

# User Manual

( WAP-8121 )



HW: V3  
UM : V1.3

# Default Settings

IP Address	192.168.188.253
Password	admin
WiFi SSID	LevelOne 2.4G / LevelOne 5.8G
Password	66666666

## Attention:

### Check box contents:

1. Screw Kit
2. RJ45 Network Cable
3. Quick Installation Guide
4. Resource CD (User Manual, QIG)

### Warning:



#### **Attention**

- Do not use the product in high humidity or high temperatures.
- Do not use the same power source for the Product as other equipment. Only use the power adapter that comes with the package. Using a different voltage rating power adapter may damage the device.
- Do not open or repair the case yourself. If the Product is too hot, turn off the power immediately and have it repaired at a qualified service center.
- Place the Product on a stable surface and avoid using this product and all accessories outdoors.

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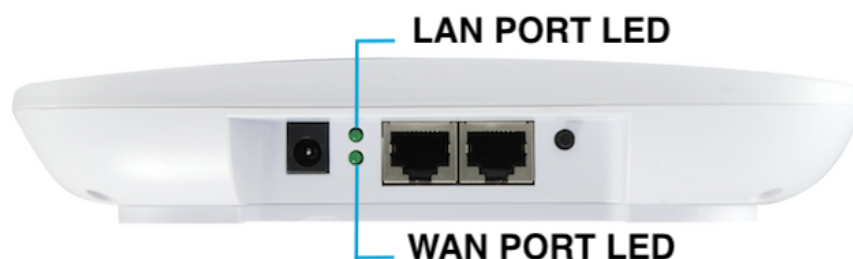
# Chapter 1 Hardware and Operation mode Instruction

## 1.1 LED indicator:



**LED Light State description**

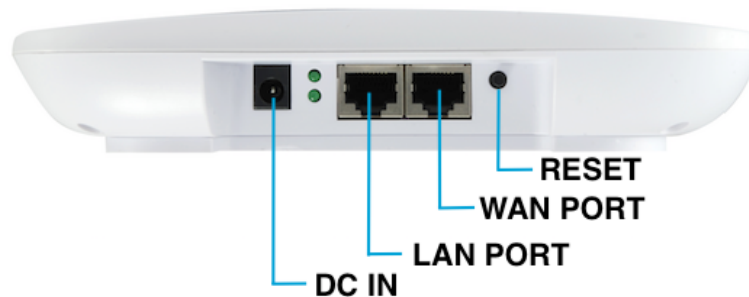
Color	Status	Description
--	Off	The WAP-8121 is not receiving power.
Red	On	Device Startup state
Green	On	2.4G WIFI SSID Broadcast ON
Blue	On	5.8G WIFI SSID Broadcast ON
Red, Green, Blue	Fast Blinking	Reset to Defaults
Green, Blue	Blinking	Green and Blue lights cross flash ,The device status is running normally.



**LED Light State description**

LED	Color	Status	Description
LAN (10/100Mbps RJ45 Ports)	Green	Fast Blinking	The port is transmitting/receiving packets
	Green	Solow Blinking	On LAN is connected
	--	Off	The port has no active network cable connected, or it is not established a link to connected device.
WAN (10/100Mbps RJ45 Ports)	Green	Fast Blinking	The port is transmitting/receiving packets
	Green	Solow Blinking	On WAN is connected
	--	Off	The port has no active network cable connected, or it is not established a link to connected device.

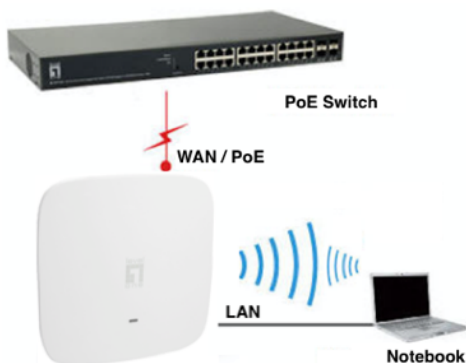
## 1.2 Interface Description



Button / Interface	Description
LAN port (10/100Mbps RJ45 port)	The LAN port is used to connect to network devices, such as a switch or PC / NB
WAN port (10/100Mbps RJ45 port)	The WAN/POE port is used to connect to network devices, such as a POE switch OR POE adapter to power the device ( IEEE802.3at ) 48 VDC. ( PoE adapter unit is to be ordered separately )
RESET (Reset to Default)	With the AP powered on, press the Reset button for 10~14 seconds until the Signal Strength LED blink faster than ever. The AP will restart itself and reset the device to factory default settings.
DC IN	12V/1.5A DC input Power Adapter . ( Power adapter unit is to be ordered separately )

## 1.3 Way to supply power for this device :

1. PoE Power supply : pls make sure the PoE switch comply with IEEE 802.3at standard.



2. The WAN port connects to the POE adapter (48V DC).

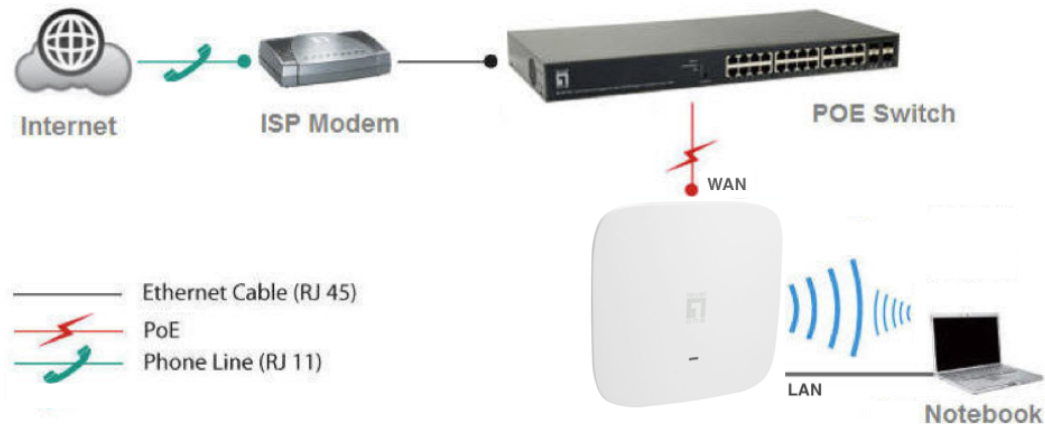
**Note:** Adapter unit is to be ordered separately



## 1.4 Operation Mode description and usage:

There are four operation mode : Gateway mode , Repeater mode , WISP Mode, AP Mode .

- **Gateway mode:** Connect to the ISP Modem through the cable network to connect to the Internet and use with 3 types of Internet access (PPPoE , DHCP, Static IP)



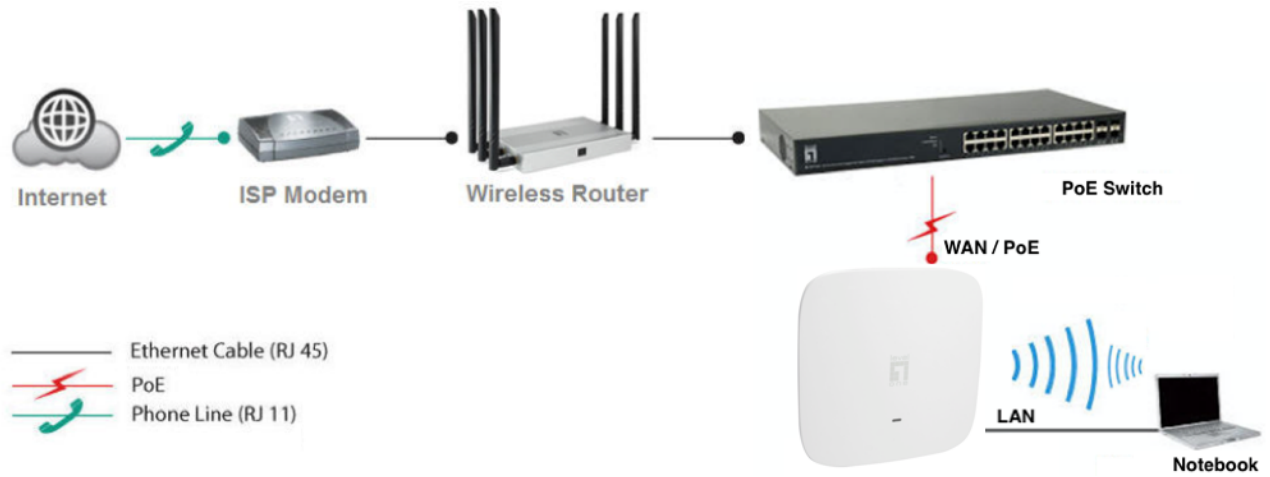
- **WISP mode:** Receive ISP Modem Wireless network and select one of them Internet access method (PPPoE, DHCP, static IP).  
( **Note:** Adapter unit is to be ordered separately )



- **Repeater mode:** The AP can bridge and extend the existing WiFi signal in this operation mode . ( **Note:** Adapter unit is to be ordered separately )



- **AP Mode:** Please Make sure that the upper device has a router, Only after confirming can use AP Mode

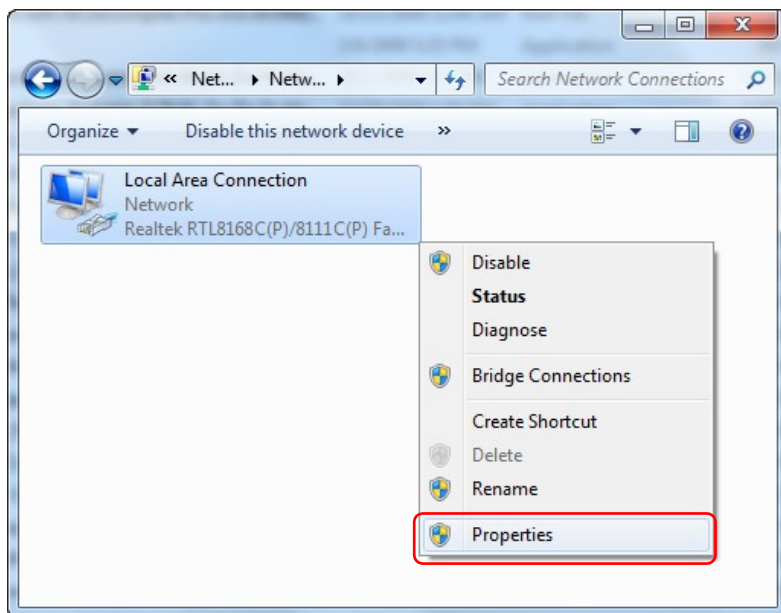


## Chapter 2 Login

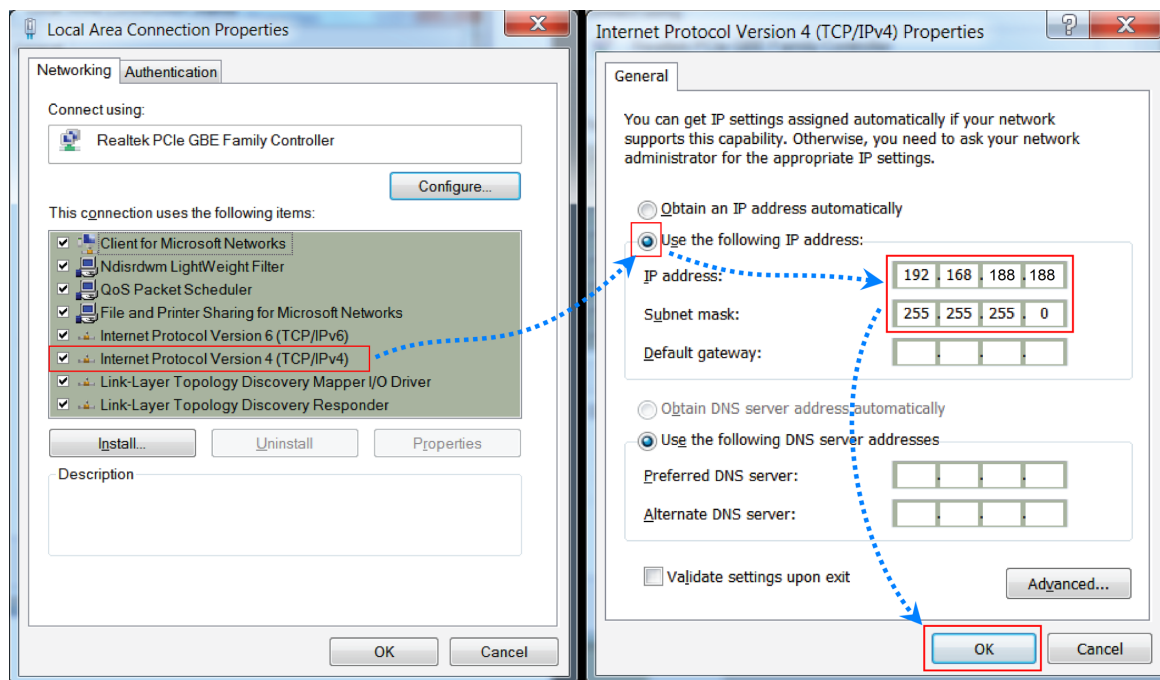
The necessary information about log in is displayed on the sticker of the product, including the URL, User Name and Pass Word

1.Connect the Ceiling AP with computer

2.Configure the PC's local connection IP address as 192.168.188.X (X is number from 2 to 252), subnet mask is 255.255.255.0, follow P1 and P2 to finish.

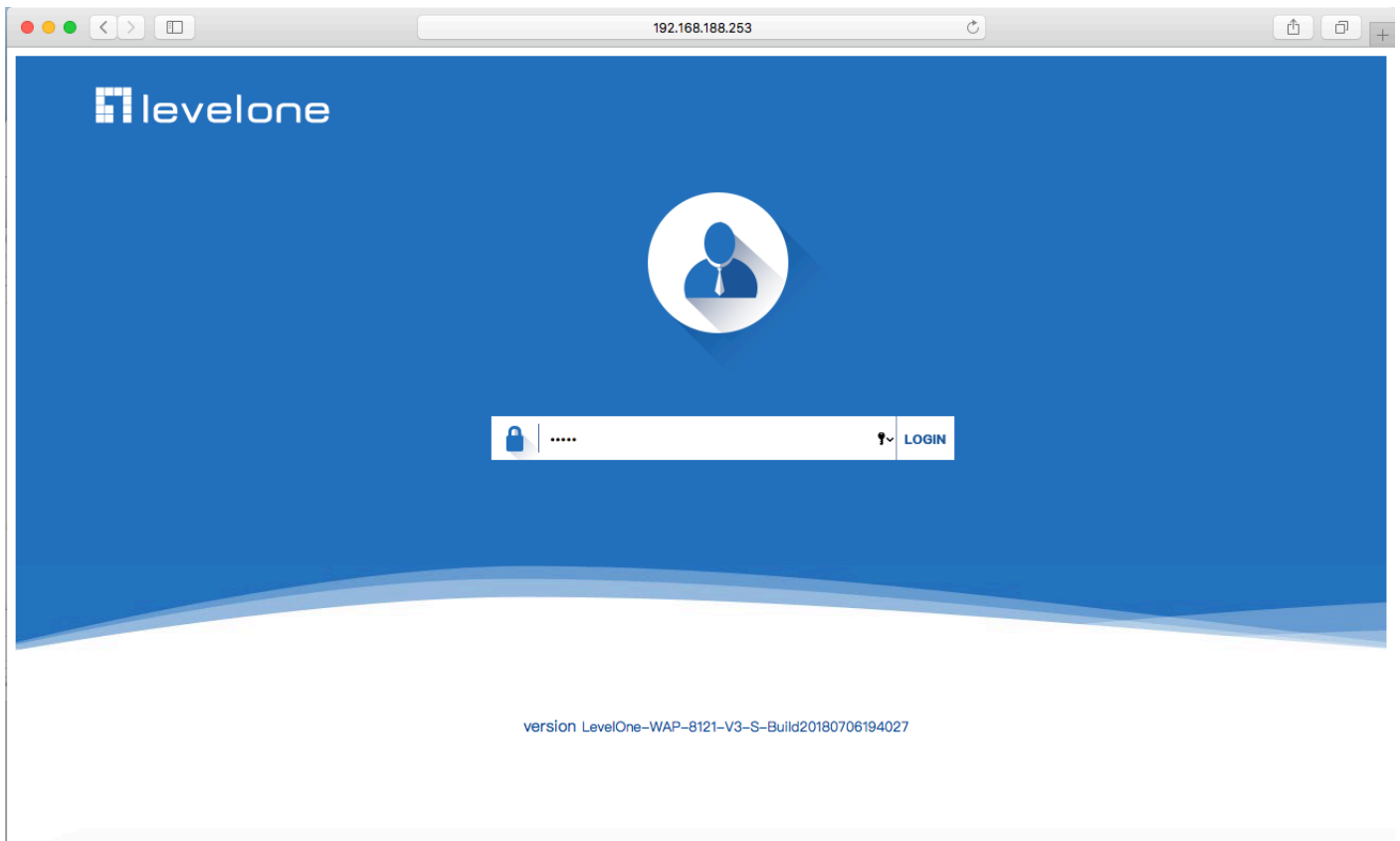


▲ P1 Setting of computer's IP address

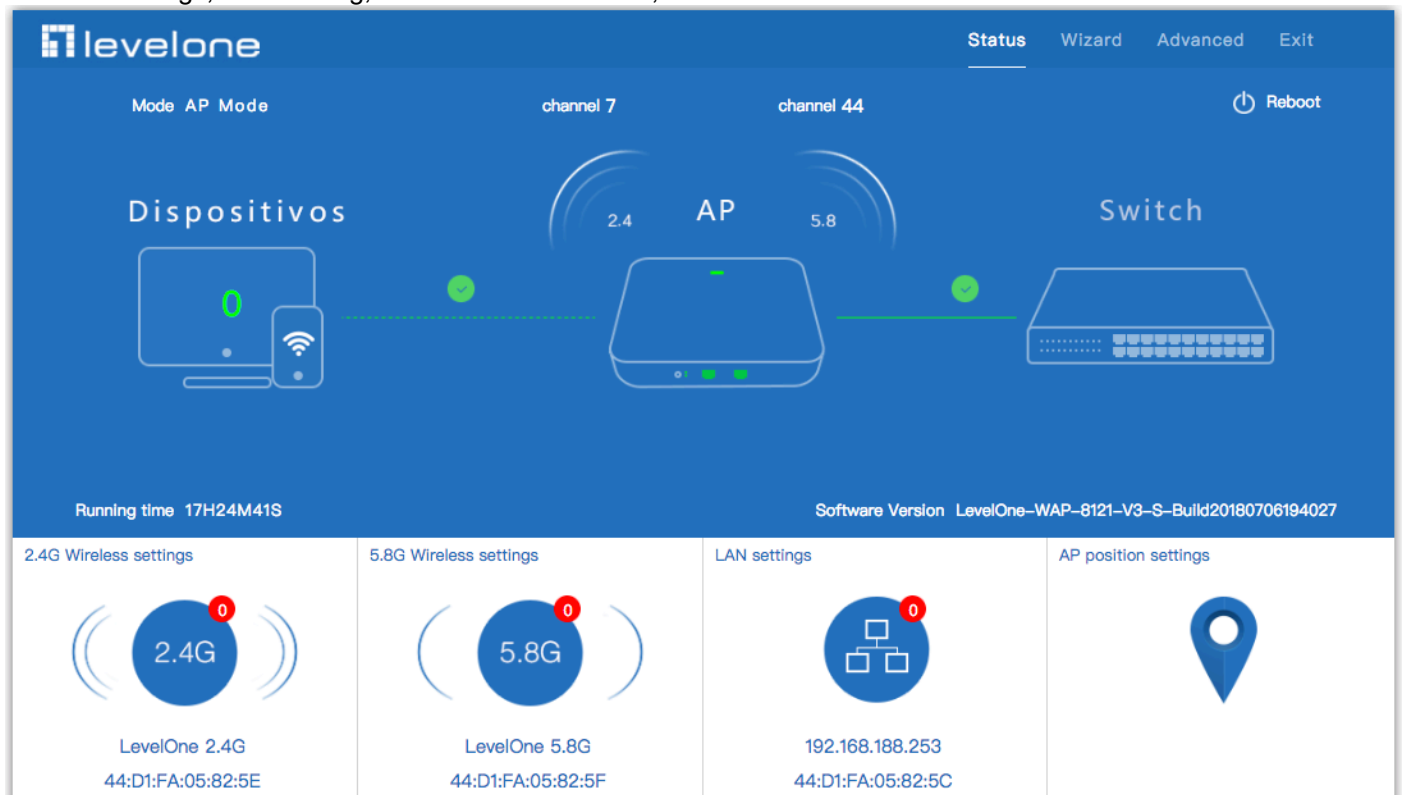


▲ P2 Setting of computer's IP address

3. Input 192.168.188.253 into browser, then pop up the login page, the default login password: **admin**, then login,

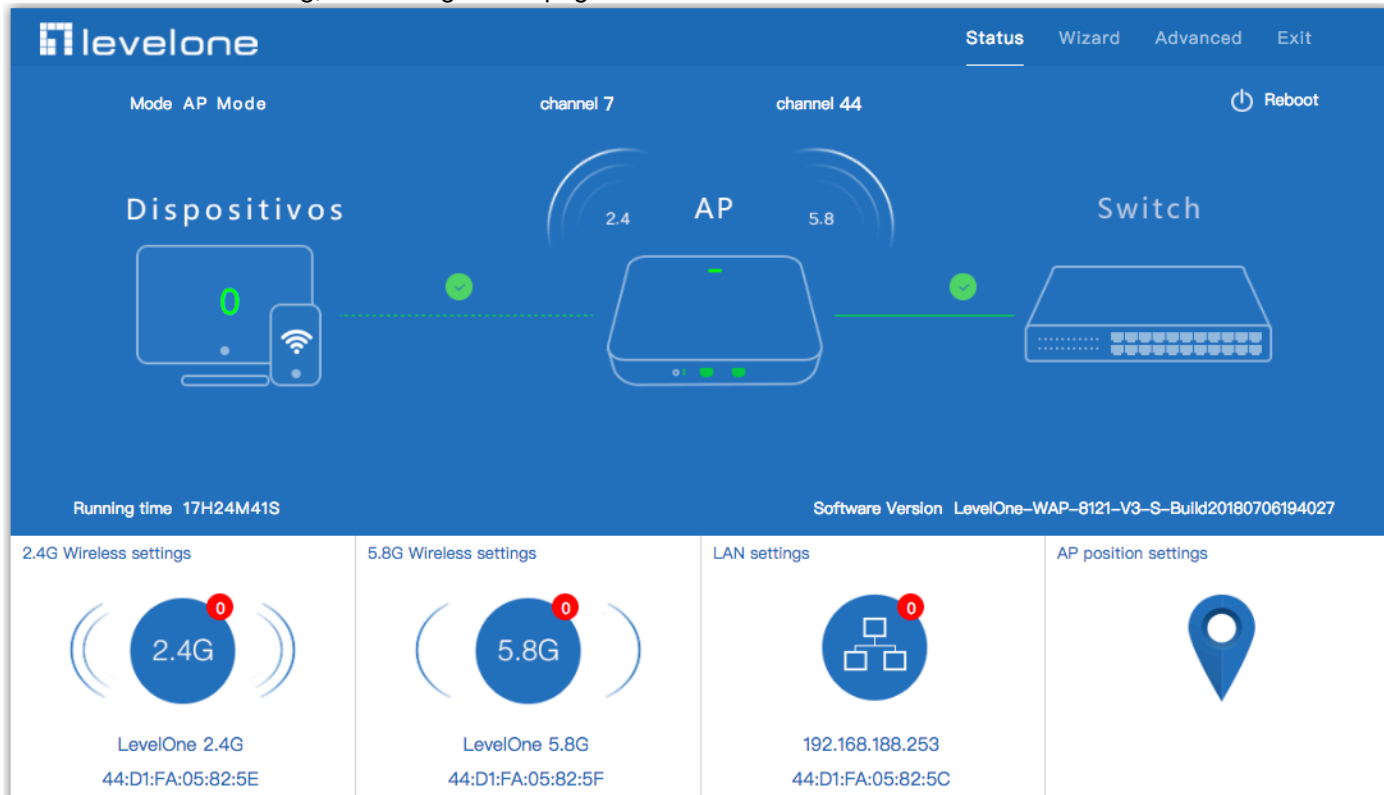


4. After login, This page will show the Wireless AP's default operation mode, channel, connection status, CPU usage, Wireless settings, LAN Setting, Wireless AP's Location, hardware/firmware version.



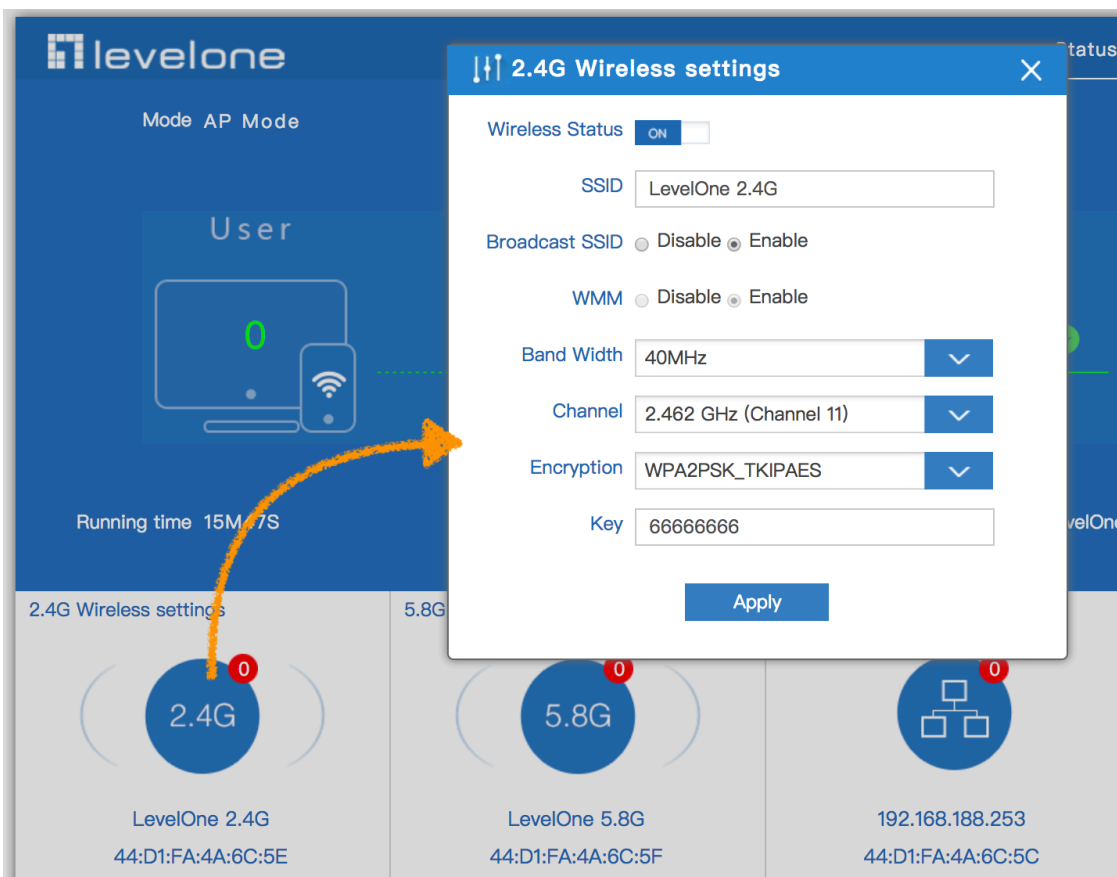
## Chapter 3 WEB GUI interface Setting

1. Then in Wireless Setting, GUI configuration page showed as below:

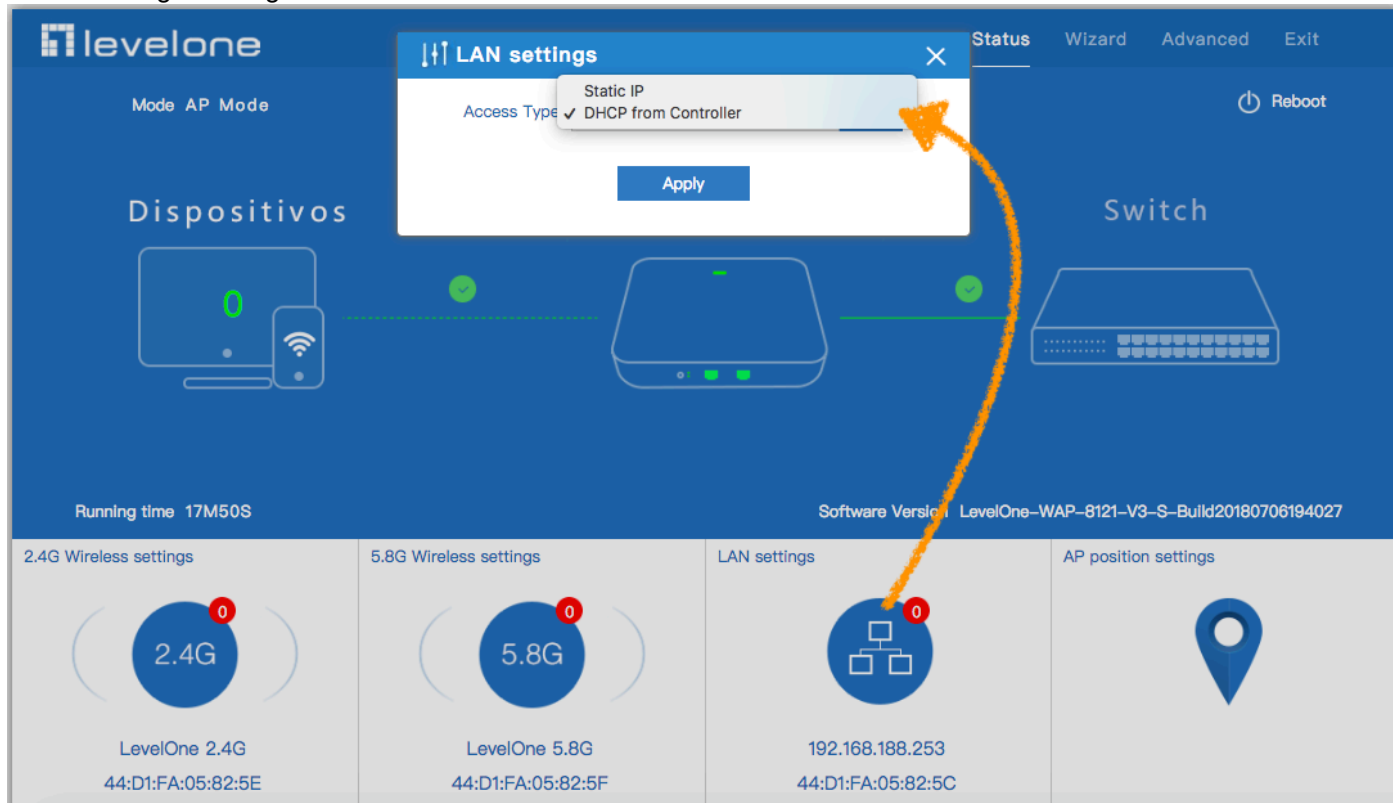


2. Then in Wireless Setting, GUI configuration page showed as below:

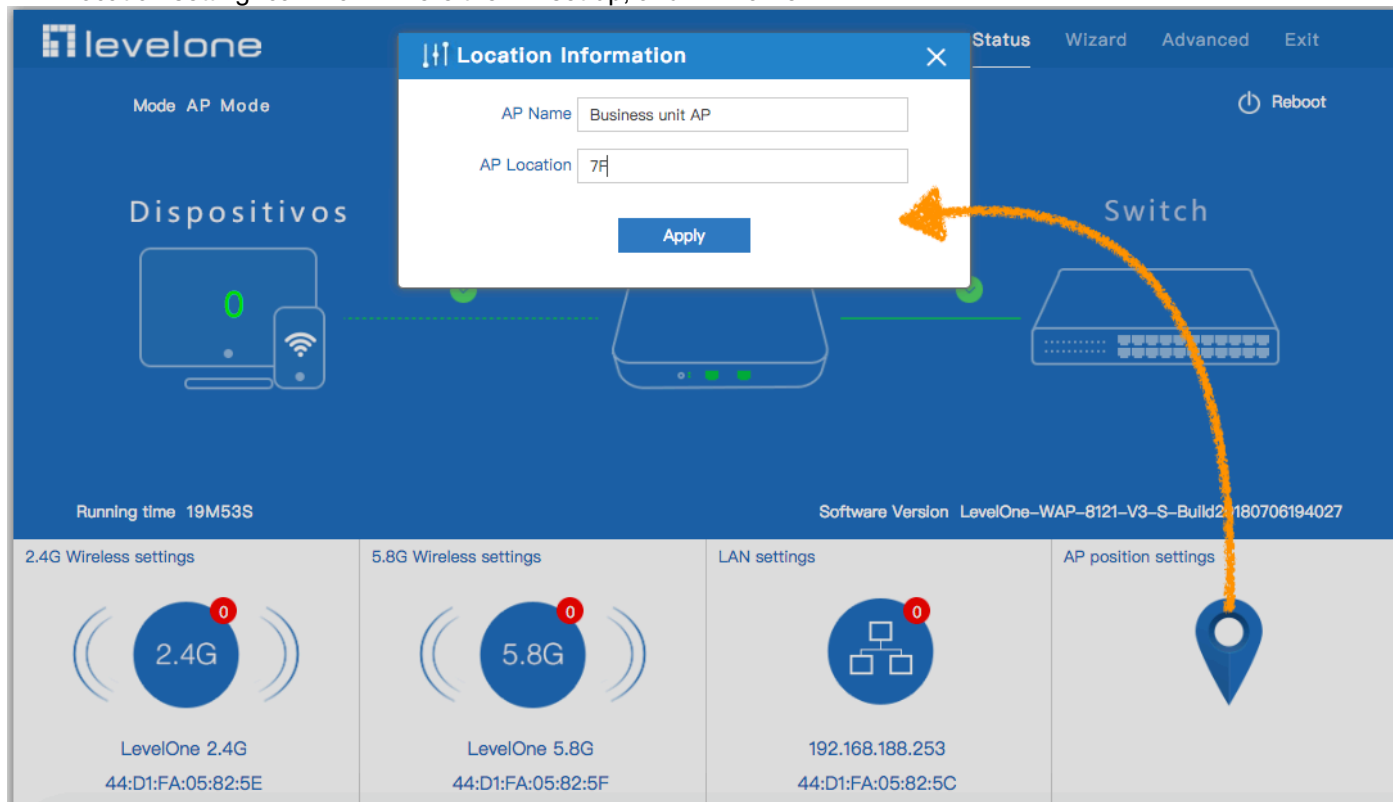
User can configure the SSID, password, band width, channel here, then Apply to finish.



### 3. LAN Setting to configure the Static IP or DHCP from Controller



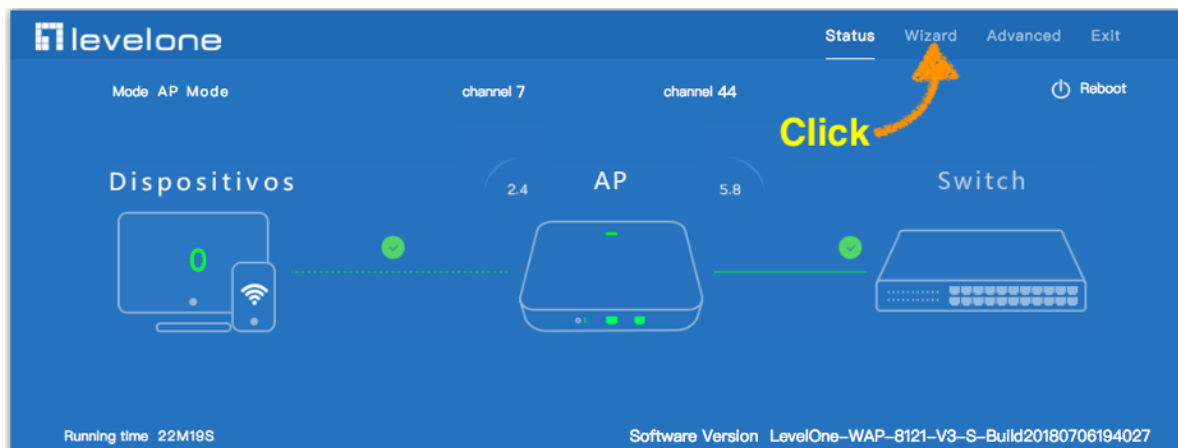
### 4. AP location setting: can mark where the AP set up, and AP name





## 3.1 Wizard :

1.Click Wizard in Status page, will pop up following page to configure the operation mode and there are explanation for each operation mode for better application.



2.Wizard: It instruct users to configure wireless AP's operation mode based on needs: there are four operation mode including gateway, repeater, WISP, Wireless AP. Please confirm the operation mode first before configuration starting.



## 3.2 Gateway Mode:

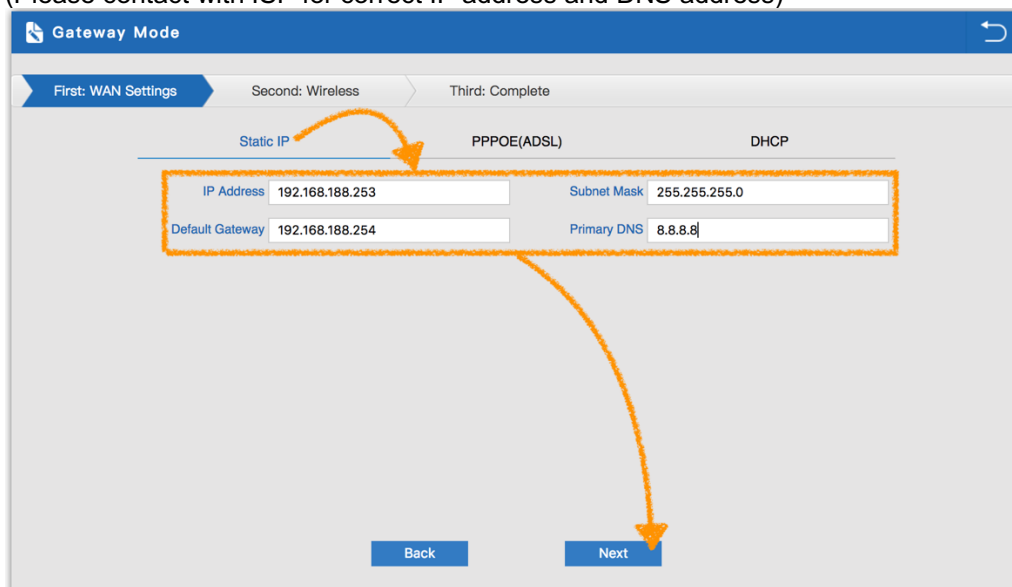
Before Click Gateway mode, confirm your internet will be static IP, PPPoE, or DHCP:

Then will pop up following picture after click it, Please choose the right WAN setting mode, then click next to continue.



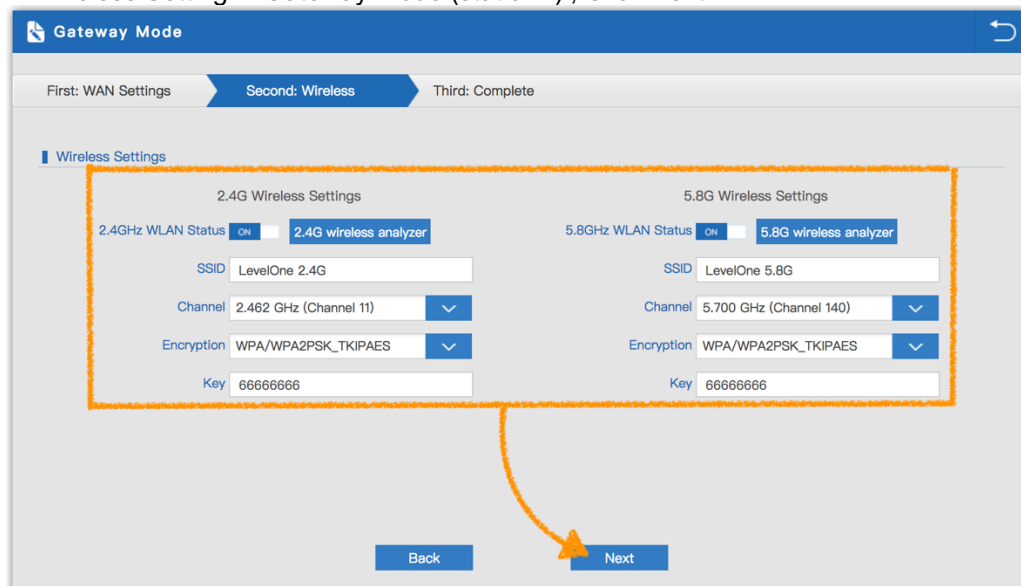
### 3.2.1 Static IP setting in Gateway Mode :

1. Sample Static IP mode setting method, then click next to continue.  
(Please contact with ISP for correct IP address and DNS address)



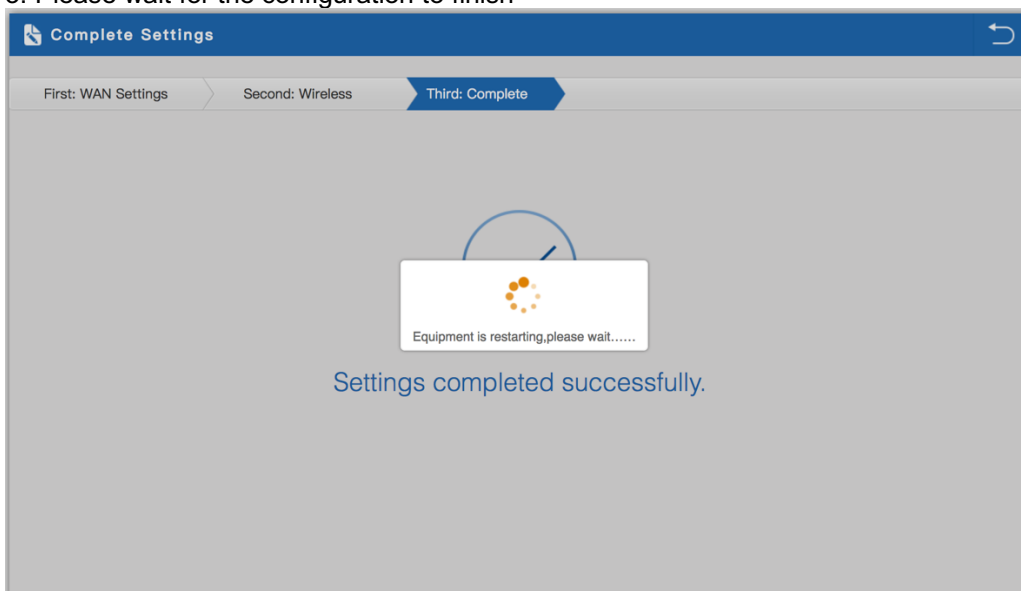
The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'First: WAN Settings' tab is active. Below it, there are three radio buttons: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'Static IP' radio button is selected. Below the radio buttons, there are four input fields: 'IP Address' (192.168.188.253), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.188.254), and 'Primary DNS' (8.8.8.8). An orange dashed box highlights these four input fields. At the bottom, there are two buttons: 'Back' and 'Next'. An orange arrow points from the 'Next' button to the 'Static IP' radio button.

2. Wireless Setting in Gateway Mode (static IP) , Click Next



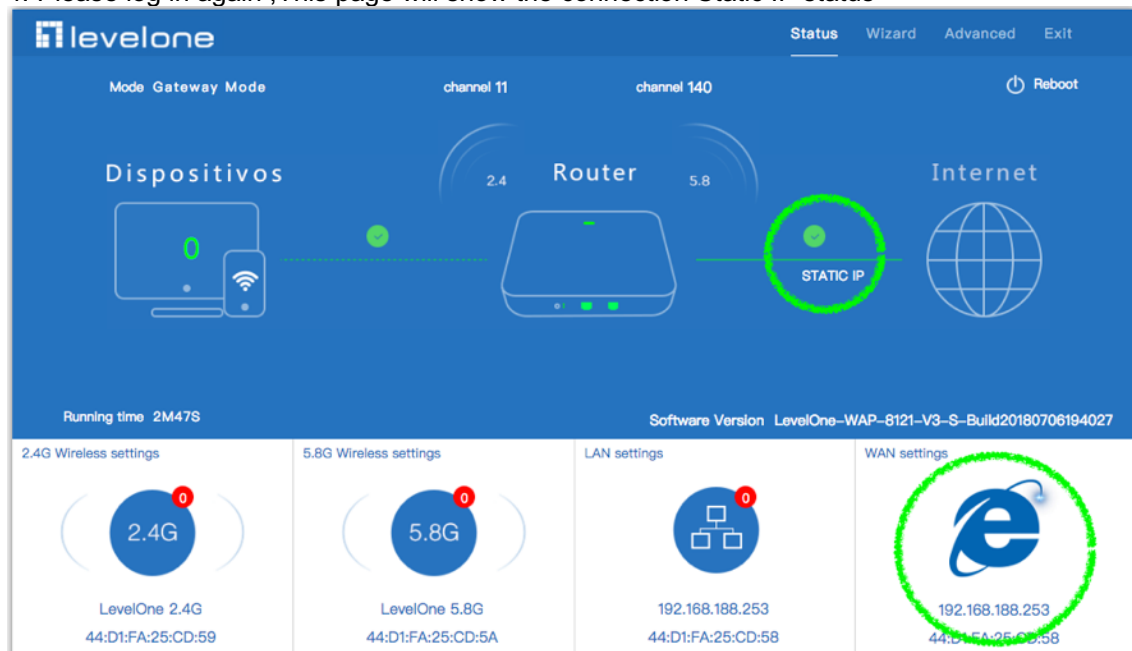
The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'Second: Wireless' tab is active. Below it, there is a section titled 'Wireless Settings'. This section contains two sub-sections: '2.4G Wireless Settings' and '5.8G Wireless Settings'. Each sub-section has a 'WLAN Status' toggle (ON), a 'wireless analyzer' button, an 'SSID' input field, a 'Channel' dropdown menu, an 'Encryption' dropdown menu, and a 'Key' input field. An orange dashed box highlights the '2.4G Wireless Settings' and '5.8G Wireless Settings' sub-sections. At the bottom, there are two buttons: 'Back' and 'Next'. An orange arrow points from the 'Next' button to the '2.4G Wireless Settings' sub-section.

3. Please wait for the configuration to finish



The screenshot shows the 'Complete Settings' screen. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'Third: Complete' tab is active. In the center of the screen, there is a large circular progress indicator with a blue arc. Below the progress indicator, there is a text box that says 'Equipment is restarting, please wait.....'. Below the text box, there is a message that says 'Settings completed successfully.'

4. Please log in again ,This page will show the connection Static IP status



### 3.2.2 PPPoE(ADSL) setting in Gateway Mode :

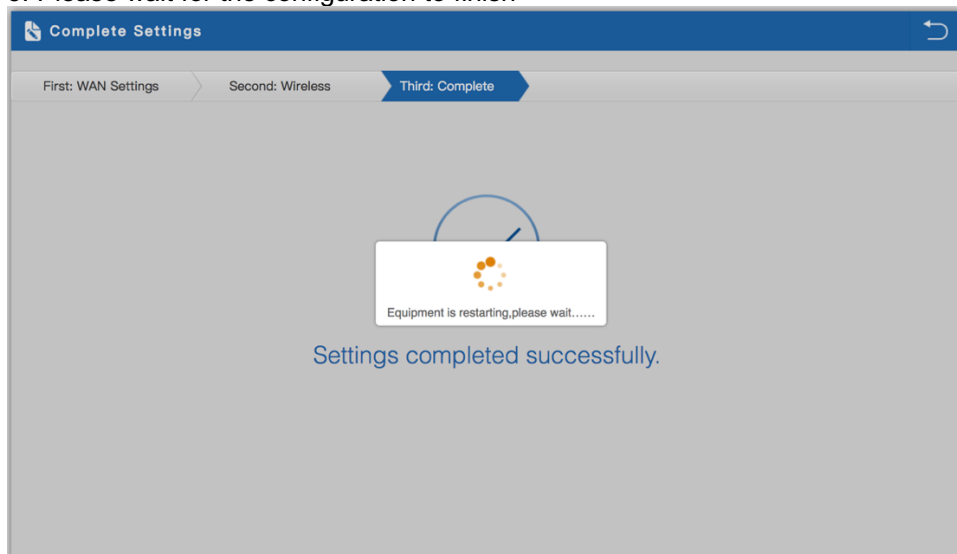
1. Sample PPPoE mode setting method, then click next to continue.  
(Please contact with ISP for correct PPPoE Name and Password)

The screenshot shows the Gateway Mode WAN Settings page. The page has three tabs: First: WAN Settings, Second: Wireless, and Third: Complete. The First: WAN Settings tab is active. Under this tab, there are three options: Static IP, PPPoE(ADSL), and DHCP. The PPPoE(ADSL) option is selected and highlighted with an orange box. Below the options, there are two input fields: PPPoE Name (87654321@hinet.net) and PPPoE Password (\*\*\*\*\*). An orange arrow points from the PPPoE(ADSL) option to the input fields. At the bottom, there are Back and Next buttons. The Next button is highlighted with an orange arrow.

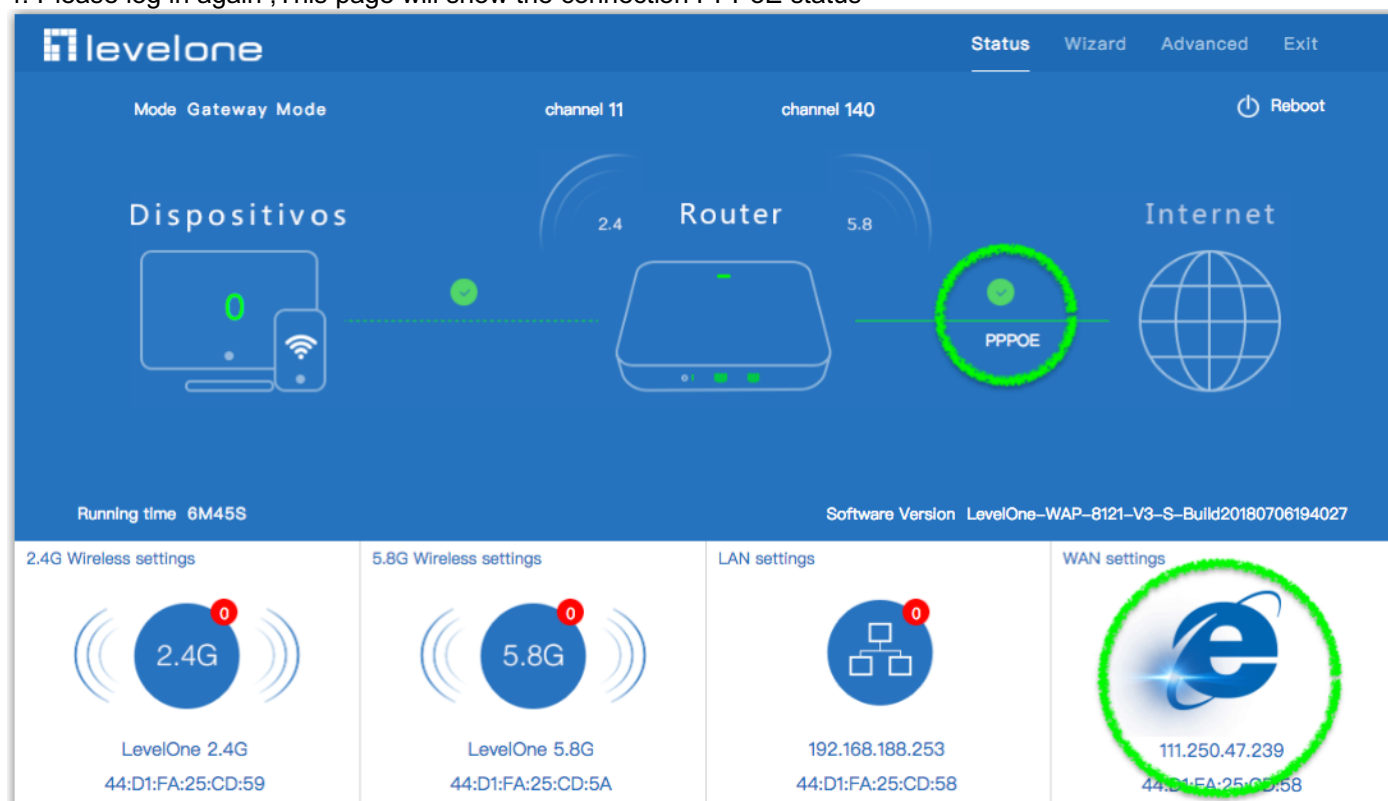
2. Wireless Setting in Gateway Mode (PPPoE), Click Next

The screenshot shows the Gateway Mode Wireless Settings page. The page has three tabs: First: WAN Settings, Second: Wireless, and Third: Complete. The Second: Wireless tab is active. Under this tab, there are two sections: 2.4G Wireless Settings and 5.8G Wireless Settings. Both sections are highlighted with an orange box. In the 2.4G Wireless Settings section, the 2.4GHz WLAN Status is ON, and the 2.4G wireless analyzer is selected. The SSID is LevelOne 2.4G, the Channel is 2.462 GHz (Channel 11), the Encryption is WPA/WPA2PSK\_TKIPAES, and the Key is 66666666. In the 5.8G Wireless Settings section, the 5.8GHz WLAN Status is ON, and the 5.8G wireless analyzer is selected. The SSID is LevelOne 5.8G, the Channel is 5.700 GHz (Channel 140), the Encryption is WPA/WPA2PSK\_TKIPAES, and the Key is 66666666. At the bottom, there are Back and Next buttons. The Next button is highlighted with an orange arrow.

3. Please wait for the configuration to finish



4. Please log in again ,This page will show the connection PPPoE status



### 3.2.3 DHCP setting in Gateway Mode :

1. Sample DHCP mode setting method, then click next to continue.  
(Please contact with ISP for correct IP address and DNS address. )

The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. Below these, there are three options for the access mode: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'DHCP' option is selected and highlighted with a blue underline. A message box in the center states: 'The current access mode is DHCP, Please click next to configure.' At the bottom, there are 'Back' and 'Next' buttons. An orange arrow points from the 'DHCP' option to the 'Next' button.

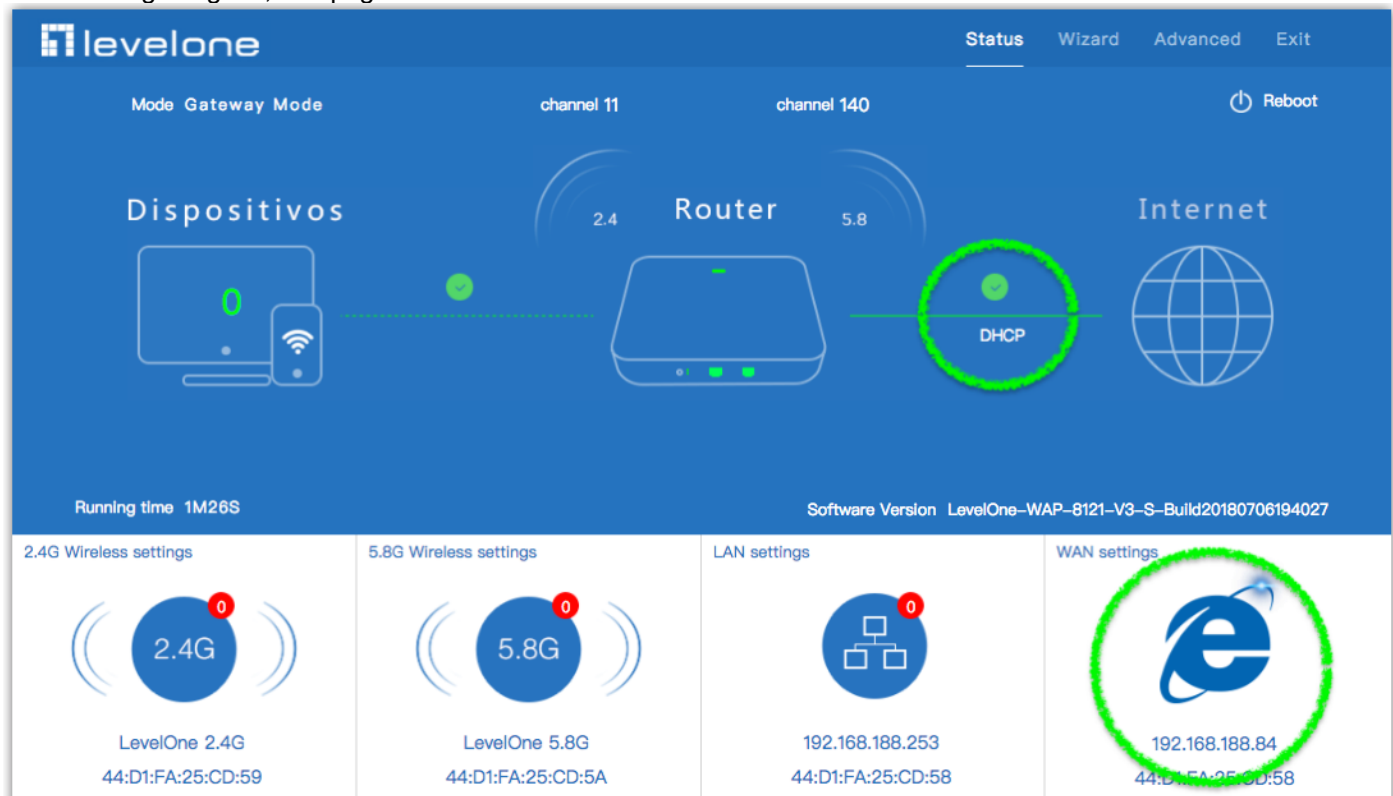
2. Wireless Setting in Gateway Mode (DHCP), Click Next

The screenshot shows the 'Gateway Mode' configuration interface, specifically the 'Wireless Settings' section. The 'Second: Wireless' tab is selected. The 'Wireless Settings' section is divided into two columns: '2.4G Wireless Settings' and '5.8G Wireless Settings'. Each column has a 'WLAN Status' toggle set to 'ON' and a 'wireless analyzer' button. Below these are fields for 'SSID', 'Channel', 'Encryption', and 'Key'. For 2.4G, the SSID is 'LevelOne 2.4G', Channel is '2.462 GHz (Channel 11)', Encryption is 'WPA/WPA2PSK\_TKIPAES', and Key is '66666666'. For 5.8G, the SSID is 'LevelOne 5.8G', Channel is '5.700 GHz (Channel 140)', Encryption is 'WPA/WPA2PSK\_TKIPAES', and Key is '66666666'. An orange box highlights the entire 'Wireless Settings' section. An orange arrow points from the bottom of this box to the 'Next' button at the bottom of the screen.

3. Please wait for the configuration to finish

The screenshot shows the 'Complete Settings' screen. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'Third: Complete' tab is selected. In the center, there is a progress indicator consisting of a circular arrow and a loading icon. Below the progress indicator, a message box states: 'Equipment is restarting, please wait.....'. At the bottom, the text 'Settings completed successfully.' is displayed.

4. Please log in again ,This page will show the connection DHCP status

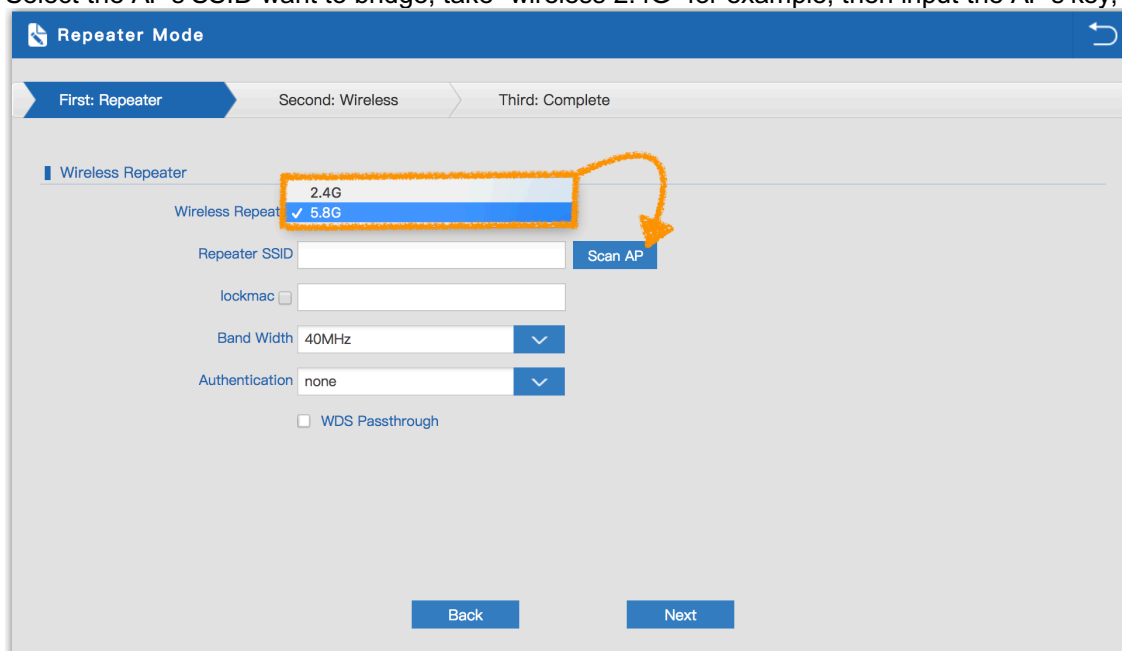


### 3.3 Repeater mode :

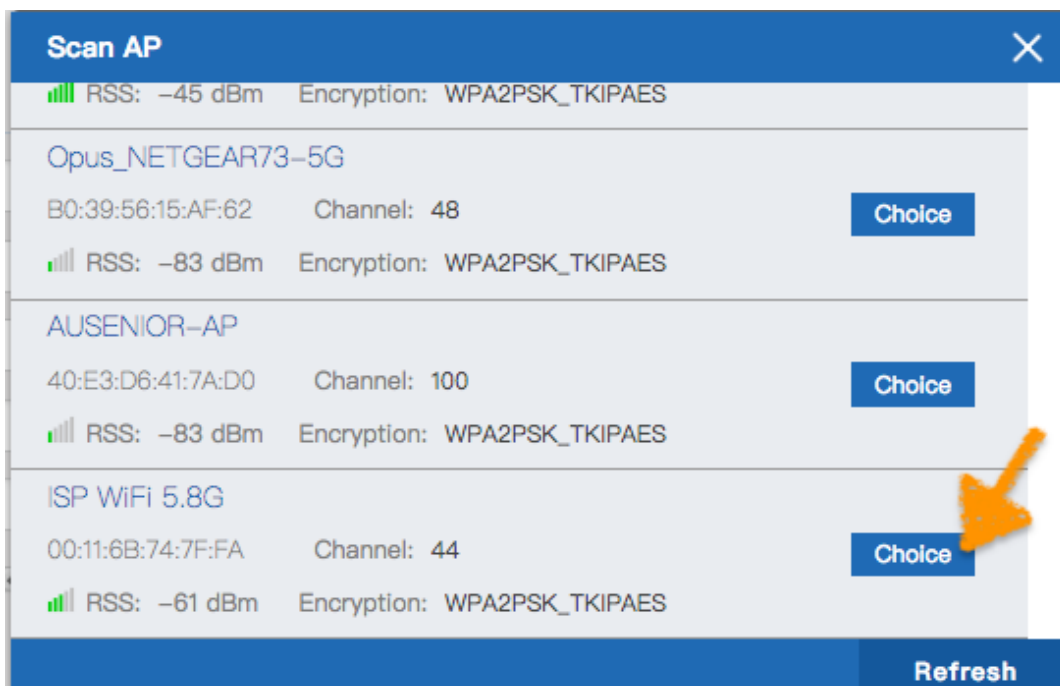


1.Can choose to relay the front-end 2.4G or 5.8G wireless signal to extend the wireless signal range.

Select the AP's SSID want to bridge, take "wireless 2.4G" for example, then input the AP's key, click Scan AP



2.Please select WIFI SSID to connect



3. Enter the WIFI SSID password to be linked, When click Next.

**Suggestion:** If the upper wireless device is not the same model (WAP-8121), Don't click to WDS Passthrough.

Repeater Mode

First: Repeater   Second: Wireless   Third: Complete

Wireless Repeater

Wireless Repeater: 5.8G

Repeater SSID: ISP WIFI 5.8G Scan AP

lockmac: ☐ 00:11:6B:74:7F:FA

Band Width: 80MHz

Authentication: WPA2PSK\_TKIPAES

Key: 66666666

☒ WDS Passthrough

Back Next

4. If choose to relay the front-end 5.8G wireless signal to extend the wireless signal range. Can choose to enable or disable the 2.4G wireless broadcast of the WAP-8121 itself.

Repeater Mode

First: Repeater   Second: Wireless   Third: Complete

Wireless Settings

2.4G Wireless Settings

2.4GHz WLAN Status: ☒ ON 2.4G wireless analyzer

SSID: LevelOne 2.4G

Channel: \* 2.462 GHz (Channel 11)

Encryption: WPA/WPA2PSK\_TKIPAES

Key: 66666666

Back Next

5. Click Return button, will back to Status, show Repeater mode data, show fail or success

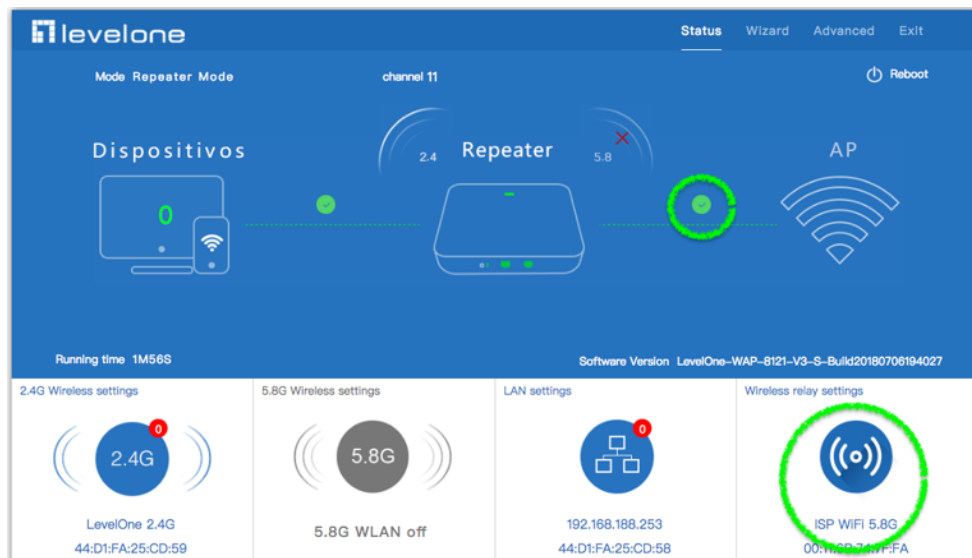
Repeater Mode

First: Repeater   Second: Wireless   Third: Complete

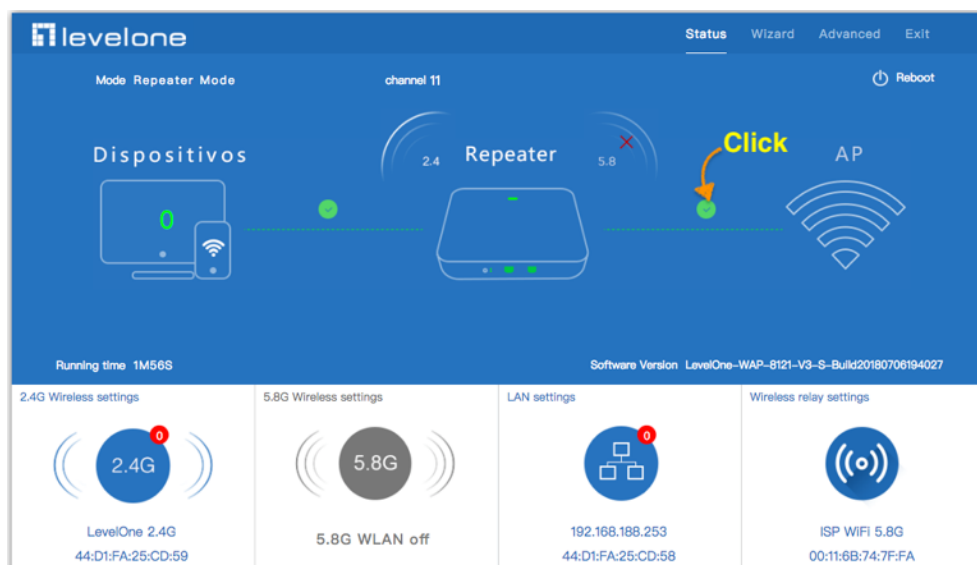
Settings completed successfully.



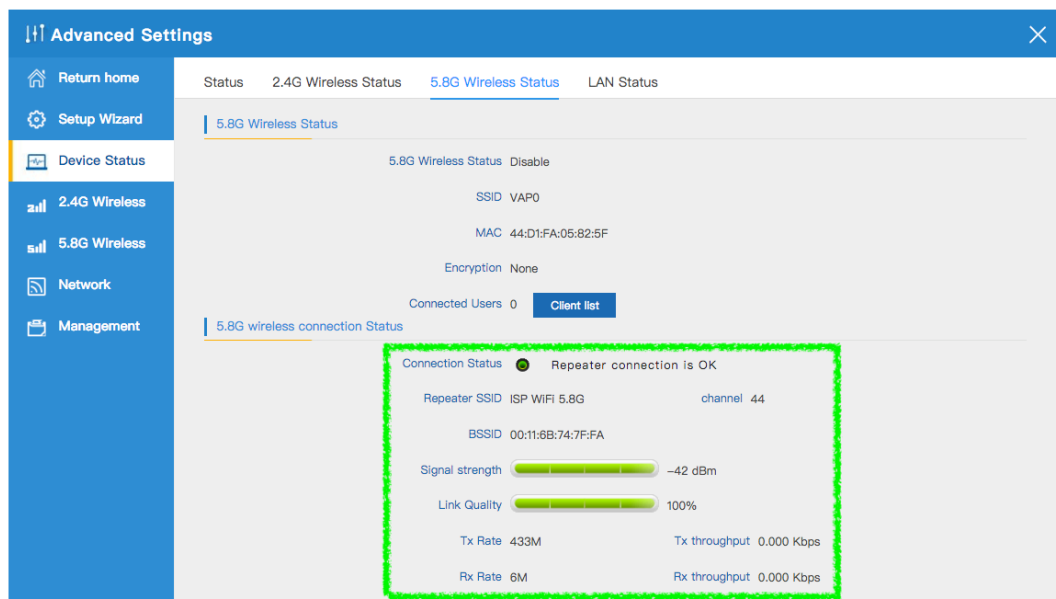
6. Check WIFI Repeater mode data. If choose to relay the front-end 5.8G wireless signal to extend the wireless signal range. In wifi repeater operation mode, WAP-8121 the default is 5.8G SSID disable.



7. Click Status button



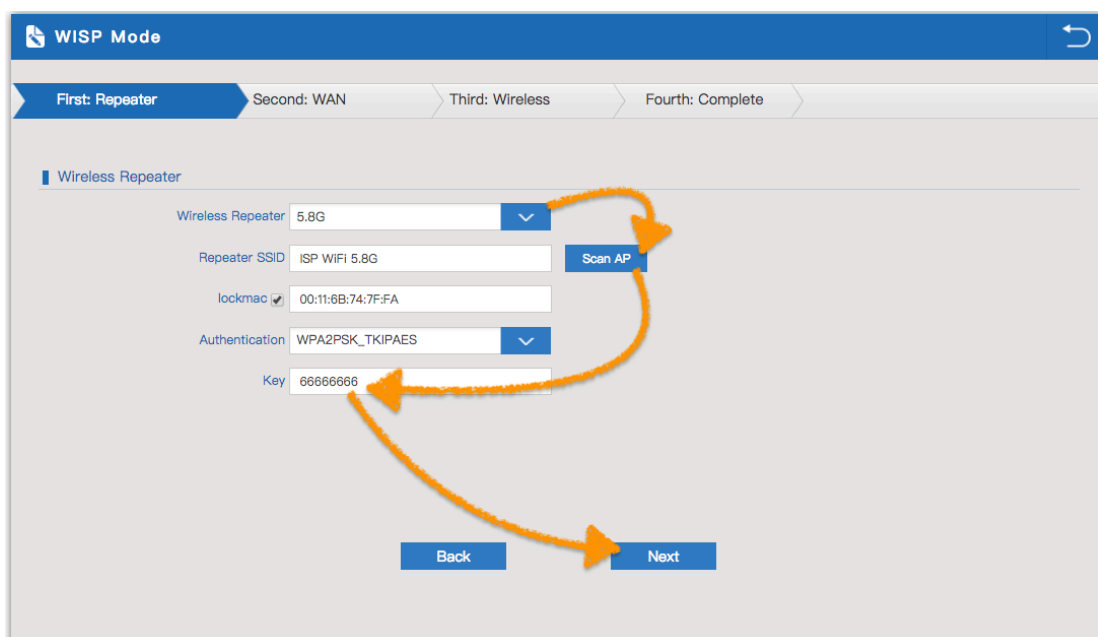
8. Check WIFI Repeater mode data



### 3.4 WISP Mode:



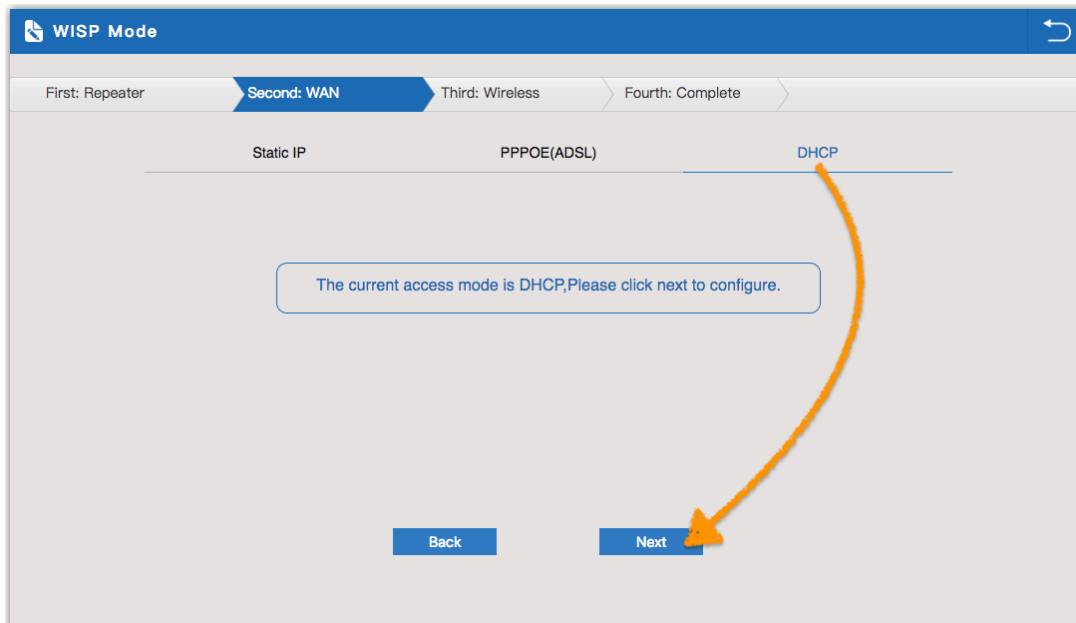
1. Select the AP's SSID you want to bridge, take "wireless 5.8G" for example, then input the AP's key, click Scan AP. Enter the WIFI SSID password to be linked, When click Next



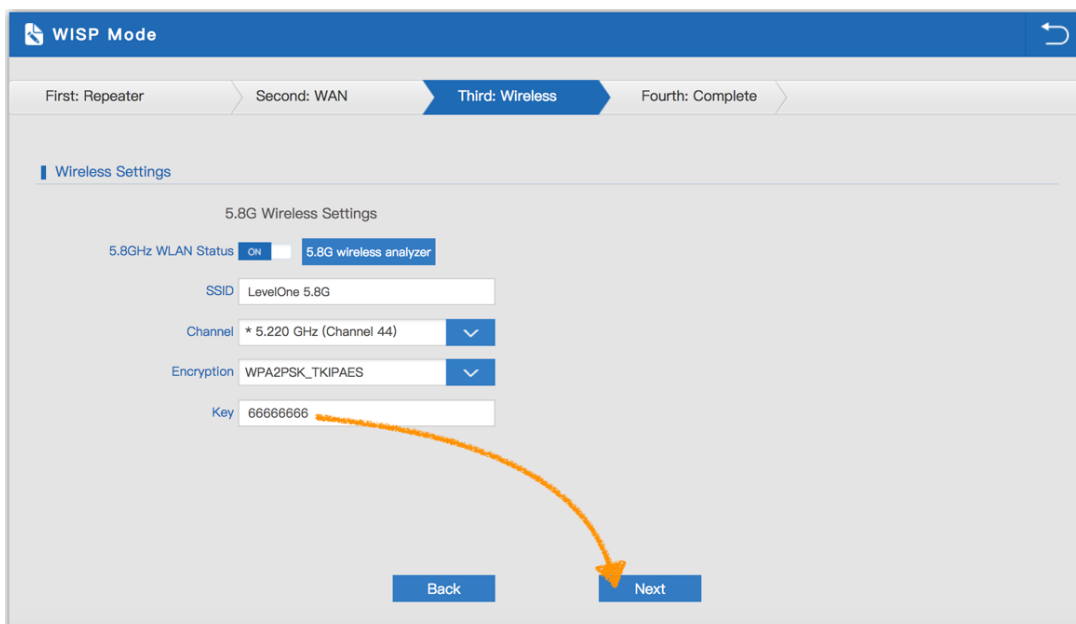
2. Before Click WISP Mode, confirm your ISP WIFI will be static IP, PPPoE, or DHCP: Then will pop up following picture after click it, Please choose the right WAN setting mode, then click next to continue.



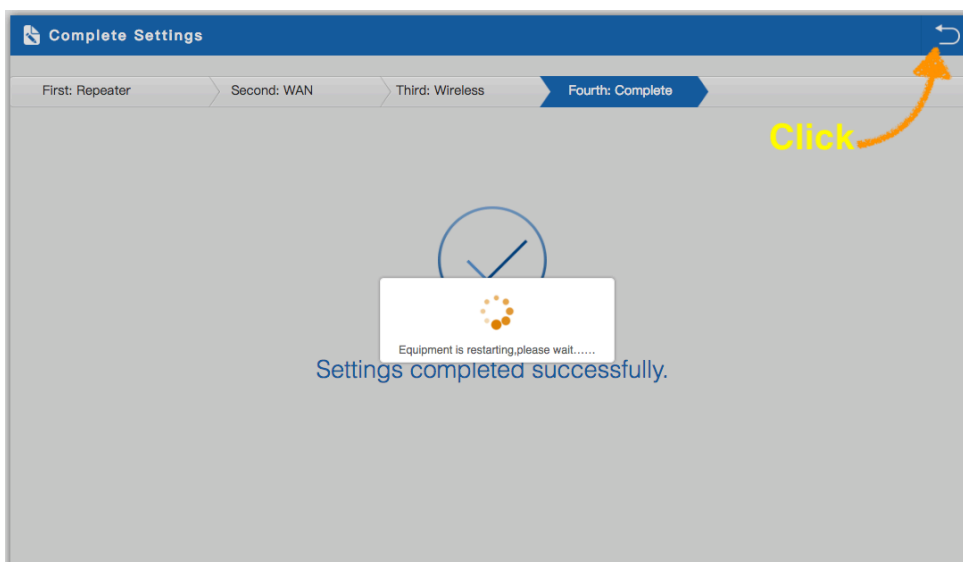
3. Take **DHCP** for example.



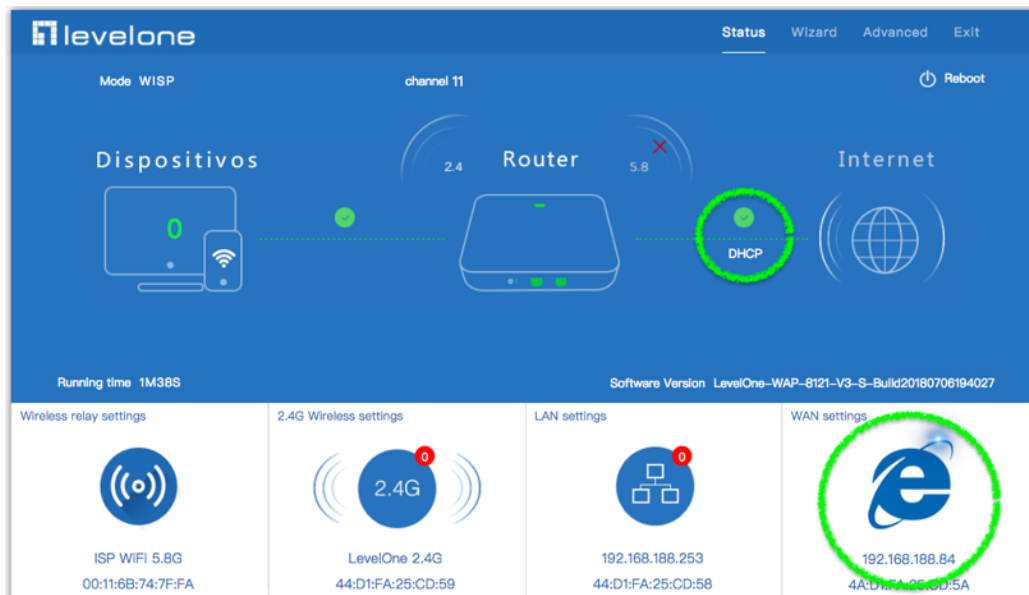
4. Configure the SSID and password AP going to broadcast.



5. Click Return button, will back to Status, show WISP mode data, show fail or success



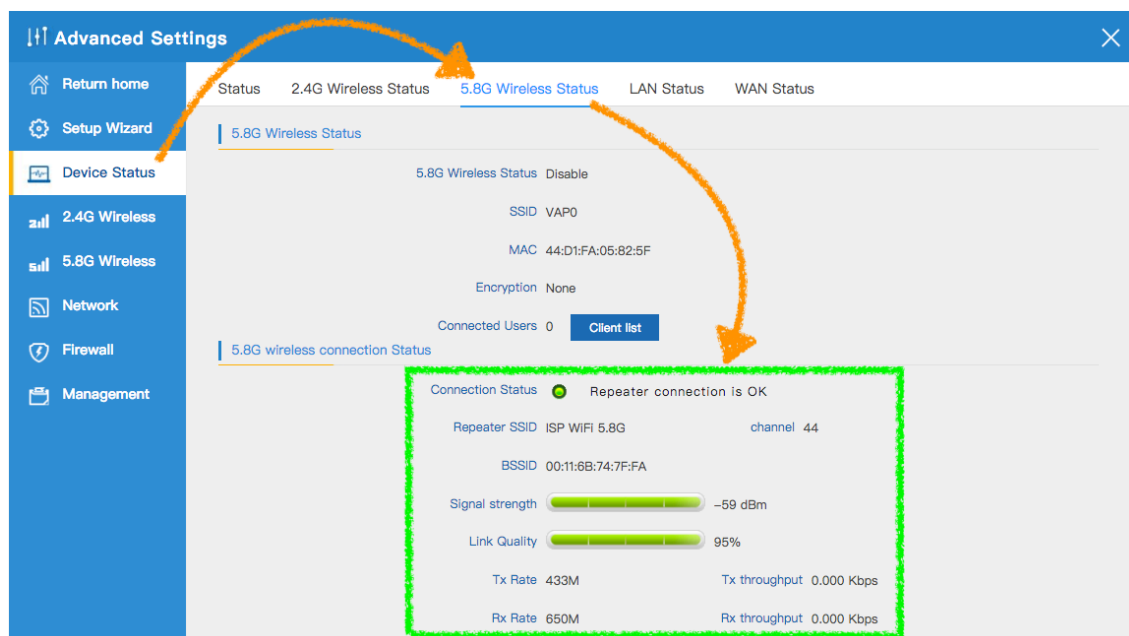
## 6. Check WISP Mode Status show fail or success



## 7. Check WISP Mode data for WAN Status , Check IP address that is received by DHCP .



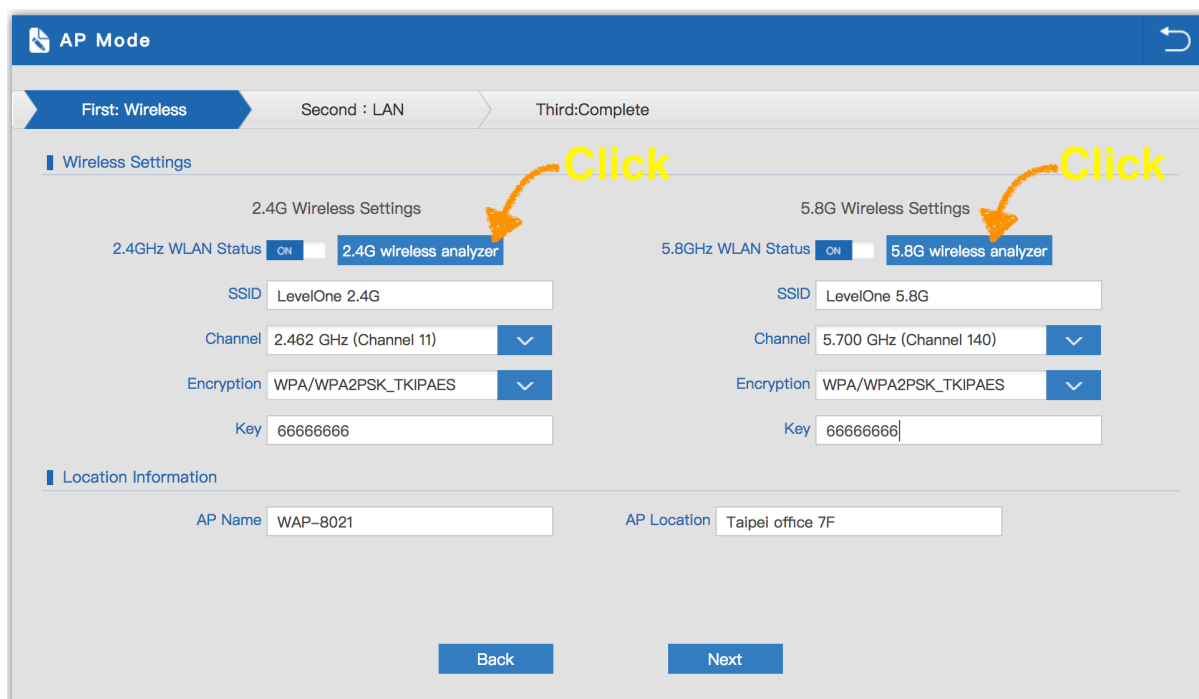
## 8. Check WISP Mode Status data



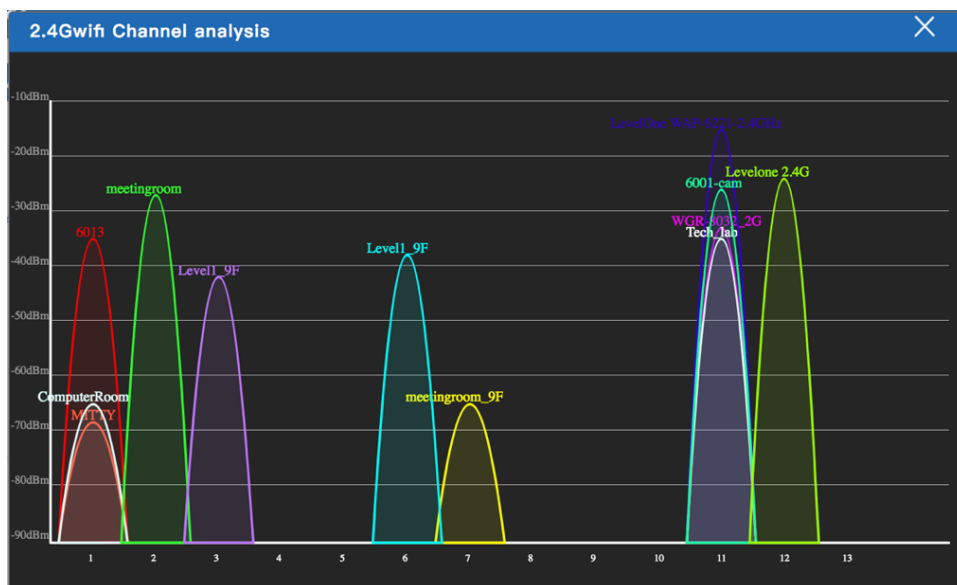
### 3.5 AP mode & Wireless analyzer :



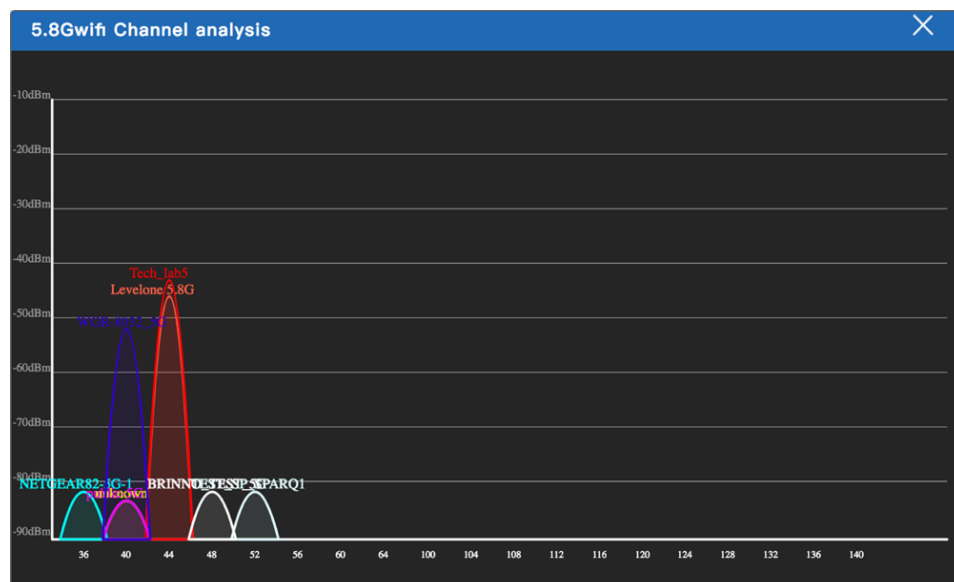
1.To make the WAP-8121 work in some clear channel, user can click wireless analyzer at first. Look for Unoccupied channel, then Wireless performance will be more stable. Picture showed as below.



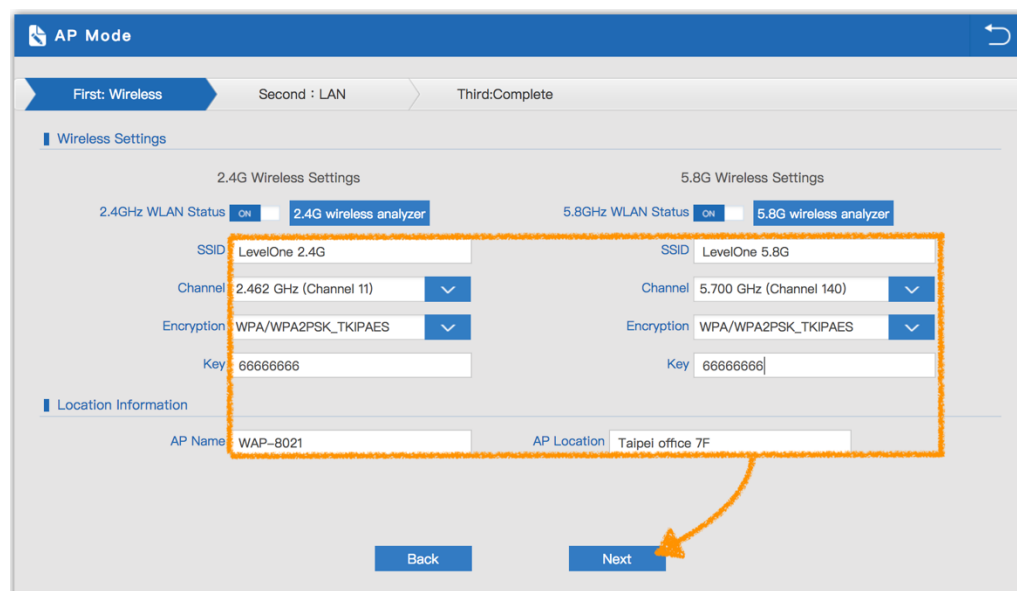
2. Wireless analyzer Look for Unoccupied channel (2.4GHz)



### 3. Wireless analyzer Look for Unoccupied channel (5.8GHz)



4. Set the wireless data, AP Location info as required, then click next to continue and enter into LAN setting. After LAN setting, complete the AP mode configuration and back to Status.



AP Mode

First: Wireless Second: LAN Third: Complete

Wireless Settings

2.4G Wireless Settings

2.4GHz WLAN Status ☒ 2.4G wireless analyzer

5.8G Wireless Settings

5.8GHz WLAN Status ☒ 5.8G wireless analyzer

SSID LevelOne 2.4G

Channel 2.462 GHz (Channel 11)

Encryption WPA/WPA2PSK\_TKIPAES

Key 66666666

SSID LevelOne 5.8G

Channel 5.700 GHz (Channel 140)

Encryption WPA/WPA2PSK\_TKIPAES

Key 66666666

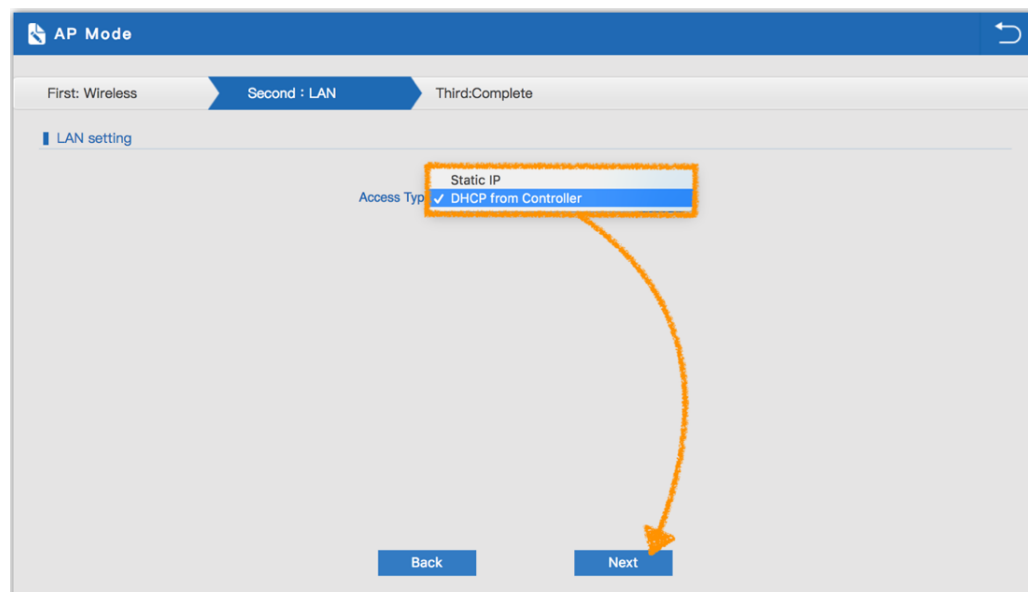
Location Information

AP Name WAP-8021

AP Location Taipei office 7F

Back Next

5. Set according to environmental requirements.



AP Mode

First: Wireless Second: LAN Third: Complete

LAN setting

Access Type

Static IP

☒ DHCP from Controller

Back Next

## 6.Demo Static IP setting

AP Mode

First: Wireless    **Second : LAN**    Third:Complete

LAN settings

Access Type: Static IP

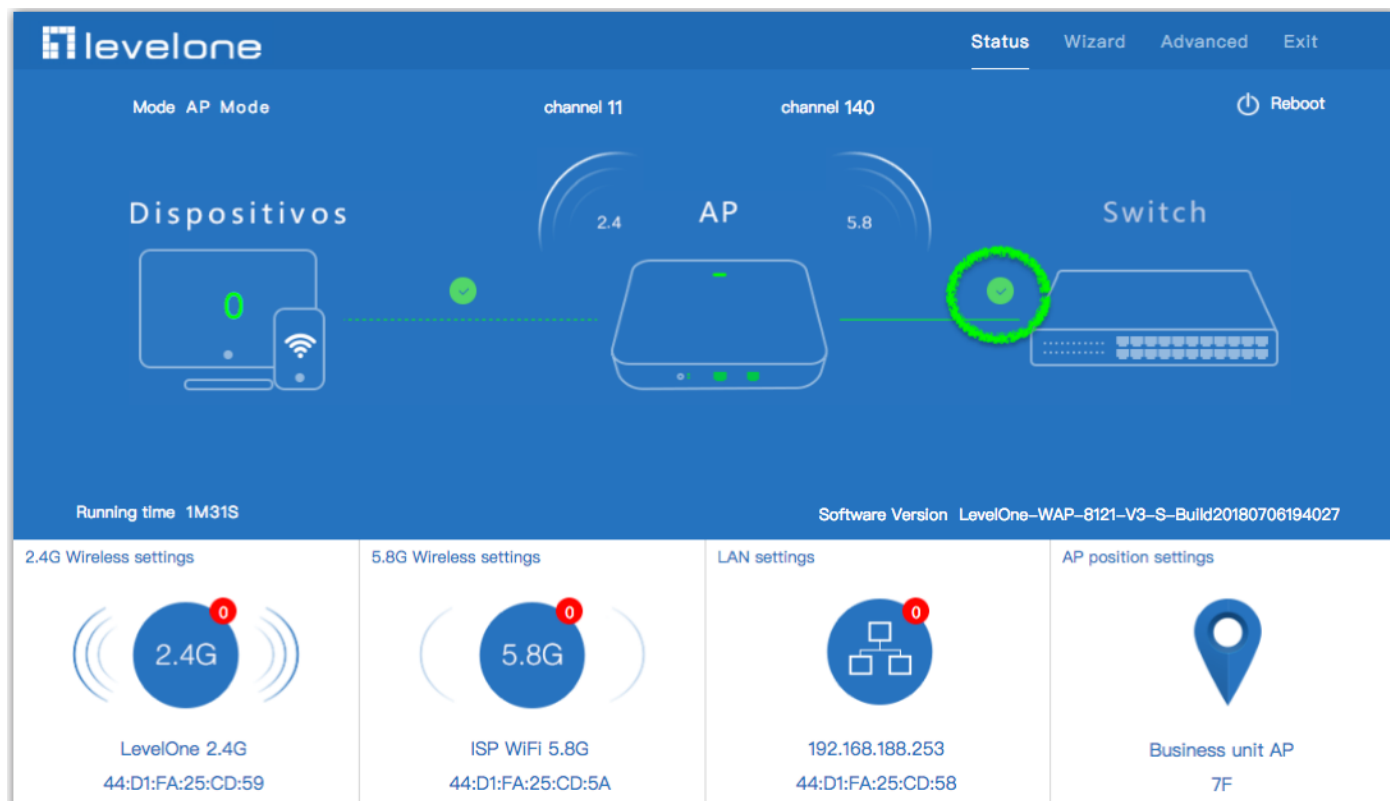
IP: 192.168.188.253

Subnet Mask: 255.255.255.0

Manage server IP: 192.168.188.254

Back    Next

## 7. Check AP Mode Status show fail or success.

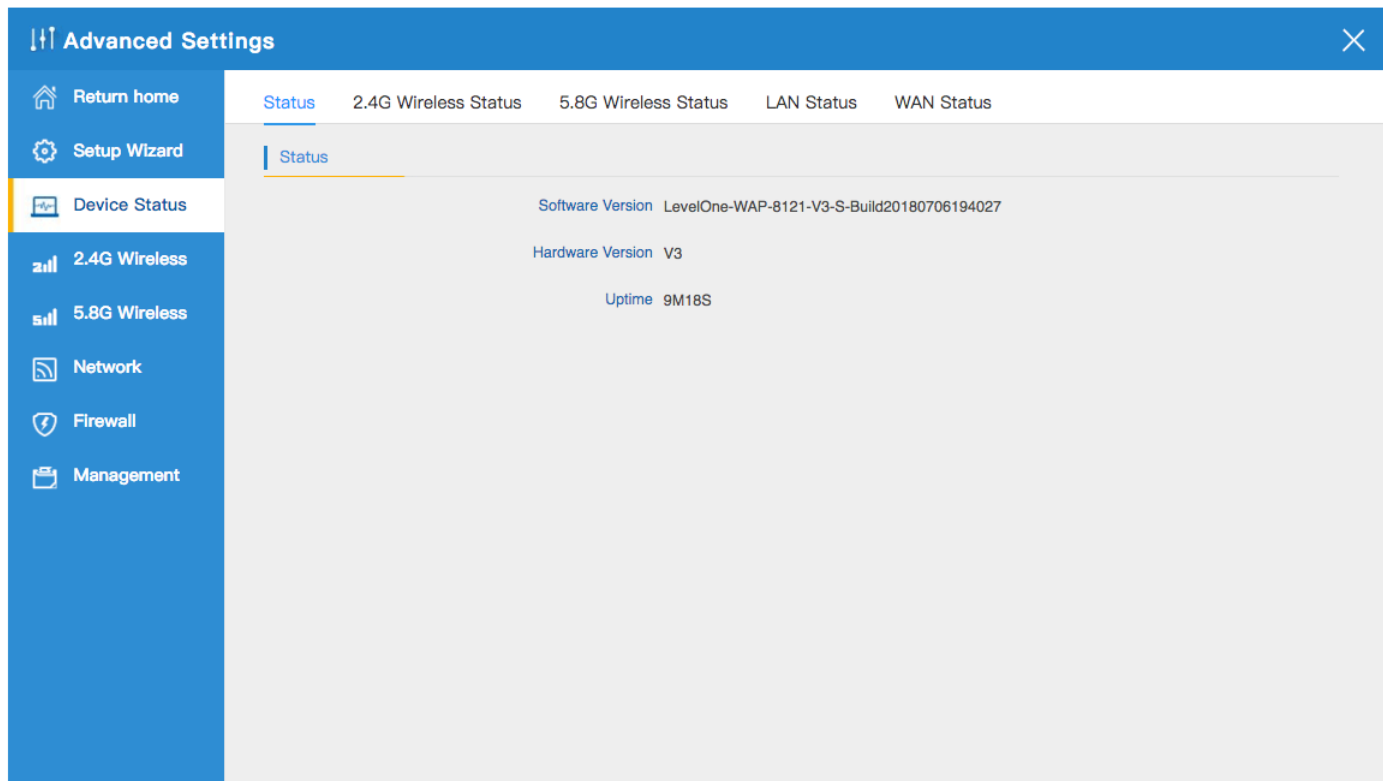


# Chapter 4 Advanced Setting

## 4.1 Device Status

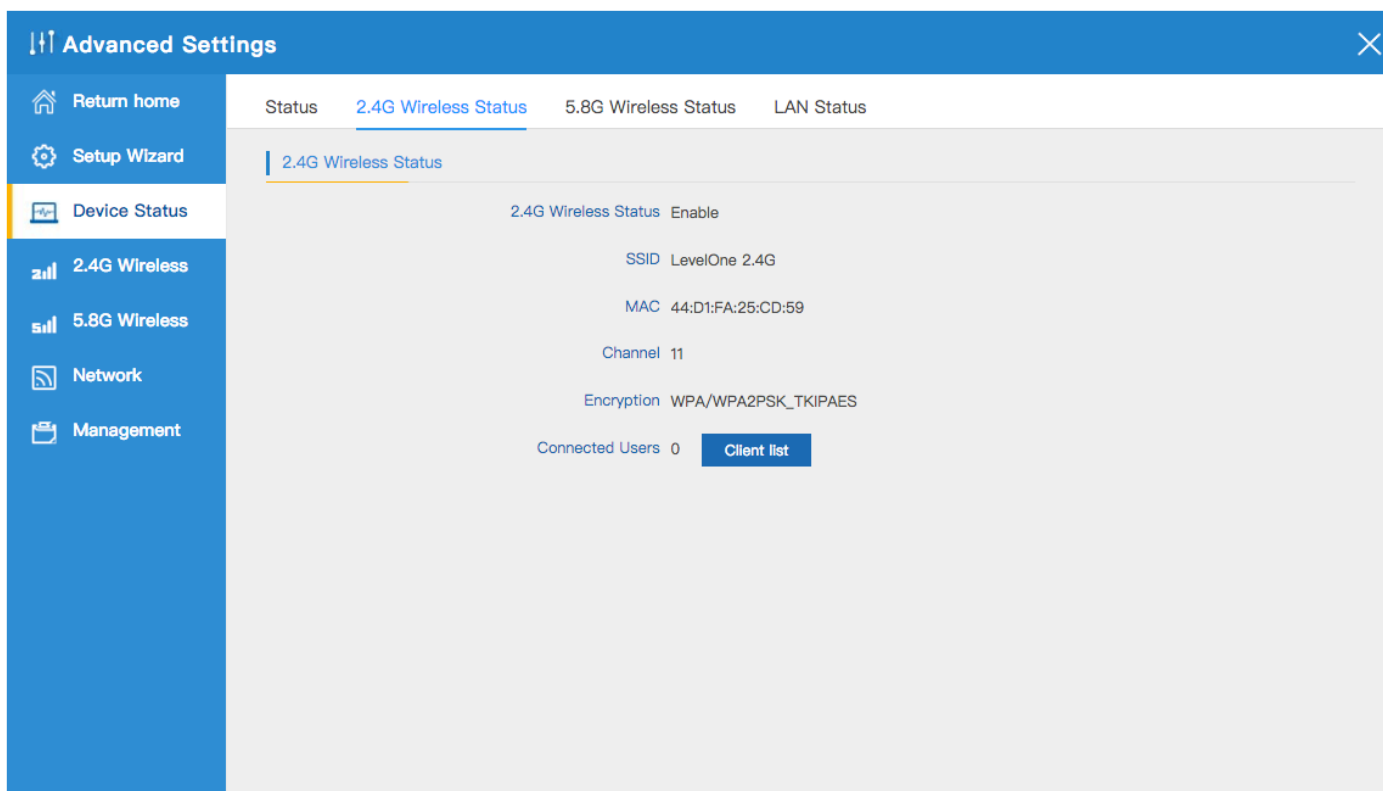
### 4.1.1 Status:

- Mainly to check the wireless AP's firmware version, hardware version, uptime info.



### 4.1.2 2.4G Wireless Status:

- Show wireless AP's SSID, MAC address for WiFi, Channel, Encryption, Client List info.





### 4.1.3 5.8G Wireless Status:

- Show wireless AP's SSID, MAC address for WiFi, Channel, Encryption, Client List info.

The screenshot shows the 'Advanced Settings' interface with a sidebar on the left containing links: Return home, Setup Wizard, Device Status, 2.4G Wireless, 5.8G Wireless, Network, and Management. The main content area has tabs for Status, 2.4G Wireless Status, 5.8G Wireless Status (selected), and LAN Status. Under the '5.8G Wireless Status' tab, the following information is displayed:

5.8G Wireless Status	Enable
SSID	ISP WIFI 5.8G
MAC	44:D1:FA:25:CD:5A
Channel	60
Encryption	WPA2PSK_TKIPAES
Connected Users	0

A 'Client list' button is located next to the 'Connected Users' count.

### 4.1.4 LAN Status:

- Check wireless AP's IP address, Subnet Mask, LAN MAC address and other info showed in following picture

The screenshot shows the 'Advanced Settings' interface with the same sidebar as the previous image. The main content area has tabs for Status, 2.4G Wireless Status, 5.8G Wireless Status, and LAN Status (selected). Under the 'LAN Status' tab, the following information is displayed:

LAN IP	192.168.188.253
Subnet Mask	255.255.255.0
MAC	44:D1:FA:25:CD:58
Manage server IP	192.168.188.254
DHCP Status	Disable
DHCP address range	192.168.188.2 — 192.168.188.252
Assigned IP	0

A 'Client list' button is located next to the 'Assigned IP' count.

## 4.2 2.4G Wireless

### 4.2.1 2.4G Basic Settings :

- Mainly to configure the wireless SSID, password, band width ,encryption, channel, Multi SSID.

The screenshot shows the 'Advanced Settings' window with the '2.4G Basic Settings' tab selected. The left sidebar contains navigation options: Return home, Setup Wizard, Device Status, 2.4G Wireless (selected), 5.8G Wireless, Network, and Management. The main content area is divided into three sections: 'Wireless Basic Settings', 'Channel', and 'Authentication'. In 'Wireless Basic Settings', 'Wireless Status' is set to 'ON' with a '2.4G wireless analyzer' button, 'SSID' is 'LevelOne 2.4G', 'Broadcast SSID' is 'Enable', and 'WMM' is 'Enable'. The 'Channel' section shows 'Band Width' as '20MHz' and 'Channel' as '\* 2.442 GHz (Channel 7)'. The 'Authentication' section shows 'Encryption' as 'WPA/WPA2PSK\_TKIPAES' and 'Key' as '66666666'. An 'Apply' button is at the bottom.

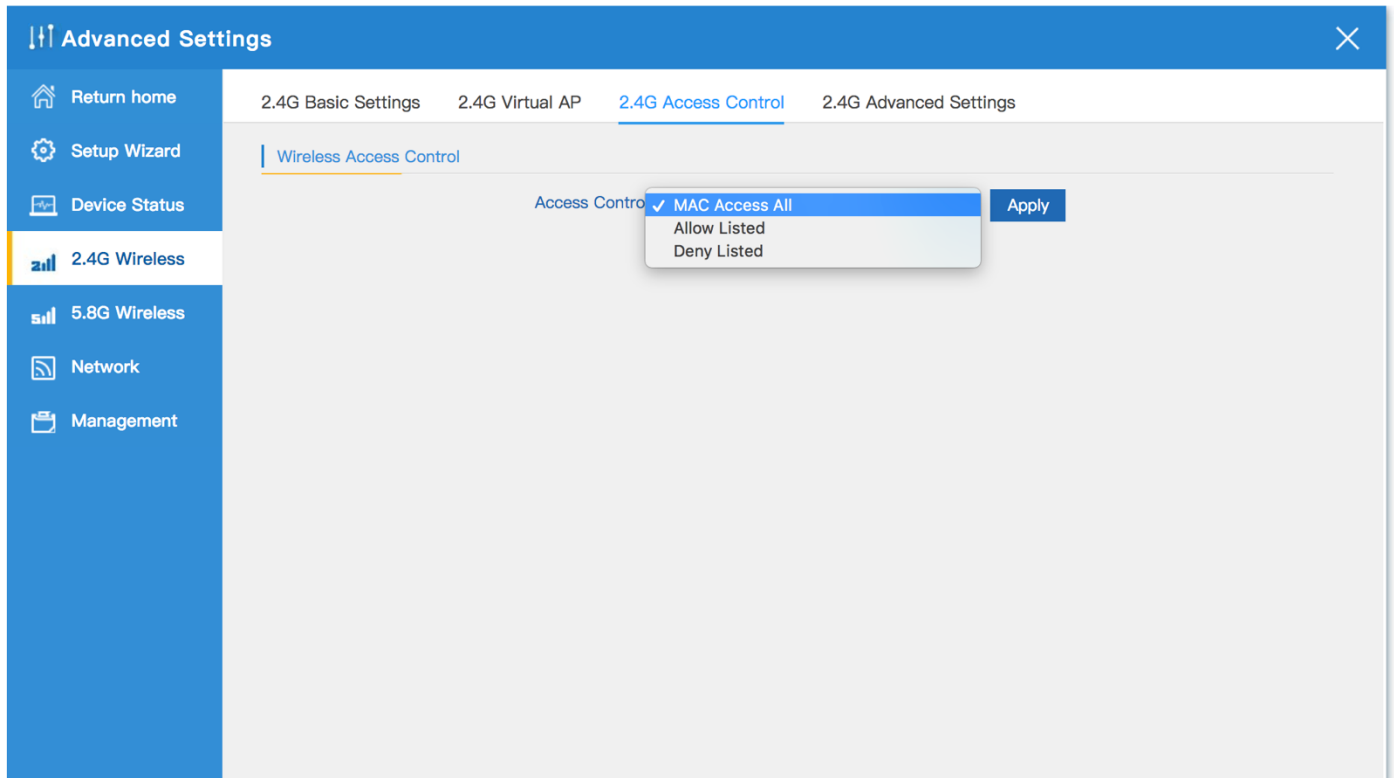
### 4.2.2 2.4G Virtual AP :

- There are 3 virtual AP in 2.4G wireless, if need enable multi SSIDs, then users can configure it showed in following picture:

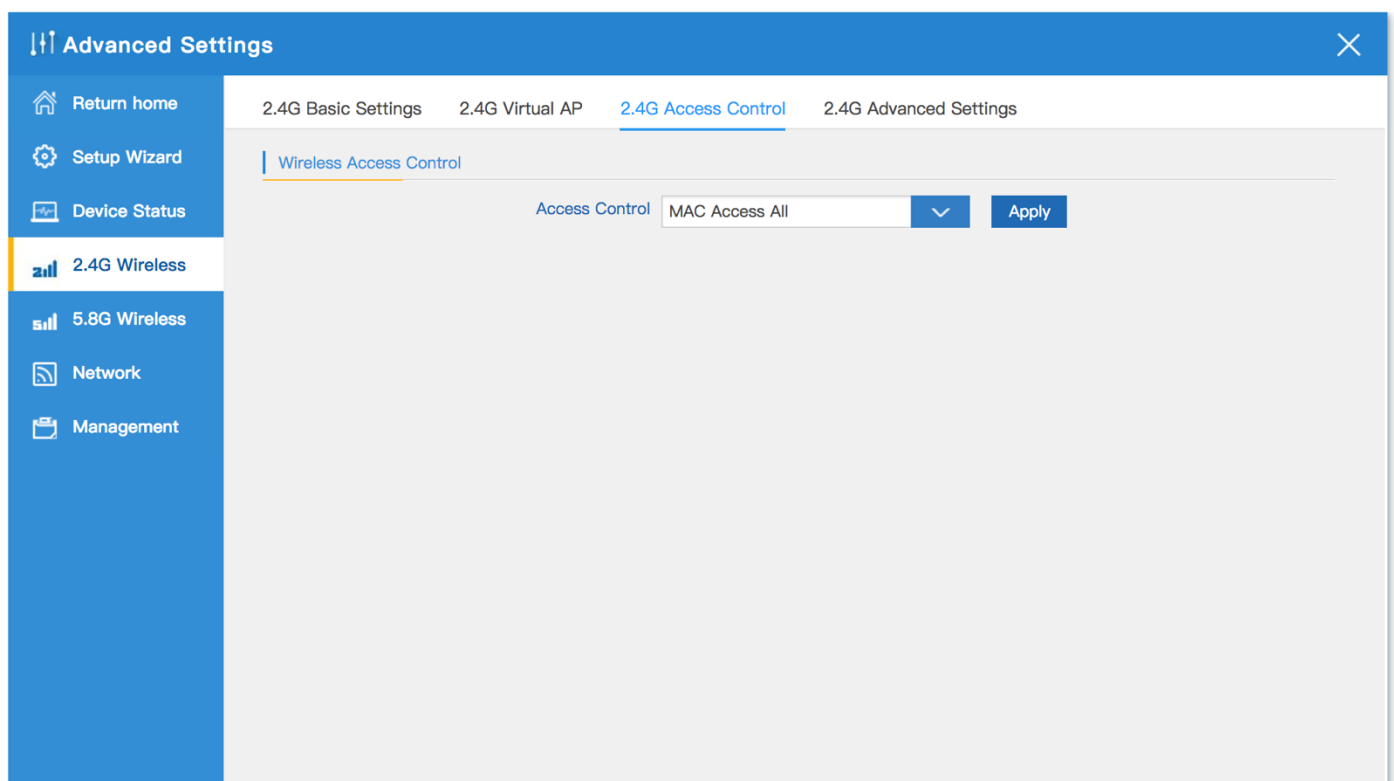
The screenshot shows the 'Advanced Settings' window with the '2.4G Virtual AP' tab selected. The left sidebar is the same as the previous screenshot. The main content area has tabs for 'Virtual AP1', 'Virtual AP2', and 'Virtual AP3'. The 'Virtual AP1' tab is active, showing 'Wireless Status' as 'OFF', 'SSID' as 'VAP0', 'Broadcast SSID' as 'Enable', 'WMM' as 'Enable', and 'Encryption' as 'none'. An 'Apply' button is at the bottom.

## 4.2.3 2.4G Access Control :

1. Allow or deny the users access into this wireless AP based on MAC address.



2. Allow all the users access into this wireless AP



3. Only users who have joined the MAC address list can access the wireless AP.

The following is a demonstration of teaching . Add the user MAC address in the list to the access control list

**Advanced Settings**

2.4G Basic Settings   2.4G Virtual AP   **2.4G Access Control**   2.4G Advanced Settings

**Wireless Access Control**

Access Control: Allow Listed [v] [Apply]

MAC: [ ] [Add]

**Access Control List** [Clear]

ALL	MAC
-----	-----

**Association STA list** [Refresh]

ALL	MAC
<input checked="" type="checkbox"/>	4C:18:9A:D1:5A:25

[Import]

4. After the user's MAC address is added to the access control list, Click Apply.

After setting is completed, it will start to allow users access to this wireless AP function

**Advanced Settings**

2.4G Basic Settings   2.4G Virtual AP   **2.4G Access Control**   2.4G Advanced Settings

**Wireless Access Control**

Access Control: Allow Listed [v] [Apply]

MAC: [ ] [Add]

**Access Control List** [Clear]

ALL	MAC
<input checked="" type="checkbox"/>	4C:18:9A:D1:5A:25

**Association STA list** [Refresh]

ALL	MAC
-----	-----

[Import]

5. Users who have joined the MAC address list are denied access to the wireless AP.

The following is a demonstration of teaching . Add the user MAC address in the list to the access control list

Advanced Settings

2.4G Basic Settings 2.4G Virtual AP 2.4G Access Control 2.4G Advanced Settings

Wireless Access Control

Access Control: Deny Listed [v] [Apply]

MAC: [ ] [Add]

Access Control List [Clear]

ALL	MAC
-----	-----

Import

Association STA list [Refresh]

ALL	MAC
<input checked="" type="checkbox"/>	4C:18:9A:D1:5A:25

6. After the user's MAC address is added to the access control list, Click Apply.

After setting is completed, it will start to deny users access to this wireless AP function

Advanced Settings

2.4G Basic Settings 2.4G Virtual AP 2.4G Access Control 2.4G Advanced Settings

Wireless Access Control

Access Control: Deny Listed [v] [Apply]

MAC: [ ] [Add]

Access Control List [Clear]

ALL	MAC
<input checked="" type="checkbox"/>	4C:18:9A:D1:5A:25

Import

Association STA list [Refresh]

ALL	MAC
-----	-----

7. In this page, will show the regional, mode, RF Power, Max user access...

The screenshot shows the 'Advanced Settings' window for 2.4G. The left sidebar contains navigation links: Return home, Setup Wizard, Device Status, 2.4G Wireless (selected), 5.8G Wireless, Network, and Management. The top navigation bar includes: 2.4G Basic Settings, 2.4G Virtual AP, 2.4G Access Control, and 2.4G Advanced Settings (selected). The main content area is titled '2.4G Advanced Settings' and contains the following configuration options:

- Regional: U.S.A (dropdown)
- Channel(1-11): (dropdown)
- MODE: 802.11N/G (dropdown)
- RF Output Power: 50% (dropdown)
- Packet Threshold: 2346 (range 256-2346)
- RTS Threshold: 2346 (range 0-2347)
- Ack Timeout control: 64 (range 0-255)us
- Beacon interval: 100 (range 100-1024)ms
- MAX User: 64 (range 0-64, 0 not limited)
- Coverage Threshold: -90 (range -95dBm~-65dBm)
- Aggregation: ☒ ON
- Short GI: ☒ ON
- User isolation: ☐ OFF

An 'Apply' button is located at the bottom center of the settings area.

## 4.3 5.8G Wireless

### 4.3.1 5.8G Basic Settings :

- Mainly to configure the wireless SSID, password, band width ,encryption, channel, Multi SSID.

The screenshot shows the 'Advanced Settings' window for 5.8G. The left sidebar is identical to the previous screenshot, with '5.8G Wireless' selected. The top navigation bar includes: 5.8G Basic Settings (selected), 5.8G Virtual AP, 5.8G Access Control, and 5.8G Advanced Settings. The main content area is titled 'Wireless Basic Settings' and contains the following configuration options:

- Wireless Status: ☒ ON
- 5.8G wireless analyzer: (button)
- SSID: LevelOne 5.8G
- Broadcast SSID: ☐ Disable ☒ Enable
- WMM: ☐ Disable ☒ Enable
- Channel section:
  - Band Width: 80MHz (dropdown)
  - Channel: \* 5.220 GHz (Channel 44) (dropdown)
- Encryption section:
  - Encryption: WPA/WPA2PSK\_TKIPAES (dropdown)
  - Key: 66666666

An 'Apply' button is located at the bottom center of the settings area.

### 4.3.2 5.8G Virtual AP :

- There are 3 virtual AP in 5.8G wireless, if need enable multi SSIDs, then users can configure it showed in following picture:

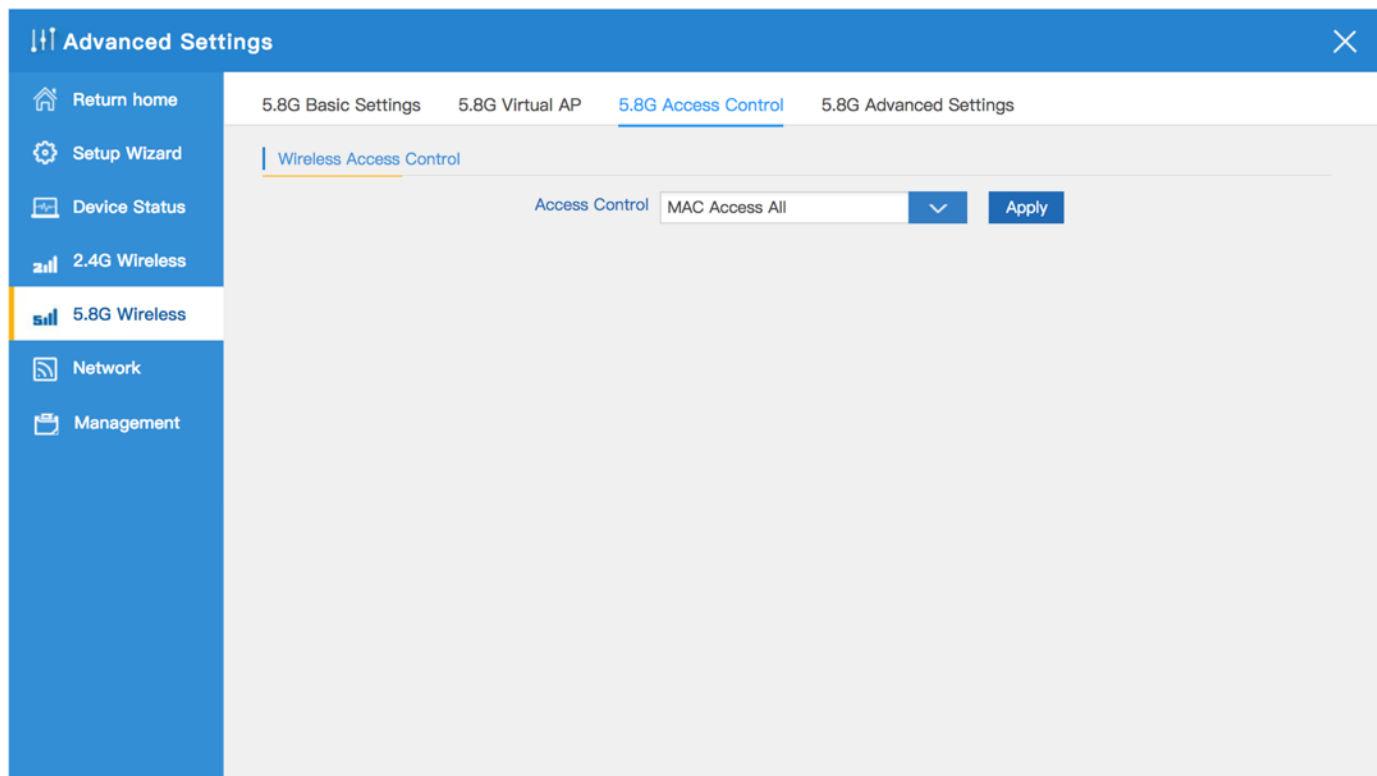
The screenshot shows the 'Advanced Settings' window with the '5.8G Virtual AP' tab selected. The left sidebar contains navigation options: Return home, Setup Wizard, Device Status, 2.4G Wireless, 5.8G Wireless (highlighted), Network, and Management. The main content area has tabs for '5.8G Basic Settings', '5.8G Virtual AP', '5.8G Access Control', and '5.8G Advanced Settings'. Under the '5.8G Virtual AP' tab, there are three sections for 'Virtual AP1', 'Virtual AP2', and 'Virtual AP3'. The 'Virtual AP1' section is active and shows the following settings: 'Wireless Status' is set to 'OFF' (indicated by a red switch), 'SSID' is 'VAP0', 'Broadcast SSID' has 'Disable' and 'Enable' radio buttons (both are unselected), 'WMM' has 'Disable' and 'Enable' radio buttons (both are unselected), and 'Encryption' is set to 'none' in a dropdown menu. An 'Apply' button is located at the bottom center of the configuration area.

### 4.3.3 5.8G Access Control :

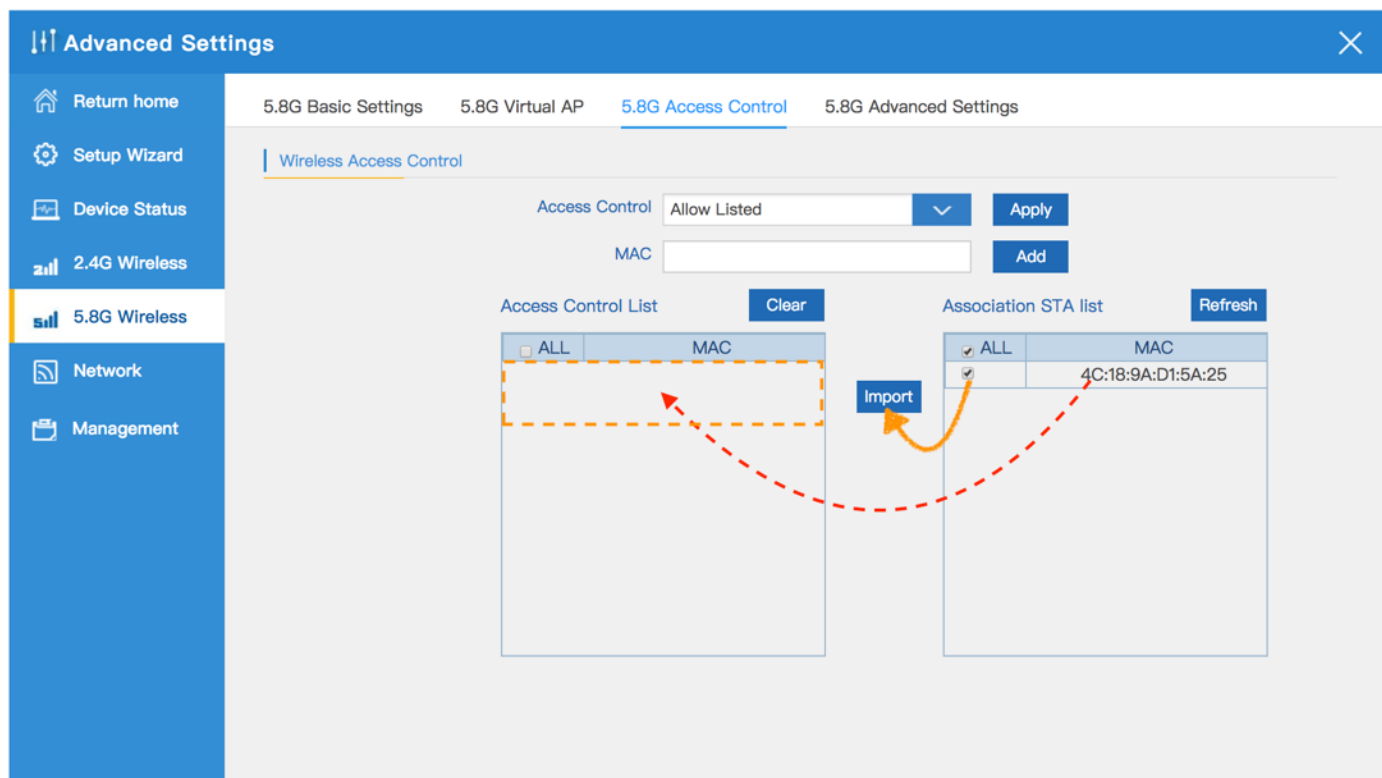
1. Allow or deny the users access into this wireless AP based on MAC address.

The screenshot shows the 'Advanced Settings' window with the '5.8G Access Control' tab selected. The left sidebar is the same as in the previous screenshot. The main content area has tabs for '5.8G Basic Settings', '5.8G Virtual AP', '5.8G Access Control', and '5.8G Advanced Settings'. Under the '5.8G Access Control' tab, there is a 'Wireless Access Control' section. A dropdown menu is open, showing three options: 'MAC Access All' (which is selected with a checkmark), 'Allow Listed', and 'Deny Listed'. An 'Apply' button is located to the right of the dropdown menu.

2. Allow all the users access into this wireless AP



3. Only users who have joined the MAC address list can access the wireless AP. The following is a demonstration of teaching . Add the user MAC address in the list to the access control list





4. After the user's MAC address is added to the access control list, Click Apply. After setting is completed, it will start to allow users access to this wireless AP function

The screenshot shows the 'Advanced Settings' window with the '5.8G Access Control' tab selected. The 'Wireless Access Control' section is active. The 'Access Control' dropdown is set to 'Allow Listed'. The 'MAC' input field is empty. The 'Access Control List' table has one entry with a checked checkbox and MAC address '4C:18:9A:D1:5A:25'. The 'Association STA list' table is empty. An orange arrow points from the 'Apply' button to the 'Access Control' dropdown. Another orange arrow points from the 'Import' button to the 'Access Control List' table.

Advanced Settings

5.8G Basic Settings 5.8G Virtual AP 5.8G Access Control 5.8G Advanced Settings

Wireless Access Control

Access Control: Allow Listed [v] [Apply]

MAC: [Add]

Access Control List [Clear]

ALL	MAC
<input checked="" type="checkbox"/>	4C:18:9A:D1:5A:25

[Import]

Association STA list [Refresh]

ALL	MAC
-----	-----

5. Users who have joined the MAC address list are denied access to the wireless AP. The following is a demonstration of teaching . Add the user MAC address in the list to the access control list

The screenshot shows the 'Advanced Settings' window with the '5.8G Access Control' tab selected. The 'Wireless Access Control' section is active. The 'Access Control' dropdown is set to 'Deny Listed'. The 'MAC' input field is empty. The 'Access Control List' table is empty. The 'Association STA list' table has one entry with a checked checkbox and MAC address '4C:18:9A:D1:5A:25'. A dashed orange arrow points from the 'Import' button to the 'Access Control List' table. Another dashed orange arrow points from the 'Association STA list' table to the 'Import' button.

Advanced Settings

5.8G Basic Settings 5.8G Virtual AP 5.8G Access Control 5.8G Advanced Settings

Wireless Access Control

Access Control: Deny Listed [v] [Apply]

MAC: [Add]

Access Control List [Clear]

ALL	MAC
-----	-----

[Import]

Association STA list [Refresh]

ALL	MAC
<input checked="" type="checkbox"/>	4C:18:9A:D1:5A:25

6. After the user's MAC address is added to the access control list, Click Apply. After setting is completed, it will start to deny users access to this wireless AP function

**Advanced Settings**

5.8G Basic Settings   5.8G Virtual AP   **5.8G Access Control**   5.8G Advanced Settings

**Wireless Access Control**

Access Control: Deny Listed

MAC:

Access Control List

ALL	MAC
<input checked="" type="checkbox"/>	4C:18:9A:D1:5A:25

Association STA list

ALL	MAC
-----	-----

7. In this page, will show the regional, mode, RF Power, Max user access...

Remark : In Regional, the default is Debug, which including the frequency of 5.180GHz to 5.825GHz, but some local laws will prohibit this, so, pls strictly abide by local laws and by cautious in using them.

**Advanced Settings**

5.8G Basic Settings   5.8G Virtual AP   5.8G Access Control   **5.8G Advanced Settings**

**5.8G Advanced Settings**

Regional: ETSI

MODE: 802.11AN/AC

RF Output Power: 50%

Packet Threshold: 2346 (256-2346)

RTS Threshold: 2346 (0-2347)

Ack Timeout control: 64 (0-255)us

Beacon interval: 100 (100-1024)ms

MAX User: 64 (Range 0-64 0 not limited)

Coverage Threshold: -90 (-95dBm~-65dBm)

Aggregation: ☒ ON   Short GI: ☒ ON   User isolation: ☐ OFF   DFS switch: ☒ ON

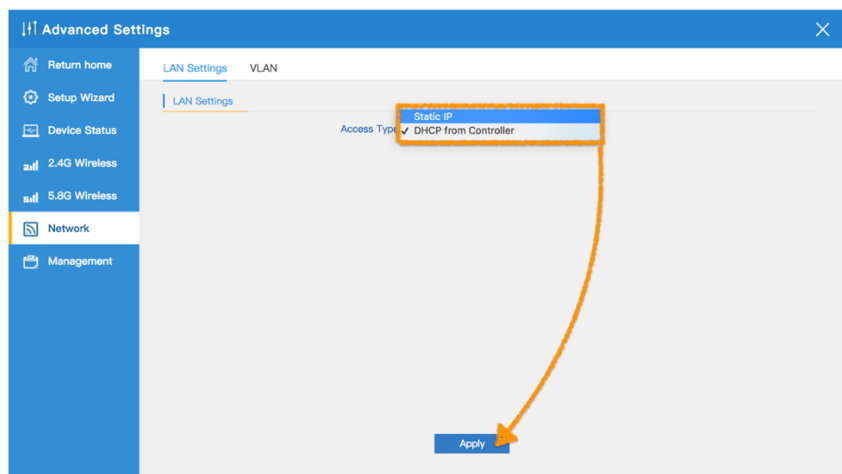
## Enable the status of Repeater Mode or AP Mode



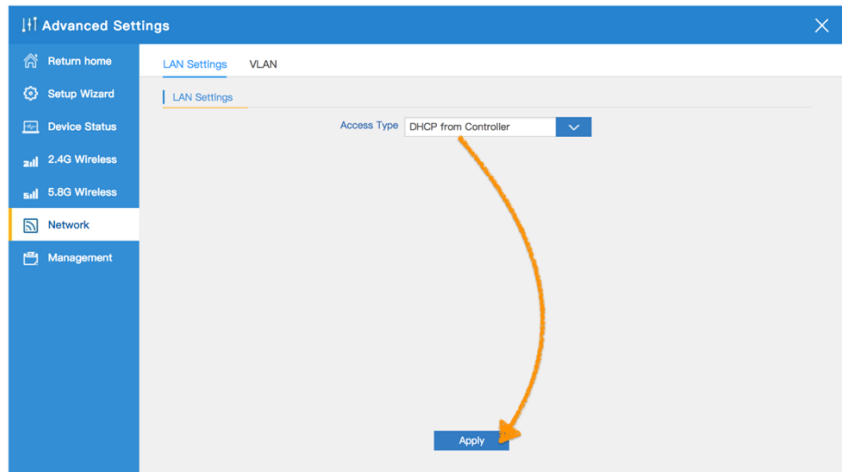
### 4.4 Network

#### 4.4.1 LAN Settings:

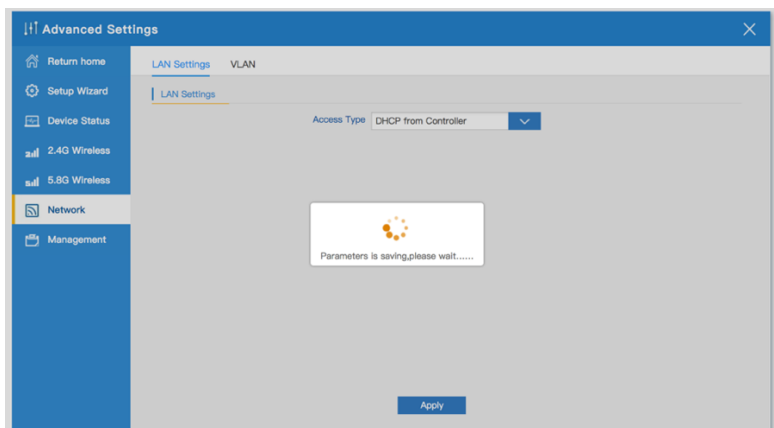
1. Can choose two kinds of usage modes (Static IP, DHCP for Controller) which can be selected according to the current network architecture environment.



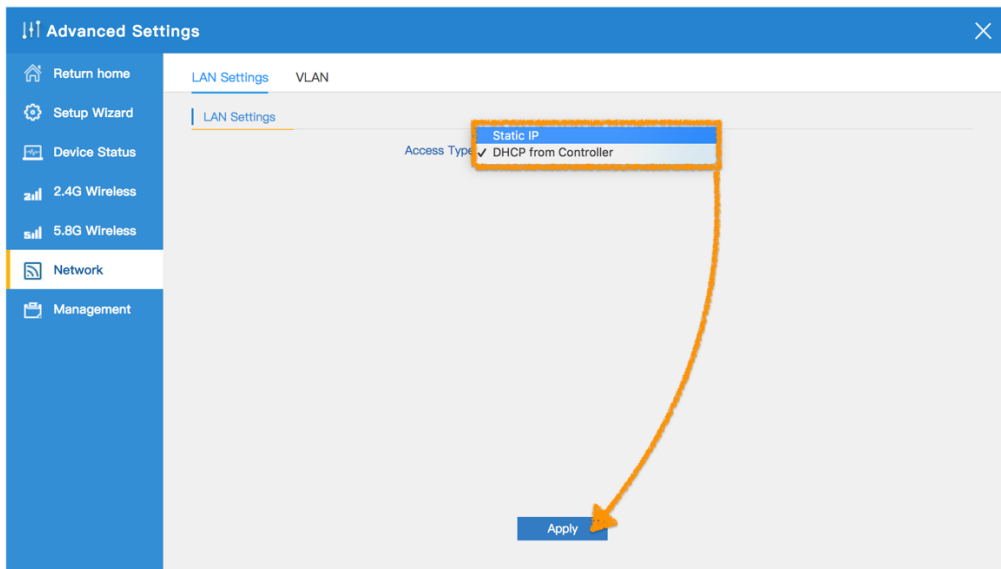
2. Use DHCP for Controller mode, please confirm that the current network architecture has IP address allocation.



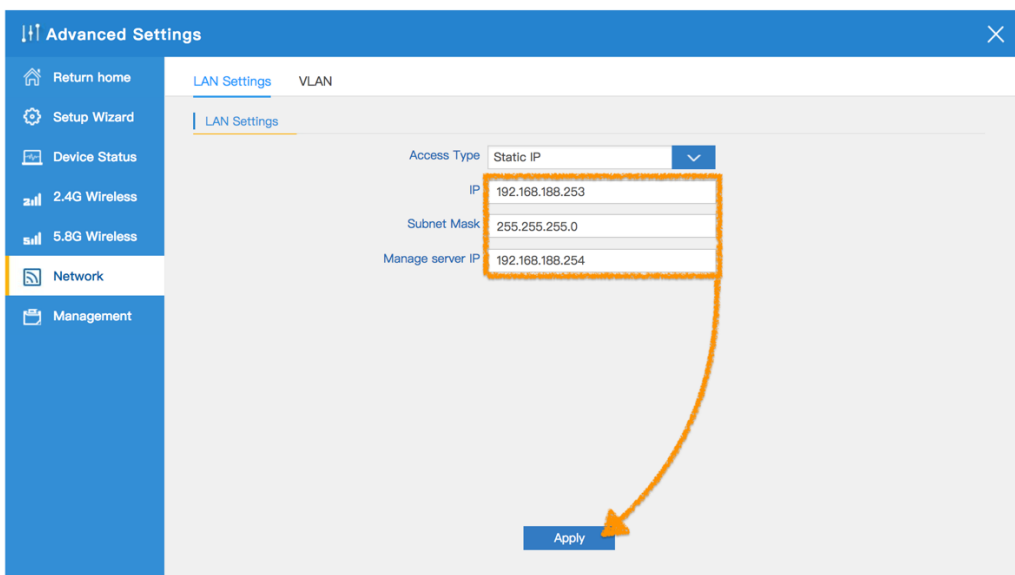
3. Click Apply, Wait for DHCP Controller Mode is Enable, please wait about 20~30 seconds.



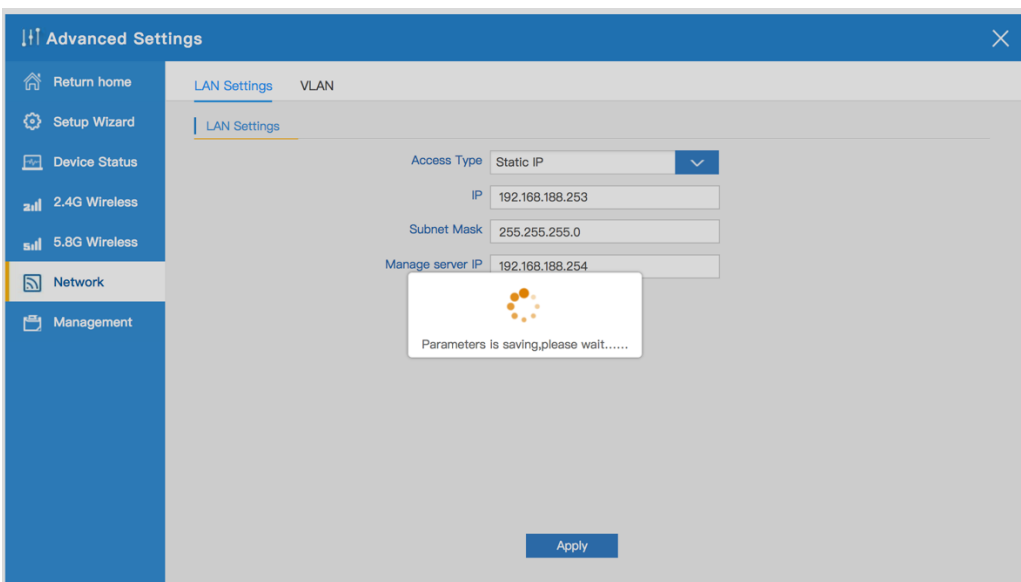
#### 4. The following example for Static IP Mode



5. Sample Static IP mode setting method, then click Apply to continue.  
(Please contact with ISP for correct IP address, Subnet MasDNS address)



6. Click Apply, Wait for Static IP Mode is Enable, please wait about 40~50 seconds.



## 4.4.2 VLAN :

- Please confirm before you can use ,Need support IEEE 802.1Q and VLAN Tagging Managed Switch, Specify WiFi SSID for WAP-8121 , corresponding to the VLAN-ID (3-4094).

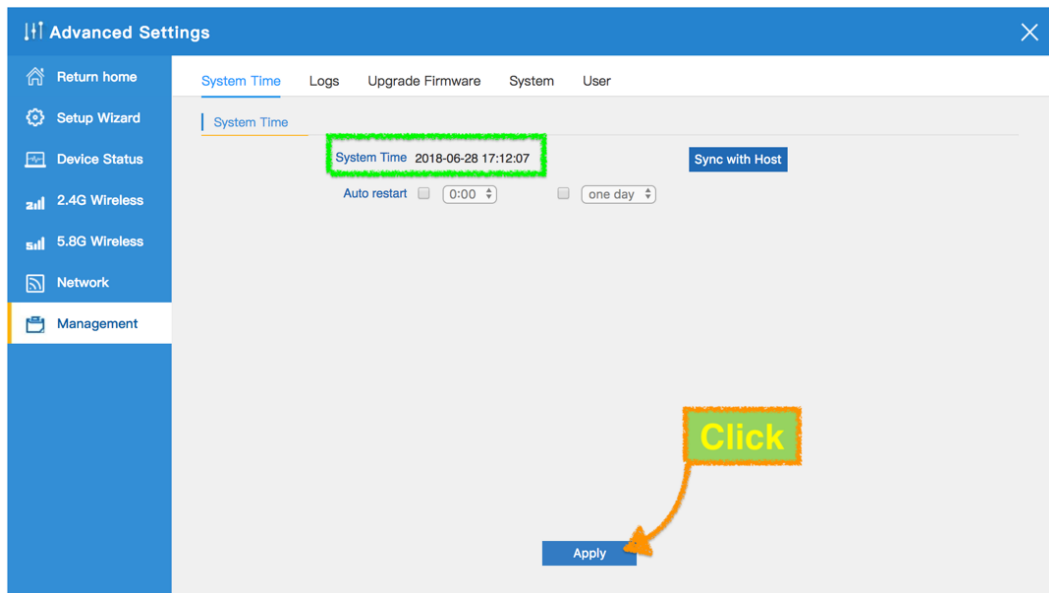
Advanced Settings

LAN Settings VLAN

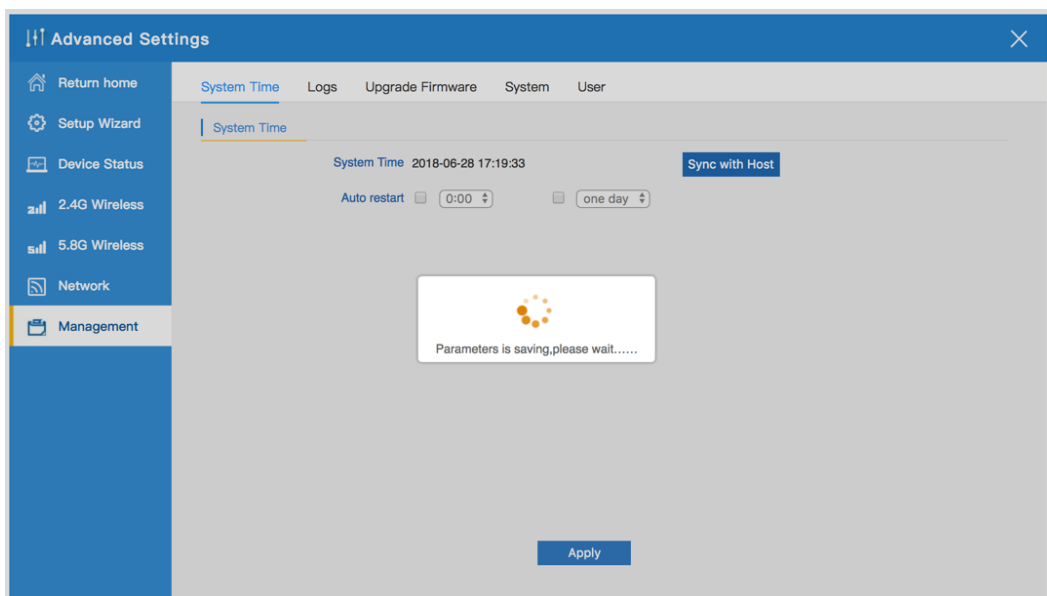
VLAN

VLAN-ID(3-4094)	2.4G				5.8G			
	AP	VAP1	VAP2	VAP3	AP	VAP1	VAP2	VAP3
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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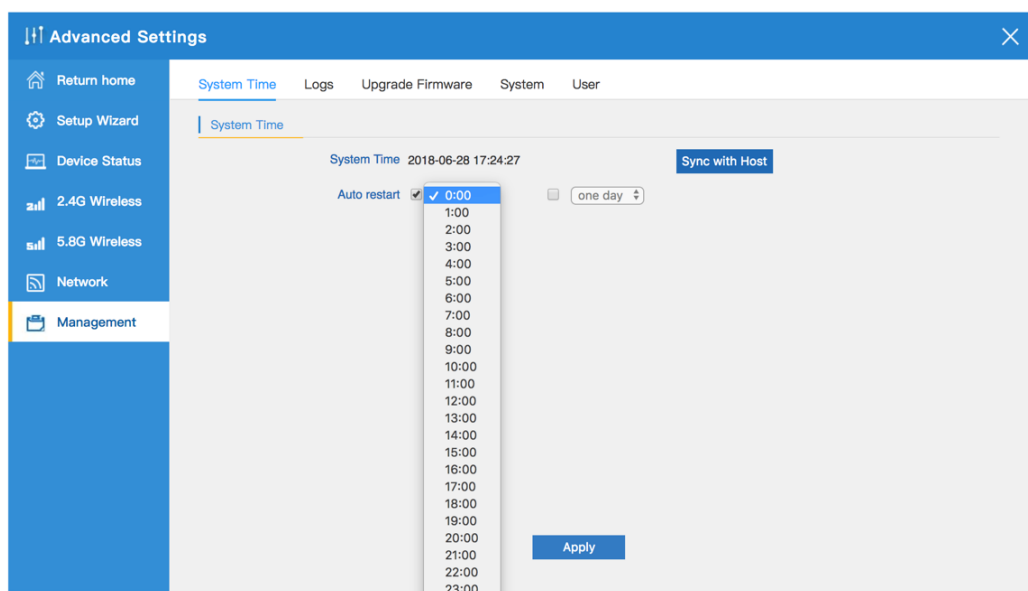
2. Confirm that System Time is correctly refreshed to the current time, Click Apply



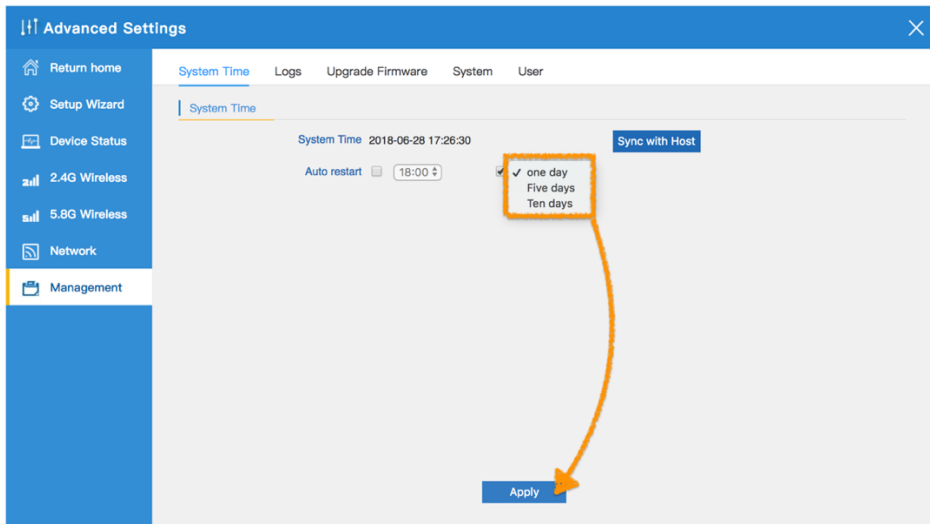
3. Enable System for update to the current Time, please wait about 30~50 seconds.



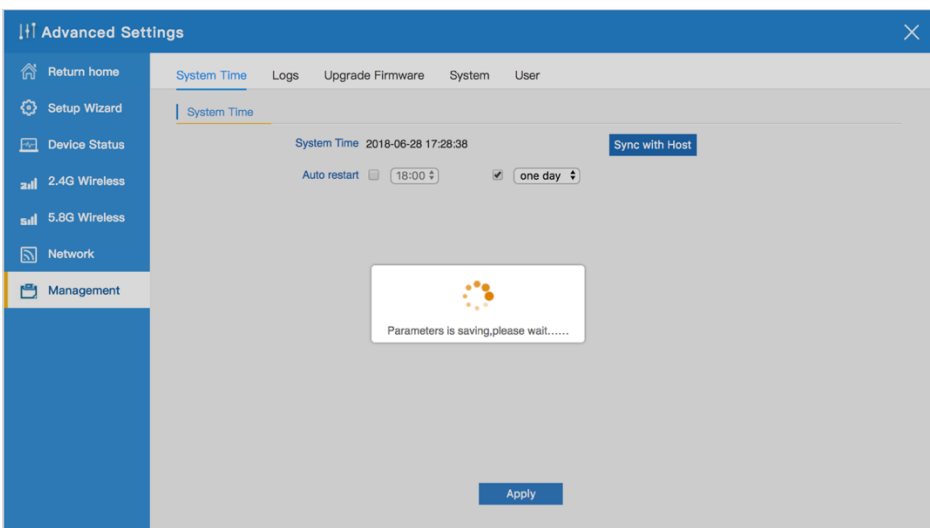
4. Define the system reboot time(0:00~23:00)



5.Can choose every day or every five days or every 10 days , System Reboot Automatically.

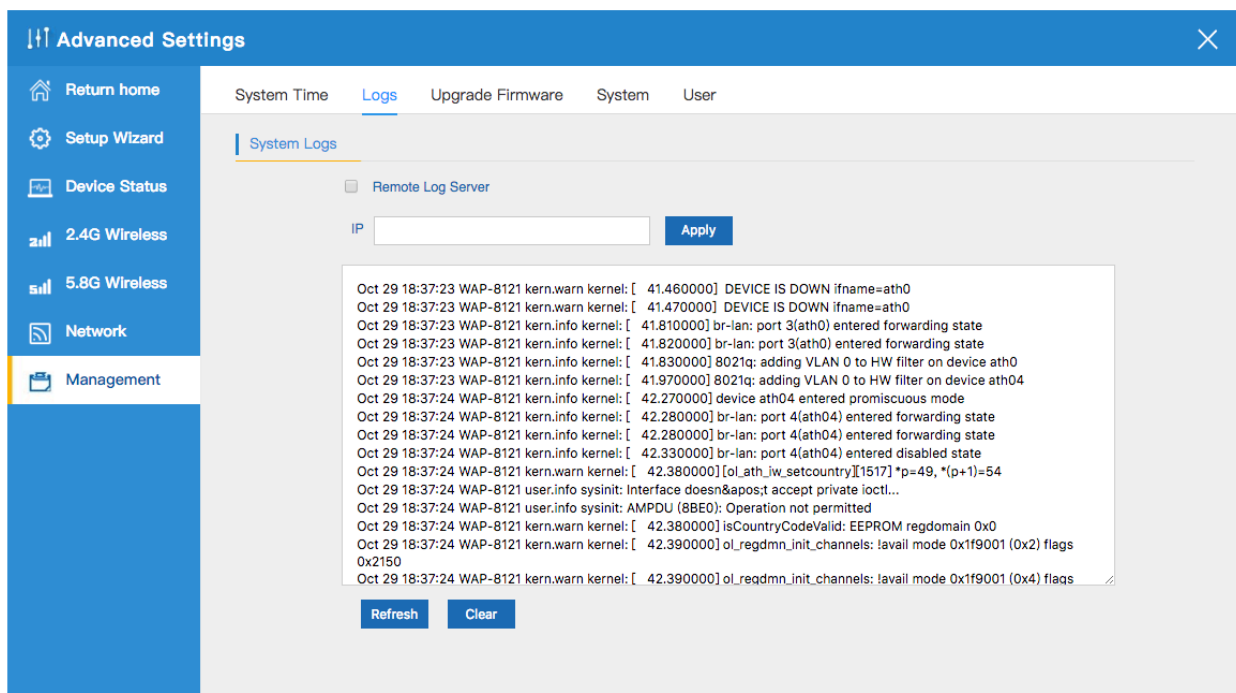


6. Enable Define the system reboot time, please wait about 30~50 seconds.



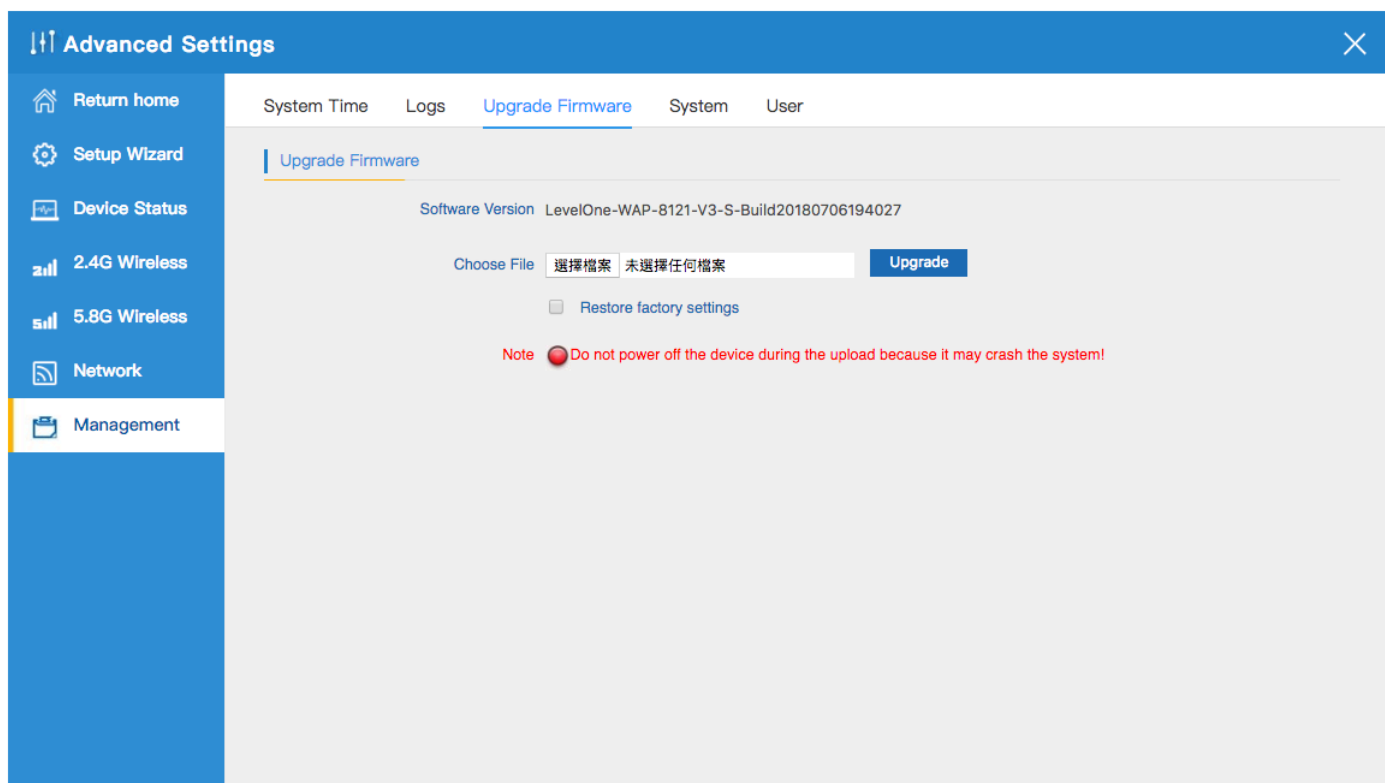
## 4.5.2 Logs :

- In Logs part, you can copy the running history of the device to consult the engineers when you have any trouble



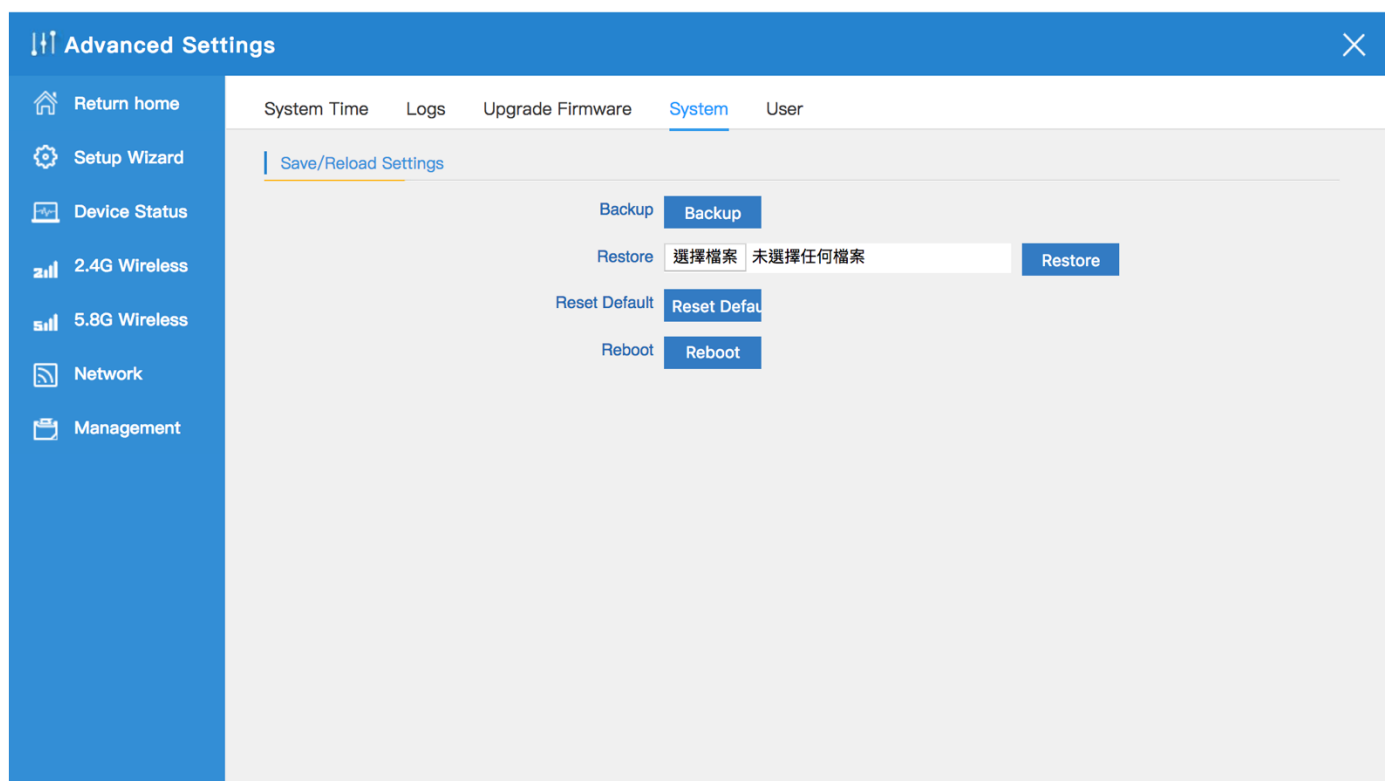
### 4.5.3 Upgrade Firmware :

- Allows you to browse the new firmware in your computer and upgrade. Please do not power off the device during upgrade. ( **Note** : The update firmware is recommended to use the connection RJ45 Network Cable update . Not recommended to use the wireless connection method to update the firmware.)



### 4.5.4 System :

- You are able to backup the current configuration to your PC and restore by applying the configuration file from your PC. And you can Reset and Reboot the device with just one click





## 4.5.5 User :

- Management and change the password for Log in

Advanced Settings

Return home

Setup Wizard

Device Status

2.4G Wireless

5.8G Wireless

Network

Management

System Time

Logs

Upgrade Firmware

System

User

User

Old Password

Password

Confirm Password

Apply

# Enable the status of Gateway Mode or WISP Mode



## 5.1 Network

### 5.1.1 LAN Settings :

1. Set the specified device retention IP for easy management. The following is a demonstration of teaching .

Advanced Settings

Return home

Setup Wizard

Device Status

2.4G Wireless

5.8G Wireless

Network

Firewall

Management

LAN Settings

VLAN

WAN Settings

WAN advanced settings

LAN Settings

IP192.168.188.253

Subnet Mask255.255.255.0

DHCP StatusON

DHCP Client IP192.168.188.2

DHCP Client IP Start192.168.188.200

DHCP Client IP End192.168.188.200

Lease Time(hour)12(1-360)

IP-MAC Bind

IP-MAC Bind

Add

Scan

Clear

ALL

IP

MAC

Apply

2.Click Choice

Advanced Settings

Return home

Setup Wizard

Device Status

2.4G Wireless

5.8G Wireless

Network

Firewall

Management

LAN Settings

VLAN

WAN Settings

WAN advanced settings

LAN Settings

Client List

MAC

IP

Choice

Choice

Refresh

Apply

3.Add the user MAC address in the list to the access control list . Completed the reserved IP settings

Return home

Setup Wizard

Device Status

2.4G Wireless

5.8G Wireless

**Network**

Firewall

Management

Advanced Settings

LAN Settings

VLAN

WAN Settings

WAN advanced settings

LAN Settings

IP

192.168.188.253

Subnet Mask

255.255.255.0

DHCP Status

ON

DHCP Client IP

192.168.188.2

DHCP Client IP Start

DHCP Client IP End

192.168.188.200

Lease Time(hour)

12

(1-360)

IP-MAC Bind

IP-MAC Bind

192.168.188.197

38:C9:86:38:81:2C

Add

Scan

Clear

<input checked="" type="checkbox"/> ALL	IP	MAC
<input checked="" type="checkbox"/>	192.168.188.197	38:C9:86:38:81:2C

Apply

### 5.1.2 VLAN :

- Please confirm before you can use ,Need support IEEE 802.1Q and VLAN Tagging Managed Switch, Specify WiFi SSID or WAN/LAN Port for WAP-8121 , corresponding to the VLAN-ID (3-4094).

⌵ ⌵ ⌵ Advanced Settings
✕

- 🏠 Return home
- ⚙️ Setup Wizard
- 📶 Device Status
- 📶 2.4G Wireless
- 📶 5.8G Wireless
- 🌐 Network
- 🛡️ Firewall
- 📁 Management

LAN Settings    VLAN    WAN Settings    WAN advanced settings

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| VLAN

VLAN-ID(3-4094)	2.4G				5.8G			
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Apply

### 5.1.3 WAN Settings :

1. Please check with the ISP first how to access the Internet , The following is a demonstration of Static IP teaching .

The screenshot shows the 'Advanced Settings' window with the 'WAN Settings' tab selected. The 'Static IP' option is highlighted with an orange arrow. The configuration fields are as follows:

Field	Value
IP Address	192.168.50.150
Subnet Mask	255.255.255.0
Default Gateway	192.168.50.1
MTU	1500 (1400-1500)
Primary DNS	8.8.8.8
Secondary DNS	8.8.4.4

An orange arrow points from the 'Static IP' label to the 'Apply' button at the bottom right.

2.The following is a demonstration of PPPoE teaching .

The screenshot shows the 'Advanced Settings' window with the 'WAN Settings' tab selected. The 'PPPOE(ADSL)' option is highlighted with an orange arrow. The configuration fields are as follows:

Field	Value
PPPOE Name	87654321@hinet.net
PPPOE Password	*****
MTU	1445 (1400-1492)
<input checked="" type="checkbox"/> Manually set DNS	
Primary DNS	8.8.8.8
Secondary DNS	8.8.4.4

An orange arrow points from the 'PPPOE(ADSL)' label to the 'Apply' button at the bottom right.

3.The following is a demonstration of DHCP teaching .

**Advanced Settings**

LAN Settings | VLAN | **WAN Settings** | WAN advanced settings

Static IP | PPPOE(ADSL) | **DHCP**

MTU: 1500 (1400-1500)

☒ **Manually set DNS**

Primary DNS: 8.8.8.8

Secondary DNS: 8.8.4.4

**Apply**

#### 5.1.4 WAN advanced settings:

- Internet security does not recommend enable Ping Access on WAN to prevent interested people from knowing the real IP address

**Advanced Settings**

LAN Settings | VLAN | WAN Settings | **WAN advanced settings**

**WAN advanced settings**

☐ MAC clone  **Scan**

☒ Enable Web Server Access on WAN Web Port: 8080

☒ Enable uPnP

☐ Enable IGMP Proxy

☐ Enable Ping Access on WAN

☒ Enable IPsec pass through on VPN connection

☒ Enable PPTP pass through on VPN connection

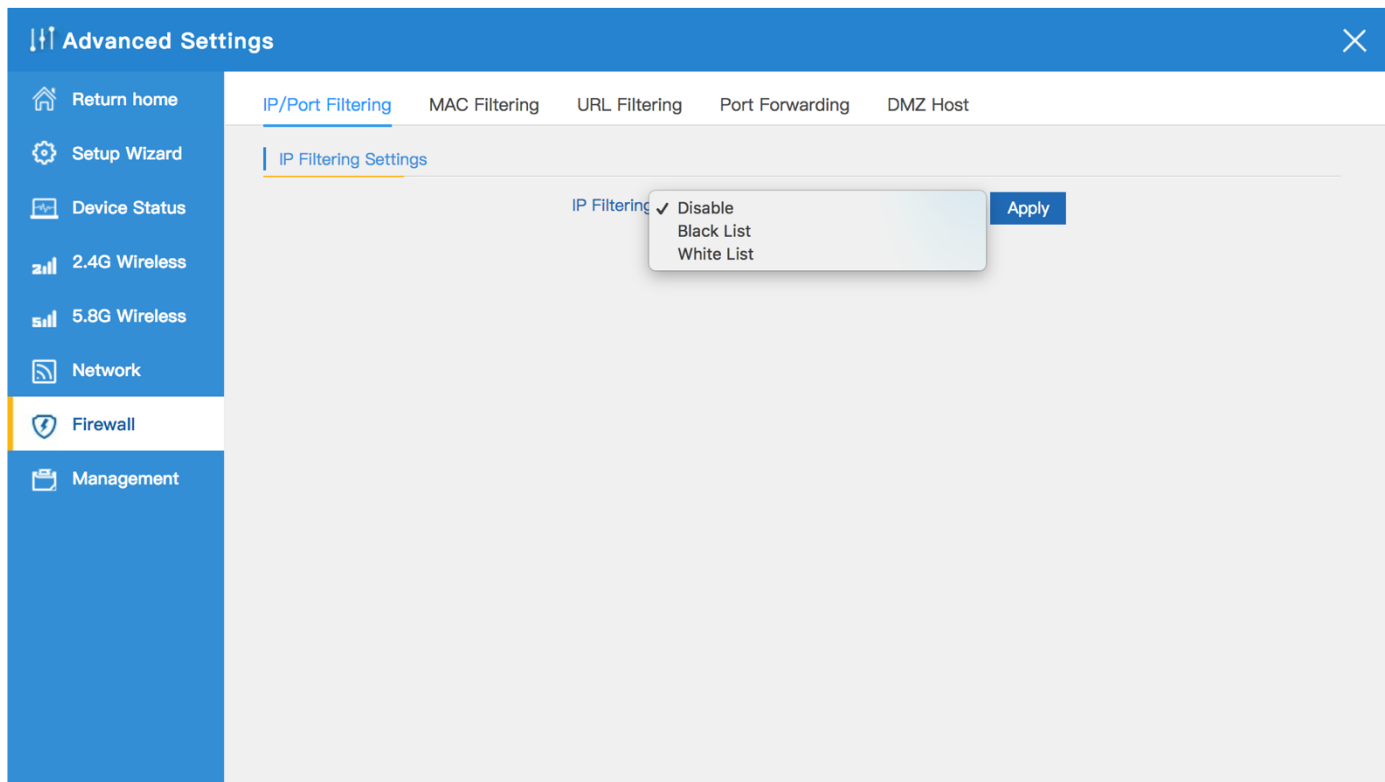
☒ Enable L2TP pass through on VPN connection

**Apply**

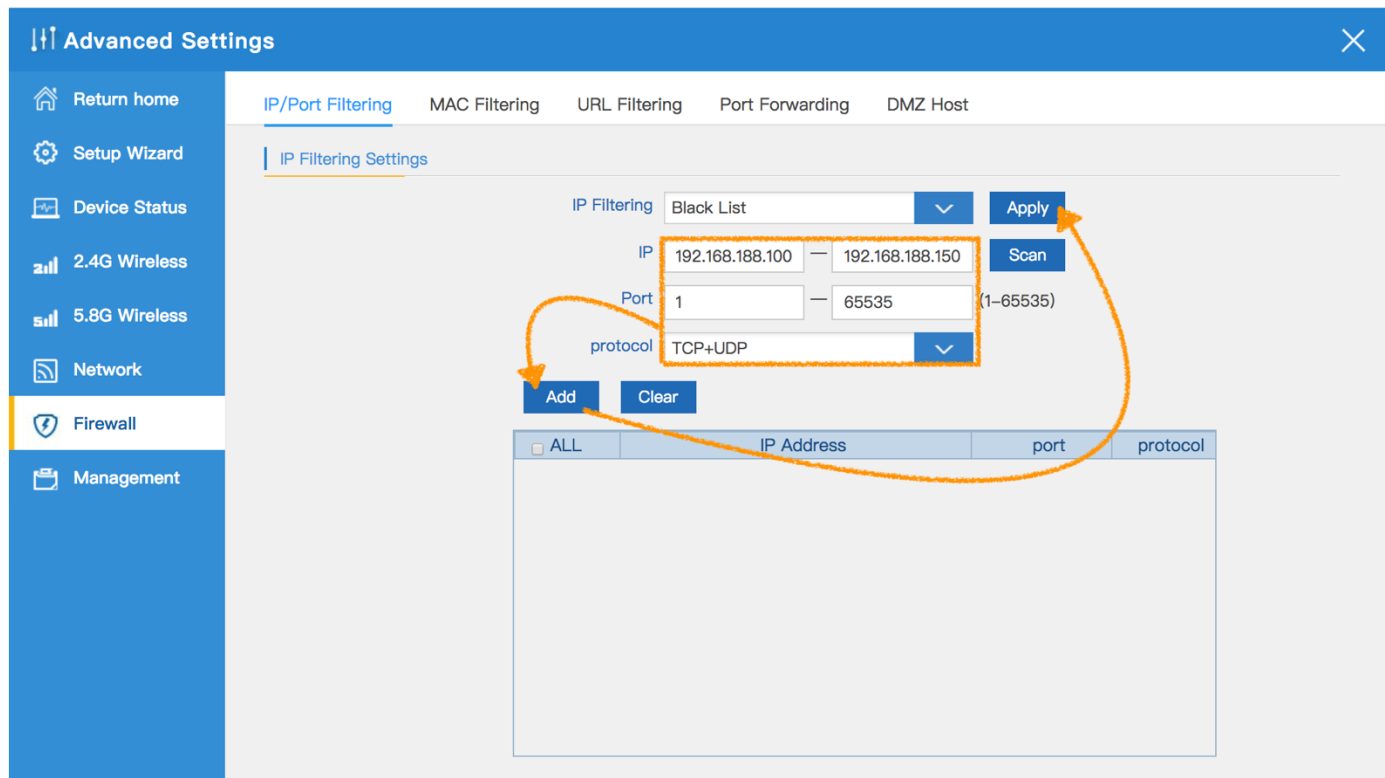
## 5.2 Firewall

### 5.2.1 IP/Port Filtering :

1.Factory default value is Disable, Can be set to whitelist or blacklist. The following will begin to introduce how to set the enable function



**2.Black List :** IP Address that can be specified as a separate or range , and then specifies the port range (1~65535) and protocol(TCP/UDP) .



**3.White List :** IP Address that can be specified as a separate or range , and then specifies the port range (1~65535) and protocol(TCP/UDP) , which is set as the status of the allow.

Advanced Settings

Return home Setup Wizard Device Status 2.4G Wireless 5.8G Wireless Network Firewall Management

IP/Port Filtering MAC Filtering URL Filtering Port Forwarding DMZ Host

IP Filtering Settings

IP Filtering White List Apply

IP 192.168.188.151 — 192.168.188.180 Scan

Port 1 — 80 (1~65535)

protocol TCP+UDP

Add Clear

ALL	IP Address	port	protocol
-----	------------	------	----------

## 5.2.2 MAC Filtering :

1.Factory default value is disable, Can be set to whitelist or blacklist. The following will begin to introduce how to set the enable function

Advanced Settings

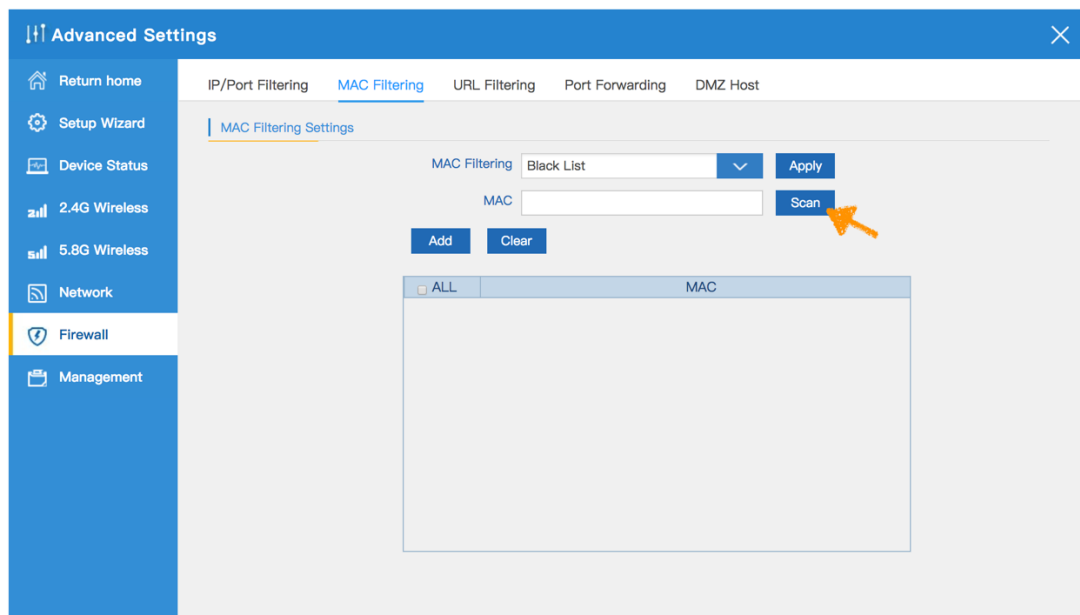
Return home Setup Wizard Device Status 2.4G Wireless 5.8G Wireless Network Firewall Management

IP/Port Filtering MAC Filtering URL Filtering Port Forwarding DMZ Host

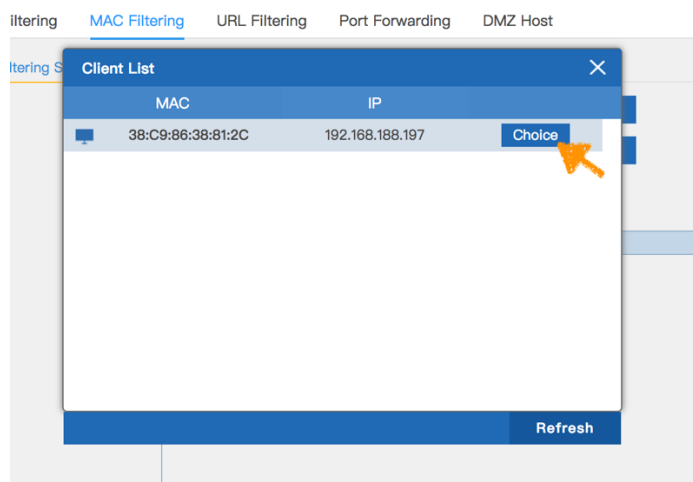
MAC Filtering Settings

MAC Filtering Disable Black List White List Apply

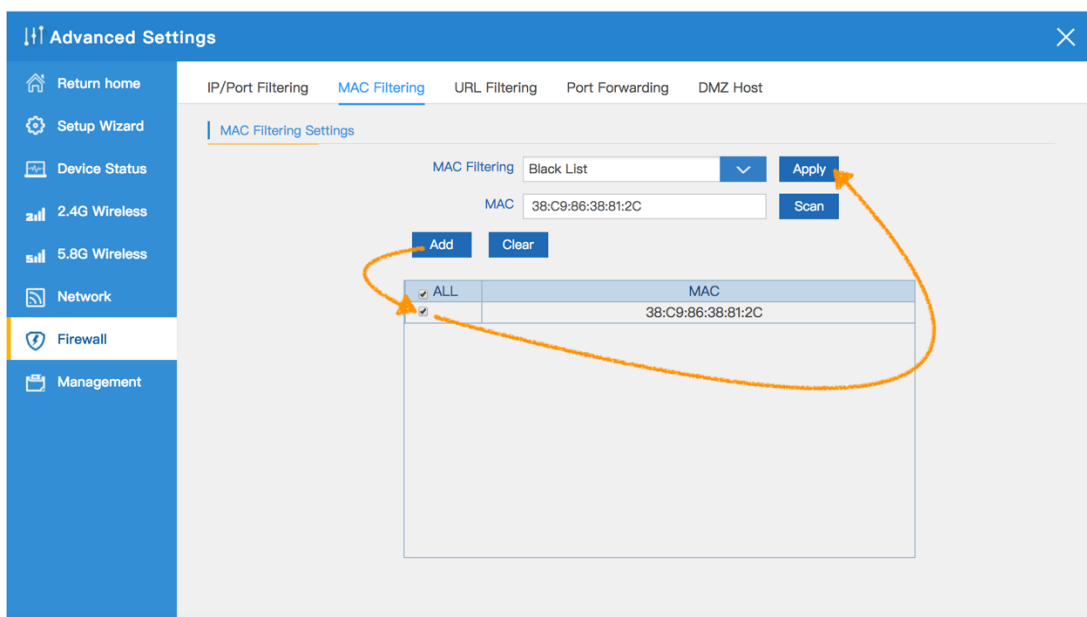
**2.Black List :** Scan specified mode or manual input mode to set, you can block the specified MAC address to connect to the Internet, leaving only link Regional network function.



### 3.Click Choice

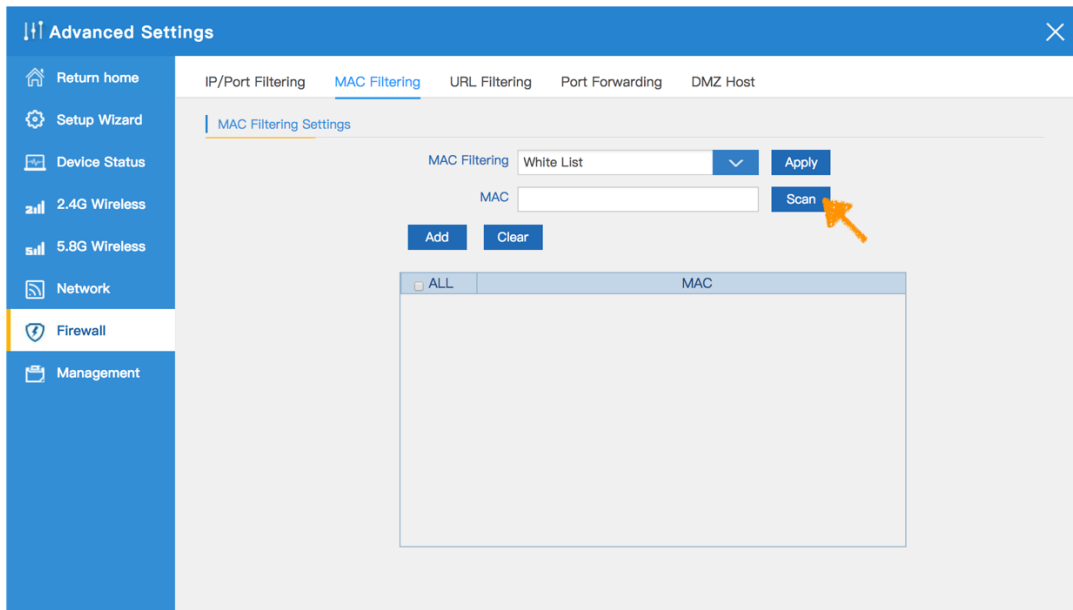


### 4. Added specified MAC address , Click Apply

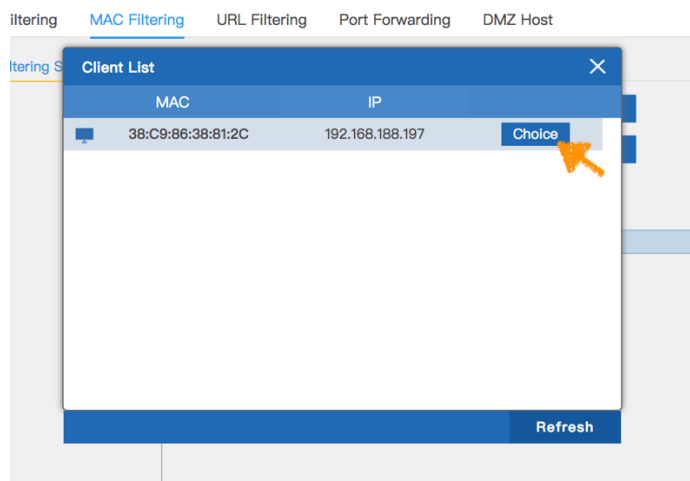




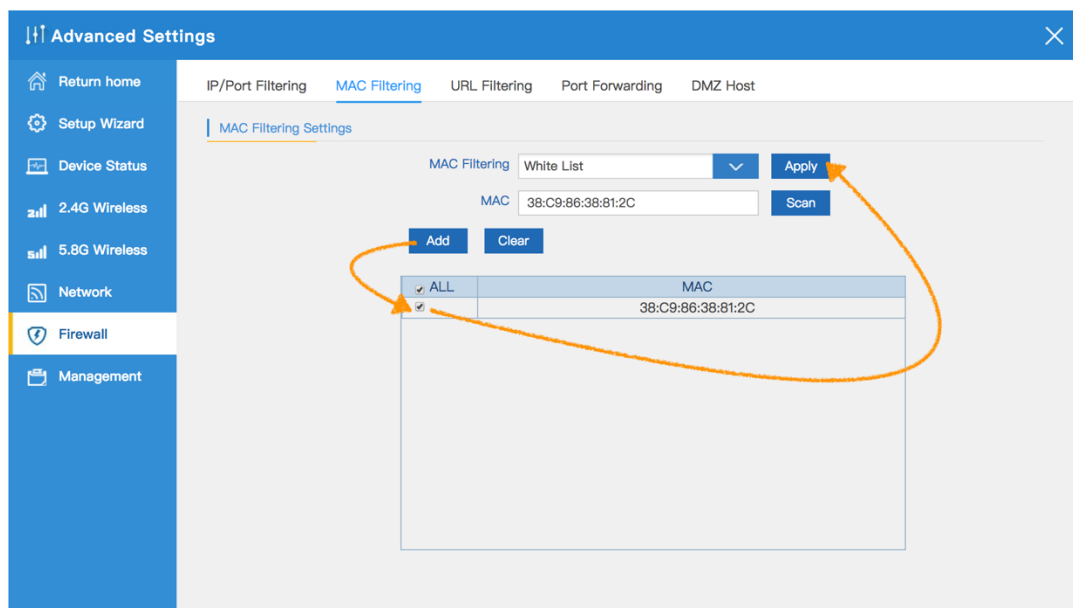
**5.White List :** Scan specified mode or manual input mode is set to allow the specified MAC address to connect to the Internet



**6.Click Choice**

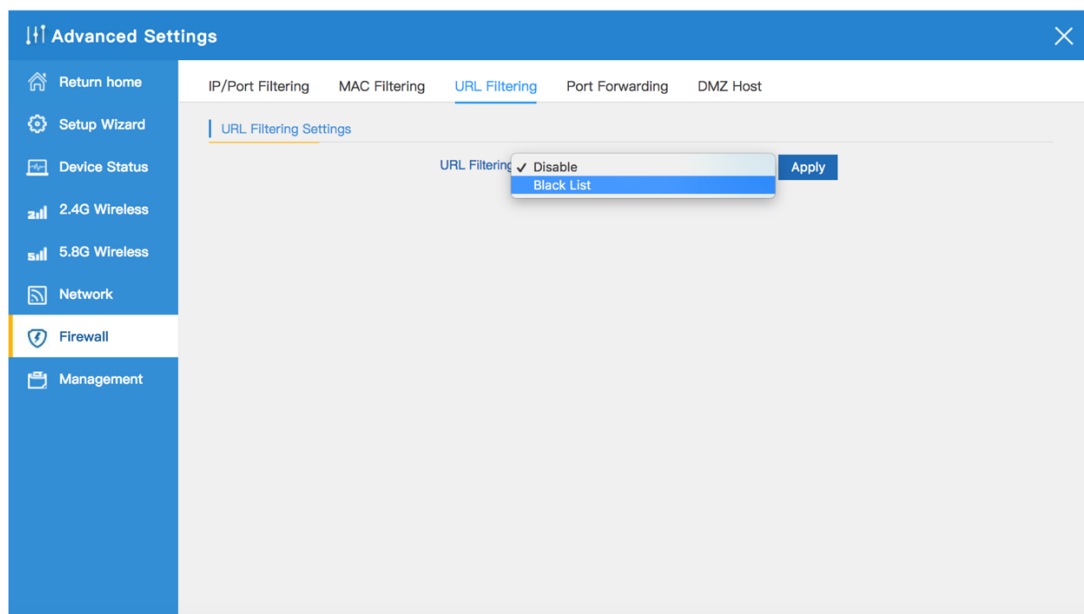


**7.Added specified MAC address , Click Apply**

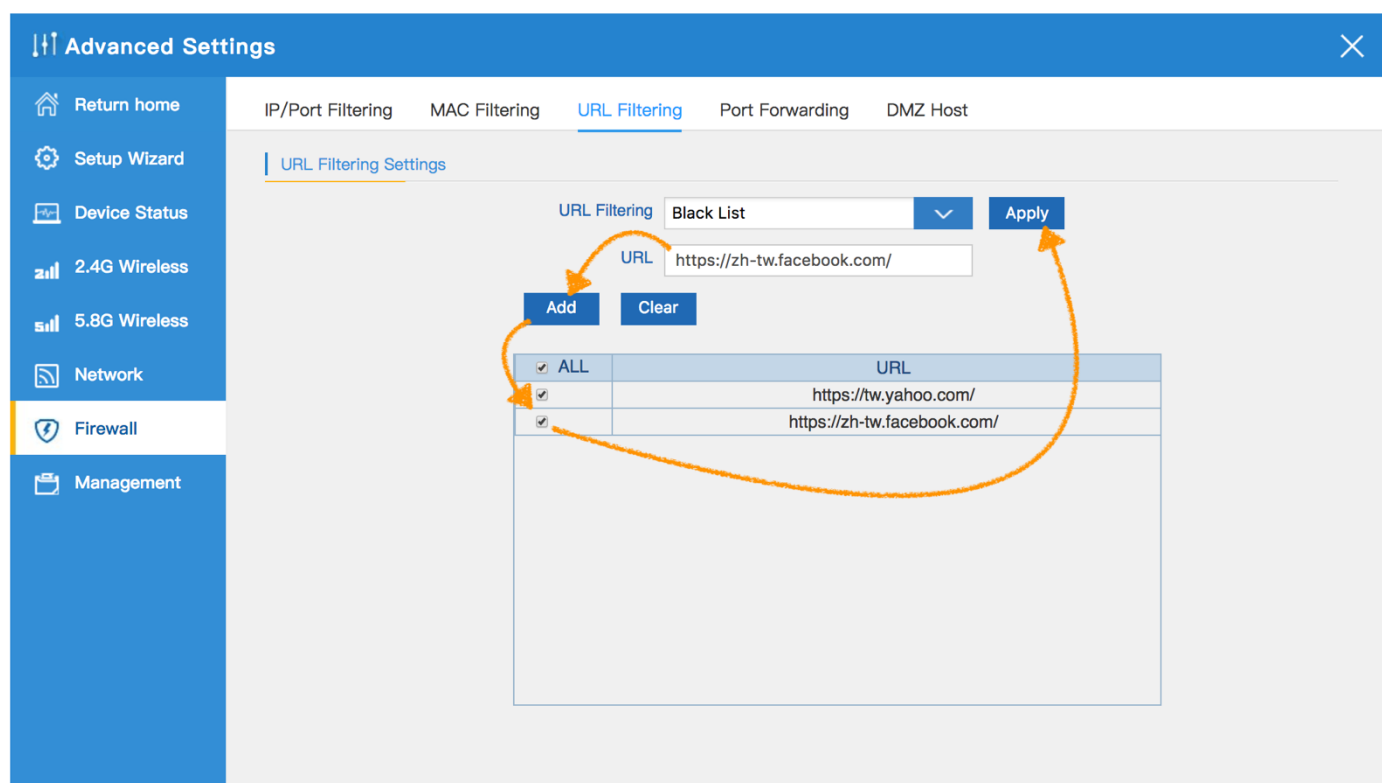


### 5.2.3 URL Filtering :

1.Factory default value is disable, Can be set to Black List. The following will begin to introduce how to set the enable Black List function



2.**Black List** : Can set the URL refuse to access the list , making all devices unable to connect to the list of websites



## 5.2.4 Port Forwarding

- The scan specified mode or manual input mode is set to allow the specified internal IP address of the External / External port so that other users can connect from the remote network to the WAP-8121 internal network equipment (ex: NAS , IP camera)
- After the setting is completed, the real fixed IP address or DDNS mode can be used to remotely connect to the NAS inside the WAP-8121

(ex: Remote user page input http://111.250.96.135:2020 Port Forwarding to NAS IP address:192.168.188.197:80)

Advanced Settings

IP/Port Filtering   MAC Filtering   URL Filtering   **Port Forwarding**   DMZ Host

Port Forwarding

IP: 192.168.188.197   **Apply**

Internal Port: 80 (1-65535)

External Port: 2020 (1-65535)

**Add**   **Clear**   **Scan**

	IP	Internal Port	External Port
<input checked="" type="checkbox"/> ALL			
<input checked="" type="checkbox"/>	192.168.188.197	80	2020

## 5.2.5 DMZ Host

1.Factory default value is disable . The following will begin to introduce how to set the enable DMZ Host function

Advanced Settings

IP/Port Filtering   MAC Filtering   URL Filtering   Port Forwarding   **DMZ Host**

DMZ Settings

DMZ Setting: **Enable DMZ**   **Apply**

DMZ LAN IP:

2. When enabled, will independent a non-military block for this ip address device.

**Note :** This device will be directly exposed on the Internet, there will be some risk

Advanced Settings

Return home

Setup Wizard

Device Status

2.4G Wireless

5.8G Wireless

Network

Firewall

Management

IP/Port FilteringMAC FilteringURL FilteringPort ForwardingDMZ Host

DMZ Settings

DMZ Setting

Enable DMZ

▼

Apply

DMZ LAN IP

192.168.188.197

## 5.3 Management

### 5.3.1 System Time :

1. Get time from NTP server can only be available under Gateway and WISP Mode. Before sync with host, please select your Time zone. **Auto restart** : Define the system reboot time(0:00~23:00) , Can choose every day or every five days or every 10 days , System Reboot Automatically.

**Advanced Settings**

Return home | Setup Wizard | Device Status | 2.4G Wireless | 5.8G Wireless | Network | Firewall | Management

**System Time** | DDNS settings | QoS | Logs | Upgrade Firmware | System | User

Synchronous mode: ☐ Sync with Host ☒ Sync with Server

System Time: 2015-10-29 20:52:06 Sync with Server

Choose Time Zone: Taipei

NTP Server: 64.250.177.145-Time.nist.gov

Auto restart: ☐ 0:00 ☐ one day

Apply

2. Can set up the required NAT Server

**Advanced Settings**

Return home | Setup Wizard | Device Status | 2.4G Wireless | 5.8G Wireless | Network | Firewall | Management

**System Time** | DDNS settings | QoS | Logs | Upgrade Firmware | System | User

Synchronous mode: ☐ Sync with Host ☒ Sync with Server

System Time: 2018-05-30 16:04:10 Sync with Server

Choose Time Zone: Taipei

NTP Server: 

- time.windows.com
- 210.98.16.100-Time.Kriss.re.kr
- 211.115.194.21-Ntp1.epidc.co.kr
- 64.250.177.145-Time.nist.gov
- 192.5.41.41-North America
- 192.5.41.209-North America
- 208.184.49.9-North America
- 131.188.3.220-Europe
- 130.149.17.8-Europ
- 203.60.1.2-Australia
- 203.117.180.36-Asia Pacific
- CUSTOM---

Auto restart: ☐ 0:00 ☐ one day

Apply

### 3. Can add NTP Server yourself (ex: Hinet NTP Server)

**Advanced Settings**

**System Time** | DDNS settings | QoS | Logs | Upgrade Firmware | System | User

Synchronous mode: ☐ Sync with Host ☒ Sync with Server

System Time: 2018-05-30 16:05:35 [Sync with Server](#)

Choose Time Zone: Taipei

NTP Server: ---CUSTOM---

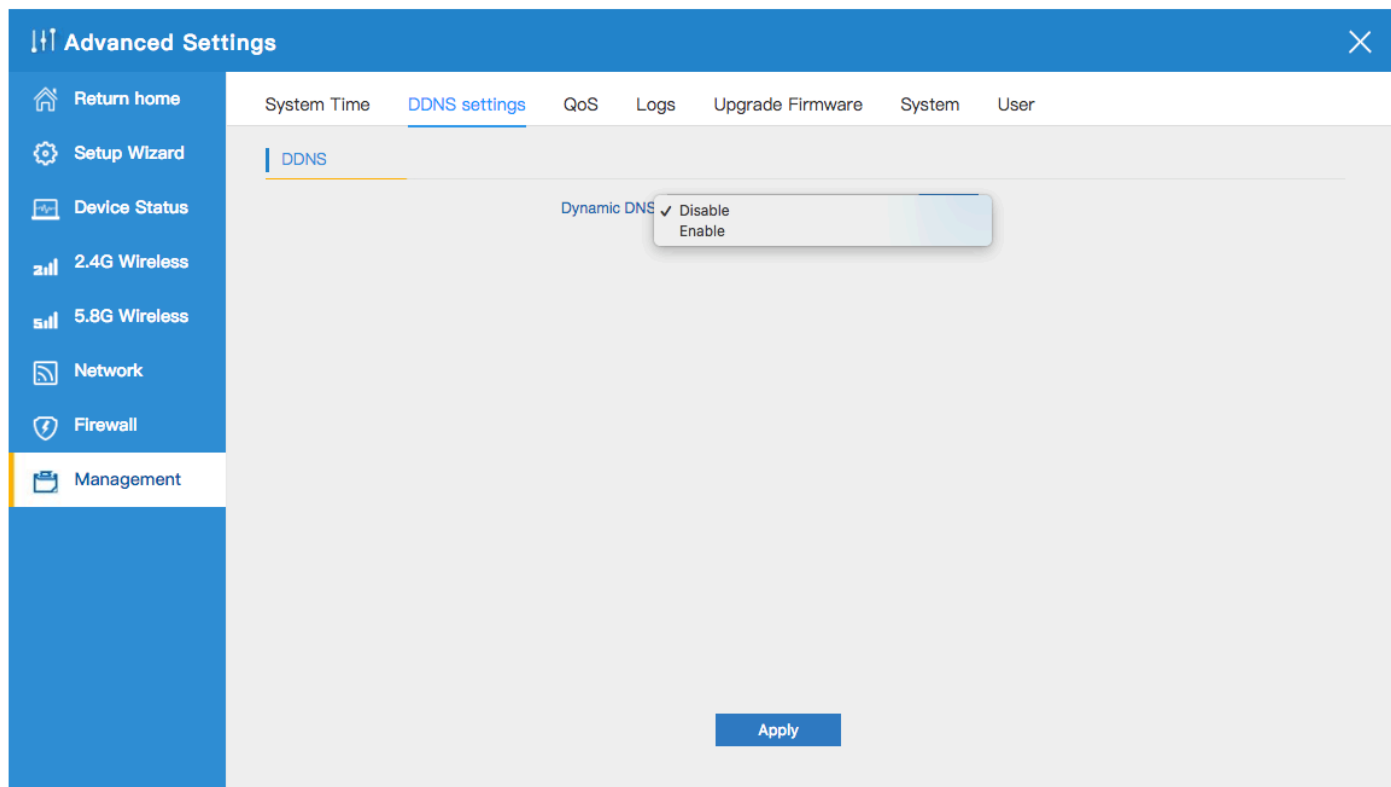
Manual Setup: clock.stdtime.gov.tw

Auto restart: ☐ 0:00 ☐ one day

[Apply](#)

## 5.3.2 DDNS settings :

1.Factory default value is disable



The screenshot shows the 'Advanced Settings' window with the 'DDNS settings' tab selected. The 'Dynamic DNS' dropdown menu is open, showing 'Disable' as the selected option and 'Enable' as an alternative. The 'Apply' button is at the bottom right.

Advanced Settings

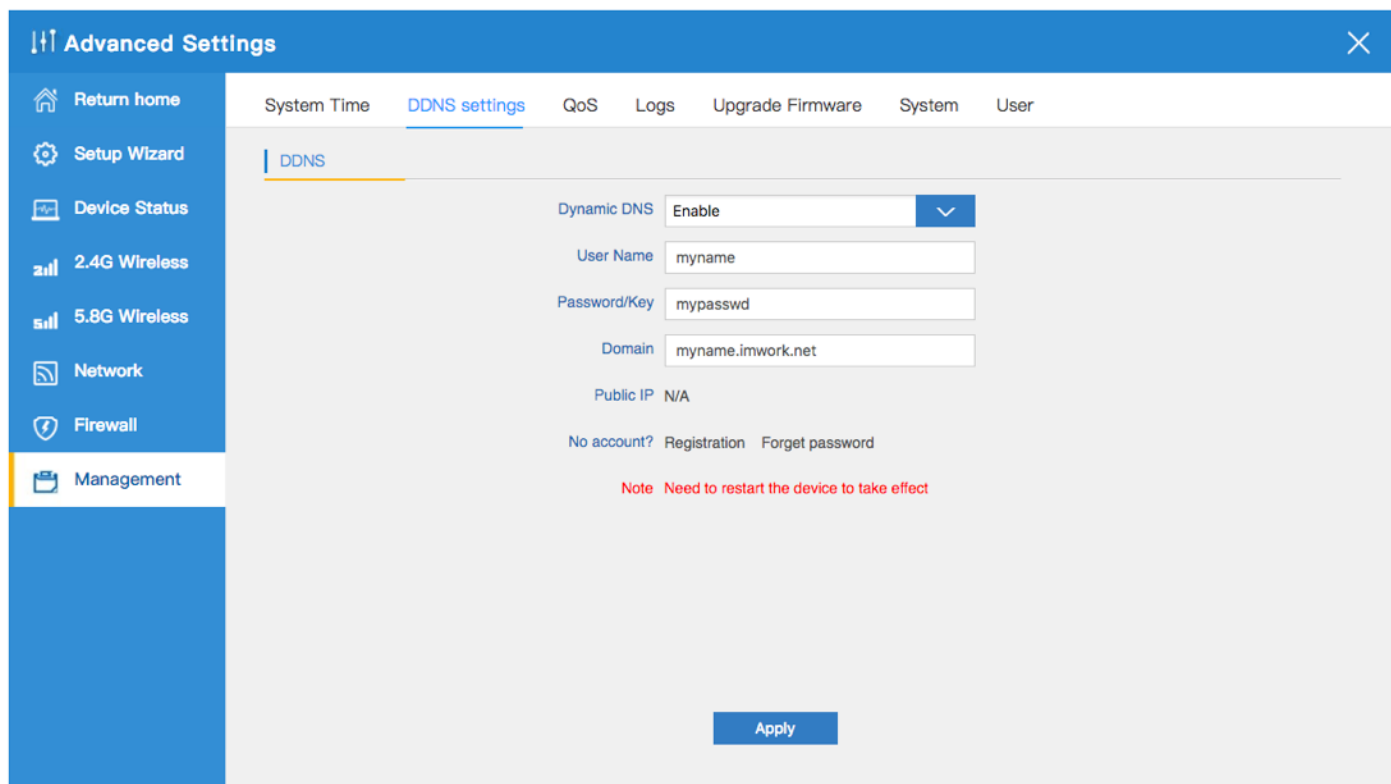
System Time DDNS settings QoS Logs Upgrade Firmware System User

DDNS

Dynamic DNS ☒ Disable ☐ Enable

Apply

2. For users no apply for an ISP fixed IP address, only Floating real IP address , you can also connect to the network device in WAP-8121 through the DDNS service.



The screenshot shows the 'Advanced Settings' window with the 'DDNS settings' tab selected. The 'Dynamic DNS' dropdown menu is set to 'Enable'. The 'User Name' field is filled with 'myname', the 'Password/Key' field is filled with 'mypasswd', and the 'Domain' field is filled with 'myname.imwork.net'. The 'Public IP' field is filled with 'N/A'. There are links for 'Registration' and 'Forget password' under the 'No account?' label. A red note at the bottom states 'Need to restart the device to take effect'. The 'Apply' button is at the bottom right.

Advanced Settings

System Time DDNS settings QoS Logs Upgrade Firmware System User

DDNS

Dynamic DNS

User Name

Password/Key

Domain

Public IP

No account? [Registration](#) [Forget password](#)

Note Need to restart the device to take effect

Apply

### 5.3.3 QoS :

- Can manually specify the IP address range of the device to limit the upload and download

**Advanced Settings**

System Time DDNS settings **QoS** Logs Upgrade Firmware System User

**QoS**

☒ ON Apply

Upload  Range:(100-1024000)Kbps

Download  Range:(100-1024000)Kbps

**QoS Rule settings**

☒ IP range  —

Mode ☒ Share total bandwidth with all IP address. ☐ Assign bandwidth for each IP address.

Bandwidth Upload  Kbps Download  Kbps

Comment  Add Clear

<input type="checkbox"/> ALL	Start IP	End IP	Mode	Upload(Kbps)	Download(Kbps)	Comment
<input checked="" type="checkbox"/>	192.168.188.100	192.168.188.200	Share	20000	50000	engineer

### 5.3.4 Logs :

- In Logs part, you can copy the running history of the device to consult the engineers when you have any trouble

**Advanced Settings**

System Time DDNS settings QoS **Logs** Upgrade Firmware System User

**System Logs**

☐ Remote Log Server

IP  Apply

```
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.640000] vap-0(ath1):ieee80211_setup_node forcing sta to associate in 19 mode
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.640000] Getting extcaps from Scan Entry
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.650000] OL vap_start +
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.650000] wmi_unified_vdev_start_send for vap 0 (86df0000)
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.660000] OL vap_start -
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.660000] ol_vdev_start_resp_ev for vap 0 (86df0000)
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.670000] ath_wmm_update:
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.670000] Notification to UMAC VAP layer
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.680000] wmi_unified_vdev_stop_send for vap 0 (86df0000)
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.680000] STOPPED EVENT for vap 0 (86df0000)
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.810000] vap-0(ath1):ieee80211_setup_node forcing sta to associate in 19 mode
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.810000] Getting extcaps from Scan Entry
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.820000] OL vap_start +
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.820000] wmi_unified_vdev_start_send for vap 0 (86df0000)
Oct 29 18:40:10 WAP-8121 kern.warn kernel: [ 208.830000] OL vap_start -
```

Refresh Clear



### 5.3.5 Upgrade Firmware :

- Allows you to browse the new firmware in your computer and upgrade. Please do not power off the device during upgrade.

The screenshot shows the 'Advanced Settings' web interface. On the left is a blue sidebar with navigation links: Return home, Setup Wizard, Device Status, 2.4G Wireless, 5.8G Wireless, Network, Firewall, and Management (highlighted). The main content area has a top bar with tabs: System Time, DDNS settings, QoS, Logs, Upgrade Firmware (selected), System, and User. Below the tabs, the 'Upgrade Firmware' section displays the 'Software Version' as 'LevelOne-WAP-8121-V3-S-Build20180706194027'. There is a 'Choose File' button followed by a text input field containing '選擇檔案' and '未選擇任何檔案', and an 'Upgrade' button. Below this is a checkbox for 'Restore factory settings'. A red note with a warning icon states: 'Do not power off the device during the upload because it may crash the system!'.

### 5.3.6 System :

You are able to backup the current configuration to your PC and restore by applying the configuration file from your PC. And you can Reset and Reboot the device with just one click

The screenshot shows the 'Advanced Settings' web interface with the 'System' tab selected. The sidebar is the same as in the previous screenshot. The main content area has tabs: System Time, DDNS settings, QoS, Logs, Upgrade Firmware, System (selected), and User. Below the tabs, the 'System' section displays a 'Save/Reload Settings' link. There are four rows of controls: 'Backup' with a 'Backup' button; 'Restore' with a text input field containing '選擇檔案' and '未選擇任何檔案', and a 'Restore' button; 'Reset Default' with a 'Reset Default' button; and 'Reboot' with a 'Reboot' button.

### 5.3.7 User :

- Management and change the password for Log in

Advanced Settings

Return home

Setup Wizard

Device Status

2.4G Wireless

5.8G Wireless

Network

Firewall

Management

System Time

DDNS settings

QoS

Logs

Upgrade Firmware

System

User

User

Old Password

Password

Confirm Password

Apply

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