



WIRELESS BRIDGE

USER MANUAL



Model: CPE369

Tips:

Thank you for ordering and using AdaLov CPE369 Wireless Bridge, please read the manual carefully before use. If there are any problems during the use, please contact us in time.

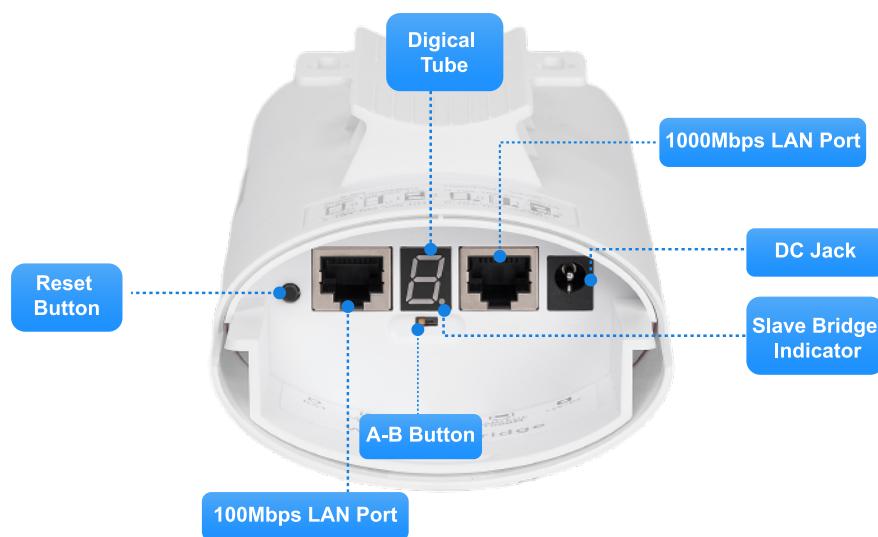
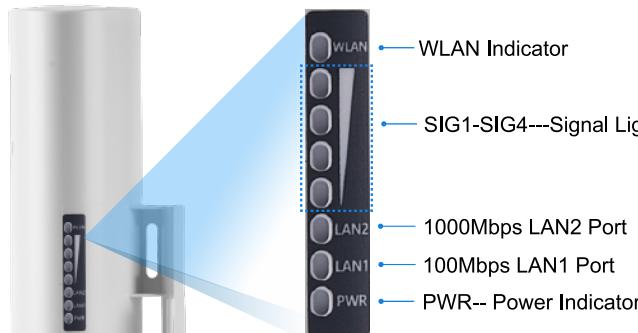
Technology Service Email: cs@adalovus.com

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Chapter 1- Get to Know About Your Wireless Bridge

1.1 Product Overview



1.2 Appearance

1.2.1 Port and Button Description

Port or Buttons	Description
A-B Button	Pushing the button to "A" indicates that the bridge acts as the master bridge(transmitter),and pushing the button to "B" indicates that the bridge acts as the slave bridge (receiver)
Reset Button	Short press once to toggle a different character to pairing; Press and hold for 10s to reset the wireless bridge
LAN 1 Port	The 100Mbps adaptive RJ45 port,also can be used as a POE port
LAN 2 Port	The 1000Mbps adaptive RJ45 port,also can be used as a POE port
Digital Tube	Know the current configuration character through the digital tube
DC	12V / 1A (DC 5521)

1.2.2 LED Explanation

Name	Indication
PWR	Power indicator, the wireless bridge is on or off.
WLAN	Wireless Status Indicator
Signal Indicator	In the master bridge mode:as the output power indicator, the stronger signal, the more lights on; In the slave bridge mode:it indicates the signal strength of the connection after successful pairing, the stronger the signal, the more lights.
LAN1/LAN2	The green light is solid when the LAN1/LAN2 Port is connected and goes out when the LAN1/LAN2 Port is disconnected.
Digital Tube	Display current number, including 0, 1, 2, 3, 4, 5, 6, 7, 8, 9,A,b,C,d,E,F loop.

1.3 Specifications

Model	CPE369
CPU	7620A+7612E+IP1001
Flash	8MByte
DRAM	DDR264MByte
Interface	10/100/1000Mbps LANx1&10/100Mbps LANx1
Data rate	11a: 54M, 48M, 36M, 24M, 18M, 12M, 9M, 6Mbps
	11n: 7.2M, 14.4M, 21.7M, 28.9M, 43.3M, 57.8M, 65M, 72.2M, 14.4M, 28.9M, 43.3M, 57.8M, 86.7M, 115.6M, 130M, 144.4Mbps 433Mbps
Transfer method	Direct Sequence Spread Spectrum(DSSS)
Modulation	OFDM/ BPSK/ QPSK/ CCK/ DQPSK/ DBPSK
Protocol standard	IEEE802.11ac, IEEE802.11n, IEEE802.11a, IEEE802.3u
Agreement	CSMA/CA, TCP/IP, IPX/SPX, Net BEUI, DHCP, NDIS3, NDIS4, NDIS5
Frequency range	4900~6100MHz
Power	≤3W, POE24V~1A/ DC 12V/ 1A
Antenna	16dBi, Horizontal 60°/ Vertical 30°
WEP GUI	Support
Telnet	Support
Serial	Support
Safety	WEP64/128bits, WPA, WPA2, 802.1x
One Bridge Size / Weight	24.5x9x4.8cm/295g (3pcs wireless bridges included)

Chapter 2 - Highlights

1. Using 5.8Ghz wireless technology;
2. Gigabit wireless bridge with 1000Mbps RJ45 LAN port;
3. Built-in 16dbi high gain directional WiFi antenna;
4. IEEE802.11ac IEEE802.11n, IEEE802.11a, IEEE802.3u;
5. Transmission distance up to 3km(direct line-of-sight);
6. Master bridge supports WiFi hotpot access;
7. Dialing pair, one key operation;
8. WDS networking mode;
9. Support point-to-point(PTP), point-to-multipoint mode(PTMP);
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.

Chapter 3 - Package

Package Included:

- 3 x CPE369 Wireless Bridges,
- 3 x POE Adapters,
- 3 x Metal Cable Ties,
- 3 x Network Cables,
- 1 x User Manual.



Chapter 4

- Wireless Bridge Pairing & Installation

4.1 POE Power Supply

The CPE369 wireless bridge adopts a POE power supply, which is easy to install and manage while saving costs.

- (1) According to the requirements, prepare along enough network cable (Recommended within 20 meters, must Cat 5e network cable to connect the wireless bridge and the POE power supply. The POE port of the POE power supply is connected to the LAN port to the wireless bridge.
- (2) The LAN port of the POE power supply is connected to the PC, router, and switch.

4.2 Master Bridge & Slave Bridge Pairing

The bridges are pre-paired, just connect to POE adapter, it will auto pair in a few minutes, you can adjust the channel.

1. Set master/slave bridge:

NOTE: There are 3 pcs wireless bridges in the package, you can set Point to point mode or Point to multipoint mode

--Point to point mode

Set a master bridge--(switch “A-B” button to “A” position)

Set a slave bridge-- (switch “A-B” button to “B” position)

--Point to multipoint mode

Set a master bridge--(switch “A-B” button to “A” position)

Set two slave bridges-- (switch “A-B” button to “B” position)

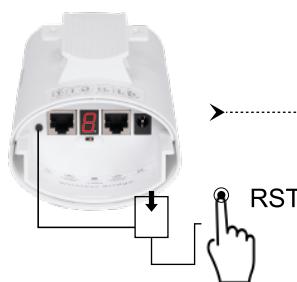


master bridge

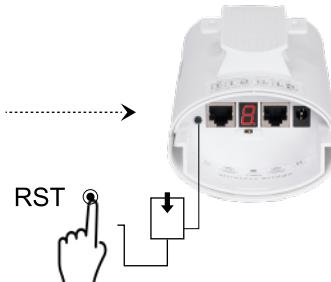


slave bridge

2. Short press the reset button to change the channel from 0-9, A-F, the LED indicator will display the numeric to show what channel it is, please keep the master and slaves bridges in the same channel.



Master CPE



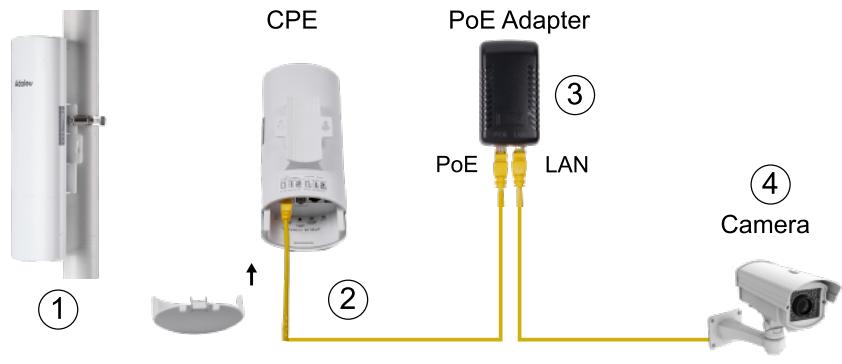
Slave CPE

3. Wait them for pairing. When the signal light on the side turns on, it means the pairing is successful;



4.3 Master Bridge & Slave Bridge Installation

4.3.1 Install Wireless Bridge Diagram

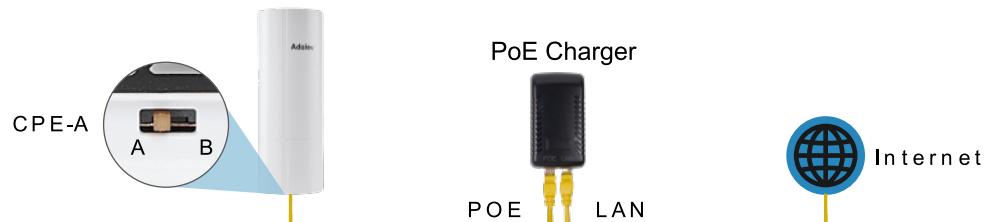


4.3.2 Installation Steps:

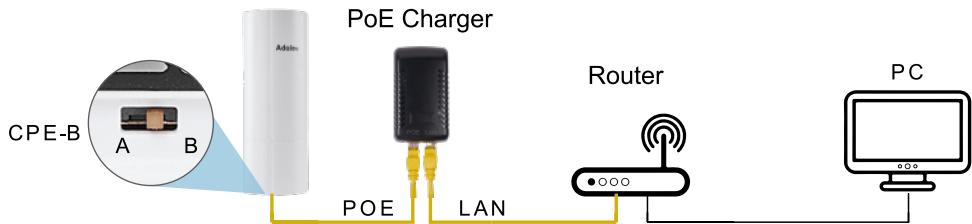
1. Put the bridges front side face to face in the same direction, then use the ties to fix the CPE. (Note: the bracket is not included in the package).
2. Use a long network cable to connect the POE adapter and the bridge.
3. Master bridge connection:

Step 1: The LAN port of the POE Adapter connect to the router or the internet through an Ethernet cable.

Step 2: The POE port of the POE adapter connect to POE/LAN port of the master wireless bridge by another Ethernet cable.



4. Slave Bridge (or slaves bridges) Connection:



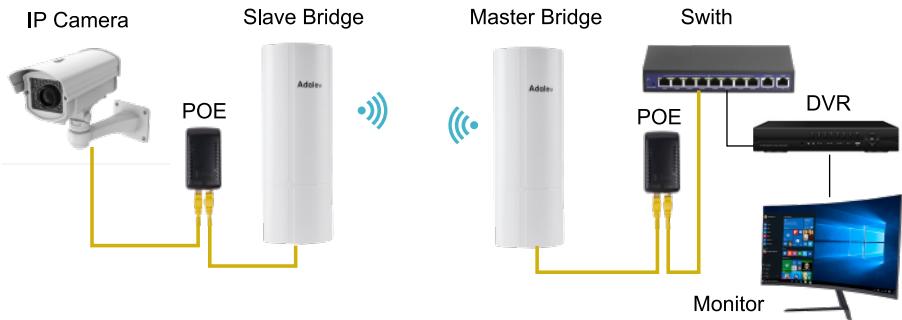
Step 1: The POE port of the POE adapter connect to the POE/LAN port of slave bridge through an Ethernet cable.

Step 2: The LAN port of the POE adapter connect to the LAN port of the computer or router by another Ethernet cable.

5. Tips:

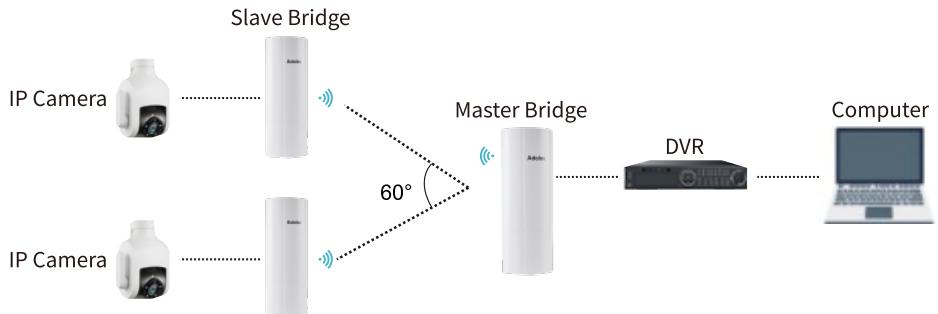
- (1). Before installation, please check whether the wireless bridge is paired well, please refer the master and slave pair setting page.
- (2). For installation, keep clear line of sight between the 2 wireless bridge. There is no strong electricity, strong magnetism, and other signal interference between the two wireless bridges.
- (3). The signal transmission angle of the wireless bridge is 60°, for point-to-multipoint installation, the angle of the slave bridge needs to be adjusted to ensure that it is within the 60° signal range of the main bridge. The antenna polarization direction is horizontal 60°/ vertical 30°.

(1) Point-to-Point Diagram



(2) Point to Multi-point Diagram(Up to 8 slave bridges)

Note: There is only one Master bridge, and others all Slave bridges.

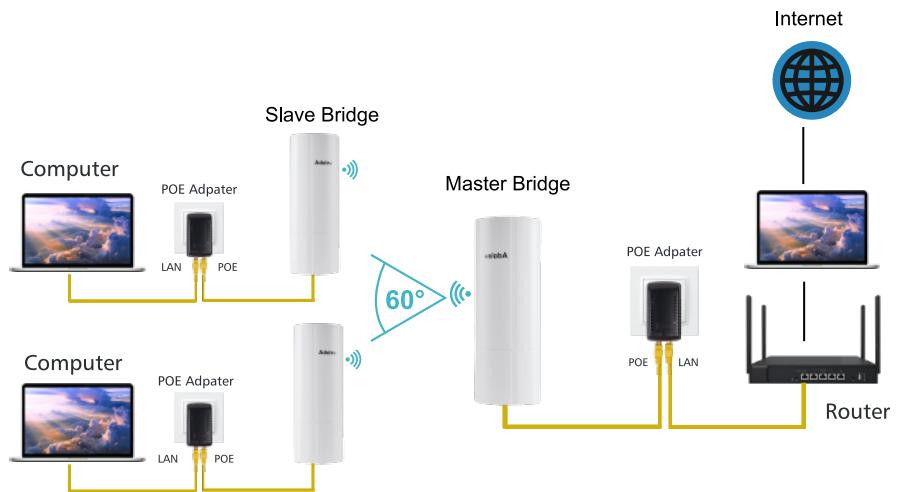


Note:

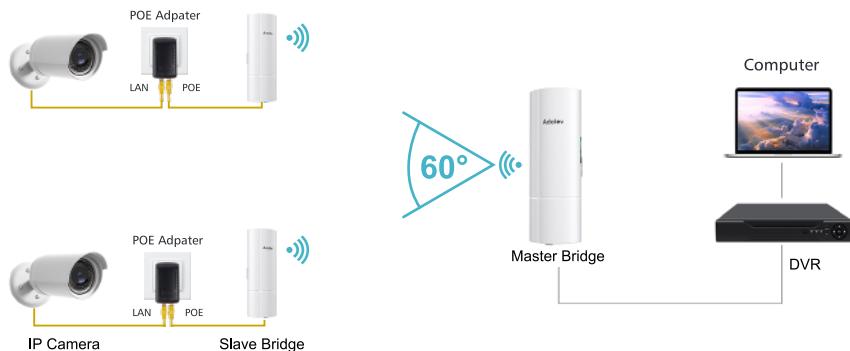
- (1). The slave bridges must be in front of the master bridge;
- (2). The master bridge and slave bridges must be face to face;
- (3). The maximum angle between the master bridge and slave bridges should not exceed 60 degrees

Chapter 5 - Application

5.1 For Network Extend Diagram:



5.2 For Video Transmission Diagram:



Chapter 6 - Computer Access

6.1 Modify Computer's IP

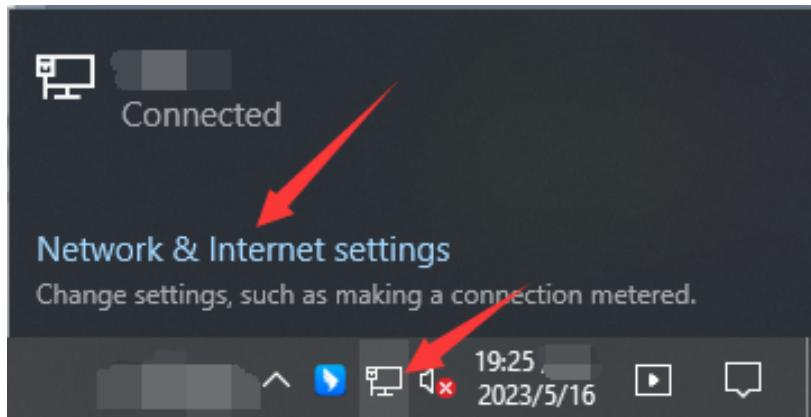


1. Refer to the figure left to connect the CPE to the computer through a POE adapter and an Ethernet cable.

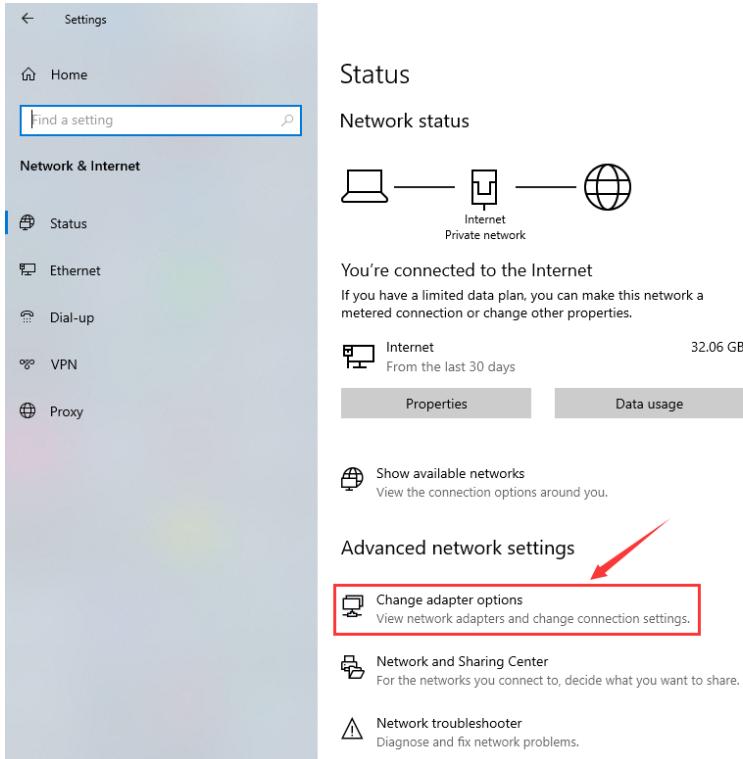
Note: You can enable the device without advanced settings

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

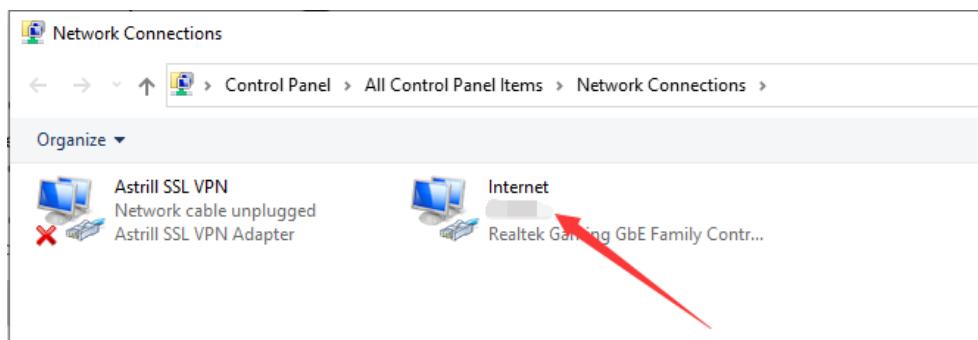
Click the network icon in the lower right corner of the computer, then click “Network & Internet settings”

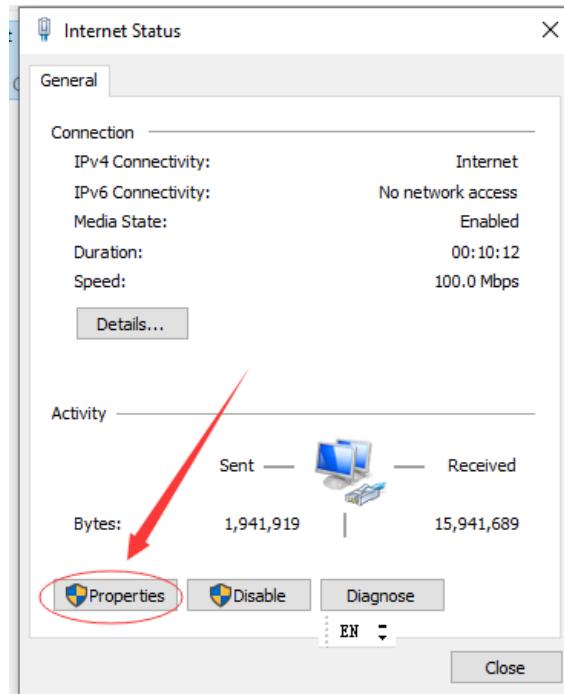


Select Ethernet and click “Change Adapter Options”

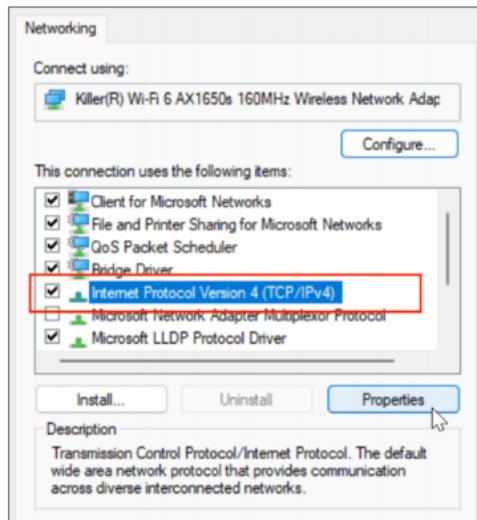


Find the network connection you are using, right click it and select “Properties”





Double-click the “Internet Protocol version 4 (TCP/IPv4)” go to IP configure interface



Configure your computer IP address as 192.168.255.x
(x is a figure 0-200).

Note: The Pc's IP can not be the same as the bridge.

6.2 Login via browser

Open the browser and enter the IP address of the wireless bridge to access, for example, enter "192.168.255.101" on the browser address column, you can access your bridge control panel.



A login screen will appear, by default, the Username and Password of the wireless bridge all are "admin".

A screenshot of a 'Sign in' dialog box. At the top, it says 'Sign in' and shows the URL 'http://192.168.255.101'. Below that, it says 'Your connection to this site is not private'. There are two input fields: 'Username' with 'admin' typed in, and 'Password' with '*****' typed in. At the bottom, there are two buttons: a blue 'Sign in' button and a white 'Cancel' button.

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

Digital & IP Chart

Digital & IP Chart	A - IP	B - IP	5.8G ID	WiFi SSID	Password
0	192.168.255.100	192.168.255.200	0	CPE5G_5G0	zllinkcpe1234560
1	192.168.255.101	192.168.255.201	36	CPE5G_5G36	zllinkcpe12345636
2	192.168.255.102	192.168.255.202	40	CPE5G_5G40	zllinkcpe12345640
3	192.168.255.103	192.168.255.203	44	CPE5G_5G44	zllinkcpe12345644
4	192.168.255.104	192.168.255.204	48	CPE5G_5G48	zllinkcpe12345648
5	192.168.255.105	192.168.255.205	120	CPE5G_5G120	zllinkcpe123456120
6	192.168.255.106	192.168.255.206	124	CPE5G_5G124	zllinkcpe123456124
7	192.168.255.107	192.168.255.207	128	CPE5G_5G128	zllinkcpe123456128
8	192.168.255.108	192.168.255.208	132	CPE5G_5G132	zllinkcpe123456132
9	192.168.255.109	192.168.255.209	136	CPE5G_5G136	zllinkcpe123456136
A	192.168.255.110	192.168.255.210	140	CPE5G_5G140	zllinkcpe123456140
b	192.168.255.111	192.168.255.211	149	CPE5G_5G149	zllinkcpe123456149
C	192.168.255.112	192.168.255.212	153	CPE5G_5G153	zllinkcpe123456153
d	192.168.255.113	192.168.255.213	157	CPE5G_5G157	zllinkcpe123456157
E	192.168.255.114	192.168.255.214	161	CPE5G_5G161	zllinkcpe123456161
F	192.168.255.115	192.168.255.215	165	CPE5G_5G165	zllinkcpe123456165

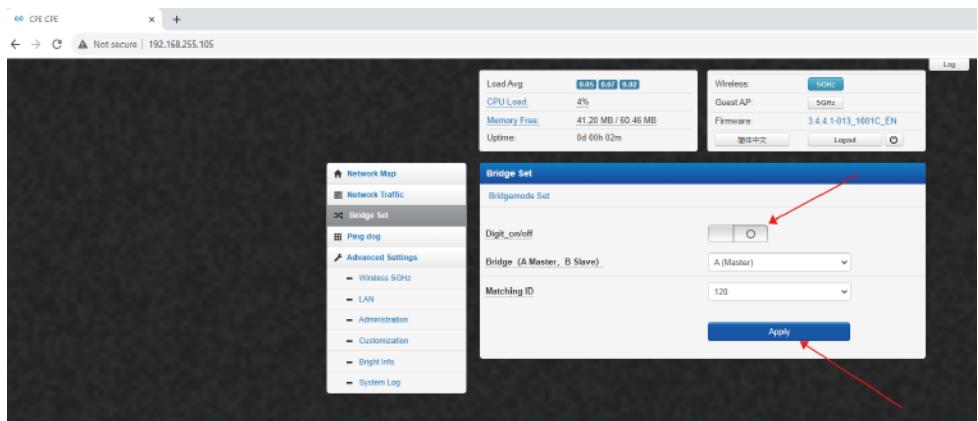
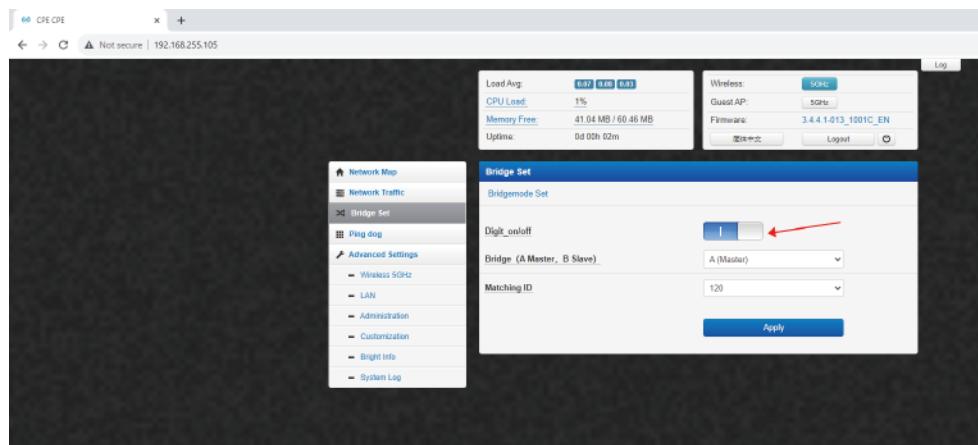
Chapter 7- Advanced settings

7.1 How to Change Configuration

7.1.1 Set Master bridge

Turn off the Digital tube by “Digit-on/off”.

(Note:The digital tube mode must be turned off, then the settings could be saved.)



Then short press the reset button, the digital tube won't change the channel.

Hide SSID or Change SSID name and password:

In the wireless settings, could turn on/off "Hide SSID", modify the SSID name and WiFi password

(Note: Please remember the new SSID name and WiFi password. Because pair two bridges will need them).

The screenshot shows the 'Wireless - General (5GHz)' configuration page. On the left, a sidebar lists navigation options: Network Map, Network Traffic, Bridge Set, Ping dog, Advanced Settings, Wireless 5GHz (highlighted with a red box), LAN, Administration, Customization, Bright Info, and System Log. The main panel has tabs for General, Guest AP, Bridge, Wireless MAC Filter, RADIUS Settings, and Professional. The General tab is selected. It contains the following fields:

- Enable Radio?**: A toggle switch is set to off (gray). An arrow points from the 'Wireless 5GHz' sidebar to this field.
- Date to Enable Radio (workweek):** A dropdown menu showing Mo Tu We Th Fr checked.
- Time of Day to Enable Radio (workweek):** A time picker set to 00:00 - 23:59.
- Date to Enable Radio (weekend):** A dropdown menu showing Sa Su checked.
- Time of Day to Enable Radio (weekend):** A time picker set to 00:00 - 23:59.
- SSID:** A text input field containing 'CPE5G_5G120'. An arrow points from this field to the 'SSID' label.
- Hide SSID:** A toggle switch set to off (gray). An arrow points from the 'Hide SSID' label to this field.
- Wireless Mode:** A dropdown menu set to 'a/n Mixed'.
- Channel Bandwidth:** A dropdown menu set to '20/40 MHz'.
- Radio Channel:** A dropdown menu set to '120'.
- Extension Channel:** A dropdown menu set to 'Auto'.
- Fixed TX Rate Link Mode:** A dropdown menu set to 'No (*)'.
- Authentication Method:** A dropdown menu set to 'WPA2-Personal' (highlighted with a red box). An arrow points from the 'Authentication Method' label to this field.
- WPA Encryption:** A dropdown menu set to 'AES'.
- WPA Pre-Shared Key:** A text input field containing 'zllinkcpe123456120'. An arrow points from this field to the copy icon (a clipboard with a right arrow).
- Network Key Rotation Interval:** A dropdown menu set to '3600'.
- TX Power Adjustment (%):** A dropdown menu set to '100'.
- Region Code:** A dropdown menu set to 'Debug (all channels)'.

A large blue 'Apply' button is located at the bottom right of the form.

	Network Map
	Network Traffic
	Bridge Set
	Ping dog
	Advanced Settings
-	Wireless 5GHz
-	LAN
-	Administration
-	Customization
-	Bright Info
-	System Log

Wireless - General (5GHz)

General Guest AP Bridge Wireless MAC Filter RADIUS Settings Professional

Enable Radio?

Date to Enable Radio (workweek): Mo Tu We Th Fr

Time of Day to Enable Radio (workweek): 00 : 00 - 23 : 59

Date to Enable Radio (weekend): Sa Su

Time of Day to Enable Radio (weekend): 00 : 00 - 23 : 59

SSID: master-wireless

Hide SSID?

Wireless Mode: a/n Mixed

Channel Bandwidth: 20/40 MHz

Radio Channel: 120

Extension Channel: Auto

Fixed TX Rate Link Mode: No (*)

Authentication Method: WPA2-Personal

WPA Encryption: AES

WPA Pre-Shared Key: master123456

Network Key Rotation Interval: 3600 [0..2592000]

TX Power Adjustment (%): 100 [0..100]

Region Code: Debug (all channels)

Change the IP for the bridge: (I changed it to 116.30.231.100)

The screenshot shows the 'LAN IP Settings' page of a router's web interface. The left sidebar has a 'LAN' section highlighted with a red box. The 'IP Address' field contains '192.168.255.105' with a red box around it. A red arrow points to the 'Apply' button at the bottom right.

Load Avg: 0.00 0.00 0.00

CPU Load: 8%

Memory Free: 40.99 MB / 60.46 MB

Uptime: 0d 00h 10m

Wireless: 5GHz

Guest AP: 5GHz

Firmware: 3.4.4.1-013_1001C_EN

简体中文 Logout

LAN IP Settings

LAN IP DHCP Server IPTV Ethernet Switch Wake-on-LAN

Configure the LAN IP of ZL-CPE5G in AP mode.

Get IP Automatically?

IP Address: 192.168.255.105
192.168.255.100/200

Subnet Mask: 255.255.255.0 255.255.255.0

Default Gateway: 192.168.255.254

Domain Name:

DNS Server 1:

DNS Server 2:

Apply

The screenshot shows the 'LAN IP Settings' page of a router's web interface. The left sidebar has a 'LAN' section highlighted with a red box. The 'IP Address' field now contains '116.30.231.100' with a red box around it. A red arrow points to the 'Apply' button at the bottom right.

Load Avg: 0.06 0.05 0.01

CPU Load: 0%

Memory Free: 41.46 MB / 60.46 MB

Uptime: 0d 00h 06m

Wireless: 5GHz

Guest AP: 5GHz

Firmware: 3.4.4.1-013_1001C_EN

简体中文 Logout

LAN IP Settings

LAN IP DHCP Server IPTV Ethernet Switch Wake-on-LAN

Configure the LAN IP of ZL-CPE5G in AP mode.

Get IP Automatically?

IP Address: 116.30.231.100
192.168.255.100/200

Subnet Mask: 255.255.255.0

Default Gateway:

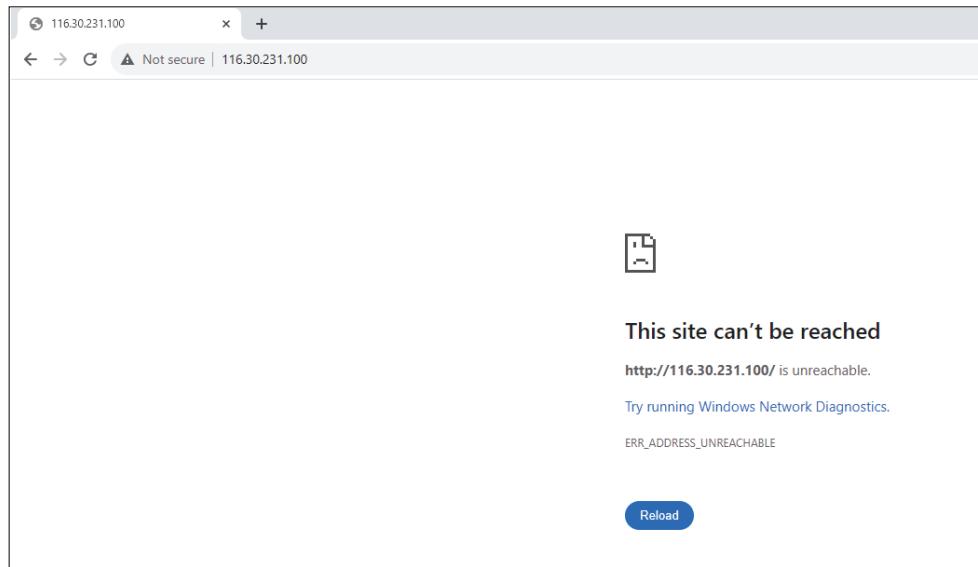
Domain Name:

DNS Server 1:

DNS Server 2:

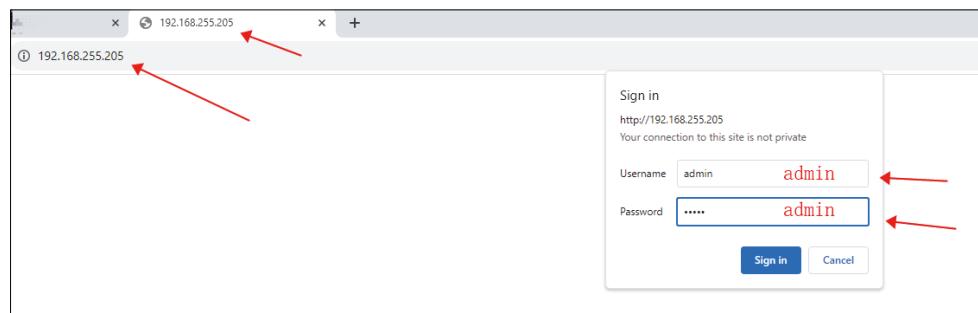
Apply

After change the IP, then will appear this page



7.1.2 Set Slave bridge:

Open a browser and Enter in the slave bridge's IP to access it.



Turn off the “Digit on/off”.

(Note: The digital tube mode must be turned off, then the settings can be saved.)

The screenshot shows the ZL-CPE5G web interface with the URL 192.168.255.205. The left sidebar menu is visible with items like Network Map, Network Traffic, Bridge Set, Ping dog, Advanced Settings (with LAN selected), Administration, Customization, Bright Info, and System Log. The main content area is titled 'Bridge Set' under 'Bridgemode Set'. It shows 'Digit_on/off' set to off (grayed out), 'Bridge (A Master, B Slave)' set to 'B (Slave)', and 'Matching ID' set to 120. A large red arrow points to the 'Apply' button at the bottom right of the form.

Change the IP for the slave bridge.

(I changed it to 116.30.231.200)

The screenshot shows the ZL-CPE5G web interface with the URL 192.168.255.205/Advanced_AP LAN_Content.asp. The left sidebar menu is visible with items like Network Map, Network Traffic, Bridge Set, Ping dog, Advanced Settings (with LAN selected), Administration, Customization, Bright Info, and System Log. The main content area is titled 'LAN IP Settings' under 'LAN IP'. It shows tabs for LAN IP, DHCP Server, IPTV, Ethernet Switch, and Wake-on-LAN. The 'LAN IP' tab is active. It includes fields for 'Get IP Automatically?' (off), 'IP Address' (192.168.255.205), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.255.254), 'Domain Name' (empty), 'DNS Server 1' (empty), and 'DNS Server 2' (empty). A large red arrow points to the 'Apply' button at the bottom right of the form.

Load Avg: 0.00 0.00 0.00

CPU Load: 0%

Memory Free: 41.09 MB / 60.46 MB

Uptime: 0d 00h 21m

Wireless: 5GHz

Guest AP: 5GHz

Firmware: 3.4.4.1-013_1001C_EN

简体中文 Logout

LAN IP Settings

LAN IP DHCP Server IPTV Ethernet Switch Wake-on-LAN

Configure the LAN IP of ZL-CPE5G in AP mode.

Get IP Automatically?

IP Address: 116.30.231.200
192.168.255.100/200

Subnet Mask: 255.255.255.0

Default Gateway:

Domain Name:

DNS Server 1:

DNS Server 2:

Apply

After change the IP, then will appear this page.

116.30.231.200

116.30.231.200

This site can't be reached

http://116.30.231.200/ is unreachable.

Try running Windows Network Diagnostics.

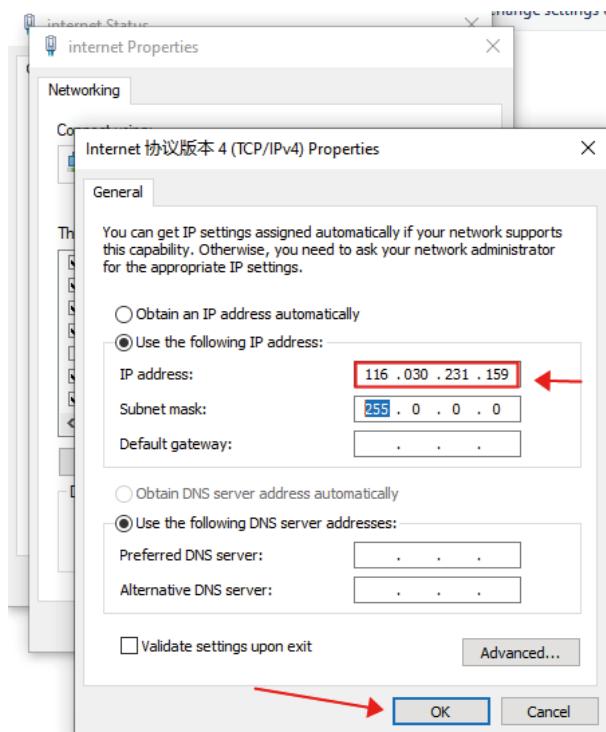
ERR_ADDRESS_UNREACHABLE

Reload

7.2 How to pair bridges in non-Digit tube mode

(After you change the IP of two bridges, then you want to access in the bridge, please modify your computer's IP, the IP must be in the same LAN as the bridge.)

Change your computer's IP to 116.30.231.xxx (IP couldn't be same as two bridges)



Open a browser to access in the slave bridge.



Click “Wireless 5GHz”-“Bridge” and choose the “AP-Client (AP is disabled)”. Then enter in the STA SSID and Shared key (which is the new master bridge’s SSID and password) and click “Apply” to pair two bridges.

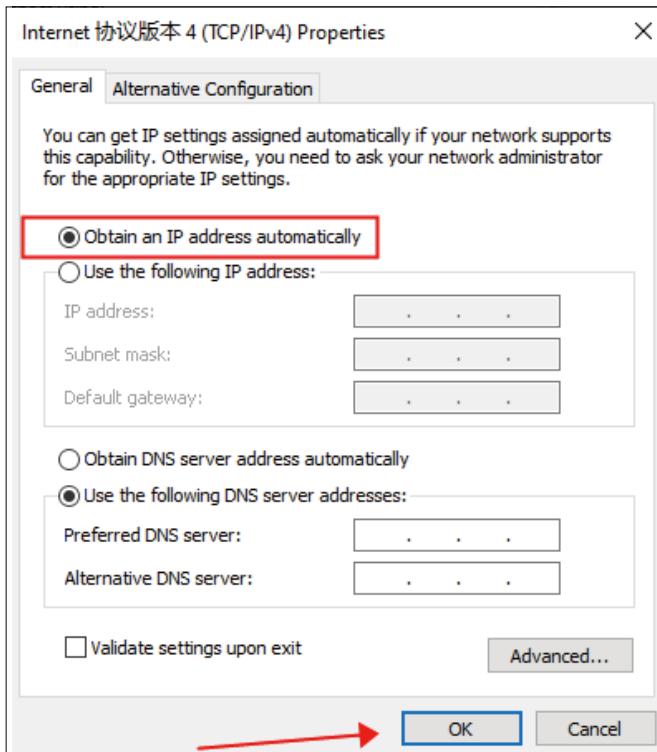
The screenshot shows the ZL-CPE5G web interface. At the top, there's a summary box with Load Avg., CPU Load, Memory Free, and Uptime information. To the right, there are Wireless settings (5GHz), Guest AP (5GHz), Firmware (3.4.4.1-013_1001C_EN), and language/Logout buttons. The main content area has a sidebar with Network Map, Network Traffic, Bridge Set, Ping dog, Advanced Settings (with Wireless 5GHz selected), LAN, Administration, Customization, Bright Info, and System Log. The main panel title is "Wireless - Bridge (5GHz)" with tabs for General, Guest AP, Bridge (selected), Wireless MAC Filter, RADIUS Settings, and Professional. A note says: "Bridge function allow your ZL-CPE5G to connect to an access point wirelessly. • To ensure the AP-Client connection, please set the same channel with remote AP. • AP-Client performs MAC-addresses translation through our MAC (MAT feature)." The configuration fields are: Wireless Operation Mode (AP-Client (AP is disabled)), Radio Channel (120), STA SSID (master-wireless), Authentication Method (WPA2-Personal), WPA Encryption (AES), and WPA Pre-Shared Key (master123456). The "Apply" button at the bottom right is highlighted with a red arrow pointing to it.

When the signal indicator lights up, it means pairing is successful.



Set up another slave bridge in the same way.

After setting up the bridge, reset your computer's IP.



Chapter 8 - After-Sales Service

Tips:

1. The installation of this device requires network knowledge, if you can not install it, please contact us or ask a professional for help, if the product you receive is damaged or miss any accessories, please contact us for exchange or resend.
2. The wireless transmission maximum speed (wireless bridge A to B unit) is 900Mbps, the LAN network transmission maximum speed (POE adapter to wireless bridge connection) is 100/433Mbps, the LAN port is 100/1000Mbps standard.

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