

NC-LINK

User Manual of NC-AP224



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	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

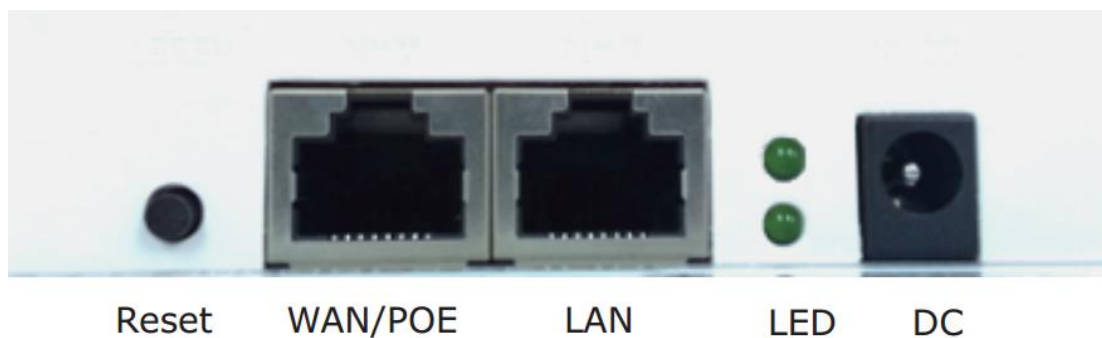
2. Product Introduction

NC-AP224 are highly performance Wi-Fi Access Point, complied with IEEE 802.11n/g/b.

NC-AP224 is 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-AP224 with 2 x 10/100Mbps auto-negotiation RJ45 Ethernet Port

NC-AP221 with 2 x 10/100Mbps auto-negotiation RJ45 Ethernet Port

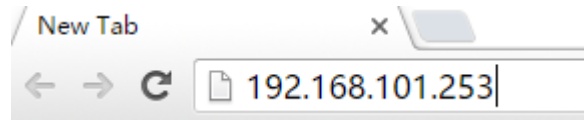
3. Login

Connect your PC to the NC-AP224 **LAN Port**, then login Web Management Page with default IP Address: <http://192.168.188.253>

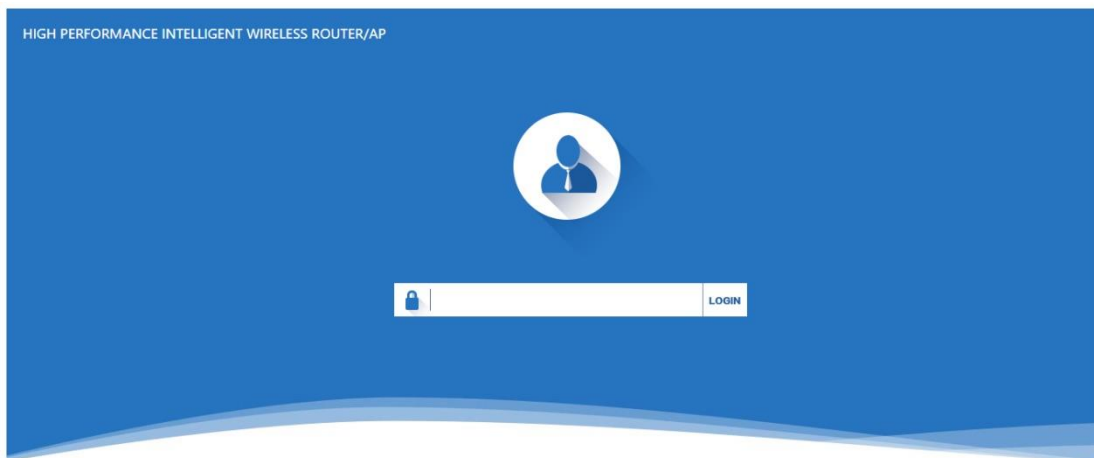
Default password: **admin**. Below base on **Chrome** browser.

Login Steps:

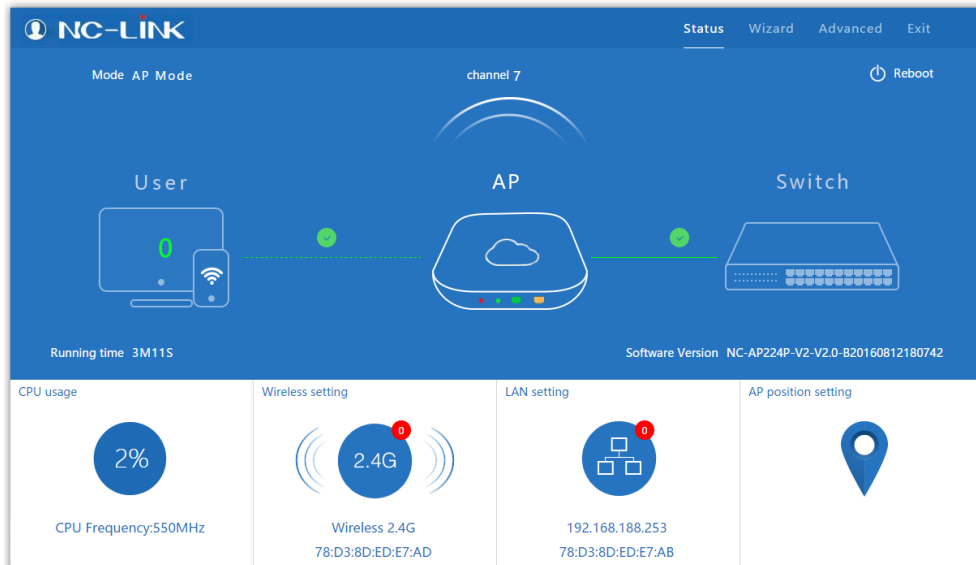
Open Chrome browser, input **http://192.168.188.253** in the address bar to login Access Point



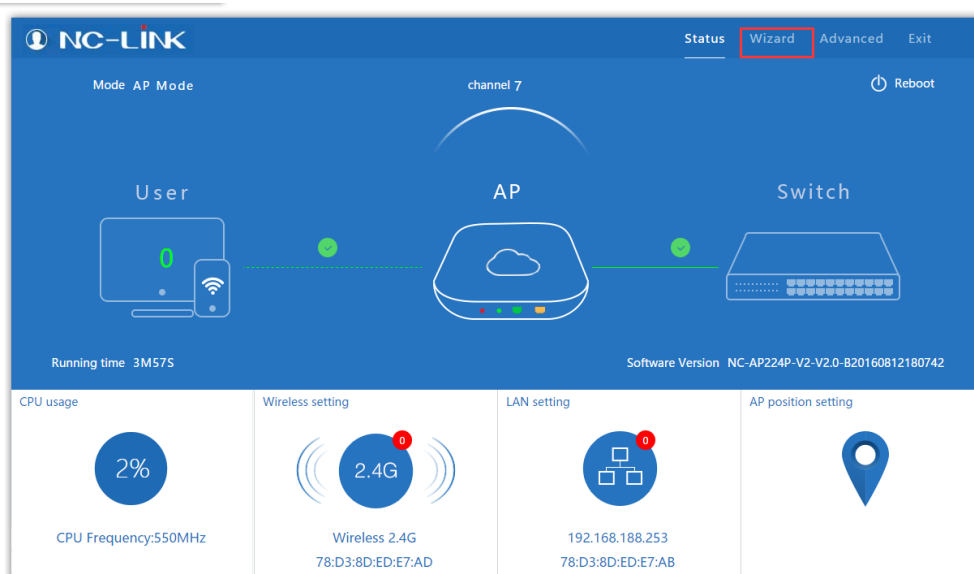
Login screen require password, the default is admin, input it and click "**LOGIN**"

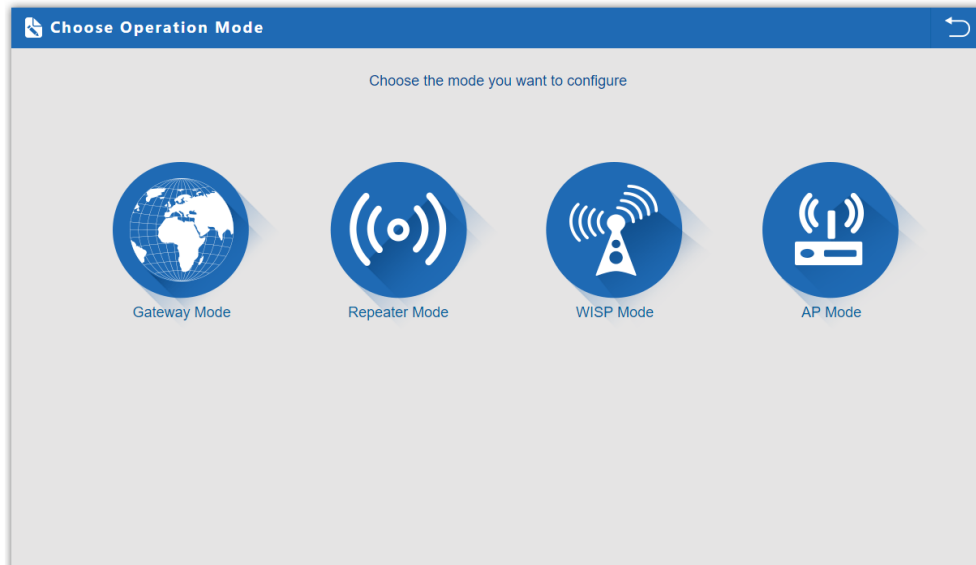


After login, you can see below Web page.



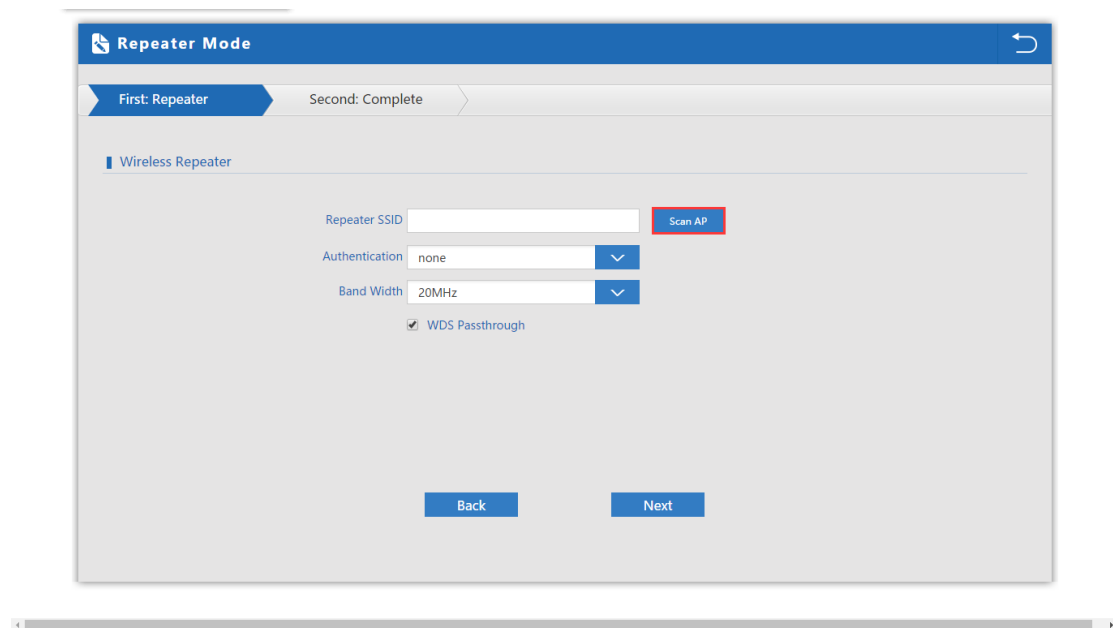
Click **“Wizard”** to start operating mode configuration.



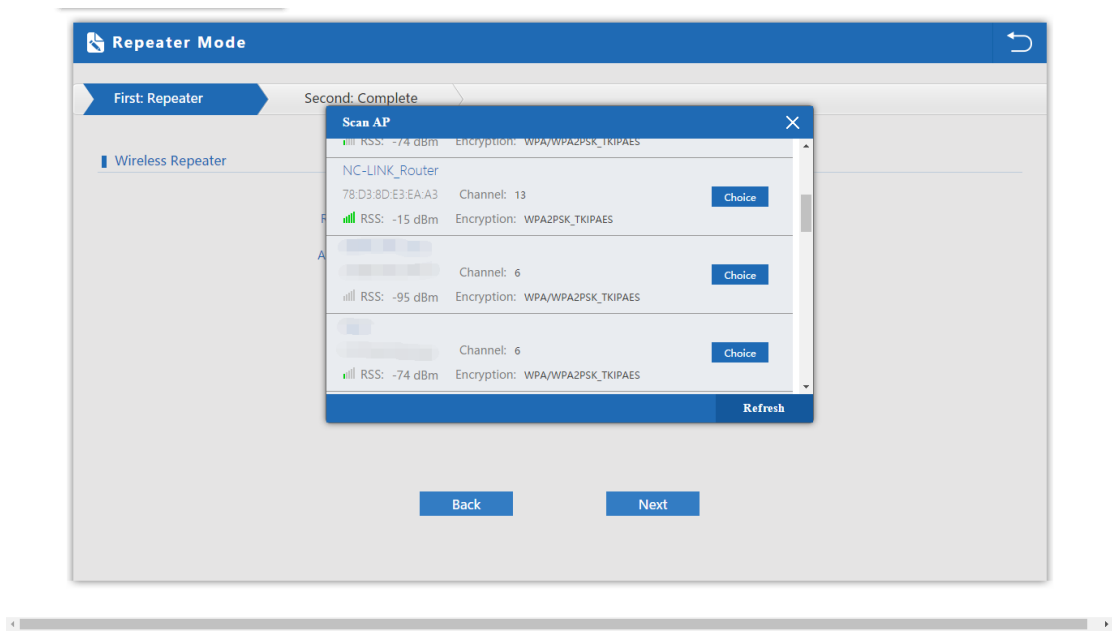


4. Repeater Mode Configuration

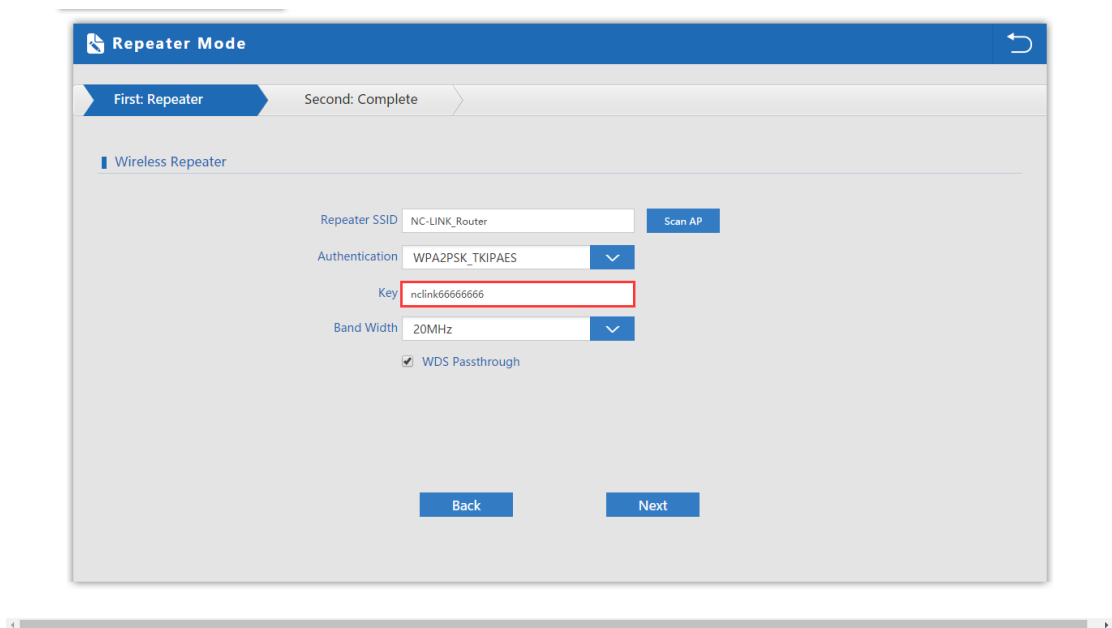
a) Select the AP radio frequency and **"Scan AP"**



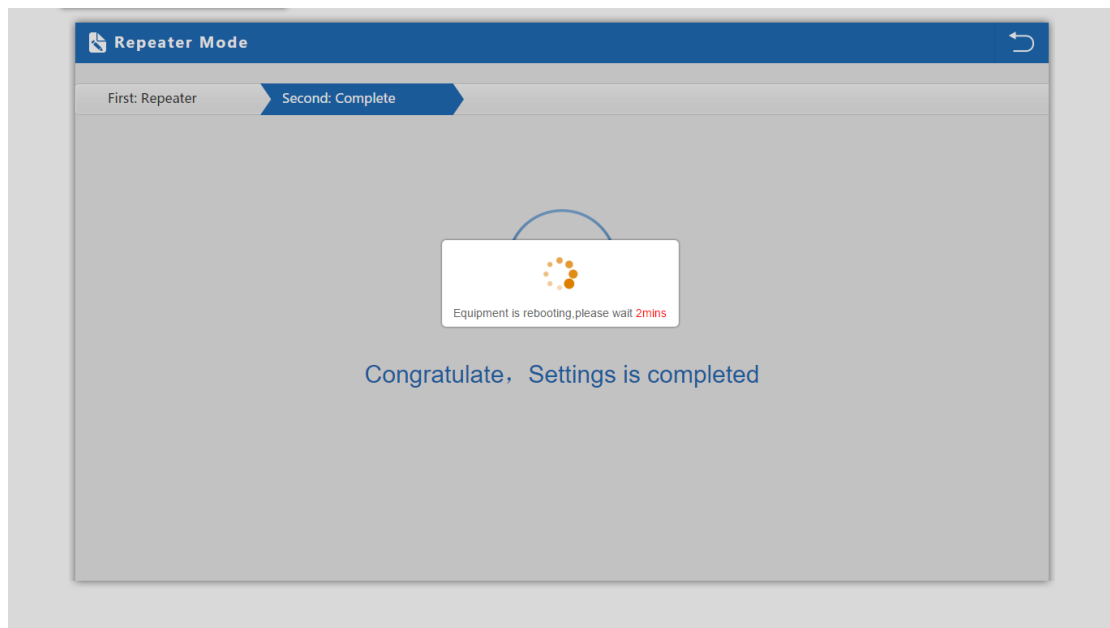
b) Select the AP signal you want to repeat



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

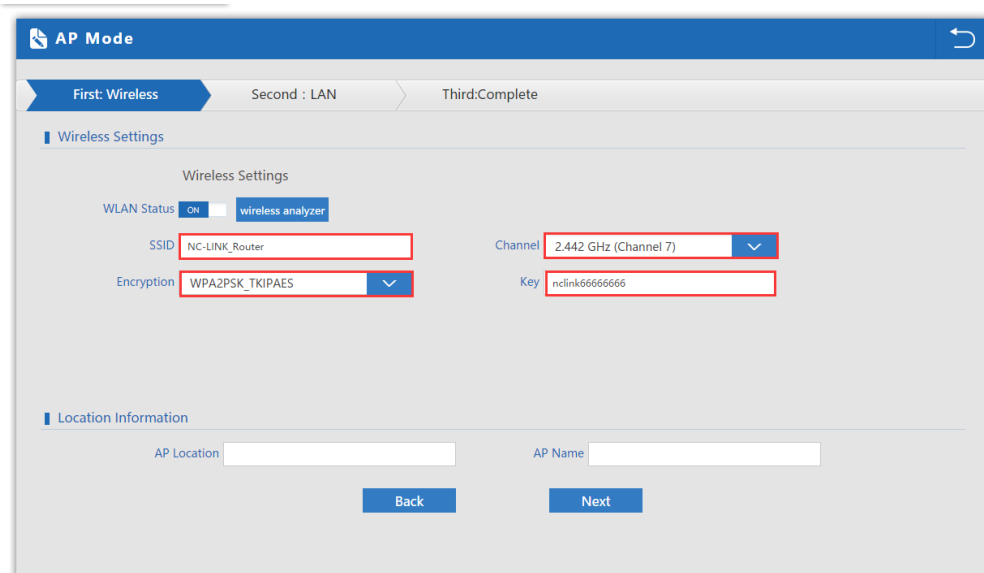


d) Configuration complete, device will reboot in **2 minutes**



5. AP Mode Configuration

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



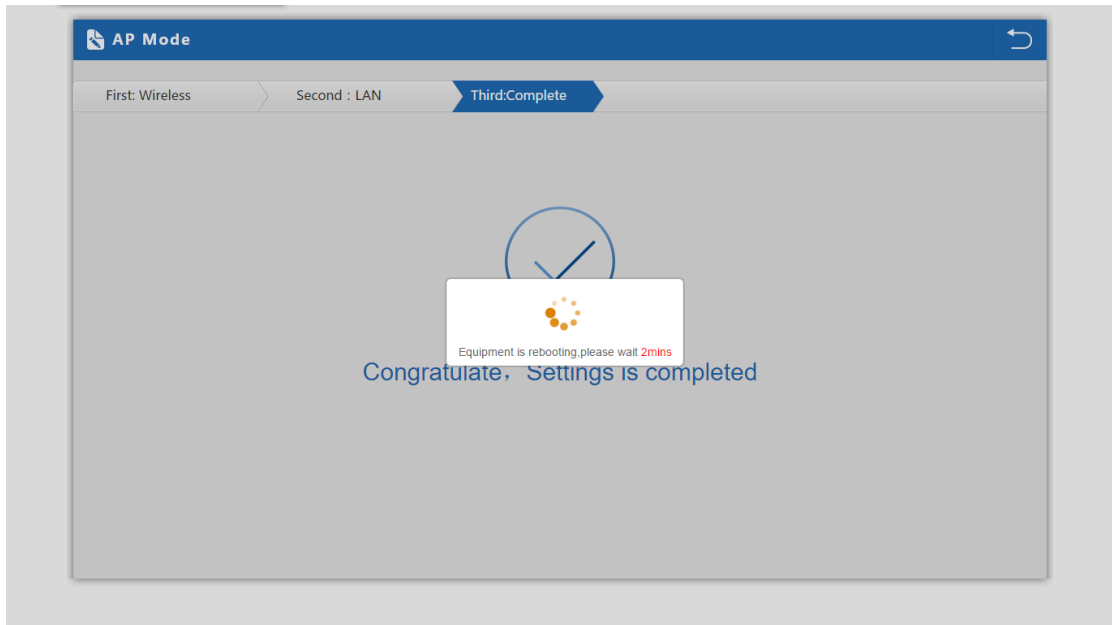
b) If Internet to LAN Port is DHCP, just click **"Next"**

The screenshot shows the 'AP Mode' configuration interface. At the top, there are three steps: 'First: Wireless', 'Second : LAN' (highlighted with a blue arrow), and 'Third:Complete'. Below this, the 'LAN setting' section is visible. The 'Access Type' dropdown menu is set to 'DHCP'. At the bottom of the interface, there are two buttons: 'Back' and 'Next', with the 'Next' button highlighted in red.

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

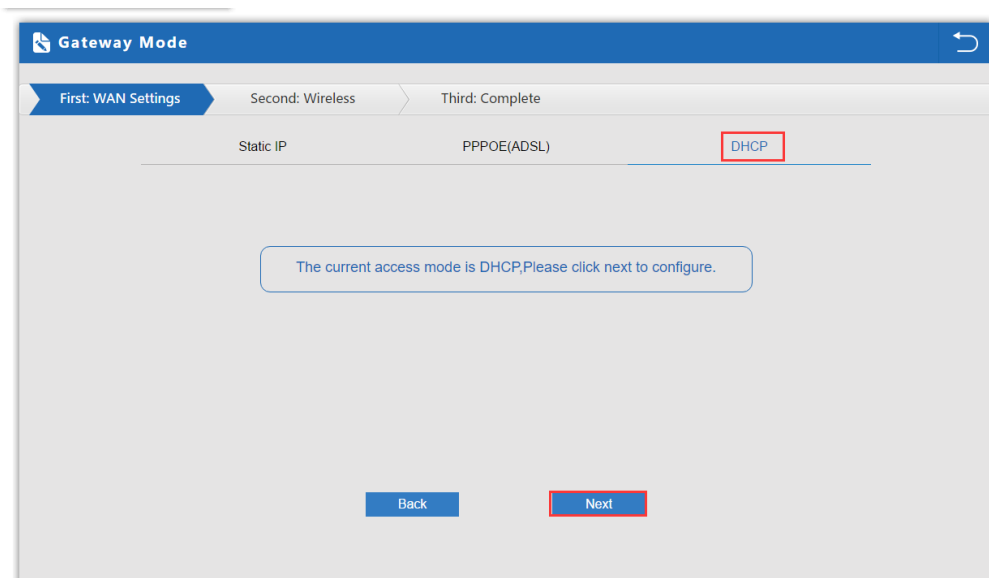
The screenshot shows the 'AP Mode' configuration interface. At the top, there are three steps: 'First: Wireless', 'Second : LAN' (highlighted with a blue arrow), and 'Third:Complete'. Below this, the 'LAN setting' section is visible. The 'Access Type' dropdown menu is set to 'Static IP'. Below this, there are four input fields: 'IP' (192.168.188.253), 'Subnet Mask' (255.255.255.0), and 'Manage server IP' (192.168.188.1). The 'IP' and 'Manage server IP' fields are highlighted with red boxes. At the bottom of the interface, there are two buttons: 'Back' and 'Next', with the 'Next' button highlighted in red.

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

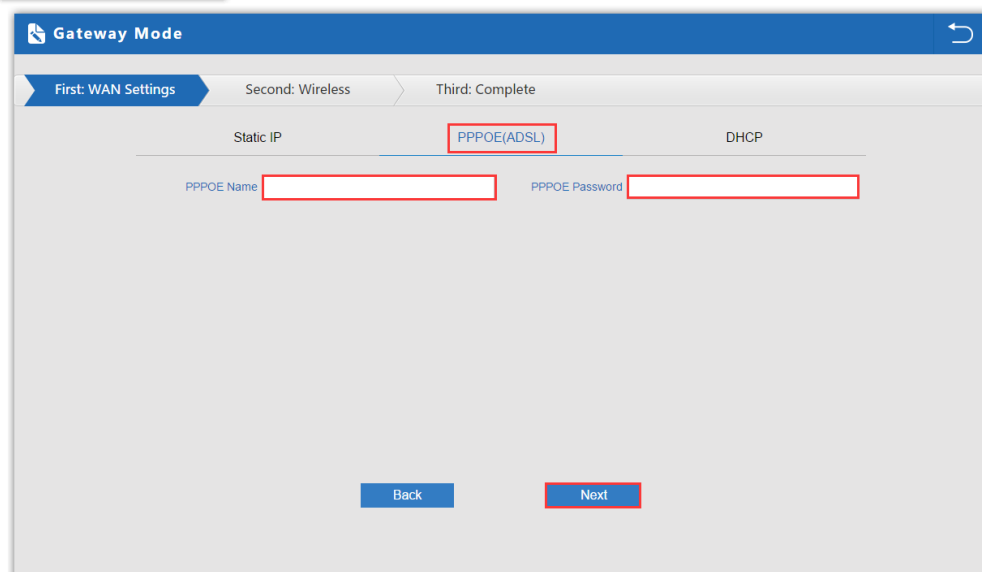


6. Gateway Mode Configuration

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

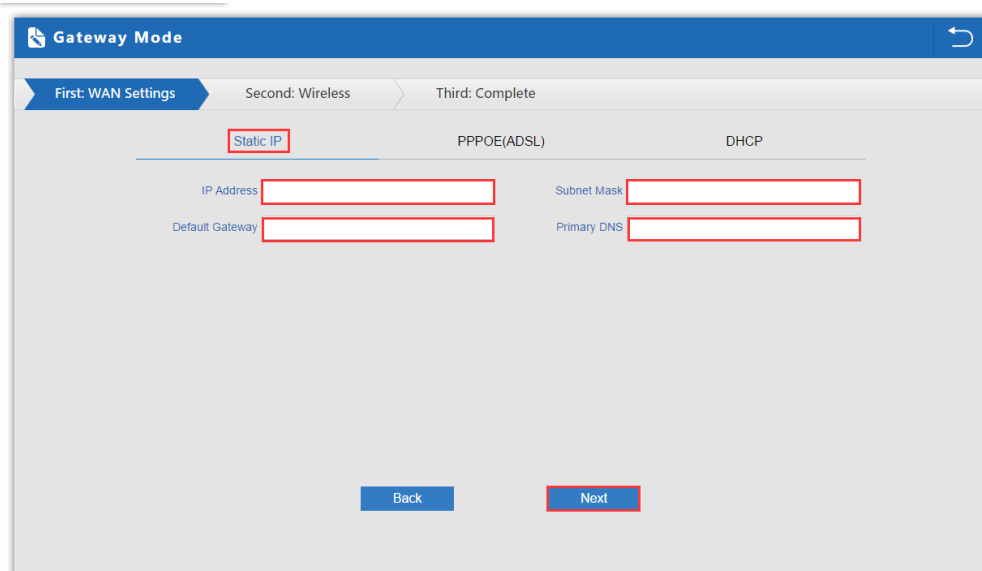


b) WAN is PPPoE access type, input the **Username** and **Password** then click **"Next"**



The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three steps: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'Static IP' tab is selected and highlighted with a red box. Below the tabs, there are two input fields: 'PPPOE Name' and 'PPPOE Password', both outlined in red. At the bottom, there are two buttons: 'Back' and 'Next', with the 'Next' button highlighted in red.

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

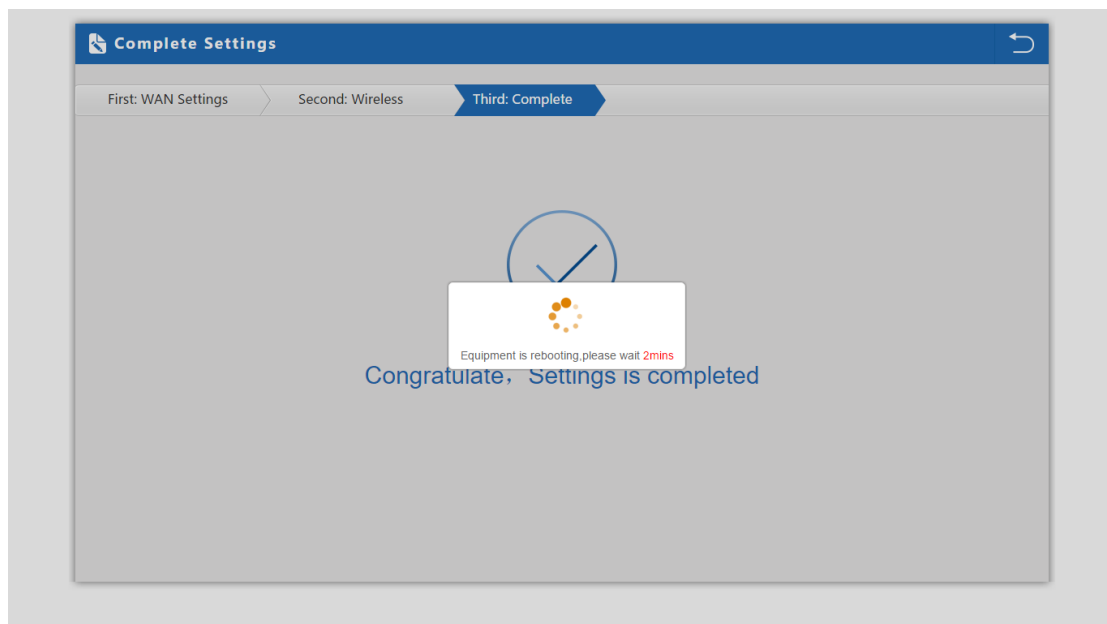


The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three steps: 'First: WAN Settings', 'Second: Wireless', and 'Third: Complete'. The 'Static IP' tab is selected and highlighted with a red box. Below the tabs, there are four input fields: 'IP Address', 'Subnet Mask', 'Default Gateway', and 'Primary DNS', all outlined in red. At the bottom, there are two buttons: 'Back' and 'Next', with the 'Next' button highlighted in red.

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

The screenshot shows the 'Gateway Mode' configuration interface. At the top, there are three progress steps: 'First: WAN Settings', 'Second: Wireless' (which is highlighted), and 'Third: Complete'. Below this, the 'Wireless Settings' section is visible. It includes a 'WLAN Status' toggle set to 'ON' with a 'wireless analyzer' button next to it. The 'SSID' field contains 'NC-LINK_Router', the 'Channel' dropdown is set to '2.442 GHz (Channel 7)', the 'Encryption' dropdown is set to 'WPA2PSK_TKIPAES', and the 'Key' field contains 'nclink66666666'. At the bottom of the form, there are 'Back' and 'Next' buttons.

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



7. WISP Mode Configuration

a) Click "Scan AP"

The screenshot shows the 'WISP Mode' configuration interface. At the top, there are three steps: 'First: Repeater' (selected), 'Second: WAN', and 'Third: Complete'. Below this, the 'Wireless Repeater' section contains the following fields:

- Repeater SSID: NC-LINK_Router
- Authentication: WPA2PSK_TKIPAES
- Key: nclink66666666

A red box highlights the 'Scan AP' button. At the bottom, there are 'Back' and 'Next' buttons.

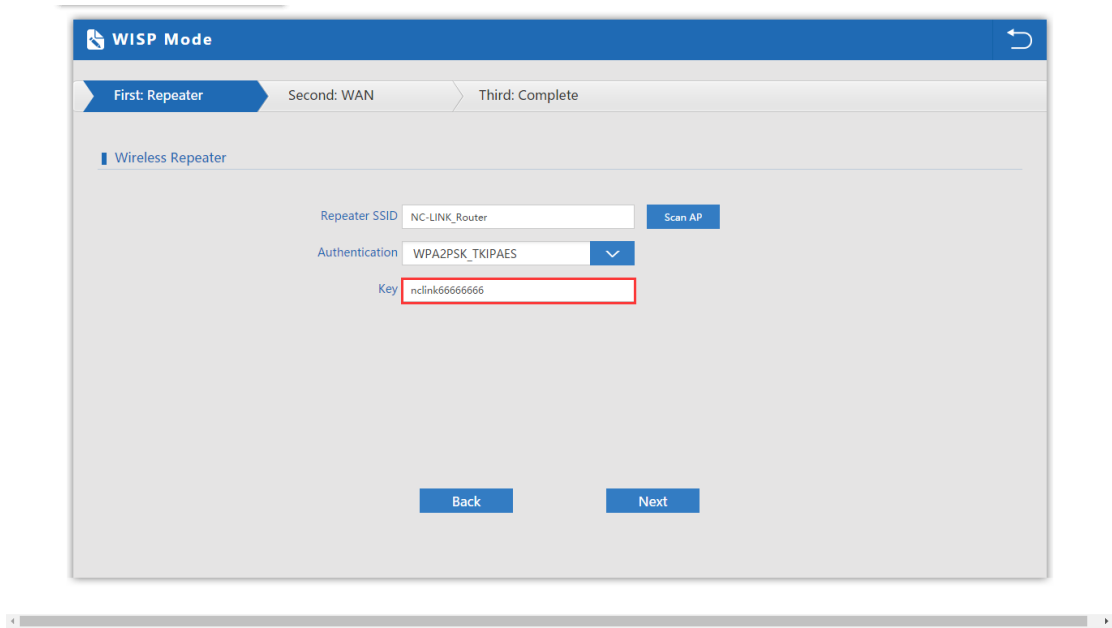
b) Select the AP signal you want to repeat

The screenshot shows the 'WISP Mode' configuration interface with a 'Scan AP' dialog box open. The dialog box lists the following detected APs:

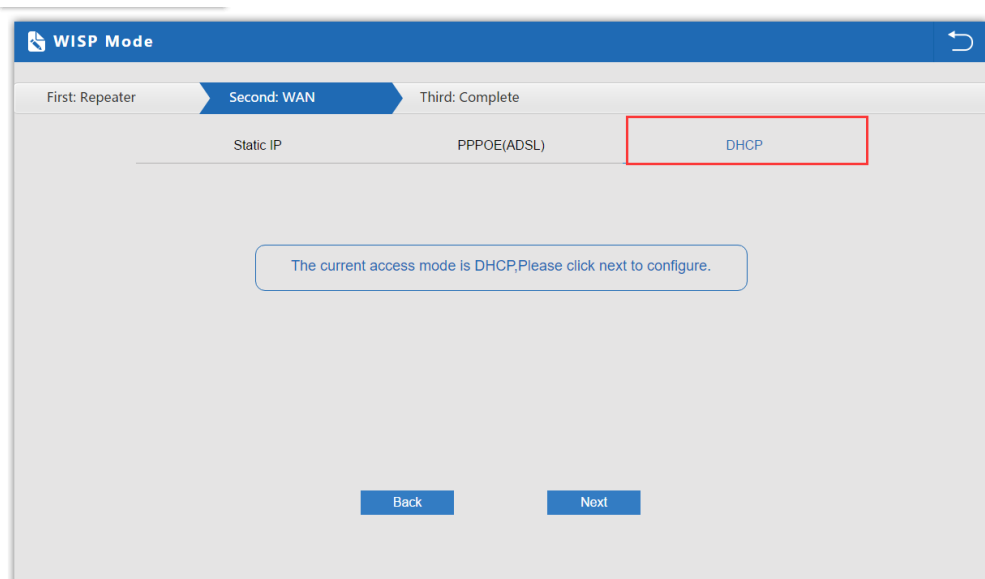
AP Name	MAC Address	Channel	RSS	Encryption	Action
NC-LINK_Router	78:D3:8D:E3:EA:A3	13	-26dBm	WPA2PSK_TKIPAES	Choice
NC-LINK_VPN	28-f3-66-9b-69-20	1	-28dBm	WPA2PSK_TKIPAES	Choice
		6	-48dBm	WPA2PSK_TKIPAES	Choice

The dialog box also includes a 'Refresh' button at the bottom right. The background configuration page shows the 'Scan AP' button is no longer highlighted, and the 'Back' and 'Next' buttons are visible at the bottom.

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



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



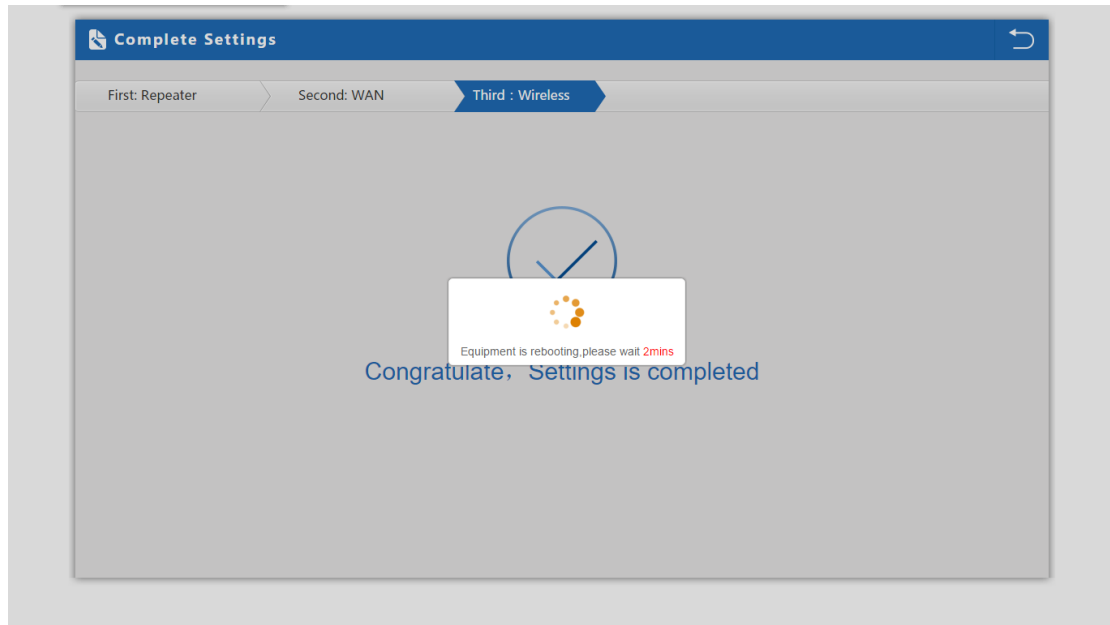
e) WAN is PPPoE access type, input the **Username** and **Password** then click **"Next"**

The screenshot shows the 'WISP Mode' configuration interface. At the top, there are three steps: 'First: Repeater', 'Second: WAN', and 'Third: Complete'. The 'Second: WAN' step is active. Below this, there are three options: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'PPPOE(ADSL)' option is selected and highlighted with a red box. Underneath, there are two input fields: 'PPPOE Name' and 'PPPOE Password'. At the bottom, 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 three steps: 'First: Repeater', 'Second: WAN', and 'Third: Complete'. The 'Second: WAN' step is active. Below this, there are three options: 'Static IP', 'PPPOE(ADSL)', and 'DHCP'. The 'Static IP' option is selected and highlighted with a red box. Underneath, there are four input fields: 'IP Address', 'Subnet Mask', 'Default Gateway', and 'Primary DNS'. At the bottom, there are two buttons: 'Back' and 'Next'.

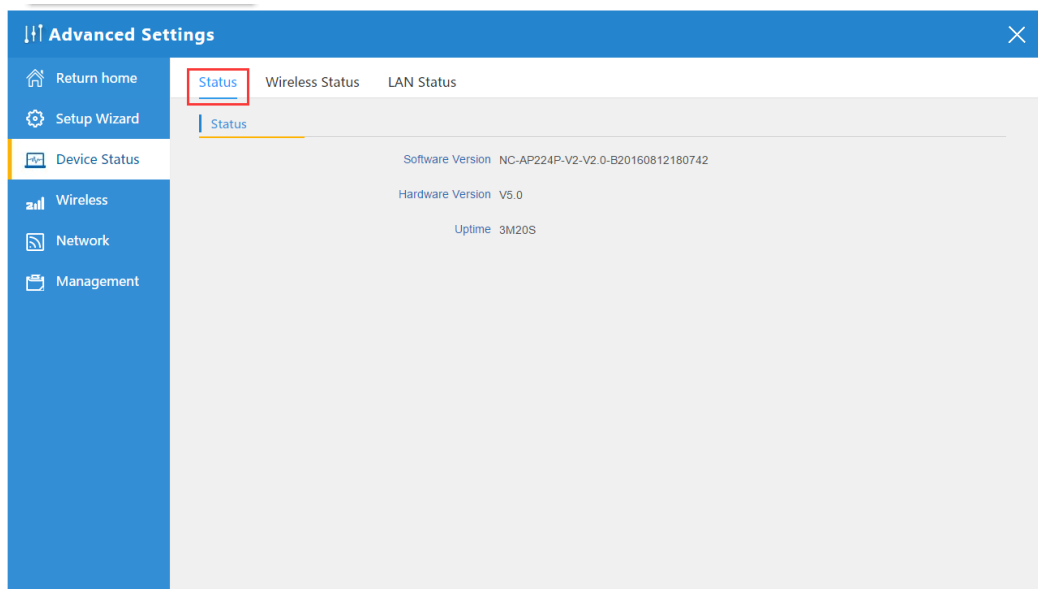
g) Configuration complete, device will reboot in **2 minutes**

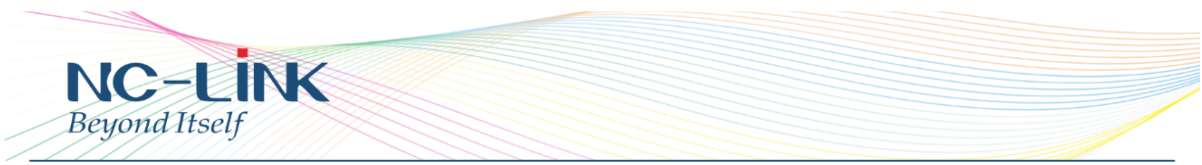


8. Advanced

8.1 Device Status

8.1.1 Status





8.1.2 Wireless Status

Status [Wireless Status](#) LAN Status

Wireless Status

Wireless Status Enable

SSID NC-LINK_Wireless

MAC 78:D3:8D:ED:E7:AD

Channel 7

Encryption WPA/WPA2PSK_AES

Connected Users 0 [Client list](#)

8.1.4 LAN Status

Status [Wireless Status](#) [LAN Status](#)

LAN Status

LAN IP 192.168.188.253

Subnet Mask 255.255.255.0

MAC 78:D3:8D:ED:E7:AB

Manage server IP 192.168.188.1

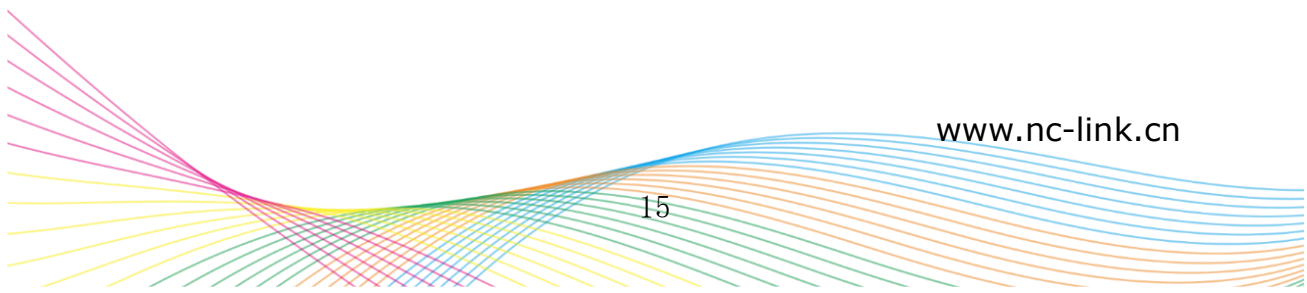
DHCP Status Disable

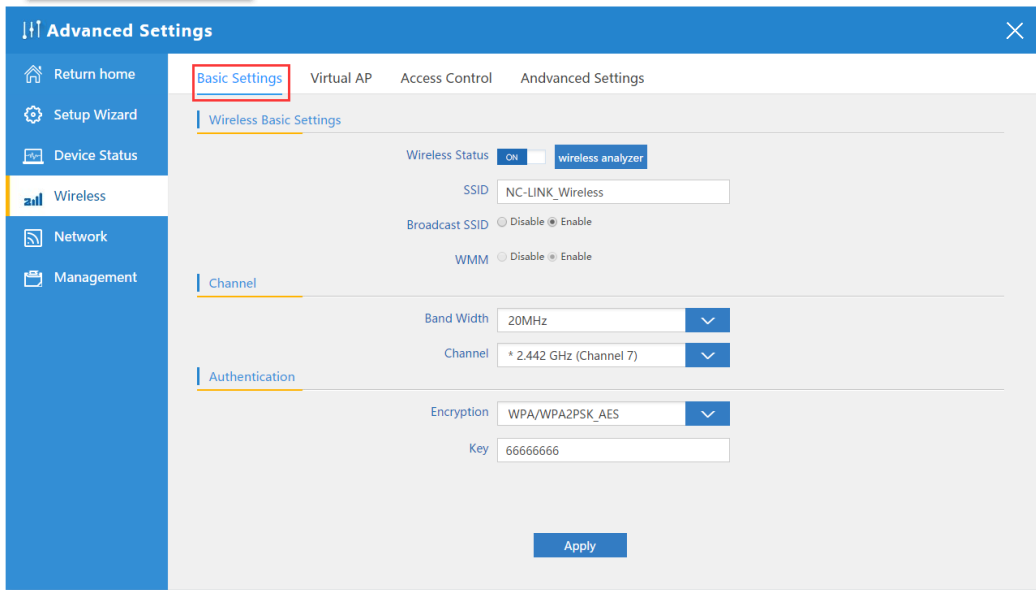
DHCP address range 192.168.188.2 — 192.168.188.252

Assigned IP 0 [DHCP list](#)

8.2 Wireless

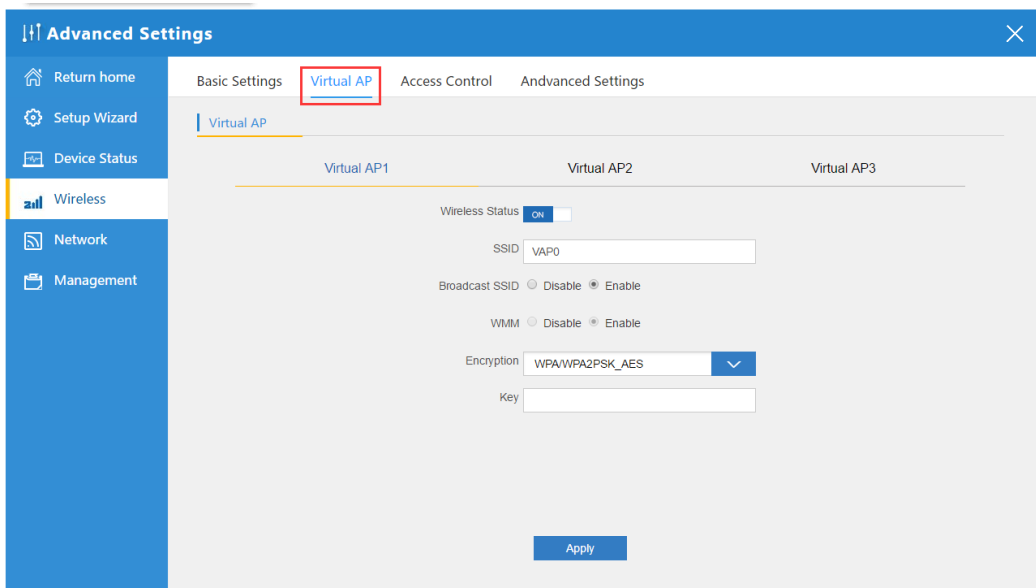
8.2.1 Basic Setting





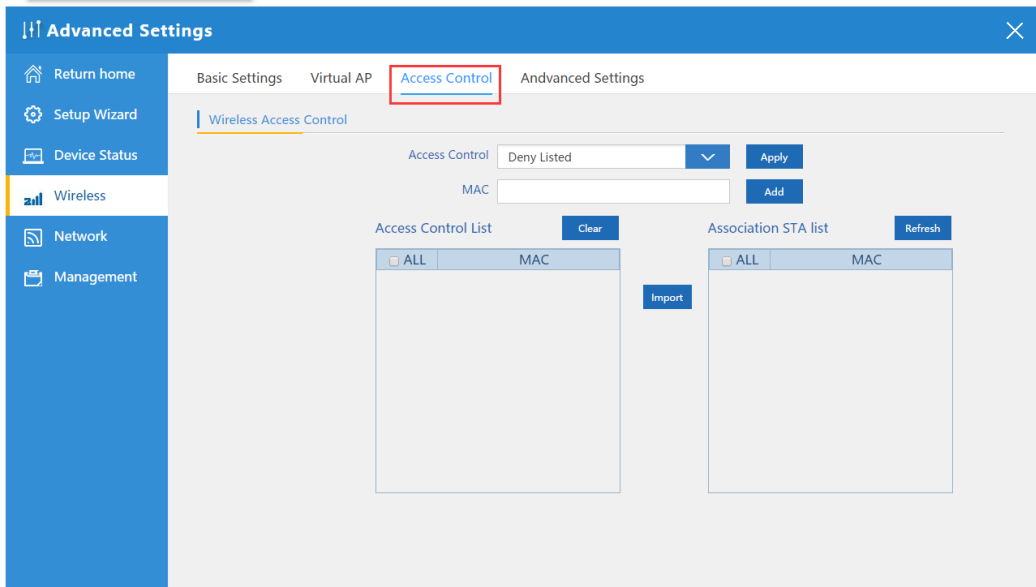
- Wireless Status: ON/OFF the 2.4GHz wireless
- Wireless Analyzer: Analyze the wireless signal around help to choose a better channel to avoid interference
- SSID: Set the SSID
- Broadcast SSID: Enable or Disable broadcast SSID
- WMM: Enable or Disable WMM function
- Band Width: Set the Band Width of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

8.2.2 Virtual AP



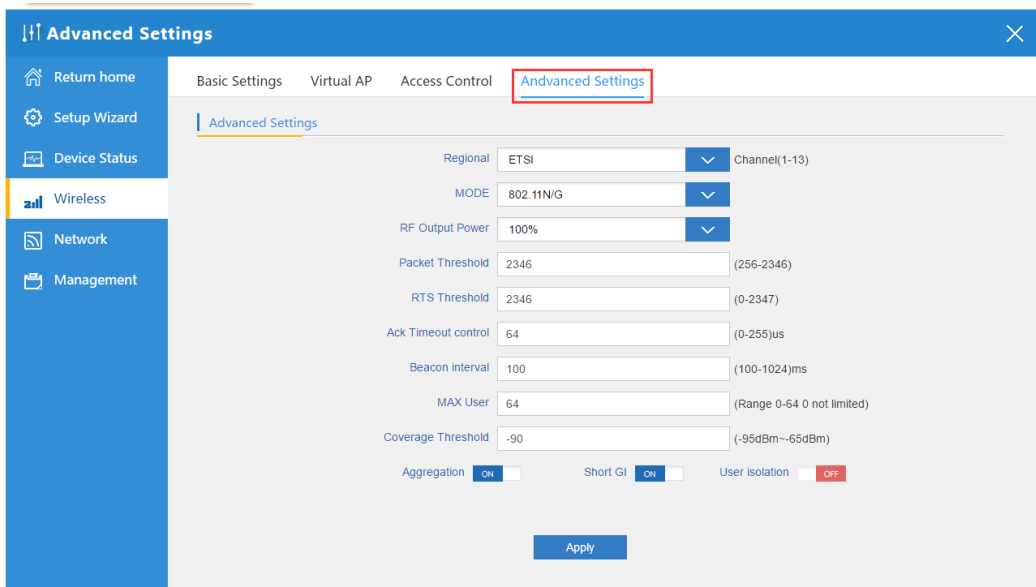
- Wireless Status: ON/OFF the Virtual AP
- SSID: Set the SSID
- Broadcast SSID: Enable or Disable broadcast SSID
- WMM: Enable or Disable WMM function
- Encryption: Choose the encryption type or open

8.2.3 Access Control



Allow or deny the Access Control based on MAC address

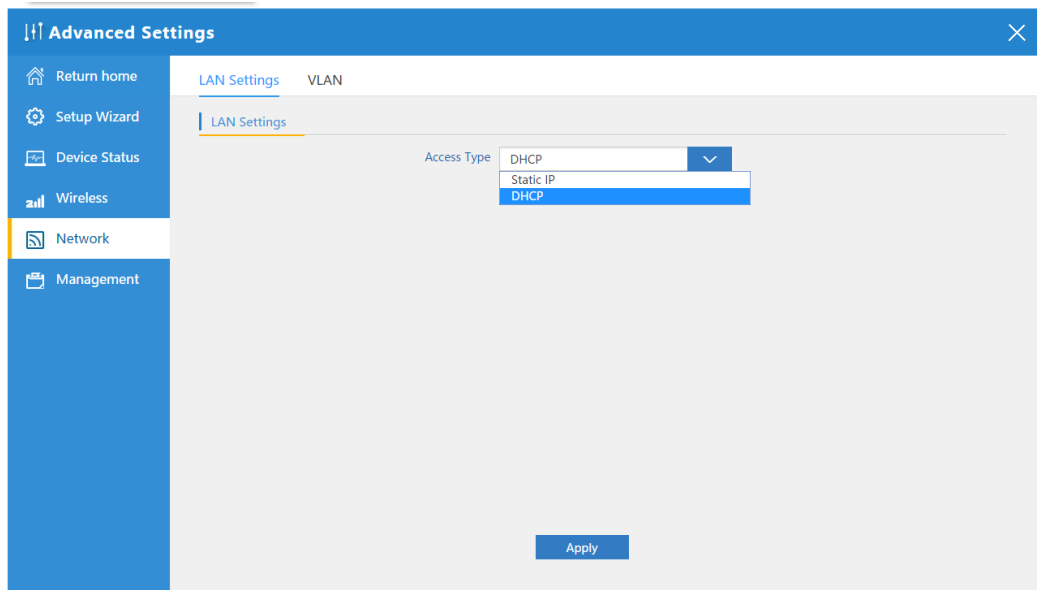
8.2.4 Advanced Setting



- 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

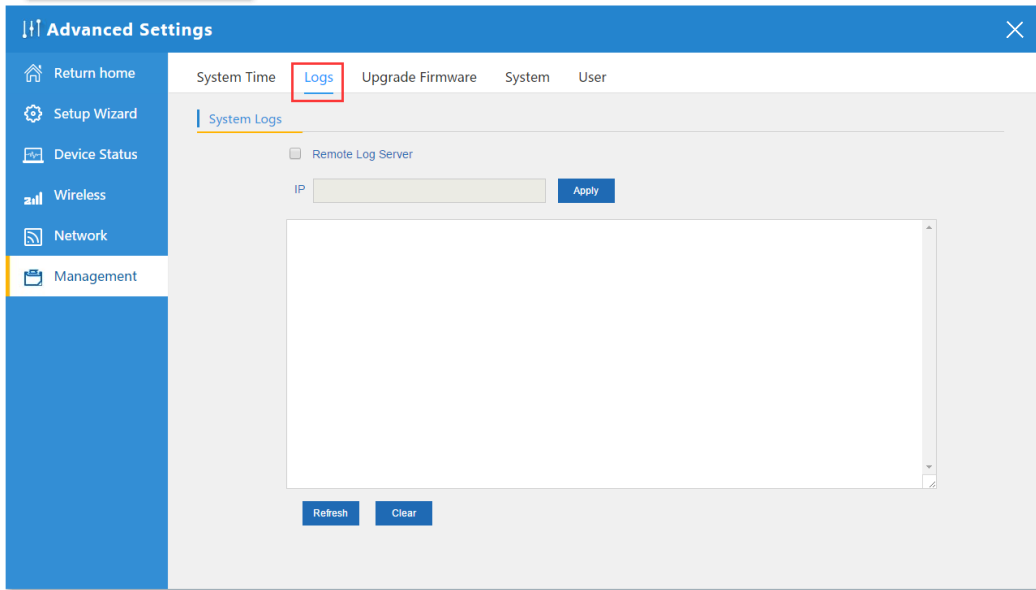
8.3 Network

8.4.1 LAN Settings



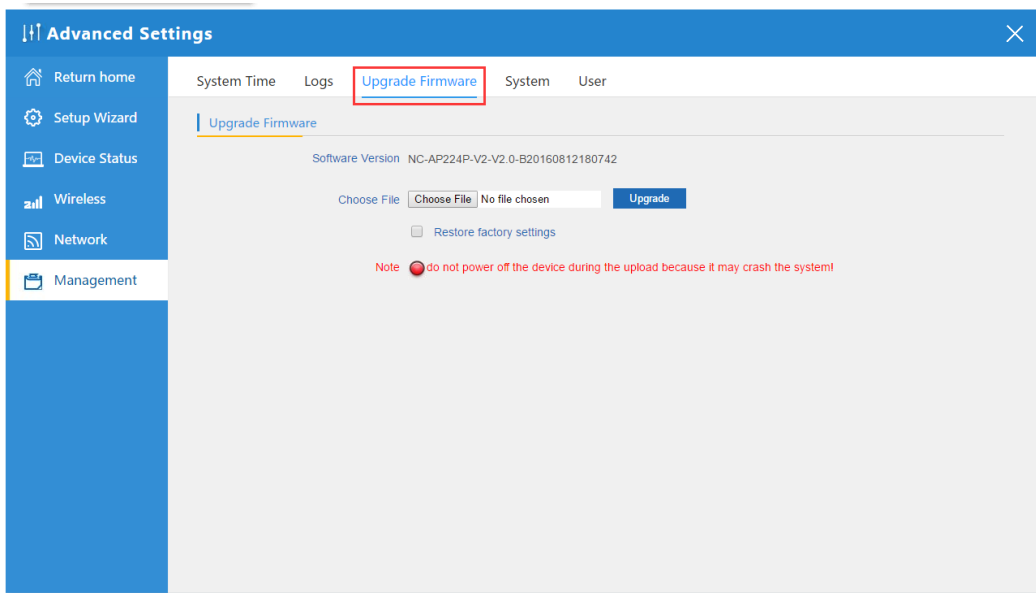
Setting the Access Type of Internet

8.5.2 Logs



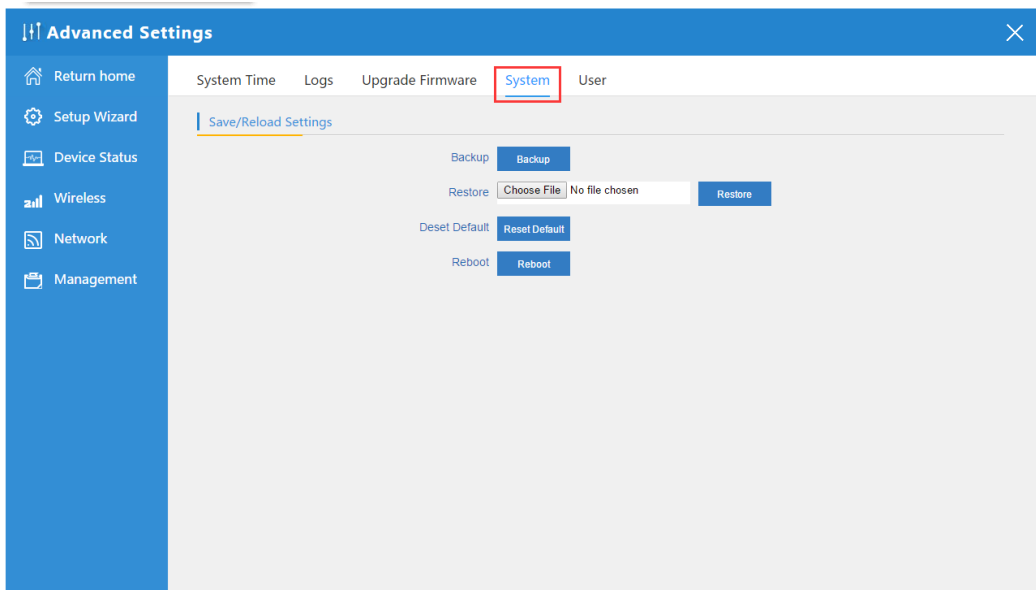
Logs: the system logs can be enable or disable, user can view the system log

8.5.3 Upgrade Firmware



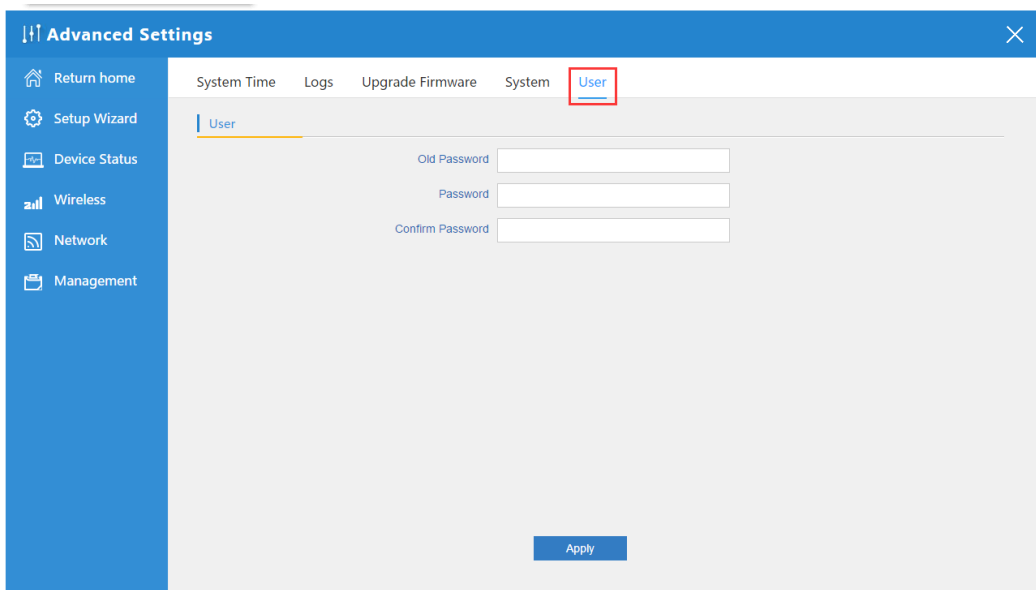
Upgrade Firmware: Upgrade new firmware to access stable function for CPE

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 low

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 adjustment