# Manual Instruction **EUROSPOT**

WiFi High Frefresh LED controller

SKU:6252-6253

# 1.Features

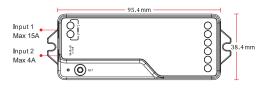
The controller features advanced PWM control technology with a memory function, retaining light settings after power off. It supports wireless and 4G control via the Tuya Smart Life APP. With a maximum PWM dimming frequency of 20 kHz, it effectively reduces noise and flickering during operation.



# 2.Parameters

Model No.: CH21W Input Voltage: DC12-24V(5.5\*2.1mm) ⊖ • • • Output: 7.5A/Channel(Total output Max:12A/20kHz 15A/2kHz) Working Temerature:-25~40 C Communication Mode: WiFi-IEEE 802.11b/g/n 2.4GHz RF:2.4GHz Weight: 65g

Model No.: CH31W Input Voltage: DC12-24V(5.5\*2.1mm) ⊖-€--⊕ Output: 5A/Channel(Total output Max:12A/20kHz 15A/2kHz) Working Temerature:-25~40 Communication Mode: WiFi-IEEE 802. 11b/g/n 2.4GHz RF:2.4GHz Weight: 65g



SET Button: Long press SET 3 seconds when the purple pilot lamp blinking, the device will enter the network matching status or cancel the network matching status.

Switch ON and OFF 4 times(ON-OFF-ON-OFF-ON-OFF-ON)within 10 seconds the purple light will blink 3 times, the device will enter the network matching status or cancel the network matching status.

# Note:

After the controller resets the network, all previously set lighting parameters, scenes, biological rhythm, sleep aid lighting, wake-up lighting, holiday mode, power-off memory, and Do Not Disturb settings will be restored to factory defaults.

Switching Output Mode: Short press "SET" button to switch the output mode; The Pilot lamp flickering means switching successfully; Different colors flickering correspond to different output mode; Details see below sheet.

CH	CH21W		CH31W		
White Light Flickering	Yellow Light Flickering	Red Light Flickering	Green Light Flickering	Blue Light Flickering	
Single Color Mode	Dual White/ CCT Mode (Default Mode)	RGB Mode	RGBW Mode	RGB+CCT Mode (Default Mode)	

Suggestion: Complete the network distribution of the equipment first, then adjust the output mode Pilot lamp.

# Indicating light instruction:

Red light	Green light	Red light	Blue light
always-on	always-on	blinking	always-on
Disconnected	Networking	Waiting for	WiFi router disconnected
from network	successfully	smart link	but still controllable

# 2.1.Switch PWM Frequency

#### Switch to Low Frequency:

Press and hold the SET button for more than 15 seconds, the blue indicator light will flicker slowly, indicating a switch to a low frequency of 2KHz.

## Switch to High Frequency:

Press and hold the SET button for more than 15 seconds, the green indicator light will flicker slowly, indicating a switch to a high frequency of 20KHz.

#### Note:

1.Application for switching the PWM frequency to avoid noise caused by different power supplies. 2. The default frequency is high frequency.

# 3. remote dynamic mode

Dynamic mode controlled by remote control				
Dynamic mode No.	mode	Applicable Models		
1	Seven color jumps: red,orange, yellow,green,cyan,blue,purple			
2	Seven color gradients: Red,Orange, Yellow,Green,Cyan,Blue,Purple.			
3	Six color breathing changes: Red, Yellow,Green,Cyan,Blue,Purple.			
4	Colorful 360-degree cyclic gradient.			
5	Colorful random jump change	CH31		
6	Red to yellow gradient			
7	Cyan to Blue gradient.			
8	red to purple gradient			
9	green to cyan gradient			
10	/	CH21 (Does not support dynamic functionality)		

# 4. Auto-synchronization function

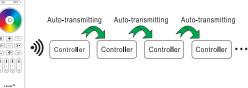
Different controllers can work synchronously when they are started at different times, controlled by the same remote, under same dynamic mode and with same speed.



2. Controller will be auto-synchronizing in the same dynamic modes and within 30m controlling distance

# 5.Auto-transmitting Diagram

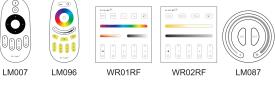
One strip controller can transmit the signals from the remote control to another controller within 30m, as long as there is a strip controller within 30m the remote control distance can be limitless.



# 6.Remote Controler

Compatible with these remote controls (Purchased separately). For more details, pls read the remote instruction.

() () () () () () () () () () () () () (	RC04RF/			RC01RF/	
C05RF/ C05RFB	RC04RF/ RC04RFB	RC03RF/ RC03RFB	RC02RF/ RC02RFB	RC01RF/ RC01RFB	LM091
	$\bigcirc$				



# 7.Connect to PWM LED strip

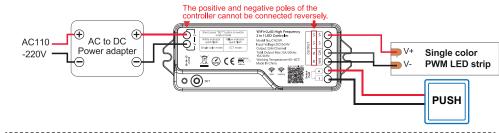
The positive and negative poles of the controller cannot be connected reversely Otherwise, the controller will be burned out, (It is recommended that the wire

length between the controller and the power supply not exceed 1 meter.)

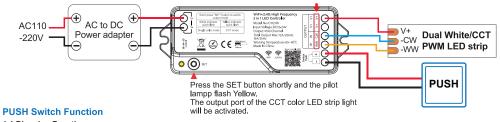
Controller input voltage must be in accordance with the required voltage of LED Strips

DC12V LED must use DC12V power supply. DC24V LED must use DC24V power supply.

# Connect to single color PWM LED strip diagram(CH21W)



# Connect to Dual White/CCT PWM LED strip diagram(CH21W)



## 1.1 Dimming Function:

(1)Short press PUSH Switch: Turn ON or Turn OFF the light.

(2) Long press PUSH Switch: Dimming the brightness smoothly

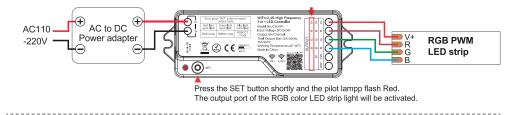
Long press Push Dimmer, then loosen the Push Dimmer, then long press again, switch increase brightness or decrease brightness. 1.2 Dimming Function:

Short press Push Switch over 4 times within 5 second, make thedevice into Link/Unlink Mode. The Link/Unlink will last for 5 seconds. 1.3 Smart Link to APP

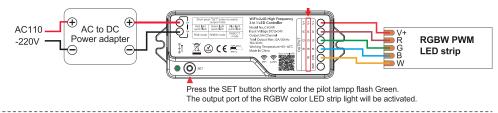
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Long press Push Switch for over 15 seconds, under light OFF mode.

# Connect to RGB PWM LED strip diagram(CH31W)



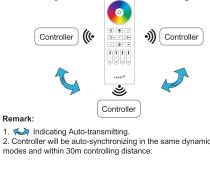
# Connect to RGBW PWM LED strip diagram(CH31W)



Connect to RGB+CCT PWM LED strip diagram (CH31W)



The output port of the RGBCCT color LED strip light will be activated.



ON OFF 0 . 8-9. mmm

R

R

# 8.Bluetooth controlinstructions

When the router is disconnected, you can turn on the Bluetooth of your smartphone and connect directly controlled device at a short distance

#### Switching Bluetooth control steps:

(1) Complete the network distribution of the equipment. (2) Power off the router used for network configuration, turn off WiFi on the mobile phone, turn on Bluetooth,1 minute later, reopen the APP, it can control the device by Bluetooth automatically.

# 9.APP Installation

9.1. Download and install [Smart Life] APP or [Tuya Smart] APP

Search for [Smart Life] in Apple or Google store or scan following QR code to download and install the app.

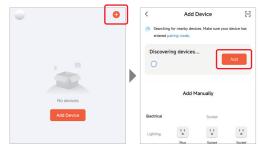
Please click "Register" button to create account while using it in the first time, Log in directly if you already had account.



#### 9.2. Network Configuration

- (1) Connect the controller to the power supply.
- (2) Long-press the "SET" key until the pilot lamp flashes quickly. (3) Turn on the Bluetooth and Wi-Fi and select Wi-Fi 2.4GHz
- network you want
- Meanwhile, please disconnect Bluetooth from other devices, such as earphones, stereos, etc.
- (4) Open Tuya Smart APP or Smart Life APP, you will be

reminded of "Devices to be added" or "Discovering devices", click the "Add" button.





(5) After entering WiFi information, click "Next" to add devices successfully



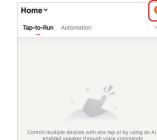
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#### 9.4. Device name editing, third-party control, device sharing, group control.

(1) Click" Z on the upper right corner of control page to enter edit page, where you can modify device name, icon, etc. (2) Click icon under third-party control to view detailed description of third-party control. (3) Click "Share Device" to share device with family and friends. (4) Click "Create Group " and follow APP prompt after setting is completed, the device can be controlled by group.

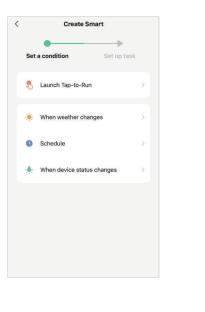
Device Info	ormation		>
Tap-to-Run and Automation		>	
Third-party (	Control		
0	••	••	
Alexa	Google Assistant	XIAODU	
Device Offlin	e Notification		
Offline Notification			
Others			
Share Devi	ce		>
Create Gro	up		>

(1) Click " Smart " at the bottom. Click " + " in the upper righ anto intolli





(3) In the page of creating smart, you can set command to be executed under the specified conditions (such as: turn on or turn off light, color, brightness, mode, etc.)



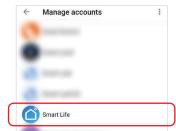
# **10.Support Amazon Alexa Contro**

Please search "Smart Life" skill in Alexa APP and activate the skill



# **11.Support Google Home Control**

Please search " Smart Life" skill in Google Home APP and activate the skill



# **12.Causes of Connection Failures** and How to Resolve Them

#### (1) LED Strip only light up Red light .No other colors can light up A: The voltage of the power supply doesn't match the voltage of LED

light . Maybe your LED strip is DC24V, You just use DC12V Power supply .Please check your power supply output voltage.

# (2) Not using the CORRECT light strip

A: Before using the controller, please make sure your strip is PWM strip without IC, not SPI strip

#### (3) The insufficient power of the power supply causes the controller to lose control.

A: Use a more high-power power supply. Insufficient power will cause the controller Wi-Fi disconnect. If you don't know how to calculate the power of LED light strips, please contact us and we can help you with the calculation

#### (4) Incorrect wiring of the light strip with the controller

A: Please read the wiring diagram of the manual carefully before connecting, after connecting, please check whether it is correctly connected before connecting to the power supply.

#### (5) Incorrect network usage

A: Using 2.4GHz network.You can check your home network for problems via a mobile hotspot. Because the mobile hotspot network is 2.4GHz.

### (6) Bluetooth not turned on

A:Turning on Bluetooth improves connection success.Meanwhile, please disconnect Bluetooth from other devices, such as earphones, stereos, etc.

#### (7) Too much distance between router and controller, weak WiFi signal

A: Adjust the distance between the controller and the router.

#### (8) The controller's Output mode not selected correctly

A:Please choose the correct indicator color according to your light strip, refer to the second point Paramters of the manual to adjust the controller indicator to the correct color

# 13.Attention

1. Please check whether the input voltage of the constant voltage power supply is in accordance with the controller, and please check the connection of both the cathode and anode.

- 2. The working Voltage is DC12~24V, the controller will be broken if the voltage is higher than 24V.
- 3. Non-professional user cannot dismantle the controller directly. otherwise, it may cause fire and electric shock.
- 4. The working temperature is-25~40°C; Do not use the device to direct sunlight, moist and other high temperature area. 5. Please do not use controller around the mental area and high

magnetic field, otherwise, it will badly affect the control distance 6. When the device load to 15A, wire diameter must be over

2mm<sup>2</sup>







(2) Click music to enter music rhythm mode, light will change with rhythm of music.

#### Note: Music rhythm mode requires phone keep on this page.

brightness, color temperature, and scene.

9.3. APP control





- 9.5. Intelligent control
  - aent control

(2) CI	ick " + " in the upper right corner to	create intellige
	Home ~	•
	Tan-to-Run Automation	