

NC-LINK

User Manual of NC-AC44APP/NC-AC21AP



Version V1.0

Thank you for purchasing NC-Link Access Point. This manual will instruct you how to configure and the AP, enable you to use it in a perfect status. Please check the Package before use it.

Package Contents

Item	Description	Unit	QTY
1	Access Point	PCS	1
2	PoE Injector (NC-AC21AP)	PCS	1
3	Mounting Accessory	Set	1
4	Quick Installation Guide	PC	1

1. Manual Instruction

This manual is subject to tell users how to use this Wireless Access Point properly. Contents include description of this platform's properties, and how to configure this platform. Pre-reading this manual before operation is highly recommended.

1.1 Target Reader

This manual is for those familiar with basic networking knowledge and terminology

2. Product Introduction

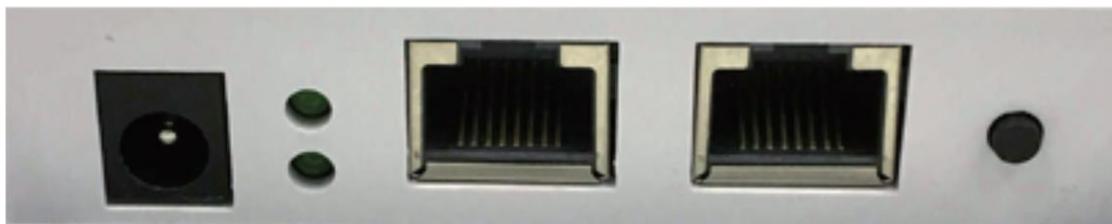
NC-AC44APP/NC-AC21AP are highly performance Wi-Fi Access Point, complied with IEEE 802.11ac/n/g/b/a.

NC-AC44APP is 1200Mbps, 867Mbps @5.8GHz, 300Mbps @2.4GHz

NC-AC21AP is 750Mbps, 433Mbps @5.8GHz, 300Mbps @2.4GHz

2.1 Product Layout

2.1.1 Interface



DC Jack: It is used for 12V direct current power supply.

WAN/PoE: The WAN/PoE port is used to connect to the power and Internet.

LAN: Then LAN port is used for bridging.

Reset: Press the Reset button about **15 seconds**, then release to reset. The default IP address is **192.168.188.253**

Default password is **admin**

RJ45 Connector

NC-AC44APP with 2 x 10/100M/1000Mbps auto-negotiation RJ45 Ethernet Port

NC-AC21AP with 2 x 10/100Mbps auto-negotiation RJ45 Ethernet Port

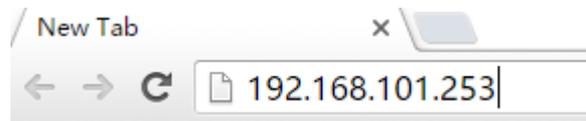
3. Login

Connect your PC to the NC-AC44APP **LAN Port**, then login Web Management Page with default IP Address: <http://192.168.188.253>

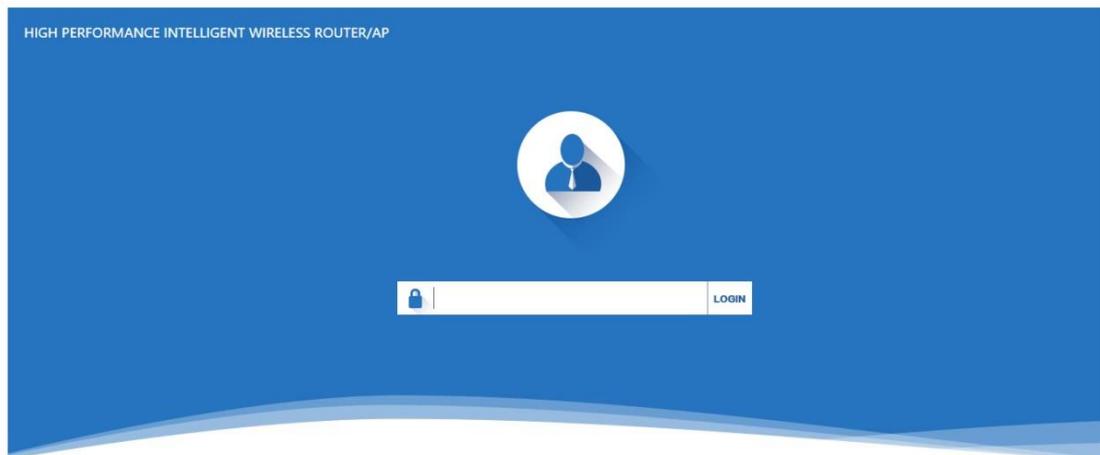
Default password: **admin**. Below base on **Chrome** browser.

Login Steps:

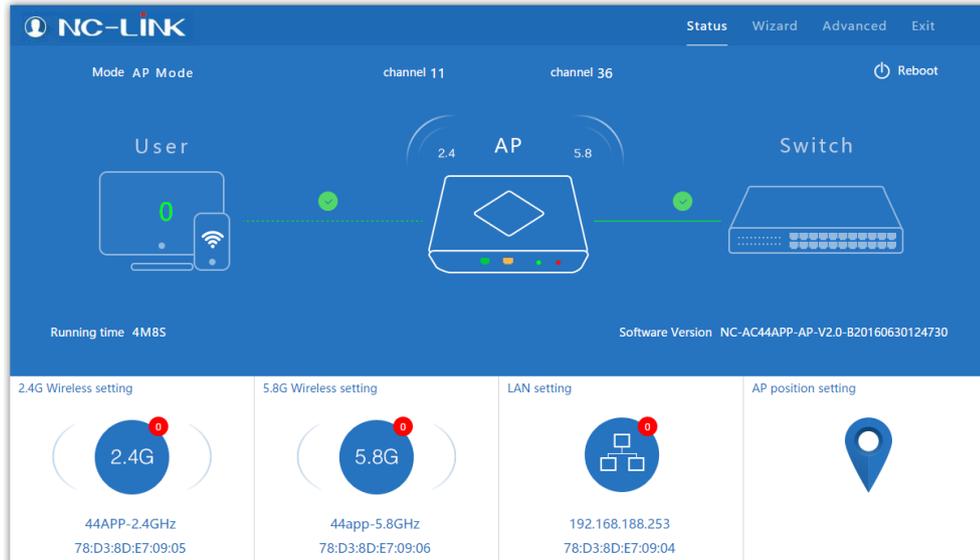
Open Chrome browser, input **http://192.168.188.253** in the address bar to login Access Point



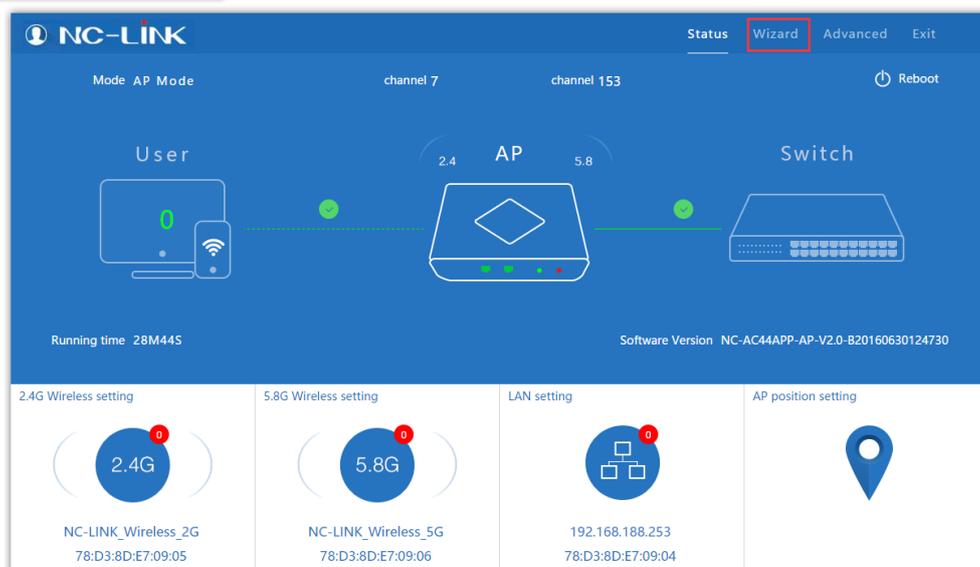
Login screen require password, the default is admin, input it and click **“LOGIN”**

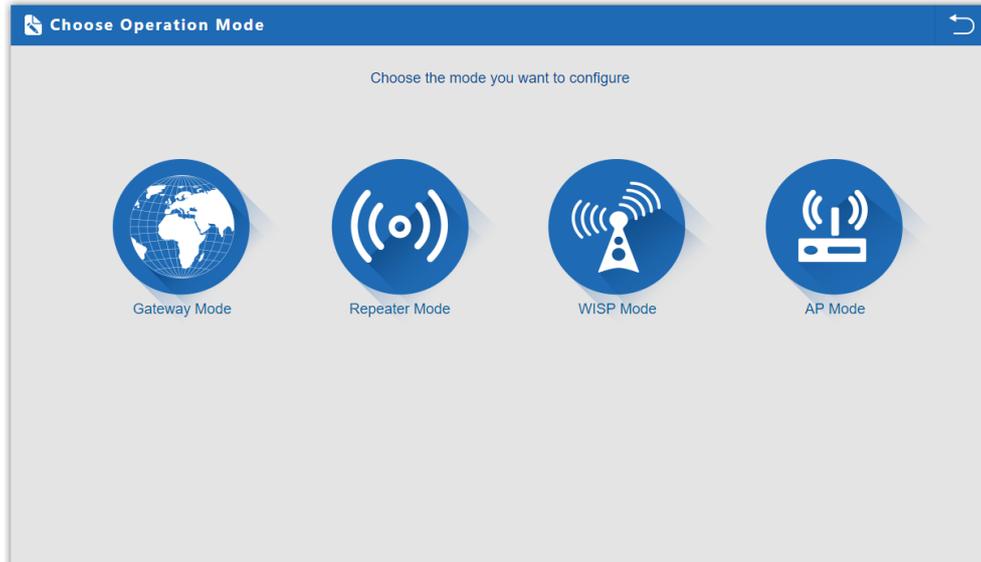


After login, you can see below Web page.



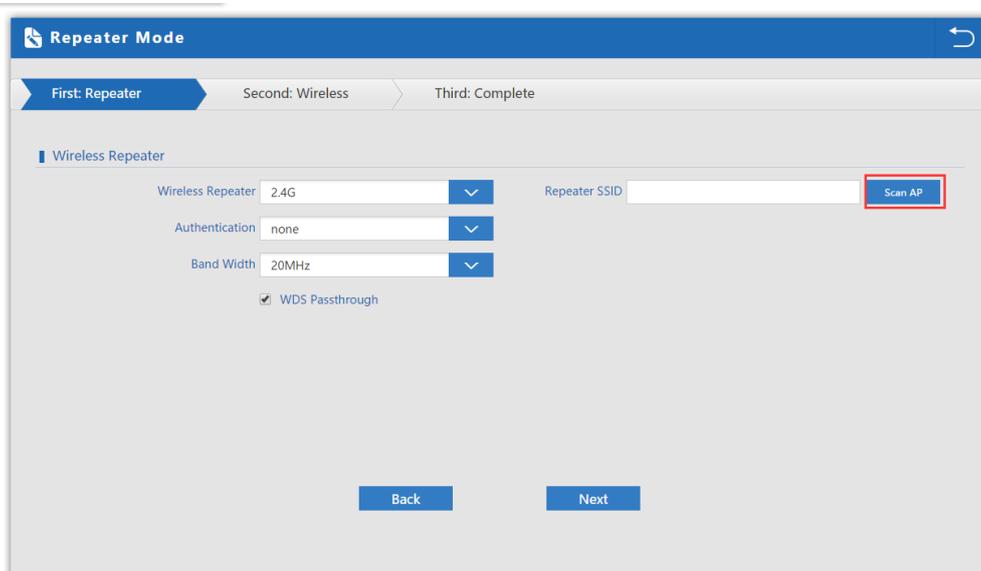
Click **“Wizard”** to start operating mode configuration.



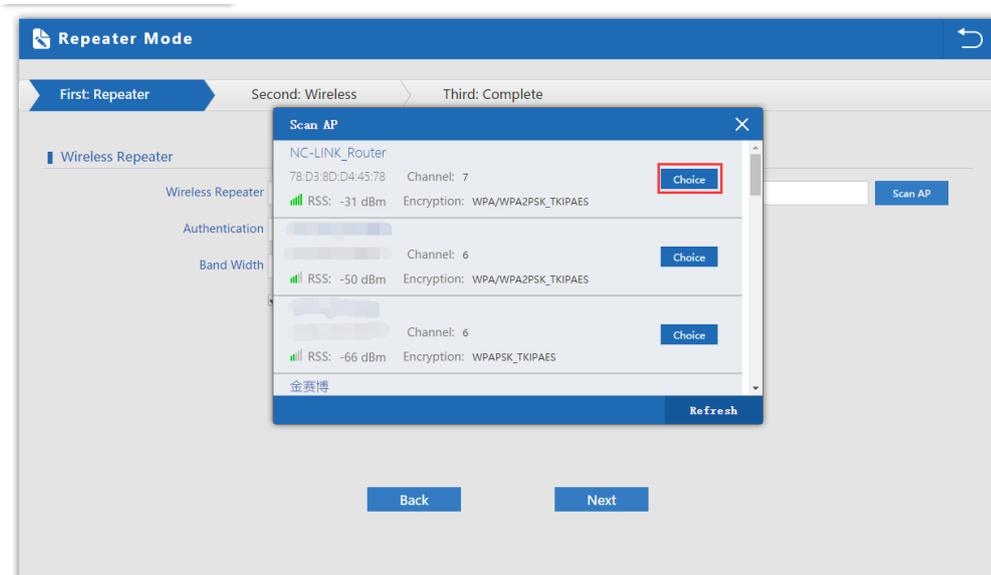


4. Repeater Mode Configuration

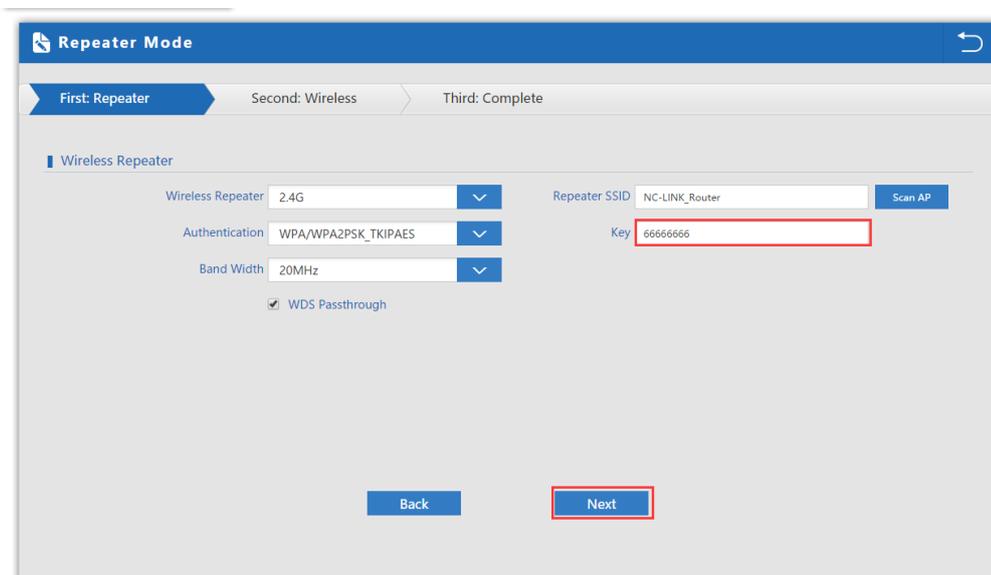
a) Select the AP radio frequency and **"Scan AP"**



b) Select the AP signal you want to repeat



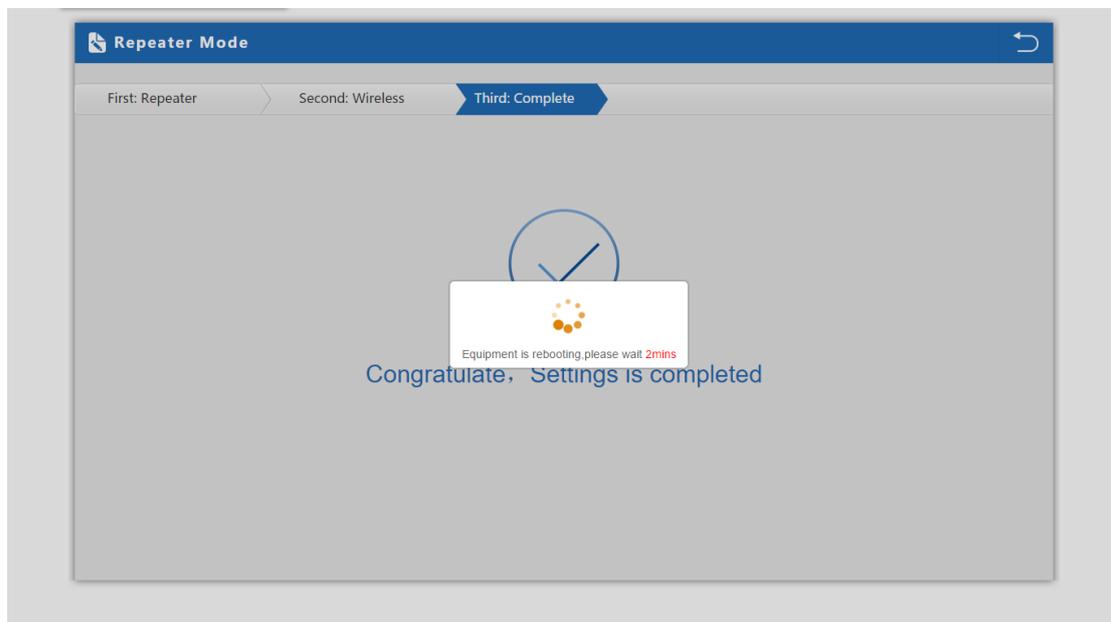
c) Input the **Password** and click **Next**



d) Configure wireless parameter then click **"Next"**

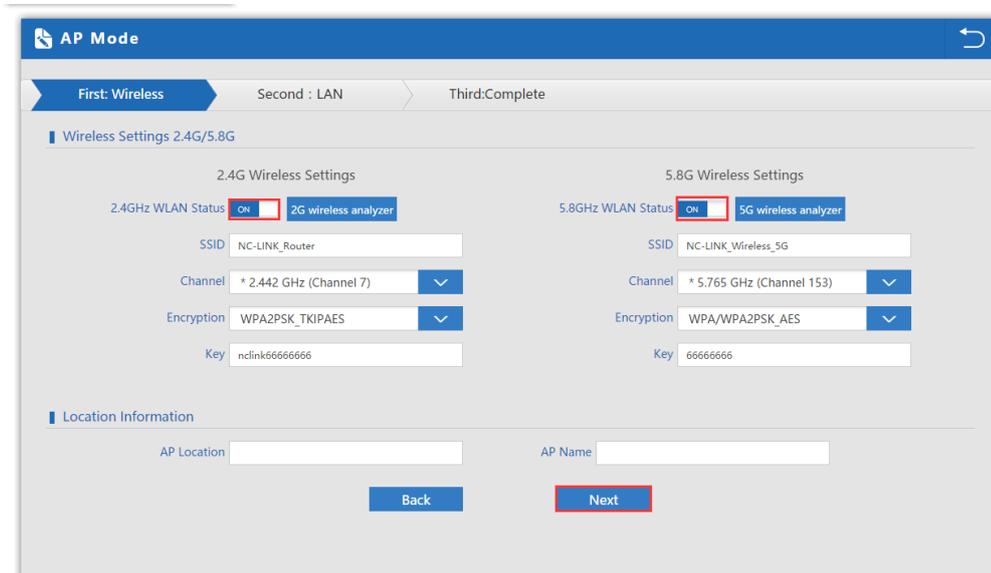
The screenshot shows the 'Repeater Mode' configuration interface. At the top, there are three progress steps: 'First: Repeater', 'Second: Wireless' (which is highlighted), and 'Third: Complete'. Below this, the 'Wireless Settings 2.4G/5.8G' section is visible. Under '5.8G Wireless Settings', the '5.8GHz WLAN Status' is set to 'ON' and '5G wireless analyzer' is checked. The 'SSID' field contains 'NC-LINK_Wireless_5G', the 'Channel' is set to '* 5.765 GHz (Channel 153)', and the 'Encryption' is set to 'WPA/WPA2PSK_AES'. The 'Key' field contains '66666666'. At the bottom, there are 'Back' and 'Next' buttons, with the 'Next' button highlighted by a red box.

e) Configuration complete, device will reboot in **2 minutes**



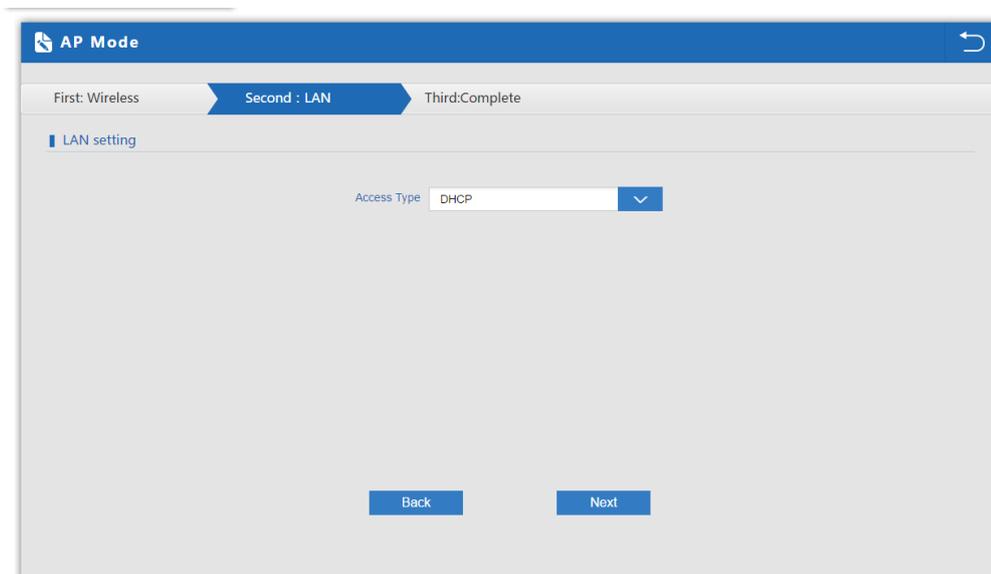
5. AP Mode Configuration

a) Configure the wireless parameter as you want then click **“Next”**



The screenshot shows the 'AP Mode' configuration interface. At the top, there are three steps: 'First: Wireless', 'Second: LAN', and 'Third: Complete'. The 'First: Wireless' step is active. Below this, there are two sections: '2.4G Wireless Settings' and '5.8G Wireless Settings'. In the 2.4G section, '2.4GHz WLAN Status' is set to 'ON', '2G wireless analyzer' is checked, SSID is 'NC-LINK_Router', Channel is '* 2.442 GHz (Channel 7)', Encryption is 'WPA2PSK_TKIPAES', and Key is 'nclink66666666'. In the 5.8G section, '5.8GHz WLAN Status' is set to 'ON', '5G wireless analyzer' is checked, SSID is 'NC-LINK_Wireless_5G', Channel is '* 5.765 GHz (Channel 153)', Encryption is 'WPA/WPA2PSK_AES', and Key is '66666666'. At the bottom, there are fields for 'AP Location' and 'AP Name', and two buttons: 'Back' and 'Next'.

b) If Internet to LAN Port is DHCP, just click **“Next”**



The screenshot shows the 'AP Mode' configuration interface. At the top, there are three steps: 'First: Wireless', 'Second: LAN', and 'Third: Complete'. The 'Second: LAN' step is active. Below this, there is a section titled 'LAN setting'. The 'Access Type' is set to 'DHCP'. At the bottom, there are two buttons: 'Back' and 'Next'.

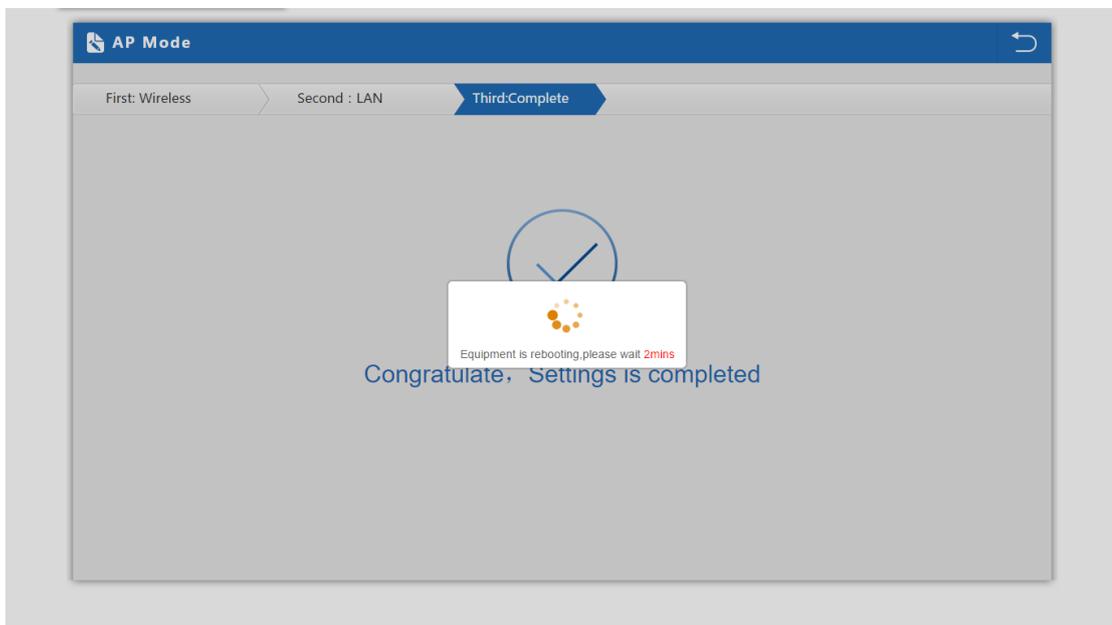
c) If Internet to LAN Port need static IP, input as it required then **"Next"**

The screenshot shows the 'AP Mode' configuration interface. At the top, there are three progress steps: 'First: Wireless', 'Second : LAN' (highlighted), and 'Third:Complete'. Below this, the 'LAN setting' section is visible. It includes the following fields:

- Access Type: Static IP (dropdown menu)
- IP: 192.168.188.253
- Subnet Mask: 255.255.255.0
- Manage server IP: 192.168.188.1

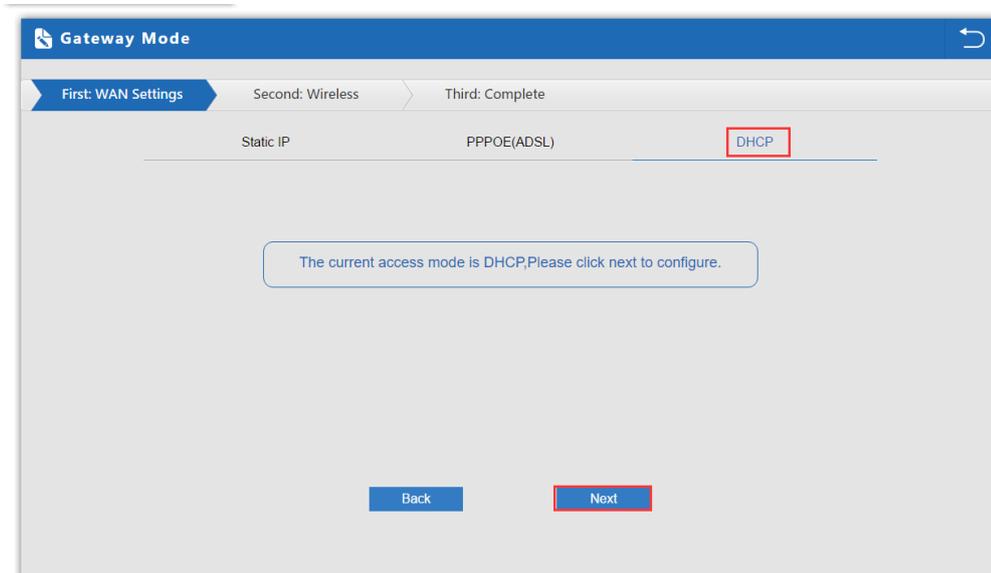
At the bottom of the form, there are two buttons: 'Back' and 'Next'.

d) Configuration complete, device will reboot in **2 minutes**



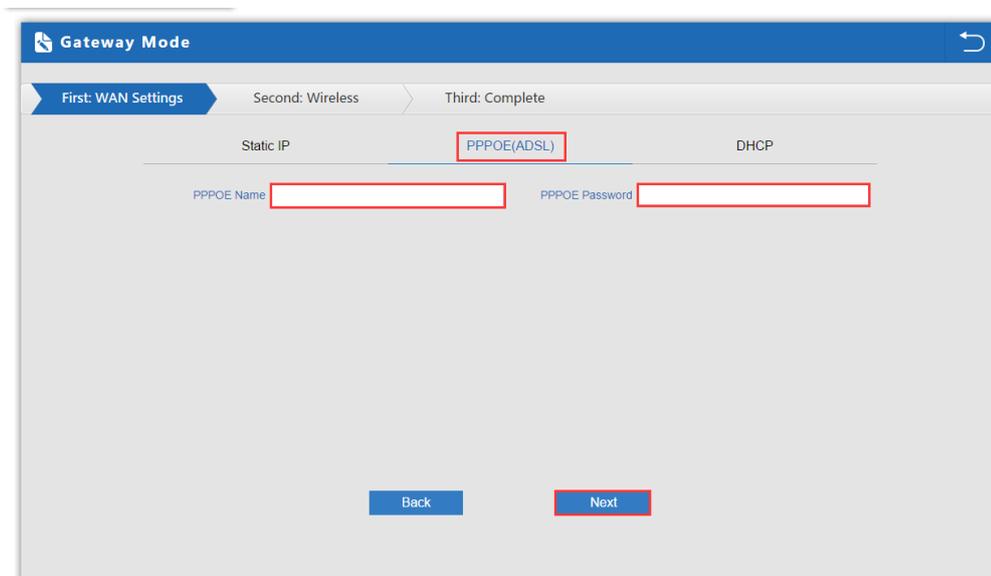
6. Gateway Mode Configuration

a) WAN is DHCP access type, just click “**Next**”



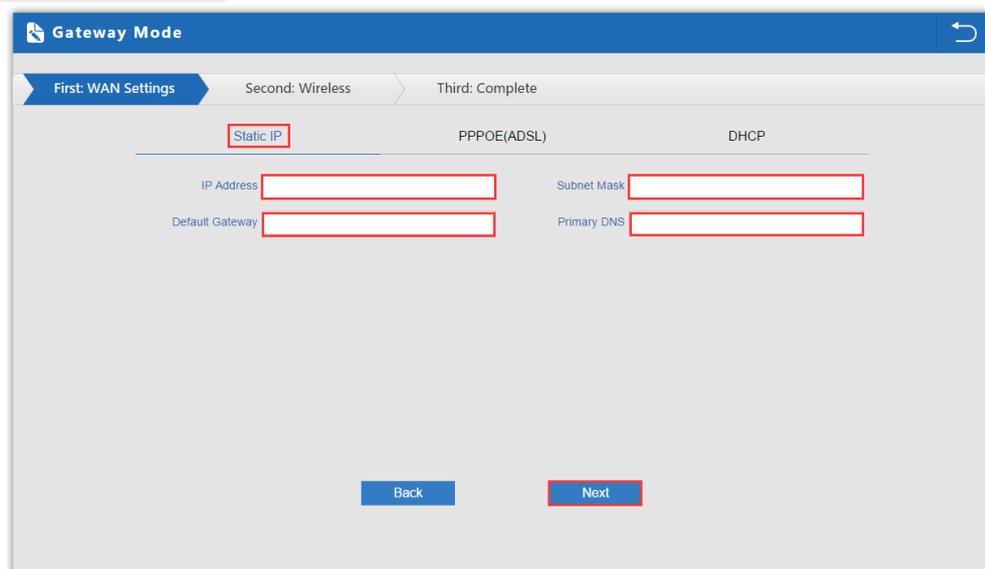
The screenshot shows the 'Gateway Mode' configuration page. At the top, there are three steps: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. Under 'First: WAN Settings', there are three radio button options: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'DHCP' option is selected and highlighted with a red box. Below the options, a message box states: 'The current access mode is DHCP, Please click next to configure.' At the bottom, there are two buttons: 'Back' and 'Next', with the 'Next' button highlighted by a red box.

b) WAN is PPPoE access type, input the **Username** and **Password** then click “**Next**”



The screenshot shows the 'Gateway Mode' configuration page. At the top, there are three steps: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. Under 'First: WAN Settings', there are three radio button options: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'PPPOE(ADSL)' option is selected and highlighted with a red box. Below the options, there are two input fields: 'PPPOE Name' and 'PPPOE Password', both highlighted with red boxes. At the bottom, there are two buttons: 'Back' and 'Next', with the 'Next' button highlighted by a red box.

c) WAN is Static IP access type, input all the information require then click **"Next"**

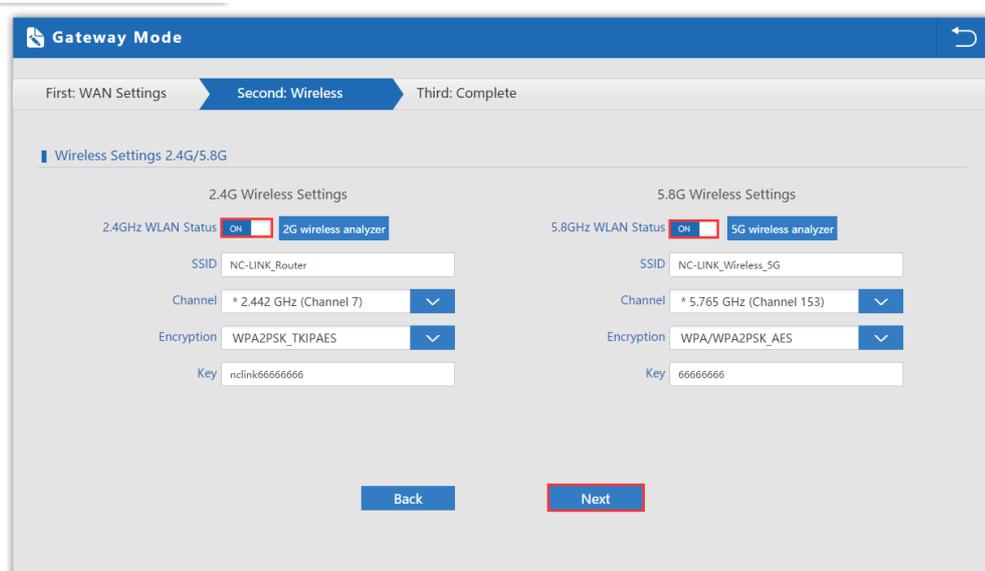


The screenshot shows the 'Gateway Mode' configuration interface. The 'First: WAN Settings' step is active, with 'Static IP' selected. The configuration fields are as follows:

Field	Value
IP Address	[Empty]
Subnet Mask	[Empty]
Default Gateway	[Empty]
Primary DNS	[Empty]

Buttons: Back, Next

d) Configure the wireless parameter as you want then click **"Next"**

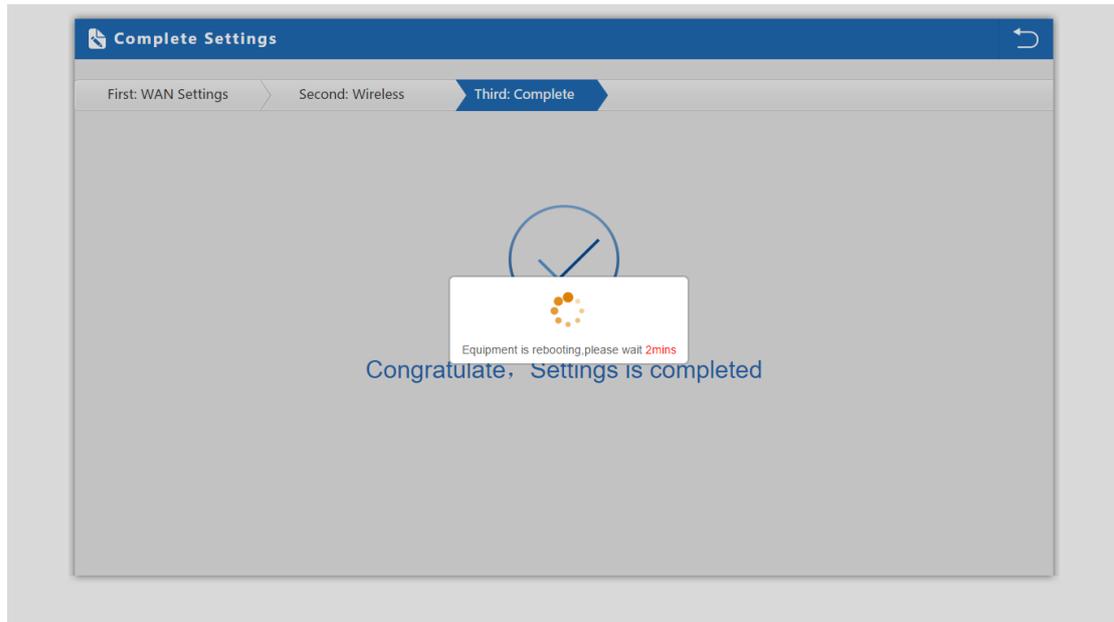


The screenshot shows the 'Gateway Mode' configuration interface. The 'Second: Wireless' step is active. The configuration is split into two sections:

Section	Field	Value
2.4G Wireless Settings	2.4GHz WLAN Status	ON
	SSID	NC-LINK_Router
	Channel	* 2.442 GHz (Channel 7)
	Encryption	WPA2PSK_TKIPAES
5.8G Wireless Settings	5.8GHz WLAN Status	ON
	SSID	NC-LINK_Wireless_5G
	Channel	* 5.765 GHz (Channel 153)
	Encryption	WPA/WPA2PSK_AES

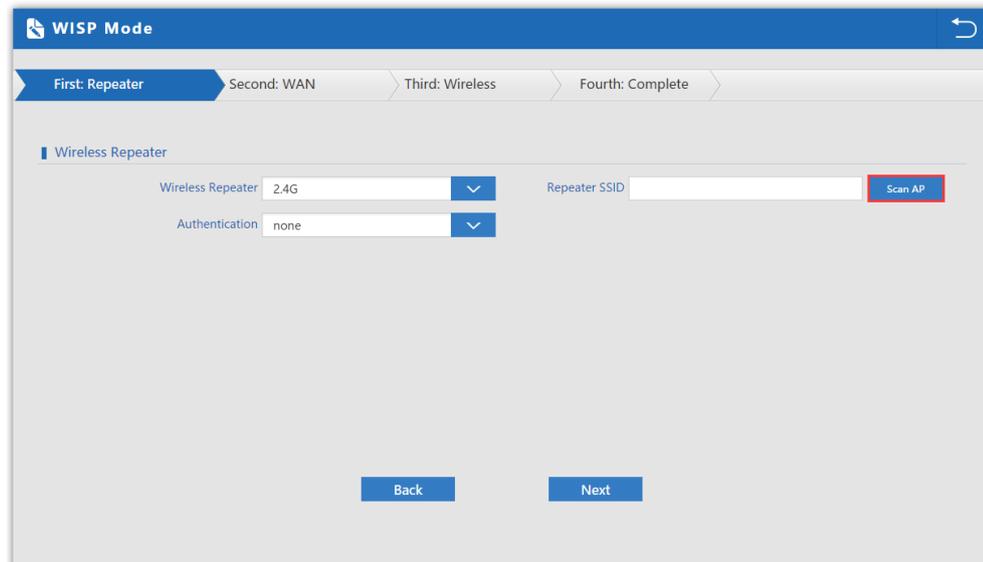
Buttons: Back, Next

e) Configuration complete, device will reboot in **2 minutes**

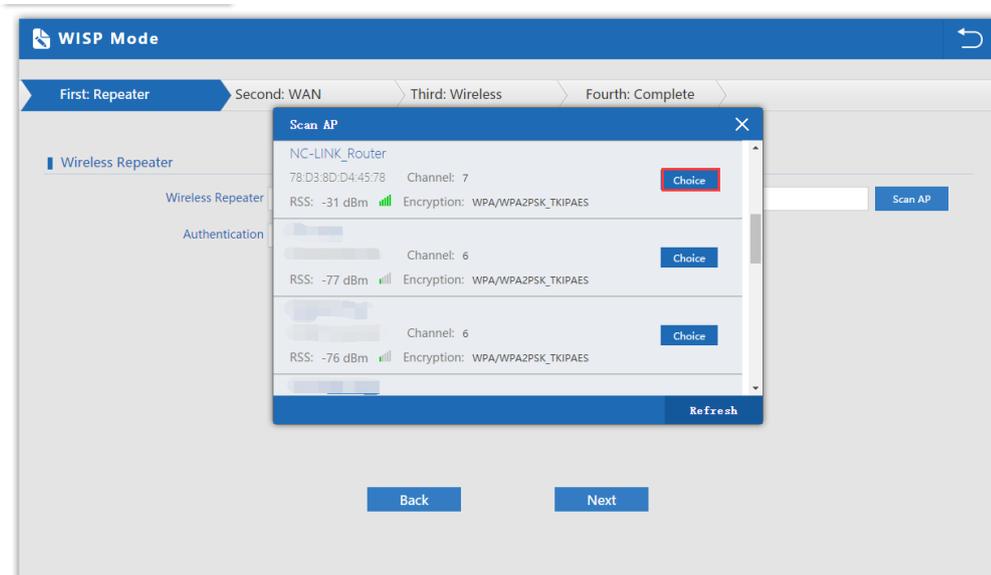


7. WISP Mode Configuration

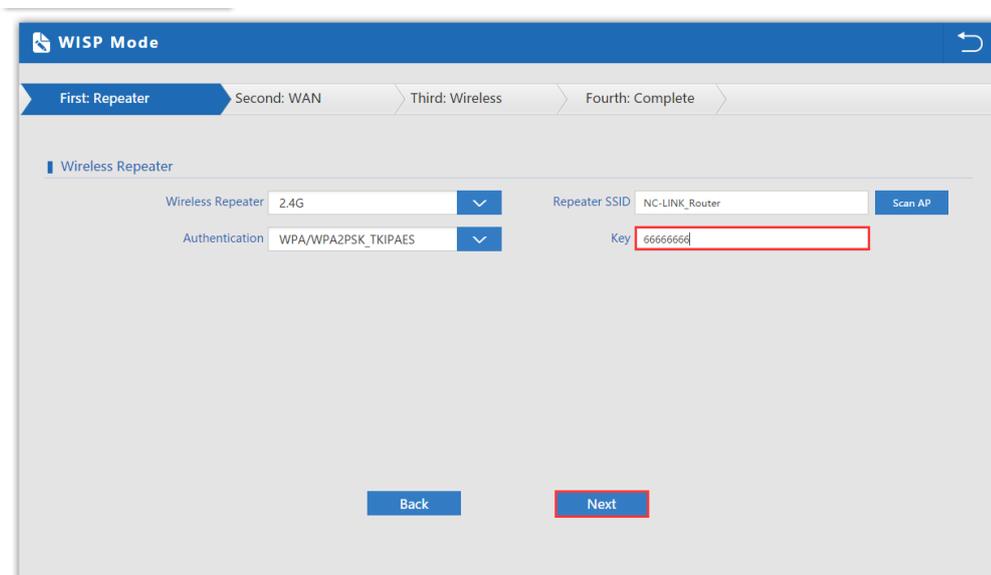
a) Select the AP frequency then **"Scan"**



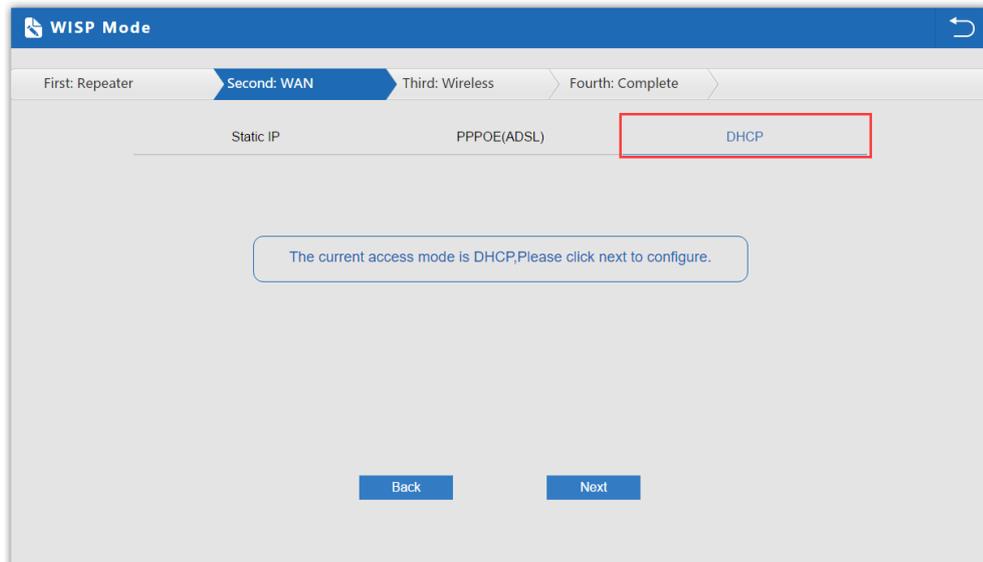
b) Select the AP signal you want to repeat



c) Input the **Password** and click **Next**

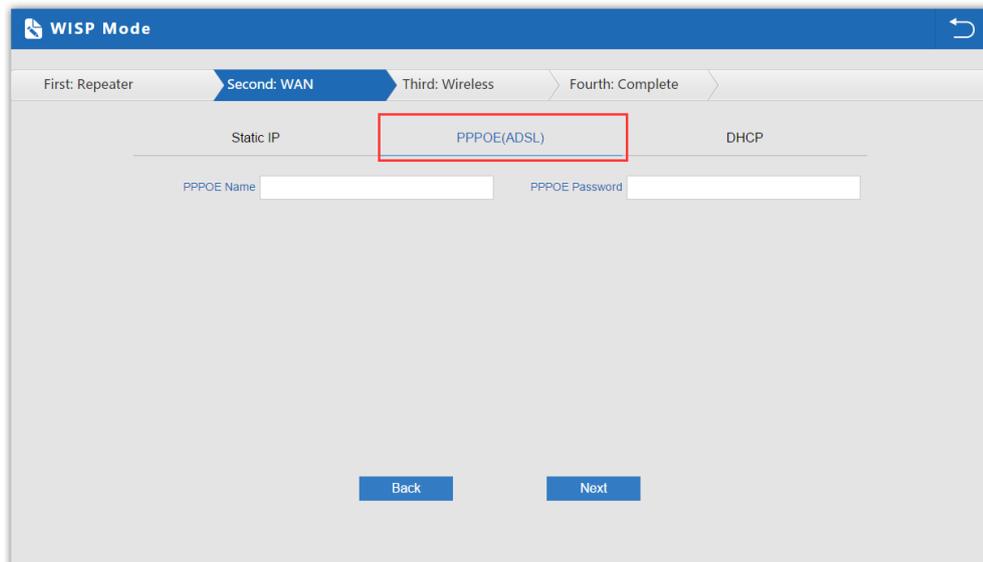


d) WAN is DHCP access type, just click **"Next"**



The screenshot shows the 'WISP Mode' configuration page. At the top, there is a progress bar with four steps: 'First: Repeater', 'Second: WAN', 'Third: Wireless', and 'Fourth: Complete'. The 'Second: WAN' step is active. Below the progress bar, there are three radio button options: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'DHCP' option is selected and highlighted with a red box. Below the options, a message box states: 'The current access mode is DHCP, Please click next to configure.' At the bottom of the page, there are two buttons: 'Back' and 'Next'.

e) WAN is PPPoE access type, input the **Username** and **Password** then click **"Next"**



The screenshot shows the 'WISP Mode' configuration page. At the top, there is a progress bar with four steps: 'First: Repeater', 'Second: WAN', 'Third: Wireless', and 'Fourth: Complete'. The 'Second: WAN' step is active. Below the progress bar, there are three radio button options: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'PPPOE(ADSL)' option is selected and highlighted with a red box. Below the options, there are two input fields: 'PPPOE Name' and 'PPPOE Password'. At the bottom of the page, there are two buttons: 'Back' and 'Next'.

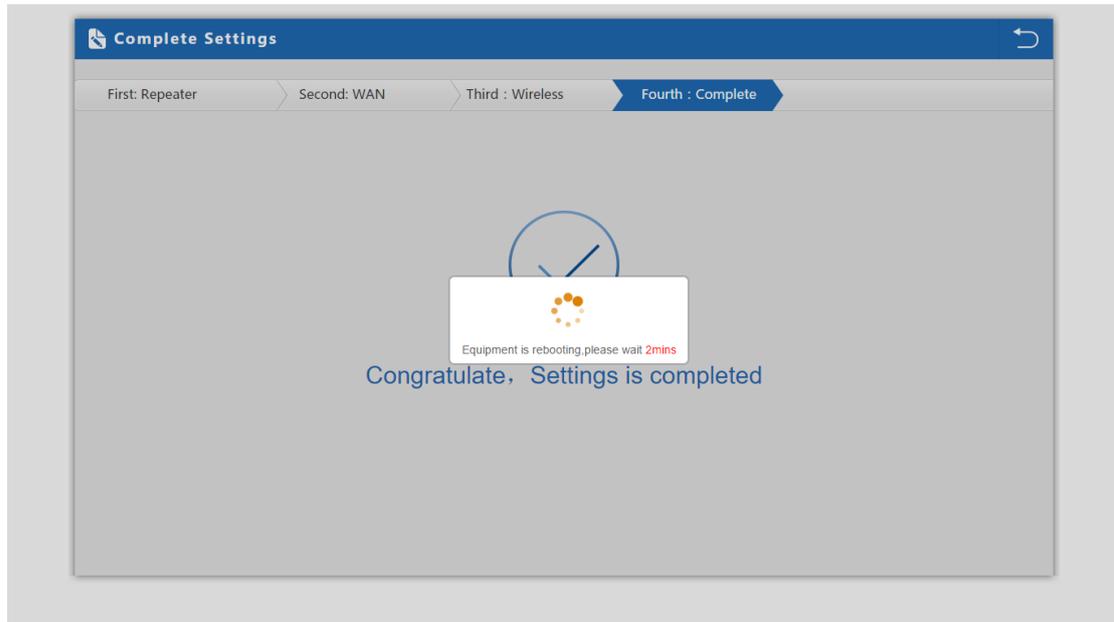
f) WAN is Static IP access type, input all the information require then click **"Next"**

The screenshot shows the 'WISP Mode' configuration interface. At the top, there are four steps: 'First: Repeater', 'Second: WAN', 'Third: Wireless', and 'Fourth: Complete'. The 'Second: WAN' step is active. Below this, there are three tabs: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'Static IP' tab is selected. It contains four input fields: 'IP Address', 'Subnet Mask', 'Default Gateway', and 'Primary DNS'. Each field is currently empty and has a red border. At the bottom of the page, there are two buttons: 'Back' and 'Next'.

g) Configure the wireless parameter as you want then click **"Next"**

The screenshot shows the 'WISP Mode' configuration interface, now on the 'Third: Wireless' step. The 'Wireless Settings 2.4G/5.8G' section is visible. Under '5.8G Wireless Settings', there are several options: '5.8GHz WLAN Status' is set to 'ON', and '5G wireless analyzer' is a toggle switch. Below these are four input fields: 'SSID' (containing '.44app-5.8GHz'), 'Channel' (set to 'auto'), 'Encryption' (set to 'WPA/WPA2PSK_AES'), and 'Key' (containing '11111111'). Each field has a red border. At the bottom, there are 'Back' and 'Next' buttons.

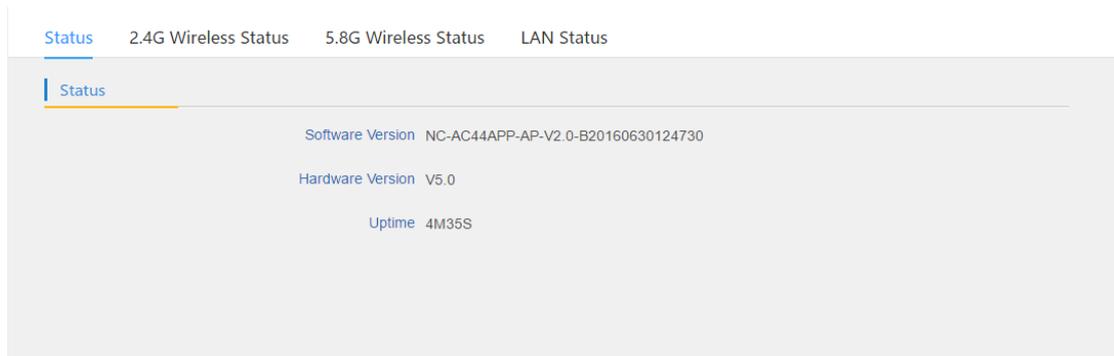
h) Configuration complete, device will reboot in **2 minutes**



8. Advanced

8.1 Device Status

8.1.1 Status



8.1.2 2.4G Wireless Status

Status [2.4G Wireless Status](#) 5.8G Wireless Status LAN Status

[2.4G Wireless Status](#)

2.4G Wireless Status Enable

SSID NC-LINK_Wireless_2G

MAC 78:D3:8D:E7:09:05

Channel 7

Encryption WPA/WPA2PSK_AES

Connected Users 0 [Client list](#)

8.1.3 5.8G Wireless status

Status 2.4G Wireless Status [5.8G Wireless Status](#) LAN Status

[5.8G Wireless Status](#)

5.8G Wireless Status Enable

SSID NC-LINK_Wireless_5G

MAC 78:D3:8D:E7:09:06

Channel 153

Encryption WPA/WPA2PSK_AES

Connected Users 0 [Client list](#)

8.1.4 LAN Status

Status 2.4G Wireless Status 5.8G Wireless Status [LAN Status](#)

[LAN Status](#)

LAN IP 192.168.188.253

Subnet Mask 255.255.255.0

MAC 78:D3:8D:E7:09:04

Manage server IP 192.168.188.1

DHCP Status Disable

DHCP address range 192.168.188.2 — 192.168.188.252

Assigned IP 0 [Client list](#)

8.2 2.4G Wireless

8.2.1 2.4G Basic Setting

Advanced Settings

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

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

Wireless Basic Settings

Wireless Status: ON / OFF | **2G wireless analyzer**

SSID: NC-LINK_Wireless_2G

Broadcast SSID: Disable / Enable

WMM: Disable / Enable

Channel

Band Width: 20MHz

Channel: * 2.442 GHz (Channel 7)

Authentication

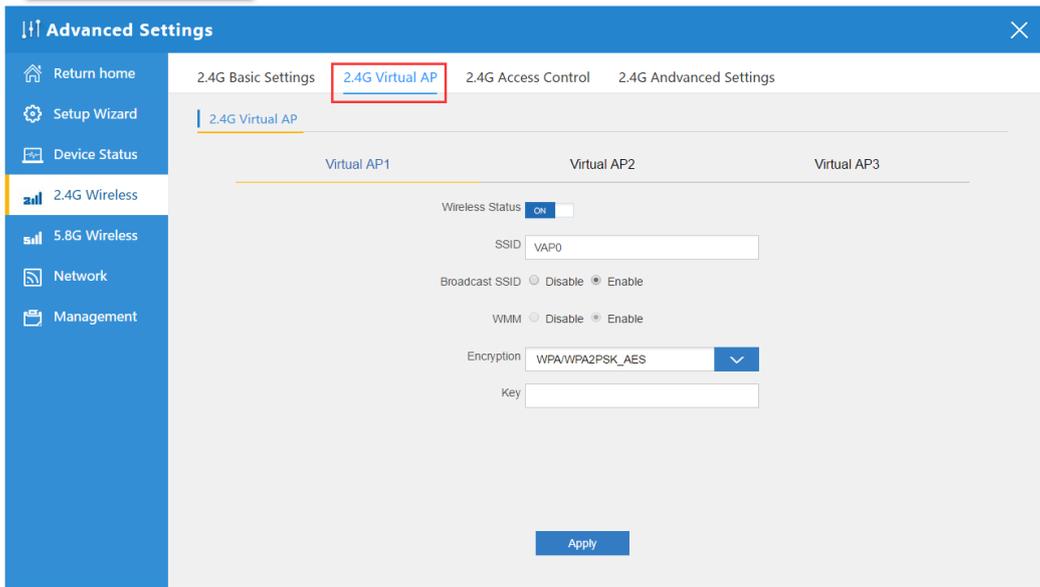
Encryption: WPA/WPA2PSK_AES

Key: 66666666

Apply

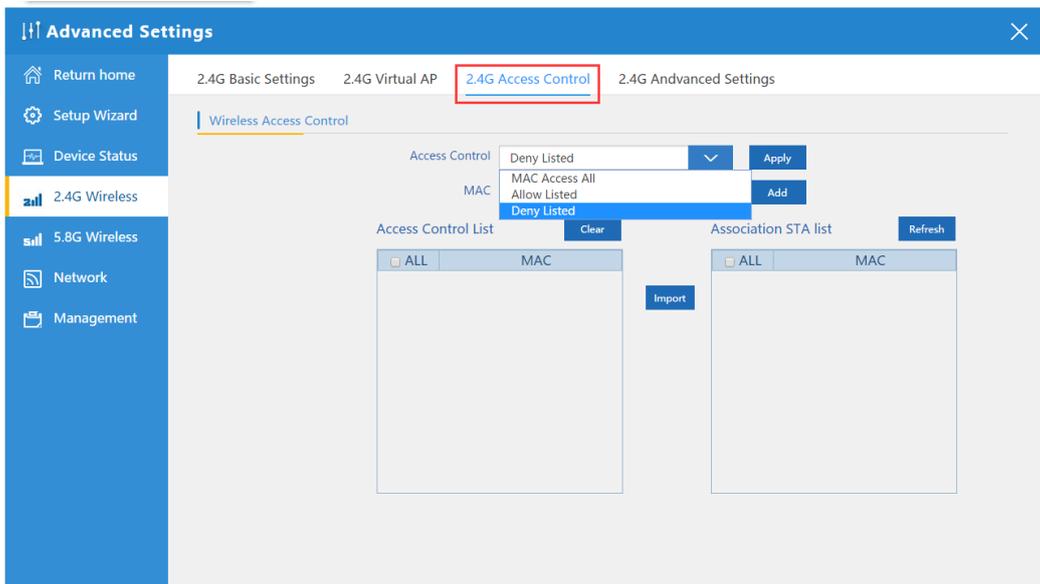
- Wireless Status: ON/OFF the 2.4GHz wireless
- 2G Wireless Analyzer: Analyze the 2.4G wireless signal around help to choose a better channel to avoid interference
- SSID: Set the SSID
- Broadcast SSID: Enable or Disable broadcast SSID
- WMM: Enable or Disable WMM function
- Band Width: Set the Band Width of wireless signal
- Channel: Set the Channel of the wireless signal
- Encryption: Choose the encryption type or open

8.2.2 2.4G Virtual AP



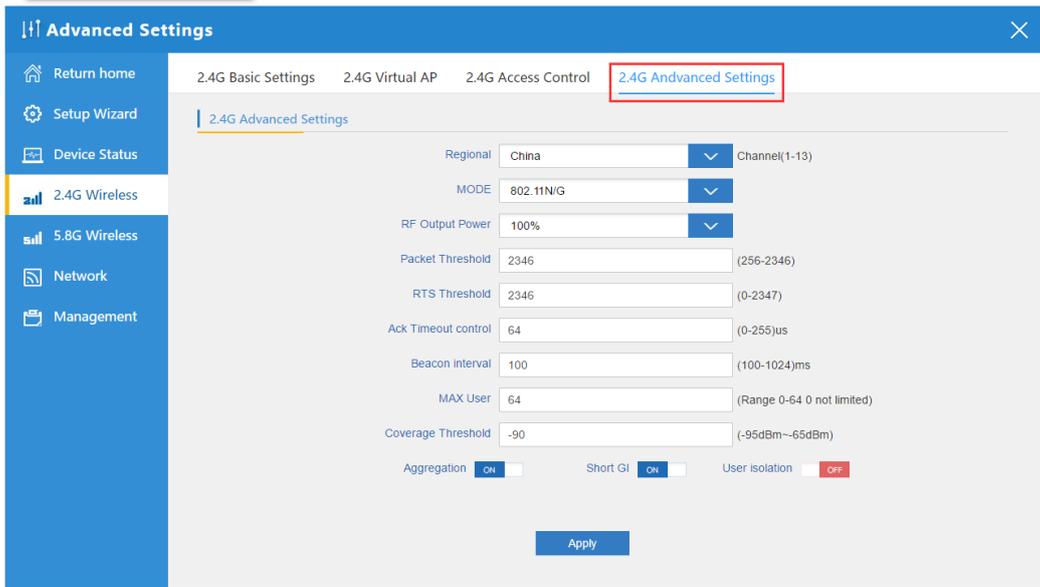
- Wireless Status: ON/OFF the Virtual AP
- SSID: Set the SSID
- Broadcast SSID: Enable or Disable broadcast SSID
- WMM: Enable or Disable WMM function
- Encryption: Choose the encryption type or open

8.2.3 2.4G Access Control



Allow or deny the Access Control based on MAC address

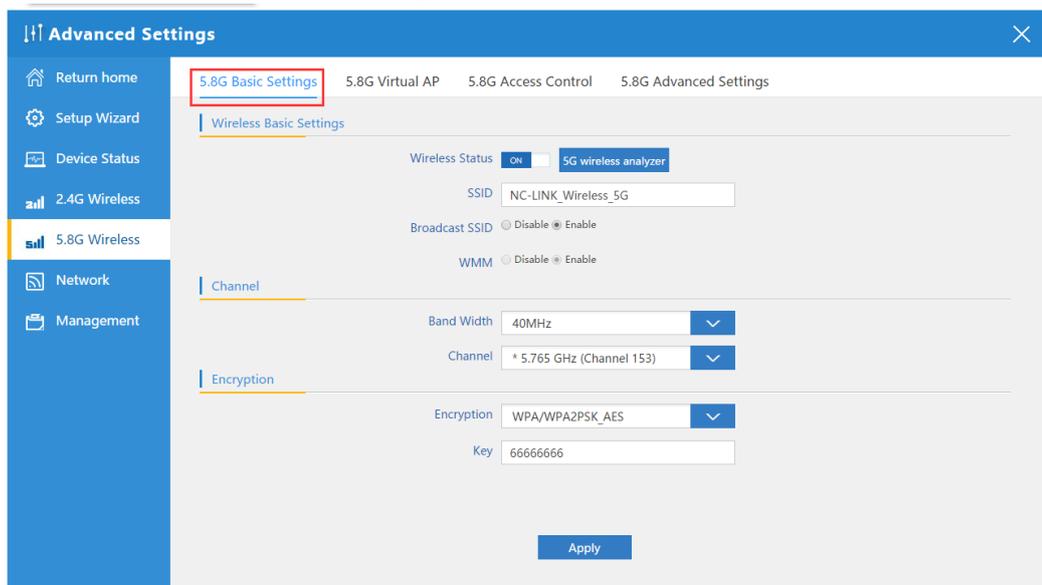
8.2.4 2.4G Advanced Setting



- Regional: set it of your country or region
- MODE: you can choose 802.11N/G, 802.11B/G
- RF Output Power: 100%, 75%, 50%, 25%, 12.5%
- MAX user: limit the number of connect client
- Coverage threshold: limit the number of connect client
- Other advanced Setting: Professional installation or maintenance person can set it accordingly. General, keep it default. Click Apply after setting

8.3 5.8G Wireless

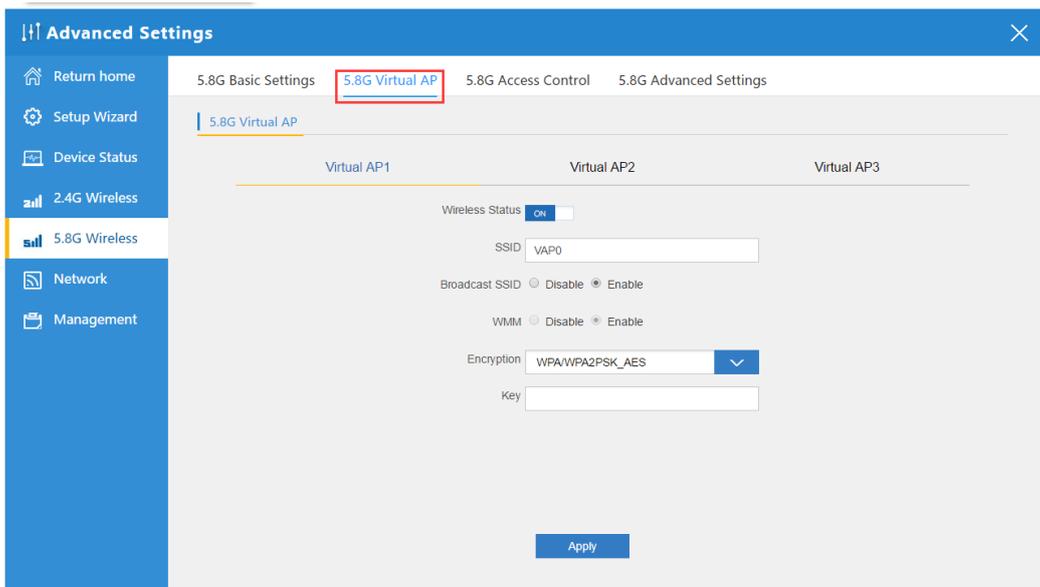
8.3.1 5.8G Basic Setting



- Wireless Status: ON/OFF the 5.8GHz wireless

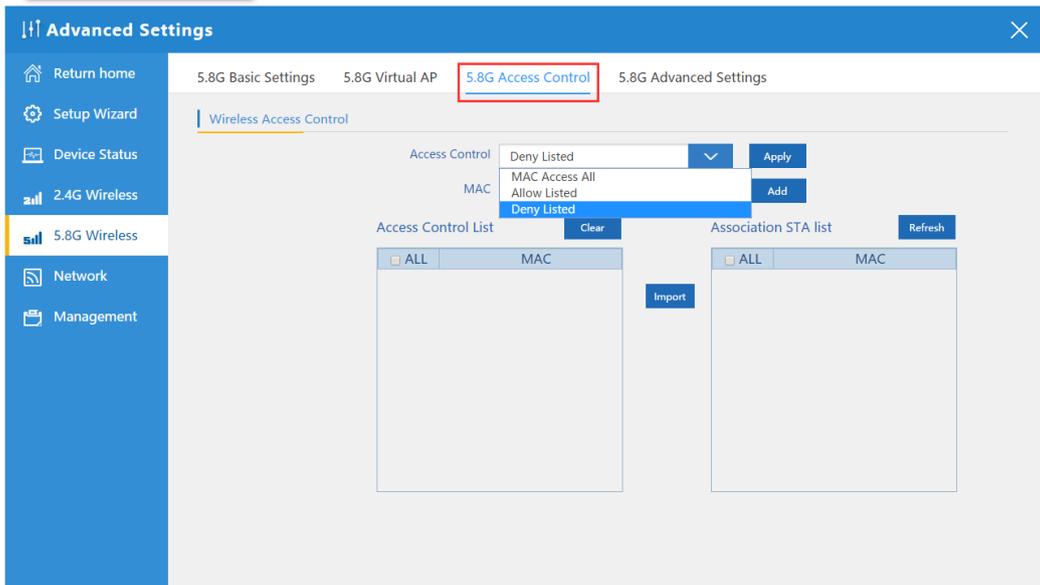
- 5G Wireless Analyzer: Analyze the 25.8G wireless signal around help to choose a better channel to avoid interference
- SSID: Set the SSID
- Broadcast SSID: Enable or Disable broadcast SSID
- WMM: Enable or Disable WMM function
- Band Width: Set the Band Width of wireless signal
- Channel: Set the Channel of the wireless signal
- Encryption: Choose the encryption type or open

8.3.2 5.8G Virtual AP



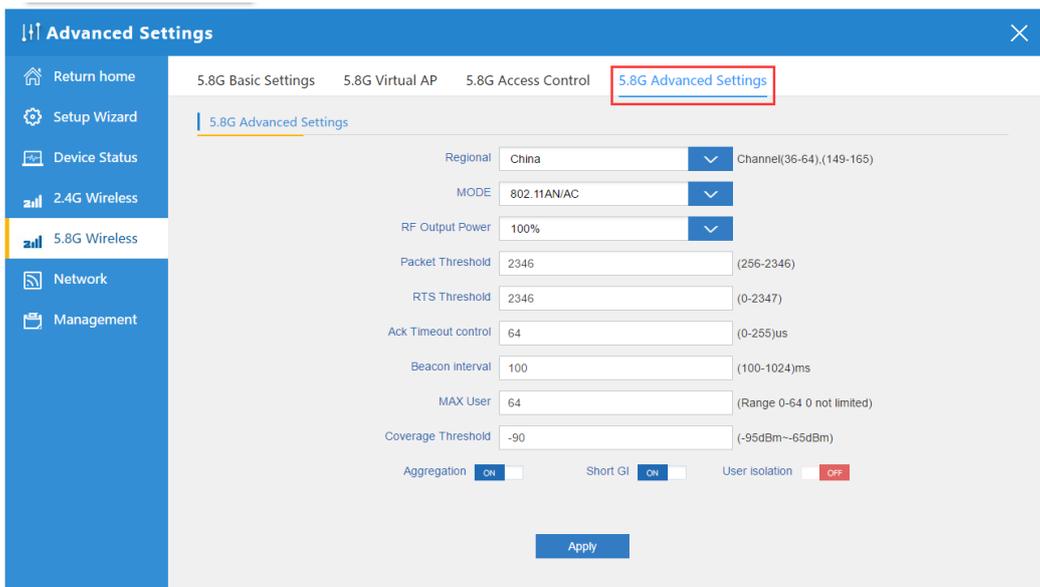
- Wireless Status: ON/OFF the Virtual AP
- SSID: Set the SSID
- Broadcast SSID: Enable or Disable broadcast SSID
- WMM: Enable or Disable WMM function
- Encryption: Choose the encryption type or open

8.3.3 5.8G Access Control

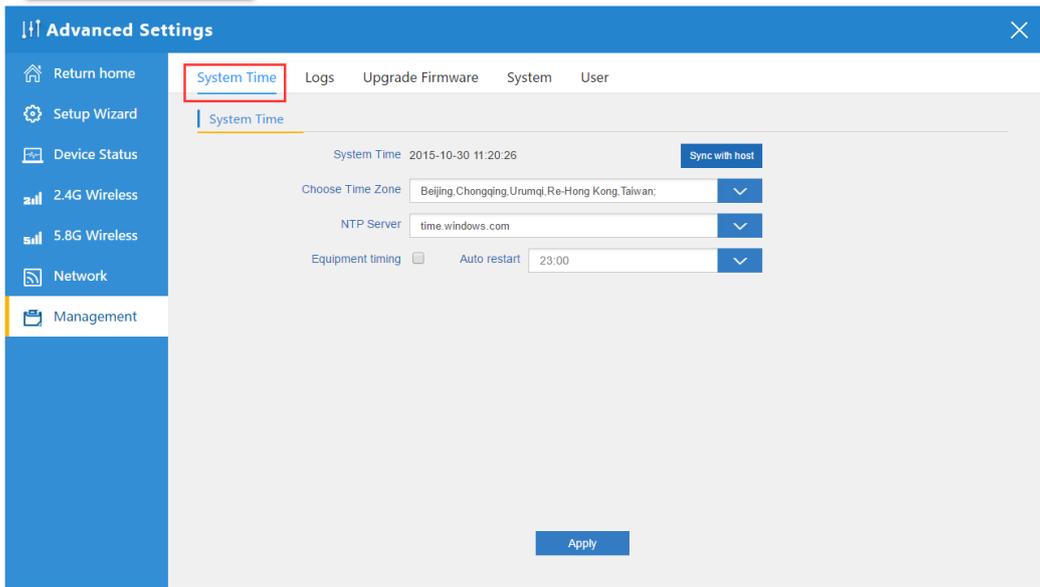


Allow or deny the Access Control based on MAC address

8.3.4 5.8G Advanced Setting

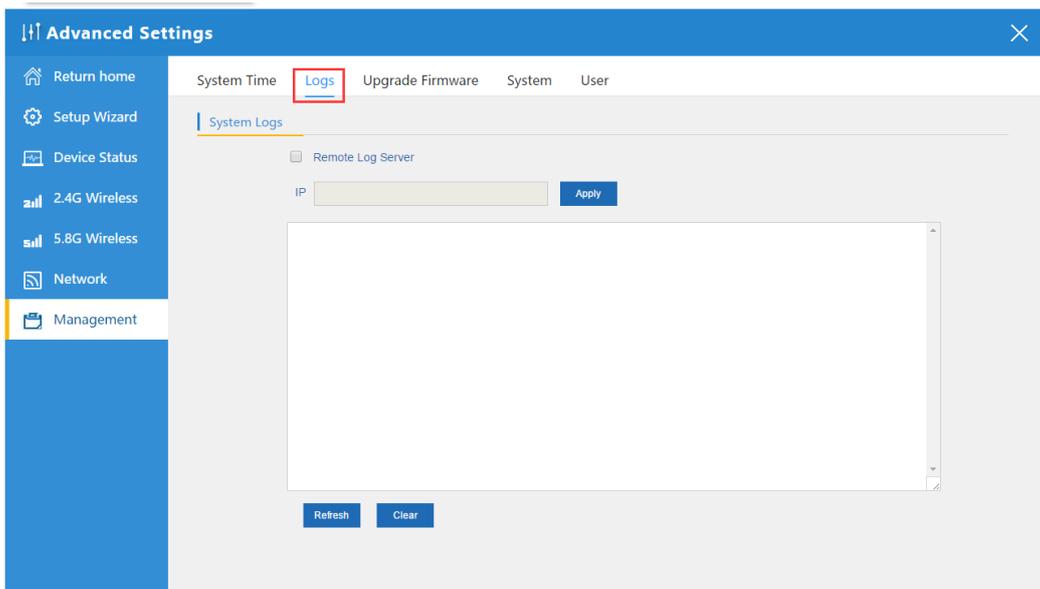


- Regional: set it of your country or region
- MODE: you can choose 802.11A, 802.11AN, 802.11AN/AC
- RF Output Power: 100%, 75%, 50%, 25%, 12.5%
- MAX user: limit the number of connect client
- Coverage threshold: limit the number of connect client
- Other advanced Setting: Professional installation or maintenance person can set it accordingly. General, keep it default. Click Apply after setting



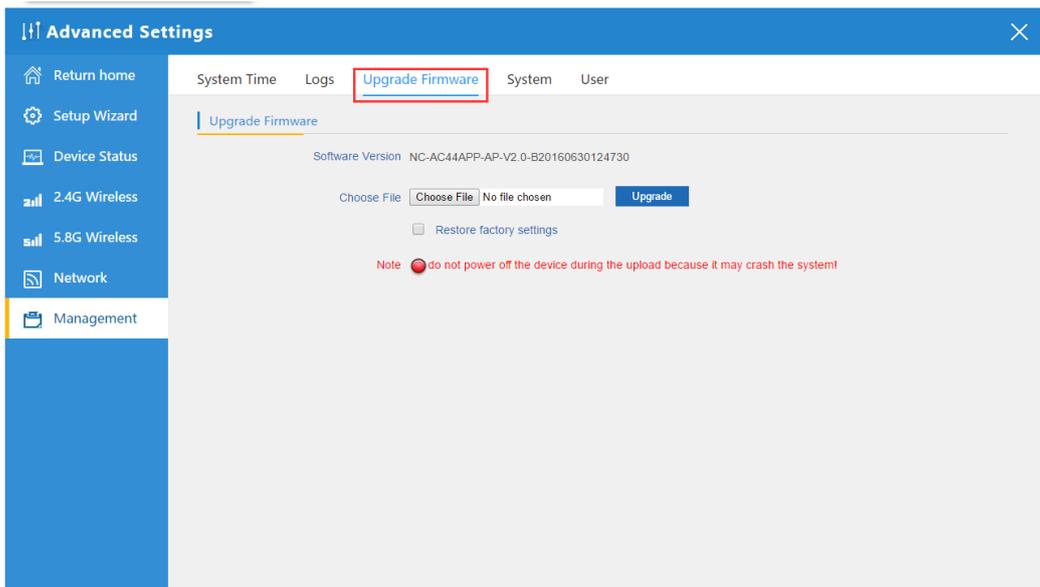
System Time: Set CPE's time

8.5.2 Logs



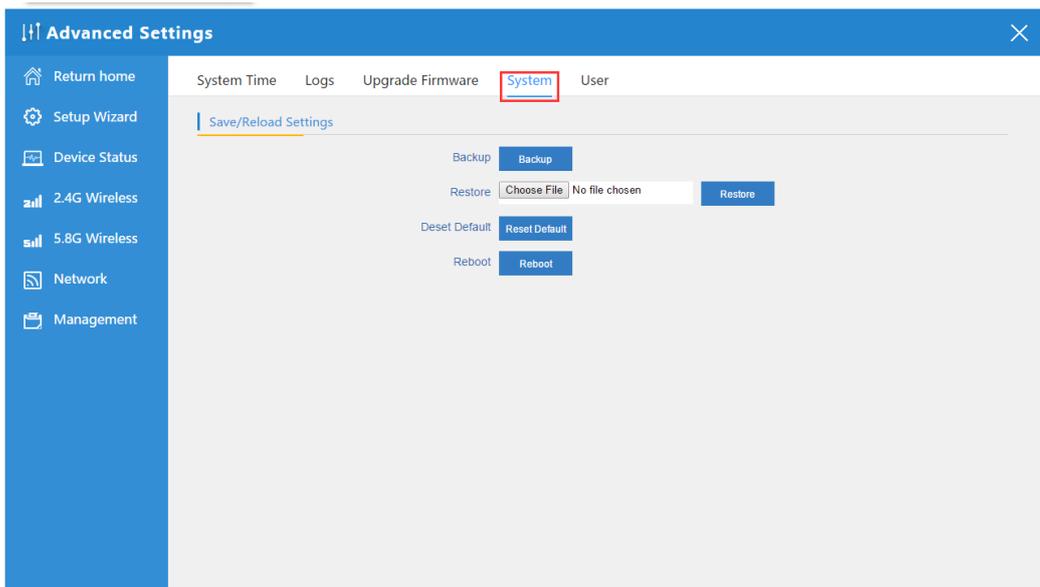
Logs: the system logs can be enable or disable, user can view the system log

8.5.3 Upgrade Firmware



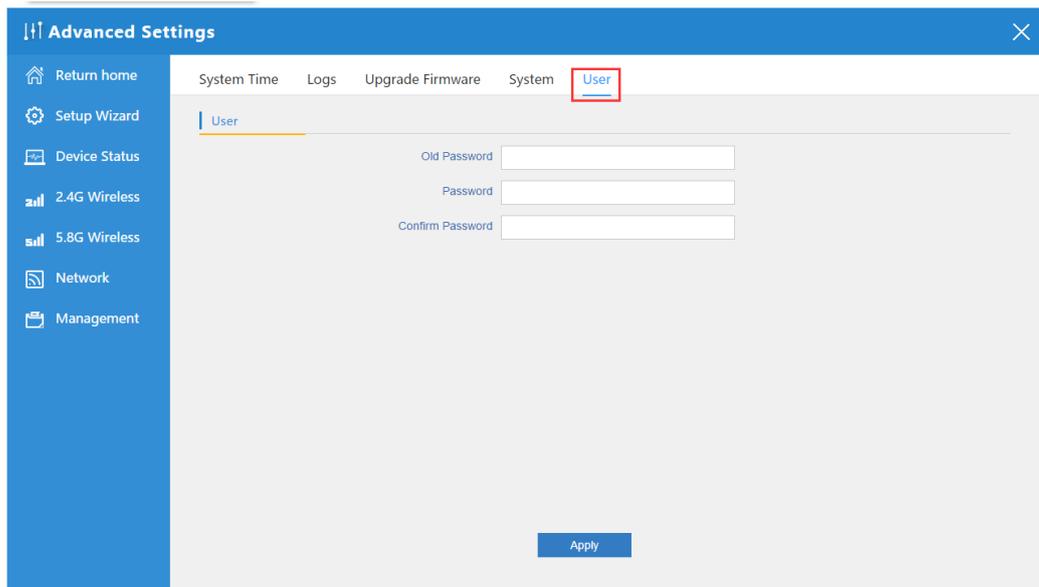
Upgrade Firmware: Upgrade new firmware to access stable function for CPE

8.5.4 System



System: from here you can reload the backup file to restore the system, or restore to factory default, reboot the CPE through firmware

8.5.5 User



User: Set the CPE's User Name and Password

9. Trouble Shooting

Q: Client can not find the SSID

A: To check wireless setting about the broadcast SSID whether enable

Q: Client can not connect to the SSID

A: Firstly, check client quantity whether reach the limit; secondly, check client's RSSI whether lower than the threshold limit; thirdly, check the client whether in the deny list of setting

Q: Client can connect to SSID but can not surf the Internet

A: This mainly due to the DNS issue, check the gateway router for the DNS setting

Q: Client network speed is slow

A: Check the link rate of your connection. If it is low, change other place to get better signal. If it is high, need to check whether has QoS in the gateway router then do some adjustments