



DG-WA7910P

User Manual

V1.0
2018-08-01

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1. Hardware and Operation Mode Instruction



Package Contents

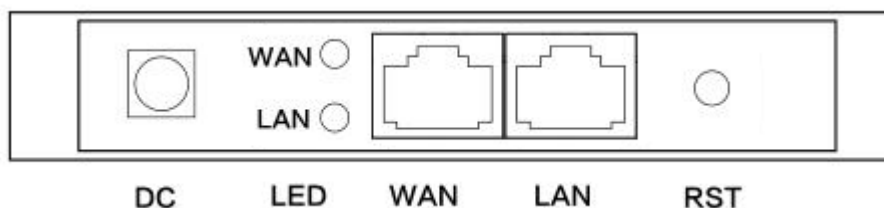
Before using this access point, please check if there is anything missing in the package, and contact your dealer of purchase to claim for missing items:

- DG-WA7910P Outdoor Access Point
- DC 12V Power Adapter
- Patch Cord
- User Manual CD
- Mounting Brackets

1.1. LED Indicator

SYS: Power Indicator
2G: 2.4G Wireless
5G: 5.8G Wireless

1.2. AP Interface



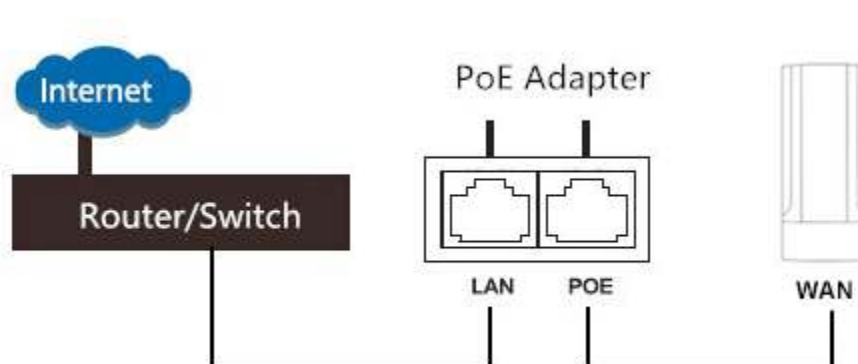
RST	Reset Button, it make AP revert to default settings after pressing it for 15 seconds
WAN	WAN Port, connect with ADSL modem or Internet mainly. It will be LAN port under Wireless AP and WiFi Repeater operation mode
LAN	LAN Port to end users
LED	LED Indicator for WAN port and LAN port
DC	DC power connector

1.3. Power Supply

1.3.1 PoE Adapter Power Supply:

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

The wireless AP support 48V IEEE802.3at PoE, so PoE adapter should be 48V IEEE802.3at PoE standard.



P1

1.3.2. PoE Switch Power Supply

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

Pls note the wireless AP support 48V IEEE802.3at PoE, the PoE switch should comply with 48V IEEE802.3at PoE standard.



P2

Operation Mode:

There are three operation mode on this wireless AP:

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



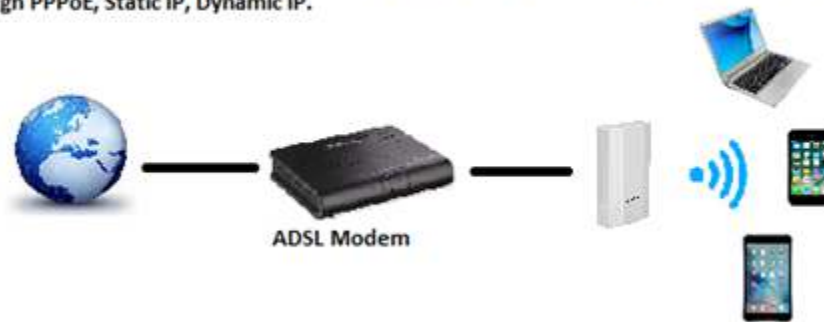
P3

2. Wireless Repeater: Wireless Receive and Transmit, to extend the existing wireless network for more range.



P4

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



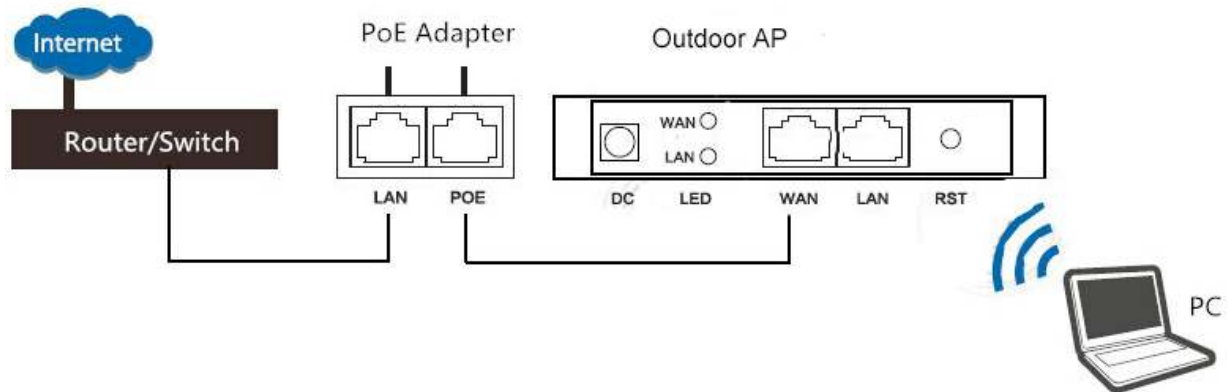
P5

2. Connect Wireless AP with PC

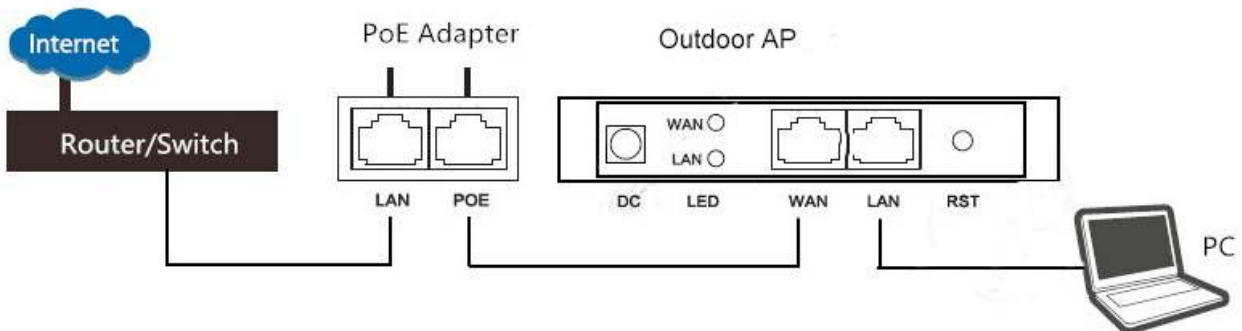
Connect the PC with wireless AP by Wireless SSID or LAN cable:

The diagram of wireless connection showed as follow:

Pls note: the default SSID is **DG-WA7910P-2.4G/5.8G**, SSID's are open with no password.



P6. Connecting the PC to the AP with wireless



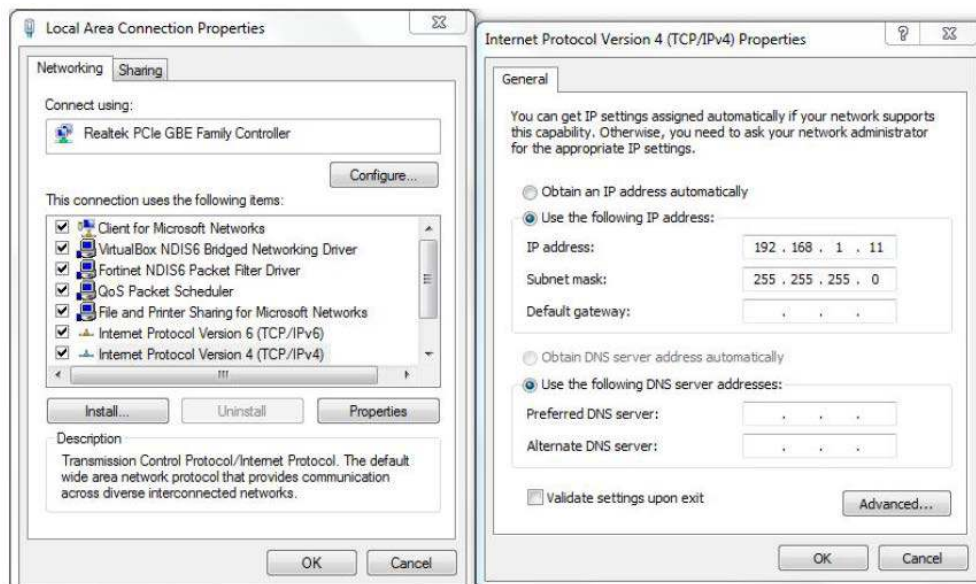
P7: Connecting the PC to the AP with wired LAN

3. Login

1. Connect the Outdoor AP with computer by wired or wireless
2. The default IP address of this wireless AP is 192.168.1.200. Configure the PC's local connection. IP address as 192.168.1.X (X is number from 2 to 254), subnet mask is 255.255.255.0.

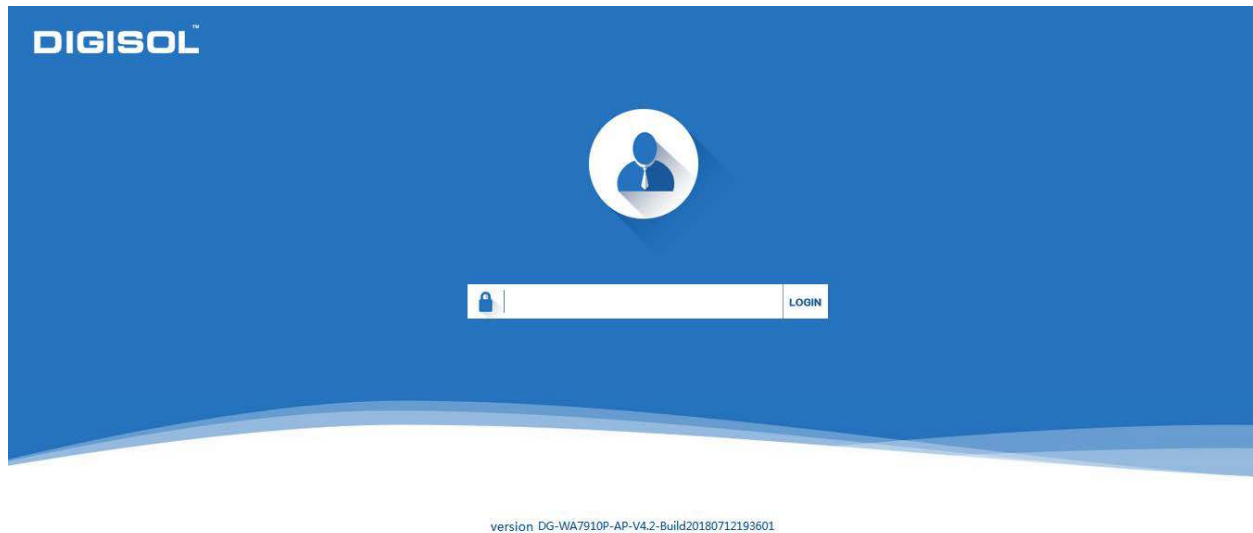


P8



P9

3. Input 192.168.1.200 into browser, login page will appear, the default login **password: admin**.



P10: Login Page

4. After login the following page appears which shows Device Status. This page will show the device default operation mode, Channel, Connection status, CPU usage, Wireless settings, LAN Setting, Wireless AP's Location, Hardware/Firmware version.



P11: Device Status

4. WEB GUI interface Setting

4.1. Status

After login, the Device Status and home page will be showed



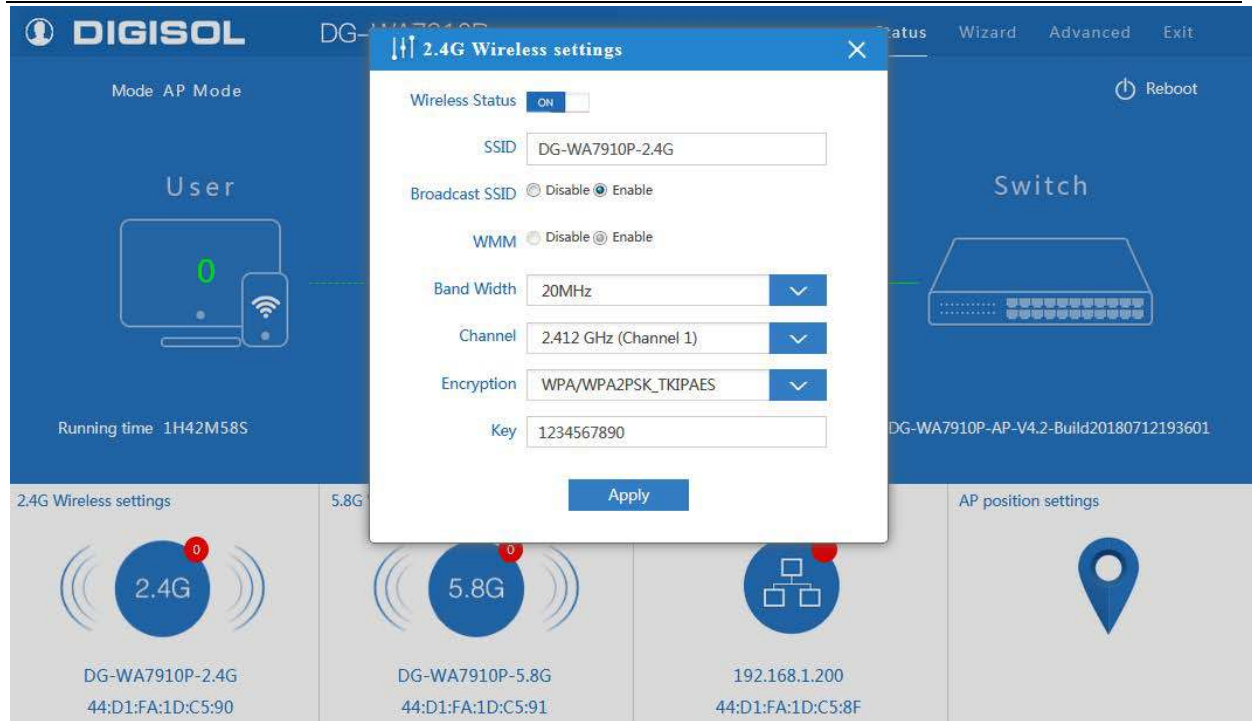
P12: Device Status

This page, show the device default operation mode, channel, end user QTY, connection status, CPU usage status, Wireless, LAN and AP location info.

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

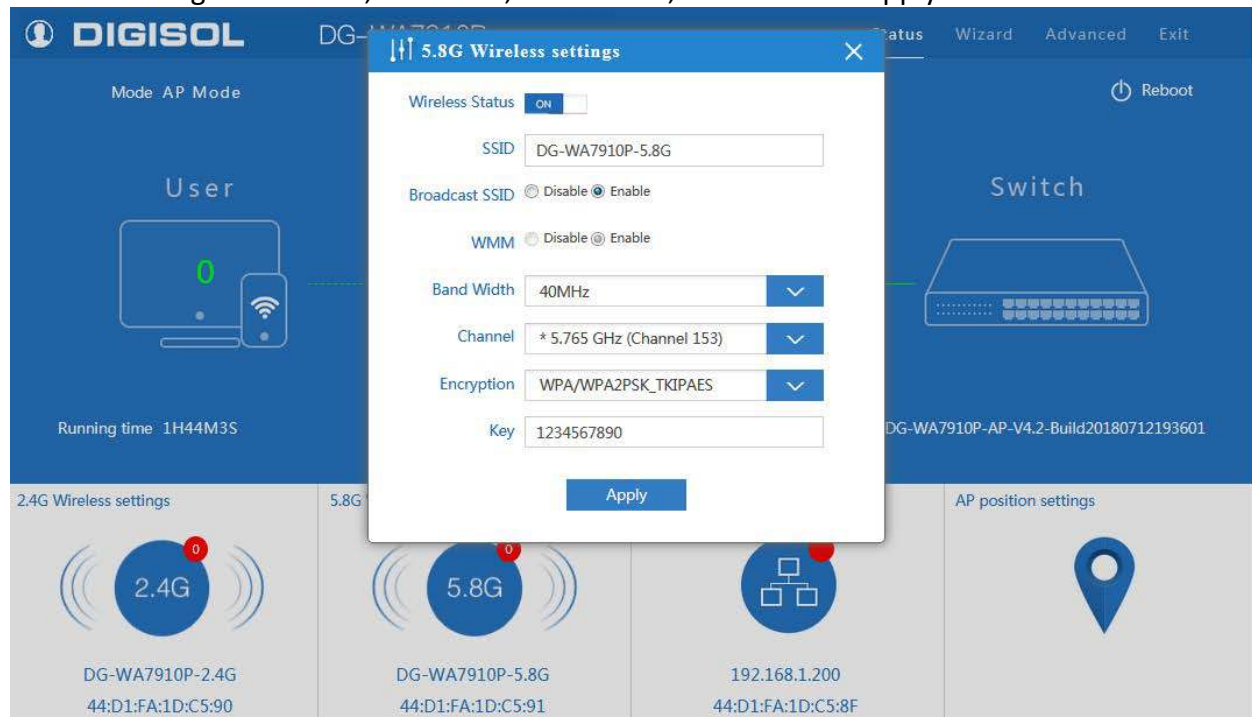
Then in 2.4G Wireless Setting, GUI configuration page shown as below:

User can configure the SSID, Password, Band width, Channel then Apply to finish.



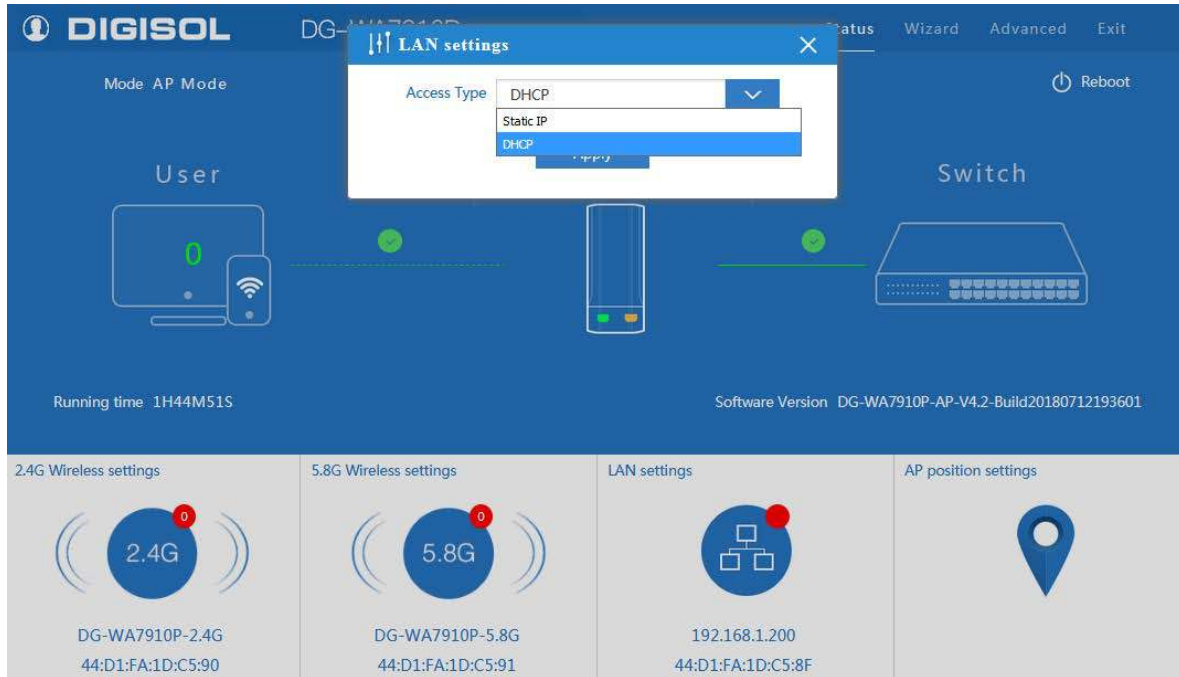
P13: 2.4G Wireless Setting

Then in 5G Wireless Setting, GUI configuration page shown as below:
User can configure the SSID, Password, Band width, Channel then Apply to finish.



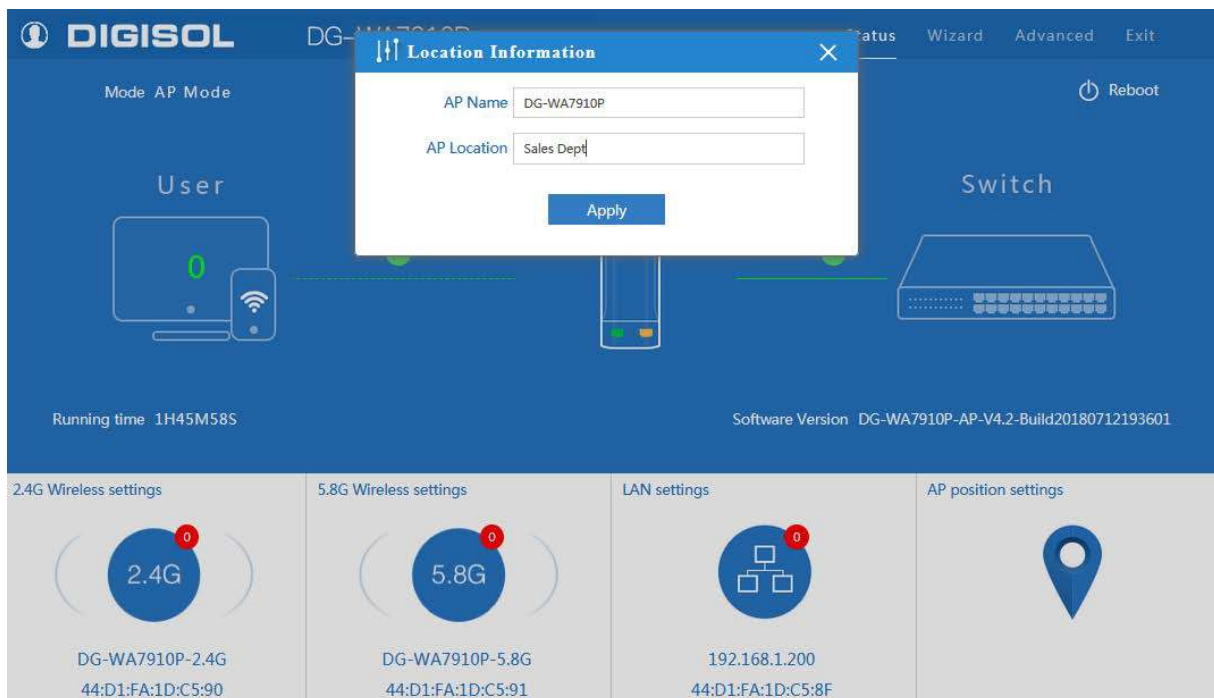
P14: 5G Wireless Setting

As shown below user can set LAN Setting to configure the DHCP or Static IP address.



P15: LAN Setting

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



P16: AP Location Setting

4.2. Wizard Configuration

Wizard: It instructs users to configure wireless AP operation mode based on needs, there are four operation modes including Gateway, Repeater, WISP, and Wireless AP. Please confirm the operation mode first before starting the configuration.

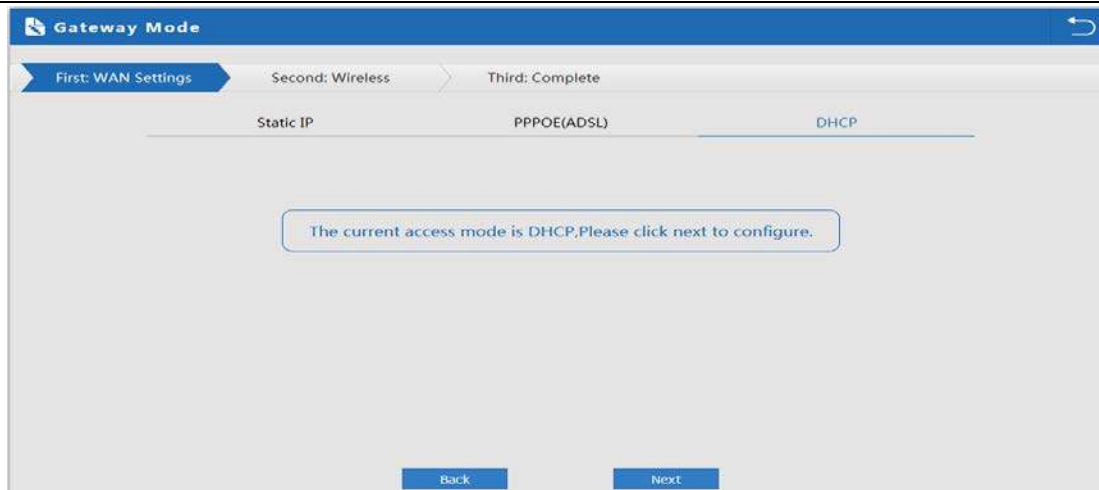
Clicking Wizard in the Status page will pop up the following page to configure the operation mode and there is an explanation for each operation mode for better application.



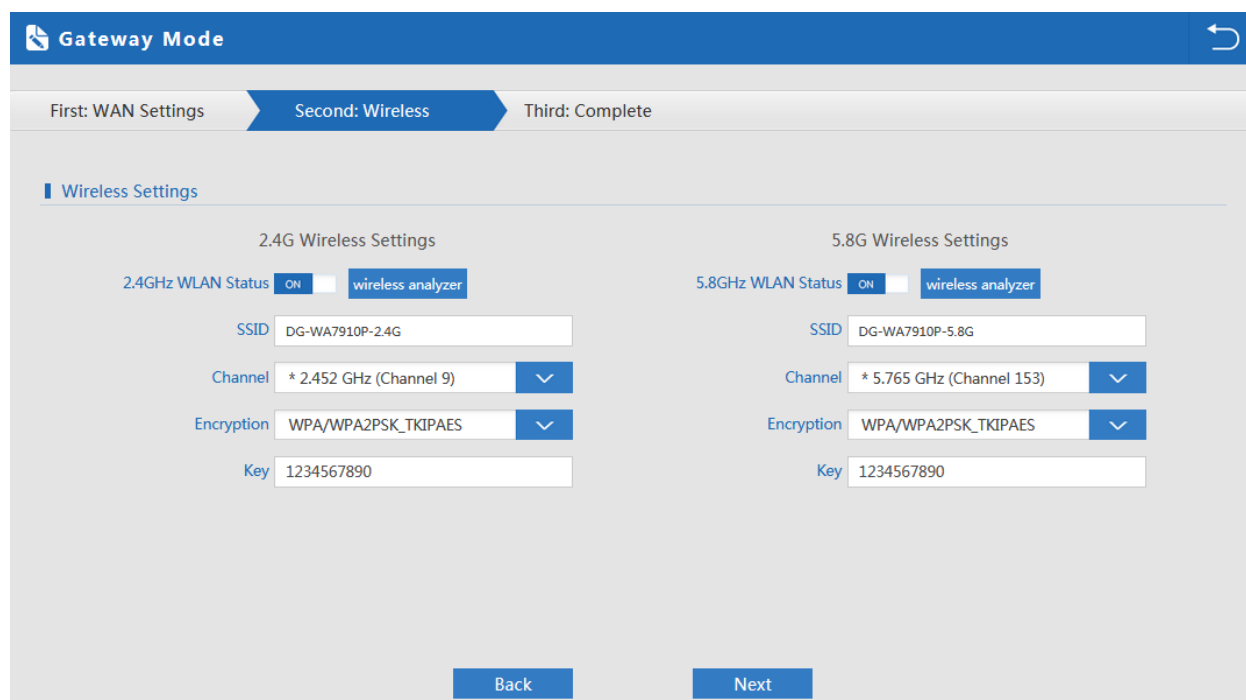
P17: Wizard Configuration

4.2.1 Gateway Mode

Before clicking the Gateway mode, confirm your internet will be Static IP, PPPoE, or DHCP. Then clicking on the Gateway mode will pop up the below image. Please choose the right WAN setting mode, then click next to continue. Then configure the wireless parameters and click next.

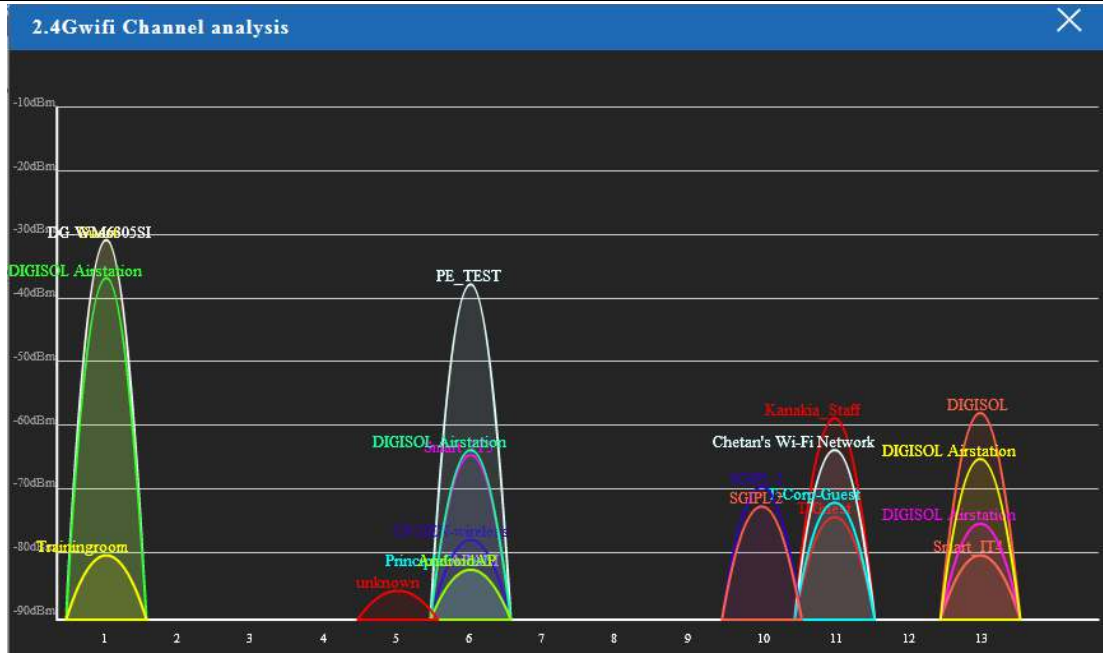


P18: WAN Setting in Gateway Mode

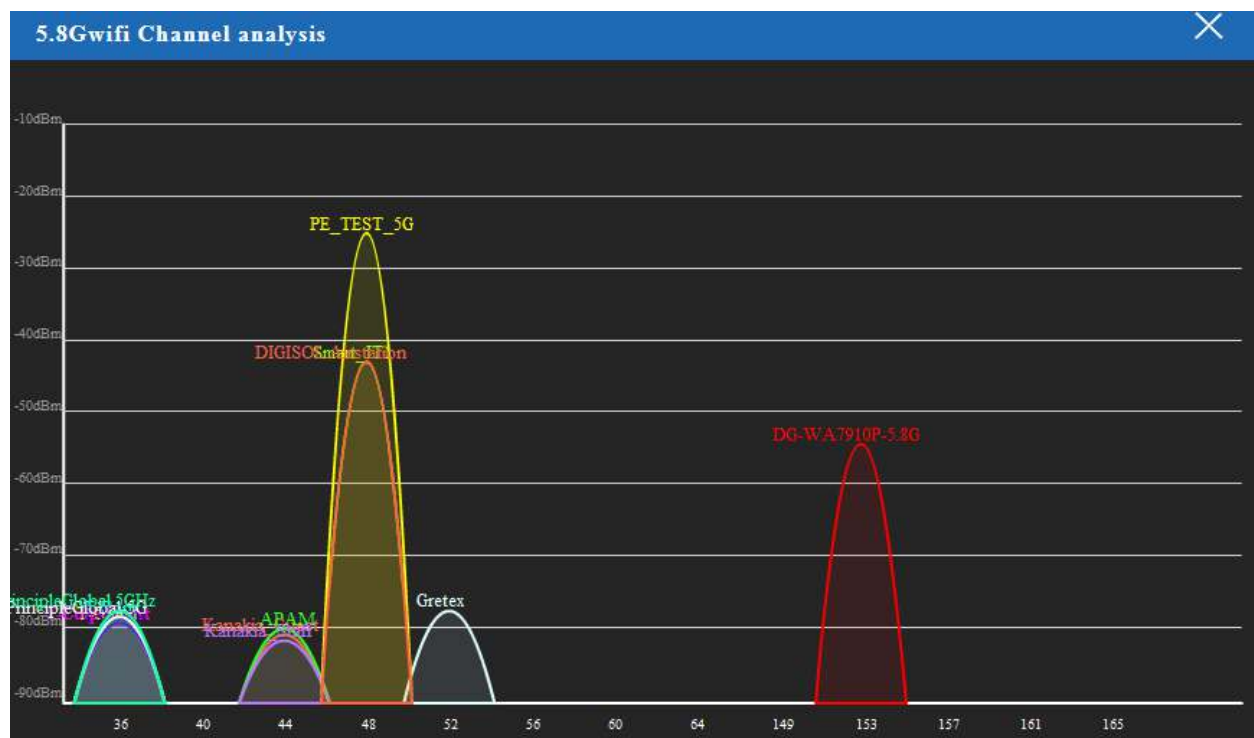


P19: Wireless Setting in Gateway Mode

Please note: to make the device work in some clear channel, user can click wireless analyzer at first. Check Less AP in the channel, and then select your channel accordingly, then Wireless performance will be more stable. Picture shown as below:



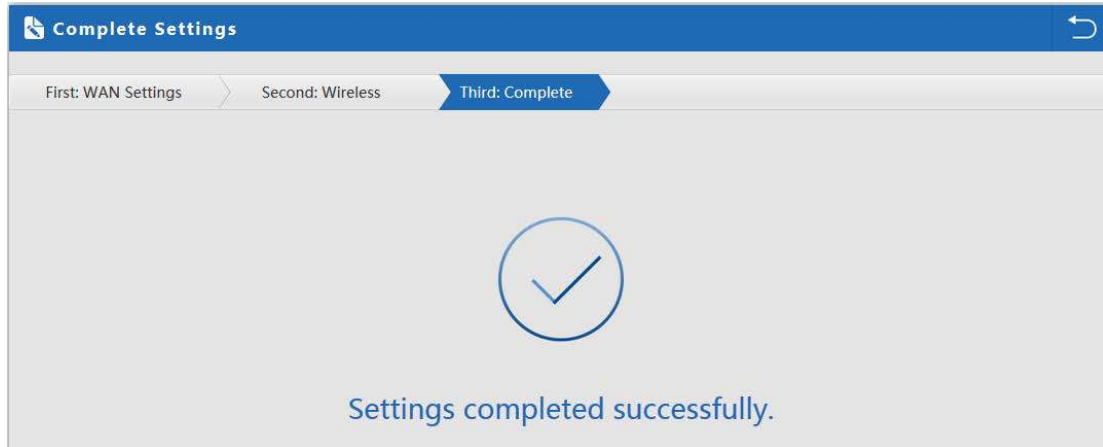
P20: 2.4G Wireless Analyzer



P21: 5.8G Wireless Analyzer

Clicking next will complete the Gateway mode setting and show following picture:

Please Note: The equipment will restart automatically for the changes to take effect.



P22: Settings Complete in Gateway Mode

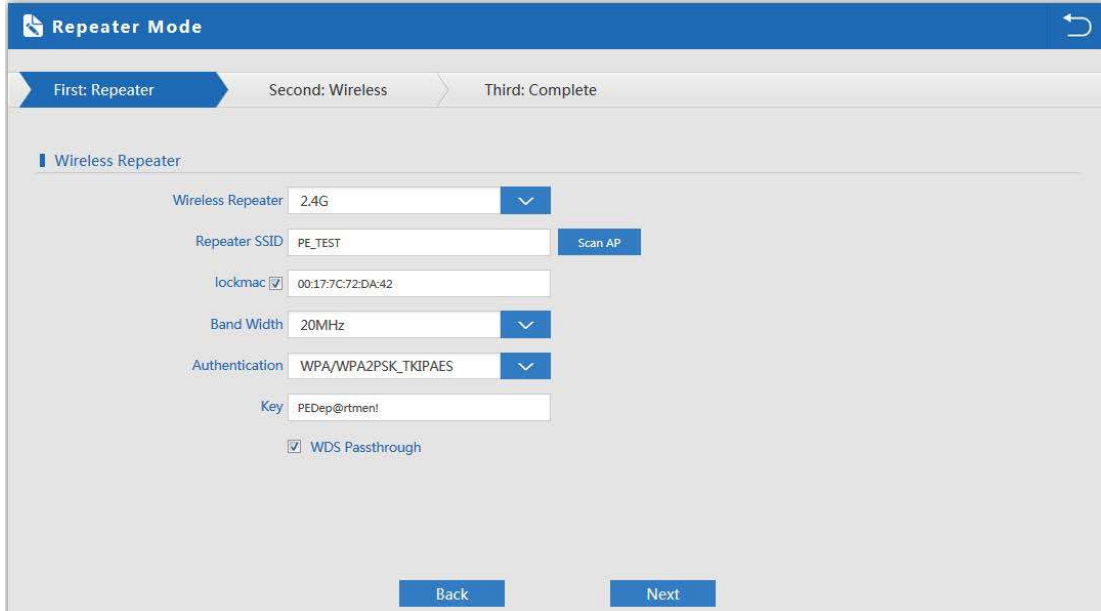
When return to Status page, will show Wireless router's SSID, Internet connection, LAN connection status shown as below.



P23: Status in Gateway Mode

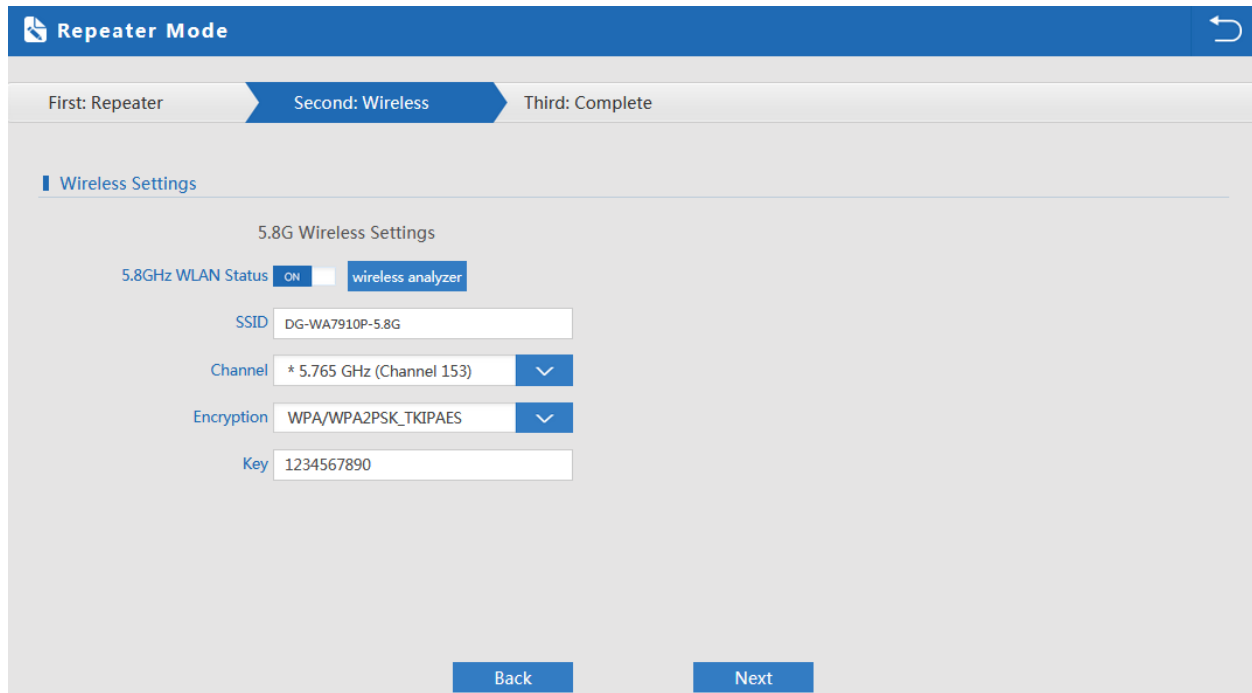
4.2.2. WiFi Repeater mode

1. Login the Web management page, click “Wizard” then “WiFi Repeater”
2. Scan AP and select the AP’s SSID want to bridge then input the AP’s key, click next to complete.



P24: Repeater Mode

Click next to configure the Wireless Setting as follows, then click next to finish.



P25: Wireless Setting in Repeater Mode

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

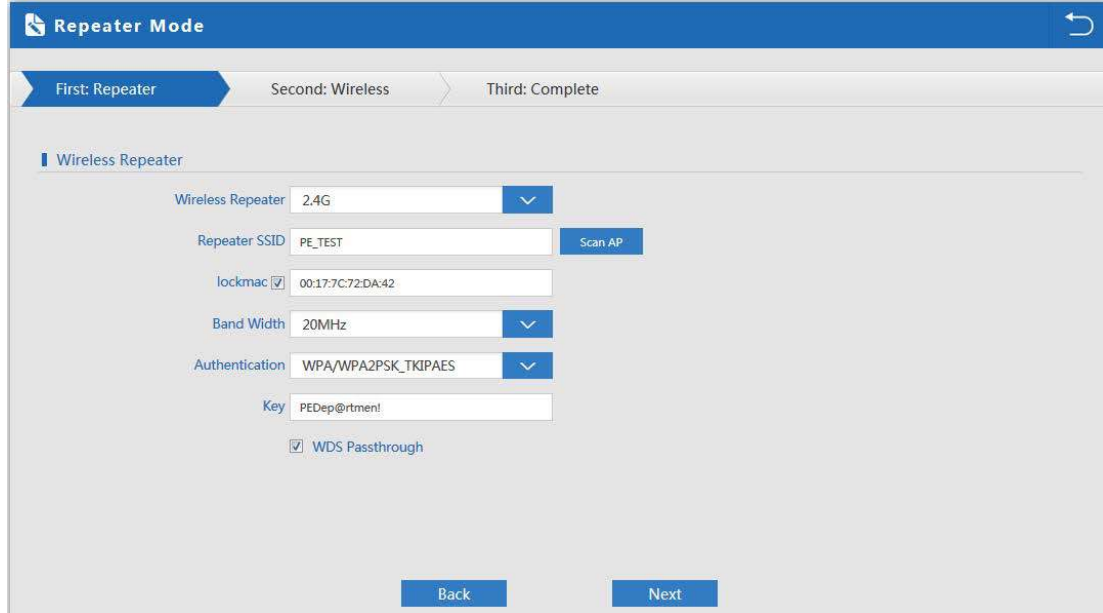
Please Note: The equipment will restart automatically for the changes to take effect.



P26: Status in Repeater Mode

In wifi repeater operation mode, the default is SSID disable. If you want to enable SSID, then click Wireless Setting.

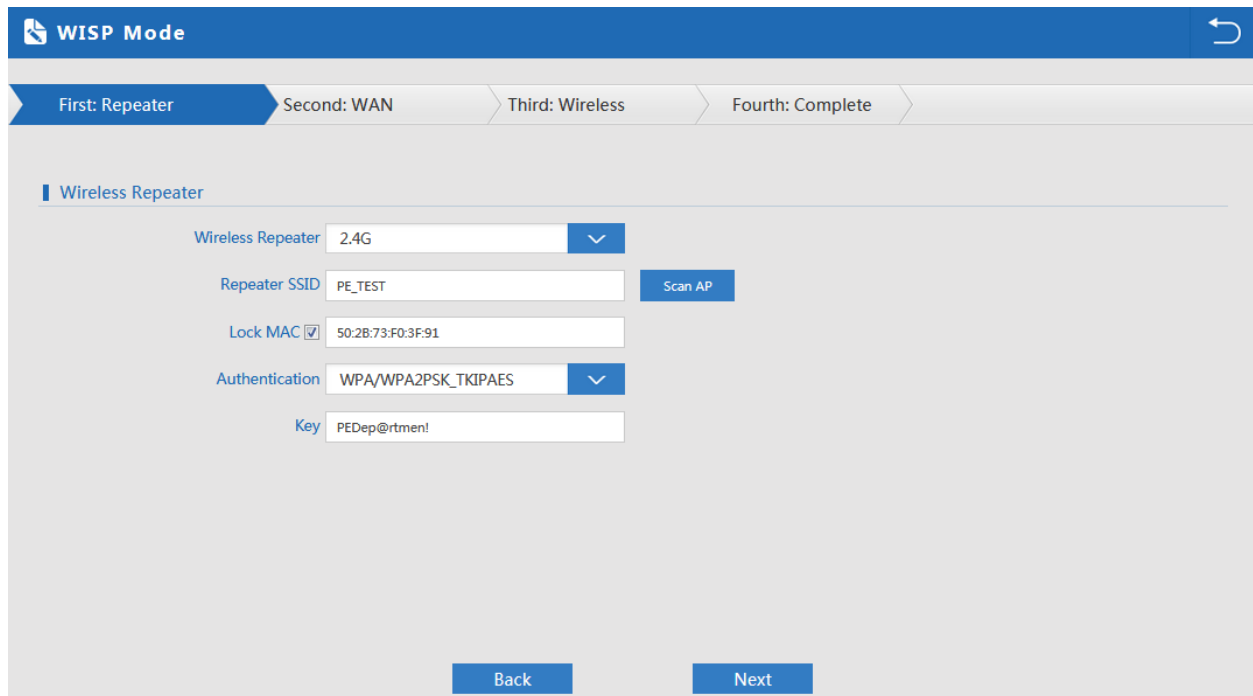
Pls note, when click wireless relay setting, following page will pop up, you can make changes from here easily.



P27: Wireless Relay Settings

4.2.3. WISP Operation mode

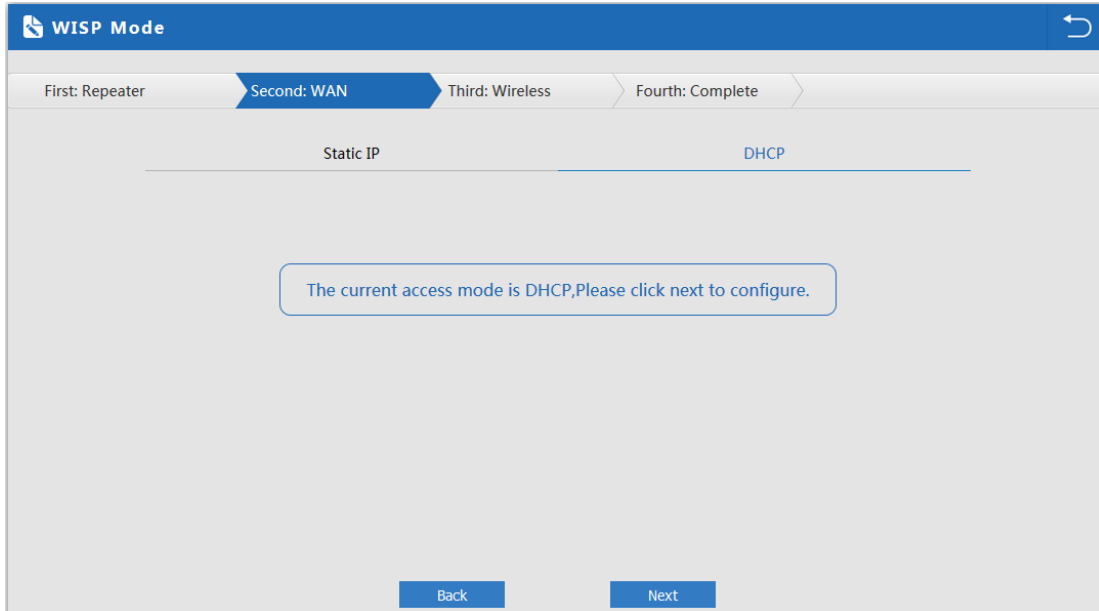
Click WISP operation mode in Wizard, then will pop up the configure page, please set the WISP operation mode based on the steps shown in picture:



P28: WISP Mode

Select the appropriate wireless AP and configure the correct WAN setting in WISP operation mode, then next to complete.

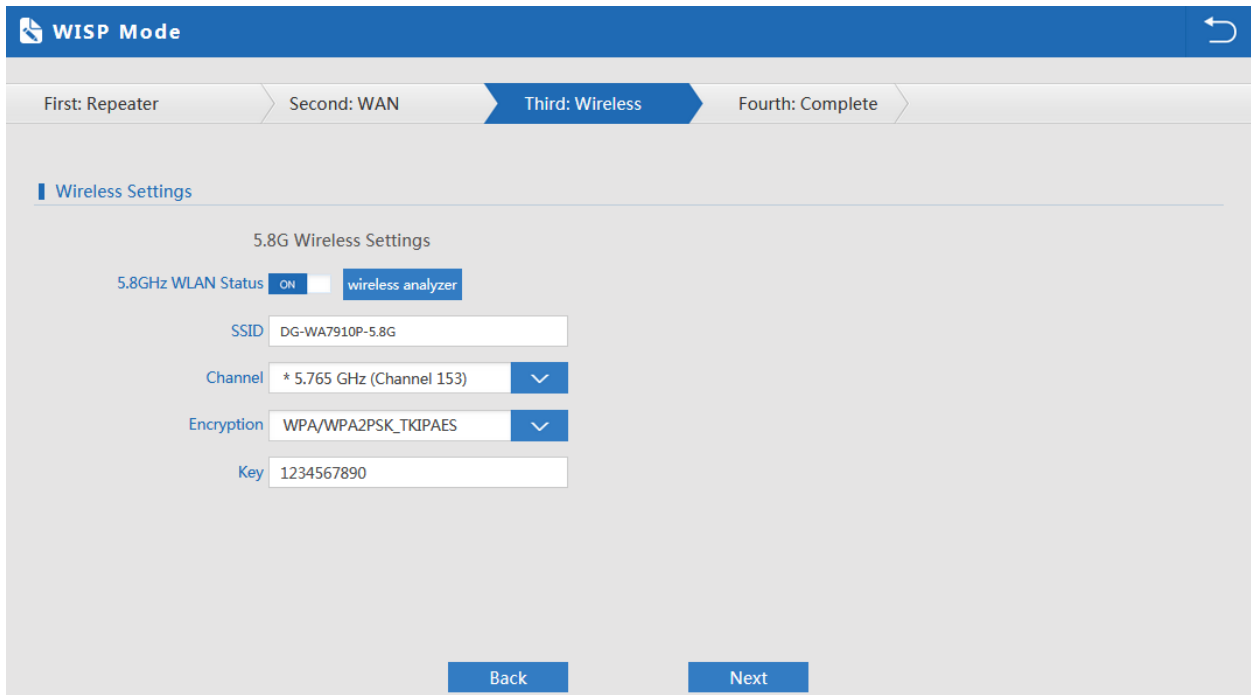
Please Note: The equipment will restart automatically for the changes to take effect.



The screenshot shows the 'WISP Mode' configuration interface. At the top, a blue header bar contains the 'WISP Mode' title and a refresh icon. Below the header, a progress bar indicates four steps: 'First: Repeater', 'Second: WAN' (highlighted with a blue arrow), 'Third: Wireless', and 'Fourth: Complete'. The main content area is divided into two sections: 'Static IP' and 'DHCP'. The 'DHCP' section is selected, and a message box states: 'The current access mode is DHCP, Please click next to configure.' At the bottom, there are 'Back' and 'Next' buttons.

P29: WAN Setting in WISP Mode

Configure the Wireless Data as shown below



The screenshot shows the 'WISP Mode' configuration interface for 'Wireless Settings'. The progress bar at the top shows 'Third: Wireless' as the current step. The 'Wireless Settings' section is expanded, showing '5.8G Wireless Settings'. The '5.8GHz WLAN Status' is set to 'ON' with a toggle switch, and a 'wireless analyzer' button is visible. Below this, the 'SSID' is 'DG-WA7910P-5.8G', the 'Channel' is '* 5.765 GHz (Channel 153)', the 'Encryption' is 'WPA/WPA2PSK_TKIPAES', and the 'Key' is '1234567890'. At the bottom, there are 'Back' and 'Next' buttons.

P30: 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:



P31: Status in WISP Mode

4.2.4. 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 Wireless Settings

2.4GHz WLAN Status ☒ ON wireless analyzer

SSID

Channel ▼

Encryption ▼

Key

5.8G Wireless Settings

5.8GHz WLAN Status ☒ ON wireless analyzer

SSID

Channel ▼

Encryption ▼

Key

Location Information

AP Name

AP Location

Back
Next

P32: Wireless Setting in AP Mode

AP Mode
↶

First: Wireless
Second : LAN
Third:Complete

LAN settings

Access Type ▼

Static IP

DHCP

Back
Next

P33: LAN Setting in AP Mode

Please Note: The equipment will restart automatically for the changes to take effect.



P34: Status in AP Mode

4.3. Advanced Setting

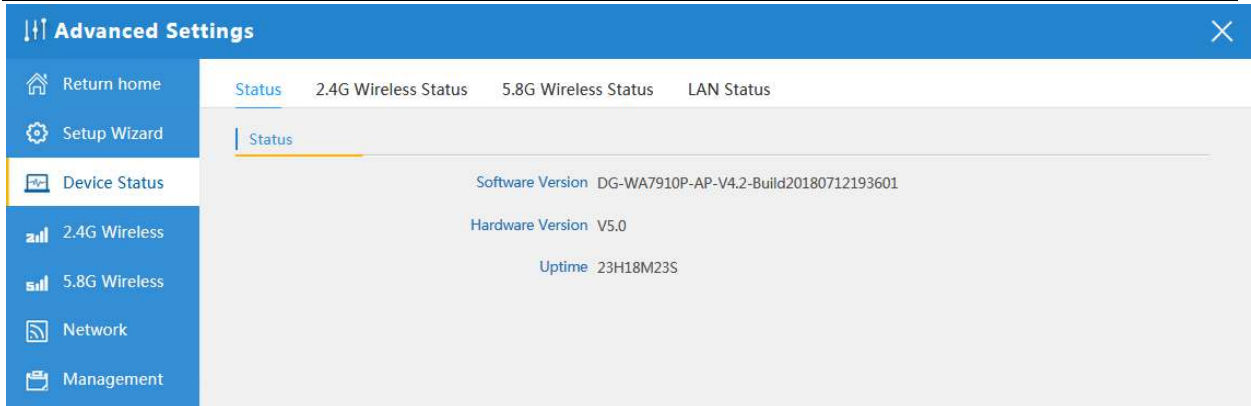
In advanced setting you can get wireless AP device status, Wireless setting, Network setting and AP management configuration. Let's click Advanced Setting in status page, will show Return home, Setup Wizard which we showed before.

Let's see more in Device Status, Wireless, Network and Management in following pages:

4.3.1. Device Status

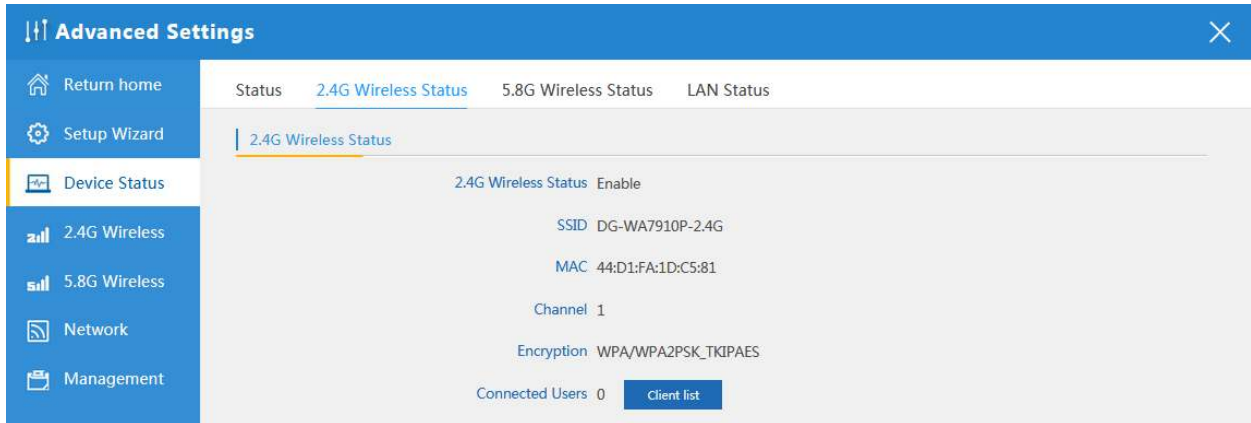
To show the device status, Wireless Status and LAN status.

In status, mainly to check the AP firmware version, hardware version, uptime info.

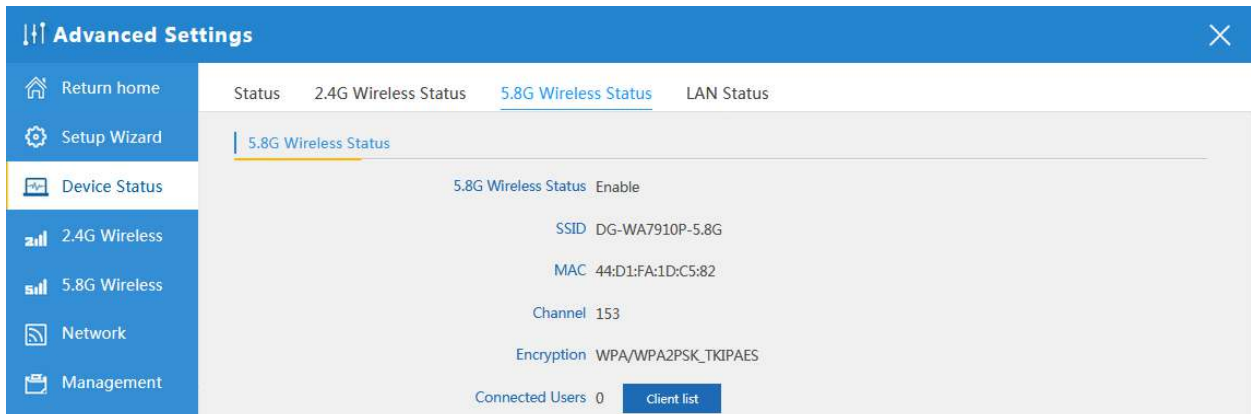


P35: Device Status

Wireless status show wireless AP's SSID, MAC address for WiFi, Channel, Encryption, Client List info.

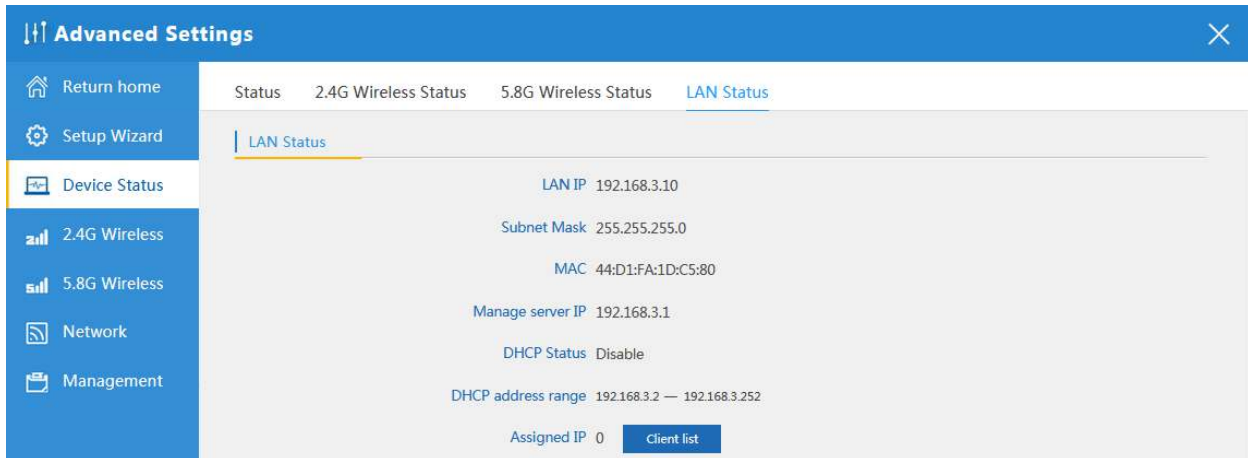


P36: 2.4G Wireless Status



P37: 5G Wireless Status

In LAN Status, we can check device IP address, Subnet Mask, LAN MAC address and other info showed in following picture.



The screenshot shows the 'Advanced Settings' window with the 'LAN Status' tab selected. The left sidebar contains navigation options: Return home, Setup Wizard, Device Status, 2.4G Wireless, 5.8G Wireless, Network, and Management. The main content area displays the following information:

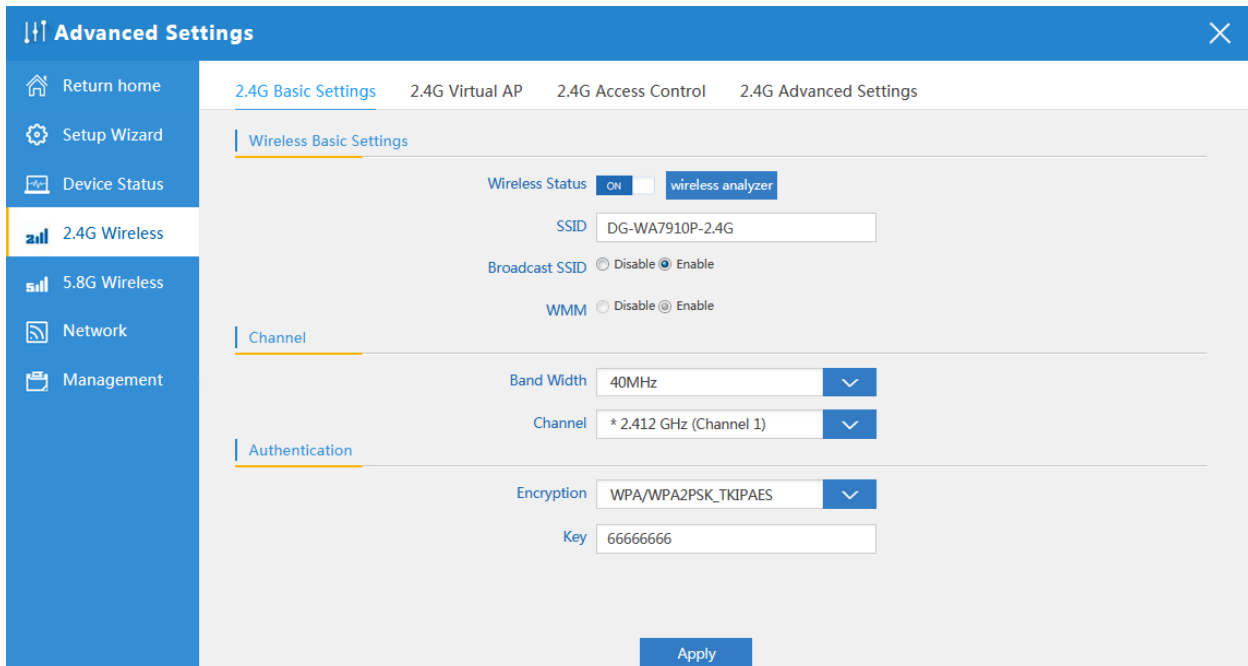
- LAN IP: 192.168.3.10
- Subnet Mask: 255.255.255.0
- MAC: 44:D1:FA:1D:C5:80
- Manage server IP: 192.168.3.1
- DHCP Status: Disable
- DHCP address range: 192.168.3.2 — 192.168.3.252
- Assigned IP: 0
- Client list button

P38: LAN Status

4.3.2. Wireless Setting

Wireless setting, mainly to configure the wireless SSID, password, encryption, channel, Multi SSID, tag VLAN & RF power adjust from Basic Setting, Virtual AP, Access control and Advanced Setting:

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

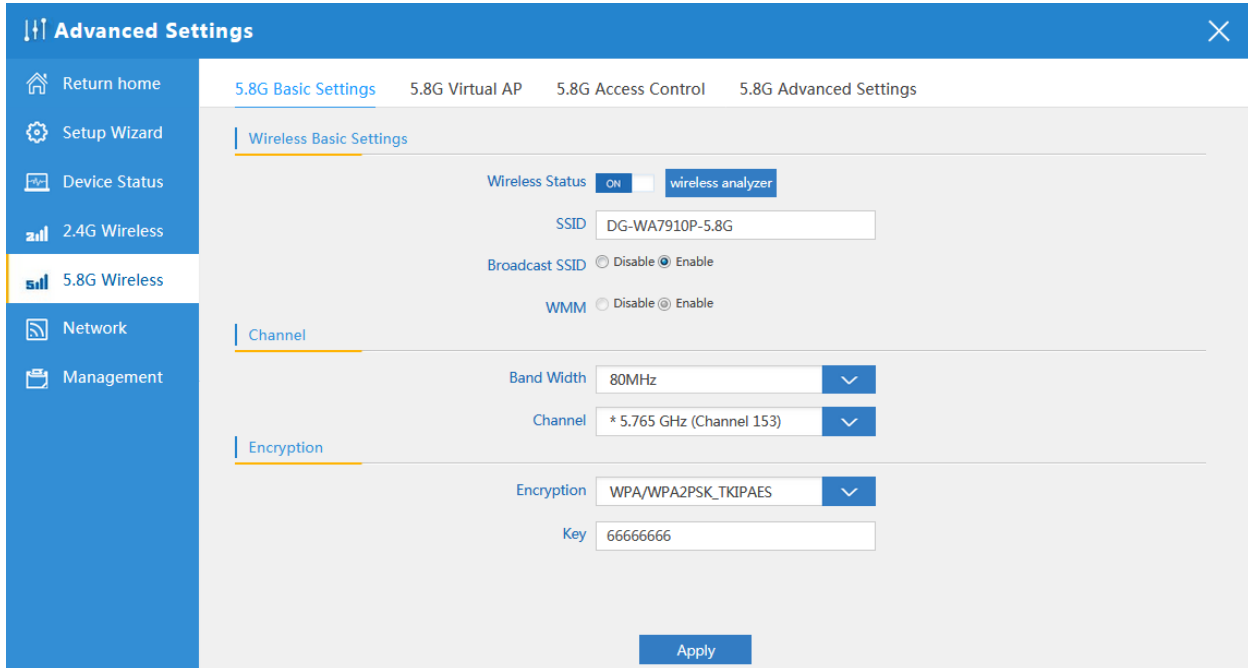


The screenshot shows the 'Advanced Settings' window with the '2.4G Basic Settings' tab selected. The left sidebar is the same as in the previous screenshot. The main content area displays the following settings:

- Wireless Status: ON (with a 'wireless analyzer' button)
- SSID: DG-WA7910P-2.4G
- Broadcast SSID: ☐ Disable ☒ Enable
- WMM: ☐ Disable ☒ Enable
- Channel section:
 - Band Width: 40MHz
 - Channel: * 2.412 GHz (Channel 1)
- Authentication section:
 - Encryption: WPA/WPA2PSK_TKIPAES
 - Key: 66666666
- Apply button

P39: Basic Settings in 2.4G Wireless Setting

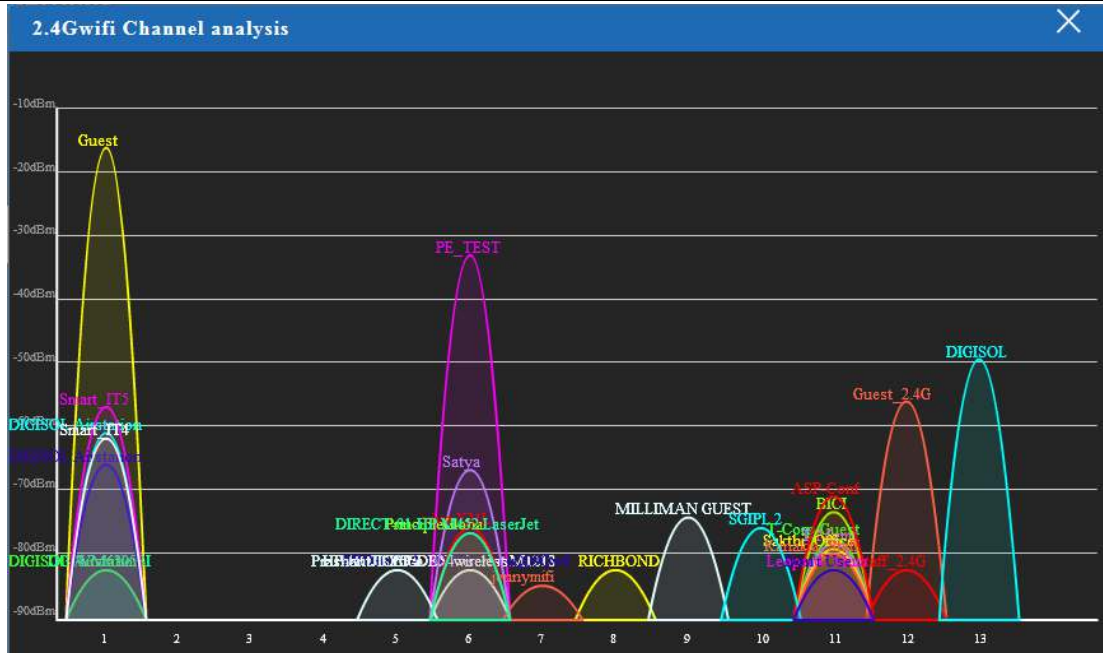
5G Wireless Setting: In this part, will show the 5G Basic Setting, Virtual AP, Access control and Advanced Setting:



P40: Basic Settings in 5G Wireless Setting

Wireless Status: On mean SSID on, Off mean SSID off.

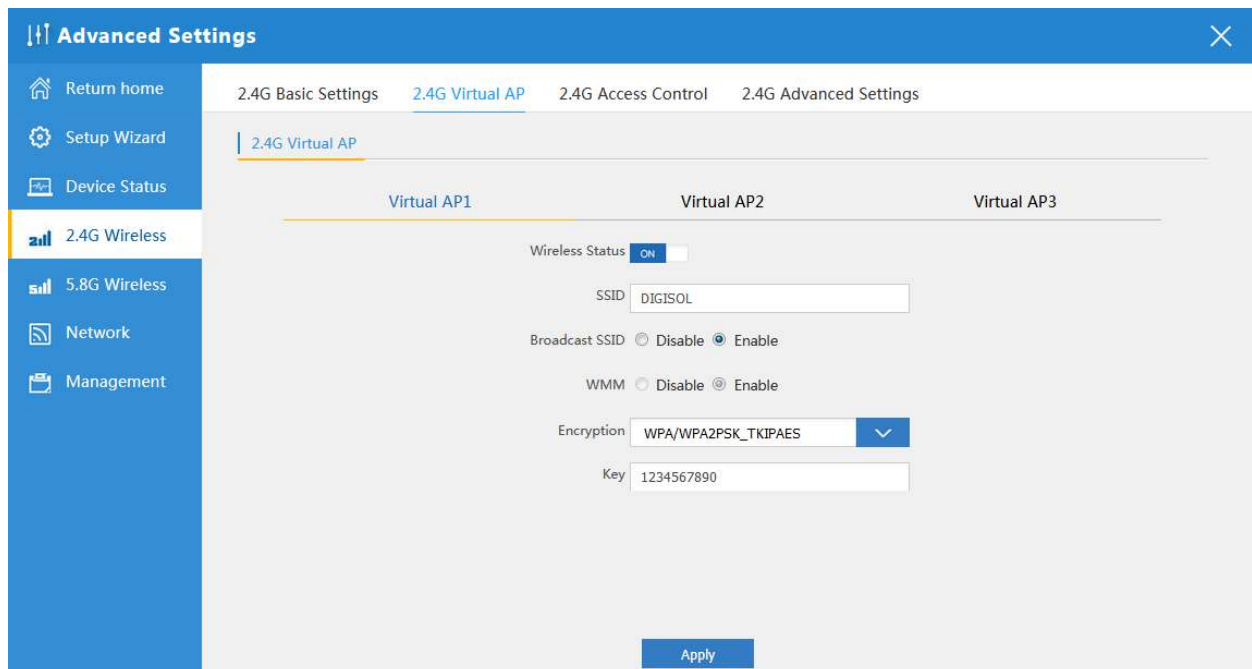
2.4G Wireless Analyzer: Mainly to analyze the AP's signal strength and channel, to make user more easy to choose the channel with less wireless AP and to avoid the Wireless Interference.



P41: 2.4G Wireless Analyzer

4.3.3. Virtual AP

There are 3 virtual AP in 2.4G and in 5G wireless, for use of multi SSID, then users can configure it as shown in following picture.



Advanced Settings

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

2.4G Virtual AP

Virtual AP1 | Virtual AP2 | Virtual AP3

Wireless Status: ☒ ON

SSID: DIGISOL

Broadcast SSID: ☐ Disable ☒ Enable

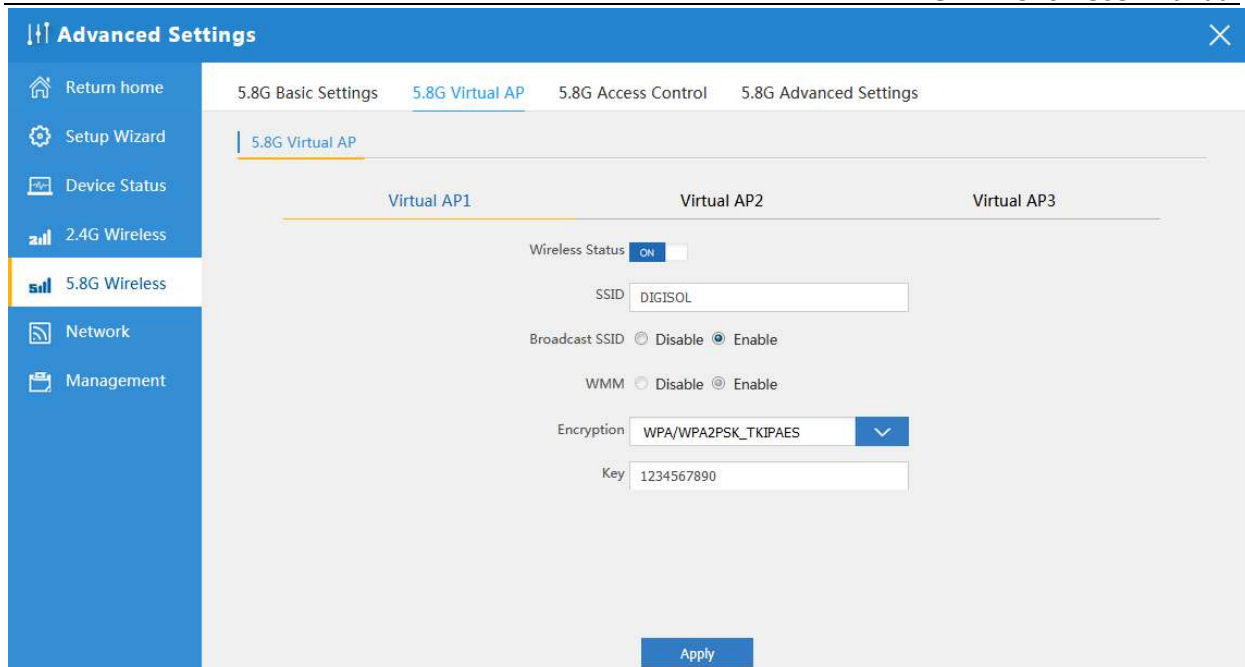
WMM: ☐ Disable ☒ Enable

Encryption: WPA/WPA2PSK_TKIPAES

Key: 1234567890

Apply

P42: 2.4G Virtual AP



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

5.8G Virtual AP

Virtual AP1 | Virtual AP2 | Virtual AP3

Wireless Status: ☒ ON

SSID: DIGISOL

Broadcast SSID: ☐ Disable ☒ Enable

WMM: ☐ Disable ☒ Enable

Encryption: WPA/WPA2PSK_TKIPAES

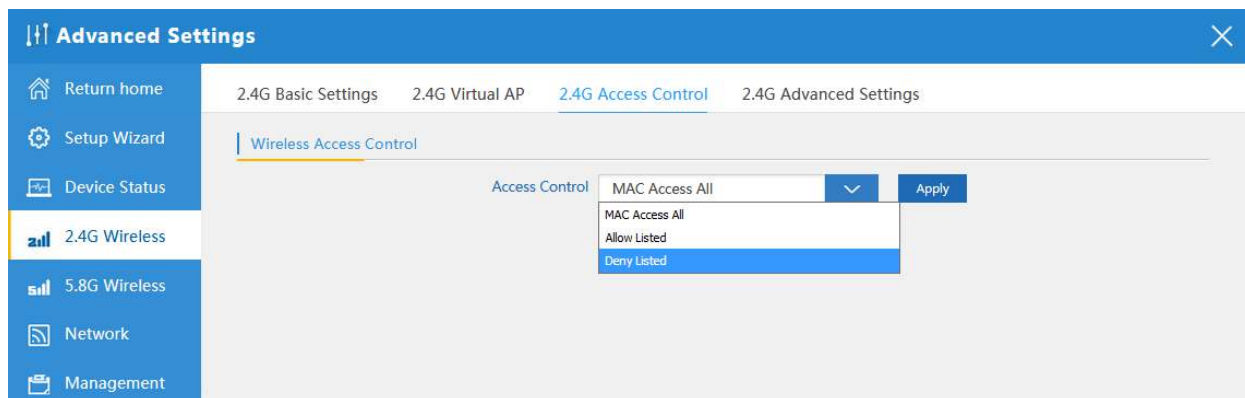
Key: 1234567890

Apply

P43: 5G Virtual AP

4.3.4. Access Control

Allow or deny the users access into this device based on MAC address.



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

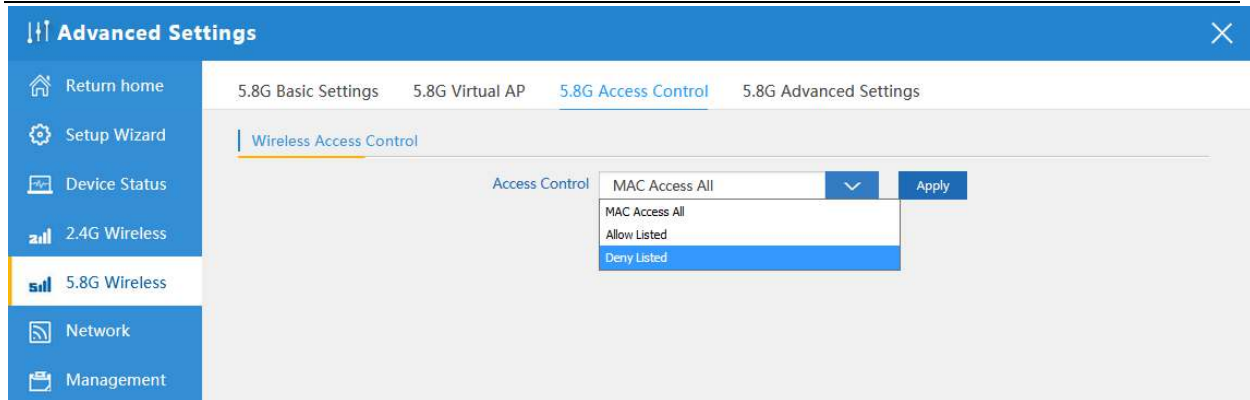
Wireless Access Control

Access Control: MAC Access All

MAC Access All
Allow Listed
Deny Listed

Apply

P44: 2.4G Access Control Settings

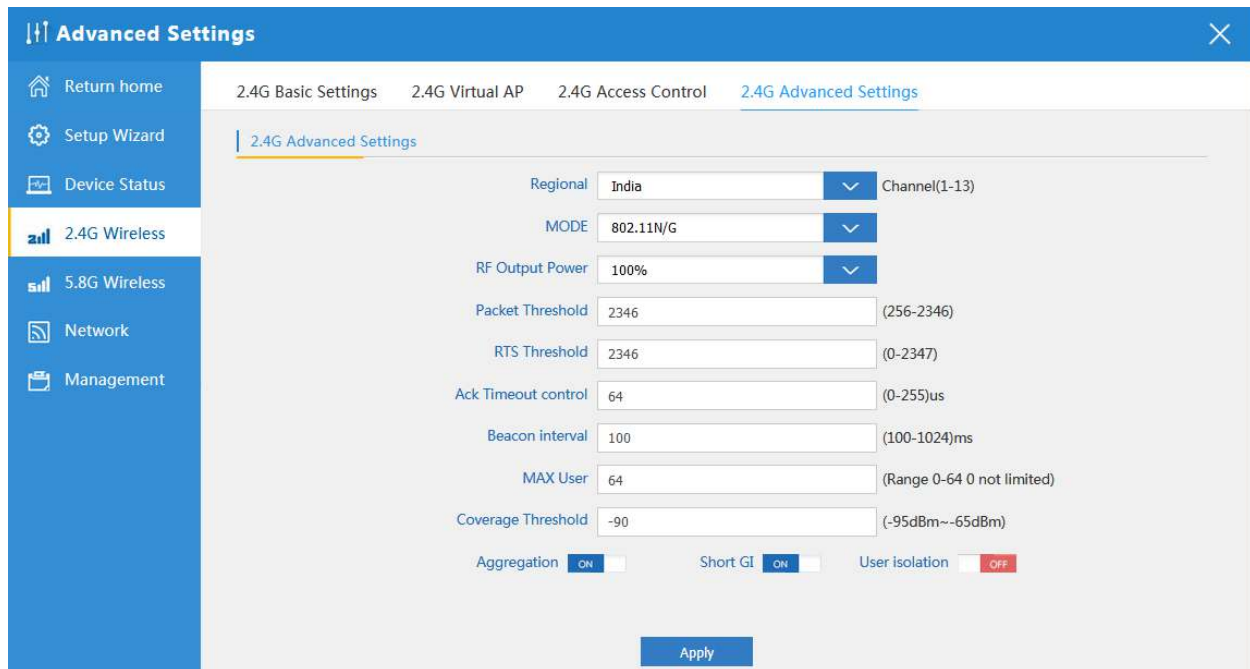


The screenshot shows the 'Advanced Settings' window with the '5.8G Access Control' tab selected. The left sidebar contains navigation options: Return home, Setup Wizard, Device Status, 2.4G Wireless, 5.8G Wireless (highlighted), Network, and Management. The main content area is titled 'Wireless Access Control' and features a dropdown menu for 'Access Control' currently set to 'MAC Access All'. The dropdown options are 'MAC Access All', 'Allow Listed', and 'Deny Listed'. An 'Apply' button is located to the right of the dropdown.

P45: 5G Access Control Settings

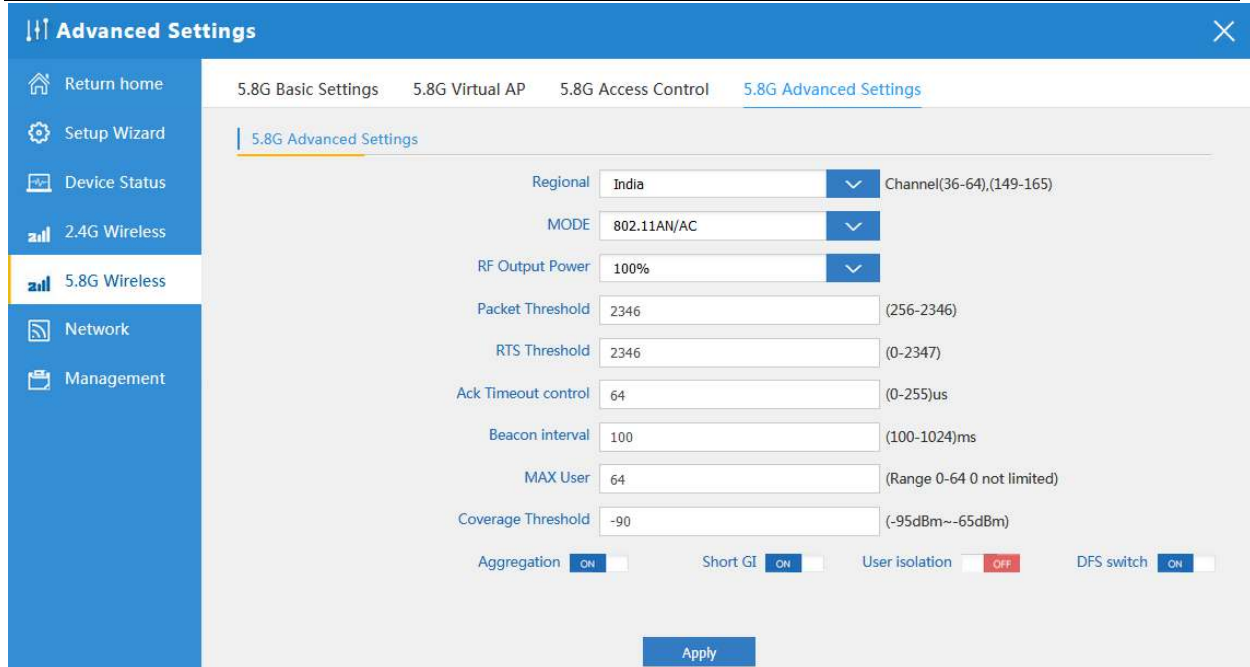
4.3.5. Advanced Settings

This page, will show the regional info, mode, RF Power, Max user access, etc.



The screenshot shows the 'Advanced Settings' window with the '2.4G Advanced Settings' tab selected. The left sidebar is identical to the previous screenshot, with '5.8G Wireless' highlighted. The main content area is titled '2.4G Advanced Settings' and contains several configuration fields: 'Regional' (set to India), 'MODE' (set to 802.11N/G), 'RF Output Power' (set to 100%), 'Packet Threshold' (2346, range 256-2346), 'RTS Threshold' (2346, range 0-2347), 'Ack Timeout control' (64, range 0-255us), 'Beacon interval' (100, range 100-1024ms), 'MAX User' (64, range 0-64 0 not limited), and 'Coverage Threshold' (-90, range -95dBm~-65dBm). At the bottom, there are three toggle switches: 'Aggregation' (ON), 'Short GI' (ON), and 'User isolation' (OFF). An 'Apply' button is located at the bottom center.

P46: 2.4G Advanced Wireless Settings



Advanced Settings

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

5.8G Advanced Settings

Regional: India (Channel(36-64),(149-165))

MODE: 802.11AN/AC

RF Output Power: 100%

Packet Threshold: 2346 (256-2346)

RTS Threshold: 2346 (0-2347)

Ack Timeout control: 64 (0-255)us

Beacon interval: 100 (100-1024)ms

MAX User: 64 (Range 0-64 0 not limited)

Coverage Threshold: -90 (-95dBm--65dBm)

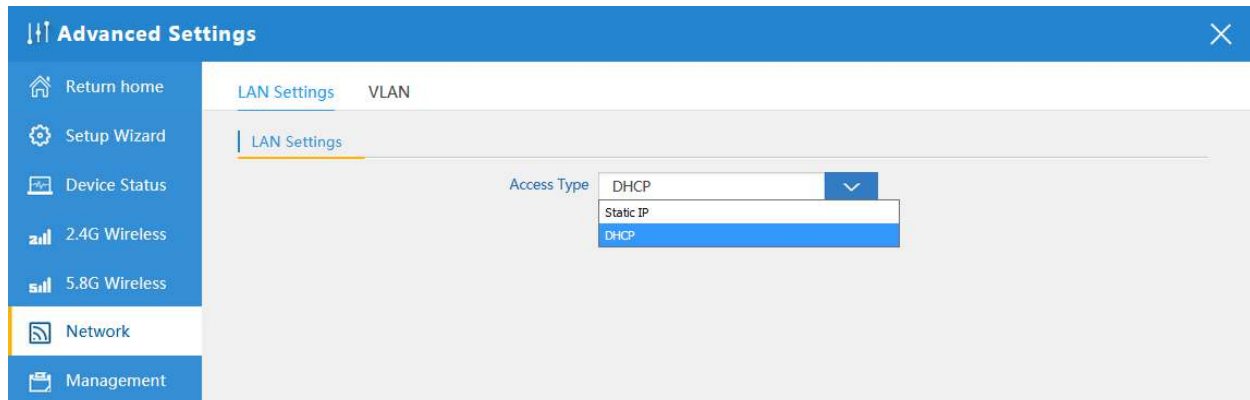
Aggregation: ☒ ON Short GI: ☒ ON User isolation: ☐ OFF DFS switch: ☒ ON

Apply

P47: 5G Advanced Wireless Settings

4.3.6. Network Setting

In network, you can configure LAN setting and tag VLAN as follow:
In LAN Settings, mainly including Static IP and DHCP.



Advanced Settings

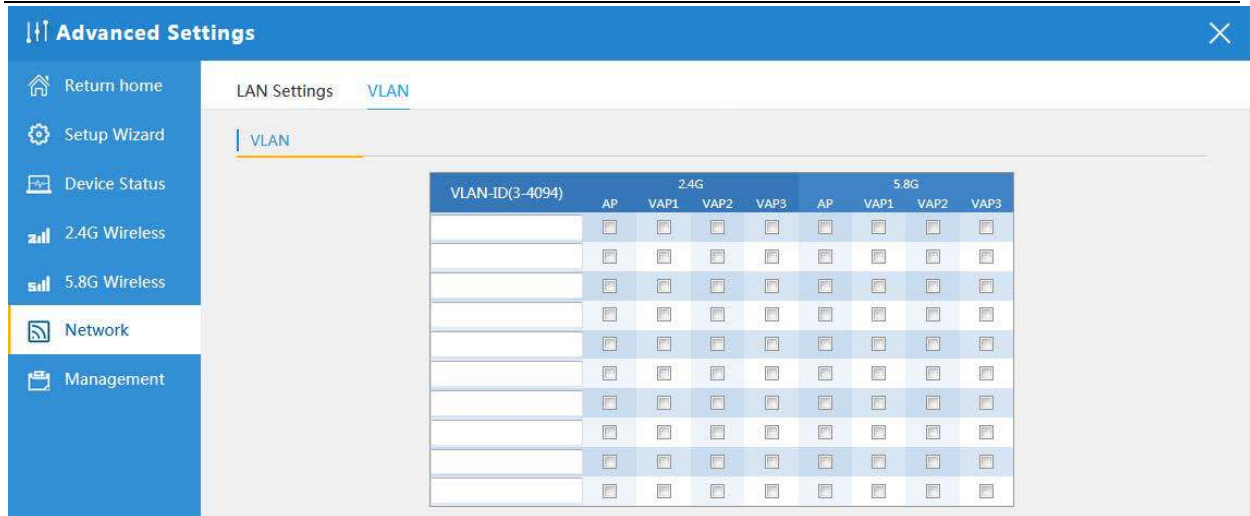
LAN Settings VLAN

LAN Settings

Access Type: DHCP (Static IP, DHCP)

P48: LAN Settings

In VLAN part, you need an VLAN switch and make sure the multi SSID is enable, then input the VLAN ID to different SSID.

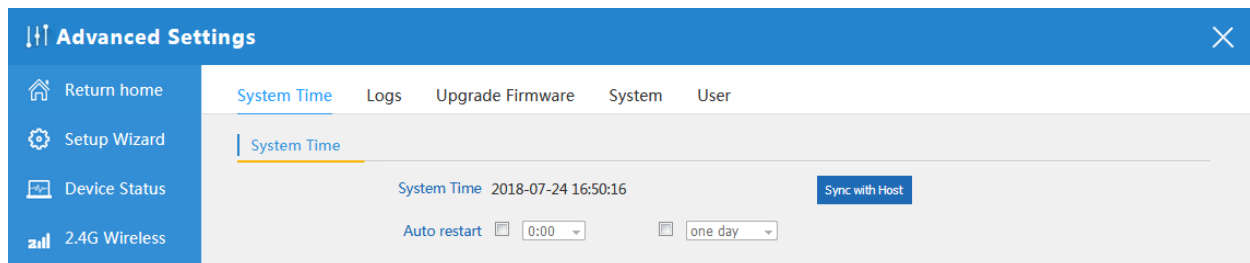


P49: Tag VLAN Setting

4.3.7. Management

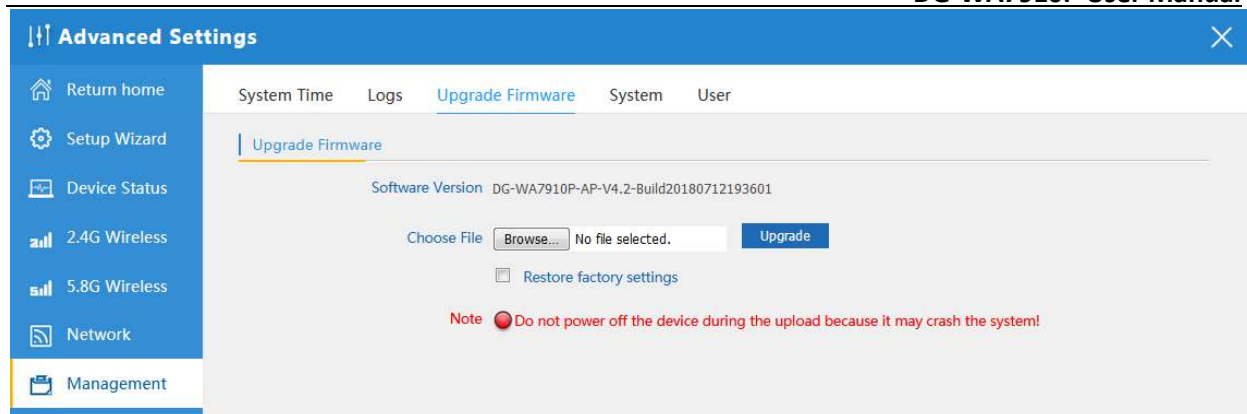
It shows the System time, Logs, Upgrade firmware, System, User info.

System Time:- Can configure the device timing



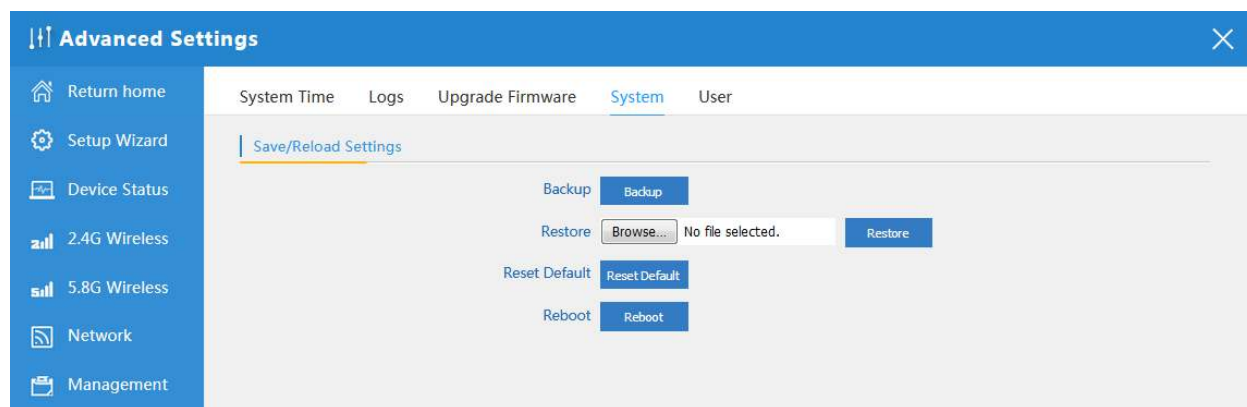
P50: System Time

Upgrade Firmware:- Browse the firmware file and click on upgrade. Wait till the upgrade is successful. The device will reboot automatically and successful firmware upgrade.



P51: Firmware Upgrade

System:- You can save the config or restore the previously saved config or reset the device to its default config.

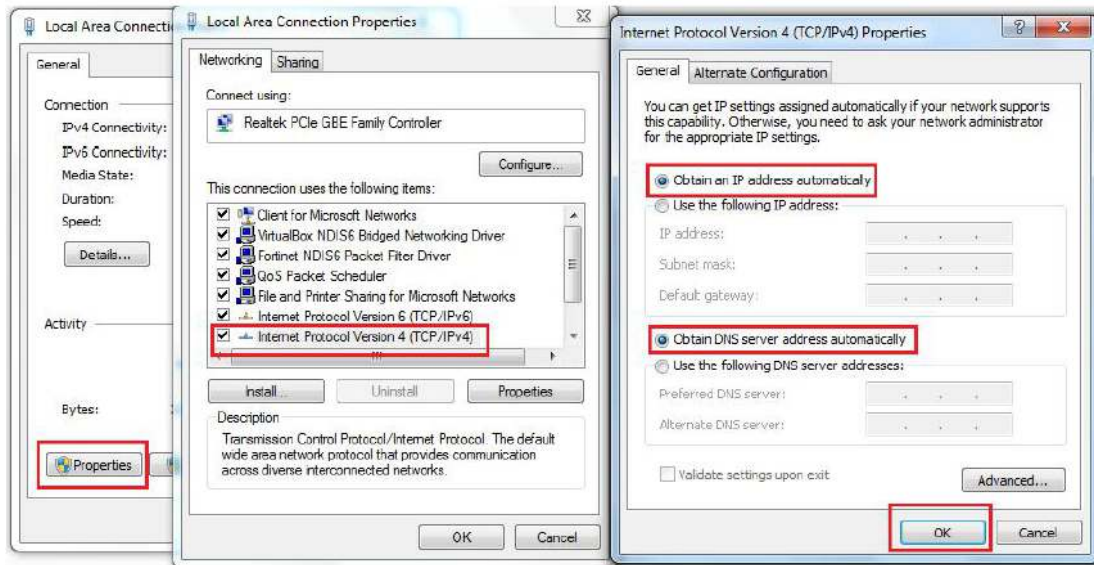


P52: System Settings

5. 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.



P53

Troubleshooting

The Failure phenomenon and solution

If the problems are not listed, please contact the local service or call the Toll Free service. We are willing to offer the service.

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	<p>Pls 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 192.168.1.200 to test the Wireless AP connectivity.</p> <p>Reset Wireless AP and load it again;</p> <p>Pls make sure the IP address 192.168.1.200 is not occupied by other device in Wireless AP'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>
Wireless AP can't connect with AP (the status display unconnected)	<p>Try to scan the available wireless networking again ;</p> <p>Make sure the Wireless AP's wireless standard is correct; (2.4Ghz signal should connect 2.4Ghz, 5.8Ghz signal should connect 5.8Ghz signal).</p> <p>The Security and passwords are matched between Wireless AP Router and AP ;</p> <p>The signal strength of AP is too weak to connect, should be</p>

	more than -75dBm ;
Can't scan the wireless AP	Scan it several times more; If using 5Ghz to scan, please make sure there are 5G signal existed. Reset the device, scan it again after device restarts; ;
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 dynamic, 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 device will restore factory default after it restarts.

This product comes with One Year warranty. For further details about warranty policy and product registration, please visit support section of www.digisol.com



DIGICARE™

Standard Warranty

This Product is covered under DIGICARE Standard Warranty program backed by DIGICARE Service Center. To avail this Standard Warranty offer, customer needs to contact DIGICARE's Technical Assistance Center for the same. You may be asked to provide proof of purchase of product for warranty claim of defective product. Please refer website www.digisol.com for the detailed support terms & conditions and support process.

Warranty Policy

1. **Hardware Warranty :** Hardware warranty period shall be limited up to One year. External Power Adapter shall carry Three months warranty only against manufacturing defects. Any repair or replacement will be rendered by DIGICARE at its Service Center only.
2. **Software Warranty :** DIGISOL issues this Limited Software Warranty that the software portion of the product ("Software") will substantially confirm to DIGISOL's then current functional specifications for the software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of one year ("Software Warranty period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation.
3. **Governing Law:** This warranty shall be governed by Indian Laws.
4. **Standard Warranty** shall subject to the terms & conditions specified in the DIGISOL PRODUCT WARRANTY policy displayed on www.digisol.com



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