WiFi-102 LED Controller

ISO9001:2008 FC CE RoHS COMPLIANT warranty 3 years

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.

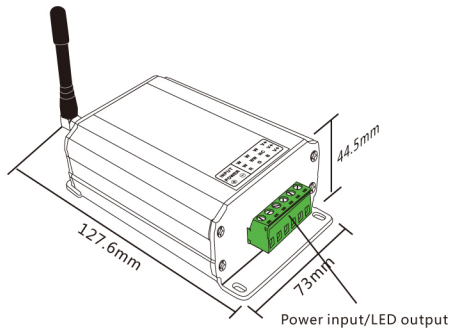
1. Product parameter

WiFi-102 Technical parameters	
Power supply	LED CV SMPS
Input voltage	DC12V~DC24V
Output current	Max 3A*3
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	9
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	Android(2.2MB), iOS(3.4MB)
Language	English
Category	Tool
Others	Free, Plug-in-free

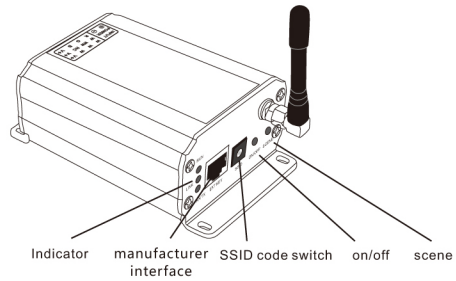
T1, T2, T3 Technical parameters	
Input voltage	DC5V built-in Lithium battery
Working current	≤30mA
Working frequency	2.4GHZ
RF remote distance	30m
Battery capacity	1000mAh
Standby tim	≤6 months
Normal using time	30 days
Dimensions	L145×W55×H22mm
Package Size	L168×W102×H28mm
Weight (G.W)	200g

Note: remote control is another purchase accessories

2. Configuration Diagram



Side A

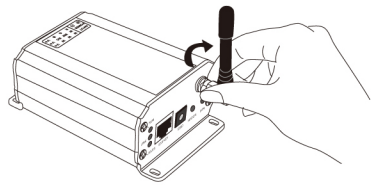


Side B

3. Controller operating instructions

1. Install / uninstall ANT

Install the WiFi antenna clockwise, uninstall anticlockwise



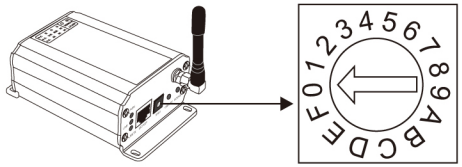
ANT installation instruction

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.

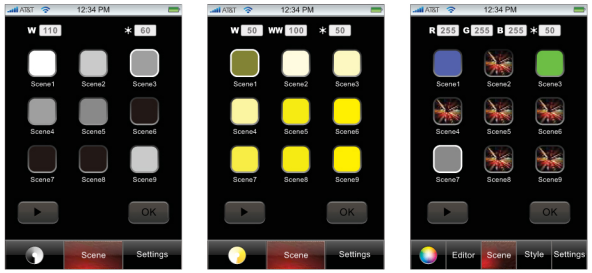
3. SSID Number setting

Use code switch to set the controller's SSID Number-- WIFI-101-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
Long press "Scene" to the 1st scene mode. short press "Scene" to scene mode sequentially , Scene mode changes from 1 to 9, then changed back from 9 to 1.



DIM driver scene CT driver scene RGB driver scene

4. LED controller software instructions

(1) Ltech WIFI-100 software installation

this software has two versions -Android & iOS, choose the installation based on your mobile device. Check the installation and usage of each version below

1) Installation of Android version: Transmit the installation package to the mobile device memory card and Click to install.

2) installation of iOS version: A. search "WiFi-100 " WiFi-100 in the App store through mobile device and install.

B. after connecting the mobile device with PC, search "WiFi-100" WiFi-100 in the iTunes Store through iTunes and install.

(2) Software Operating Instructions

1. WiFi connection and settings

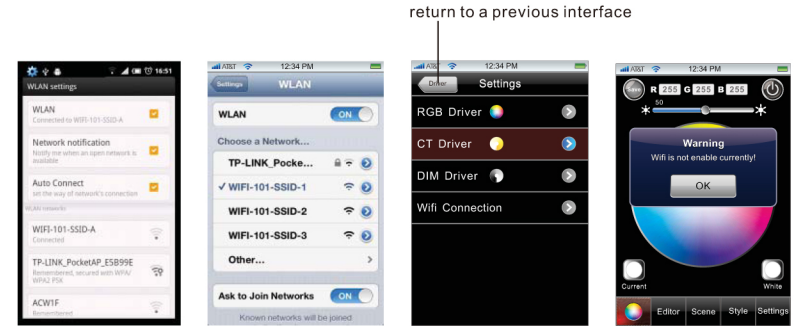
(1) Click mobile devices' WiFi-setting, enable the WiFi function. The system will search automatically and list the SSID No. for the controller (as shown below). Click the SSID No, to connect.

(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.

Click settings to setting interface. Setting interface is used to switch among RGB, CT, DIM drivers and enter the WiFi connection interface.

WiFi connection interface is for displaying the information of the connected controller.

Note: Device IP and port number are the fixed value, which are unchangeable.



Android WiFi connection iOS WiFi connection setting interface prompt box saying without WiFi connection

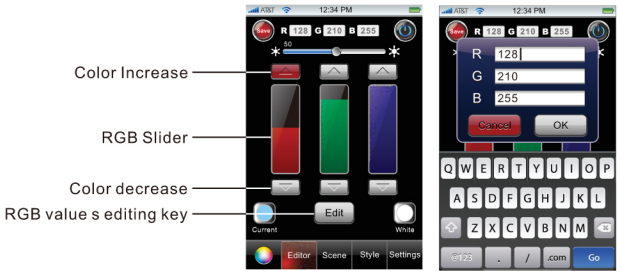
2. RGB,CT,DIM driver color wheel interface

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 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 the top right corner to turn on /off the controller. Click on the top left corner to Scene interface to save the scene

Dimming mode CT mode RGB mode

3. RGB driver editing interface

Click “Editor” to RGB driver editing interface in the RGB mode color wheel status, drag the RGB color slider or click the adjustment key which is above the slider to change the RGB values directly.
drag brightness slider to change the overall brightness, click “Edit “to edit the RGB numerical values



RGB editing interface　　RGB value editing dialog box

4. RGB Driver Style interface &DIY interface

Click “Style” to RGB driver Style interface in RGB mode status

(1) M1~M40 represents 40 different changing modes (M1~M3: the default fixed changing modes; M33~M40: DIY changing modes). Each changing mode has 8 speed level and 8 brightness level. S8 - the fastest speed, B8 - the brightest light. Click “ play/pause” to suspend or keep playing. the current changing mode.

(2) Click” in DIY changing modes (M33~M40) to edit the modes. Select color by touching the color wheel. then click any of the 10 color boxes to fill the current color in the corresponding color box. Click “ delete “ to delete the selected color box's color, and it will be black. Click” Jump/Gradual” on the upper right to jump or gradual the modes. Click “ play “ or change the type of DIY changing mode, controller will play all the DIY changing modes immediately. Advised that choosing speed level S6, brightness level S8 before entering into DIY interface to observe the chosen DIY changing mode effect.
The DIY changing colors are at most 10 kinds. When less than 10 kinds, the rest color boxes will be the default black. Take the below images as an example: the sequence of the 10 color boxes is black, red, black, green, black, blue, black, yellow, black, black, which means choosing 8 colors. If the changing pattern is jump, implement the black, red, black, green, black, blue, black, yellow jump changing mode. That is red, green, blue, yellow strobe changing mode. If the changing pattern is gradual, implement 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.

Style interface　　DIY interface

Tables of RGB Driver Style interface Changing mode:

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

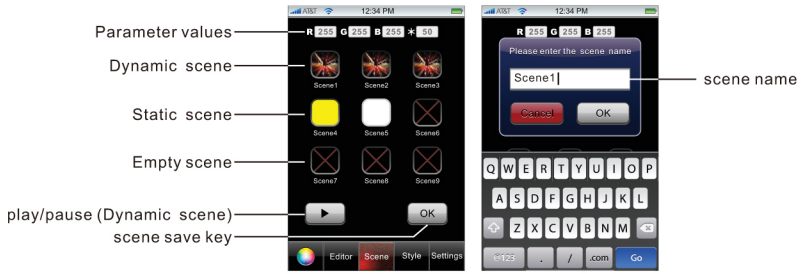
5. RGB driver scene interface

1) save scene :

Click " save "on the interface of RGB color wheel, RGB editor or style, 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 Scene changing mode; click "cancel" then Cancel the Save operation.

2) Play scene:

Click "Scene" on the RGB driver interface,select any Scene 1 ~ 9, the corresponding Scene changing mode will pop-up immediately , the mode's parameters are above the screen. If it is a dynamic changing mode, click " play/pause" to suspend or keep playing. the chosen changing mode.



RGB driver scene interface

modify the Scene name

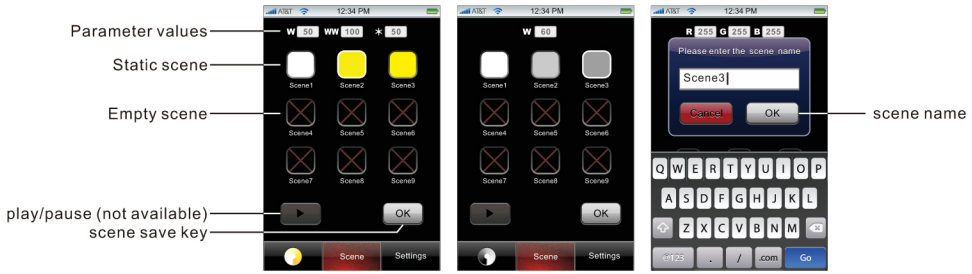
6. CT & DIM driver scene interface

1) save scene :

Click " save" on the CT&DIM color wheel interface, 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 scene changing mode; click " Cancel", then Cancel the Save operation.

2) Play scene:

Click "scene" on the CT&DIM driver interface, choose any Scene 1 ~ 9, the corresponding Scene changing mode will pop-up immediately, the mode's parameters are above the screen.



CT driver scene interface

DIM driver scene interface

modify the Scene name

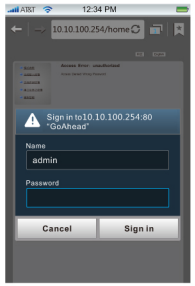
5. WiFi network password settings

Using the mobile devices to open the browser, input "http://10.10.100.254" at the address bar, In the resulting dialog fill in the user name and password, the default value is "admin". opt-in the(wireless access point Settings) page, select the encryption mode and encryption algorithm, set WiFi network password, then enter the(module management)page to restart module. opt-in the (module management) page to modify the default user name and password "admin".

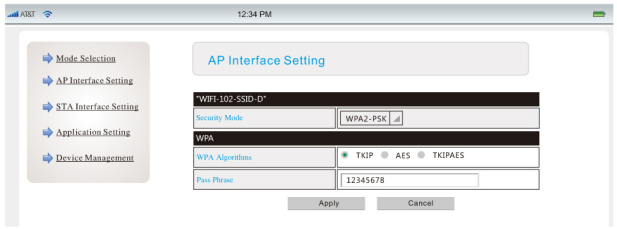
Note: Don't modify the other setup parameter on the web page. If modify by accident , can enter (module management)page to restore the default value.
Or press the ON/OFF button and Scene button on the controller for above 3 seconds, then the controller will restore WIFI module parameter to the default value automatically.

When forget the password of WiFi network,can use the above 2 methods to cancel the password.
Use method 2 to restore the default value when forget login user or password.

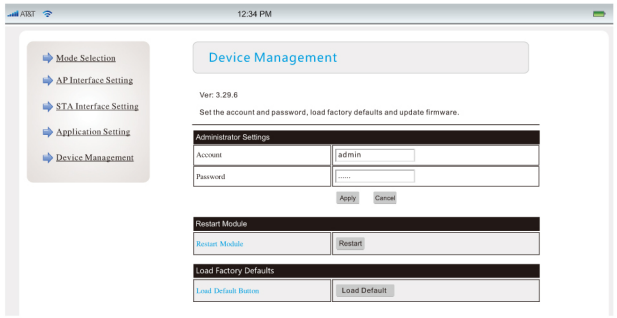
Note: the above operation is similar as common wireless router setting operation.



Sign in go WiFi controller



Set the WiFi network password



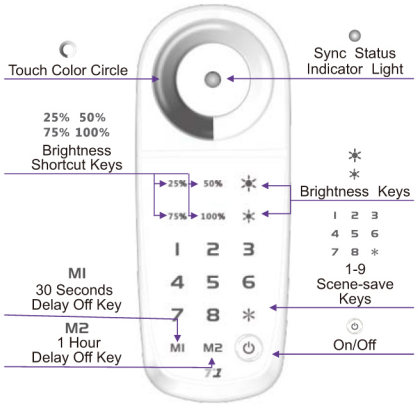
Device Management

6. The remote control operating instructions

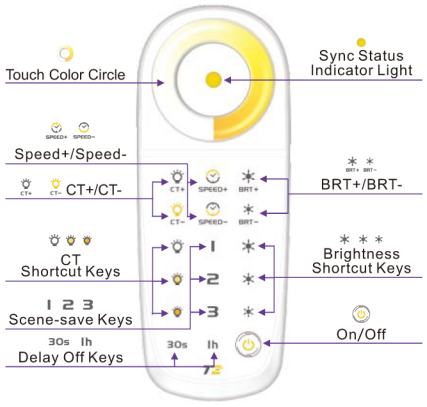
(1) The learning method of T1/T2/T3 to WiFi - 102

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.

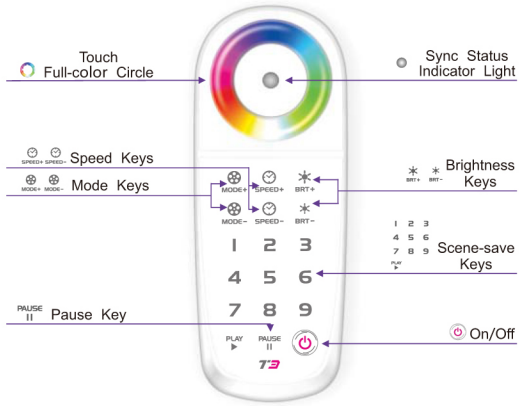
(2) Function definition of Remote control buttons



T1



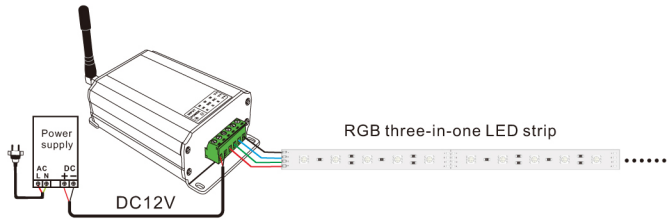
T2



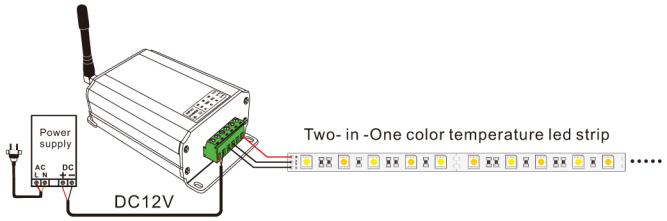
T3

7. Conjunction diagram

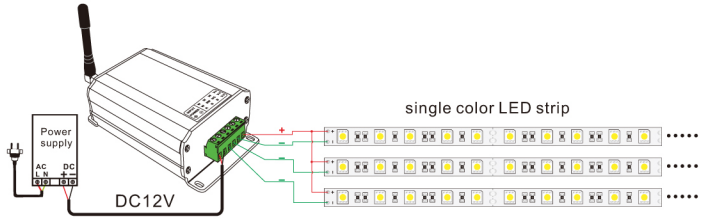
1. RGB driver connection diagram



2. CT dimming driver connection diagram:



3. DIM dimming driver connection diagram



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.