# F3-D(WT)+RC3

# 3-Button WiFi & IR RGB LED Controller

- WiFi & infrared remote control 3 channels constant voltage RGB LED controller.
- $\bullet\,$  1.5A per channel, output connects with 5 meters RGB LED strip.
- 3 buttons operation with on/off, mode and color adjustment.
- 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 voice assistant.
- 4096 levels 0-100% dimming smoothly without any flash.
- Built in 10 dynamic modes, include jump or gradual change style.

# C ∈ RoHS emc



# **Technical Parameters**

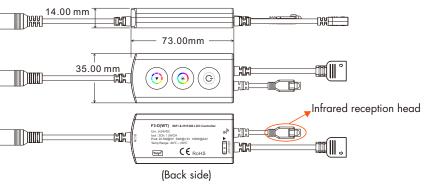
Input and Output		
Input voltage	5-24VDC	
Output voltage	5-24VDC	
Output current	3CH, 1.5A/CH	
Output power	22.5W@5V 54W@12V 108W@24V	
Environment		
Operation temperature	Ta: -30° C ~ +50° C	
Case temperature (Max.)	Tc: +85°C	

Dimming data		
Input signal	Tuya APP + IR + 3 button	
Control distance	10m(Barrier-free space)	
Dimming gray scale	4096 level	
Dimming range	0-100%	
Dimming curve	Logarithmic	
PWM Frequency	2KHz (default)	
Warranty	5 years	
Protection	Over heat	

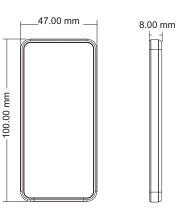
Safety and EMC			
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4		
Safety standard	EN 61348-1:2015+A1:2021 EN 61348-2-13:2014+A1:2017		
Certification	CE, EMC		
Package			
Size	L110 x W57 x H28mm		
Gross weight	0.093kg		

# Mechanical Structures and Installations

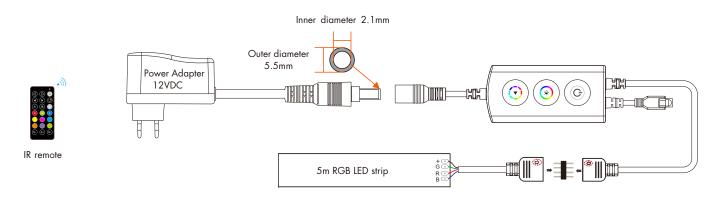
### Controller size:



### Remote size:

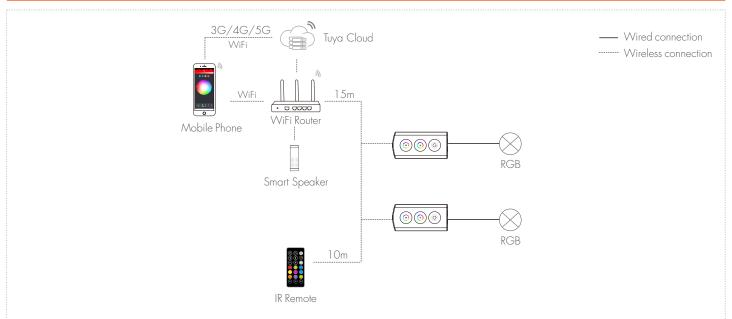


# Wiring Diagram





## 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 F3-D(WT) devices and router close, and check the WiFi signals.
- 4. WiFi signal strength detection: open the main interface of social security, click Z enter the device interface, click "check device network" for testing.

#### **Button function**



:Turn on or off light.



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



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

#### Note:

- 1. Press and hold the (6) and (7) 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 (6), (3) and (5) 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.

# 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 will flash 10 times.

Press and hold (a) and (b) button for 5s: Clear previous network connection, enter AP config mode, the output LED will flash 5 times. If smart config failed, please try AP config.



Smart life APP

Tuva Smart

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 .

# Tuya APP interface



### White interface

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



#### Colour interface

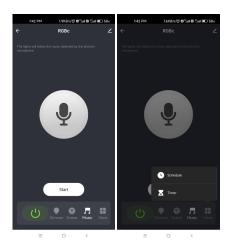
Touch color circle to adjust static RGB color.
Touch brightness slide to adjust color brightness.



# 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.

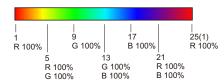


On/Off: Turn on/off light.

(O) Mode+: Short press run the next dynamic mode, long press 2s run mode cycle.

Mode - : Short press run the previous dynamic mode, long press 2s run the first mode.

Color: Short press get 24 kinds static RGB color, long press for continuous static color adjustment.



Speed -/+: For static mode, adjust the color saturation. Short press 11 levels;
Long Press 1-6 seconds for 256 consecutive levels of adjustment.

For dynamic mode, increase speed, short press 10 levels, long press 2s get the fastest/slowest speed.

W+/-: Short press turn on/off white (RGB mix);
Long press 1-6s adjust saturation continuously, namely change current static RGB color to mixed white slowly.

Bright -/+ : short press 10 levels; Long press 1-6 seconds for 256 consecutive levels for adjustment.

R/G/B: Short press get red, green or blue color directly, long press 1-ós adjust R/G/B brightness continuously to achieve millions of colors.

Yellow/Purple/Cyan: Short press get static yellow, purple, cyan color directly.

Orange/Grape/Grass green: Short press get static orange, grape, grass green color directly.

 $(S_1)$   $(S_2)$   $(S_3)$   $(S_3$ 

# Dynamic mode list

Use the controller's Mode button or the IR remote control's Mode +/- keys to switch between 10 dynamic modes:

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

### Dimming curve

