

WiFi-102 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-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 | • RGB color change mode: | 32 fixed modes, 8 DIY modes |
| • Input voltage: | DC12V~DC24V | • Scene mode: | RGB 9 modes ,CT 3 modes |
| • Output current: | 4A×3CH Max 12A | • Operating temperature: | -20°C~50°C |
| • Max output power: | 144W/288W(12V/24V) | • Dimensions: | L127.6×W73×H44.5mm |
| • Output control: | flexibly control single color, CT, RGB LED lighting fixture | • Package size: | L135×W80×H50mm |
| • Control distance: | Max 100m | • Weight (G.W): | 325g |

Software Technical parameters

- Platform: Android 2.1 or above, IOS3.2 or above, with the wifi function
- Size: iOS(4.6MB), Android(1.5MB)
- Language: English
- Category: Tool
- Others: Free, Plug-in-free

T1, T2, T3 Technical parameters

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

Note: remote control is another purchase accessories

T3-CV Receiving controller

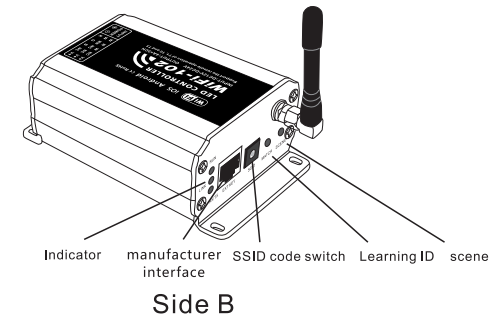
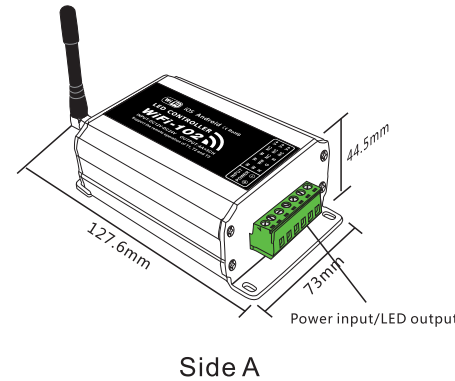
- Input voltage: DC5V~DC24V
- Max current load: 6A×3CH Max 18A
- Max output power: 90W/216W/432W(5V/12V/24V)
- Compatible remote control: T1/T2/T2M/T3/T3M/T3X
- Working temperature: -30°C~55°C
- Dimension: L175×W44×H30mm
- Package size: 178×W48×H33mm
- Weight (G.W.): 110g

T3-CC Receiving controller (current 3 in 1)

- Input voltage: DC12V~DC48V
- Output voltage: DC3V~46V
- Output current: CC 350/700/1050mA×3CH(3 in 1)
- Output power: 1.05W~48.3W ×3CH Max 144.9W
- Compatible remote control: T1/T2/T2M/T3/T3M/T3X
- Working temperature: -30°C~55°C
- Dimension: L175×W44×H30mm
- Package size: 178×W48×H33mm
- Weight (G.W.): 110g

Note: Receiving controller is another purchase accessories

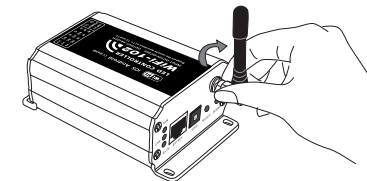
2. Configuration Diagram



3. Controller operating instructions

1. Install / uninstall ANT

Install the WiFi antenna clockwise, uninstall anticlockwise



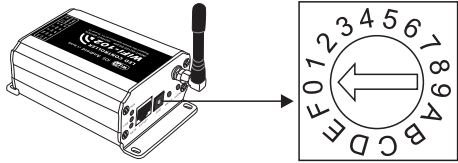
ANT installation instruction

2. Work status indicator instructions

indicator 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.

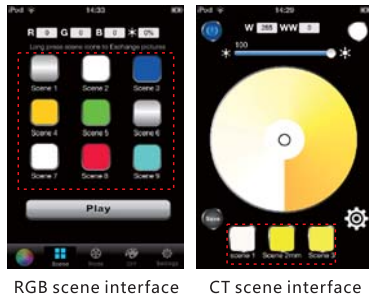
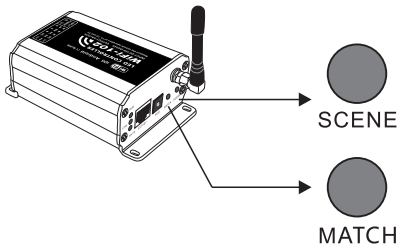
3. SSID Number setting

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. " 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.



RGB scene interface CT scene interface

[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 connection password is blank.

4. The instructions of APP software:

(1) Download App software



iOS scan for download



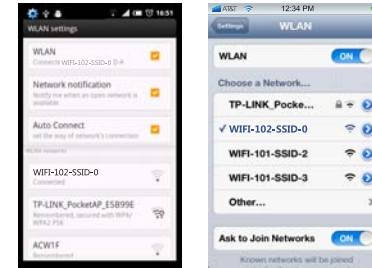
Android scan for download



(2) Software Operating Instructions

1. WiFi connection and settings

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



Android WiFi connection iOS WiFi connection

(2) Click to Enable software.

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.

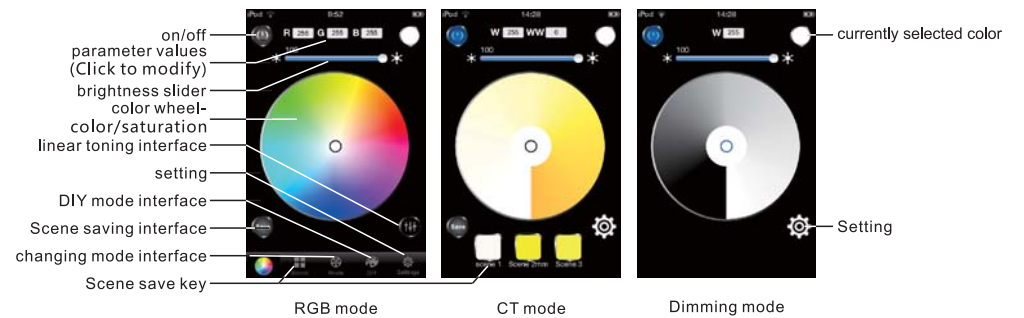
return to a previous interface



setting interface

prompt box saying without WiFi connection

2. RGB,CT,DIM driver color wheel interface



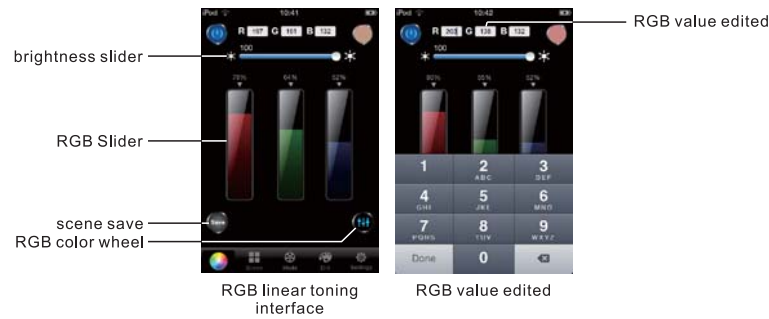
RGB mode

CT mode

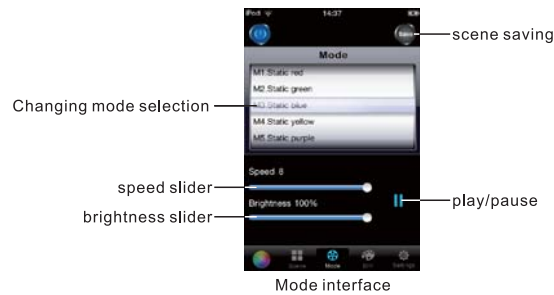
Dimming mode

3. RGB linear toning interface

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



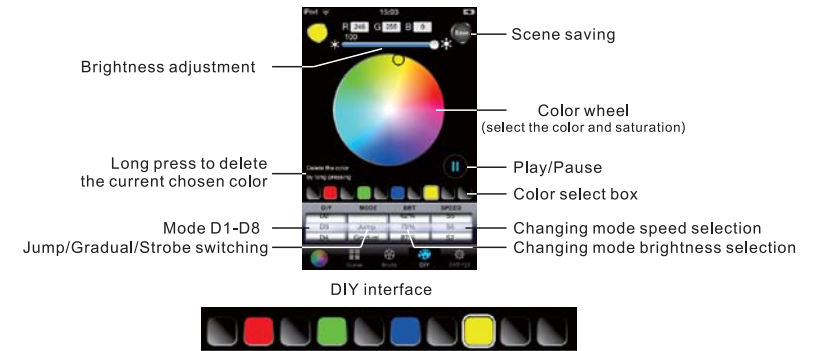
4. RGB Mode interface



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

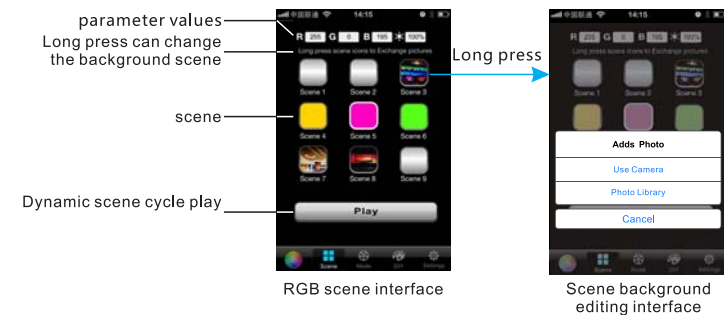
5. DIY interface



For example:

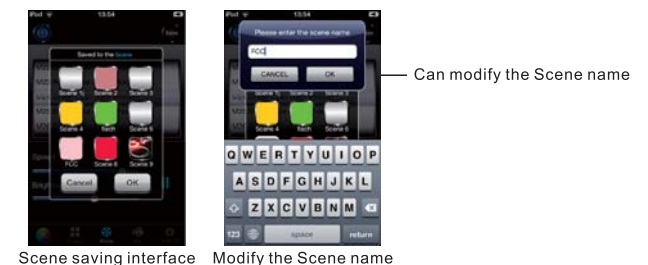
The Sequence for 10 color boxes is black, red, black, green, black, blue, black, yellow, black, black, which means choosing 8 colors. If the type of changing mode is jump, carry out the black, red, black, green, black, blue, black, yellow jump changing mode. That is red, green, blue, yellow strobe changing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



7. RGB scene settings

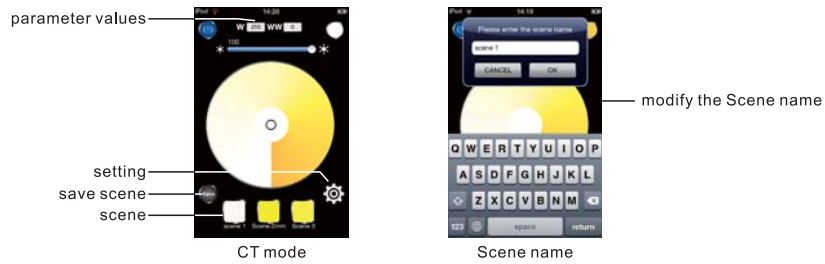
Click on the interface of RGB color wheel, linear toning, and mode or DIY, select any Scene 1 ~ 9, and click "OK", the Scene name prompt box will pop-up, scene name can be modified. Click "OK" again, the current changing mode will be saved as the Scene changing mode; Click "cancel" then Cancel the Save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



Scene saving interface Modify the Scene name

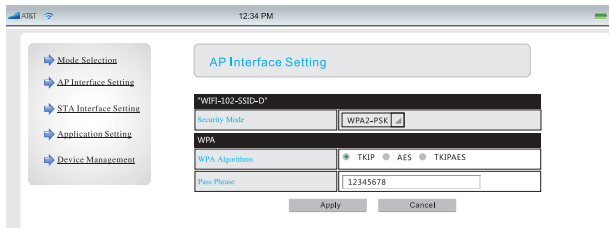
8. CT scene settings

On CT interface, touch the color wheel to select color temperature, Click **Scene**, 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.
 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.



5. WiFi network password settings

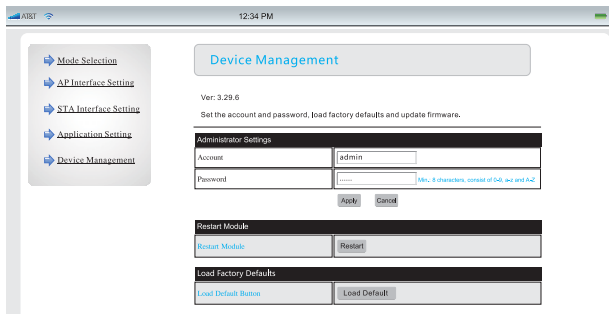
- Using the mobile devices connect to the WiFi controller, typing **http://10.10.100.254** in the address field of your browser, and then click **Enter**, a login window like the one in the flowing figure opens.
- Type **admin** in the User name field and password in the Password field, and click **Sign in**.
Your web browser displays the **Mode Selection** screen.
- 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**.



Set the WiFi network password

- 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".

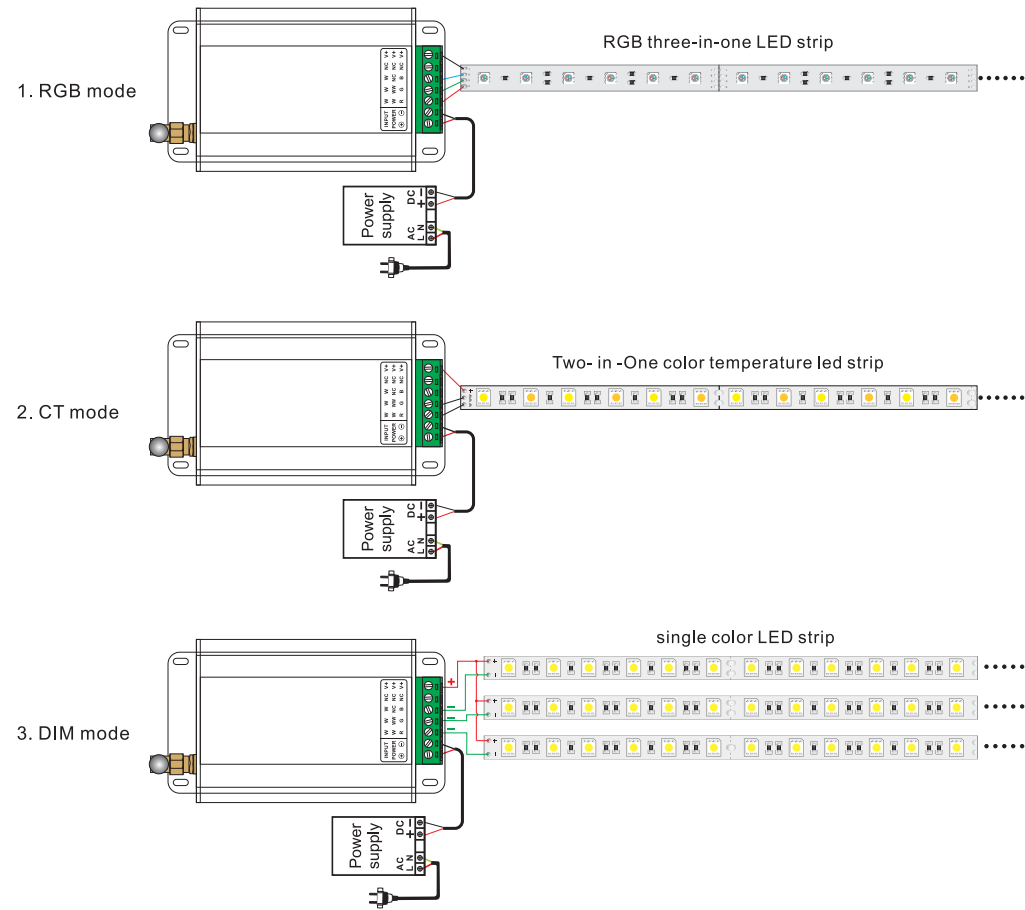


Device Management

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

6. Conjunction diagram

Connecting with the LEDs



7. The remote control operating instructions

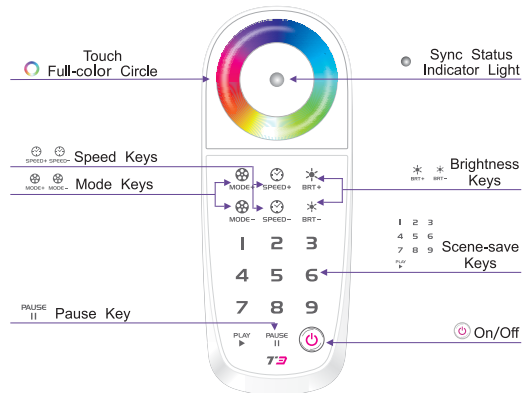
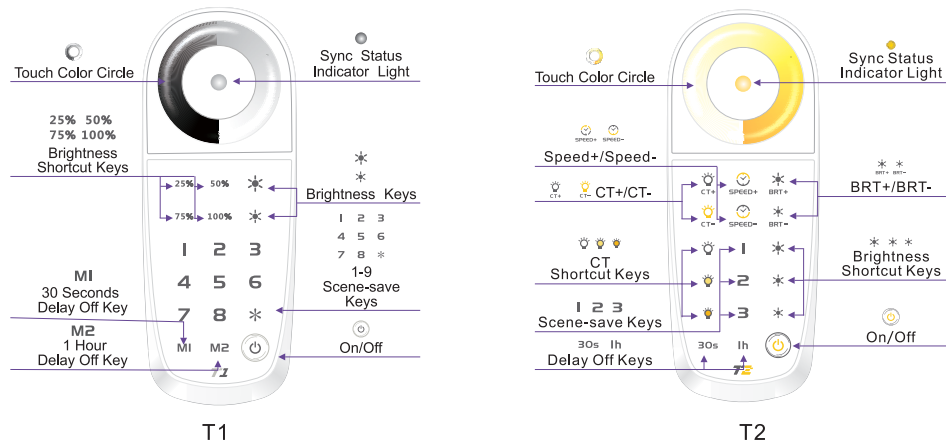
(1) The learning method of T1/T2/T3 to WiFi - 102

Learning ID: Short press learning key "MATCH"(as shown below) on WIFI-102, buzzer sound once, long press any key(except ON/OFF key) on Remote within 5 seconds until the green LED indicator or the white one flashes 3 times (meanwhile the buzzer long sound,) means the controlling between remote and WIFI-102 is activated.

Cancelling ID: long press "MATCH" on WIFI-102(over 5 seconds) till the buzzer long sound, means all the remotes learned with WIFI-102 cancelled.



(2) Function definition of Remote control buttons



T3

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

Learning ID:

Long press the SCENE key on the wifi-102 controller(as shown below)until the buzzer long sound(RUN light flash quickly), and then short press the ID on the T3-CV/T3-CC, the buzzer long sound again. Learning ID successful.

Cancelling ID:

Long press the SCENE key on the wifi-102 controller until the buzzer long sound twice, cancel all the T3-CV/T3-CC learned with wifi-102 controller.



wireless branch control connection

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



8. Attention

- The product shall be installed and serviced by a qualified person.
- This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- Please check if the output voltage of any LED power supplies used comply with the working voltage of the product.
- 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.
- Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
- If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

9. Warranty Agreement

- 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.
- 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.
- 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.
- 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.