UeeVii

2.4G & 5G Wireless Bridge

— User Manual —



Model: CPE5824

Tips:

Thank you for ordering and using UeeVii CPE5824 Wireless Bridge, please read the manual carefully before use. If there are any problems during the use, please contact us in time. The installation of this device requires some network knowledge. If you can't install it, please let us know or contact a professional.

Customer Service Email: support@ueevii.com

MENU

OVERVIEW	02
1. Introduce	02
2. Highlights	
3. Specifications	
4. Package Contents	
5. Interface Details	
6. Button Operation	
7. LED Indicator Details	05
Quick Start	06
1. How to Connect	
2. Pairing	
3. Installation	
4. WiFi Function	10
5. Application Case	12
Advanced Settings	14
1. Connect Computer and Power Supply	
2. How to Change Your IP Address on Windows	
3. How to Change Your IP Address on Mac	
4. Configuration Wizard	
4.1 Button Configuration	20
4.2 Web Configuration	21
4.2.1 Set Master Bridge	21
4.2.2. Set Slave Bridge	26
4.3 "Network" Information Overview	33
4.4. User Management	34
4.5. System Settings	34
Troubleshooting	35
Technical Support and Service	

OVERVIEW

1. Introduce

UeeVii CPE5824 is a long-distance dual-band 2.4GHz & 5.8GHz wireless transmission device. It uses wireless communication technology to transmit network data using air as a medium to perform long-distance point-to-point or point-to-multipoint interconnection. The working data link layer realizes the interconnection of local area networks 5KM. CPE5824 Video Bridge Transmission usually consists of two devices in AP and Client mode respectively. On the Client-side (Receiving side) CPE connects with IP Camera, at the AP side (Transmitting side) CPE connects with a video recorder. The AP can be receiving wireless data transmitted from multiple Clients, and it is easy and convenient for centralized management of the remote equipment.

CPE is widely used in highways, reservoir river monitoring, elevator monitoring systems, site crane monitoring systems, port terminal monitoring systems, marine aquaculture monitoring systems, and so on. Point to point extend network WiFi range, extend the network in the house to your barn, garage, church, warehouse, and even neighbor's house through wireless bridge signal transmission. No need to install a new modem and pay for it every month, saving you money.

2. Highlights

- 1. High speed transmission; 2.4G 300Mbps; 5.8G 900Mbps
- 2. 1*100Mbps and 1*1000Mbps dual RJ45 LAN/PoE port
- 3. Built-in 15dbi high gain antenna for 5G frequency; Built-in 9dbi high gain antenna for 2.4G frequency
- 4. Support IEEE802.11b/g/n,IEEE802.11a, IEEE802.11ac, IEEE802.3u Protocol Standard
- 5. Transmission distance up to 5KM(Barrier-Free) for 5GHz frequency
- 6. Master/Slave bridge supports dual-band WiFi hotspot access
- 7. Dialing to set the transmitter and receiver, is easy to use
- 8. WDS networking mode, video network dual compatible
- 9. Support point-to-point, point-to-multipoint mode
- 10. Dynamic MIMO power saving mode (DMPS) and APSD
- 11. Support 24V POE power supply, easy to install and deploy
- 12. Support WEB GUI access management device

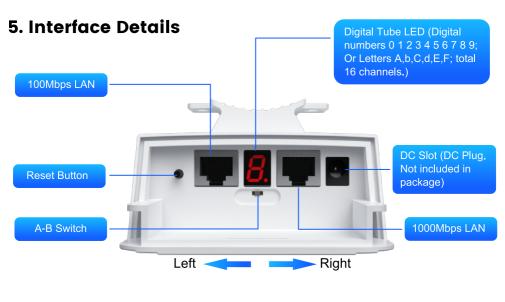
3. Specififications

Brand	UeeVii
Model	CPE5824
Flash	8MByte
DRAM	DDR2 64MByte
Networking Interface	10/100/1000Mbps Ethernet Port LAN*1 10/100Mbps Ethernet Port LAN*1
Data rate	11g: 6/9/12/18/24/36/48/54Mbps 11n: 300Mbps(max.) 11ac+: 900Mbps(max.)
Transfer method	Direct Sequence Spread Spectrum(DSSS)
Modulation	OFDM/BPSK/QPSK/CCK/DQPSK/DBPSK
Protocol standard	IEEE802.11b/g/n, IEEE802.11a,IEEE802.11ac, IEEE802.3u
Agreement	CSMA/CA, TCP/IP, IPX/SPX, NetBEUI, DHCP, NDIS3, NDIS4, NDIS5
Frequency Range	5.8GHz: 4900~6100MHz 2.4GHz: 2400~2500MHz
Antenna	Built-in 15dbi high gain antenna fo r5G frequency; Built-in 9dbi high gain antenna for 2.4G frequency
Power	≤3W, POE24V~1A
WEP GUI	Support
Telnet	Support
Safety	WPA/WPA2,WPA-PSK,WPA2-PSK
Temperature	-30 ~ 65℃
Box Size & Weight	11.8 * 11.5 * 2.7 inch & 2.2LB

4. Package Contents

- 2 * CPE5824 Gigabit Bridge
- 2 * Gigabit POE Adapter (24V)
- 2 * 3FT Test Network Cable
- 2 * Metal Hoop
- 1 * User Manual







6. Button Operation

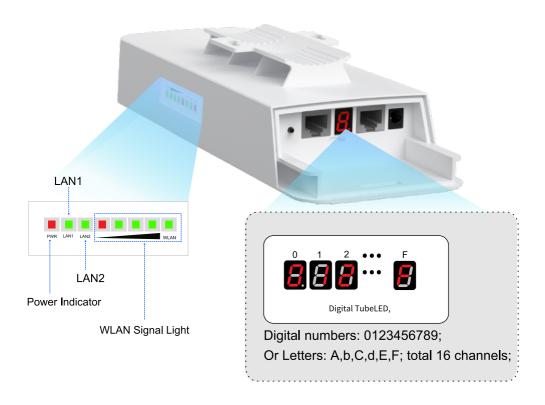
Reset Button:

In setup mode Short press once to toggle a different character to pair. Press and hold for 10S to reset the wireless bridge; the factory defaults channel with a digital number "0".

A-B Switch:

Pushing the switch to "A" (Left side) indicates that the bridge acts as the master bridge (transmitter); Pushing the switch to "B" (Right side) indicates that the bridge acts as the slave bridge (receiver)

7. LED Indicator Details



LED Light	Description
Signal Lights	After the bridge is connected successfully, the WLAN light will be on, not connected the WLAN light will not be lit.
LAN1/LAN2	The data connection is successful, the LED light is flashing, otherwise, it is not bright.
PWR	Power indicator, the LED is on after the power is connected
Digital Tube LED	Digital numbers or letters indicate the current working channel. Digital numbers: 0123456789; Or Letters: A,b,C,d,E, F; total 16 channels; Device default channel is "0". Short press Reset button once to change its channel!
Behind the A-B Button LED	When set to B, the green light is always on; when set to A, the green light goes out.

Quick Start

1. How to Connect



- 1.1. According to the requirements, prepare a long enough network cable (Recommended within 20 meters, must be Cat 5e or up) to connect the wireless bridge and the PoE power supply.
- 1.2. Must use the supplied PoE plug for the power source. Other PoE plugs or PoE switches might not comply with our device.
- 1.3. Connect the network cable from router to the 1000mbps port of the wireless bridge to help get a higher network speed.
- 1.4. Note: It only supports a 24V POE power supply and does not support 48V POE switch power supply. Connecting to a 48V POE power supply will damage the device.

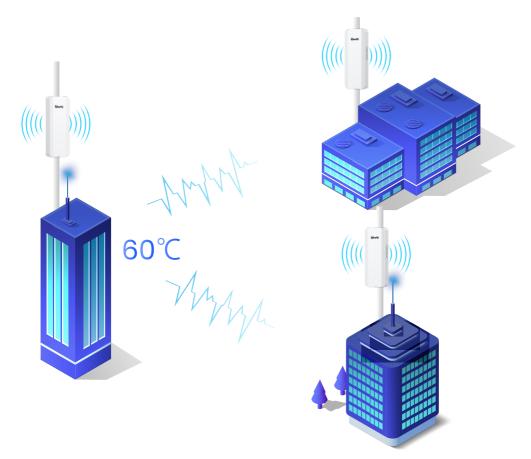
2. Pairing

Note:

When pairing, please keep their pairing distance more than 6 FT.

A. Point to Point Pairing Step

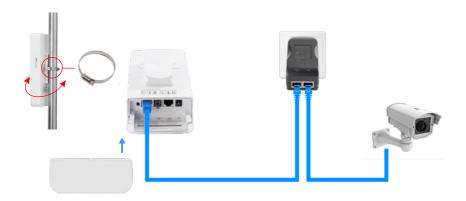
- 1. Switch one unit to A(Master Bridge) and one unit to B(Slave Bridge);
- 2. Connect the POE to each unit using the Ethernet cable and plug the POE in;
- 3. Wait for them to power up, about 2 min;
- 4. Use the tiny reset button to click through until you get a channel with a letter. 1,2,3,..., A,B,C,...,F, here used C:
- 5. Then on the other unit do the same. Both units need to be on the same channel:
- 6. Wait for 2-5 minutes to complete the pairing (Unplug the source network cable, the pairing will be faster). When the number of the digital tube is solid and the signal light on the side turns on, it means the pairing is successful;
- 7. Finally connect other devices (Router, PC, Switch) and install them to the target location.



1 master bridge with 3 slave bridges

- 1. Switch one unit to A(Master Bridge) and 3 units to B(Slave Bridge);
- 2. Connect the POE to each unit using the Ethernet cable and plug the POE in:
- 3. Wait for them to power up, about 2 min;
- 4. Use the tiny reset button to click through until you get a channel with a letter. 1,2,3,..., A,B,C,...,F, here used C;
- 5. Then on the other 3 unit do the same. 4 units need to be on the same channel:
- 6. Wait for 2-5 minutes to complete the pairing. When the number of the digital tube is solid and the signal light on the side turns on, it means their pairing is successful;
- 7. Finally connect other devices (Router, PC, Switch) and install them to the target location.

3. Installation



- It is recommended to test all functions of the network bridge together before physically installing it to the target location; after the test is completed, install it to the target location;
- 2. In order to obtain the best signal, the two network bridges must be facing each other, with clear line of sight, no obstacles, no strong current and magnetic equipment, and they must be installed as high as possible;
- Install it on a pole or wall at the target location, ensuring that the network bridge is fixed to prevent strong winds and other harsh antennas; the recommended UeeVii universal bracket (ASIN: B09Y56M6Z9);
- 4. The package comes with a 3FT test network cable. You need to prepare an additional longer network cable to install the bridge at a higher position. It is recommended that the network cable be CAT 5e or above:
- 5. Regularly check the physical integrity, secure positioning and software updates of devices to ensure they are operating optimally.

Note:

For point-to-point installation, the line of sight of the 2 wireless bridge brackets must be clear and cannot pass through the wall. The signal transmission angle of the bridge is 60 degrees. For point-to-multipoint installation, the angle of the slave bridge needs to be adjusted to ensure that it is within the 60-degree signal range of the main bridge. The antenna polarization direction is horizontal 60°/vertical 30°.

4. WiFi Function

The Wi-Fi function is turned on by default for the master bridge! And CPE5824 device generates 2.4GHz and 5.8GHz dual band Wi-Fi SSID at the same time.

The WiFi password rules in "Button Configuration" mode are as follows:

2.4G Wi-Fi name and password:

Wi-Fi SSID: CPE5G_2G1

Wi-Fi Password: 1234567890

5.8G Wi-Fi name and password:

Wi-Fi SSID: CPE5G_5GXXX

Wi-Fi Password: iotcpe123456XXX

XXX represents different channels, please refer to the comparison table in

details

Comparison Table:

Digital LED & IP Chart	A (Master bridge)- IP	B(Slave bridge) - IP	Channel	WiFi SSID	Password
0	192.168.255.100	192.168.255.200	0	CPE5G_5G64	iotcpe12345664
1	192.168.255.101	192.168.255.201	36	CPE5G_5G36	iotcpe12345636
2	192.168.255.102	192.168.255.202	40	CPE5G_5G40	iotcpe12345640
3	192.168.255.103	192.168.255.203	44	CPE5G_5G44	iotcpe12345644
4	192.168.255.104	192.168.255.204	48	CPE5G_5G48	iotcpe12345648
5	192.168.255.105	192.168.255.205	120	CPE5G_5G120	iotcpe123456120
6	192.168.255.106	192.168.255.206	124	CPE5G_5G124	iotcpe123456124
7	192.168.255.107	192.168.255.207	128	CPE5G_5G128	iotcpe123456128
8	192.168.255.108	192.168.255.208	132	CPE5G_5G132	iotcpe123456132
9	192.168.255.109	192.168.255.209	136	CPE5G_5G136	iotcpe123456136
Α	192.168.255.110	192.168.255.210	140	CPE5G_5G140	iotcpe123456140
b	192.168.255.111	192.168.255.211	149	CPE5G_5G149	iotcpe123456149
С	192.168.255.112	192.168.255.212	153	CPE5G_5G153	iotcpe123456153
d	192.168.255.113	192.168.255.213	157	CPE5G_5G157	iotcpe123456157
E	192.168.255.114	192.168.255.214	161	CPE5G_5G104	iotcpe123456104
F	192.168.255.115	192.168.255.215	165	CPE5G_5G108	iotcpe123456108

You can access the wireless bridge through your computer to set the SSID and new WiFi password. Please refer to the advanced settings section.

5. Application Case

5.1 Casel: Point-to-point extended network WiFi range

suitable for extending the network to second buildings, such as garages, shops, barns, etc

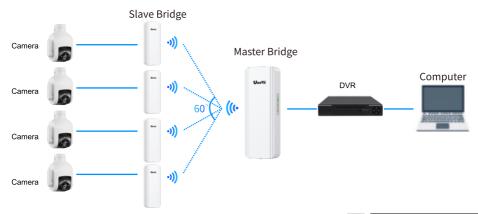


5.2 Case2: Point-to-point extended of surveillance cameras range

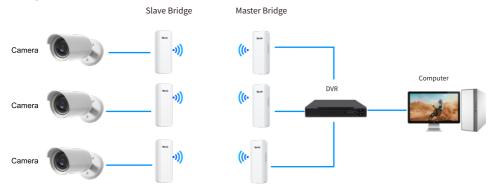
suitable for extending the network to second buildings, such as garages, shops, barns, etc



5.3 Case 3: Point-to-multiple point extended surveillance cameras range



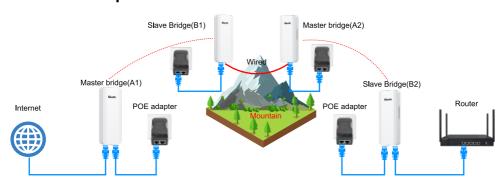
5.3 Case 4: Point-to-point extended surveillance cameras range



5.4 Case 4: Work with Starlink



5.5 Case 5: Repeater mode obstacle avoidance transmission



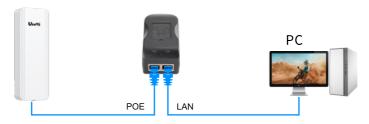
Advanced Settings

Note:

You can enable the device without advanced settings.

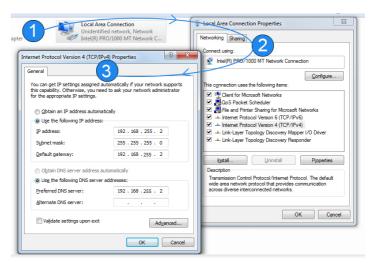
1. Connect Computer and Power Supply

Computer Access Wireless Bridge, connect the CPE to the computer Refer to the figure left to connect the CPE to the computer through a PoE adapter and an Ethernet cable.

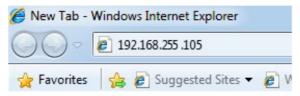


2. How to Change Your IP Address on Windows

2.1 Modify your computer's IP address, make your computer's IP and the bridge's IP address be on the same network segment(LAN) so that you can access them.

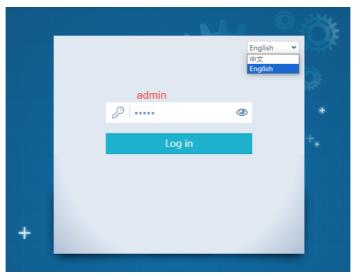


- **Step 1:** Find and open "Open Network and Sharing Center" on your computer. Tips: click the network icon in the lower right corner of the computer.
- **Step 2:** Find and open the "Change adapter settings", select "Local Area Connection" to right-click to open the network properties. Refer to the picture above to open.
- **Step 3:** Find and double-click open the "Internet Protocol Version 4(TCP/IPv4)", choose the "Use the following IP address" and enter IP address, subnet mask, Default gateway, Preferred DDS server.
- **2.2** Change your computer's IP address to 192.168.255.xxx (192.168.255.xxx cannot be the same as the IP of the CPE), then the entry IP address is 192.168.255.xxx, the subnet mask is 255.255.255.0 (Autofill), the Default gateway is 192.168.255.xxx, Preferred DDS server 192.168.255.xxx. You can use 192.168.255.105 (xxx=2) in the reference picture to set.

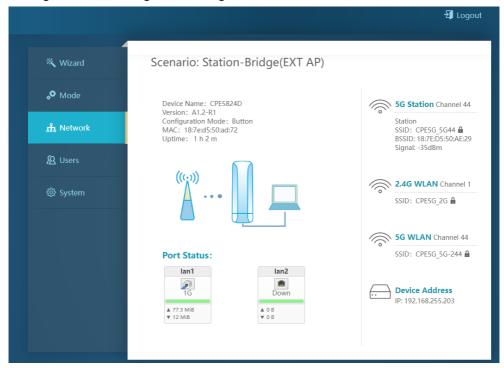


2.3 On the login screen, the default user name and login password of the wireless bridge is "admin", just entry password login.

Note: "admin" is not the password of the WiFi SSID, it is just the password for WEB access.

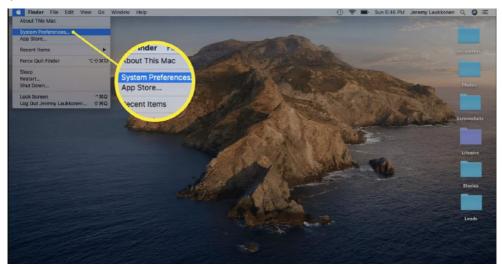


2.4 Login successful, go to setting.



3. How to Change Your IP Address on Mac

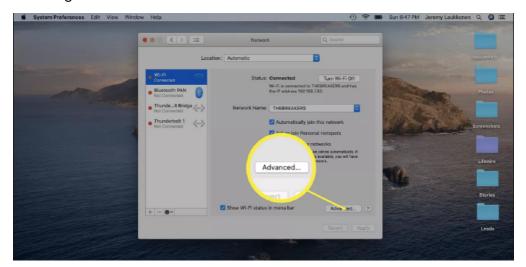
3.1 Click the Apple icon in the upper-left corner of the screen, and select System Preferences.

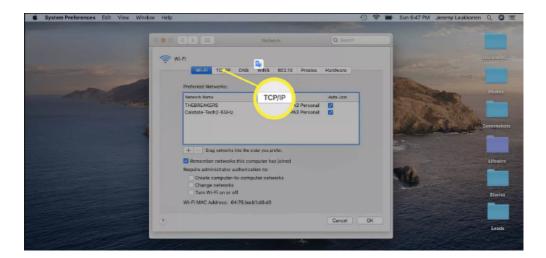


3.2 Click Network.

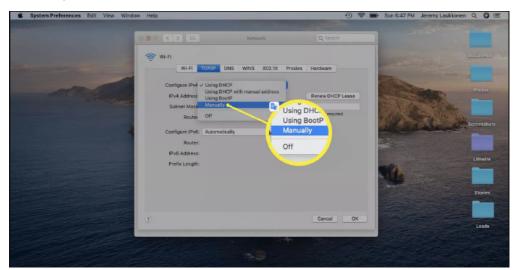


3.3 Click your current network on the left and then click Advanced in the lower-right corner of the window.

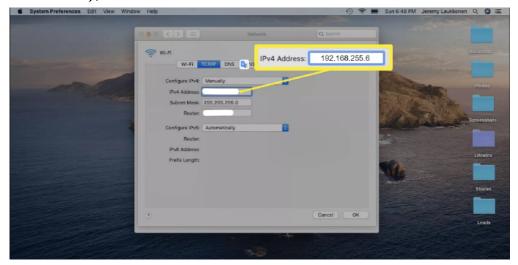




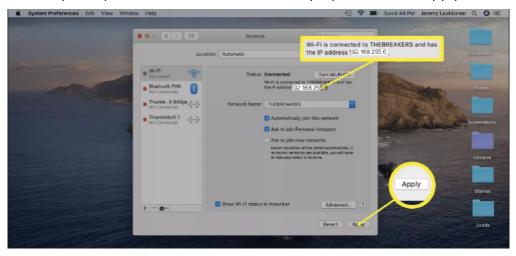
3.5 Click the drop-down box next to Configure IPv6 (or IPv4) and select Manually.



3.6 Enter the IP address you want to use (enter 192.168.255.6; Router 192.168.255.1), and click OK.



3.7 Verify that your new local IP address is displayed and click Apply.

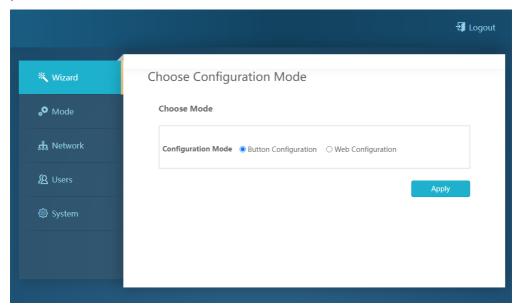


3.8 Complete the above steps to modify the IPv4 address of your computer, then you can open a browser and enter the IP address of the wireless bridge to access it

4. Configuration Wizard

4.1 Button Configuration

In this mode, you only need to query information without setting any parameters.



Please note:

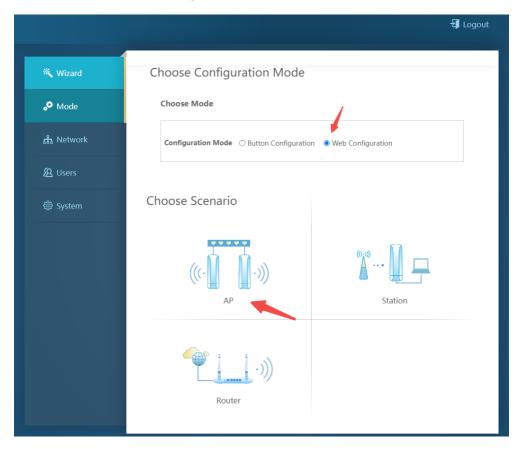
- --In Button Configuration mode (Dip switch pairing mode), the bridge's channel value is set via the reset button.
- --The IP address, SSID, and password are automatically generated by the system based on the channel value. While these settings can be viewed by accessing the bridge, they cannot be modified.
- --If you need to make changes, please switch to the WEB configuration mode.
- --In this mode, when changing the pairing number, the WiFi name and password will change.

4.2 Web Configuration

4.2.1 Set Master Bridge

Before setting up the main network bridge, please ensure that the main network bridge and the computer are physically connected through the computer, and modify the computer's IPv4 address to be in the same network segment as the bridge 192.168.255.xxx.

A. Select "Web Configuration" and then select the "AP" icon mode. AP represents the master bridge mode.



B. Set the IP address of the master bridge, you can also use the default IP address 192.168.255.xxx. DHCP is not recommended.

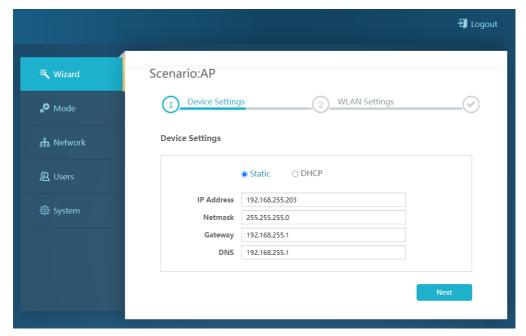
For example: assuming your subnet is 10.10.10.10, the IP address can be set to 10.10.10.103,

Netmask:255.255.255.0,

Gateway:10.10.10.1,

DNS:10.10.10.1

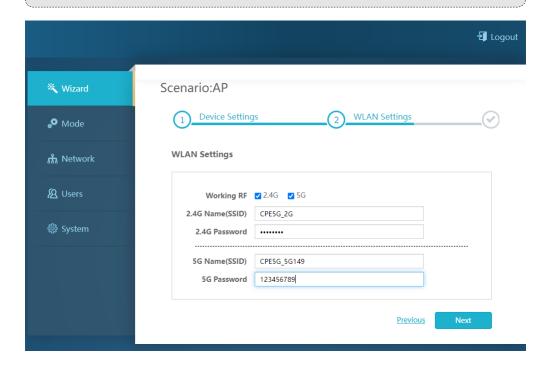
After completing the settings, click "Next"



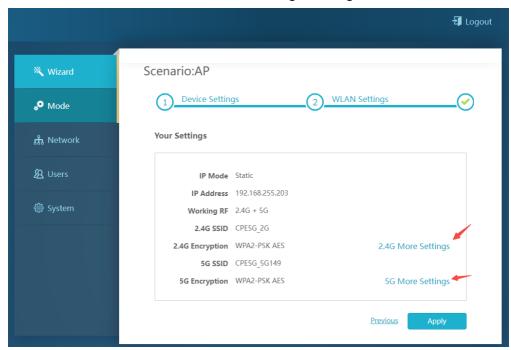
C. WLAN settings, set the 2.4G and 5.8G WiFi names and passwords of the master bridge, remember the 5.8G WiFi name and password, and click "next".

Note:

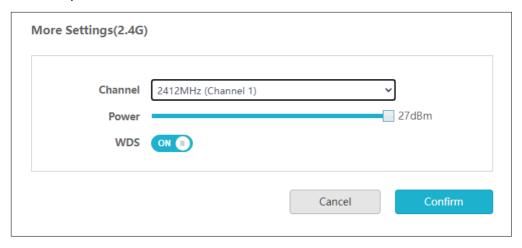
2.4G only provides network coverage, not transmission, so you cannot pair bridges through 2.4G.

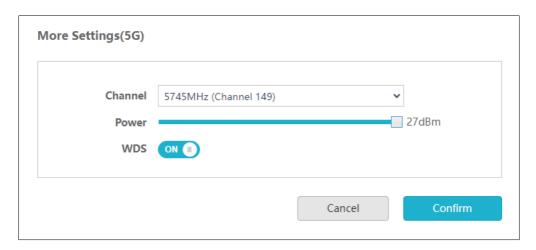


D. Confirm the contents of the master bridge settings.

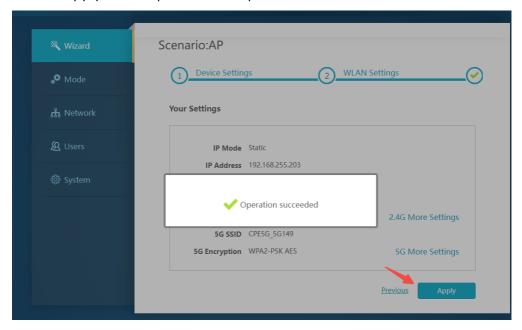


E. You can click "2.4G More Setting" and "5G More Setting" to set the channel, power and WDS.





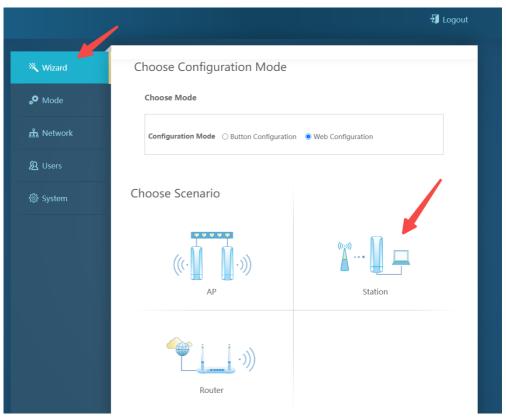
F. Click "Apply" to complete the setup.



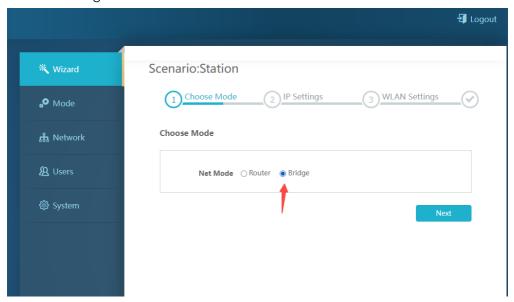
4.2.2. Set Slave Bridge

Before setting up the slave bridge, please ensure that the slave bridge and the computer are physically connected through the computer, and modify the computer's IPv4 address to be in the same network segment as the bridge 192.168.255.xxx.

A. Click "Wizard" and select the "Station" icon mode. Station represents the slave bridge.



B. Select "Bridge" mode and click "next"



C. Set the IP address of the slave bridge. You can also use the default IP address 192.168.255.xxx. DHCP is not recommended.

For example: assuming your subnet is 10.10.10.10, the IP address can be set to

10.10.10.203

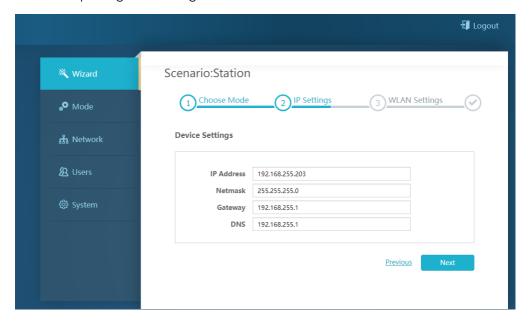
(Note: The master bridge and slave bridge need to be set on the same LAN),

Netmask: 255.255.255.0,

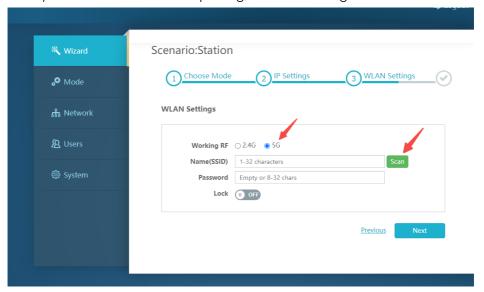
Gateway: 10.10.10.1,

DNS: 10.10.10.1

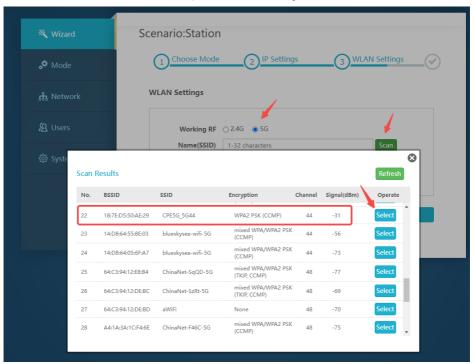
After completing the settings, click "Next"



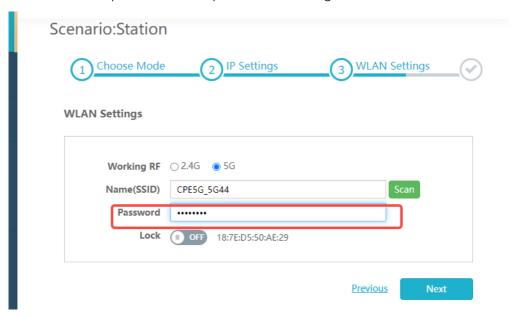
D. Here you must select "5G" for pairing, click "SCAN" again



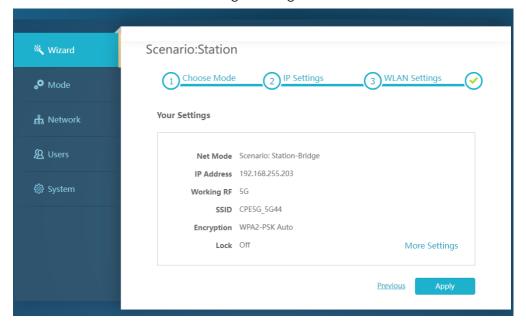
E. Find the WiFi SSID name set by the main bridge and select



F. Enter the WiFi password set by the master bridge and click "next"



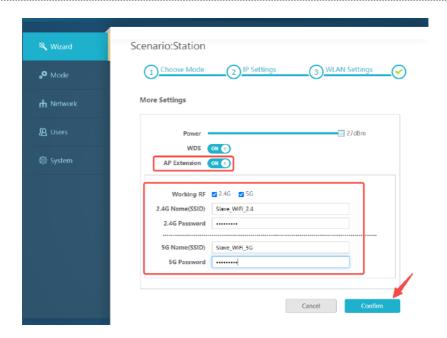
G. Confirm whether the slave bridge settings are correct.

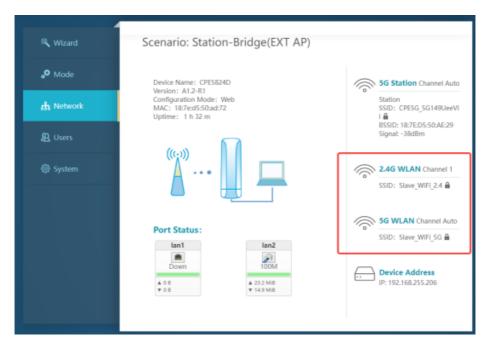


H. Click "more setting" and then start "AP Extension", set the wifi name and password of 2.4G and 5G, and click "Confirm" to complete.

Note:

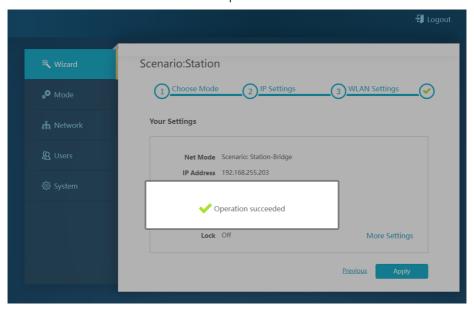
Letting the slave bridge itself broadcast WiFi affects wireless transmission performance. Because it is a directional antenna, the WiFi coverage behind the bridge is smaller. It is recommended to connect a new router on the slave bridge side to broadcast WiFi for the best performance.





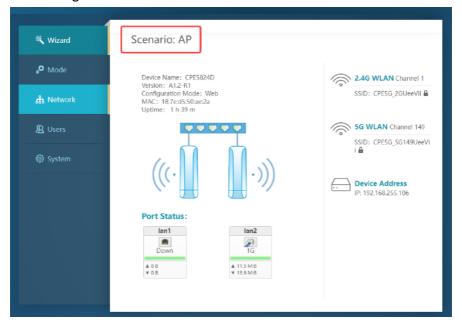
I. Click "Apply" to complete and wait for a successful pairing.

Check the signal indicators on the side of the bridge, if they all light up, the pairing is successful; if they do not light up, the pairing is unsuccessful. You need to check whether the above steps are correct.

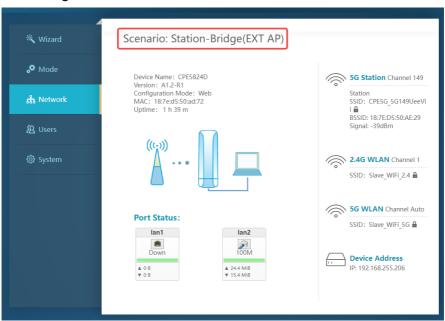


4.3 "Network" Information Overview

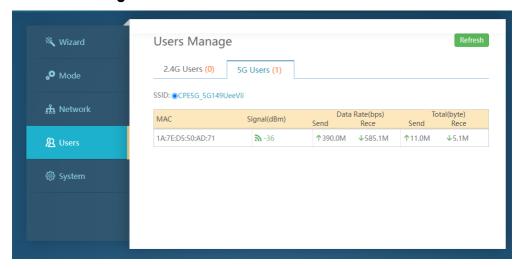
A. Master Bridge



B. Slave Bridge

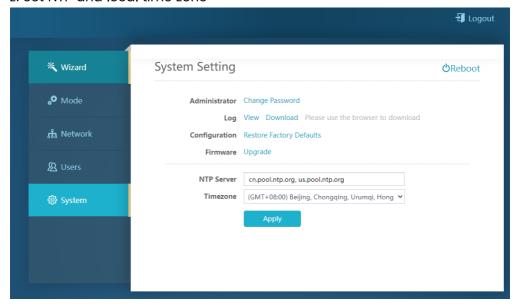


4.4. User Management



4.5. System Settings

- A. Change the login password
- B. View and download Log
- C. Restore default settings
- D. Update firmware
- E. Set NTP and local time zone



Troubleshooting

Trouble	Reason	Solution
Packet Latency	Wireless interference Distance is too long, or there are some walls between them CPE's angle in the wrong direction, weak signal	Use WiFi analysis to choose the best channel CPE should be in the normal distance, and avoid the wall Adjust the angle of CPE according to signal strength
Wrong Password	Forget the password Input wrong password Too much cookie WiFi password is confused with the WEB access password	 Press the "RST" button in 10s to reset the bridge, the default password is admin. Re-input the password Clear cookie, run arp -d to clear MAC table
Can not login WEB	1. Local IP is not in the same network segment of CPE 2. IP is taken by other devices 3. LAN connection or ethernet cable has a problem 4. Too much cookie, MAC address haven't update	 Ping 192.168.255.253 to see the connection status Stop other devices or change to another IP address Check LAN connection and Ethernet cable Clear cookie, run arp-d to clear MAC address
System LED light off	1. PoE power supply is not working 2. Some problem in CPE's PoE port 3. Ethernet cable is loose, RJ45 port is wrong power current/voltage lower or wrong	1. Check if the PoE adapter or PoE switch work 2. Check if the PoE port of CPE is ok 3. Check if Ethernet cable is loose if Ethernet cable plugged into PoE port 4. Check if the voltage is normal, if the socket has problem if the input voltage of the PoE adapter is normal

Low transmission Rate	1. Packet Latency 2. Ethernet cable circuit 3. Network virus attack 4. Too much access users	Adjust the distance, angle and channel to decrease latency Check if port isolated to avoid network virus and broadcast storm Decrease the access users
Device always dead	Static electricity Running time too long (too much memory) Lightning stroke	1. Change another channel and then it will pair auto matically. 2. Make CPE or PoE adapter need a ground connection 3. Running time over 7 days, reboot it (You can set scheduled restart) 4. After lightning, device PoE port broken or unstable better to deploy lightning conductor 5. If still can't solve, please contact us to solve.
LAN 1 and LAN 2 do not light up	1. The connection is poor. Check whether the connection is normal and whether the network cable is damaged. 2. The connection is good, but LAN 1 and LAN 2 still don't light up.	1. Check whether the connection and network cable are good. 2. Please cut off the power and then connect again to make it work normally. If it happens frequently, please contact us to replace it with a new wireless bridge.

Technical Support and Service

Thank you for your order and for using UeeVii Wireless Bridge, please read the manual carefully before use.

If there are any problems during the use, please contact us in time.

Tech Service Email: support@ueevii.com

e.g

- 1. Accessories are missing in the box, please contact us.
- 2. If you can't pair or install it, please contact us.
- 3. Damaged wireless bridge or PoE power adapter, please contact us.
- 4. If the wireless bridge fails or is dead after working for a period of time, please contact us.
- 5. No access to the wireless bridge from a computer, please contact us.
- 6. The speed provided by the wireless bridge is very slow, please contact us.
- 7. For the latest PDF user manual and other questions, please contact us.

Website: https://www.ueevii.com

FaceBook: https://www.facebook.com/UeeVii

FB Group: https://www.facebook.com/groups/8869731233069487

YouTube channel:

https://www.youtube.com/channel/UCvcFqnEd44EJWDrBlb7wxWQ





Made In China

Facebook