



WIRELESS BRIDGE USER MANUAL

Model: CPE806S



Tips:

Thank you for purchasing and using the ULNA CPE806S Wireless Bridge. Please read this manual carefully before use. If you encounter any issues during setup or operation, feel free to contact us at any time. Installing this device requires basic networking knowledge. If you're unsure how to install it, please contact us or seek assistance from a professional technician.

 **ULNA Store:** <https://www.amazon.com/ulna>
 **Customer Service Email:** support01@ulnastore.com

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1. Product Overview

1. 1 Introduction

The ULNA CPE806S is a dual-band, long-range WiFi 6 outdoor wireless bridge that operates on both 5.8GHz and 2.4GHz frequencies. Featuring advanced wireless communication technology, it supports both point-to-point and point-to-multipoint connections with transmission distances of up to 5 km (3.1 miles). Leveraging the benefits of WiFi 6, the CPE806S delivers faster speeds, greater capacity, and improved stability in outdoor wireless deployments.

The CPE806S system includes two units: a Master bridge (Transmitter, A) and a Slave bridge (Receiver, B). The device roles can be easily switched using the physical A-B toggle switch, offering flexible deployment options for various scenarios.

This wireless bridge is ideal for extending network coverage to remote buildings such as barns, garages, warehouses, churches, or nearby homes—without the need to install additional modems or pay recurring monthly service fees. It provides a cost-effective, reliable solution for wireless network expansion. The wireless bridge is widely used in outdoor surveillance and connectivity scenarios including highway traffic monitoring, water reservoir and river systems, elevator and crane operations, construction sites, seaports, marine aquaculture, and other environments requiring stable long-distance transmission.

1.2 Specifications

Bridge Unit	Brand	ULNA
	Model	CPE806S
	Chipset	MT7981AB+MT7976DAN
	Memory / Flash	256MB/16MB
	Antenna	Dual-band MIMO directional antennas
	Antenna Gain	16dBi
	Ports	1 × 10/100/1000Mbps RJ45 1 × 2.5Gbps RJ45 1 × DC power socket
	LED Indicators	SYS, LAN1, LAN2, 4 × 5G WiFi signal strength LEDs, WLAN
	Wireless Speeds	802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps 802.11ac: up to 900Mbps 802.11ax: up to 2400Mbps
	Standards Supported	IEEE802.11b/g/n, IEEE802.11a, IEEE802.11ac+, IEEE802.3u
Buttons	Frequency Switch Button / Reset Button	Short press (1s): Cycle through frequency channels (0–9, A–F); LED display indicates selected channel Long press (10s): Restore factory settings
Power Supply	PoE Power	24V–48V PoE
	DC Input	12V 1.0A, CCC certified (adapter not included)
RF Performance	Max Transmit Power	<27dBm

Client Connections	Max Client Connections	50+ devices
Wireless Features	SSID Hiding	Supported
	WDS Bridging	Supported
	Custom SSIDs	4 total, customizable for 2.4GHz and 5.8GHz
	Encryption Modes	OPEN, WPA, WPA2, WPA-PSK, WPA2-PSK, WPA3
Environmental Parameters	ESD Protection	+/-6KV
	Surge Protection	Differential Mode +/-2KV
	Max Power Consumption	<15W
	Ingress Protection	IP65-rated
	Operating Temperature	-20°C to 75°C / -4°F to 167°F

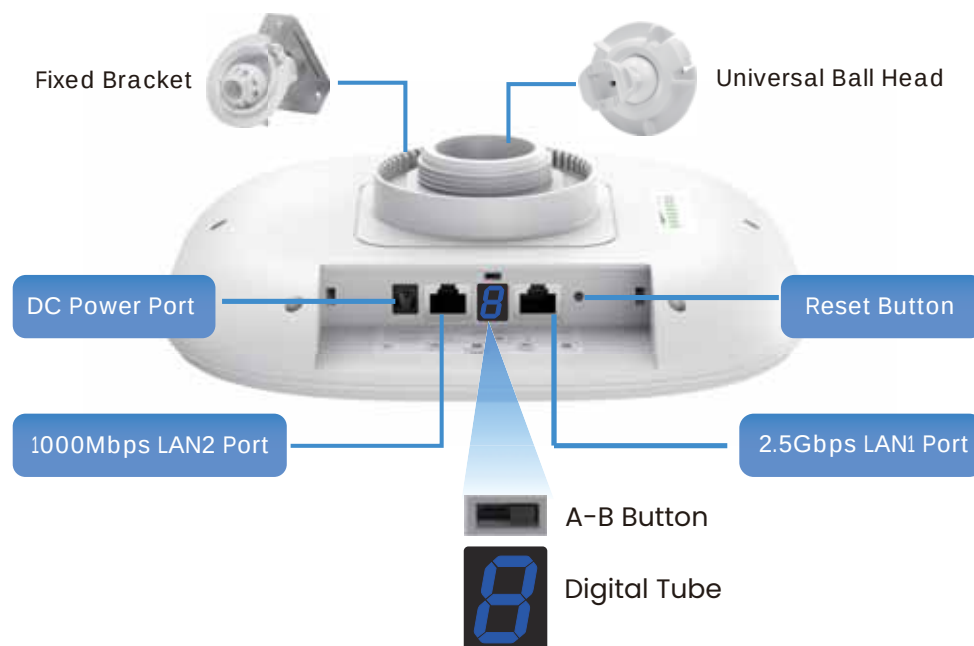
1.3 Package List



2 x ULNA CPE806S Wireless Bridge Units
2 x Mounting Brackets
2 x 24V POE Adapter
2 x 3ft Ethernet Test Cables

4 x Large Metal Zip Ties
2 x Small Metal Zip Ties
2 x Mounting Screw Kits
1 x User Manual

1.4 Interface Details

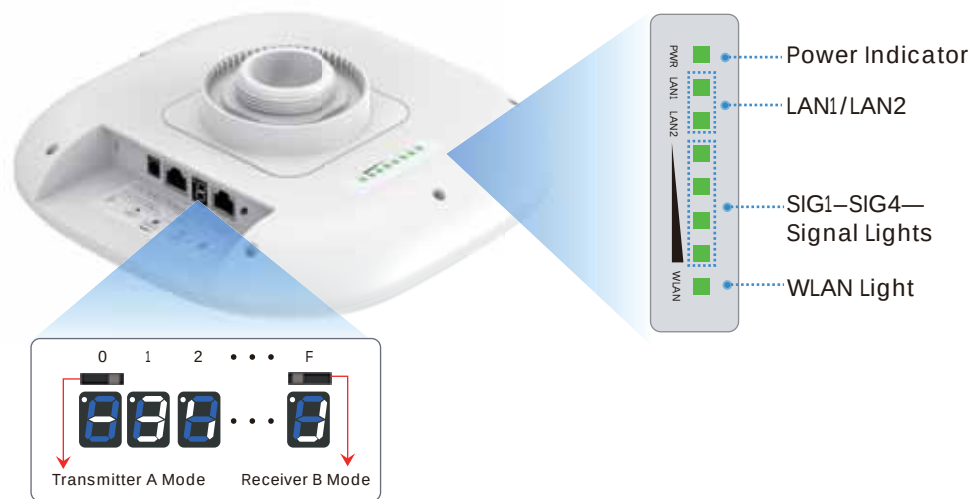




Port and Button	Description
Reset Button	Short press once to cycle through pairing channels (0–9, A–F); press and hold for 10 seconds to restore factory settings
A-B Button	Toggle between device roles: A = Master Bridge (Transmitter), B = Slave Bridge (Receiver)
LAN1 Port	2.5Gbps auto-sensing RJ45 Ethernet port
LAN2 Port	1000Mbps auto-sensing RJ45 Ethernet port
DC	12V / 1A DC input, 5.5×2.1mm barrel connector (power adapter not included)
Digital Display	Shows the current pairing channel (0–9, A–F)

POE Adapter	Description
POE Port	Supplies power to the wireless bridge via Power over Ethernet (24V PoE output)
LAN Port	1000Mbps Ethernet port for data transmission to and from your network.

1.5 LED Indicator Details



LED Light	Status Description
PWR	Power status, solid or flashing light means power is on
LAN1	Solid or flashing green: LAN1 port is connected and actively transmitting data
LAN2	Solid or flashing green: LAN2 port is connected and actively transmitting data
SIG1-SIG4	Signal strength indicators. Lights up after successful bridge pairing. The more LEDs lit, the stronger the wireless signal.
WLAN	Solid or flashing green: The wireless function is active and working properly
Digital Display	The digital tube displays paired numbers and letters, 0~9, A~F.
	Digital display LED display "L" and flashing indicates settings status
	Digital display LED display "H" indicates WEB configuration status

2. Quick Start Guide



Scan for ULNA YouTube setup videos

2.1 PoE Supply Power

1. Both LAN ports support 24V–48V wide-voltage PoE input. The CPE806S can be powered using a 24V/48V PoE adapter, or connected directly to a standard PoE switch (IEEE 802.3af/at)
2. Prepare a Cat5e or Cat6 (or higher-grade) Ethernet cable. Connect the PoE port of the PoE adapter to the LAN port of the wireless bridge. It's recommended to keep the cable length within 15 meters (50 feet). Once powered, the power indicators on the bridge will begin to illuminate, confirming proper operation.



2.2 Pairing the Bridges

1. Auto Pairing

The wireless bridges are pre-configured at the factory. Power on both units and wait 2–5 minutes for them to automatically pair.

2. Manual Pairing (if automatic pairing fails)

Step 1: Set Master and Slave

Slide the A-B switch on one unit to “A” to set it as the Master (Transmitter)
Slide the switch on the other unit to “B” to set it as the Slave (Receiver).



Step 2: Select the Same Channel

Short press the “Reset” button on each unit to adjust the channel. Each press increases the value shown on the digital display in sequence (0–9, then A–F in a loop). Ensure both bridges are set to the same channel value.



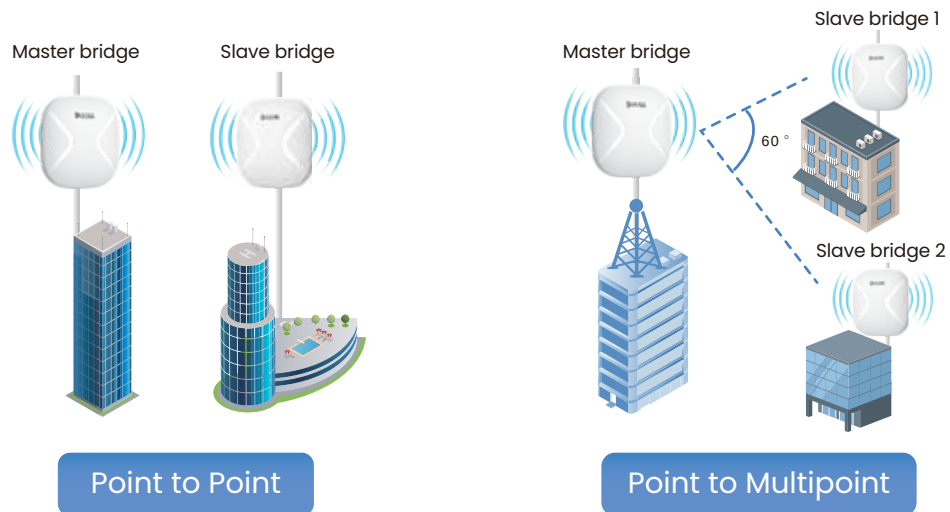
Step 3: Wait for Pairing

Wait 2–5 minutes for the units to establish a link. When the SIG1–SIG4 indicators on the device light up, the pairing is complete. The more signal indicators are lit, the stronger the wireless connection between the devices.

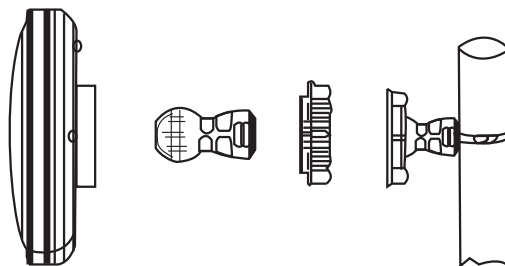


2.3 Installation Notes

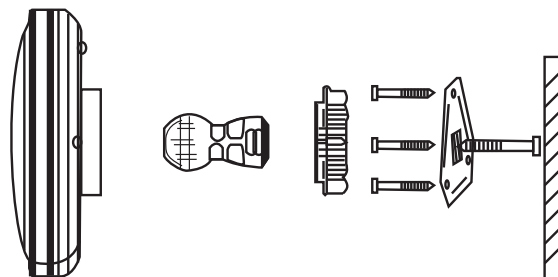
1. Pre-test before mounting: It is recommended to power on both units and complete the pairing process before physical installation.
2. Ensure line of sight: Install both wireless bridges facing each other with a clear line of sight. Avoid obstacles such as walls, glass windows, or trees that may block or weaken the wireless signal.
3. Install at height: Mount the devices on rooftops, poles, or other elevated locations to maximize signal quality and range.
4. Avoid interference: Keep away from strong electrical or magnetic sources such as high-voltage transformers, power lines or large industrial equipment.
5. For point-to-multipoint setups: The Master bridge provides a 60° horizontal and 30° vertical transmission angle. Make sure all Slave bridges are installed within this recommended coverage area to maintain stable and efficient communication.



Pole mount



Wall mount



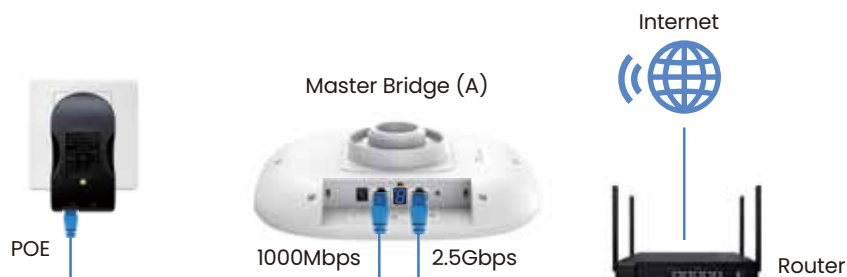
3. Network Connection

Master Bridge Setup:

1. Connect the PoE port of the PoE adapter to the LAN port on the master bridge to supply power.
2. Connect the internet source (e.g., main router, modem or network switch) to the LAN port of the PoE adapter, or directly to the LAN port on the master bridge to establish a data connection.



3. For high-speed (>1Gbps) connections: Bypass the PoE adapter's 1000Mbps LAN port and connect your router directly to the 2.5Gbps LAN port on the wireless bridge.



Slave Bridge Setup:

1. Connect the PoE port of the PoE adapter to the LAN port on the bridge to supply power.
2. Connect the LAN port of the PoE adapter or the LAN port on the bridge to the WAN port of a router, a PC, or another terminal device.

Slave Bridge(B)



4. Digital & IP & WiFi Chart

2.4G WiFi

WiFi SSID: CPE5G_2G

Password: 1234567890

5.8G WiFi

Master Bridge WiFi SSID: CPE5G_5GXXX

Slave Bridge WiFi SSID: CPE5G_5G-2XXX

Password: smartcpe123456XXX

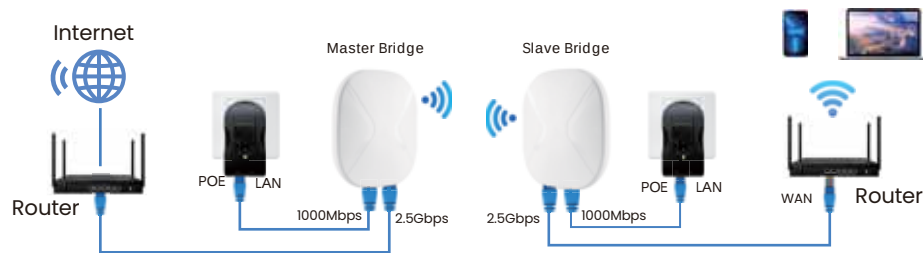
XXX represents different channels

LED	A (Master bridge)- IP	B (Slave bridge)- IP	5.8G Channel	A (Master)- WiFi SSID	B (Slave)- WiFi SSID	Password
0	192.168.255.100	192.168.255.200	64	CPE5G_5G64	CPE5G_5G-264	smartcpe12345664
1	192.168.255.101	192.168.255.201	36	CPE5G_5G36	CPE5G_5G-236	smartcpe12345636
2	192.168.255.102	192.168.255.202	40	CPE5G_5G40	CPE5G_5G-240	smartcpe12345640
3	192.168.255.103	192.168.255.203	44	CPE5G_5G44	CPE5G_5G-244	smartcpe12345644
4	192.168.255.104	192.168.255.204	48	CPE5G_5G48	CPE5G_5G-248	smartcpe12345648
5	192.168.255.105	192.168.255.205	52	CPE5G_5G52	CPE5G_5G-252	smartcpe12345652
6	192.168.255.106	192.168.255.206	56	CPE5G_5G56	CPE5G_5G-256	smartcpe12345656
7	192.168.255.107	192.168.255.207	60	CPE5G_5G60	CPE5G_5G-260	smartcpe12345660
8	192.168.255.108	192.168.255.208	100	CPE5G_5G100	CPE5G_5G-2100	smartcpe123456100
9	192.168.255.109	192.168.255.209	104	CPE5G_5G104	CPE5G_5G-2104	smartcpe123456104
A	192.168.255.110	192.168.255.210	108	CPE5G_5G108	CPE5G_5G-2108	smartcpe123456108
b	192.168.255.111	192.168.255.211	112	CPE5G_5G112	CPE5G_5G-2112	smartcpe123456112
C	192.168.255.112	192.168.255.212	116	CPE5G_5G116	CPE5G_5G-2116	smartcpe123456116
d	192.168.255.113	192.168.255.213	120	CPE5G_5G120	CPE5G_5G-2120	smartcpe123456120
E	192.168.255.114	192.168.255.214	124	CPE5G_5G124	CPE5G_5G-2124	smartcpe123456124
F	192.168.255.115	192.168.255.215	128	CPE5G_5G128	CPE5G_5G-2128	smartcpe123456128

5. Application Case

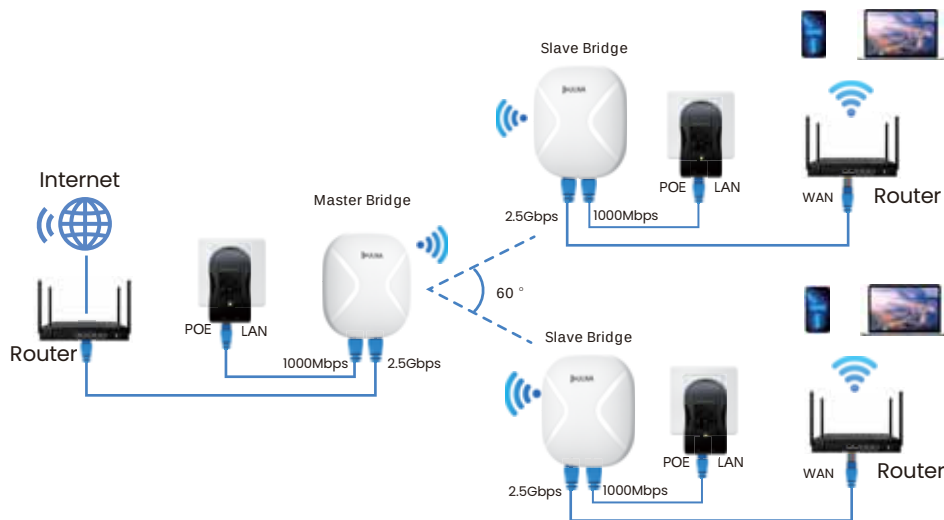
5.1 Point-to-Point Network Extension

Used to wirelessly extend an existing network to a remote location, such as a detached building, barn, or shop



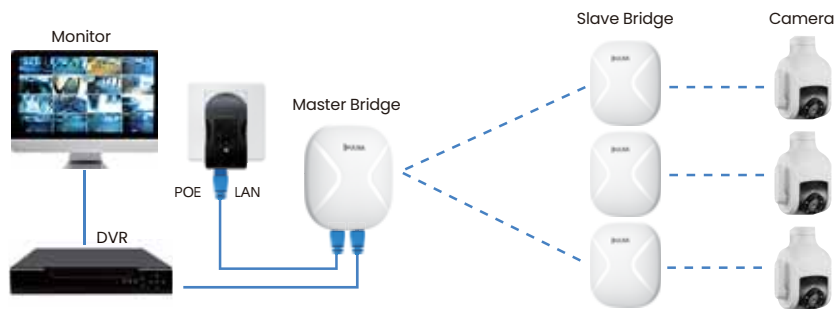
5.2 Point-to-Multipoint Network Extension

A single Master bridge connects to multiple Slave bridges to deliver internet or network access to several remote buildings simultaneously



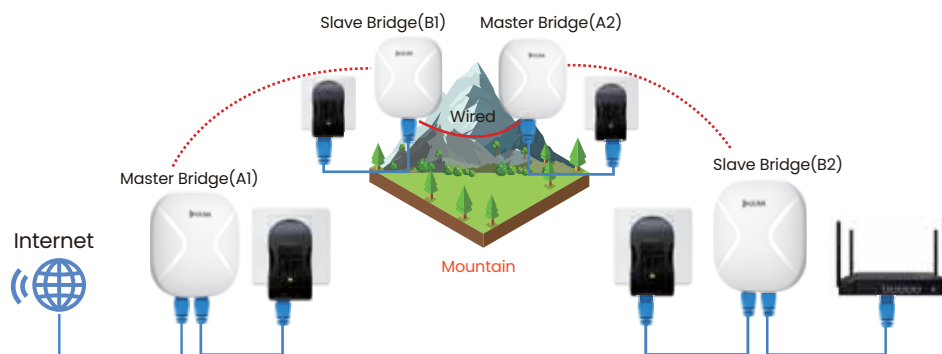
5.5 Point-to-Multipoint Surveillance Expansion

One Master bridge connects to multiple Slave bridges to build a multi-camera monitoring system across a wide area.



5.6 Wireless Relay Mode

Used as a relay to extend the wireless transmission range between two endpoints where direct line-of-sight is not possible



6. WEB Access

Tips: WEB Access and Advanced Settings are optional. The wireless bridge is pre-configured for plug-and-play use. Access the web interface only to apply custom configurations.

6.1 Windows System Login

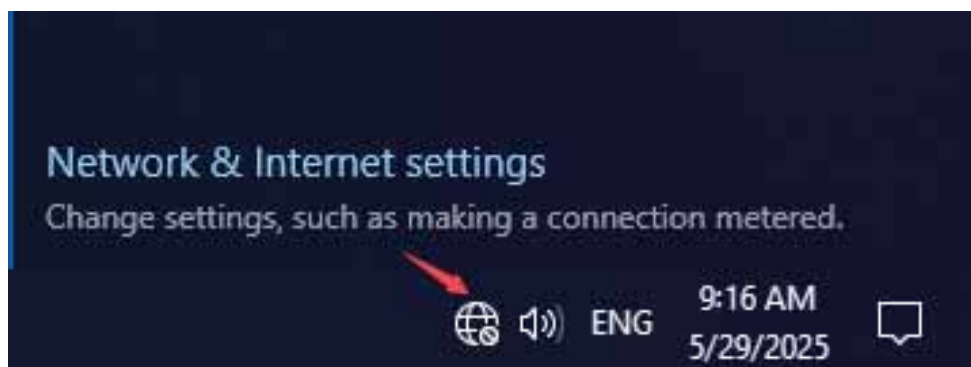
1. Use an Ethernet cable to connect the computer directly to the wireless bridge.



2. To access the web interface, set your computer's IP address to the same subnet as the bridge.

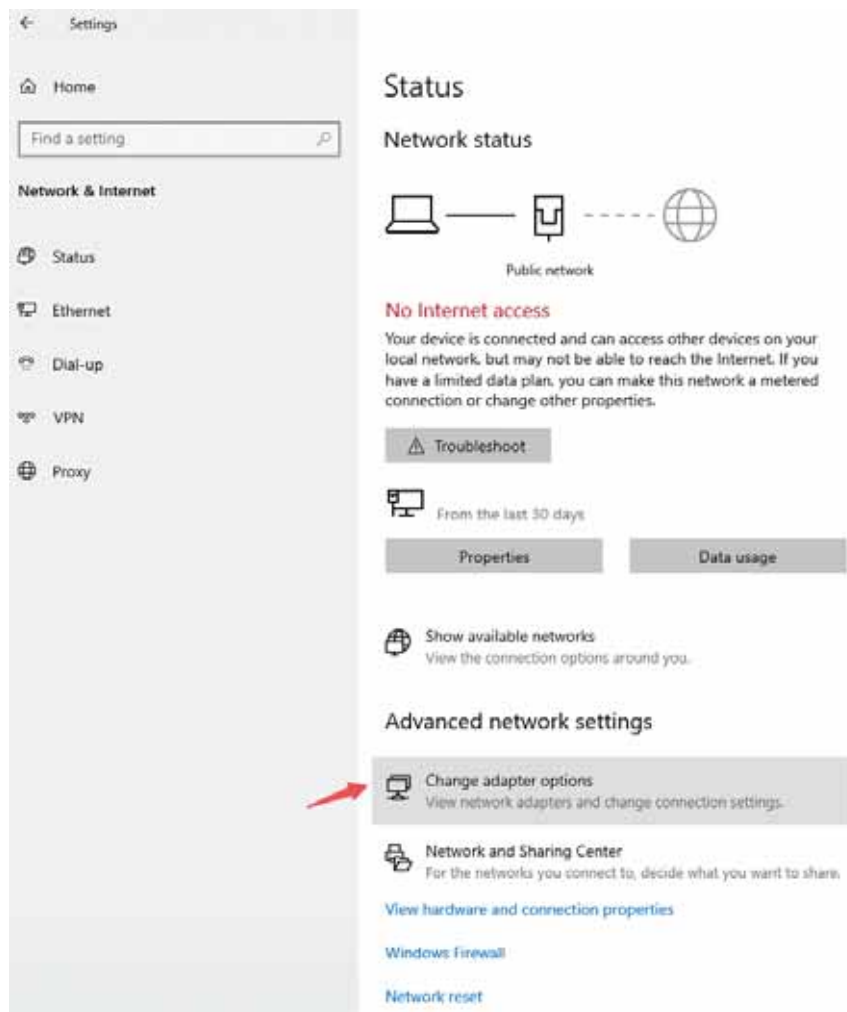
Step 1: Open Network Settings

Click the network icon in the lower-right taskbar, then click "Network & Internet Settings".



Step 2: Open Adapter Options

In the settings window, go to Status, then scroll down and click “Change adapter options”.



Step 3: Open Network Properties

Right-click the current network (Ethernet), and select "Properties".

Step 4: Configure IP Settings

Double-click "Internet Protocol Version 4 (TCP/IPv4)" → Select "Use the following IP address", and fill in the fields as follows:

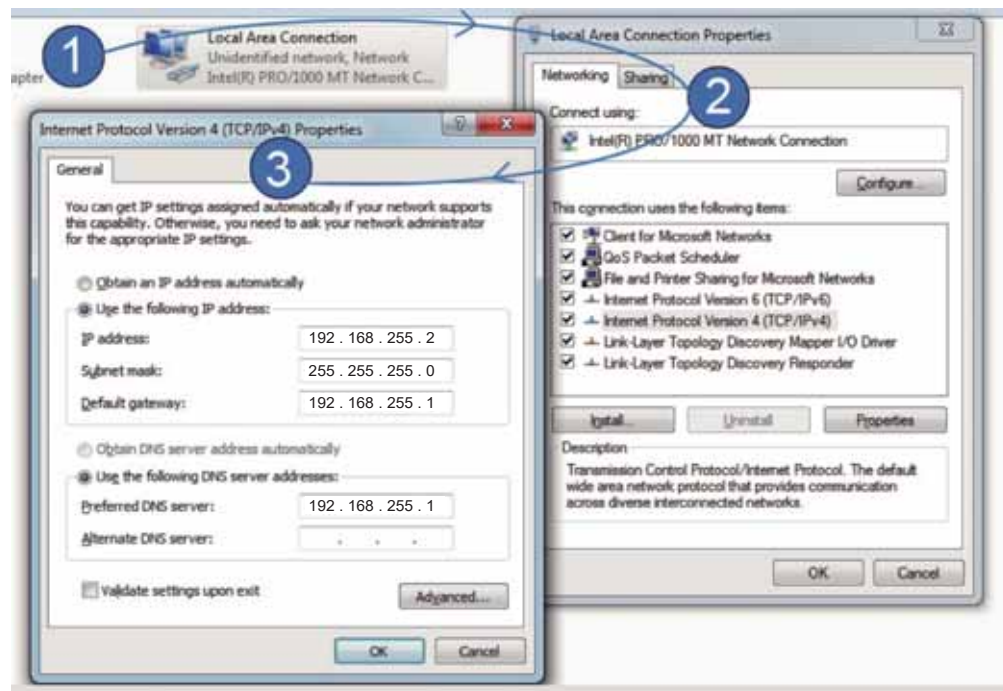
IP address: 192.168.255.xxx (e.g., 192.168.255.2; and not be the same as the bridge IP)

Subnet mask: 255.255.255.0 (usually autofilled)

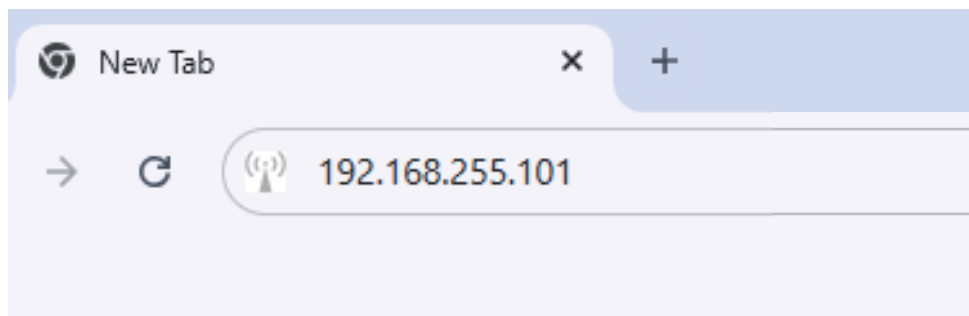
Default gateway: 192.168.255.1

Preferred DNS server: 192.168.255.1

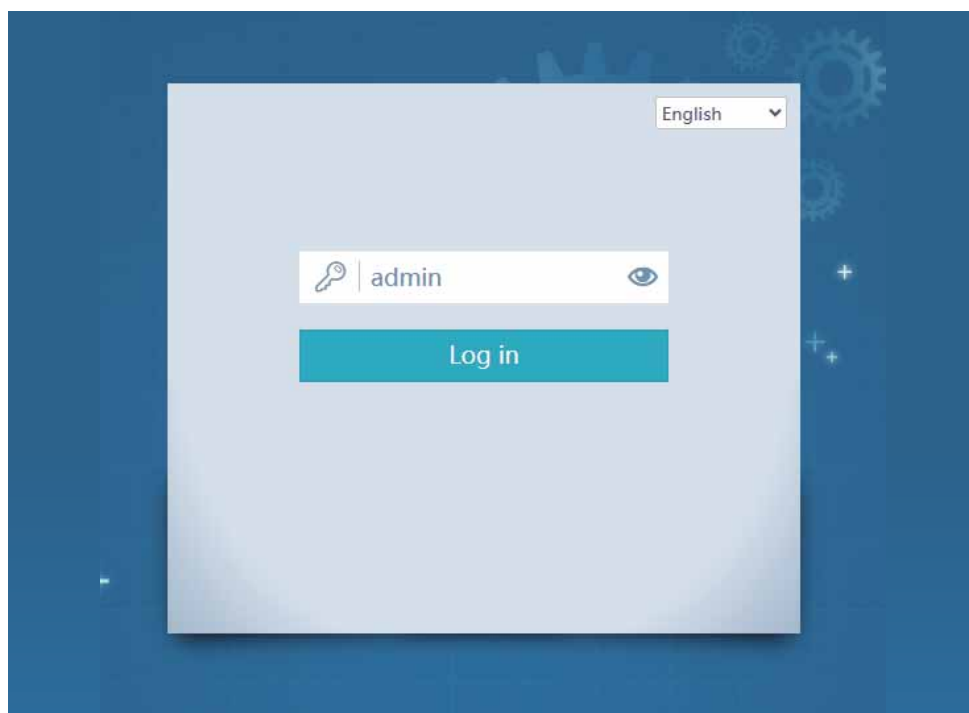
Step 5: Click OK to apply the settings



3. Open a browser and enter the IP address of the bridge. The default IP address depends on the LED value, please refer to the "Digital & IP & WiFi Chart" for details.

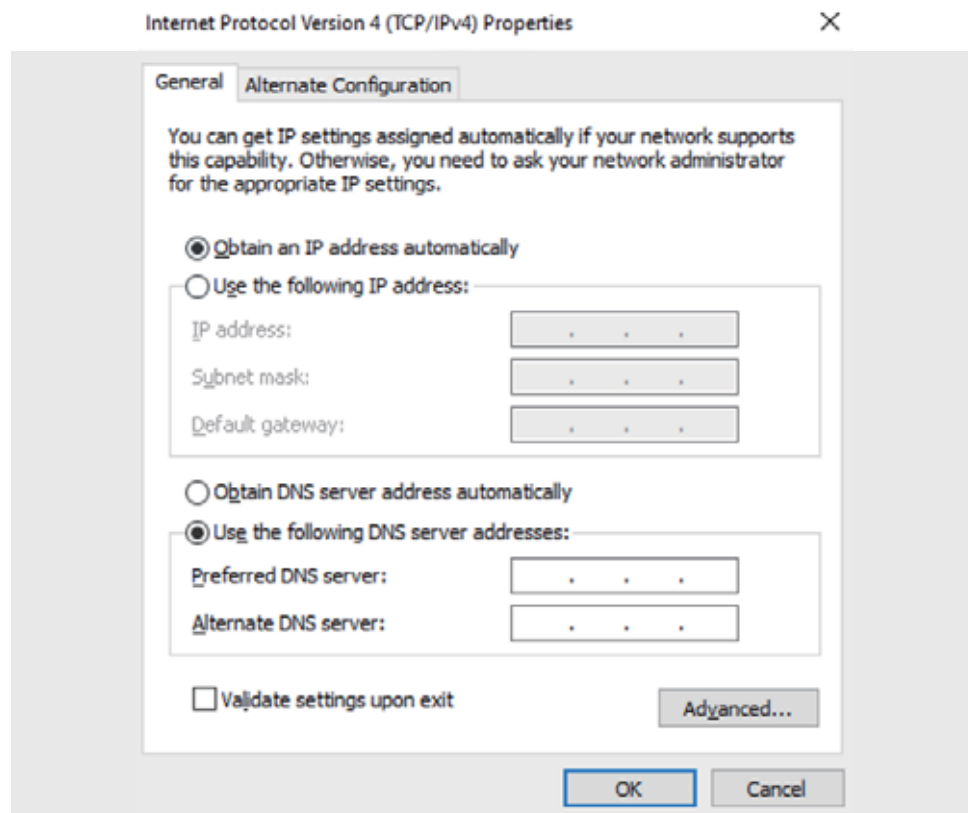


4. On the login screen, enter the default password: admin



Note: "admin" is only used for logging into the bridge's web interface. It is not the WiFi SSID password.

5. After setup, restore IP settings to automatic (DHCP) to resume normal internet access.



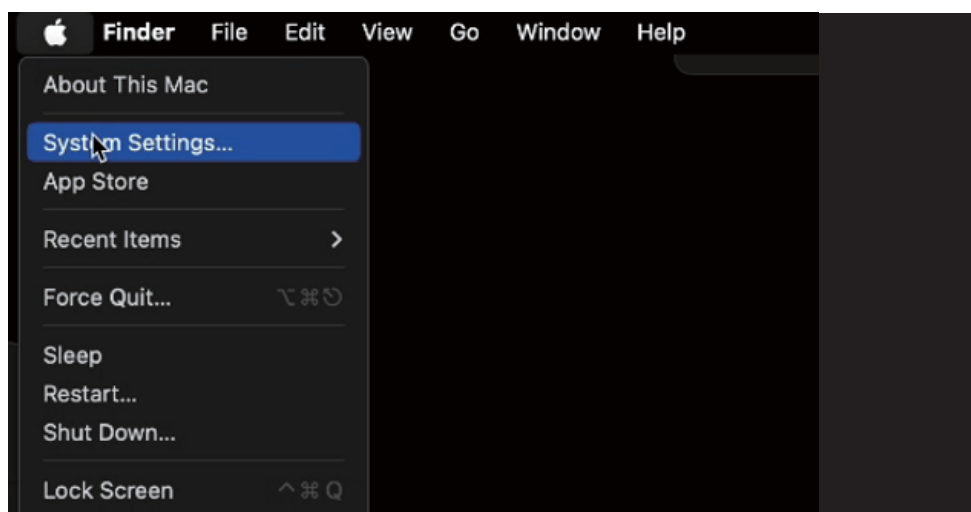
6.2 macOS System Login

1. From the menu bar, click the Wi-Fi icon and connect to the wireless bridge's default SSID

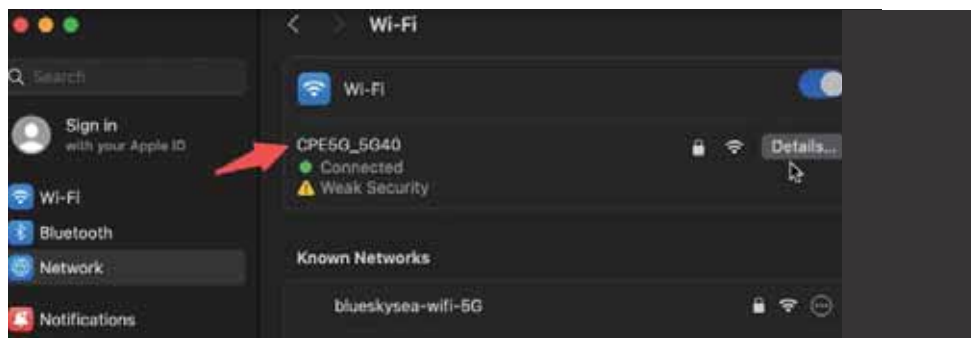
2. Set a static IP address on your Mac

Step 1: Open System Settings (or System Preferences in older macOS versions).

Click the Apple icon in the top-left corner → System Settings → Network



Step 2: Select Wi-Fi, then click Details (or Advanced)



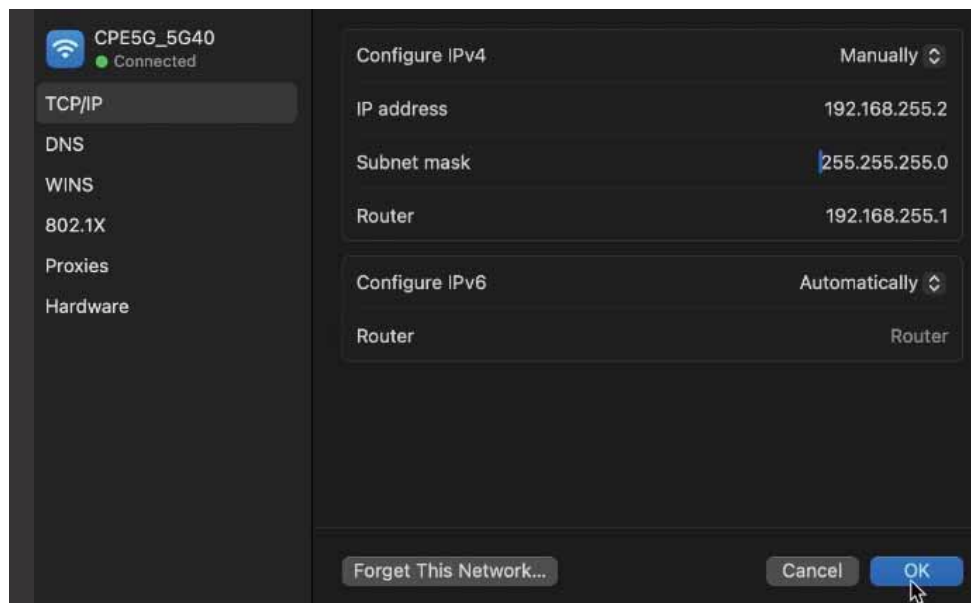
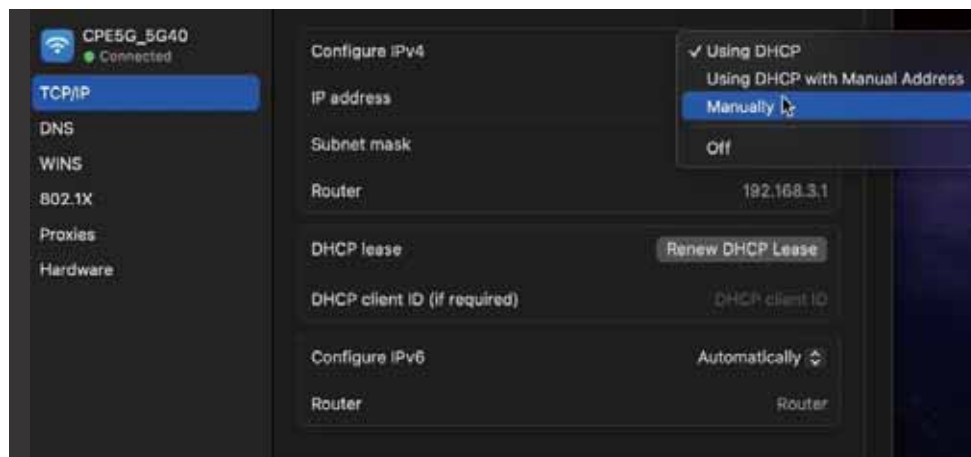
Step 3: Under the TCP/IP tab, change Configure IPv4 to Manually

Enter the following:

IP address: 192.168.255.xxx (e.g., 192.168.255.2, avoid using the same IP as the bridge)

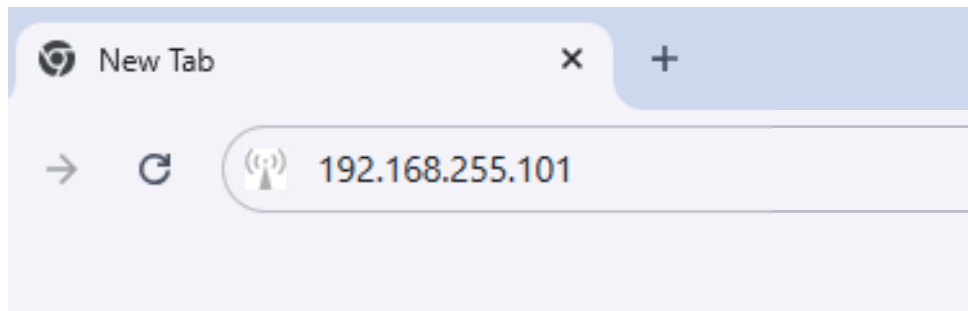
Subnet mask: 255.255.255.0

Router (Gateway): 192.168.255.1

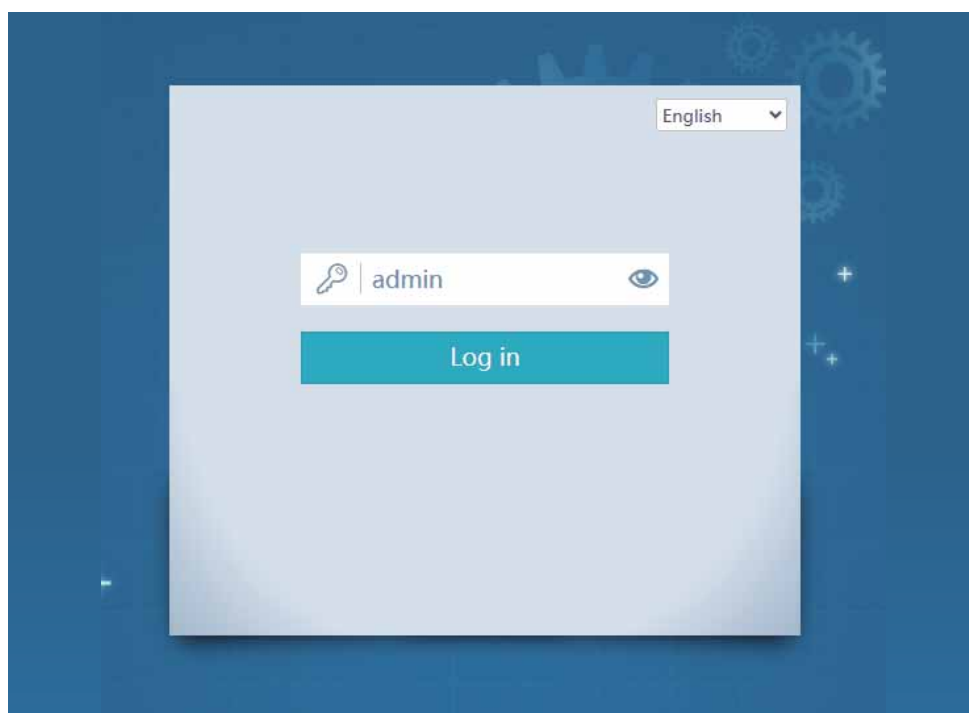


Step 4: Click OK or Apply to save the settings.

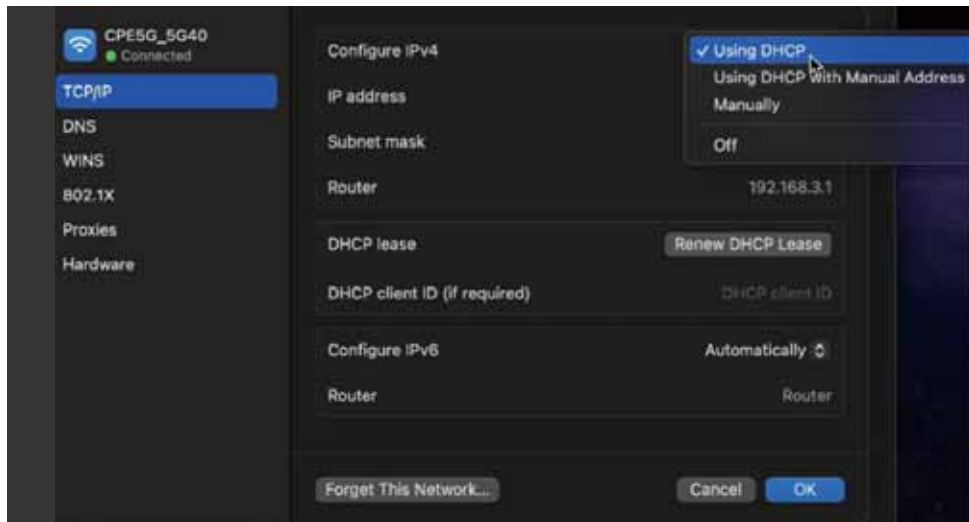
3. Open a web browser and enter the default IP address of the wireless bridge in the address bar. The default IP address depends on the LED value, please refer to the “Digital & IP & WiFi Chart” for details.



4. On the login screen, enter the default password: admin



5. After setup, restore IP settings to automatic (DHCP) to resume normal internet access.



6.3 Mobile Device Login

1. Go to your phone's Wi-Fi settings and connect to the wireless bridge's default SSID. Please refer to the "Digital & IP & WiFi Chart" for the exact SSID name and password.

2. Tap the connected Wi-Fi, then tap "Configure IP" and select "Manual". Enter the following details:

IP address: 192.168.255.xxx (e.g., 192.168.255.2; and not be the same as the bridge IP)

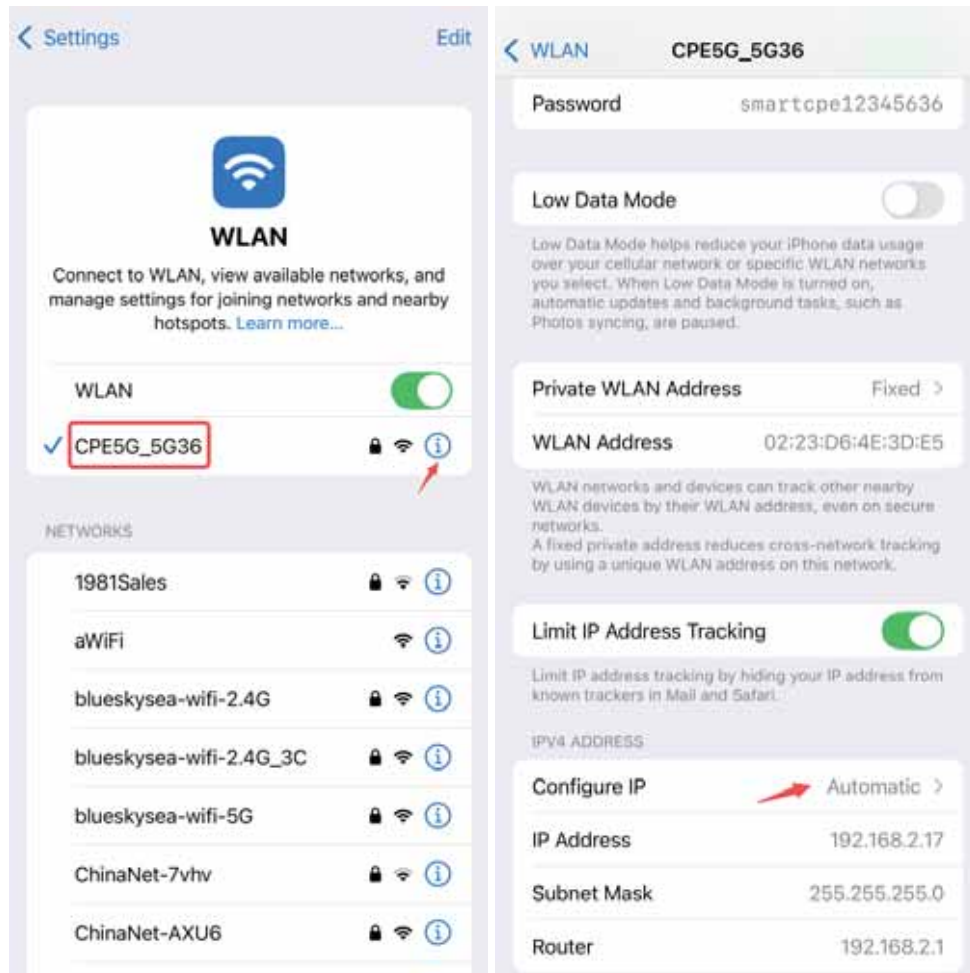
Subnet mask: 255.255.255.0

Router:192.168.255.1

3.Open a browser and enter the IP address of the bridge. The default IP address depends on the LED value, please refer to the "Digital & IP & WiFi Chart" for details.

4.On the login screen, enter the default password: admin

5.After setup, return to your phone's Wi-Fi settings and set the IP configuration back to Automatic to resume normal internet access.



[Back](#) **Configure IPv4** [Save](#)

Automatic

Manual  

BootP

MANUAL IP

IP Address	192.168.255.2
Subnet Mask	255.255.255.0
Router	192.168.255.1

English

 admin 

Log in

192.168.255.101

Back

Configure IPv4

Save

Automatic

Manual

BootP

Client ID

7. Advanced Settings

7.1 Wizard

The Wizard provides a guided and user-friendly setup process, making it easier than configuring each tab manually. It allows you to quickly initialize key bridge parameters such as operating mode, IP address, wireless SSID and password, channel value, and more.

7.1.1 Two Configuration Mode Comparison

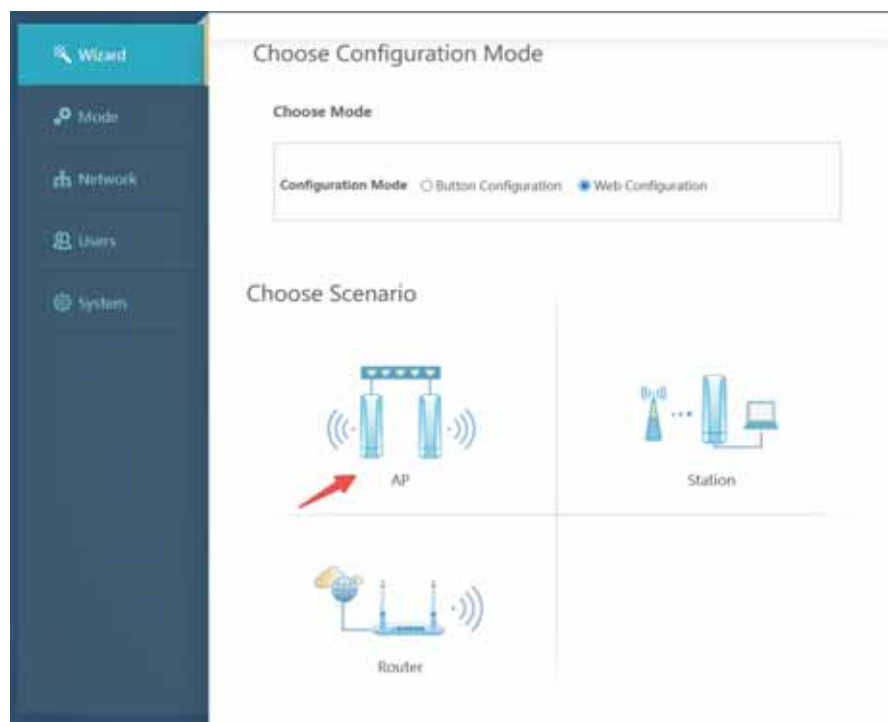
Configuration Mode	Button Configuration	Web Configuration
Bridge working mode	Determined by A/B switch A: AP mode (Master) B: Station mode (Slave)	Selectable via Web UI AP: Master Station: Slave
Channel value	Based on LED value	LED display shows "H", the LED value is locked. The channel can be manually selected through the Web UI
Bridge IP address	Automatically assigned based on channel value A(Master): 192.168.255.100+X B(Slave): 192.168.255.200+X X = LED channel value	Fully customizable
SSID	Fixed SSID based on channel and role: Master bridge 2.4G SSID : CPE5G_2G (Available) Master bridge 5.8G SSID: CPE5G_5GX (Available) Slave bridge 2.4G SSID:	Fully customizable Master bridge 2.4G SSID : Custom (Available) Master bridge 5.8G SSID : Custom (Available) Slave bridge 2.4G SSID: Custom (Available)

	CPE5G_2G (Available) Slave bridge 5.8G SSID: CPE5G_5G-2X (Available)	Slave bridge 5.8G SSID: Custom (Available) Slave bridge SSID: Bridging SSID (Unavailable)
Password	Fixed by channel and role 2.4G SSID password: 1234567890 Master/Slave bridge 5.8G SSID password: smartcpe123456X	Fully customizable

7.1.2 Web Configuration Pairing Method

A. Master bridge setup steps:

(1) Select Web Configuration and click the AP icon.



(2) Configure the IP settings for the master bridge.

Scenario: AP

1 Device Settings 2 WLAN Settings

Device Settings

☒ Static ☐ DHCP

IP Address	10.10.10.56
Netmask	255.255.255.0
Gateway	10.10.10.1
DNS	10.10.10.1

Next

IP Address: Set the IP address as required

Netmask: Typically set to 255.255.255.0

Gateway: Set the gateway IP, which must be in the same subnet as the IP address

DNS: Usually set the same as the Gateway

Note: After changing the bridge's IP address, you will need to update your computer's IP to match the new subnet before logging in again. Then enter the new IP address in the browser.

(3) Set the wireless SSID and password for both 2.4G and 5.8G.

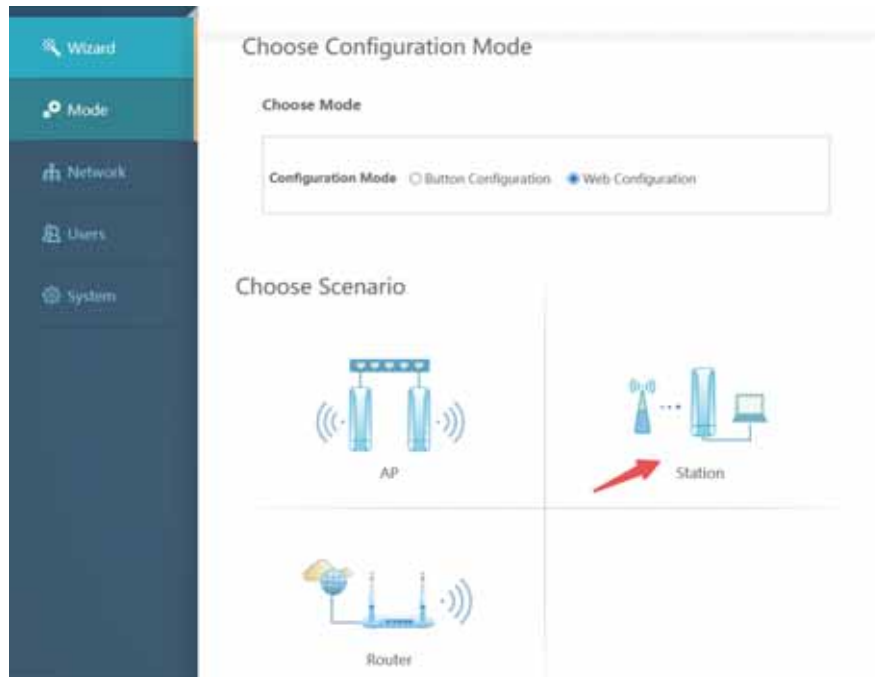
The screenshot shows the 'WLAN Settings' page in a configuration wizard. The left sidebar contains a 'Wizard' menu and other options like 'Mode', 'Network', 'Users', and 'System'. The main area has a progress bar with two steps: '1 Device Settings' and '2 WLAN Settings', with the second step being active. Below the progress bar, the 'WLAN Settings' section includes a 'Working RF' section with checkboxes for '2.4G' and '5G', both of which are checked. Underneath, there are input fields for '2.4G Name(SSID)' (containing 'CPE2.4G-A'), '2.4G Password' (masked with asterisks), '5G Name(SSID)' (containing 'CPESG-A'), and '5G Password' (masked with asterisks). At the bottom right, there are 'Previous' and 'Next' buttons.

(4) Preview the configuration, then click Apply to complete the master bridge setup.

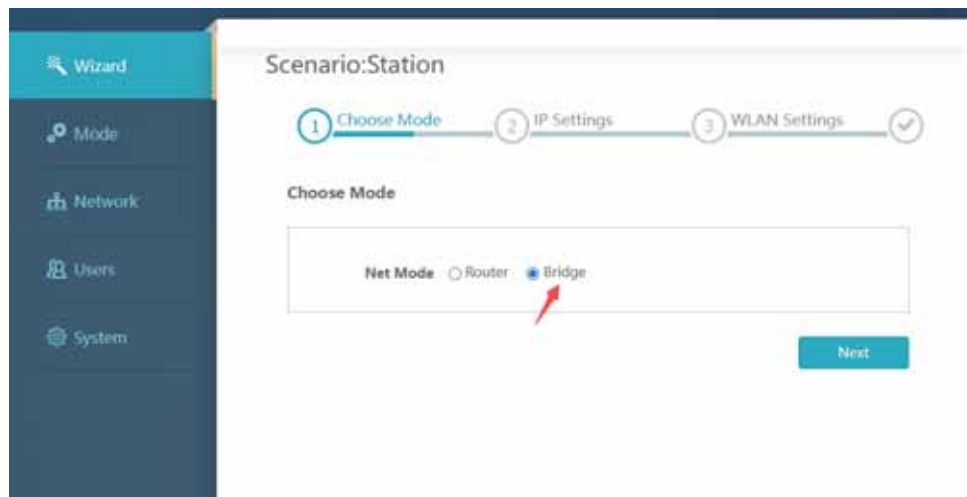
The screenshot shows the 'Your Settings' preview page in the same configuration wizard. The progress bar now shows three steps: '1 Device Settings', '2 WLAN Settings', and a third step marked with a checkmark. The 'Your Settings' section displays a summary of the configured values: 'IP Mode' is 'Static', 'IP Address' is '10.10.10.58', 'Working RF' is '2.4G + 5G', '2.4G SSID' is 'CPE2.4G-A', '2.4G Encryption' is 'WPA2-PSK AES', '5G SSID' is 'CPESG-A', and '5G Encryption' is 'WPA2-PSK AES'. To the right of the encryption settings, there are links for '2.4G More Settings' and '5G More Settings'. At the bottom right, there are 'Previous' and 'Apply' buttons.

B. Slave bridge setup steps:

(1) Select Web Configuration and click the Station icon.



(2) Set Network Mode to Bridge.



(3) Configure the IP settings for the slave bridge.

The screenshot shows a configuration wizard titled 'Scenario: Station'. On the left is a sidebar with a 'Wizard' menu and options for 'Mode', 'Network', 'Users', and 'System'. The main area displays a progress bar with three steps: '1 Choose Mode', '2 IP Settings' (the current step), and '3 WLAN Settings'. Below the progress bar, the 'Device Settings' section contains four input fields: 'IP Address' (10.10.10.66), 'Netmask' (255.255.255.0), 'Gateway' (10.10.10.1), and 'DNS' (10.10.10.1). At the bottom right are 'Previous' and 'Next' buttons.

Device Settings	
IP Address	10.10.10.66
Netmask	255.255.255.0
Gateway	10.10.10.1
DNS	10.10.10.1

IP Address: Set the IP address as required

Netmask: Typically set to 255.255.255.0

Gateway: Set the gateway IP, which must be in the same subnet as the IP address

DNS: Usually set the same as the Gateway

Note: After changing the IP address, update your computer's IP to the new subnet before logging in again.

(4) Set the bridge working band to 5G, then click Scan to search for the master bridge's SSID.

Scenario: Station

1 Choose Mode 2 IP Settings 3 WLAN Settings

WLAN Settings

Working RF ☐ 2.4G ☒ 5G

Name(SSID) 1-32 characters Scan

Password Empty or 8-32 chars

Lock ☐ ON

Previous Next

(5) Select the SSID of the master bridge.

Scan Results Refresh

No.	BSSID	SSID	Encryption	Channel	Signal(dBm)	Operate
34	1A:7E:D5:51:21:71	CPE5G_5G-2132	WPA2 PSK (CCMP)	132	-69	Select
35	18:7E:D5:51:21:81	CPE5G_5G132	WPA2 PSK (CCMP)	132	-73	Select
36	34:F7:16:B3:ED:BC	TP-LINK_5G_EDB7	None	149	-89	Select
37	E0:24:81:97:77:C8	Elsie	WPA2 PSK (CCMP)	149	-92	Select
38	F4:2A:7D:50:C1:ED	TP-LINK_5G_C1E8	mixed WPA/WPA2 PSK (TKIP, CCMP)	149	-91	Select
39	18:7E:D5:50:ED:B5	CPE5G-A	WPA2 PSK (CCMP)	153	-6	Select
40	60:3A:7C:C2:46:85	TP-LINK_5G_SZL	mixed WPA/WPA2 PSK (CCMP)	157	-85	Select
41	50:02:00:00:00:00	TP-LINK_5G_SZL	WPA2 PSK (CCMP)	157	-85	Select

(6) Enter the password for the master bridge's SSID.

The screenshot shows a network configuration wizard with a sidebar on the left containing 'Wizard', 'Mode', 'Network', 'Users', and 'System'. The main panel is titled 'Scenario: Station' and shows a progress bar with three steps: '1 Choose Mode', '2 IP Settings', and '3 WLAN Settings' (which is currently active and marked with a checkmark). Below the progress bar, the 'WLAN Settings' section contains the following fields: 'Working RF' with radio buttons for '2.4G' and '5G' (5G is selected); 'Name(SSID)' with a text box containing 'CPESG-A' and a green 'Scan' button; 'Password' with a text box containing '88888888' and a red arrow pointing to it; and 'Lock' with a toggle switch set to 'OFF' and a MAC address '18:7E:D5:50:ED:B5' displayed next to it. At the bottom right of the settings area are 'Previous' and 'Next' buttons.

(7) Preview the configuration. You may click "More Settings" to modify the WiFi information of the slave bridge.

The screenshot shows the 'Your Settings' preview page in the same network configuration wizard. The sidebar and progress bar are identical to the previous screen. The 'Your Settings' section displays a summary of the configured values: 'Net Mode: Scenario: Station-Bridge', 'IP Address: 10.10.10.66', 'Working RF: 5G', 'SSID: CPESG-A', 'Encryption: WPA2-PSK Auto', and 'Lock: OFF'. A red arrow points to a 'More Settings' link located at the bottom right of the settings box. Below the settings box are 'Previous' and 'Apply' buttons.

Scenario: Station

1 Choose Mode 2 IP Settings 3 WLAN Settings

More Settings

Power 27dBm

WDS On

AP Extension On

Working RF ☒ 2.4G ☒ 5G

2.4G Name(SSID) CPE2.4G-B

2.4G Password

5G Name(SSID) CPE5G-B

5G Password

Cancel Confirm

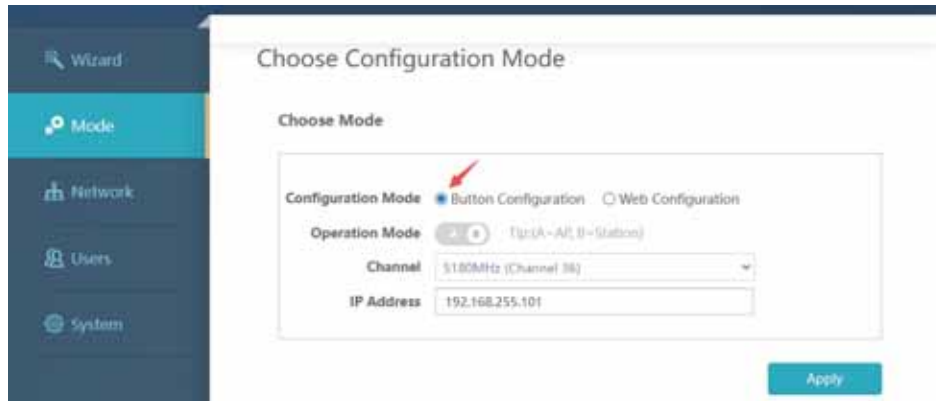
(8) Click Apply to complete the configuration and start pairing, Wait for a moment. When the SIG1–SIG4 indicators on the bridge light up, the pairing is successful.

7.2 Mode Module

This section is used to switch the wireless bridge between its two configuration modes.

Web Configuration: Allows for manual setup of the channel, IP address, SSID, password, and other advanced settings.

Button Configuration: The channel is adjusted using the physical Reset button. Network settings (IP, SSID, password) are automatically generated by the system and cannot be manually altered.



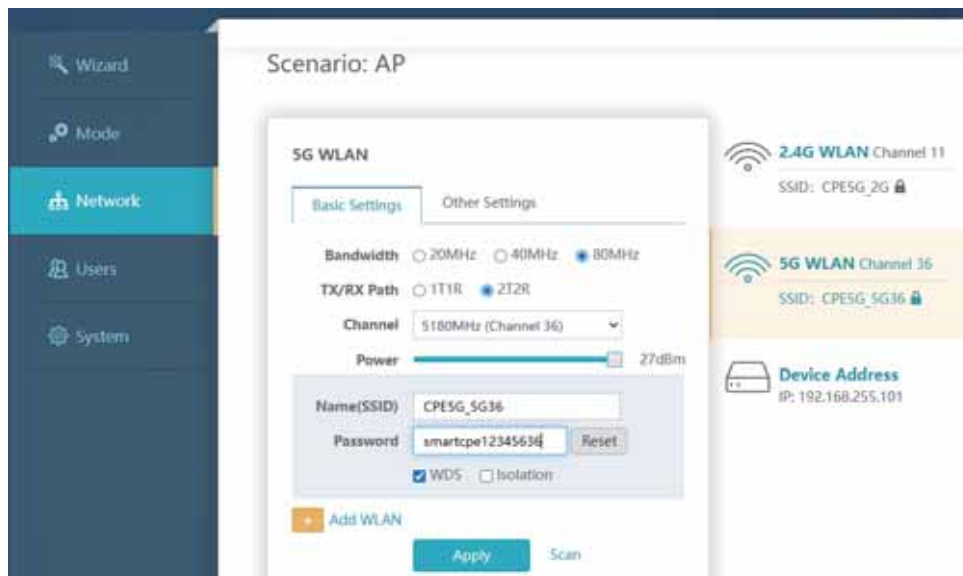
7.3 Network Module

This module provides access to view and modify the bridge's SSID, password, and IP address settings.

7.3.1 Wireless Network Settings

(1) Button Configuration mode

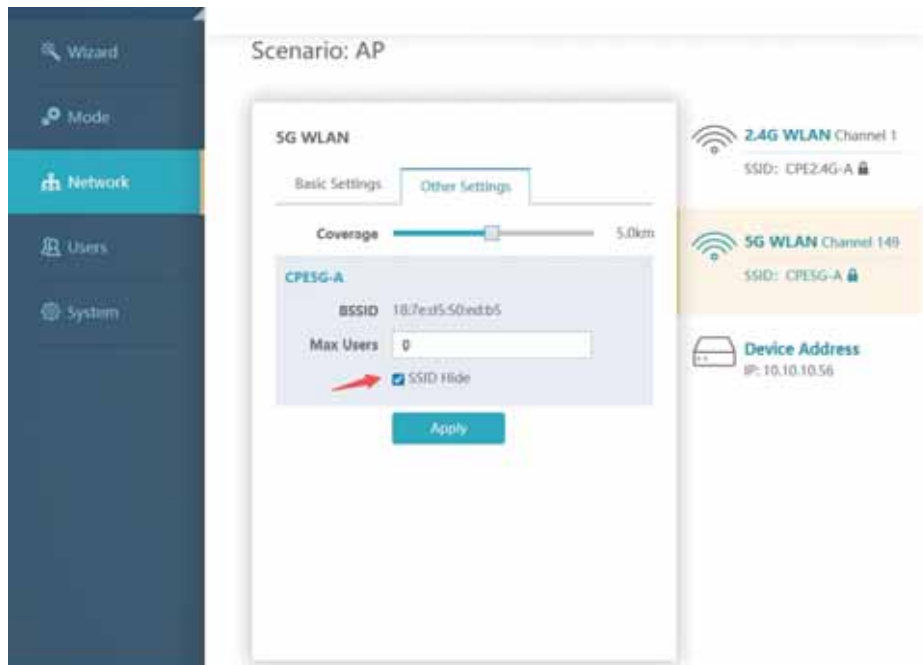
The SSID and password can only be viewed. Adding or modifying SSIDs is not supported.



(2) Web Configuration mode

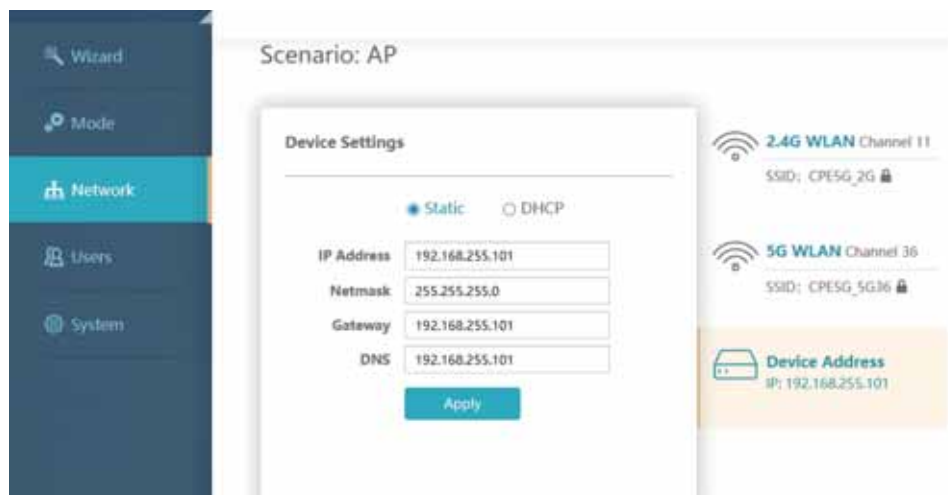
The SSID and password for both the 2.4 GHz and 5.8 GHz bands can be modified on both bridges. This mode supports creating additional SSIDs with custom passwords and includes an option to hide SSIDs

The screenshot displays the 'Scenario: AP' configuration page. On the left is a dark blue sidebar with navigation links: 'Wizard', 'Mode', 'Network' (highlighted in teal), 'Users', and 'System'. The main content area is titled 'Scenario: AP' and features a '5G WLAN' configuration panel. This panel has two tabs: 'Basic Settings' (active) and 'Other Settings'. Under 'Basic Settings', there are options for 'Bandwidth' (20MHz, 40MHz, 80MHz), 'TX/RX Path' (1T1R, 2T2R), 'Channel' (5745MHz (Channel 149)), and a 'Power' slider set to 27dBm. Below these are two sections for SSID configuration. The first section has 'Name(SSID)' set to 'CPE5G-A', a masked 'Password', and checkboxes for 'WDS' (checked) and 'Isolation'. The second section has 'Name(SSID)' set to '1-32 characters', a masked 'Password', and checkboxes for 'WDS' and 'Isolation'. An 'Add WLAN' button is at the bottom left of the panel. To the right of the 5G WLAN panel, there are two summary cards: '2.4G WLAN Channel 1' with SSID 'CPE2.4G-A' and '5G WLAN Channel 149' with SSID 'CPE5G-A'. At the bottom right, a 'Device Address' card shows 'IP: 10.10.10.56'. At the bottom of the main content area are 'Apply' and 'Scan' buttons.



7.3.2 IP Address Settings

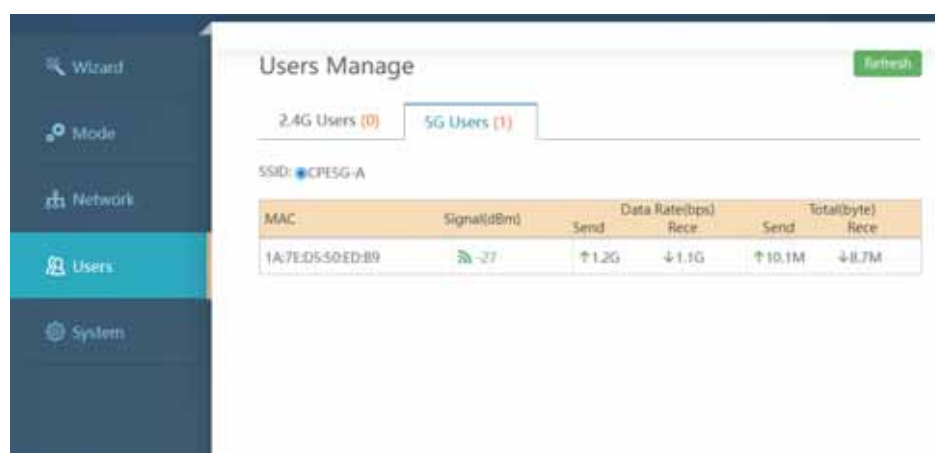
(1) In Button Configuration mode, IP address information is read-only and cannot be modified.



(2) In Web Configuration mode, IP address information can be both viewed and manually modified.

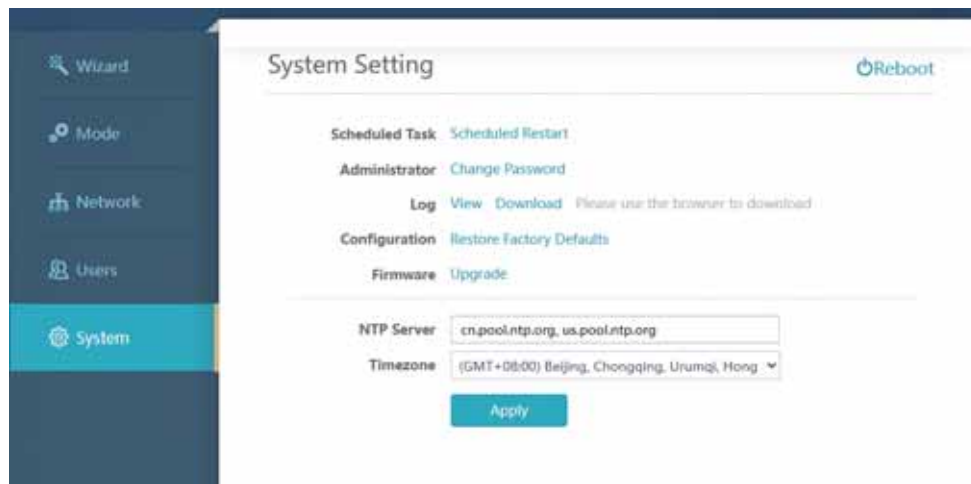


7.4 Users Manage



7.5 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



The screenshot shows a web interface for 'System Setting'. On the left is a dark blue sidebar with a menu containing 'Wizard', 'Mode', 'Network', 'Users', and 'System' (which is highlighted in a lighter blue). The main content area has a title 'System Setting' and a 'Reboot' button in the top right. Below the title, there are several configuration sections: 'Scheduled Task' with a link to 'Scheduled Restart'; 'Administrator' with a link to 'Change Password'; 'Log' with links to 'View' and 'Download' (followed by the text 'Please use the browser to download'); 'Configuration' with a link to 'Restore Factory Defaults'; and 'Firmware' with a link to 'Upgrade'. At the bottom, there are two input fields: 'NTP Server' with the value 'cn.pool.ntp.org, us.pool.ntp.org' and 'Timezone' with a dropdown menu showing '(GMT+08:00) Beijing, Chongqing, Urumqi, Hong'. An 'Apply' button is located below these fields.

8. Troubleshooting

Q1: Bridge Fails to Power On

1. **Verify the Power Source:** Ensure the PoE adapter is functioning properly.
2. **Inspect the Ethernet Cable:** Poor-quality cables or those exceeding the recommended length of 15 meters (50 feet) may prevent the bridge from powering on. Use a high-quality CAT5e or CAT6 cable within the recommended limit.
3. **Hardware Check:** If the issue persists after verifying the power and cabling, the device may be damaged.

Q2: Unable to Access the Bridge Management Interface

1. **Confirm the IP Address:** The default management IP address varies depending on the channel number. Refer to the Digital & IP & WiFi Chart to ensure the correct address is used.
2. **Verify LAN Connection:** Ensure the computer is connected to the same local area network (LAN) as the bridge. Use an Ethernet cable to connect the computer directly to the bridge's LAN port.
3. **Confirm Subnet Settings:** After establishing a physical connection, configure the computer's IP address to match the bridge's subnet. For example, assign an IP address within the 192.168.255.x range.
4. **Login Troubleshooting:**
 - a. **Check for IP Conflicts:** Disconnect all other devices and connect only the two bridges for testing.
 - b. **Hardware Reset:** If the management IP was changed and forgotten, press and hold the physical Reset button for approximately 10 seconds to restore factory defaults. Reconfigure and record the new IP.
 - c. **Browser Issues:** Try a different web browser.

Q3: Frequent Disconnection Between Bridges

1. **Insufficient PoE Power Supply:** Ensure the Ethernet cable is not damaged or loose, is of high quality, and remains within the 15-meter limit.
2. **Weak Signal Strength:** Align the bridges face-to-face with a clear line

of sight, avoiding obstacles such as walls, glass, or trees.

- 3. Wireless Interference:** Environmental factors or nearby routers may cause channel interference. Switch to a different wireless channel and avoid placing the bridges near strong electromagnetic fields.
- 4. Further Support:** If the issue persists, contact ULNA customer support.

Q4: No Internet Access from Router Connected to Slave Bridge

- 1. Ensure Correct Port Connection:** Verify the router is connected to its WAN port, not the LAN port, to ensure proper routing.
- 2. Check Indicator Lights:**
 - LAN Indicator:** Confirm LAN1 or LAN2 is lit. If off, inspect the Ethernet cable and port for damage.
 - Pairing Status:** Ensure SIG1–SIG4 on both bridges are lit, indicating a successful link.
- 3. Test Direct Network Access:** Connect a computer directly to the slave bridge via Ethernet cable to test for a valid IP address and internet access.

If access is successful: The wireless transmission is functioning properly. Check the router settings: when the remote router is operating in router mode, ensure the main router and remote router use different LAN subnets. Try using a different router in case of compatibility issues or possible router malfunction.

If access fails: The wireless bridge connection may have failed. Reset and re-pair both bridges, then test again.

Q5: Unable to Connect to Bridge SSID or Password Incorrect

- 1. Verify Credentials:** Double-check the password and ensure connection to the correct SSID. Refer to the Digital & IP & WiFi Chart for correct values.
- 2. Change Channels:** Switch to a different channel and use the corresponding newly generated SSID and password.
- 3. Hardware Reset:** Press and hold the Reset button for approximately 10 seconds to restore factory default settings, then reconnect using the default password.

9. After-sales Service

If you encounter any of the following issues, please feel free to contact us. We are here to help:

1. Missing accessories in the package.
2. Difficulty with pairing or setup.
3. Damaged wireless bridge or PoE power adapter.
4. The wireless bridge stops working or becomes unresponsive after a period of use.
5. Unable to access the wireless bridge.
6. Need the latest firmware update or PDF user manual.
7. Have other questions or technical concerns.

Customer Support Email: support01@ulnastore.com

YouTube Channel: https://www.youtube.com/@ulna_ltd



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10. FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.