Wireless 802.11N Compact AP/Client Adapter

WCR-150GN

User’s Manual

Version 1.1

Jan. 2010

Contents

1. Introduction

Thank you for purchasing your WCR-150GN.

This user guide will assist you with the installation procedure.

The package you have received should contain the following items:

- WCR-150GN
- User Guide CD-ROM
- 2dBi detachable RSMA Antenna
- Universal AC/DC Power Adapter
- Combo Cable for RJ-45 Network and Power

Note: if anything is missing, please contact your vendor

2. Safety Notification

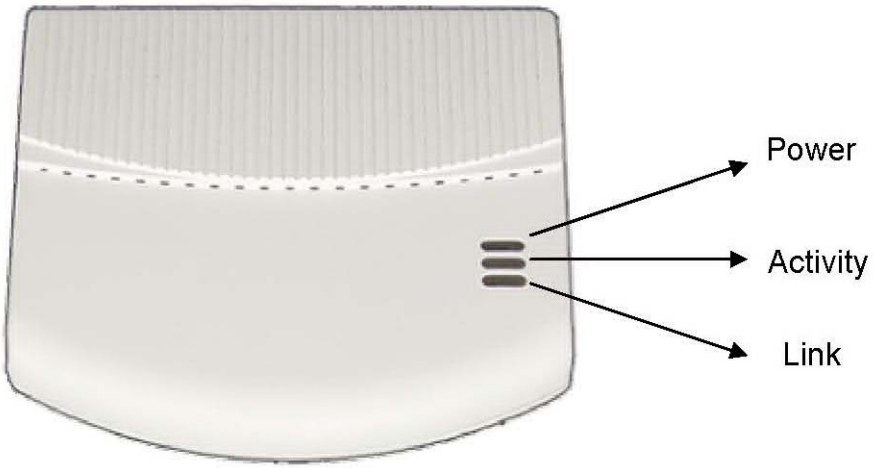
Your WCR-150GN should be placed in a safe and secure location. To ensure proper operation, please keep the unit away from water and other damaging elements. Please read the user manual thoroughly before you install the device.
The device should only be repaired by authorized and qualified personnel.

- Please do not try to open or repair the device yourself.
- Do not place the device in a damp or humid location, i.e. a bathroom.
- The device should be placed in a sheltered and non-slip location within a temperature range of +5 to +40 Celsius degree.
- Please do not expose the device to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.

3. Hardware Installation

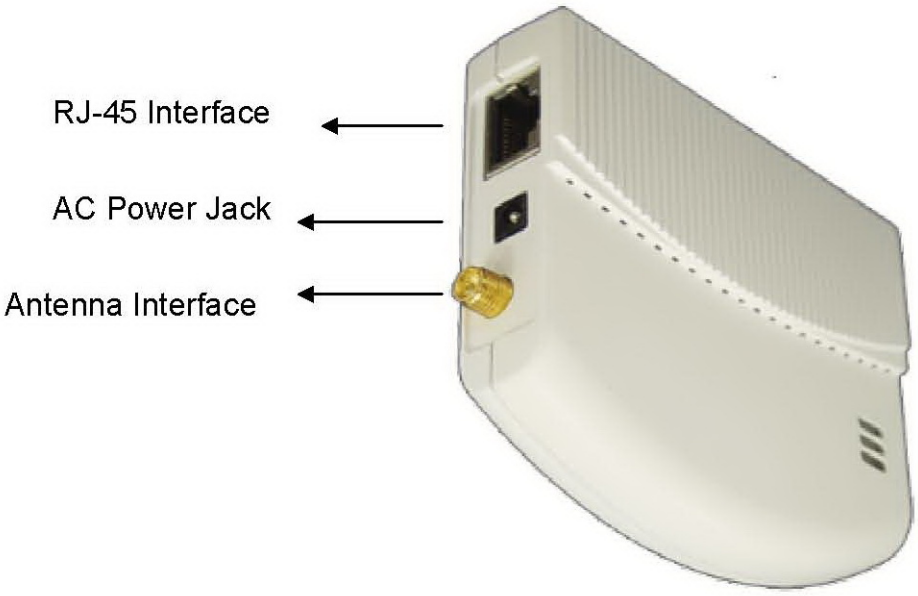
Front Panel

The front panel provides LED status of device. Refer to the following table for the meaning of each feature.



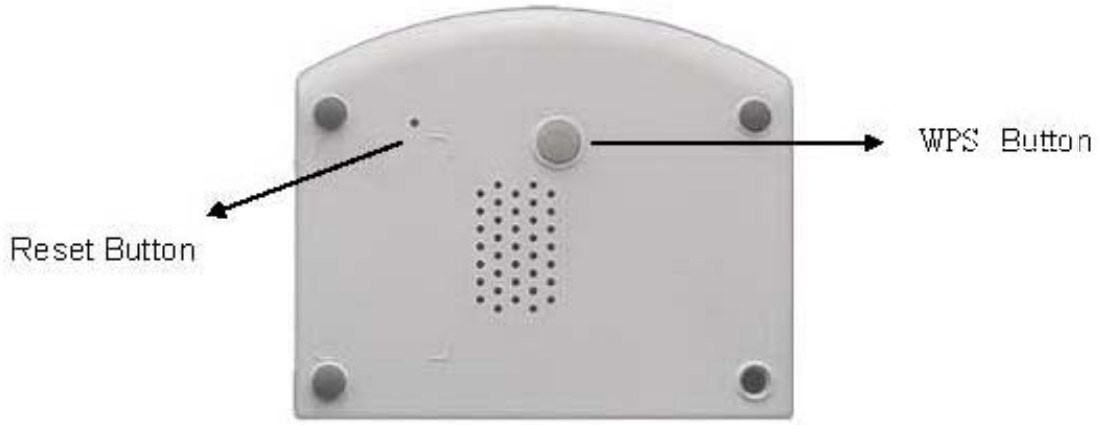
LED Name	Light Status	Description
Power	On	The device is on and ready.
	Off	The device is off.
Activity	On	The device is on and ready.
	Off	The device is off.
	Flashing	The device is transmitting or receiving data.
Link	On	The device is connected to an Ethernet network.
	Off	The device is off or there is no Ethernet connection.

Side view



Rear Panel

The rear panel features Reset button and WPS Button. Refer to the following table for the meaning of each feature.



RESET Button	The **RESET button** can restore device to factory default settings by press this button for approx.
WPS Button	Press this button to start WPS function..

Default Settings

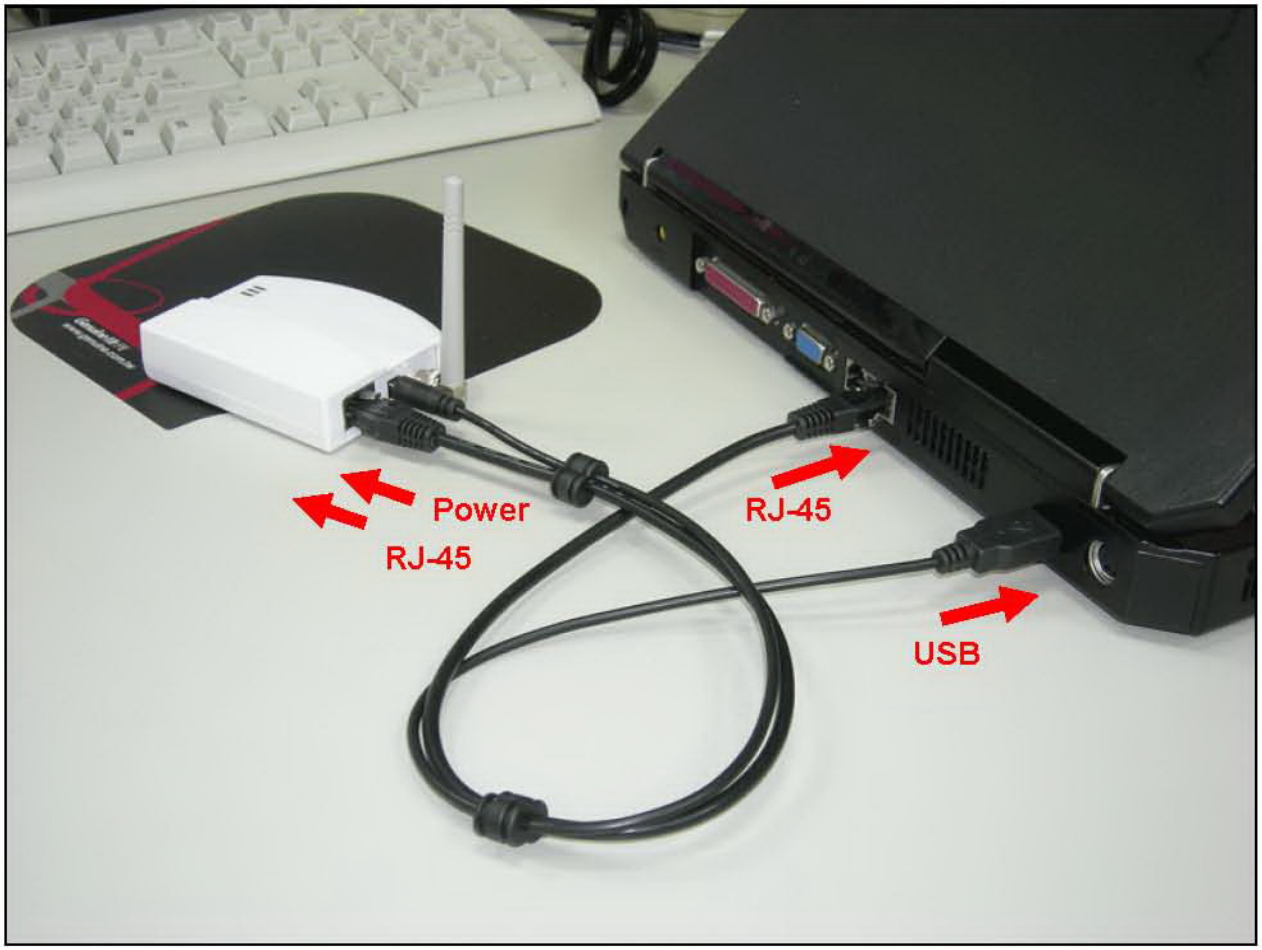
Operation Mode	Access Point Router ●**AP Client**
User	admin
Password	admin
IP Address	192.168.1.250
Router Mode IP Address	172.32.1.254
Subnet Mask	255.255.255.0
SSID	SparkLAN_11N_AP
Channel	6
Mode	11b/g/n mixed mode
Encryption	Disabled
WPS Function	Disabled
DHCP Server	Enabled

Hardware Installation for Connection to Your local network

1. Connect the antenna with the WCR-150GN.

2. Plug the power connection into the AC-in port on the unit, and plug the other end into a USB interface of laptop..

3. Connect the WCR-150GN with your PC or notebook via a LAN cable.



4. First Time Configuration

TURN ON POWER SUPPLY
Quick power cycle would cause system corruption. When power on, be careful not to shut down in about 5 seconds, because data is writing to the flash.

START UP & LOGIN
In order to configure the WCR-150GN, you must use web browser and manually input http://**192.168.1.250** into the Address box and press Enter. The Main Page will appear.

The configuration of this device is through web-browser. To access the configuration interfaces, make sure you are using a computer connected to the same network as the device. The default IP address of the device is 192.168.1.250, and the subnet-mask is 255.255.255.0. For the first time configuration, please login with username: **admin** and password: **admin**.

Once you have logged-in as administrator, it is a good idea to change the administrator password to ensure a secure protection to the WCR-150GN. The “Administrators Settings” can let you change the password.

Once you have input the correct password and logged-in, the screen will change to the Setup page screen.

4.1 Install Wizard

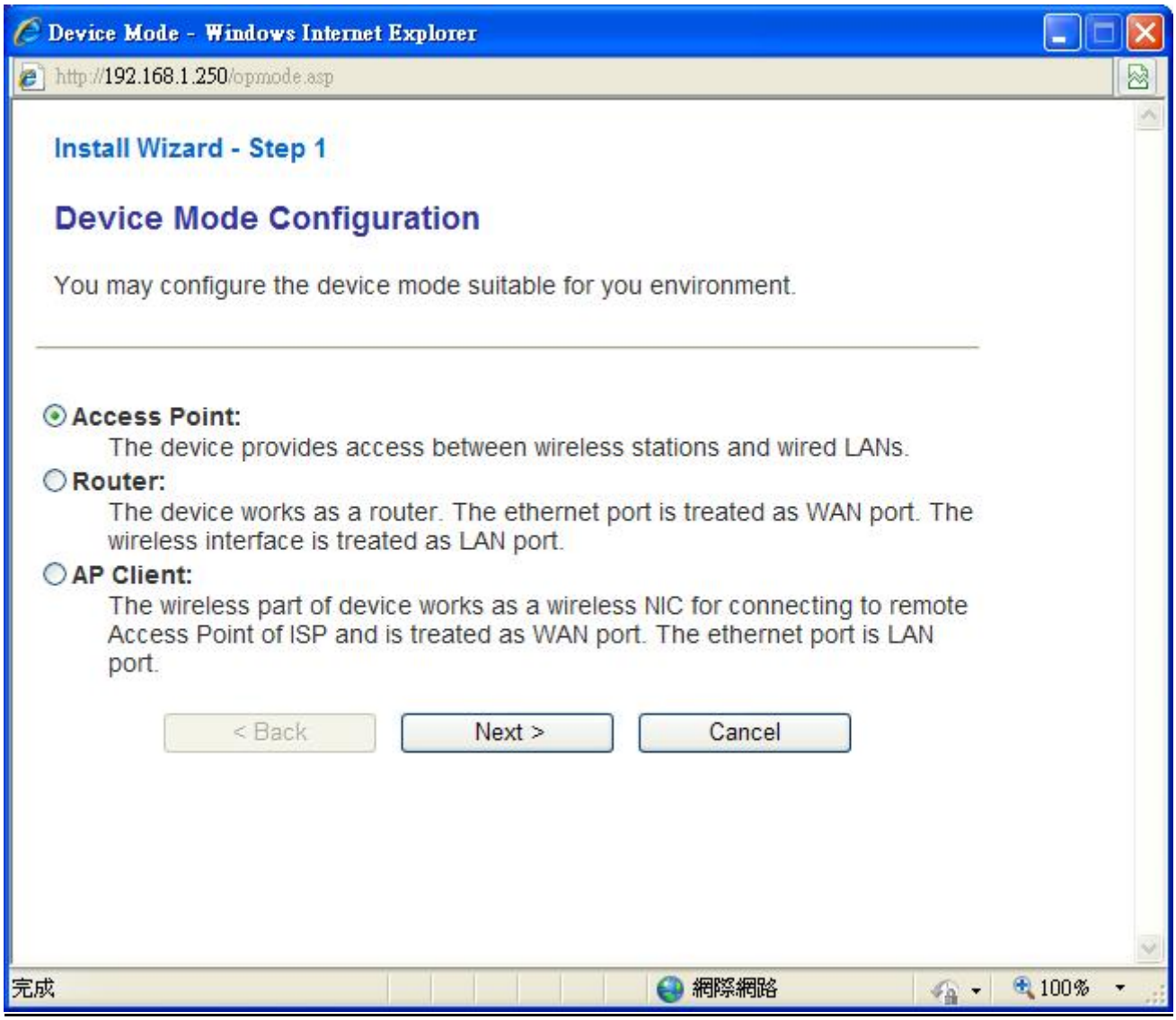
MAKE CORRECT NETWORK SETTINGS OF YOUR COMPUTER
To change the configuration, use Internet Explorer (IE) or Netscape Communicator to connect the WEB management **192.168.1.250**.
This following screen contains all of the AP's basic setup functions.

Please go to Quick Setup menu by clicking 'Install Wizard' button.

Choose the Device Operation Mode:

You can refer to Chapter 4.2 to choose the mode which you want to perform in this device.

After you finish with all settings, please click ‘Next’ button.



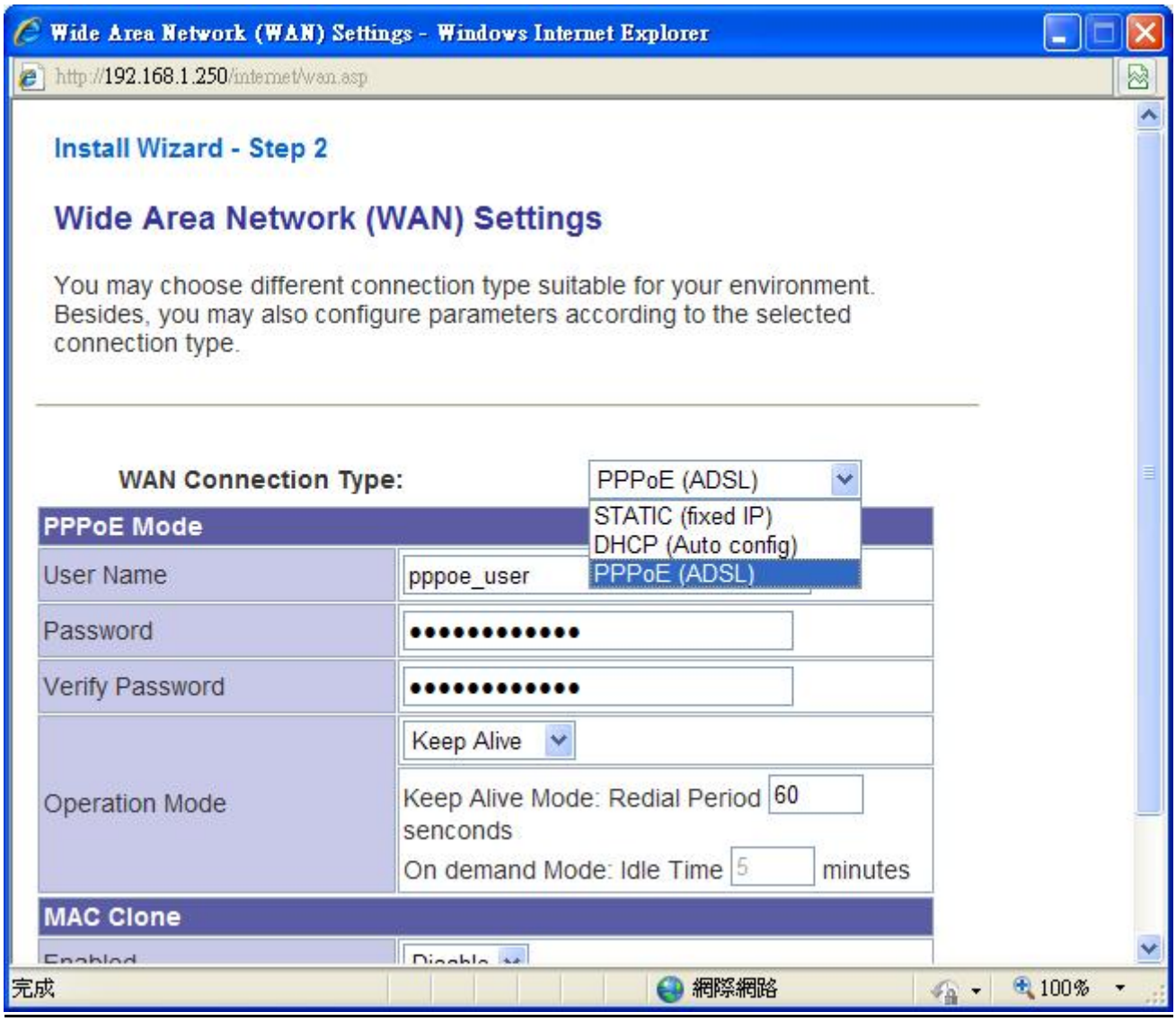
This Step is for Router Mode. If you use Access Point mode, please jump to next Step.

Wide Area Network (WAN) Settings:

Choose the Network Type your ISP provides.

You can refer to Chapter 5.1 to setup the different WAN Type.

After you finish with all settings, please click 'Next' button.



LAN Settings:

IP address:

Please input the IP address of this device.

Subnet Mask:

Please input subnet mask for this network.

DHCP Server:

If you want to activate DHCP server function of this router, select ‘Enabled’, or set it to ‘Disabled’.

Start IP Address:

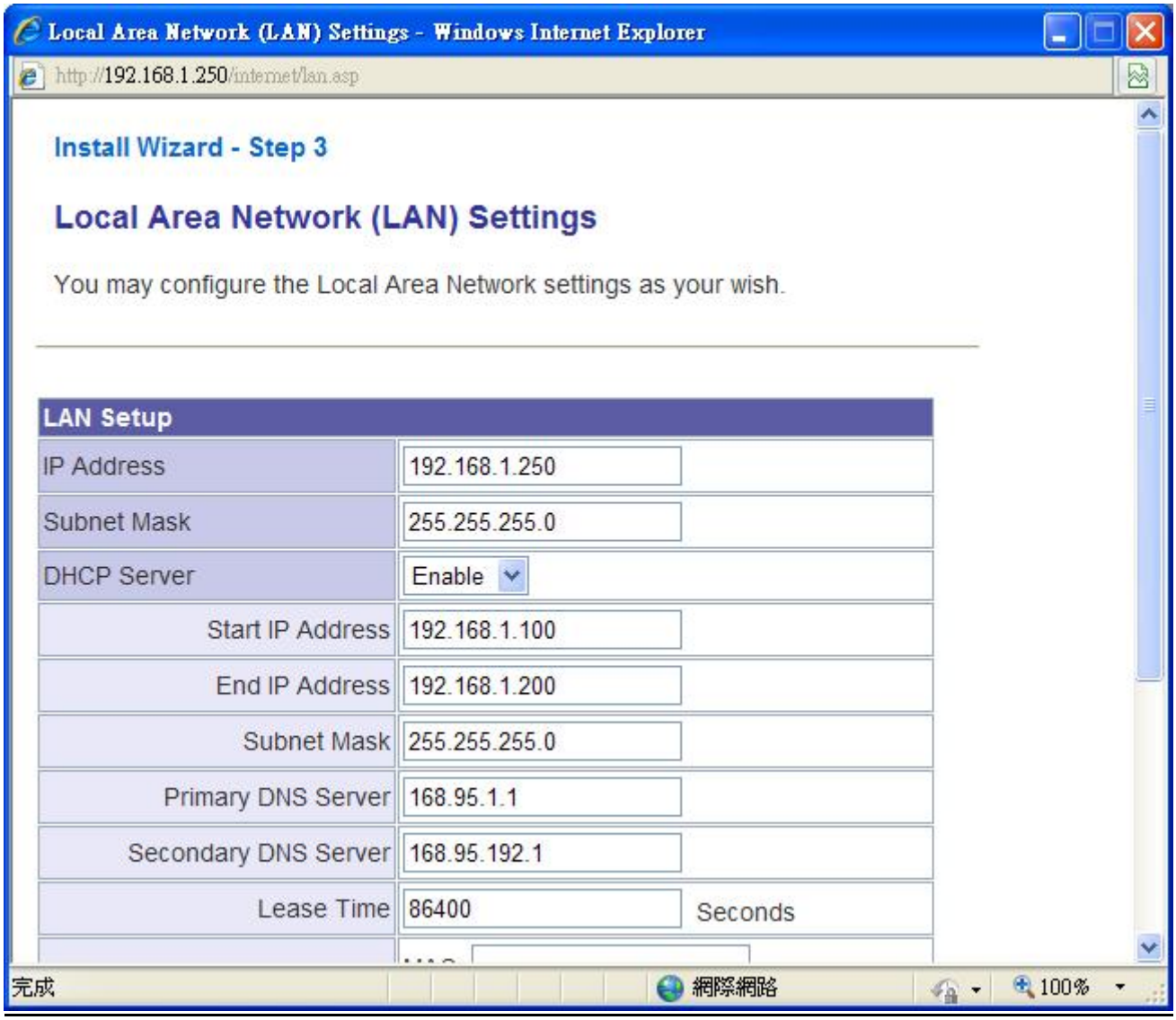
Please input the start IP address of the IP range.

End IP Address:

Please input the end IP address of the IP range.

Other Settings can refer to Chapter 5.2.

After you finish with all settings, please click ‘Next’ button.



Basic Wireless Settings:

Radio State:

If you want to disable wireless function, please select ‘Turn OFF’.

Network mode:

Please select the radio band you want to use.

Network name (SSID):

This is the name of WCR-150GN. You can type any alphanumerical characters here, maximum 32 characters. SSID is used to identify your own wireless AP from others when there are other wireless APs in the same area.

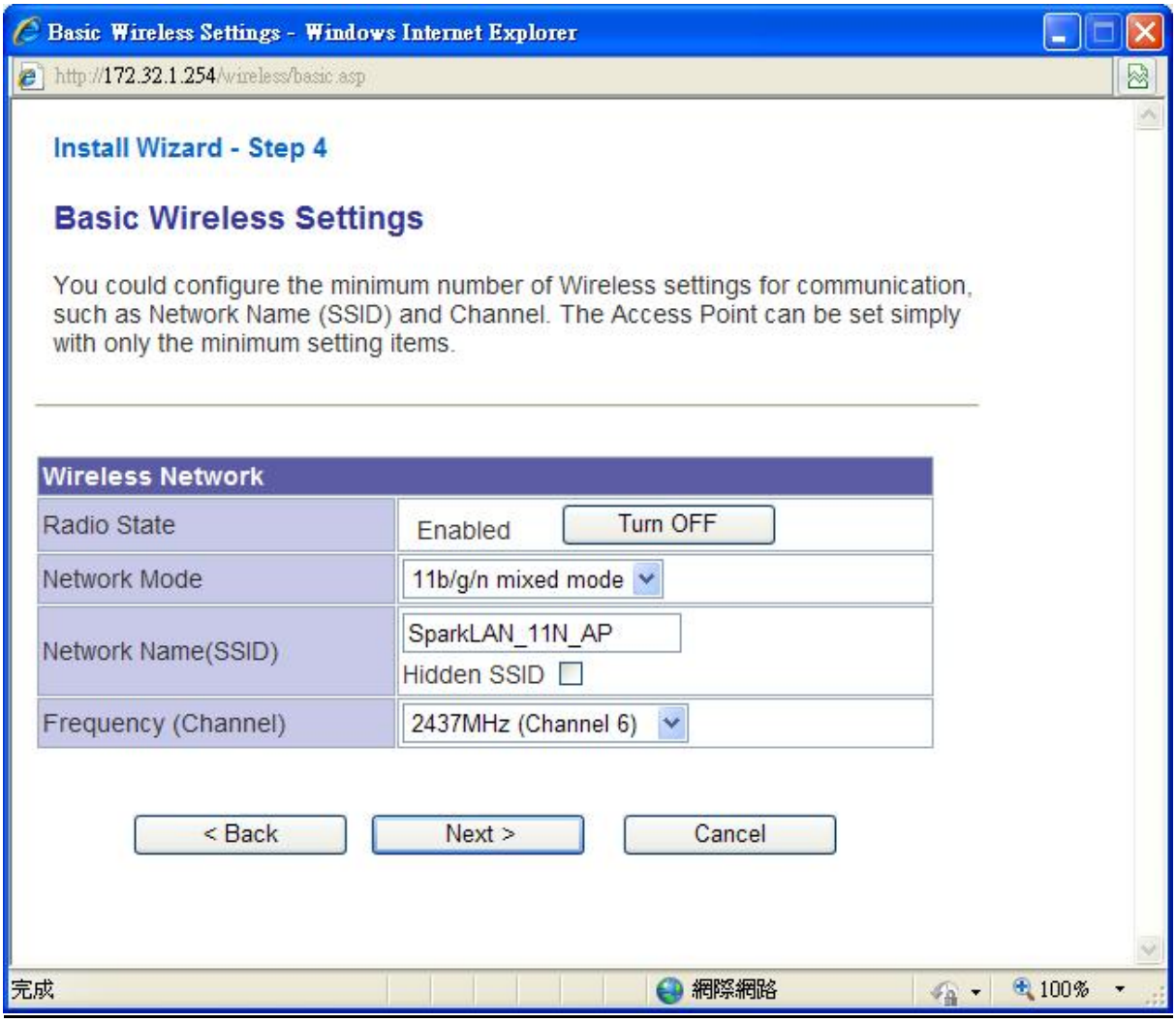
Hidden SSID:

This option can decide if the wireless AP will broadcast its own SSID or not. You can hide the SSID of your WCR-150GN, so only people those who know the SSID of your WCR-150GN can get connected.

Frequency (Channel):

You can keep the default channel setting ‘AutoSelect’ or select a channel from the dropdown list of ‘Channel’. Select one proper channel which does not employ in your environment can reduce radio interference possibility.

After you finish with all settings, please click ‘Next’ button.



Wireless Security/Encryption Settings:

Please select an encryption method from ‘Security Mode’ dropdown menu, there are four options:

You can refer to Chapter 6.1 for the detail explaining.

After you finish with all settings, please click ‘Finish’ button.

4.2 Operation Mode

This device supports 3 modes for the IP network. Choose the Device Mode and click the “Apply” button to change the modes.

Access Point: The device provides access between wireless stations and LANs. In this mode, the Ethernet port becomes a “LAN” port.

Router: The device provides Router function. Choose this option, the Ethernet port will be acted as WAN port. You can connect this port to the ADSL, cable modem or other devices for outbound connection. At the same time, the WLAN interface will be LAN port in this operating mode.

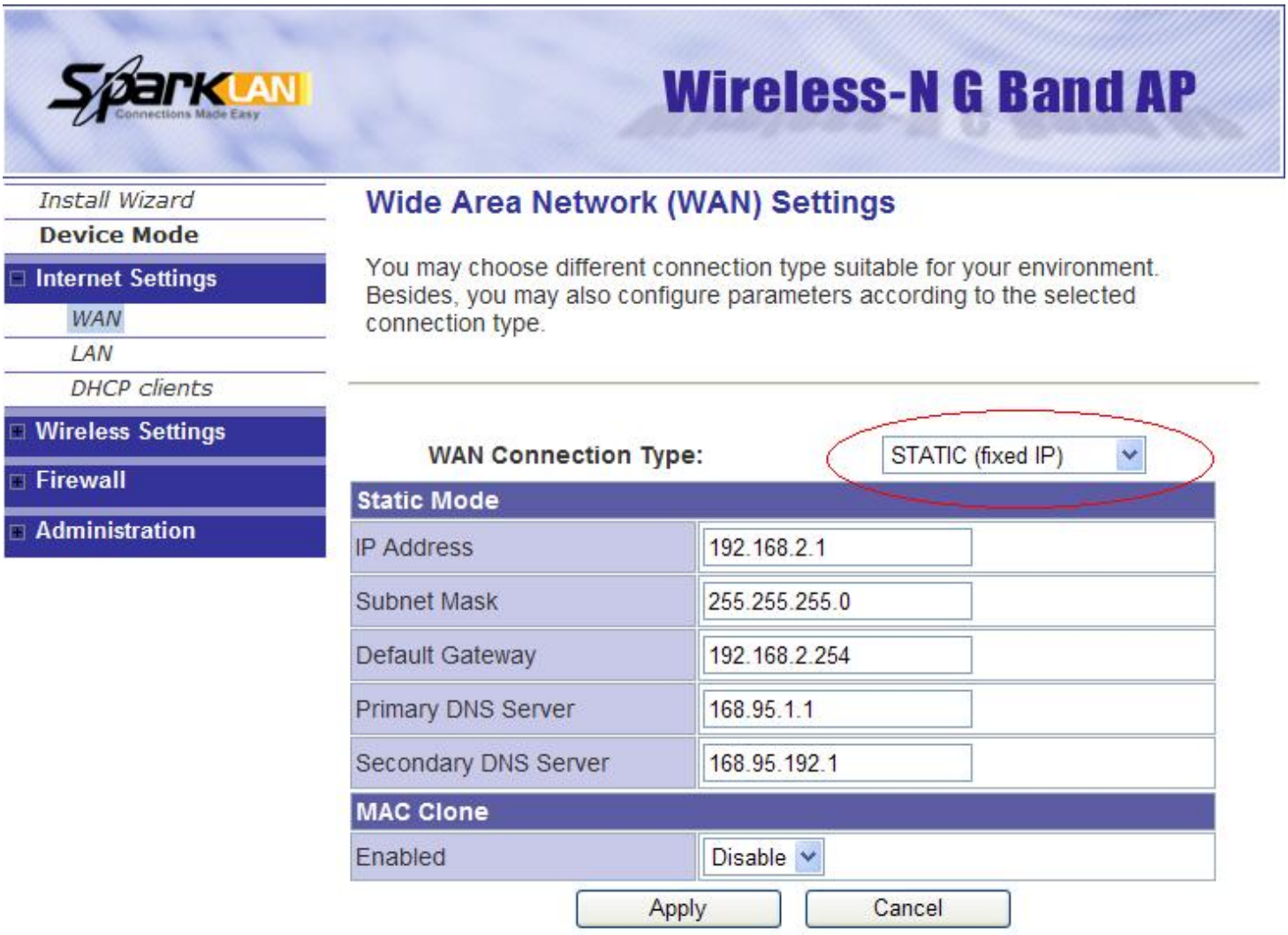
AP Client: In this operating mode, the WLAN interface will be acted as “WAN” and “Wireless Station (Client mode)” role. In this moment the NAT is enabled. This mode is usually used in WISP (Wireless Internet Service Provider) application.

5. Internet Settings

5.1 Configuring WAN Interface

The device supports three kinds of IP configuration for WAN interface, including Static IP, DHCP Client and PPPoE. You can select one of the WAN Access Types that depend on your ISP required. The default WAN Access Type is “Static IP”

STATIC: You can get the IP configuration data of Static-IP from your ISP. You will need to fill the fields of IP address, subnet mask, gateway address, and one of the DNS addresses.



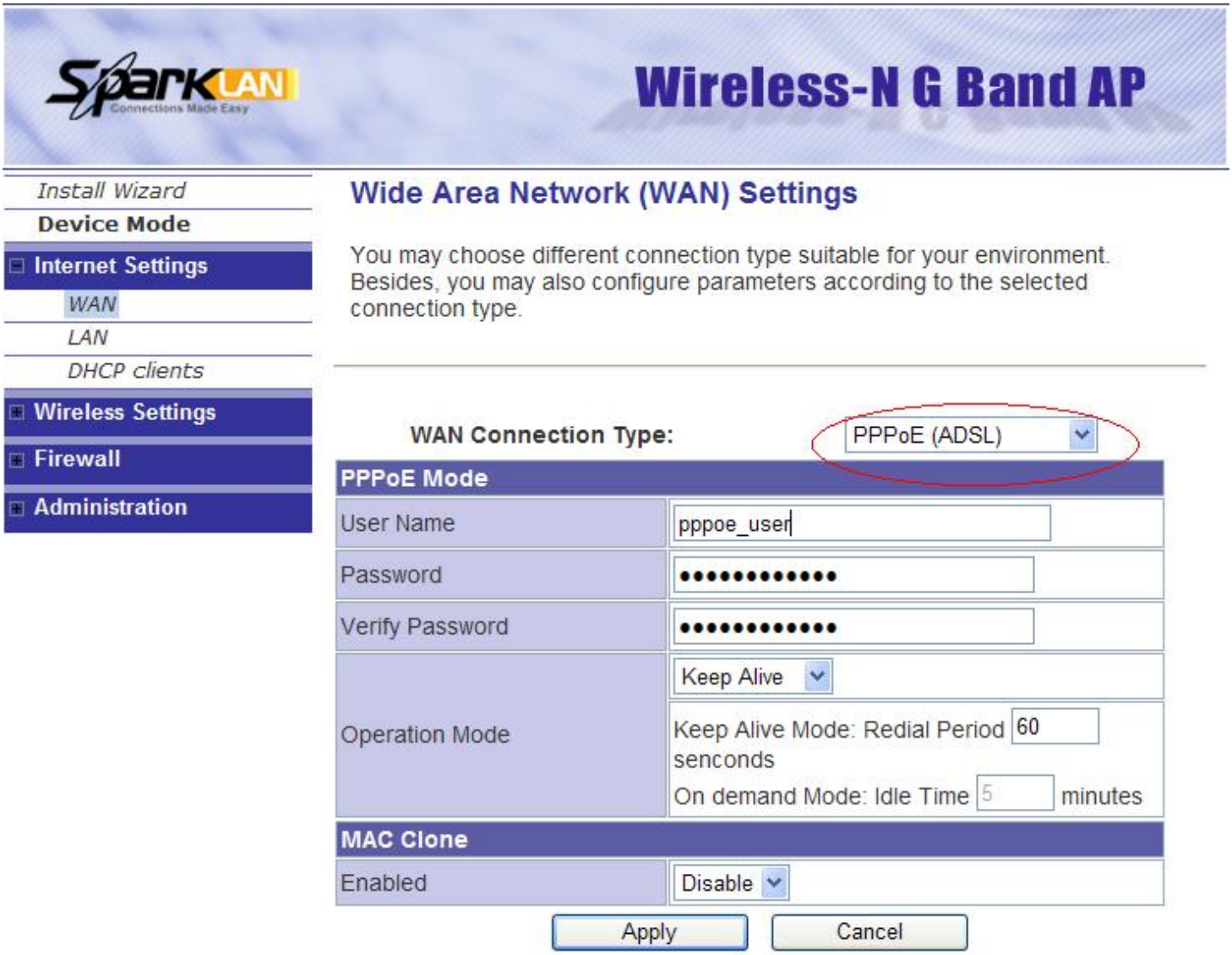
Item	Description
IP Address	The Internet Protocol (IP) address of WAN interface provided by your ISP or MIS. The address will be your network identifier besides your local network.
Subnet Mask	The number used to identify the IP subnet network, indicating whether the IP address can be recognized on the LAN or if it must be reached through a gateway.
Default Gateway	The IP address of Default Gateway provided by your ISP or MIS. Default Gateway is the intermediate network device that has

	knowledge of the network IDs of the other networks in the Wide Area Network, so it can forward the packets to other gateways until they are delivered to the one connected to the specified destination.
Primary & Secondary DNS	The IP addresses of DNS provided by your ISP. DNS (Domain Name Server) is used to map domain names to IP addresses. DNS maintain central lists of domain name/IP addresses and map the domain names in your Internet requests to other servers on the Internet until the specified web site is found.
MAC Clone	Clone device MAC address to the specify MAC address required by your ISP. Fill my MAC button: You can manually input the MAC Address for MAC clone, or click the button to input the MAC Address of the PC which you are using it to configure the device.

DHCP: All IP configuration data will obtain from the DHCP server when **DHCP (Auto config)** is selected.

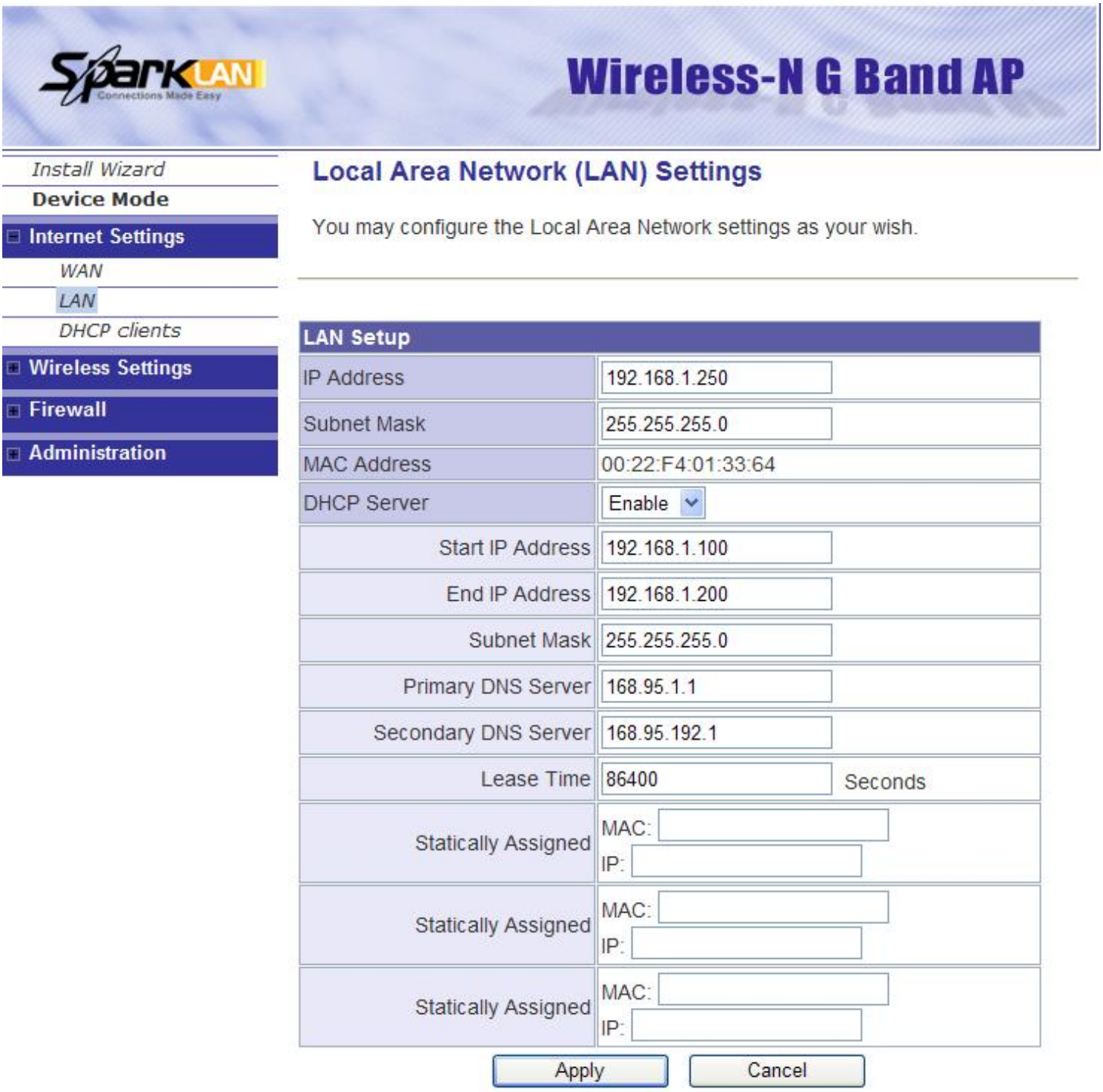
Item	Description
MAC Clone	Clone device MAC address to the specify MAC address required by your ISP

PPPoE: When the PPPoE (Point to Point Protocol over Ethernet) WAN Access Type is selected, you must fill the fields of User Name, Password provided by your ISP. The IP configuration will be done when the device successfully authenticates with your ISP.



Item	Description
User Name	The account is provided by your ISP.
Password/ Verify Password	The password for your account. It is required to input again in 'Verify Password' in order to make sure the input password is correct.
Operation Mode	When selecting the "Keep Alive" mode, the redial time can be set in this field. It will redial the connection to keep it online. The default value is 60 seconds. On demand: When selecting the "On Demand" mode, the idle time can be set in this field. If the network is idle more than this time, the WAN will disconnect.
MAC Clone	Clone device MAC address to the specify MAC address required by your ISP

5.2 Configuring LAN Interface



Item	Description
IP Address	This is the IP Address for this device. You can login this device by the IP Address via LAN or WLAN physical interface and do any necessary configuration change.
Subnet Mask	This is the subnet mask for the LAN. The default value is “255.255.255.0”.
MAC Address	The MAC Address of LAN is shown in this field.
DHCP Server	You can select to enable DHCP server. When enabling the DHCP server, you must setup the information below.

Start IP Address	This is the first IP Address of the IP pool which the server assigns the IP Address from.
End IP Address	This is the last IP Address of the IP pool.
Subnet mask	This is the subnet mask of this domain. The default value is “255.255.255.0”.
Primary DNS Server	This is the primary DNS server for the LAN PCs.
Secondary DNS Server	This is the second DNS server for the LAN PCs.
Lease Time	This is the DHCP lease time. When it is short, the issued IP address to DHCP clients will be updated frequently. It is recommended to keep default setting except for another purpose.
Statically Assigned	You can manually assign the IP Address to the certain PCs. Enter the MAC Address and IP Address in the table.

5.3 DHCP Client List

6. Wireless Settings

6.1 Access Point & Router mode

Basic

Basic Settings	
Item	**Description**
Turn On/Off	Click the “Turn OFF” button to turn off the radio. Click it again to turn on the radio.
Network Mode	The available options are “11b/g mixed mode”, “11b only”, “11g only”, 11n only, and “11b/g/n mixed mode”.
Network Name (SSID)	The SSID is a unique identifier that wireless networking devices use in order to establish and maintain wireless connectivity. Multiple access point/bridges on a network or sub-network can use the same SSID. SSIDs are

	case sensitive and can contain up to 32 alphanumeric characters.

HT Physical Mode	
Item	**Description**
Operating Mode	Default: Mixed (Mixed, Green Field). **Mixed mode:** In this mode the device transmits the packets with preamble compatible legacy (802.11g), so they can be decoded by legacy devices. The device receives and decodes both Mixed Mode packets and legacy packets. **Green Field mode:** the device transmits HT packets without legacy compatible part. But the device receives and decodes both Green Field and legacy packets.
Channel Bandwidth	This option only works when selecting Band mode in 11b/g/n mixed mode. Click the radio button to choose between 20 MHz or 20/40MHz. This option affects the Phy data rate of radio. Please refer to the table below
MCS	It is Modulation Coding Scheme. The available options are “Auto, 0, 1, …, 32”. It changes the modulation of this device and effect the maximum Physical data rate. We recommend “Auto” setting. For the details, please refer to the table below.
Extension Channel	The “20/40” bandwidth mode uses 5 channels. For example, selecting channel 7 and you can select 3 or 11 for extension channel. Choose the unused channel for the extension channel.

The table below shows the relationship among Physical data rate, Bandwidth and Guard Interval.

Data Rate Mbps MCS	Bandwidth = 20MHz		Bandwidth = 40MHz	
	Short Guard Interval	Long Guard Interval	Short Guard Interval	Long Guard Interval
0 (1S)	7.2	6.5	15	13.5
1	14.4	13	30	27
2	21.7	19.5	45	40.5
3	28.9	26	60	54
4	43.3	39	90	81
5	57.8	52	120	108
6	65	58.5	135	121.5
7	72.2	65	150	135

8 (2S)	14.4	13	30	27
9	28.9	26	60	54
10	43.3	39	90	81
11	57.8	52	120	108
12	86.7	78	180	162
13	115.6	104	240	216
14	130	117	270	243
15	144.4	130	300	270
32	Not Supported	Not Supported	6.7	6

MCS: Modulation Coding Scheme
MCS=0~7 (1S, One Tx Stream)
MCS=8~15 (2S, Two Tx Stream)
MCS 32: BPSK

Security

Wireless Security/Encryption Settings

Wireless Security/Encryption Settings	
Item	**Description**
Security Mode	OPEN, SHARED, WPA-PSK, WPA2-PSK

The available options are shown according to the numbers of the BSSID in the Basic Setting. Each SSID can setup different encryption type. For example, set up 4 BSSID and 4 sets of security shows on this page:

Security Mode: Choose one as the wireless authentication among the following types: OPEN, SHARED, WPA-PSK,, WPA2-PSK

Encryption Type: Select one for the encryption type. The options vary depending on the Authentication mode. The corresponding options shows below.

Authentication	Encryption type	Key option
Open/Shared/WEP Auto	WEP	Default Key ID, Key content of Key 1/2/3/4
WPA/WPA2-PSK (Pre-Shared Key)	TKIP, AES, TKIP/AES (both)	Pass Phrase (8-64 characters), Key Renewal Interval

WEP Encryption Setting
Wired Equivalent Privacy (WEP) is implemented in this device to prevent unauthorized access to your wireless network. The WEP setting must be as same as each client in your wireless network.

Authentication Type: Open, Shared and Auto. When choose “Open” or “Shared”, all of the clients must select the same authentication to associate this AP. If select “WEP Auto”, the clients don’t have to use the same “Open” or “Shared” authentication. They can choose any one to authenticate.

Default Key ID: Select whether the Key ID as the default Key.

Key 1/2/3/4: Select “ASCII” or “Hex” and then type the key in the text field.

64-bit WEP Encryption：64-bit WEP keys are as same as the encryption method of 40-bit WEP. When input 10 hexadecimal digits (0-9, a-f or A-F) or 5 ACSII chars as the key, it is using 64-bit WEP encryption.

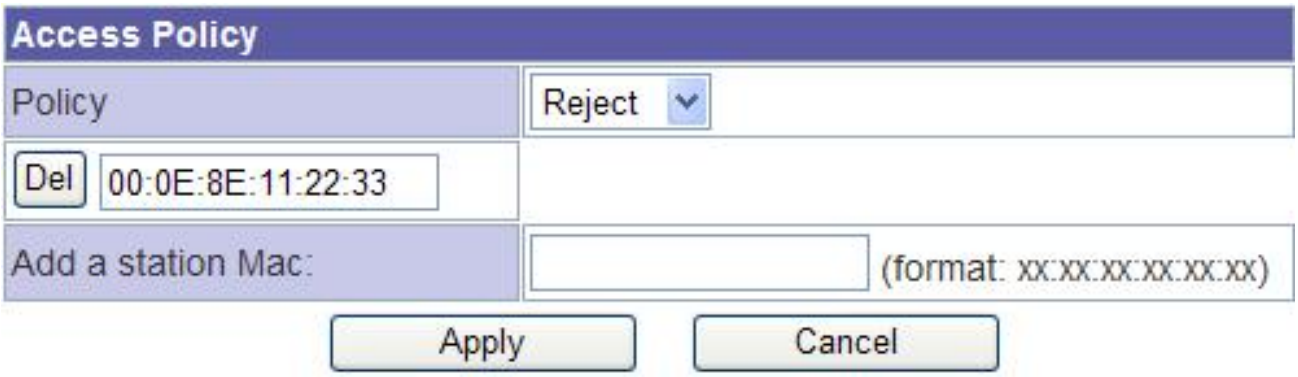
128-bit WEP Encryption：128-bit WEP keys are as same as the encryption method of 104-bit WEP. When input 26 hexadecimal digits (0-9, a-f or A-F) or 13 ACSII chars, it is using 128-bit WEP encryption.

WPA/WPA2-PSK:
Pass Phrase:
Option: Pass Phrase (8-64 characters). This mode requires only an access point and client station that supports WPA-PSK. The WPA-PSK settings include Key Format, Length and Value. They must be as same as each wireless client in your wireless network. When Key format is Passphrase, the key value should have 8-64 ACSII characters.

Key Renewal Interval:
The WPA Algorithm will regroup the key for a period. The default value is 3600 seconds and you can adjust the time interval.

Access Policy
For each SSID, the Access Policy can be selected and setup. The policy includes “Reject” and “Allow”. The Reject policy rejects the station according to the MAC table in the policy configuration, and let the other stations to connect. The allow policy performs reversely.

Add a station MAC: Key in station MAC Address in the text field. The valid format of the MAC Address should be “xx:xx:xx:xx:xx:xx”. The station MAC Address can be found on the label or configure utility of the WLAN card. For deleting one record in the table, click the “Del” button of the record.



WPS

This function helps to establish the Wi-Fi security. For AP mode, it can be setup one WPS method including PIN (Personal Identification Number) and PBC (Push Button Communication).

To begin the WPS progress, the WLAN security must be setup first. Please setup one among WPAPSK, WPA2PSK and then apply WPS setting.

PIN: query the PIN code in the utility of WLAN client, and then enter it in the PIN field. The Wi-Fi link between the WLAN client and the device should be encrypted.

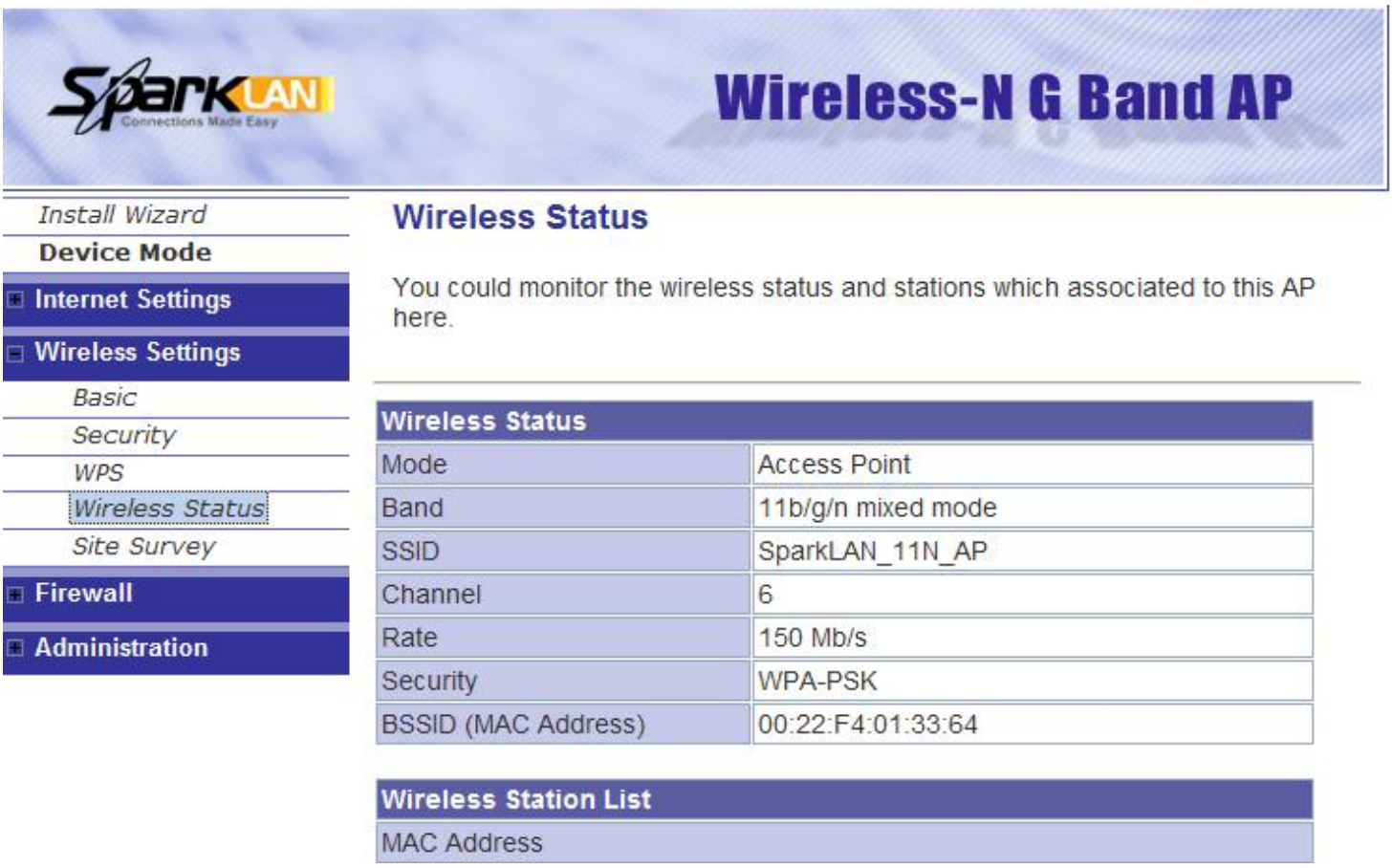
PBC: Select PBC, and then you can begin the PBC process. Press the PBC button in the rear panel can also trigger this process. Press or click the PBC button on the WLAN client to finish the communication. You can press the PBC button on the WLAN client first and then click the PBC button on this device to establish the encryption.
The options and the information fields are shown below.

WPS Config	
Item	**Description**
WPS	Through drop-down manual to enable / disable this function.

WPS Summary	
Item	**Description**
WPS Current Status	It shows the current status of the WPS process.
WPS Configured	It indicated whether the WPS is configured.
WPS SSID	It is the SSID of this device.
WPS Auth Mode	It indicates the authenticate mode of this device. It can be configured in the wireless security page.
WPS Encryption Type	It indicates the encryption method of this device. Like WPS authentication mode, it can be configured in the wireless security page.
AP PIN	It shows the current PIN number of this device.
Auto WPS Settings	Press this button to setup the WPS of this device.

WPS Progress	
Item	**Description**
WPS mode	Choose to use PIN (Personal Identification Number) or PBC (Push Button Communication).
PIN	Input the 8-digits PIN of client.

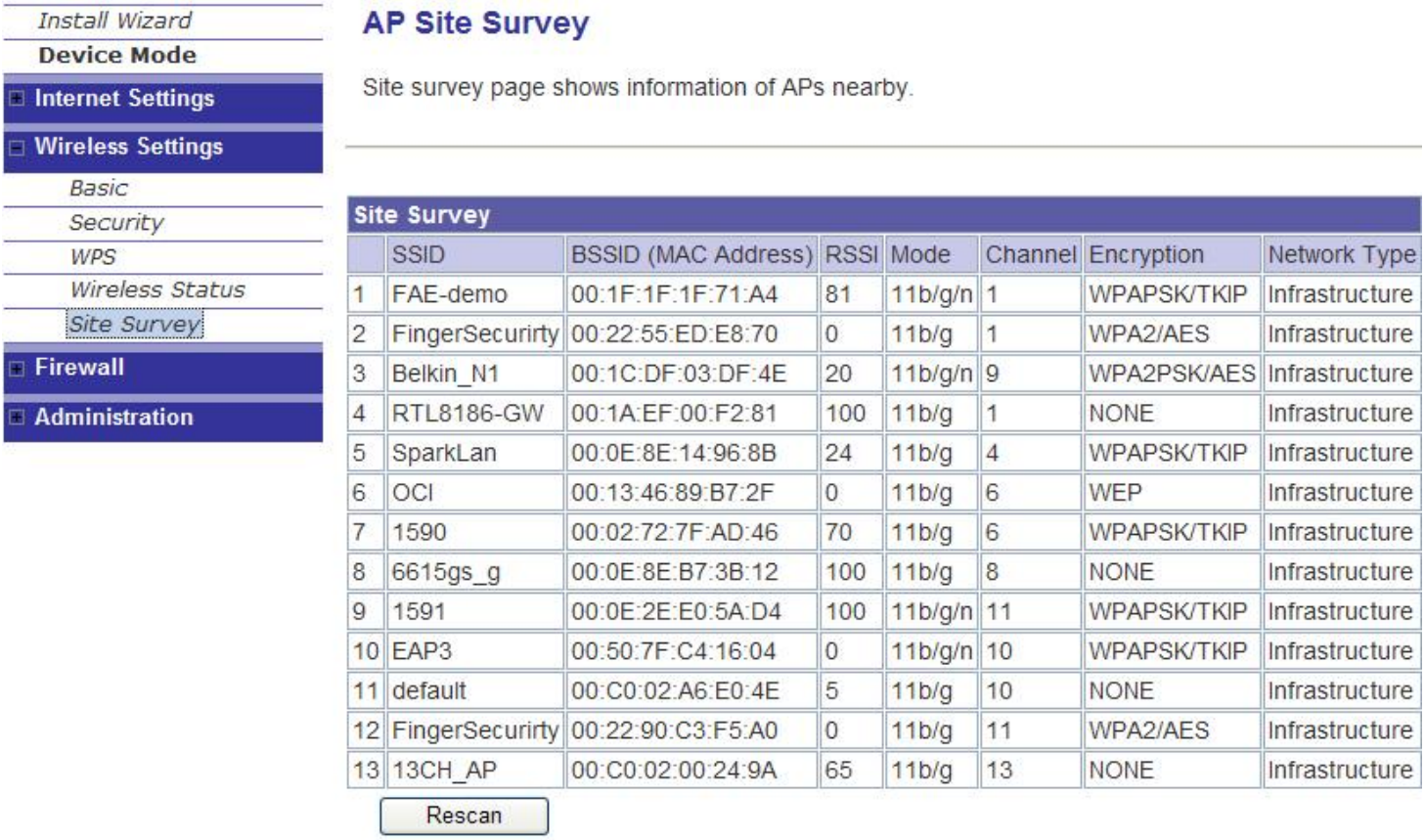
Wireless Status



Item	Description
Mode	This is the wireless mode for the device such as AP, client mode.
Band	It shows the current radio mode such as “B/G/N”, “B/G”, “B only” and “G only”.
SSID	It shows the SSID of this device.
Channel	It shows the current channel of the radio.
Rate	The data rate of this device.
Security	It indicates the encryption type for the radio.
BSSID	It is the current BSSID of the radio. In this device, it is also the MAC Address of the WLAN interface.
Wireless Station List	The number of associated WLAN clients show in this field.

Site Survey

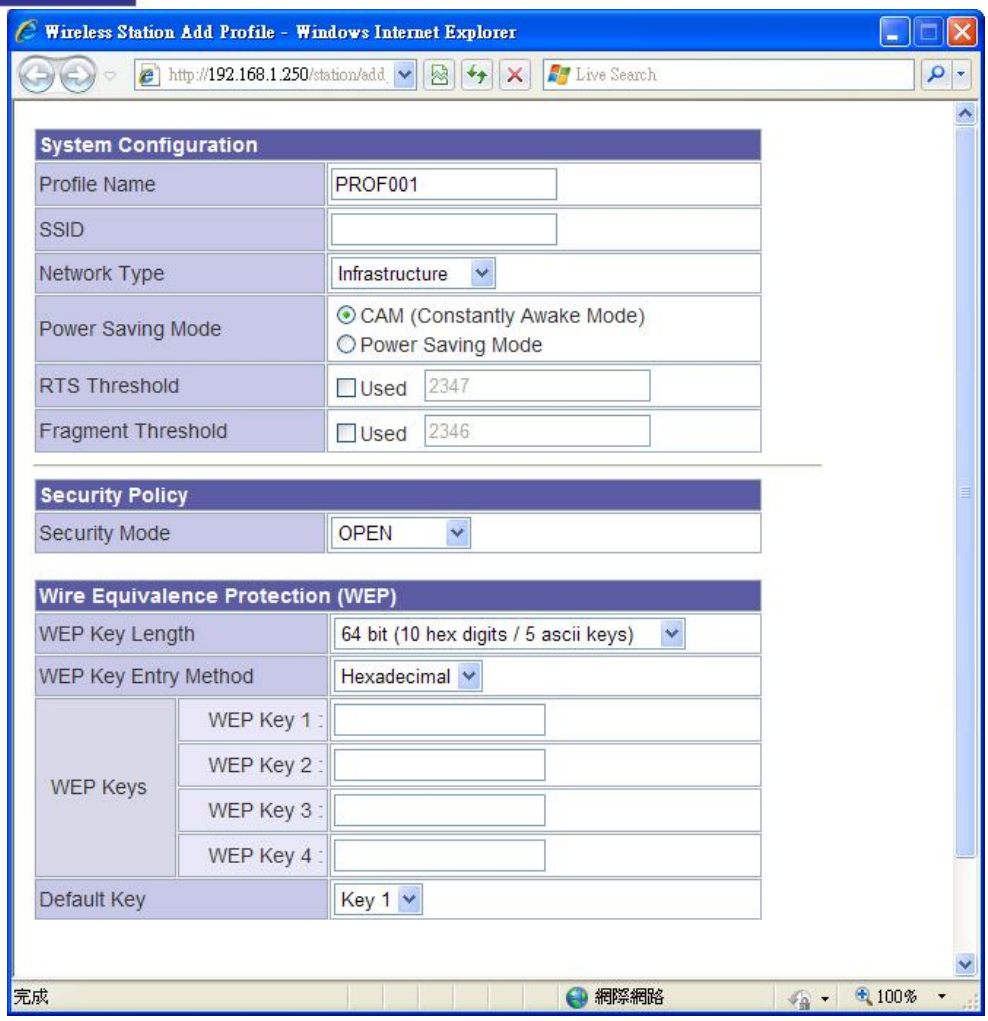
In the Site Survey, the information of nearby APs will be shown here.



6.2 AP Client mode

Profile

In the first page, you can see the profile list to show the information including Profile name, SSID, Network Type, Power Saving Mode, RTS Threshold, Fragment Threshold. Use four buttons to manage the profile list. The “Add” button is to add a new profile. The “Delete” button is to delete the selected profile. The “Edit” button is to edit the selected profile. The “Activate” button is to enable the selected button, so this device will associate to the AP according to the profile.



System Configuration	
Item	**Description**
Profile Name	Enter your profile name.
SSID	Enter the SSID of the AP or Ad Hoc network.
Network Type	Choose one between “802.11Ad Hoc” and Infrastructure.
Power Saving Mode	For the Infrastructure network, this device can be setup to CAM (Constantly Awake Mode) or Power Saving Mode.
RTS Threshold	Check the box to setup the RTS Threshold. The default value is 2347 and the available range is from 0 to 2432.
Fragment Threshold	Check the box to setup the Fragment Threshold. The default value is 2346 and the available range is from 256 to 2432.

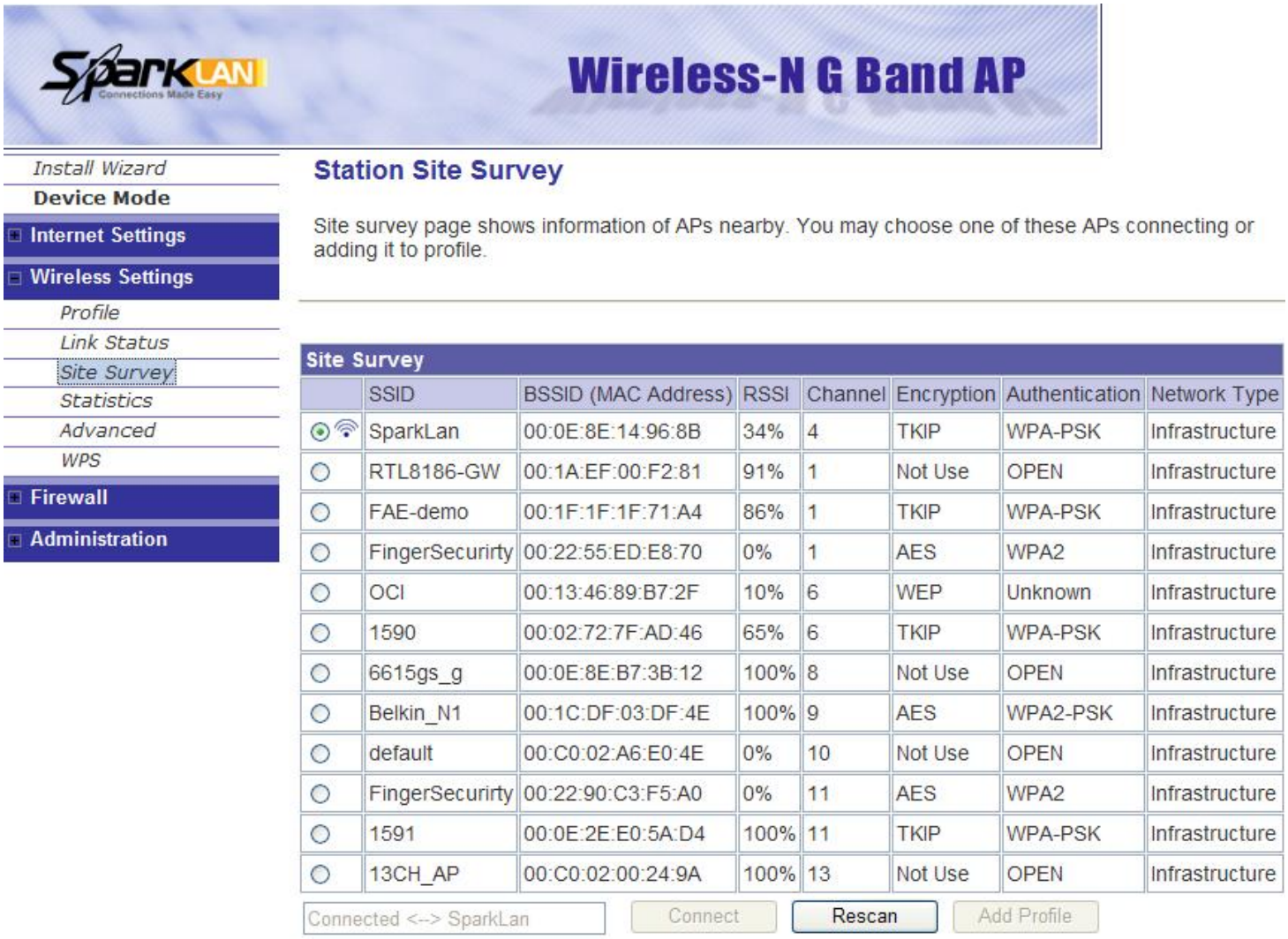
Security Policy	
Item	**Description**
Security Mode	Please choose the encryption method. The available options are OPEN, SHARED, WPA-Personal and WPA2-Personal.

Wire Equivalence Protection (WEP)	
Item	**Description**
WEP Key Length	Choose to use 64bit or 128bit length of key.
WEP Key Entry Method	Select the key type. The available options are ASCII Text or Hexadecimal.
WEP Keys	For WEP key, please input the key1-4. The key text and the length must match the above settings.
Default Key	Select the default Tx WEP key.

Link Status

The status of the radio shows in this field.

Site Survey



Site Survey	
Item	**Description**
Connect	Check the radio button in front of the SSID and click “Connect” button to connect.
Rescan	Click this button to refresh the list.
Add Profile	Check the radio button in front of the SSID and click “Add Profile” to add the SSID to the profile.

Statistics

- Install Wizard
- Device Mode
- Internet Settings
- Wireless Settings
  - Profile
  - Link Status
  - Site Survey
  - Statistics
  - Advanced
  - WPS
- Firewall
- Administration

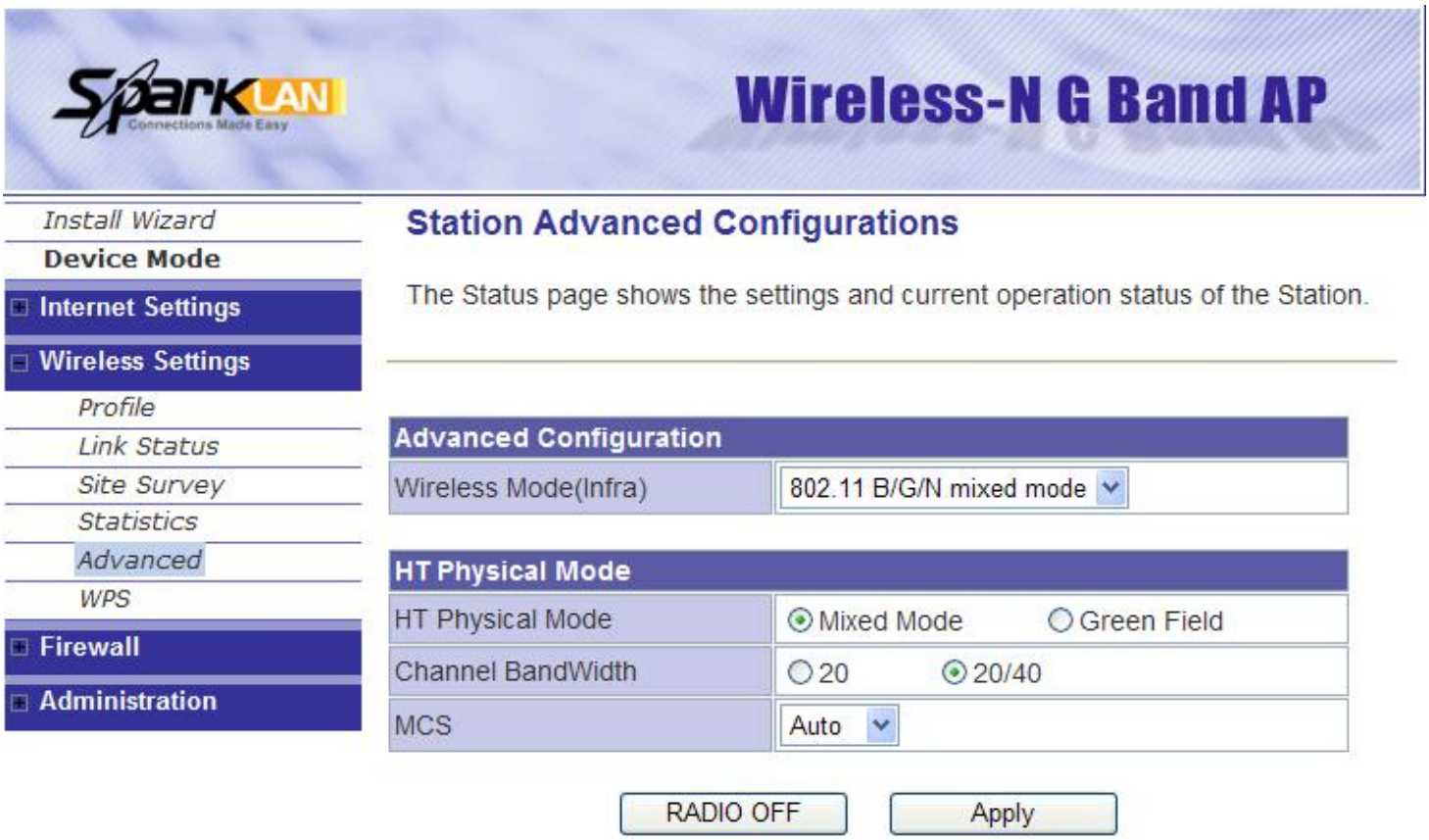
Station Statistics

The Status page shows the settings and current operation status of the Station.

Transmiting Statistics	
Frames Transmitted Successfully	785
Frames Transmitted Successfully Without Retry	554
Frames Transmitted Successfully After Retry(s)	231
Frames Fail To Receive ACK After All Retries	0
RTS Frames Sucessfully Receive CTS	0
RTS Frames Fail To Receive CTS	0
Receiving Statistics	
Frames Received Successfully	40611
Frames Received With CRC Error	56620
Frames Dropped Due To Out-of-Resource	0
Duplicate Frames Received	29

Reset Counters

Advanced



Advanced Configuration	
Item	**Description**
Wireless Mode (Infrastructure)	Choose the proper Wireless Mode to connect remote AP which provided by your WISP.

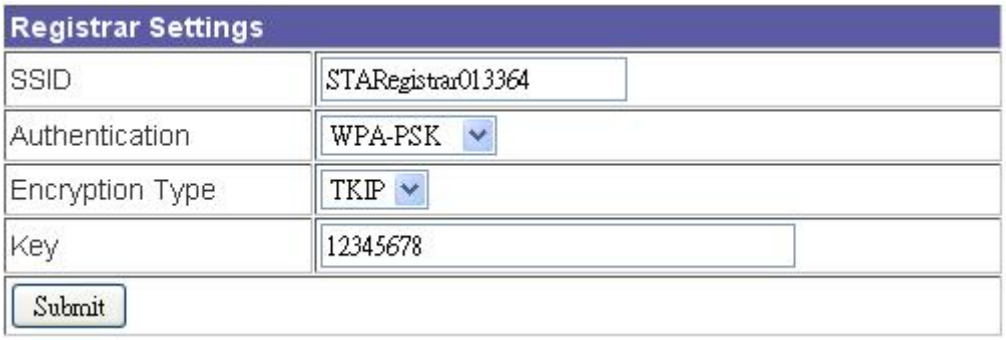
HT Physical Mode	
Item	**Description**
HT Physical Mode (High throughput)	MM (Mixed Mode) or GF (Green Field). Mixed mode: In this mode the device transmits the packets with preamble compatible legacy (802.11g), so they can be decoded by legacy devices. The device receives and decodes both Mixed Mode packets and legacy packets. Green Field mode: the device transmits HT packets without legacy compatible part. But the device receives and decodes both Green Field and legacy packets.
Channel Bandwidth	Choose “20” for the standard bandwidth or “Auto” to use the 40MHz bandwidth automatically.
MCS (Modulation Coding Scheme)	Choose MCS. Please refer to the section of Access Point.

WPS

The WPS AP lists in the top of the page. The bottom panel shows the status of WPS. Please refer to the section 6.1, WPS section of Access Point mode for the operation.

WPS configuration	
Item	**Description**
Refresh	Click this button to refresh the WPS AP list.
Mode	This device supports Enrollee and Registrar in AP Client mode.
PIN	This is the PIN code for PIN communication. Click “Renew PIN” to generate a new PIN code.
PIN Start	Click this button to start PIN process.
PBC Start	Click this button to start PBC communication.
Cancel	Click this button to cancel the establishing WPS link.
Renew PIN	Click this button to discard current PIN and generate a new PIN code.

Registrar Mode can let you change the AP, which you connect, information as below.

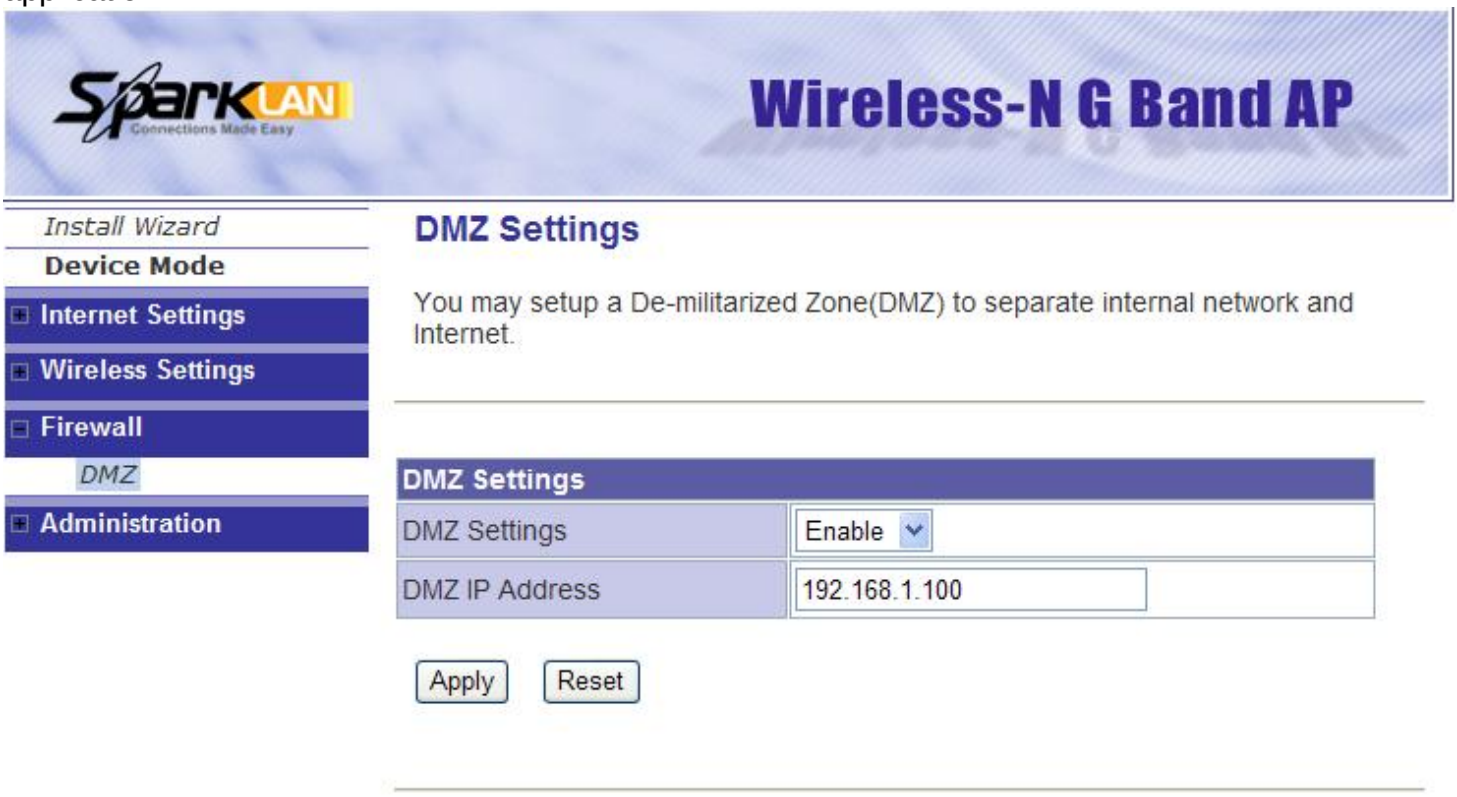


Registrar Settings	
Item	**Description**
SSID	The SSID that you want to change
Authentication	WPA-PSK, WPA2-PSK
Encryption	TKIPP, AES
Key	Pass Phrase (8-64 characters), Key Renewal Interval

7. Firewall

7.1 DMZ

A De-Militarized Zone is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers. So that all inbound packets will be redirected to the computer you set. Generally it is not recommended to setup DMZ due to fully exposed the PC/server to the Internet, but for some application using uncertain incoming ports such as Internet games, it is could be useful to setup DMZ for the application.



Item	Description
DMZ Settings	Enable this setting, and then click “Apply” button to save the changes.
DMZ IP Address	Input the IP Address of the computer that you want to expose to Internet.

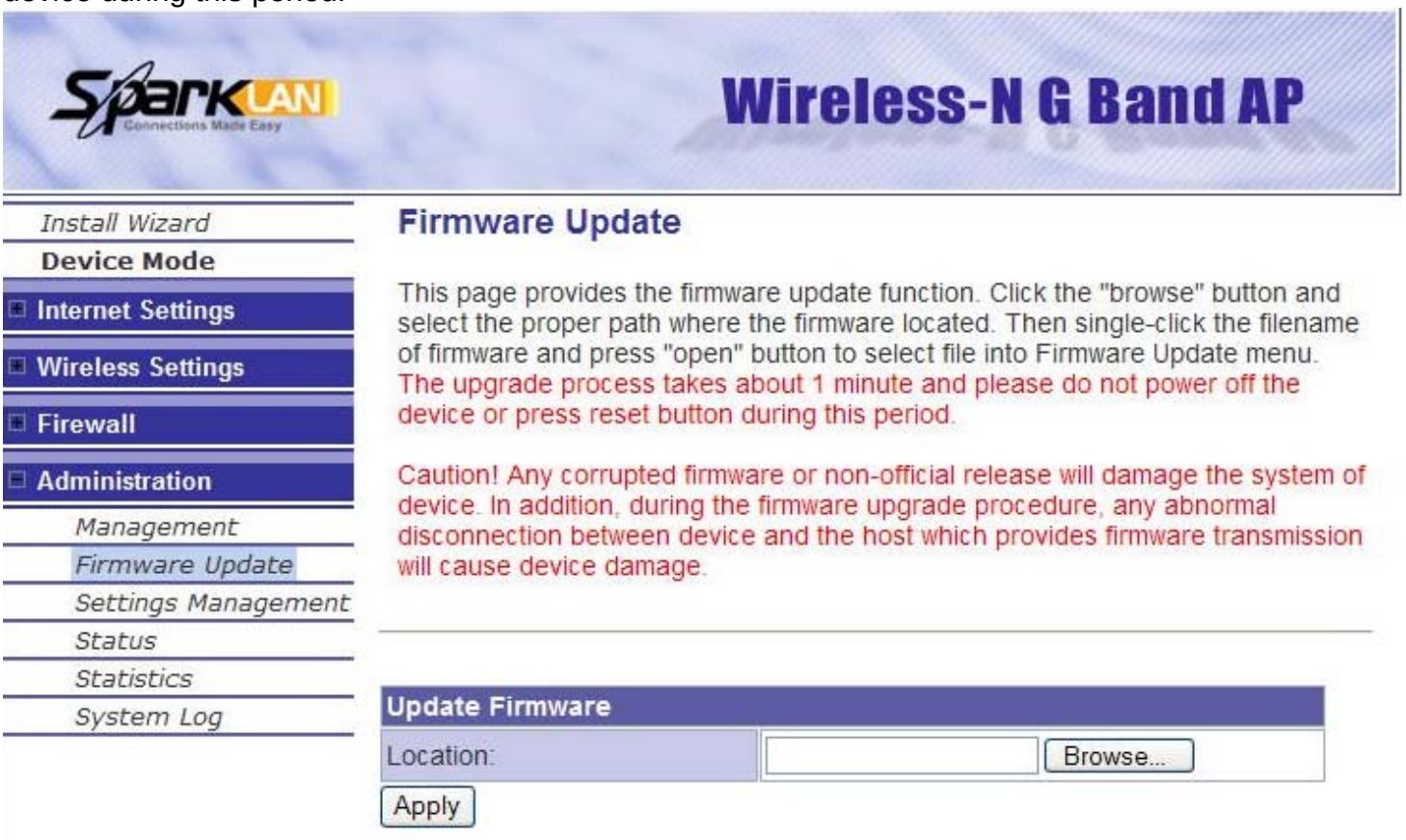
8. Administration

8.1 Management

Item	Description
Account	Enter the name for login. The default name is **“admin”**.
Password	Enter the password for login. The default password is **“admin”**.

8.2 Firmware Update

This page provides the firmware update function. Click the browse button to browse the file and click “open” button to select the file. The update process takes about 1 minute and do not power off the device during this period.



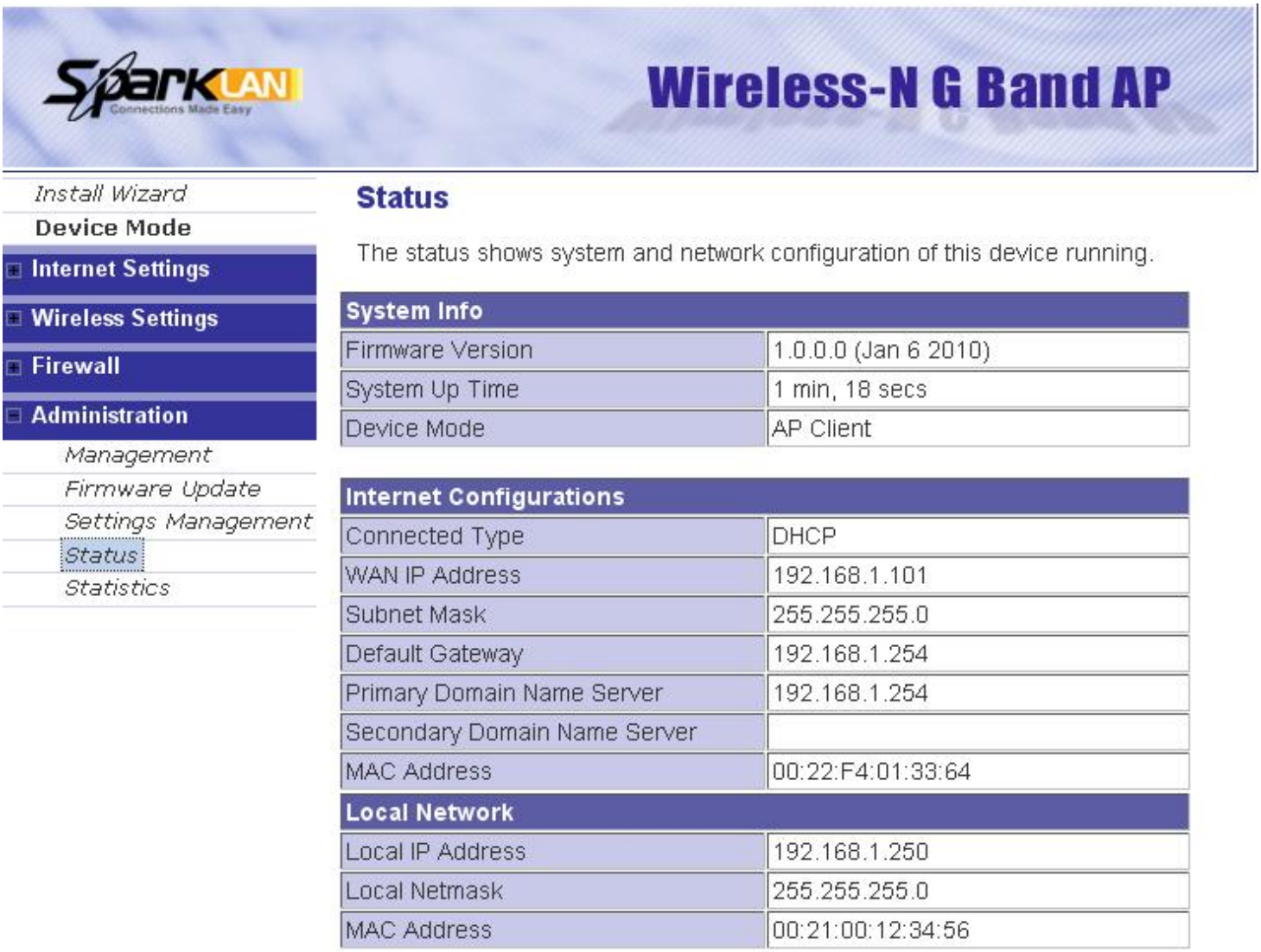
Item	Description
Browse	Click the “Browse” to choose the Firmware.
Apply	Click to start update Firmware.

8.3 Settings Management

In this page, you can export the setting, import the setting or load the factory default.

Item	Description
Export Settings	To export the settings, click “Export” button to save the configuration. In the pop up window, click “Open” to open the configuration. You can read the configuration in the next page. Click “Save” to save the configuration file. The file extension is “.dat”.
Import Settings	To import the settings, click “Browse” to browse the file, and then click “Import” to import the setting file.
Load Factory Defaults	Click “Load Default” button to reset the device to factory default. All users’ settings will be erased.

8.4 Status



System Info

Item	Description
Firmware Version	It shows the version of firmware on this device.
System Up Time	It indicates the time on this device. If the NTP client is enabled, the time will sync with the NTP server.
Device Mode	It shows the operation mode of this device.

Internet Configurations

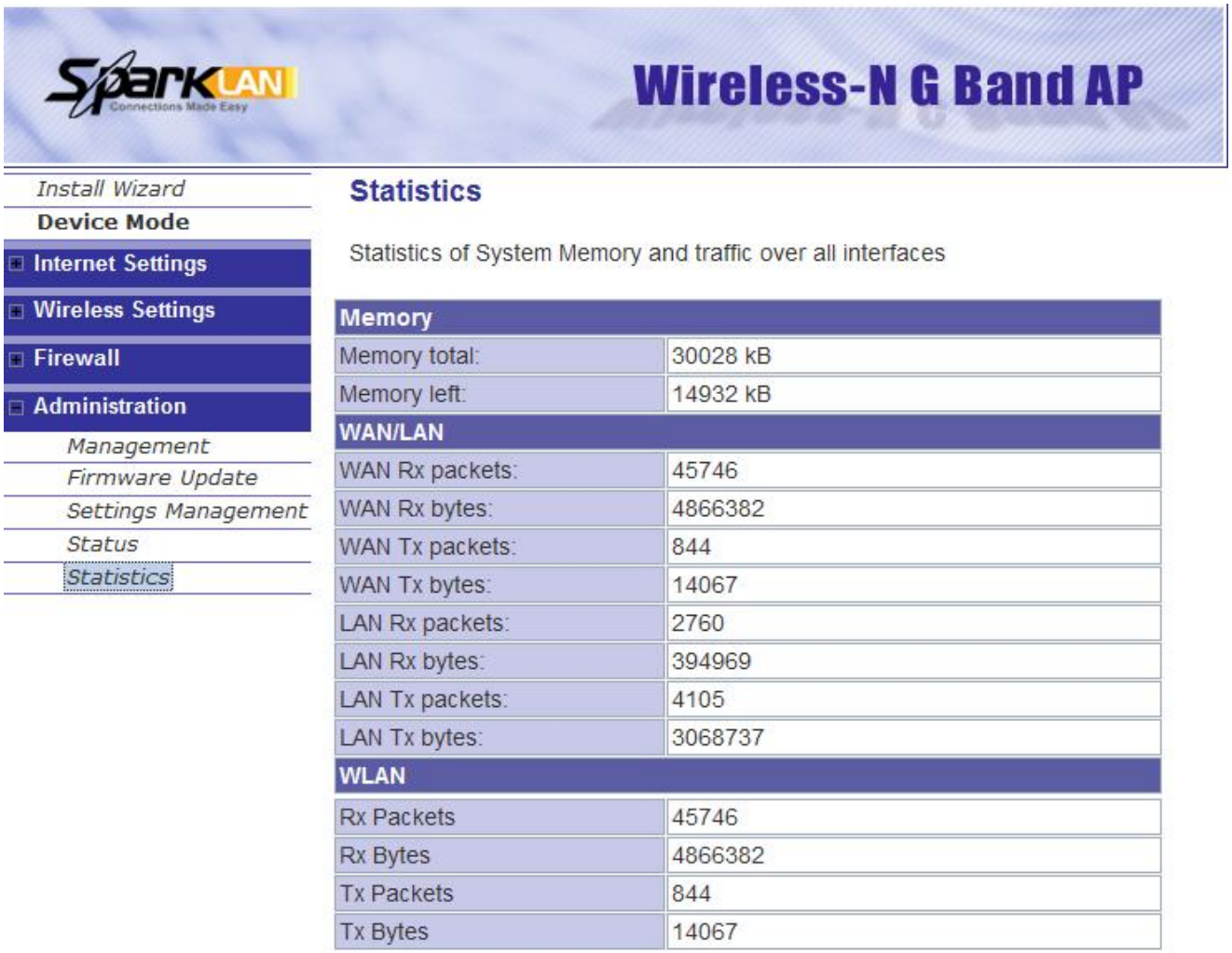
Item	Description
Connected Type	It shows the WAN type information such as DHCP, Static IP, PPPoE, etc.
WAN IP Address	It shows the IP Address of the WAN interface.
Subnet Mask	This is subnet mask of the WAN interface.
Default Gateway	It is the default gateway of WAN interface.
Primary Domain Name Server	It shows the primary DNS server.
Secondary Domain Name	It shows the current secondary DNS server.

Server	
MAC Address	This is the MAC Address of the WAN interface.

Local Network

Item	Description
Local IP Address	This is the IP Address of the LAN interface.
Local Netmask	This is the Netmask for the LAN.
MAC Address	This is the MAC Address of the LAN interface.

8.5 Statistics



Memory

Item	Description
Memory total	This is the total memory size for this device.
Memory left	The available memory size shows in this field.

WAN/LAN

The information shows packet accumulation during each interface transmission

WLAN

The information shows packet accumulation during WLAN transmission

9. Troubleshooting – Q & A

1. I'm trying to log on the AP's Web configuration page, but I do not see the login screen.

Answer:

1. Please make sure the IP address that you input on address field of IE browser is correct.
2. Make sure the physical layer connection is established. If you are using wired to connect this AP, check the relevant LAN LED whether is lit or not.
3. On Command Prompt screen, using " ping " command to probe this AP, check if you got reply from it.
   Command: ping < Destination IP address >
4. If you have any TCP/IP setting problem, please refer to the Quick Installation Guide.

2. I forgot my password, how to log on this AP for configuration?

Answer:

1. Reset the AP to factory default by pressing the Reset button for 10 seconds then releasing it.
2. Log on the AP's web management by http://192.168.1.250
   Enter the username "**admin"** and enter the default password "**admin"**.

3. How to set the AP to factory default setting.

Answer:

1. Reset the AP to factory default by pressing the Reset button for 10 seconds then releasing it.
2. After release the Reset button, the AP will get back all setting to factory default and reboot system.
3. While the reboot is complete, log on the AP's web management by default IP http://192.168.1.250
   Enter the username "**admin"** and enter the default password "**admin"**.

4. My AP will not turn on. No LED's light up.

Answer:

Usually it is caused by the power is not connected.
Please double check the power adapter if it connected to your AP and the other side is plugged into the power outlet.
If it still has no power, please contact your reseller.

5. I can't access the AP from a wireless client.

Answer:

Generally to make the wireless client unable to access AP with following possible issues:
1. Settings are different among each wireless station.
2. Out of range.
3. Wrong security key.

Resolution:

Make sure that mode, SSID, Channel and encryption settings are set the same on each wireless adapter. Make sure that your computer is within range and free from any strong electrical devices that may cause interference.

6. What devices cause interference?

Answer:

The AP is operating in the unlicensed 2.4 GHz band. Other devices operate in this frequency range that may cause interference include microwave ovens and 2.4 GHz portable phones. PCs or analog cellular phones do not operate at 2.4 GHz and do not cause interference. Proper placement of access points usually eliminates interference problems created by other 2.4 GHz devices.

EC Declaration of Conformity

Name applicant:
Sparklan Communications, Inc.
8F #257, Sec 2, Tiding Blvd,
Neihu District, (11493)
Taipei, Taiwan

Hereby declares under sole responsibility that product

Brand name:	Sparklan
Product number:	**WCR-150GN/WAPR-150GN**
Product description:	**802.11bgn smart client/802.11bgn AP**

To which this declaration relates complies with the requirements of the following standards:

EN 300 328 V1.7.1 (2006-10)
EN 301 489-1 V1.8.1(2008-04)
EN 301 489-17 V2.1.1(2009-05)
EN 50385 (2002-08)
EN 60950-1: 2006

This certifies that the designated product as described above complies with the directives described above and carries the CE marking accordingly.

This declaration has been signed under responsibility of the manufacturer / importer.

This document is only valid in connection with the test report no.:
RE990429C04,RM990429C04,SE990429C04,LD990429C04
Test laboratory: Advanced Data Technology Corporation
Lab Address: No. 47, 14th Ling, Chia Pau Tsuen, Linko Hsiang 244, Taipei Hsien, Taiwan. ROC

Name manufacturer / importer:

Sparklan Communications, Inc.

May 3, 2010

Mike Chen

President

Federal Communication Commission Interference Statement

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

NCC statement:

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。