

# NWA300

## User Manual of 11ac 1200Mbps Ceiling AP



This is the user manual of the NWA300, 11ac 1200Mbps Ceiling AP, which will approximate guide you to set and apply the AP, it provides a convenient graphical interface for network construction and maintenance person, as well as a user guide for simple and accurate operation, and configuration management of the wireless access point.

Contents

<b>1</b>	<b>HARDWARE AND OPERATION MODE INSTRUCTION.....</b>	<b>3</b>
1.1	LED INDICATOR: .....	3
1.2	AP INTERFACE: .....	3
1.3	POWER SUPPLY: .....	3
<b>1.3.1</b>	<b>PoE Adapter Power Supply:.....</b>	<b>3</b>
<b>1.3.2</b>	<b>Powered by PoE Switch .....</b>	<b>4</b>
<b>1.3.3</b>	<b>Operation Mode: .....</b>	<b>4</b>
<b>1.3.4</b>	<b>Connect Wireless AP with PC: .....</b>	<b>5</b>
1.4	LOGIN.....	6
<b>1.4.1</b>	<b>Default settings .....</b>	<b>6</b>
<b>2</b>	<b>WEB GUI INTERFACE SETTING:.....</b>	<b>8</b>
2.1	STATUS .....	8
2.2	WIZARD CONFIGURATION: .....	11
<b>2.2.1</b>	<b>Gateway Mode:.....</b>	<b>11</b>
<b>2.2.2</b>	<b>WiFi Repeater mode.....</b>	<b>14</b>
2.3	WISP OPERATION MODE: .....	16
2.4	AP OPERATION MODE: .....	18
2.5	ADVANCED SETTING: .....	20
<b>2.5.1</b>	<b>Turn off LEDs .....</b>	<b>22</b>
<b>2.5.2</b>	<b>2.4G Wireless Setting: .....</b>	<b>23</b>
<b>2.5.3</b>	<b>Virtual AP: .....</b>	<b>24</b>
<b>2.5.4</b>	<b>2.4G Access Control: .....</b>	<b>25</b>
<b>2.5.5</b>	<b>2.4G Advanced Settings: .....</b>	<b>25</b>
<b>2.5.6</b>	<b>5.8G Wireless Setting: .....</b>	<b>26</b>
<b>2.5.7</b>	<b>Network setting: .....</b>	<b>27</b>
<b>3</b>	<b>SHARE INTERNET AND OBTAIN IP ADDRESS AUTOMATICALLY .....</b>	<b>30</b>
3.1	TROUBLE SHOOTING: .....	31

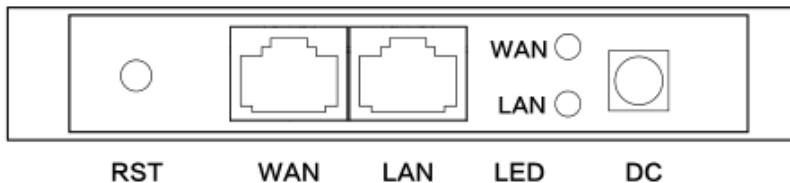
# 1 Hardware and Operation mode Instruction



## 1.1 LED indicator:

Green: Power Indicator  
Blue: WiFi Indicator

## 1.2 AP Interface:



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

WAN: Gigabit WAN Port, connect with ADSL modem or Internet mainly. It will be LAN port under Wireless AP and WiFi Repeater operation mode

LAN: Gigabit LAN Port to end users

LED: LED Indicator of WAN port and LAN port

DC: DC power connector

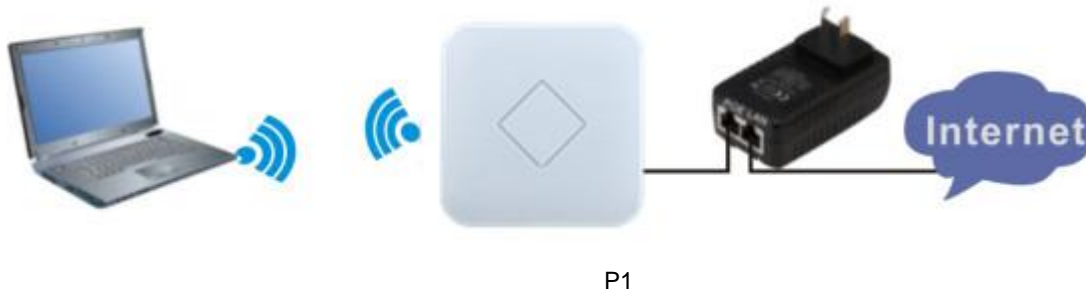
## 1.3 Power Supply:

### 1.3.1 PoE Adapter Power Supply:

The connection diagram showed as P1, internet cable connect to PoE adapter's LAN Port, Ceiling AP's WAN port connect to PoE adapter's PoE Port, then PC will access into ceiling AP through cable or wireless

Pls note, if the PD Wireless AP support 24V passive PoE, then the PoE adapter should be 24V Passive PoE,.

If the PD wireless AP support 48V IEEE 802.3af standard PoE, the PoE adapter should be 48V PoE standard.

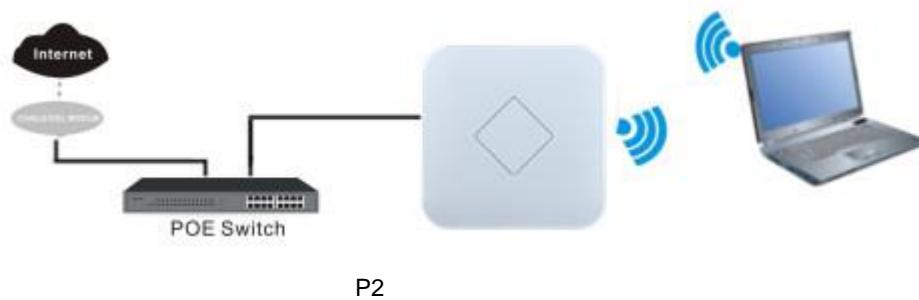


### 1.3.2 Powered by PoE Switch

The connection diagram shows as P2, Internet cable from PoE Switch to Ceiling AP's WAN Port, then PC access into ceiling AP wired/wireless.

Pls note, if the PD Wireless AP support 24V passive PoE, then the PoE switch should be 24V Passive PoE,.

If the PD wireless AP support 48V IEEE 802.3af standard PoE, m the PoE switch should comply with 802.3af 48V PoE standard.



### 1.3.3 Operation Mode:

There are three operation modes on this wireless AP:

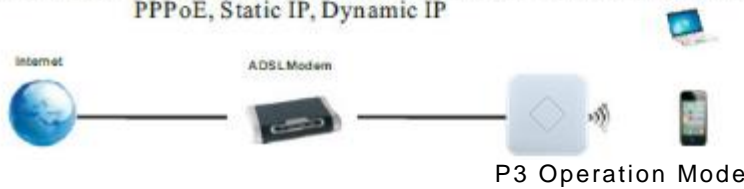
1. Wireless AP: Plug and Play to transmit Wireless signal for wireless end users from wired networking



2. Wireless Repeater: Wireless receive and transmit, to extend the existing wireless networking for more range.



3. Gateway: Supply WAN connection from DSL, Cable Modem or broadband mobile phone network through PPPoE, Static IP, Dynamic IP

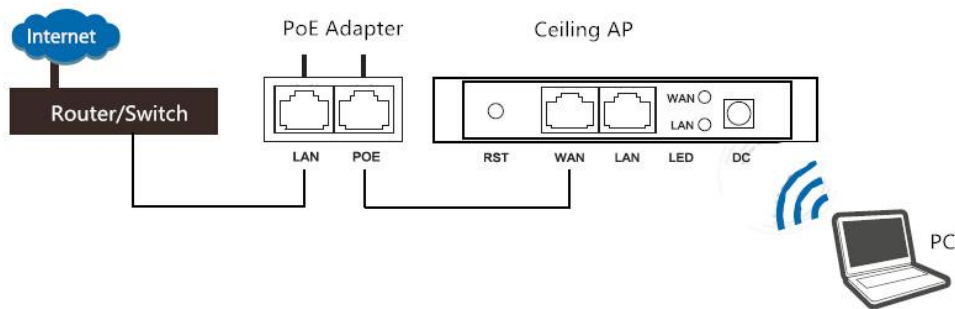


1.3.4 Connect Wireless AP with PC:

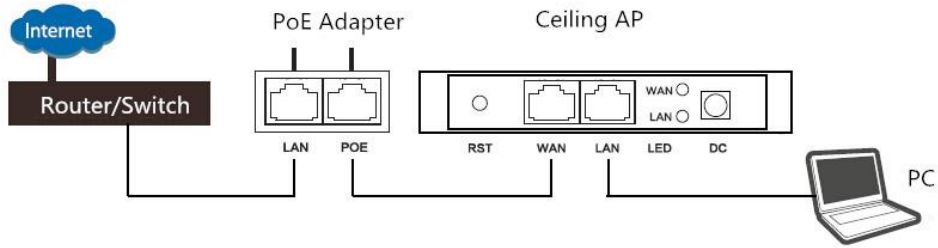
U can connect the PC with wireless AP by Wireless SSID and LAN cable:

The diagram of wireless connection showed as follow:

Pls note: the default SSID is **WirelessAP2.4G/5.8G**, **SSID's password is 66666666**



The diagram of LAN cable connection showed as follow:



## 1.4 Login

### 1.4.1 Default settings

**Default IP: 192.168.2.200**

**User: admin**

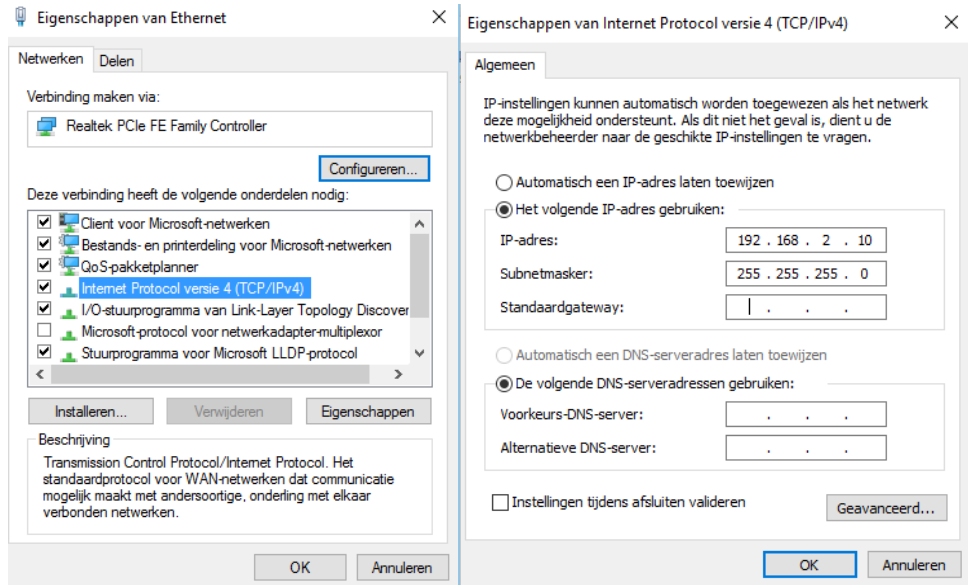
**Password: admin**

1) Connect the Ceiling AP with computer

2) Configure the PC's local connection IP address as 192.168.2.X (X is number from 2 to 254), subnet mask is 255.255.255.0, follow P4 and P5 to finish.



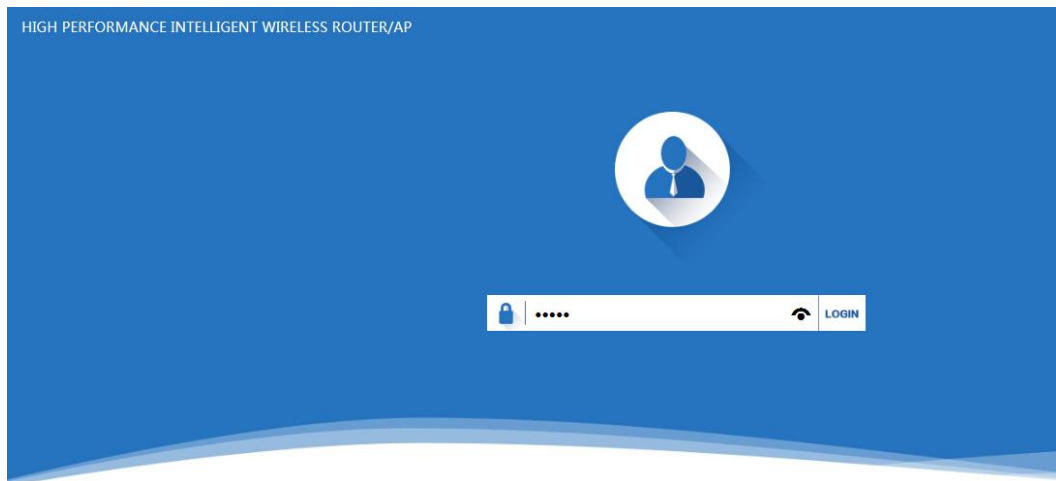
P4 Setting of computer's IP address



P 5 Setting of computer's IP address

3) Input 192.168.2.200 into browser, then pop up the login page,

the default login user name: Admin, Passwords: admin, pls do following P6



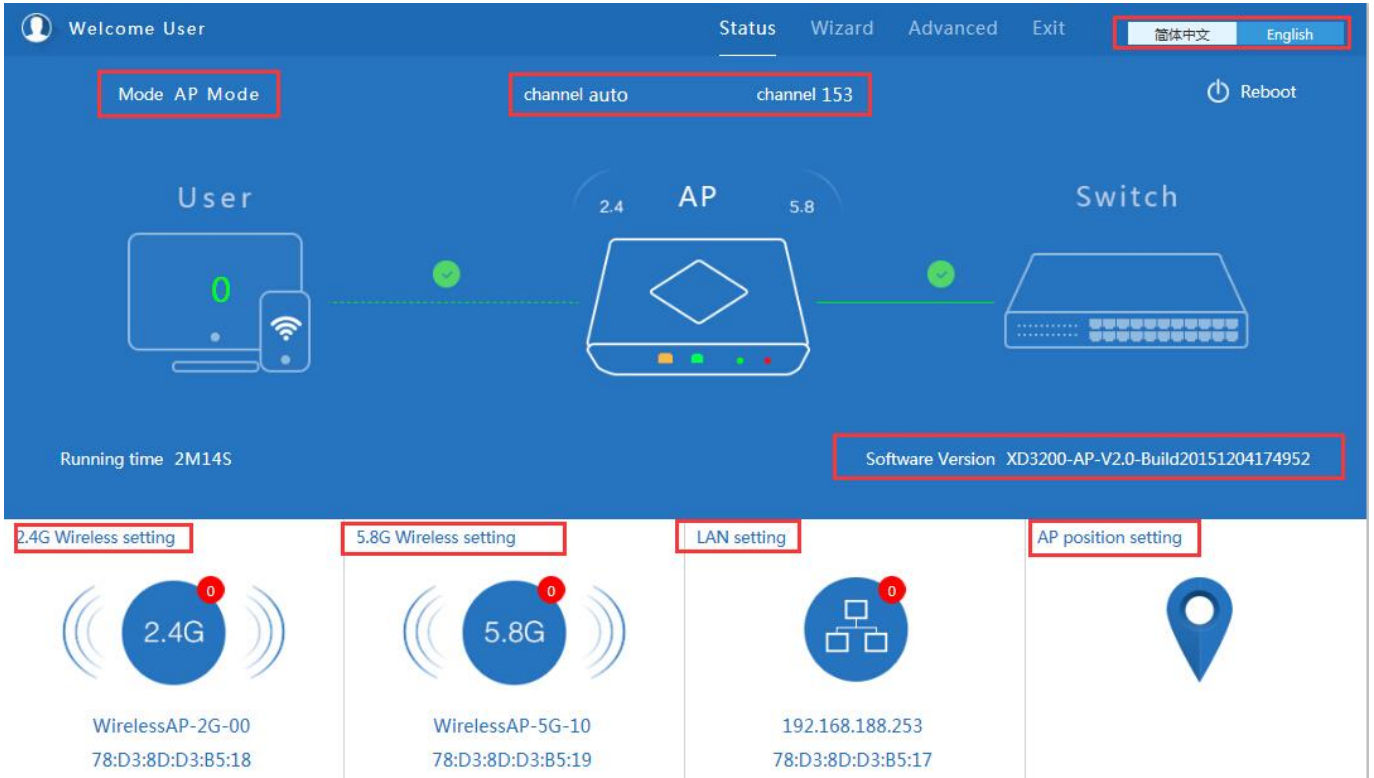
软件版本(version) XD3200-AP-V2.0-Build20151204030606

P6 Login

## 2 WEB GUI interface Setting:

### 2.1 Status

After login, then P7 Device Status will be showed:



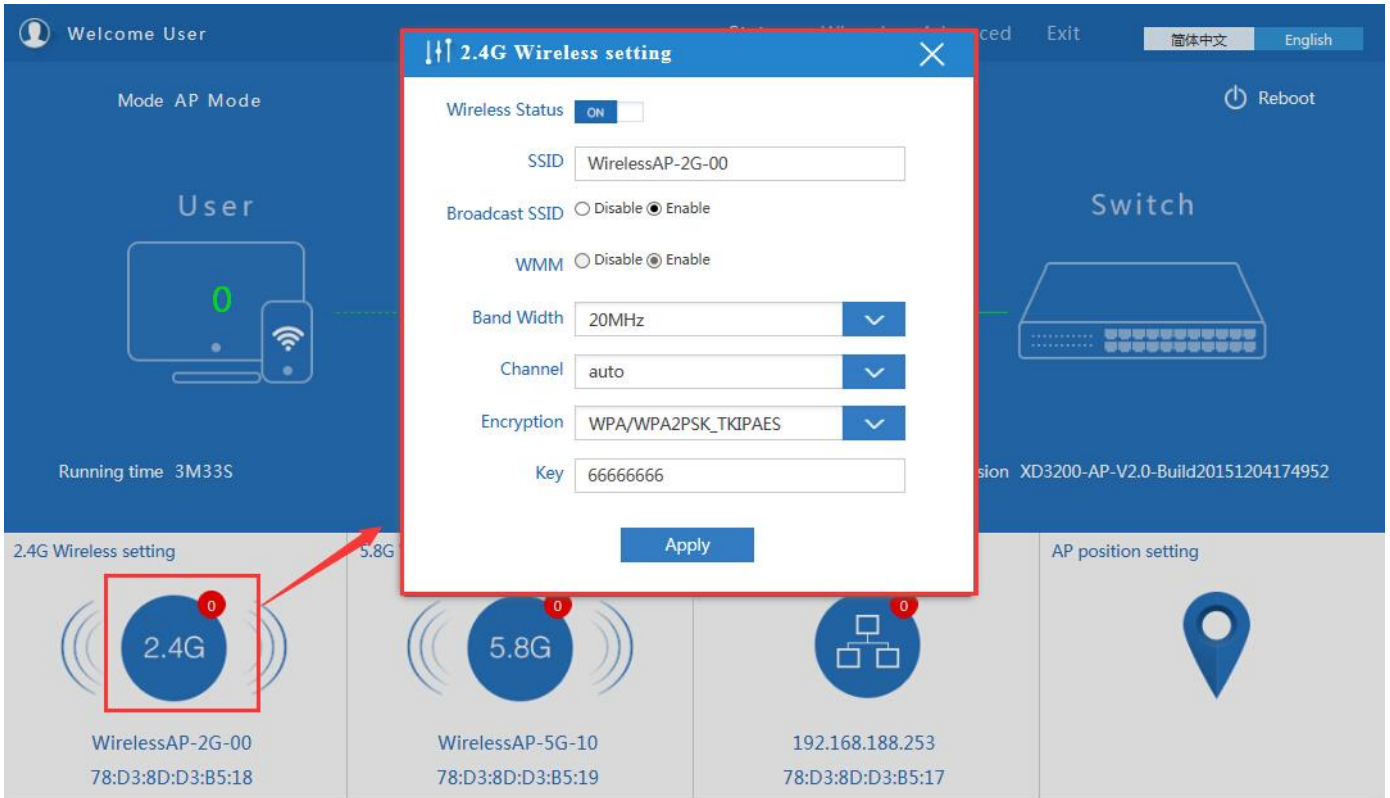
P7: Device Status

In this ceiling wireless AP, the default operation mode is AP mode.

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

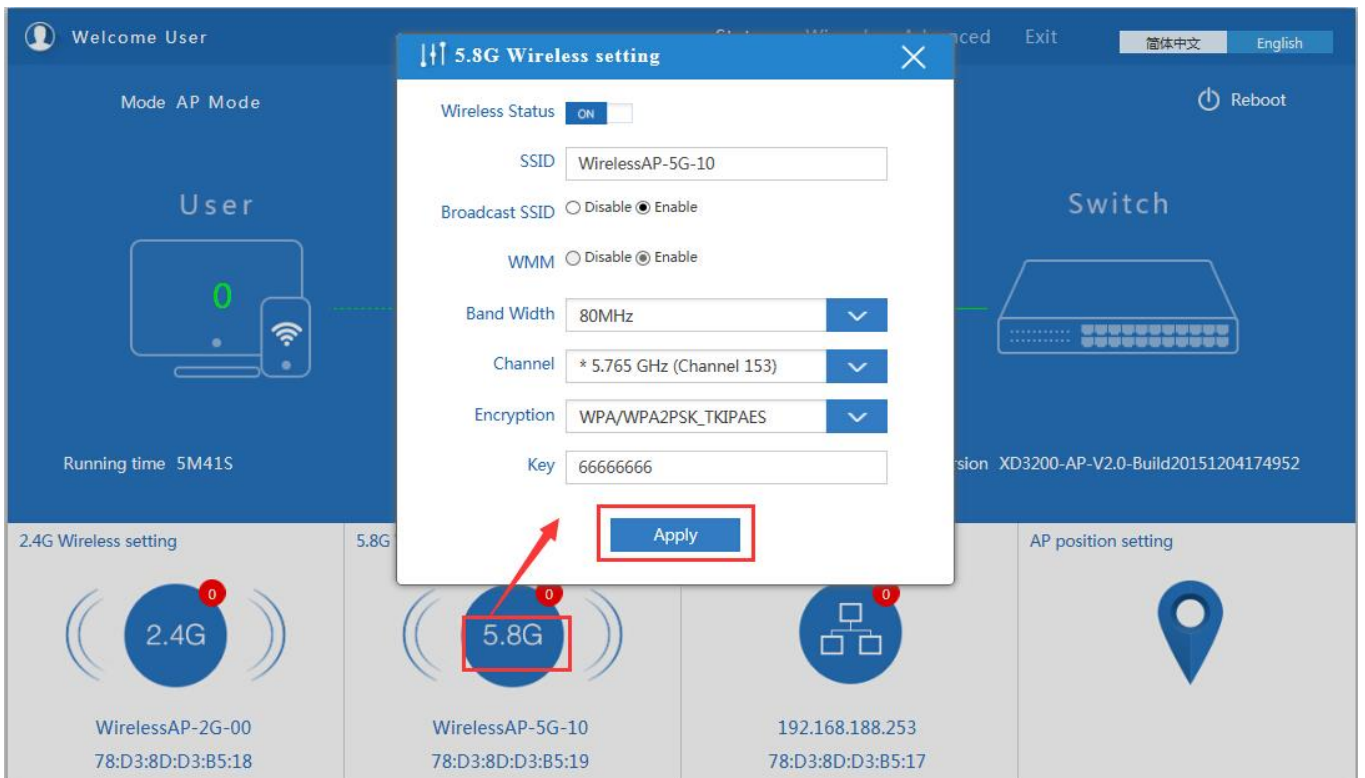
User can configure the SSID, password, band width, channel here, then Apply to finish.





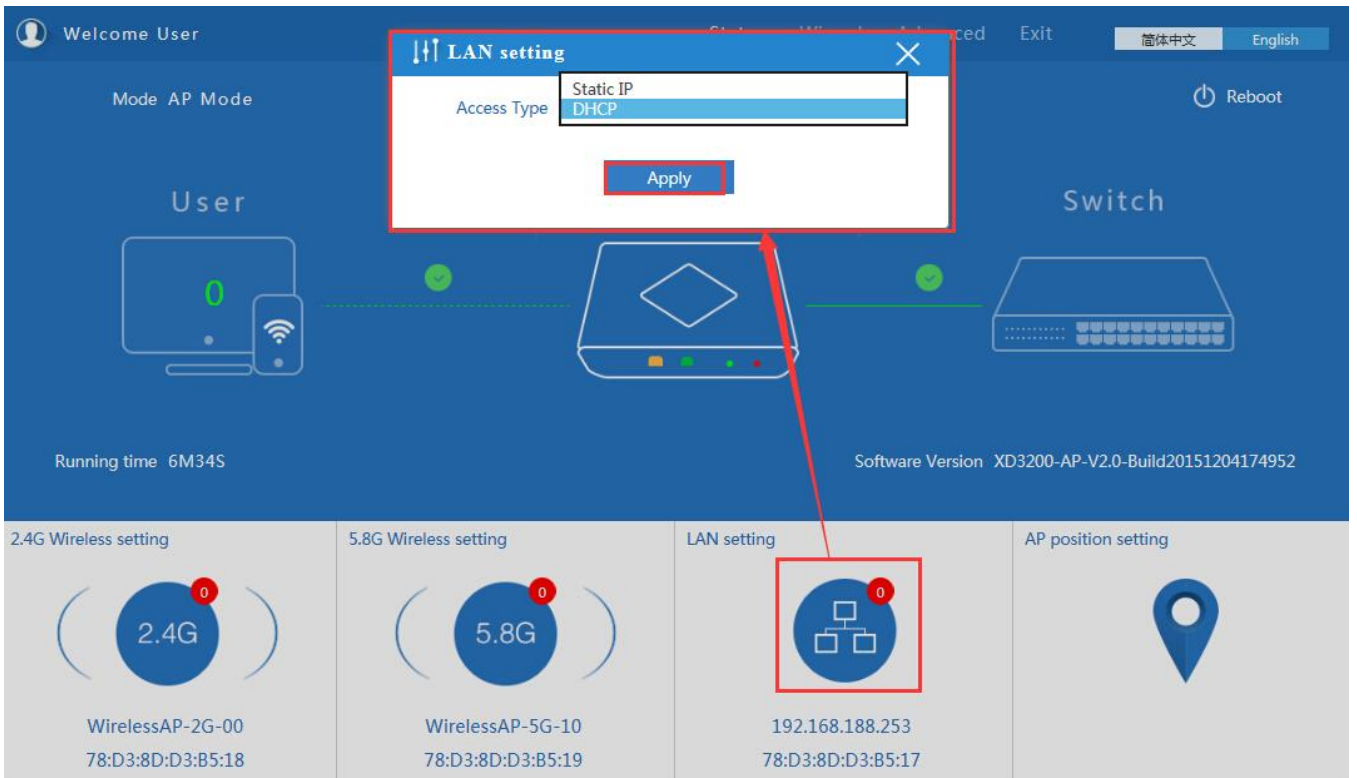
P8. 2.4G Wireless setting

5.8G Wireless Setting GUI configuration setting showed as P8:



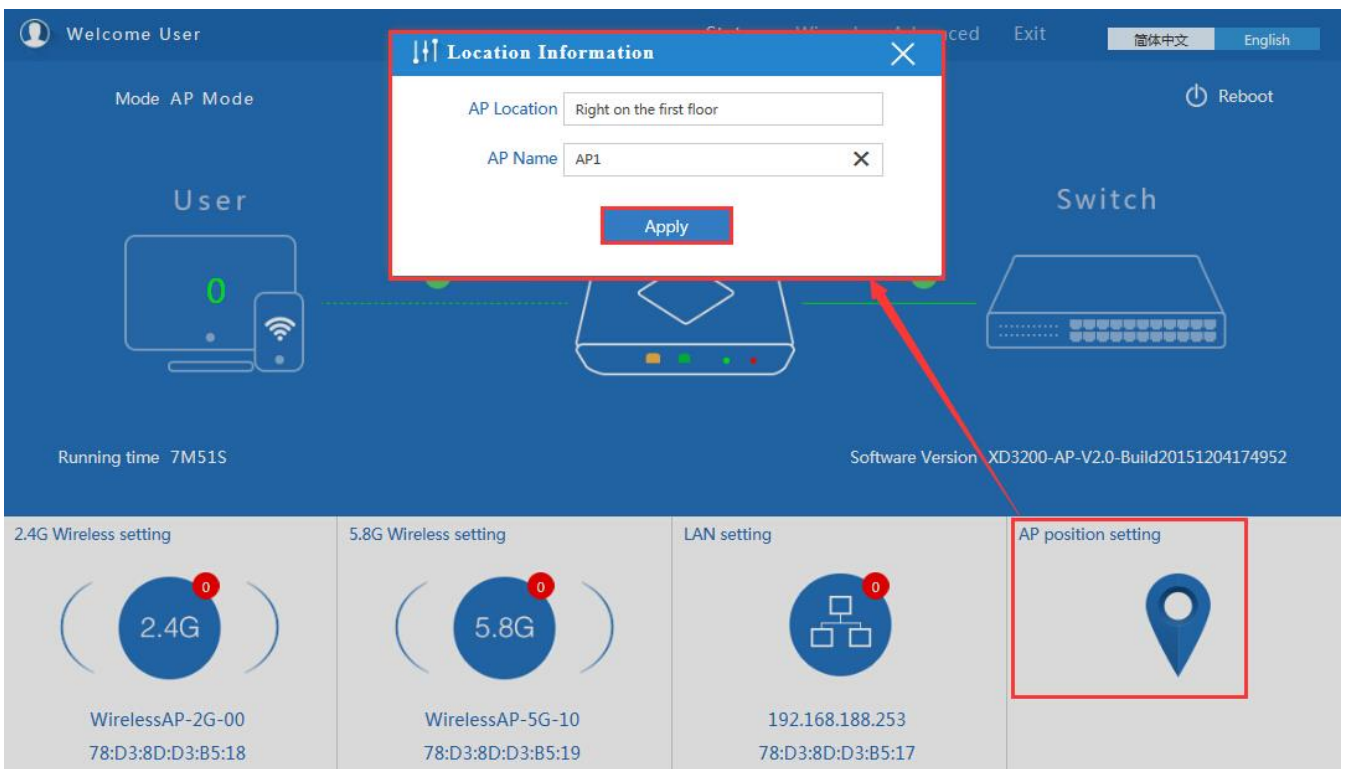
P9 5.8G Wireless Setting

LAN Setting to configure the DHCP or Fix IP



P10 LAN Setting

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

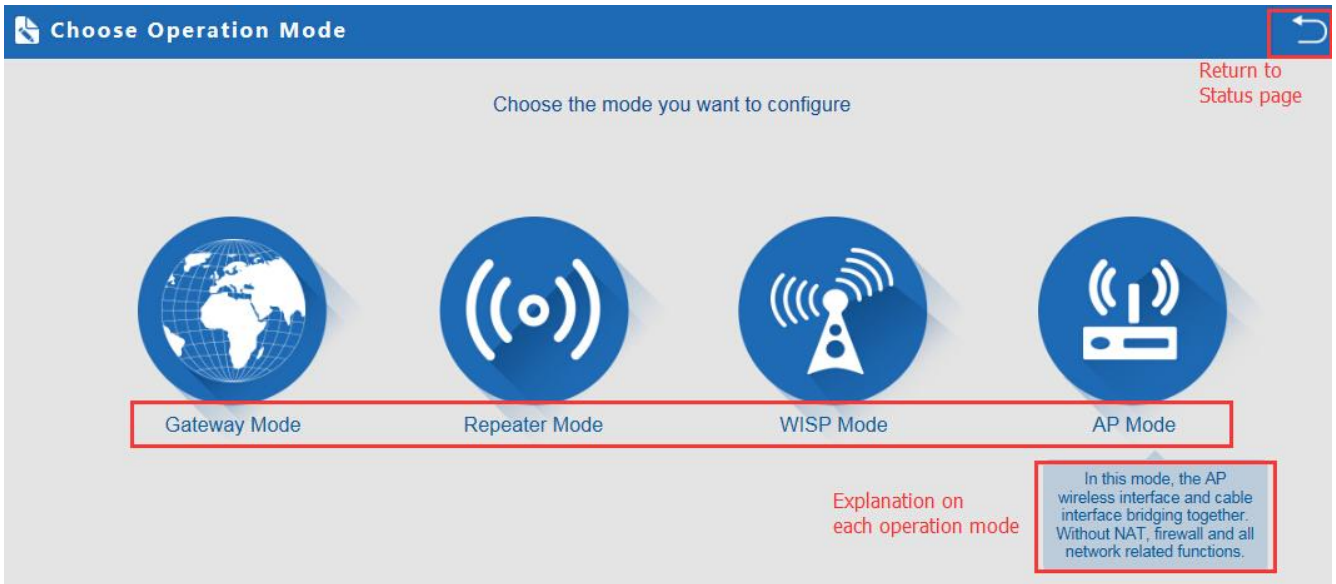


P11 AP Postion setting

## 2.2 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 wireless AP, and there are explanation for each operation mode for better application.

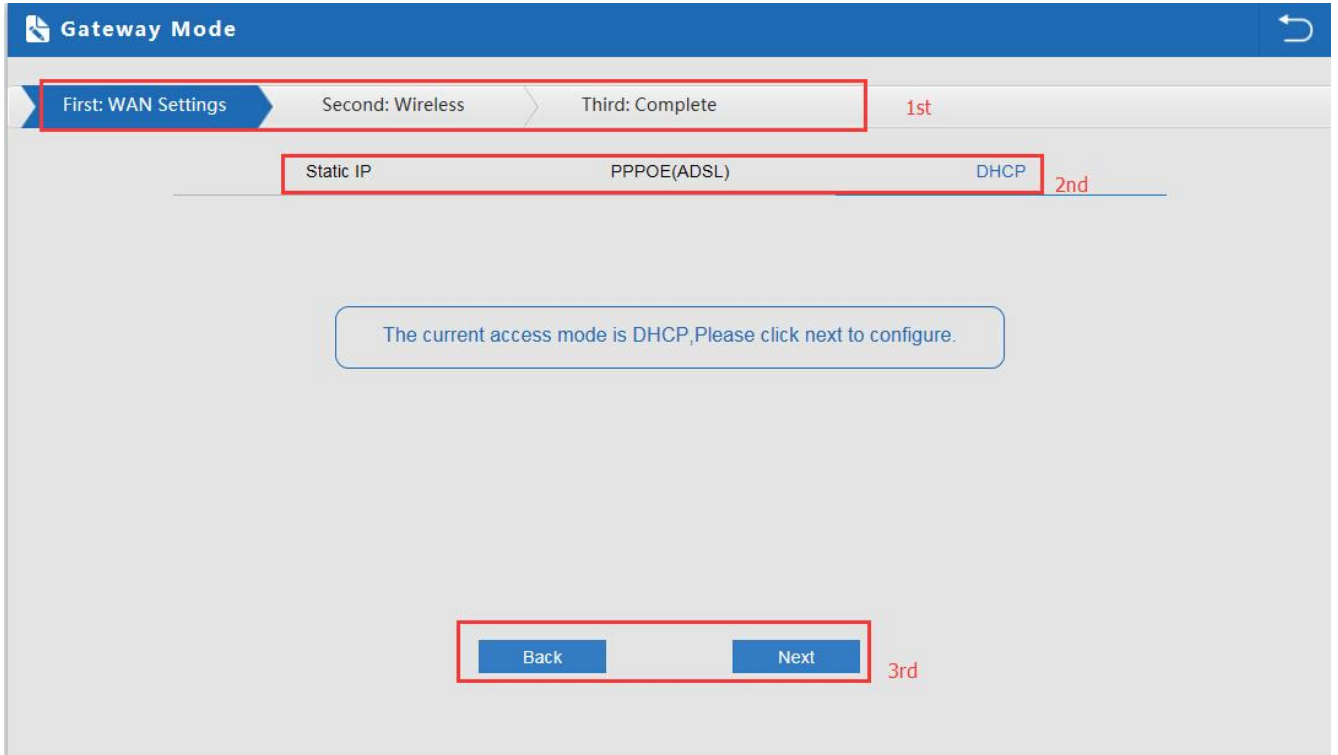


P12 Operation mode

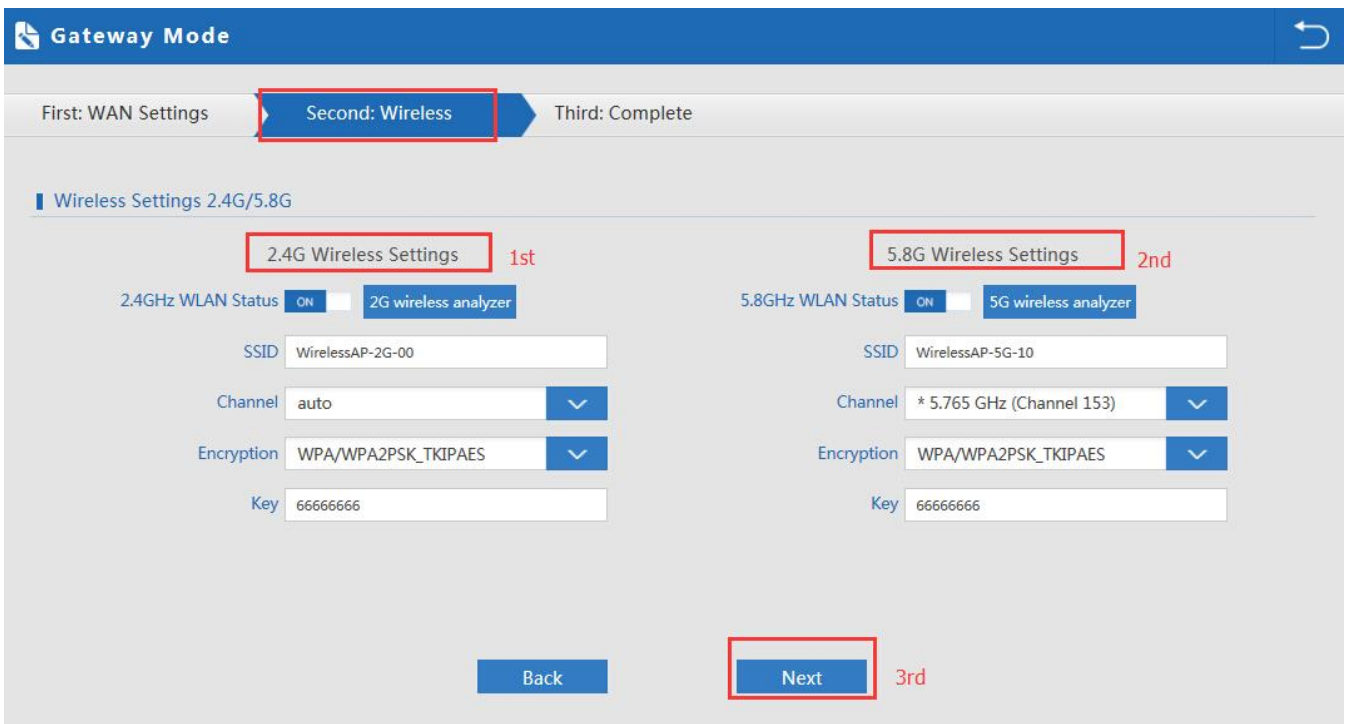
### 2.2.1 Gateway Mode:

Click Gateway mode, will pop up following pictures:

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

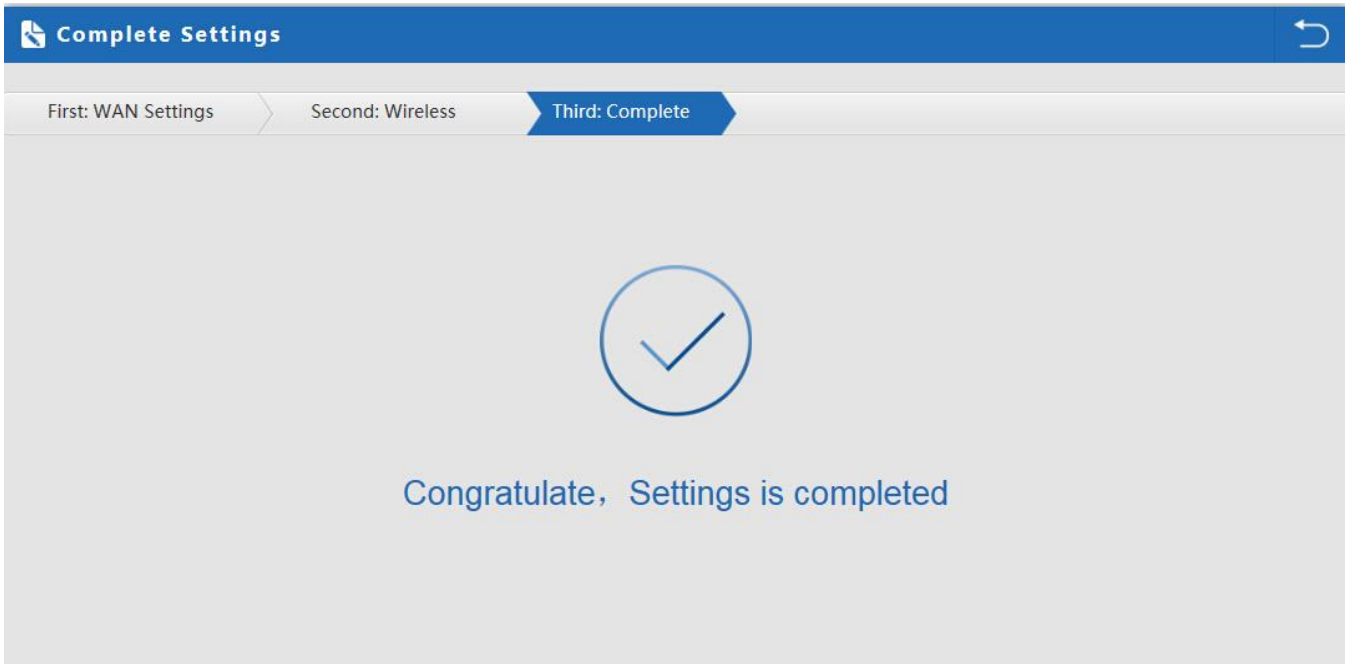


P13. WAN setting in Gateway Mode



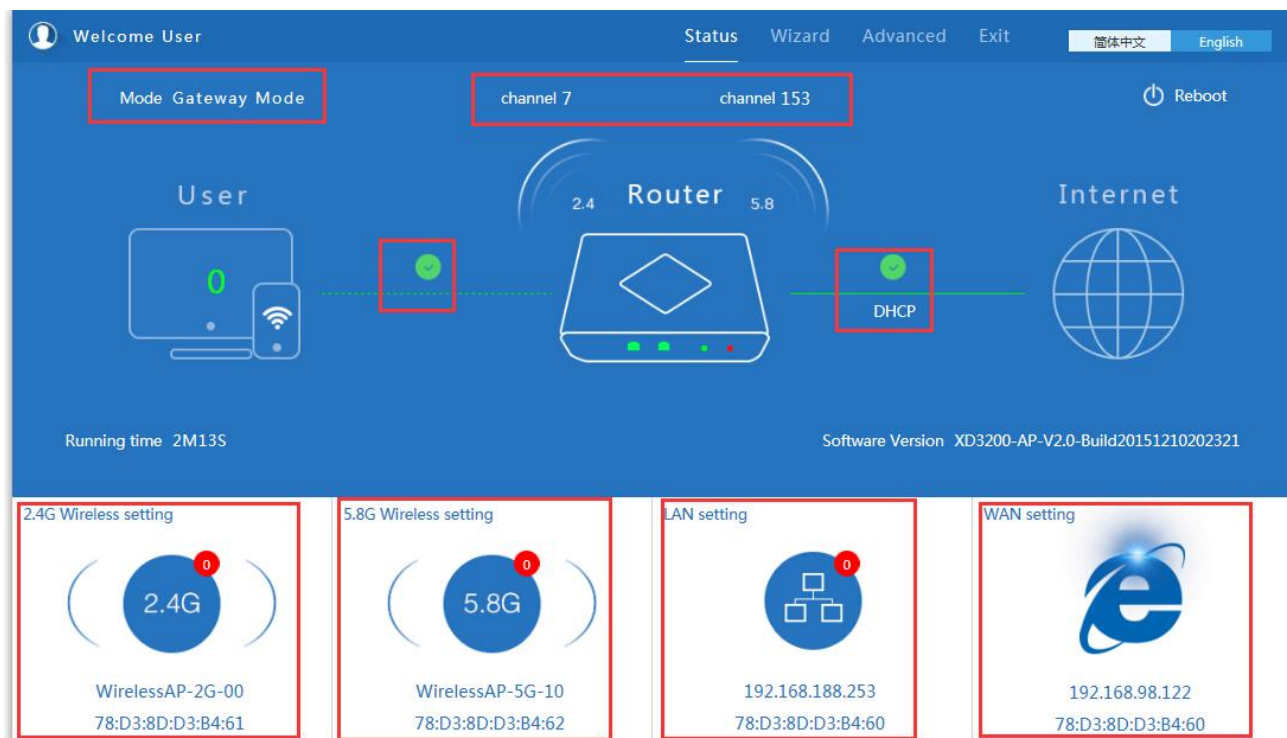
P14 Wireless Setting in Gateway Mode

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



P15 Complete the setting in Gateway Mode

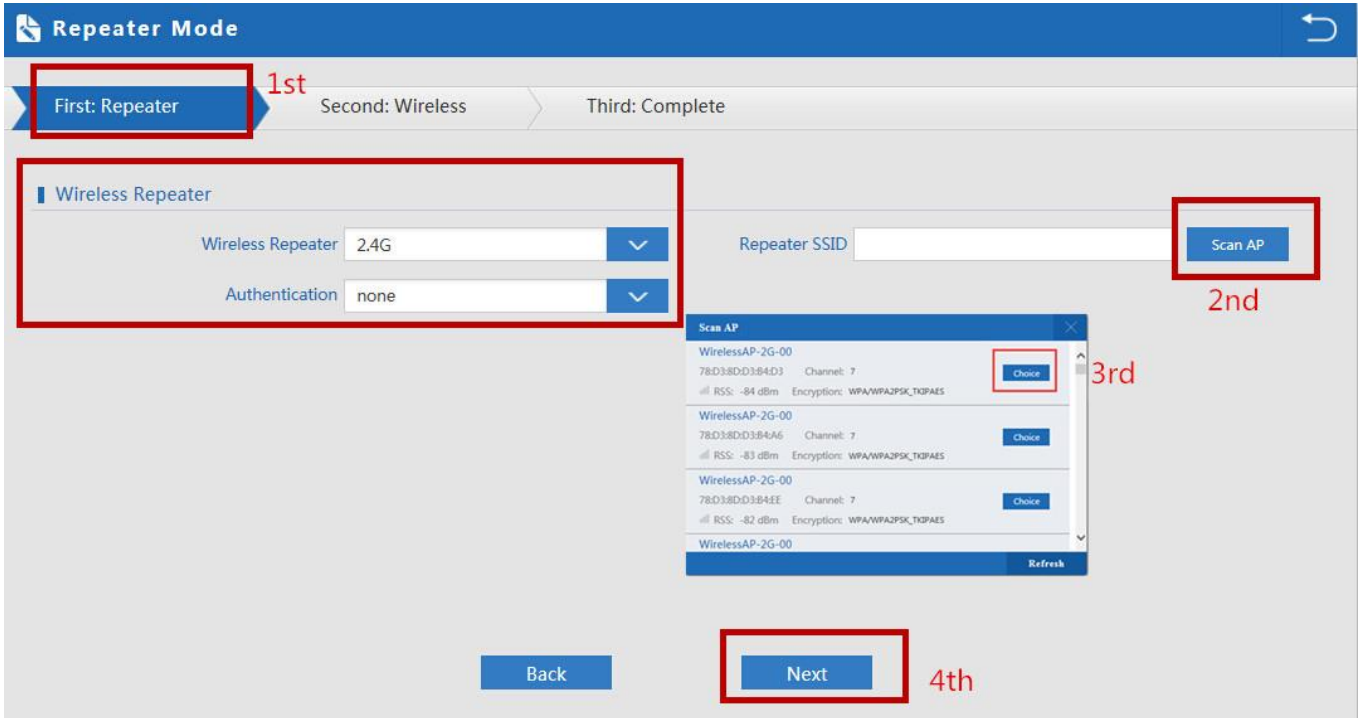
When return to Status, the page showed as follow:



P16 Status in Gateway Mode

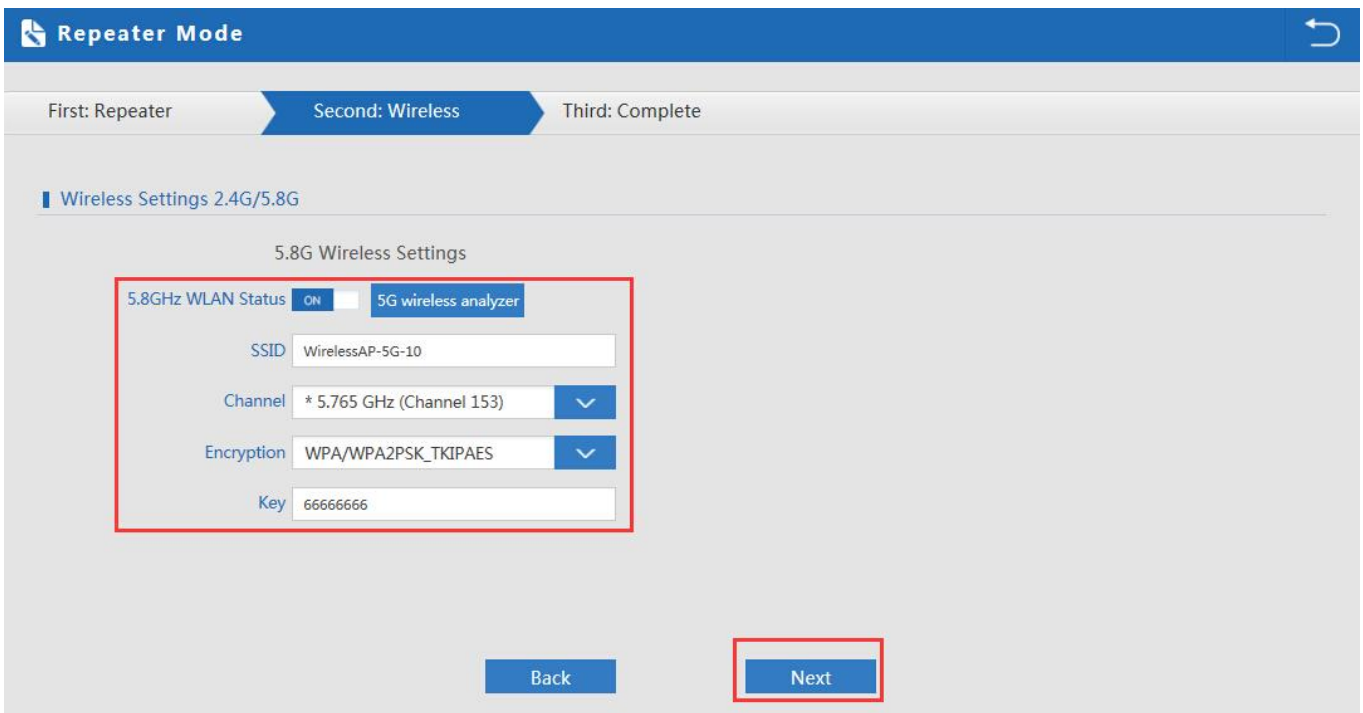
## 2.2.2 WiFi Repeater mode

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:



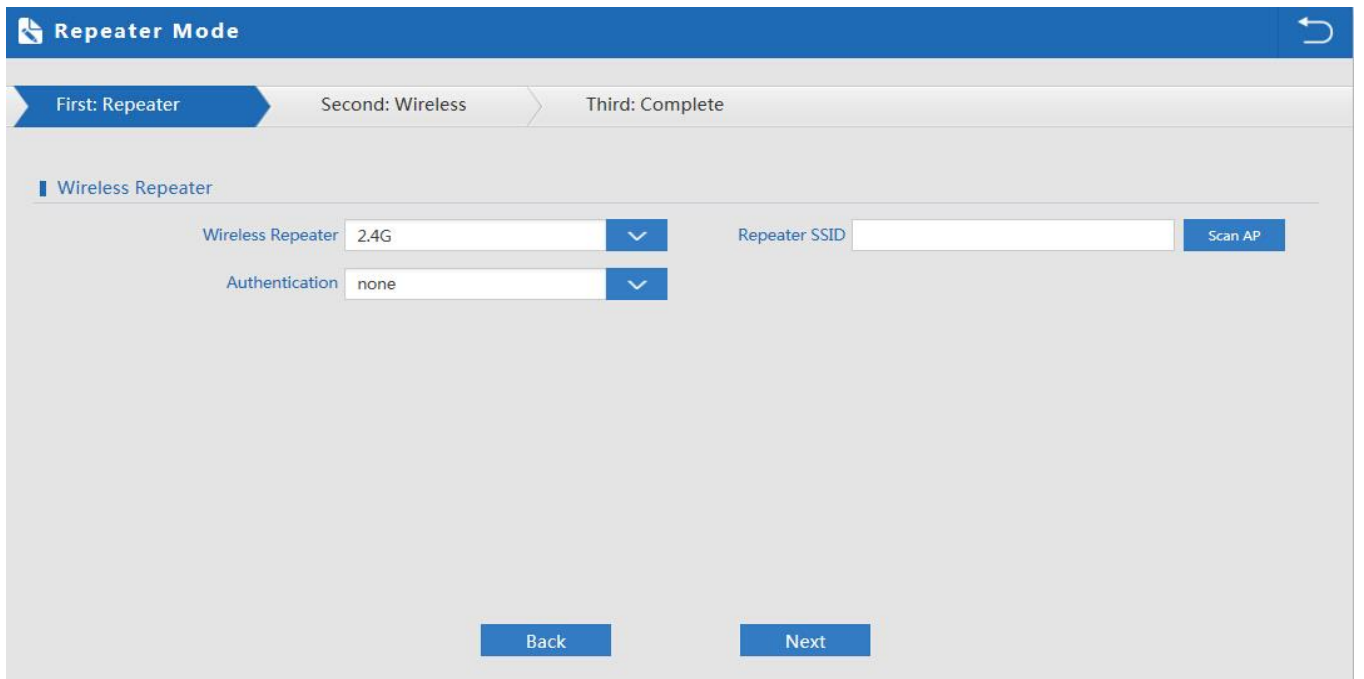
P18 Wireless Setting in Repeater Mode

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

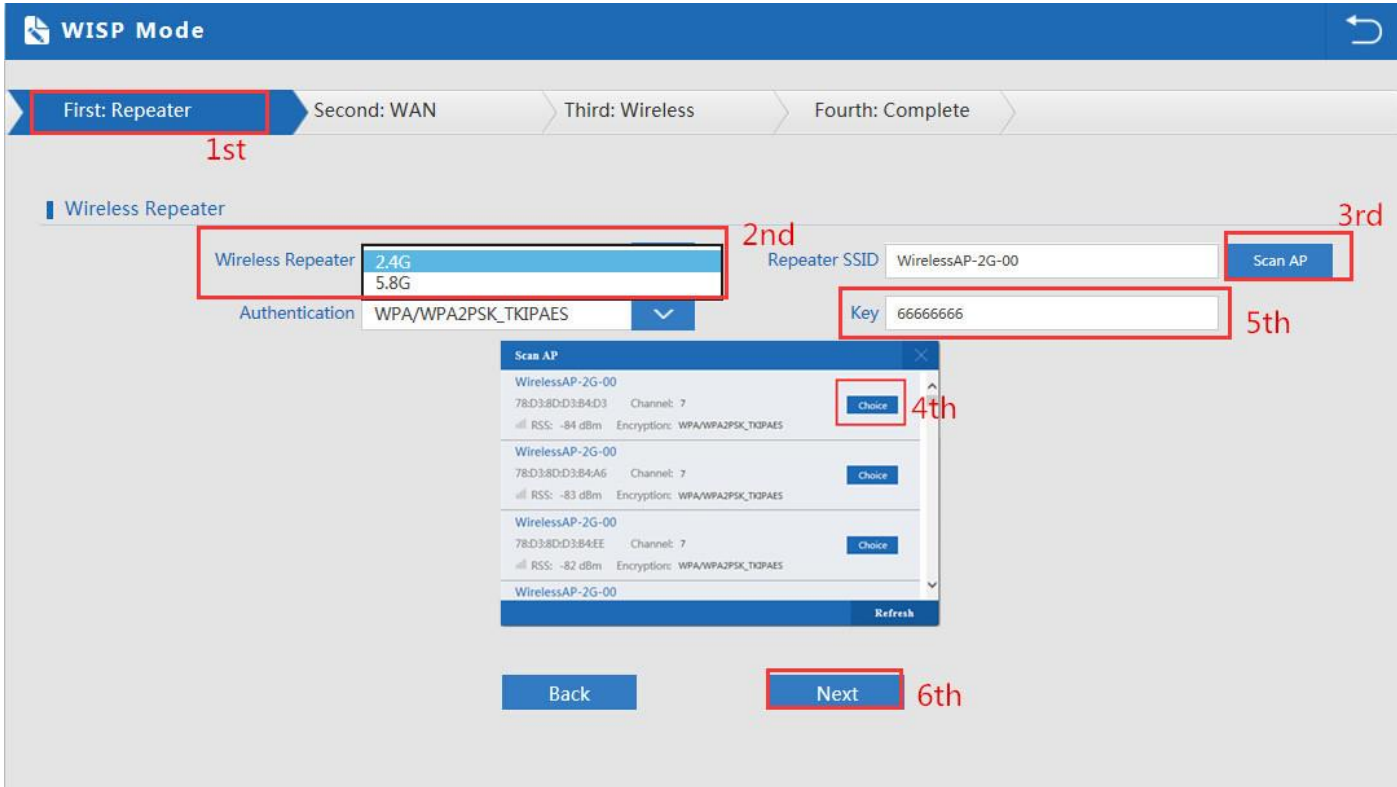
Pls note, when click wireless relay setting, following page will pop up, you can make change from here easy:



P20 Wireless Relay Setting

### 2.3 WISP Operation mode:

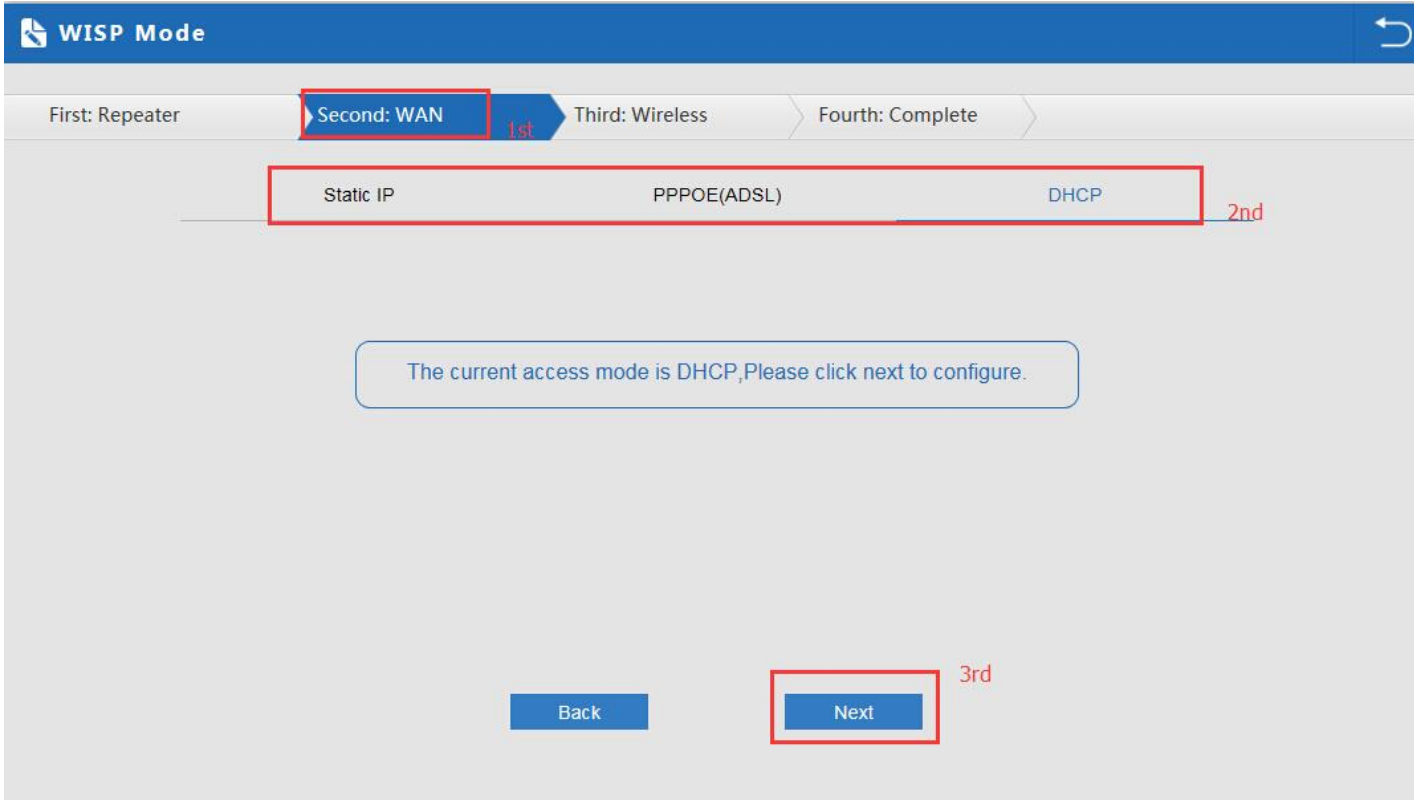
Click WISP operation mode in Wizard, then will pop up the configure page, pls set the WISP operation mode based on the steps showed in picture:



P21 WISP Mode

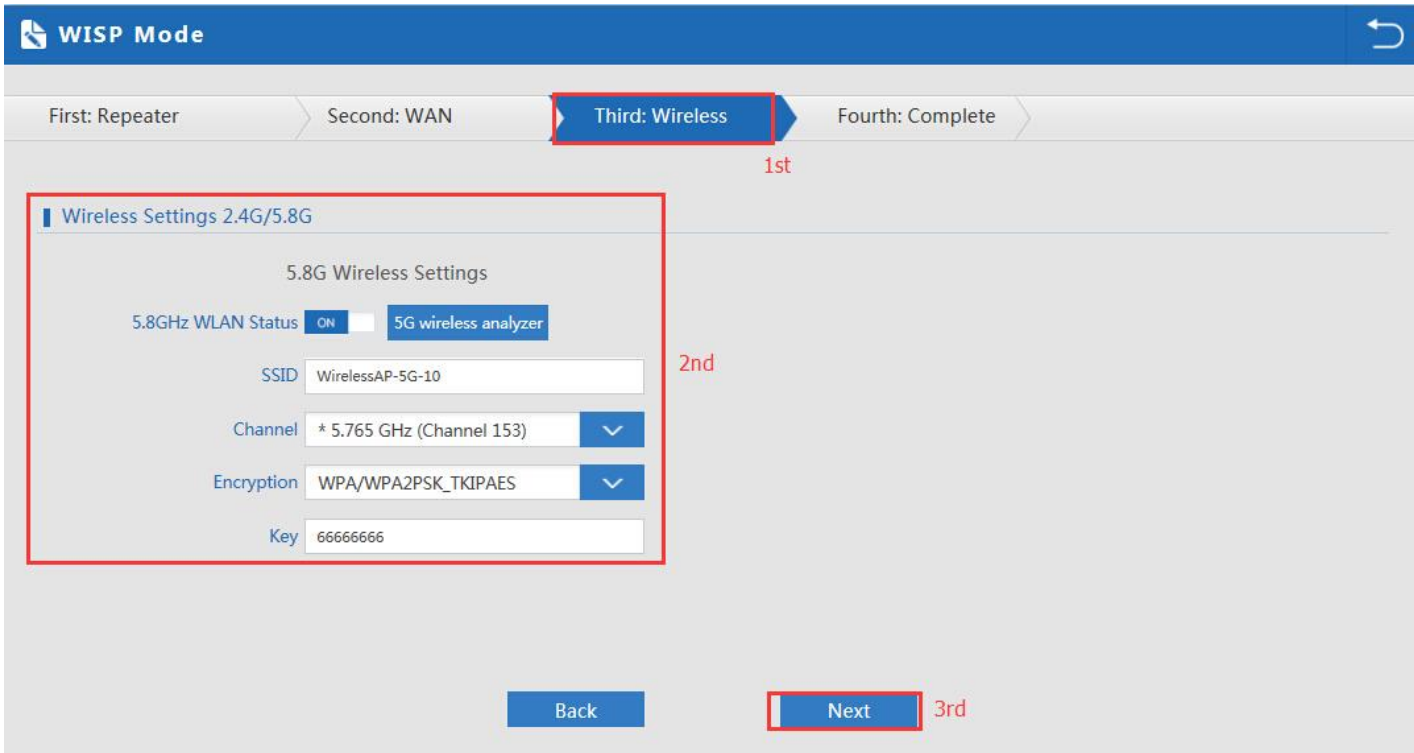
Configure the right WAN setting in WISP operation mode, then next.





P22 WAN setting in WISP mode

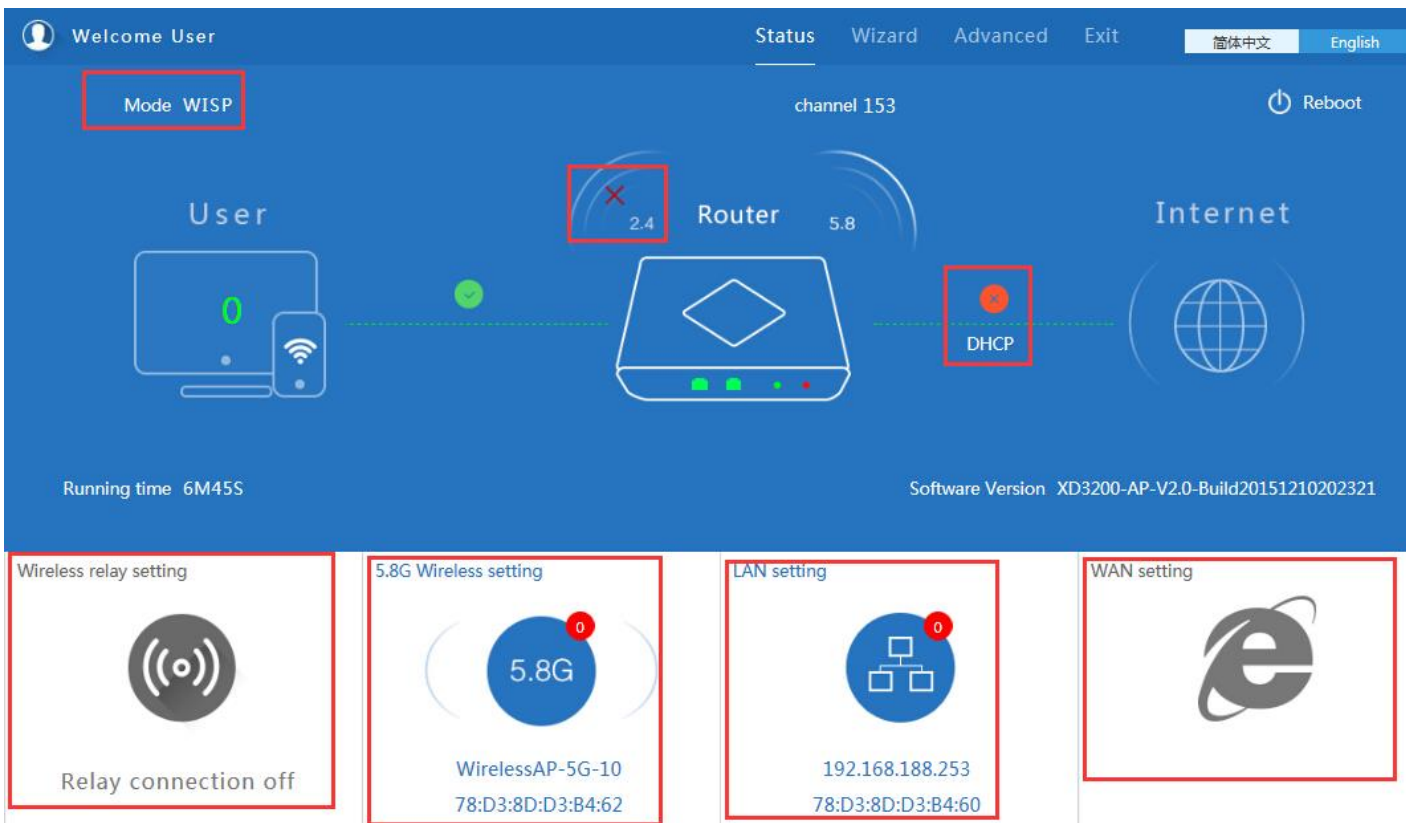
Configure wireless data showed as follow:



P23 Wireless Setting in WISP mode

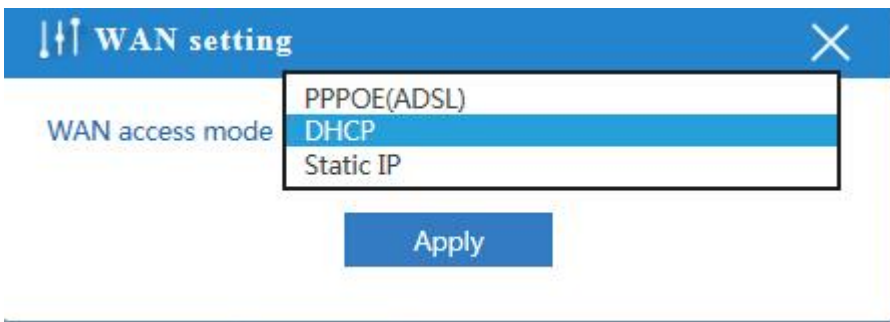
Then complete and back to status, will show the connection fail or success, then can configure the data based on

request:



P24 Status in WISP mode

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



P25 WAN setting in WISP mode

## 2.4 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:

**AP Mode**

First: Wireless    Second : LAN    Third:Complete

**Wireless Settings 2.4G/5.8G**

2.4G Wireless Settings	5.8G Wireless Settings
2.4GHz WLAN Status: <input checked="" type="checkbox"/> ON    2G wireless analyzer	5.8GHz WLAN Status: <input checked="" type="checkbox"/> ON    5G wireless analyzer
SSID: WirelessAP-2G-00	SSID: WirelessAP-5G-10
Channel: * 2.442 GHz (Channel 7) ▼	Channel: * 5.765 GHz (Channel 153) ▼
Encryption: WPA/WPA2PSK_TKIPAES ▼	Encryption: WPA/WPA2PSK_TKIPAES ▼
Key: 66666666	Key: 66666666

**Location Information**

AP Location:     AP Name:

Back    Next

P26 Wireless setting in AP Mode

**AP Mode**

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

**LAN setting**

Access Type:

Back    Next

P27 LAN Setting in AP Mode



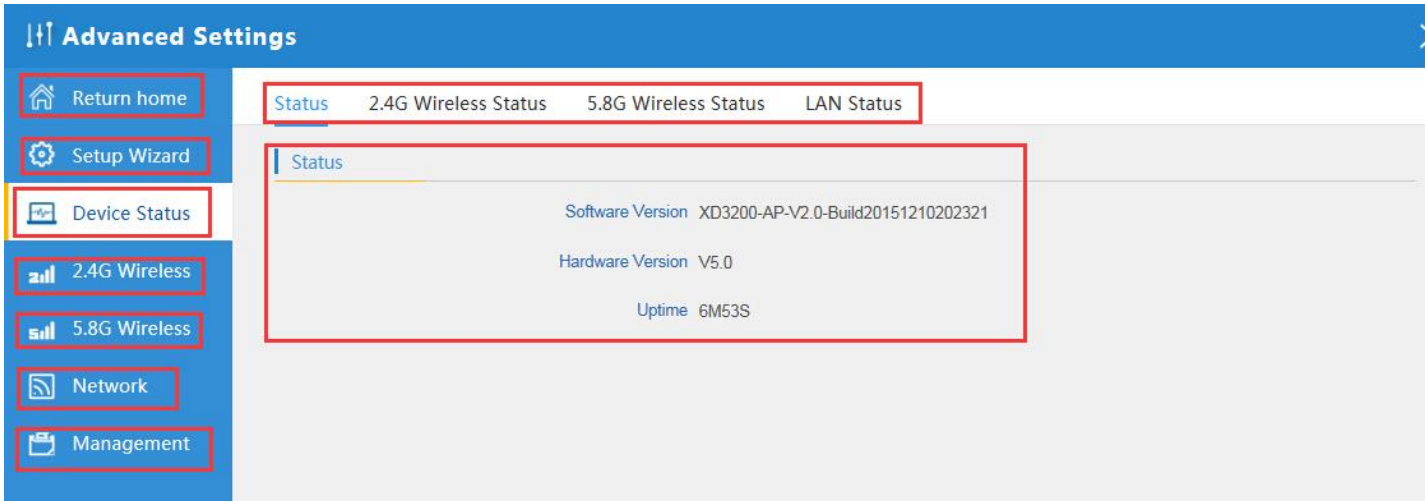
P28 Status in AP Mode

## 2.5 Advanced Setting:

In advanced setting, user can check the ceiling AP's firmware version, working status, 2.4G wireless, 5.8G Wireless, LAN Status, upgrade firmware, Reset... turn of LEDs

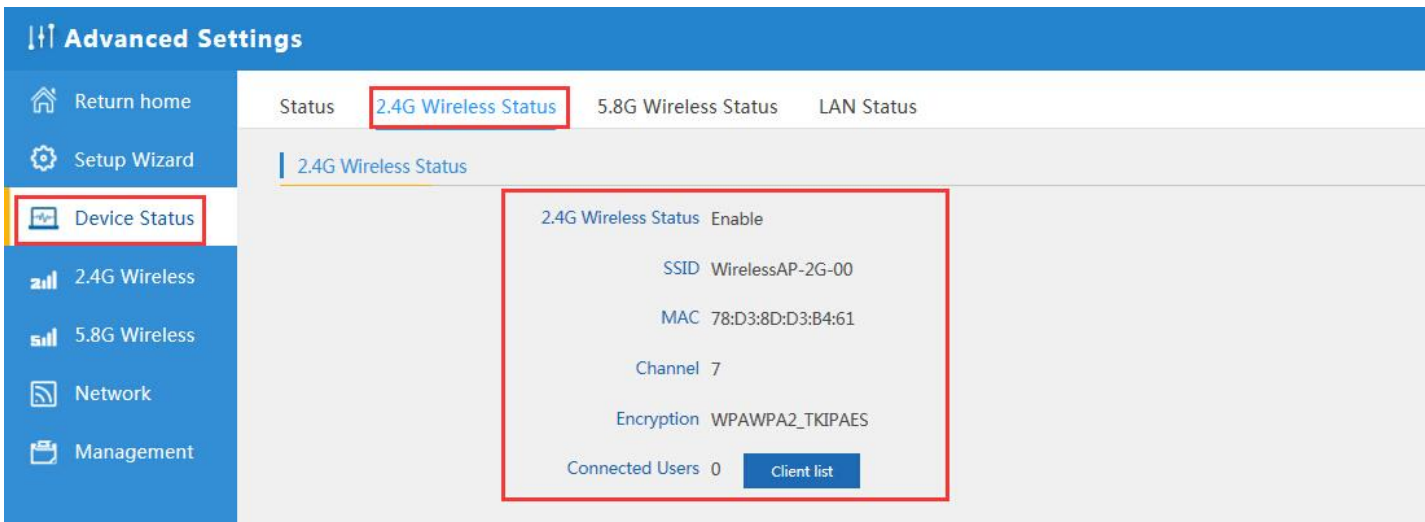
Let's Click Advanced Setting in status page, will show return home, Setup Wizard which we showed before.

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 ceiling AP's status in firmware version, 2,4G Wireless, 5.8G Wireless and LAN status:



P30 2.4G Wireless Status

The screenshot shows the 'Advanced Settings' interface. On the left, a navigation menu includes 'Return home', 'Setup Wizard', 'Device Status' (highlighted with a red box), '2.4G Wireless', '5.8G Wireless', 'Network', and 'Management'. The main content area has tabs for 'Status', '2.4G Wireless Status', '5.8G Wireless Status' (highlighted with a red box), and 'LAN Status'. Under the '5.8G Wireless Status' tab, the following information is displayed:

- 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 button

P31 5.8G Wireless Status

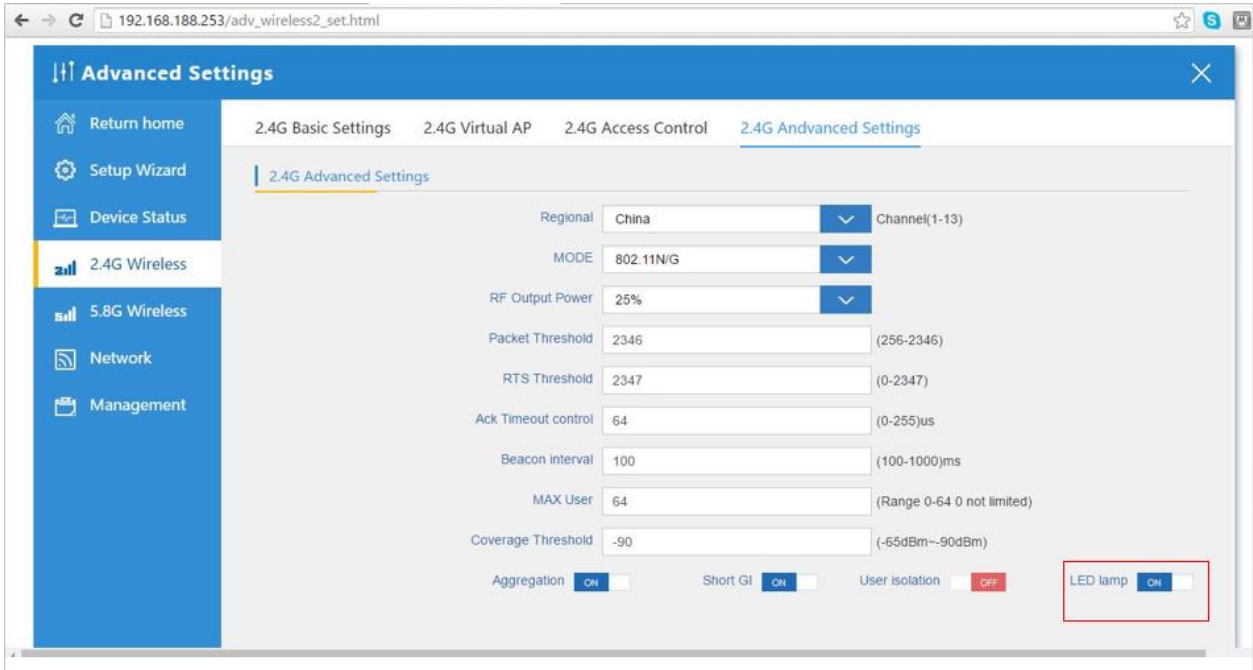
The screenshot shows the 'Advanced Settings' interface. On the left, a navigation menu includes 'Return home', 'Setup Wizard', 'Device Status' (highlighted with a red box), '2.4G Wireless', '5.8G Wireless', 'Network', and 'Management'. The main content area has tabs for 'Status', '2.4G Wireless Status', '5.8G Wireless Status', and 'LAN Status' (highlighted with a red box). Under the 'LAN Status' tab, the following information is displayed:

- 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 button

P32 LAN Status

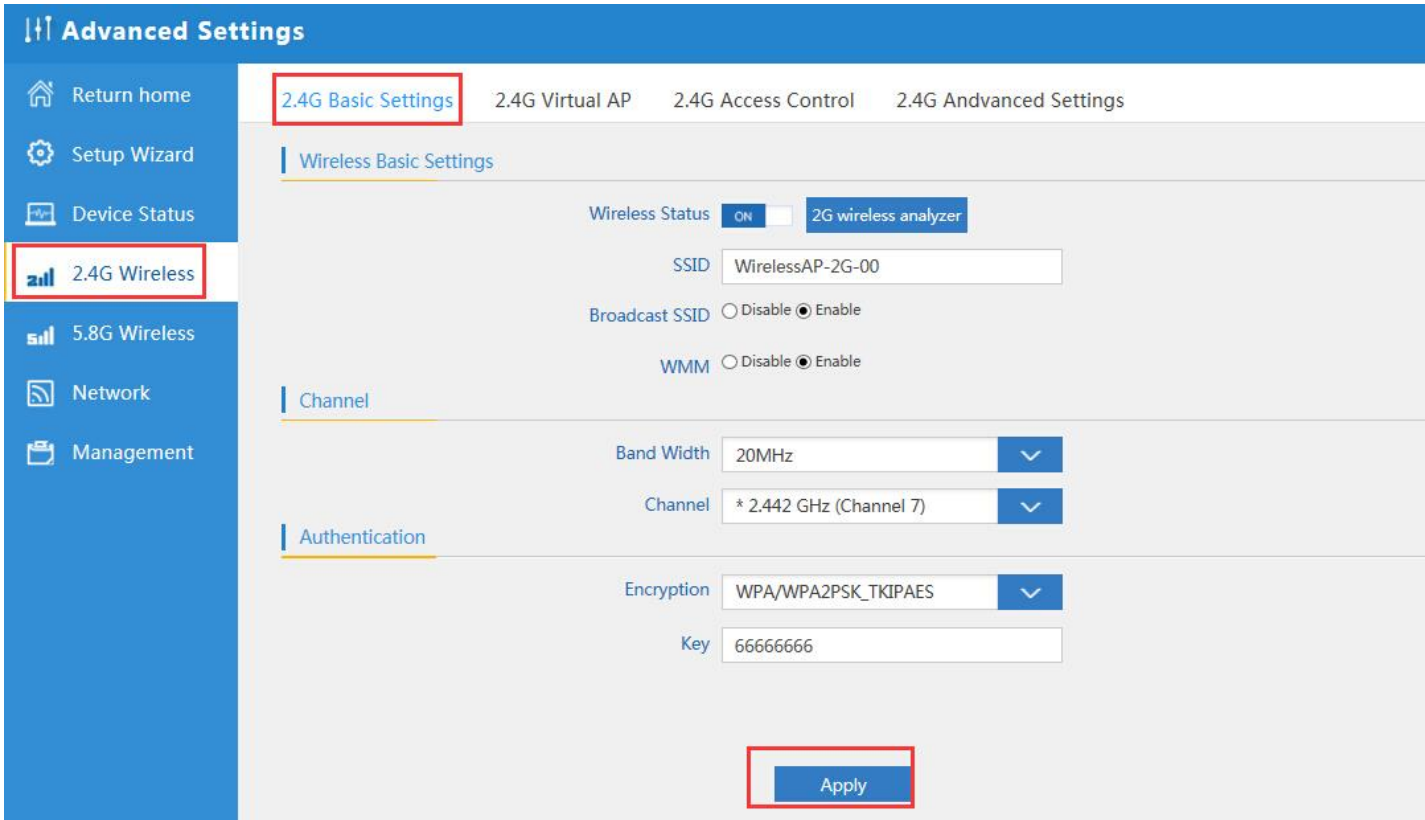
### 2.5.1 Turn off LEDs

Please see below how to turn off LED lights in Accesspoint



### 2.5.2 2.4G Wireless Setting:

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



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 Wi-Fi interface.

### 2.4Gwifi Channel analysis

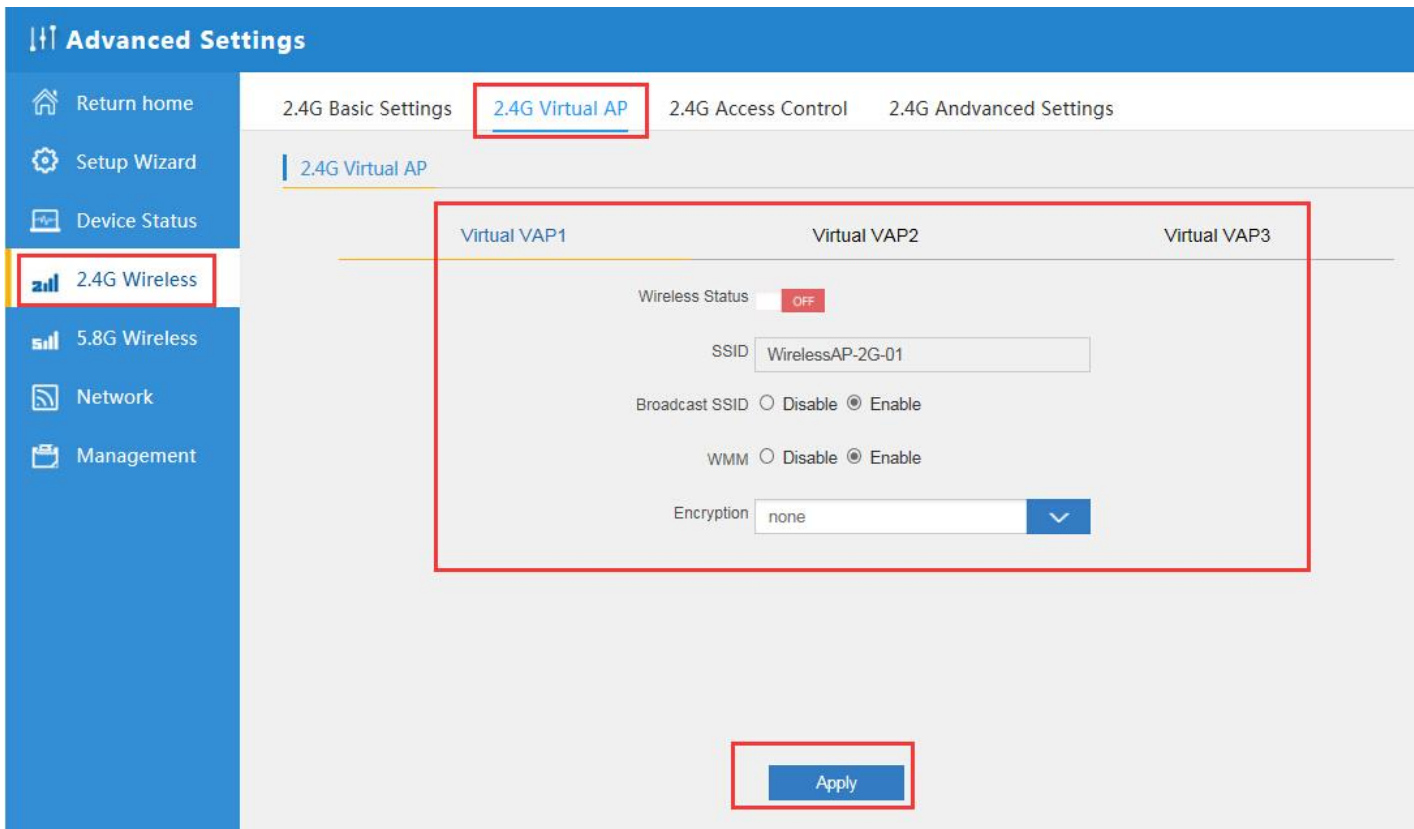


P34 Wireless Analyzer

### 2.5.3 Virtual AP:

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

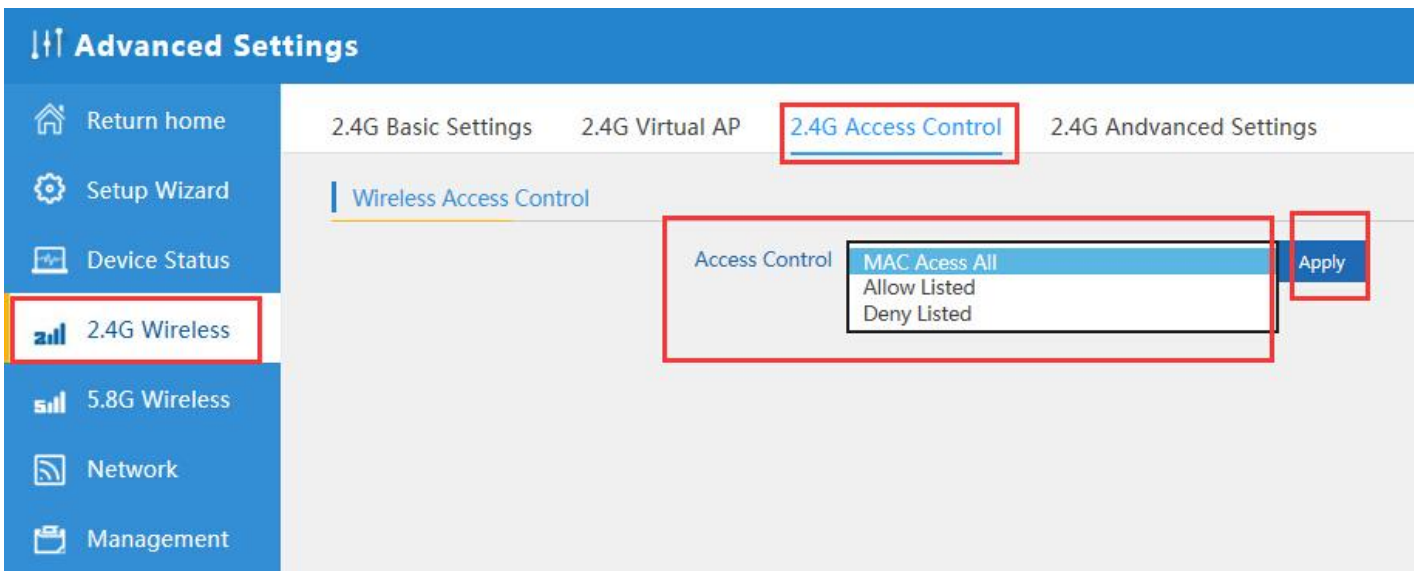




P35 Virtual AP

#### 2.5.4 2.4G Access Control:

Mainly show MAC allow or deny:



P36 MAC Access Control

#### 2.5.5 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

### 2.5.6 5.8G Wireless Setting:

Almost same as 2.4G Wireless:

The screenshot shows the 'Advanced Settings' interface for Niveon Professional. On the left is a blue sidebar with navigation options: 'Return home', 'Setup Wizard', 'Device Status', '2.4G Wireless', '5.8G Wireless' (highlighted with a red box), 'Network', and 'Management'. The main content area is titled 'Advanced Settings' and contains several tabs: '5.8G Basic Settings' (selected), '5.8G Virtual AP', '5.8G Access Control', and '5.8G Advanced Settings'. The '5.8G Basic Settings' tab is further divided into three sections: 'Wireless Basic Settings', 'Channel', and 'Encryption'. In the 'Wireless Basic Settings' section, 'Wireless Status' is set to 'ON' with a '5G wireless analyzer' button. The 'SSID' is 'WirelessAP-5G-10'. 'Broadcast SSID' and 'WMM' are both set to 'Enable'. The 'Channel' section shows 'Band Width' as '80MHz' and 'Channel' as '\* 5.765 GHz (Channel 153)'. The 'Encryption' section shows 'Encryption' as 'WPA/WPA2PSK\_TKIPAES' and 'Key' as '66666666'. An 'Apply' button is located at the bottom right of the settings area.

P38 5.8G Wireless Setting

### 2.5.7 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.

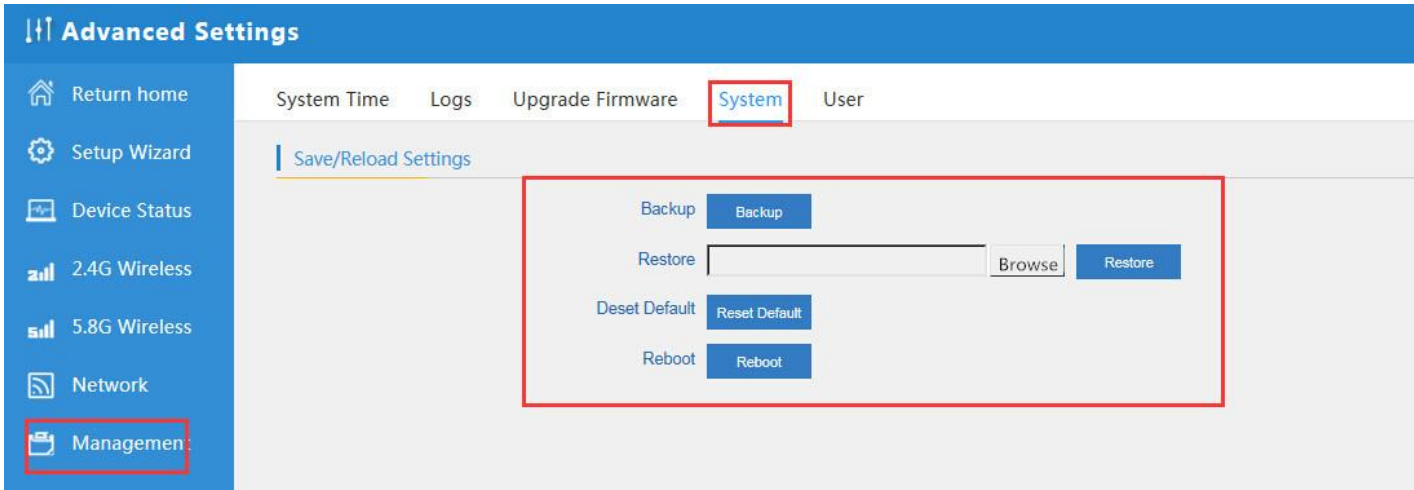
And we show System time, how to upgrade firmware and system page to users:

The screenshot shows the 'Advanced Settings' interface. On the left is a navigation menu with items: Return home, Setup Wizard, Device Status, 2.4G Wireless, 5.8G Wireless, Network, and Management (highlighted with a red box). The main content area has a sub-menu with 'System Time', 'Logs', 'Upgrade Firmware', 'System', and 'User' (all highlighted with a red box). The 'System Time' section is active, showing the current time as 2015-10-30 11:16:34 and a 'Sync with host' button. Below this are three dropdown menus: 'Choose Time Zone' (Beijing, Chongqing, Urumqi, Re-Hong Kong, Taiwan), 'NTP Server' (time.windows.com), and 'Equipment timing' (Auto restart: 23:00). An 'Apply' button is at the bottom right.

P41 System Time

The screenshot shows the 'Advanced Settings' interface with the 'Upgrade Firmware' section selected. The navigation menu on the left has 'Management' highlighted with a red box and a '1st' label. The sub-menu at the top has 'Upgrade Firmware' highlighted with a red box and a '2nd' label. The main content area shows the current 'Software Version' as XD3200-AP-V2.0-Build20151210202321. Below this is a 'Choose File' input field with a 'Browse' button (3rd) and an 'Upgrade' button (4th), both highlighted with red boxes. A red-bordered note box at the bottom contains the text: 'Note do not power off the device during the upload because it may crash the system!' (5th).

P42 Firmware Upgrade

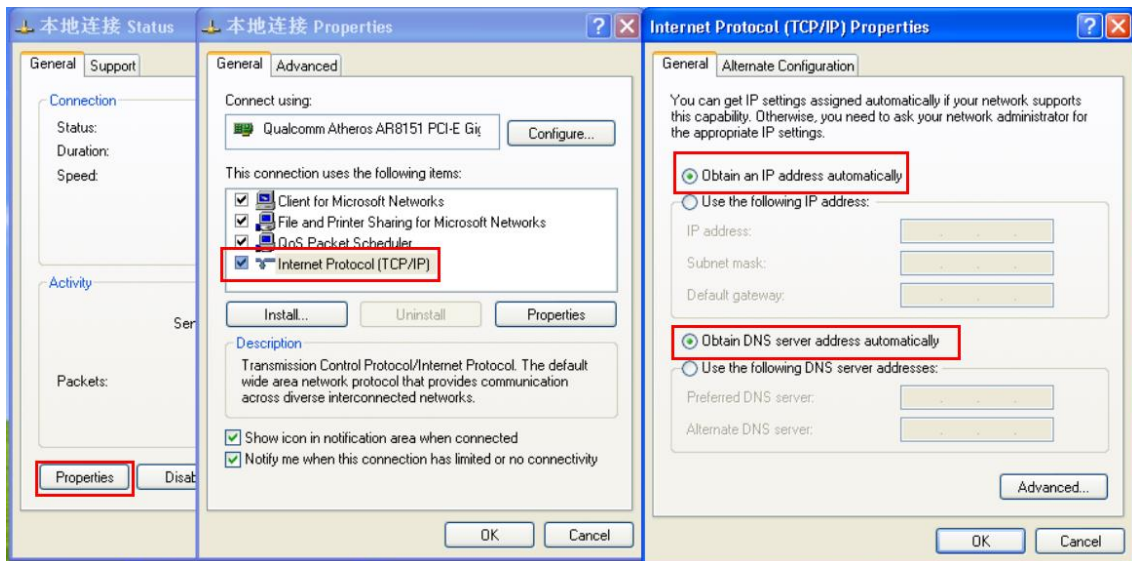


P43 System info

### 3 Share Internet and Obtain IP address automatically

Set computer's TCP/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.



### 3.1 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 Wireless AP through Web page	Pls check the IP address of computer and Wireless AP to see whether they are in same networking seg00nt, The method is click "start"- "Run" input "cmd", ping 192.168.2.253 to test the Wireless AP connectivity. Reset Wireless AP and load it again; Pls make sure the IP address 192.168.2.200 is not occupied by other device in Wireless AP's networking; Check computer and cable problem, Clean up Arp binding from "Start"- "Run" input "cmd" arp -d Clean the IE Brower's temporary files and Cache file.
Wireless AP can't connect with AP (the status display unconnected)	Try to scan the available wireless networking again; Make sure the Wireless AP's wireless standard (11b/g/n, 2.4G) is correct; The Security and passwords are matched between Wireless AP and AP; The signal strength of AP is too weak to connect, should be more than -75dBm;
Can't scan the wireless AP	Scan it several times more; Make sure there are 5G signal existed. Reset the Wireless AP, scan it again after Wireless AP restart;
The connection of Wireless AP and AP is success, but the computer can't share internet	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.
How to Reset Wireless AP	Press the "Reset" button more than 15 seconds after power on. The Wireless AP will restore factory default after the Wireless AP restart.