

# MC606X | PWM 5-IN-1 intelligent grouping Controller MC606X Controllers+MR series Remote Control Specification



MC606W-WIFI



MC606Z-Zigbee



MC606B-BLUETOOTH

## Compatible remote control

A single device can support 10 remote controls at the same time



MR10X Series



MR11X Series



MR011 DIM/CCR



MR333 RGB



MR20X Series



MR02X Series



MR501-Human body sensor

## Compatible voice assistant

Support language command switch, adjust brightness, and color.



小米小爱



小智管家



天猫精灵



百度小度



Amazon Alexa



Yandex Alice



Google Assistant

Local + remote control:

The MESH remote control realizes local physical button control (such as switching, group switching, and basic dimming) through MESH, which is suitable for the elderly, children, or quick operation.

The MESH five-in-one controller supports remote APP control through Wi-Fi/BLUETOOTH/ZIGBEE gateway + Tuya ecology, can finely adjust the brightness and dynamic effects, and can be shared Equipment, create groups and other functions.

## peculiarity

- MESH wireless transmission technology, stable signal and strong penetration.
- Each node has a signal relay function, which makes long-distance transmission more sensitive and consumes less power.
- 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 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 12-48V
Input current	10/CH; 30A max
Access signal	MESH+WIFI/Bluetooth/Zigbee
Control the distance	30M
Size	L129.5XW81XH25mm
Authentication	CE,ROHS

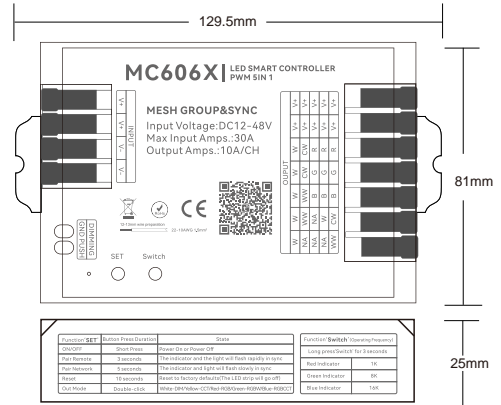
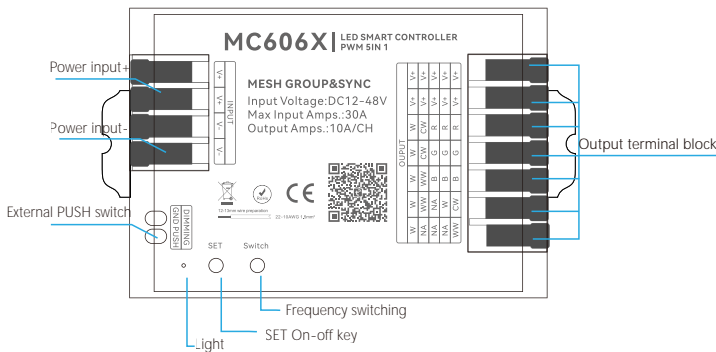
## Environment

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

## Wrap

Package size	L13.5XW9XH3cm/0.16kg
Box size (100 pcs)	L70XW15XH32cm/1.8kg

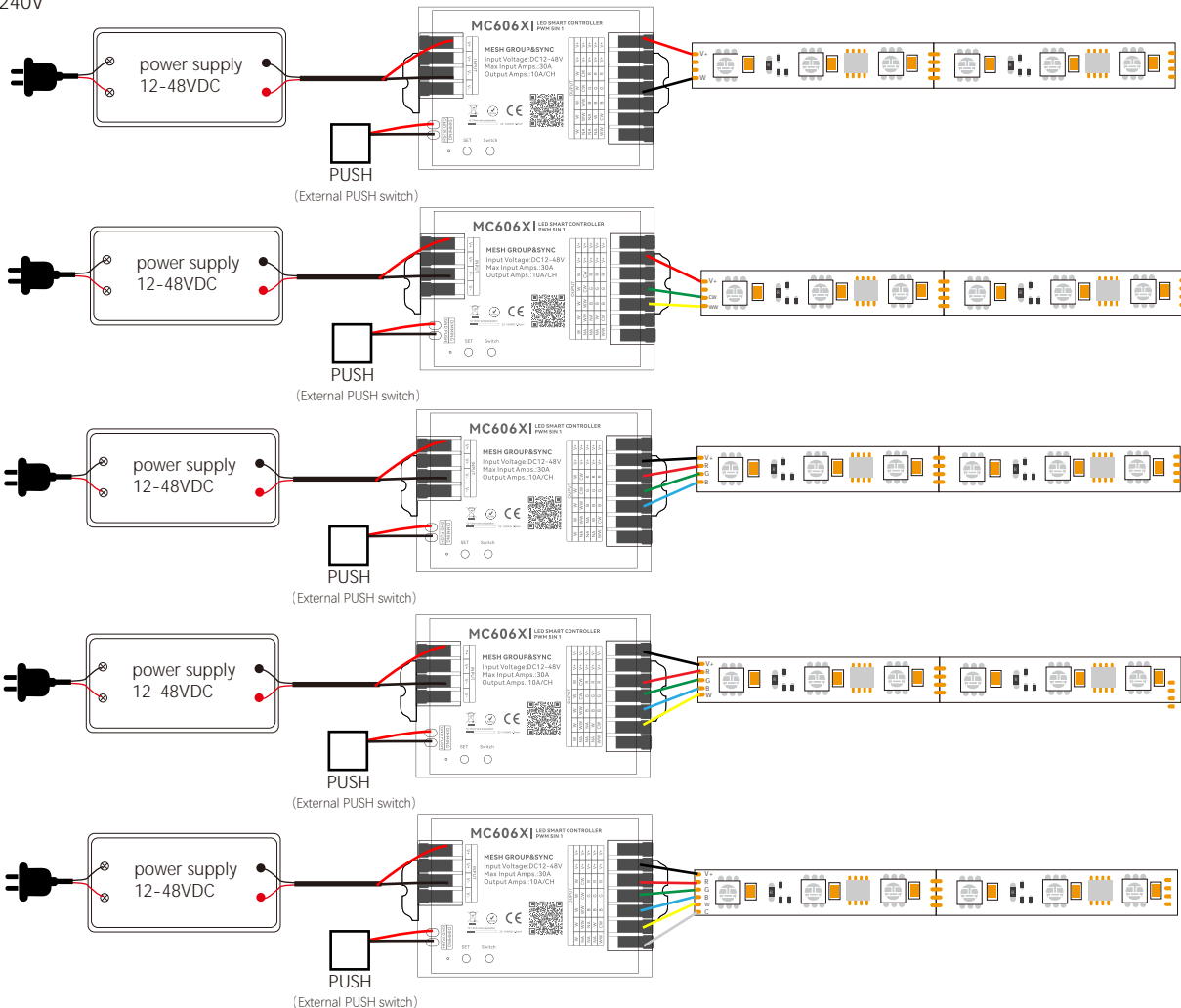
# Equipment mechanism and installation



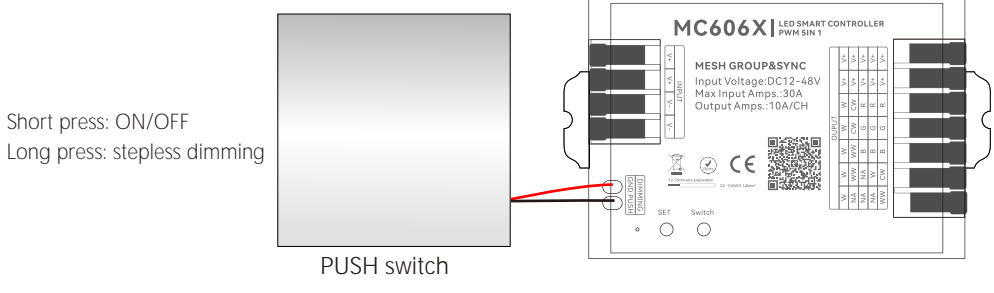
# Wiring diagram of the device

## Connect the strip light

AC100-240V

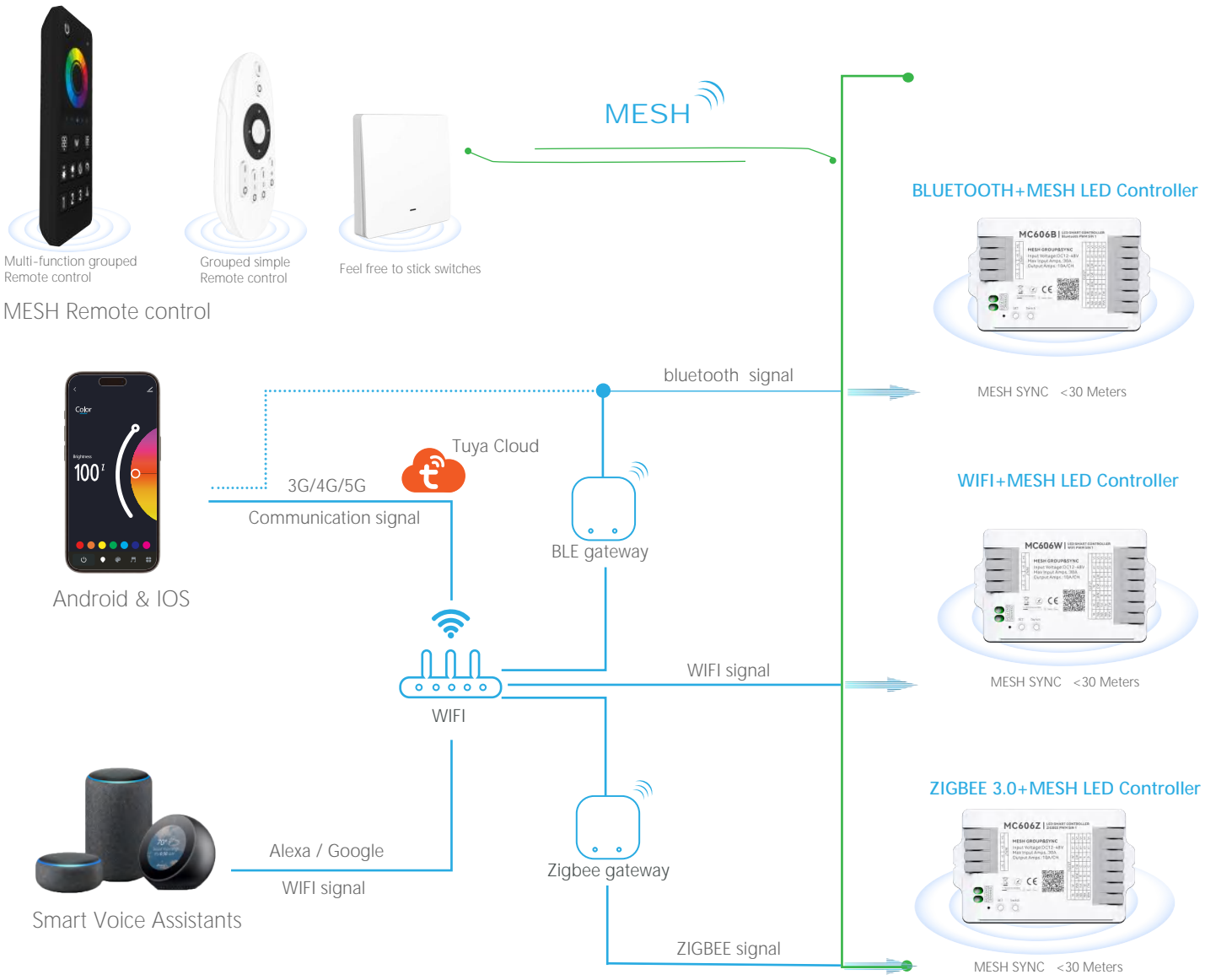


# External PUSH switch description



# Schematic diagram of the control connection

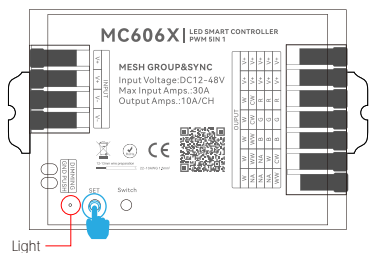
## MESH wireless communication technology







# Controller Configuration Function Description

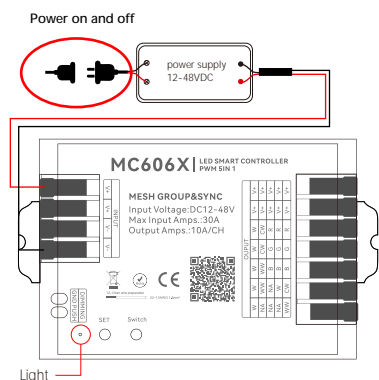
## 1. Controller Configuration Function Description





### 1-1. Controller Configuration Settings - SET Button



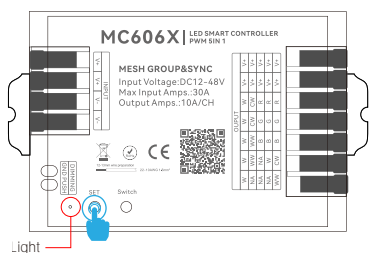
Function		'SET' button method
ON/OFF	 'SET' button	Short press (release within 1 second)
Pairing remote control	 MR Series Remote Control	Press and hold the 'SET' button for 1-3 seconds and then release it. The controller indicator light will flash rapidly. Next, press any group button on the remote control to complete the remote control pairing.
Network Configuration	 Connect APP	Press and hold the 'SET' button for 1-5 seconds, then release it. The controller indicator light will flash slowly, and operate the network configuration on the mobile app.
Device Reset	 Clear and reset	Press and hold the 'SET' button for 10 seconds and then release it. The controller indicator light will blink slowly, the device will reset, and WiFi network information and remote control pairing will be cleared.

### 1-2. Controller Configuration Settings - Power On/Off Function Description



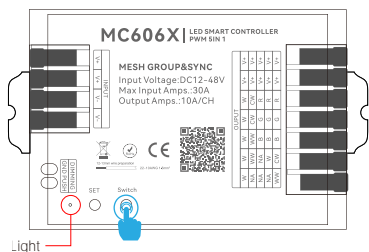
Function		'Power on and off method
ON/OFF	 'SET' button	Not supported
Pairing remote control	 MR Series Remote Control	After powering on and off three times consecutively, the controller indicator light flashes rapidly, then press any group button on the remote control to complete the remote control pairing.
Network Configuration	 Connect APP	After powering on and off 5 times in a row, the controller indicator light flashes slowly, and configure the network on the mobile app.
Device Reset	 Clear and reset	After turning on the power 10 times consecutively and then turning it off, the controller indicator light flashes slowly, the device resets, and the WiFi network information and remote control pairing are cleared.

### 1-3. Controller Configuration Settings - 5-in-1 Controller Switch Output Mode



Double [SET] click to switch output mode		
Indicator color	White ○	DIM
	Yellow ●	CCT
	Red ●	RGB
	Green ●	RGBW
	Blue ●	RGBCT

### 1-4. Controller Configuration Settings - Adjusting Controller Frequency



Function 'Switch' (Operating Frequency)	
Long press 'Switch' for 3 seconds	
Red Indicator	1K
Green Indicator	8K
Blue Indicator	16K

## 2. Tuya smart download

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



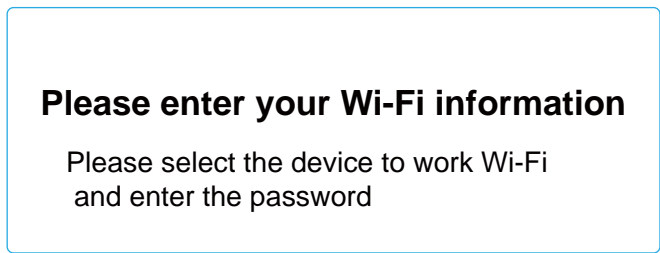
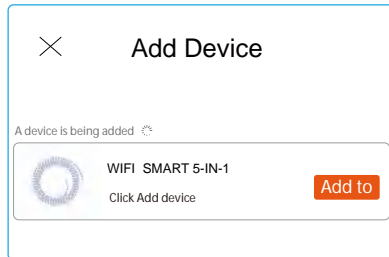
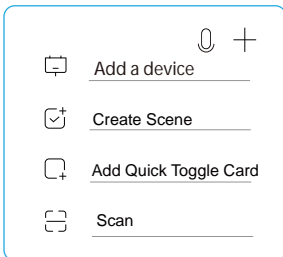
Tuya Smart APP

## 3. APP network connection

### MC606W-WIFI Connection process

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 it is not found, please click " + " in the upper right corner, and then manually select "Add Device", when adding, you need to enter the WiFi password of your smartphone connection, and wait for 5-10 seconds to complete the connection after successfully entering
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

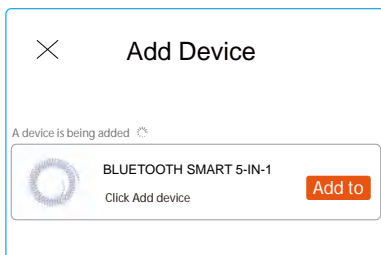
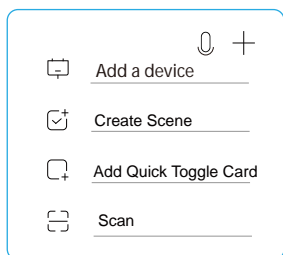
Follow these steps to complete the connection:



### MC606B-BLUETOOTH Connection process

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

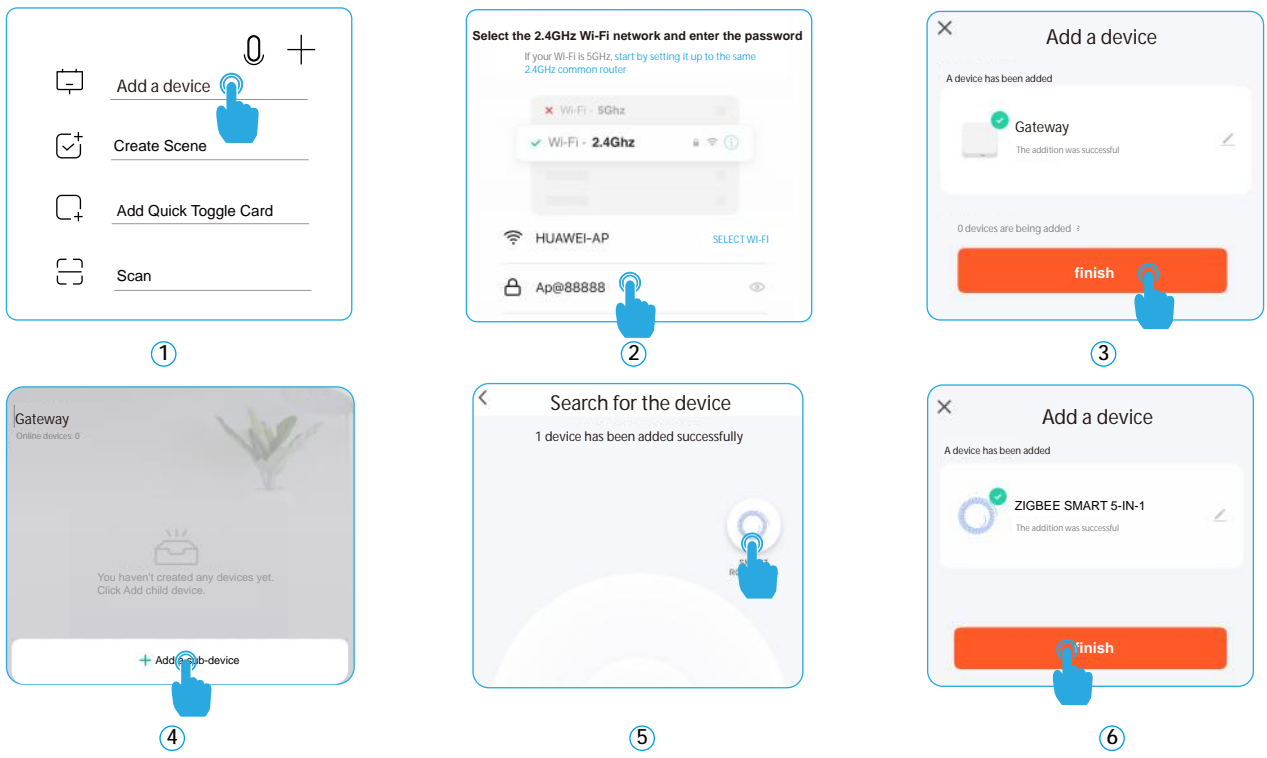
Follow these steps to complete the connection:



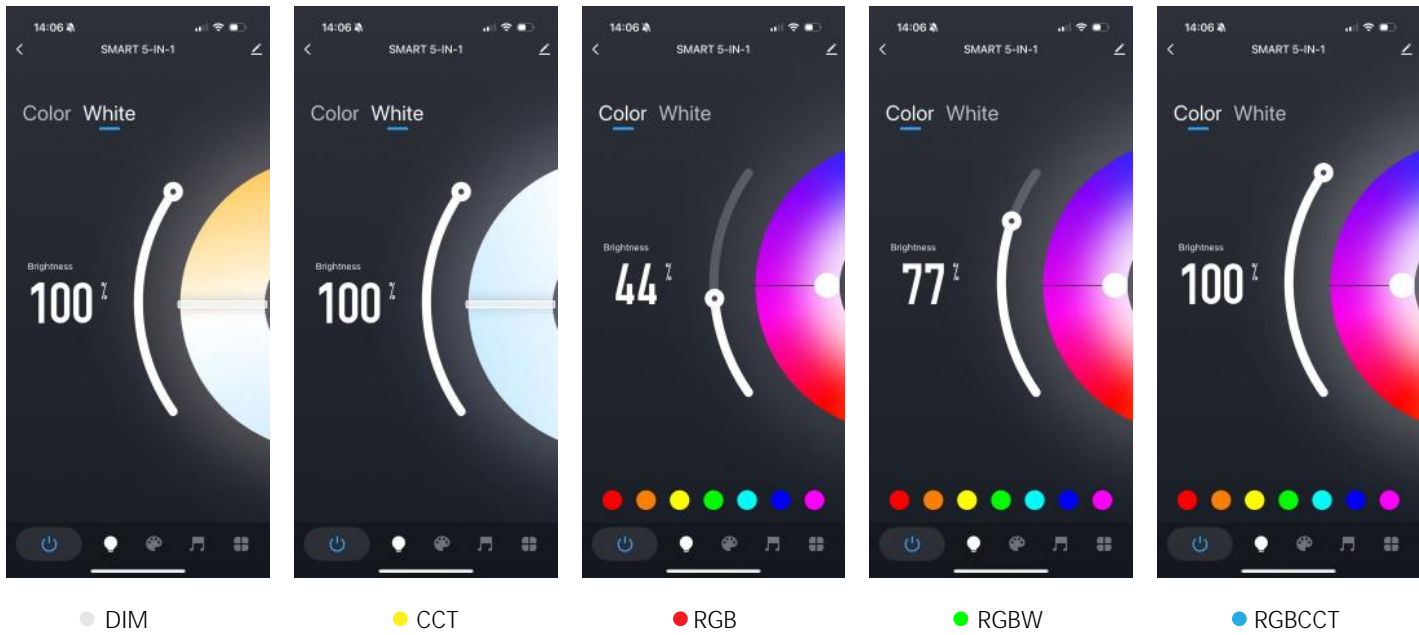
### MC606Z-ZIGBEE connection to TUYA APP process

1. Make sure your smartphone is working under a WLAN network.
2. Open the Tuya APP, select Manually Add Gateway Central Control, select Zigbee Gateway, and enter the WIFI password to connect (Incorrect WIFI password will cause the connection to fail, non-2.4G network WIFI also.) will cause the connection to fail)
3. Reset the Zigbee gateway device, the red and blue lights of the Zigbee gateway are always on, turn on the power supply, please confirm that the red light is flashing, the blue light is always on, and the red light is always on after the connection is successful.
4. Click Done to enter the gateway control interface, add sub-devices, and confirm that the sub-devices belong to the network configuration mode (please place the gateway, controller, and smartphone close to each other for quick speed.) Pairing identification) long press the controller "SET" for 5 seconds, after the connection is successful, the sub-device will be displayed on the home page, then tap the device and enter the control interface to do more.
5. After the controller is installed in the APP, we can easily control the LED lighting with the APP.

Follow these steps to complete the connection:

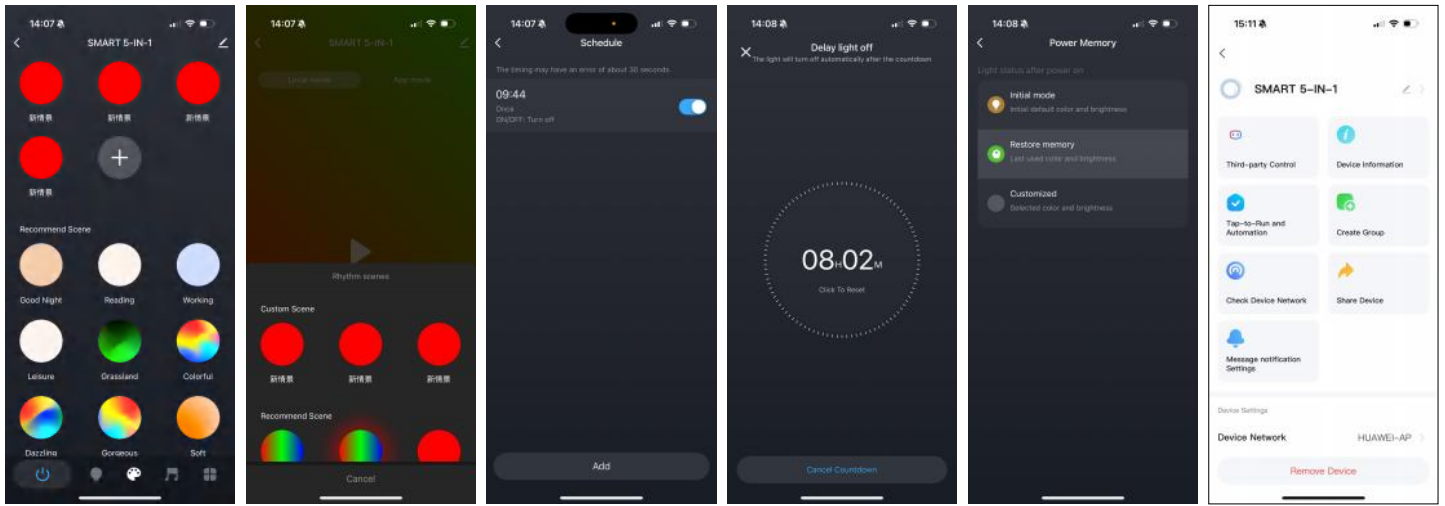


Introduction to the functions of the APP interface



DIM/CCT/RGB/RGBW/RGBWC Status Interface: You can set the color and brightness of the light, and you can quickly color it with one click.

After the controller is connected to the TUYA APP, double-click the "SET" button to switch the APP status.  
 Note: The TUYA APP will automatically switch the corresponding status according to the color of the indicator light, and the status interface without the corresponding indicator will not be able to operate.



Scenario mode

Music mode

Timing

Countdown

Power-off mode

Set up

**Scenario mode:** 32 recommended scenario modes and 10 customized; Customize the static, jumping, breathing, color brightness, and change speed of the scene, a total of 10 scenes can be customized.

**Music mode:** It is divided into local mode and APP mode; The local mode can adjust the sensitivity, 5 recommended scenes, and can be customized to add groove scenes, a total of 3 custom groove scenes can be added. The APP mode is not adjustable, and the phone needs to be turned on. The microphone detects the music.

**Timing:** Customize multiple times to perform on/off light actions;

**Countdown:** Define the countdown time to perform the on/off light action, and the light will automatically turn off when the countdown ends.

**Power-off mode:** The energizing reaction can set the state of the light after the energizing is applied

**Set up:** 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 12~48V, if the voltage is higher than 48V, 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 device 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.