode, the blue LED indicator flash fatly, the output LED will flash 10 times. Press and hold Match key for 5s: Clear previous network connection, enter AP config mode, the blue 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 blue LED indicator will stop flash, and in Tuya APP, you can find RGB device (or other DIM, CCT).

Tuya 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.





Color temperature interface

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



Colour interface

For RGB 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).



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.

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 type, such as green fade in and fade out, RGB jump, 6 color jump, 6 color smooth. User Manual Ver 1.0.0

Push-Dim control

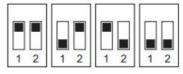
Long press one Push key and Match key at the same time to select 3 kinds light type, and each light type will have different push key function. Long press 1 key and Match key 2 seconds, set as single color type. Long press 2 key and Match key 2 seconds, set as dual color type. Long press 3 key and Match key 2 seconds, set as RGB type. After the light type is set, please repeat network con gure operation by Tuya APP.

	1 key	Short press turn on/off 1/2/3 channel, long press 1-6s dim up/down
Single color	2 key	Unvalid
	3 key	Unvalid
	1 key	Short press turn on/off light, long press 1-6s dim up/down
Dual color	2 key	Short press 3 levels color temperature (WW, NW, CW), long press 1-6s color temperature up/down
	3 key	Unvalid
	1 key	Short press turn on/off light, long press 1-6s dim up/down
RGB	2 key	Short press change dynamic mode, long press 2s to set speed (1-10 levels)
	3 key	Short press change static RGB color (24 levels), long press 1-6s adjust saturation

RGB dynamic mode list

No.	Name	No.	Name
1	RGB jump	6	RGB fade in and out
2	2 RGB smooth		Red fade in and out
3	6 color jump	8	Green fade in and out
4	4 6 color smooth		Blue fade in and out
5	Yellow cyan purple smooth	10	White fade in and out

PWM frequency setting

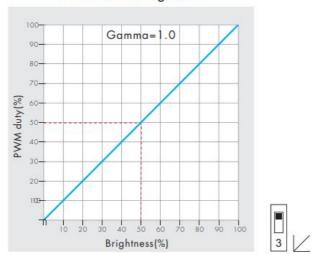


16KHz 8KHz 2KHz 500Hz

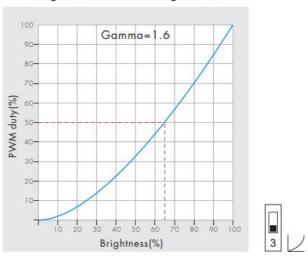
We can select four PWM frequency: 500Hz, 2KHz, 8KHz or 16KHz. Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

Dimming curve setting

Linear dimming curve



Logarithmic dimming curve



V3-L(WT) match remote control (Optional)

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

Use the V3-L(WT)'s Match key

Match: Short press match key of V3-L(WT), 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 V3-L(WT) for 10s, The LED indicator fast flash a few times means all matched remotes were deleted.

Use Power Restart

Match: Switch off the power of V3-L(WT), 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 V3-L(WT), 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.

V3-L(WT) 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.

Documents / Resources



SKYDANCE V3-L WT WiFi and RF 3 in 1 LED Controller [pdf] User Manual V3-L WT, WiFi and RF 3 in 1 LED Controller, V3-L WT WiFi and RF 3 in 1 LED Controller, RF 3 in 1 LED Controller, LED Controller, Controller

Manuals+,