

WiFi & RF Rotary Glass Panel Constant Voltage LED Controller



Features

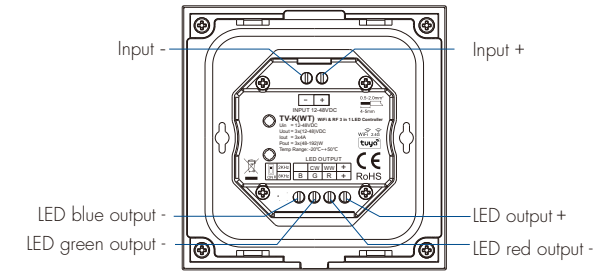
- WiFi & RF rotary panel single color, color temperature, RGB 3-in-1 constant voltage LED controller.
- Tuya smart APP cloud control, support on/off, brightness, color temperature, RGB color adjustment, delay turn on/off light, timer run, scene edit and music play function.
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu smart speakers.
- Rotate knob to change brightness, color temperature or RGB color, support short press, double press or long press operation.
- Output PWM frequency 2000/8000Hz optional.
- Match with RF 2.4G single-zone or multi-zone remote controller optional.
- Can be used as a remote control to output RF 2.4G signal to remote control other RF LED controllers or RF dimming LED drivers.
- Anti-reverse/over-heat/short circuit protection, recover automatically.

CE RoHS

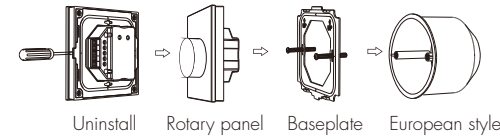
Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	WiFi + RF 2.4G	EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3/-17
Input current	12.5A	Control distance	10m(Barrier-free space)	Safety standard	EN 61347-1/-2
Output voltage	12-48VDC	Dimming gray scale	4096(2^12) levels	Radio equipment	ETSI EN 300 440 ETSI EN 300 328
Output current	3CH,4A/CH	Dimming range	0-100%	Certification	CE RoHS
Output power	3×[48-192]W	Dimming curve	Logarithmic	Environment	
Output type	Constant voltage	PWM Frequency	2000Hz,8000Hz	Operation temperature	Ta: -20°C ~ +50°C
Warranty and Protection		Package		Case temperature (Max.)	Tc: +80°C
Warranty	5 years	Size	L112xW112xH 60mm	IP rating	IP20
Protection	Anti-reverse, Over-heat, Short circuit	Gross weight	0.240kg		

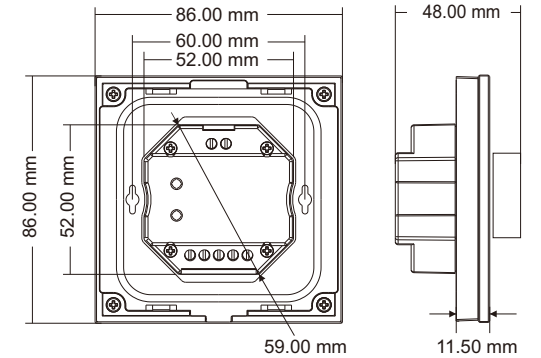
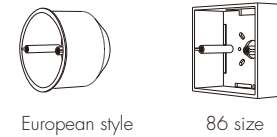
Mechanical Structures and Installations



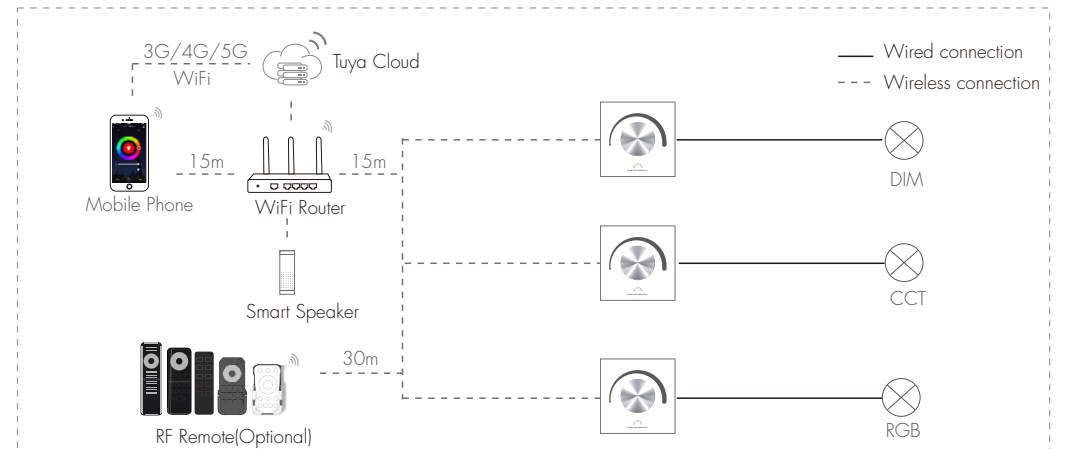
Installation diagram:



Typical base as below:



System Wiring

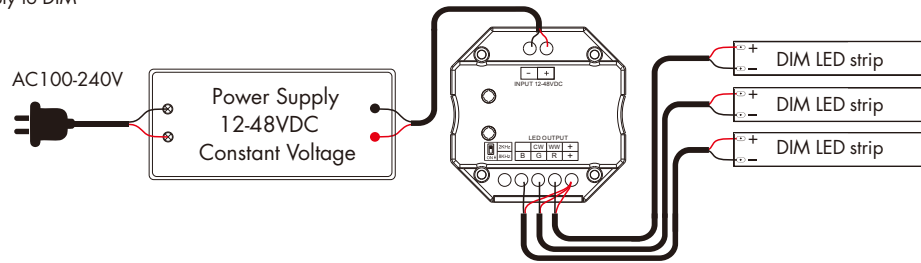


Note:

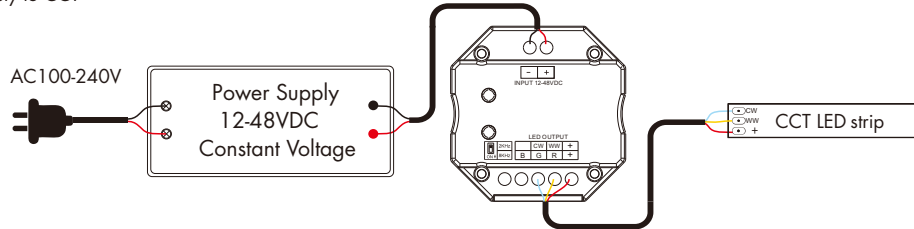
1. The above distance is measured in spacious(no obstacle) environment, please refer to the actual test distance before installation.
2. Please check if the WiFi router net in 2.4G band, the 5G band is not available, and do not hide your router network.
3. Please keep the distance between TV-K(WT) controller and router close, and check the WiFi signals.
4. WiFi signal strength detection: open the main interface of device, click enter the device interface, click "check device network" for testing.

Wiring Diagram

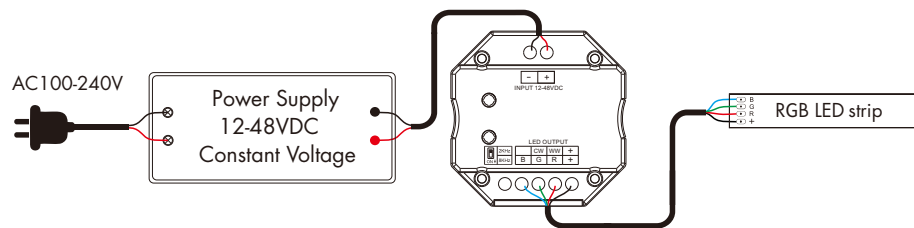
• Apply to DIM



• Apply to CCT



• Apply to RGB



PWM Frequency Setting



Select 2000Hz or 8000Hz output PWM frequency via DIP switch.
High PWM frequency will lead to low output current and high driver noise,
but are better suitable for camera shooting (no flicker).

Light Type Setting

The TVK(WT) is compatible with single color, color temperature, RGB light types, factory default is monochrome light type.
There are two ways to switch light types.

Way 1:

Moment of power on,
long press knob for 5s to set DIM light type,
the indicator flash 1 time;
long press knob for 10s to set CCT light type,
the indicator flash 2 times;
long press knob for 15s to set RGB light type,
the indicator flash 3 times.

Way 2:

Short press knob to turn on light, then turn off light, repeat 3 times.
Immediately long press knob.
Long press knob for 5s to set DIM light type,
the indicator flash 1 time.
Long press knob for 10s to set CCT light type,
the indicator flash 2 times.
Long press knob for 15s to set RGB light type,
the indicator flash 3 times.

Tuya Smart APP Network Connection and Operation

• Download and Open APP

Search for "Tuya Smart/Smart Life APP" in the APP store,
or scan the QR code on the right to download the APP.
Register and login after installation.



Smart Life

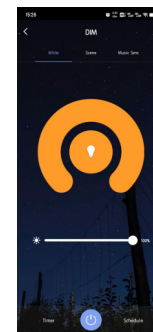
Tuya Smart

• APP Pairing Network

Please set the correct light type before configuring via Tuya Smart APP.
The light type setting operation will clear previous network connection,
enter WiFi Smart config mode, the output LED strip flashes 10 times.
If Tuya smart APP network connection succeed, the output LED strip will stop flash,
and in Tuya smart APP, you can find DIM device (or other CCT, RGB device).

When controlling the light with Tuya Smart/Smart Life APP, if the network connection is poor,
you can control the light with Bluetooth connection within the Bluetooth control range.
Note: The light can not be directly controlled by Bluetooth without WiFi configuration.

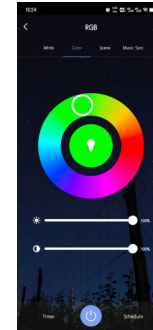
• APP Operation



DIM interface

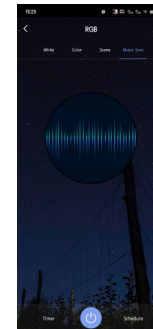
For DIM type:
Touch brightness slide, adjust brightness.

For RGB type:
Touch brightness slide,
get RGB mixed white firstly,
then to adjust white 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).

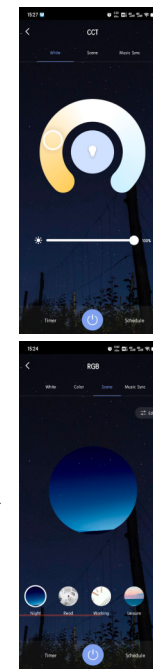


Music, Timer, Schedule

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 automatically in the next 24 hours.

The schedule key can add multiple timers to turn on or turn off light according to different time periods.



Color temperature interface

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

Scene interface

The 1-8 scene can be edited.
3 ways of color change can be set: Static,
Jump, Fade.
The color change speed can be set
for the jump change and fade change.

Knob Function

● DIM light type

Short press: Turn on or off light.

Double click: Switch 10% or 100% brightness.

Rotate: Adjust the brightness, dimming range 5-100% (1 turn, 20 levels).

● CCT light type

Short press: Turn on or off light.

Double click: Switch 3 levels of color temperature (cool white - natural white - warm white) in sequence, and enter the knob adjust the color temperature state.

After 5s of no operation, it will automatically return to the knob adjust the brightness state.

Rotate: In knob adjust brightness state, adjust the brightness (1 turn, 20 levels);

In knob adjust color temperature state, adjust color temperature (1 turn, 21 levels).

Default knob adjust brightness.

● RGB light type

Short press: Turn on or off light.

Double click: Switch color light or mixed white light (current color +50% saturation), and enter the knob adjust the color (red - yellow - green - cyan - blue - purple) or color saturation state.

After 5s of no operation, it will automatically return to the knob adjust the brightness state.

Rotate: In knob adjust brightness mode, adjust the brightness (1 turn, 20 levels);

In knob adjust color mode, adjust RGB color (3 turns, 60 levels);

In knob adjust color saturation mode, adjust the color saturation (1 turn, 21 levels).

Default knob adjust brightness.

Note:

1. Turn counterclockwise to adjust the brightness until the light is off, then short press the knob again, the light will automatically return to 5% brightness.
2. When the light is on, long press the knob to adjust the brightness.
3. When rotate the knob to adjust the color temperature or RGB color light, the indicator is always on.

Rotary Panel Match with RF Remote Control

The rotary panel can match with single-zone or multi-zone RF remotes. Two match/delete methods are available:

Use knob

Match:

Short press knob to turn on light first, then turn off.

Immediately long press the knob for 5s, the indicator flash slowly,

immediately press on/off key (single zone remote)

or zone key (multiple zone remote) of the remote.

The LED indicator fast flash means match is successful.

Delete:

Short press knob to turn on light first, then turn off.

Immediately long press the knob for 10s,

the indicator fast flash 5 times means all matched remotes

were deleted.

Use Power Restart

Match:

Switch off the rotary panel power, 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 indicator flashes 3 times means match is successful.

Delete:

Switch off the rotary panel power, 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 indicator fast flashes 5 times means all matched remotes were deleted.

Rotary Panel Used as RF Remote Control

When used as an RF remote control, the knob panel can match one or more RF LED controllers/RF dimming LED drivers (including single-color, dual-color, and RGB light types). Two match/delete methods are available:

Use Controller's Match key

Match:

Short press controller's match key, immediately press the knob.

The LED indicator of controller fast flash means match is successful.

Delete:

Long press controller's match key for 5s to delete all match.

The indicator of controller fast flash 5 times means all matched remotes were deleted.

Use Power Restart

Match:

Switch off the controller power, then switch on power, repeat again.

Immediately short press the knob 3 times.

The light flashes 3 times means match is successful.

Delete:

Switch off the controller power, then switch on power, repeat again.

Immediately short press the knob 5 times.

The light flashes 5 times means all matched remotes were deleted.

RGB Dynamic Mode List (RF RGB Remote Control Call Up)

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