

User Manual of 11ac 1200Mbps Outdoor Access Point Point:HWAP80-P48



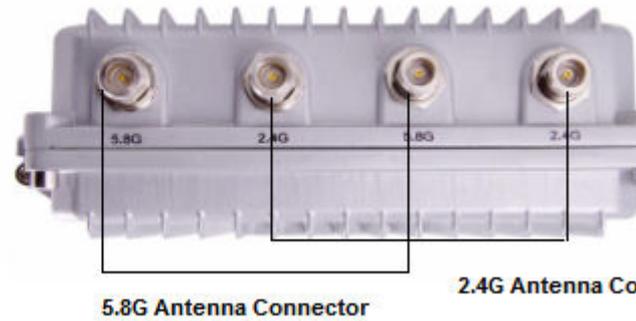
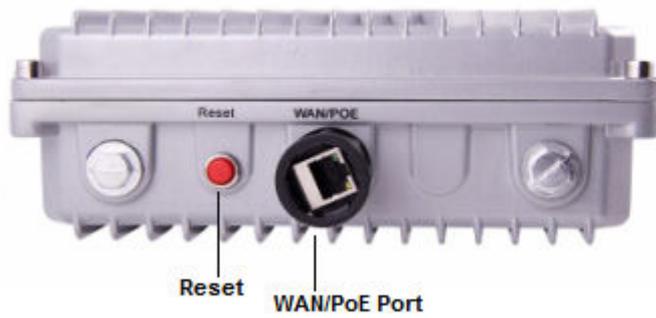
This is the user manual of 11ac 1200Mbps Outdoor Access Point, which will approximate guide you how to set and apply the Outdoor Access Point, it provide a convenient graphical interface for network construction and maintenance person, as well as a user through a simple and accurate operation, and configuration management of the ceiling wireless access point.

1st Hardware Instruction

AP Setup



AP Interface:



RST: Reset Button, it make AP revert to default data after press it 15 seconds.

WAN/PoE: Gigabit WAN Port, connect with ADSL modem or Internet mainly. It will be LAN port under Outdoor Access Point and WiFi Repeater operation mode.

SMA Connector: have 2.4G and 5.8G, connect with 2.4G or 5.8G antenna.

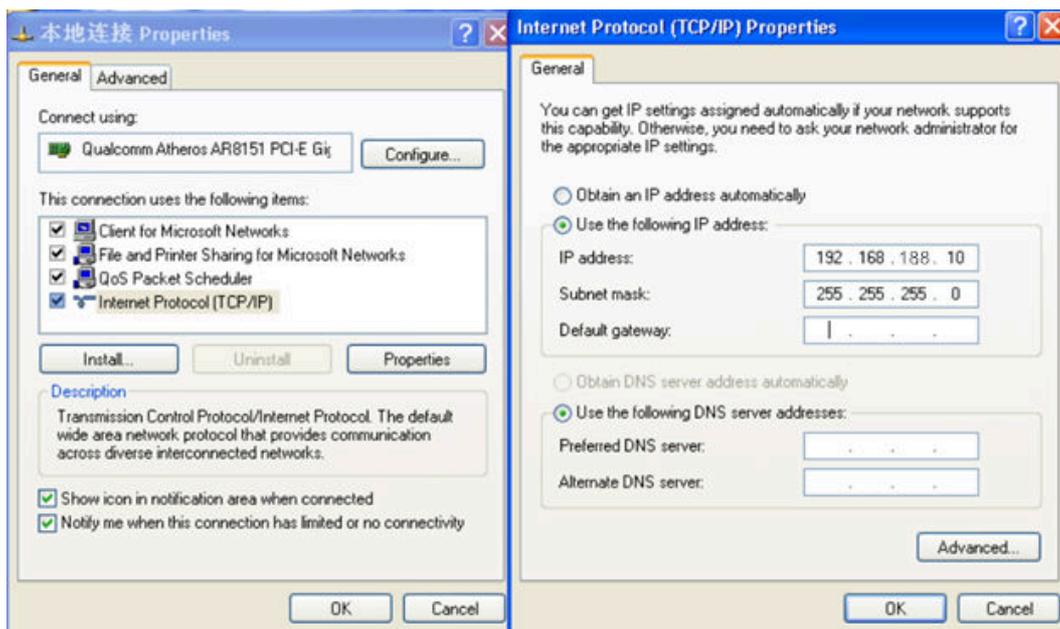
2nd: Login

1) Connect the Outdoor Access Point with computer

2) Configure the PC's local connection IP address as 192.168.188.X (X is number from 2 to 254), subnet mask is 255.255.255.0, follow P4 and P5 to finish.

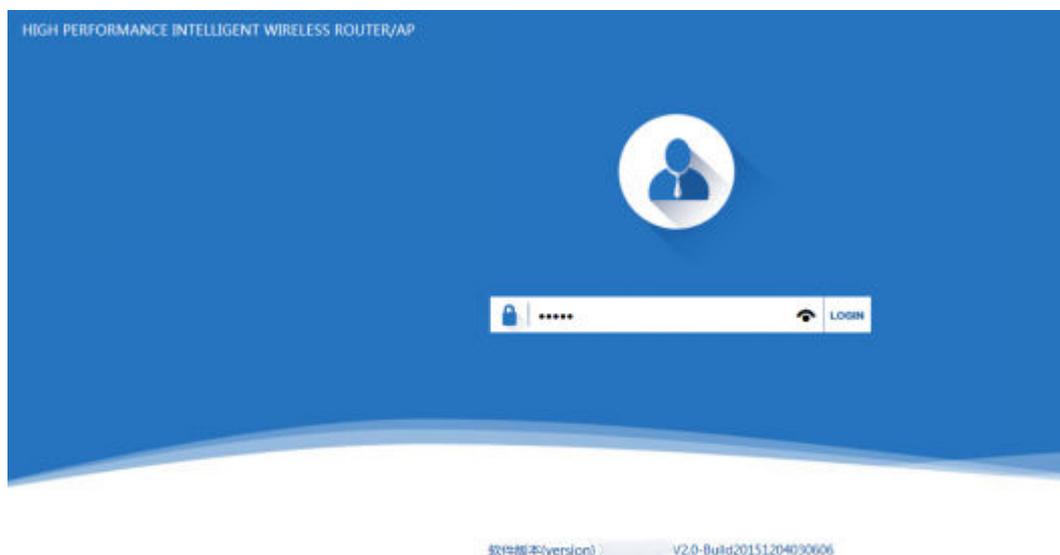


P4 Setting of computer's IP address



P 5 Setting of computer's IP address

3) Input 192.168.188.253 into IE browser, then pop up the login page, the default login user name: Admin,
 Passwords: admin, pls do following P6



P6 Login

3rd : WEB GUI interface Setting:

1) Status

After login, then P7 Device Status will be showed:

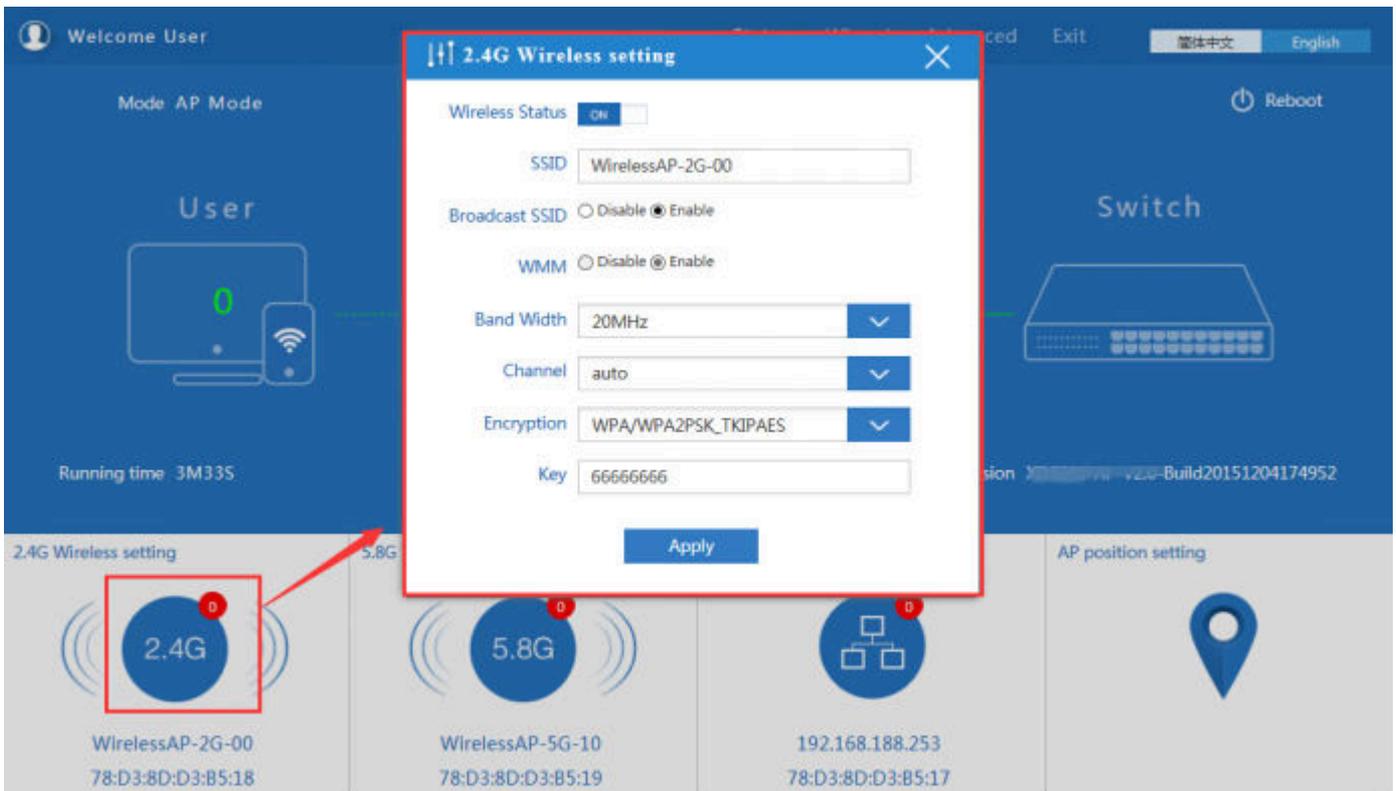


P7: Device Status

In this ceiling Outdoor Access Point, the default operation mode is AP mode.

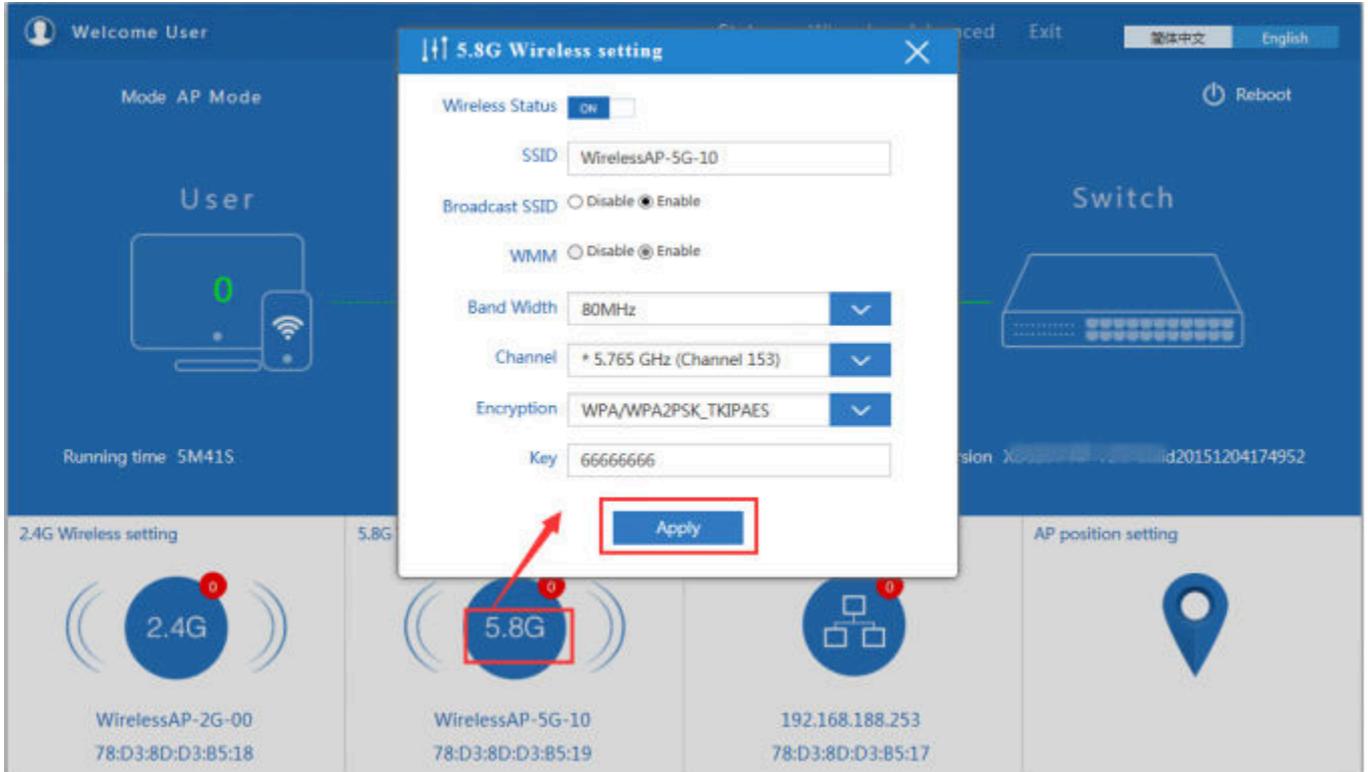
Then in 2.4G Wireless Setting, GUI configuration page showed as below:

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



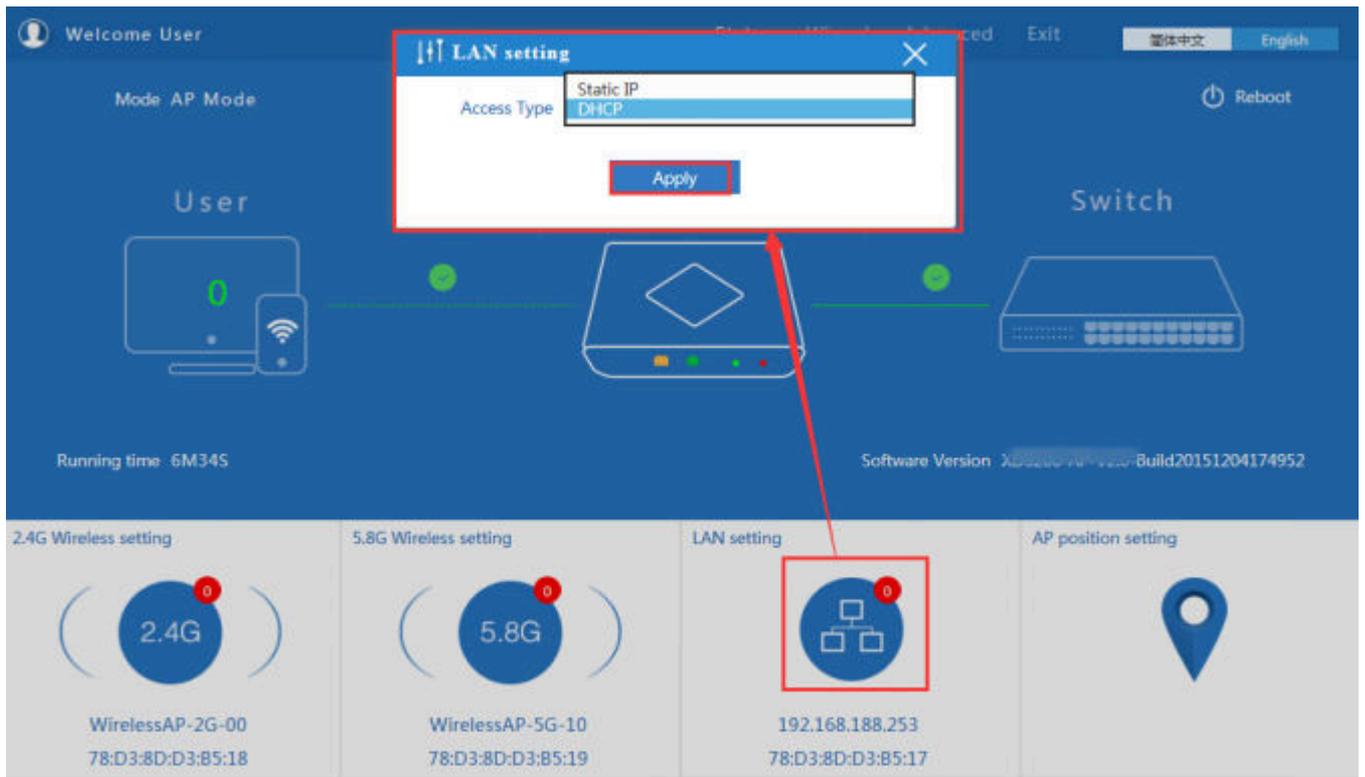
P8. 2.4G Wireless setting

5.8G Wireless Setting GUI configuration setting showed as P8:



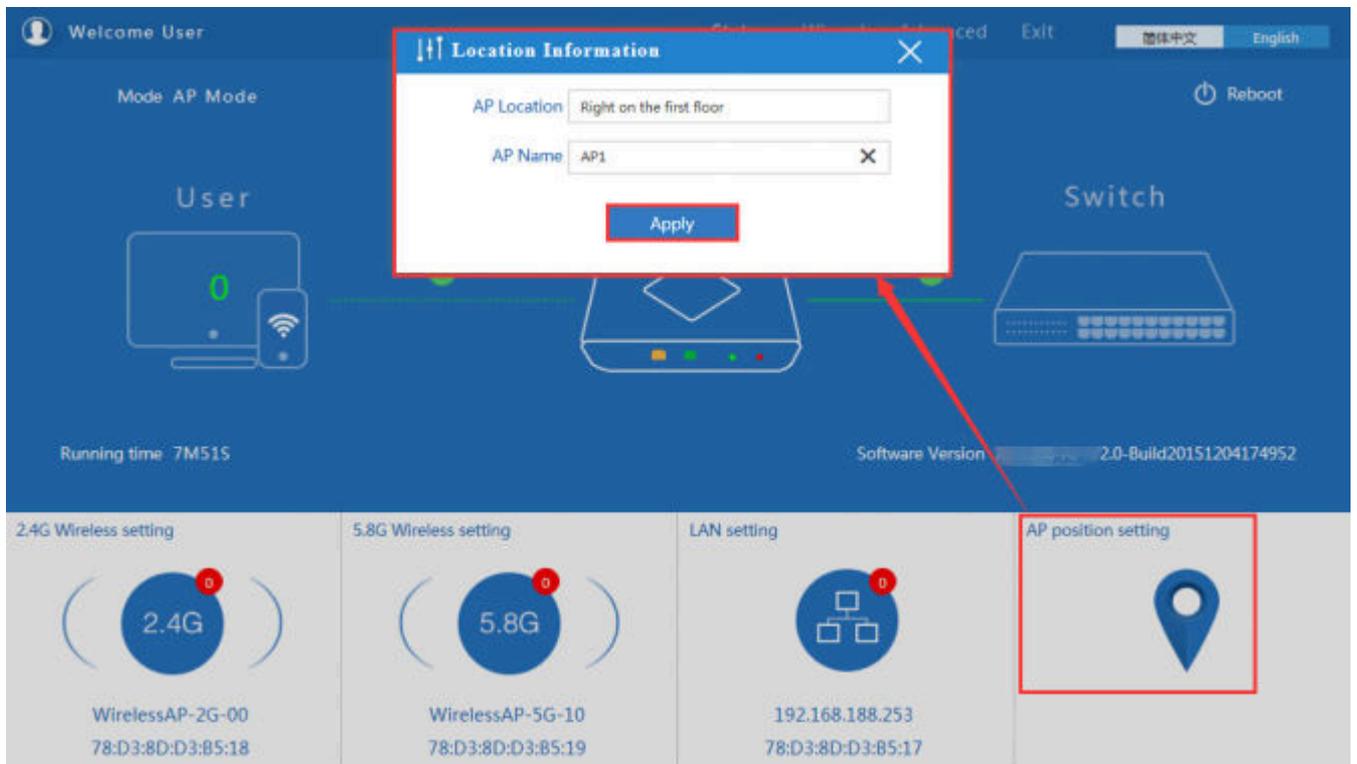
P9 5.8G Wireless Setting

LAN Setting to configure the DHCP or Fix IP



P10 LAN Setting

AP location setting: can mark where the AP set up, and AP name as P11:



P11 AP Postion setting

2) Wizard Configuration:

Click Wizard in Status page, will pop up following page to configure the operation mode:

There are four operation mode of this ceiling Outdoor Access Point, and there are explanation for each operation mode for better application.

Choose Operation Mode

Return to Status page

Choose the mode you want to configure

Gateway Mode Repeater Mode WISP Mode AP Mode

Explanation on each operation mode

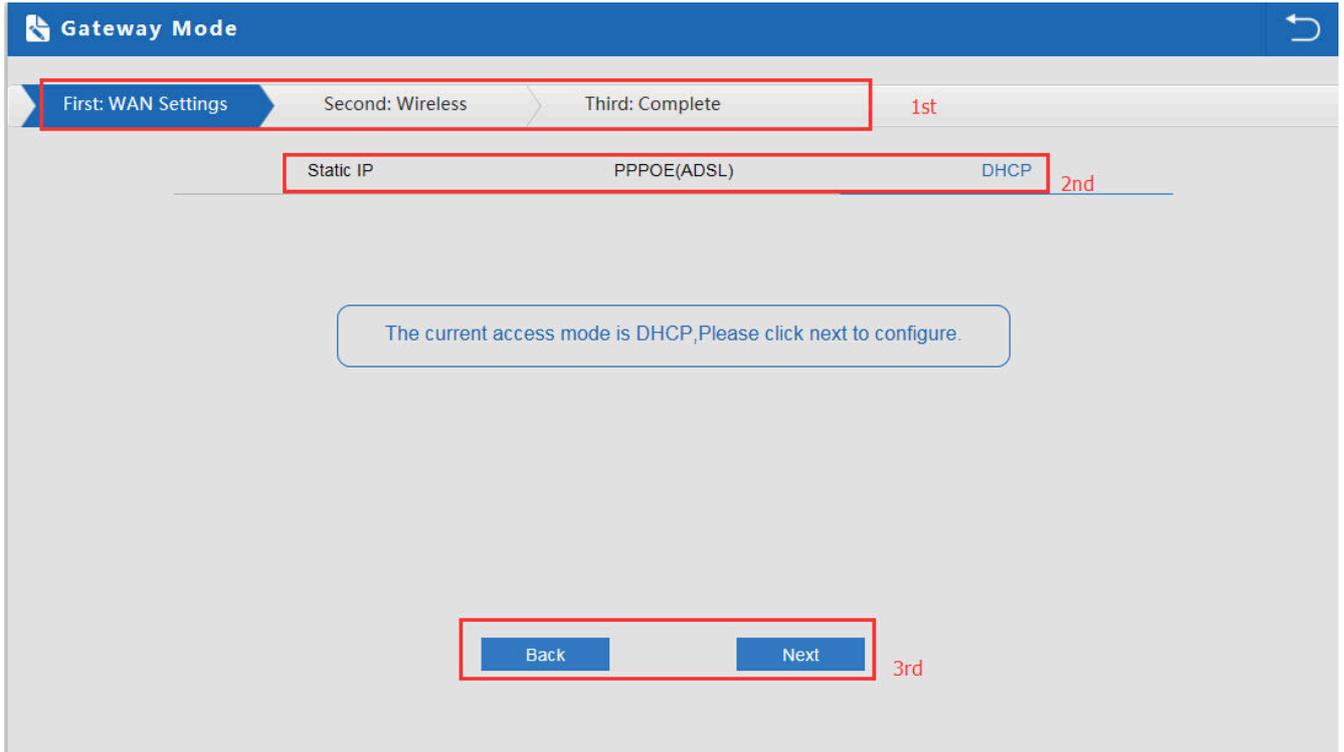
In this mode, the AP wireless interface and cable interface bridging together. Without NAT, firewall and all network related functions.

P12 Operation mode

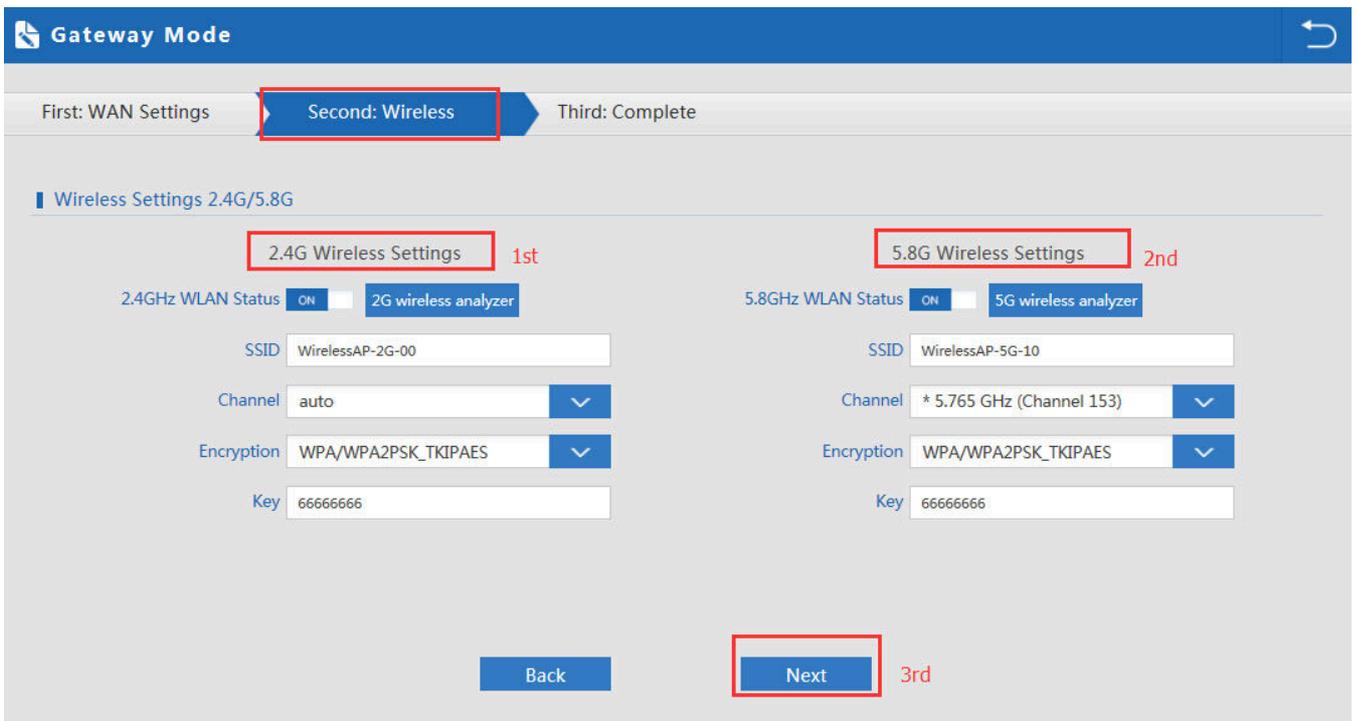
1. Gateway Mode:

Click Gateway mode, will pop up following pictures:

Pls choose the right WAN setting mode, then click next to continue.

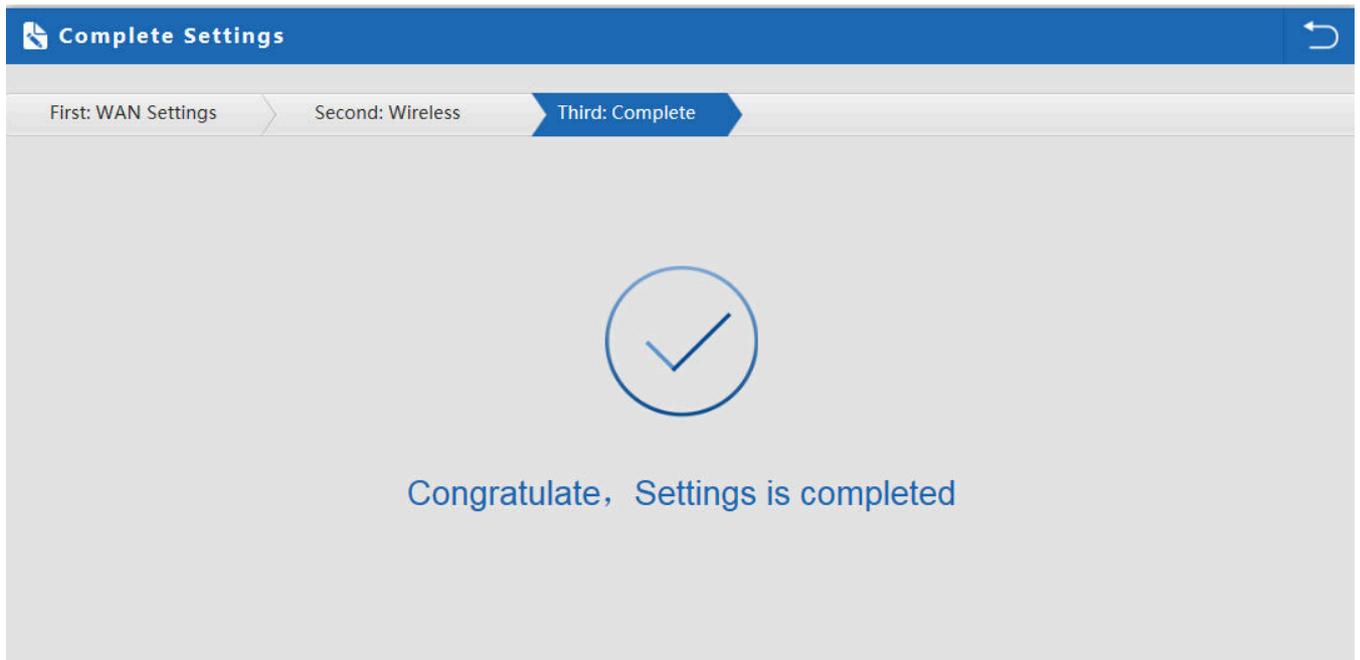


P13. WAN setting in Gateway Mode



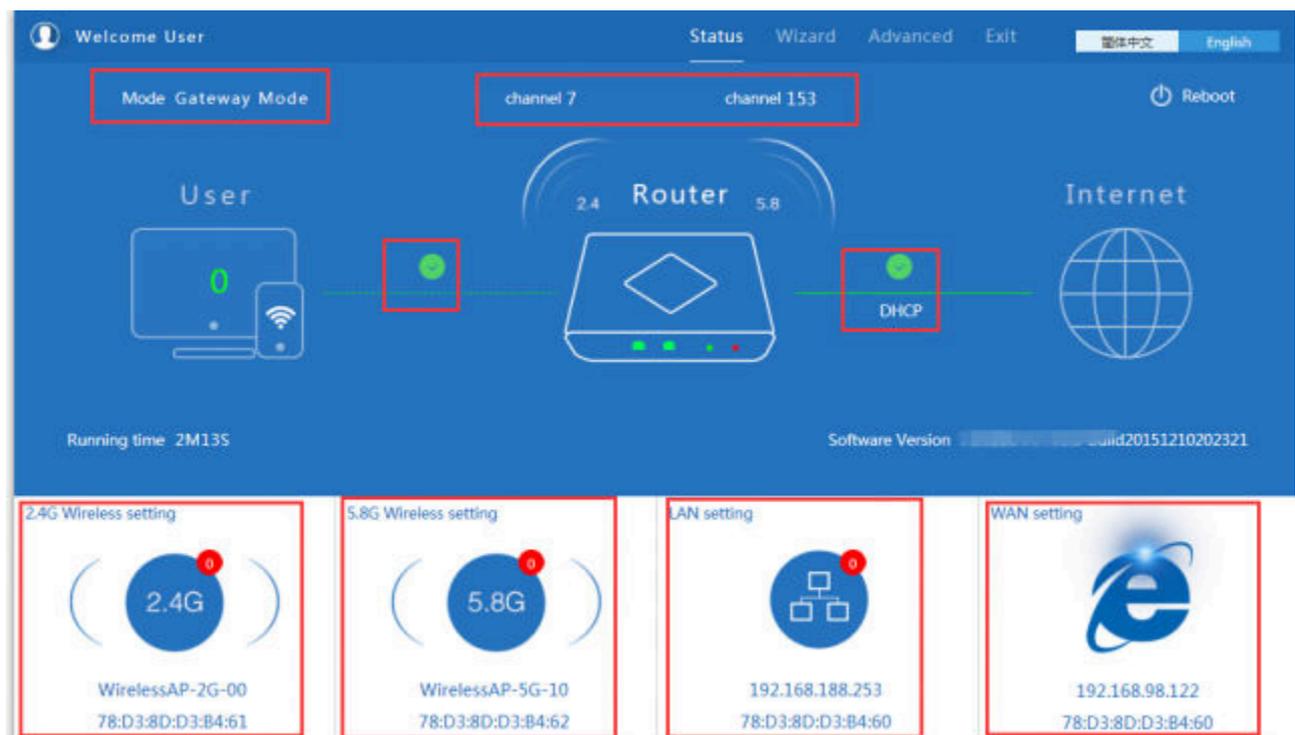
P14 Wireless Setting in Gateway Mode

When click Next, then will complete the Gateway mode setting and show following picture:



P15 Complete the setting in Gateway Mode

When return to Status, the page showed as follow:

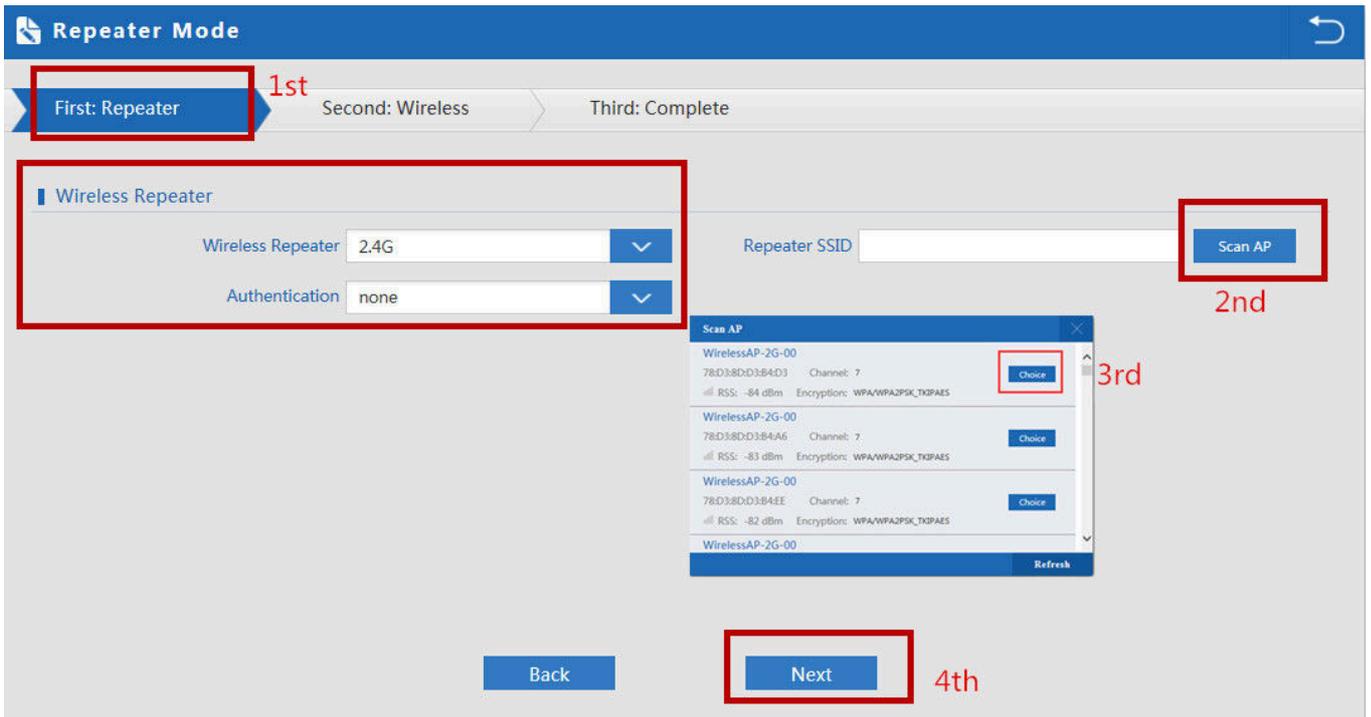


P16 Status in Gateway Mode

2. WiFi Repeater mode

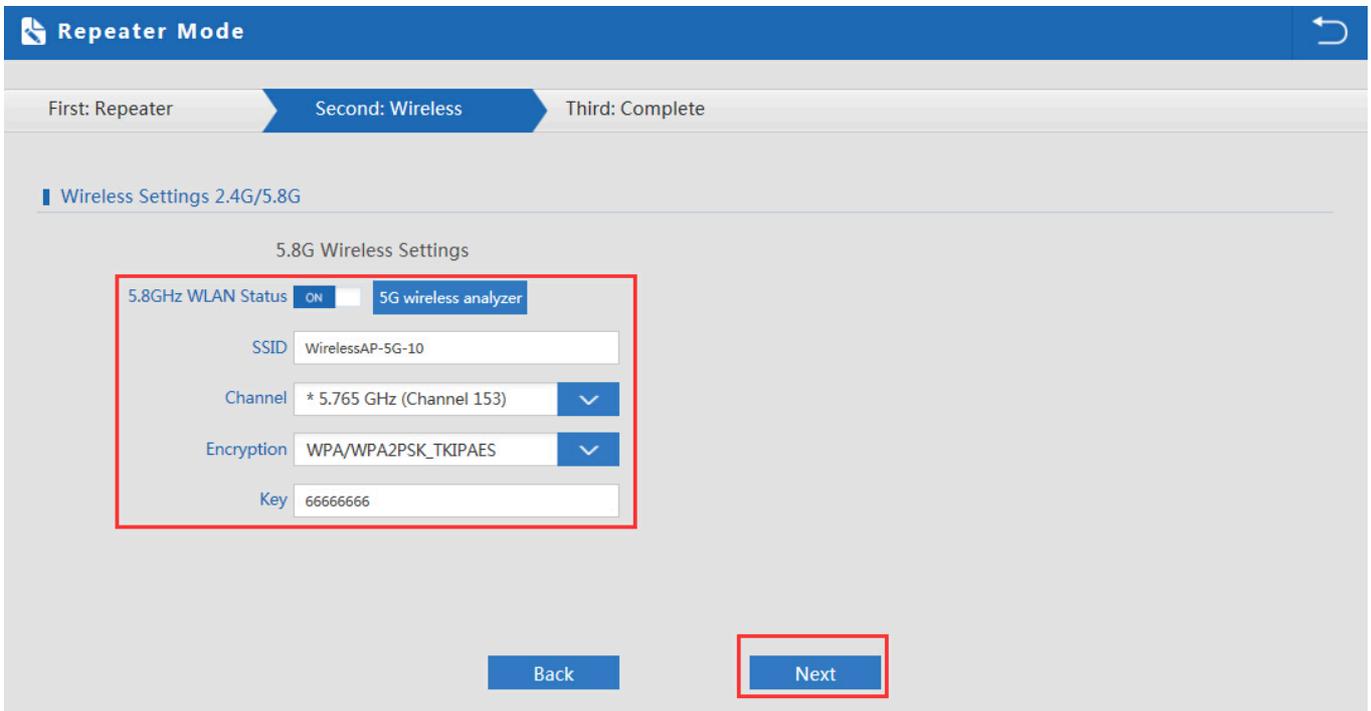
Click WiFi Repeater operation mode in Wizard, then following page will pop up, and choose the right SSID to bridge,

then next.



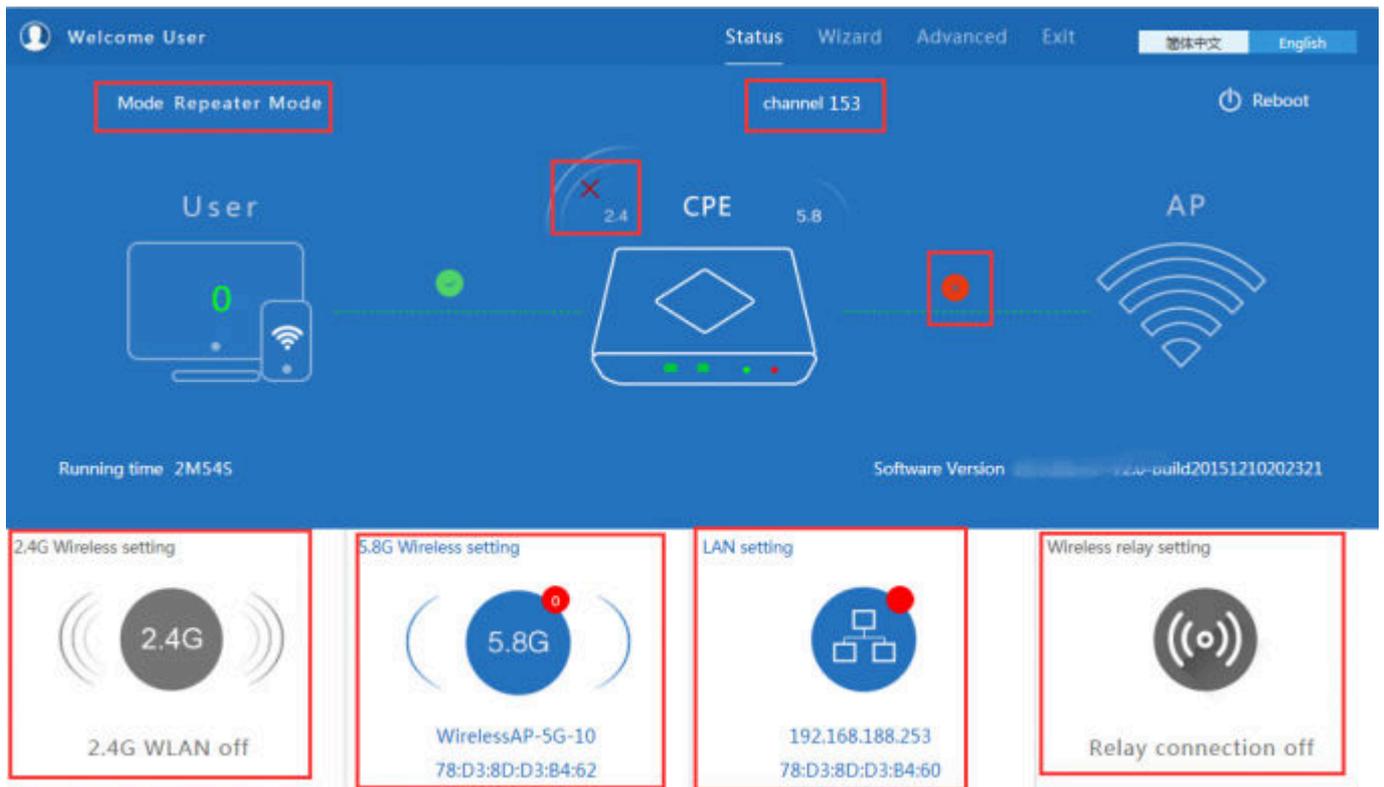
P17 Repeater Mode

After click Next button, then should configure the wireless setting as follow, then click Next to finish:



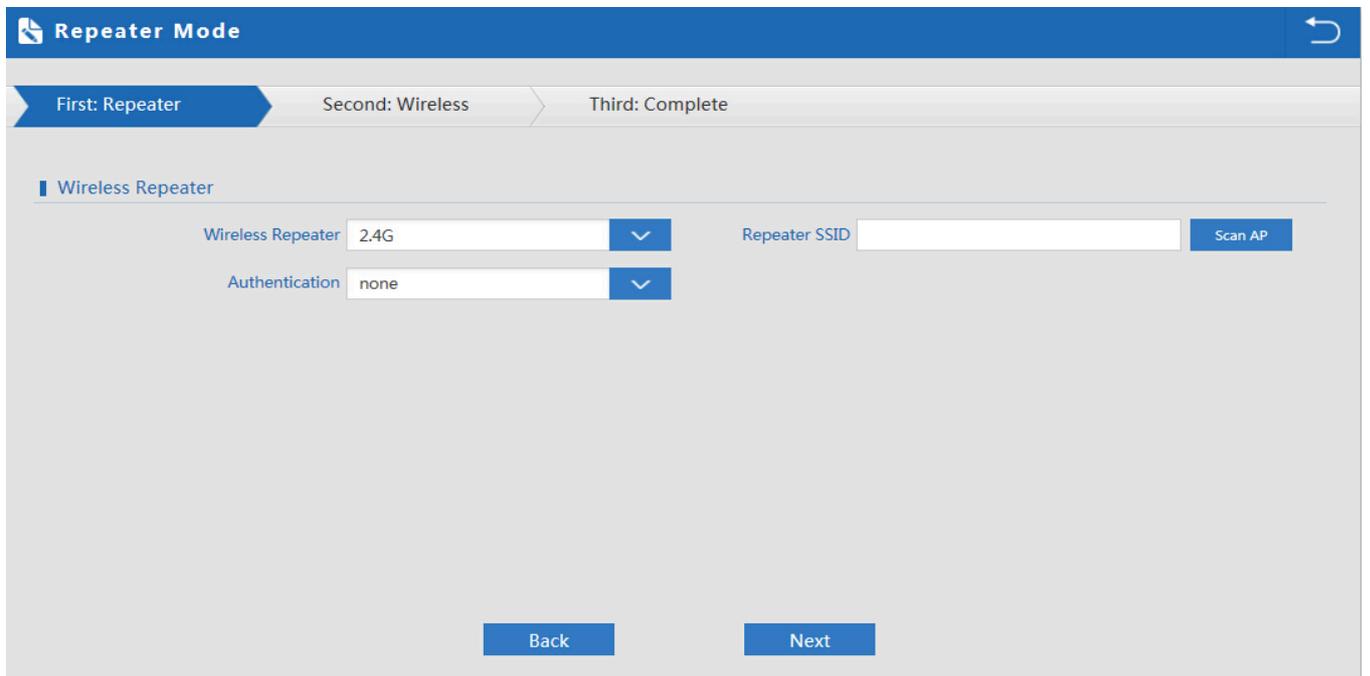
P18 Wireless Setting in Repeater Mode

Click Return button, will back to Status, show Repeater mode data, show fail or success, and user can configure this data in this page if required.



P19 Status in Repeater Mode

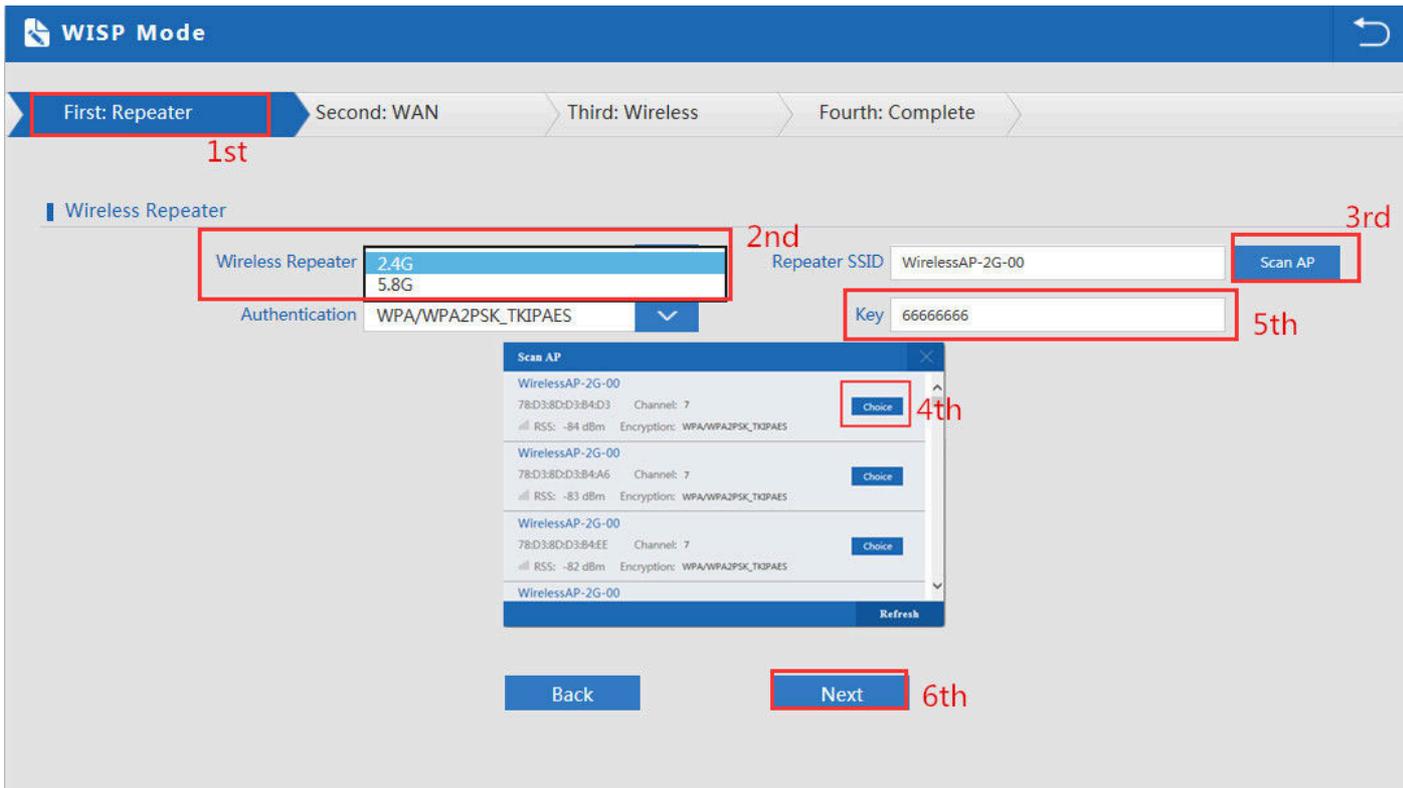
Pls note, when click wireless relay setting, following page will pop up, you can make change from here easy:



P20 Wireless Relay Setting

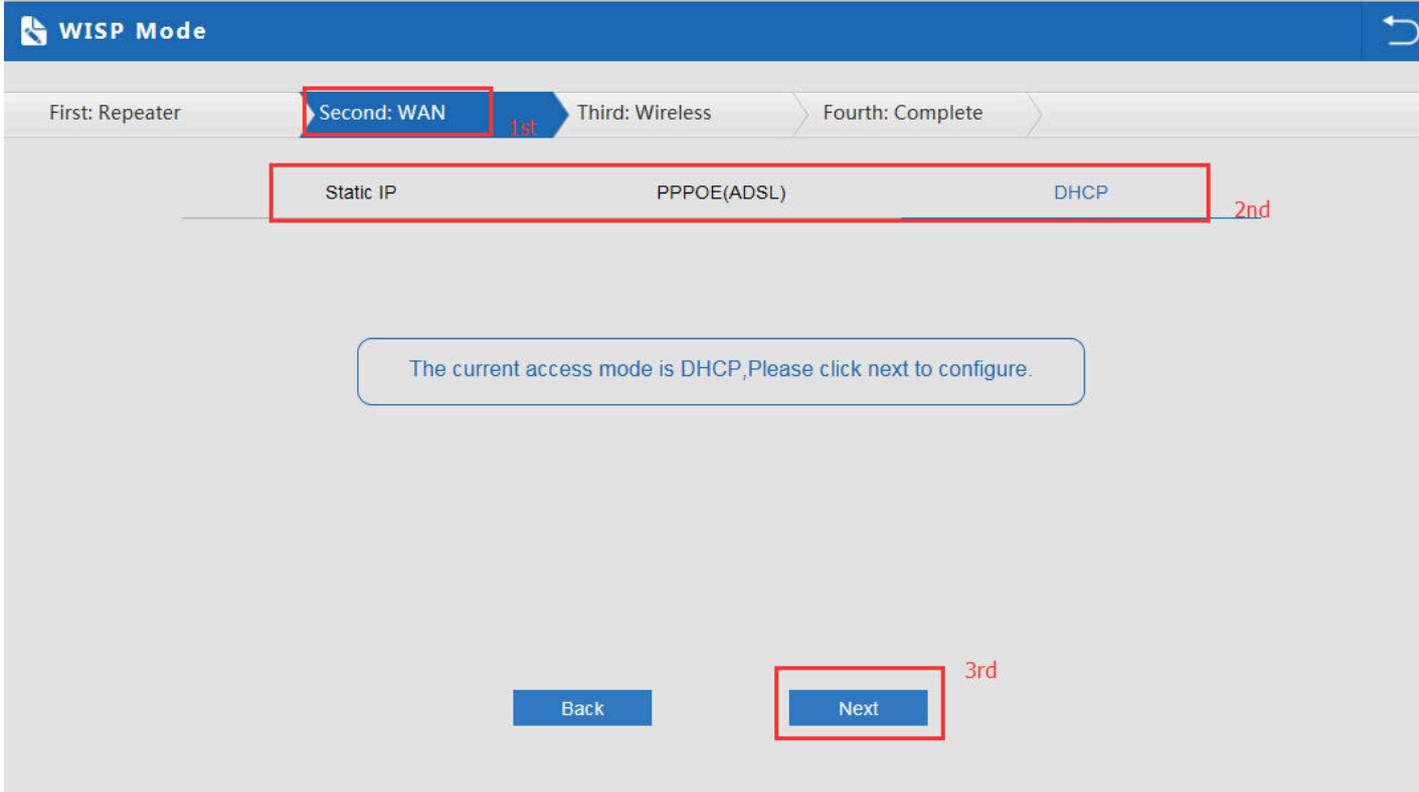
3. WISP Operation mode:

Click WISP operation mode in Wizard, then will pop up the configure page, pls set the WISP operation mode based on the steps showed in picture:



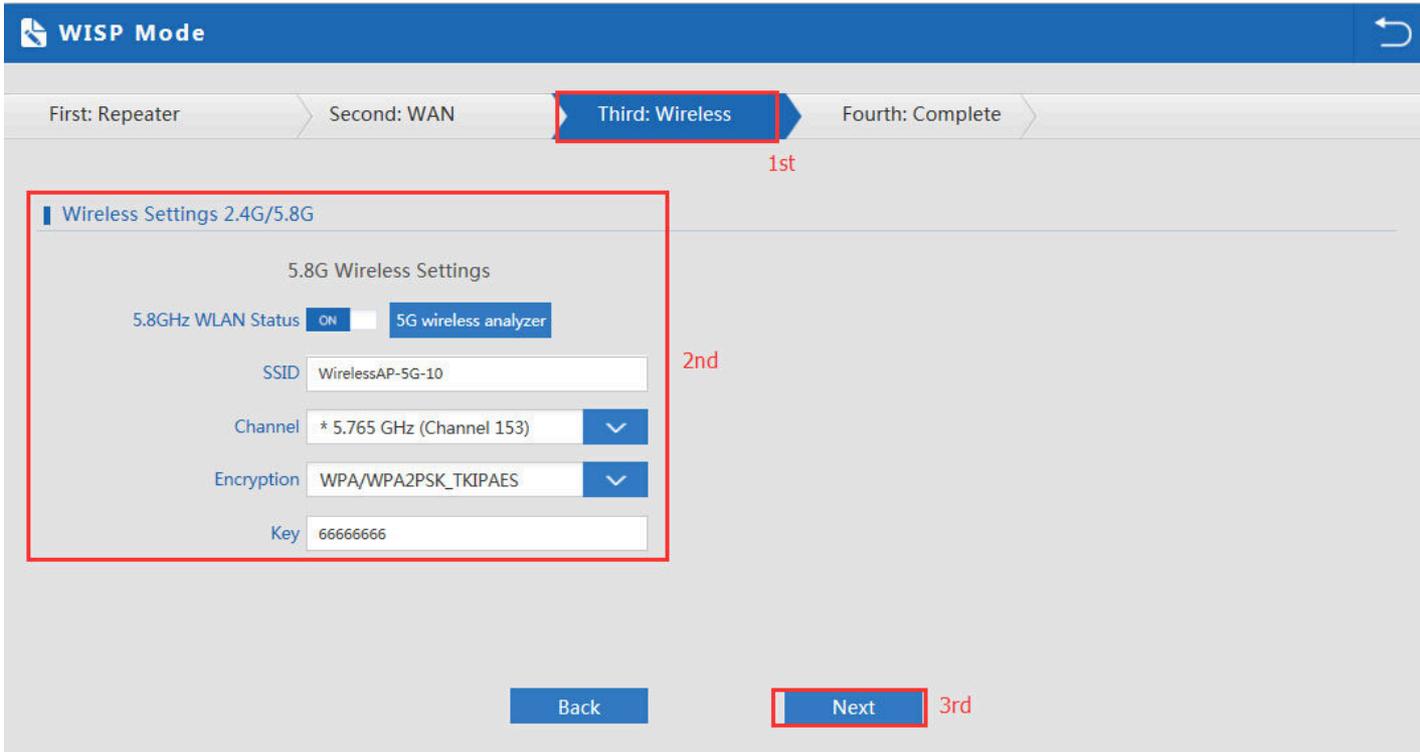
P21 WISP Mode

Configure the right WAN setting in WISP operation mode, then next.



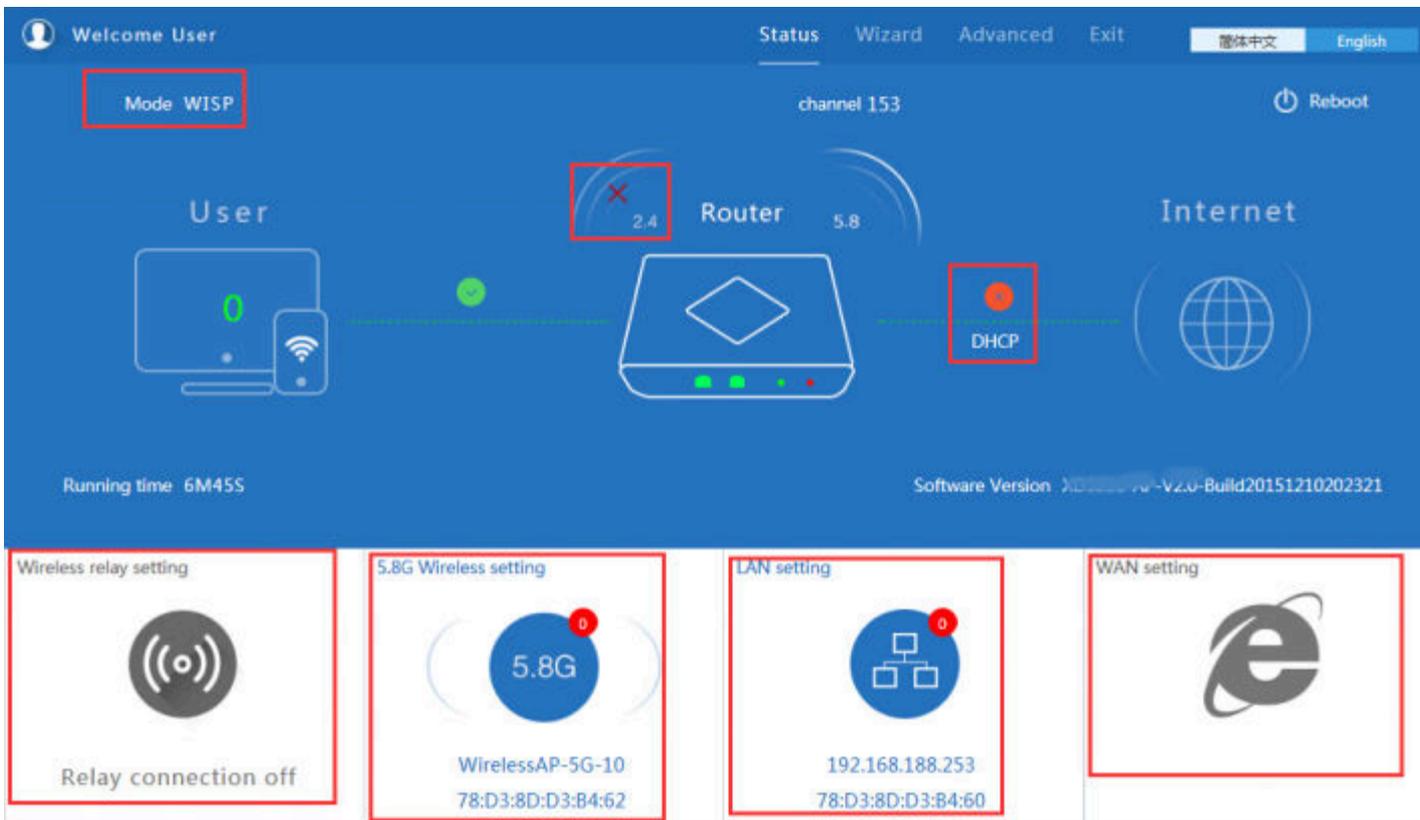
P22 WAN setting in WISP mode

Configure wireless data showed as follow:



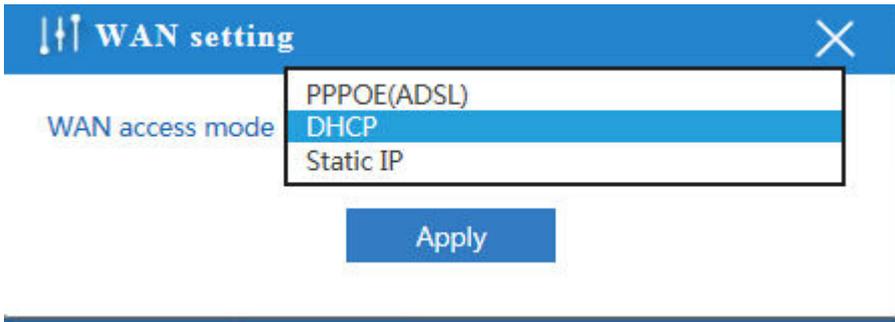
P23 Wireless Setting in WISP mode

Then complete and back to status, will show the connection fail or success, then can configure the data based on request:



P24 Status in WISP mode

Remark: When click WAN Setting, will pop up following picture:

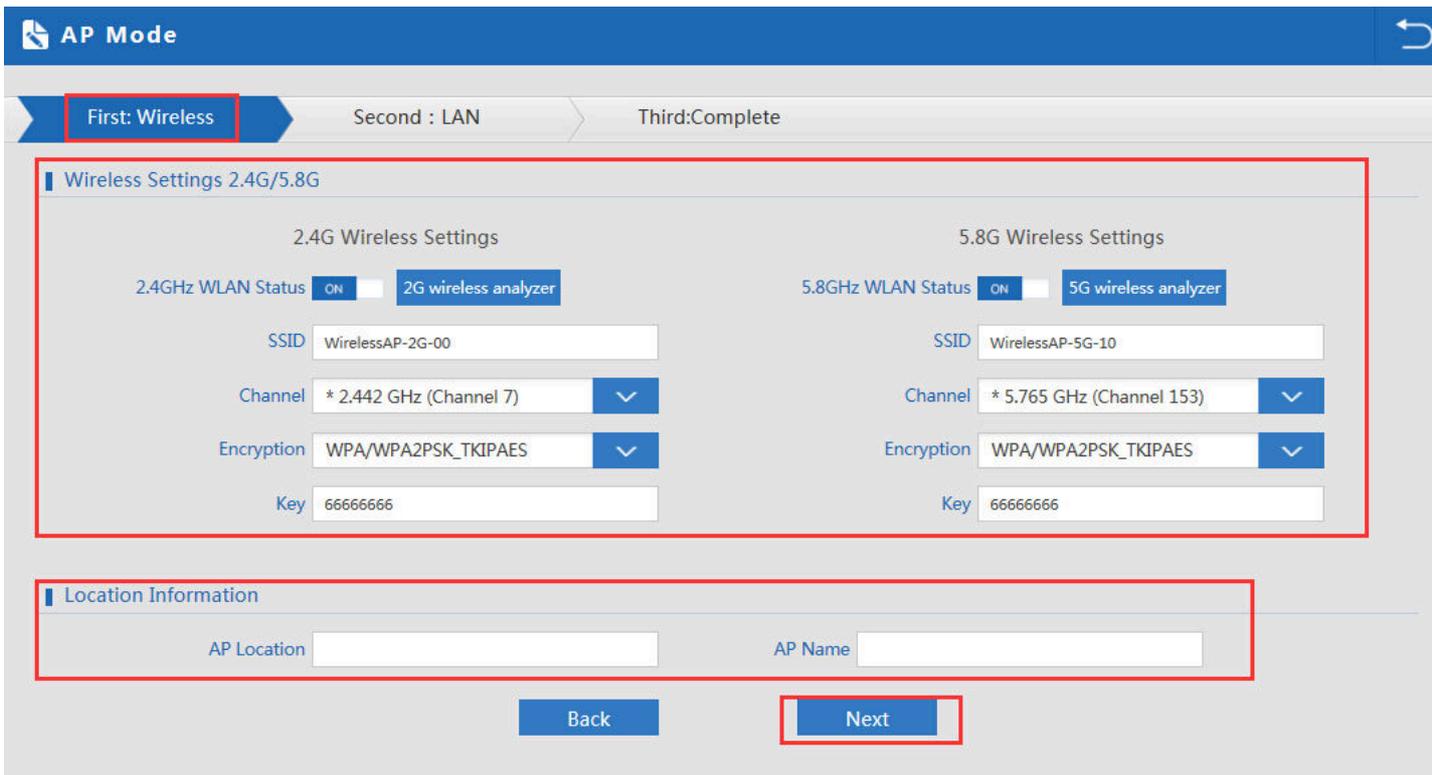


P25 WAN setting in WISP mode

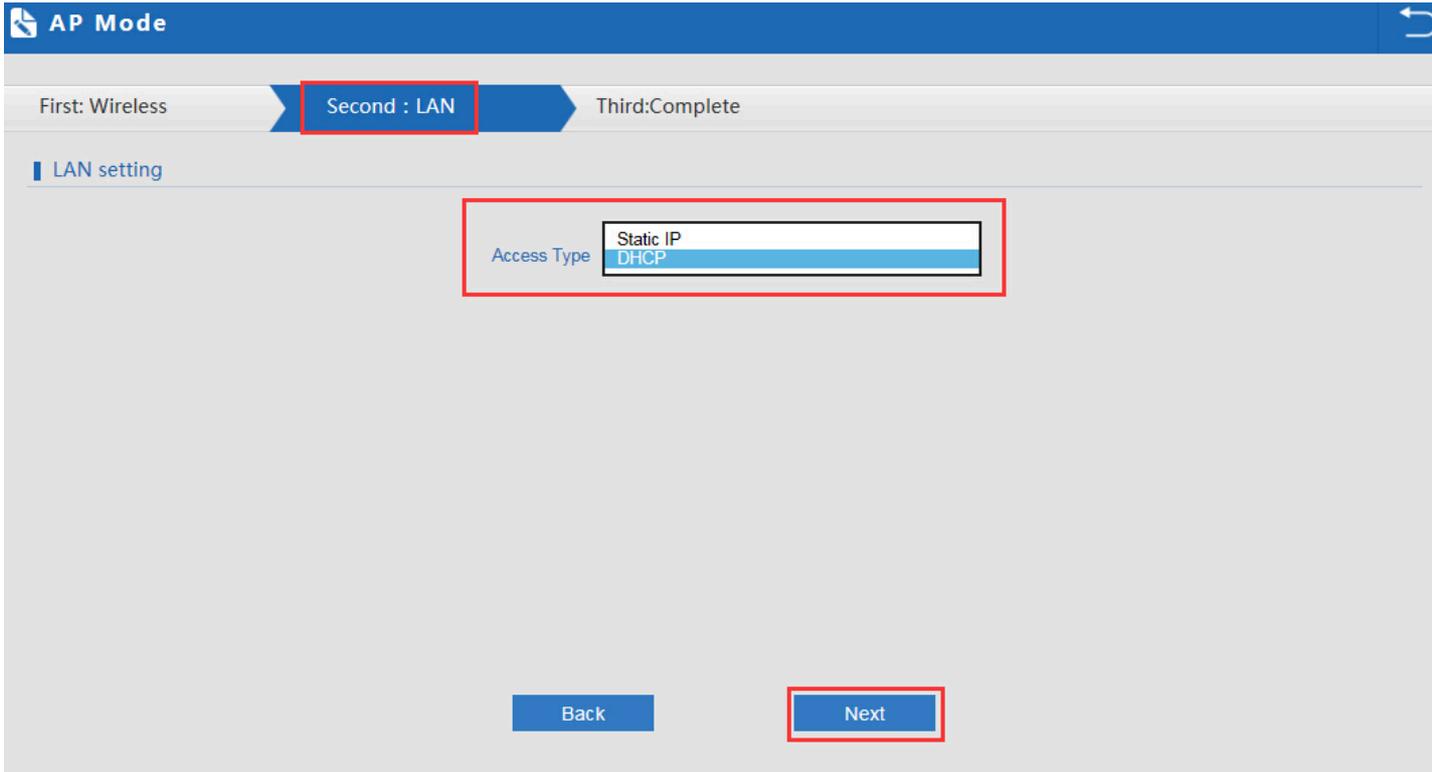
4. AP Operation mode:

Set the wireless data, AP Location info as required, then click next to continue and enter into LAN setting.

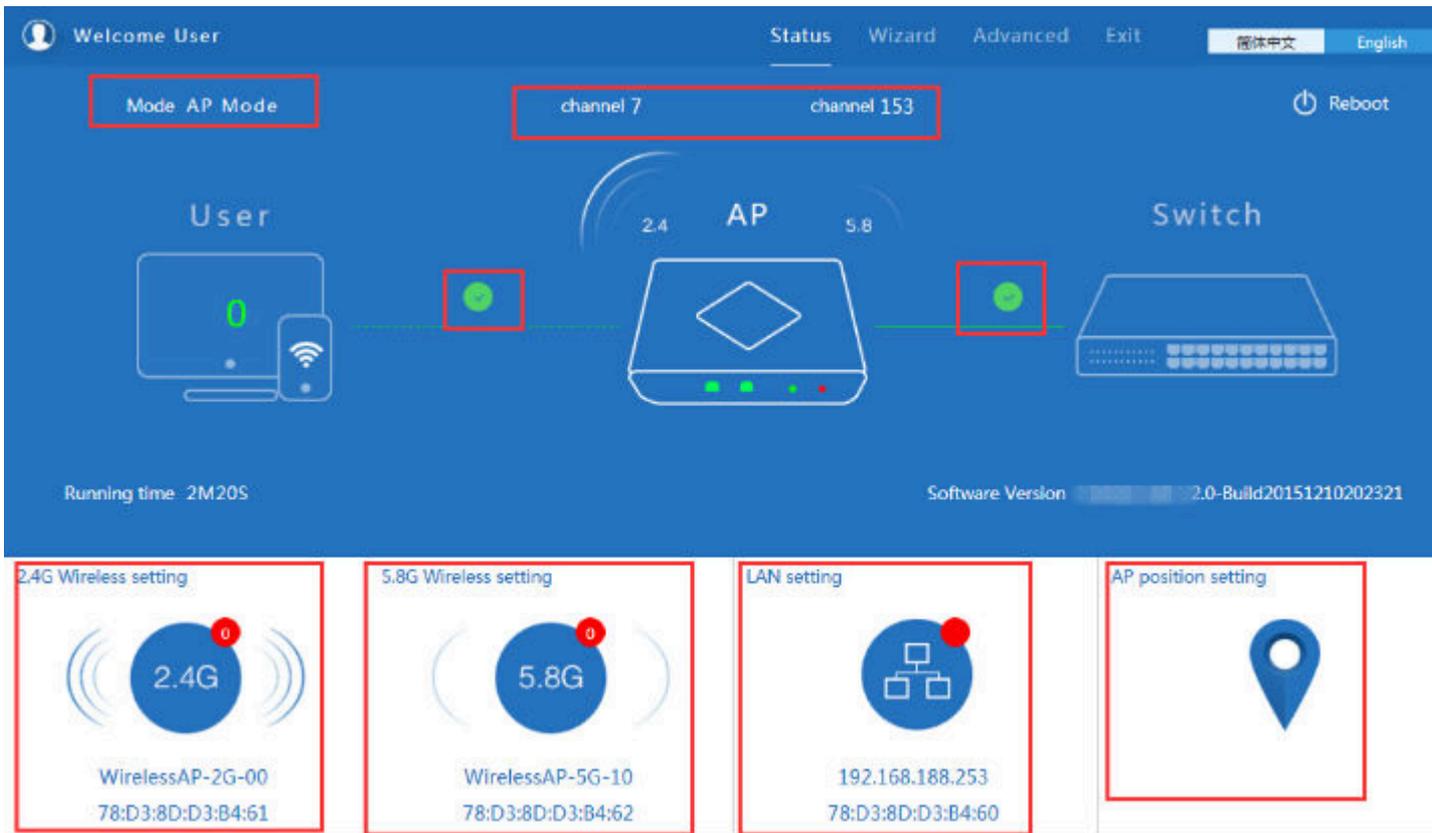
After LAN setting, complete the AP mode configuration and back to Status:



P26 Wireless setting in AP Mode



P27 LAN Setting in AP Mode



P28 Status in AP Mode

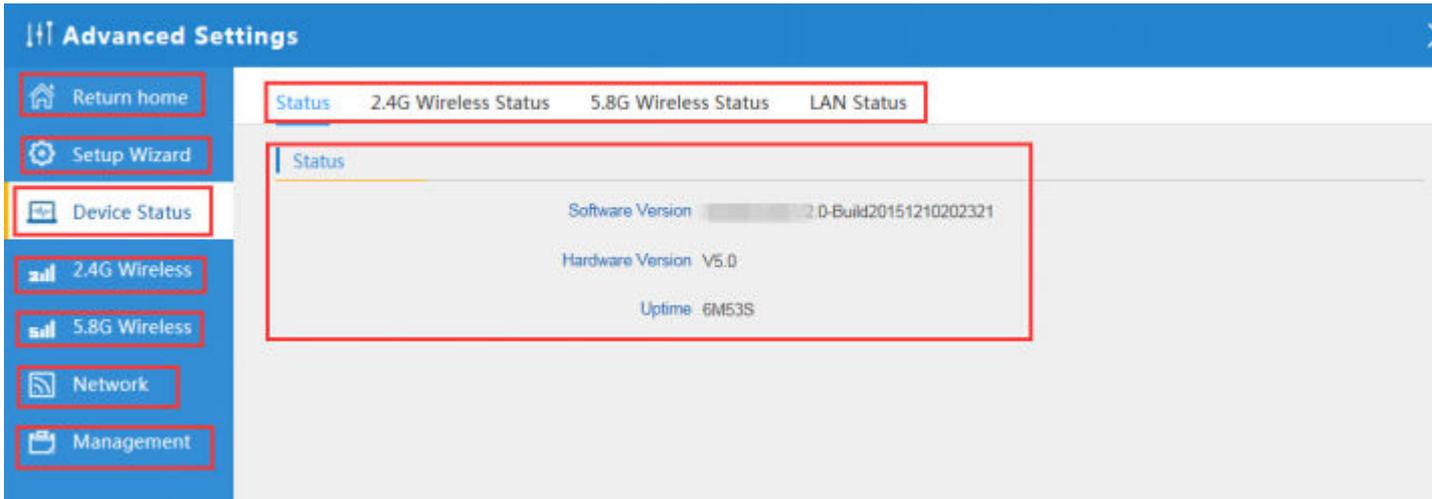
3) Advanced Setting:

In advanced setting, user can check the Outdoor Access Point's firmware version, working status, 2.4G wireless, 5.8G Wireless, LAN Status,

upgrade firmware, Reset...

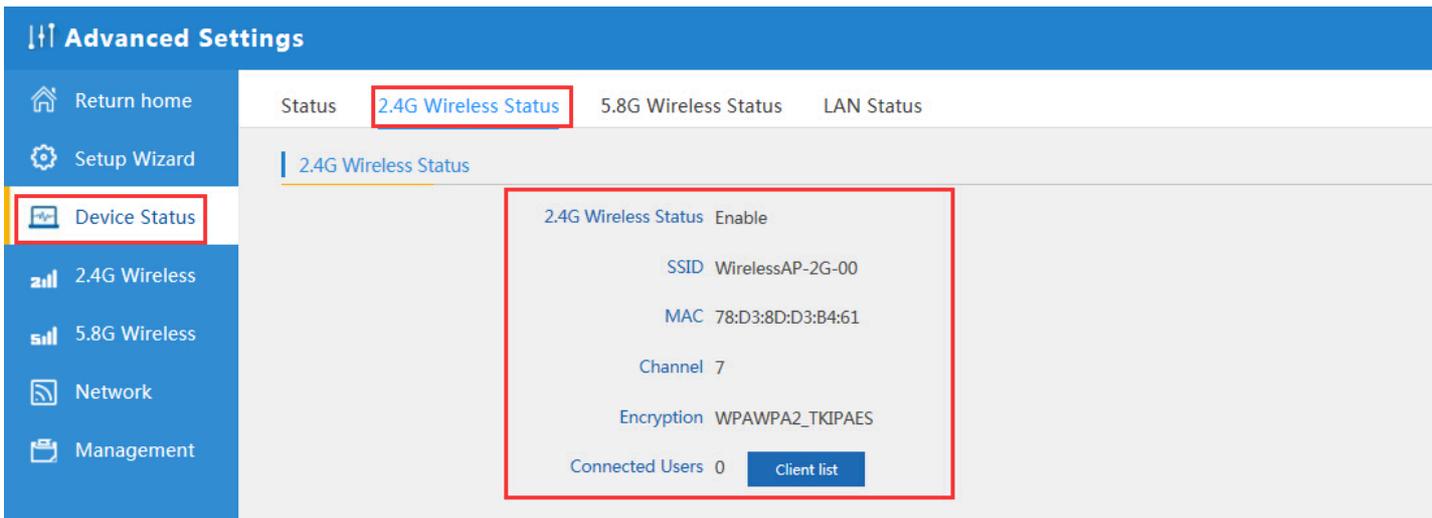
Let's Click Advanced Setting in status page, will show return home, Setup Wizard which we showed before.

Let's shown mode in Device Status, 2.4G Wireless, 5.8G Wireless, Network and Management.



P29 Device Status

Device Status: In this page, mainly to check the Outdoor Access Point's status in firmware version, 2,4G Wireless, 5.8G Wireless and LAN status:



P30 2.4G Wireless Status

Advanced Settings

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

Status 2.4G Wireless Status **5.8G Wireless Status** LAN Status

5.8G Wireless Status

5.8G Wireless Status: Enable

SSID: WirelessAP-5G-10

MAC: 78:D3:8D:D3:B4:62

Channel: 153

Encryption: WPAWPA2_TKIPAES

Connected Users: 0 [Client list](#)

P31 5.8G Wireless Status

Advanced Settings

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

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:D3:B4:60

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](#)

P32 LAN Status

2.4G Wireless Setting:

In this part, will show the 2.4G Basic Setting, Virtual AP, Access control and Advanced Setting:

Advanced Settings

Return home | **2.4G Basic Settings** | 2.4G Virtual AP | 2.4G Access Control | 2.4G Advanced Settings

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

Wireless Basic Settings

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

SSID:

Broadcast SSID: Disable Enable

WMM: Disable Enable

Channel

Band Width: ▼

Channel: ▼

Authentication

Encryption: ▼

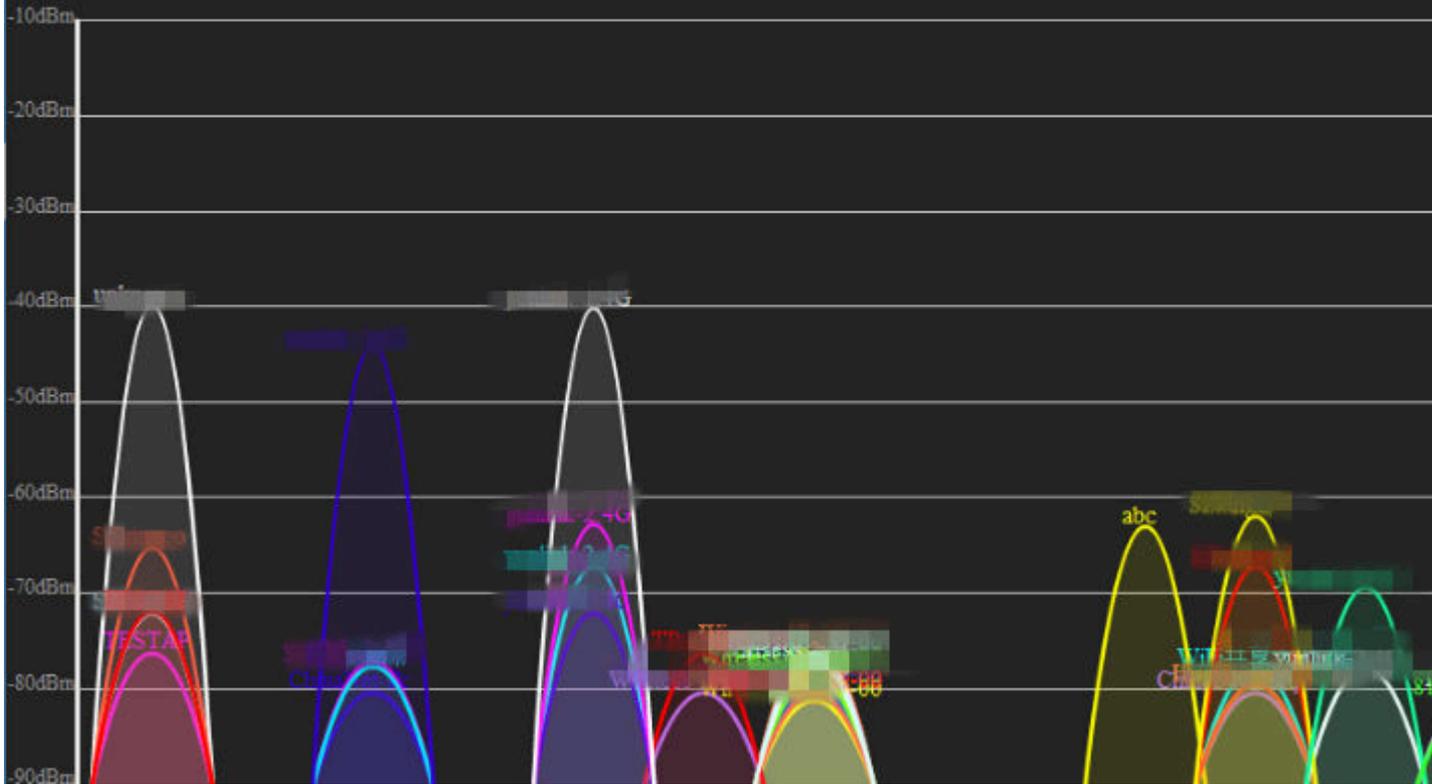
Key:

Apply

P33 Basic Setting in 2.4G Wireless

2G Wireless Analyzer: Mainly to analyze the AP's signal strength in some channel, to make user more easy to choose the right channel and avoid the wifi interface.

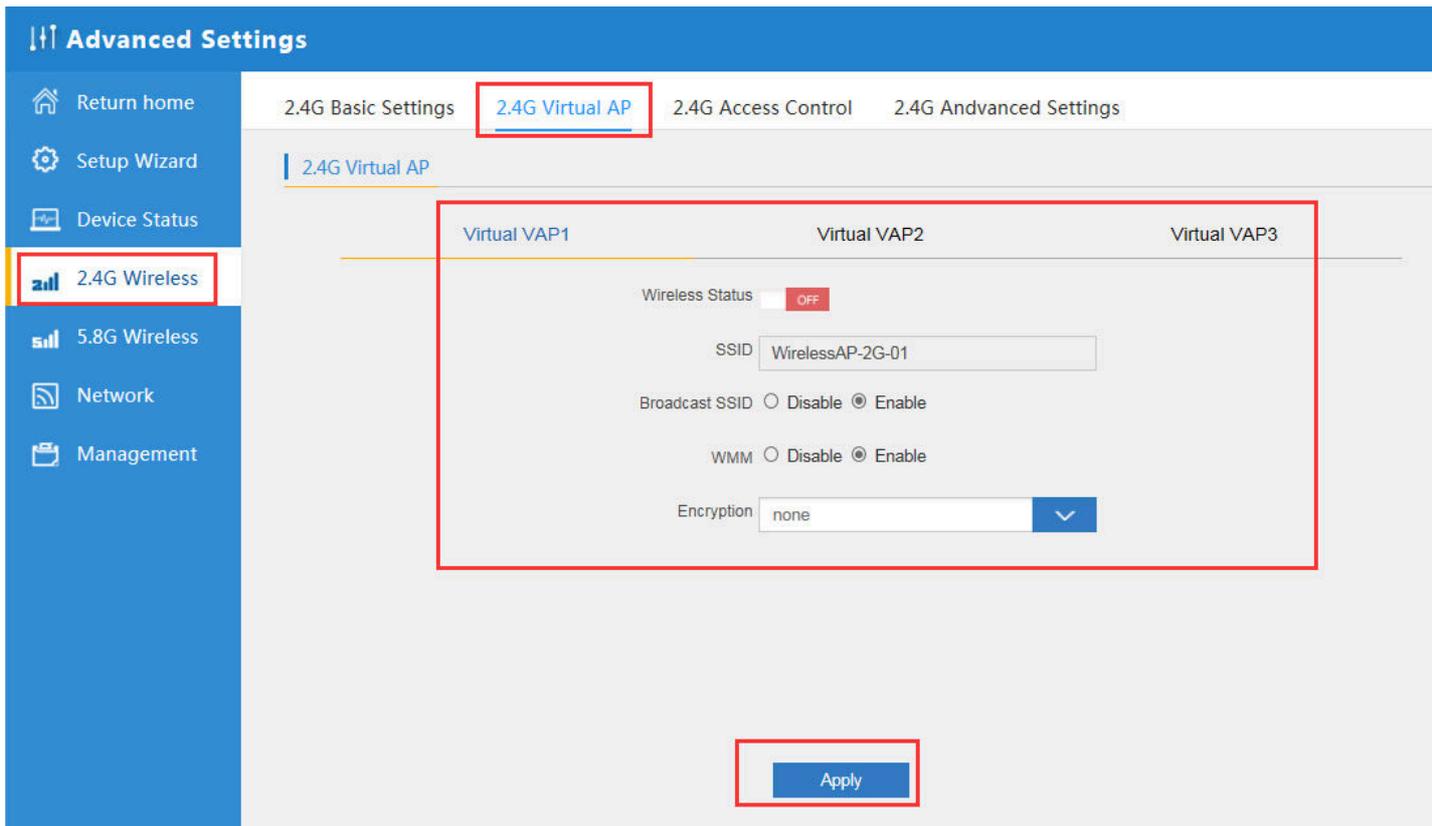
2.4Gwifi Channel analysis



P34 Wireless Analyzer

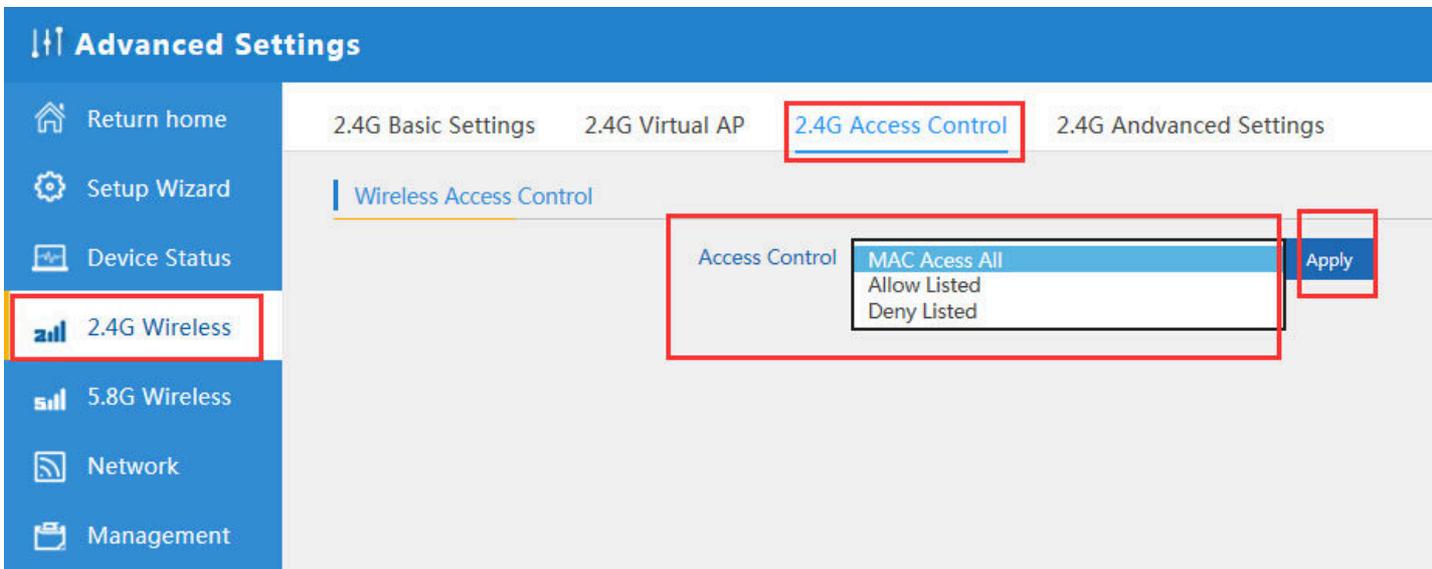
Virtual AP:

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



P35 Virtual AP

2.4G Access Control: Mainly show MAC allow or deny:



P36 MAC Access Control

2.4G Advanced Settings:

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

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**

2.4G Advanced Settings

Regional	China	▼	Channel(1-13)
MODE	802.11B/G	▼	
RF Output Power	100%	▼	
Packet Threshold	2346		(256-2346)
RTS Threshold	2346		(256-2346)
Ack Timeout control	64		(0-255)us
Beacon interval	100		(100-1000)ms
MAX User	64		(Range 0-64 0 not limited)
Coverage Threshold	-90		(-65dBm~-90dBm)

Aggregation ON Short GI ON User isolation OFF

Apply

P37 Advanced Setting

5.8G Wireless Setting: Almost same as 2.4G Wireless:

Advanced Settings

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

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

Wireless Basic Settings

Wireless Status ON OFF [5G wireless analyzer](#)

SSID

Broadcast SSID Disable Enable

WMM Disable Enable

Channel

Band Width

Channel

Encryption

Encryption

Key

P38 5.8G Wireless Setting

Network setting:

In this page, mainly to show the LAN setting and VLAN as follow:

P40 Tag VLAN Setting

Management:

In this part, show the system time, Logs, upgrade firmware, system, user info.

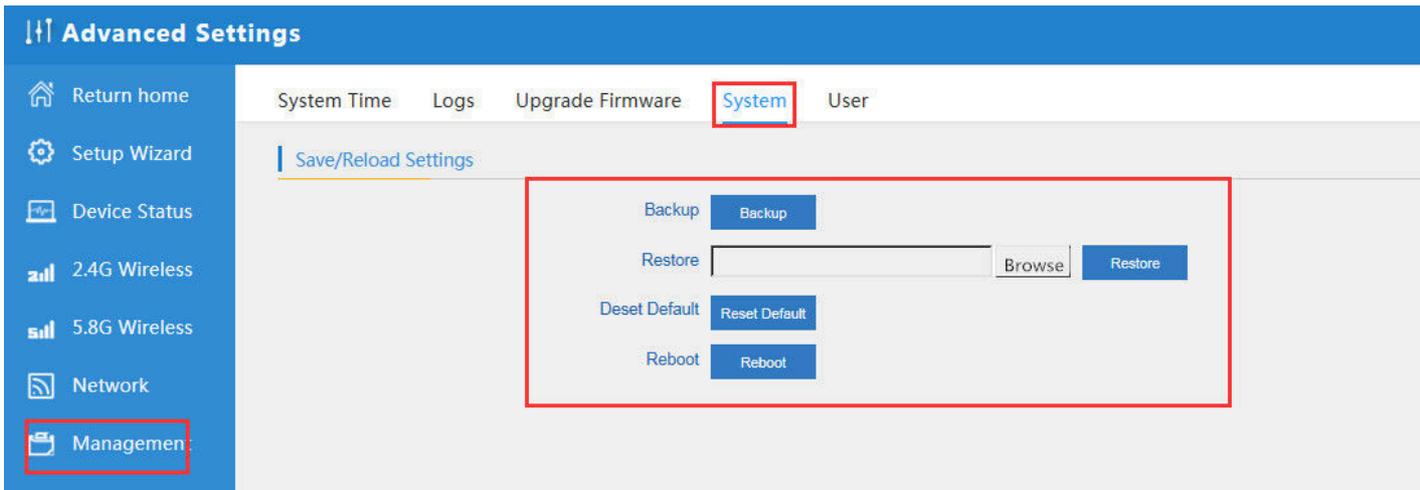
And we show System time, how to upgrade firmware and system page to users:

The screenshot displays the 'Advanced Settings' page with a sidebar on the left containing navigation options: Return home, Setup Wizard, Device Status, 2.4G Wireless, 5.8G Wireless, Network, and Management. The 'Management' option is highlighted with a red box. The main content area shows a navigation bar with 'System Time', 'Logs', 'Upgrade Firmware', 'System', and 'User'. The 'System Time' page is active, showing the current system time as 2015-10-30 11:16:34 and a 'Sync with host' button. Below this, there are three dropdown menus: 'Choose Time Zone' (set to Beijing, Chongqing, Urumqi, Re-Hong Kong, Taiwan), 'NTP Server' (set to time.windows.com), and 'Equipment timing' (with an unchecked checkbox and 'Auto restart' set to 23:00). An 'Apply' button is located at the bottom right of the configuration area.

P41 System Time

The screenshot displays the 'Advanced Settings' page with the 'Upgrade Firmware' option highlighted in the navigation bar. The 'Management' option in the sidebar is also highlighted with a red box and labeled '1st'. The 'Upgrade Firmware' page shows the current 'Software Version' as build20151210202321. Below this, there is a 'Choose File' input field with a 'Browse' button (labeled '3rd') and an 'Upgrade' button (labeled '4th'). A red-bordered note box contains the text: 'Note do not power off the device during the upload because it may crash the system!' (labeled '5th').

P42 Firmware Upgrade

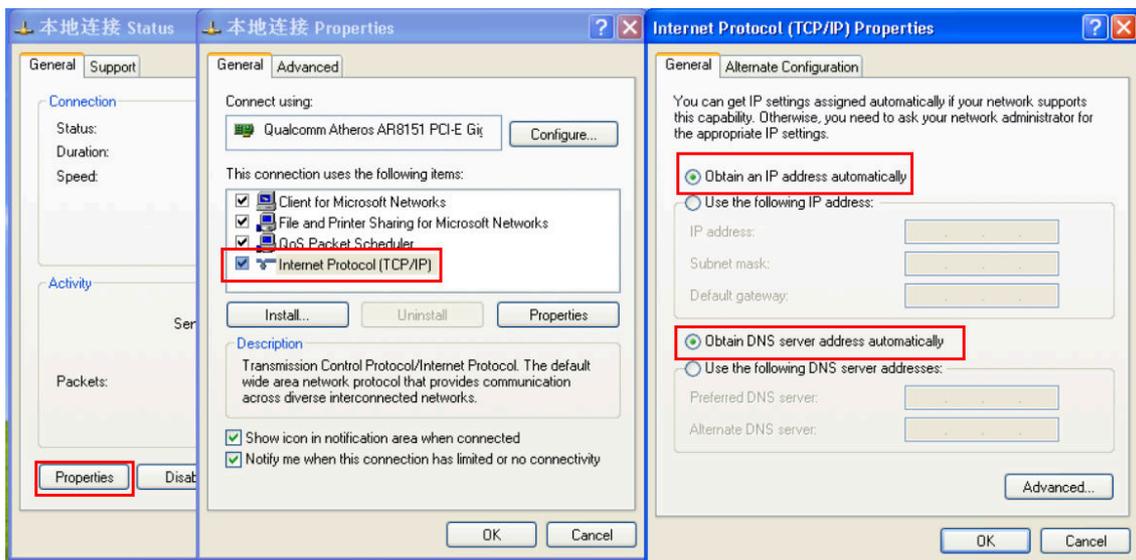


P43 System info

4th Share Internet and Obtain IP address automatically

Set computer's TPC/IP as [Obtain an IP address automatically](#), [Obtain DNS server address automatically](#) as following picture showed.

the computer will obtain the IP address from router or base station to get Internet.



Trouble Shooting:

F 1 The Failure phenomenon and solution

Failure phenomenon	Solution
SYS Indicator off	Pls make sure the PoE module connection is right. POE Port

	connect with AP, LAN port connect with computer
Can't land to Outdoor Access Point through Web page	<p>Pls check the IP address of computer and Outdoor Access Point to see whether they are in same networking segment, The method is click "start"- "Run" input "cmd", ping 192.168.188.253 to test the Outdoor Access Point connectivity.</p> <p>Reset Outdoor Access Point and load it again;</p> <p>Pls make sure the IP address 192.168.188.253 is not occupied by other device in Outdoor Access Point's networking;</p> <p>Check computer and cable problem, recommend to use 10/100M UTP unshielded cable;</p> <p>Clean up Arp binding from "Start"- "Run" input "cmd" arp -d</p> <p>Clean the IE Brower's temporary files and Cache file.</p>
Outdoor Access Point can't connect with AP (the status display unconnected)	<p>Try to scan the available wireless networking again;</p> <p>Make sure the Outdoor Access Point's wireless standard (11b/g/n, 2.4G) is correct;</p> <p>The Security and passwords are matched between Outdoor Access Point and AP;</p> <p>The signal strength of AP is too weak to connect, should be more than -75dBm;</p>
Can't scan the Outdoor Access Point	<p>Scan it several times more;</p> <p>Make sure there are 5G signal existed.</p> <p>Reset the Outdoor Access Point, scan it again after Outdoor Access Point restart;</p>
The connection of Outdoor Access Point and AP is success, but the computer can't share internet	<p>Pls Check the computer's IP address and DNS setting. If it is dynamin, set the network card as automatically obtain. If it is static IP, pls contact with ISP for correct IP address and DNS address.</p>
How to Reset Outdoor Access Point	<p>Press the "Reset" button more than 15 seconds after power on. The Outdoor Access Point will restore factory default after the Outdoor Access Point restart.</p>

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note 2: 1.Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2. The minimum separation generally be used is at least 20 cm.