

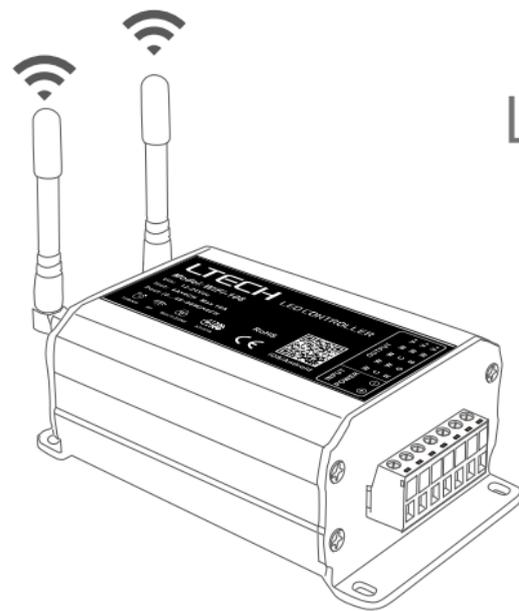
FC CE RoHS

warranty  
5 years



www.ltech-led.com

# LTECH



Model: WiFi-106

## L-BUS Lighting Control System



iOS

Andriod





L-BUS is a WiFi lighting control system, consisted of APPs and WiFi controller. Controls various types of LED lighting products by installing the related App on our Android or iOS mobile devices which support WiFi connection.

With DIM, CT adjustment, RGB and RGBW changing 4 in 1 operation, plus 12 zones control function, you can connect directly or by a router.

**1. Product Parameter:**

**WiFi-106 Gateway**

Communication Standard:	2.4GHz WiFi, 802.11b/g/n Protocol
Input Voltage:	12~24Vdc
Output Current:	4A×4CH Max. 16A
Max Output Power:	[0~48W...96W]×4CH Max. 384W
Output Control:	Dimming, CT, RGB, RGBW
Operating Temp.:	-30℃ ~55℃
Dimensions:	L128×W73×H45(mm)
Package Size:	L160×W110×H50(mm)
Weight (G.W.):	470g



**F12 RF Remote Control**

Working Voltage:	3Vdc (Battery CR2032)
Wireless Frequency:	RF 2.4GHz
Package Size:	L150×W46×H18(mm)
Weight(G.W.):	85g



**Software Technical Parameters**

Platform:	Android 4.0 or above, iOS 8.0 or above
Language:	English
Category:	Appliance

**Optional accessories**

**Touch panel**

Single zone control

Output signal: RF + DMX512



Multi-zone control

Output signal: RF + DMX512



Dimming control

Output signal: RF + DMX512



Power touch panel

Output signal: RF + Power output



**Remote**



**RF relay**



**Signal converter**



RF to DMX  
EBOX-DMX



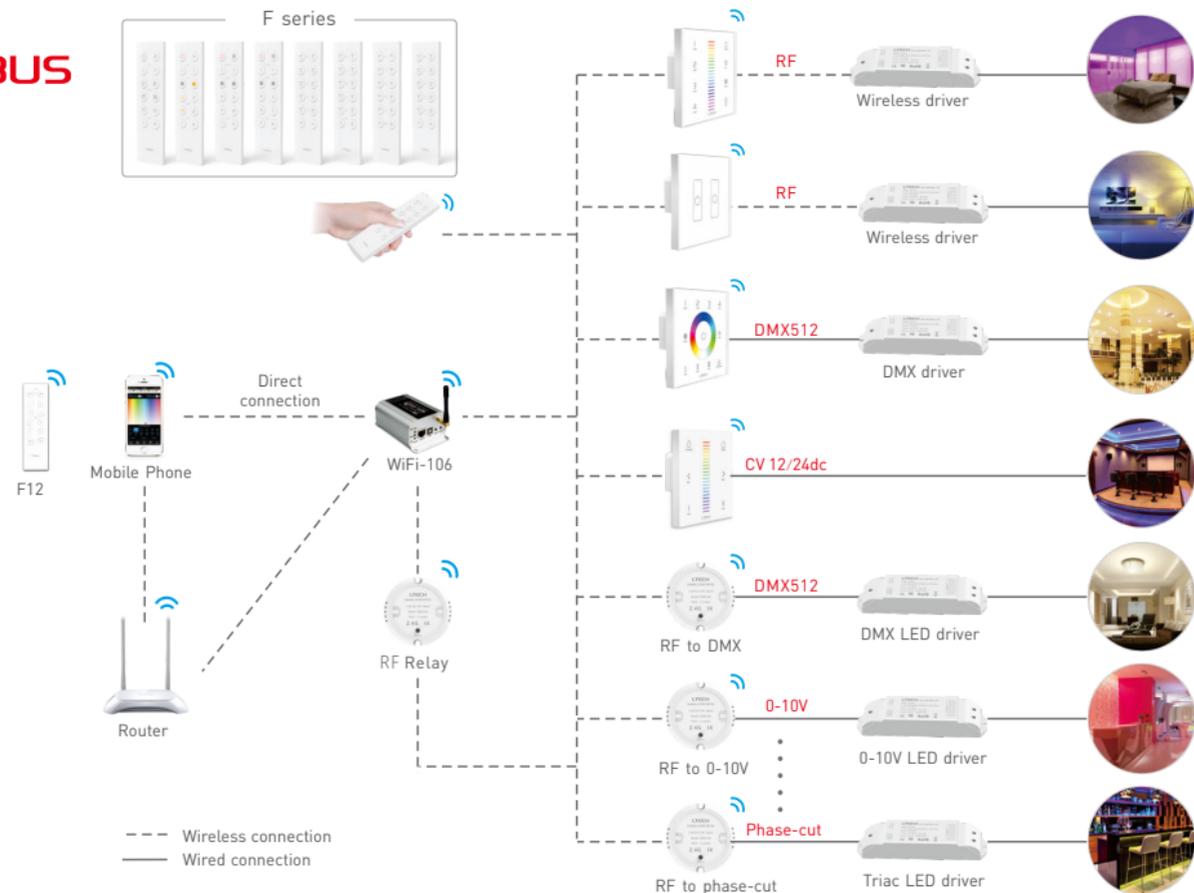
RF to 0-10V  
EBOX-AD



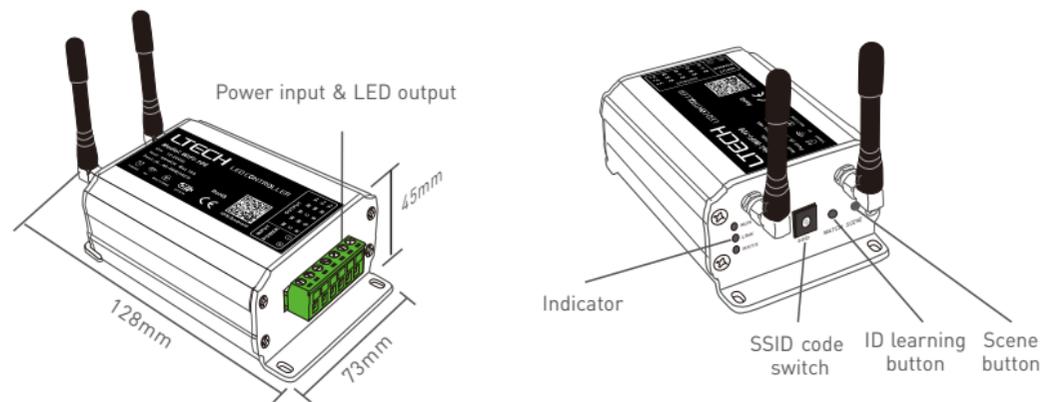
RF to Triac  
EBOX-TD

**Receiver**





## 2. Configuration Diagram:



## 3. Controller Operating Instructions:

### 3.1 Install/Uninstall ANT:

Clockwise to install the WiFi-106 ANT, counterclockwise to take off.

### 3.2 Work Status Indicator Instructions:

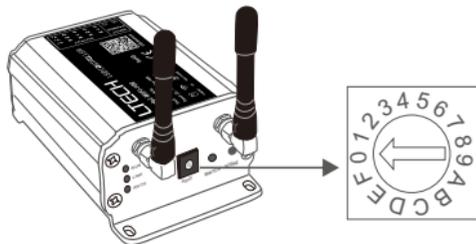
**RUN:** The indicator light flashes quickly about 60 seconds during the electric initialization. Return to flash slowly after initialization.

**LINK:** The indicator light stays lit when the mobile device connects to WiFi-106, and turns off when disconnect.

**RX/TX:** The indicator light flashes when WiFi-106 receive or transmit the WiFi data, turns off in the free time.

**3.3 SSID Number Setting:**

Use code switch to set the controller's SSID number, WiFi-106-SSID-X, X stands for a certain No. ranging from 0-F, totally 16 options. which means our product could set 16 isolated LAN in the same area. WiFi-106 will initialize with run LED indicator flashing about 25s quickly, each time the SSID NO. is changed. Mobile devices need to search and connect WiFi again after Initialization finished.

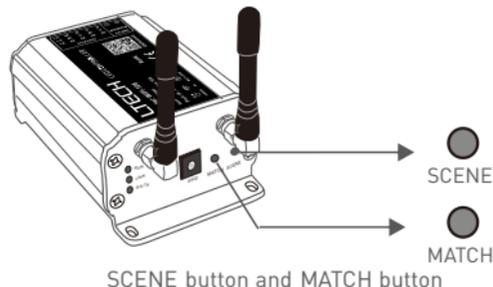


**3.4 "MATCH" and "SCENE" Button:**

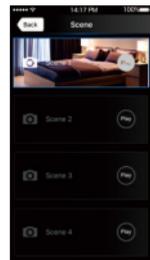
Short press MATCH button, WiFi controller begins its learning ID status for F12 remote (learning method, see P16). Short press "SCENE" button entering into the user-saved scene modes sequentially, 8 scenes total.

**[ Restore factory settings/Delete password ]**

Long press "MATCH" and "SCENE" button simultaneously more than 2 seconds, the machine will back to the default parameter, including the parameters of changing modes, zone, group and network. Machine default parameters: Only 1st zone is present, default RGBW mode, the changing mode is RGB jumping, white is the brightest, no groups, network SSID is WiFi-106-SSID-X (X is the actual coding switch corresponding SSID values), WiFi-106 controller restores as direct connection and the connection password is blank.



SCENE button and MATCH button



Scene interface

**4. The Instructions of APP Software:**

**4.1. WiFi-106 Software Installation:**

Scan QR Code to download the APP via mobile phone.



iOS/Android

**4.2 Software Operating Instructions:**

**4.2.1 WiFi Connection and Settings**

WiFi-106 support 2 connection modes: Direct connection as a router or connect by an additional router.

**A. WiFi-106 Controller Direct Connection as a Router:**

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



Android WiFi connection (Figure-1)



Apple WiFi connection

Attn: When WiFi-106 work as a router, to avoid the mobile device automatically connect to other network, please disconnect the other network in "WiFi setting" interface.

**B. Connection with an Additional Router:**

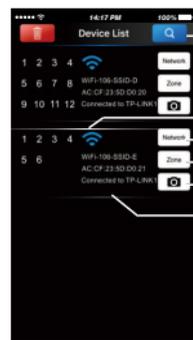
**Connect WiFi-106 Controller to the Additional Router Network:**

- a. Connect to the WiFi-106 controller, the same step as (4.2.1)
- 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 Figure-2-1)



Delete WiFi-106 controller list  
Workable zone NO.  
Connect to WiFi-106  
Disconnect to WiFi-106 controller

WiFi-106 as a router interface (Figure-2-1)



Connect an additional router interface (Figure-2-2)

Manual searching the WiFi-106 controller which connect to the additional router  
Workable WiFi-106 Network  
Zone function  
Change the background  
Connect to the additional router TP-LINK1

- c. Click "Network" key to enter network interface(as Figure-3-1), start "connect to exiting LAN", software will search the workable WiFi net SSID list, choose the specified router to connect (Attn: do not choose WiFi-106 controller), can add the WiFi-106 controller to the wireless router (as figure-3-2 the wireless router TP-LINK1)

**Repeat the abc steps if you need connecting multiple WiFi-106 controllers to this wireless router**

- d. Exit WiFi-106 software, enter mobile device setting-wireless network setting, choose the wireless router to connect. Device list interface shows as Figure 2-2 when re-opening the WiFi-106 software. Now completes the steps to connect to the additional router.



(Figure-3-1)



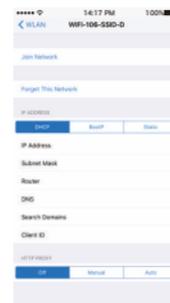
(Figure-3-2)

Network interface

**Attn:** In this connection mode, to avoid the mobile device automatically connect to WiFi-106 after the setting has completed, please disconnect WiFi-106 in the "WiFi setting" interface.

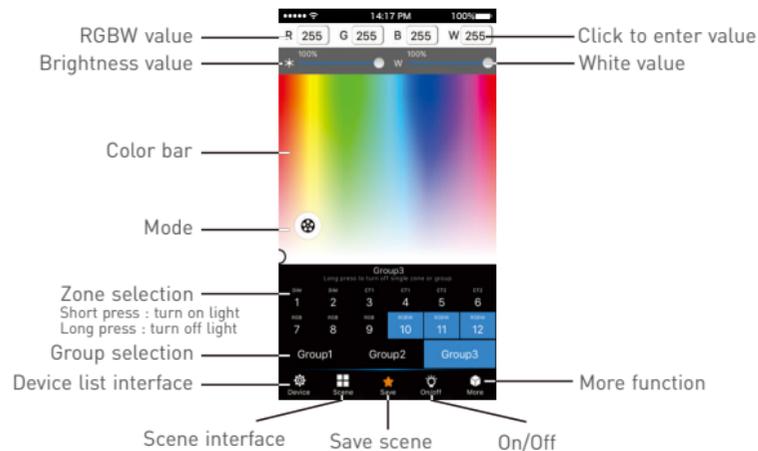


Android cancellation of the save of WiFi-106 connection



Apple cancellation of the save of WiFi-106 connection

4.2.2 Main Interface ( 5 types )



5 Main Interface



4.2.3 The Learning Method of Zone Control

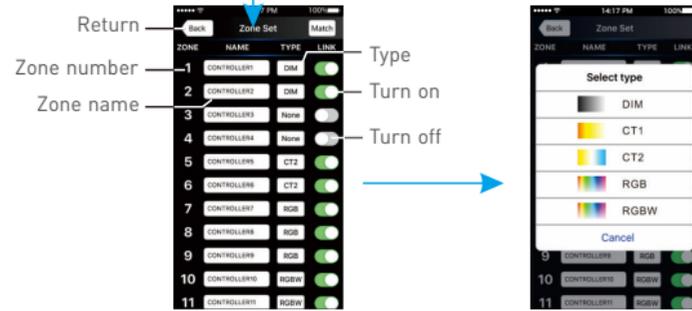
A. Turn On Zones Control

Click "Zone" on the **Device List** interface, enter **Zone set** interface. turn on each zone, choose the LED type accordingly (zones are nameable).

**[Attn]:** WiFi-106 itself is defaulted as zone NO.1, connecting lights is optional, slave control will be zone NO.1 if not connected.



Device list interface

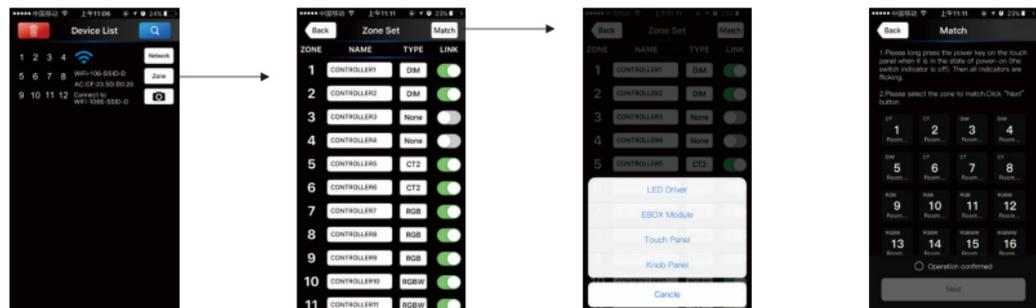


Zone set interface

Select type interface

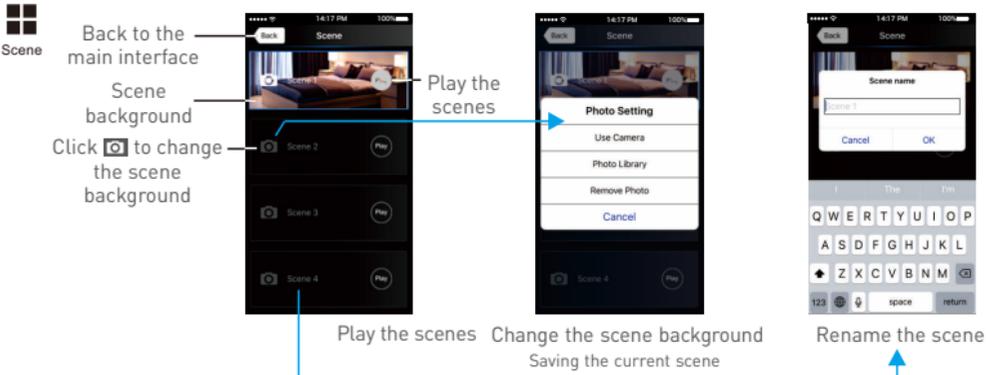
B. Learning ID:

Click "Zone" button in the "Device List" interface, enter "Zone Set" interface, and click "Match" to match with LED driver, panel and EBOX Module.

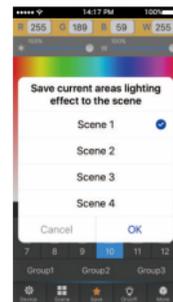


[Attn]: Reset function is available during ID cancellation. Considering dysfunction in rare cases, please cancel the ID and re-sync. Please refer to the relevant product manual for the ID cancellation method.

4.2.4 Scene Interface



4.2.5 Save scene

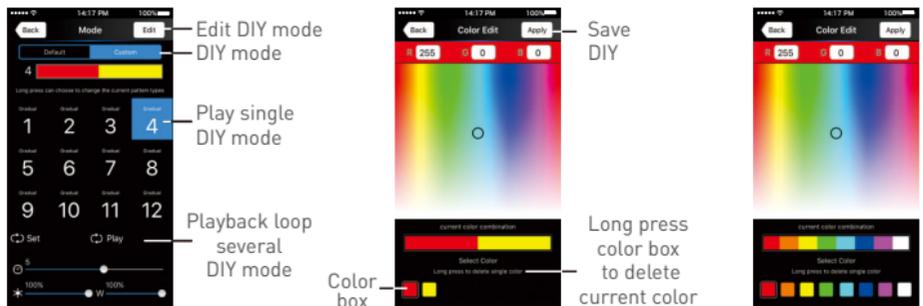


Save current areas lighting effect to the scene

4.2.6 Mode Interface for RGB / RGBW Type



4.2.7 DIY Interface 



DIY mode interface

Edit single DIY mode

Edit single DIY mode

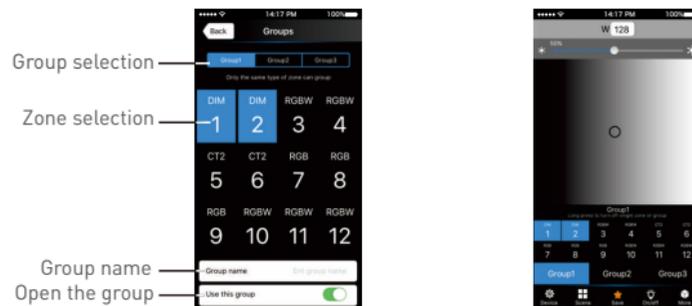
4.2.8 More Function 



Group Features :

- Choose several zones as one group and control in sync.
- Max 3 groups, same LED types in one group and one zone could join multiple groups.
- Enable the group status, the corresponding group will appear on the main interface.
- Group settings will be auto off if zone LED type on & off state changed.

A. Group



Group selection

Zone selection

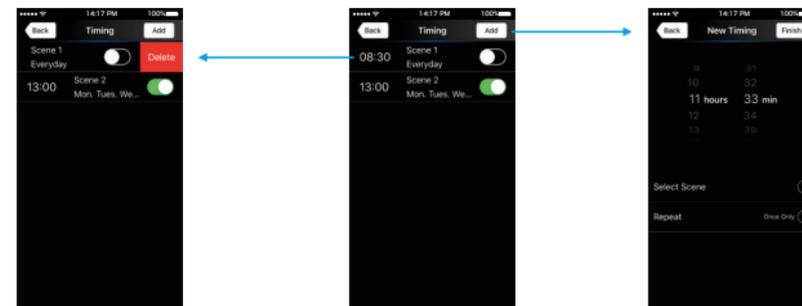
Group name

Open the group

Group interface

Group operations in main interface

B. Timing



Slide left to delete timing

Timing interface

Add new timing

### 5. WiFi Network SSID Name and Password Setting

On device list interface, click "Network" key to enter Network interface, select "Change SSID and Password" (Click "⊙") to enter User Setting interface. Type 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.



[Attn]: Direct connection of using WiFi-106 as a router, exit the App after the SSID name and the password changed, reconnect the WiFi-106 on the mobile devices.

For extra router connection, just press "🔍" on Device List interface to research WiFi-106.

[Attn]: If forget the WiFi network password, press "MATCH" and "SCENE" button simultaneously above 2s to restore the factory default settings and delete the WiFi network password (see P5)  
[Restore factory settings / Delete password]

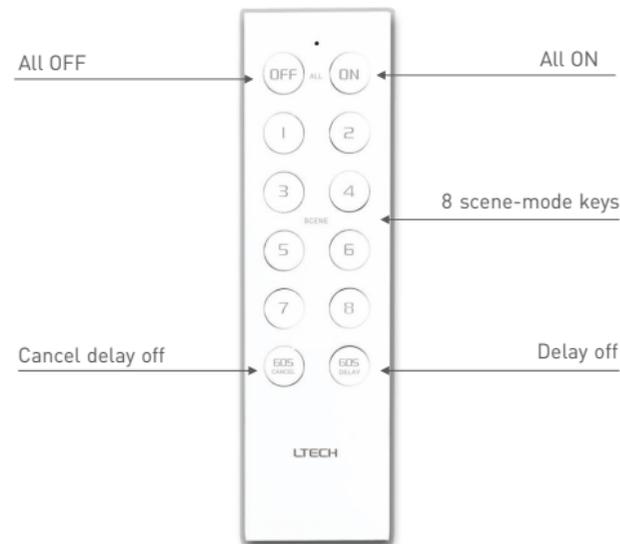
### 6. Remote Operating Instructions

#### Learning ID

Short press "MATCH" on WiFi-106, the buzzer long beep, press any key on F12, the buzzer beep again, ID matched.

#### Cancelling ID

Long press "MATCH" on WiFi-106 above 6s, the buzzer long beep, ID cancelled (cancelled all matched remotes).

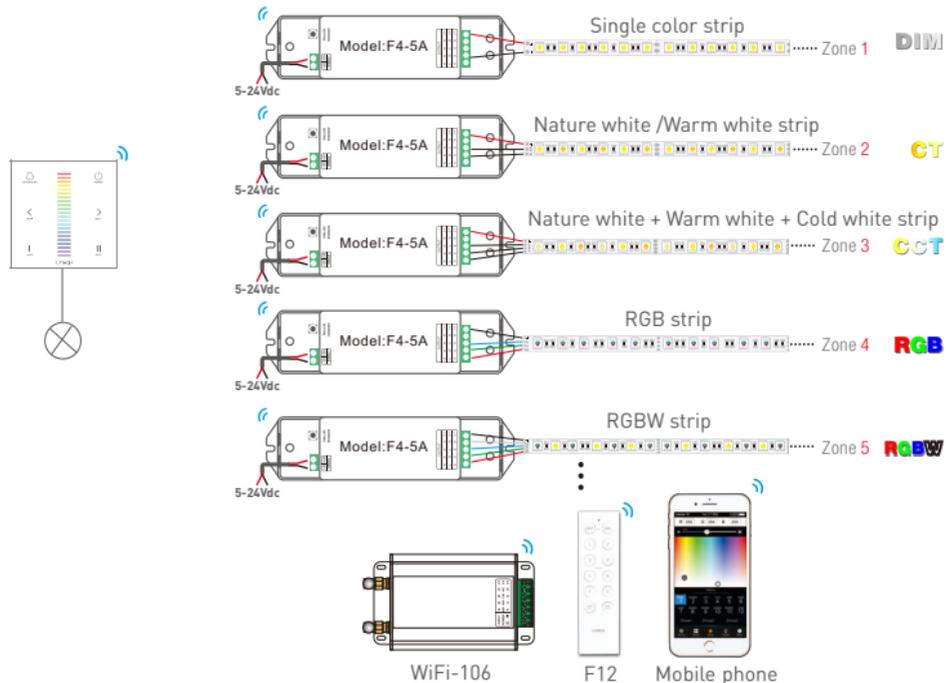


## 7. Wiring Diagram

### 7.1 Connection Between Zone Receiver to LEDs ( Same as WiFi-106 )

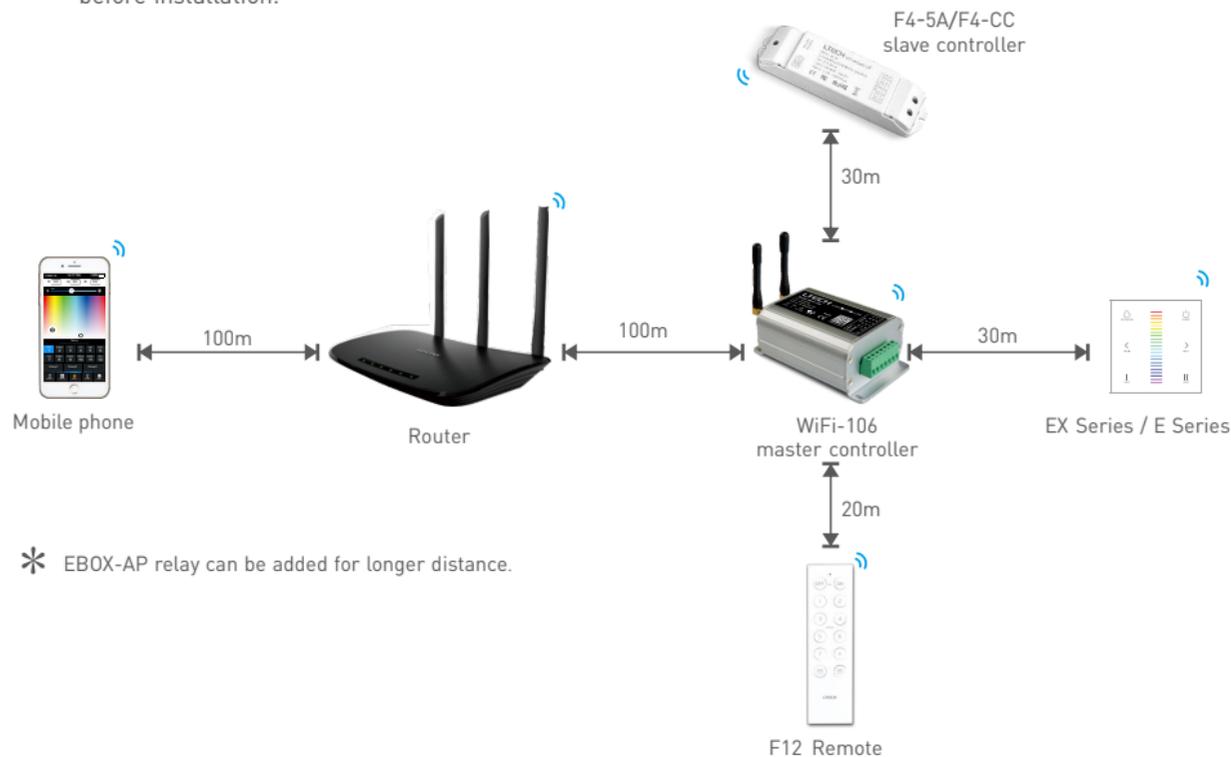
[Attn]: WiFi-106 itself is defaulted as zone NO.1, connecting lights is optional, slave control will be zone NO.1, if not connected.

All zones could be used for same LED types or not. e.g. single color dimming in all zones, all set to DIM type. Set different LED type in each zone accordingly (Dimming, CT or RGB, etc.).



## 7.2 Remote Distance Reference

[Attn]: The following distance figures is measured in spacious environment. Please refer to the actual test distance before installation.



\* EBOX-AP relay can be added for longer distance.