

# User Manual

( WAB-5010)



V1.0

Digital Data Communications GmbH, Germany.

<http://www.level1.com>

# Default Settings

|            |                 |       |
|------------|-----------------|-------|
| IP Address | 192.168.188.253 |       |
| User name  | user            | Admin |
| Password   | admin           | root  |

## Attention:

### Check box contents:

- 1.Pole Mounting Hose Clamp (40-64mm)
- 2.RJ45 Network Cable
- 3.Resource CD (User Manual, QIG)
- 4.Quick Installation Guide

## 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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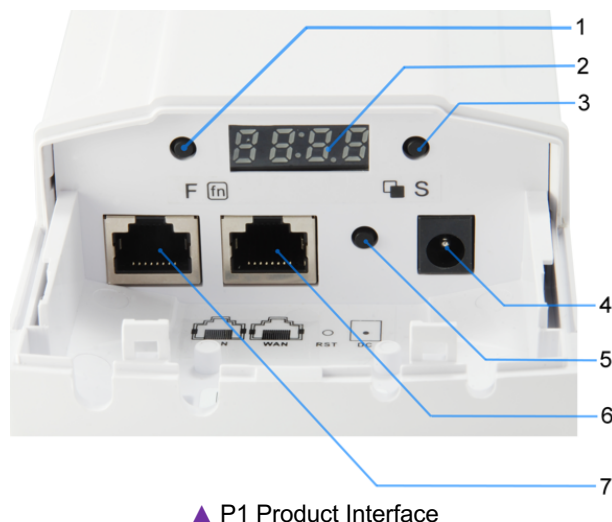
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# Chapter 1 Hardware and Operation mode Instruction

## 1.1 Interface Instruction:



| Marked number | LED/Button/Interface                   | Description  |
|---------------|--|--|
| 1             | LED display Function Button            | Select modify location   |
| 2             | LED display                            | show AP/Client operation mode, Channels, IP address and RF Power .(If not operate this LED display in 10 mins, the screen will be automatically black screen)                                    |
| 3             | LED display Selection Button           | Can select the Increase or decrease value ; View Channels, IP address and Signal strength status.  |
| 4             | DC                                     | 12V/1A DC input injector (Power adapter unit is to be ordered separately)  |
| 5             | RST(Reset to Default)                  | With the AP powered on, press the Reset button for 10 seconds until the Signal Strength LED blink faster than ever. The AP will restart itself and reset the device to factory default settings. |
| 6             | WAN/POE port<br>(10/100Mbps RJ45 port) | The WAN/POE port is used to connect to network devices, such as a switch OR POE adapter to power the device  |
| 7             | LAN port<br>(10/100Mbps RJ45 port)     | The LAN port is used to connect to network devices, such as a switch or PC / NB  |

## 1.2 LED light instruction:



| LED | Color | Status         | Description                |
|-----|-------|----------------|----------------------------|
| 5G  | Green | Blinking       | On 5.8G WIFI is on         |
| LAN | Green | On             | On LAN is connected        |
| WAN | Green | On             | On WAN is connected        |
| SYS | Green | Solow Blinking | WDS Mode, Master AP        |
|     | Green | On             | WDS Mode Client / Slave AP |
|     | Green | Fast Blinking  | Reset to Defaults          |

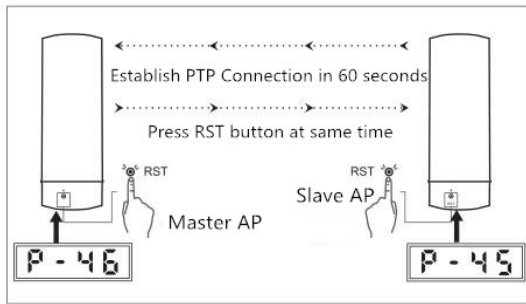
## 1.3 LED Display instruction:

| LED Display Content | Content Instruction                                  | Remark  |
|---------------------|--|---|
|                     | H: Hotspot, WDS mode, Master AP<br>44: Channel is 44 | Show the channel of AP and Client;<br>Pls note, the channel should be same of AP and Client.  |
|                     | C: Client, WDS Mode, Slave AP<br>44: Channel is 44   | If not operate this LED display in 10 mins, the screen will be automatically black screen   |
|                     | A: IP Address<br>253: IP address is 192.168.188.253  | Show AP or Client's IP address;<br>Remark:<br>In AP and Clients, there is one device with IP address: 192.168.188.253; Other device with IP of 192.168.188.X, to avoid the IP address conflict. |
|                     | P: RF Power<br>-42: The signal Strength is -42dBm    | The signal strength is different if distance different.   |

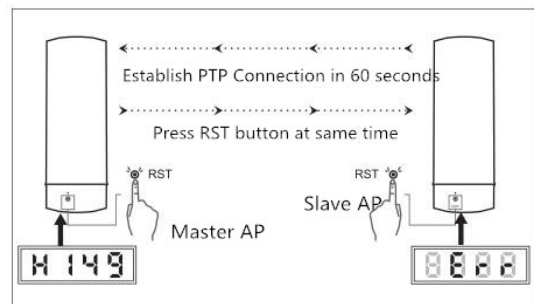
**1<sup>st</sup>:** In default, all device is in Client(Slave AP) Mode, the IP address is 192.168.188.253;  
So, please setup one device when bridge the two outdoor WAB-5010 together.  
In 5G Outdoor WAB-5010, the default channel is 44 ; Picture showed as follow:



**2<sup>nd</sup>:** Configure the Point to Point connection by press reset button, then waiting for the PTP connection, No need to setup client side:



**Connection Success**

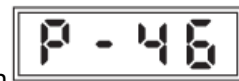


**Connection Fail**

Press mater AP and slave AP's reset button at same time to establish the point to point connection;



When LED display show **P888**, mean is in connecting, should be connected in 60 seconds;



When PTP connection success, the LED display will show WAB-5010's signal strength **P-46** ;

We can press "S" button to view WAB-5010's IP address, channel, signal strength; If connection fail, the



LED display show **8888**, will back to default page after 10 seconds.

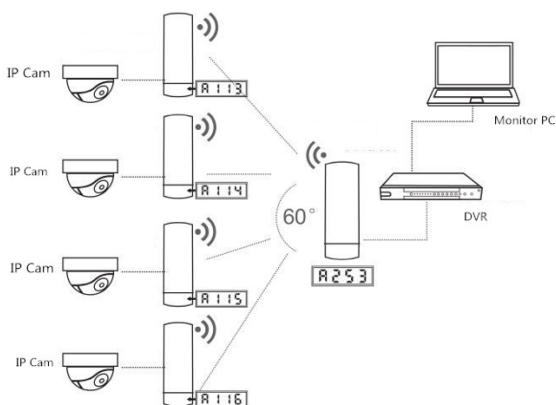
### 3<sup>rd</sup>: Firmware Status

When PTP connection success, can view the connection status in WEB interface, picture showed as follow:

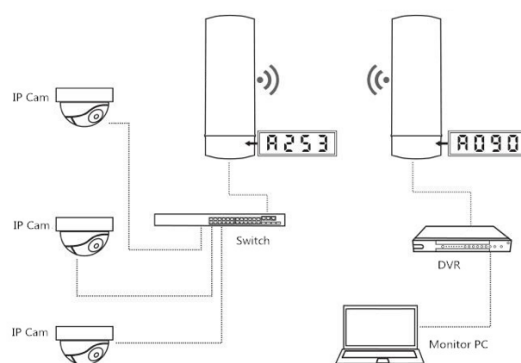
| CHANEL: 36  |             |                   |                 |         |         |         |
|-------------|-------------|-------------------|-----------------|---------|---------|---------|
| Device List | Description | MAC Address       | IP Address      | Signal  | Status  | Uptime  |
| DEV0        | N/A         | 44:D1:FA:21:A3:7E | 192.168.188.253 | -53 dBm | on-line | 00:6:37 |
| DEV1        | N/A         | 44:D1:FA:21:68:E9 | 192.168.188.156 | -53 dBm | on-line | 00:6:37 |

### 4<sup>th</sup>: The application network topology.

#### Point to Multi Point



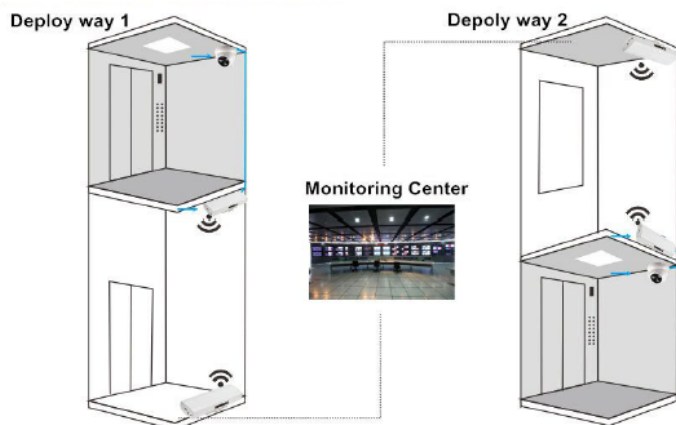
#### Point to Point



## Chapter 2 Working Diagram

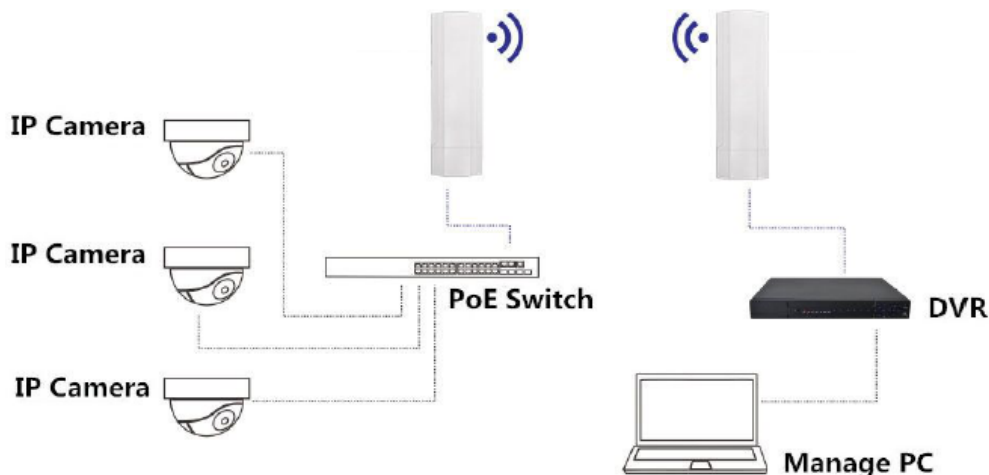
Mostly for Point to Point and Point to multi Point connections, outdoor WAB-5010 work with IP camera for example to show the working diagram:

### A. PTP Working Diagram of Outdoor WAB-5010 work in Elevator:



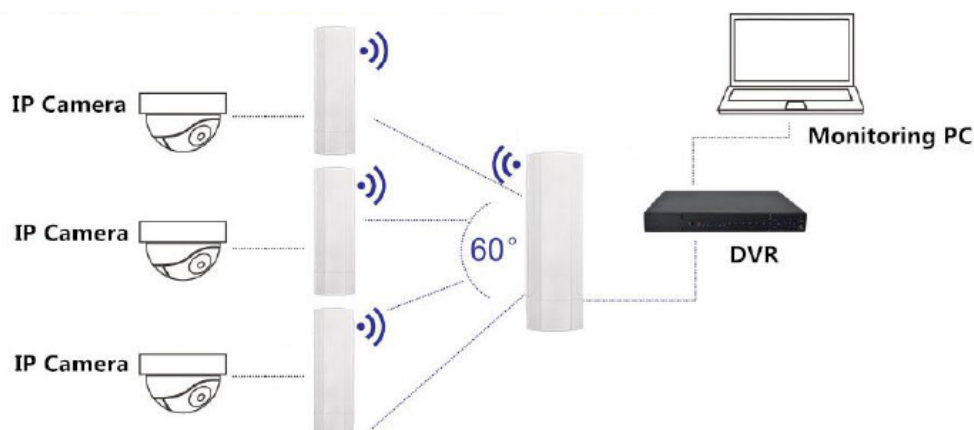
▲ P3: Working diagram

### B. PTP Working Diagram of Outdoor WAB-5010 work with Multiple IP Camera:



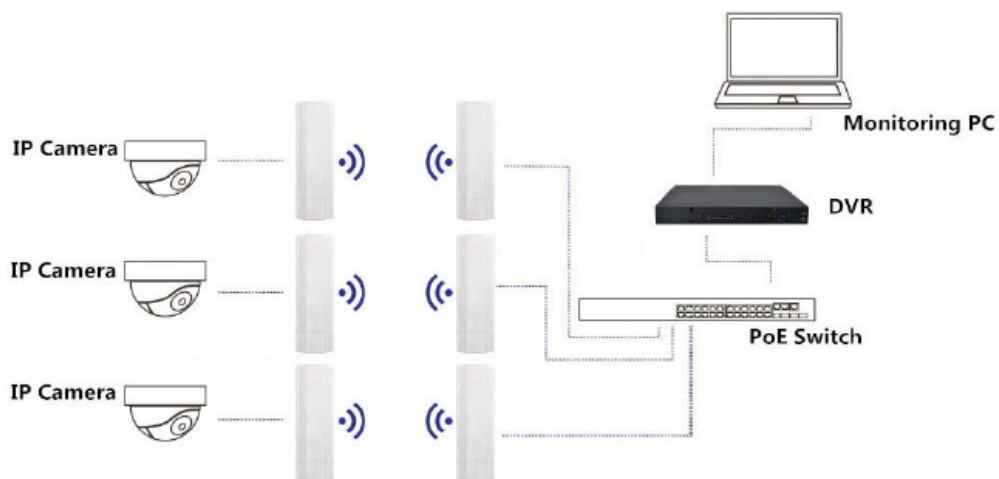
▲ P4: Working diagram

### C. PTMP Working Diagram of Outdoor WAB-5010 work with IP Camera:



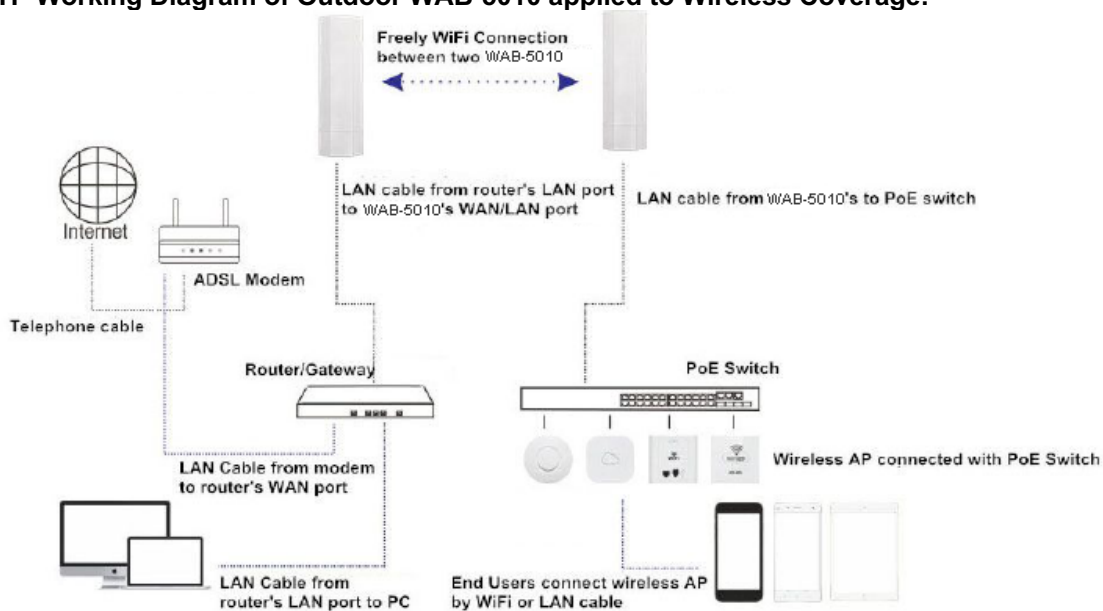
▲ P5: Working diagram

#### D. PTMP Working Diagram of Outdoor WAB-5010 work with Multiple IP Camera:



▲ P6: Working diagram

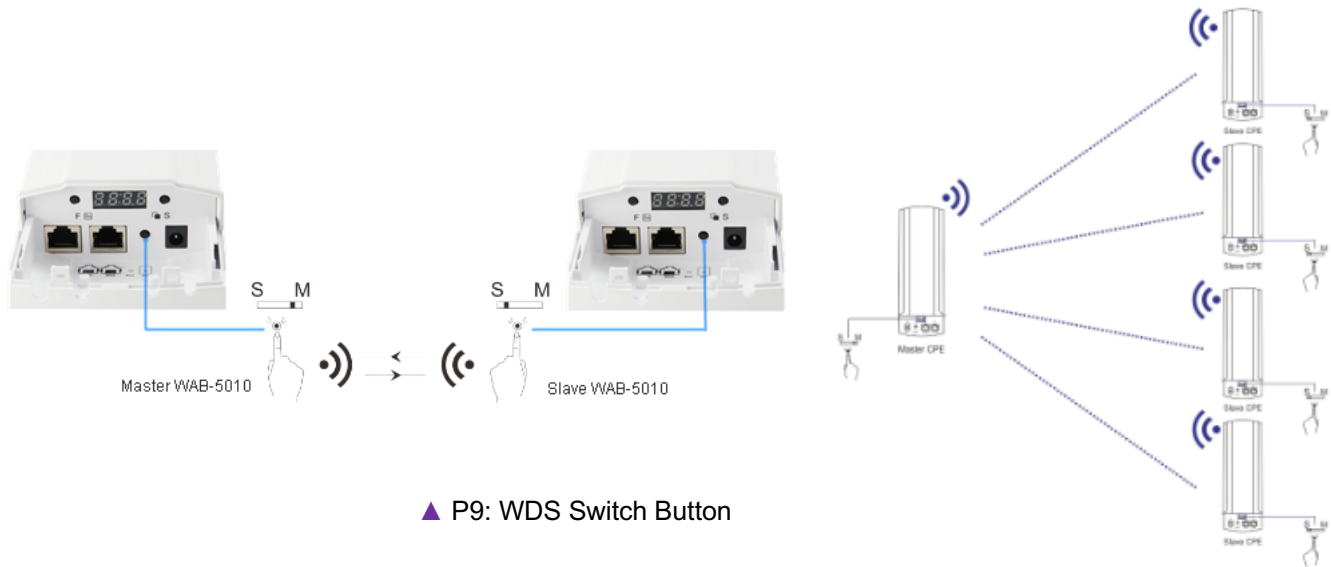
#### E. PTP Working Diagram of Outdoor WAB-5010 applied to Wireless Coverage:



▲ P7: Working diagram

## Chapter 3 WDS Switch Button Configuration

This Outdoor WAB-5010 support Wireless AP, Gateway, WISP, Wireless Bridge, WDS operation mode, effective solution for PTP, PTMP application and outdoor long range wifi coverage application. What's more, there is WDS button on the case, easy to do PTP,PTMP connection by press the WDS button and reset button, no need to access into product GUI.



Here we are show how to the connection by press the WDS switch button:

S: Mean Slave AP

M: Mean Master AP

When WDS switch button on M side, mean this outdoor WAB-5010 is a master AP;

When WDS switch button on S side, mean this outdoor WAB-5010 is an slave AP

### Remark:

The master AP can connect with 1~4 slave AP

The WDS switch button in S side in default

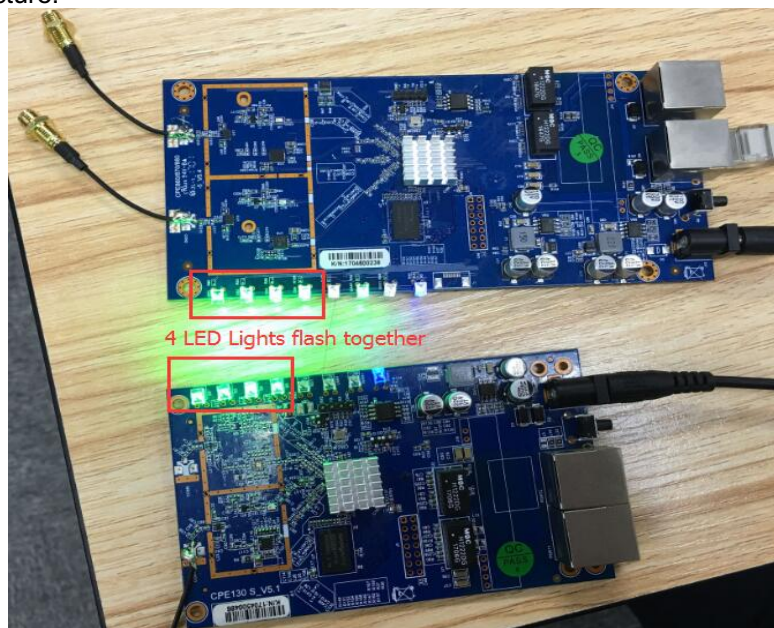
The default IP address of master AP and slave AP is 192.168.288.253.

### Operation:

1<sup>st</sup> : Power on the Master AP and Slave AP;

2<sup>nd</sup>: Push the WDS switch button to M side on Master AP, Master AP's IP address will change to 192.168.188.252.

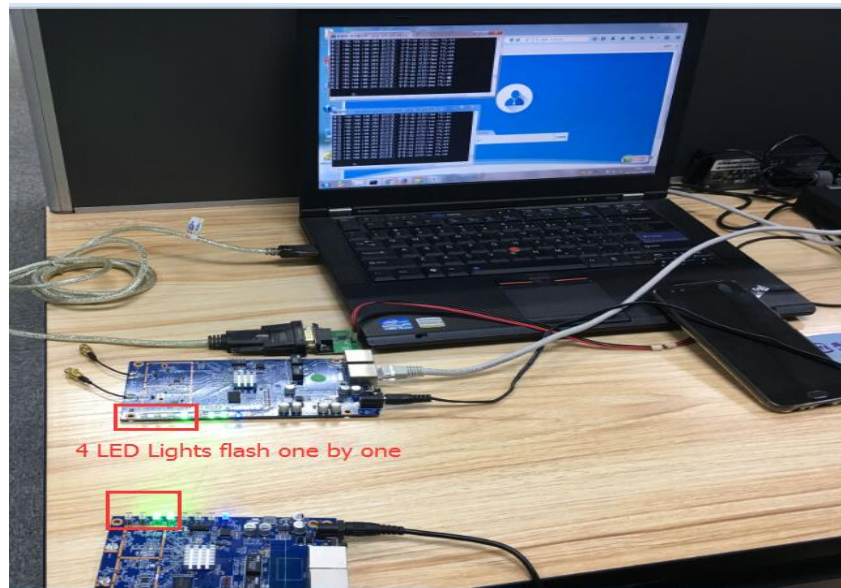
3<sup>rd</sup>: Press the reset button on master AP and Slave AP together in 1 second, then 4 signal LED light will flash together like following picture:



▲ P10: LED Light Status



4<sup>th</sup>: Wait a while, the slave AP will connect with master AP automatically, then master AP and slave AP LED signal LED lights flash one by one as following picture:



▲ P11: LED Light Status

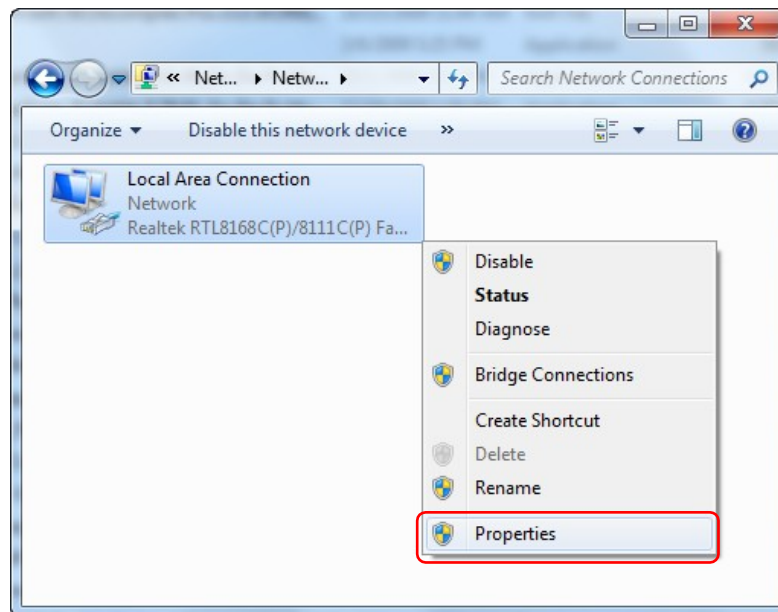
If there are 2~4 Slave APs, the 4 steps will change to as follow:

Press the reset button around 1 second on the 2nd slave AP, 3rd slave AP, 4th slave AP, and finish this step in 2 mins, then all slave AP will connect with master AP automatically; The LED lights status is same.

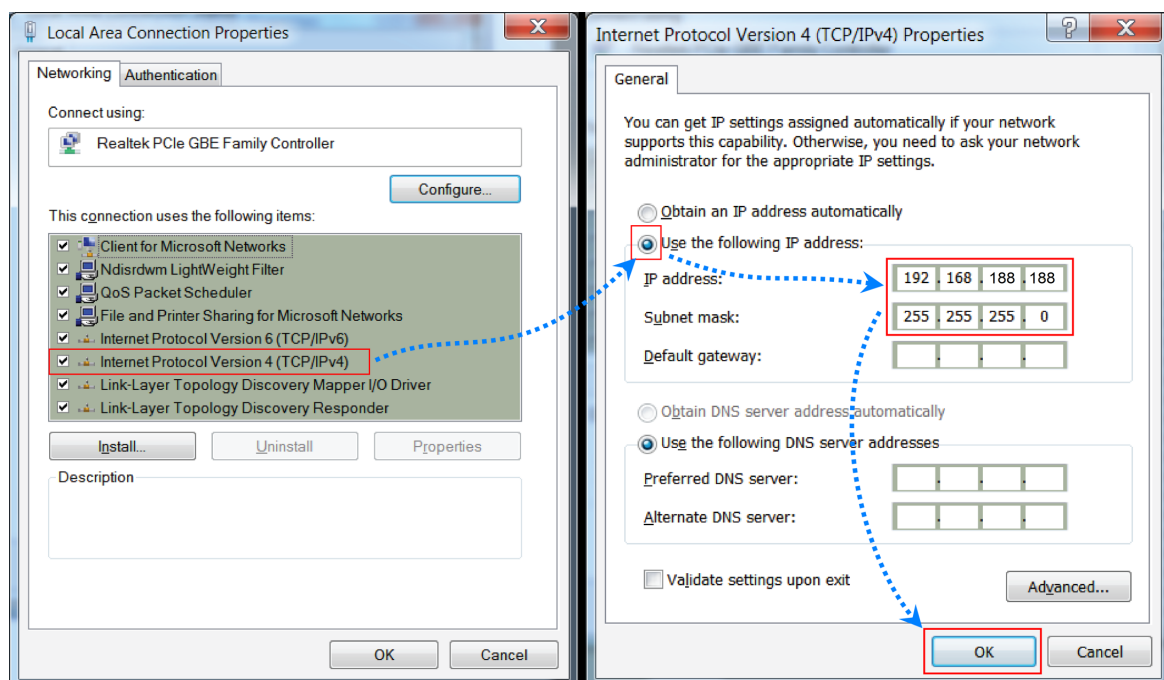
## Chapter 4 Login

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.



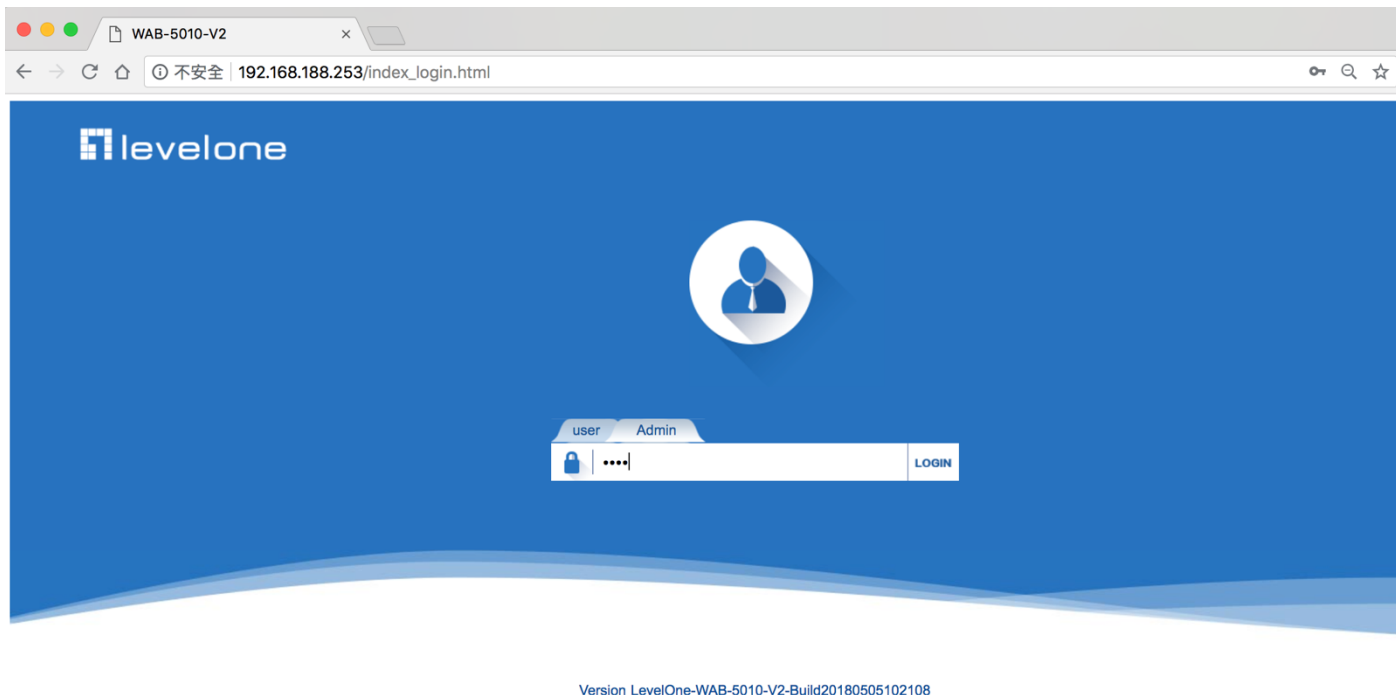
▲ P1 Setting of computer's IP address



▲ P 2 Setting of computer's IP address



3. Input 192.168.188.253 into browser, then pop up the login page, there are user/Admin login page, input Admin to login the user page; input root to login the admin page.



4. After login, then P4 Device Status will be showed;

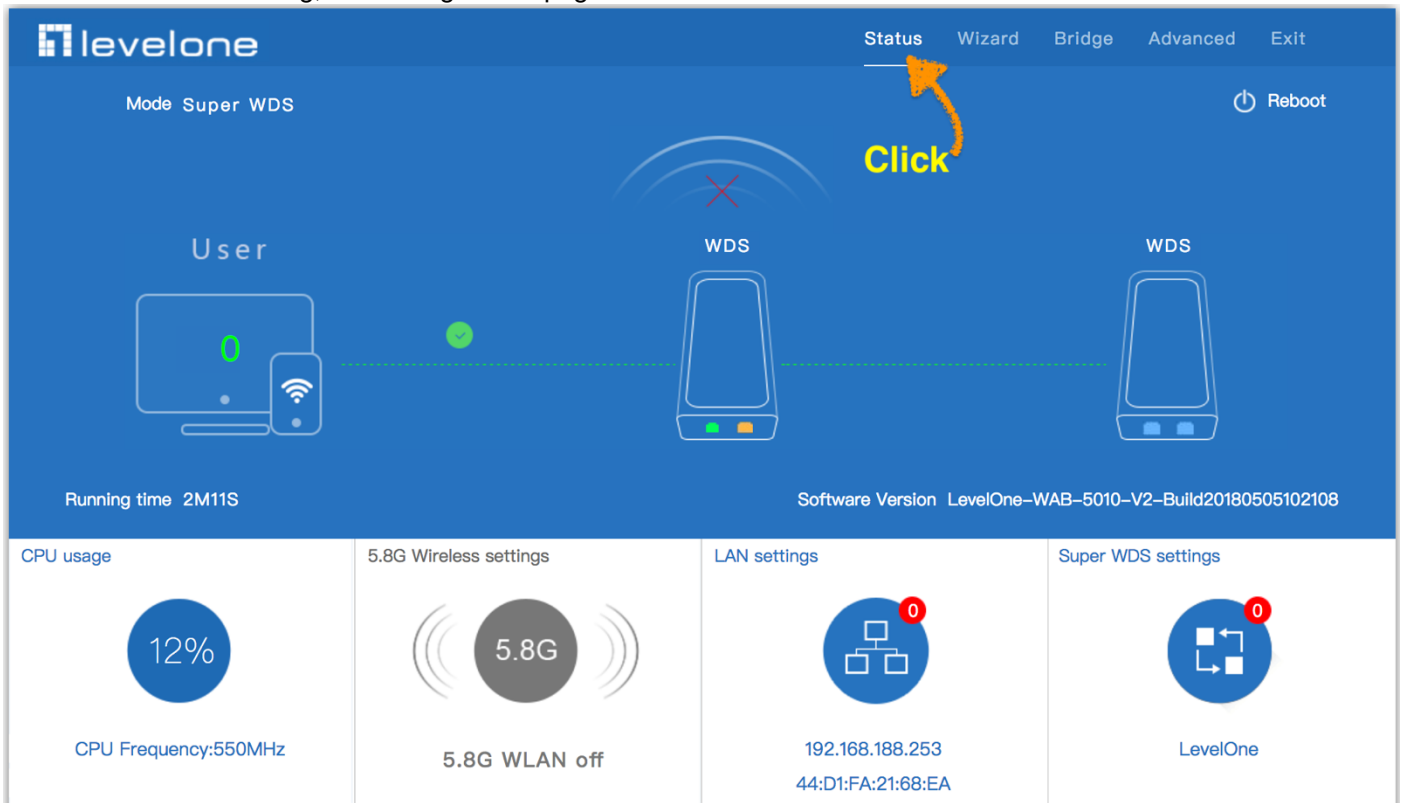
This page will show the Wireless AP's default operation mode, channel, connection status, CPU usage, Wireless settings, LAN Setting, Wireless AP's Location, hardware/firmware version.



## Chapter 5 WEB GUI interface Setting

### 5.1 Status :

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

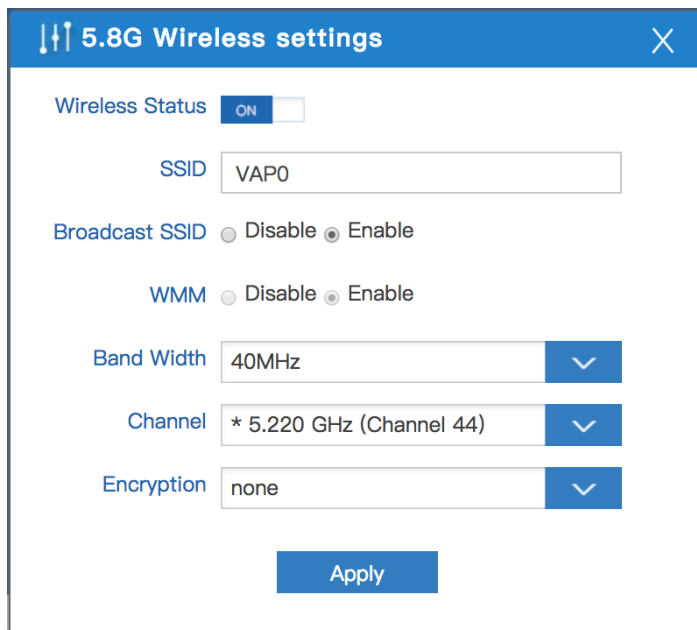


2.Then in Wireless Setting, GUI configuration page showed as below:

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



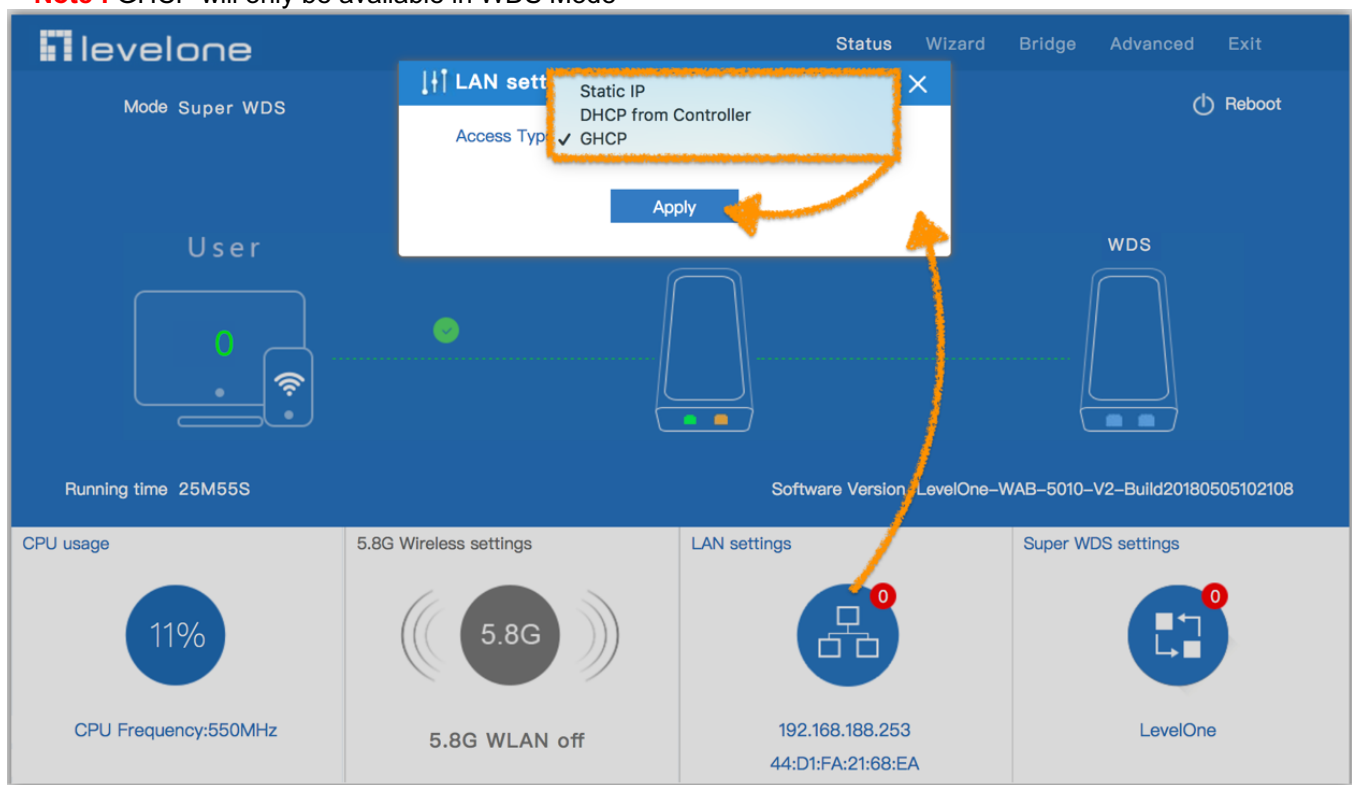
3. User can configure the SSID, password, bandwidth, channel in the above picture, then Apply to finish.



The image shows a '5.8G Wireless settings' window. At the top, 'Wireless Status' is set to 'ON'. Below it, the 'SSID' is 'VAP0'. 'Broadcast SSID' is set to 'Enable' (radio button selected). 'WMM' is also set to 'Enable'. 'Band Width' is set to '40MHz'. 'Channel' is set to '\* 5.220 GHz (Channel 44)'. 'Encryption' is set to 'none'. An 'Apply' button is at the bottom.

4. LAN Setting can be used in one of the modes depending on your network environment.

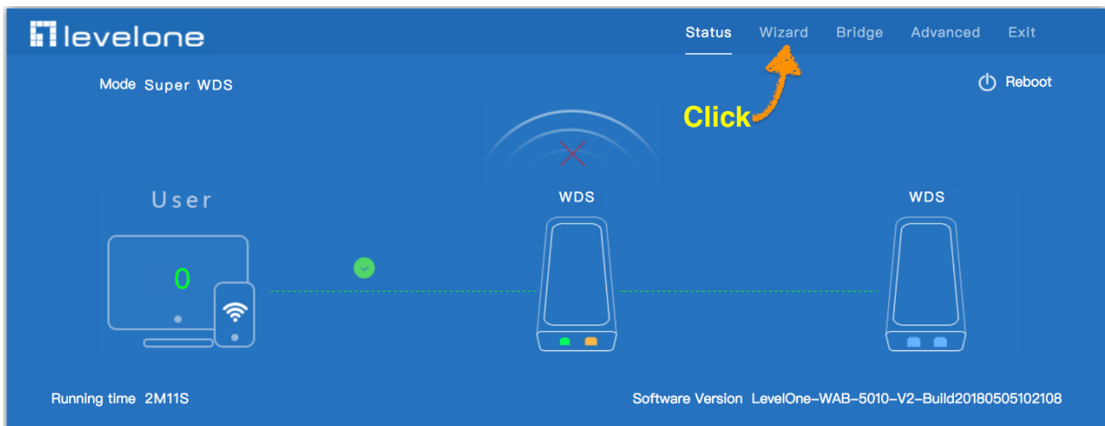
**Note :** GHCP will only be available in WDS Mode



The image shows the LevelOne WDS Mode interface. At the top, there are tabs: Status, Wizard, Bridge, Advanced, and Exit. The main area shows 'Mode Super WDS' and a 'Reboot' button. Below this is a diagram showing a 'User' (laptop and phone) connected to a 'WDS' (router) via a green wireless signal. The bottom status bar shows: CPU usage (11%), 5.8G Wireless settings (5.8G WLAN off), LAN settings (192.168.188.253, 44:D1:FA:21:68:EA), and Super WDS settings (LevelOne). An orange-bordered 'LAN settings' window is overlaid on the interface, showing 'Access Type' with options: 'Static IP', 'DHCP from Controller', and 'GHCP' (which is checked). An 'Apply' button is at the bottom of this window. An orange arrow points from the 'LAN settings' window to the 'LAN settings' icon in the bottom status bar.

## 5.2 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.

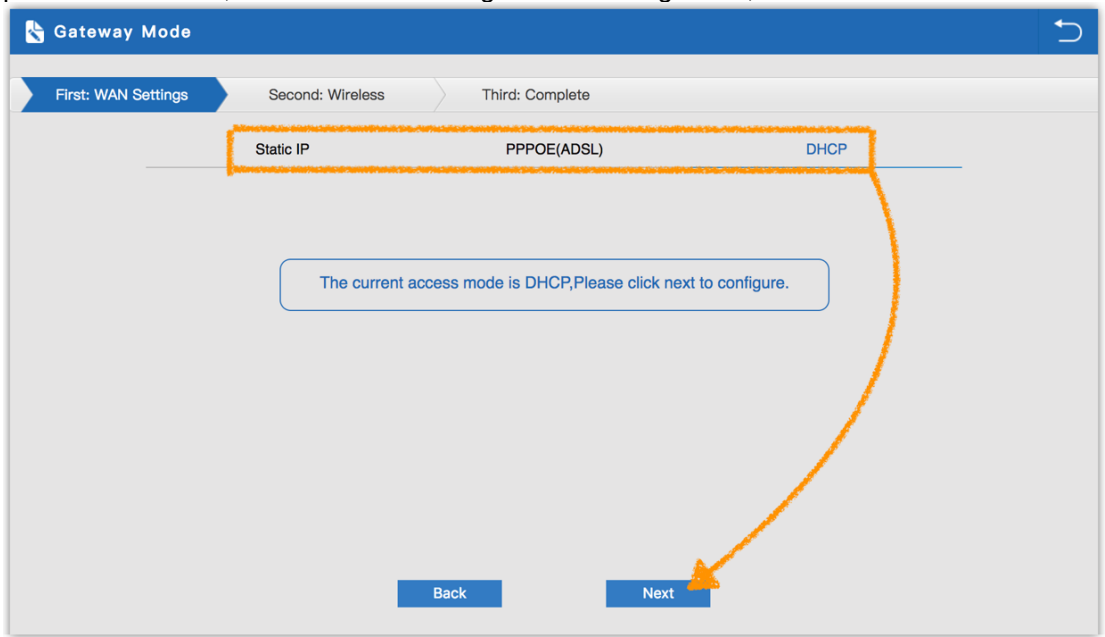


2. In admin login to Wizard, There are Gateway, Repeater, WISP, AP and Super WDS operation mode, Please confirm the operation mode first before configuration starting.Click Wizard in Status page, will pop up following page to configure the operation mode and there are explanation for each operation mode for better application.



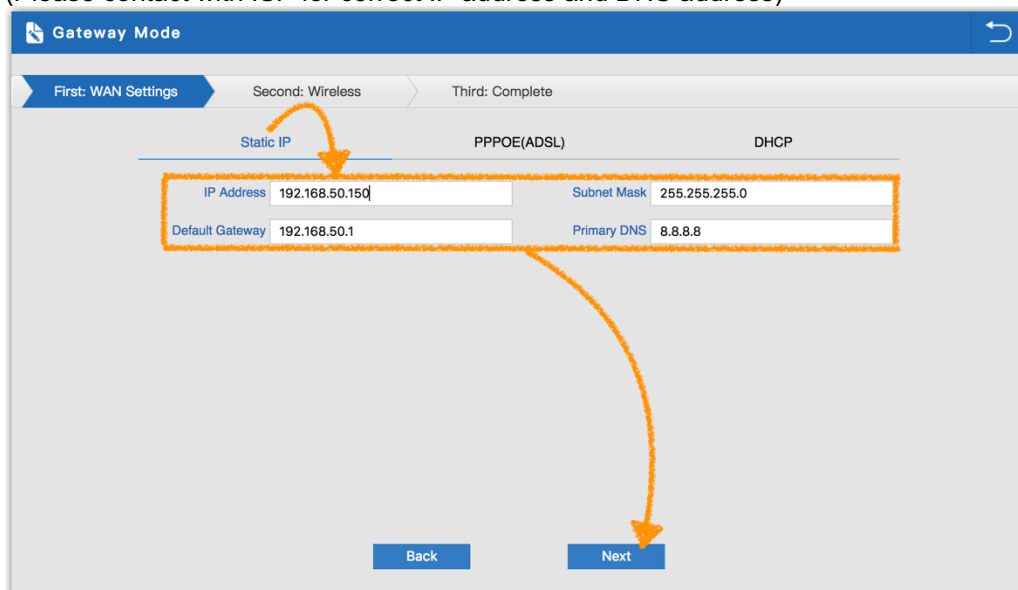
### 5.2.1 Gateway Mode:

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.



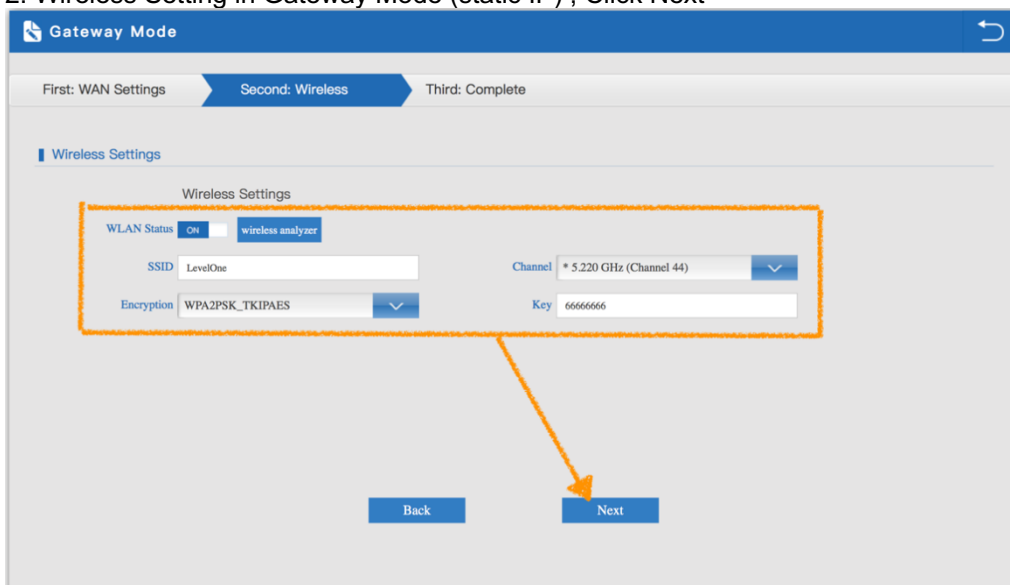
## 5.2.1.1 Static IP setting in Gateway Mode :

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



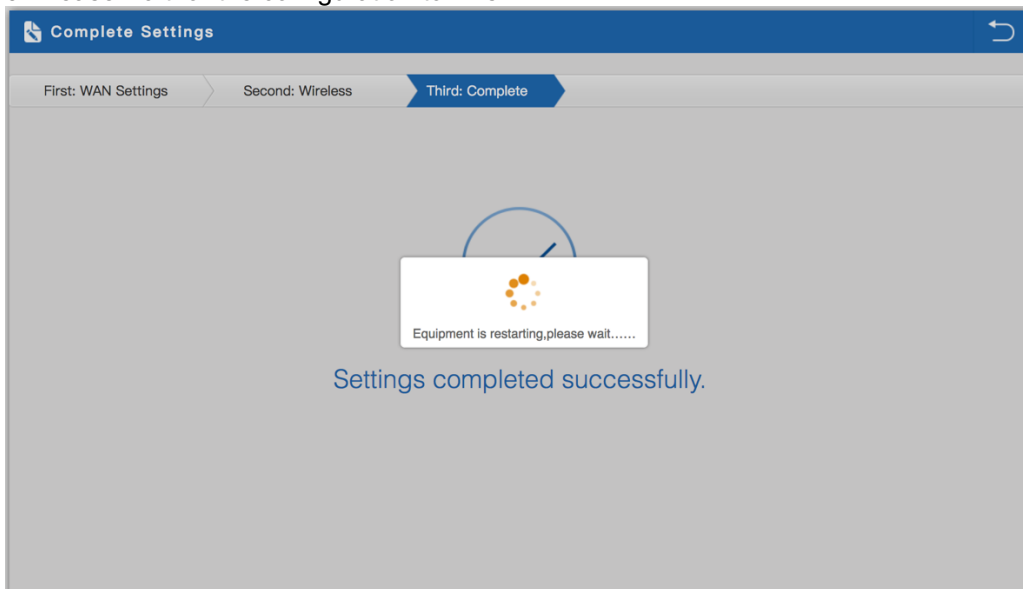
The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'First: WAN Settings' tab is active. Below the tabs, there are three radio buttons: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'Static IP' radio button is selected. Below the radio buttons, there are four input fields: 'IP Address' (192.168.50.150), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.50.1), and 'Primary DNS' (8.8.8.8). These fields are enclosed in an orange dashed box. Below the input fields, there are two buttons: 'Back' and 'Next'. An orange arrow points from the 'Static IP' radio button to the 'Next' button.

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



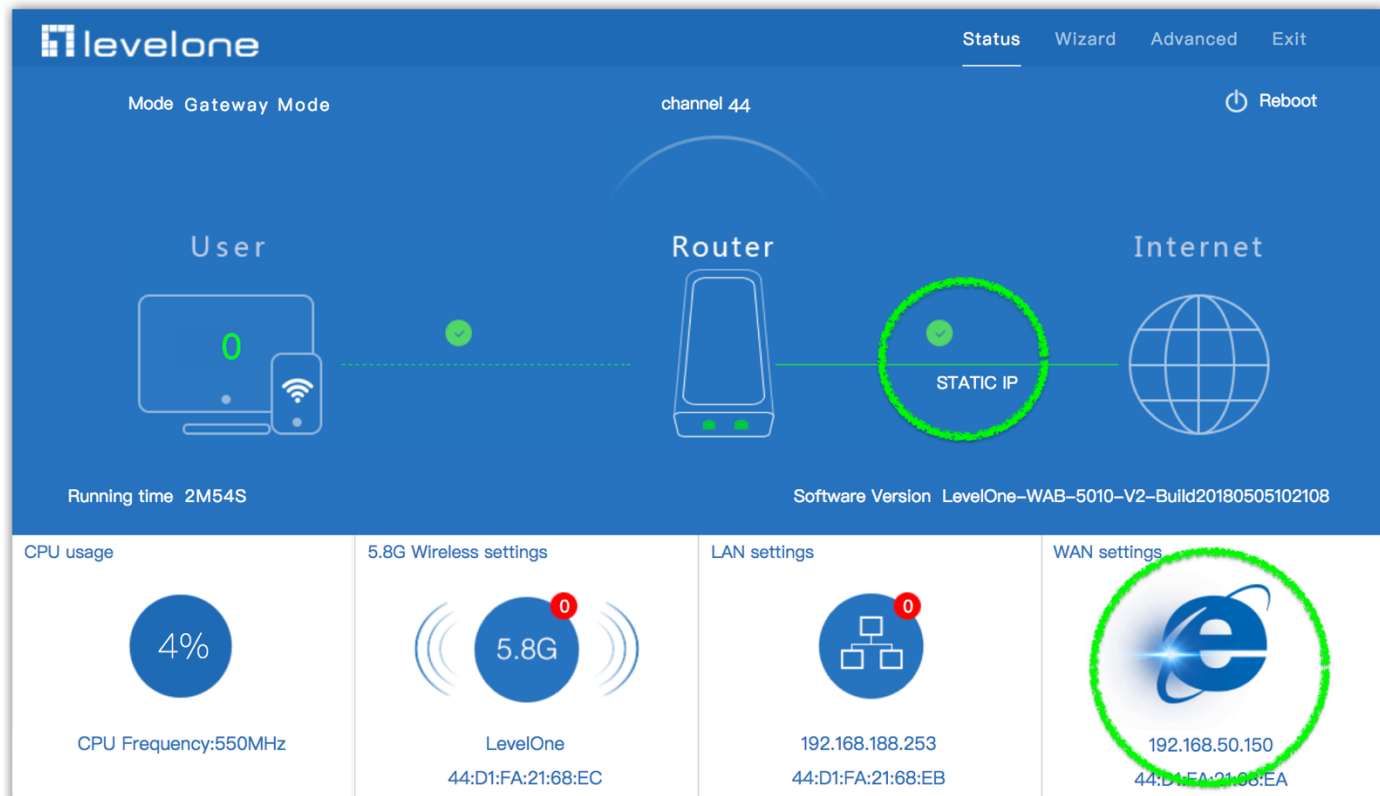
The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three tabs: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'Second: Wireless' tab is active. Below the tabs, there is a section titled 'Wireless Settings'. Inside this section, there are several fields: 'WLAN Status' (ON), 'wireless analyzer' (button), 'SSID' (LevelOne), 'Channel' (\* 5.220 GHz (Channel 44)), 'Encryption' (WPA2PSK\_TKIPAES), and 'Key' (66666666). These fields are enclosed in an orange dashed box. Below the input fields, there are two buttons: 'Back' and 'Next'. An orange arrow points from the 'Next' button in the previous screen to the 'Next' button in this 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 active. Below the tabs, there is a large circular progress indicator. In the center of the progress indicator, there is a message: 'Equipment is restarting, please wait.....'. Below the progress indicator, there is a message: 'Settings completed successfully.'

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



## 5.2.1.2 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' 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 the tabs, there are three options: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'PPPOE(ADSL)' option is selected and highlighted with an orange box. Below this, there are two input fields: 'PPPOE Name' with the value '87654321@hinet.net' and 'PPPOE Password' with a masked value '\*\*\*\*\*'. Both fields are also highlighted with an orange box. At the bottom, there are two buttons: 'Back' and 'Next'. An orange arrow points from the 'Next' button to the 'PPPOE(ADSL)' option.

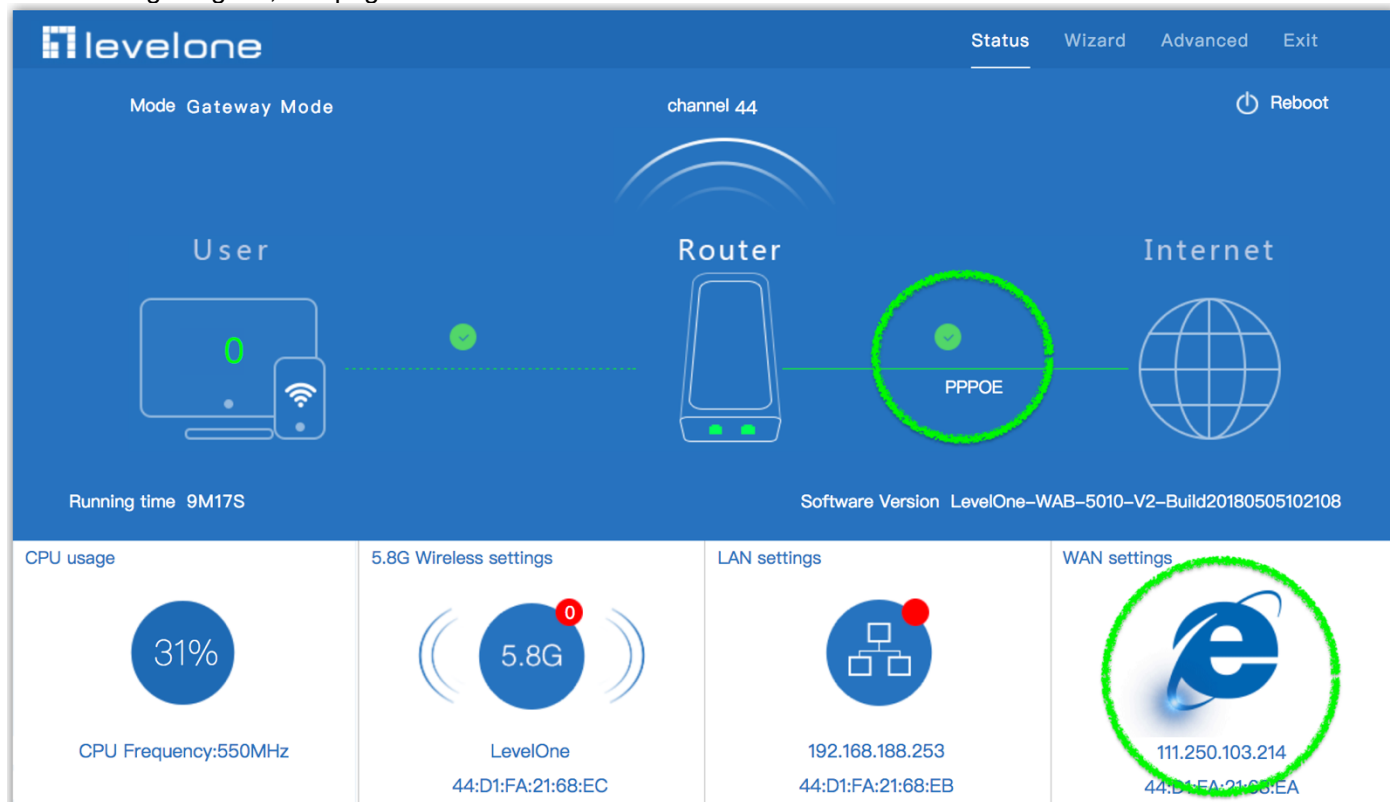
2. Wireless Setting in Gateway Mode (PPPoE), Click Next

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 the tabs, there is a section titled 'Wireless Settings'. Inside this section, there are several fields: 'WLAN Status' with a toggle switch set to 'ON', 'SSID' with the value 'LevelOne', 'Channel' with a dropdown menu showing '\* 5.220 GHz (Channel 44)', 'Encryption' with a dropdown menu showing 'WPA2PSK\_TKIPAES', and 'Key' with the value '66666666'. All these fields are highlighted with an orange box. At the bottom, there are two buttons: 'Back' and 'Next'. An orange arrow points from the 'Next' button to the 'Wireless Settings' section.

3. Please wait for the configuration to finish

The screenshot shows the 'Complete Settings' page. 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 page, there is a progress indicator consisting of a circular arrow and a message box that says 'Equipment is restarting, please wait.....'. Below this, the text 'Settings completed successfully.' is displayed.

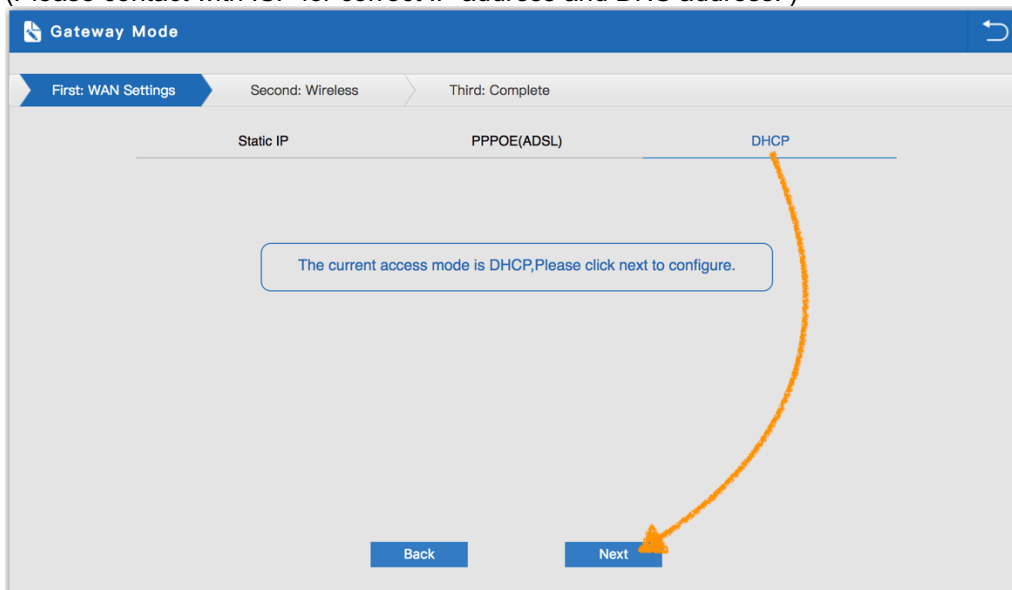
4. Please log in again ,This page will show the connection PPPoE status



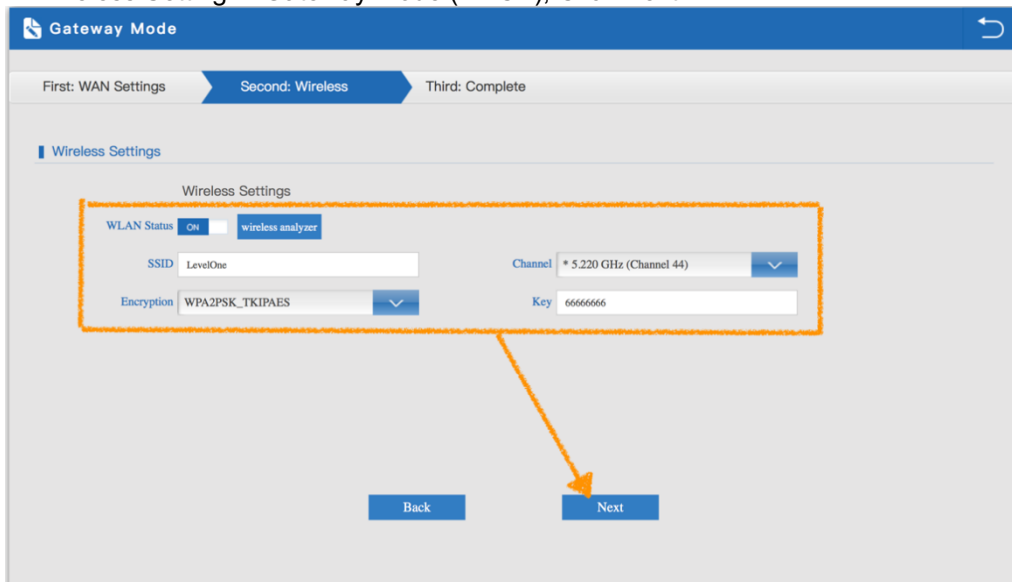


### 5.2.1.3 DHCP setting in Gateway Mode :

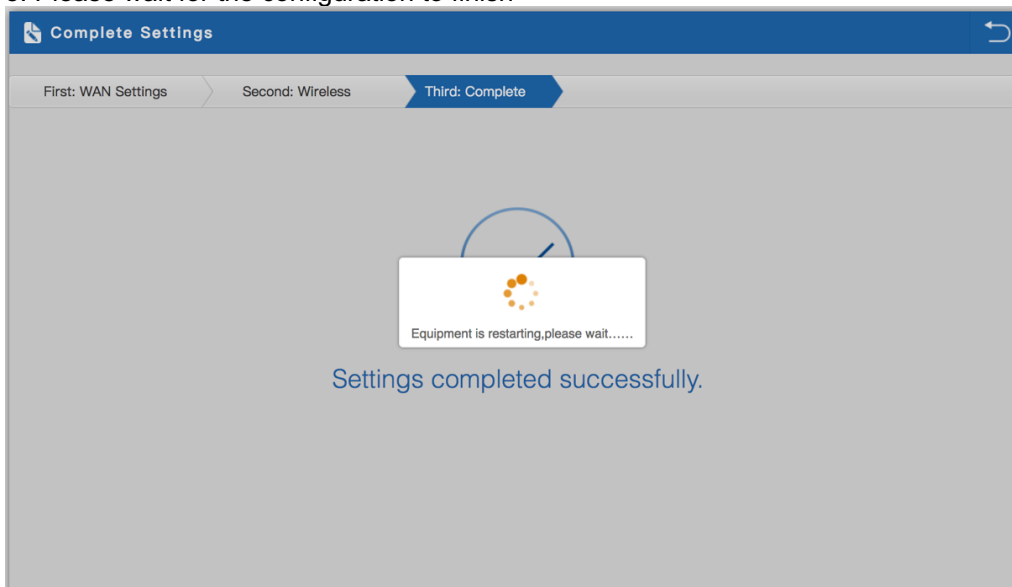
1. Sample DHCP mode setting method, then click next to continue.  
(Please contact with ISP for correct IP address and DNS address. )



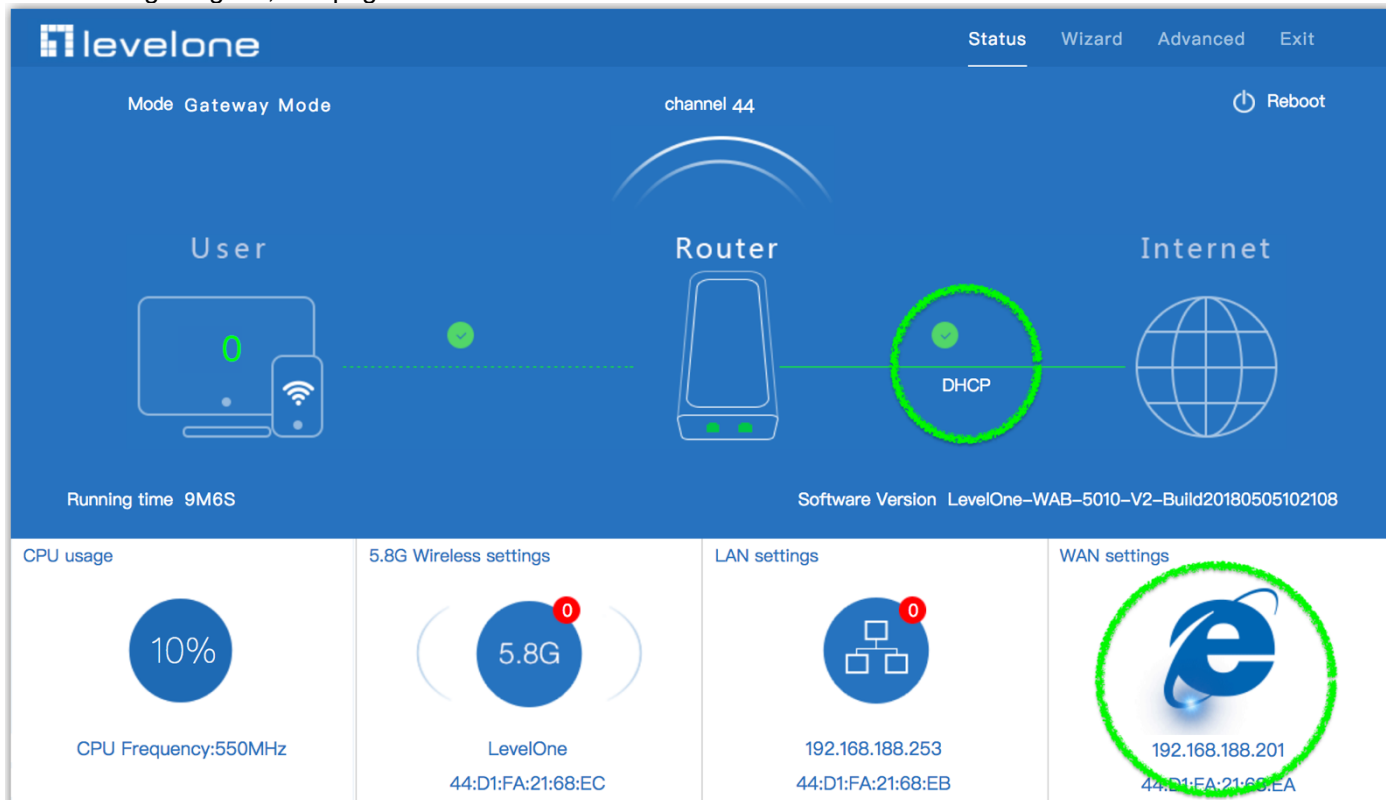
2. Wireless Setting in Gateway Mode (DHCP), Click Next



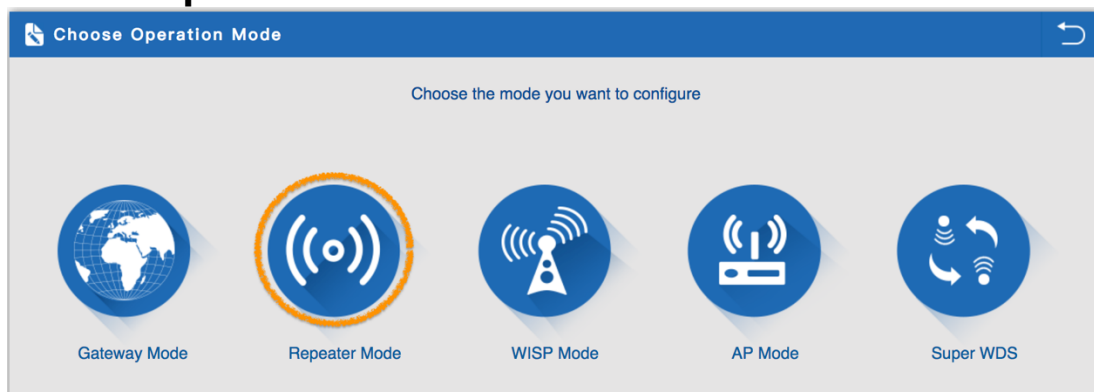
3. Please wait for the configuration to finish



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



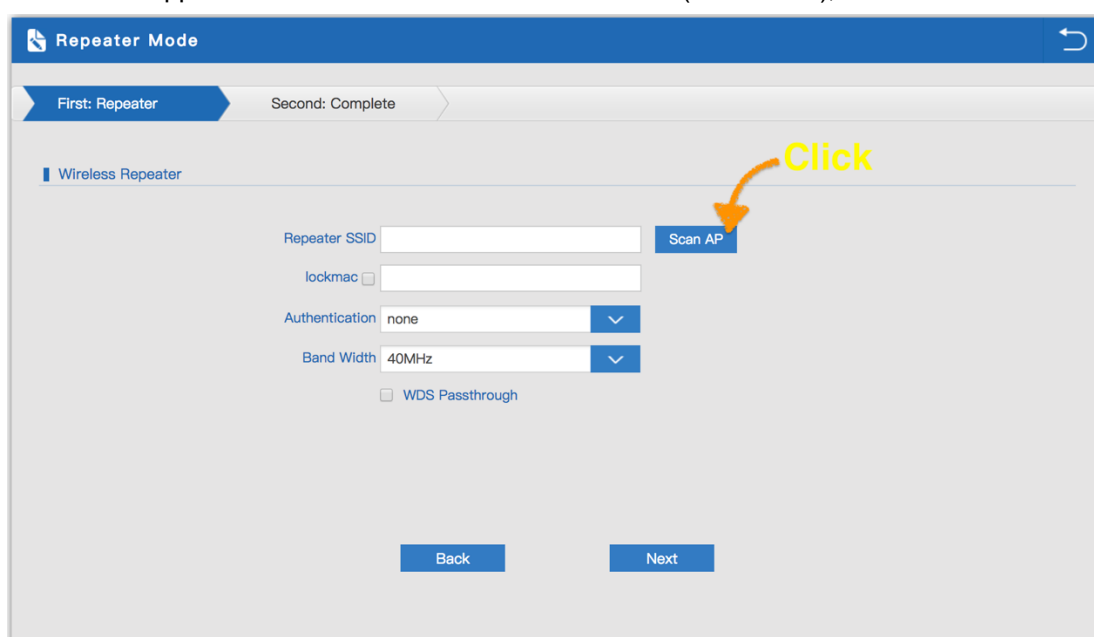
## 5.2.2 Repeater Mode



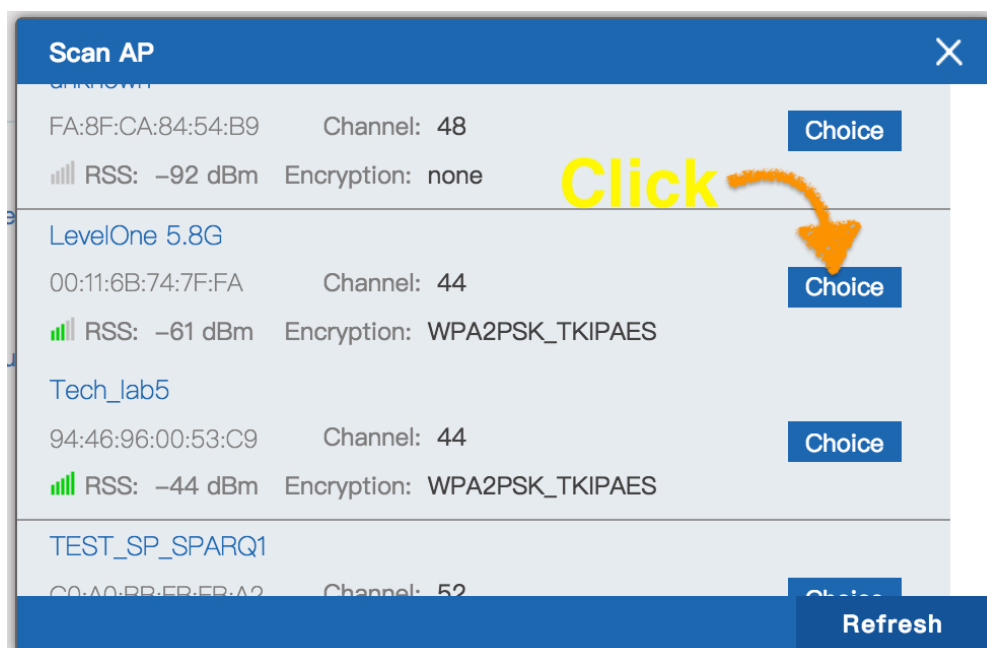
1. Can choose to relay the front-end 5.8G wireless signal to extend the wireless signal range.

Select the AP's SSID want to bridge, then input the AP's key, Click Scan AP .

**Note:** If the upper wireless device is not the same model (WAB-5010), Don't click to WDS Passthrough.

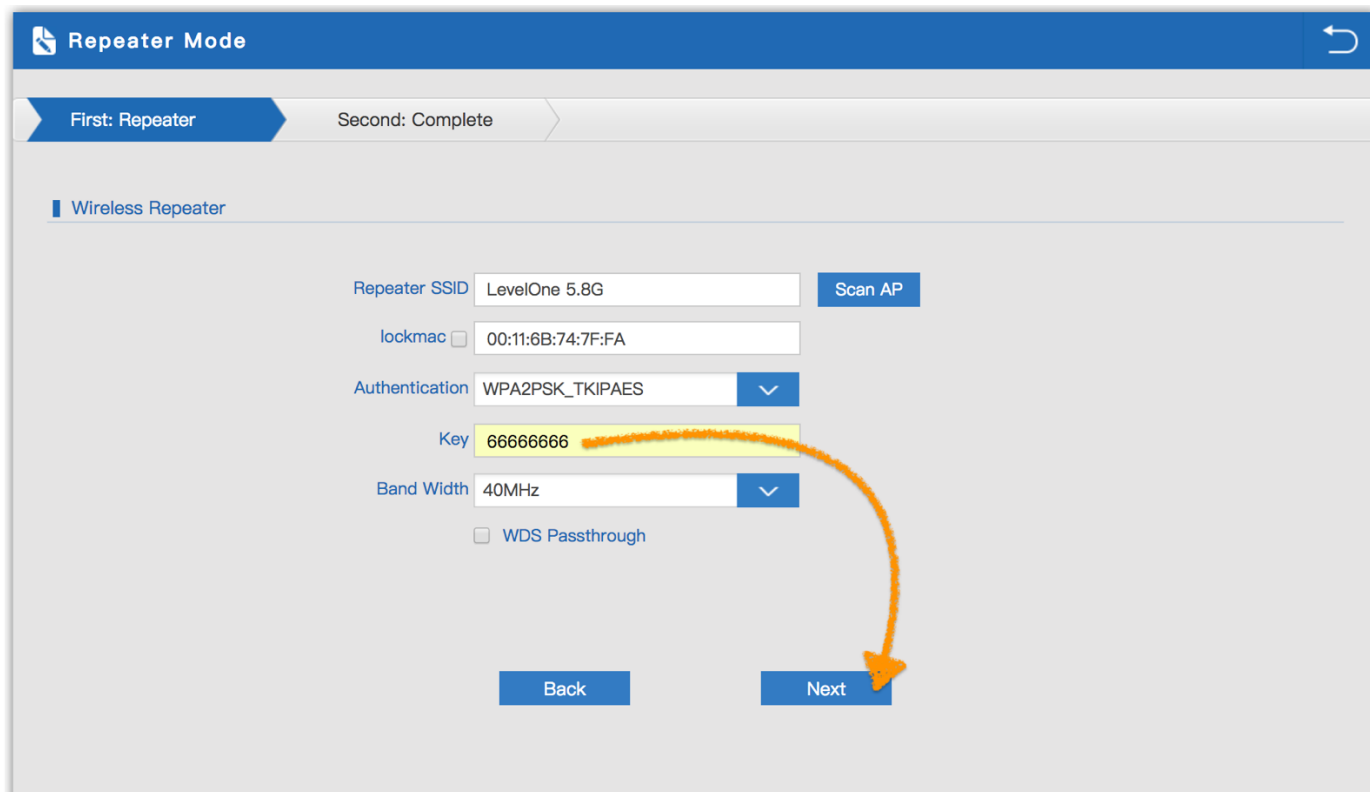


2. Please select WIFI SSID to connect



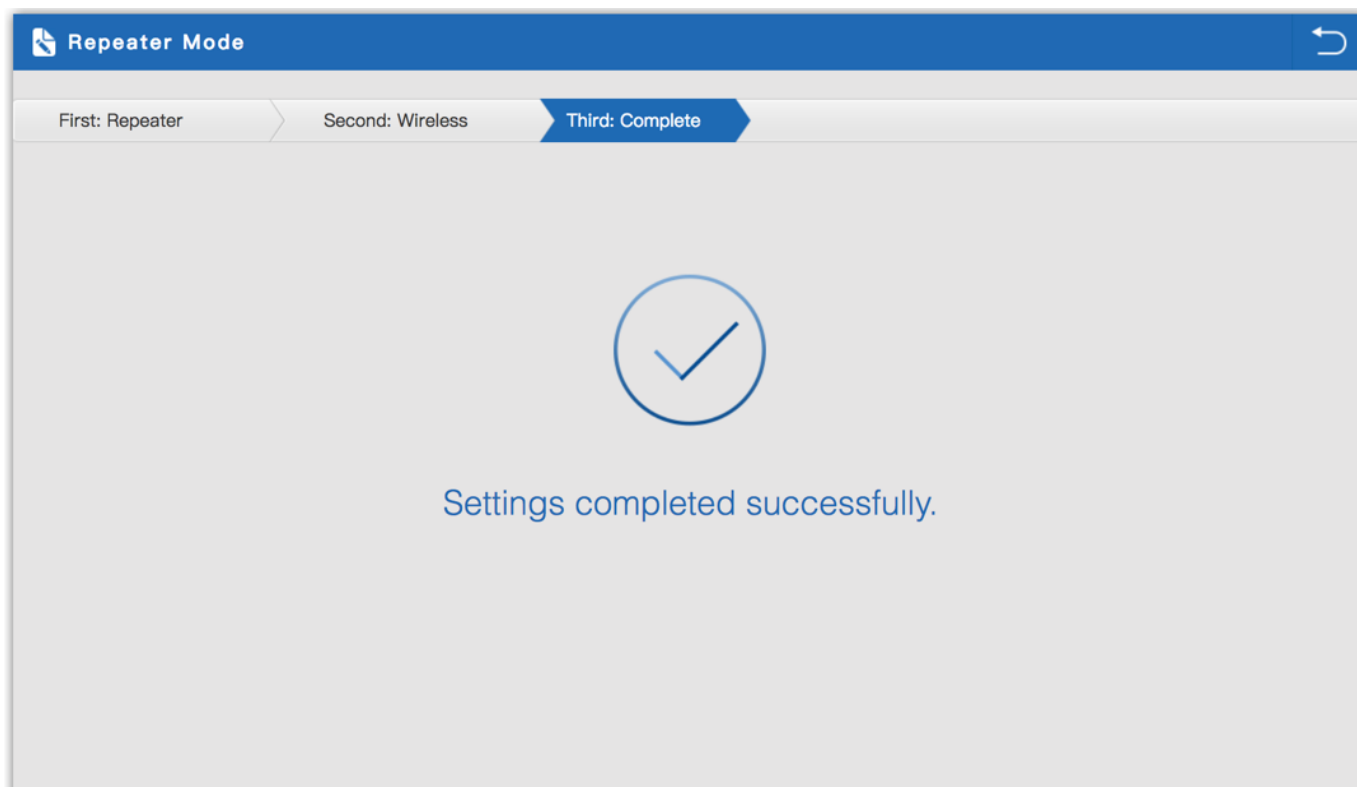
3. Enter the WIFI SSID password to be linked, When click Next

**Note:** If the upper wireless device is not the same model (WAB-5010), Don't click to WDS Passthrough.



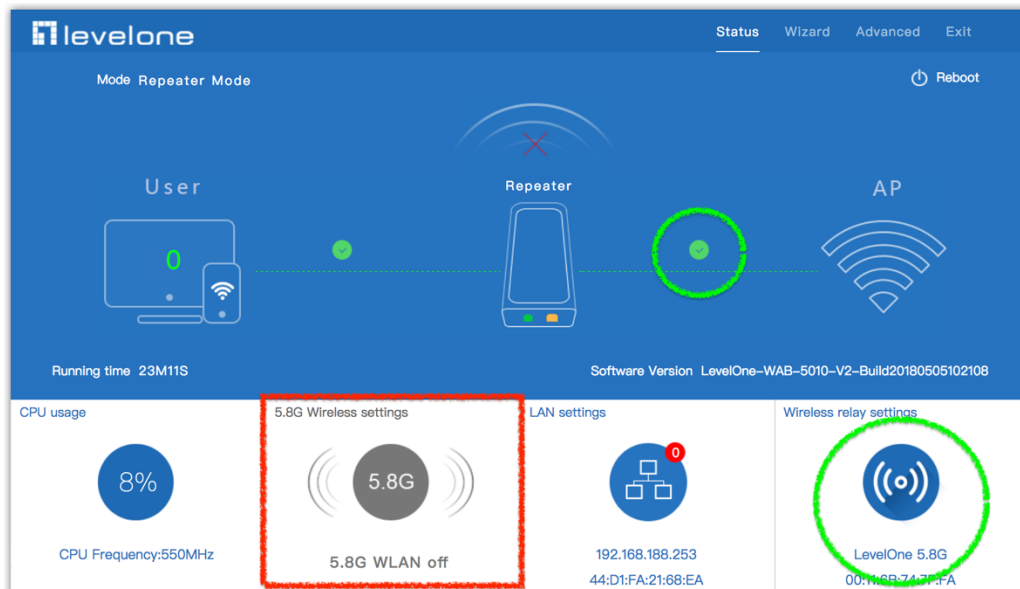
The screenshot shows the 'Repeater Mode' configuration interface. At the top, there's a blue header with a document icon and the text 'Repeater Mode', and a back arrow on the right. Below the header is a progress bar with two steps: 'First: Repeater' (active) and 'Second: Complete'. The main content area is titled 'Wireless Repeater'. It contains several input fields: 'Repeater SSID' with the value 'LevelOne 5.8G' and a 'Scan AP' button; 'lockmac' with a checkbox and the value '00:11:6B:74:7F:FA'; 'Authentication' with a dropdown menu showing 'WPA2PSK\_TKIPAES'; 'Key' with a text field containing '66666666' (highlighted in yellow); and 'Band Width' with a dropdown menu showing '40MHz'. There is also an unchecked checkbox for 'WDS Passthrough'. At the bottom, there are 'Back' and 'Next' buttons. An orange arrow points from the 'Key' field to the 'Next' button.

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

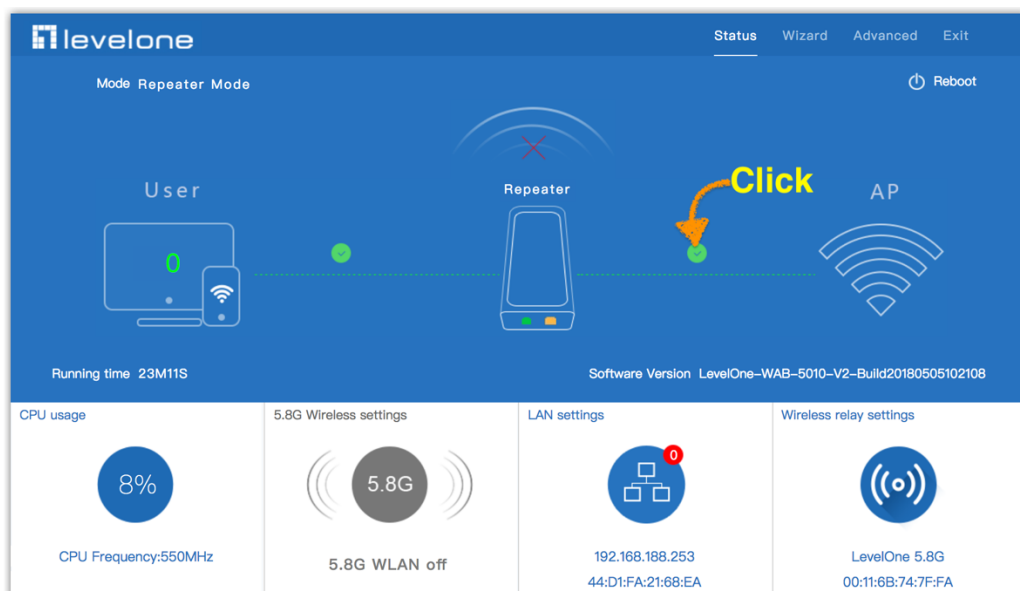


The screenshot shows the 'Repeater Mode' completion screen. At the top, there's a blue header with a document icon and the text 'Repeater Mode', and a back arrow on the right. Below the header is a progress bar with three steps: 'First: Repeater', 'Second: Wireless', and 'Third: Complete' (active). The main content area features a large blue checkmark icon inside a circle, followed by the text 'Settings completed successfully.'

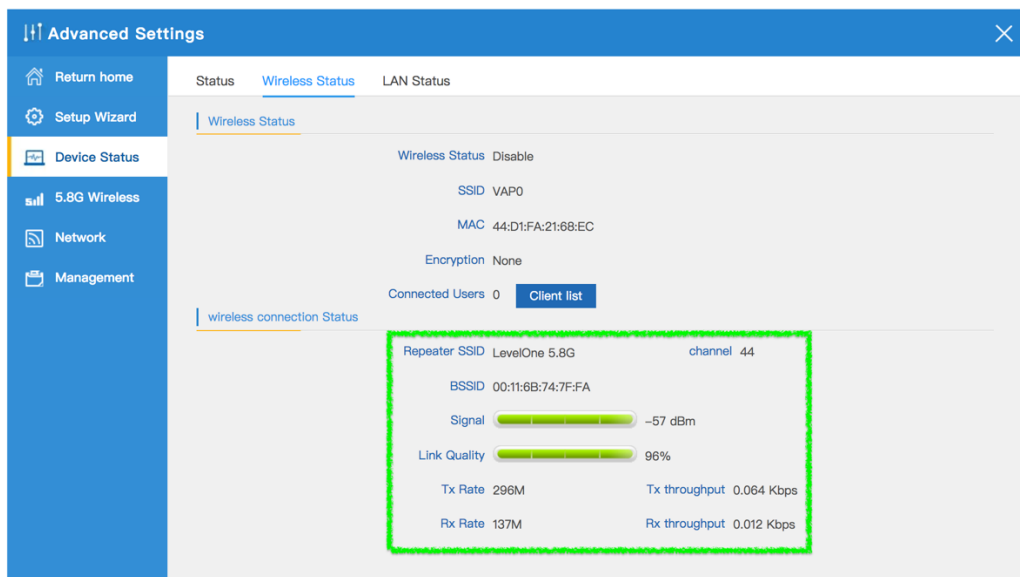
5. Check WIFI Repeater mode data (**NOTE:** In wifi repeater operation mode, the default is SSID disable.)



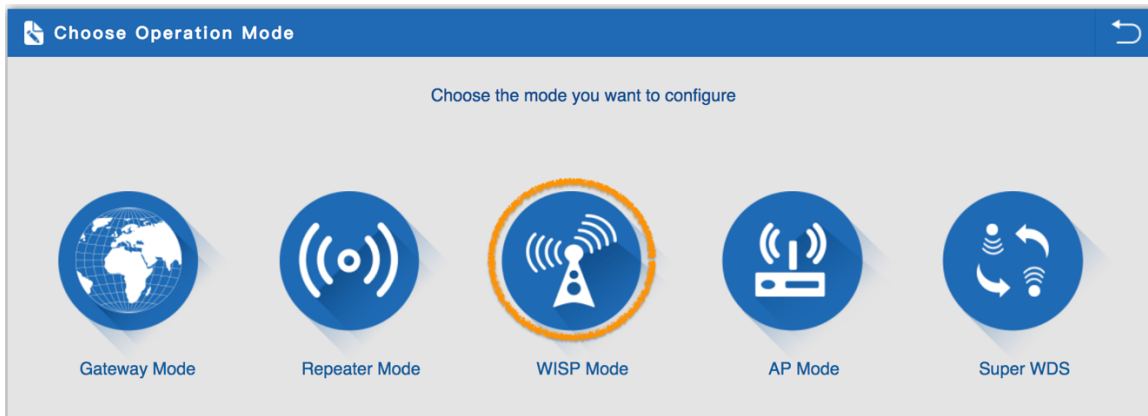
6. Click Status button



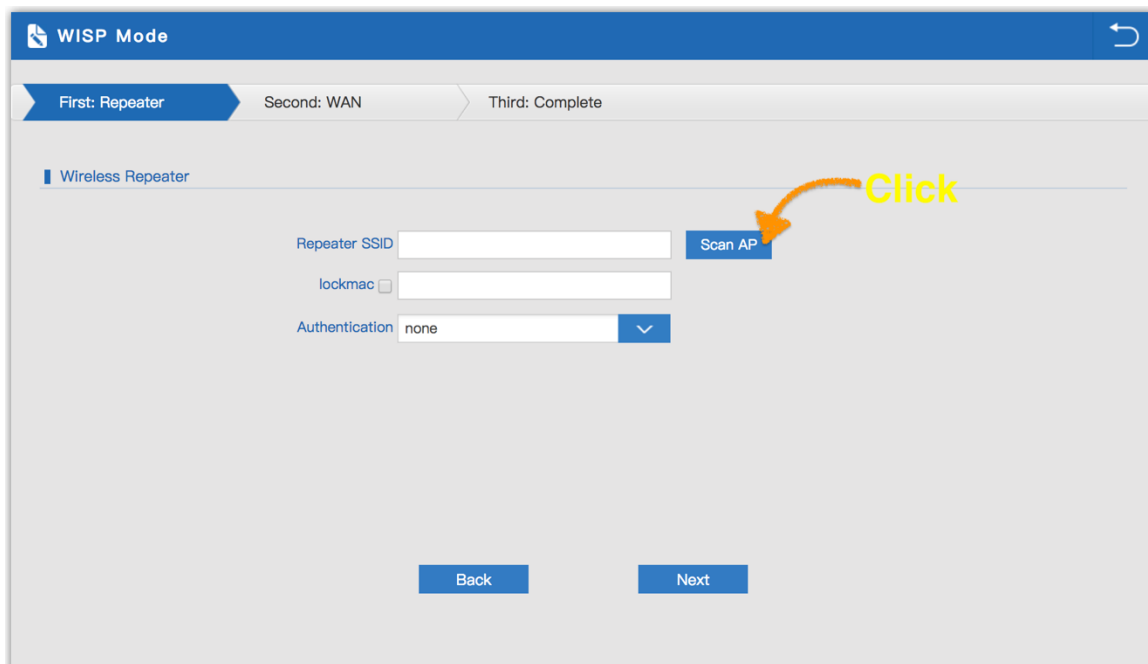
7. Check WIFI Repeater mode data



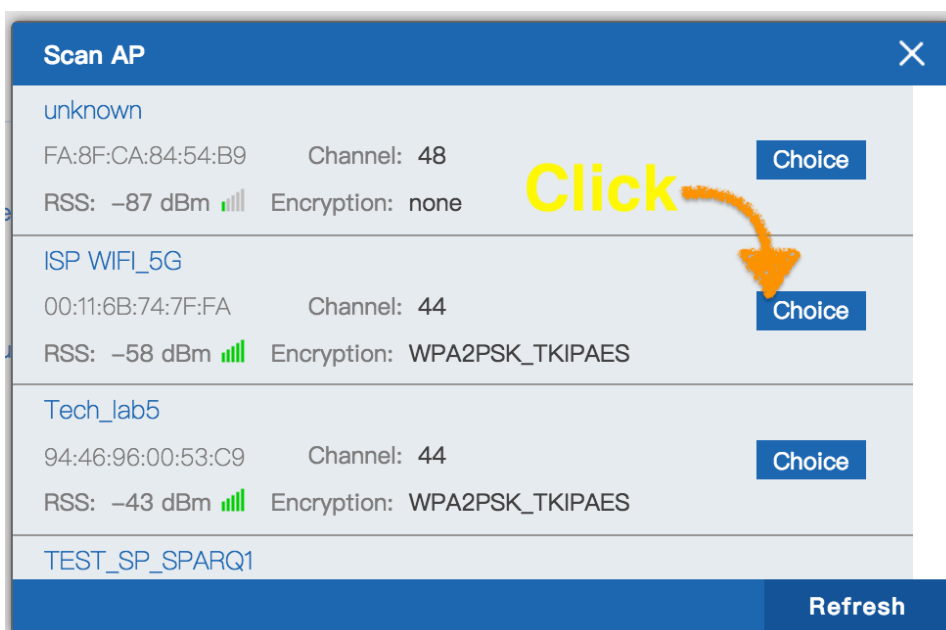
## 5.2.3 WISP Mode:



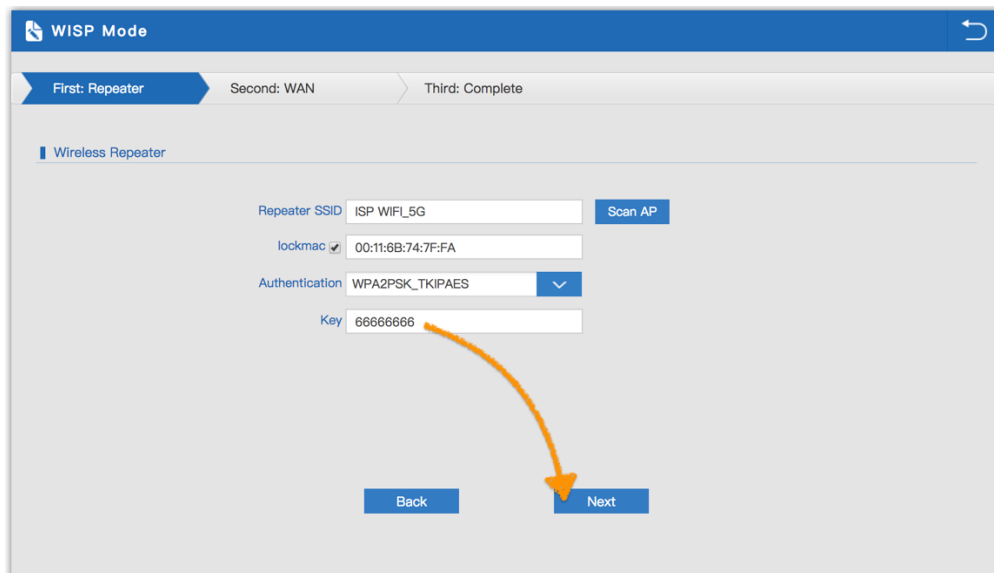
1. Click Scan AP.



2. Select the AP's SSID want to bridge, take "ISP WIFI 5G" for example, then input the AP's key, click Scan AP.



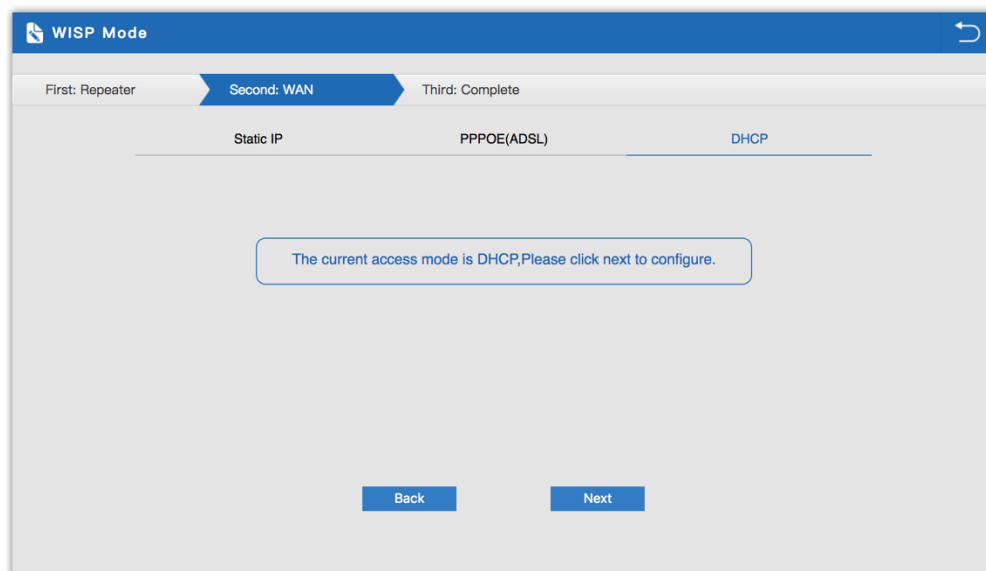
3. Enter the WIFI SSID password to be linked, When click Next



The screenshot shows the 'WISP Mode' configuration interface, specifically the 'First: Repeater' step. The interface has a blue header with 'WISP Mode' and a back arrow. Below the header, there are three tabs: 'First: Repeater' (active), 'Second: WAN', and 'Third: Complete'. Under the 'First: Repeater' tab, there is a section titled 'Wireless Repeater'. It contains the following fields: 'Repeater SSID' with the value 'ISP WIFI\_5G', a 'Scan AP' button, 'lockmac' checked with a value of '00:11:6B:74:7F:FA', 'Authentication' set to 'WPA2PSK\_TKIPAES', and a 'Key' field with the value '66666666'. At the bottom, there are 'Back' and 'Next' buttons. An orange arrow points from the 'Key' field to the 'Next' button.

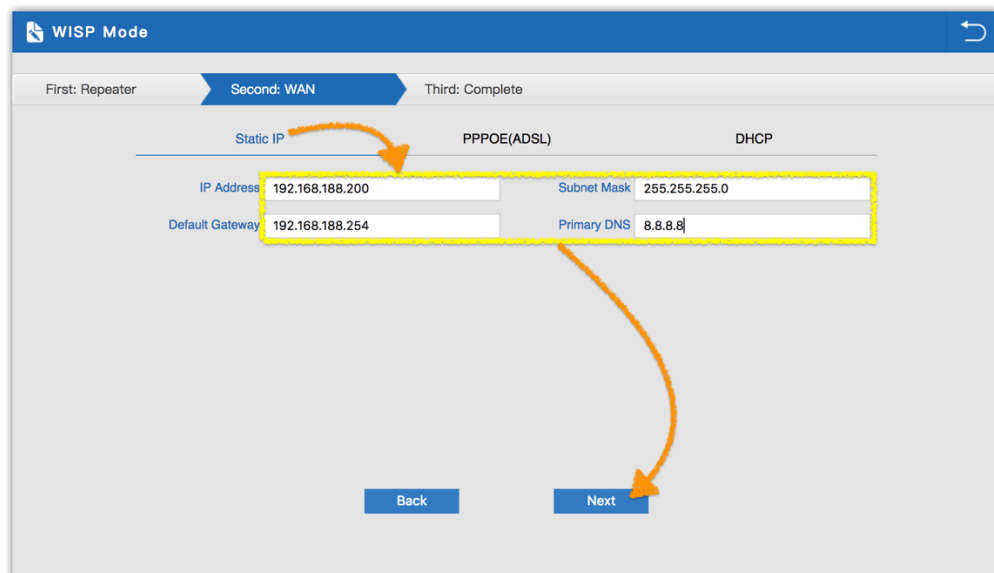
4. Before Click WISP Mode, confirm your ISP WIFI will be static IP, PPPoE, or DHCP:

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



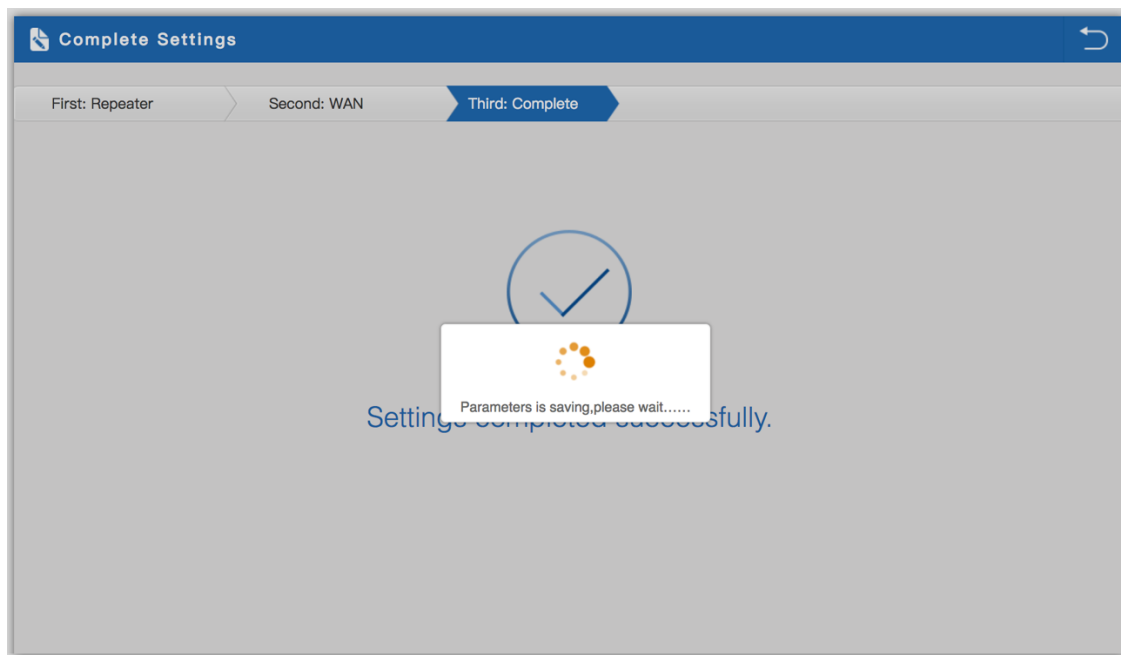
The screenshot shows the 'WISP Mode' configuration interface, specifically the 'Second: WAN' step. The interface has a blue header with 'WISP Mode' and a back arrow. Below the header, there are three tabs: 'First: Repeater', 'Second: WAN' (active), and 'Third: Complete'. Under the 'Second: WAN' tab, there are three radio buttons: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'DHCP' option is selected. Below the radio buttons, there is a message box that says 'The current access mode is DHCP, Please click next to configure.' At the bottom, there are 'Back' and 'Next' buttons.

5. take "Static IP" for example. (Please contact with ISP for correct IP address and DNS address)



The screenshot shows the 'WISP Mode' configuration interface, specifically the 'Second: WAN' step, with the 'Static IP' option selected. The interface has a blue header with 'WISP Mode' and a back arrow. Below the header, there are three tabs: 'First: Repeater', 'Second: WAN' (active), and 'Third: Complete'. Under the 'Second: WAN' tab, there are three radio buttons: 'Static IP' (selected), 'PPPOE(ADSL)', and 'DHCP'. Below the radio buttons, there are four input fields: 'IP Address' (192.168.188.200), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.188.254), and 'Primary DNS' (8.8.8.8). These fields are highlighted with a yellow box. At the bottom, there are 'Back' and 'Next' buttons. An orange arrow points from the 'Static IP' radio button to the 'Next' button.

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



7. Check WISP Mode Status show fail or success

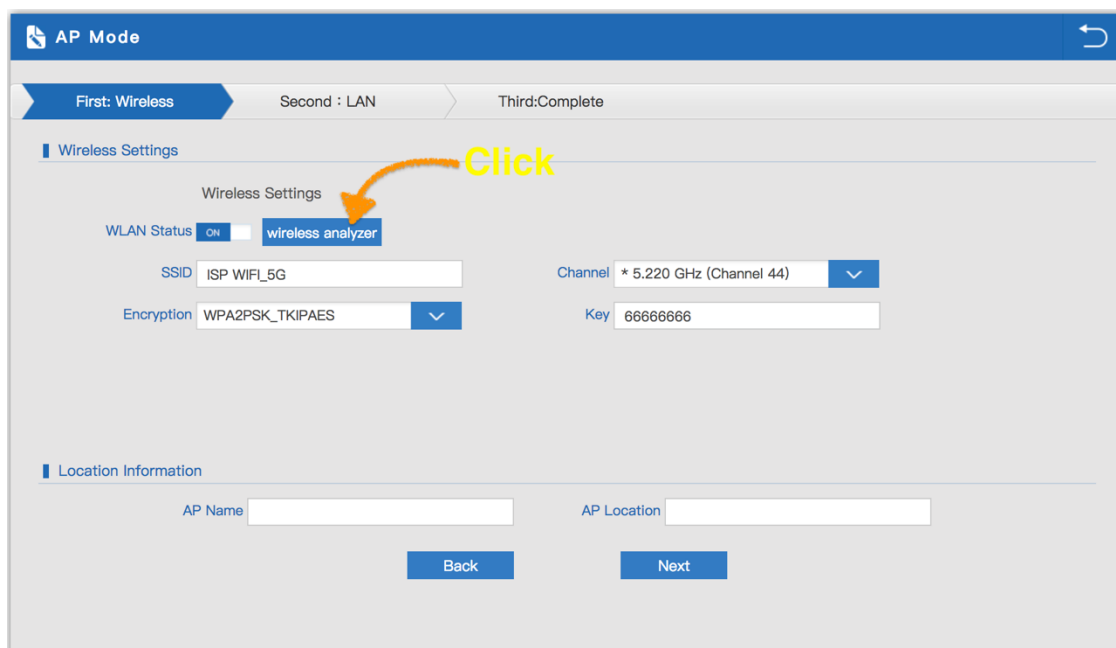




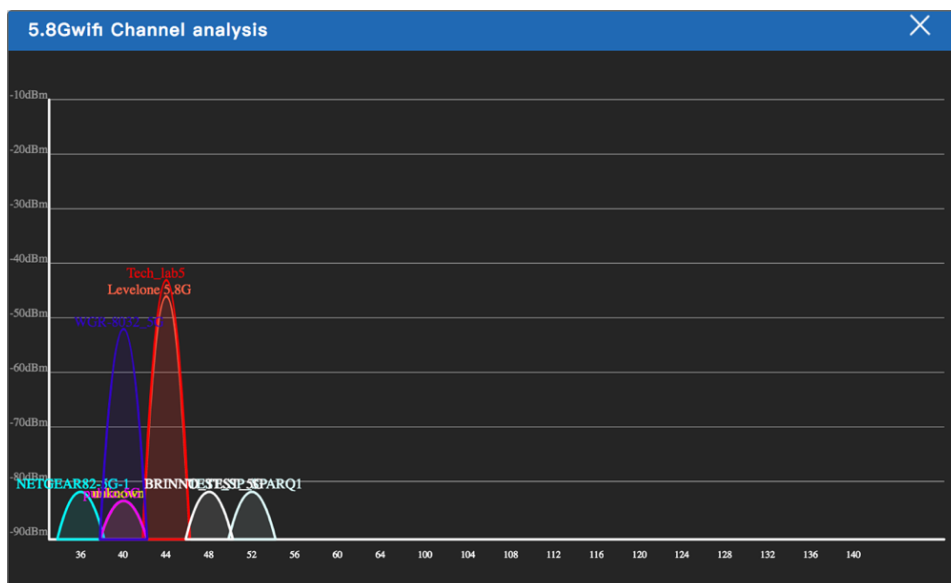
## 5.2.4 AP mode & Wireless analyzer :



1.To make the WAB-5010 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 (5.8GHz)



3. 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

WLAN Status: ☒ ON    wireless analyzer

SSID: LevelOne    Channel: \* 5.220 GHz (Channel 44)

Encryption: WPA2PSK\_TKIPAES    Key: 66666666

Location Information

AP Name: WAB-5010    AP Location: Taipei office 7F

Back    Next

4. Set according to environmental requirements.

AP Mode

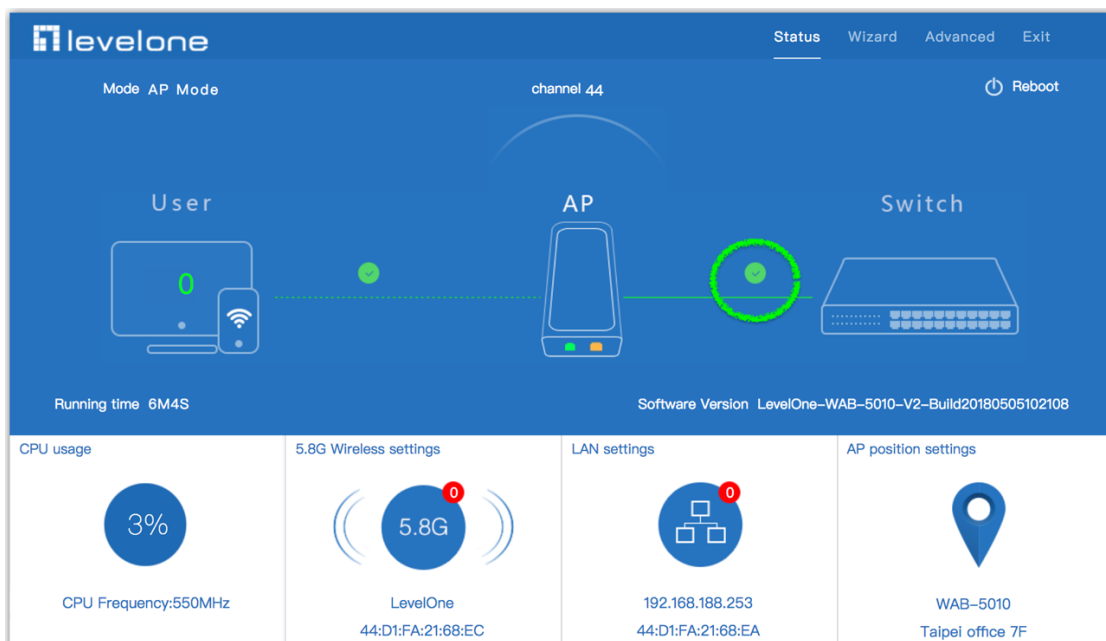
First: Wireless    Second : LAN    Third:Complete

LAN settings

Access Type: Static IP  
✓ DHCP from Controller

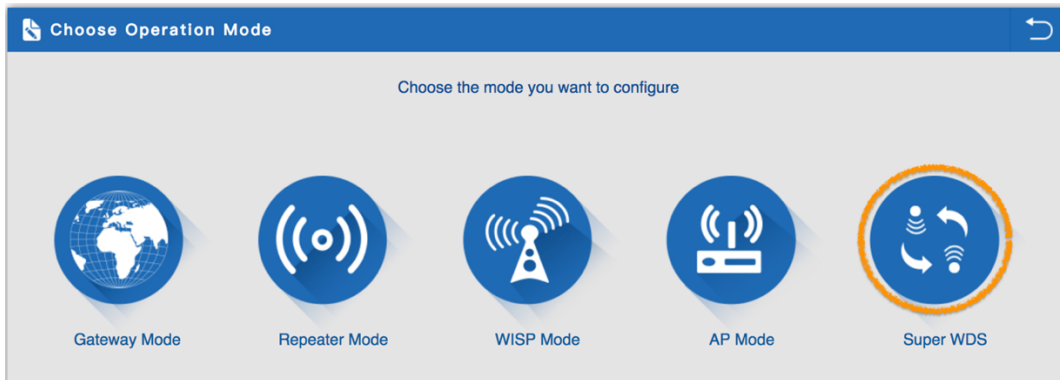
Back    Next

5. Check AP Mode Status show fail or success.

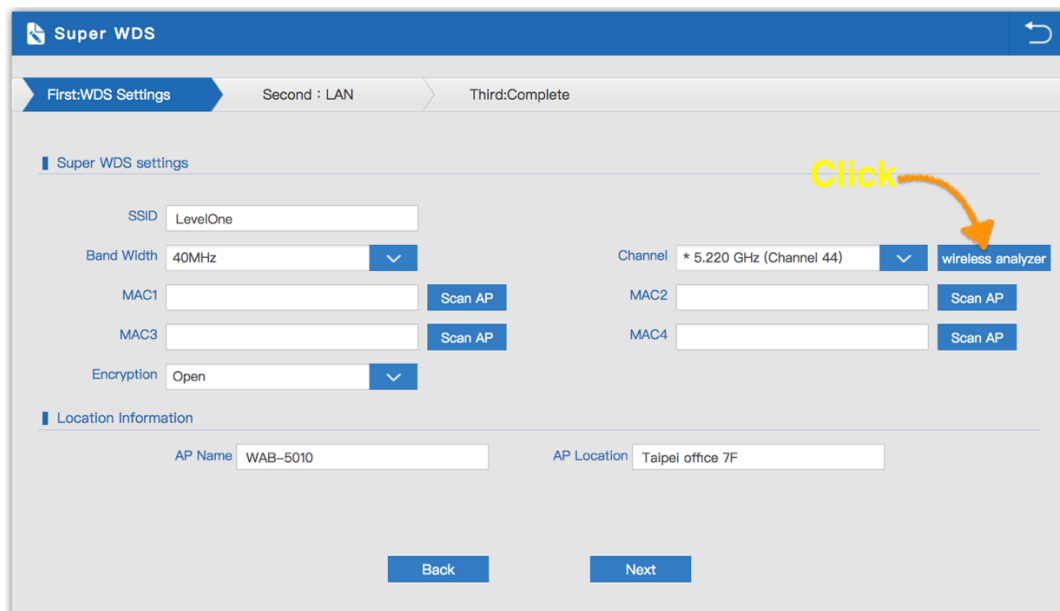


## 5.2.5 Super WDS Mode & Wireless analyzer

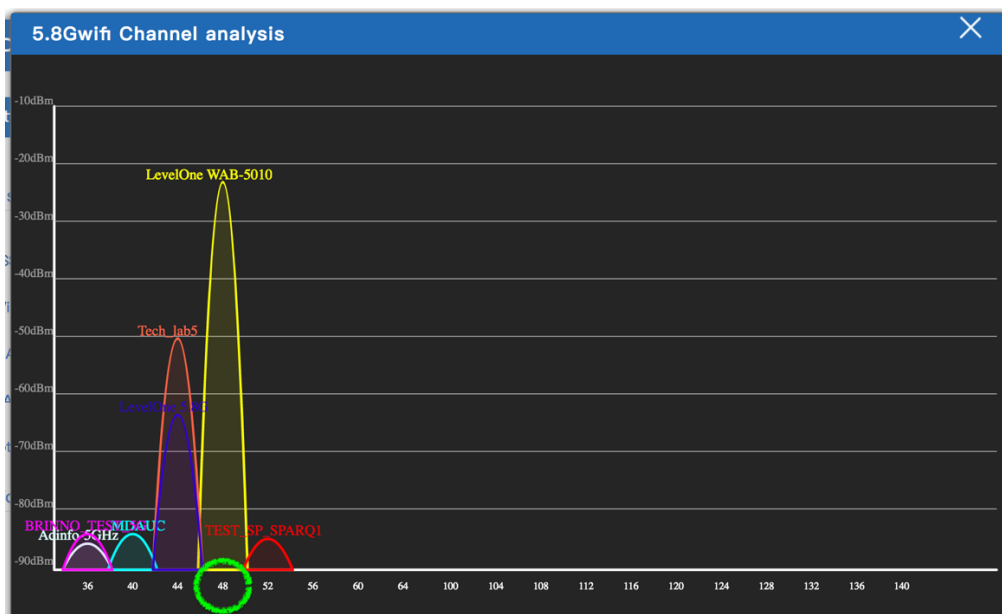
**Note:** That if you want to use WDS mode connection, Please use the same model wireless ap to avoid compatibility issues. Please check these 2 APs are face(front panel) to face at the same height.



1. Click Wireless analyzer, Confirm the current 5.8G WiFi Channel wireless network environment



2. WAB-5010 Both parties need to choose the same Wireless Channel.



3. After the wireless analysis is confirmed, change to use the same Wireless Channel 48. Click on Scan AP

Super WDS

First:WDS Settings    Second : LAN    Third:Complete

Super WDS settings

SSID: LevelOne

Band Width: 40MHz

MAC1:  Scan AP

MAC2:  Scan AP

MAC3:  Scan AP

MAC4:  Scan AP

Encryption: Open

Channel: 5.240 GHz (Channel 48) wireless analyzer

Location Information

AP Name: WAB-5010    AP Location: Taipei office 7F

Back    Next

4. Click on Choice

Scan AP

LevelOne WAB-5010

78:D3:8D:FE:83:07    Channel: 48

RSS: -19 dBm    Encryption: none

Choice

Tech\_lab5

94:46:96:00:53:C9    Channel: 44

RSS: -45 dBm    Encryption: WPA2PSK\_TKIPAES

Choice

TEST\_SP\_SPARQ1

C0:A0:BB:FB:FB:A2    Channel: 52

RSS: -88 dBm    Encryption: WPA/WPA2PSK\_TKIPAES

Choice

Adinfo-5GHz

Refresh

5. The two WAB-5010s can each set Band Width 40 MHz

Super WDS

First:WDS Settings    Second : LAN    Third:Complete

Super WDS settings

SSID: LevelOne

Band Width: 40MHz

MAC1: 78:D3:8D:FE:83:07 Scan AP

MAC2:  Scan AP

MAC3:  Scan AP

MAC4:  Scan AP

Encryption: Open

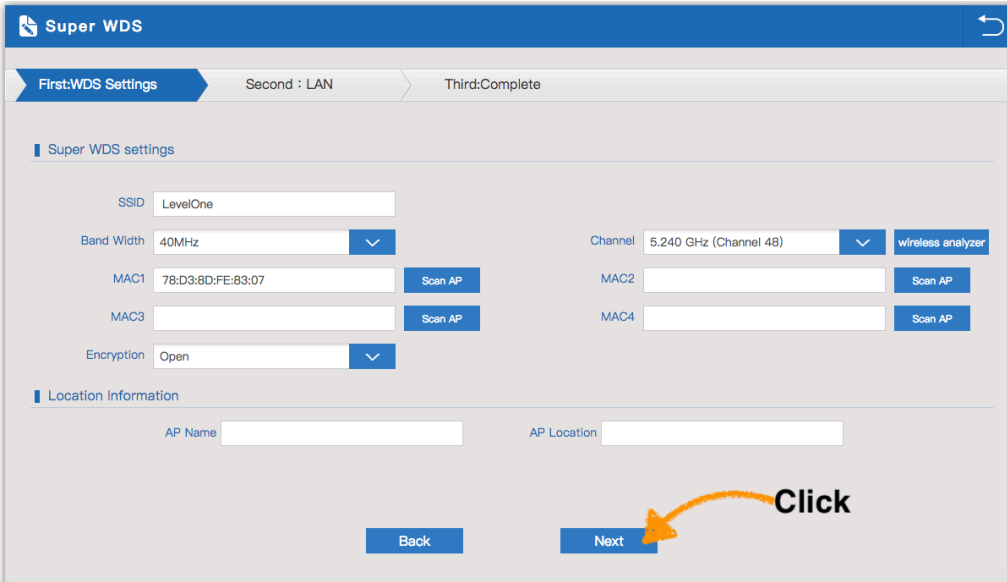
Channel: 5.240 GHz (Channel 48) wireless analyzer

Location Information

AP Name:     AP Location:

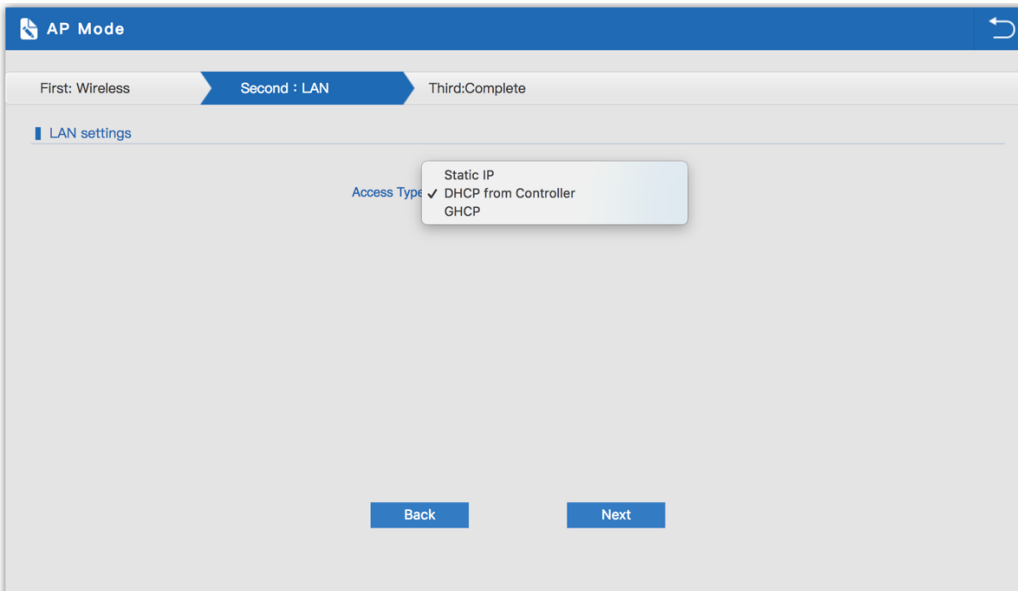
Back    Next

6. Click on Next.



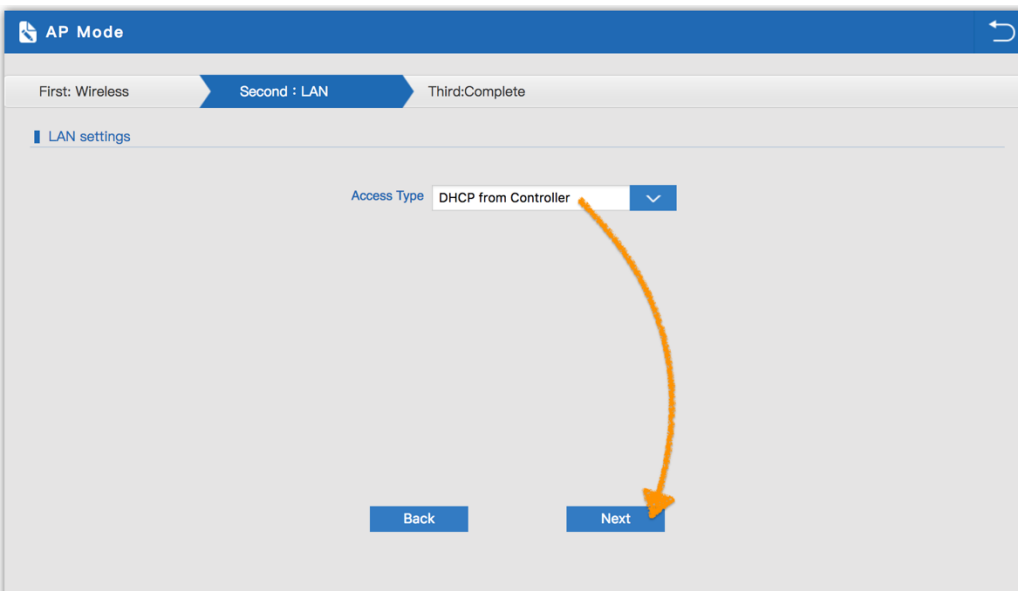
The screenshot shows the 'Super WDS' configuration window. At the top, there are three tabs: 'First:WDS Settings', 'Second : LAN', and 'Third:Complete'. The 'First:WDS Settings' tab is active. Below the tabs, there are two sections: 'Super WDS settings' and 'Location Information'. The 'Super WDS settings' section contains fields for SSID (LevelOne), Band Width (40MHz), Channel (5.240 GHz (Channel 48)), MAC1 (78:D3:8D:FE:83:07), MAC2, MAC3, MAC4, and Encryption (Open). Each MAC field has a 'Scan AP' button next to it. The 'Location Information' section has fields for AP Name and AP Location. At the bottom, there are 'Back' and 'Next' buttons. An orange arrow points to the 'Next' button with the word 'Click' next to it.

7. Need to confirm the current environment settings to choose one of the 3 modes



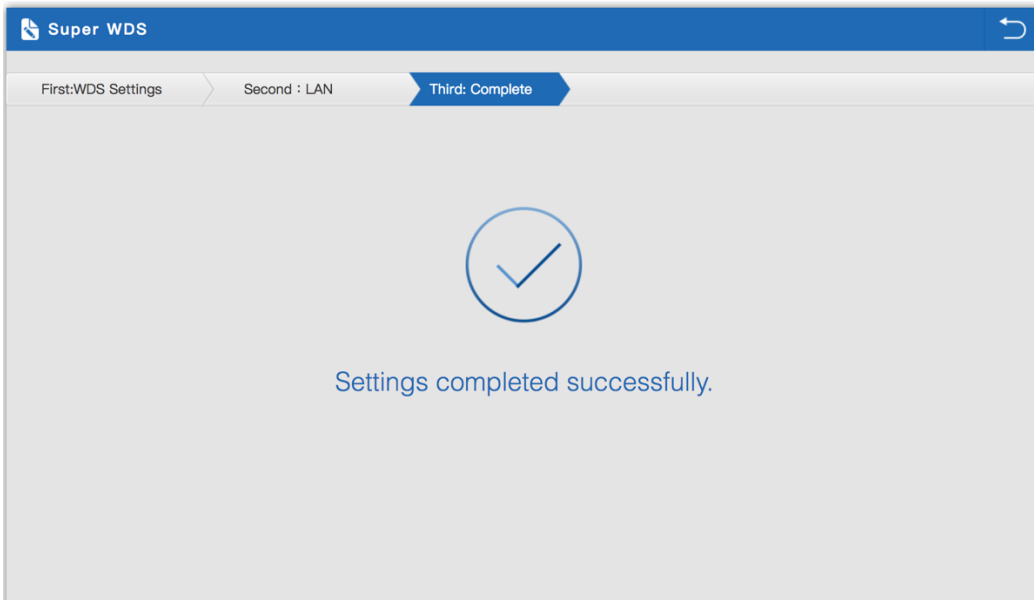
The screenshot shows the 'AP Mode' configuration window. At the top, there are three tabs: 'First: Wireless', 'Second : LAN', and 'Third:Complete'. The 'Second : LAN' tab is active. Below the tabs, there is a section titled 'LAN settings'. In this section, there is a dropdown menu for 'Access Type' with a tooltip showing three options: 'Static IP', 'DHCP from Controller' (which is selected), and 'GHCP'. At the bottom, there are 'Back' and 'Next' buttons.

8. The following examples of how the Static IP is set

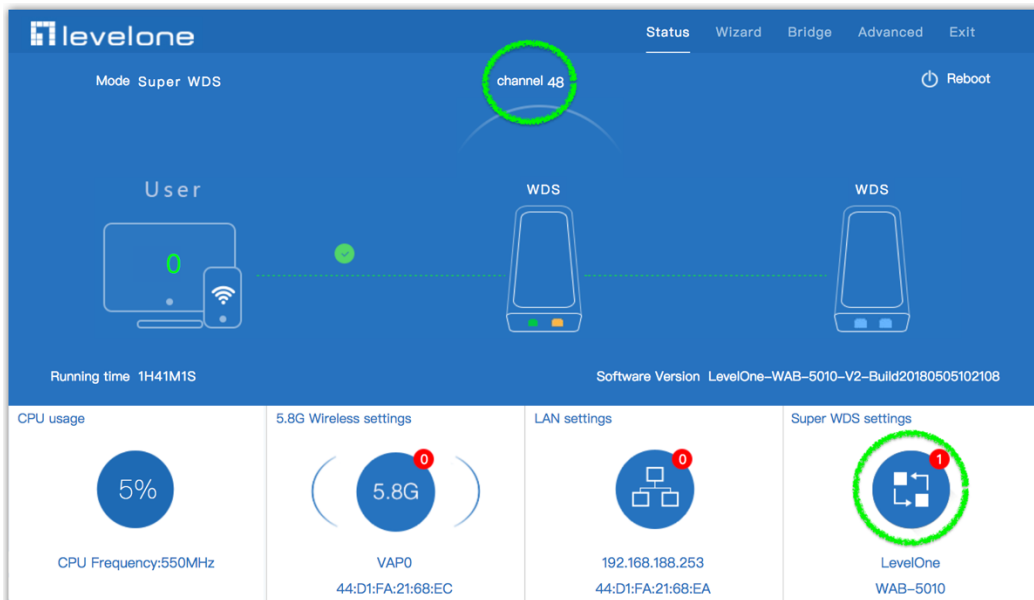


The screenshot shows the 'AP Mode' configuration window, similar to the previous one. The 'Second : LAN' tab is active. In the 'LAN settings' section, the 'Access Type' dropdown menu is set to 'Static IP'. An orange arrow points from the 'Static IP' option in the dropdown menu to the 'Next' button at the bottom.

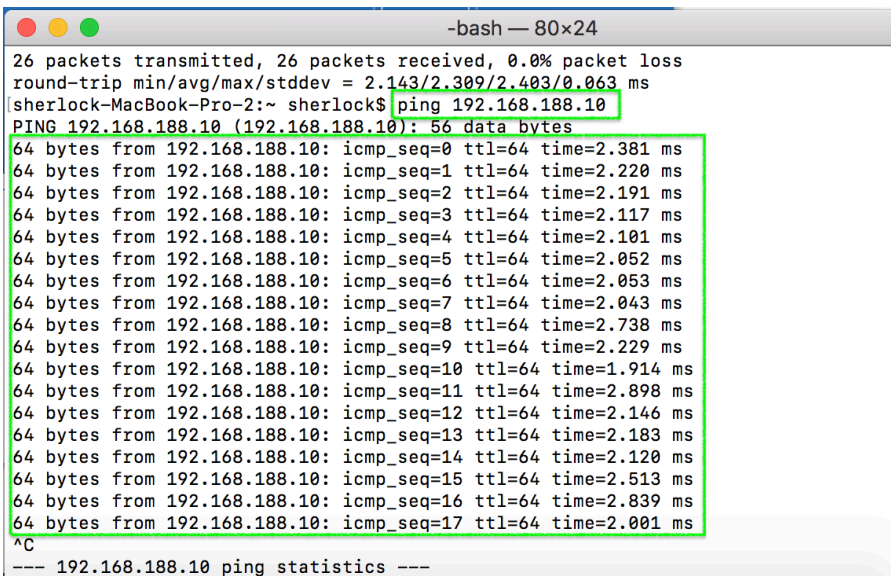
9. Set the save, please wait 30~40 seconds



10. Confirm the status of WDS Mode, whether it is set successfully



11. Use ping another Wireless AP IP Address to confirm the status of the WDS mode.

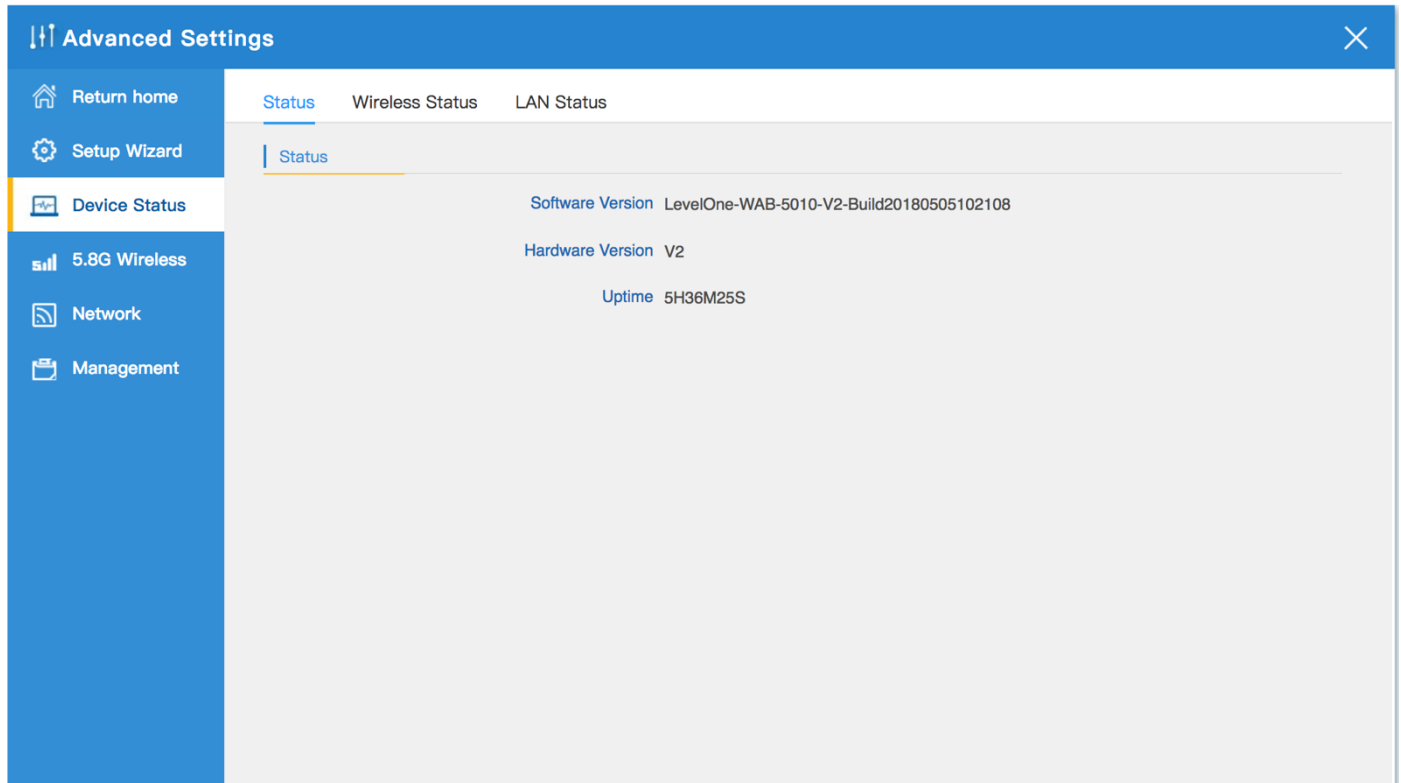


# Chapter 6 Advanced Setting

## 6.1 Device Status

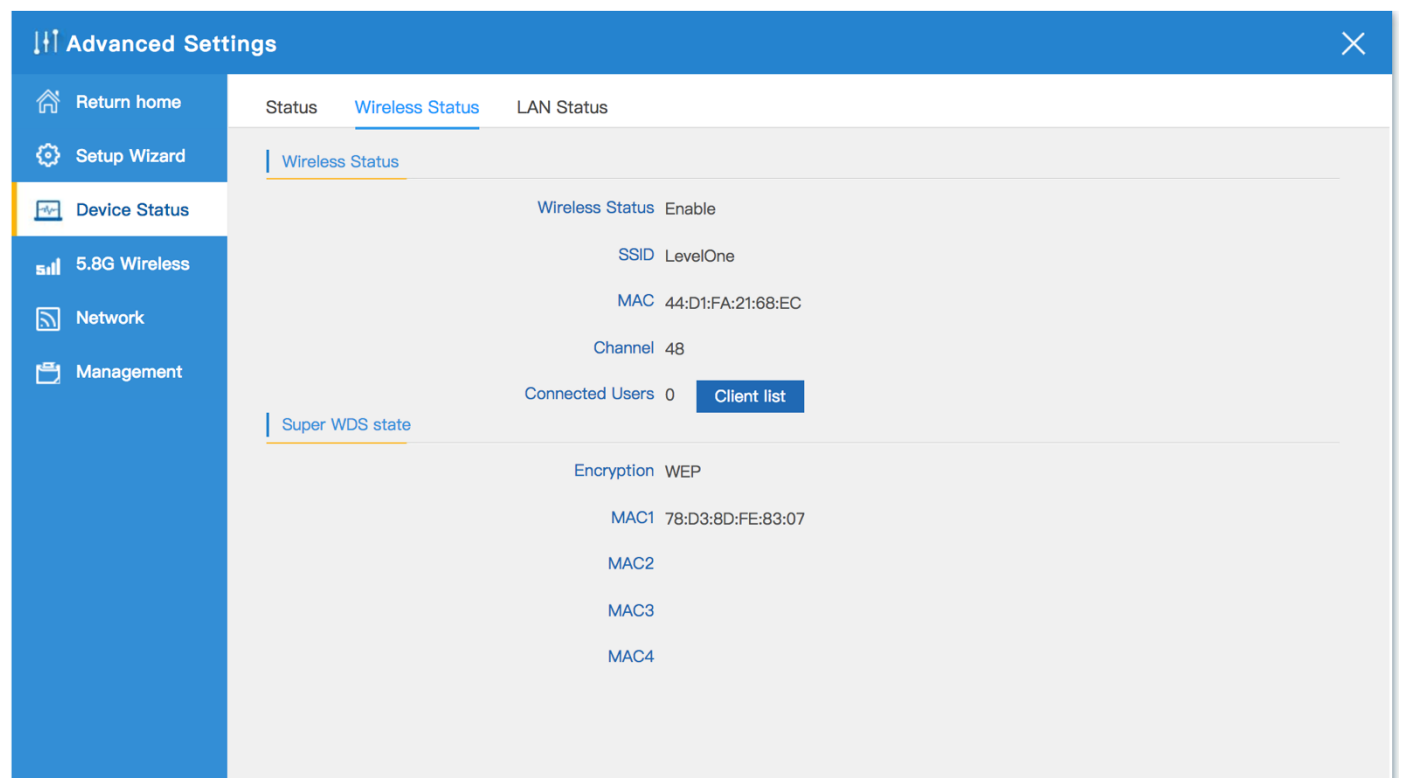
### 6.1.1 Status:

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



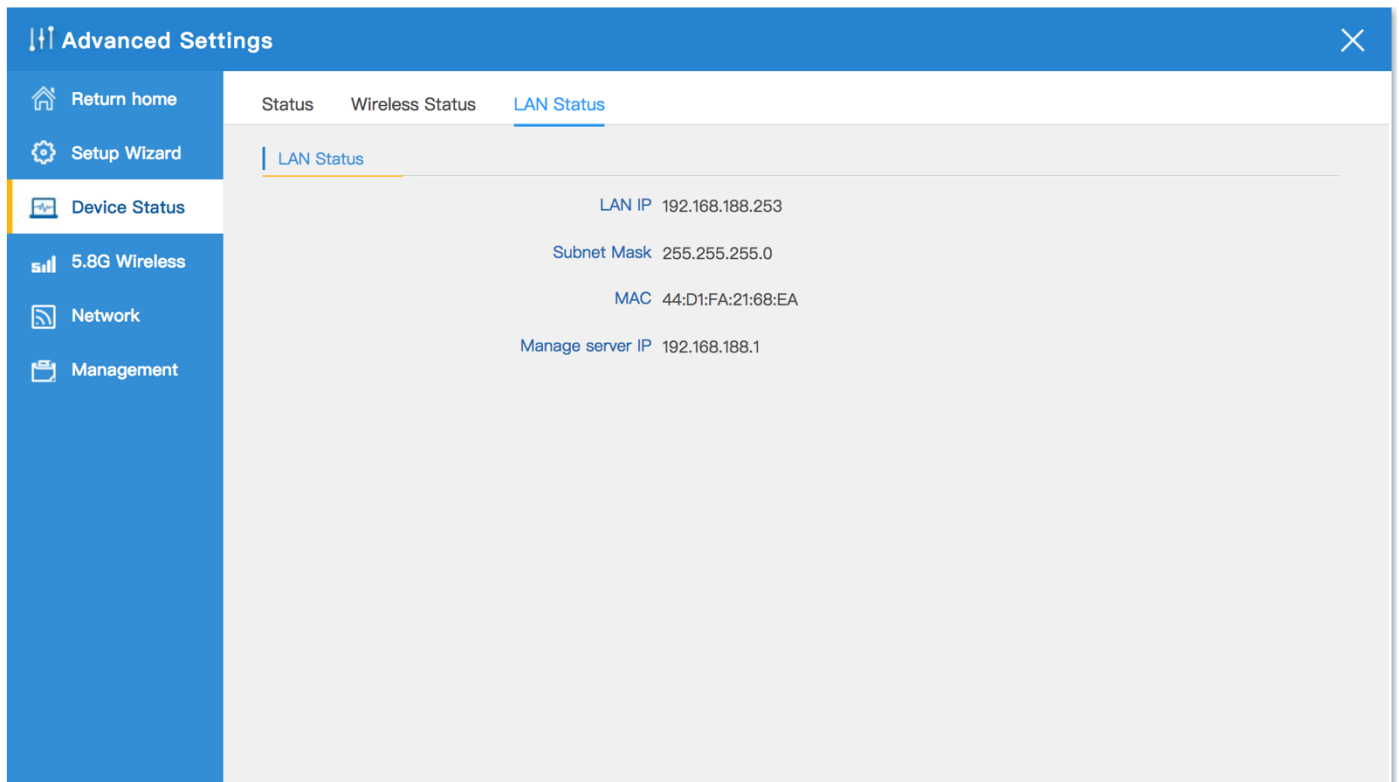
### 6.1.2 5.8G wireless status:

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



### 6.1.3 LAN Status:

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





## 6.2 5.8G Wireless

### 6.2.1 5.8G Basic Settings :

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

The screenshot shows the 'Advanced Settings' window with the '5.8G Wireless' tab selected in the left sidebar. The 'Basic Settings' sub-tab is active. The 'Super WDS settings' section contains the following fields:

- SSID: LevelOne
- Band Width: 40MHz (dropdown)
- Channel: \* 5.220 GHz (Channel 44) (dropdown)
- Encryption: Open (dropdown)
- MAC1, MAC2, MAC3, MAC4: Empty text boxes
- SSID1, SSID2, SSID3, SSID4: Empty text boxes, each with a 'Scan AP' button to its right
- Onekey AiConnect: ON (toggle)
- wireless analyzer: Button

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

### 6.2.2 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

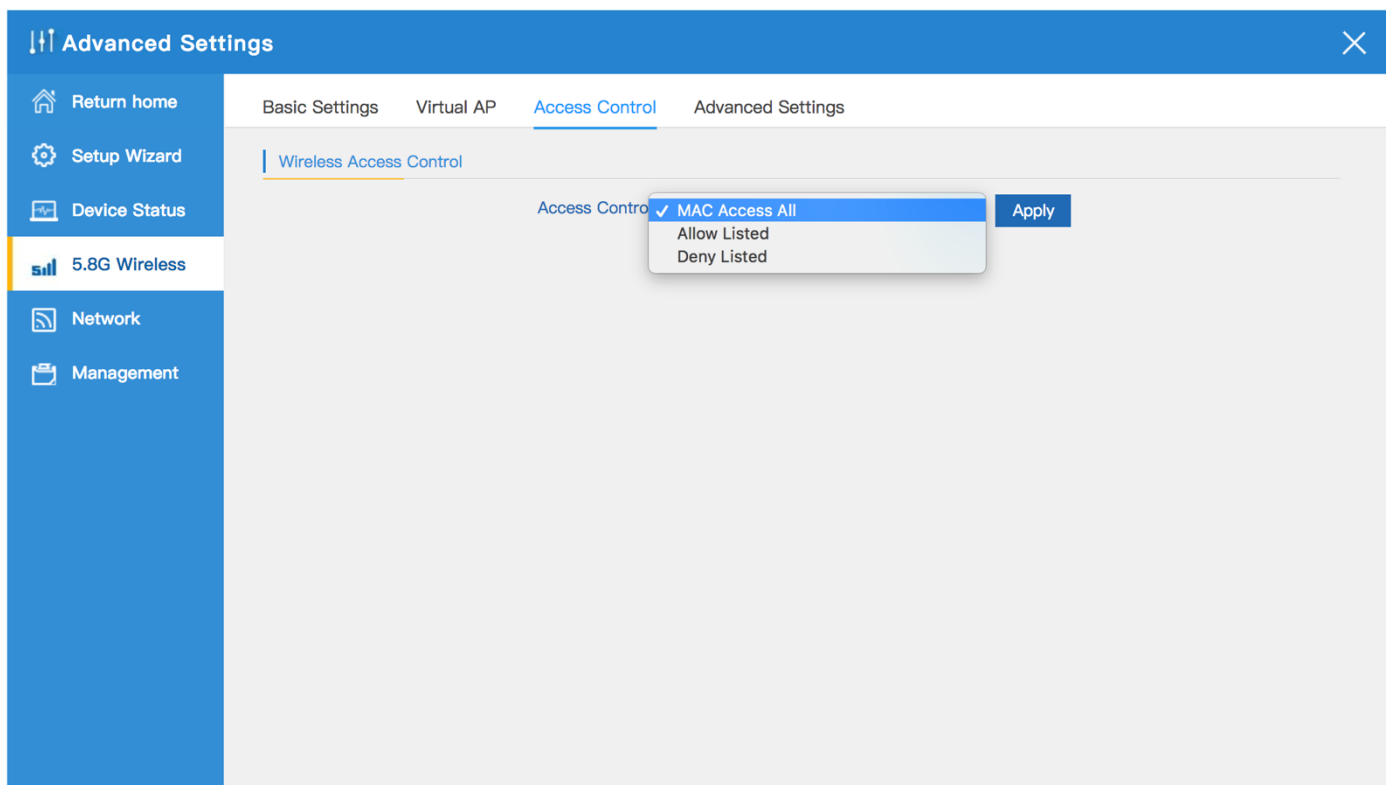
The screenshot shows the 'Advanced Settings' window with the '5.8G Wireless' tab selected in the left sidebar. The 'Virtual AP' sub-tab is active. The configuration area is divided into three columns for 'Virtual AP1', 'Virtual AP2', and 'Virtual AP3'. The settings for Virtual AP1 are visible:

- Wireless Status: OFF (toggle)
- SSID: VAP0
- Broadcast SSID: Disable (radio), Enable (radio)
- WMM: Disable (radio), Enable (radio)
- Encryption: none (dropdown)

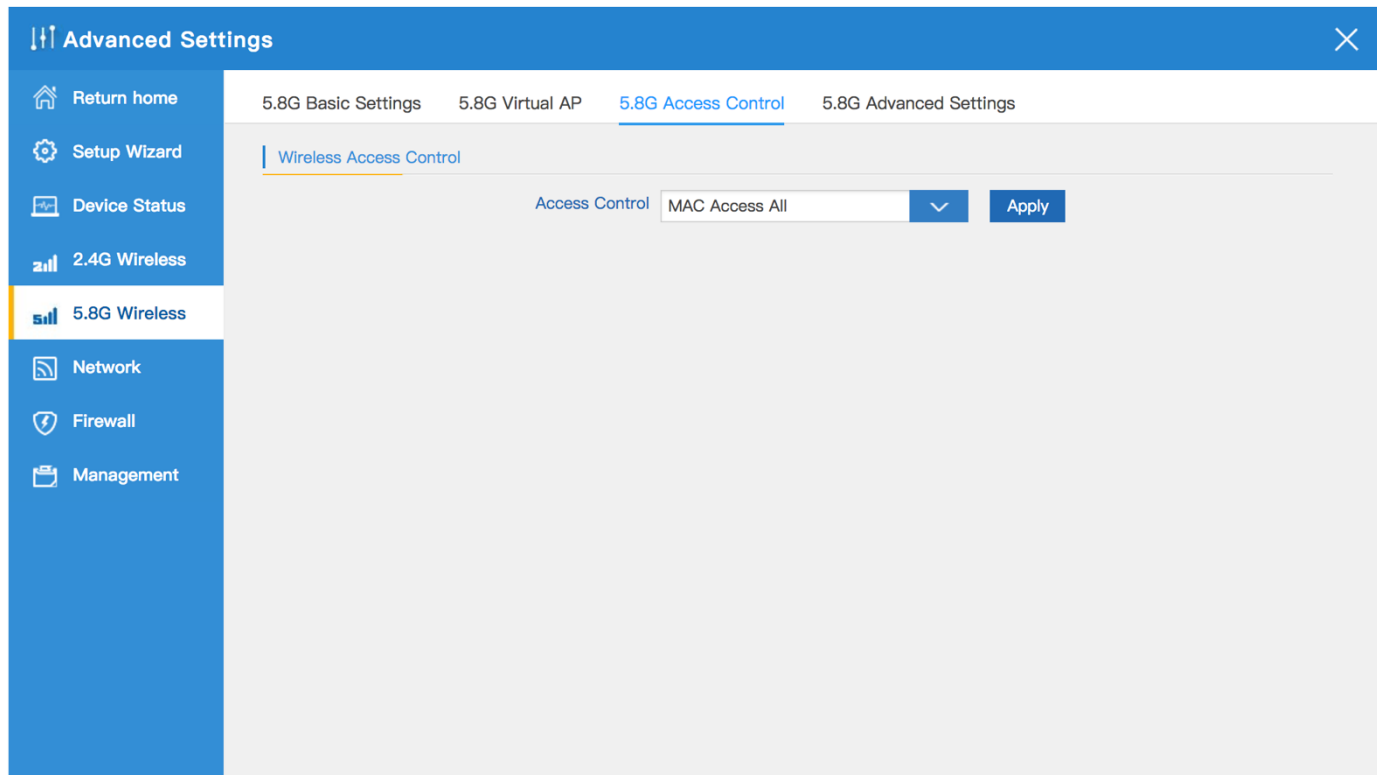
An 'Apply' button is located at the bottom center of the configuration area.

### 6.2.3 5.8G 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**

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

**Wireless Access Control**

Access Control: Allow Listed

MAC:

**Access Control List**

| ALL | MAC |
|-----|-----|
|-----|-----|

**Association STA list**

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

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**

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

**Wireless Access Control**

Access Control: Allow Listed

MAC:

**Access Control List**

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

**Association STA list**

| 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

**Advanced Settings**

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

**Wireless Access Control**

Access Control: Deny Listed

MAC:

Access Control List

| ALL | MAC |
|-----|-----|
|-----|-----|

Import

Association STA list

| 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**

Basic Settings Virtual AP **Access Control** 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 |

Import

Association STA list

| ALL | MAC |
|-----|-----|
|-----|-----|

## 6.2.4 Advanced Settings :

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

Advanced Settings

Return home

Setup Wizard

Device Status

5.8G Wireless

Network

Management

Basic SettingsVirtual APAccess ControlAdvanced Settings

Advanced Settings

Regional

ETSI

Channel(36-64),(100-128),(132-140)

MODE

802.11AN

RF Output Power

100%

Packet Threshold

2346

(256-2346)

Beacon interval

100

(100-1024)ms

MAX User

64

(Range 0-64 0 not limited)

Coverage Threshold

-95

(-95dBm~-65dBm)

Distance

500

(0 Meter-20000 Meter)

Aggregation

ON

Short GI

ON

User isolation

OFF

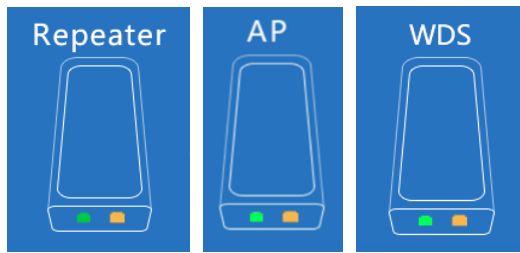
DFS switch

OFF

DFS opened will cause connect fail in one key connect procedure

Apply

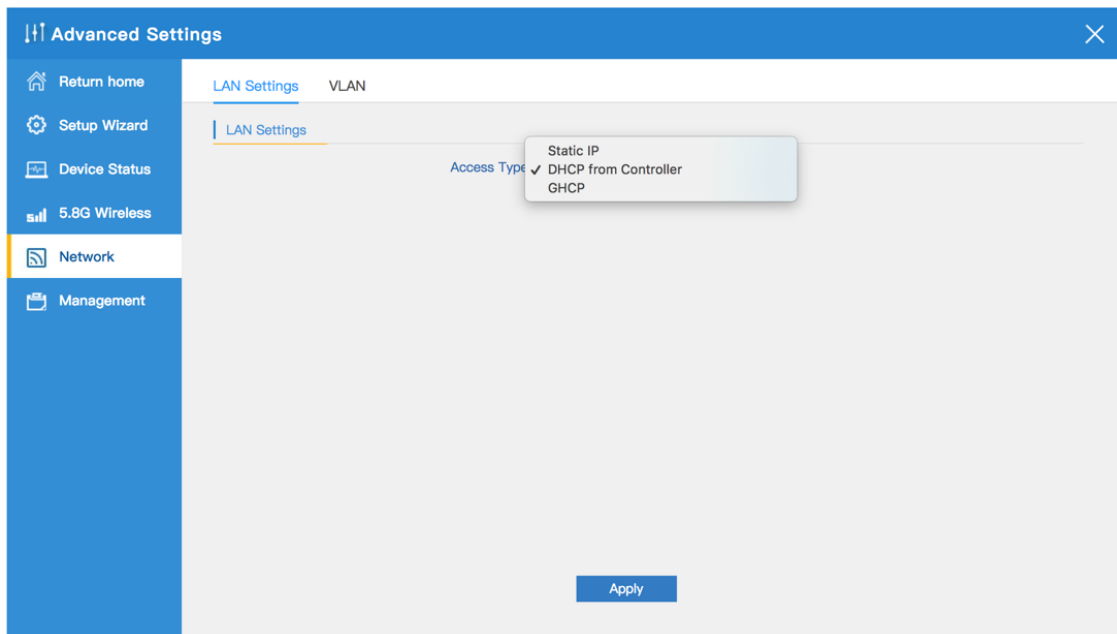
## CHAPTER 7 Enable the status of Repeater Mode or AP Mode or WDS Mode



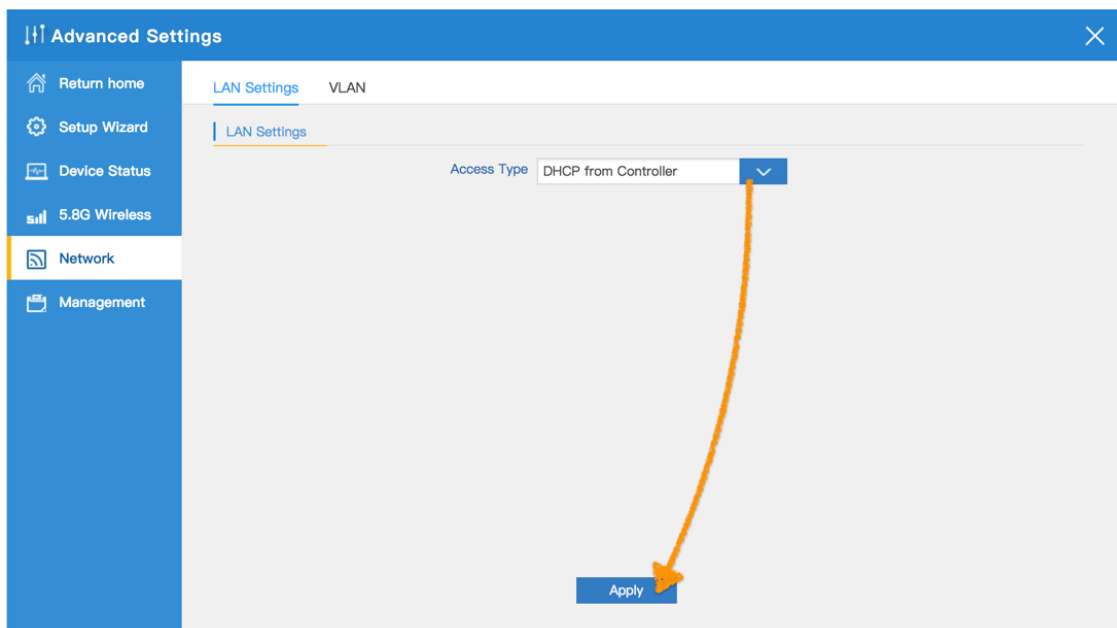
### 7.1 Network

#### 7.1.1 LAN Settings :

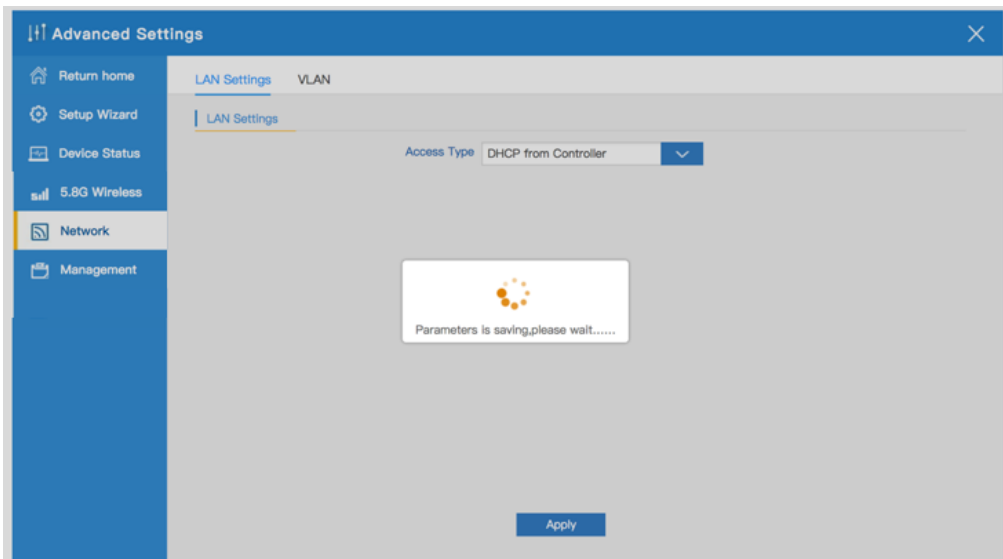
1. Can choose three kinds of usage modes (Static IP, DHCP for Controller ,GHCP) which can be selected according to the current network architecture environment.



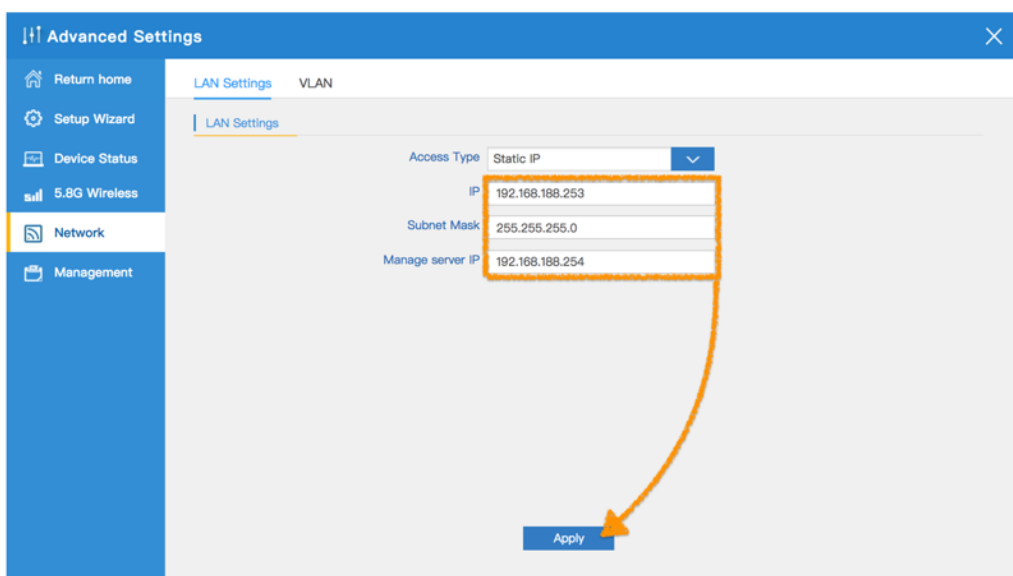
2. Use DHCP for Controller mode, please confirm that the current network architecture has IP address allocation.



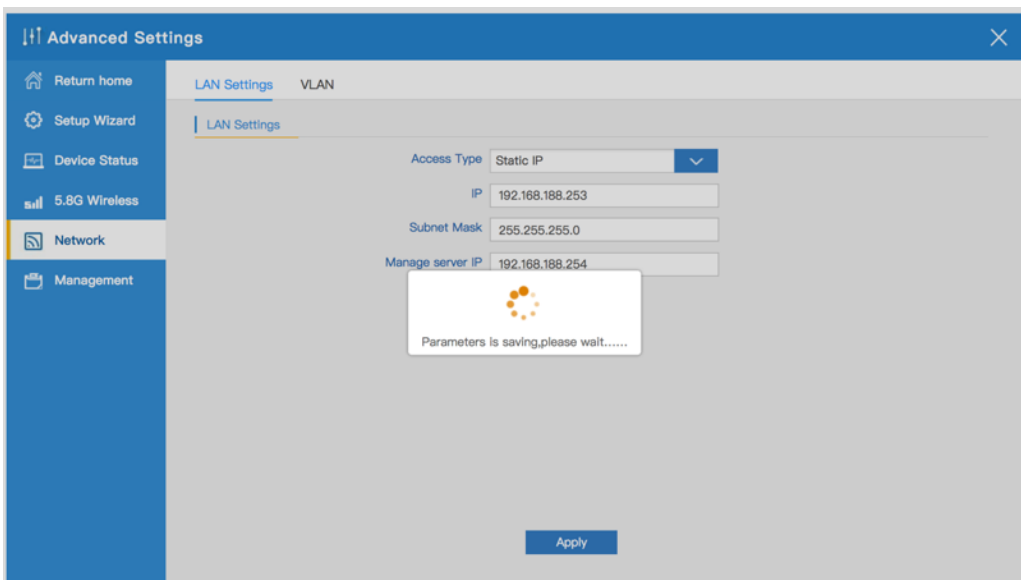
3. Click Apply, Wait for DHCP Controller Mode is Enable, please wait about 20~30 seconds.



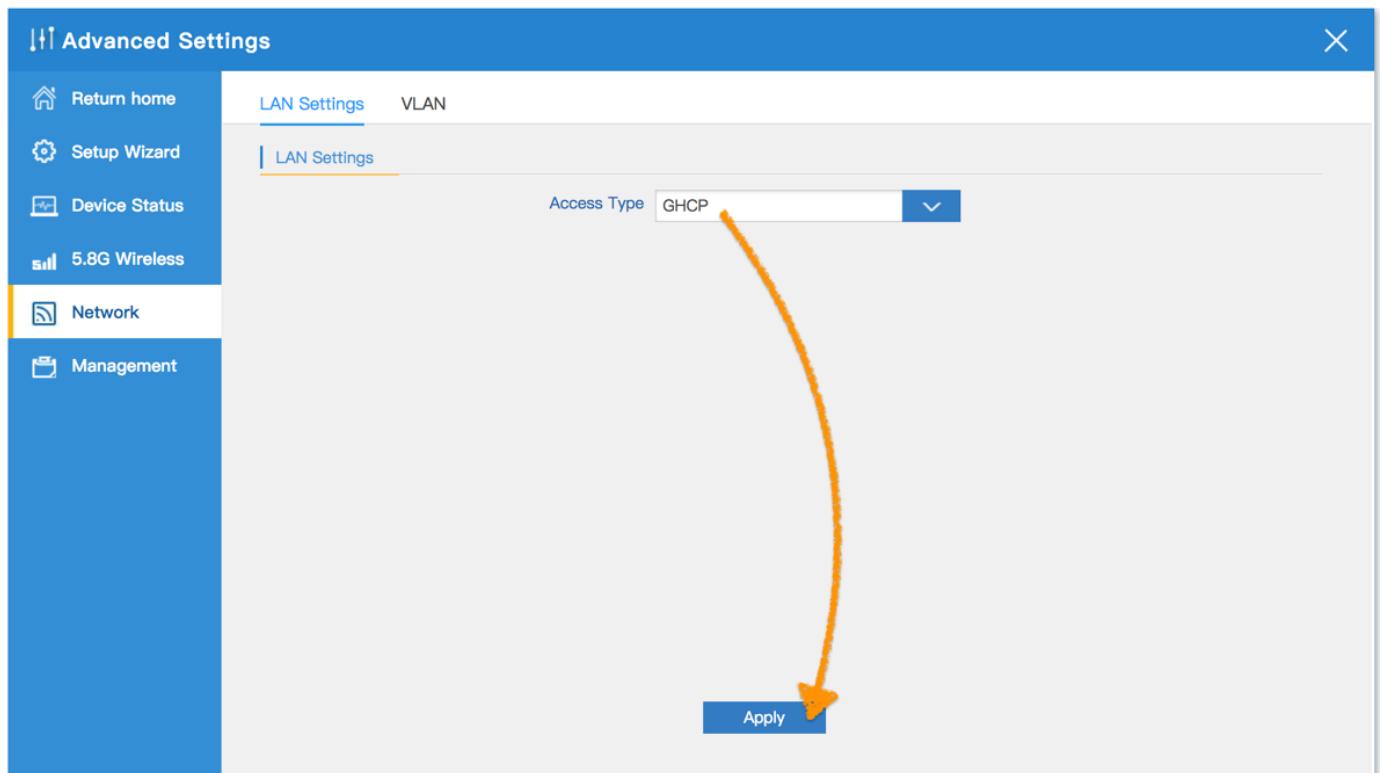
4. Sample Static IP mode setting method, then click Apply to continue.  
(Please contact with ISP for correct IP address, Subnet MasDNS address)



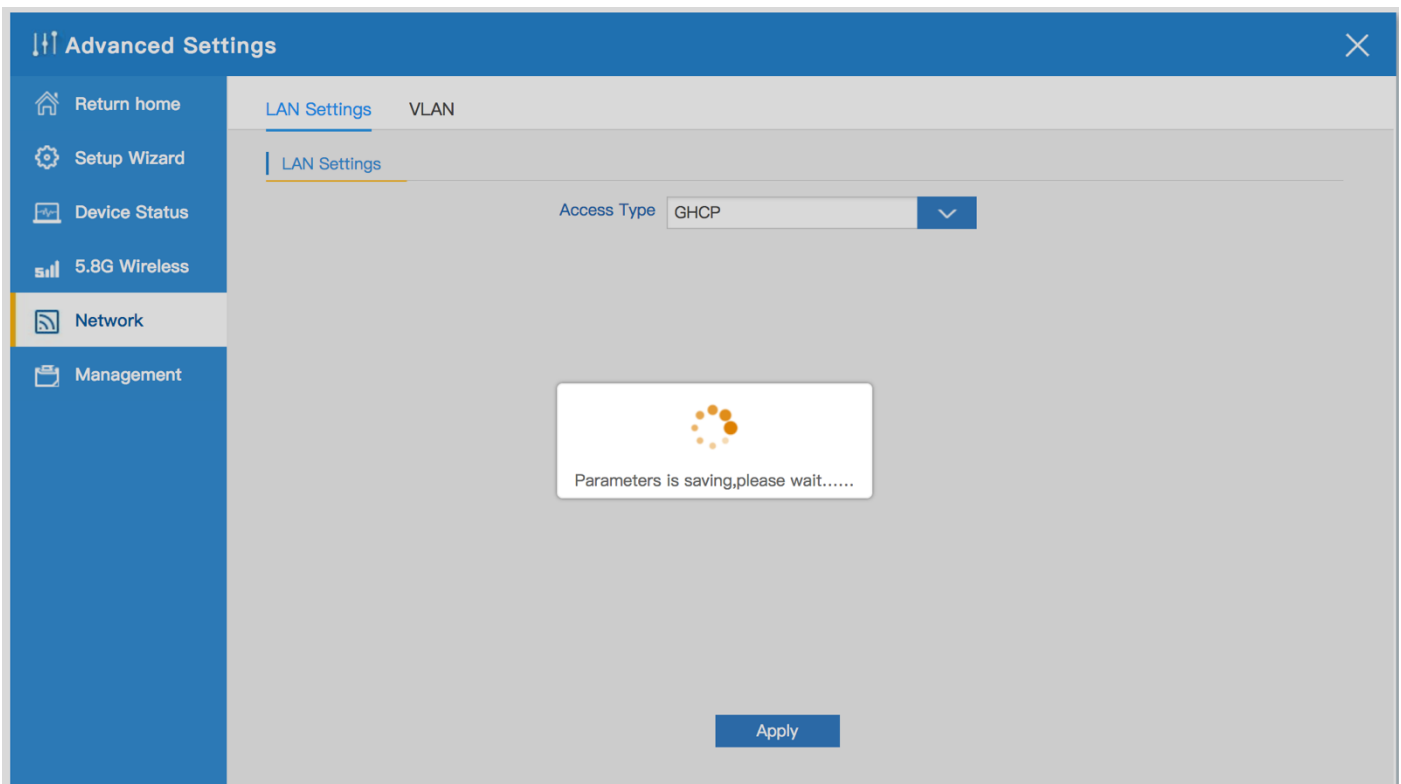
5. Click Apply, Wait for Static IP Mode is Enable, please wait about 40~50 seconds.



6. Use GHCP mode, please confirm that the current network architecture has IP address allocation



7. Click Apply, Wait for GHCP Mode is Enable, please wait about 20~30 seconds.





### 6.3.2 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 WAB-5010 , corresponding to the VLAN-ID (3-4094).

Advanced Settings

LAN Settings **VLAN**

VLAN

| VLAN-ID(3-4094) | 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"/> |
|                 | <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

## 7.2 Management

### 7.2.1 System Time & Define the system reboot time :

1. Click on Sync with Host to automatically update to the current Time.

Advanced Settings

System Time Signal tracking Logs Upgrade Firmware System User

System Time

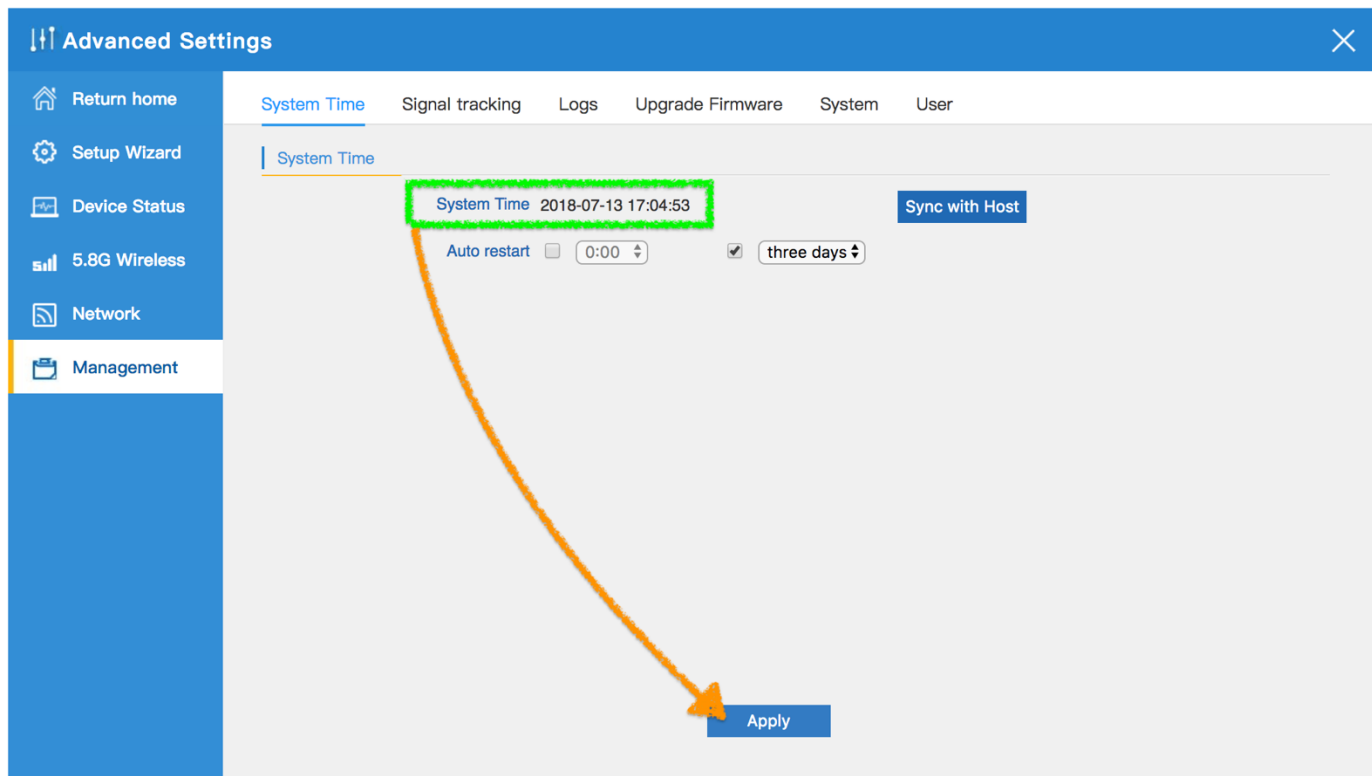
System Time 2015-10-30 11:55:33

Auto restart ☐ 0:00 ☒ three days

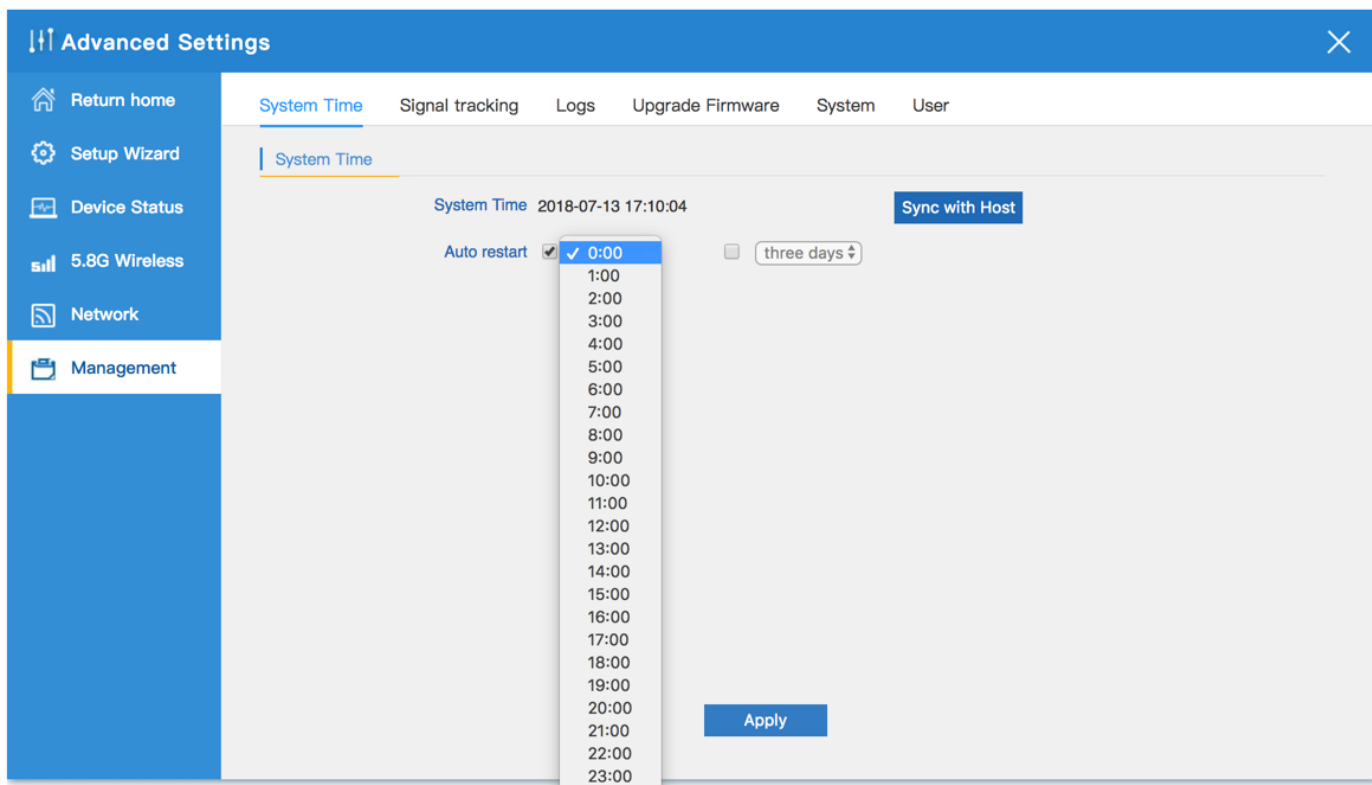
Sync with Host

Apply

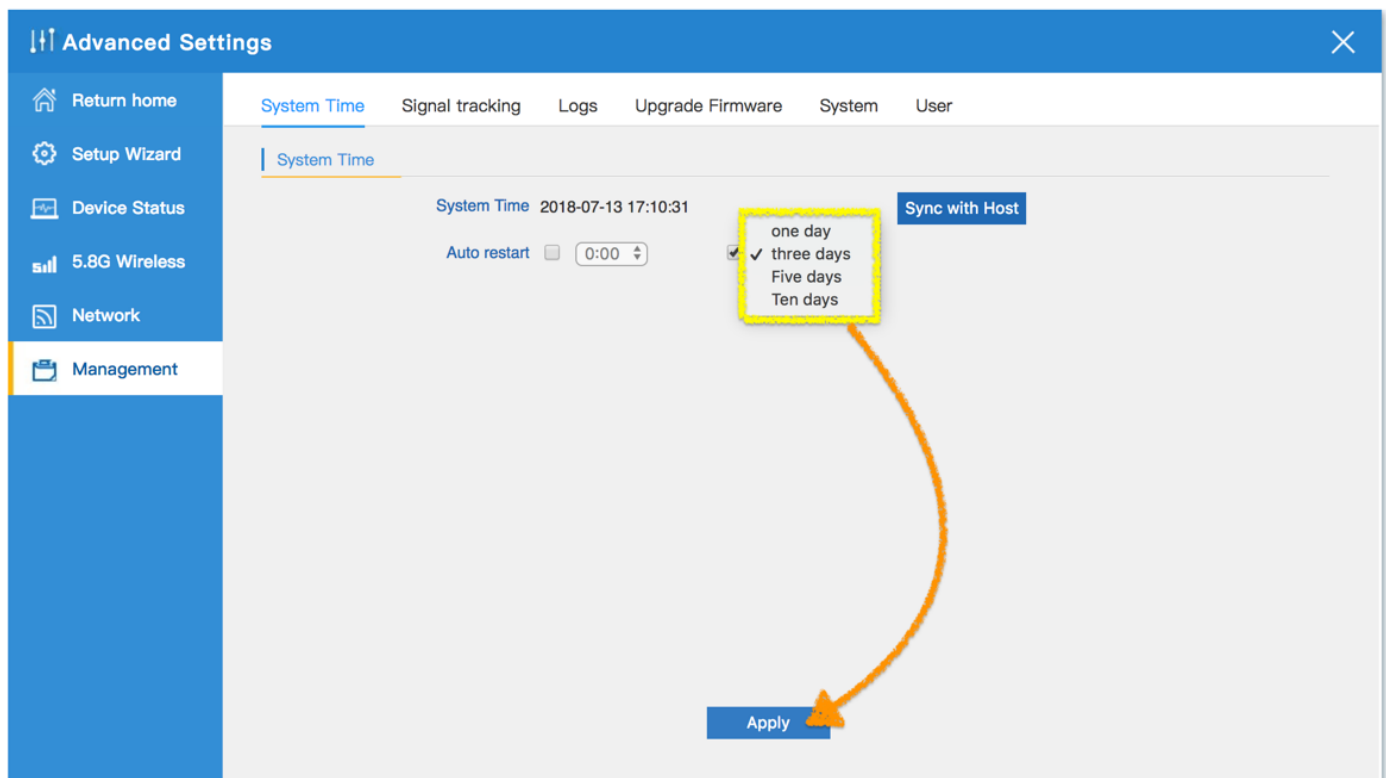
2. Confirm that System Time is correctly refreshed to the current time, Click Apply



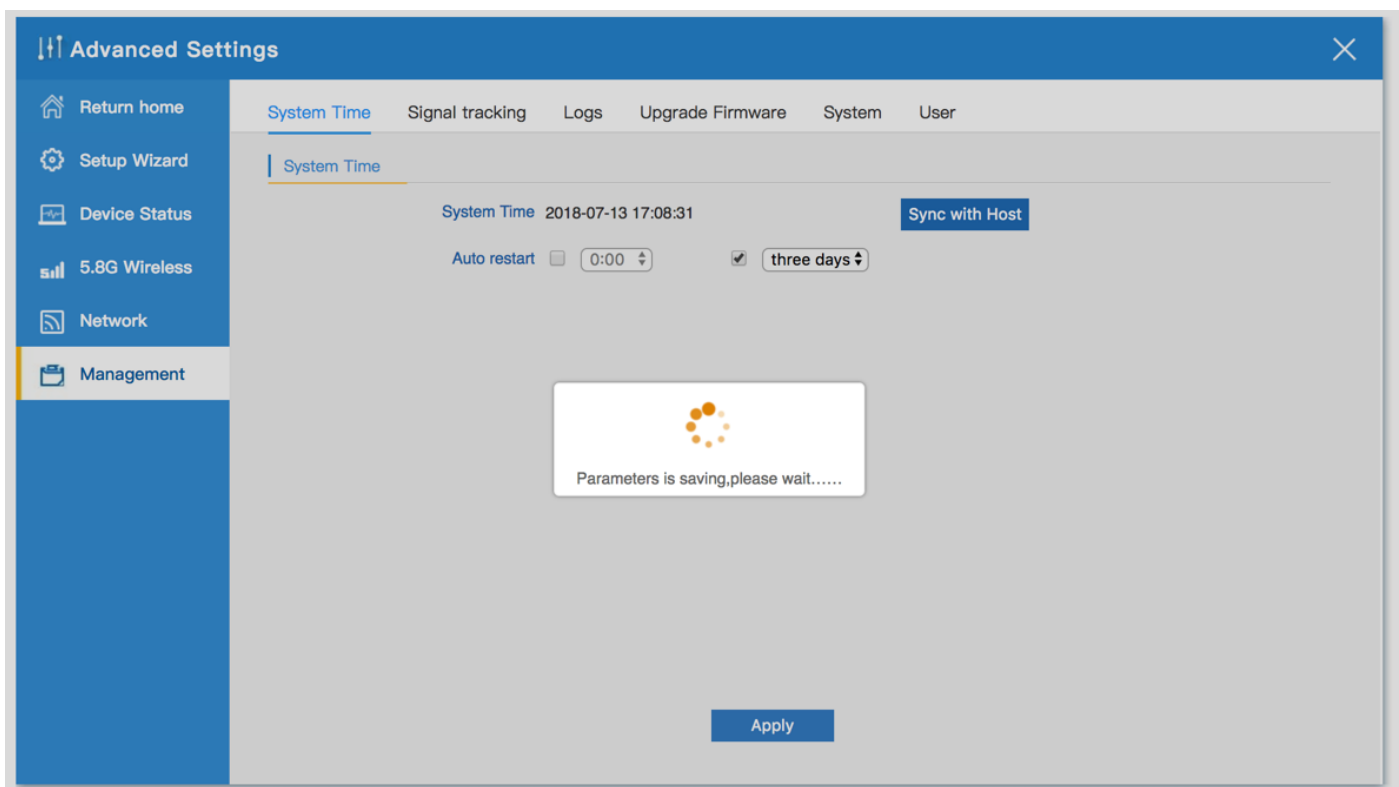
3. Define the system reboot time(0:00~23:00)



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

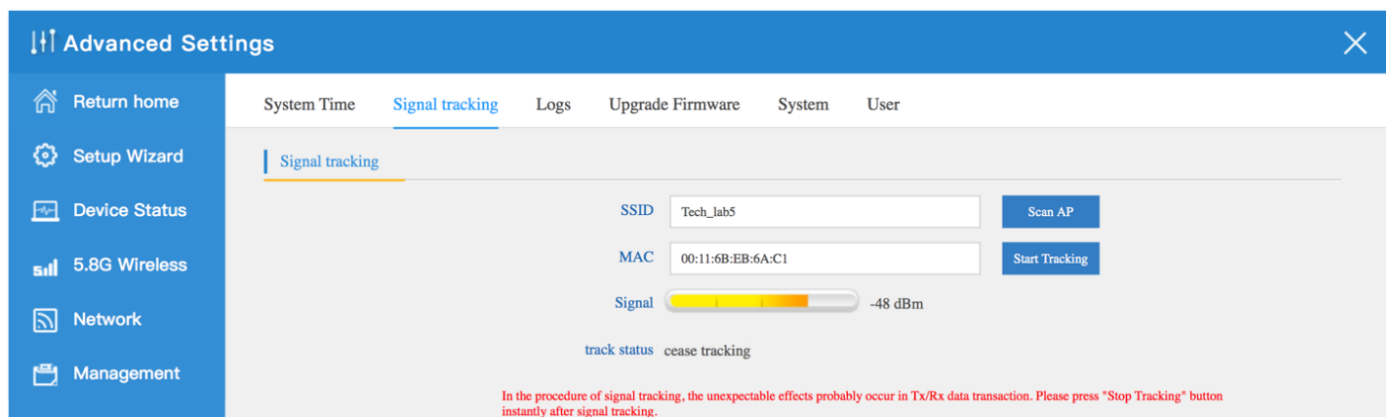


5. Enable Define the system reboot time, please wait about 20~30 seconds.



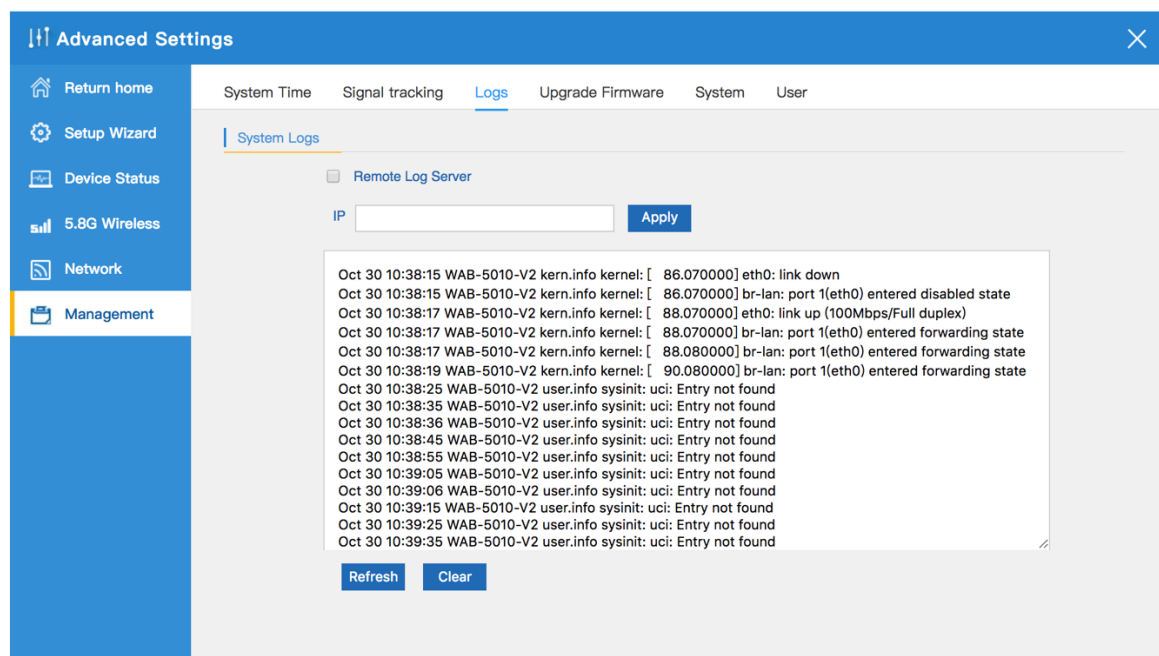
## 7.2.2 Signal tracking

- can display the information of the AP in the tracking. ex: MAC, Signal receiving strength



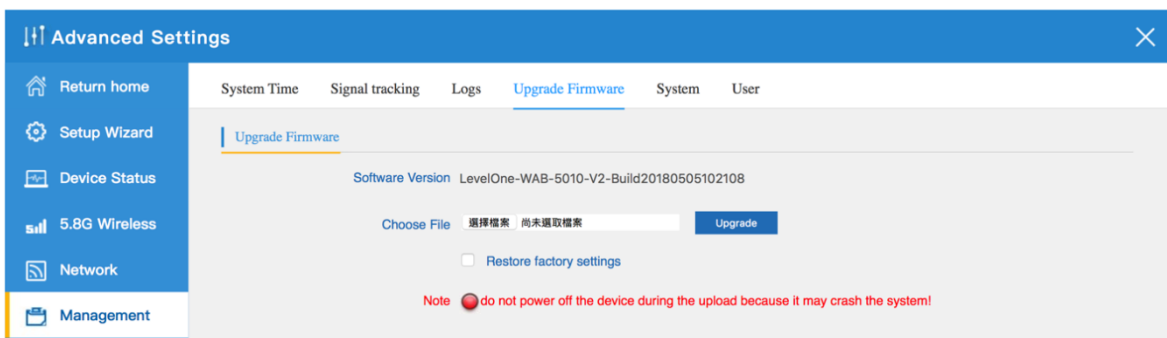
## 7.2.3 Log

- Logs to show the outdoor WAB-5010's operation logs, useful for problem solved.



## 7.2.4 Upgrade Firmware

- The 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.



## 7.2.5 System

- In System, this is for firmware backup or restore, or reset to default. Or reboot, mostly for problem solve.

The screenshot shows the 'Advanced Settings' window with the 'System' tab selected. The left sidebar contains links: Return home, Setup Wizard, Device Status, 5.8G Wireless, Network, and Management. The main content area has tabs for System Time, Signal tracking, Logs, Upgrade Firmware, System (selected), and User. Under the 'System' tab, there is a 'Save/Reload Settings' link. Below this, there are four sections: 'Backup' with a 'Backup' button; 'Restore' with a dropdown menu showing '選擇檔案' and '尚未選取檔案', and a 'Restore' button; 'Reset Default' with a 'Reset Default' button; and 'Reboot' with a 'Reboot' button.

## 7.2.6 User

- user can change the login password based on their needs:

The screenshot shows the 'Advanced Settings' window with the 'User' tab selected. The left sidebar is the same as in the previous screenshot. The main content area has tabs for System Time, Signal tracking, Logs, Upgrade Firmware, System, and User (selected). Under the 'User' tab, there is a 'User' link. Below this, there are four input fields: 'User name' with the value 'root', 'Old Password', 'Password', and 'Confirm Password'.

# CHAPTER 8    Enable the status of Gateway Mode or WISP Mode



## 8.1 Network

### 8.1.1 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

5.8G Wireless

Network

Firewall

Management

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 Start

192.168.188.2

DHCP Client IP End

192.168.188.252

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

5.8G Wireless

Network

Firewall

Management

LAN Settings

VLAN

WAN Settings

WAN advanced settings

LAN Settings

Client List

MAC

IP

Choice

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

192.168.188.197

Refresh

IP-MAC Bind

IP-MAC Bind

Add

Scan

Clear

ALL

IP

MAC

Apply

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

**Advanced Settings**

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

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 Start 192.168.188.2

DHCP Client IP End 192.168.188.252

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

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

Apply

### 8.1.2 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 WAB-5010 , corresponding to the VLAN-ID (3-4094).

**Advanced Settings**

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

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

VLAN

| VLAN-ID(3-4094) | 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"/> |

Apply

### 8.1.3 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

### 8.1.4 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

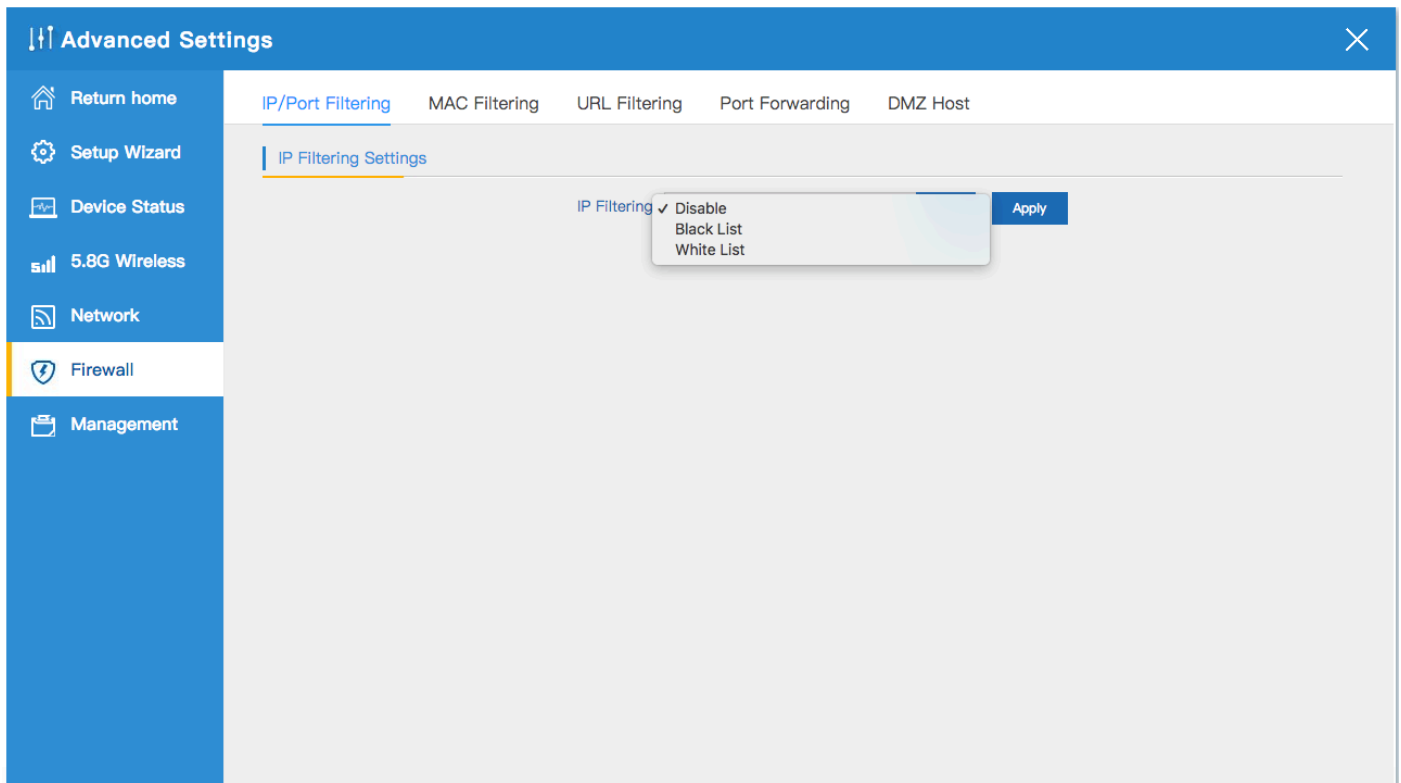
☒ Enable L2TP pass through on VPN connection

Apply

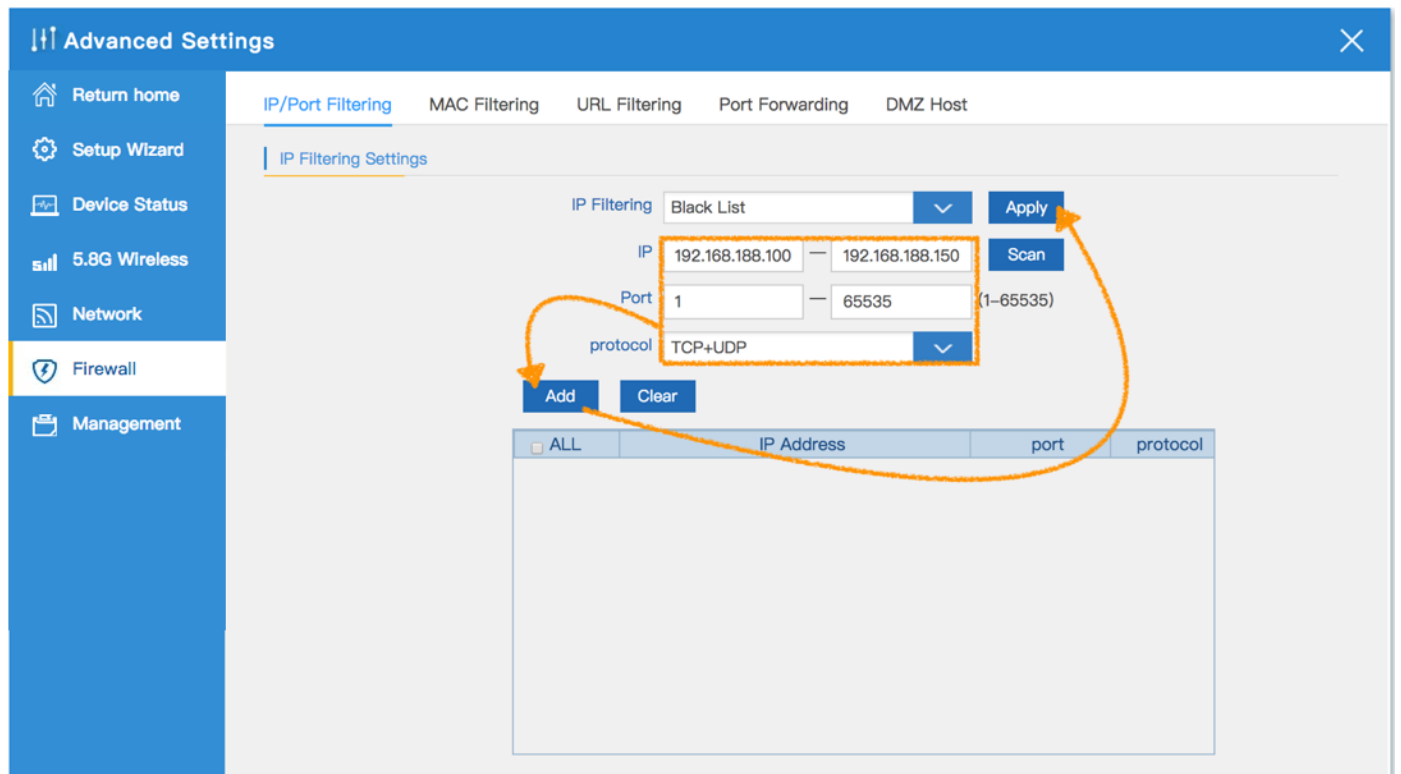
## 8.2 Firewall

### 8.2.1 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 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 |
|-----|------------|------|----------|
|-----|------------|------|----------|

## 8.2.2 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

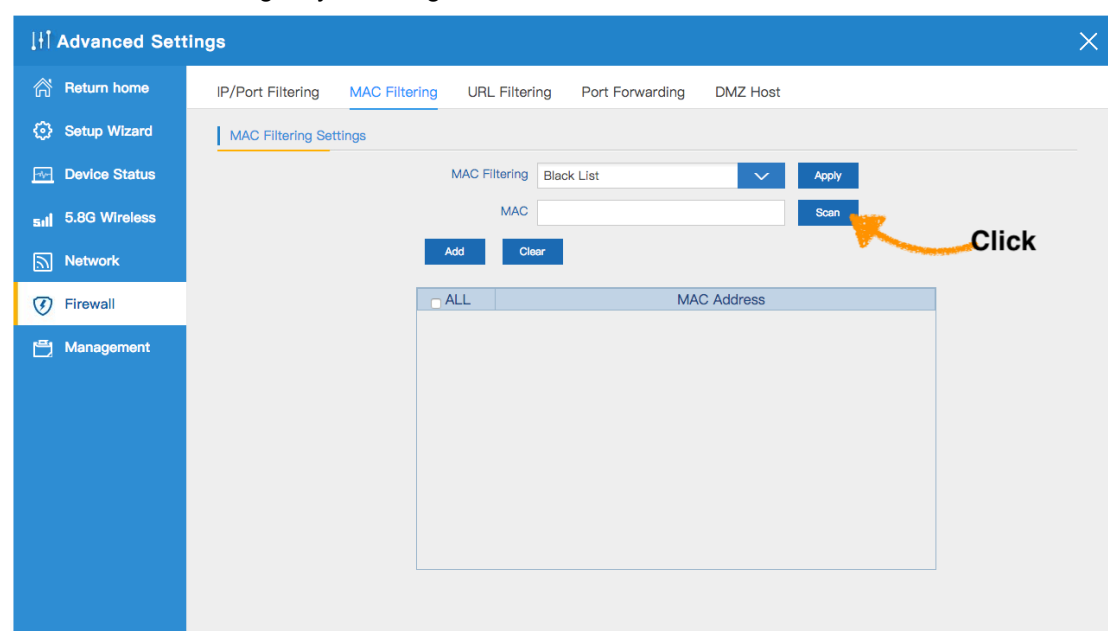
Return home Setup Wizard Device Status 5.8G Wireless Network Firewall Management

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

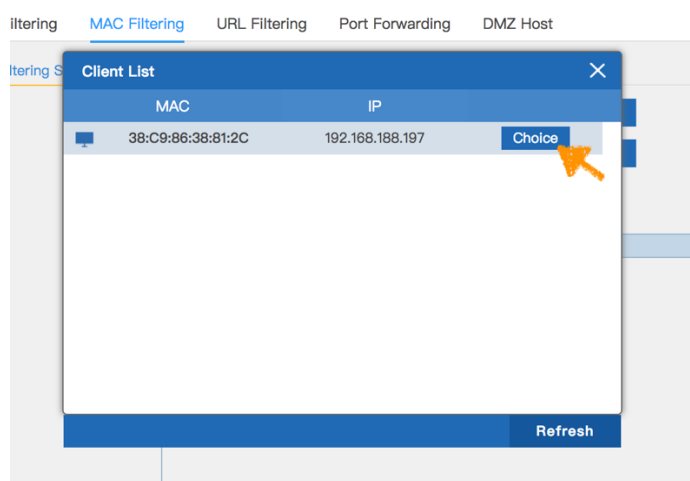
MAC Filtering Settings

MAC Filtering ✓ Disable Black List White List Apply

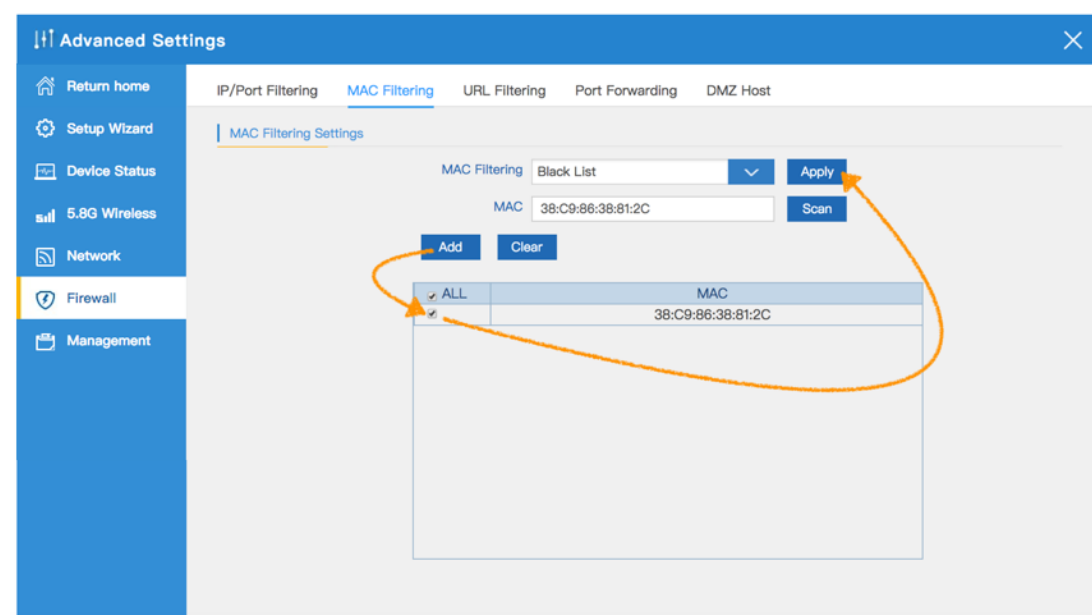
**2.Black List :** Scan specified mode or manual input mode to set, you can block the specified MAC address to connect to the Internet, leaving only link Regional network function.



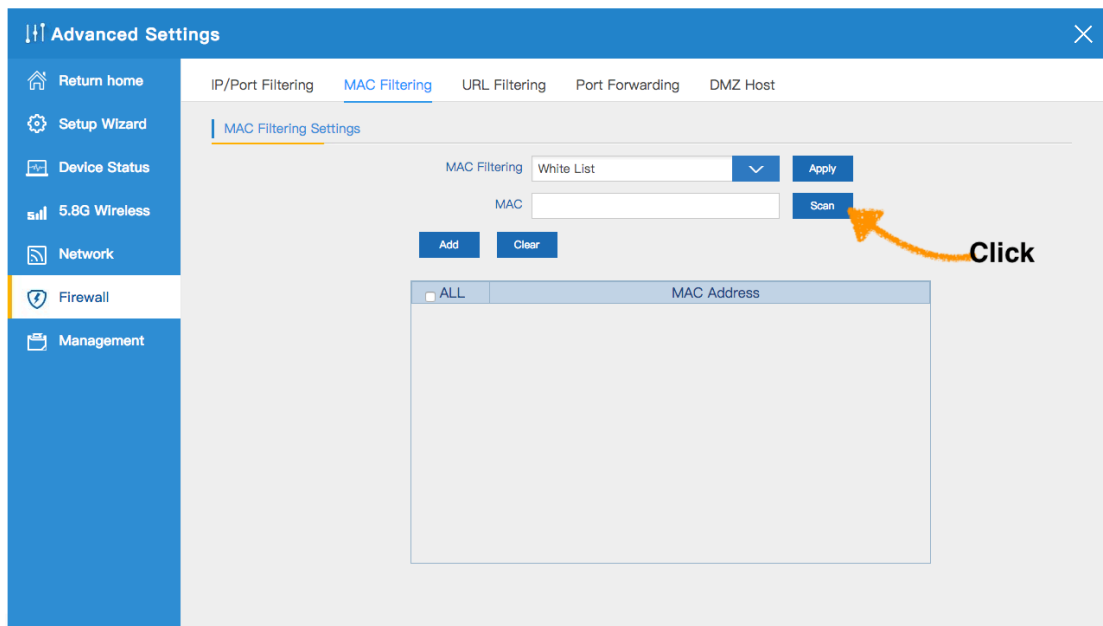
### 3.Click Choice



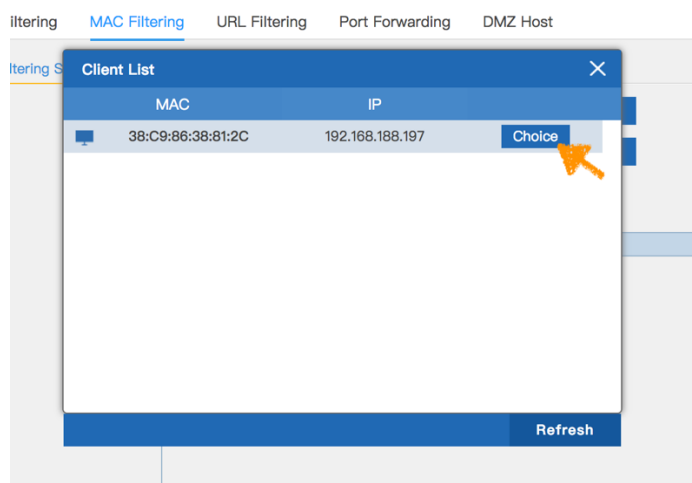
### 4. Added specified MAC address , Click Apply



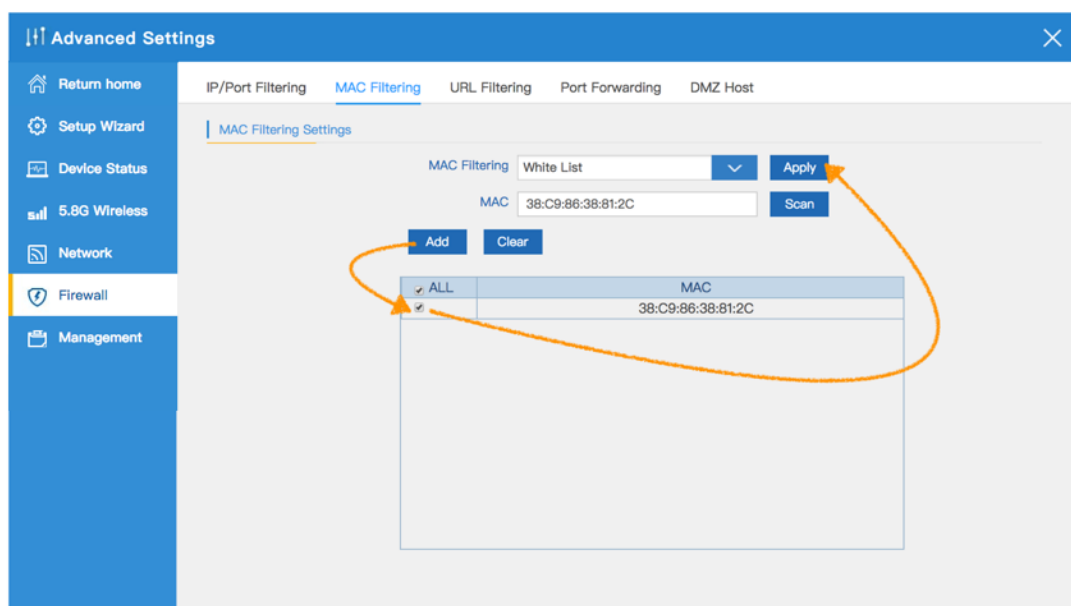
**5.White List :** Scan specified mode or manual input mode is set to allow the specified MAC address to connect to the Internet



## 6.Click Choice

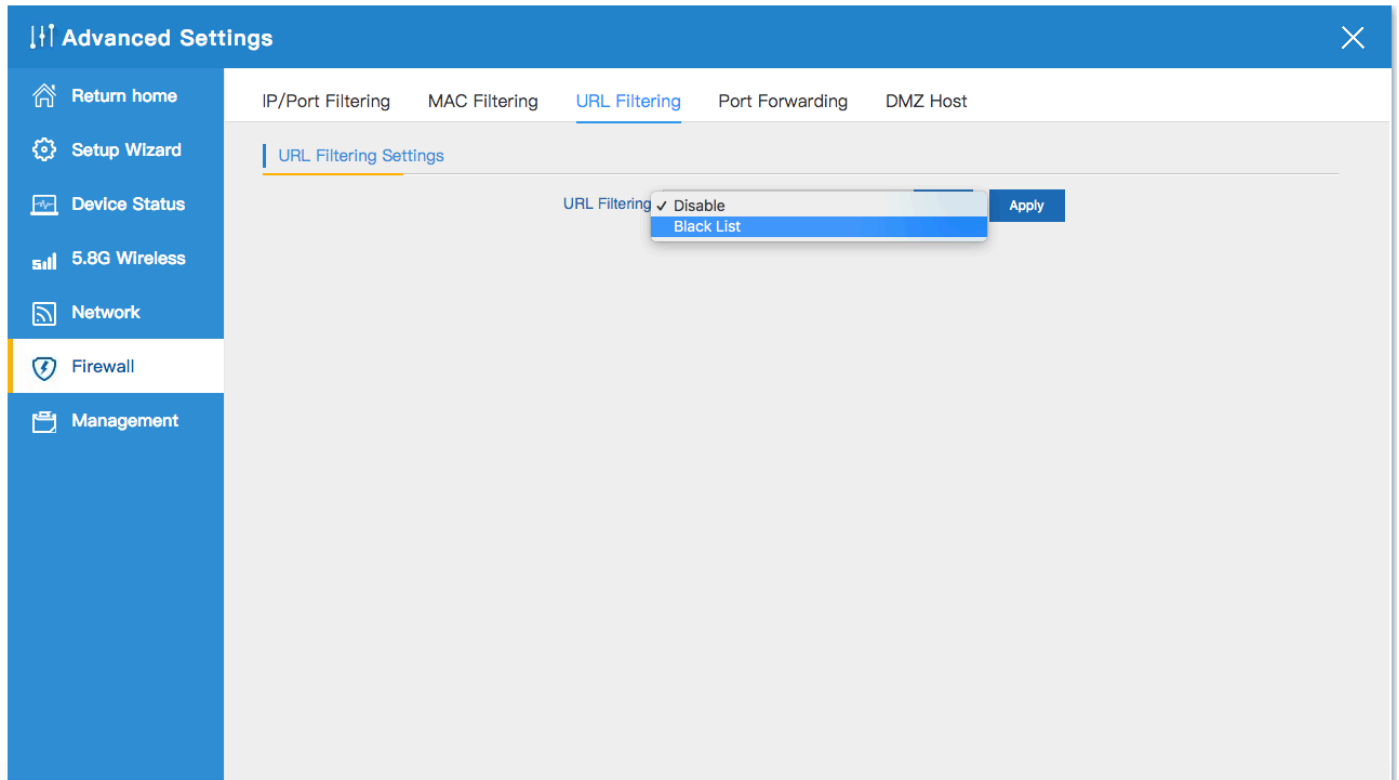


## 7.Added specified MAC address , Click Apply

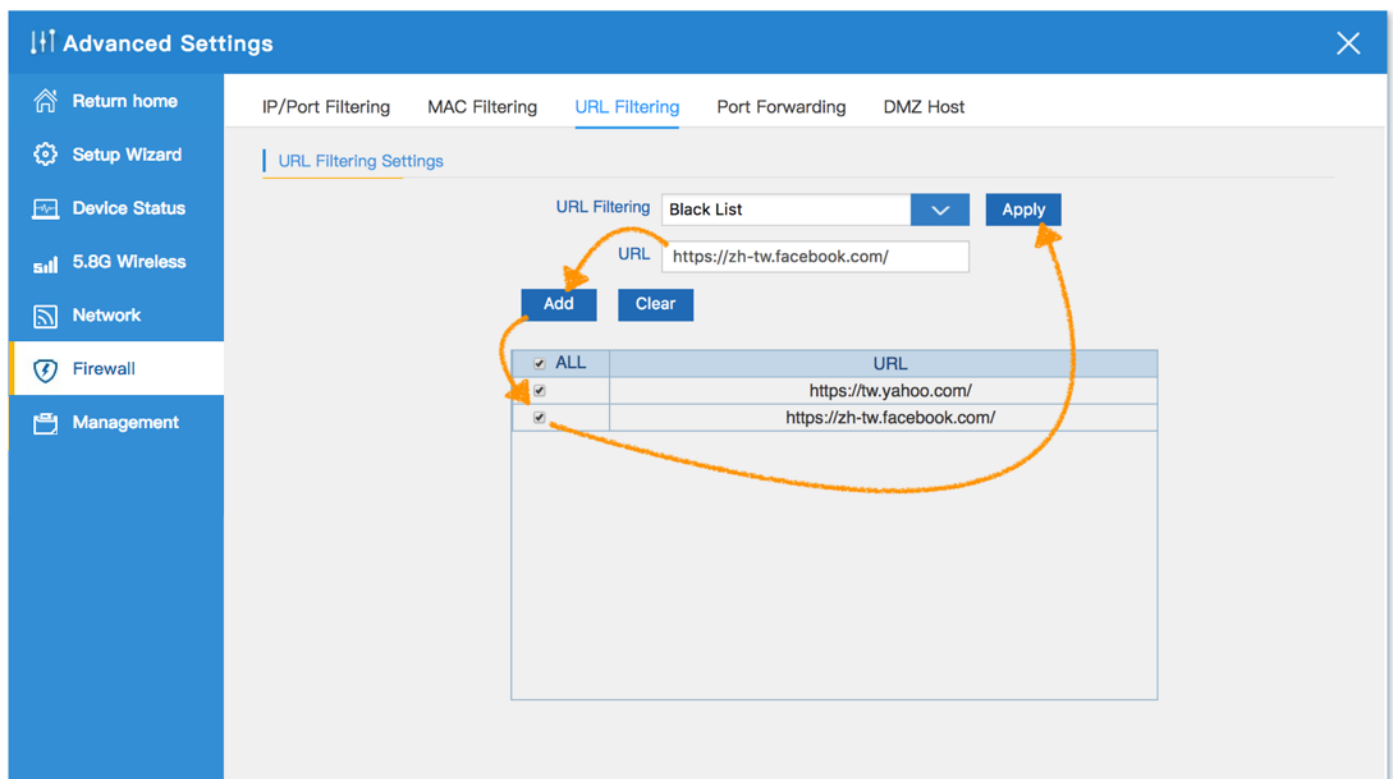


### 8.2.3 URL Filtering :

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



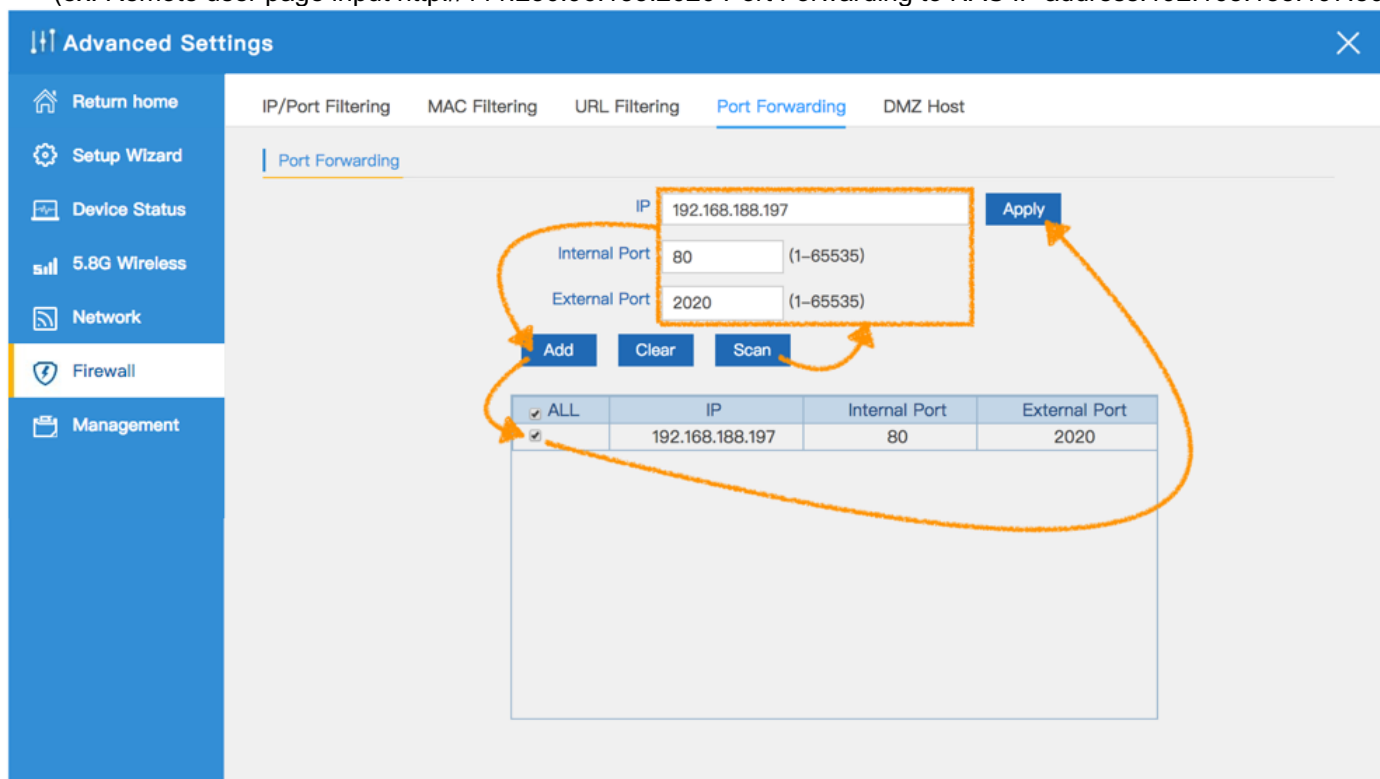
2.**Black List** : Can set the URL refuse to access the list , making all devices unable to connect to the list of websites



## 8.2.4 Port Forwarding

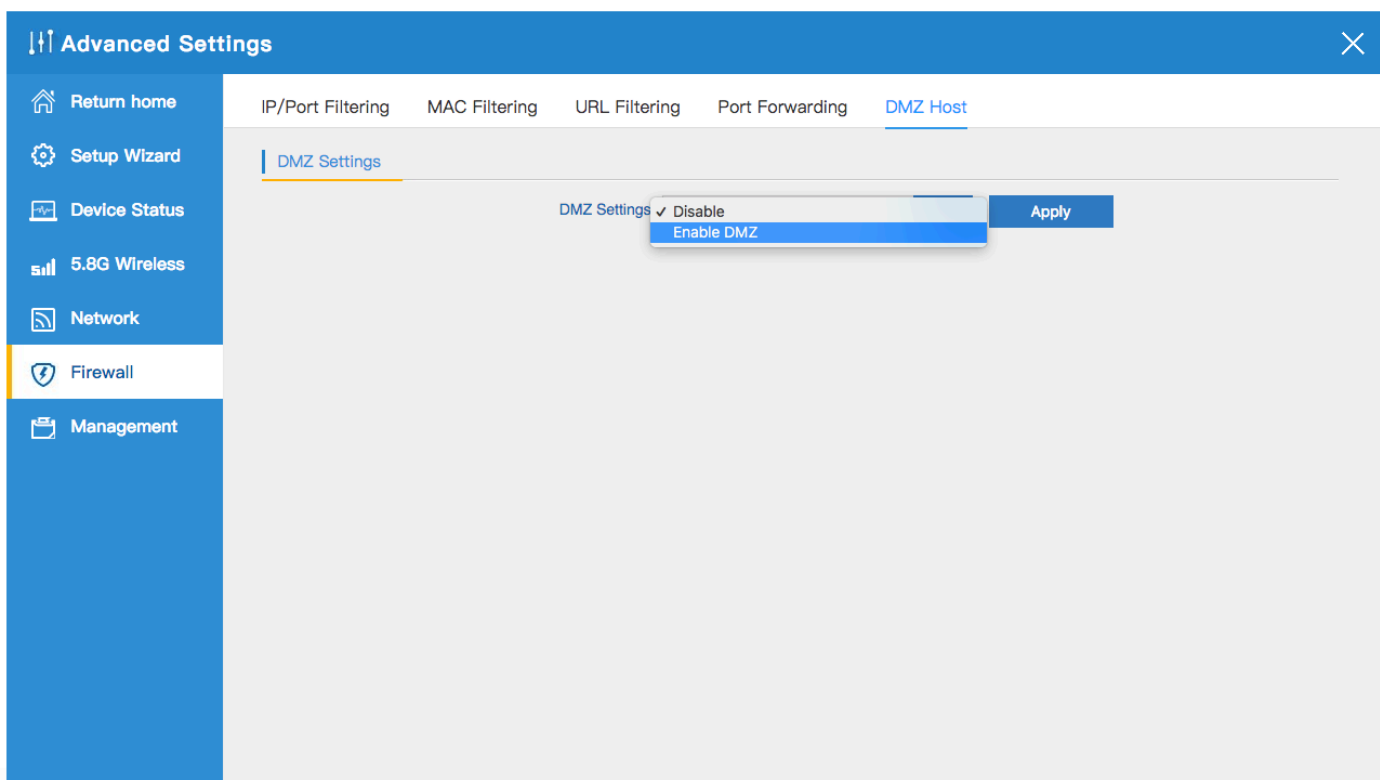
- The scan specified mode or manual input mode is set to allow the specified internal IP address of the External / External port so that other users can connect from the remote network to the WAB-5010 internal network equipment (ex: NAS , IP camera)
- After the setting is completed, the real fixed IP address or DDNS mode can be used to remotely connect to the NAS inside the WAB-5010

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



## 8.2.5 DMZ Host

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



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

5.8G Wireless

Network

Firewall

Management

IP/Port FilteringMAC FilteringURL FilteringPort ForwardingDMZ Host

DMZ Settings

DMZ Settings

Enable DMZ

▼

Apply

DMZ LAN IP

192.168.188.197



## 8.3 Management

### 8.3.1 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 | 5.8G Wireless | Network | Firewall | Management

System Time | Signal tracking | DDNS settings | QoS | Logs | Upgrade Firmware | System | User

**System Time**

Synchronous mode: ☐ Sync with Host ☒ Sync with Server

System Time: 2015-10-30 11:07:49 Sync with Server

Choose Time Zone: (GMT+08:00)Beijing,Chongqing,Hong Kong,Urumqi,Taipei ▼

NTP Server: time.windows.com ▼

Auto restart: ☐ 0:00 ☒ three days ▼

Apply

2. Can set up the required NAT Server

**Advanced Settings**

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

System Time | Signal tracking | DDNS settings | QoS | Logs | Upgrade Firmware | System | User

**System Time**

Synchronous mode: ☐ Sync with Host ☒ Sync with Server

System Time: 2015-10-30 11:17:05 Sync with Server

Choose Time Zone: (GMT+08:00)Beijing,Chongqing,Hong Kong,Urumqi,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 ☒ three days ▼

Click

Apply

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

**Advanced Settings**

System Time | Signal tracking | DDNS settings | QoS | Logs | Upgrade Firmware | System | User

Synchronous mode ☐ Sync with Host ☒ Sync with Server

System Time 2015-10-30 11:18:52 [Sync with Server](#)

Choose Time Zone (GMT+08:00)Beijing,Chongqing,Hong Kong,Urumqi,Taipei

NTP Server ---CUSTOM---

Manual Setup tock.stdtime.gov.tw

Auto restart ☐ 0:00 ☒ three days

[Apply](#)

### 8.3.2 Signal tracking

- can display the information of the AP in the tracking. ex: MAC, Signal receiving strength

**Advanced Settings**

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

Signal tracking

SSID

MAC

Signal  -45 dBm

track status cease tracking

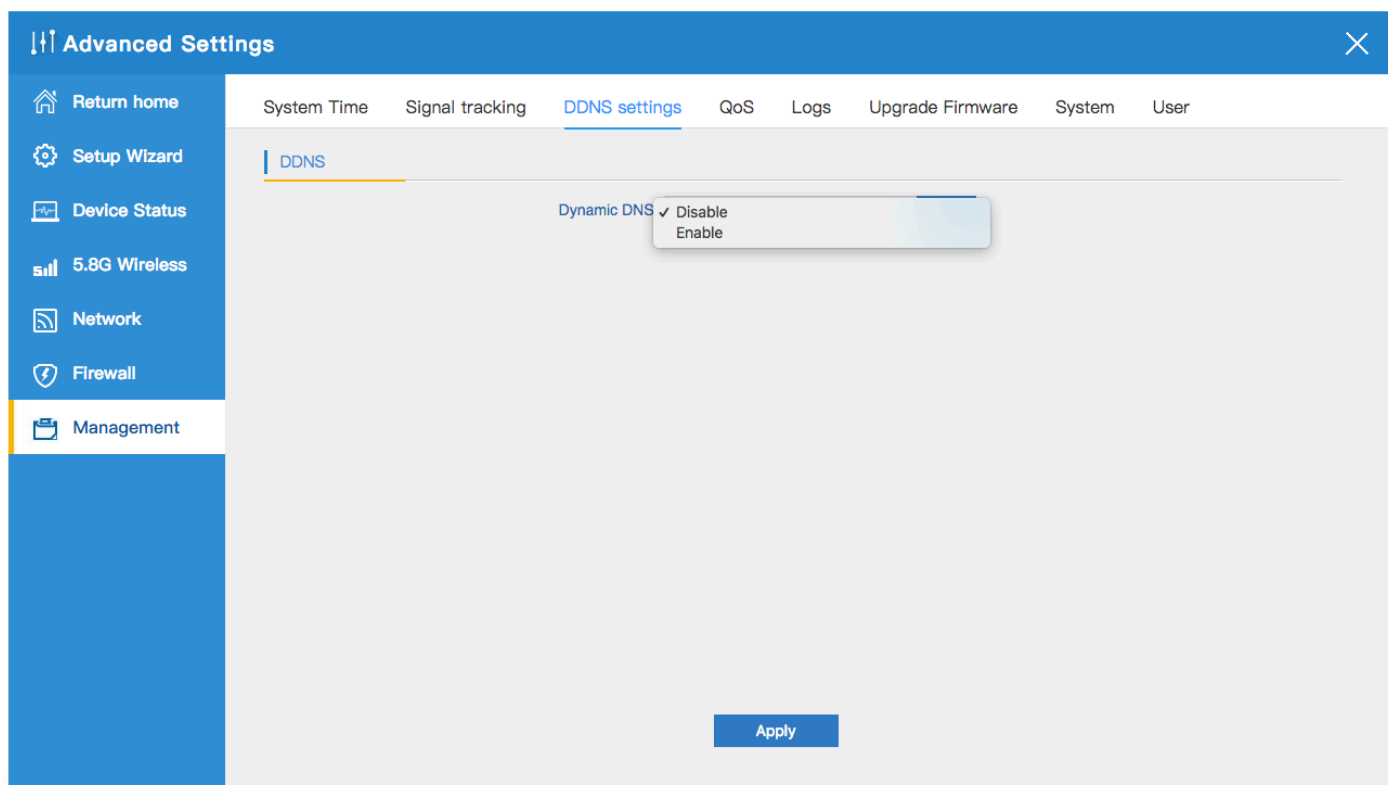
[Scan AP](#) [Start Tracking](#)

**Click**

In the procedure of signal tracking, the unexpected effects probably occur in Tx/Rx data transaction. Please press "Stop Tracking" button instantly after signal tracking.

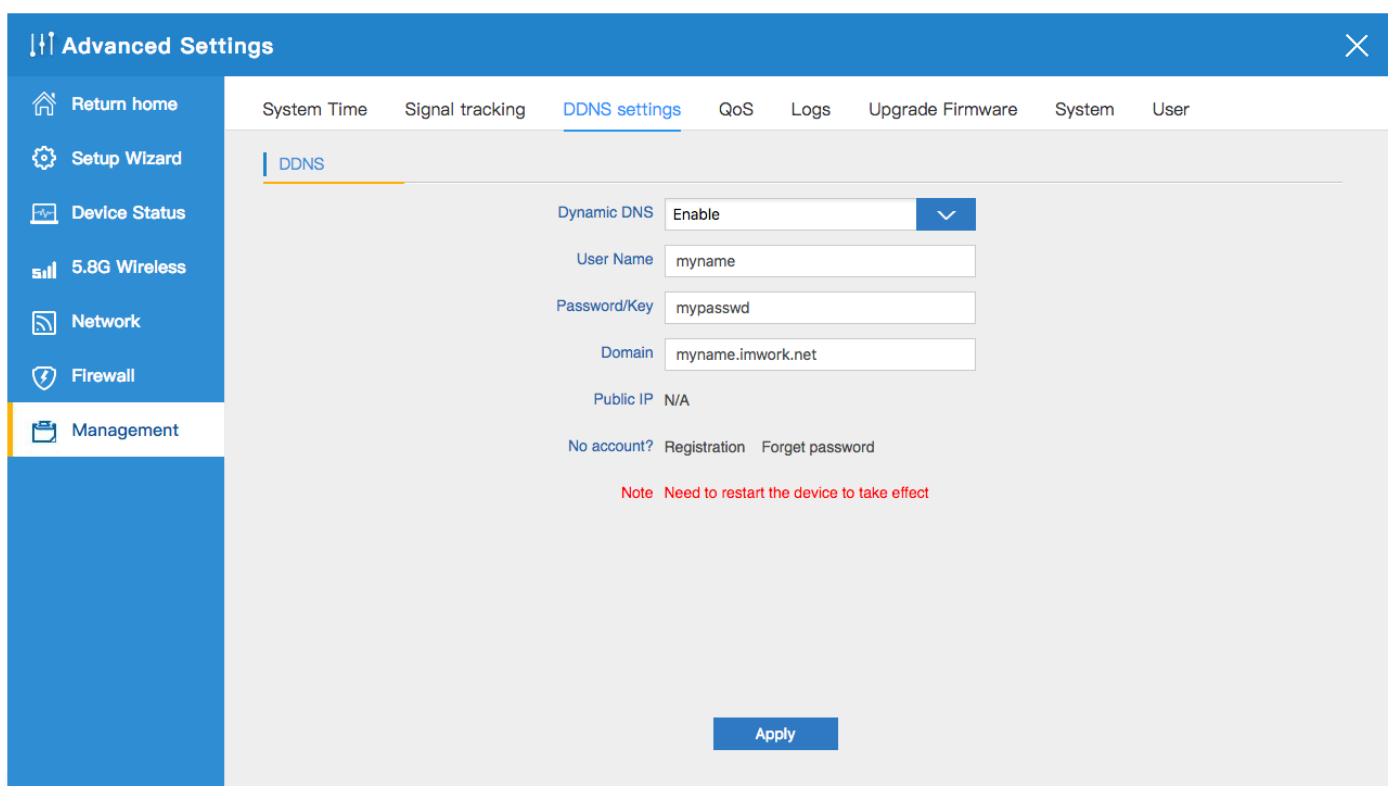
### 8.3.3 DDNS settings :

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 left sidebar contains navigation links: Return home, Setup Wizard, Device Status, 5.8G Wireless, Network, Firewall, and Management. The top navigation bar includes System Time, Signal tracking, DDNS settings, QoS, Logs, Upgrade Firmware, System, and User. An 'Apply' button is located at the bottom right of the settings area.

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 WAB-5010 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 set to 'N/A'. Below the fields, there are links for 'No account?', 'Registration', and 'Forget password'. A red note at the bottom states 'Note Need to restart the device to take effect'. An 'Apply' button is located at the bottom right of the settings area.

### 8.3.4 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 |

### 8.3.5 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 Signal tracking DDNS settings QoS **Logs** Upgrade Firmware System User

**System Logs**

☐ Remote Log Server

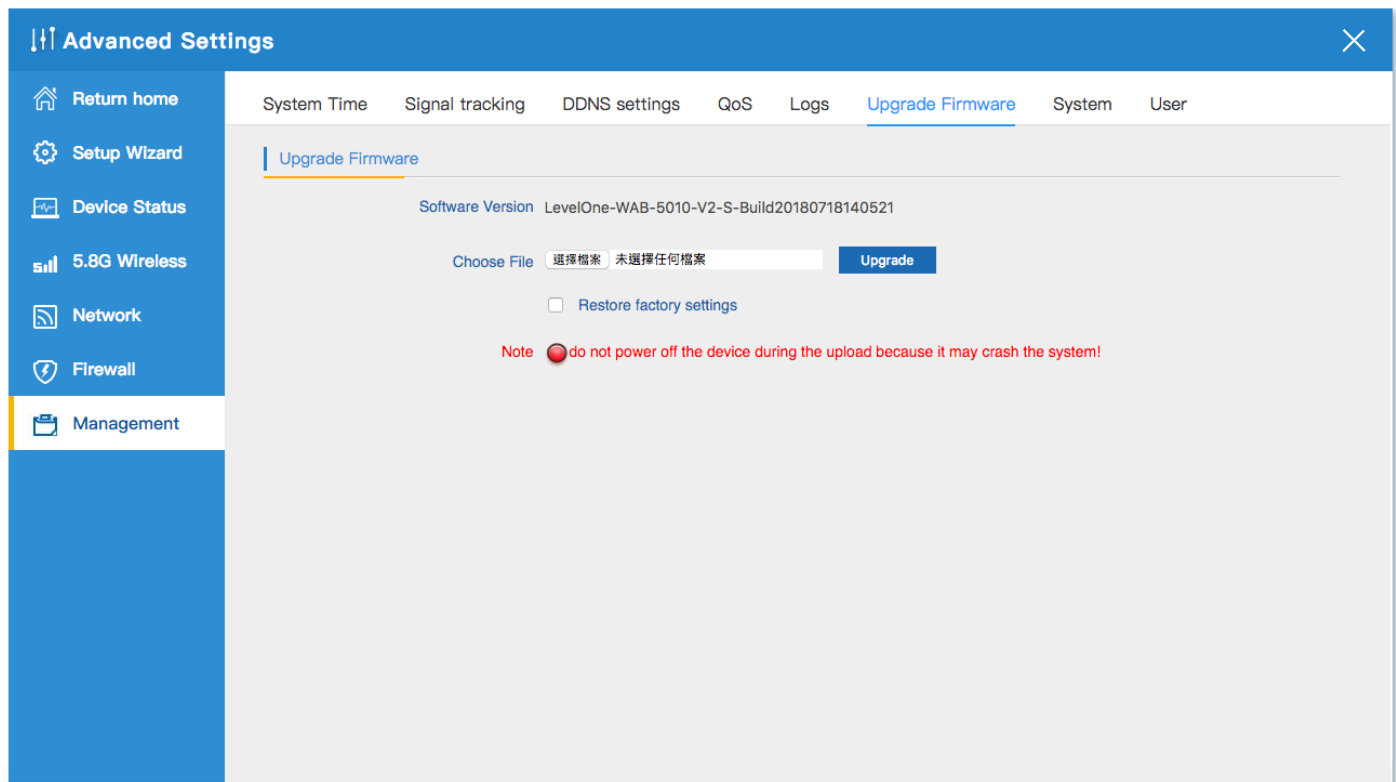
IP  Apply

```
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 2.060000] eth1: Found an AR934X built-in switch
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.100000] GACT probability on
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.100000] Mirror/redirect action on
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.100000] netem: version 1.3
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.110000] u32 classifier
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.110000] Performance counters on
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.110000] input device check on
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.120000] Actions configured
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.120000] Netfilter messages via NETLINK v0.30.
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.130000] nf_conntrack version 0.5.0 (947 buckets, 3788 max)
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.130000] ctnetlink v0.93: registering with nfnetlink.
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.140000] ip_tables: (C) 2000-2006 Netfilter Core Team
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.140000] TCP cubic registered
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.150000] NET: Registered protocol family 17
Oct 30 10:37:09 WAB-5010-V2 kern.notice kernel: [ 3.150000] Bridge firewalling registered
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.160000] Ebtables v2.0 registered
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.160000] 8021q: 802.1Q VLAN Support v1.8
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.160000] ### of_selftest(): No testcase data in device tree; not running tests
Oct 30 10:37:09 WAB-5010-V2 kern.info kernel: [ 3.180000] JFS: Mounted root (squashfs filesystem) readonly on device 31:2
```

Refresh Clear

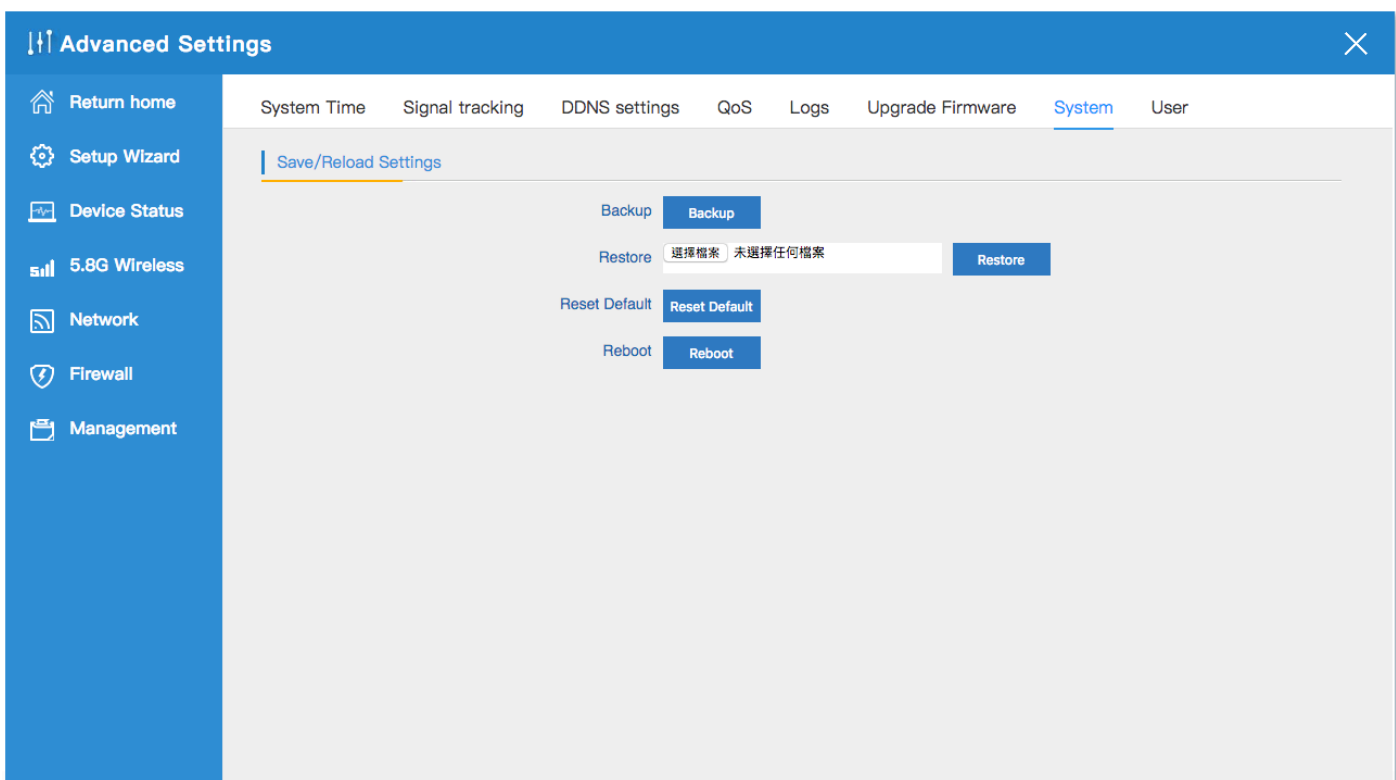
### 8.3.6 Upgrade Firmware :

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



### 8.3.7 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



### 8.3.8 User :

- Management and change the password for Log in

Advanced Settings

Return home

Setup Wizard

Device Status

5.8G Wireless

Network

Firewall

Management

System TimeSignal trackingDDNS settingsQoSLogsUpgrade FirmwareSystemUser

User

User name

root

Old Password

Password

Confirm Password

Apply

## **Appendix A LICENSE STATEMENT / GPL CODE STATEMENT**

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44319 Dortmund

Deutschland

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Fax: [+49 231 9075 - 184](tel:+492319075184)

Email: [support@level1.com](mailto:support@level1.com)

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