tuya

R-103+C-103B
RGB LED MESH+BLUETOOTH Controller Set

CE RoHS
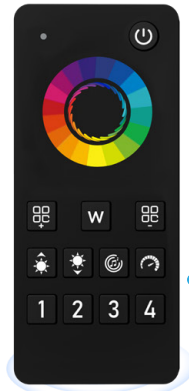
TUYA APP	R-103	C-103B

MESH+BLUETOOTH

Compatible voice assistants (Support language command switch and brightness adjustment.))

小米小爱   tuya 小智管家   天猫精灵   百度小度

Amazon Alexa   Yandex Alice   Google Assistant

Local Remote Control:
MESH remote control realizes local physical key control (such as switching, group switching, basic dimming) through MESH, which is suitable for the elderly, children or quick operation.
MSHE BLUETOOTH controller supports remote APP control through the BLUETOOTH + Tuya ecosystem, which can finely adjust brightness, color, and dynamic effects, and can share devices, create groups and other functions.

Peculiarity

●MESH wireless transmission technology, stable signal and strong penetration.
●Support matching multiple devices, multiple devices can be controlled at the same time, and one remote control can manage and synchronize up to 500 controllers. Each controller can be supported by 10 remote controls.(Control distance 30 meters)
●The brightness and color of the remote control can be adjusted according to personal preference, and the brightness and speed of the dynamic mode can be edited.
●The controller can adjust the brightness, color, voice control, select various dynamic or custom scenario modes, timing, countdown and other functions through the Tuya/Smart Life APP.
● Device click to run and automate, automatic transfer and synchronization function.
●PWM (Pulse Width Modulation) technology is adopted to ensure smooth light transition and avoid eye fatigue.
●Voice control, support Asia Alexa, Google Assistant, Tmall Genie, Xiaomi Xiaoai voice assistant and other speakers.
●Support multi-controller cascade, easily cover large-area lighting scenes such as shopping malls, theaters, building facades, etc.
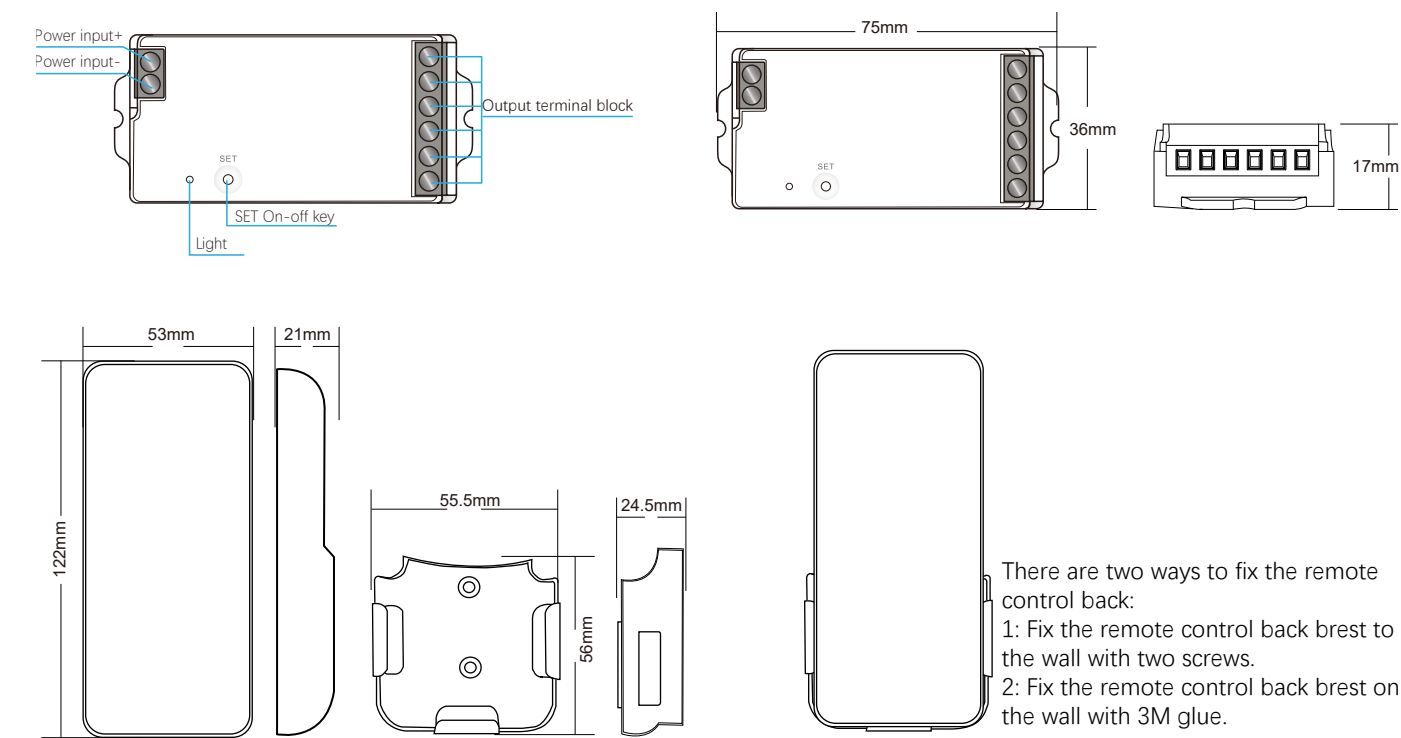
Device parameters

LED controllers

Input voltage	DC 5-24V
Input current	6/CH；15A max
Access signal	MESH+BLUETOOTH
Control the distance	30M
Size	L75XW36XH17mm
Authentication	CE,ROHS

Environment

Operating temperature	Ta:-20℃~+60℃
Maximum temperature of the case	Tc:+65℃
IP rating	IP20

Wrap

Package size	L7.6XW3.7XH2.1cm/0.04kg
Box size (100 pcs)	L19XW16XH12cm/4.2kg

LED remote control

Voltage	3V(AAA*2PCS)
Operating current	10mW
Transmission frequency	MESH（2.4GHz）
Standby power consumption	15uA
Transmit power	6dBm
Color temperature range	3000-6000K
Remote control distance	30M
Size	L122XW53XH21mm
Operating temperature	Ta:-20℃~+60℃
Authentication	CE,ROHS

Wrap

Package size	L13XW5.8XH2.7cm/0.105kg
Box size (100 pcs)	L27XW30XH15cm/11kg

Equipment mechanism and installation

Power input+
Power input-
Output terminal block
SET
SET On-off key
Light

75mm
36mm
17mm

53mm
21mm
122mm

55.5mm
24.5mm
56mm

There are two ways to fix the remote control back:
1: Fix the remote control back brest to the wall with two screws.
2: Fix the remote control back brest on the wall with 3M glue.

Wiring diagram of the device

Connect the strip light

AC100-240V

恒压电源
5-24VDC

OUTPUT
V+ V+ V+ R G B

IC

IC
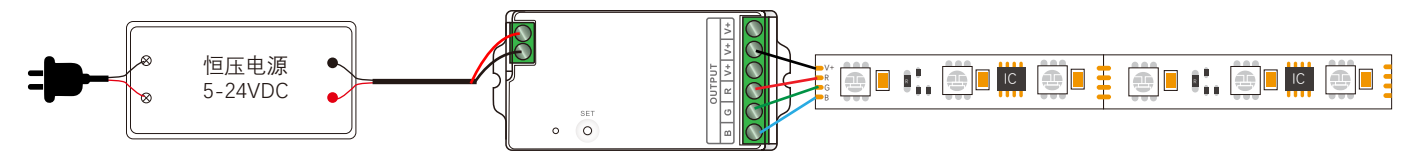
Description of the function of the remote control

Light
ON/OFF
Color Wheel
One-click white light
MODE+
MODE-
Brightness+
Music
Brightness-
SPEED
grouping

1 2 3 4

The living room, bedroom, kitchen, and corridor can be divided into different areas, which can be switched on and off independently

R-103Remote Control Mode Comparison Table

Dynamic Mode Comparison Table

S/N	MODE	S/N	MODE	S/N	MODE
1	Seven colors jump	2	Red flash	3	Green flash
4	Blue flashes	5	Yellow flash	6	Cyan Flash

S/N	MODE	S/N	MODE	S/N	MODE
7	Purple flash	8	White light flashed	9	Three-color jump
10	Three-color strobe	11	Seven colors alternate	12	The three colors flickered and flickered
13	Seven-color gradient				

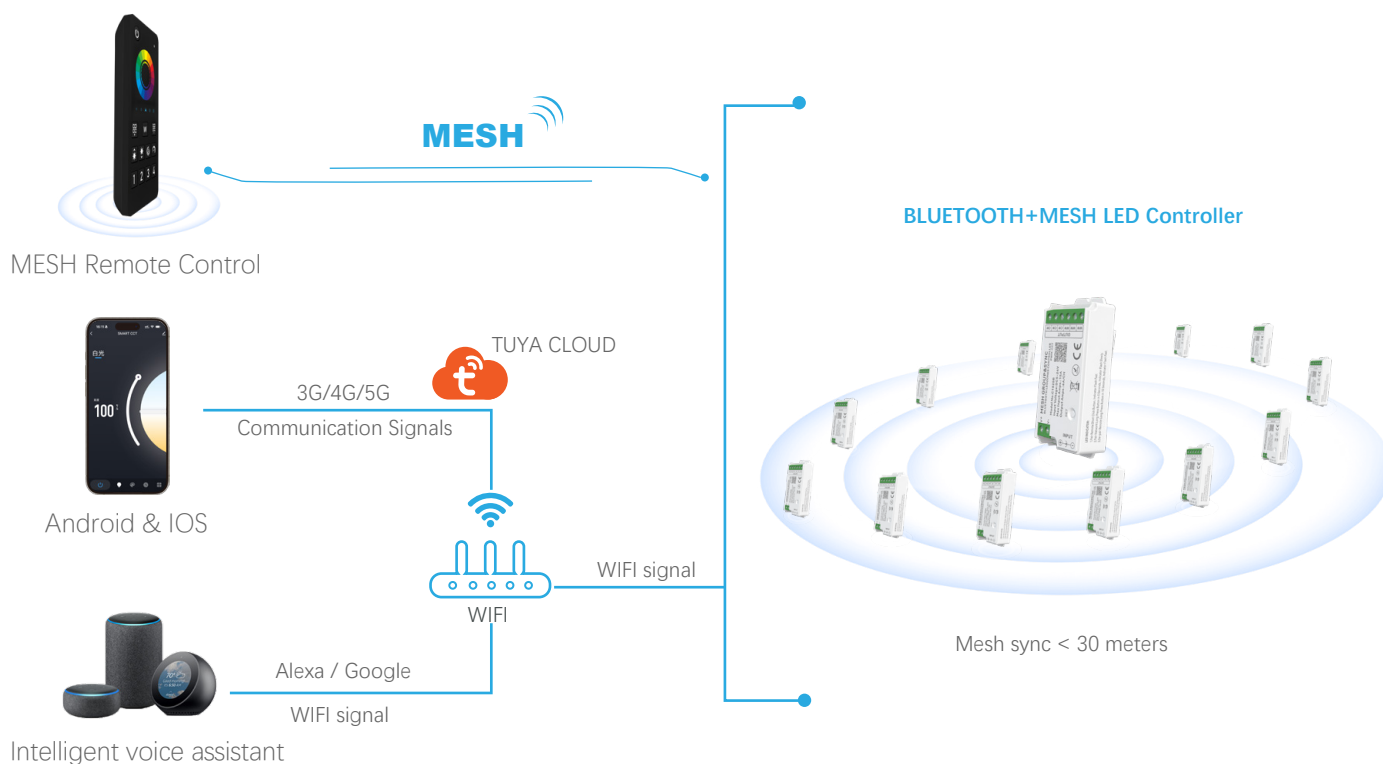Note: The brightness is adjustable and the speed is adjustable

Music Mode Comparison Table

S/N	MODE	S/N	MODE	S/N	MODE
1	Colorful beats to the music	2	Colorful gradients follow the music	3	Colorful dance to the music
4	Colorful flashes along with the music				

Note: The brightness and speed are not adjustable in music mode

Schematic diagram of the control connection

Mesh wireless transmission

MESH Remote Control

TUYA CLOUD

3G/4G/5G
Communication Signals

Android & IOS

WIFI signal

WIFI

Alexa / Google
WIFI signal

Intelligent voice assistant

BLUETOOTH+MESH LED Controller

Mesh sync < 30 meters

Tuya smart download & APP network connection

1. Download and install the [Smart Life] or [Tuya Smart] APP

Search for [Tuya Smart] on Apple or Google Play or scan the QR code below to download and install the app.
Please click on the "Sign Up" button to create an account and use it for the first time, if you already have an account, log in directly.

Please download the corresponding Tuya/Smart Life APP according to your region.

Scan the QR code to download the APP

Smart Life APP

Tuya Smart APP

function		Button mode	Power-off mode
'SET'key	ON/OFF	Short press (release within 1s)	N\A
MESH Remote Control	The remote control is paired	Press (3S) The indicator light flashes quickly	3 Times
Android & IOS	WiFi Connect	Press (5S) The indicator light flashes quickly	5 Times
	Clean up and reset	Press and hold (10S) to The controller indicator flashes quickly	10 Times
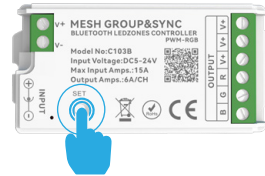
3. Connect to your smartphone

1. Make sure your smartphone is working under a WLAN network.
2. Open the login APP, press and hold "SET" to add a device, if you don't find it, please click " +" in the upper right corner, then manually select "Add Device", wait for 5-10 seconds to complete the connection.
3. Once the connection is successful, the new device will be displayed on the home page, then tap on the device and enter the control interface to do more
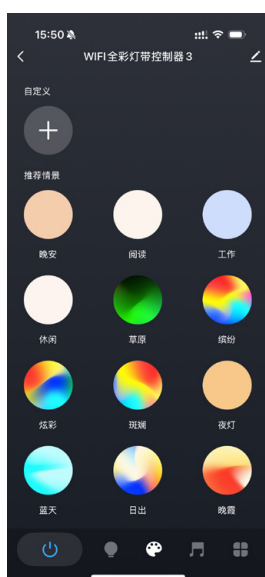
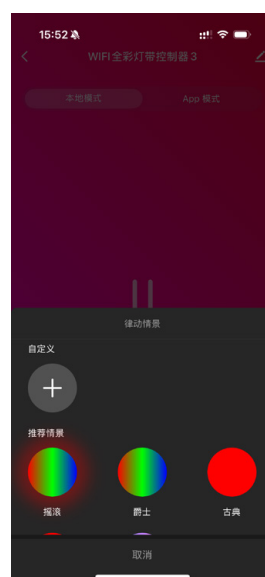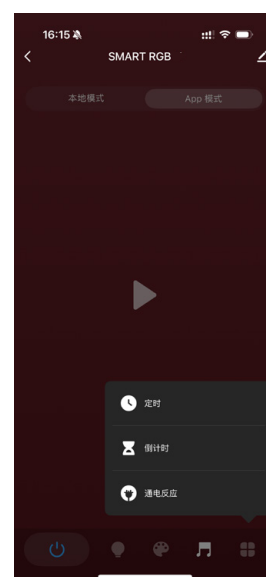Follow these steps to complete the connection:
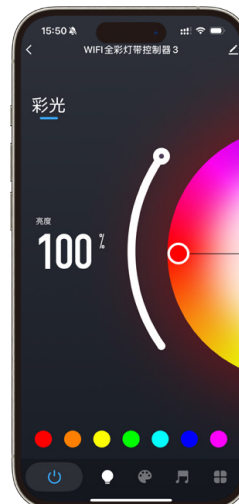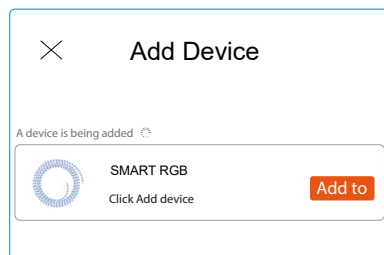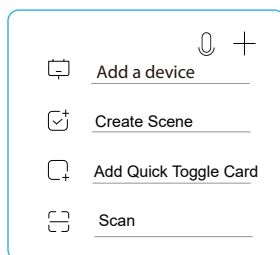
Tuya APP interface

| IPL mode | Customize the scene | Music mode | Timer & Countdown & Power-on Response | Set up |

Color light mode: set the color and brightness of the light, and quickly color it with one click.

Custom scenes: 30 scenario modes to customize; Customize the static, jumping, breathing, color brightness, and change speed of the scene, a total of 10 scenes can be customized.

Music mode: local mode adjustable sensitivity, 5 recommended scenes, custom rhythm scenes, a total of 3 custom rhythm scenes can be added. The APP mode is not adjustable, and you need to turn on the mobile phone microphone to detect the music.

Timer & Countdown & Power-on Response: Customize multiple times to perform on/off lights; Customize the countdown time to perform the on/off light action, and the light will automatically turn off when the countdown ends. The energizing reaction can set the state of the light after the energizing is applied.

Settings: This interface can be bound with third-party language control, one-click execution and automation, group creation, device sharing and other functions.

Safety Precautions

1. The remote control is a precision electronic product, please do not use it in a humid or high temperature environment for a long time. If not in use for a long time, remove the battery and store it in a cool, dry place.

2. Do not use this device in a large area of metal or in an environment with strong electromagnetic waves nearby, otherwise it will seriously affect the control distance

3. Please check whether the input voltage of the constant voltage power supply meets the requirements of the controller, and check whether the connection of the cathode and anode is correct.

4. The working voltage is DC 5~24V, if the voltage is higher than 24V, the controller will be damaged.

5. Non-professional users cannot directly disassemble the controller, otherwise it may cause fire and electric shock.

6. The working temperature (Ta) is -20~60°C; Do not use the appliance in direct sunlight, humidity, or other high-temperature areas.

7. When the equipment load reaches 15A, the wire diameter must be more than 1.5 square millimeters

8. When the device load exceeds 10A, the connection cable from the DC port to the LED strip must be shorter than 40cm.

9. Please install the device in a good heat dissipation area.