

# Product Specification

**Name:** MiNi WiFi controller

**Model:** WF102



## Product Summarization

MiNi WiFi controller is a kind of WiFi controller with small volume developed by our company. We have upgraded its appearance, the volume is more compact and beautiful. All the advantages of WiFi control has been set on it. Collocating with upgraded mobile software, it is more comfortable and novel in style. It makes the LED control more convenient, simple and humanized. User can control the lights freely. The controller can support router mode by allocating upgraded mobile software. Multi-controllers can be added to one router which makes the light control and surfing the Internet work together and can avoid the trouble of switching WiFi.

Using WiFi technology can make our control range more wider and can get rid of narrow space constraint, in building can control more than 50m, in outdoor can control more than 100m.

## Technical Parameters

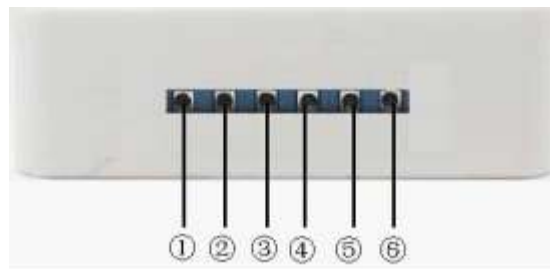
## 1. Controller Technical Parameters

1. Working voltage: DC5-24V
2. Output control: RGB light strip, color temperature light strip, dimming light strip.
3. Output current: □ 4A\*3CH
4. Connect mode: common anode
5. External dimension: L90\*W66\*H22 mm
6. Receiving sensitivity: 802.11b DSSS(-5dBm), 802.11b CCK (-10dBm), 802.11g OFDM(-15dBm)

## 2. Software Technical Parameters

1. Name: Mini control
2. Runtime platform: Android version support Android system (one must support Android system)
3. Size: 1.47M
4. Language: English/Chinese
5. Category: communications
6. Free, no plug-ins
- 7.

## Interface Instruction



Number	Wiring way of RGB light strip	Wiring way of color temperature light strip	Wiring way of dimming light strip
①	LED-Blue		LED
②	LED-Green	LED-Cold color	
③	LED-Red	LED-warm color	
④	LED positive pole	LED positive pole	LED positive pole
⑤	Power supply positive pole	Power supply positive pole	Power supply positive pole
⑥	Power supply negative pole	Power supply negative pole	Power supply negative pole

Connect wires according to the type of light strip need to control (RGB/ color temperature/ dimming). Number ①②③④ connect light strip, number ⑤ connect positive pole and number ⑥ connect negative pole.

## Software Instruction

### 1. Software Installation

Scan the QR code on the packing box, download Mini control,



, click it and then install it.

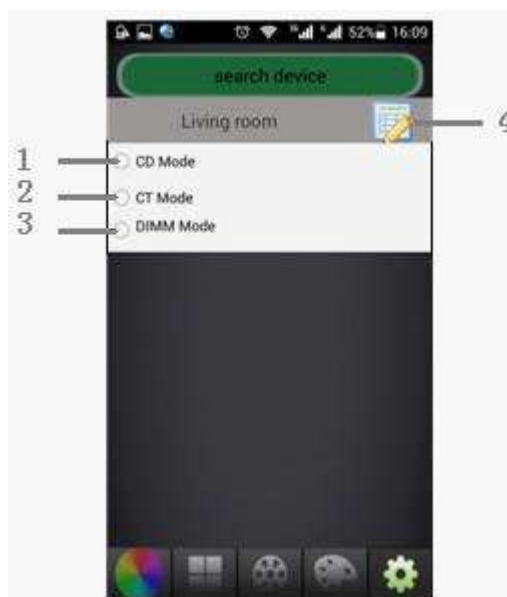
## 2. Scanning equipment



Number	Function
1	Searching for device
2	Selecting device
3	confirmation

When the equipment is powered on, mobile phones will connect with WiFi networks which called WF102-xxxxxxxxxxxx. enter the control software Mini Control which can search for appropriate equipment, select equipment and click ok.

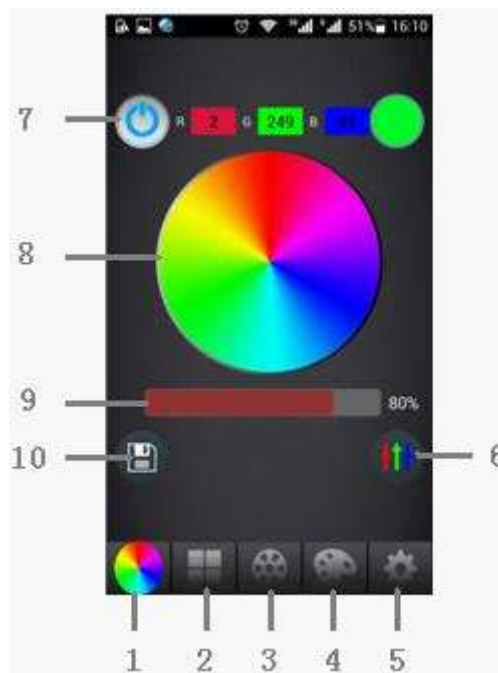
## 3. Selecting the type of light



Number	Function
1	RGB light strip control mode
2	Cold and warm light strip control mode
3	Dimming light strip control mode
4	Edit the name of device

You can click number 4 to edit the name of the device. According to the type of lights connected with device, select control mode, you can enter the corresponding control interface.

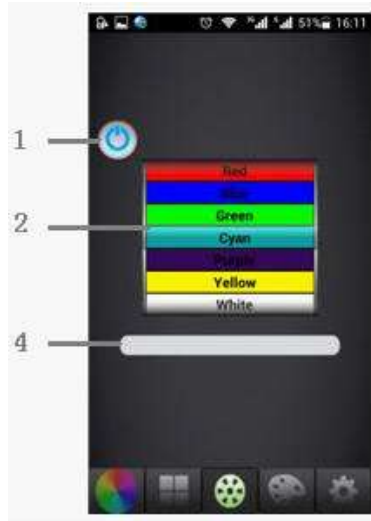
#### 4. RGB light strip control mode



Number	Function
1	RGB light strip control mode
2	Static mode
3	Built-in mode
4	Custom mode
5	setup
6	Single channel control mode
7	On-off
8	Color disk
9	Brightness
10	Storage static mode

Number 1 to 5 belongs to menu area, it can switch to control interface of each mode, the following 4.1, 4.2 will describe each mode in details. Number 7-9 can control on/off, brightness and color of RGB light strip. Number 10 can store the current color of light strip. And you can choose the color stored here in number 2 -static mode.

#### 4.1 Built-in mode



Number	Function
1	On/off
2	Mode list
4	Brightness/speed

When entering built-in mode, slide up and down number 2 to select mode, number 4 to control brightness/speed. Static mode controls the brightness and dynamic mode controls the speed.

#### 4.2 Edit the custom mode



Number	Function
1	Create new custom mode
2	Edit name of mode
3	Save
4	Frame setup

Click number 1 to create new custom mode, edit its name. One custom mode can support up to 16 frames. Click number 4, as below you can set the frame effect.

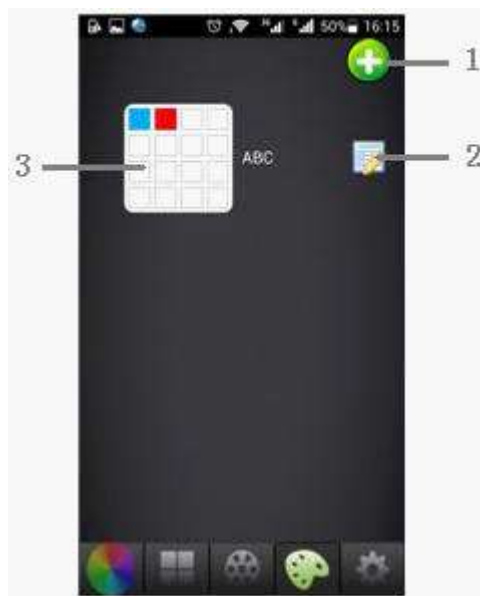
##### 4.2.1 Setup frame effect



Number	Function
1	Brightness
2	Save
3	Color disk
4	Fading time
5	Keeping time

When you choose the color, keeping time and fading time, save it, then you have finished setup of one frame, return to custom mode to set next frame.

#### 4.3 Call custom mode



Number	Function
1	Create new custom mode
2	Modify/delete mode
3	Call the mode

Click number 3, then you can call the edited custom mode.

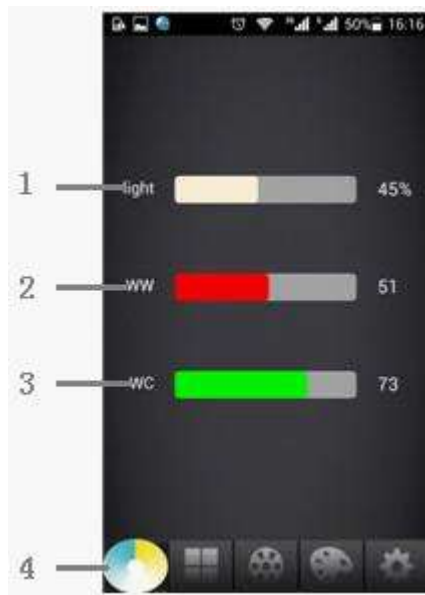
5. Cold-warm color light strip control mode.



Number	Function
1	On
2	Brightness add 1
3	Brightness minus 1
4	Off
5	Cold/warm control/single channel control
6	Warm color
7	Warm color add 1/cold color minus1
8	Warm color minus 1/cold color add 1

Click number 5, you can enter the single channel control interface.

5.1 single channel control

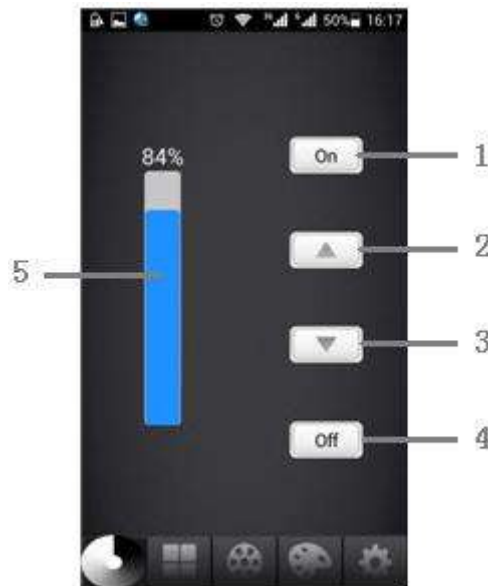


Number	Function
1	Brightness

2	Warm color value
3	Cold color value
4	Cold/warm control/single channel control

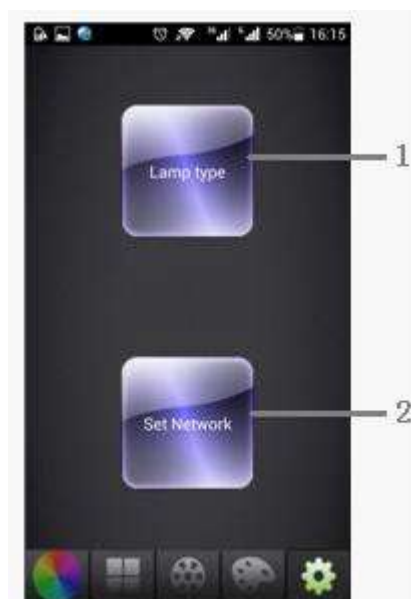
When click number 4, you can return to cold/warm control interface.

### 6. Dimming light strip control mode



Number	Function
1	On
2	Brightness add 1
3	Brightness minus 1
4	Off

### 7. Join a router





Number	Function
1	Select lamp type, search for device
2	Setup network

Click the setup icon of menu to enter the setting interface. Click number 2 to enter the router setup.

### 7.1 router setup



Number	Function
1	Searching for router
2	Connecting router

Click number 1 to search for router, if you fail to find it, please search it again. If find it, click number 2 to connect router, if router has password, enter the password, click ok to join a router. After join a router successfully, wifi in this device will be hidden, connect the router to control the device. It is unnecessary to switch the wifi network when you are surfing the Internet and controlling the light. It becomes more convenient to have multiple devices join the router. If you want to exit the router, you can long press on/off key to initialize the wifi network of device.

## Controller Function Instruction

### 1. Working state instruction

Indicator light	Function table
PWR	Power indicator light, long-time bright shows power supply normally
SYS	enter flicker when have wifi data, otherwise it will extinguish
LINK	Long-time bright shows mobile phone have connected with wifi controller, otherwise it will extinguish

### 2. On/off key Function

Short press this key, you can turn on/off of controller. Long press it until SYS indicator light is long-time bright, you can initialize wifi network.

### 3. Mode Key Function

Short press this key, you can switch the built-in mode. Specific mode refer to the built-in mode form of controller.

### 4. Built-in mode form of controller

1. The mode form of RGB light strip Control:

No.	Function	Remark	No.	Function	Remark
1	Static red	Brightness is adjustable, Speed is unadjustable	12	Red stroboflash	Brightness is unadjustable, speed is adjustable
2	Static blue		13	Blue stroboflash	
3	Static green		14	Purple stroboflash	
4	Static cyan		15	Green stroboflash	
5	Static purple		16	Yellow stroboflash	
6	Static yellow		17	Cyan stroboflash	
7	Static white		18	White stroboflash	
8	Three-color jumpy changing	Brightness and speed is adjustable	19	Red blue gradual changing alternately	Brightness is unadjustable, speed is adjustable
9	Seven color jumpy changing		20	Blue green gradual changing alternately	
10	Three-color gradual changing		21	Green red gradual changing alternately	
11	Seven-color gradual changing		22	Self-defined color	

2. The mode form of Color temperature light strip control:

No.	Brightness proportion	Remark	No.	Brightness proportion	Remark
1	C:0% W:100%	Brightness is adjustable	12	C:55% W:45%	Brightness is adjustable
2	C:5% W:95%		13	C:60% W:40%	
3	C:10% W:90%		14	C:65% W:35%	
4	C:15% W:85%		15	C:70% W:30%	
5	C:20% W:80%		16	C:75% W:25%	
6	C:25% W:75%		17	C:80% W:20%	
7	C:30% W:70%		18	C:85% W:15%	
8	C:35% W:65%		19	C:90% W:10%	
9	C:40% W:60%		20	C:95% W:5%	
10	C:45% W:55%		21	C:100% W:0%	
11	C:50% W:50%				

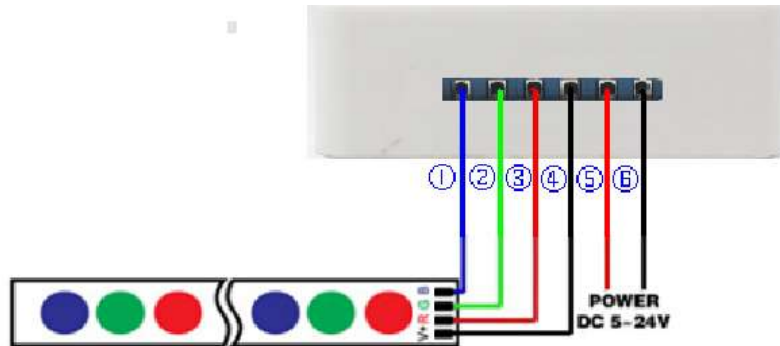
3. The mode form of dimming light strip control:

No.	Brightness	Remark	No.	Brightness	Remark
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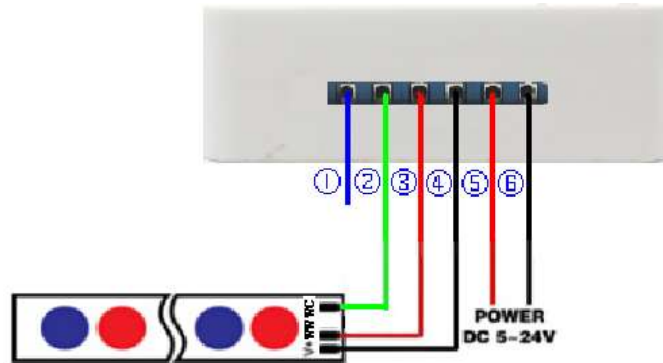
1	1%	Brightness proportion	12	55%	Brightness proportion
2	5%		13	60%	
3	10%		14	65%	
4	15%		15	70%	
5	20%		16	75%	
6	25%		17	80%	
7	30%		18	85%	
8	35%		19	90%	
9	40%		20	95%	
10	45%		21	100%	
11	50%				

### Typical application

#### 1. Wiring instructions of RGB light strip



#### 2. Wiring instructions of color temperature light strip



#### 3. Wiring instructions of dimming light strip

