

# MC20XA | PWM 1-5CH MESH(2.4G) LED grouping controller

## MC20XA Series controllers+MESH Series remote control Specification

CE RoHS



MC211A/DIM



MC212A/CCT



MC213A/RGB



MC214A/RGBW



MC215A/RGBWC

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



MR101/DIM



MR102S/CCT



MR102/CCT



MR103/RGB



MR104/RGBW



MR105/RGBCCT



MR011/DIM



MR023/3 WAY

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Local Controls:

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.

### 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 of the remote control can be adjusted according to personal preference, and the brightness and speed of the dynamic mode can be edited.
- 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.
- 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	6/CH; 15A max
Access signal	MESH(2.4G)
Control the distance	30M
Size	L113XW39XH20mm
Authentication	CE,ROHS

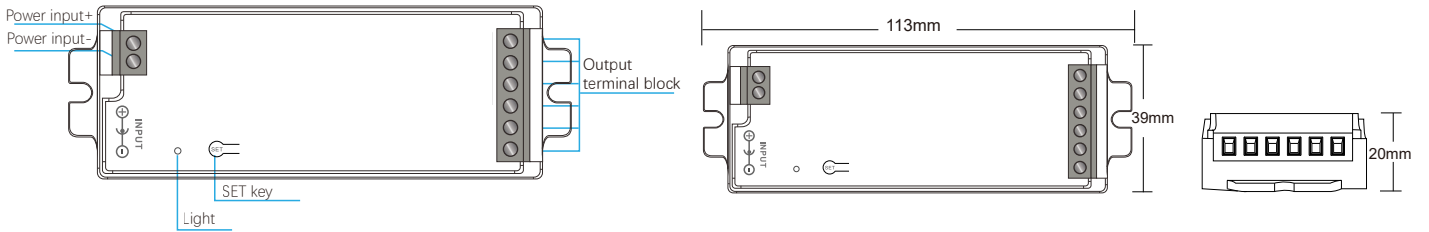
#### LED remote control

voltage	3V(AAA+2PCS)
Operating current	10mW
Transmission frequency	MESH (2.4GHz)
Transmit power	6dBm
Color temperature range	2700K-6500K
Dimming range	1-100% Infinitely dimming

<b>Environment</b>	
Operating temperature	Ta: -20°C ~ +60°C
Maximum temperature of the case	Tc: +65°C
IP rating	IP20
<b>Wrap</b>	
Package size	L11.6XW4.55XH2.45cm/0.06kg
Box size (100 pcs)	L42.5XW26.5XH17cm/6kg

Remote control distance	30M
Size	L122XW53XH21mm
Operating temperature	Ta: -20°C ~ +60°C
Authentication	CE, ROHS
<b>Wrap</b>	
Package size	L13XW5.8XH2.7cm/0.105kg
Box size (100 pcs)	L27XW30XH15cm/11kg

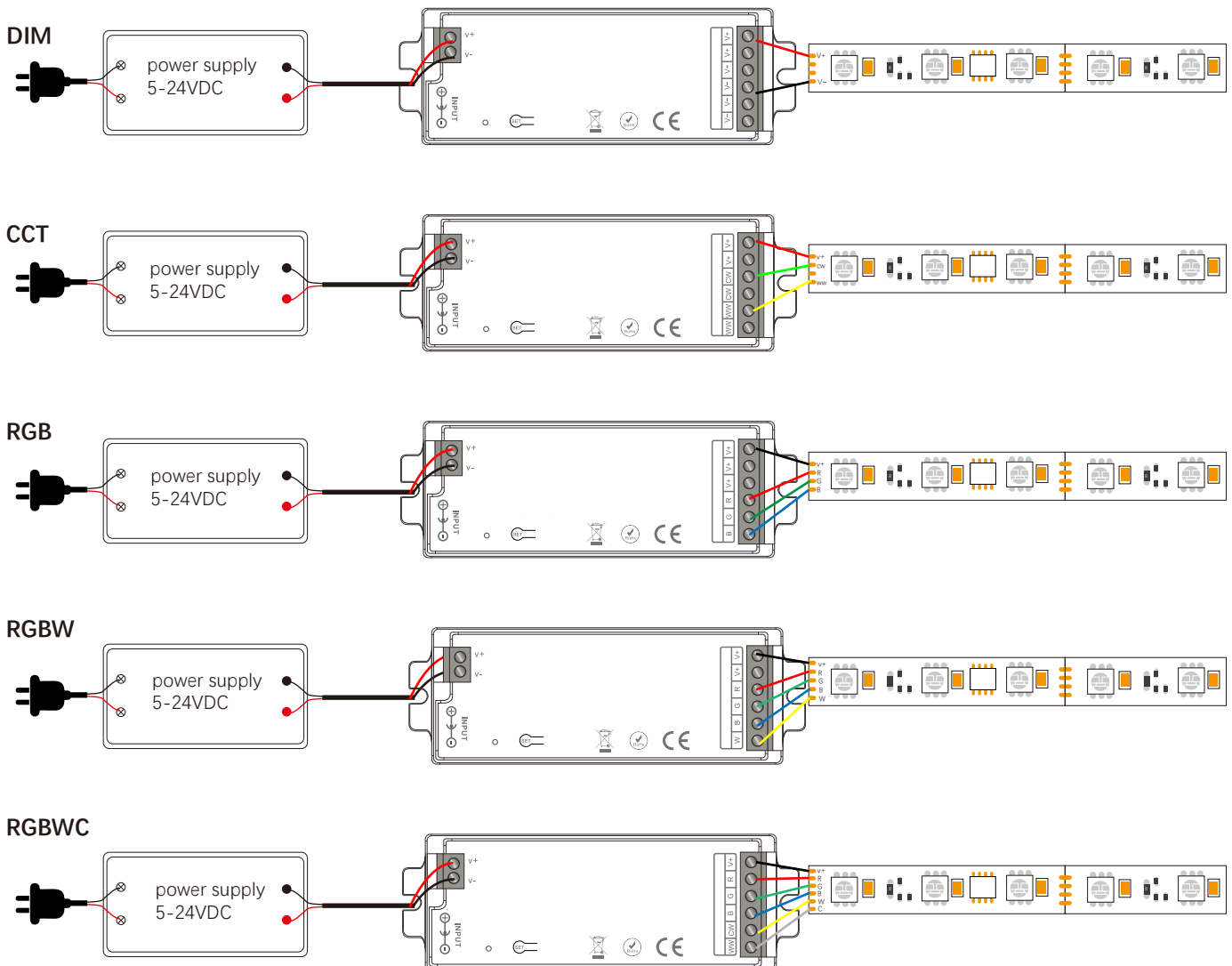
## Equipment mechanism and installation



## Wiring diagram of the device

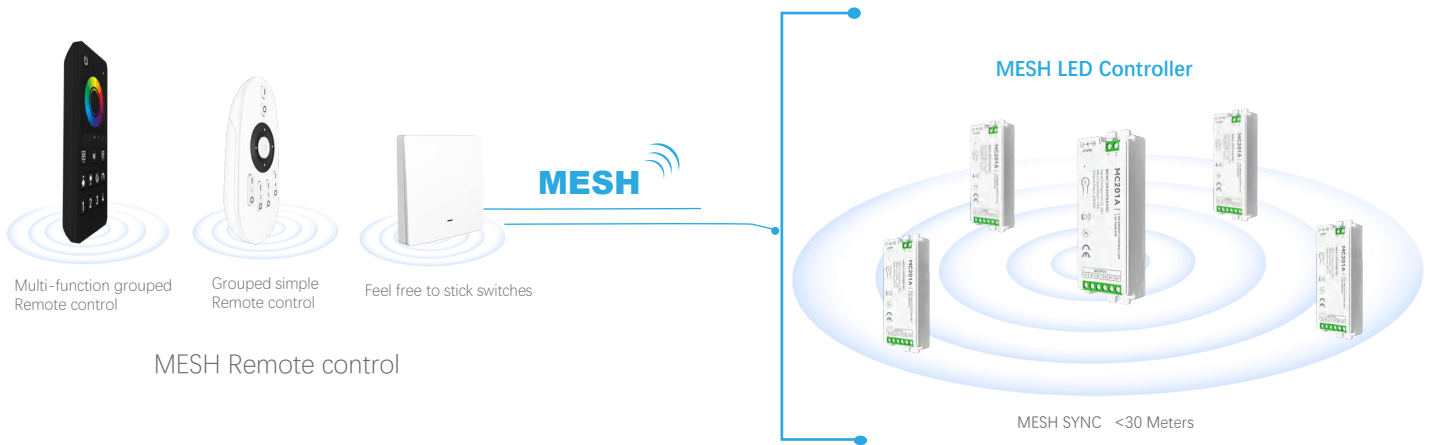
### Connect the strip light

AC100-240V

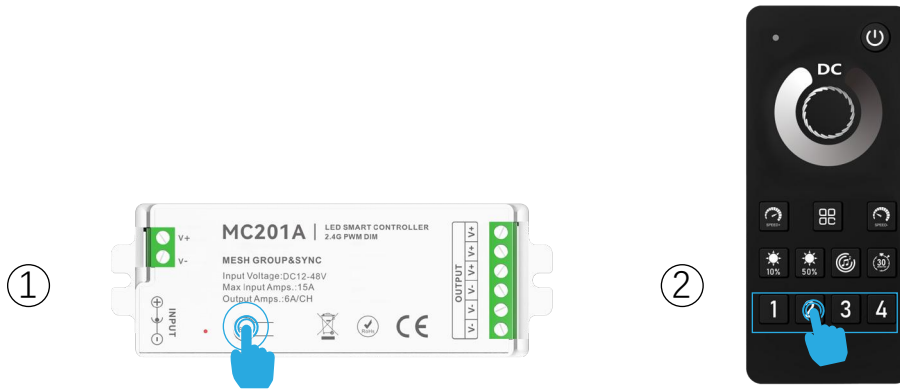


## Schematic diagram of the control connection

### MESH wireless communication technology

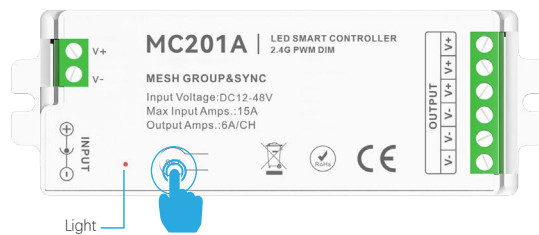


### Product function description & reset the device



Control Method 1: 'SET'Button	Control Method 2: Power Off	Indicator light status	Next steps	Functional Result
Short press (release within 1 second)	Not supported	No special flicker	No additional action required	Switch device power on/off status
Press and hold for 3 seconds, then release	3 times	Rapid flicker	Press any group button on the remote control	Complete the pairing of the remote control with the corresponding group
Press and hold for 10 seconds, then release.	10 times	Rapid flicker	No additional action required	Device reset, clear Remote control pairing

#### 2.2-1.Adjust the controller frequency



- Press and hold the "SET" button of the controller, let go after the indicator light flashes quickly, and wait for the indicator light to stop flashing.This stage is the preparation stage for frequency switching
- The indicator light stops flashing, and immediately press and hold the "SET" button again (enter the frequency selection stage):
  - When the indicator light turns to flicker slowly, let go immediately and the controller frequency is switched to 1kHz;
  - If the indicator light flashes quickly, let go immediately, and the controller frequency is 16kHz.

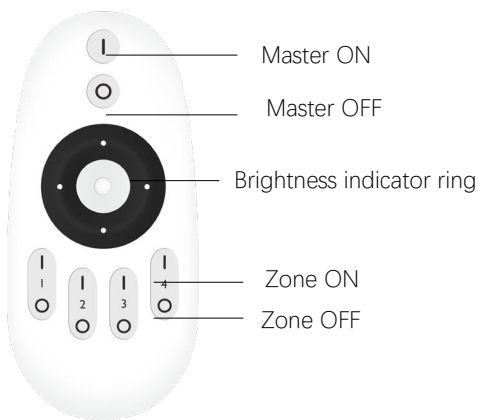
# Description of the function of the remote control

## Multi-function grouped remote control

Main ON/OFF button   
 **1 2 3 4** Grouping key   
 Short press; Select the key function. Long press; Perform key functions.

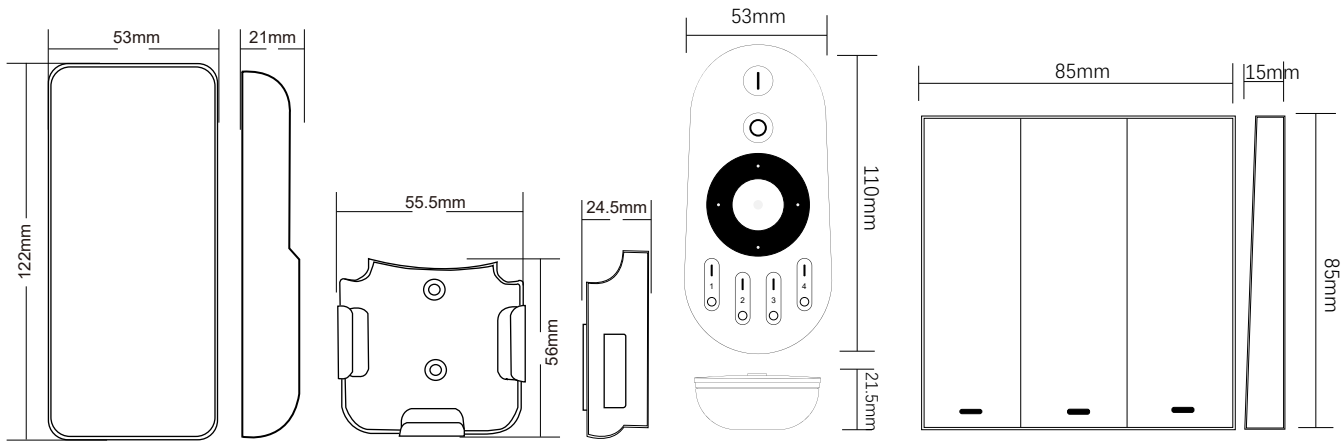


## Grouped simple Remote control



## Feel free to stick switches





## 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 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.