

# Product specification

Name: WiFi LED Controller

Model: NS-WF100



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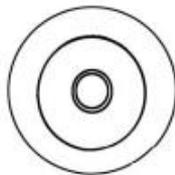
# I. Product Summarize

1. LED-WiFi Controller	It is the core of product, responsible for receive control signal and control LED equipment.
2. RF remote control	In the condition of not use the mobile phone as remote control, you can choose RF remote control to control LED.
3. A disk	Include IOS operating system and Android operating system mobile soft.

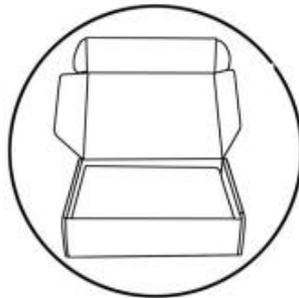
## 1. Product constitute



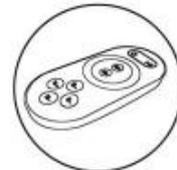
WIFI LED controller



CD



product composition picture



Touch remote control

## 2. Product summarize

LED-WiFi controller is following the traditional with infrared, RF technology controller foundation, it is birth of market and customer's demand, it is one type controller which integration the newest wifi technical in the market. It makes the LED control more convenience, more hommization. We can use an Android system or IOS system mobile phone to install control software, then it can control LED, this is the wishes of every customer.

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

In the condition of not use the mobile software, also can use the remote control to control, very convenience, bring many choices for you.

## II. Technical Parameters

### 1. Remote control technical parameters

- 1: Working temperature: -20-60°C
- 2: Power supply method: AAA\*3
- 3: Supply voltage: 1.5V\*3
- 4: Standby power: 0.015mW
- 5: Standby current: 3uA
- 6: Working current: 200uA
- 7: Emission current: 10mA
- 8: Remote control distance: about 50m
- 9: Standby time: 6 month

### 2. Software technical parameters

- 1: Name: Dream Color
- 2: Runtime platform: Android version support Android system(better one can support Samsung, HTC), IOS version support IOS system, equipment must have WiFi function.
- 3: Byte: Android version(622K)、IOS version(581K).
- 4: Language: English
- 5: Category: communications
- 6: Free, green, no plug-ins

### 3. Controller technical parameters

- 1: Working voltage: DC5--24V
- 2: Output control: can flexible control 3 channel, 2 channel, 1 channel LED lamps.
- 3: Output current: 4A\*3
- 4: Connect mode: common anode
- 5: External dimension: L107\*W65\*H30 (mm)
- 6: Receiving sensitivity: 802.11b DSSS(-5dBm), 802.11b CCK (-10dBm), 802.11g OFDM(-15dBm)

# III. Dream Color Instruction

## 1. Dream Color install course

1) This software have Android version and IOS version, according to your mobile phone to choose to install, below respectively introduce Android version and IOS version install and use method: Android version install as below:



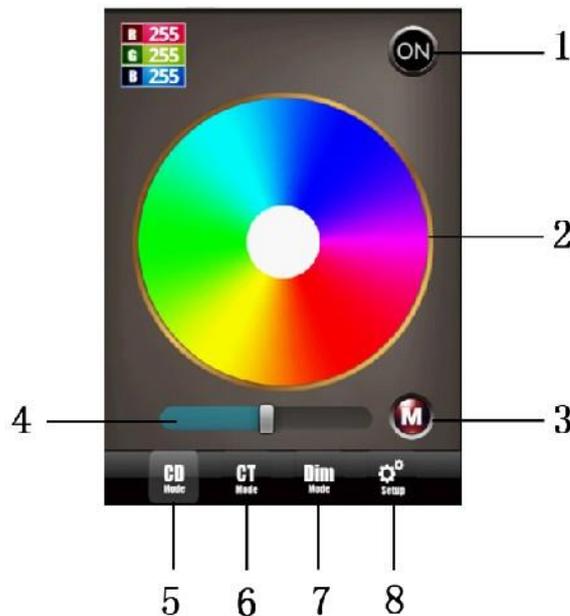
Open the optical disk can see the Dream Color erection Sequence DreamColor.apk to install

Click



Installation complete click

Open application



- 1. On Off key      2. color disk      3. mode key      4. speed/brightness bar
- 5. RGB mode LED control window
- 6. Cold white and warm white mode LED control window
- 7. Dimmer mode LED control brightness window
- 8. Dream Color software setting window

Following is control color temperature and brightness two mode page:



CT mode page(cold warm white mixed mode) DIM mode page(dimmer mode)

1. IOS version install method:(not escape or escape all can suit) can enter "app store" search Dream Color.



Then it can find our software(below scheme just limit after escape) or open itunes, make our



installation package



Dragged into itunes, as picture click to install.

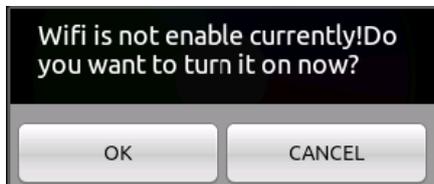


Installation complete click ,open application(same with Android version).



## 2. Connect WiFi network

If you open Dream Color show like below picture: prompt to choose "OK", jump to WiFi setting interface connect WiFi LED controller. Or choose "cancel" don't jump, then setting SIMULATION is ON, it will change to do not connect controller node, diagram form as below:



choose proceed wifi setting window



Finished setting, if popup below window:



indicate connect succeed



open wifi connect setting



prompt connect correct wifi equipment

### 3. ON/OFF Key

ON/OFF, before control LED, open on/off key. Click OFF close LED equipment.

### 4. Mode Key Function

Mode key under 3 mode page is entirely different, under CD mode page to control LED dynamic work mode, under CT mode page to control 11 kinds of special color temperature state, under DIM mode page to control 11 kinds of special brightness state.

### 5. Color disk instruction

Color disk under 3 mode page, the function is entirely different: under CD mode page is used for adjust color, under CT mode page is used for adjust color temperature, under DIM mode page is used for adjust brightness.

### 6. CD mode page control function

CD mode page is used for control LED product which consist of red,green,blue, under this mode page, every time after touch the mode key"M", the lighten way will change."M" is used for setting LED dynamic effect. Color disk touch point change will make the LED color changed.

### 7. CT mode page control function

This mode page is used for control LED product which consist of warm white and cold white. Brightness bar is used for setting the LED brightness, color disk adjust LED color temperature, mode key is used for choose some kinds of default special color temperature value.

### 8. DIM mode page control function

DIM mode page is used for control LED product which consist of single color, color disk is used for adjust LED brightness, mode key"M" is switch some special brightness state(for example: 25% brightness, 50% brightness, 75% brightness, 100% brightness)

## 9. Speed/brightness bar instruction

Speed/brightness bar under different mode page is different: under CD mode page, different situation separately control brightness and speed, under CT mode page, it is control brightness.

## 10. Setup mode function

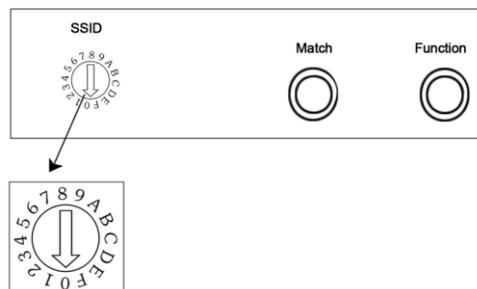
The last is Setup touch key, it have SIMULATION、SOUND and WiFi CONNECTION 3 options, SIMULATION is mainly used for set software imitate and actually connect LED-WiFi controller to choose, if choose ON state, do not need to connect LED-WiFi controller, it can used for software demonstrate, imitate demonstrate ect. Practical application need to set OFF(actually, when you connect WiFi, the software have automatic set to OFF), SOUND is the prompt tone of click the software switch,WiFi CONNECTION is used for jump to wifi network setting interface proceed wifi connection.

# IV. LED-WiFi Controller Function Instruction

## 1. Working state instruction

Indicator light	Function table
Power	Power indicator light, long-time bright shows power supply normally
Wifi	Free time long-time bright, have wifi data enter flicker, configuration wifi Ssid off
Link	Receive the date, become flicker
RF	Have correct wifi date enter flicker, free time die out, have remote then control flicker

## 2. Setting SSID number



The dial code is used for setting LED-WiFi controller Ssid number, corresponding table as below. Form 0 to 15, have 16 code in total, so our Ssid number fasten to LN001 to LN016. That means use our product in same small area can set 16 mutual isolation LAN, once the dial code changed after switch was dialed, Ssid number immediately be modified, so you need to note that it need to search and connect again.

code	SSID
0	LN001
1	LN002
2	LN003
3	LN004
4	LN005
5	LN006
6	LN007
7	LN008
8	LN009
9	LN010
A	LN011
B	LN012
C	LN013
D	LN014
E	LN015
F	LN016

### 3. Connect LED, Power supply port

LED port under CD mode page need to connect RGB 3 channel LED equipment, under CT mode page need to connect cold white and warm white 2 channel LED equipment group, under DIM mode page need to connect single color LED equipment.

### 4. Match Key function

The first time use the controller and remote control, maybe because the controller address and remote control address is not match, it will cause the remote control can not control, at this time, it need to use this button to make this 2 address matched.

Use method: first, press the controller "Match" key, at the same time press any key of the remote control, more than 2s, now the remote control indicator light RF will flicker 3 times, release "Match" key, then finished.

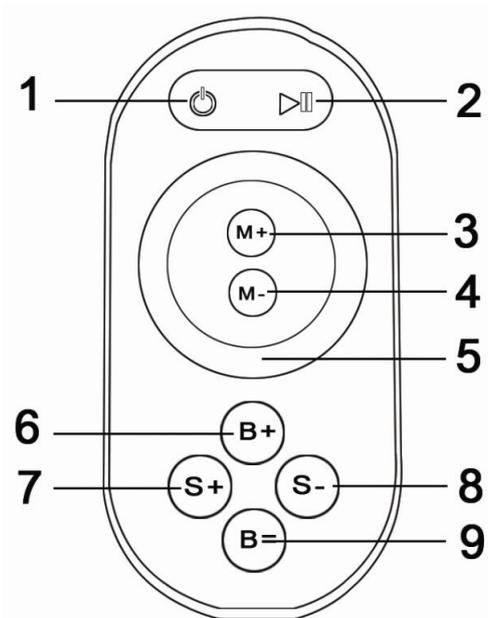
## 5. Function key function

“Function” key is a composite button, it have switch and mode change function.

Function instruction: long-time(more than 2s): on off;

Short press(less than 1s): mode change.

## 6. Remote control function instruction



- 1、 on/off key 2、 pause key 3、 mode+ 4、 mode-  
5、 Color pulley key 6、 brightness+ 7、 brightness-  
8、 speed+ 9、 speed-

1、 Touch remote panel have 64 touch button(point), each button function as below:

- 1、 on/off key, any state, can turn on or turn off controller output;
- 2、 pause key, under dynamic mode, can make the controller stop current state;
- 3、 this key have 2 function:
  - ①mode add key, so when the current control mode is pulley mode(color), if it need to realize the mode(color) in controller, can press this button.
  - ②mode switch key, so when the current control mode is M key mode, can switch the regulation mode(color) in M+ key mode table.
- 4、 This key have 2 function:
  - ①mode minus key, so when the current control mode is pulley mode(color), if it need to realize the mode(color) in controller, can press this button.
  - ②mode switch key, so when the current control mode is M key mode, can switch the regulation mode(color) in M- key mode table.

- 5、 output brightness control key, every time you press this button,the brightness series add 1, altogether 100 levels;
- 6、 output brightness control key, every time you press this button,the brightness series minus 1, altogether 100 levels;
- 7、 output speed control key, every time you press this button,the speed series add 1, altogether 100 levels;
- 8、 output speed control key, every time you press this button,the speed series minus 1, altogether 100 levels;
- 9、 Color pulley touch button, static mode choose key, up to 55 touch point.

This key have 2 function:

- ① pulley static color choose button, so when the current control mode is M key mode(color), if need to realize the static color on pulley, can press this button.
- ② pulley color switch key: can switch from 55 static color(pulley shows color).

2、 Power management: Stop using remote control more than 20 s, remote control will automatically into standby mode(the state can not touch),to extend the battery life for use;shake the remote mildly remote return to work station(the state can touch).

Remark: This remoter just apply to RGB model.

## 7. Built-in mode form of controller

1,The mode form of RGB Control:

Mode number	function	remark
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
9	Seven-color jumpy changing	

10	Three-color gradualchanging	unadjustable
11	Seven-color gradual changing	

2. The mode form of color temperature control:

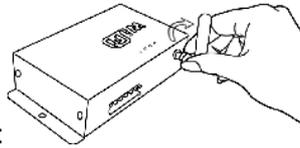
Mode number	function	remark
1	CW	Brightness adjustable
2	80%CW	
3	60%CW	
4	40%CW	
5	20%CW	
6	PW(pure white)	
7	20%WW	
8	40%WW	
9	60%WW	
10	80%WW	
11	WW	

3. The mode form of dimming Control:

Mode number	function	remark
1	1%	Brightness proportion
2	10%	
3	20%	
4	30%	
5	40%	
6	50%	
7	60%	
8	70%	
9	80%	
10	90%	
11	100%	

# V. Explain installed hardware

## 1. Install ANT

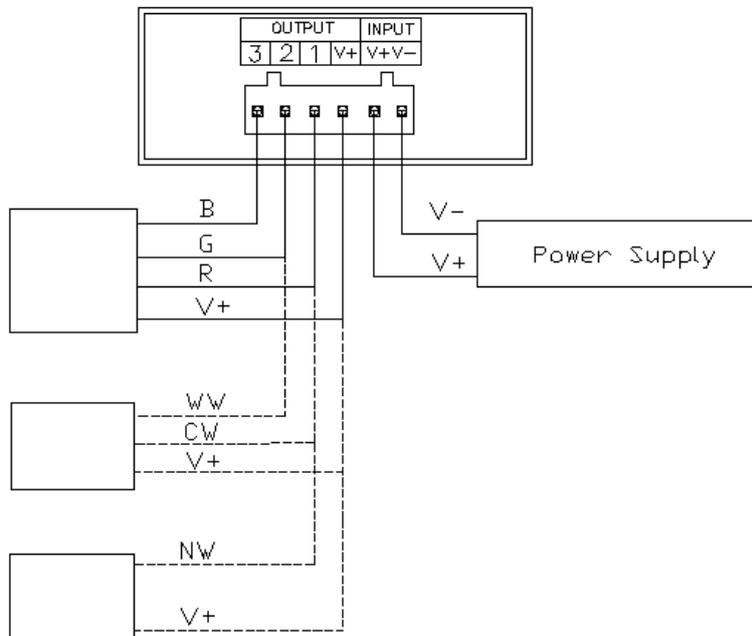


ANT's installation drawing:  
take down the antenna.

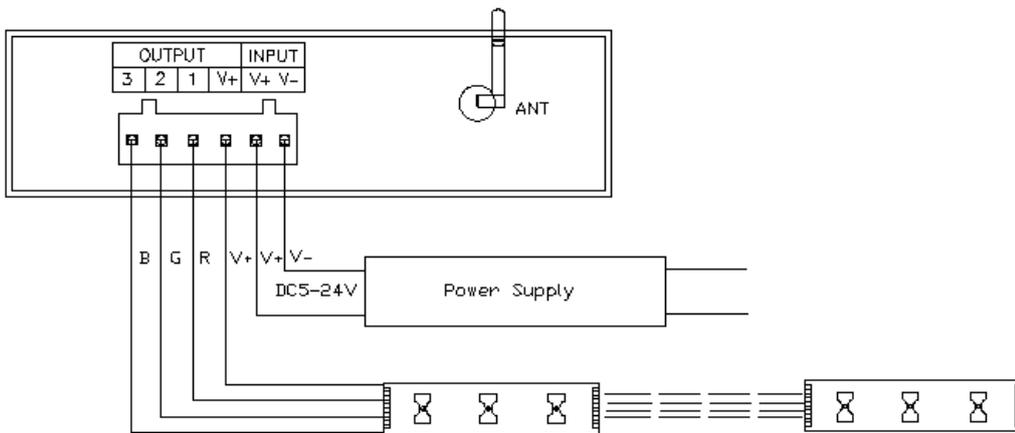
clockwise install WIFI antenna and anticlockwise

## 2. Install power supply and LED equipment

This connector structure belong to drawer structure, the device interface of power supply and LED is together, four interface one the left side (3、2、1、V+) is connect led equipment, the fifth interface is connect the anode V+ of power supply, the sixth interface is connect the cathode V- of power supply. According to the rated voltage of led lamp, we supply power to controller, and the rated voltage of controller is 24V. As follows:

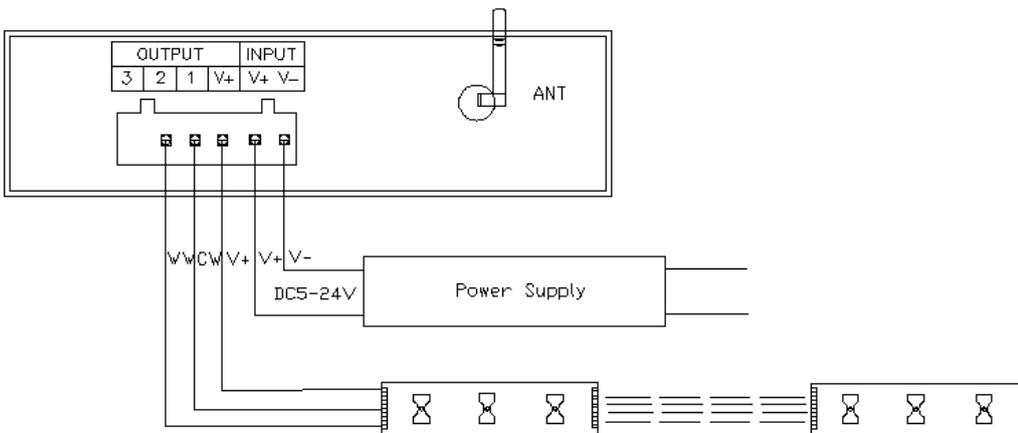


### 3. Connect three channels LED instruction



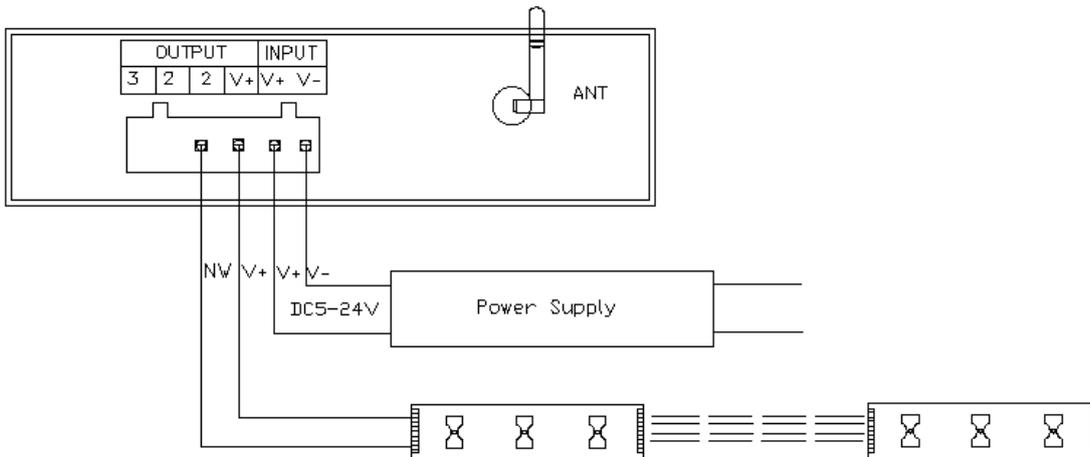
When connect three channels LED, you should put the Dream Color software switch to CD mode to use,only under this mode,you can control the LED's color,brightness and speed.Color disk adjust the color(Adjust process can be seen in the upper left corner R, G, B numerical with change),speed/brightness item adjust speed and bright("M"set the LED dynamic effect,"M"adjust the LED dynamic change.

### 4. Connect two channels LED instruction



When connect three channels LED, you should put the Dream Color software switch to CD mode to use,only under this mode,you can control the LED's color temperature,brightness and color temperature shortcut key settings.Color disk adjust the color temperature(meanwhile top left CW,WW numerical with change),brightness item adjust bright,"M"key set the special color temperature state.

## 5. Connect one channel LED instruction



When connect three channels LED, you should put the Dream Color software switch to CD mode to use, under this mode, use color disk control the LED's brightness, Adjust process can be seen in the upper left corner NM numerical with change.

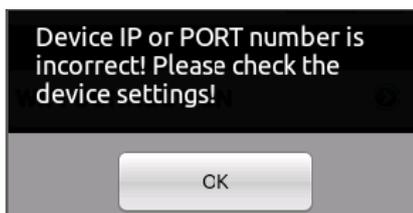
## VI. FAQ

### 1. Dream Color can not open (error and breakdown), how to do?

Answer: If it is happened, just need to open again then you can solve. If it is still not open, that maybe the compatibility of software to this phone is not very good, so you need to install the software to other phone to use.

### 2. Dream Color can not control LED?

Answer: It maybe happen of wifi connection unsteadily. 1, you can try shorten the distance of phone and controller. 2, you can enter SETUP reconnection (reinstall simulation to OFF),



if appear this, if the network of you connect is LNOXX form, that is maybe phone and wifi connection unsteadily, so retry several times, if it is still not useful, so you need to change the phone.

Now the compatibility effect better is Samsung and HTC, we recommend to use this two model. 3, close the software and open again. One of above three ways can solve this problem, but if there can not get the data, you must be ensure the distance is not too far.