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# Product Specifications

**NAME: DMX Touch panel decoder with 2.4G remote**

**MODEL: TM083**



## Summarization

DMX Touch panel decoder with 2.4G remote is a new high-end led controller which is newly researched and developed by our company. It adopts glass panel design, beautiful and fashionable in appearance. It adopts high precision capacitance touch control chip, increases the touch sensitivity, reduces trigger which caused by mistake. The controller has 2.4G remote and DMX signal control interface, furthermore, it has colorful built-in mode option and color wheel, it is a functional and high-end touch controller. It is used for controlling a variety of lamp whose source of light is LED. For instance, point source of light, flexible light strip, wall washer lamp, panel lights etc., it has many advantages such as convenient to connect, easy to use and others. According to the actual need of customers, it can carry out jumpy changing, gradual changing, stroboflash and other effects of change.

## Technical Parameters

### Controller

1. Working temperature: -20-60°C
2. Power supply voltage: DC 12~24V
3. Output: 3 channel
4. Connect way: common anode
5. External dimension: L86XW86XH41.8mm
6. Packing size: L115XW110XH56mm
7. Net weight: 227g
8. Gross weight: 291g
9. Static power consumption: <1W

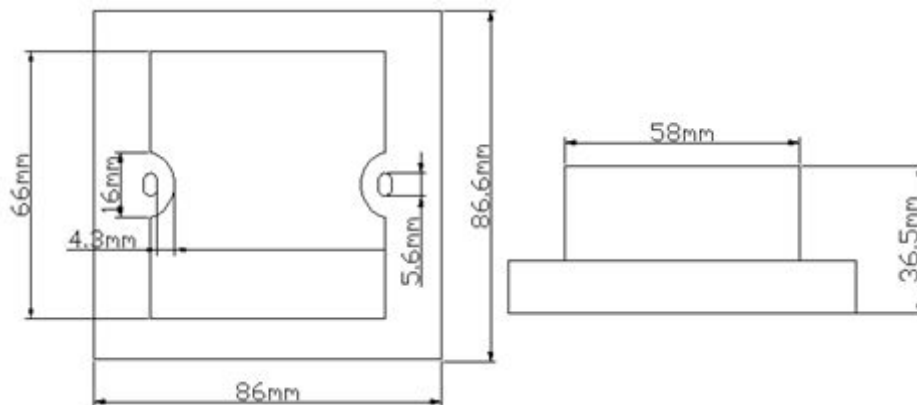
- 10. Output current: < 4A(each channel)
- 11. Output power: 12V:< 144W, 24V:< 288W

**Remote control**

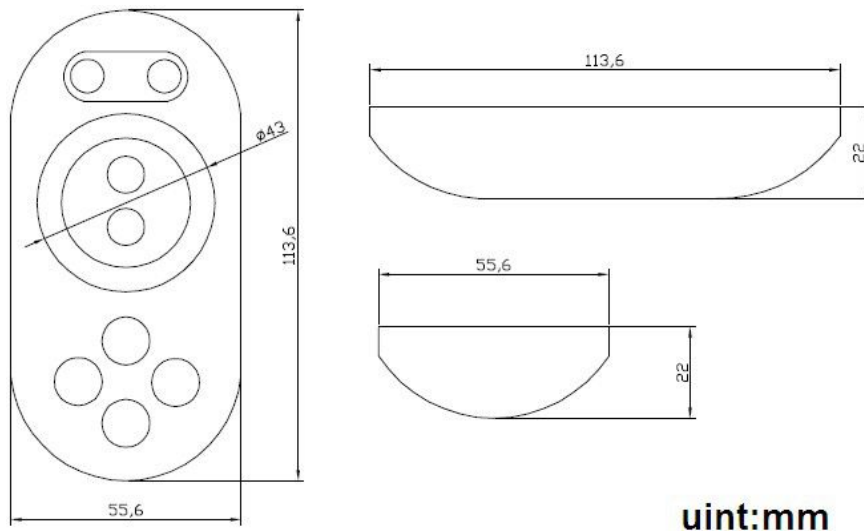
- 1. Working temperature: -20-60°C
- 2. Power supply mode: AAA\*3
- 3. Power supply voltage: 1.5V\*3
- 4. Transmitting frequency: 2.4Ghz
- 5. Standby power consumption: 0.015mW
- 6. Standby current: 60uA
- 7. Working current: 200uA
- 8. Transmitting current: 10mA
- 9. Remote distance: about 30 meters
- 10. Standby time: six month
- 11. Weight: 94g

**External Dimension**

**Controller**

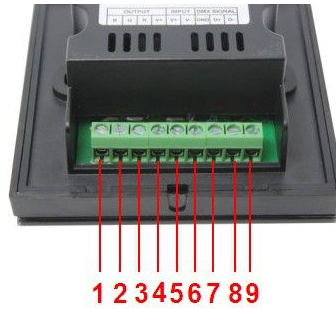


**Remote control**



unit:mm

## Interface instruction



“5”, “6”: power input pin, input voltage range is 12-24V, “6” connect the power of cathode, “5” connect the power of anode;

“1”, “2”, “3”, “4”: power output pin, output voltage is 12-24V, output each channel maximum current is 4A, “4” is the common anode, “3” is red light interface, “2” is green light interface, “1” is blue light interface.

“7”, “8”, “9”: DMX signal input interface, “7” is signal ground, “8” is signal +, “9” is signal -.

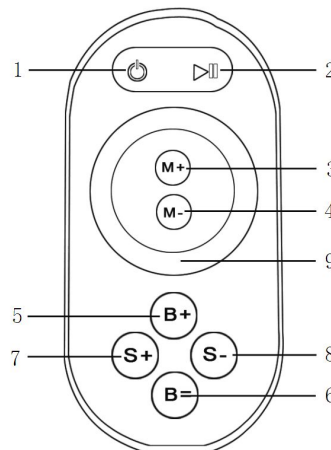
## Controller instruction

### 1. When there is DMX signal

When there is DMX signal, controller will be controlled by DMX signal, touch button is invalid, R, G, B three channel strip brightness will change by the DMX signal(can through DMX editor to edit the address);

### 2. When without DMX signal

#### A、Touch remote control instruction



- |                     |                 |            |            |
|---------------------|-----------------|------------|------------|
| 1, ON/OFF           | 2, Pause        | 3, mode+   | 4, mode -  |
| 5, brightness +     | 6, brightness - | 7, speed + | 8, speed - |
| 9, chromatic circle |                 |            |            |

There are 64 touch key (point) on the touch remote panel, the function as below:

- 1, ON/OFF key, under any state, can open or close controller output;
- 2, Pause, under dynamic state, can make controller stop at current state;
- 3, Mode add option key
- 4, Mode decrease option key
- 5, Brightness add key, the grade of the brightness add 1 by each pressing, a total of 255

- grades;
- 6, Brightness decrease key: the grade of the brightness decrease 1 by each pressing, a total of 255 grades;
  - 7, Speed add key, the grade of the speed add 1 by each pressing, a total of 100 grades;
  - 8, Speed decrease key, the grade of the speed decrease 1 by each pressing, a total of 100 grades;
  - 9, chromatic circle key, static mode option key, up to 55 touch point. Under open state, in any mode, touch chromatic circle can change into static color which is touched on the color wheel.

### Power management

Stop using the remote for 15-20s, remote automatic enter into standby state, to extend battery life. At this time, color wheel can not be used, must be pressed one key, then it can work.

### Match the code

Immediately after the electricity long press 3s touch panel key to open and any a button on the remote control, load for code success lights flashing three times.

### B、touch panel control instruction

When there is no DMX signal, controller can be controlled by the touch button, operation instruction as below:



: Multicolor pulley touch key, static mode selection key, up to 64 touch points;



: Under any state, can open or close controller output;



: Color function key, you can choose different kind of color change, total 11 kinds of change patterns, when controller is in open state, long press this key more than 3s, can open or close the buzzer output.



: Static state brightness add, 255 levels, dynamic state speed add, 100 levels.



: Static state brightness minus, 255 levels, dynamic state speed minus, 100 levels.

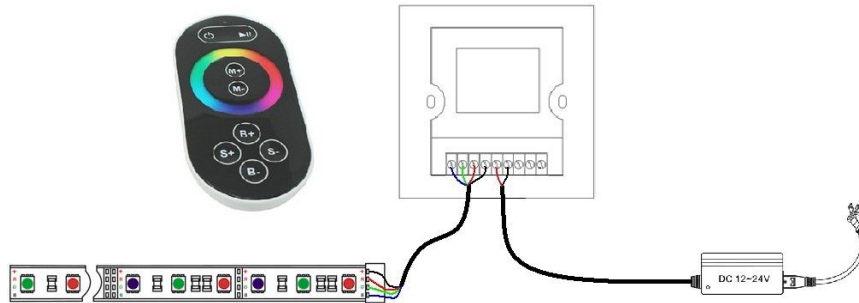
Dynamic and static state mode as below:

Mode No.	Function	Remarks
1	Static red	Brightness is adjustable, speed is unadjustable
2	Static green	
3	Static blue	
4	Static yellow	
5	Static purple	
6	Static cyan	

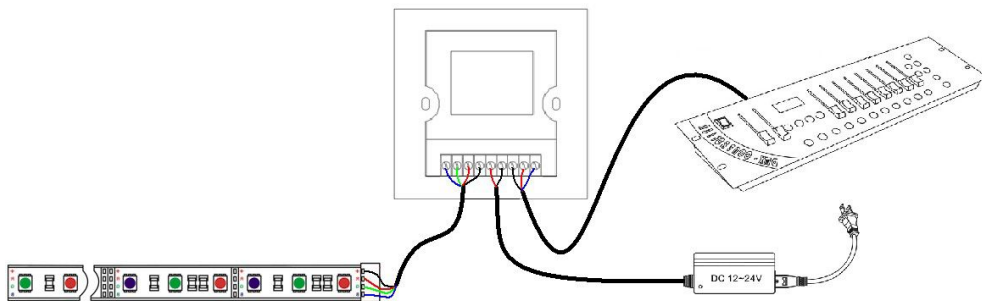
7	Static white	
8	Three-color jumpy changing	Speed is adjustable, brightness is unadjustable
9	Seven-color jumpy changing	Speed is adjustable, brightness is unadjustable
10	Three-color gradual changing	Speed is adjustable, brightness is unadjustable
11	Seven-color gradual changing	Speed is adjustable, brightness is unadjustable

## Typical Application

### 1. Without DMX signal typical application



### 2. With DMX signal typical application



## Installation Method

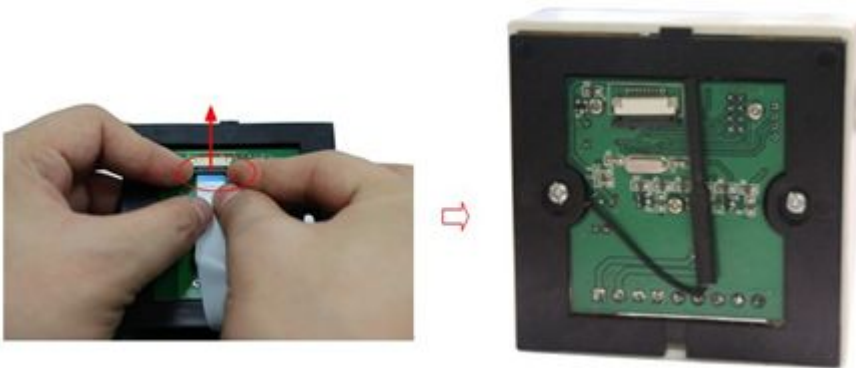
### 1. Open the touch panel

① as shown in figure, use screwdriver in touch panel gently pry gaps, take the panel;



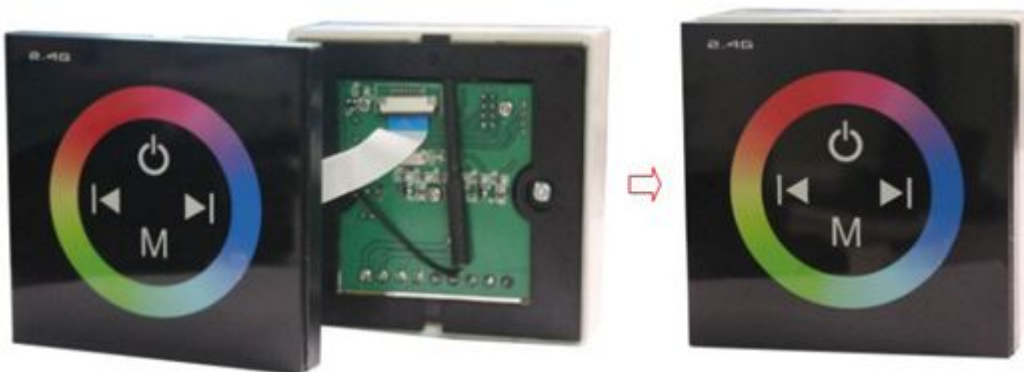
## 2. Installation switch base

In the red circle in the following picture, use your hands to push back, can unplug flat cable. When you push up, the flat cable can be fixed, connect the wire as the typical application, after connecting the line, installing touch controller into the cassette controller on the wall, then Screw it and make it fixed in the wall.



## 3, cover touch panel

Look the panel direction, then cover panel. As shown in the figure:



## Remark

- 1, Connect the load wire at first, followed by the power wire; **Please ensure short circuit can not occur between connecting wire before you turn on the power;**
- 2, Power supply voltage range is DC12~24V, more than voltage range maybe will burnout the controller.