

WiFi-103 LED Controller



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-103 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.

WiFi-103 control system supports connection directly or by router:

Direct connection: WiFi-103 can be controlled directly by mobile phone and pad, without any the third party network equipment. Connection by a router, in addition to reach all the functions of direct connection and will not affect the normal Internet function at the same time.

One WiFi-103 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-103 Technical parameters

- Communication Standard: 2.4GHz Wi-Fi, 802.11b/g/n Protocol
- Input Voltage: DC12V~DC24V
- Max Current Load: 4A x3CH Max 12A
- Max Output Power: 144W/288W(12V/24V)
- Output control : flexibly control single color, CT, RGB LED lighting fixture
- WiFi Control Distance: 100m(Distance of cross-eyed)
- RGB color change mode:32 fixed modes, 8 DIY modes
- Scene mode: RGB 9 modes, CT 3 modes
- Working Temperature: -20°C~50°C
- Dimensions: L128×W73×H45mm
- Package size: L135×W80×H50mm
- Weight (G.W): 290g

Software Technical parameters

- Platform: No Lower Than Android 2.1 or iOS5.1
- Size: Android Edition (1.8MB); iOS Edition (5.6MB)
- WiFi Function: Must Have WiFi Function

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

- Language: English
- Category: Appliance
- Other: Free, No Plug-ins

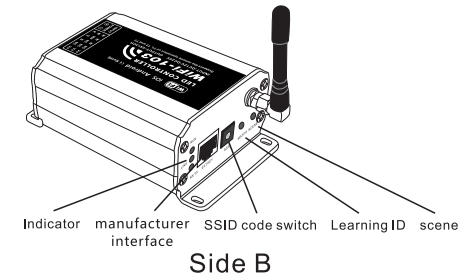
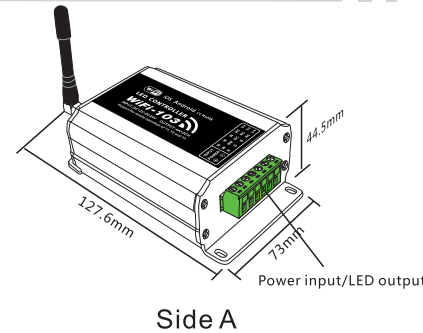
T3-CC Receiving controller (current 3 in 1)

- Working frequency: 2.4GHz
- Input voltage: DC12V-DC48V
- Output voltage: DC3V-DC46V
- Output current: CC 350/700/1050mA x3CH
- Output power: 1.05W~48.3W x3CH Max 144.9W
- Remote Distance: 50m (Distance of cross-eyed)
- Dimensions: L175×W44×H30mm
- Package size: L178×W48×H33mm
- Weight (G.W): 110g

T3-CV Receiving controller

- Working frequency: 2.4GHz
- Input voltage: DC5V-DC24V
- Max current load: 6A×3CH Max 18A
- Max output power: 90W/216W/432W(5V/12V/24V)
- Remote Distance: 50m (Distance of cross-eyed)
- Dimensions: L175×W44×H30mm
- Package size: L178×W48×H33mm
- Weight (G.W): 110g

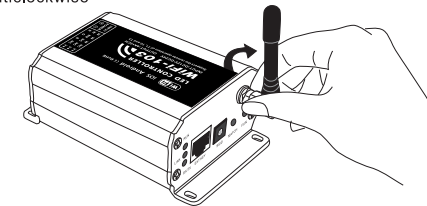
2. Configuration Diagram



3. Controller operating instructions

1. Install / uninstall ANT

Install the WiFi antenna clockwise, uninstall anticlockwise



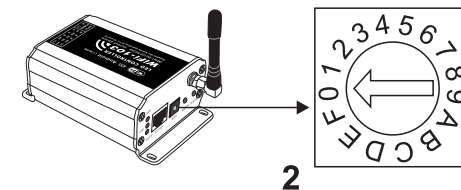
ANT installation instruction

2. Work status indicator instructions

indicator	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.

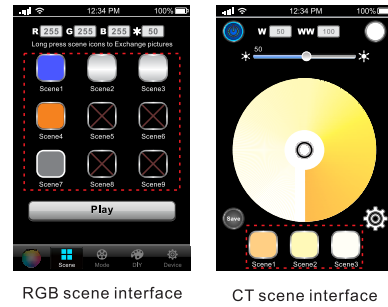
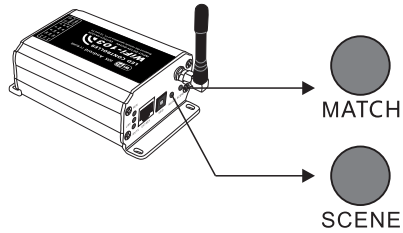
3. SSID Number setting

Use code switch to set the controller's SSID Number-- WiFi-103-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



4. MATCH Key and SCENE Key

Short press "SCENE" to the user-defined scene modes sequentially, Scene mode changes from 1 to 9, then changed back from 9 to 1.



[Restore factory settings/Delete password]

Long press **MATCH** key and **SCENE** key simultaneously more than 2 seconds, the machine will back to the default parameter, including the parameters of changing modes, and network parameters, WiFi-103 controller restore as directly connect and the connection password is blank.

4. LED controller software instructions

A. Download App software



iOS Scan for download



Android Scan for download



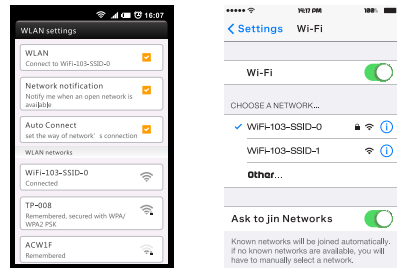
B. Software Operating Instructions

1. Network Connection Setting

WiFi-103 support 2 connection modes: Direct connection as router or connect by additional router.

• WiFi-103 controller direct connection as router:

Enter mobile device's WiFi setting, click the WiFi function, mobile device search the WiFi and list the working WiFi controller automatically(As Legend-1), Click the SSID number to connect (default is no password).



Android WiFi connection

Apple WiFi connection

(Legend-1)

• The mode of connect with a additional router:

Connect WiFi-103 controller to the additional router network:

A. Connect to the WiFi-103 controller, the same step as (1)

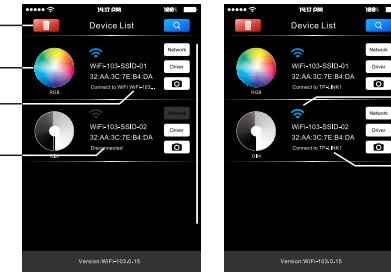
B. Click mobile device's icon to start the software, the software will search and list the working WiFi controller automatically, and there is a blue wireless icon (as Legend-2-1)

Delete WiFi-103 controller list

RGB Driver mode

Connect to WiFi-103

Disconnect to WiFi-103 controller



WiFi-103 as a router interface Connect a additional router interface

(Legend-2-1)

(Legend-2-2)

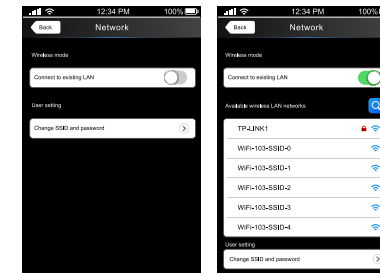
Manual searching the WiFi-103 controller which connect to the additional router

Workable WiFi-103 Network interface
RGB/CT/DIM Driver setting
Change the background interface
Connect to additional router TP-LINK1

C. Click "Network" key to enter Network interface(as legend-3-1), start "connect to exiting LAN", software will search the workable WiFi net SSID list, choose the specified router to connect (Att: do not choose WiFi-103 controller), can add the WiFi-103 controller to the wireless router(as legend-3-2 the wireless router TP-LINK1)

Repeat the ABC steps if you need connecting multiple WiFi-103 controller to this wireless router.

D. Exit WiFi-103 software, enter mobile device setting-wireless network setting, choose the wireless router to connect. Device List interface shows as legend 2-2 when re-open the WiFi-103 software. Completes the steps to connect to the additional router.

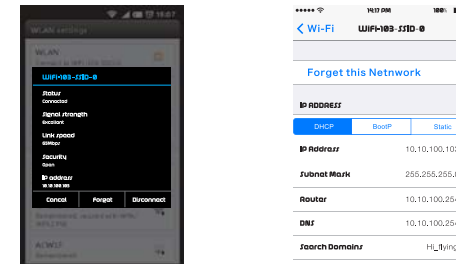


(Legend-3-1)

(Legend-3-2)

Network interface

Att: In this connection mode, to avoid the mobile device automatically connect to WiFi-103 after the setting has completed, please click "workable WiFi-103" which under the mobile device "WiFi setting" and at the message box please click "Forget this network"(apple iOS) or "Cancel save" (SUNMUNG mobile phone is "forget") to cancel the save of WiFi-103 connection.

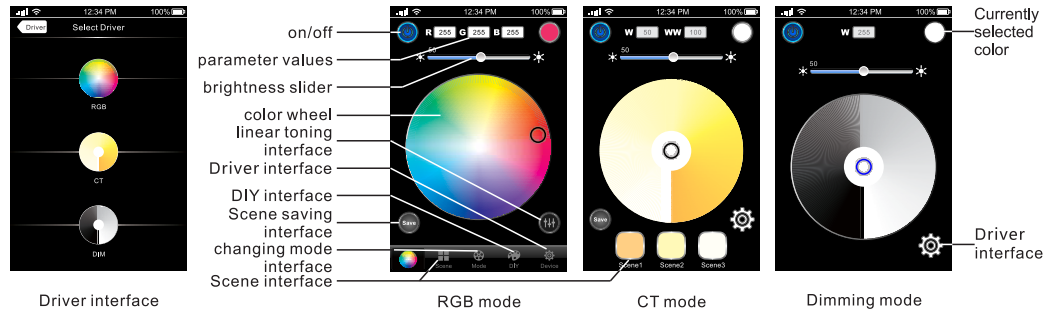


Android cancel store the WiFi-103 connection

Apple cancel store the WiFi-103 connection

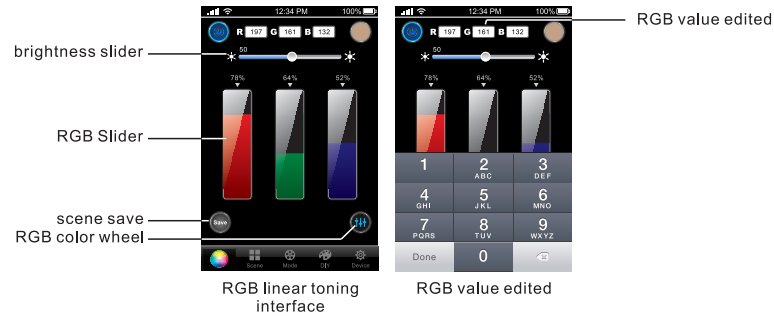
2. RGB,CT,DIM driver color wheel interface

When you open the software, **DeviceList** interface is the default one, click **Driver** into the Driver selection screen. selected the RGB/CT/DIM drive and return to the **DeviceList** interface, Click the color palette into the color palette interface, touch the color wheel that can change and control the color, CT, brightness, saturation (RGB mode only) which connected to the controller, drag the brightness bar which above the color wheel to adjust the brightness of the lighting. Click the ON / OFF button to turn off or turn on the controller. Click the save button to scene save operation.



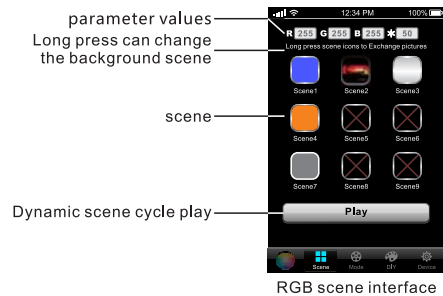
3. RGB linear toning interface

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



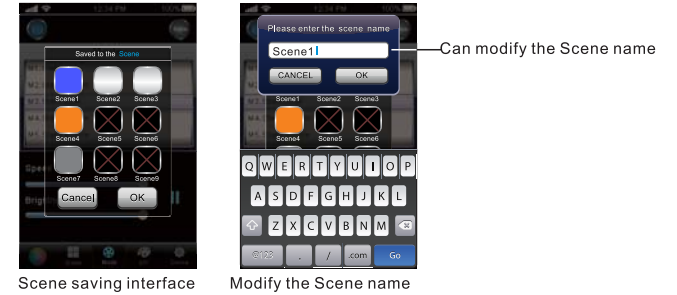
4. RGB scene interface

Click 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.

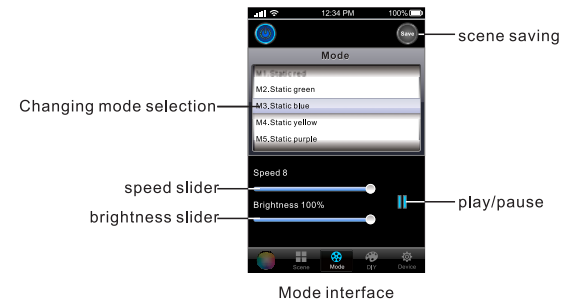


5. RGB save scene interface

Click 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.



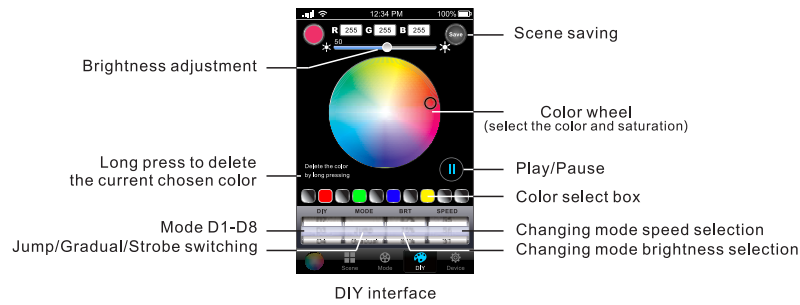
6. RGB Mode interface



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

7. 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.

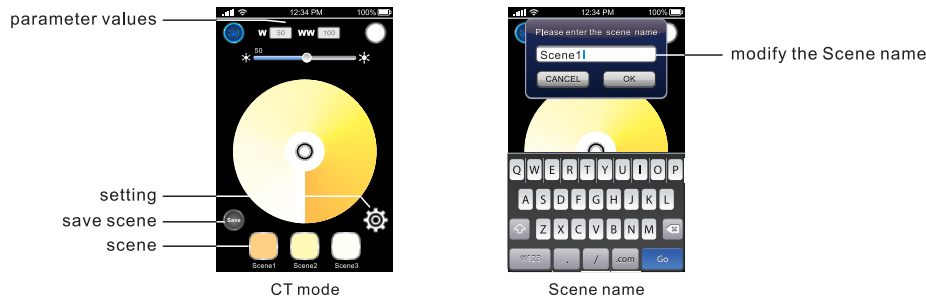
8. CT interface

A. 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.

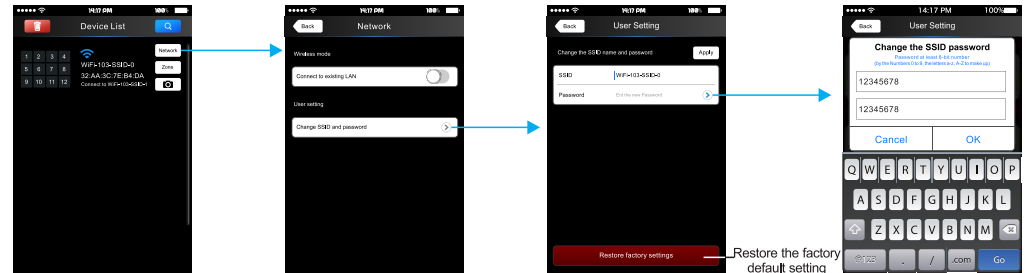
B. Save scene:

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.



5. WiFi Network SSID Name and Password Setting

In Device list interface, click "Network key" to enter Network interface, select "Change SSID and Password" (Click ">") to enter User Setting interface. Typing new SSID name and password (Min.: 8 characters, consist of 0-9, a-z and A-Z). Click "Apply" button on the top right corner of the interface to save the changes.



1.Device List interface 2.Network interface 3.Change SSID name interface 4.Change SSID password interface

[Att]: In direct connection of the WiFi-103 as a router. Please exit software after changed the SSID name and the password, then enter the mobile device system setting to reconnect the WiFi-103

In additional wireless router connection, it only needs to click "🔍" in Device List interface to search again the WiFi-103 controller after changed SSID name.

[Att]: If you forget the WiFi network password, please simultaneously press : "MATCH" and "SCENE" more than 2s to restore the factory default settings, so that can delete the WiFi network password (More details in page 3 [Restore factory settings/Delete password])

6. The remote control operating instructions

(1) The learning method of T1/T2/T3 to WiFi - 103

Learning ID:

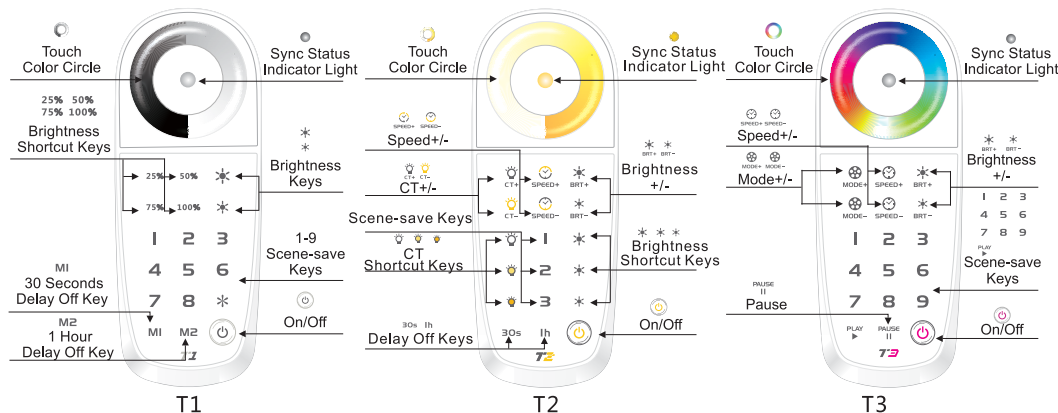
long press learning key "MATCH" on WiFi-103 (The buzzer goes off), then short press any key on Remote within 5 seconds until the green LED indicator or the white one flashes 3 times (the buzzer goes off) means the controlling between remote and WiFi-103 is activated.

Cancelling ID:

long press "MATCH" on WiFi-103 over 5 seconds (the buzzer goes off) means the controlling between remote and WiFi-103 is cancelled.

Att: different types of remote learning operation, will change WiFi-103 control mode directly(single color , color temperature and RGB mode)

(2) Function definition of Remote control buttons



7. Conjunction diagram

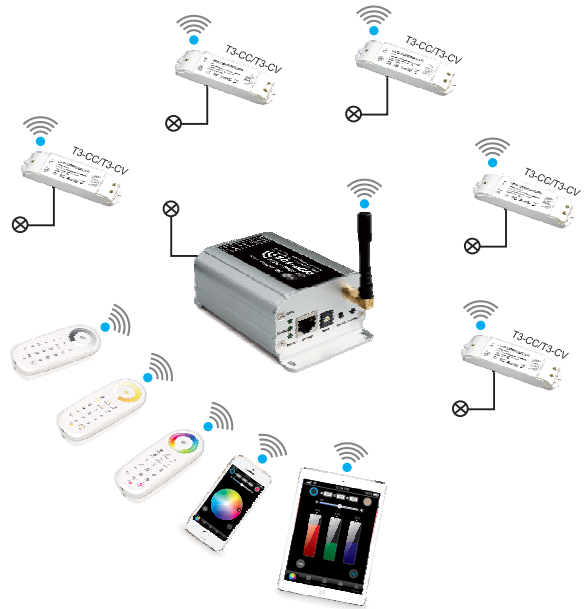
1) wireless branch control connection

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

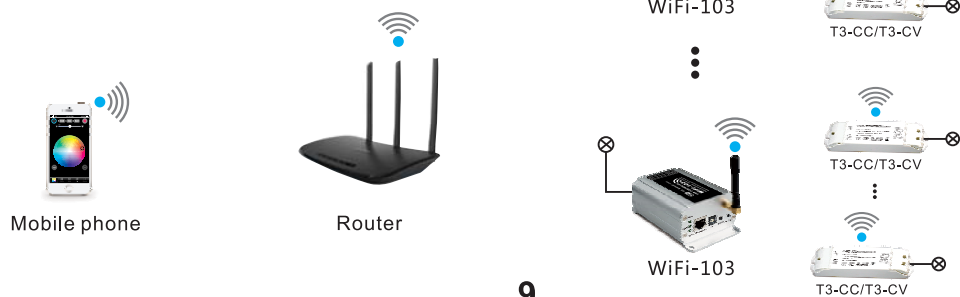
The method of synchronization for the WiFi-103 controller and T3-CV/T3-CC:

Learning ID: Long press the **SCENE** key on the WiFi-103 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.

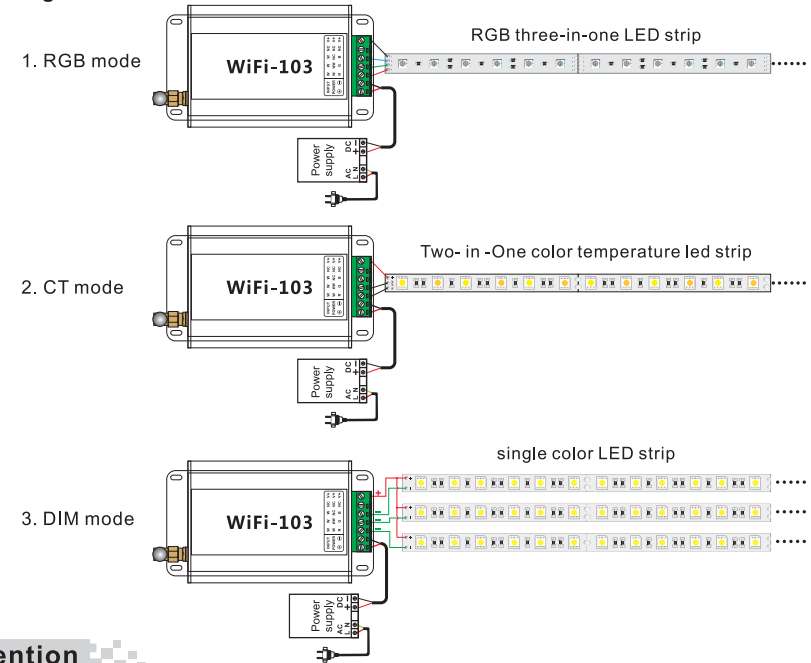
Cancelling ID: Under synchronization function on-state, long press the address setting key on the T3-CV/T3-CC for 2 seconds, until the buzzer interval long sound twice means the synchronous control between the WiFi controller and the receiver is activated.



2) Connect by a router



3) connecting with the LEDs



8. 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.

9. Warranty Agreement

1. We provide lifelong technical assistance with this product:
 - A 5-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 5-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.