



P R O F E S S I O N A L

NWA300

User Manual of NWA300 802.11ac 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.



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1 Hardware and Operation Mode Instruction

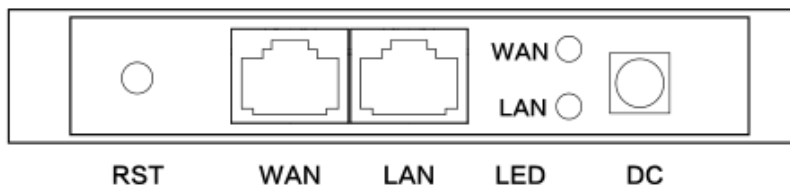


1.1 LED indicator

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

Please 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.



P1

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.

Please 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, in the PoE switch should comply with 802.3af 48V PoE standard.

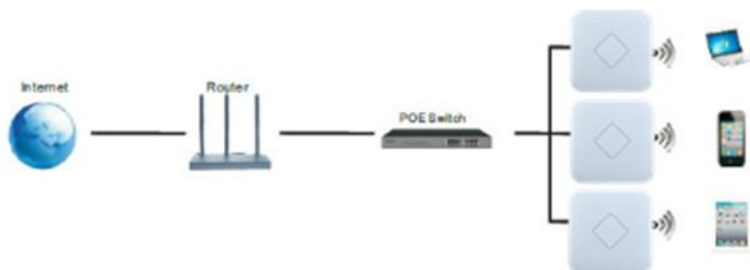


P2

1.4 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

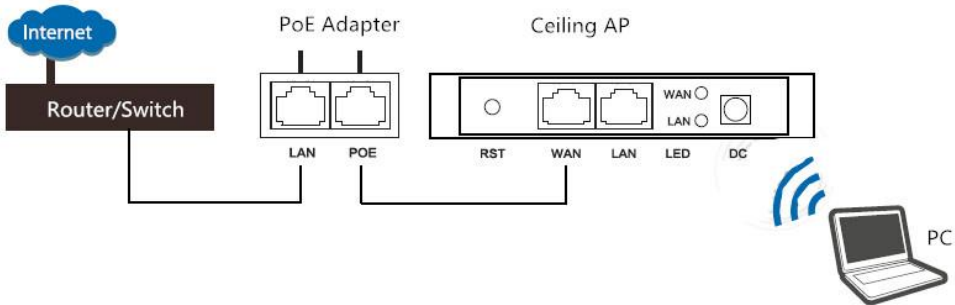


P3 Operation Mode

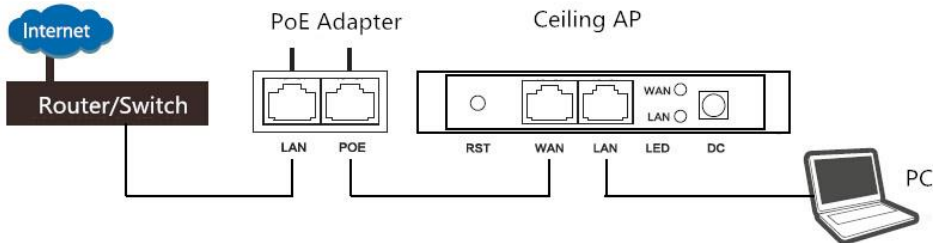
1.5 Connect Wireless AP with PC

You can connect the PC with the WAP through the Wireless SSID and LAN cable:
The diagram of wireless connection is as follows:

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



The diagram of LAN cable connection is as follows:



1.6 Login



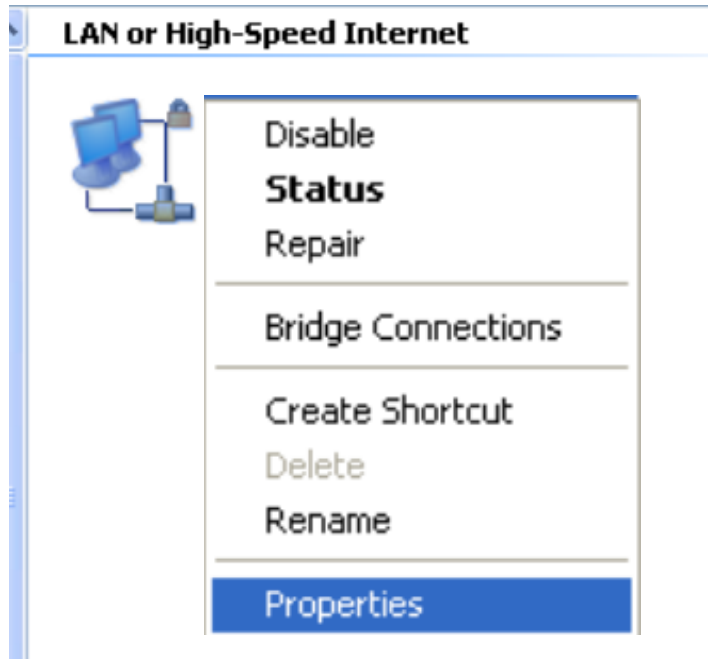
Default settings

Default IP: 192.168.2.200

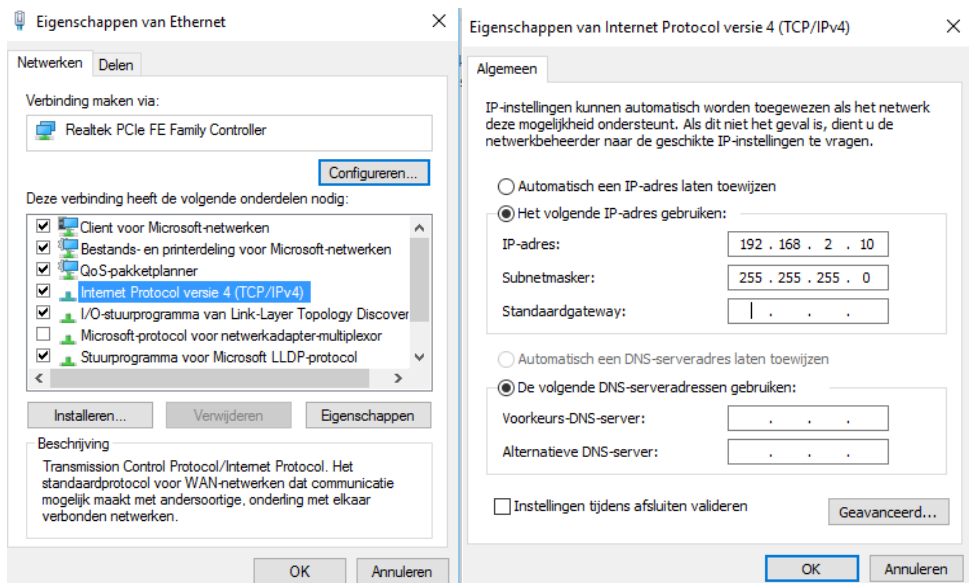
User: admin

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

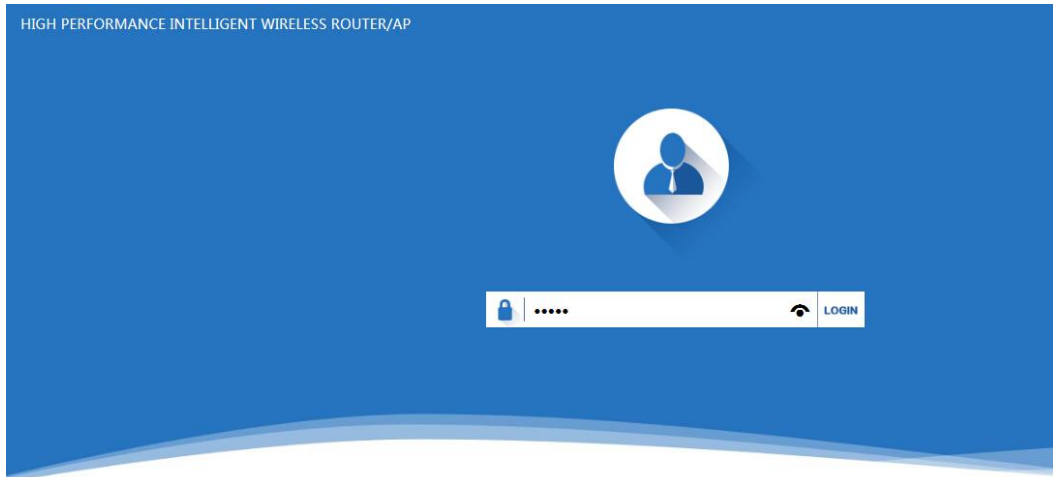




P 5 Settings of computer's IP address

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

Default login user name: Admin, Passwords: admin, (P6)



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

P6 Login



2 WEB GUI interface Setting:

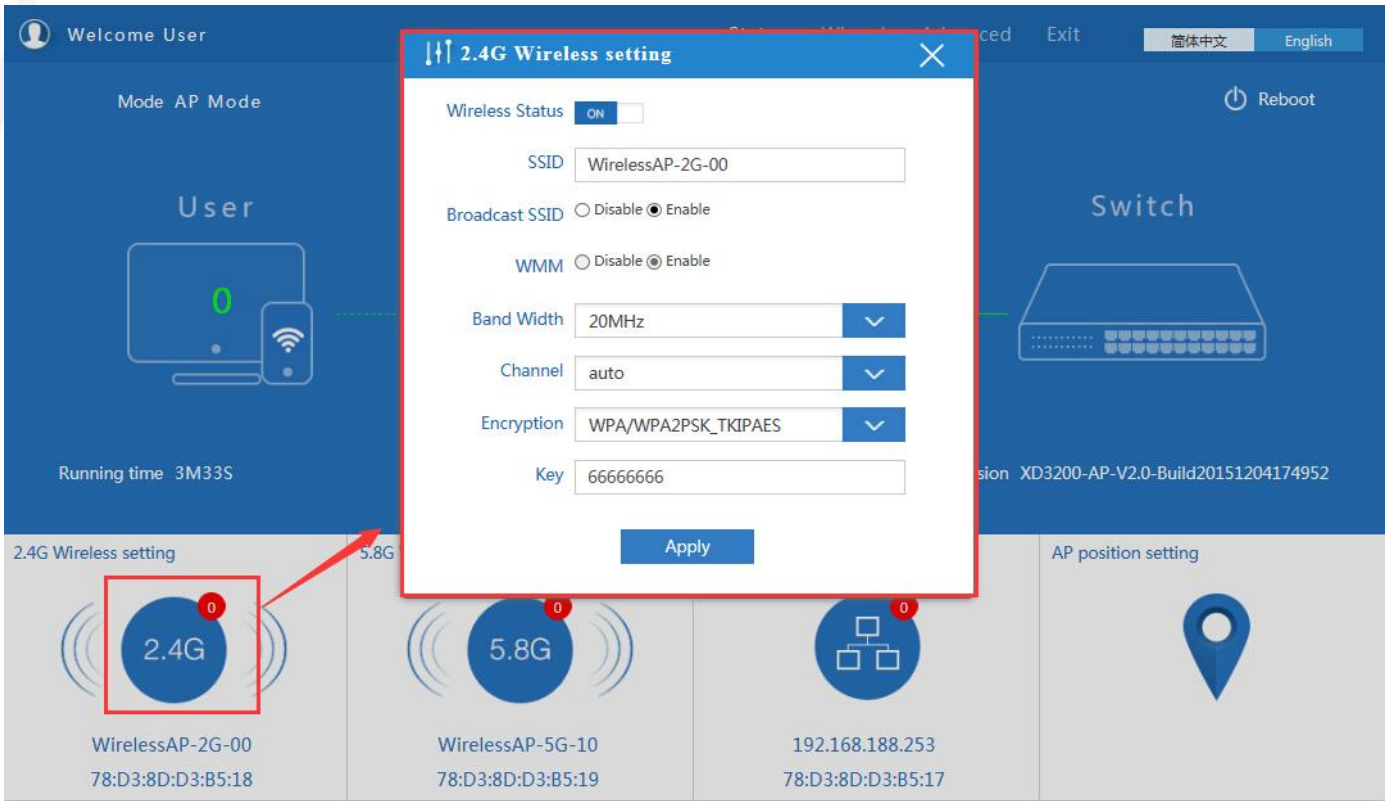
2.1 Status

After login, the P7 Device Status will be shown:

P7: Device Status

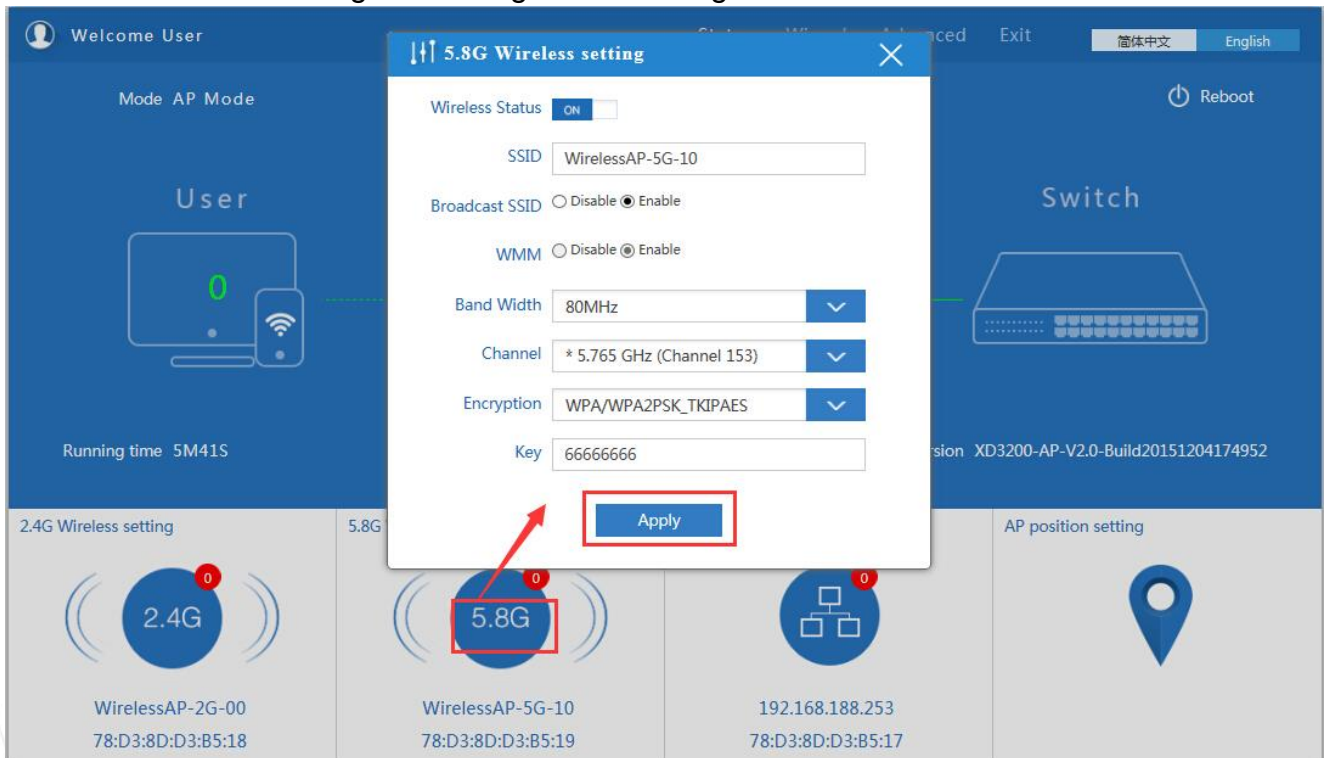
In this ceiling wireless AP, the default operation mode is AP mode. Then in 2.4G Wireless Setting, GUI configuration page showed as below:

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

Welcome User

Mode AP Mode

LAN setting

Access Type

Static IP

DHCP

Apply

Reboot

Switch

Running time 6M34S

Software Version XD3200-AP-V2.0-Build20151204174952

2.4G Wireless setting

5.8G Wireless setting

LAN setting

AP position setting

2.4G

5.8G

192.168.188.253

78:D3:8D:D3:B5:18

78:D3:8D:D3:B5:19

78:D3:8D:D3:B5:17

P10 LAN Setting

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

Welcome User

Mode AP Mode

Location Information

AP Location

Right on the first floor

AP Name

AP1

Apply

Reboot

Switch

Running time 7M51S

Software Version XD3200-AP-V2.0-Build20151204174952

2.4G Wireless setting

5.8G Wireless setting

LAN setting

AP position setting

2.4G

5.8G

192.168.188.253

78:D3:8D:D3:B5:18

78:D3:8D:D3:B5:19

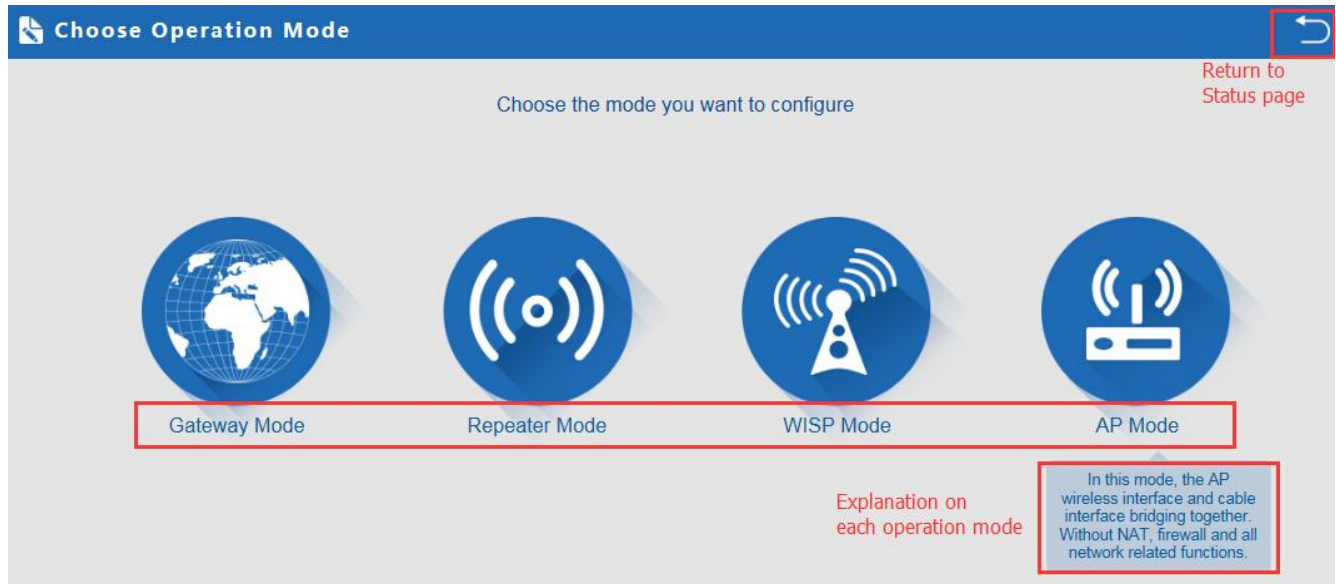
78:D3:8D:D3:B5:17

P11 AP Position setting



2.2 Wizard Configuration

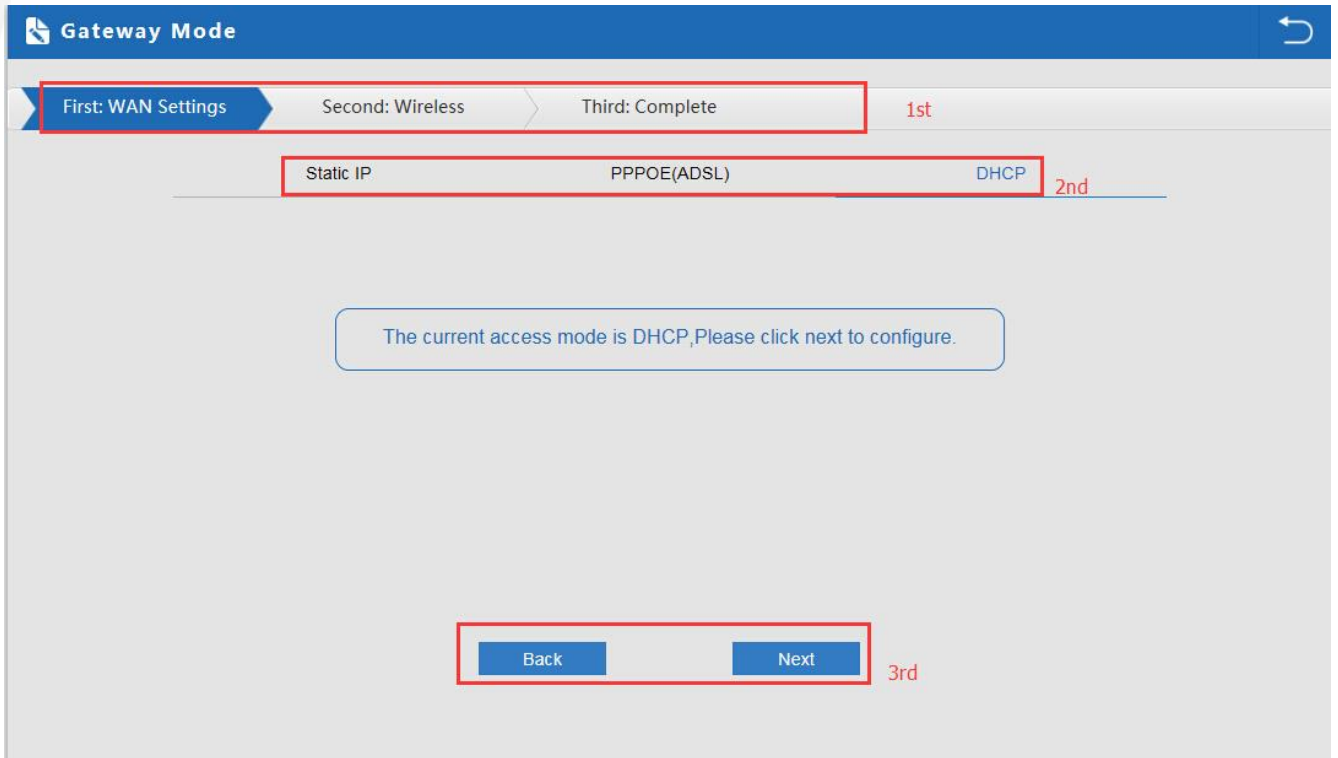
Click Wizard in Status page, will pop up following page to configure the operation mode: There are four operation mode of this ceiling wireless AP, and there are explanation for each operation mode for better application.



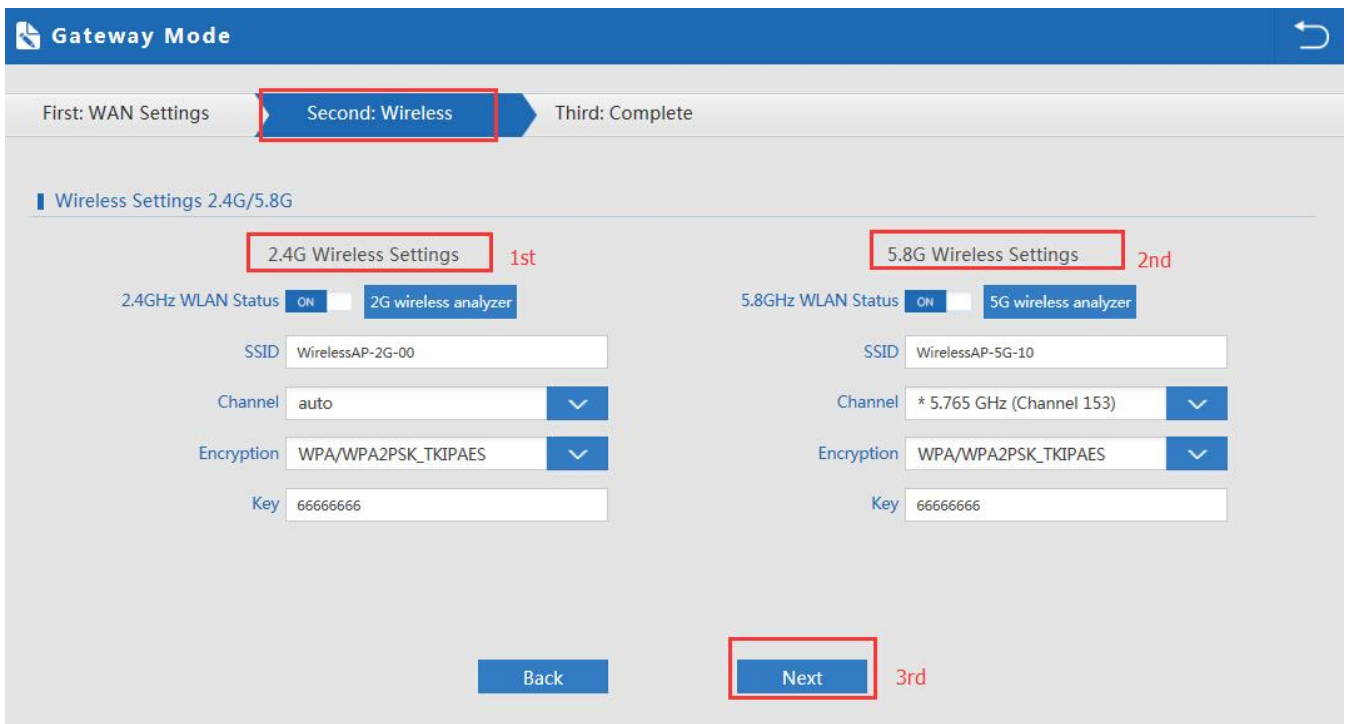
P12 Operation mode

2.2.1 Gateway Mode

Click Gateway mode, will pop up following pictures:
Please choose the right WAN setting mode, then click next to continue.

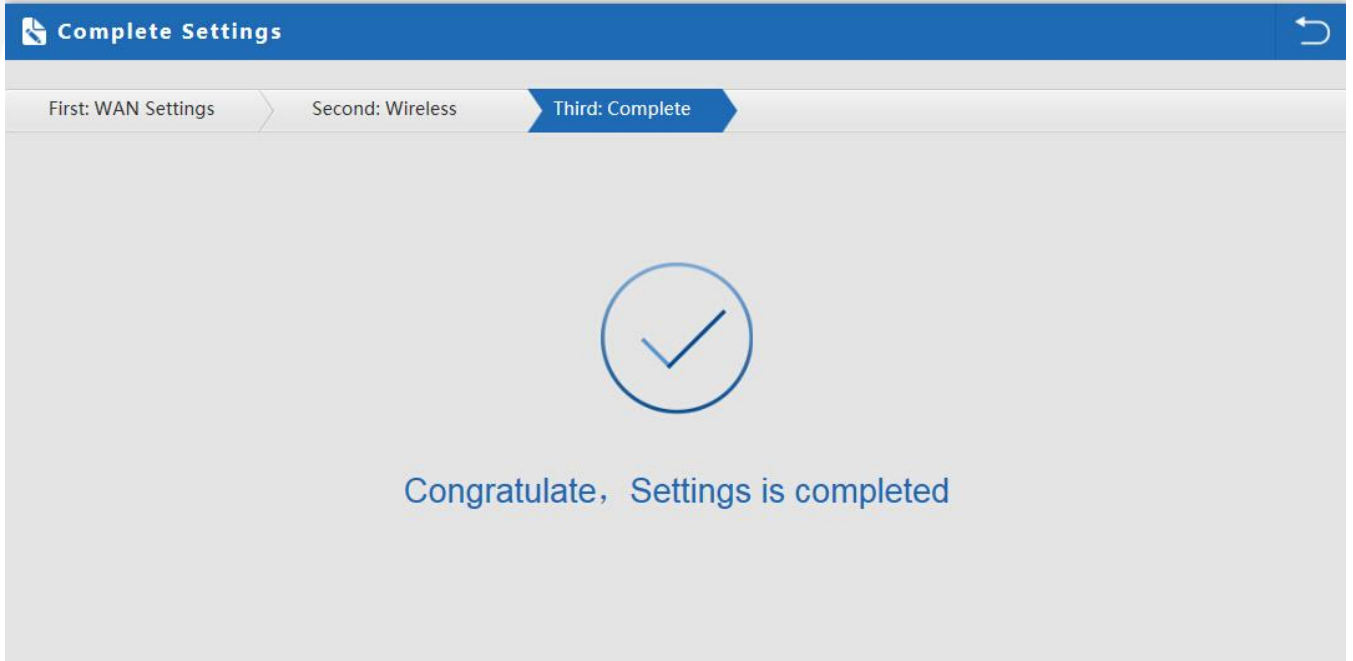


P13. WAN setting in Gateway Mode



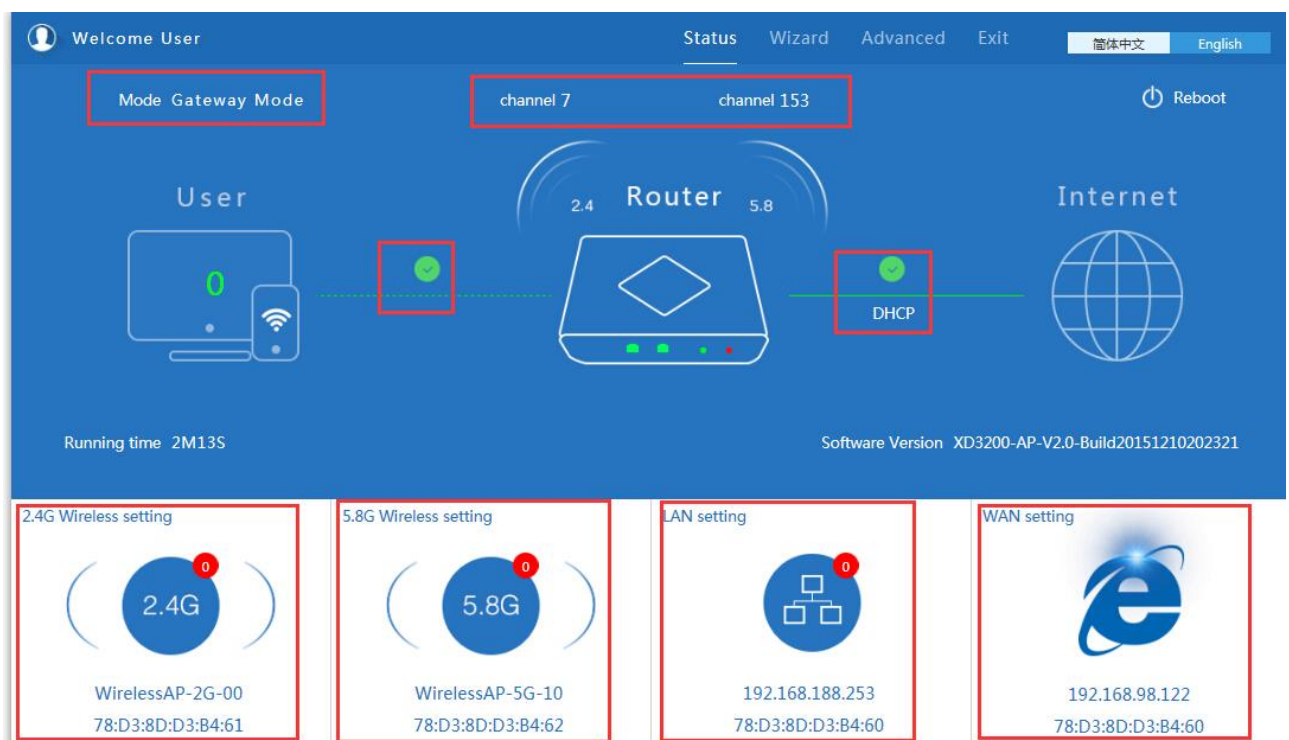
P14 Wireless Setting in Gateway Mode

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.

Repeater Mode

First: Repeater ^{1st} Second: Wireless Third: Complete

Wireless Repeater

Wireless Repeater 2.4G

Authentication none

Repeater SSID

Scan AP

Scan AP

SSID	Channel	RSS	Encryption	Action
WirelessAP-2G-00	7	-84 dBm	WPA/WPA2PSK_TKIPAES	Choice
WirelessAP-2G-00	7	-83 dBm	WPA/WPA2PSK_TKIPAES	Choice
WirelessAP-2G-00	7	-82 dBm	WPA/WPA2PSK_TKIPAES	Choice

Back Next ^{4th}

P17 Repeater Mode

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

Repeater Mode

First: Repeater Second: Wireless Third: Complete

Wireless Settings 2.4G/5.8G

5.8G Wireless Settings

5.8GHz WLAN Status ON 5G wireless analyzer

SSID WirelessAP-5G-10

Channel * 5.765 GHz (Channel 153)

Encryption WPA/WPA2PSK_TKIPAES

Key 66666666

Back Next

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

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

P20 Wireless Relay Setting



2.2.3 WISP Operation mode

Click WISP operation mode in Wizard, then will pop up the configure page, Please set the WISP operation mode

WISP Mode

First: Repeater (1st) Second: WAN Third: Wireless Fourth: Complete

Wireless Repeater: 2.4G (1st)
Authentication: WPA/WPA2PSK_TKIPAES

Repeater SSID: WirelessAP-2G-00 (2nd) Scan AP (3rd)
Key: 66666666 (5th)

Scan AP dialog box (4th):

SSID	Channel	RSS	Encryption	Action
WirelessAP-2G-00	7	-84 dBm	WPA/WPA2PSK_TKIPAES	Choice (4th)
WirelessAP-2G-00	7	-83 dBm	WPA/WPA2PSK_TKIPAES	Choice
WirelessAP-2G-00	7	-82 dBm	WPA/WPA2PSK_TKIPAES	Choice

Back Next (6th)

P21 WISP Mode

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

WISP Mode

First: Repeater Second: WAN (1st) Third: Wireless Fourth: Complete

Static IP (1st) PPPOE(ADSL) DHCP (2nd)

The current access mode is DHCP, Please click next to configure.

Back Next (3rd)

P22 WAN setting in WISP mode



Configure wireless data showed as follow:

WISP Mode

First: Repeater > Second: WAN > **Third: Wireless** > Fourth: Complete

1st

Wireless Settings 2.4G/5.8G

5.8G Wireless Settings

5.8GHz WLAN Status ON OFF **5G wireless analyzer**

SSID: WirelessAP-5G-10

Channel: * 5.765 GHz (Channel 153)

Encryption: WPA/WPA2PSK_TKIPAES

Key: 66666666

2nd

Back Next 3rd

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:

Welcome User Status Wizard Advanced Exit 简体中文 English

Mode WISP channel 153 Reboot

User Router Internet

2.4 5.8 DHCP

Running time 6M45S Software Version XD3200-AP-V2.0-Build20151210202321

Wireless relay setting Relay connection off	5.8G Wireless setting WirelessAP-5G-10 78:D3:8D:D3:B4:62	LAN setting 192.168.188.253 78:D3:8D:D3:B4:60	WAN setting
---	---	--	--------------------

P24 Status in WISP mode



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

WAN setting

WAN access mode

PPPOE(ADSL)
DHCP
Static IP

Apply

P25 WAN setting in WISP mode

2.2.4 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

2.4GHz WLAN Status 2G wireless analyzer

SSID WirelessAP-2G-00

Channel * 2.442 GHz (Channel 7)

Encryption WPA/WPA2PSK_TKIPAES

Key 66666666

5.8G Wireless Settings

5.8GHz WLAN Status 5G wireless analyzer

SSID WirelessAP-5G-10

Channel * 5.765 GHz (Channel 153)

Encryption WPA/WPA2PSK_TKIPAES

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: Static IP / DHCP

Back Next

P27 LAN Setting in AP Mode

Welcome User Status Wizard Advanced Exit 简体中文 English

Mode AP Mode channel 7 channel 153 Reboot

User 2.4 AP 5.8 Switch

Running time 2M20S Software Version XD3200-AP-V2.0-Build20151210202321

2.4G Wireless setting WirelessAP-2G-00 78:D3:8D:D3:B4:61	5.8G Wireless setting WirelessAP-5G-10 78:D3:8D:D3:B4:62	LAN setting 192.168.188.253 78:D3:8D:D3:B4:60	AP position setting
---	---	--	----------------------------

P28 Status in AP Mode



2.3 Advanced Settings

In advanced settings, 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.

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

Status

Software Version XD3200-AP-V2.0-Build20151210202321

Hardware Version V5.0

Uptime 6M53S

P29 Device Status

2.3.1 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:

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

2.4G Wireless Status

2.4G Wireless Status Enable

SSID WirelessAP-2G-00

MAC 78:D3:8D:D3:B4:61

Channel 7

Encryption WPAWPA2_TKIPAES

Connected Users 0 [Client list](#)

P30 2.4G Wireless Status



The screenshot shows the 'Advanced Settings' interface with the '5.8G Wireless Status' page selected. The left sidebar contains navigation options: Return home, Setup Wizard, Device Status (highlighted), 2.4G Wireless, 5.8G Wireless, Network, and Management. The top navigation bar includes Status, 2.4G Wireless Status, 5.8G Wireless Status (highlighted), and LAN Status. The main content area displays the following information:

5.8G Wireless Status	Enable
SSID	WirelessAP-5G-10
MAC	78:D3:8D:D3:B4:62
Channel	153
Encryption	WPAWPA2_TKIPAES
Connected Users	0

A 'Client list' button is located at the bottom right of the information box.

P31 5.8G Wireless Status

The screenshot shows the 'Advanced Settings' interface with the 'LAN Status' page selected. The left sidebar contains navigation options: Return home, Setup Wizard, Device Status (highlighted), 2.4G Wireless, 5.8G Wireless, Network, and Management. The top navigation bar includes Status, 2.4G Wireless Status, 5.8G Wireless Status, and LAN Status (highlighted). The main content area displays the following information:

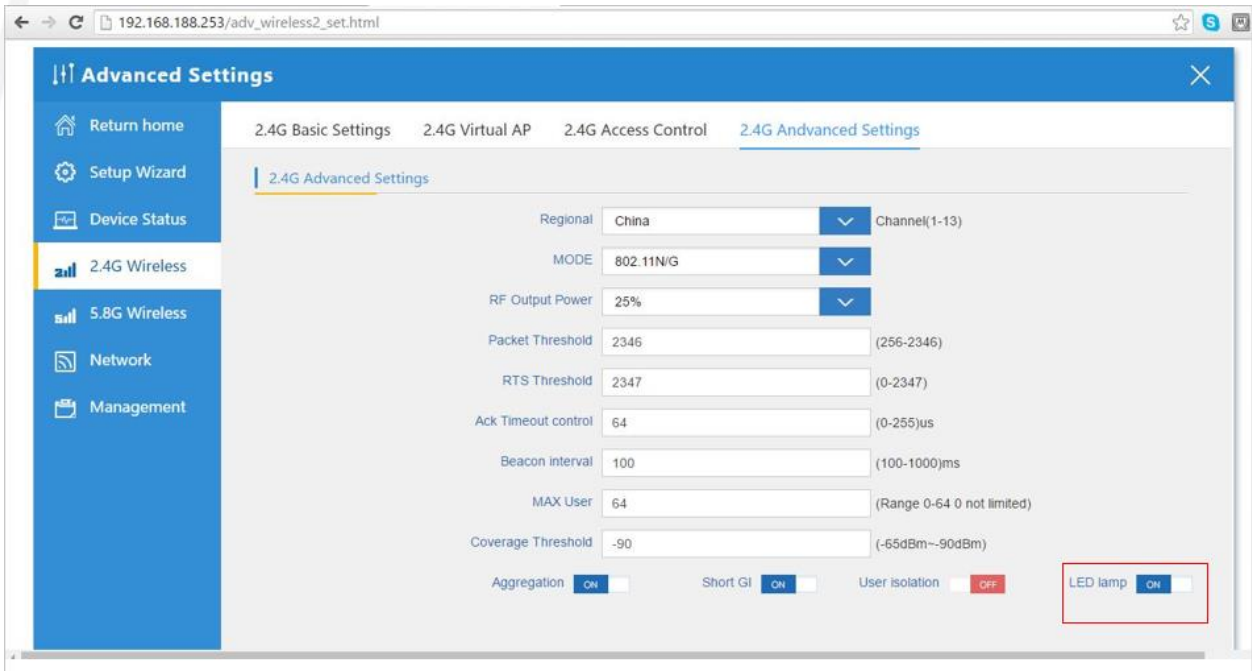
LAN IP	192.168.188.253
Subnet Mask	255.255.255.0
MAC	78:D3:8D:D3:B4:60
Manage server IP	192.168.188.1
DHCP Status	Disable
DHCP address range	192.168.188.2 — 192.168.188.252
Assigned IP	0

A 'Client list' button is located at the bottom right of the information box.

P32 LAN Status

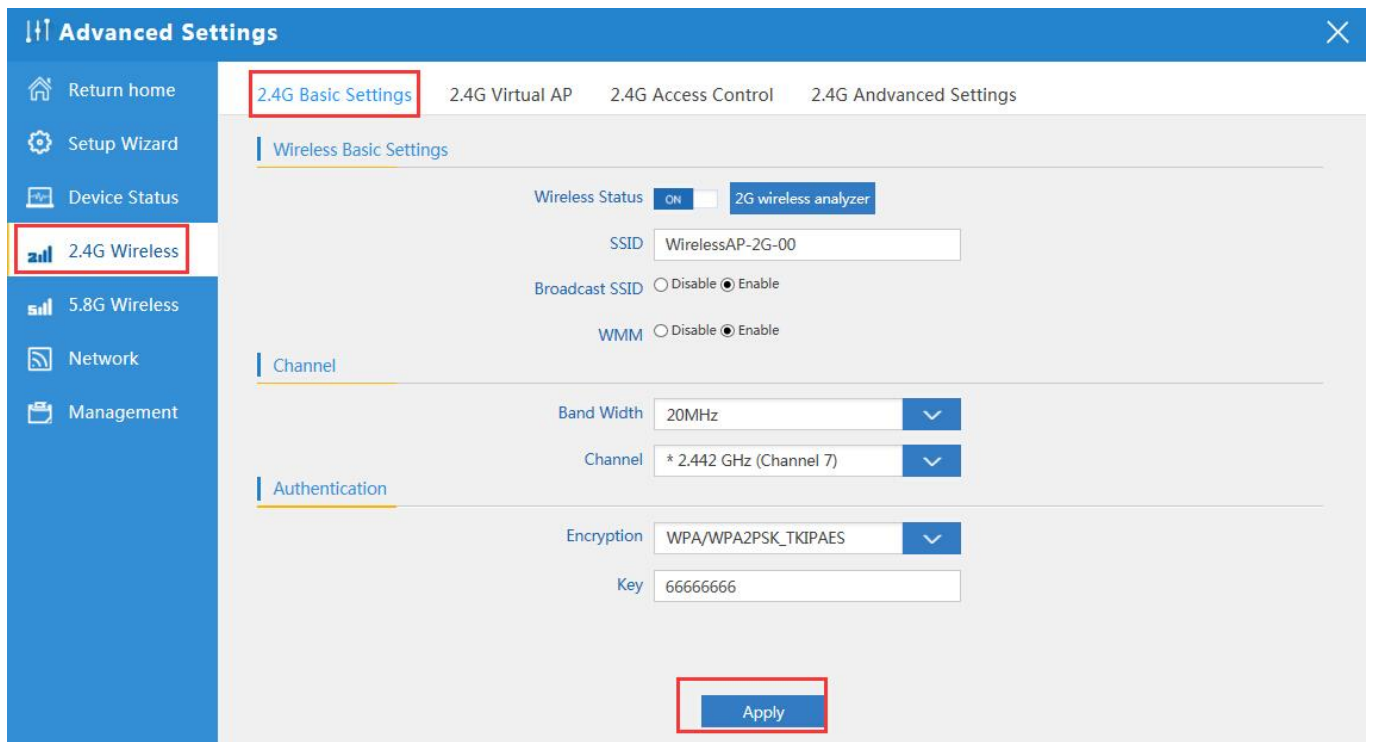
2.3.2 Turn off LEDs

Please see below how to turn off LED lights in Accesspoint



2.3.3 2.4G Wireless Setting

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

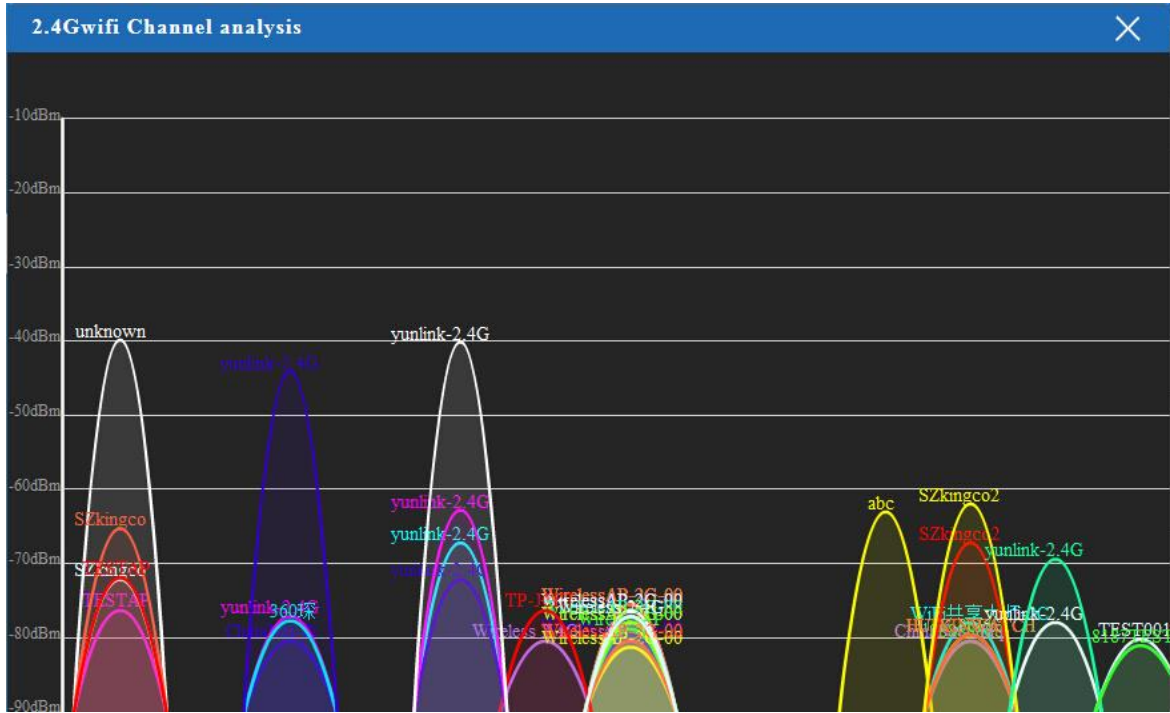


P33 Basic Setting in 2.4G Wireless



2.3.4 2G Wireless Analyzer

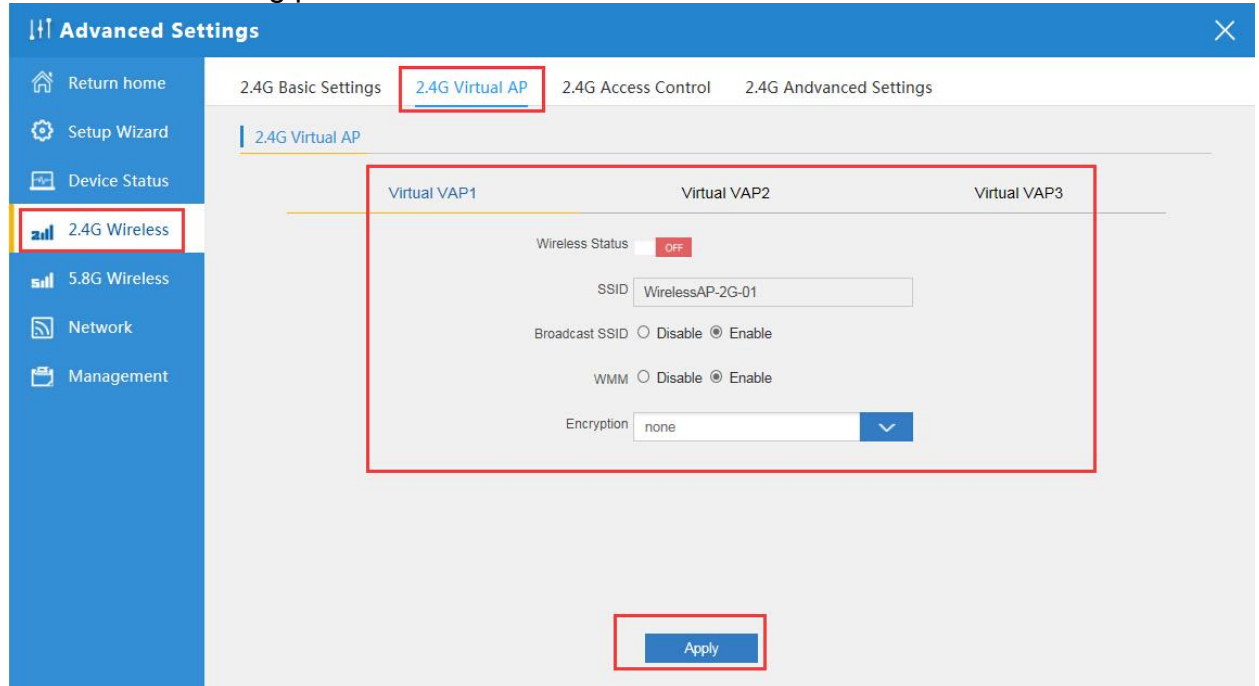
Mainly to analyze the AP's signal strength in some channel, to make user more easy to choose the right channel and avoid the Wi-Fi interface.



P34 Wireless Analyzer

2.3.5 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



2.3.6 2.4G Access Control

Mainly show MAC allow or deny:

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 Access Control

Access Control: **MAC Access All** (selected), Allow Listed, Deny Listed

Apply

P36 MAC Access Control

2.3.7 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 (dropdown) | Channel(1-13)

MODE: 802.11B/G (dropdown)

RF Output Power: 100% (dropdown)

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



2.3.8 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

SSID:

Broadcast SSID: Disable Enable

WMM: Disable Enable

Channel

Band Width:

Channel:

Encryption

Encryption:

Key:

P38 5.8G Wireless Setting

2.3.9 Network setting

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

Advanced Settings

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

LAN Settings | VLAN

LAN Settings

Access Type:

P39 Network Setting



The screenshot shows the 'Advanced Settings' interface with 'LAN Settings' selected. The 'VLAN' sub-tab is active. A table is displayed for configuring VLANs. The table has columns for 'VLAN-ID(2-4094)', '2.4G' (with sub-columns AP, VAP1, VAP2, VAP3), and '5.8G' (with sub-columns AP, VAP1, VAP2, VAP3). There are 10 rows for VLAN IDs. An 'Apply' button is at the bottom.

VLAN-ID(2-4094)	2.4G				5.8G			
	AP	VAP1	VAP2	VAP3	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"/>
	<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"/>

P40 Tag VLAN Setting

2.3.10 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 with 'Management' selected. The 'System Time' sub-tab is active. The page displays system information and configuration options. A red box highlights the configuration area. An 'Apply' button is at the bottom.

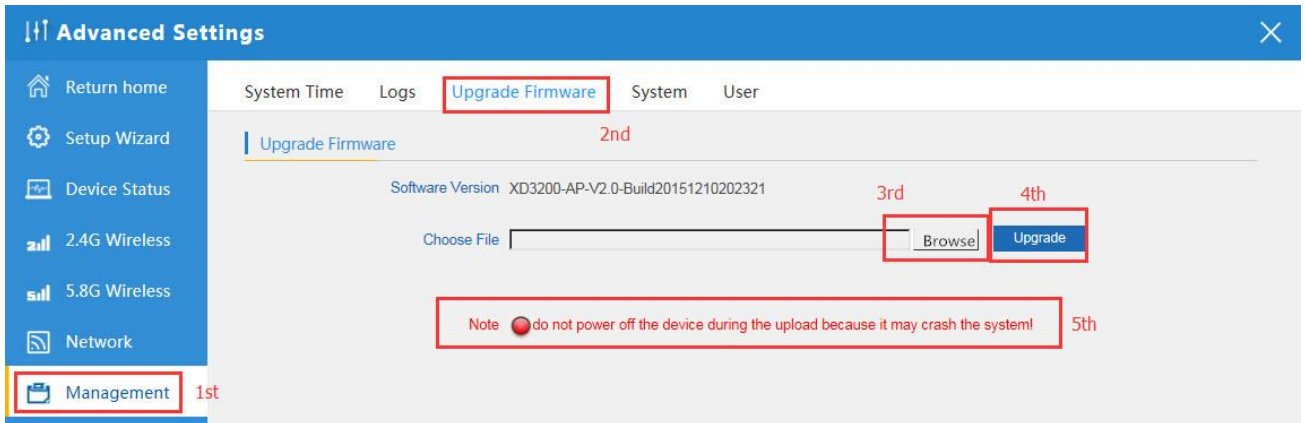
System Time: 2015-10-30 11:16:34 Sync with host

Choose Time Zone: Beijing,Chongqing,Urumqi,Re-Hong Kong,Taiwan; ▼

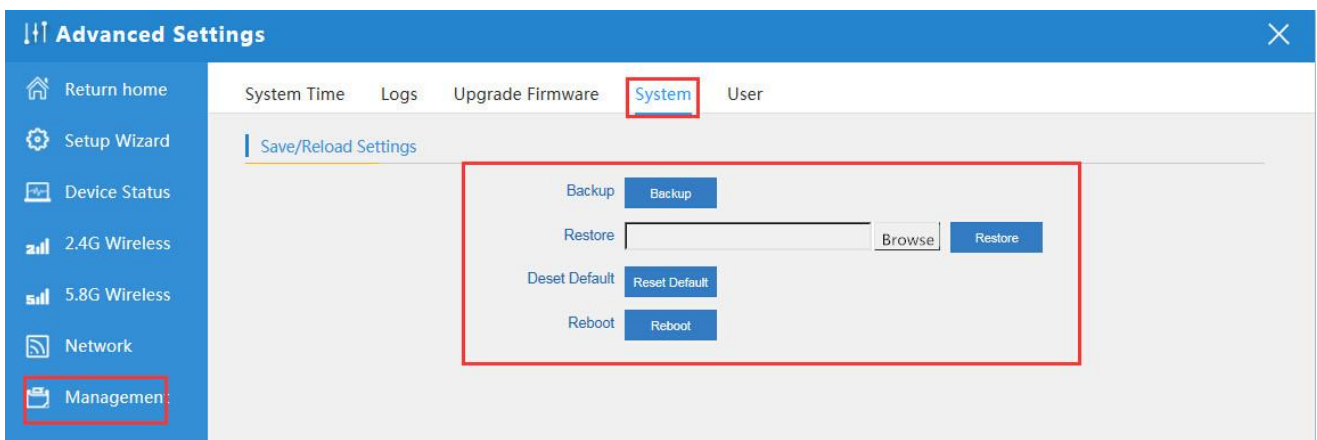
NTP Server: time.windows.com ▼

Equipment timing Auto restart: 23:00 ▼

P41 System Time



P42 Firmware Upgrade

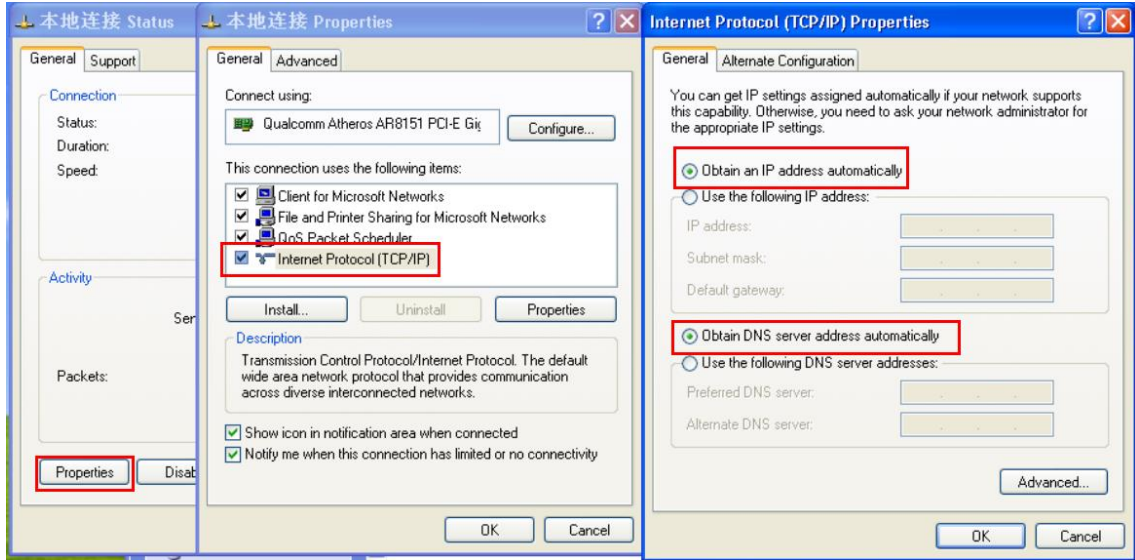


P43 System info

3 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.





4 Trouble Shooting

Issue	Solution
SYS Indicator off	Please 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	Please check the IP address of computer and Wireless AP to see whether they are in same networking segment, 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; Please 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 Browser'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	Please Check the computer's IP address and DNS setting. If it is dynamic, set the network card as automatically obtain. If it is static IP, Please 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.