WiFi-102 LED Controller

2013 Version

With the improvement of people's living standard, more and more products are linked to mobile devices like smart phones, tablet PCs, which makes life simple and intelligence. Using the emerging mobile device to control LED lighting products becomes the aspirations of each customer. As a result, WiFi-102 controller appeared, with the installation of controlling software on mobile devices like Android & IOS phones, tablet PCs. they can remote control LED lighting products through WiFi, which makes LED control more intelligent and humanization.

One WiFi-102 controller can be used as dimmer, CT controller, even RGB controller. which means a significant saving to middleman who need to stock up, now one product will realize your three desires.

In addition, this model has DIY function, Users can get any effect they want based on our controlling software.

If you don't have any mobile devices with the controlling software at hand, you could also use our 2.4G RF remote control-T series (T1, T2, T3) to control it , which provides more choices! Mobile device software and T1 / T2 / T3 could control WiFi - 102 simultaneously. and the final directives will be executed.

WiFi and remote wireless control are all based on global universal 2.4GHz frequency band to work, share a root 2.4G antenna, avoid bringing space pollution by WiFi and remote control using different frequency wireless signal.

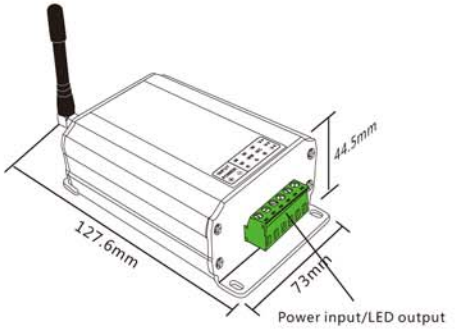
1. Product parameter

WiFi-102 Technical parameters	
Power supply	LED CV SMPS
Input voltage	DC12V~DC24V
Output current	4A×3CH Max 12A
Max output power	144W/288W(12V/24V)
Output control	flexibly control single color, cold warm color, RGB LED lighting fixture
Control distance	Max 100m
RGB color change mode	32 fixed modes, 8 DIY modes
Scene mode	RGB 9 modes ,CT 3 modes
Operating temperature	-20℃~50℃
Dimensions	L127.6×W73×H44.5mm
Package size	L135×W80×H50mm
Weight (G.W)	290g
Software Technical parameters	
Platform	Android 2.1 or above, IOS4.3 or above, with the wifi function
Size	iOS(4.5MB), Android(4.2MB)
Language	English
Category	Tool
Others	Free, Plug-in-free

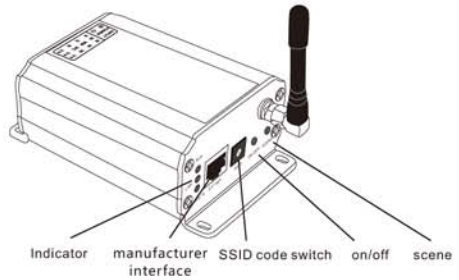
T1, T2, T3 Technical parameters	
Input voltage	DC5V built-in Lithium battery
Working current	≤30mA
Working frequency	2.4GHZ
RF remote distance	30m
Battery capacity	1000mAh
Standby tim	≤6 months
Dimensions	L145×W55×H22mm
Package Size	L168×W102×H28mm
Weight (G.W)	200g

Note: remote control is another purchase accessories

2. Configuration Diagram



Side A

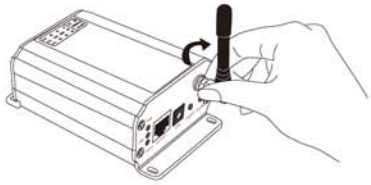


Side B

3. Controller operating instructions

1. Install / uninstall ANT

Install the WiFi antenna clockwise, uninstall anticlockwise



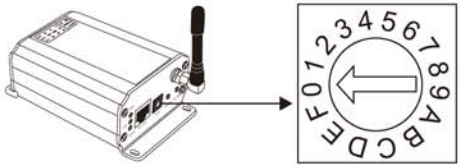
ANT installation instruction

2. Work status indicator instructions

indicator light	instructions
RUN	The indicator flashes quickly about 25 seconds during the electric initialization. Flashes once per second after initialization finished.
LINK	The indicator light stays lit when the mobile device connects with WIFI controller, and turns off when not connected.
RX/TX	The indicator light turns on when the controller receives or transmits the WiFi data. Turns off in the free time.

3. SSID Number setting

Use code switch to set the controller's SSID Number-- WIFI-102-SSID-X, X is the code switch numerical value (total 16 No. from 0 to F). which means our product could set 16 isolated LAN in the same area. The controller will re-enter initialization status once the code switch changes. RUN LED indicator light will flash quickly about 25 seconds, mobile device need to search and connect WiFi again after Initialization finished.



4. "ON/OFF" and " Scene" Key

Press "ON/OFF "to turn on / off controller
Short press "Scene" to the user-defined scene modes sequentially, Scene mode changes from 1 to 9, then changed back from 9 to 1.

Scene key

RGB scene interface

CT scene interface

4. LED controller software instructions

(1) Ltech WIFI-102 software installation

There are two versions for the software, Android & iOS, choose the installation based on your mobile device. Check the installation and usage of each version as below.

1) Installation of Android version:

A: Enter the google play store: https://play.google.com and search "WIFI-102" , downloads and install.

B: Scan following two-dimensional code to download and install.

2) installation of iOS version:

A: search "WiFi-102 " in the App store through mobile device and install.

B. after connecting the mobile device with PC, search "WiFi-102" wifi-102 in the iTunes Store through iTunes and install.

C: Scan following two-dimensional code to download and install.

Click or Scan for download

Click or Scan for download

(2) Software Operating Instructions

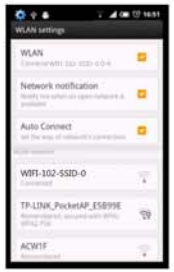
1. WiFi connection and settings

(1) Click mobile devices' WiFi-setting, enable the WiFi function. The system will search automatically and list the SSID No. for the controller (as shown below). Click the SSID No, to connect.

(2) Click to Enable software (if the Mobile devices'WiFi function is closed, the prompt box saying without WiFi connection will pop up. Click "ok" to close the Dialog box and exit the application. go back to step (1) for the WiFi connection.

No matter what is the interface after starting the software, can click settings to the setting interface for switching among RGB, CT, DIM drivers and display WIFI connection information and software version interface.

return to a previous interface



Android WiFi connection

iOS WiFi connection

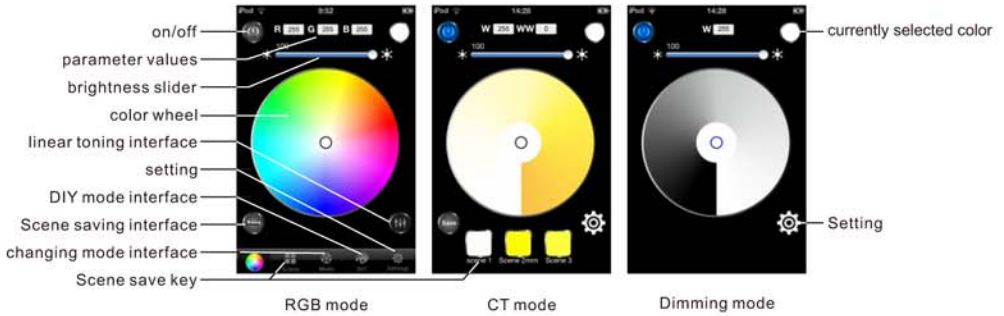
setting interface

prompt box saying without WiFi connection

2. RGB,CT,DIM driver color wheel interface

Click" Setting "to setting interface, Select RGB, CT or DIM driver to get into each one's color wheel interface. By touching the color wheel, the color, brightness, color temperature and saturation(only for RGB mode) of the connected LED could be adjusted, the brightness can also be changed by the brightness slider which is above the color wheel.

click "on/off" to turn on/off the controller; click "save" to save the current mode



RGB mode

CT mode

Dimming mode

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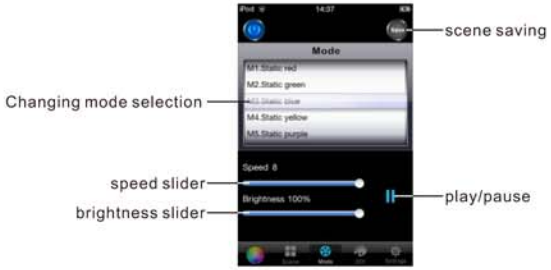
3. RGB linear toning interface

Click To enter Linear toning interface in the RGB mode color wheel status.

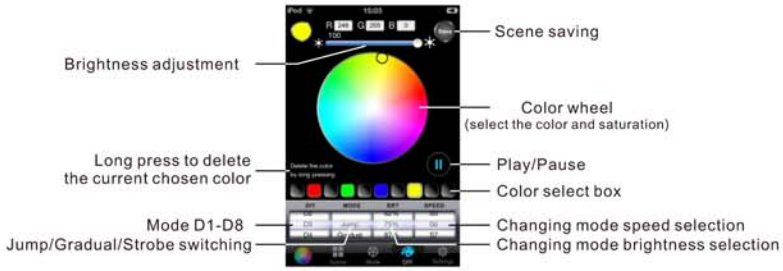
4. RGB Mode interface



Tables of Changing mode:

No.	Mode	Description	No.		
1	Static red	brightness adjustable	17	Cyan Fade out and fade in	speed/brightness adjustable
2	Static green	brightness adjustable	18	White Fade out and fade in	speed/brightness adjustable
3	Static blue	brightness adjustable	19	RGB Fade out and fade in	speed/brightness adjustable
4	Static yellow	brightness adjustable	20	Red/green gradual alternately	speed/brightness adjustable
5	Static purple	brightness adjustable	21	Red/blue gradual alternately	speed/brightness adjustable
6	Static cyan	brightness adjustable	22	Green/blue gradual alternately	speed/brightness adjustable
7	Static white	brightness adjustable	23	Red/yellow gradual alternately	speed/brightness adjustable
8	RGB skipping	speed/brightness adjustable	24	Green/cyan gradual alternately	speed/brightness adjustable
9	7 colors skipping	speed/brightness adjustable	25	Blue/purple gradual alternately	speed/brightness adjustable
10	White strobe	speed/brightness adjustable	26	Green/yellow gradual alternately	speed/brightness adjustable
11	7 colors strobe	speed/brightness adjustable	27	Blue/cyan gradual alternately	speed/brightness adjustable
12	Red Fade out and fade in	speed/brightness adjustable	28	Red/purple gradual alternately	speed/brightness adjustable
13	Green Fade out and fade in	speed/brightness adjustable	29	Blue/white gradual alternately	speed/brightness adjustable
14	Blue Fade out and fade in	speed/brightness adjustable	30	Yellow/purple/cyan gradual alternately	speed/brightness adjustable
15	Yellow Fade out and fade in	speed/brightness adjustable	31	RGB gradual alternately	speed/brightness adjustable
16	Purple Fade out and fade in	speed/brightness adjustable	32	Full color gradual alternately	speed/brightness adjustable

5. DIY interface

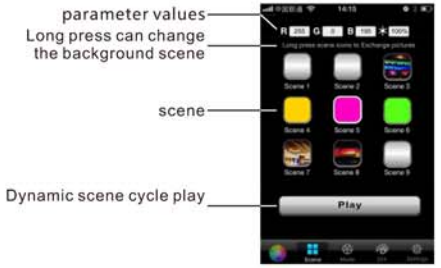


For example:

The Sequence for 10 color boxes is black, red, black, green, black, blue, black, yellow, black, black, which means choosing 8 colors. If the type of changing mode is jump, carry out the black, red, black, green, black, blue, black, yellow jump changing mode. That is red, green, blue, yellow strobe changing mode. If the changing mode is gradual, carry out the black, red, black, green, black, blue, black, yellow gradual changing mode. That is red fade out and fade in, green fade out and fade in, blue fade out and fade in. yellow fade out and fade in.

6. RGB scene interface

Click Scene on the RGB driver interface, selecting any scene 1~9, the corresponding scene changing mode will pop-up immediately, the mode's parameters are above the screen. Click "Play" key to cycle play dynamic change mode.



7. RGB save scene interface

Click Save on the interface of RGB color wheel, linear toning, and mode or DIY, select any Scene 1 ~ 9, and click "OK", the Scene name prompt box will pop-up, scene name can be modified. Click "OK" again, the current changing mode will be saved as the Scene changing mode; Click "cancel" then Cancel the Save operation.

8. CT interface

1) Save scene ：

On CT interface, touch the color wheel to select color temperature, Click , select any scene 1 ~ 3, the Scene name prompt box will pop-up, scene name can be modified. Click "OK", the current changing mode will be saved as Scene changing mode; click "cancel" then Cancel the Save operation.

2) Select scene ：

Select any scene 1~3 on the CT interface,
The corresponding scene changing mode will pop-up immediately, the mode's parameters are above the screen.

CT mode　　Scene name

5. WiFi network password settings

1. Using the mobile devices connect to the WiFi controller, typing **http://10.10.100.254** in the address field of your browser, and then click **Enter**, a login window like the one in the flowing figure opens.
2. Type **admin** in the User name field and password in the Password field, and click **Sign in**.
   Your web browser displays the **Mode Selection** screen.
3. Select the menu item **AP Interface Setting** on the left, from the **AP Interface Setting** page select the **Security Mode** and **WPA Algorithm**, then typing a Passphrase, click **Apply**.

Sign in go WiFi controller

Set the WiFi network password

4. Select the menu item **Device Management** on the left, from this page click **restart module** to restart the WIFI controller.

Note: From the **Device Management** page you can modify the default user name and password "admin".

⚠ Don't modify the other setting parameter on WiFi controller back-stage management; otherwise it will cause unable connection. If modify by accident, forget backend login password or WiFi network password, can press the **ON/FF** button and **Scene** button in the same time on the controller for above 3 seconds to reset the factory defaults for the WiFi controller.

Device Management

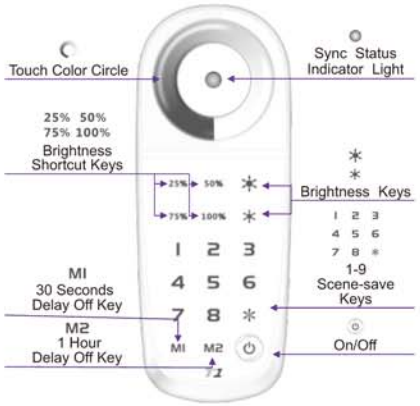
Note: the back-stage management operation is similar as common wireless router setting operation.

6. The remote control operating instructions

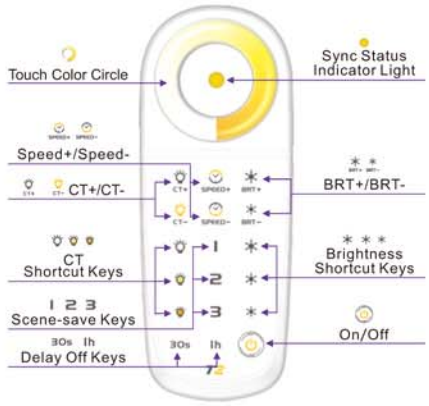
(1) The learning method of T1/T2/T3 to WiFi - 102

Learning ID: long press "on/off" on WIFI-102 for 3 seconds (the buzzer goes off). Press any key on Remote within 5 seconds until the green LED indicator or the white one flashes 3 times (the buzzer goes off) means the controlling between remote and WIFI-102 is activated.
Cancelling ID: long press "on/off" on WIFI-102 over 5 seconds (the buzzer goes off) means the controlling between remote and WIFI-102 is cancelled.

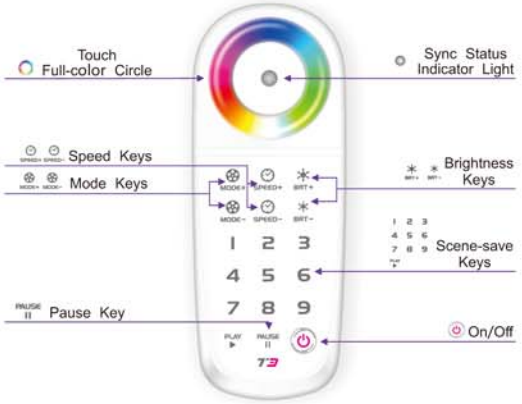
(2) Function definition of Remote control buttons



T1



T2

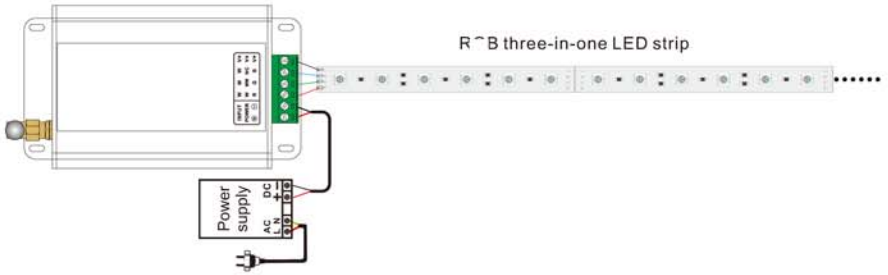


T3

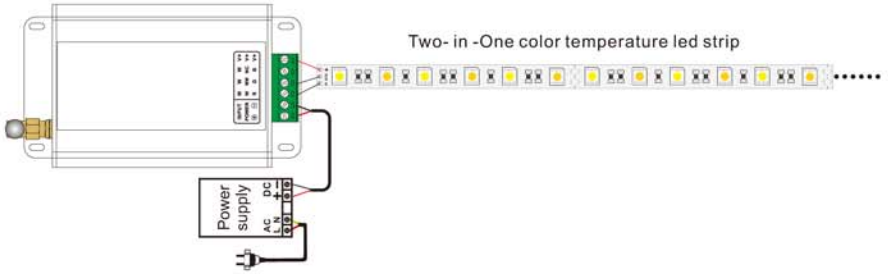
7. Conjunction diagram

1) connecting with the LEDs

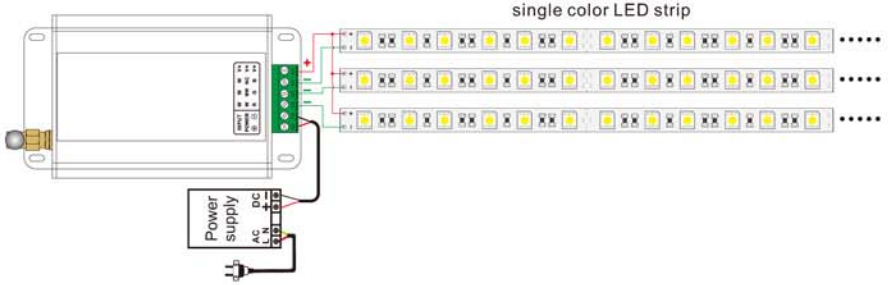
1. RGB mode



2. CT mode



3. DIM mode



2) wireless branch control connection

Can add the CV branch control T3-CV, CC branch control T3-CC.

The method of synchronization for the WIFI-102 controller and T3-CV/T3-CC:

Long press the SCENE key on the WIFI-102 controller more than 2 seconds firstly, turn on/off synchronization function. RUN lights will quick flash When open the synchronization function; RUN lights will slow flash When close the synchronization function.

Learning ID: Under synchronization function on-state, long press the address setting key on the T3-CV/T3-CC for 2 seconds, until the buzzer interval long sound twice means the synchronous control between the WiFi controller and the receiver is activated.

7. Attention

1. The product shall be installed and serviced by a qualified person.
2. This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
4. Please check if the output voltage of any LED power supplies used comply with the working voltage of the product.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector to avoid the accidents due to overheat and poor contact on the wire.
6. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

8. Warranty Agreement

1. We provide lifelong technical assistance with this product:
   - A 3 year warranty is given from the date of purchase. The warranty is for free repair or replacement and covers manufacturing faults only.
   - For faults beyond the 3 year warranty we reserve the right to charge for time and parts.
2. Warranty exclusions below:
   - Any man-made damages caused from improper operation, or connecting to excess voltage and overloading.
   - The product appears to have excessive physical damage.
   - Damage due to natural disasters and force majeure.
   - Warranty label, fragile label and unique barcode label have been damaged.
   - The product has been replaced by a brand new product.
3. Repair or replacement as provided under this warranty is the exclusive remedy to the customer. Ltech shall not be liable for any incidental or consequential damages for breach of any stipulation in this warranty.
4. Any amendment or adjustment to this warranty must be approved in writing by Ltech only.

★ This manual only applies to this model. Ltech reserves the right to make changes without prior notice.

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