Edimax Gemini
Home Wi-Fi Roaming Router/Access Point
RG21S/RA21S

User Manual

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CONTENTS

I. Product Information

I-1. Package Contents

Before you start using this product, please check if there is anything missing in the package, and contact your dealer to claim the missing item(s):

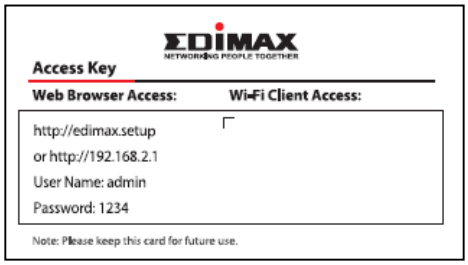
RG21S/RA21S

CD-ROM

Ethernet Cable

Quick Installation Guide

Power Adapter

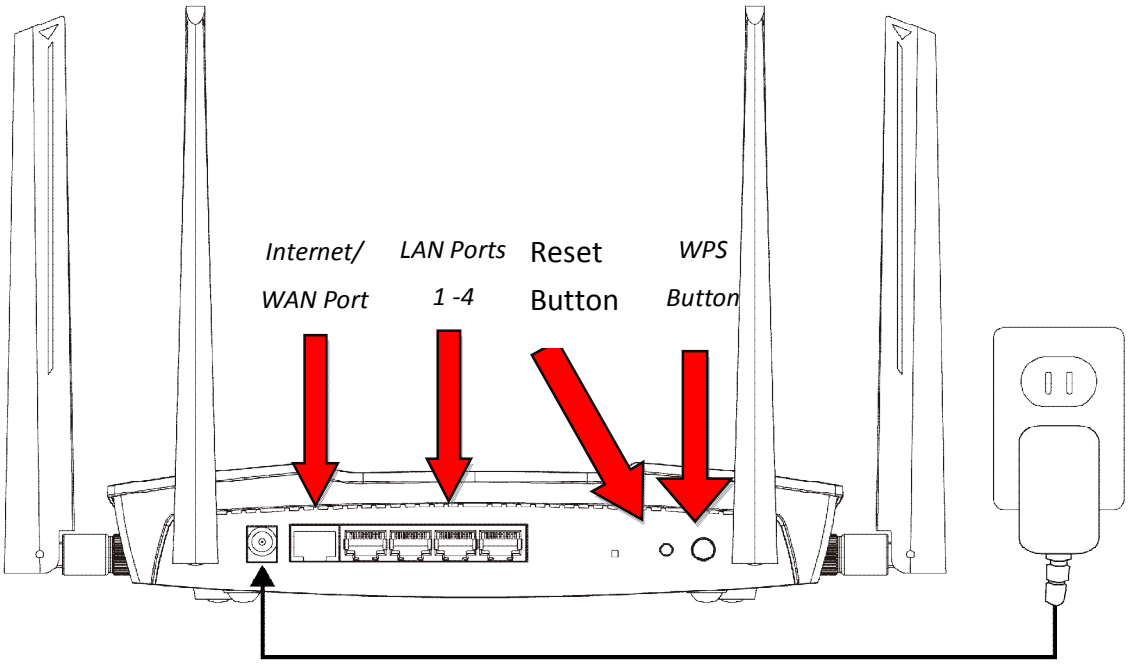


Access Key Card

I-2. LED Status

LED	Color	Status	Description
Power	Red	On	Internet is connected.
		Off	The device is off.
		Quick flashing	WPS is active
		Slow flashing	No Internet connection

I-3. Back Panel



I-4. Safety Information

In order to ensure the safe operation of the device and its users, please read and act in accordance with the following safety instructions.

1. The device is designed for indoor use only; do not place it outdoors.

2. Do not place the device in or near hot/humid places, such as a kitchen or bathroom.

3. Do not pull any connected cable with force; carefully disconnect it from the RG21S/RA21S.

4. Handle the device with care. Accidental damage will void the warranty of the device.

5. The device contains small parts which are a danger to small children under 3 years old. Please keep the device out of reach of children.

6. Do not place the device on paper, cloth, or other flammable materials. The device may become hot during use.

7. There are no user-serviceable parts inside the device. If you experience problems with the device, please contact your dealer of purchase and ask for help.

8. The device is an electrical device and as such, if it becomes wet for any reason, do not attempt to touch it without switching the power supply off. Contact an experienced electrical technician for further help.

I-5. Reset to Factory Default Settings

If you experience problems with your RG21S/RA21S, you can reset the device back to its factory settings. This resets **all** settings back to default.

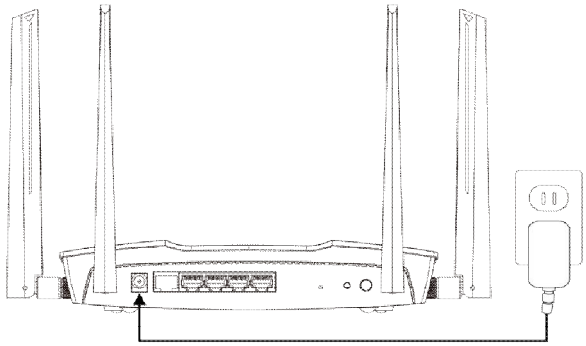
1. Press and hold the **WPS/Reset button** found on the rear base of the product for at least 10 seconds.

2. Release the button when the LED is flashing blue.

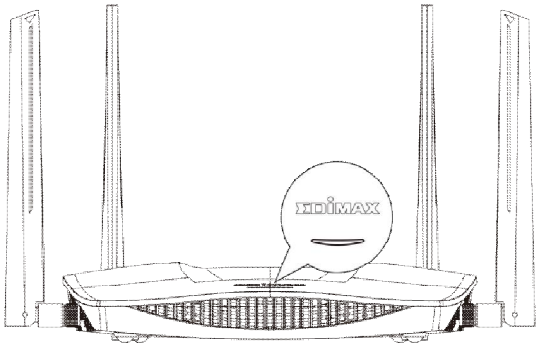
3. Wait for the RG21S/RA21S to restart.

II. Installation

1. Plug the included power adapter into the device's 12V DC power port and the other end into an electrical socket.



2. Check that the power LED displays **on**.



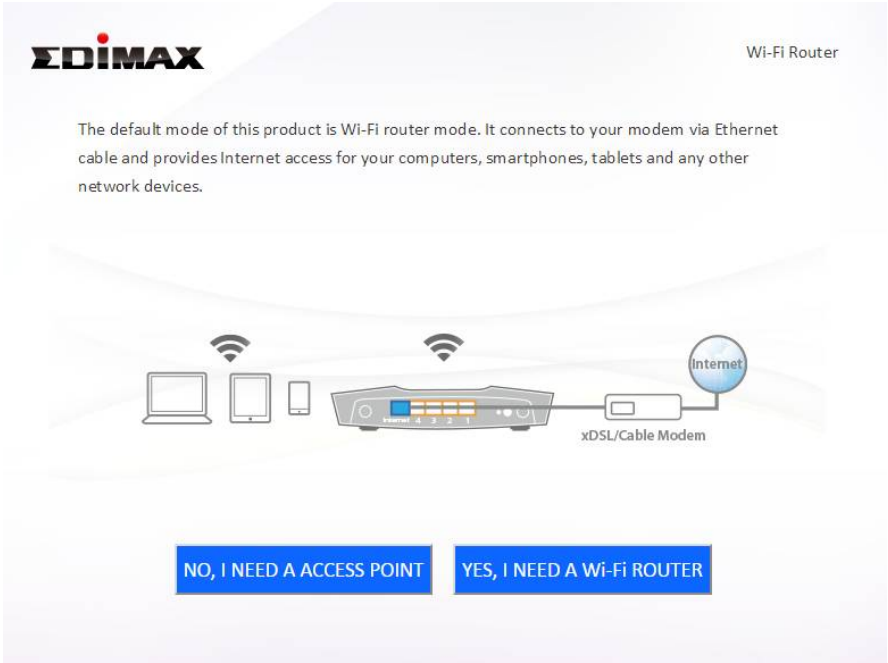
3. Use a Wi-Fi device (e.g. computer, tablet, smartphone) to search for a Wi-Fi network with the SSID "edimax.setup" or "edimax.setup5G" and connect to it.

iOS 4 or Android 4 and above are required for setup on a smartphone or tablet.

4. Open a web browser and if you do not automatically arrive at the "Get Started" screen shown below, enter the URL ***http://edimax.setup*** and click **"Get Started"** to begin the setup process.

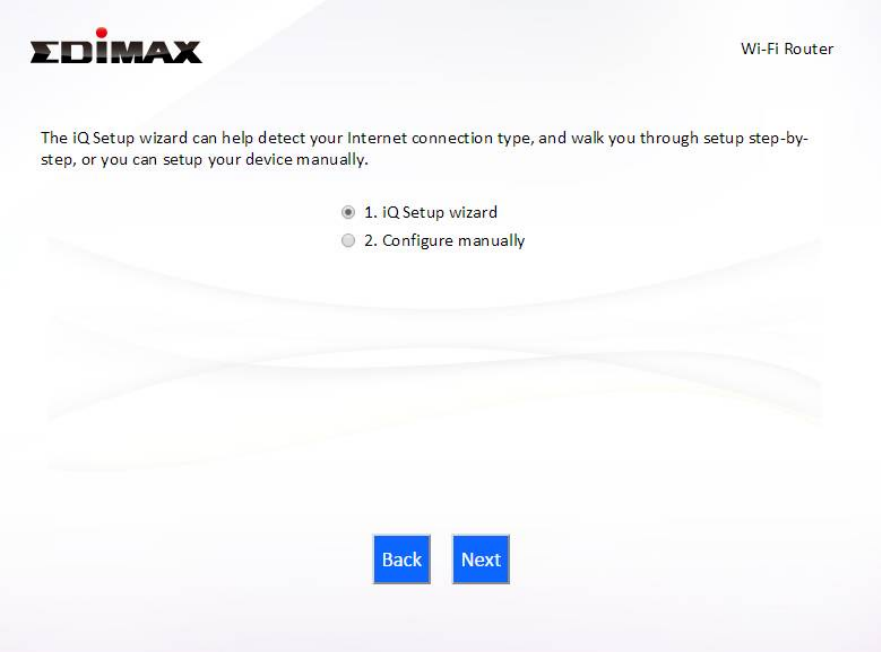
If you cannot access** http://edimax.setup**, please make sure your computer is set to use a dynamic IP address.

5. Choose if you want to use your RG21S/RA21S in its default Wi-Fi router mode or as an access point.



Wi-Fi Router Mode	*The device connects to your **modem** and provides 2.4GHz and/or 5GHz Internet (wireless and Ethernet) access for your network devices.*
Access Point Mode	*The device connects to an existing **router** via Ethernet cable and provides 2.4GHz and/or 5GHz Internet (wireless and Ethernet) access for your network devices.*

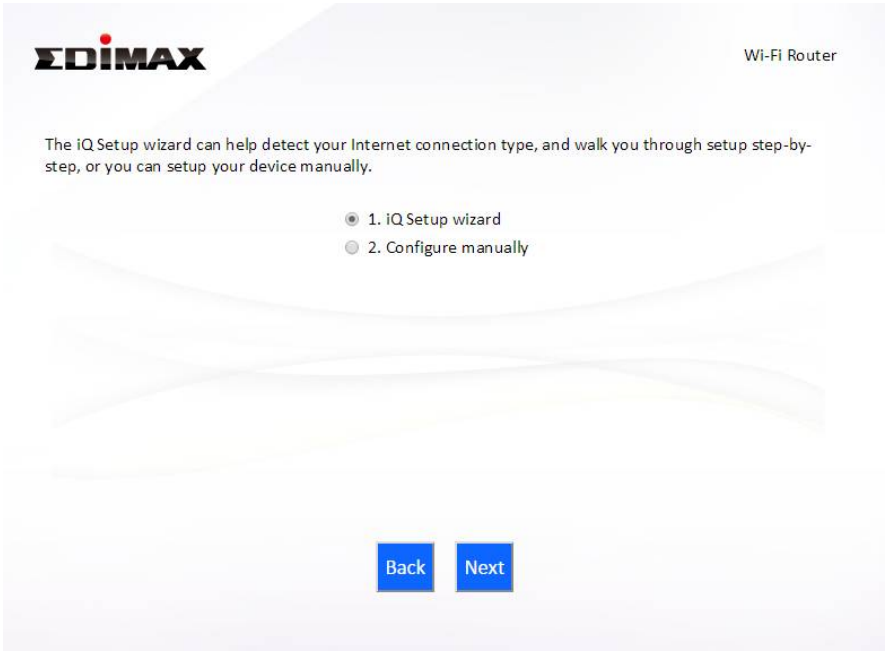
6. Follow the on-screen instructions to complete setup. Refer to the following chapters if you need more help.



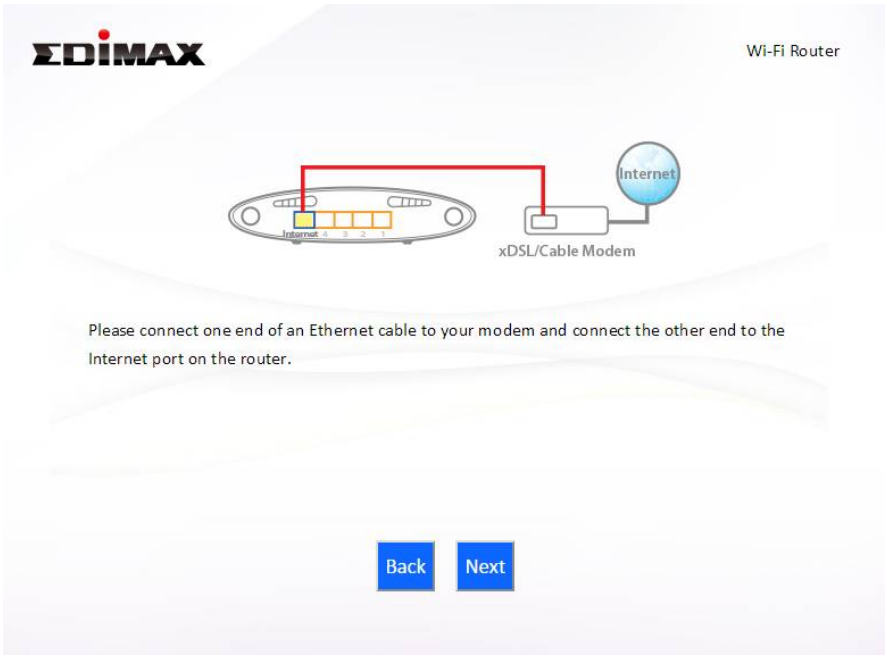
II-1. Wi-Fi Router Mode

1. Select whether to use the iQ Setup wizard (recommended) to detect your Internet connection type, or enter the settings manually.

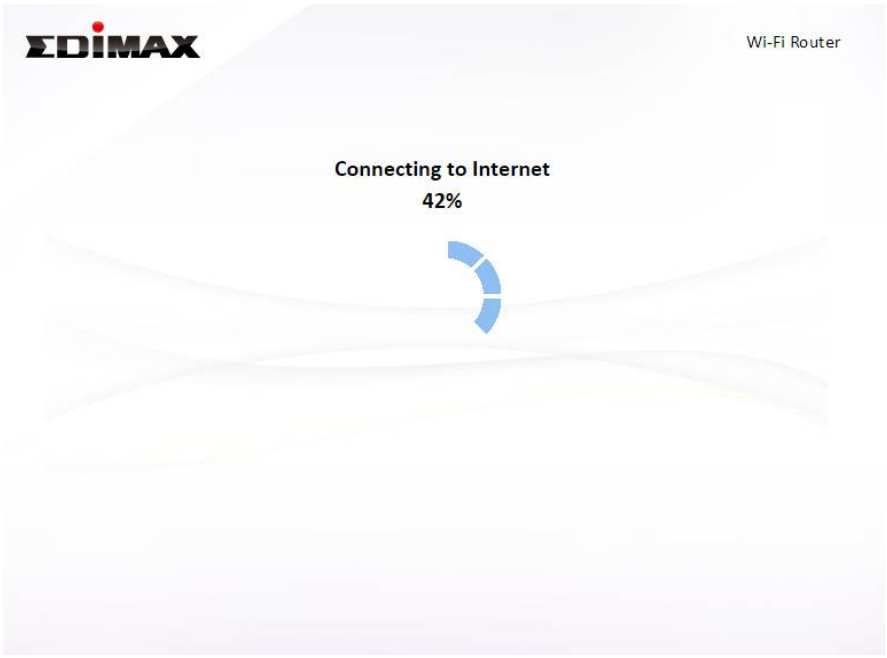
Manual configuration is only recommended for advanced users.



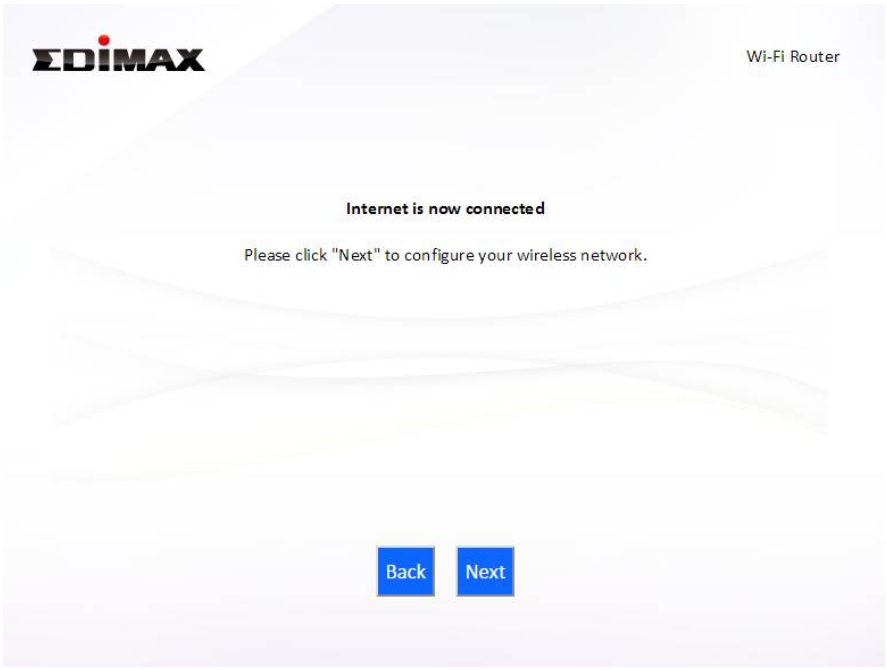
2. Connect the **blue** Internet port of your device to the LAN port of your modem using an Ethernet cable, and then click “Next”.



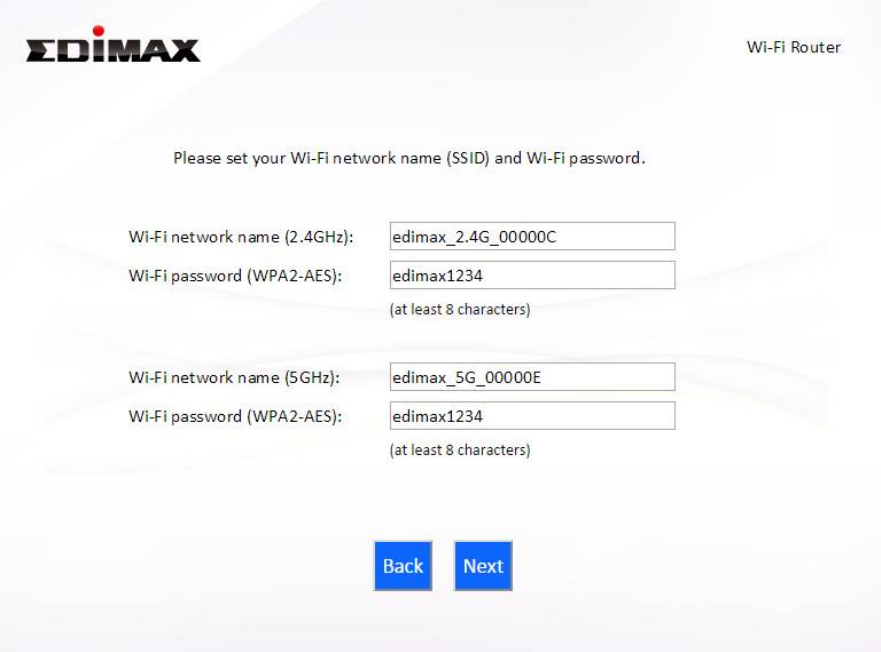
3. Please wait a moment while the device tests the connection.



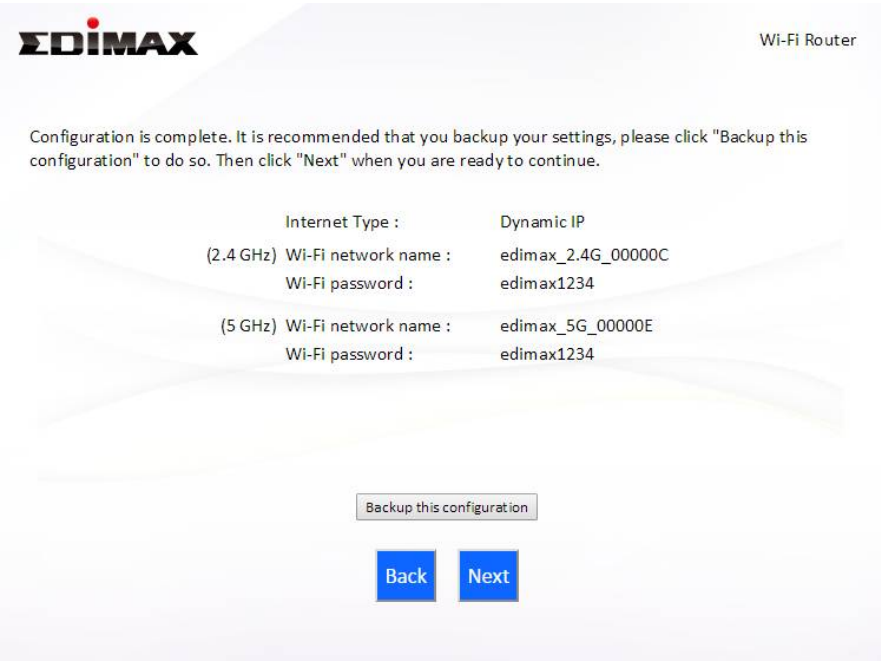
4. Click “Next” to continue and configure the device’s wireless network.



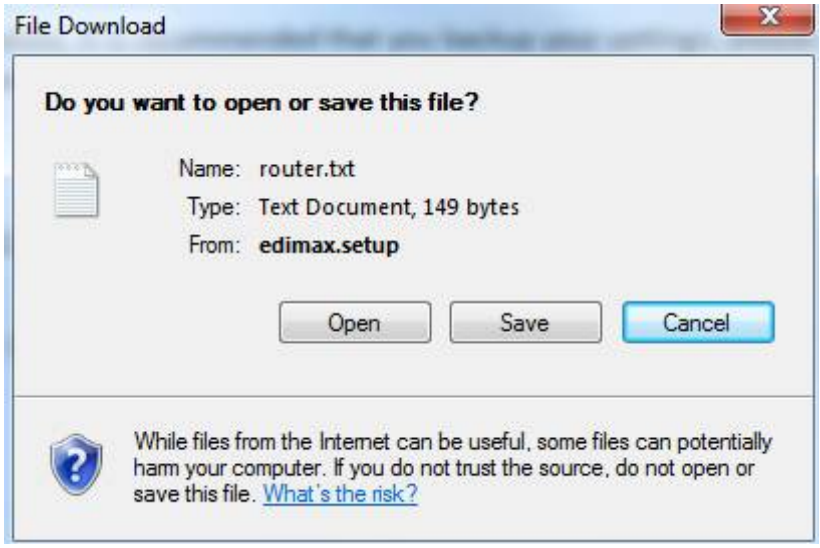
5. Enter a name and password for your 2.4GHz & 5GHz wireless networks, then click “Next” to continue.



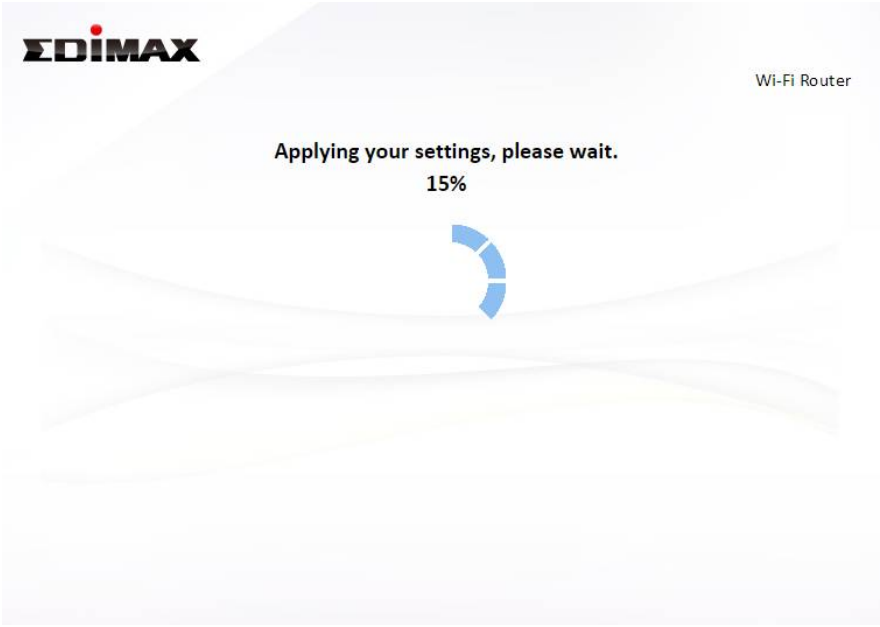
6. A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click “Next” to proceed.



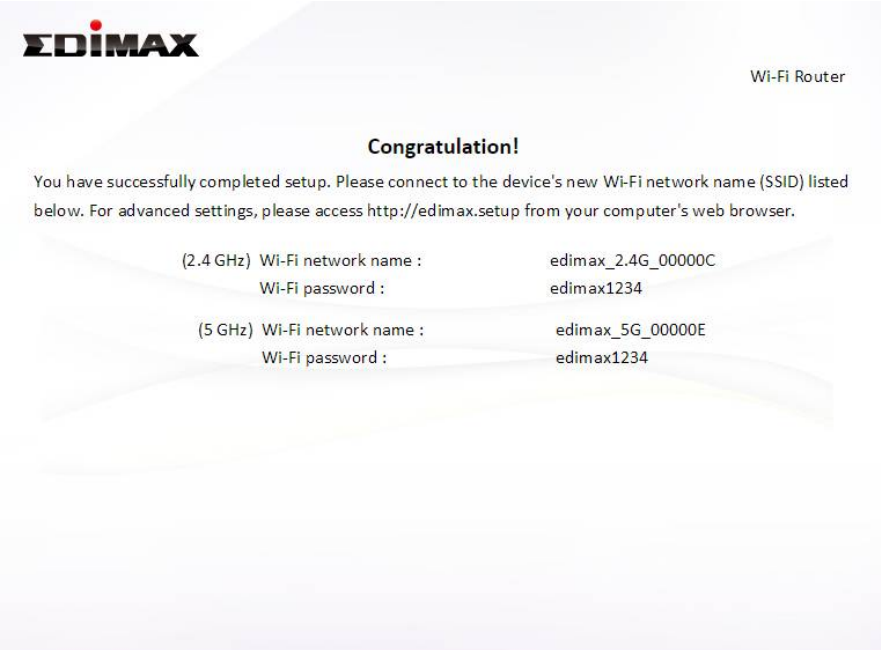
If you wish to backup the device’s settings, click “Backup this configuration” to open a new window and save your current configuration to a .txt file.



7. Please wait while the device applies your settings.



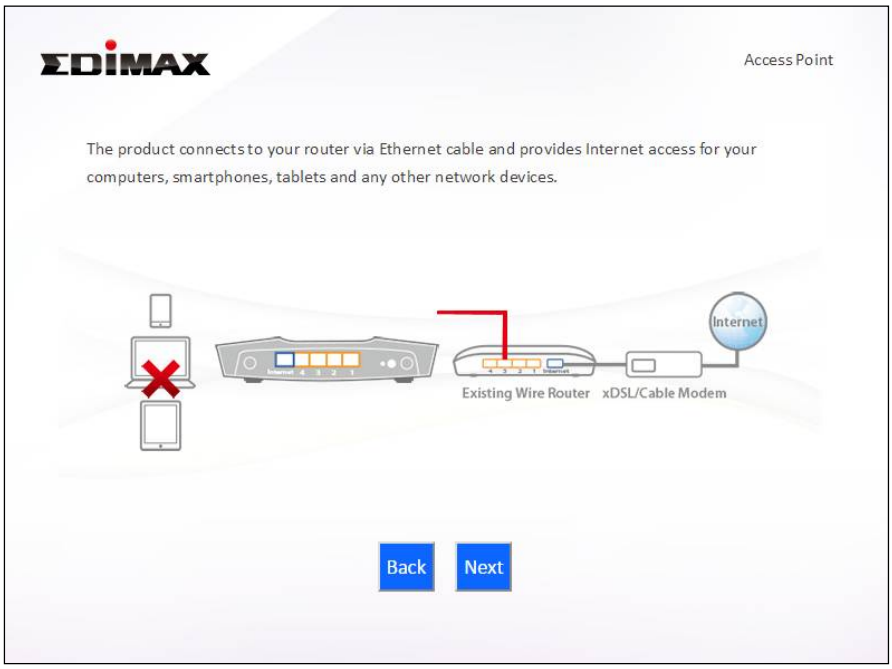
8. A final congratulations screen will indicate that setup is complete. You can now connect to the device's new SSID(s) which are shown on the screen then close the browser window.



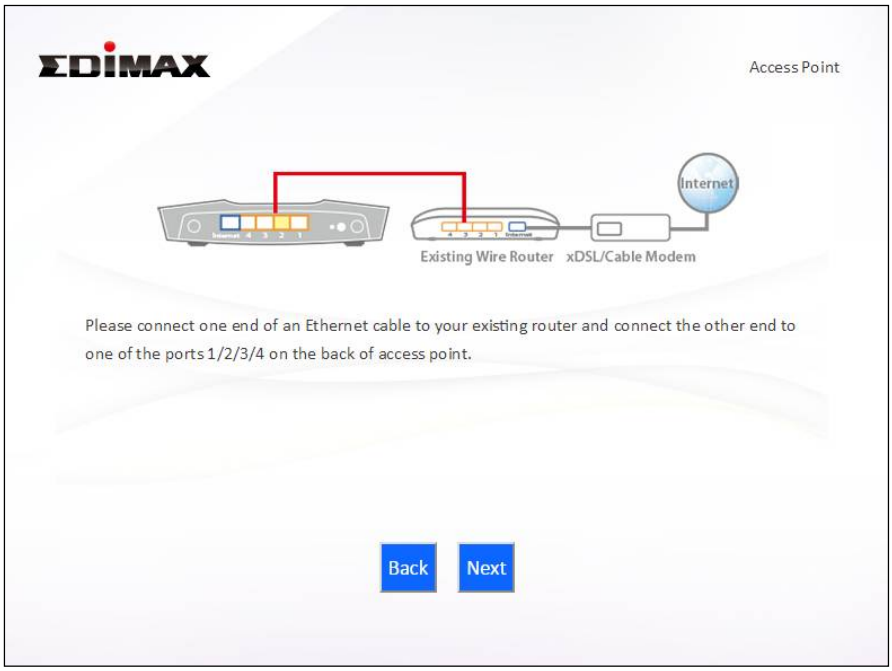
9. The RG21S/RA21S is working and ready for use. Refer to **IV-2. Connecting to a Wi-Fi network** if you require more guidance.

II-2. Access Point Mode

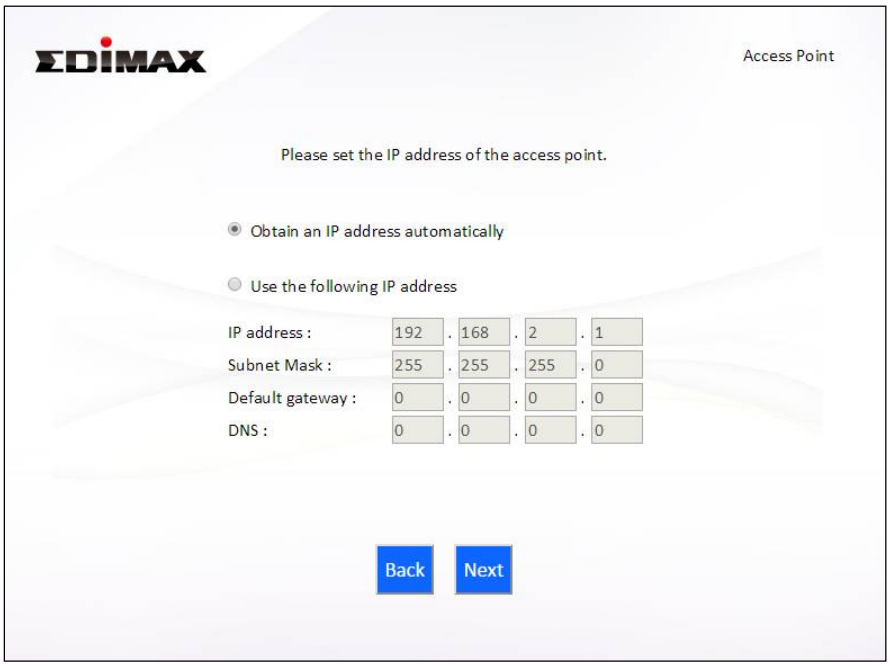
1. Select “Access Point” from the top menu and click “Next”.



2. Connect the network port of your RG21S/RA21S to the LAN port of your existing router using an Ethernet cable, then click “Next”.

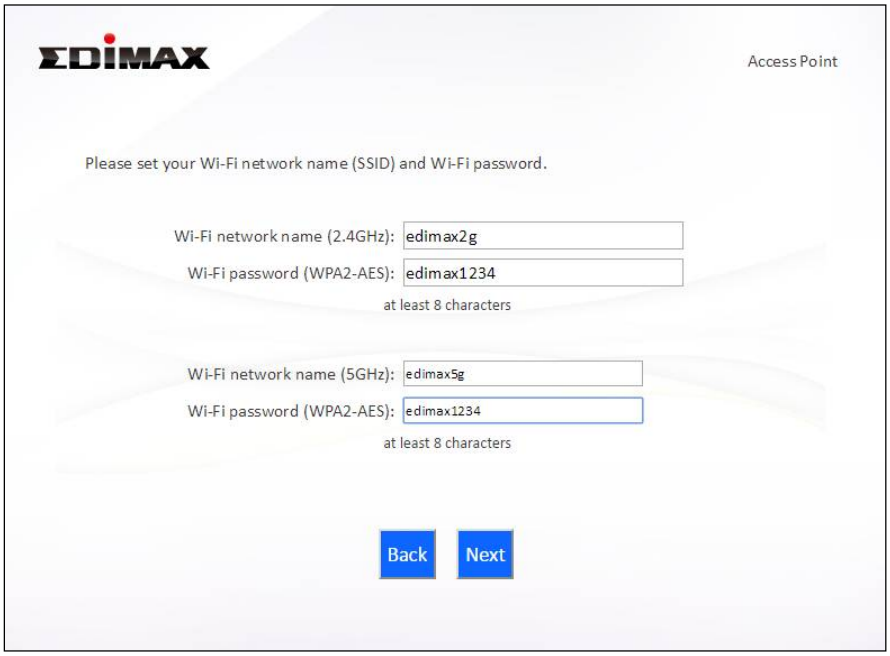


3. Select “Obtain an IP address automatically” or “Use the following IP address” for your RG21S/RA21S. If you are using a static IP, enter the IP address, subnet mask and default gateway. Click “Next” to proceed to the next step.

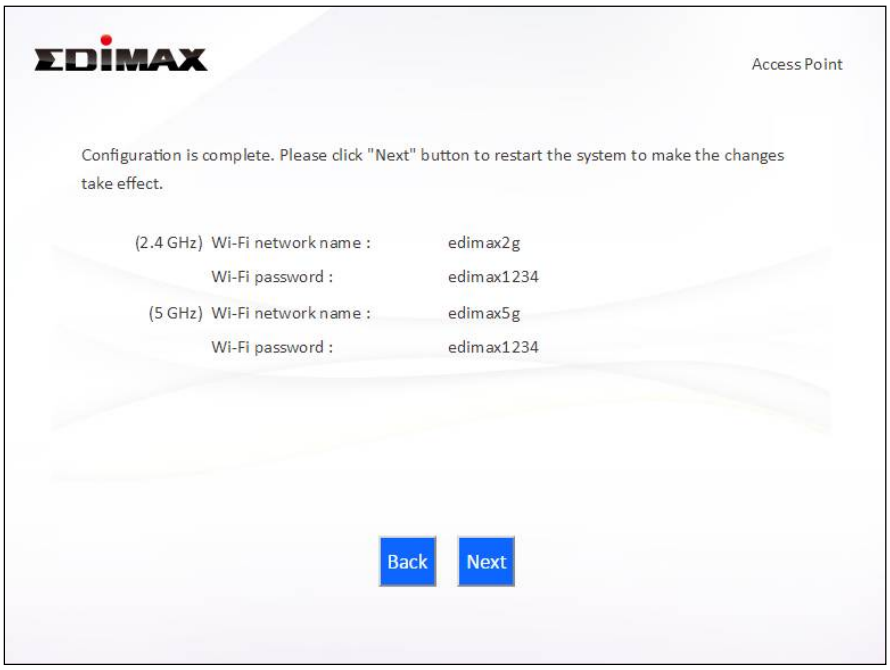


“Obtain an IP address automatically” is the recommended setting for most users. For more guidance on static IP addresses, please refer to IV-1. Configuring your IP address.

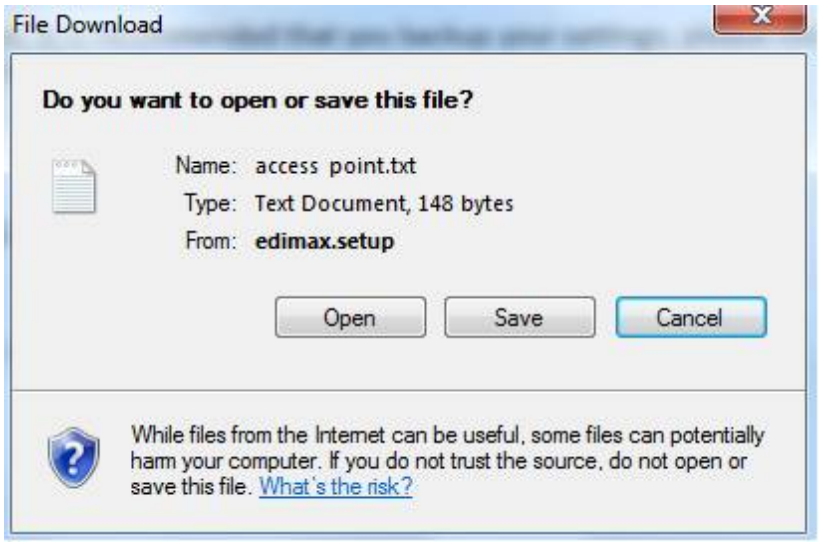
4. Enter a name and password for your 2.4GHz & 5GHz wireless networks, then click “Next” to continue.



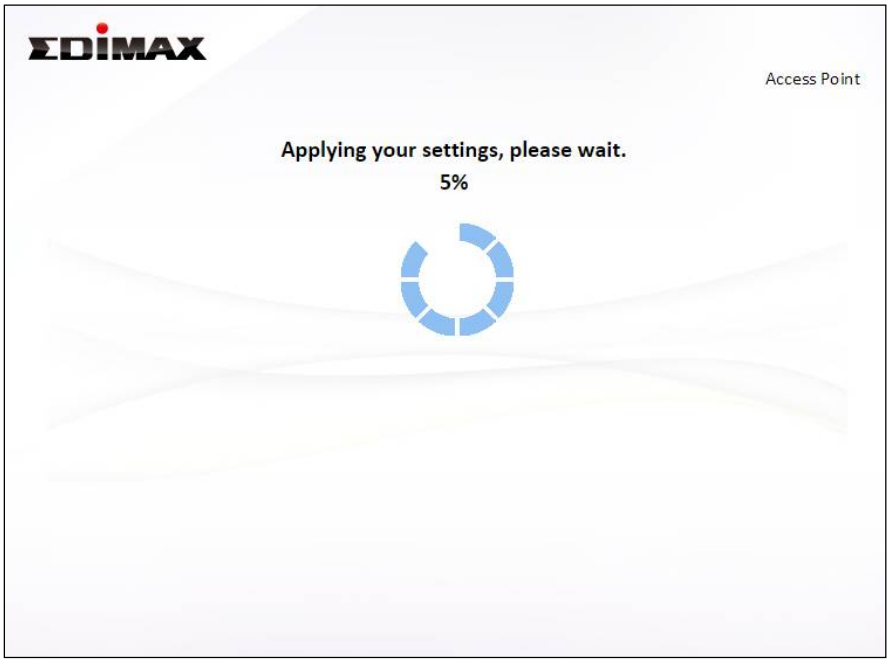
5. A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click “Next” to proceed.



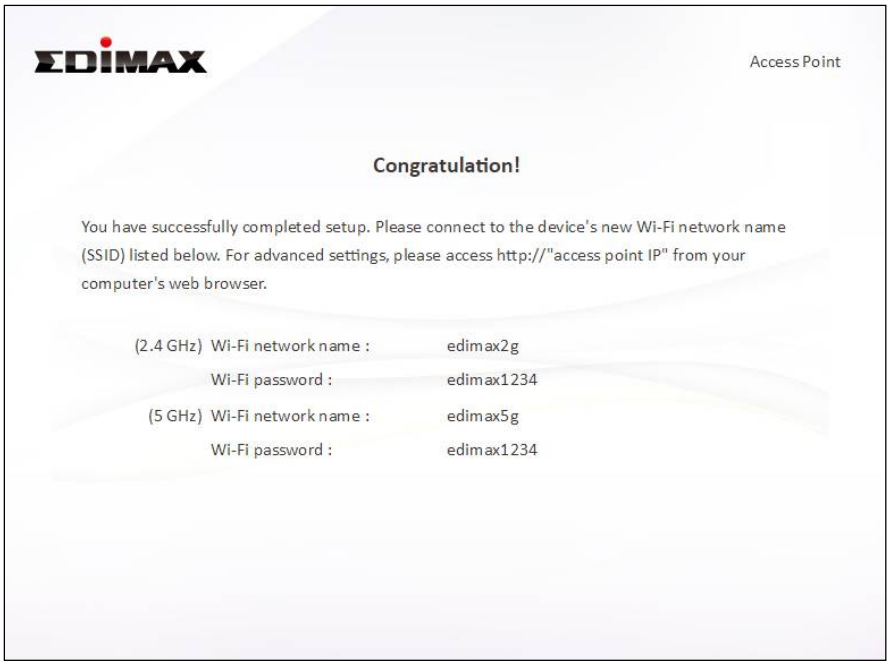
If you wish to backup the device’s settings, click “Backup this configuration” to open a new window and save your current configuration to a .txt file.



6. Please wait a moment until the RG21S/RA21S is ready.



8. A final congratulations screen will indicate that setup is complete. You can now connect to the device's new SSID(s) which are shown on the screen then close the browser window.



9. The RG21S/RA21S is working and ready for use. Refer to **IV-2. Connecting to a Wi-Fi network** if you require more guidance.

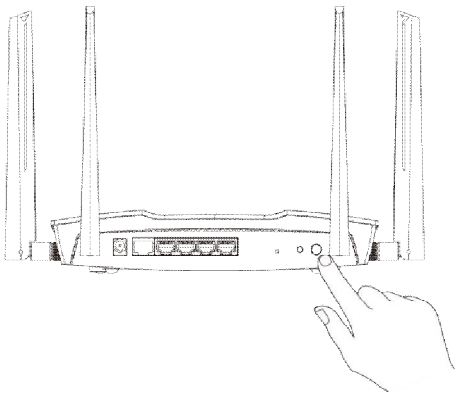
II-3. Wi-Fi Roaming

Your RG21S/RA21S supports Wi-Fi roaming. This means if you have other EDIMAX Wi-Fi products which support roaming (e.g. access point, extender) then your Wi-Fi devices (smartphones, tablets etc.) will **automatically** connect to the best available Wi-Fi signal as you move around or "roam" between them in your home.

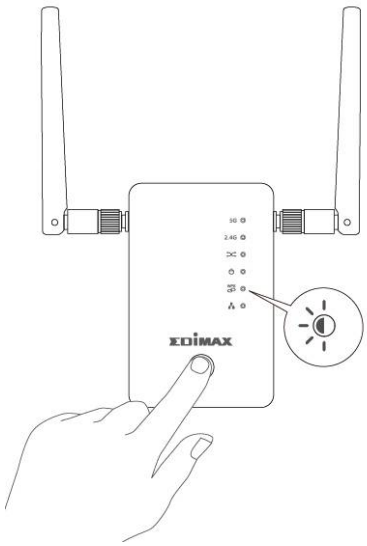
To setup other EDIMAX Wi-Fi roaming range extender, refer to their included documentation for instructions.

To setup EDIMAX Wi-Fi roaming extenders with your router/AP, you can simply press the WPS button, as explained below. Ensure both products are within range of each other.

1. Press the WPS button on your router/AP for **3 seconds**.



2. **Within two minutes,** press and hold the WPS button for **3 seconds** on the new extender you would like to add. The extender's **green** WPS LED should flash to indicate that WPS is in progress.



3. The devices will establish a connection. extender's **green** WPS LED should display on for 30 seconds to indicate a successful connection. Your extender is now active with automatic roaming.

Refer to your EDIMAX roaming Wi-Fi extenders documentation for more information.

Browser Based Configuration Interface

After you have setup the RG21S/RA21S as detailed in **II. Installation** or the included **Quick Installation Guide**, you can use the browser based configuration interface to configure advanced settings.

Please ensure that your computer is set to use a dynamic IP address. Refer to IV-1. Configuring your IP address for more information.

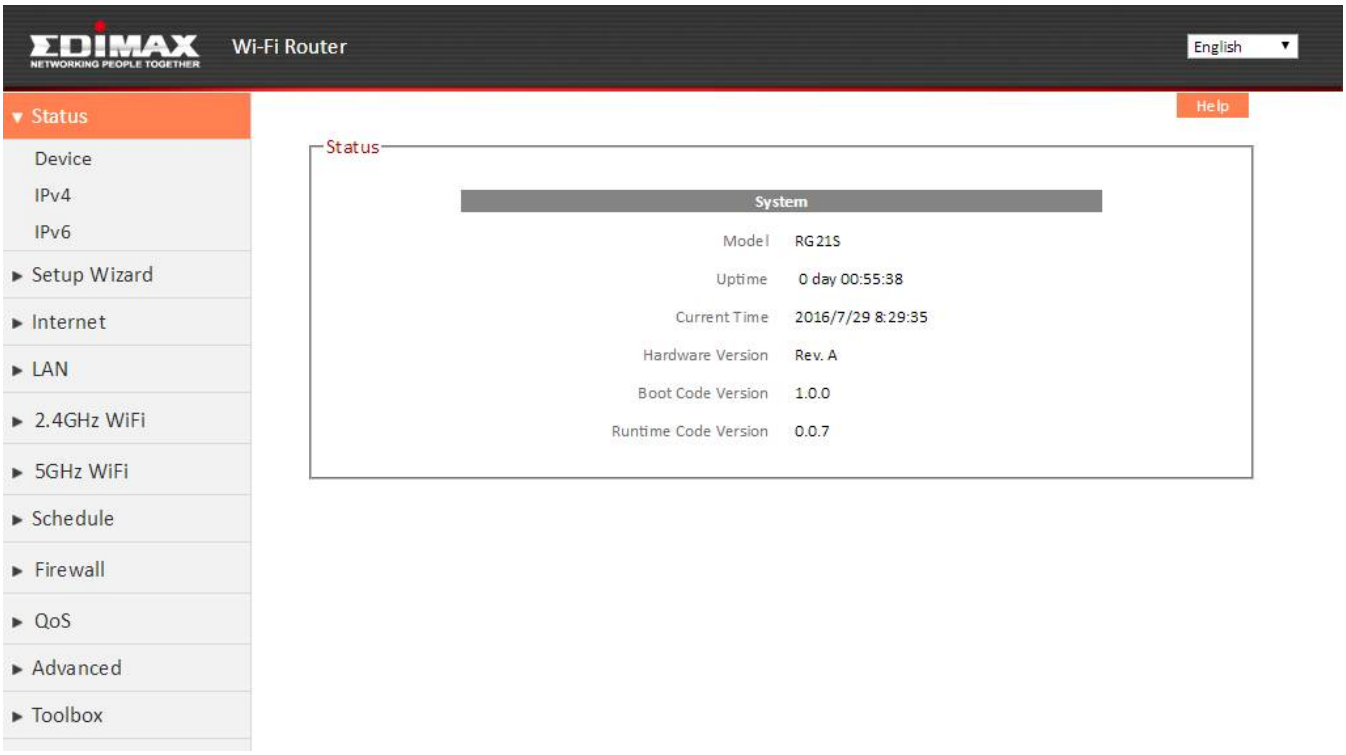
III-1. Login

1. To access the browser based configuration interface enter ***http://edimax.setup*** into the URL bar of a browser on a network device connected to the same Wi-Fi network as the RG21S/RA21S.

If you can not access** http://edimax.setup**, connect the device to a computer using an Ethernet cable and try again.

2. You will be prompted for a username and password. The default username is “admin” and the default password is “1234”.

3. You will arrive at the "Status" screen. Use the menu down the left side to navigate.

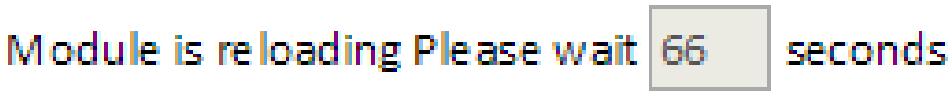


III-2. Save Settings

1. After you configure any settings, click the “Apply” button at the bottom of the screen to save your changes.

The device needs to restart in order to bring any changes into effect.

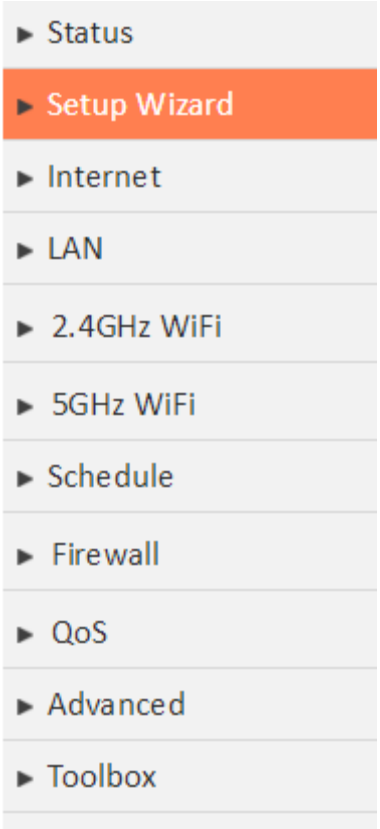
2. Wait a few moments for the device to save the changes and restart with the changes in effect.



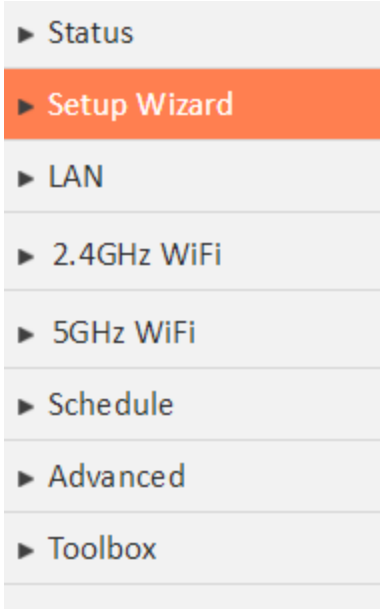
III-3. Main Menu

The main menu displays different options depending on your device's operating mode.

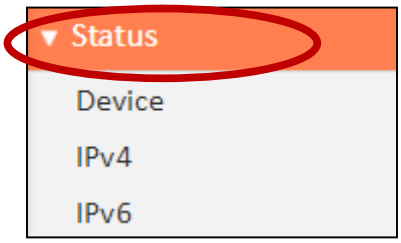
Wi-Fi Router



Access Point

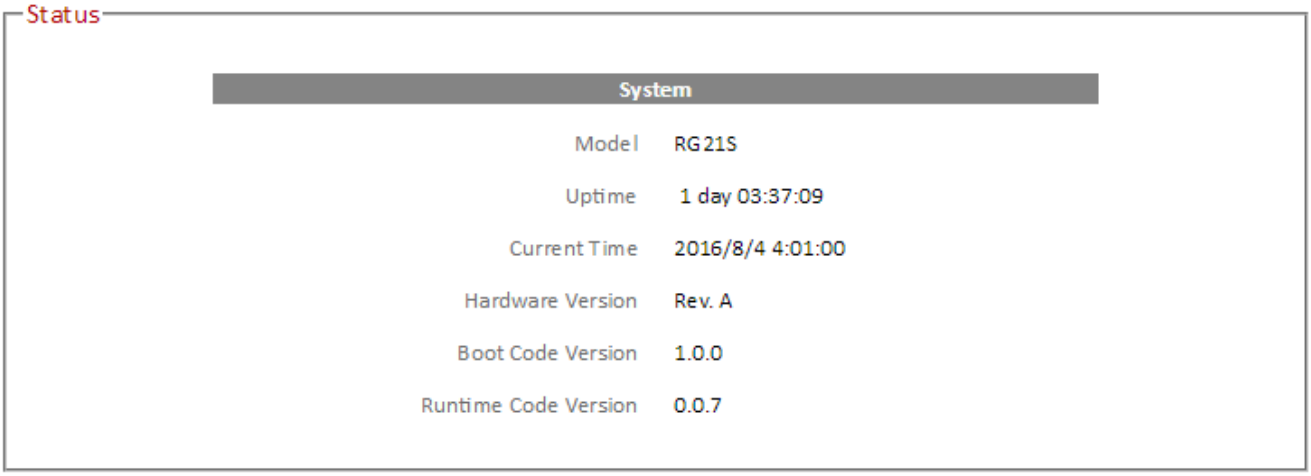


III-3-1. Status



The “Status” menu displays basic system information about the device, arranged into categories.

Screenshots displayed are examples.The information shown on your screen will vary depending on your configuration.



Model	Displays the model number.
Uptime	Displays the total time since the device was turned on.
Current Time	Displays the current device system time.
Hardware Version	Displays the hardware version for reference and support purposes.
Boot Code Version	Displays the firmware boot code version.
Runtime Code Version	Displays the firmware runtime code version.

III-3-1-1. Device

2.4G and 5G wireless and LAN status information is summarized in the device page.

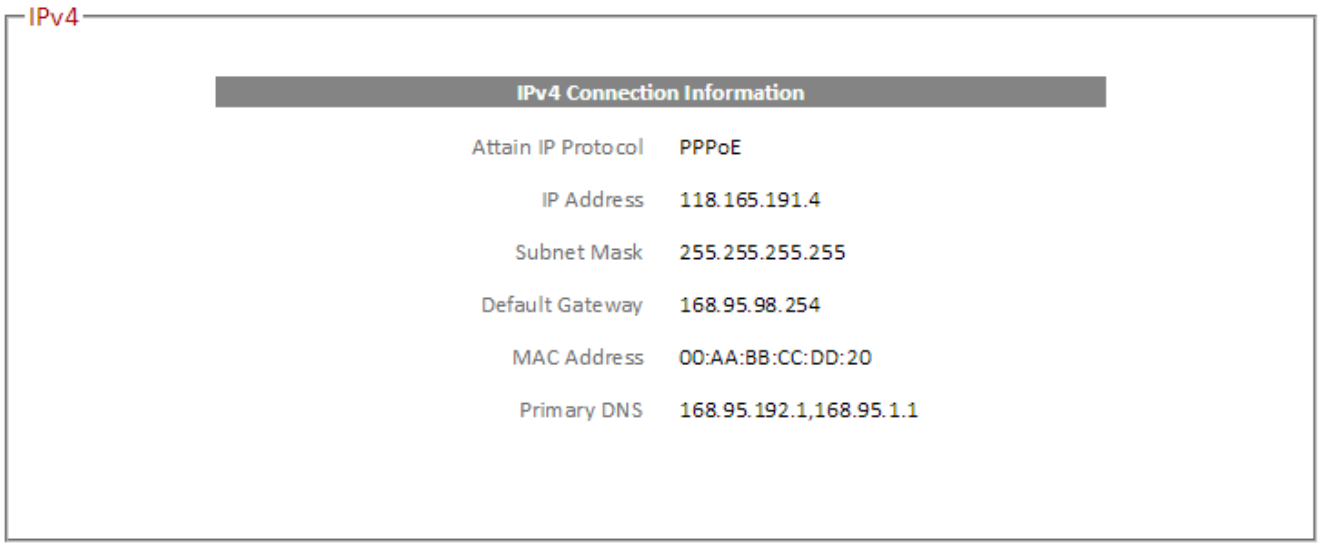
Mode	Displays the mode.
Channel	Displays the channel number the specified wireless frequency is using for broadcast.
ESSID	Displays the ESSID (also known as SSID) or

	wireless network name.
Security	Displays the encryption type for the specified SSID.
BSSID	Displays the BSSID which is a unique identifier for the device in the network, usually the MAC address.

IP Address	Displays the LAN IP address of this device.
Subnet Mask	Displays the subnet mask of this device. The default value is 255.255.255.0
DHCP Server	DHCP server is enabled or disabled.
MAC Address	Displays the MAC Address of this device.

III-3-1-2. IPv4

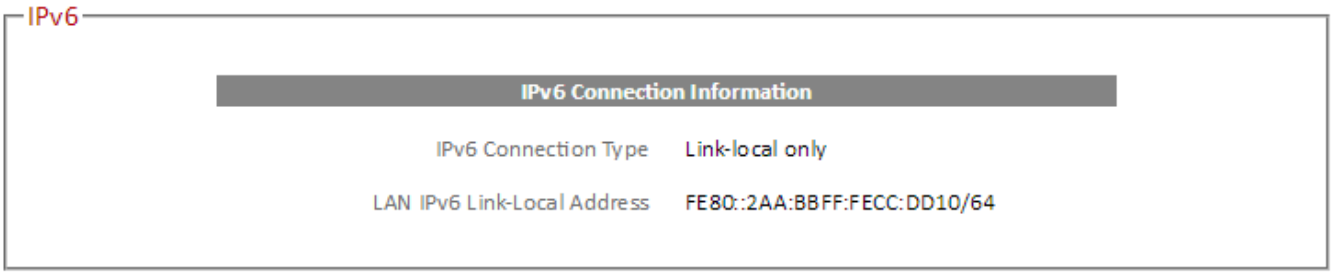
Displays basic IPv4 related status information.



Attain IP Protocol	Displays the IP Protocol used for the WAN IPv4 connection.
IP Address	Displays the WAN IP address of this device.
Subnet Mask	Displays the subnet mask of this device.
Default Gateway	Displays the IP address of the IPv4 default gateway.
MAC Address	IPv4 MAC address of this device.
Primary DNS	Primary DNS servers used by this device.

III-3-1-3. IPv6

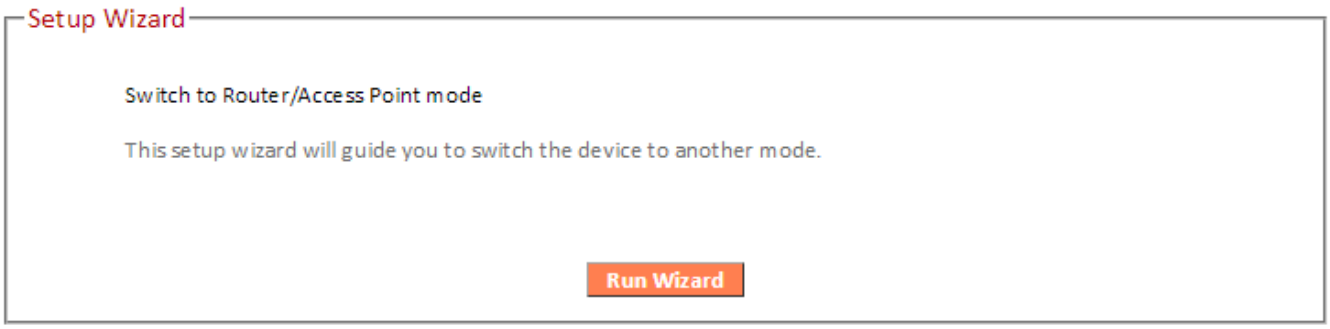
IPv6 standard is not yet widely available. Contact your ISP to check if your Internet supports IPv6.



IPv6 Connection Type	Displays the WAN IPv6 connection type.
LAN IPv6 Link-Local Address	Displays the LAN IPv6 link-local IP address.

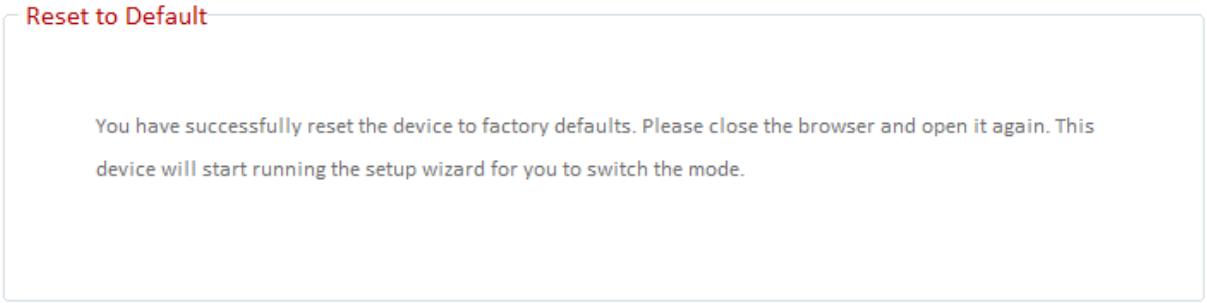
III-3-2. Setup Wizard

You can run the setup wizard again to reconfigure the basic settings of the device or switch the device to a different operating mode. Click “Run Wizard” to begin.



1. Follow the on-screen instructions to back up your current settings and then reset the device back to its factory default settings.

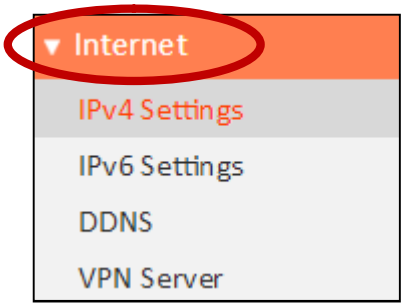
2. After the device has reset you will see the screen below. Close your browser and open it again.



3. Follow the on-screen wizard to setup your device in a different mode. Refer to **II. Installation Step 3** onwards for help if needed.

If you don’t see the** “Get Started” **screen, try reconnecting to the** edimax.setup **SSID and go to** http://edimax.setup **in a web browser.

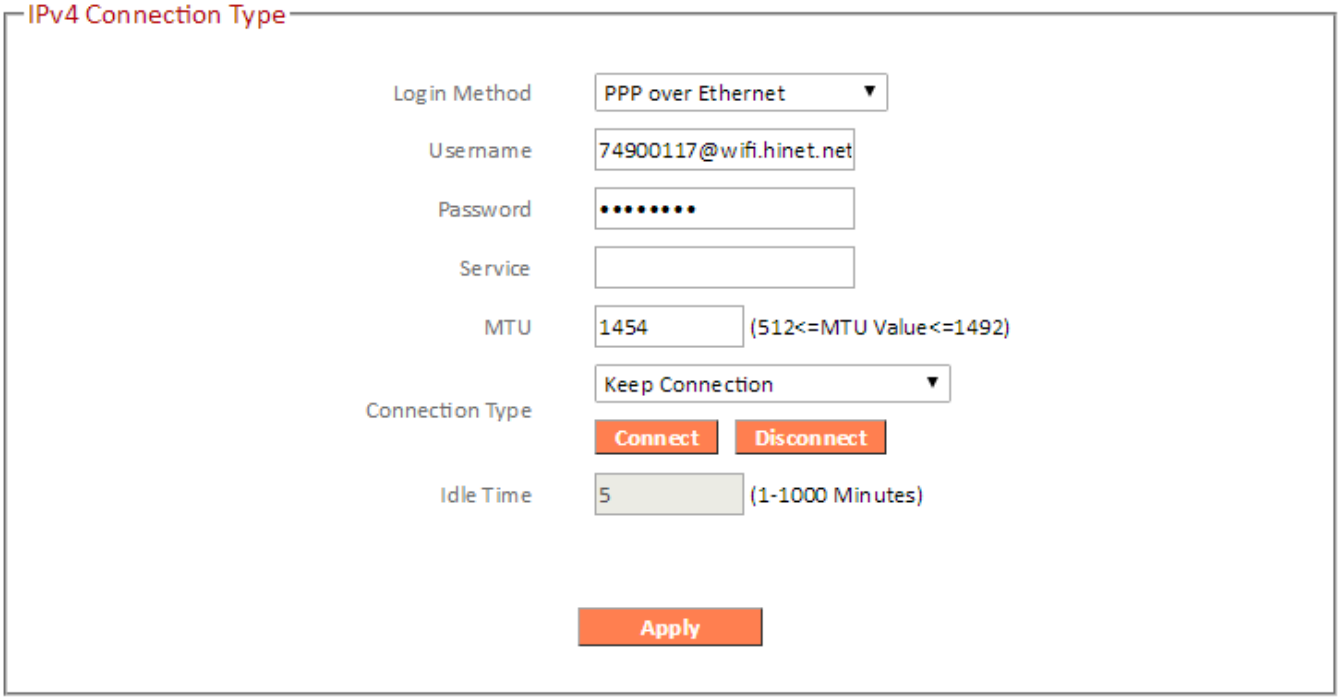
III-3-3. Internet



The “Internet” menu provides access to WAN IPv4, WAN IPv6, DDNS and VPN server settings. Click on an item from the submenu to view and/or configure the settings.

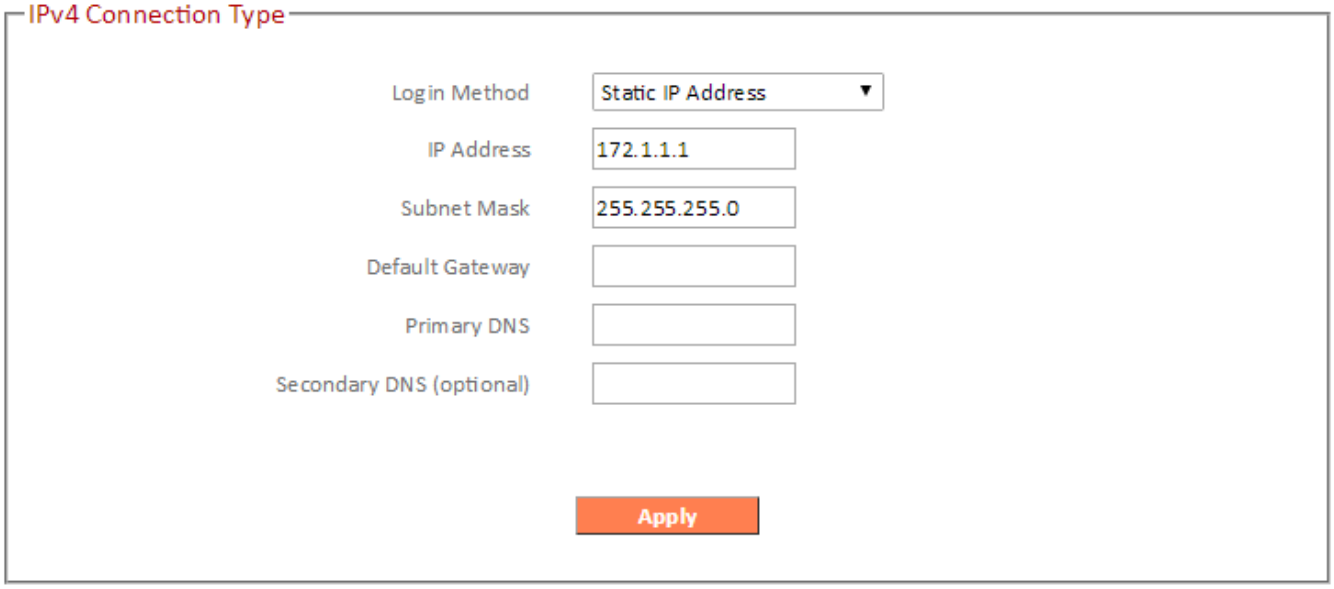
III-3-3-1. IPv4

Select a Login Method (WAN connection type) and configure the settings. If you are unsure about your login method/connection type, contact your ISP.



III-3-3-1-1. Static IP

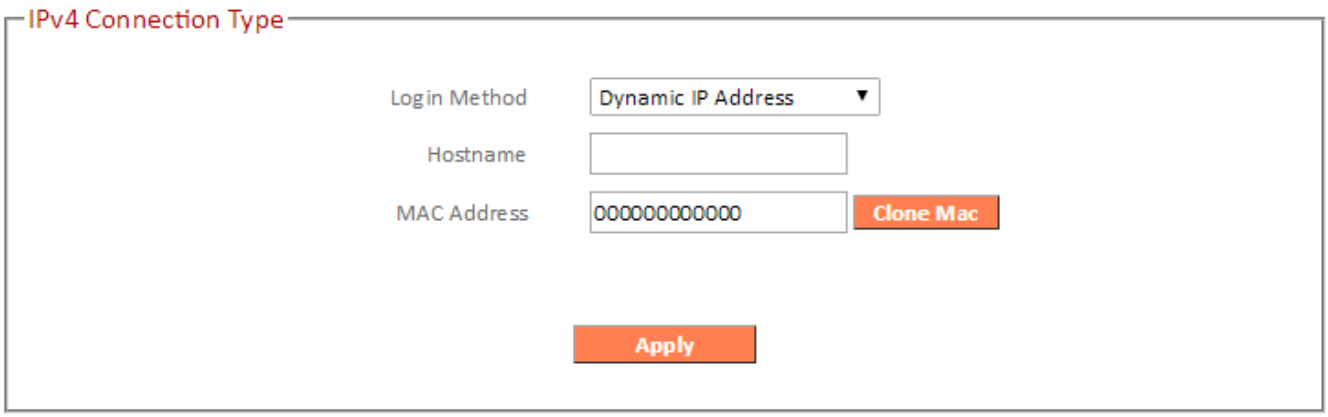
Select “Static IP” if your ISP provides Internet access via a fixed IP address. Your ISP will provide you with such information as IP address, subnet mask, gateway address, and DNS address.



Fixed IP Address	Input the IP address assigned by your ISP here.
Subnet Mask	Input the subnet mask assigned by your ISP here.
Default Gateway	Input the default gateway assigned by your ISP here. Some ISPs may call this “Default Route”.
Primary DNS	Enter the primary DNS address assigned by your ISP here.
Secondary DNS (optional)	Enter the secondary DNS address assigned by your ISP here.

III-3-3-1-2. Dynamic IP

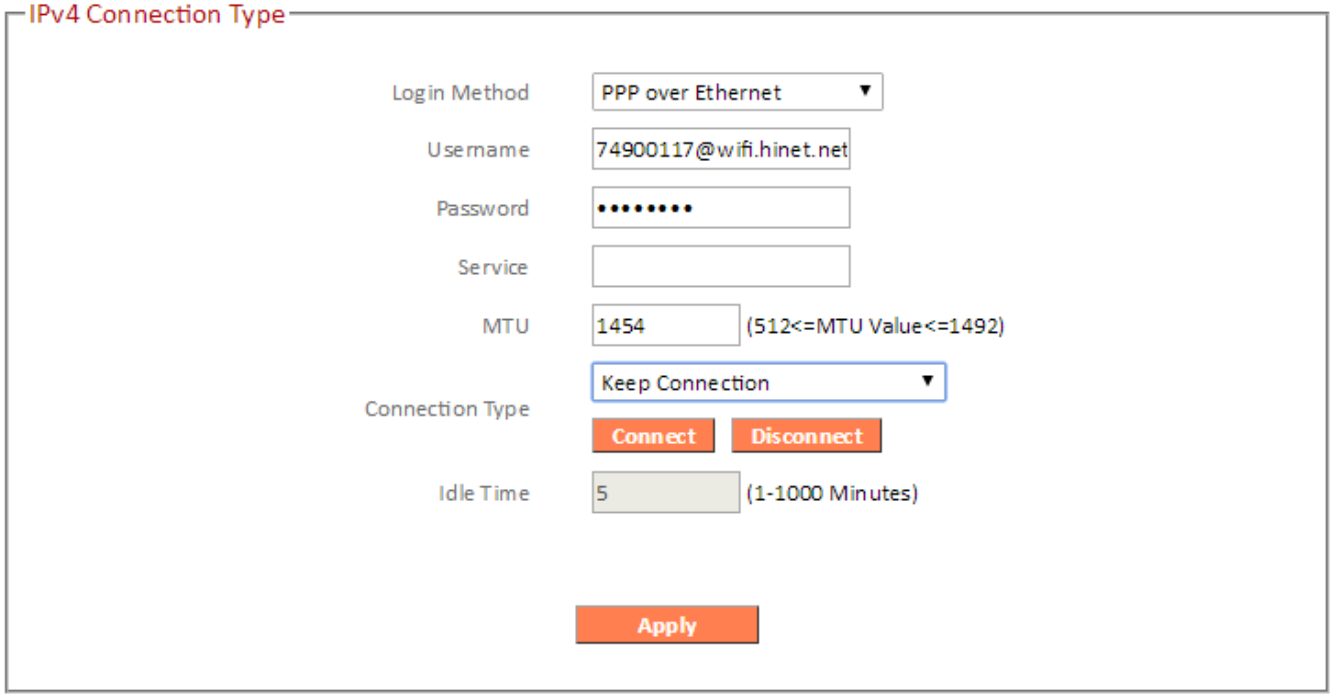
Select “Dynamic IP”. If your Internet service provider assigns IP address automatically using DHCP (Dynamic Host Configuration Protocol).



Host Name	Enter the host name of your computer.
MAC Address	For some applications, you may need to designate a specific MAC address for the router. Please enter the MAC address here. If you are connecting the router to a computer, press “Clone Mac” to automatically enter your computer’s MAC address.

III-3-3-1-3. PPPoE

Select “PPPoE” if your ISP is providing you Internet access via PPPoE (Point-to-Point Protocol over Ethernet).

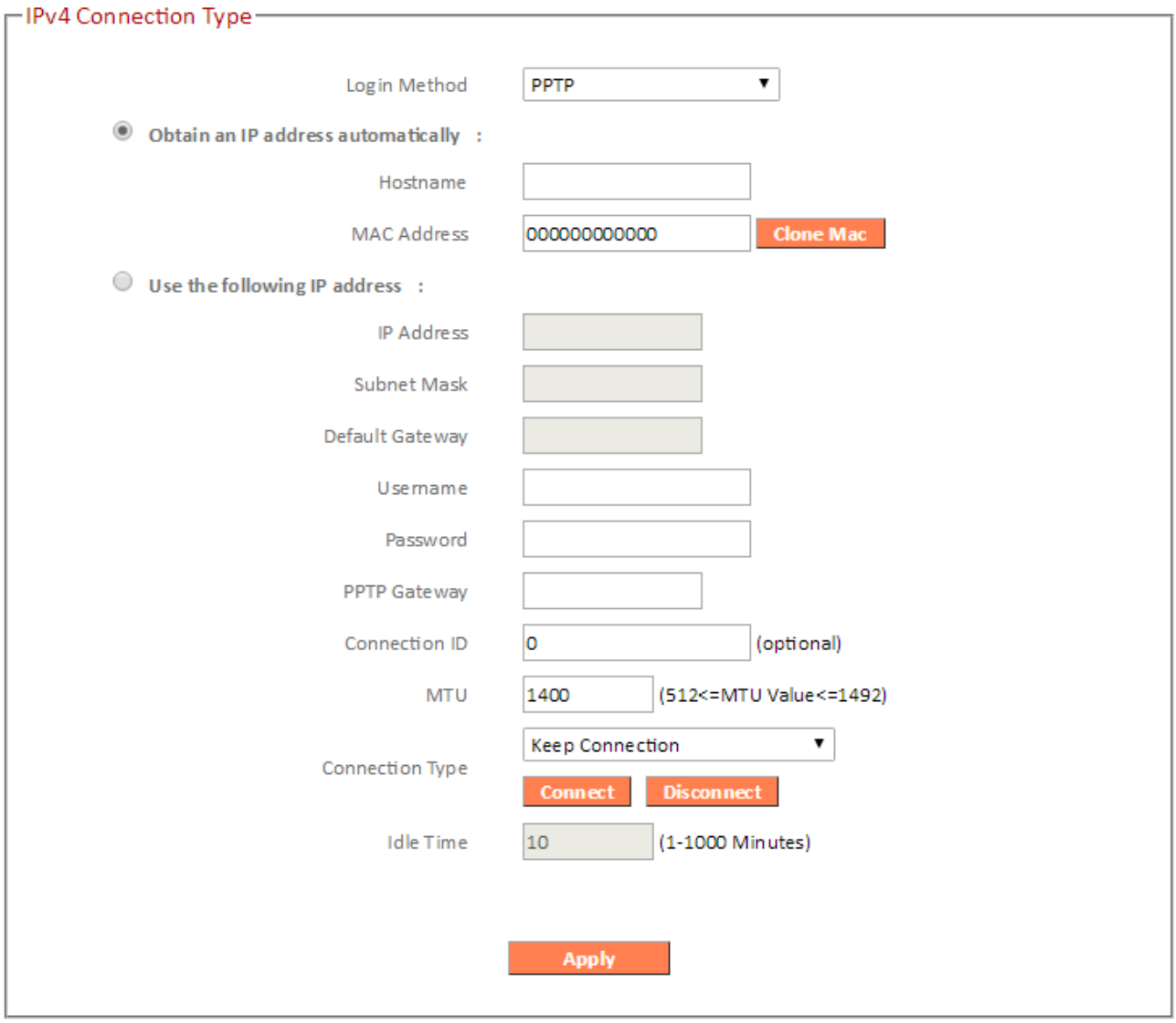


Username	Enter the user name assigned by your ISP here.
Password	Enter the password assigned by your ISP here.
MAC Address	For some applications, you may need to designate a specific MAC address for the router. Please enter the MAC address here. If you are connecting the router to a computer, press “Clone Mac” to automatically enter your computer’s MAC address.
Service Name	Give this Internet service a name (optional).
MTU	Enter the maximum transmission unit (MTU) value of your network connection. The default value is 1392.
Connection Type	Specify a connection type: 1. “Keep Connection”: Connected all the time. 2. “Automatic Connect/Disconnect”:

	Connect when you initiate an Internet connection. 3. “Manual Connect/Disconnect”: Connect/disconnect manually using the “Connect” and “Disconnect” buttons.
Idle Time	Specify the amount of time the router waits before shutting down an idle connection. Only available when “Connect on Demand” (above) is selected.

III-3-3-1-4. PPTP

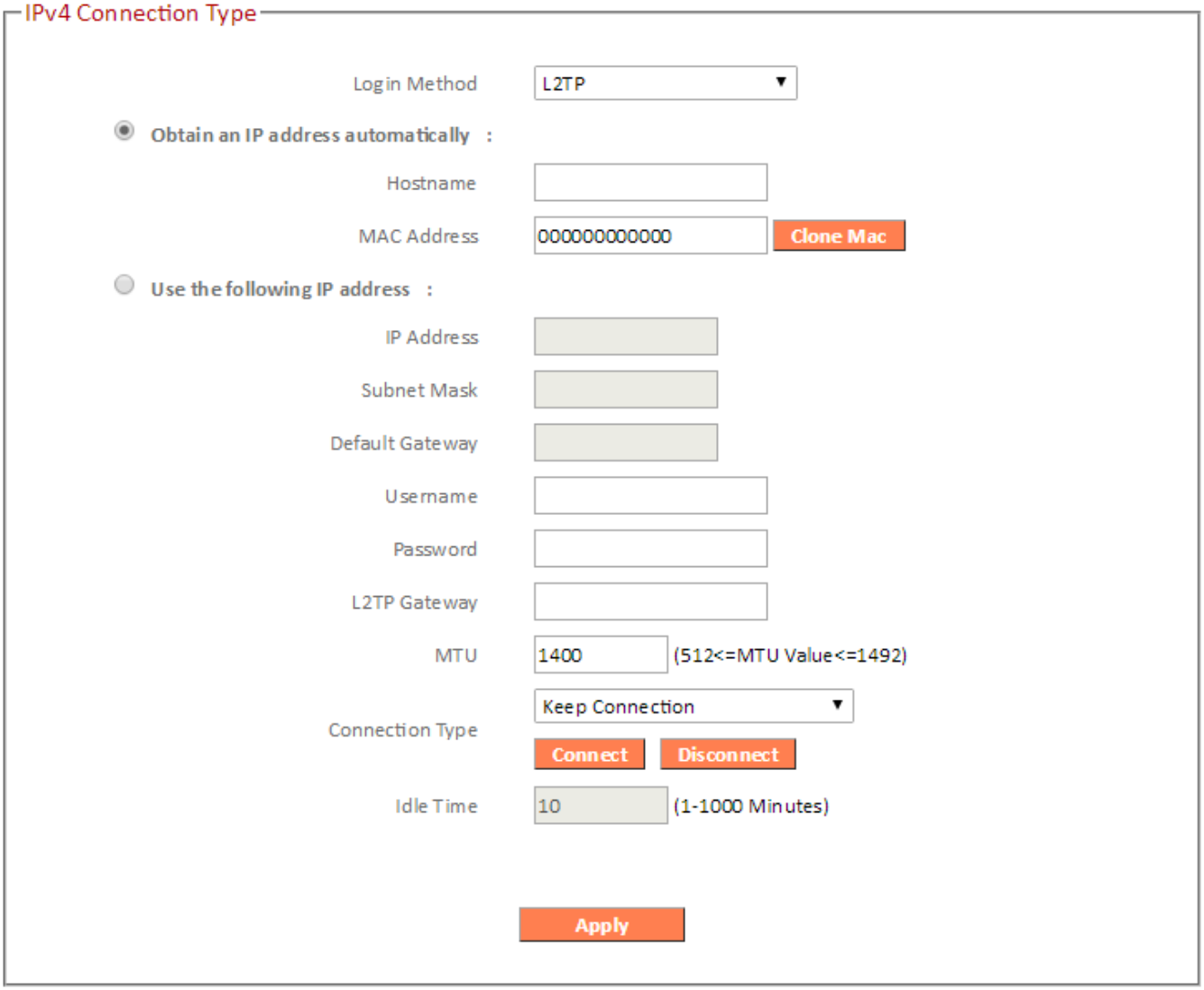
Select “PPTP” if your ISP is providing you Internet access via PPTP (Point-to-Point Tunneling Protocol). Then select “Obtain an IP address automatically” or “Use the following IP address” depending on your ISP.



Host Name	Enter the host name of your computer here If required.
MAC Address	For some applications, you may need to designate a specific MAC address for the router. Please enter the MAC address here. If you are connecting the router to a computer, press “Clone Mac” to automatically enter your computer’s MAC address.
IP Address	Input the IP address assigned by your ISP here.
Subnet Mask	Input the subnet mask assigned by your ISP here.
Default Gateway Address	Input the default gateway assigned by your ISP here. Some ISPs may call this “Default Route”.
Username	Input the user name assigned by your ISP here.
Password	Input the password assigned by your ISP here.
PPTP Gateway	Input the PPTP gateway assigned by your ISP here.
Connection ID	Specify a reference name/ID for the connection.
MTU	Enter the maximum transmission unit (MTU) value of your network connection. The default value is 1392.
Connection Type	Specify a connection type: 1. “Keep Connection”: Connected all the time. 2. “Automatic Connect/Disconnect”: Connect when you initiate an Internet connection. 3. “Manual Connect/Disconnect”: Connect/disconnect manually using the “Connect” and “Disconnect” buttons.
Idle Time	Specify the amount of time the router waits before shutting down an idle connection. Only available when “Connect on Demand” (above) is selected.

III-3-3-1-5. L2TP

Select “L2TP” if your ISP is providing you Internet access via L2TP (Layer 2 Tunneling Protocol).

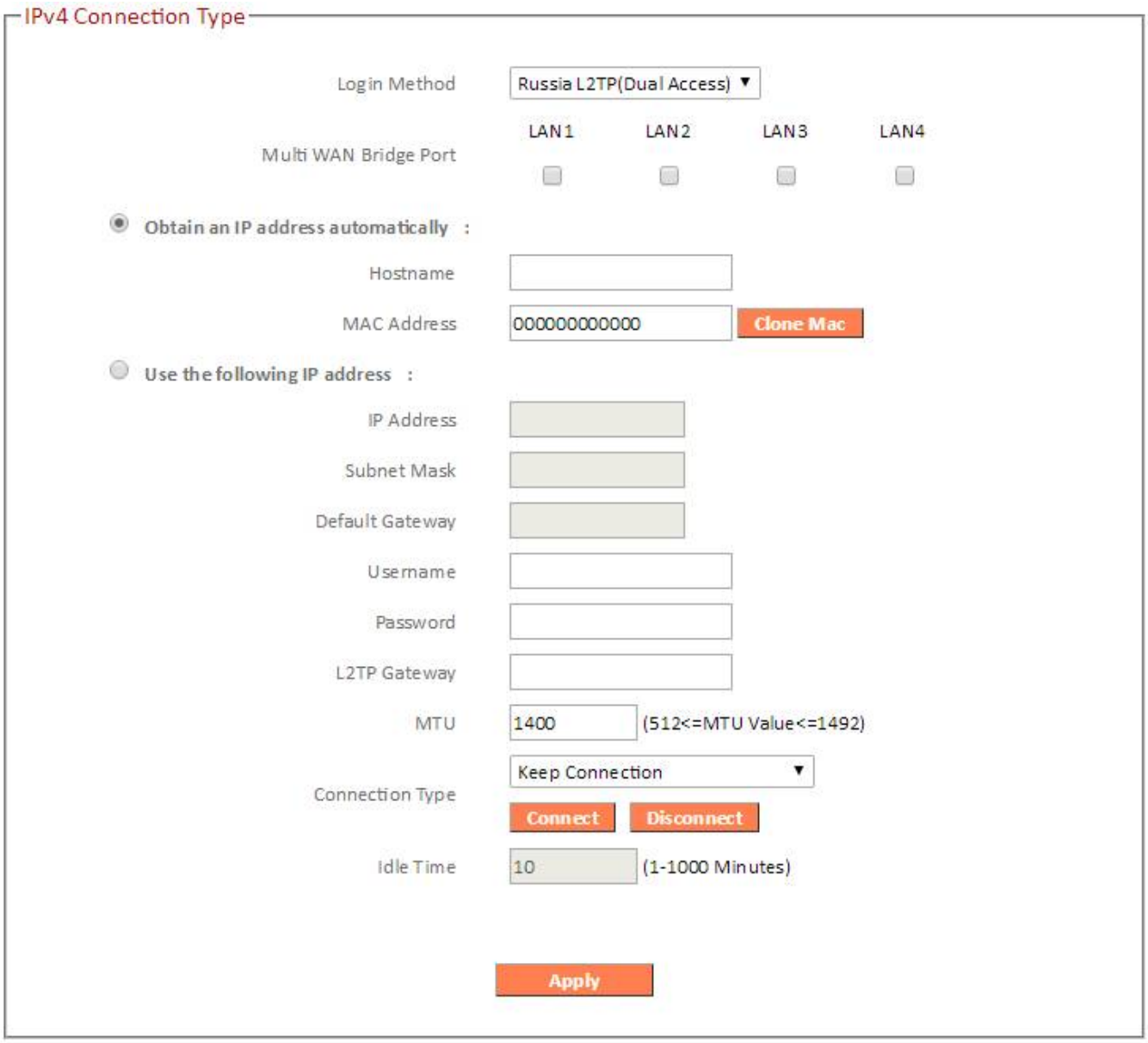


Host Name	Enter the host name of your computer here If required.
MAC Address	For some applications, you may need to designate a specific MAC address for the router. Please enter the MAC address here. If you are connecting the router to a computer, press “Clone Mac” to automatically enter your computer’s MAC address.
IP Address	Input the IP address assigned by your ISP here.
Subnet Mask	Input the subnet mask assigned by your ISP here.
Default Gateway	Input the default gateway assigned by your ISP

	here. Some ISPs may call this “Default Route”.
Username	Input the user name assigned by your ISP here.
Password	Input the password assigned by your ISP here.
L2TP Gateway	Input the L2TP gateway assigned by your ISP here.
MTU	Enter the maximum transmission unit (MTU) value of your network connection. The default value is 1392.
Connection Type	Specify a connection type: 1. “Keep Connection”: Connected all the time. 2. “Automatic Connect/Disconnect”: Connect when you initiate an Internet connection. 3. “Manual Connect/Disconnect”: Connect/disconnect manually using the “Connect” and “Disconnect” buttons.
Idle Time	Specify the amount of time the router waits before shutting down an idle connection. Only available when “Connect on Demand” (above) is selected.

III-3-3-1-6. Russia L2TP (Dual-Access)

Select “L2TP” if your ISP is providing you Internet access via L2TP (Layer 2 Tunneling Protocol).

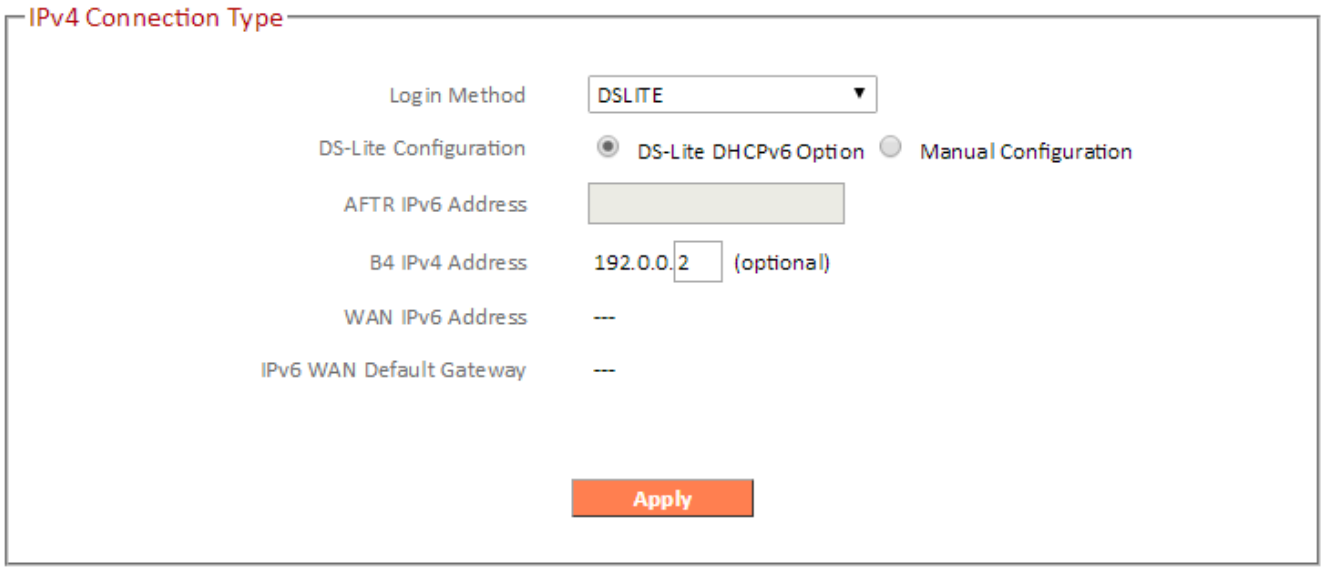


Multi WAN Bridge Port	Check which LAN port to bridge for multi-WAN.
Host Name	Enter the host name of your computer here If required.
MAC Address	For some applications, you may need to designate a specific MAC address for the router. Please enter the MAC address here. If you are connecting the router to a computer, press “Clone Mac” to

	automatically enter your computer's MAC address.
IP Address	Input the IP address assigned by your ISP here.
Subnet Mask	Input the subnet mask assigned by your ISP here.
Default Gateway	Input the default gateway assigned by your ISP here. Some ISPs may call this "Default Route".
Username	Input the user name assigned by your ISP here.
Password	Input the password assigned by your ISP here.
L2TP Gateway	Input the L2TP gateway assigned by your ISP here.
MTU	Enter the maximum transmission unit (MTU) value of your network connection. The default value is 1392.
Connection Type	Specify a connection type: 4. "Keep Connection": Connected all the time. 5. "Automatic Connect/Disconnect": Connect when you initiate an Internet connection. 6. "Manual Connect/Disconnect": Connect/disconnect manually using the "Connect" and "Disconnect" buttons.
Idle Time	Specify the amount of time the router waits before shutting down an idle connection. Only available when "Connect on Demand" (above) is selected.

III-3-3-1-7. DS-Lite

Dual-stack lite (DS-Lite) is a technology that enables Internet service providers to move to an IPv6 network while simultaneously handling IPv4 address depletion. The DS-Lite architecture uses IPv6-only links between the provider and the user while maintaining the IPv4 (or dual-stack) hosts in the user network.

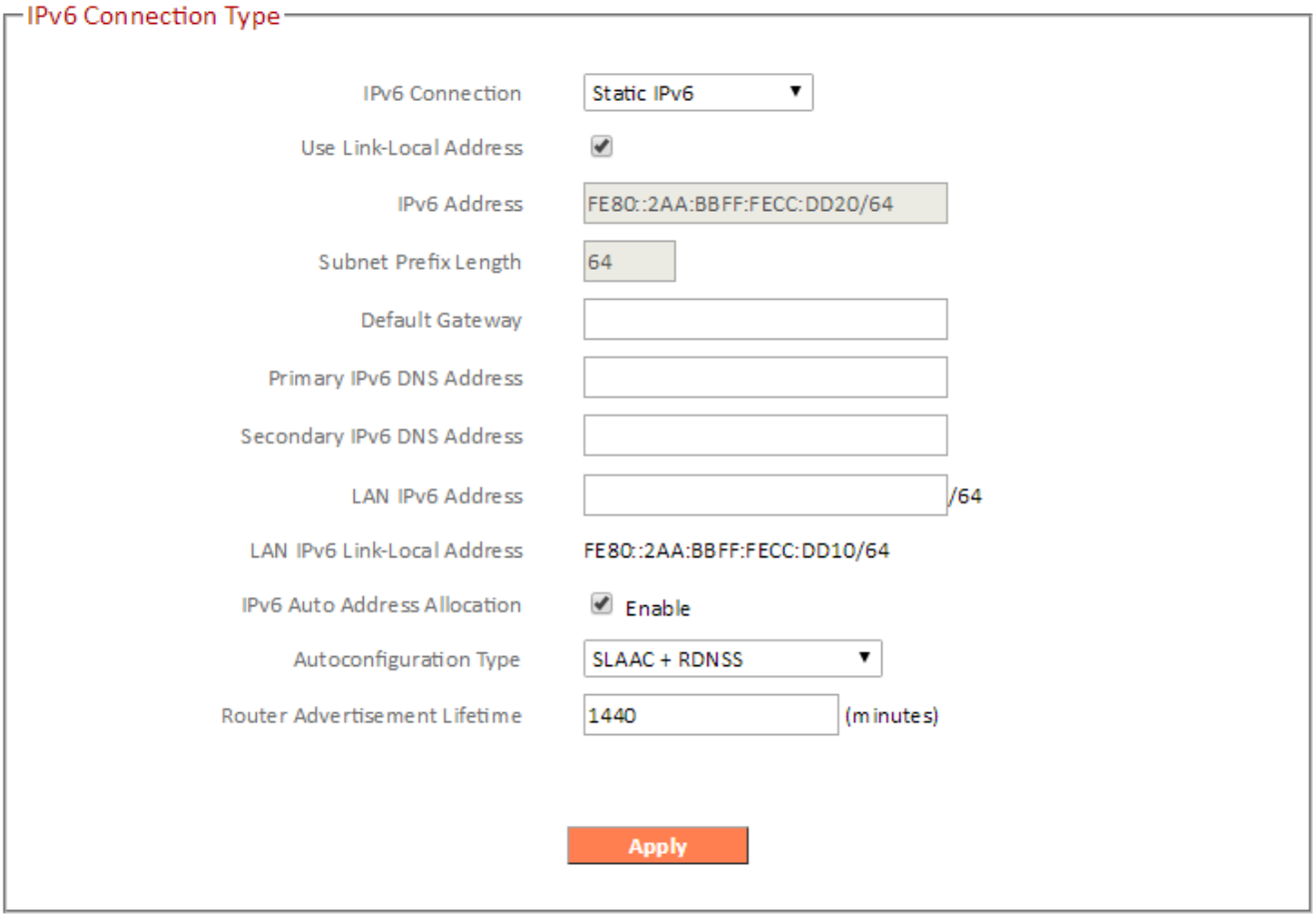


Refer to your ISP or network administrator for help configuring DS-Lite.

III-3-3-2. IPv6

Select a Login Method (WAN connection type) and configure the settings. If you are unsure about your login method/connection type, contact your ISP.

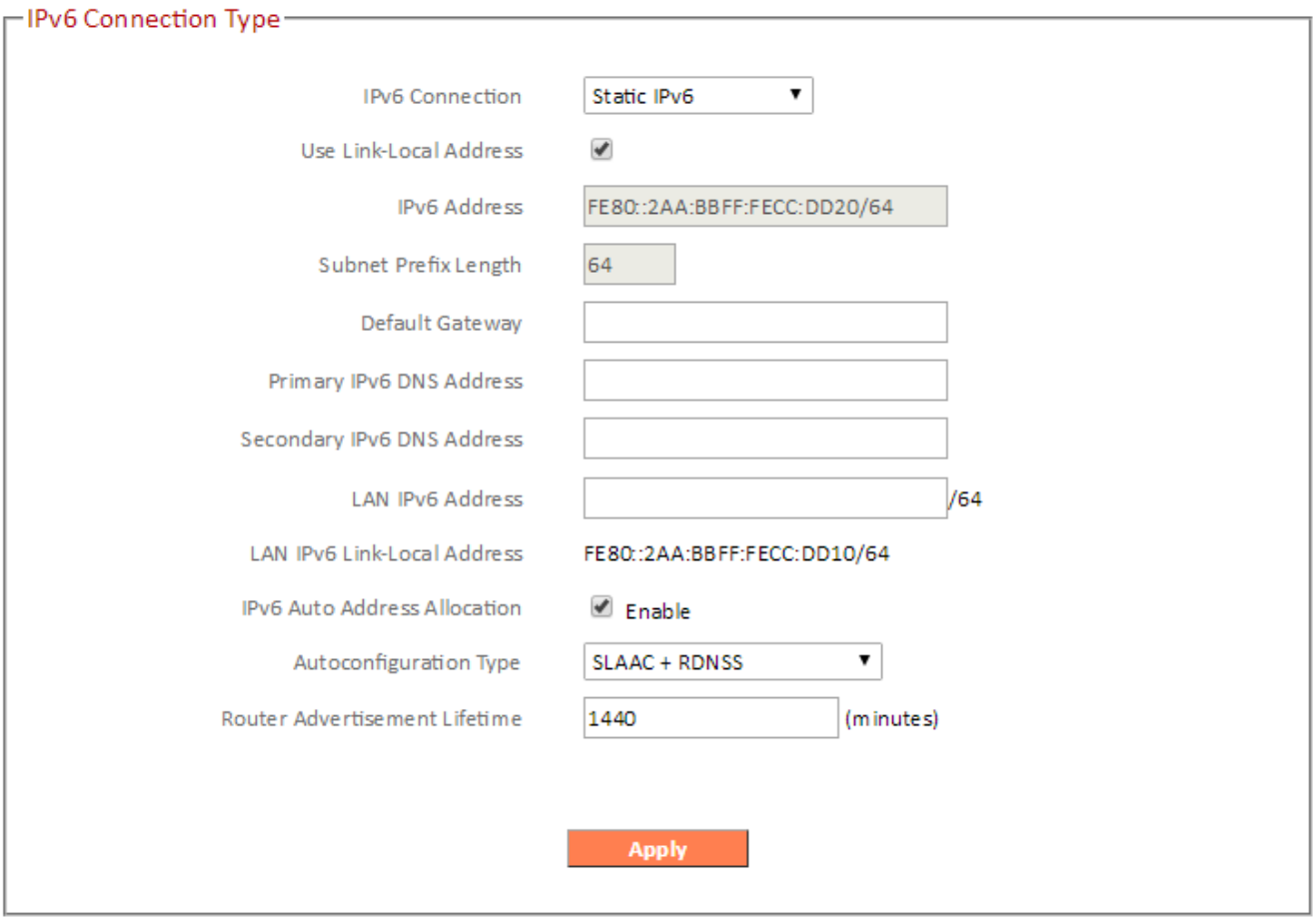
Check with your ISP for correct IPv6 configuration.



III-3-3-2-1. Static IP

Select “Static IP” if your ISP provides Internet access via a fixed IP address. Your ISP will provide you with such information as IP address, subnet mask, gateway address, and DNS address.

Check with your ISP for correct IPv6 configuration.

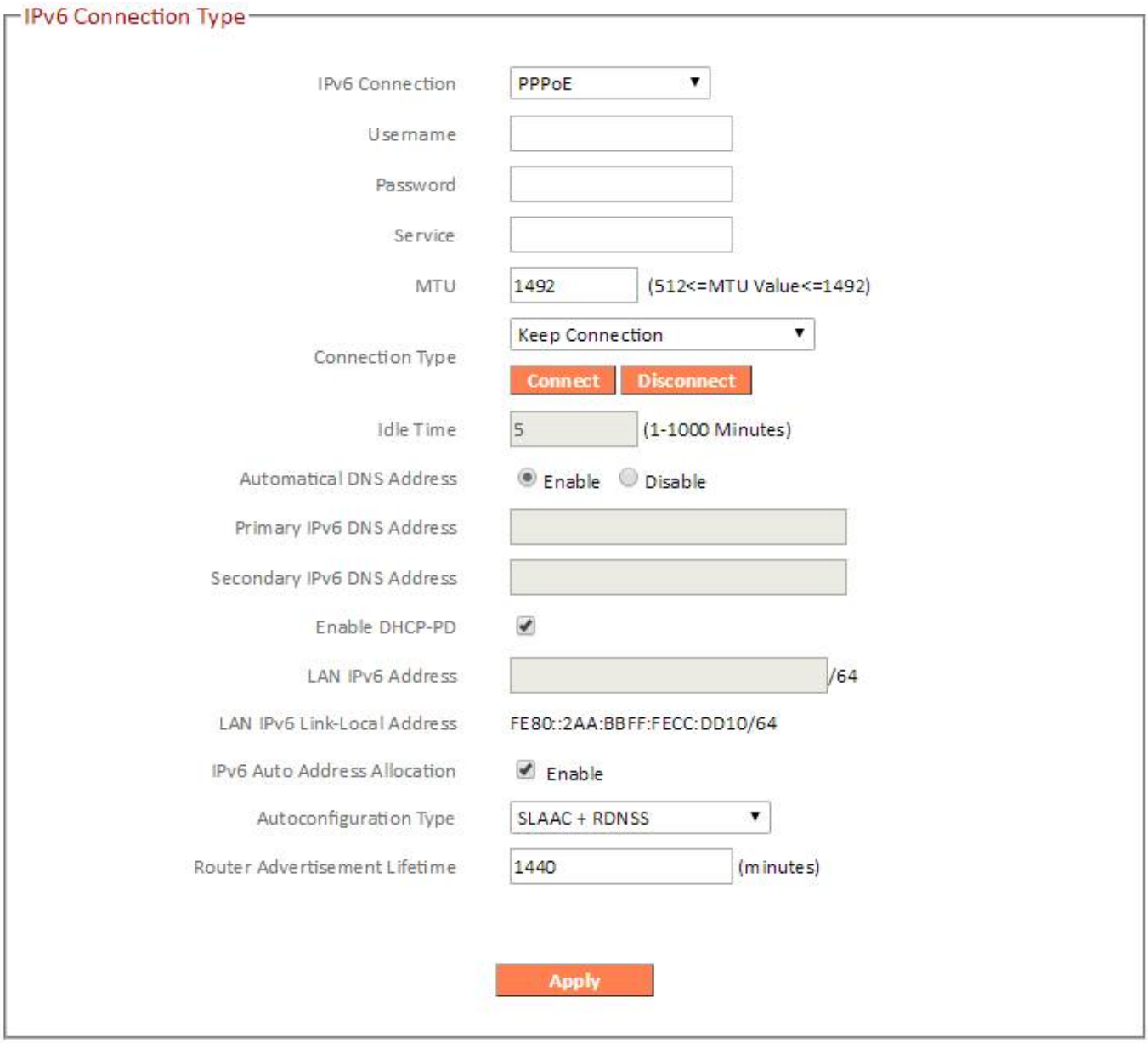


Use Link-Local Address	Check the box to use a link-local address.
IPv6 Address	Input the IPv6 address assigned by your ISP here.
Subnet Prefix Length	Specify the prefix length for the subnet.
Default Gateway	Input the default gateway assigned by your ISP here. Some ISPs may call this “Default Route”.
Primary IPv6 DNS Address	Enter the primary DNS address assigned by your ISP here.
Secondary IPv6 DNS	Enter the secondary DNS address assigned by

Address	your ISP here.
LAN IPv6 Address	Enter the LAN IPv6 address.
LAN IPv6 Link-Local Address	If using link-local IPv6 address, it's displayed here.
IPv6 Auto Address Allocation	Enable or disable auto address allocation for IPv6. Select your auto-configuration type
Auto-configuration Type	Select your auto-configuration type. Stateless: DNS server information is received from DHCPv6 server but address is generated separately. Stateful: DNS server information and address are received from DHCPv6 server.
Router Advertisement Lifetime	Time in seconds this router should be used as the default router. 0 tells the host this router should not be used as the default.

III-3-3-2-2. PPPoE

Select “PPPoE” if your ISP is providing you Internet access via PPPoE (Point-to-Point Protocol over Ethernet).



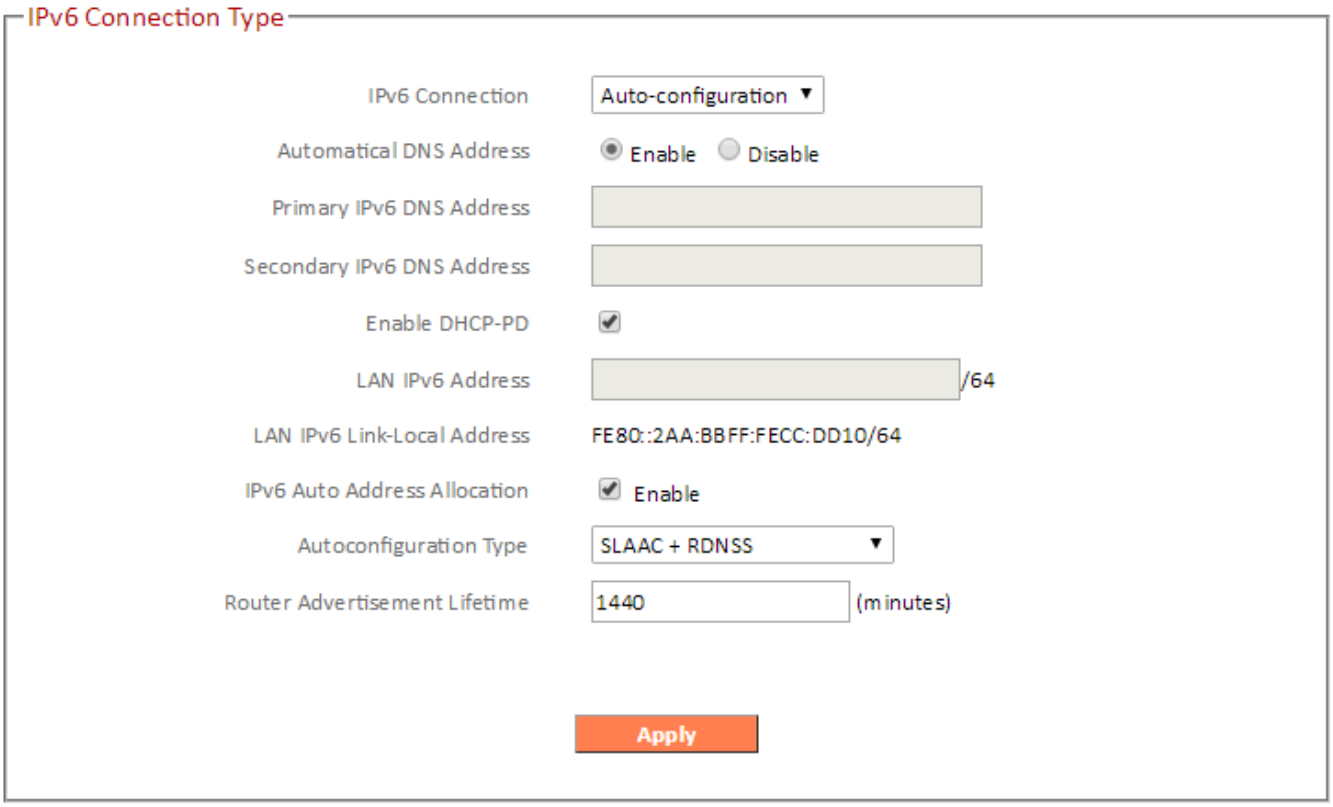
Username	Enter the user name assigned by your ISP here.
Password	Enter the password assigned by your ISP here.
MAC Address	For some applications, you may need to designate a specific MAC address for the router. Please enter the MAC address here. If you are connecting the router to a computer, press “Clone Mac” to automatically enter

	your computer's MAC address.
Service Name	Give this Internet service a name (optional).
MTU	Enter the maximum transmission unit (MTU) value of your network connection. The default value is 1392.
Connection Type	Specify a connection type: 4. "Keep Connection": Connected all the time. 5. "Automatic Connect/Disconnect": Connect when you initiate an Internet connection. 6. "Manual Connect/Disconnect": Connect/disconnect manually using the "Connect" and "Disconnect" buttons.
Idle Time	Specify the amount of time the router waits before shutting down an idle connection. Only available when "Connect on Demand" (above) is selected.
Automatic DNS Address	Enable or disable automatic DNS address.
Primary IPv6 DNS Address	Enter the primary DNS address assigned by your ISP here.
Secondary IPv6 DNS Address	Enter the secondary DNS address assigned by your ISP here.
Enable DHCP-PD	Enable or disable DHCP prefix delegation for the DHCPv6 server.
LAN IPv6 Address	Enter the LAN IPv6 address.
LAN IPv6 Link-Local Address	If using link-local IPv6 address, it's displayed here.
IPv6 Auto Address Allocation	Enable or disable auto address allocation for IPv6. Select your auto-configuration type
Auto-configuration Type	Select your auto-configuration type. Stateless: DNS server information is received from DHCPv6 server but address is generated separately. Stateful: DNS server information and address are received from DHCPv6 server.
Router	Time in seconds this router should be used as

Advertisement Lifetime	the default router. 0 tells the host this router should not be used as the default.

III-3-3-2-3. Auto-configuration

Auto-configuration allow various devices attached to an IPv6 network to connect to the Internet using Stateless Auto-configuration without requiring intermediate IP support in the form of a DHCP server.

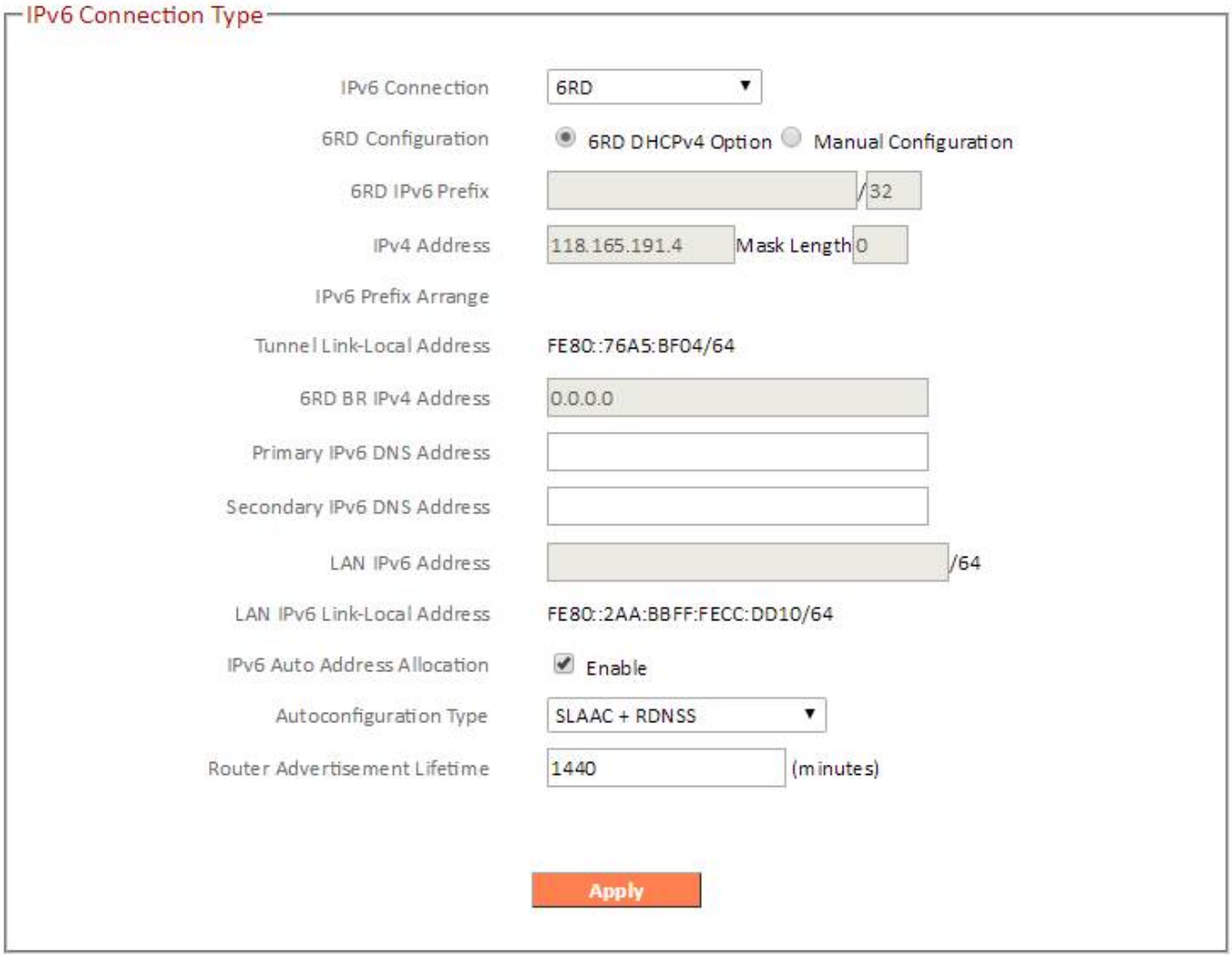


Automatic DNS Address	Enable or disable automatic DNS address.
Primary IPv6 DNS Address	Enter the primary DNS address assigned by your ISP here.
Secondary IPv6 DNS Address	Enter the secondary DNS address assigned by your ISP here.
Enable DHCP-PD	Enable or disable DHCP prefix delegation for the DHCPv6 server.
LAN IPv6 Address	Enter the LAN IPv6 address.
LAN IPv6 Link-Local Address	If using link-local IPv6 address, it's displayed here.
IPv6 Auto Address Allocation	Enable or disable auto address allocation for IPv6. Select your auto-configuration type

Auto-configuration Type	Select your auto-configuration type. Stateless: DNS server information is received from DHCPv6 server but address is generated separately. Stateful: DNS server information and address are received from DHCPv6 server.
Router Advertisement Lifetime	Time in seconds this router should be used as the default router. 0 tells the host this router should not be used as the default.

III-3-3-2-4. 6rd

6rd facilitates rapid deployment of IPv6 across ISP's IPv4 infrastructures.

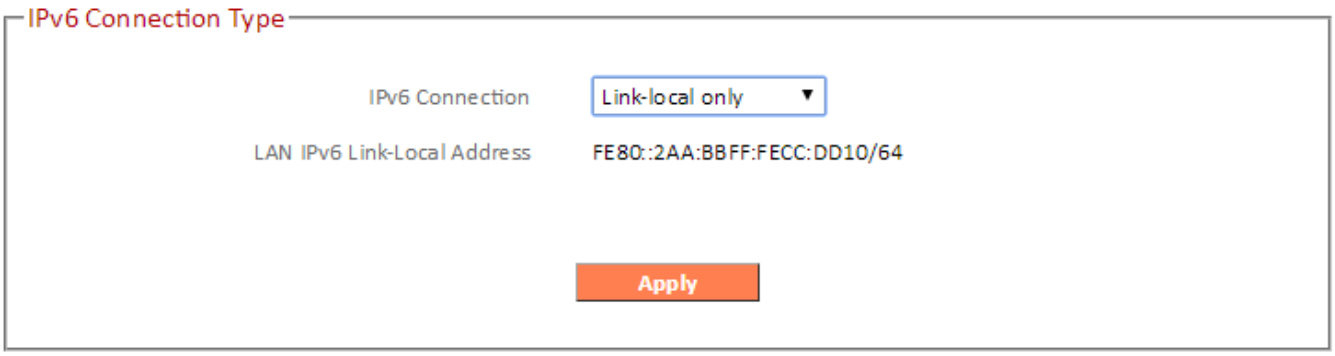


6rd Configuration	Select to configure 6rd with DHCPv4 server or manually. When manual is selected, enter the information in the fields below.
6rd IPv6 Prefix	Enter the IPv6 prefix.
IPv4 Address	Specify the IPv4 address and mask length.
IPv6 Prefix Arrange	Displays the prefix arrangement.
Tunnel Link-Local Address	Displays link-local tunnel address.
6rd BR IPv4 Address	Input the 6rd BR IPv4 address.
Primary IPv6 DNS Address	Enter the primary DNS address assigned by your ISP here.
Secondary IPv6 DNS	Enter the secondary DNS address assigned by

Address	your ISP here.
LAN IPv6 Address	Enter the LAN IPv6 address.
LAN IPv6 Link-Local Address	If using link-local IPv6 address, it's displayed here.
IPv6 Auto Address Allocation	Enable or disable auto address allocation for IPv6. Select your auto-configuration type
Auto-configuration Type	Select your auto-configuration type. Stateless: DNS server information is received from DHCPv6 server but address is generated separately. Stateful: DNS server information and address are received from DHCPv6 server.
Router Advertisement Lifetime	Time in seconds this router should be used as the default router. 0 tells the host this router should not be used as the default.

III-3-3-2-5. Link-local

A link-local address is a network address for communications only within the broadcast domain or network segment that the host is connected to.



LAN IPv6 Link-Local Address	If using link-local IPv6 address, it's displayed here.

III-3-3-3. DDNS

Dynamic DNS (DDNS) is a service which provides a hostname-to-IP service for dynamic IP users. The changing nature of dynamic IPs means that it can be difficult to access a service provided by a dynamic IP user; a DDNS service though can map such dynamic IP addresses to a fixed hostname, for easier access. The router supports several DDNS service providers, for more details and to register for a DDNS account please visit the DDNS providers website(s), examples of which are listed below.

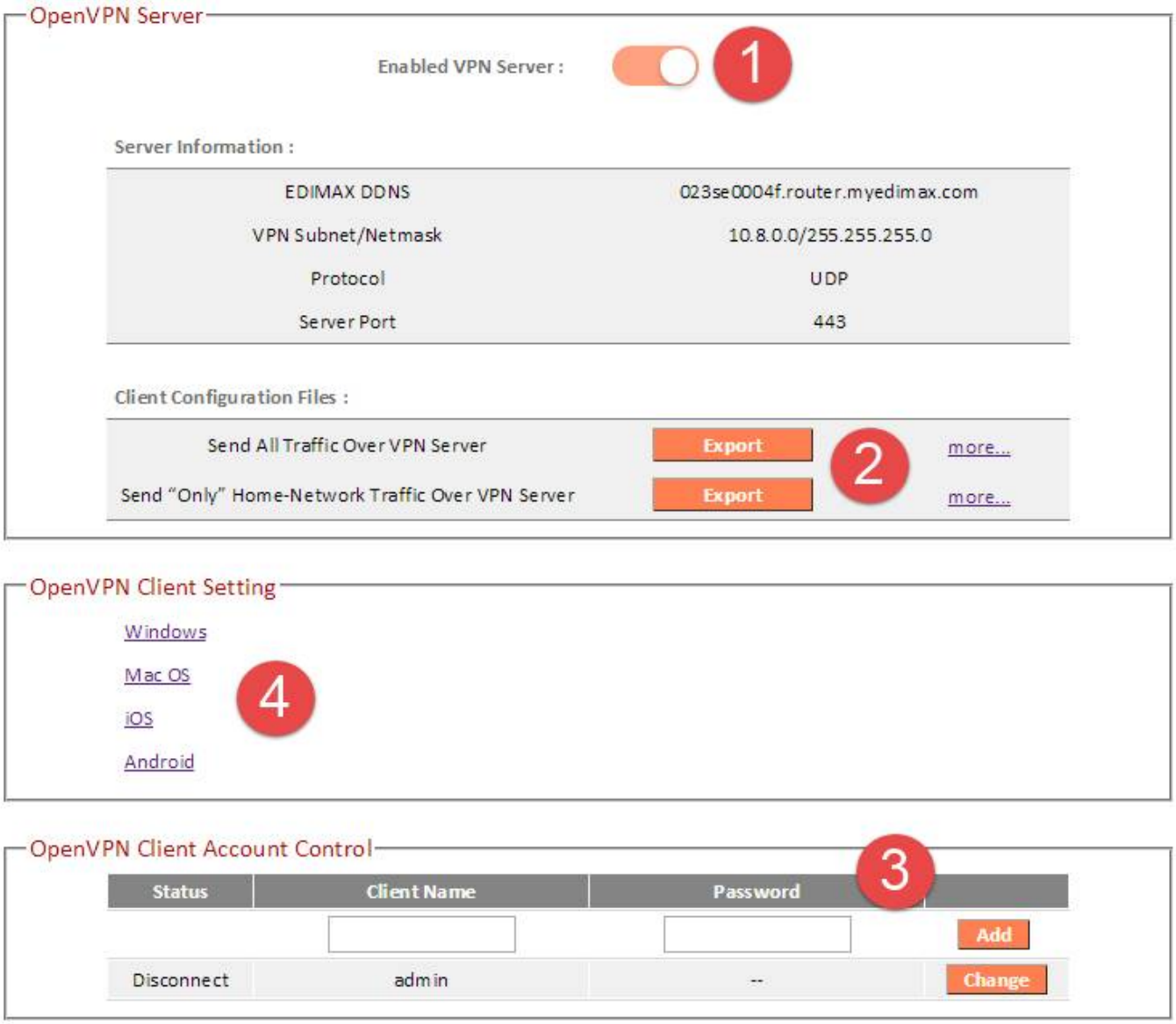
Enable/Disable	Enable or disable DDNS
Provider	Select DDNS service provider.
Domain Name	Enter the domain name provided by the DDNS provider.
Account/Email	Please enter the DDNS registration account/email.
Password/Key	Enter the DDNS service password/key.

The following DDNS services are supported:

DHS *http://www.dhs.org*
DynDNS *http://www.dyndns.org*
ZoneEdit *http://www.zoneedit.com*

III-3-3-4. VPN Server

A VPN is a virtual private network which you can connect to remotely. VPNs are secure and encrypted. Your router has a built-in VPN server which you can configure and access on your network devices, including smartphones, tablets and computers.



1. Enable VPN server.

2. Export your VPN server configuration file. You can open this file on your network device (smartphone, tablet, computer) using VPN software/app to automatically connect to your VPN on your device.

You can choose which kind of configuration file to export, depending on your requirement. "Send All Traffic Over VPN Server"

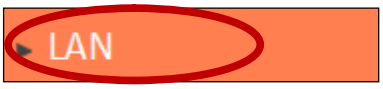
will configure your network device to use the VPN for all Internet traffic. "Send Only Home Network Traffic over VPN Server" will configure your network device to access the Internet as usual but use the VPN to access your home (router) network. The 2nd option is ideal if you only wish to use the VPN for remote access to your home network. The 1st option will encrypt all Internet traffic through the VPN.

3. Setup a login account for your VPN. This is required to access your VPN on your network device.

4. Send the exported configuration file to your network device (e.g. via email, cloud or USB). Open the file using VPN software or apps which are widely available online, and enter your login details to connect to your VPN.

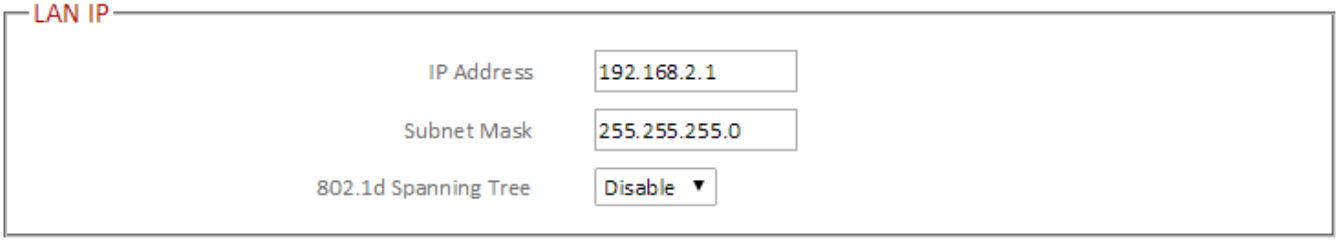
You can access further help to connect your network device to your VPN by selecting your operating system under "OpenVPN Client Settings".

III-3-4. LAN



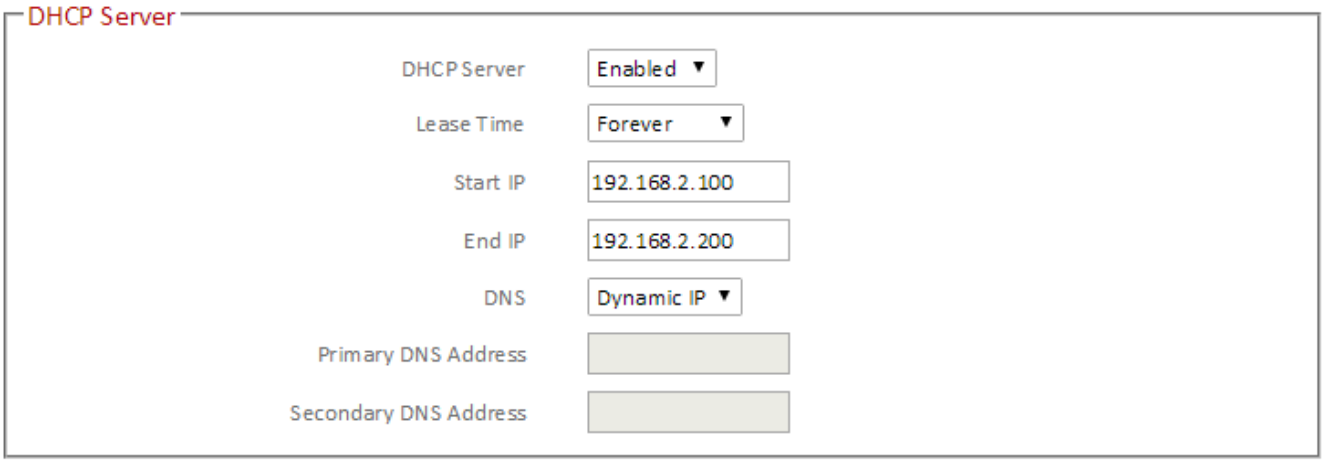
You can configure your Local Area Network (LAN) on this page. You can enable the router to dynamically allocate IP addresses to your LAN clients, and you can modify the IP address of the device. The device's default IP address is 192.168.2.1.

You can access the browser based configuration interface using the device's IP address instead of using the URL http://edimax.setup.



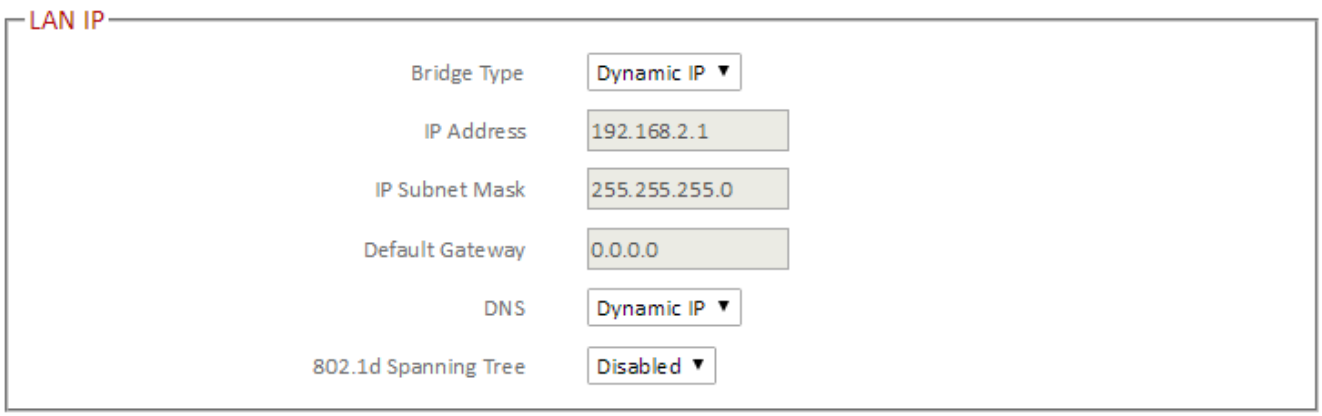
IP Address	Specify the IP address here. This IP address will be assigned to the RG21S/RA21S and will replace the default IP address.
Subnet Mask	Specify a subnet mask. The default value is 255.255.255.0
802.1d Spanning Tree	Select "Enable" or "Disable" to enable/disable 802.1d Spanning Tree. This creates a tree of connected layer-2 bridges (typically Ethernet switches) within a mesh network, and disables those links that are not part of the tree, leaving a single active path between any two network nodes.

Your device's DHCP server automatically assigns IP addresses to computers on its network, between a defined range of numbers.

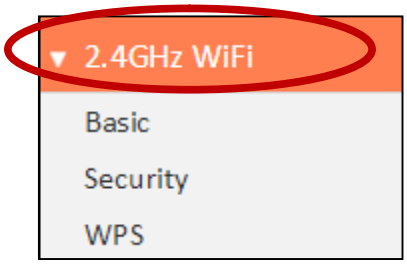


DHCP Server	Enable or disable the DHCP server.
Lease Time	Select a lease time for the DHCP leases here. The DHCP client will obtain a new IP address after the period expires.
Start IP	Enter the start IP address for the DHCP server's IP address leases.
End IP	Enter the end IP address for the DHCP server's IP address leases.
DNS	Select whether to get DNS addresses dynamically from ISP or manually enter DNS addresses.
Primary DNS Address	When Static IP is selected above, enter the primary DNS address here.
Secondary DNS Address	When Static IP is selected above, enter the secondary DNS address here.

The LAN IP page will be displayed as below when your device is set to access point mode. You can set the RG21S/RA21S to obtain an IP address automatically or you can specify an IP address.

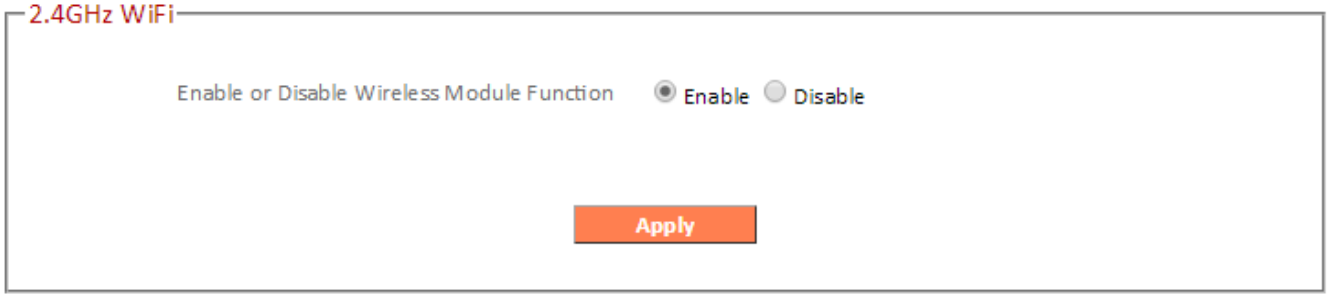

LAN IP
Bridge Type
Dynamic IP
IP Address
192.168.2.1
IP Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS
Dynamic IP
802.1d Spanning Tree
Disabled

III-3-5. 2.4GHz Wireless & 5GHz Wireless



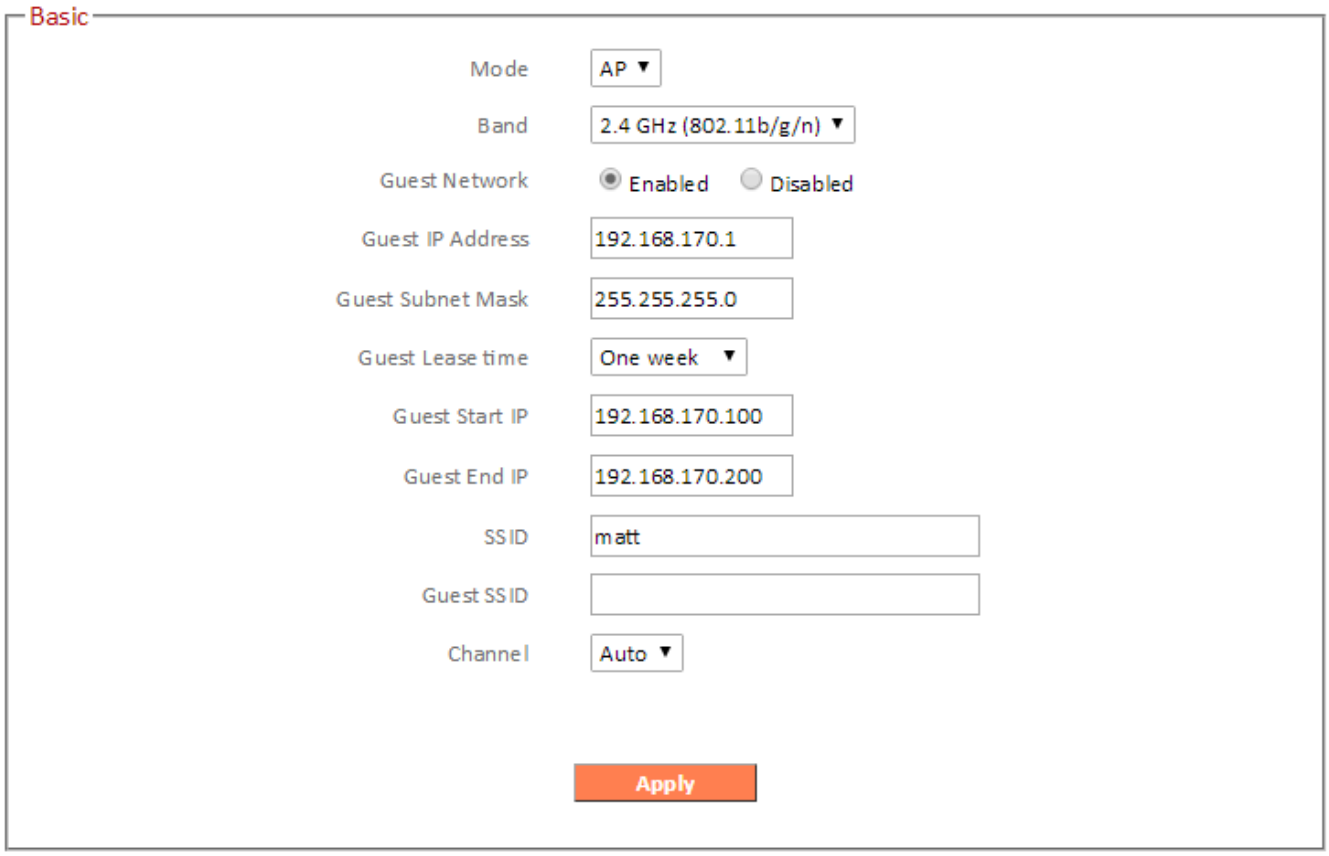
The “2.4GHz WiFi” & “5GHz WiFi” menu allows you to configure SSID and security settings for your Wi-Fi network along with a guest Wi-Fi network. WPS, access control and scheduling functions can also be managed from here. You can quickly enable/disable the 2.4GHz or 5GHz Wi-Fi from this screen.

In Access Point mode, the Guest SSID feature is not available.



III-3-5-1. Basic

The “Basic” screen displays settings for your 2.4GHz or 5GHz Wi-Fi networks.

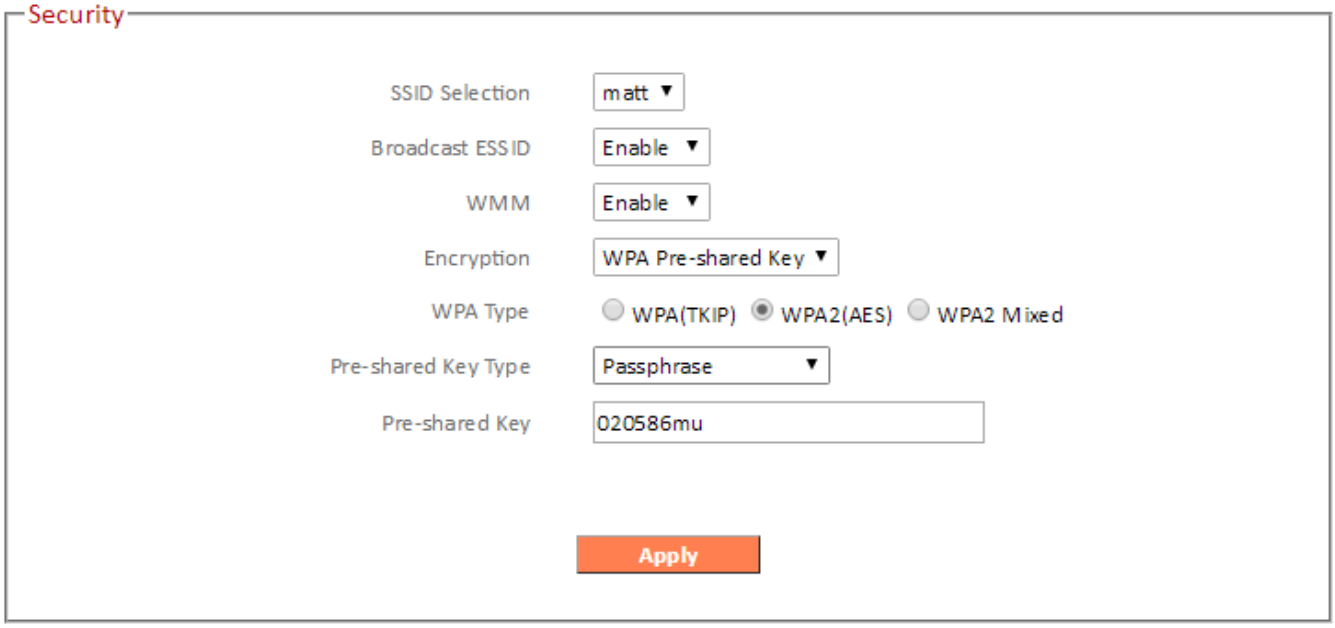


Mode	Keep the default “AP” value for the device to act as a standard wireless access point.
Band	Displays the wireless standard used for the RG21S/RA21S’s “2.4GHz (B+G+N)” means that 802.11b, 802.11g, and 802.11n wireless clients can connect to the RG21S/RA21S.
Guest Network	You can setup an additional “Guest” Wi-Fi network so guest users can enjoy Wi-Fi connectivity without accessing your primary network. Enable or disable here.
Guest IP Address	Set the guest network IP address.
Guest Subnet Mask	Set the guest network subnet address.
Guest Lease Time	Set the lease time for the DHCP server for IP addresses on the guest network.
Guest Start IP	Set the start IP address for the DHCP server range for guest IP addresses.
Guest End IP	Set the end IP address for the DHCP server

	range for guest IP addresses.
SSID	This is the name of your Wi-Fi network for identification, also sometimes referred to as “SSID”. The SSID can consist of any combination of up to 32 alphanumerical characters.
Guest SSID	This is the name of your **guest** Wi-Fi network for identification, also sometimes referred to as “SSID”. The SSID can consist of any combination of up to 32 alphanumerical characters.
Channel Number	Select a wireless radio channel or use the default “Auto” setting from the drop-down menu.

III-3-5-2. Security

Configure the security settings for Wi-Fi and guest Wi-Fi networks. Select SSID and then setup the encryption type.



SSID Selection	Keep the default “AP” value for the device to act as a standard wireless access point.
Broadcast ESSID	Broadcast or hide SSID. When broadcast, the SSID will be visible to clients as an available Wi-Fi network. When not broadcast, the SSID

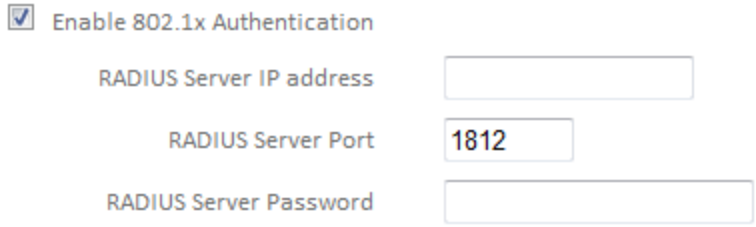
	will not be visible as an available Wi-Fi network to clients – clients must manually enter the SSID in order to connect. A hidden SSID is typically more secure than a visible SSID.
WMM	WMM (Wi-Fi Multimedia) technology can improve the performance of certain network applications, such as audio/video streaming, network telephony (VoIP) and others. When WMM is enabled, the device will prioritize different kinds of data and give higher priority to applications which require instant responses for better performance.
Encryption	Select an encryption type from the drop-down menu:  ***"WPA Pre-shared Key" is the recommended and most secure encryption type.***  ***In WISP mode, WPA RADIUS is unavailable for the wireless band that is used to connect to WISP's AP.***

III-3-5-2-1. Disable

Encryption is disabled and no password/key is required to connect to the RG21S/RA21S.

Disabling wireless encryption is not recommended. When disabled, anybody within range can connect to your device's SSID.

Enable 802.1x Authentication	Check the box to enable the 802.1x authentication. A RADIUS server is required to perform 802.1x authentication: enter the RADIUS server's information in the relevant fields (below).



III-3-5-2-2. WEP

WEP (Wired Equivalent Privacy) is a basic encryption type. For a higher level of security consider using WPA encryption.

Authentication Type	Open System, Shared Key, Auto authentication types are available.
Key Length	Select 64-bit or 128-bit. 128-bit is more secure than 64-bit.
Key Type	Choose from “ASCII” (any alphanumerical character 0-9, a-z and A-Z) or “Hex” (any characters from 0-9, a-f and A-F).
Default Key	Select which encryption key (1 – 4 below) is the default key. For security purposes, you can set up to four keys (below) and change which is the default key.
Encryption Key 1 - 4	Enter your encryption key/password according to the format you selected above.
Enable 802.1x Authentication	Check the box to enable the 802.1x authentication. A RADIUS server is required to perform 802.1x authentication: enter the RADIUS server’s information in the relevant fields.

III-3-5-2-3. WPA Pre-Shared Key

WPA pre-shared key is the recommended and most secure encryption type.

WPA Type	Select from WPA (TKIP), WPA2 (AES) or WPA2 Mixed. WPA2 (AES) is safer than WPA (TKIP), but not supported by all wireless clients. Please make sure your wireless client supports your selection. WPA2 (AES) is recommended followed by WPA2 Mixed if your client does not support WPA2 (AES).
Pre-shared Key Type	Choose from “Passphrase” (8-63 alphanumeric characters) or “Hex” (up to 64 characters from 0-9, a-f and A-F).
Pre-shared Key	Please enter a key according to the format you selected above. A complex, hard-to-guess key is recommended. Check the “Hide” box to hide your password from being displayed on-screen.

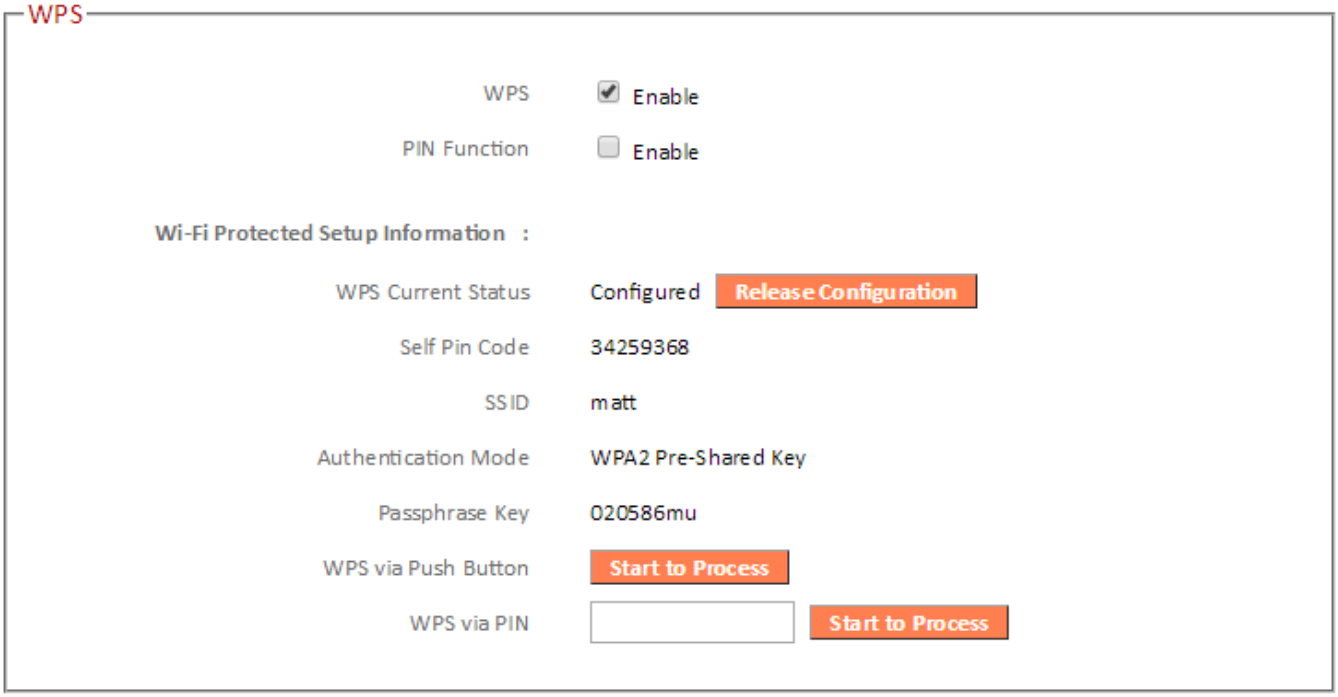
III-3-5-2-4. WPA Radius

WPA RADIUS is a combination of WPA encryption and RADIUS user authentication. If you have a RADIUS authentication server, you can authenticate the identity of every wireless client against a user database.

WPA Type	Select from WPA (TKIP), WPA2 (AES) or WPA2 Mixed. WPA2 (AES) is safer than WPA (TKIP), but not supported by all wireless clients. Please make sure your wireless client supports your selection. WPA2 (AES) is recommended followed by WPA2 Mixed if your client does not support WPA2 (AES).
RADIUS Server IP address	Input the IP address of the RADIUS authentication server here.
RADIUS Server Port	Input the port number of the RADIUS authentication server here. The default value is 1812.
RADIUS Server Password	Input the password of the RADIUS authentication server here.

III-3-5-3. WPS

Wi-Fi Protected Setup is a simple way to establish connections between WPS compatible devices. WPS can be activated on compatible devices by pushing a WPS button on the device or from within the device's firmware/configuration interface. When WPS is activated in the correct manner and at the correct time for two compatible devices, they will automatically connect. PIN code WPS includes the use of a PIN code between the two devices for verification.



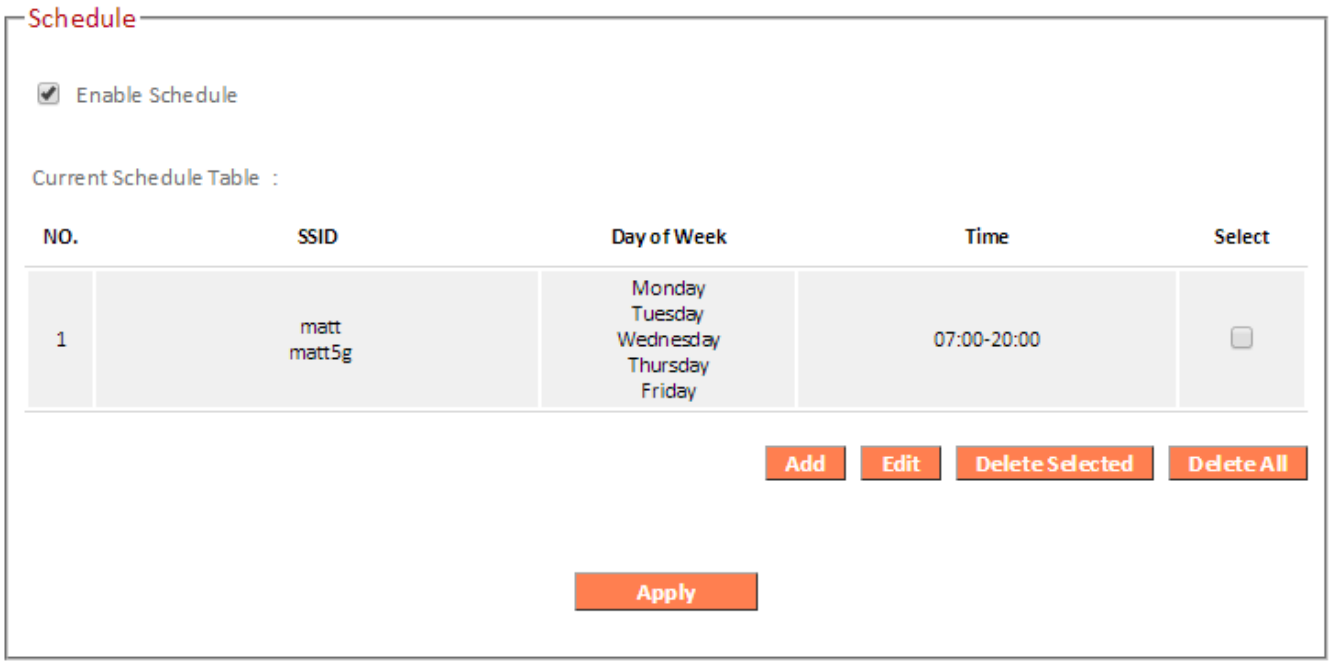
WPS	Check/uncheck this box to enable/disable WPS.
PIN Function	Check/uncheck this box to enable/disable PIN code WPS.
WPS Current Status	Displays "Configured" or "unConfigured" depending on whether WPS and SSID/security settings for the device have been configured or not, either manually or using the WPS button.
Self PIN Code	Displays the WPS PIN code of the device.
SSID	Displays the SSID of the device.
Authentication Mode	Displays the wireless security authentication mode of the device.
Passphrase Key	Displays the wireless security authentication key.
WPS via Push	Click "Start to Process" to activate WPS on the

Button	access point. WPS will be active for 2 minutes.
WPS via PIN	Enter the wireless client's PIN code here and click "Start to Process" to activate PIN code WPS. Refer to your wireless client's documentation if you are unsure of its PIN code.

III-3-6. Schedule

The schedule feature allows you to automate the wireless network for specified times. Check/uncheck the box “Enable Schedule” to enable/disable the wireless scheduling function.

The RG21S/RA21S must have time & date settings initially set to use scheduling.



Wireless scheduling can save energy and increase the security of your network.

1. Check **Enable** and use the **Select**, **Add**, **Edit** or **Delete** checkboxes to select and modify schedule(s).

2. When you click **Add**, specify day(s), start time and end time for the schedule using the drop-down menus and click **Apply**.

2.4GHz SSID		5GHz SSID	
☑	matt	☑	matt5g

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
☐	☑	☑	☑	☑	☑	☐

Start Time	End Time
07 : 00	20 : 00

Apply Cancel

3.Remember to **Apply** your changes and make sure **Enable** is checked.

Schedule

☑ Enable Schedule

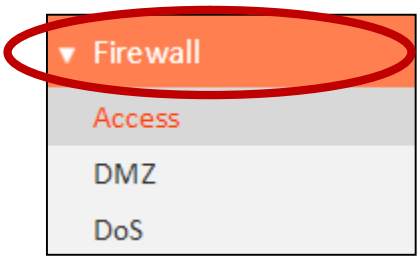
Current Schedule Table :

NO.	SSID	Day of Week	Time	Select
1	matt matt5g	Monday Tuesday Wednesday Thursday Friday	07:00-20:00	☐

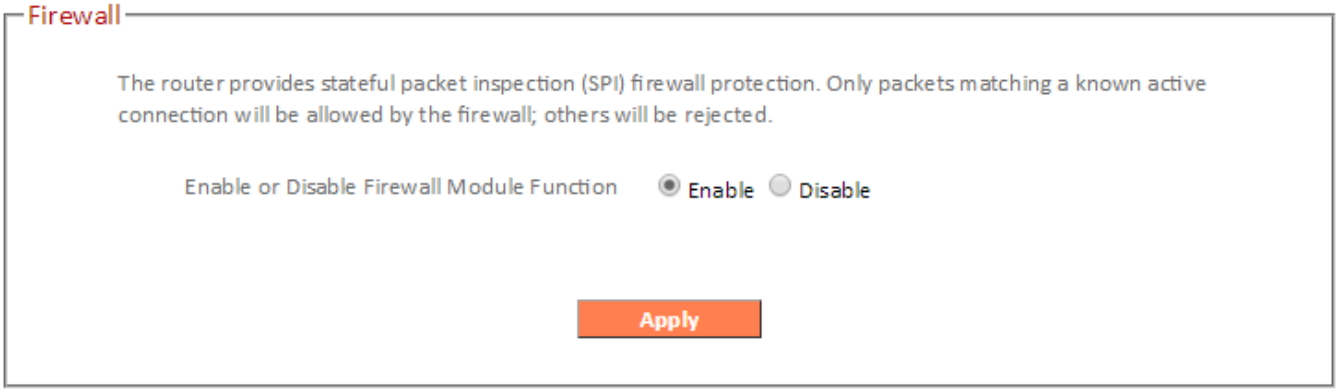
Add Edit Delete Selected Delete All

Apply

III-3-7. Firewall



The “Firewall” menu provides access to access control, DMZ and DoS functions to improve the security of your wireless network.



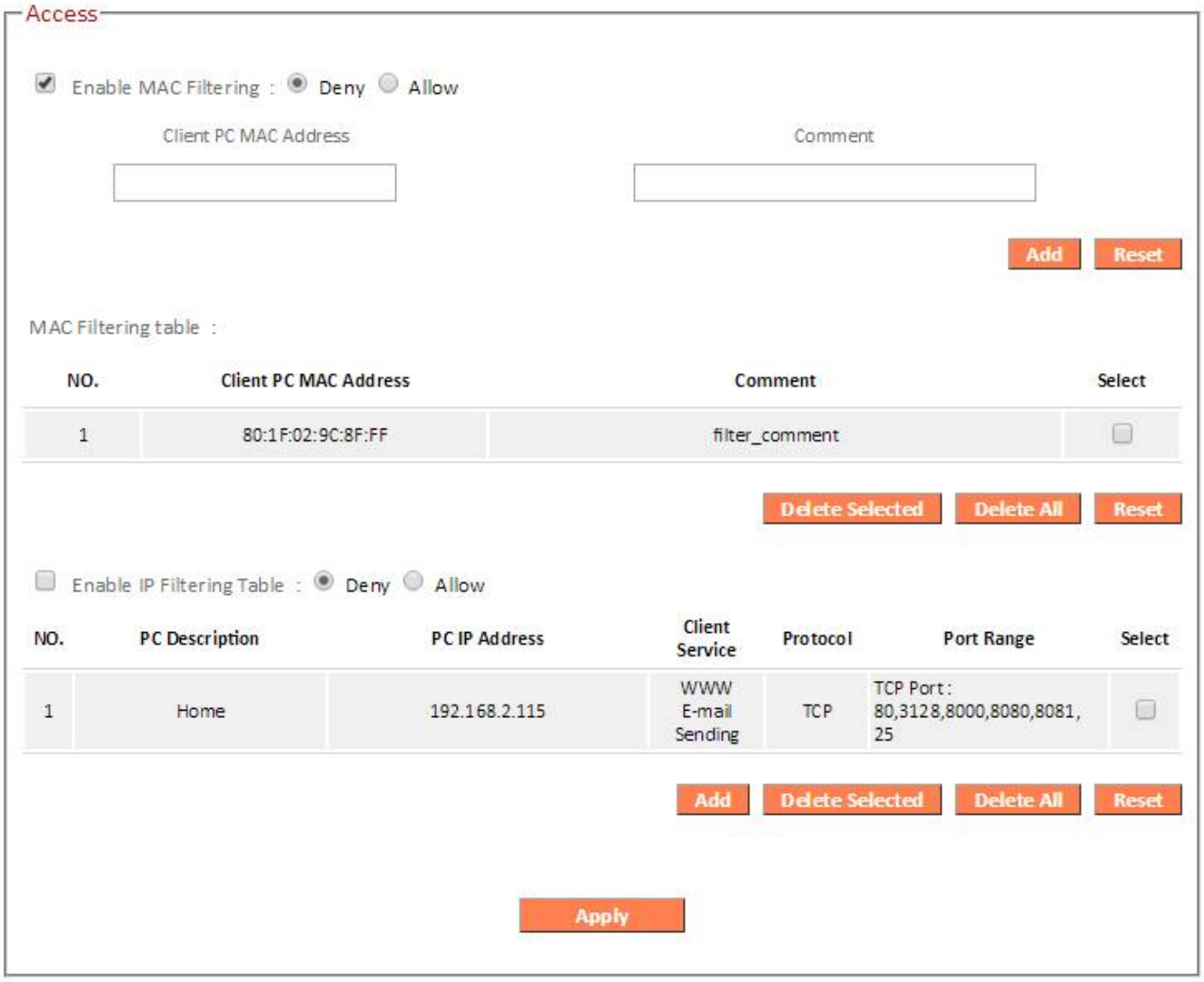
Enable or Disable Firewall Module Function	Enable or disable the Stateful Packet Inspection (SPI) firewall.

III-3-7-1. Access

Access Control is a security feature that can help to prevent unauthorized users from connecting to your wireless router.

This function allows you to define a list of network devices permitted or denied to connect to the RG21S/RA21S. Devices are each identified by their unique MAC address or IP address. Specific services can also be allowed/denied for IP addresses.

Check/uncheck the “Enable MAC Filtering” and/or “Enable IP Filtering” box to enable/disable MAC filtering and/or IP filtering.


Access
Enable MAC Filtering : Deny Allow
Client PC MAC Address
Comment
Add
Reset
MAC Filtering table :
NO.
Client PC MAC Address
Comment
Select
1
80:1F:02:9C:8F:FF
filter_comment
Delete Selected
Delete All
Reset
Enable IP Filtering Table : Deny Allow
NO.
PC Description
PC IP Address
Client Service
Protocol
Port Range
Select
1
Home
192.168.2.115
WWW E-mail Sending
TCP
TCP Port : 80,3128,8000,8080,8081, 25
Add
Delete Selected
Delete All
Reset
Apply

MAC Filtering:

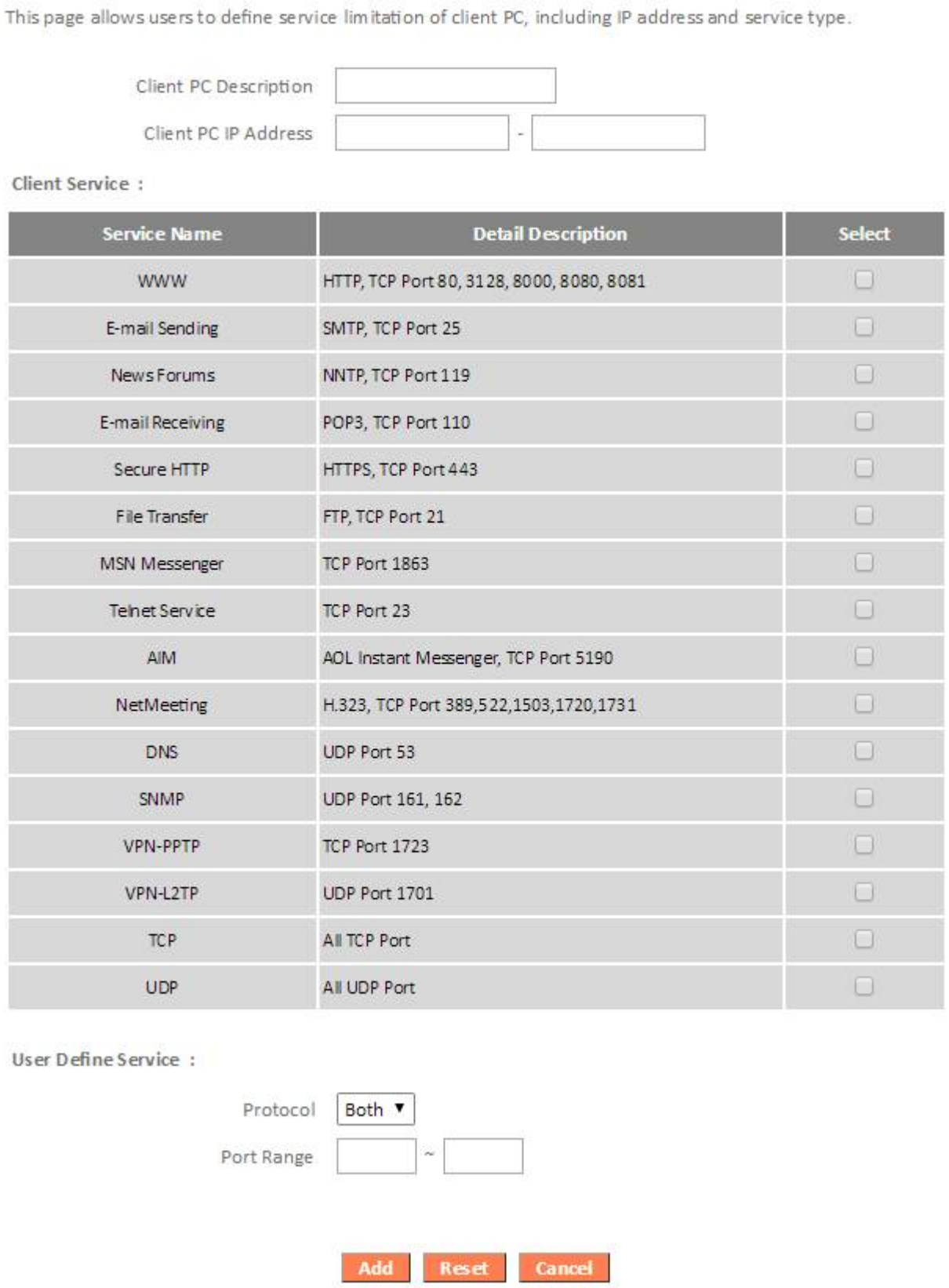
Enable MAC Filtering	Check the box to enable MAC filtering and select whether to “Deny” or “Allow” access for specified MAC address.
Client PC MAC Address	Enter a MAC address of computer or network device manually without dashes or colons e.g. for MAC address ‘aa-bb-cc-dd-ee-ff’ enter ‘aabbccddeeff’.
Comment	Enter a comment for reference/identification consisting of up to 16 alphanumerical characters.
Add	Click “Add” to add the MAC address to the MAC address filtering table.

MAC address entries will be listed in the table. Select an entry using the “Select” checkbox.

Delete Selected / Delete All	Delete selected or all entries from the table.

IP Filtering:

Enable IP Filtering	Check the box to enable IP filtering and select whether to “Deny” or “Allow” access for specified IP address.
Add PC	Opens a new window to add a new IP to the list, to deny or allow access/services according to above.



Client PC Description	Enter a description for reference/identification of up to 16 alphanumeric characters.
Client PC IP address	Enter a starting IP address in the left field and the end IP address in the right field to define a

	range of IP addresses; or enter an IP address in the left field only to define a single IP address.
Service Name	Various services are listed here with a short description. Check/uncheck the box for each service you wish to select.
Protocol	Select protocol “TCP” or “UDP” or “Both” for a service not included in the “Client PC Service” list.
Port Range	Enter the port range for the service not included in the “Client PC Service” list. Enter a single port number e.g. 110, a range of port numbers e.g. 110-120, or multiple port numbers separated by a comma e.g. 110,115,120.
Add	Click “Add” to add selected services or a user defined service to the IP filtering table.

III-3-7-2. DMZ

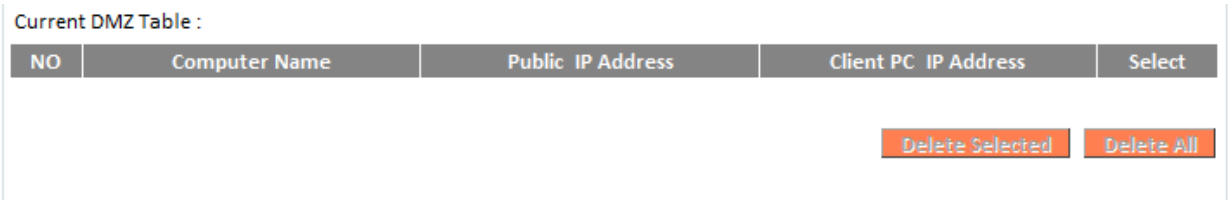
A Demilitarized Zone (DMZ) is an isolated area in your local network where private IP addresses are mapped to specified Internet IP addresses, allowing unrestricted access to the private IP addresses but not to the wider local network.

You can define a virtual DMZ host here. This is useful for example, if a network client PC cannot run an application properly from behind an NAT firewall, since it opens the client up to unrestricted two-way access.

Enable DMZ	Check/uncheck the box to enable/disable the device's DMZ function.
Public	Select "Dynamic IP" or "Static IP" here. For "Dynamic IP" select an Internet connection session from dropdown menu. For "Static IP" enter the IP address that you want to map to a specific private IP address.
Client PC	Enter the private IP address that the internet IP address will be mapped to.
Add	Click "Add" to add the client to the "Current

	DMZ Table".

DMZ entries will be displayed in the table shown below:

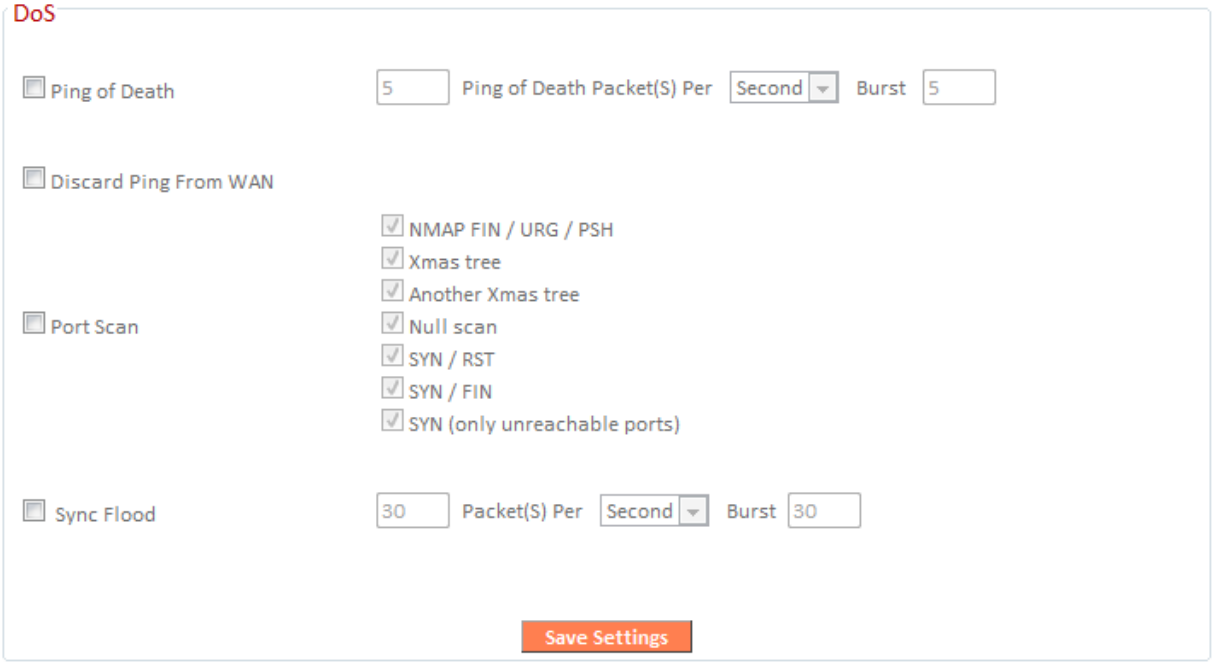


Delete Selected/ Delete All	Delete selected or all entries from the table.

III-3-7-3. DoS

Denial-of-Service (DoS) is a common form of malicious attack against a network. The router's firewall can protect against such attacks.

If you are not familiar with these functions, it is recommended you keep the default settings.



Ping of Death	Specify the frequency of ping of death packets which will trigger the router's DoS protection function.
Discard Ping from WAN	Check this box and the router will not answer ping requests from the Internet.
Port Scan	Intruders use "port scanners" to detect open Internet IP address ports. Check each type of port scan to prevent.
Sync Flood	Specify the frequency of sync flood packets which will trigger the DoS protection function.

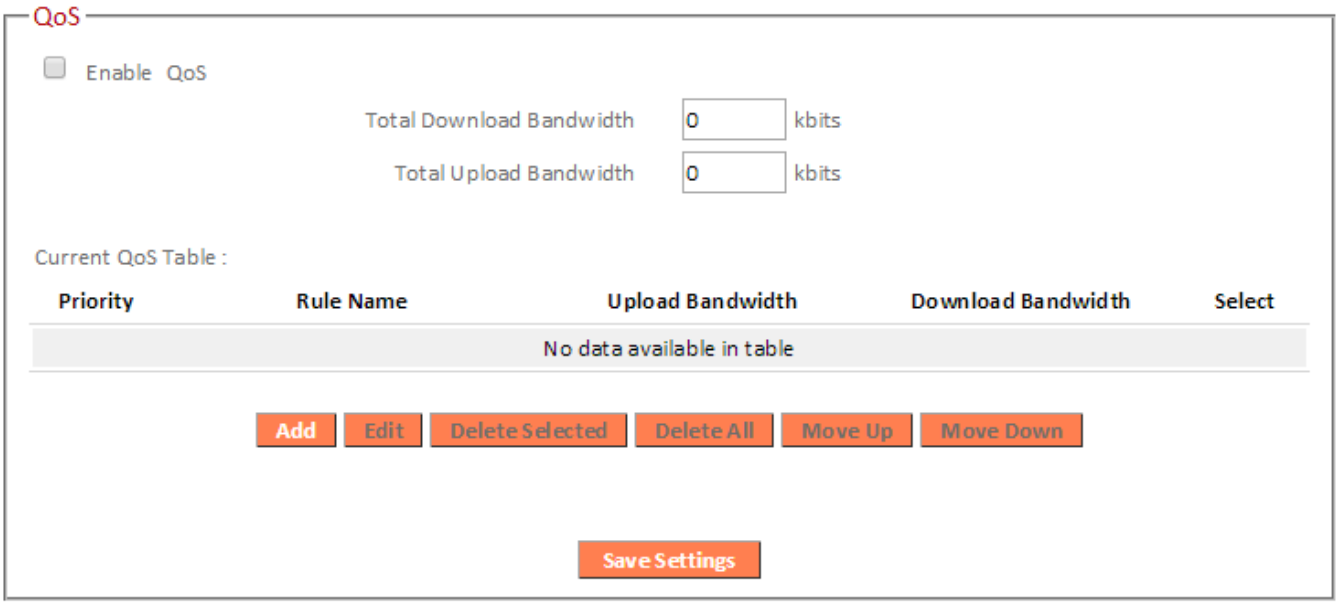
III-3-8. QoS

Quality of Service (QoS) is a feature to manage Internet bandwidth efficiently. Some applications require more bandwidth than others to function properly, and QoS allows you to ensure that sufficient bandwidth is available. Minimum or maximum bandwidth can be guaranteed for a specified application.

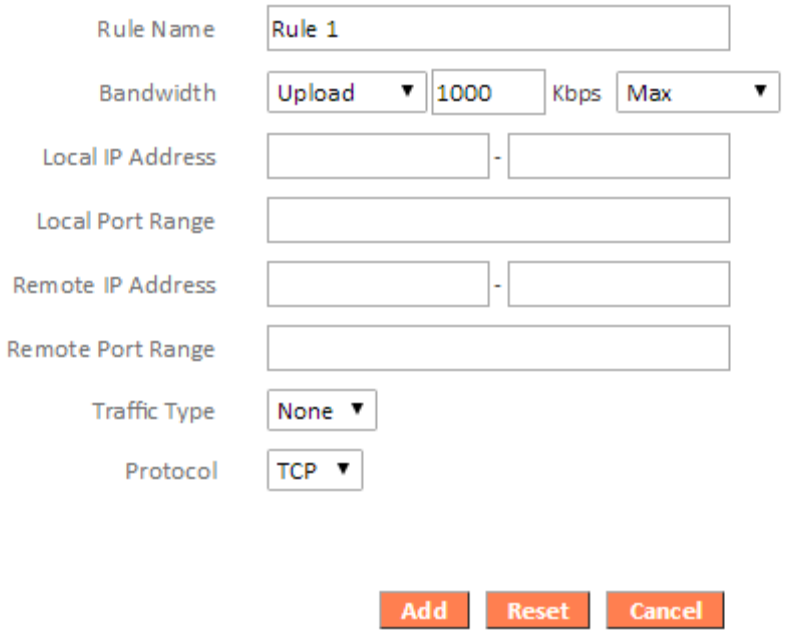
QoS can improve the RG21S/RA21S's performance. QoS is recommended to optimize performance for online gaming.

III-3-8-1. QoS

Check/uncheck the box "Enable QoS" to enable/disable the QoS function. Click "Add" to open a new window and setup a QoS rule. The "Current QoS Table" displays all QoS rules.



Total Download Bandwidth	Enter your total download bandwidth limit from your Internet service provider (ISP) in kbits.
Total Upload Bandwidth	Enter your total upload bandwidth limit from your Internet service provider (ISP) in kbits.
Add	Opens a new window to add a new QoS rule to the current QoS table.



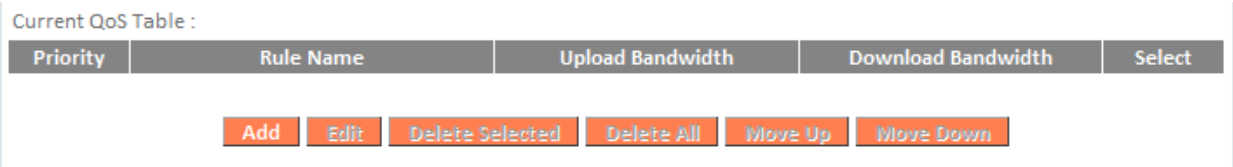
Rule Name	Enter a name for the QoS rule for reference/identification.
Bandwidth	Set the bandwidth limits for the QoS rule:  (1) (2) (3) 1. Select “Download” or “Upload” for the QoS rule. 2. Enter the bandwidth limit. 3. Select whether the bandwidth is a “Guarantee” (minimum) or “Max” (maximum).
Local IP Address	Enter the IP address range to which the QoS rule will be applied. Enter a starting IP address in the left field and the end IP address in the right field to define a range of IP addresses; or enter an IP address in the left field only to define a single IP address.
Local Port Range	Enter the port range to activate the QoS rule. Enter a single port number e.g. 110 or a range of port numbers e.g. 110-120

Remote IP Address	Enter the remote IP address range which will activate the QoS rule. Enter a starting IP address in the left field and the end IP address in the right field to define a range of IP addresses; or enter an IP address in the left field only to define a single IP address.
Remote Port Range	Enter the remote port range to activate the QoS rule. Enter a single port number e.g. 110 or a range of port numbers e.g. 110-120
Traffic Type	Select traffic type as an alternative to specifying a port range above.
Protocol	Select a “TCP” or “UDP” protocol type.
Save	Click ‘add’ button to add a new QoS rule (detailed instructions will be given below).

QoS rule entries will be listed in the “Current QoS Table” as shown below. Select a rule using the “Select” checkbox.

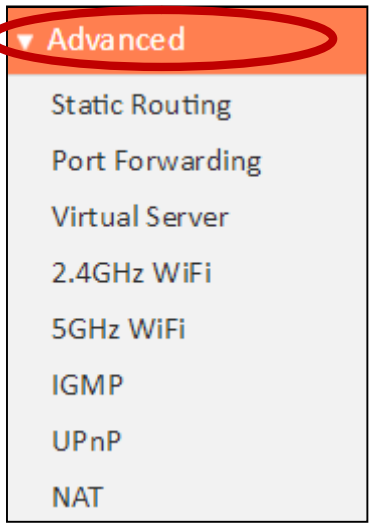
When using the “Edit” button only one rule can be selected each time.

QoS rules will be processed in the order that they are listed i.e. the rule at the top of the list will be applied first, and then the second rule etc. The order can be adjusted using the “Move Up/Down” buttons.



Edit	Edit a selected rule.
Delete Selected/ Delete All	Delete selected or all entries from the table.
Move Up/Down	Move selected rule up or down the list.

III-3-9. Advanced

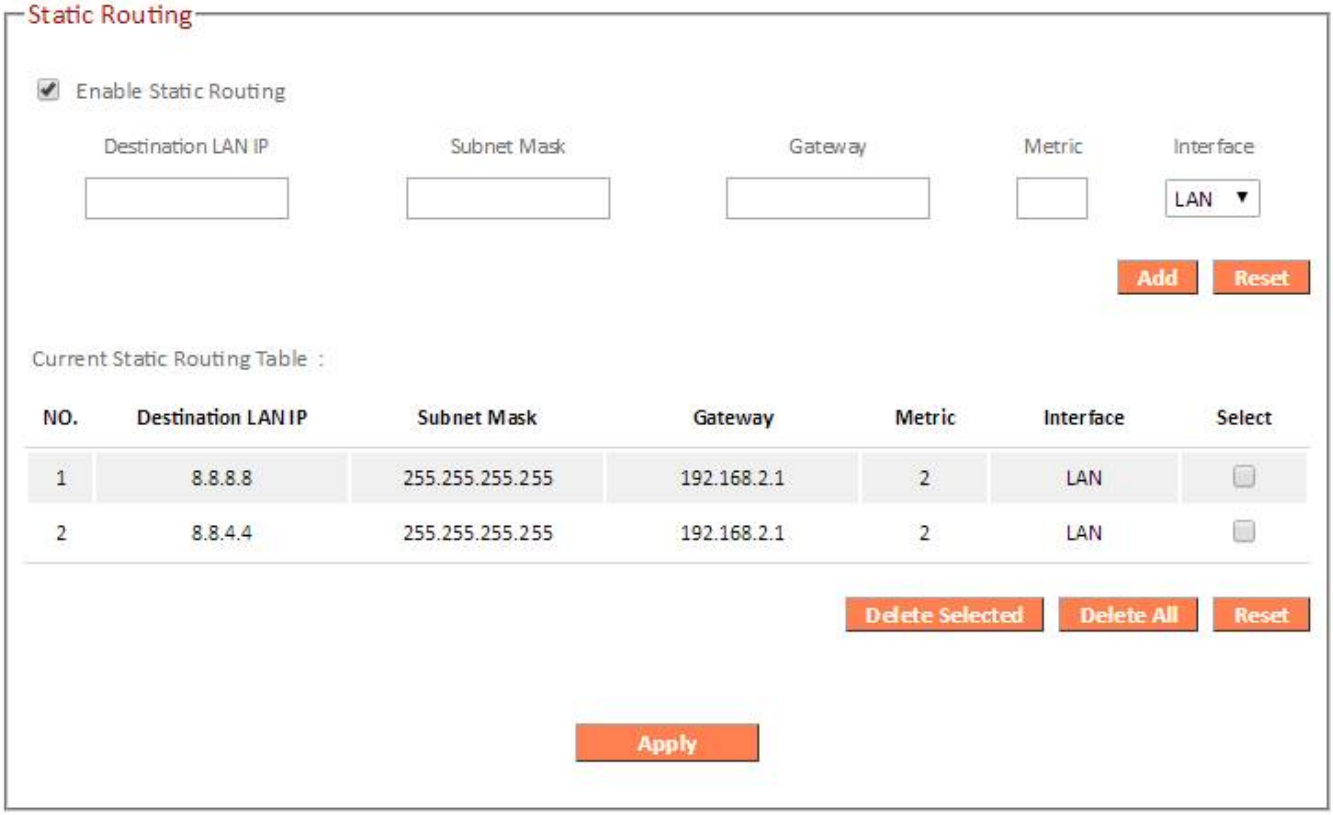


Advanced features of the RG21S/RA21S can be configured from the “Advanced” menu.

III-3-9-1. Static Routing

Static routing is a method of configuring path selection of routers, characterized by the absence of communication between routers regarding the current topology of the network. The opposite of static routing is dynamic routing, sometimes also referred to as adaptive routing.

You can configure static routing and manually add routes to the routing table shown below.

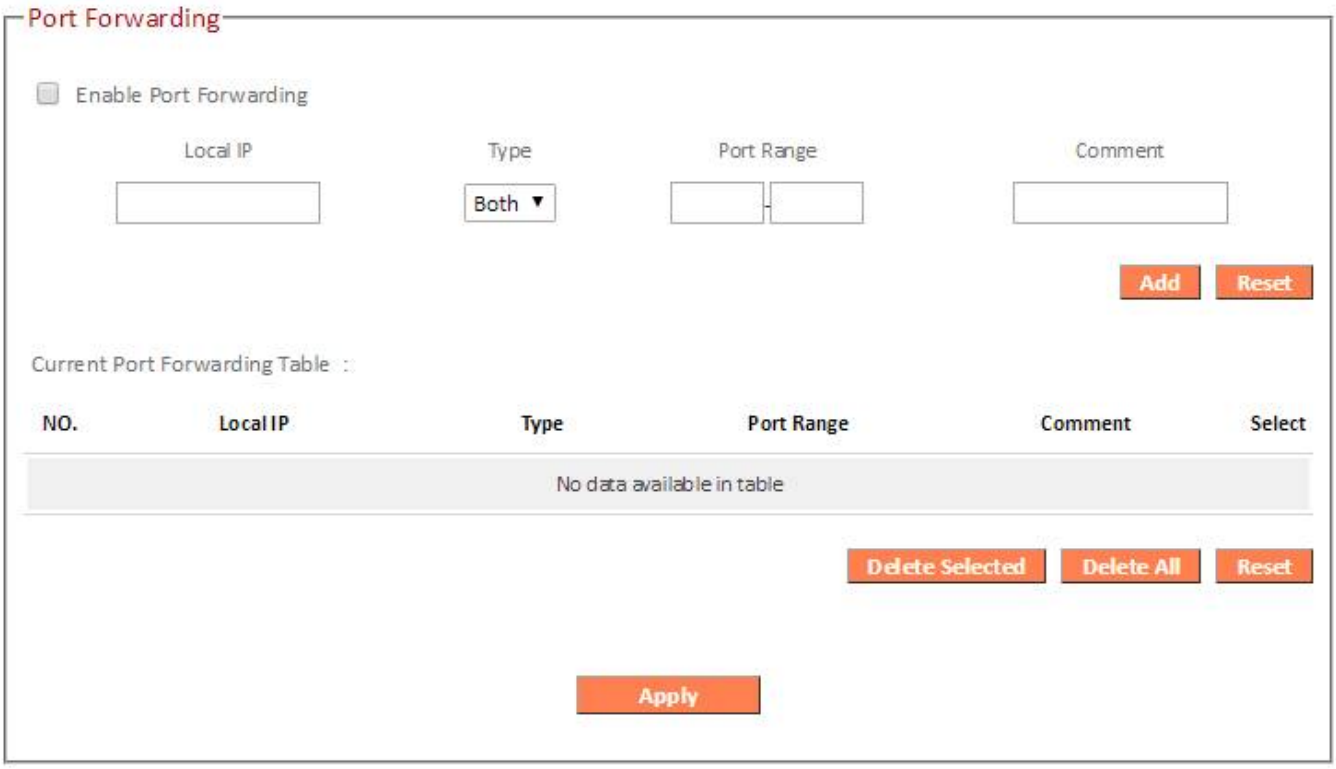


Enable Static Routing	Check/uncheck the box to enable/disable static routing.
Destination LAN IP	Enter the destination network's IP address.
Subnet Mask	Enter the subnet mask of the destination network.
Default Gateway	Enter the default gateway of the destination network.
Metric	Enter the hop count (the distance between destination network and this broadband router) here.
Interface	Enter the interface which leads to destination network.
Add	Add the route to the current static routing table.

III-3-9-2. Port Forwarding

This function allows you to redirect a single port or consecutive ports of an Internet IP address to the same port of a local IP address. The port number(s) of the Internet IP address and local IP address must be the same.

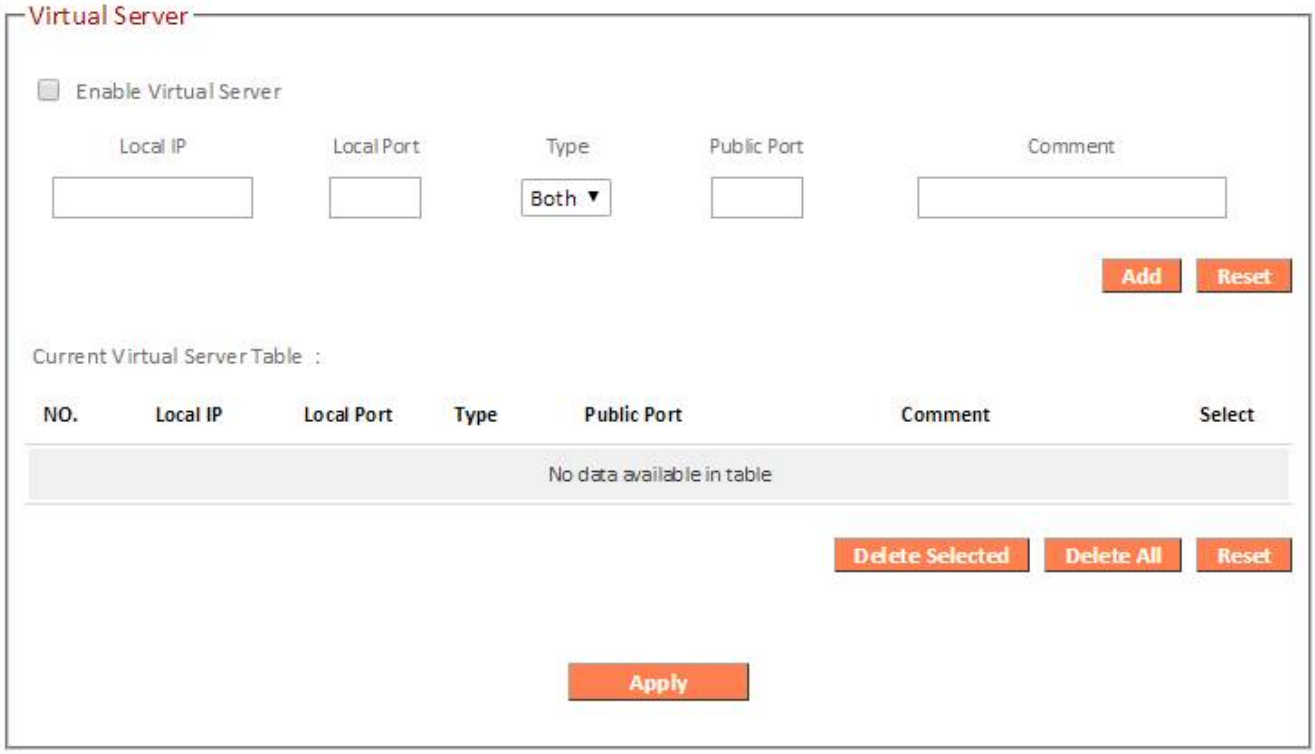
If the port number of the Internet IP address and local IP address is different, please use the “Virtual Server” function instead.



Local IP	Enter the IP address of the computer on the local network.
Type	Select the type of connection, “TCP”, “UDP” or “Both”.
Port Range	Input the starting port number in the left field, and input the ending port number in the right field. If you only want to redirect a single port number, only enter a port number in the left field.
Comment	Enter a comment for reference or identification.

III-3-9-3. Virtual Server

This function allows you to set up an internet service on a local computer, without exposing the local computer to the internet. You can also build various sets of port redirection, to provide various internet services on different local computers via a single internet IP address.

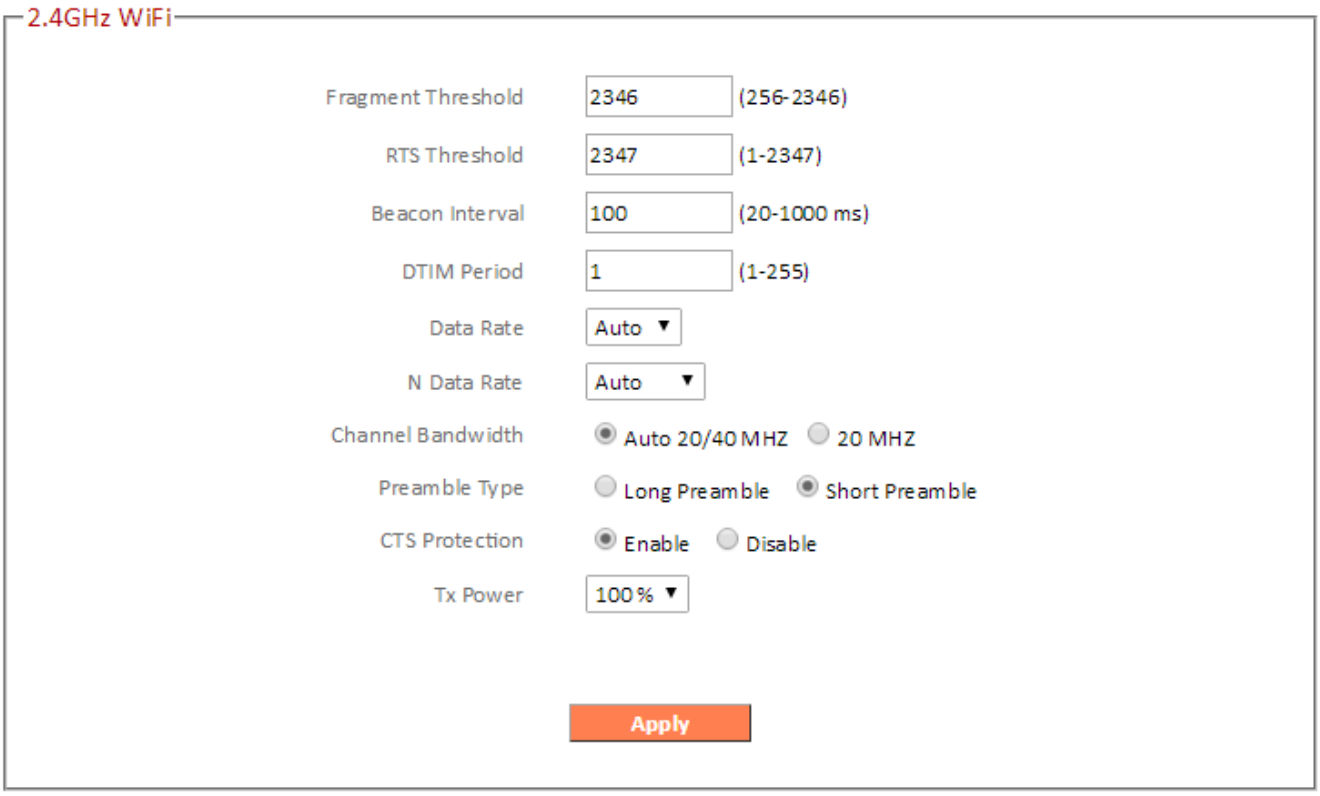


Local IP	Specify the IP address of the computer on your local network.
Local Port	Specify the private port you wish to use on the computer in your local network.
Type	Select the type of Internet Protocol.
Public Port	Specify a public port to access the computer on your local network.
Comment	Enter a comment for reference or identification.

Delete Selected/ Delete All	Delete selected or all entries from the table.

III-3-9-4. 2.4GHz Wireless

These settings are for experienced users only. Please do not change any of the values on this page unless you are already familiar with these functions.

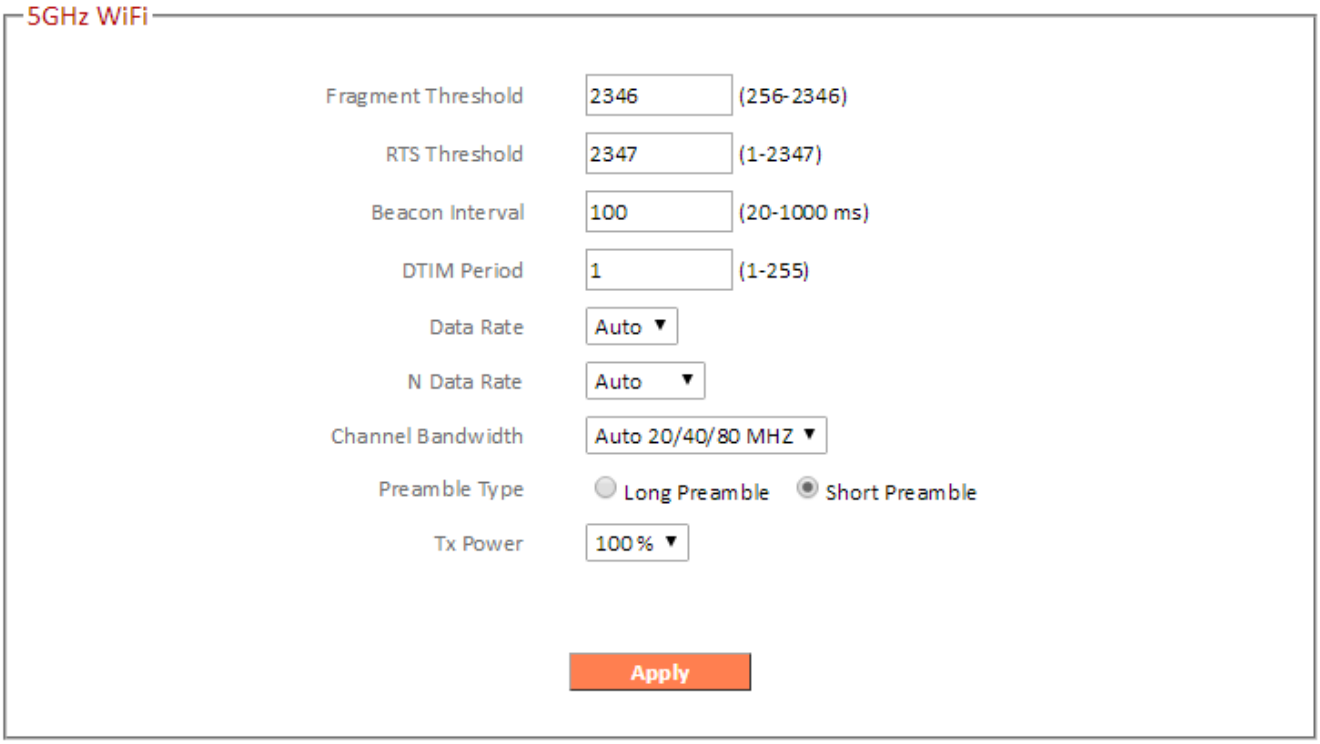


Fragment Threshold	Set the Fragment threshold of the wireless radio. The default value is 2346.
RTS Threshold	Set the RTS threshold of the wireless radio. The default value is 2347.
Beacon Interval	Set the beacon interval of the wireless radio. The default value is 100.
DTIM Period	Set the DTIM period of wireless radio. The default value is 3.
Data Rate	Set the wireless data transfer rate. The default is set to Auto.
N Data Rate	Set the data rate of 802.11n. The default is set to Auto.
Channel Bandwidth	Select wireless channel width (bandwidth used by wireless signals from the device) – the recommended value is Auto 20/40MHz.

Preamble Type	Set the wireless radio preamble type. The default value is “Short Preamble”.
CTS Protection	Enabling this setting will reduce the chance of radio signal collisions between 802.11b and 802.11g wireless access points. It’s recommended to set this option to “Auto”.
Tx Power	Set the power output of the wireless radio. You may not require 100% output power. Setting a lower power output can enhance security since potentially malicious/unknown users in distant areas will not be able to access your signal.

III-3-9-5. 5GHz Wireless

These settings are for experienced users only. Please do not change any of the values on this page unless you are already familiar with these functions.

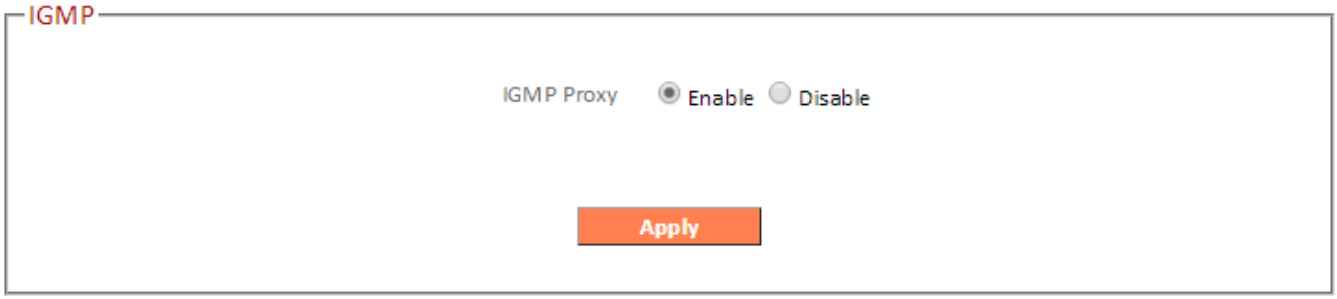


Fragment Threshold	Set the Fragment threshold of the wireless radio. The default value is 2346.
RTS Threshold	Set the RTS threshold of the wireless radio. The default value is 2347.
Beacon Interval	Set the beacon interval of the wireless radio. The default value is 100.
DTIM Period	Set the DTIM period of wireless radio. The default value is 3.
Data Rate	Set the wireless data transfer rate. The default is set to Auto.
N Data Rate	Set the data rate of 802.11n. The default is set to Auto.
Channel Bandwidth	Select wireless channel width (bandwidth used by wireless signals from the device) – the recommended value is 20/40/80MHz.
Preamble Type	Set the wireless radio preamble type. The default value is “Short Preamble”.

Tx Power	Set the power output of the wireless radio. You may not require 100% output power. Setting a lower power output can enhance security since potentially malicious/unknown users in distant areas will not be able to access your signal.

III-3-9-6. IGMP

IGMP is a communications protocol used to establish multicast group memberships. It allows for a more efficient use of resources and better performance for applications such as IPTV video streaming.

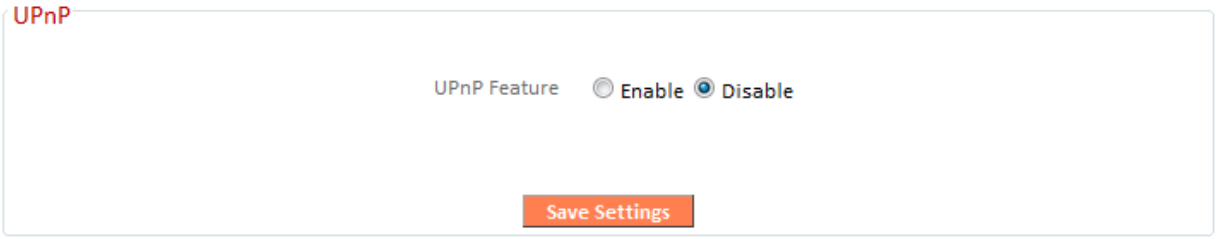


IGMP Proxy	IGMP proxy enables intelligent multicast forwarding based on IGMP snooping information. Select enable or disable.

It is recommended to set "IGMP Proxy" to "Enable".

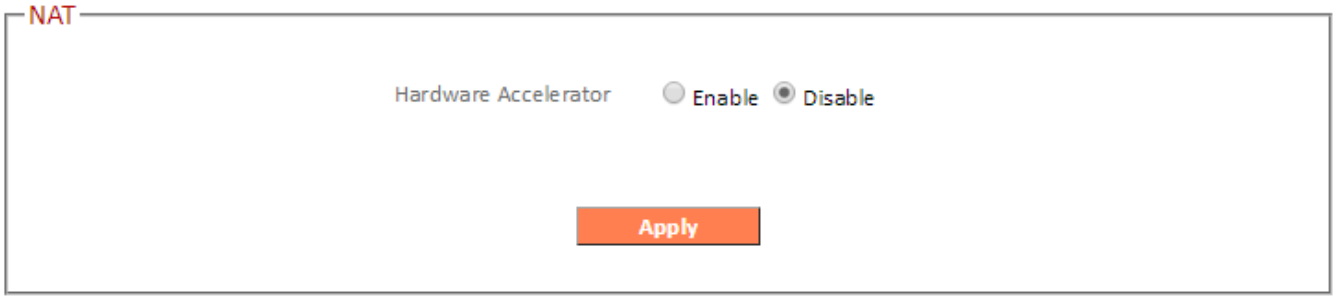
III-3-9-7. UPnP

Universal plug-and-play (UPnP) is a set of networking protocols which enables network devices to communicate and automatically establish working configurations with each other. Select “Enable” or “Disable”.

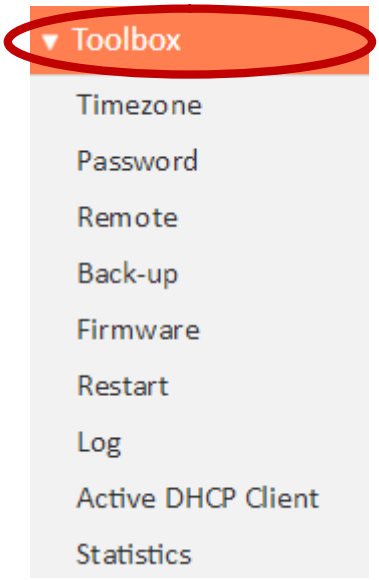


III-3-9-8. NAT

Enable or disable NAT (Network Address Translation) hardware acceleration for better network performance on fast connections.



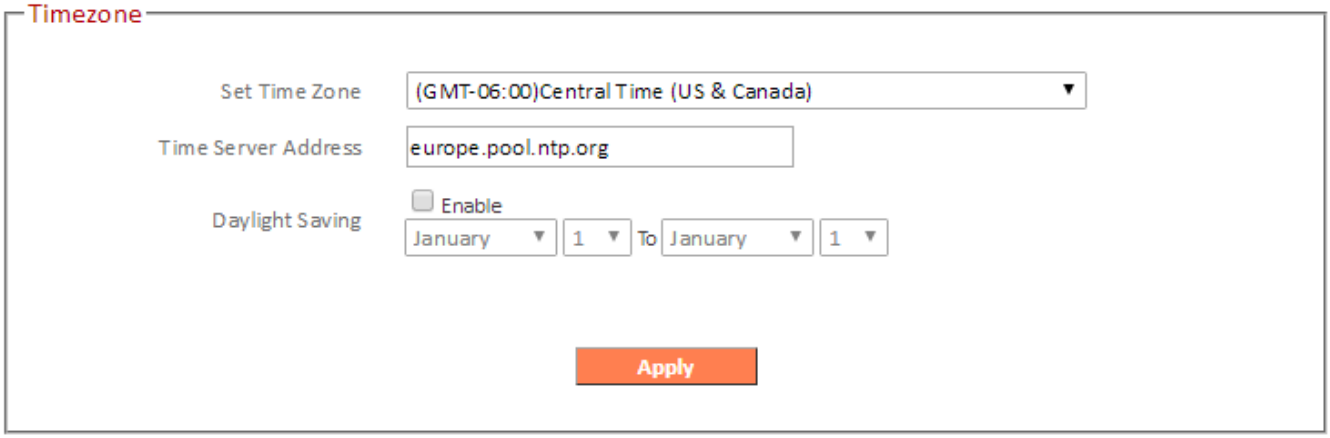
III-3-10. Toolbox



Various administrative functions can be accessed from the “Administration” menu.

III-3-10-1. Time Zone

Setup time zone for your RG21S/RA21S.

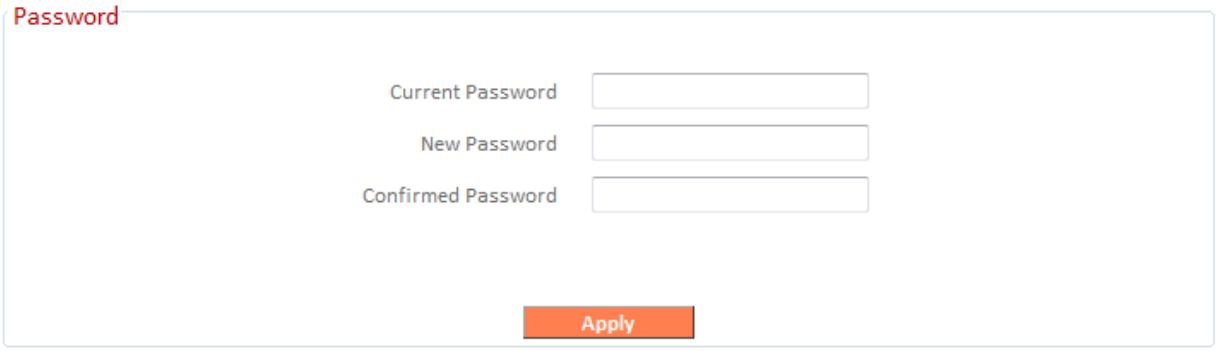


Set Time Zone	Select the time zone of your country or region.
Time Server Address	The travel router supports NTP (Network Time Protocol) for automatic time and date setup. Input the host name of the IP server manually.
Daylight Saving	If your country/region uses daylight saving time, please check the “Enable” box, and select the start and end date.

III-3-10-2. Password

You can change the password used to login to the browser-based configuration interface here. It is advised to do so for security purposes.

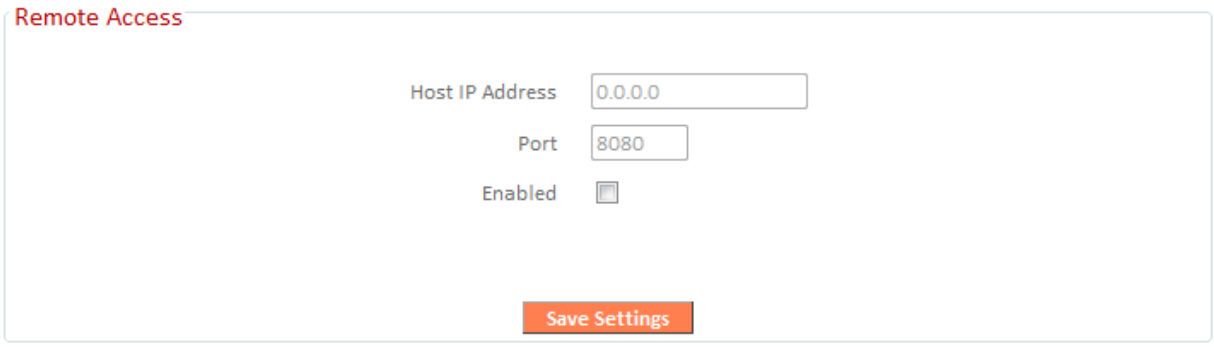
Please make a note of the new password. In the event that you forget the password and are unable to login to the browser based configuration interface, see *I-5. Reset to factory default settings* ***for how to reset the device.***



Current Password	Enter your current password.
New Password	Enter your new password.
Confirmed Password	Confirm your new password.

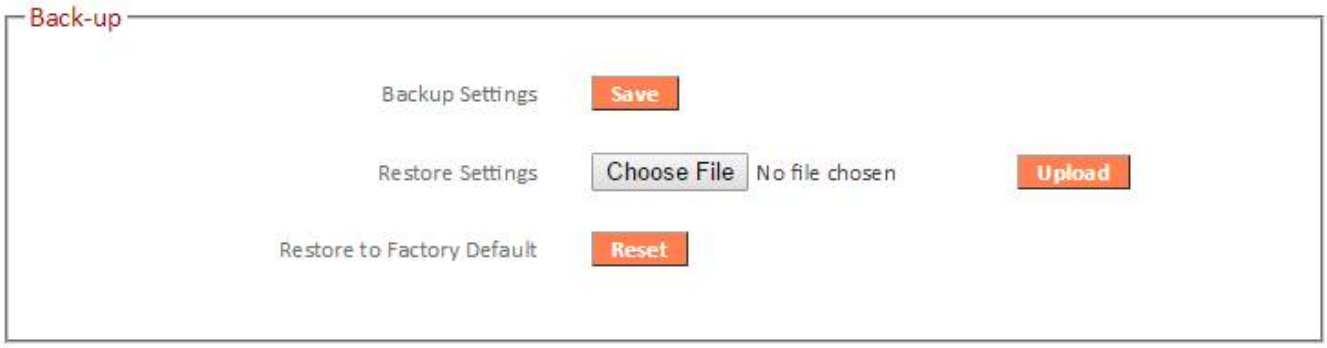
III-3-10-3. Remote

Check “Enable” to enable the remote access feature and then enter the appropriate values.



Host IP Address	Specify the IP address which is allowed remote access.
Port	Specify a port number (0–65535) used for remote access.

III-3-10-4. Backup/Restore

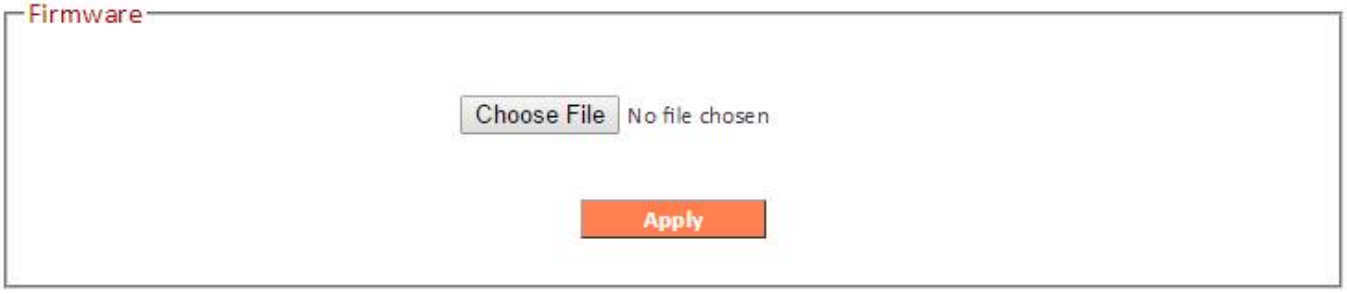


Backup Settings	Click “Save” to save the current settings on your computer as config.bin file.
Restore Settings	Click “Browse” to find a previously saved config.bin file and then click “Upload” to replace your current settings.
Restore to Factory Default	Click “Reset” to restore settings to the factory default. A pop-up window will appear and ask you to confirm and enter your log in details. Enter your username and password and click “Ok”. See below for more information.

III-3-10-5. Firmware

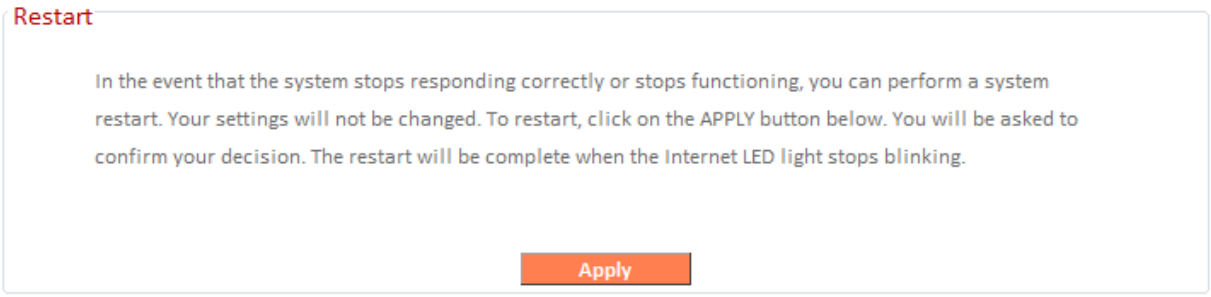
The firmware page allows you to upgrade the system firmware to a more recent version. You can download the latest firmware from the Edimax website and upgrade manually using the **Choose File** button. After the upgrade, the system will restart.

Do not switch off or disconnect the device during a firmware upgrade, as this could damage the device. It is recommended that you use a wired Ethernet connection for a firmware upgrade and that you backup your existing firmware before upgrading.



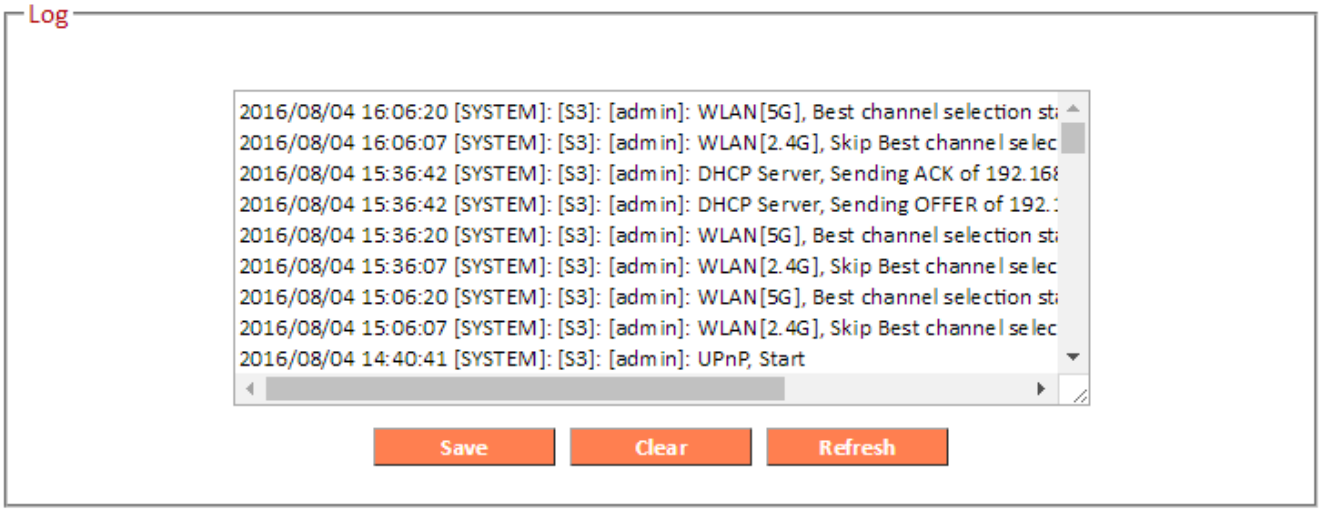
III-3-10-6. Restart

In the event that the router malfunctions or is not responding, then it is recommended that you restart the device.



III-3-10-7. Log

You can view the system log here.

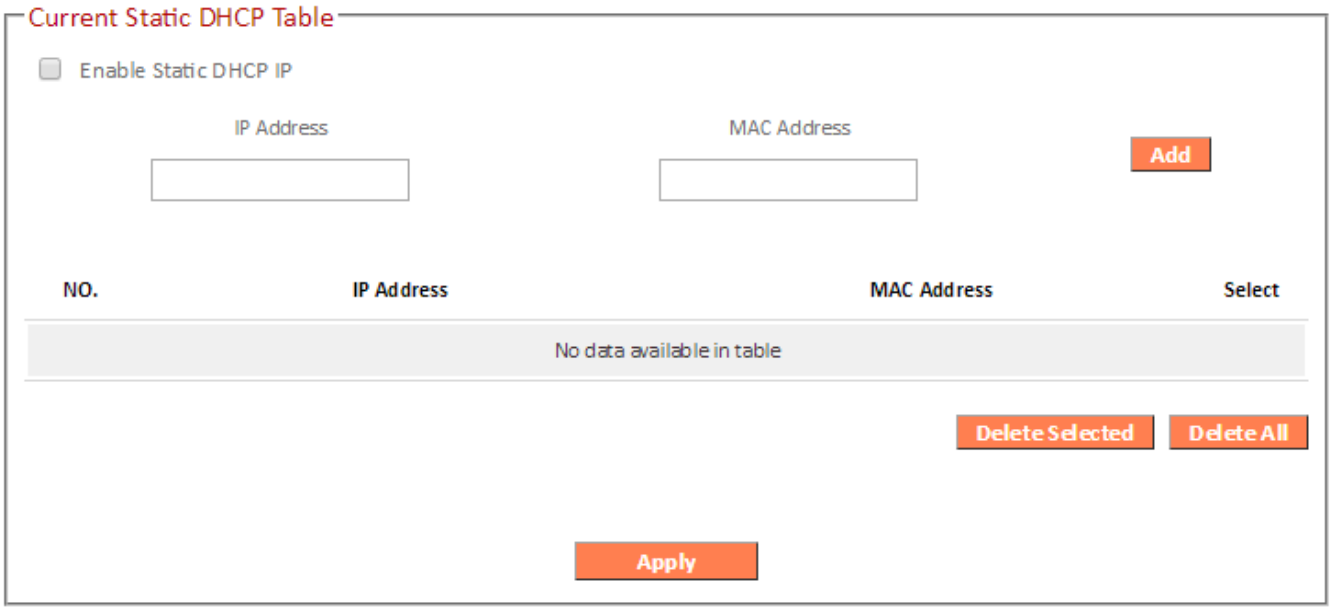


Save	Click “Save” to save the log on your computer as .txt file.
Clear	Click “Clear” to clear/erase the existing log.
Refresh	Click “Refresh” to refresh the log and update any activity.

III-3-10-8. Active DHCP Client

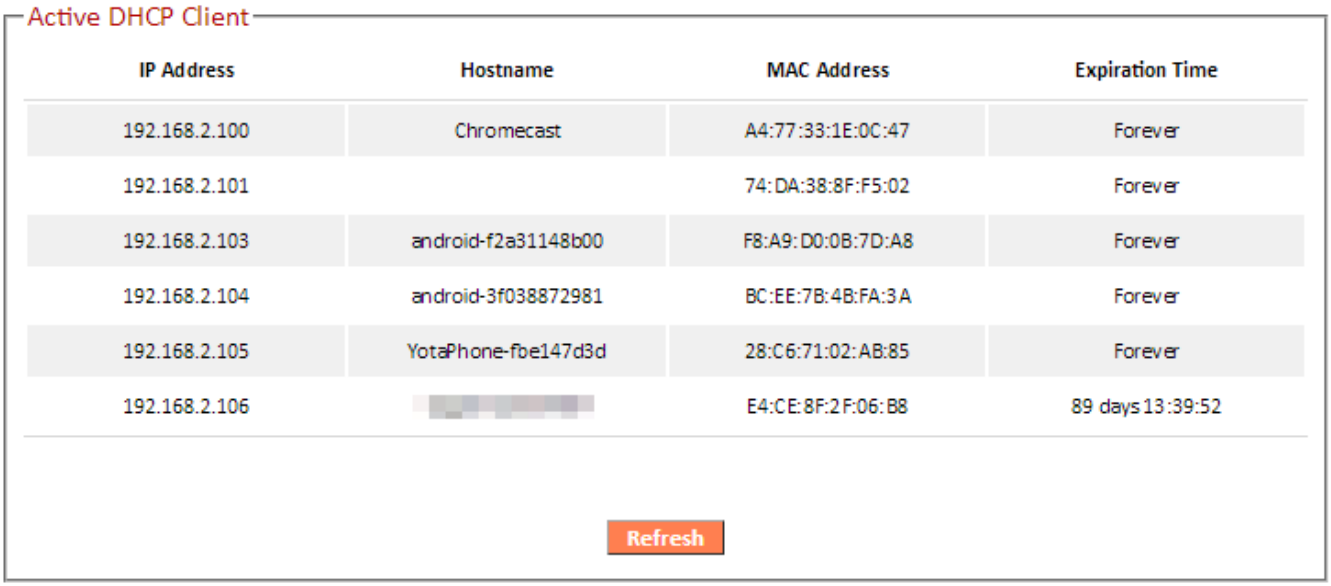
Information about active DHCP clients is shown in the table, which displays the DHCP server assigned IP address, MAC address and time expired for each computer or device on the local network.

Your device’s DHCP server can be configured to assign static (fixed) IP addresses to specified network devices, identified by their unique MAC address.



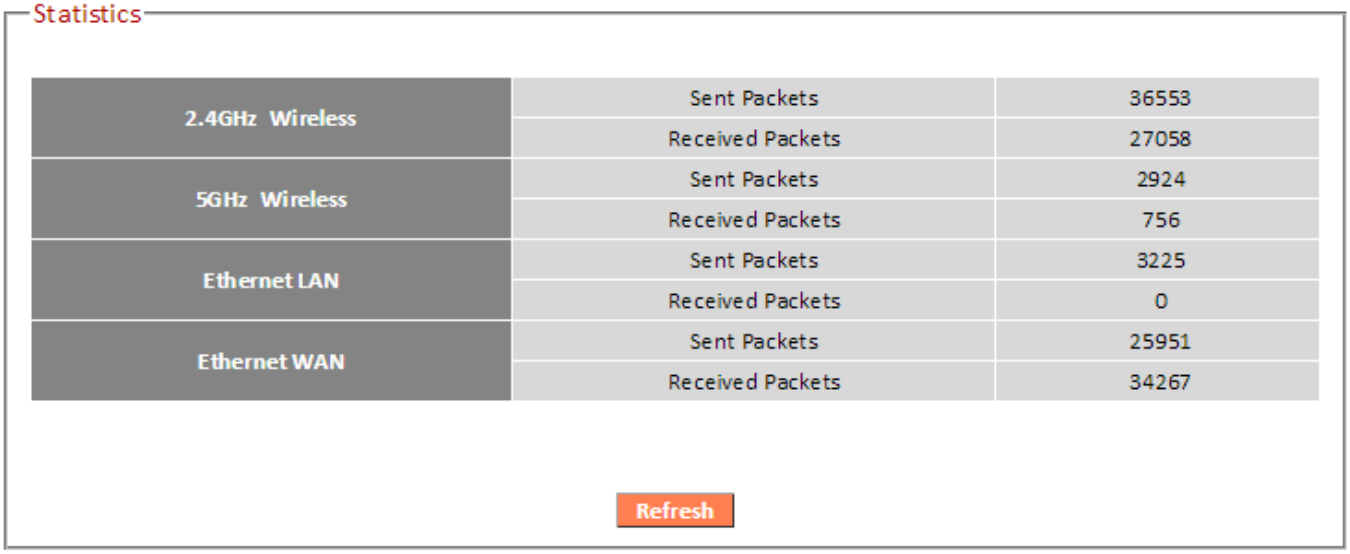
Enable Static DHCP IP	Enable/disable static DHCP leases. This must be enabled in order to assign any network device a static IP address.
IP Address	Assign a fixed IP address for the specified network device here.
MAC Address	Enter the specified network device’s MAC address here.
Add	Add the information to the “Static DHCP Leases Table”.
Clear	Clear the MAC address and IP address fields.

Delete Selected / Delete All	Delete selected or all entries from the table.



III-3-10-9. Statistics

Displays sent and received packet network statistics.



III. Appendix

IV-1. Configuring your IP address

For first time access to the URL ***http://edimax.setup*** please ensure your computer is set to use a dynamic IP address. This means your computer can obtain an IP address automatically from a DHCP server. You can check if your computer is set to use a dynamic IP address by following **IV-1-1. How to check that your computer uses a dynamic IP address**.

Static IP users can also temporarily modify your computer's IP address to be in the same IP address subnet e.g. **192.168.2.x (x = 3 – 254)** as the RG21S/RA21S in order to access ***http://edimax.setup***.

The RG21S/RA21S's default IP address is 192.168.2.1.

The procedure for modifying your IP address varies across different operating systems; please follow the guide appropriate for your operating system in **IV-1-2. How to modify the IP address of your computer****.**

Static IP users please make a note of your static IP before you change it.

You can assign a new IP address to the device which is within the subnet of your network during setup or using the browser based configuration interface (refer to **III-3-4. LAN**). Then you can access the URL ***http://edimax.setup*** in future without modifying your IP address.

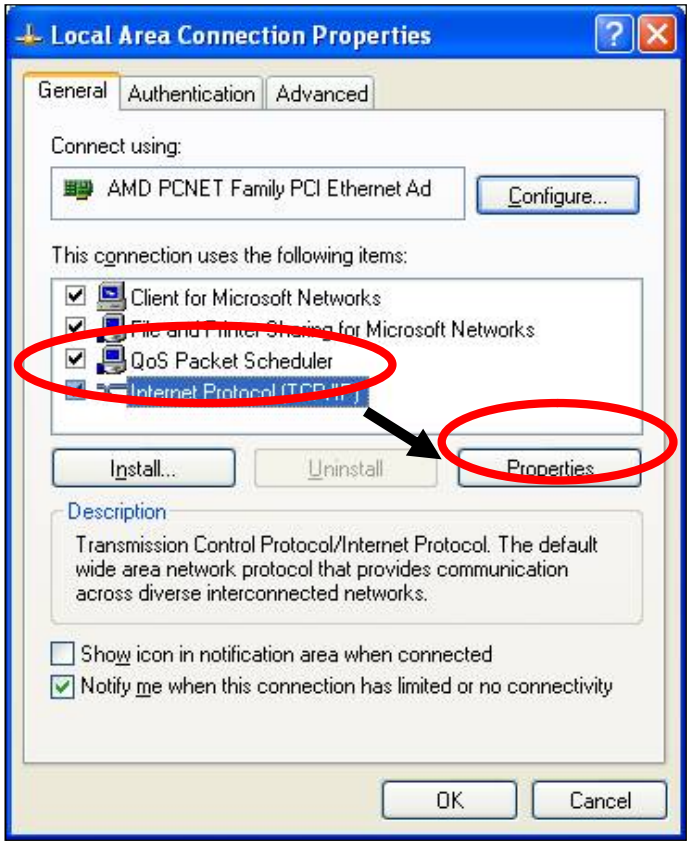
Please remember to change your IP address back to its original value after the device is properly configured.

IV-1-1. How to check that your computer uses a dynamic IP address

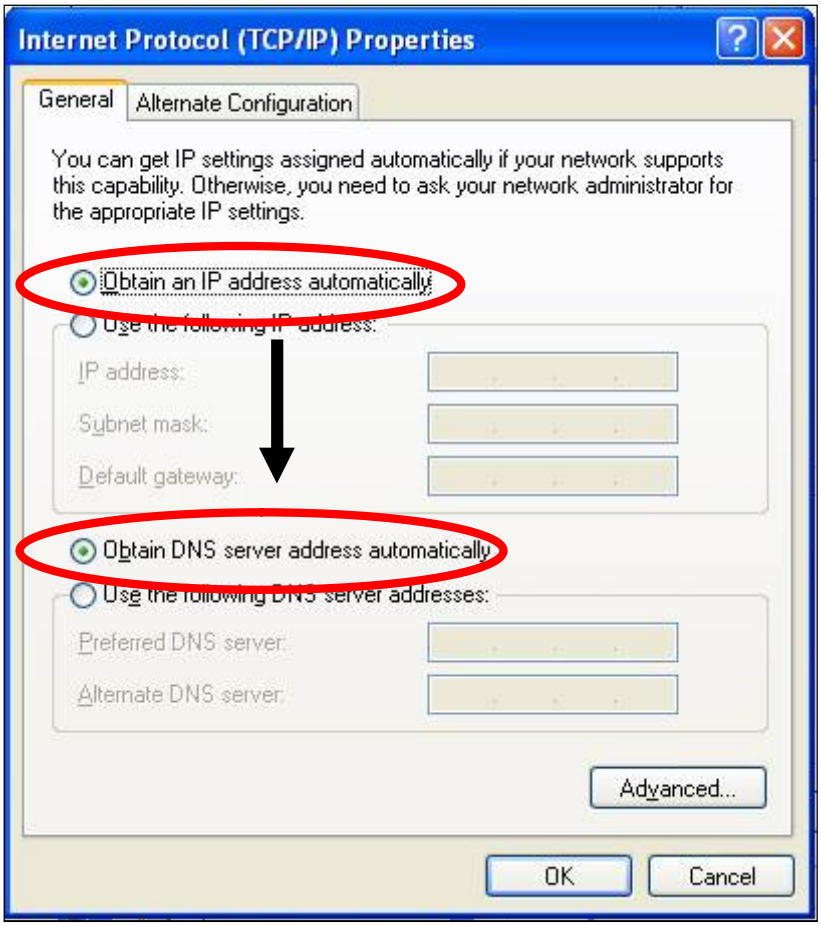
Please follow the instructions appropriate for your operating system.

IV-1-1-1. Windows XP

1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”. Double-click the “Network and Internet Connections” icon, click “Network Connections”, and then double-click “Local Area Connection”. The “Local Area Connection Status” window will then appear, click “Properties”.

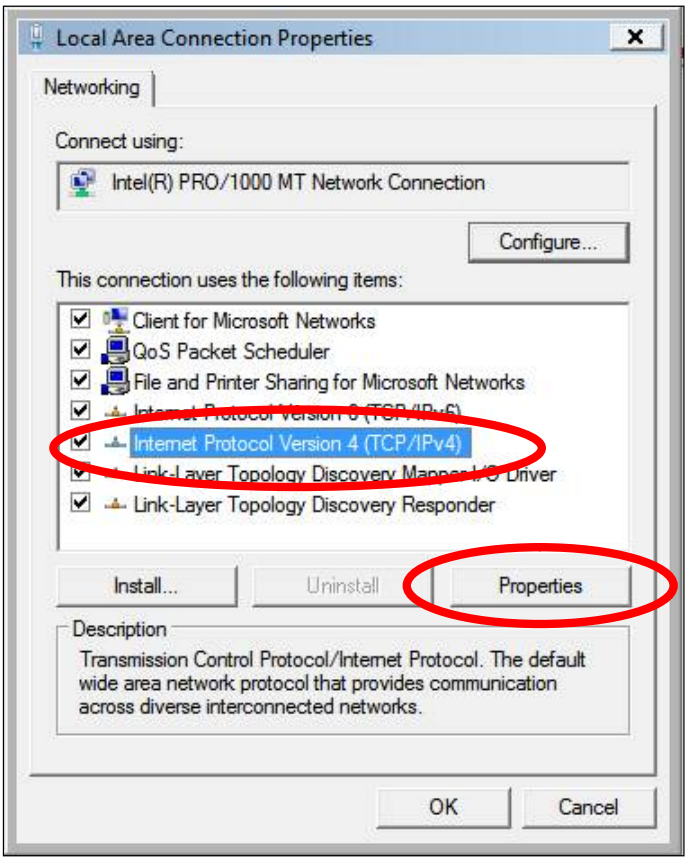


2. “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

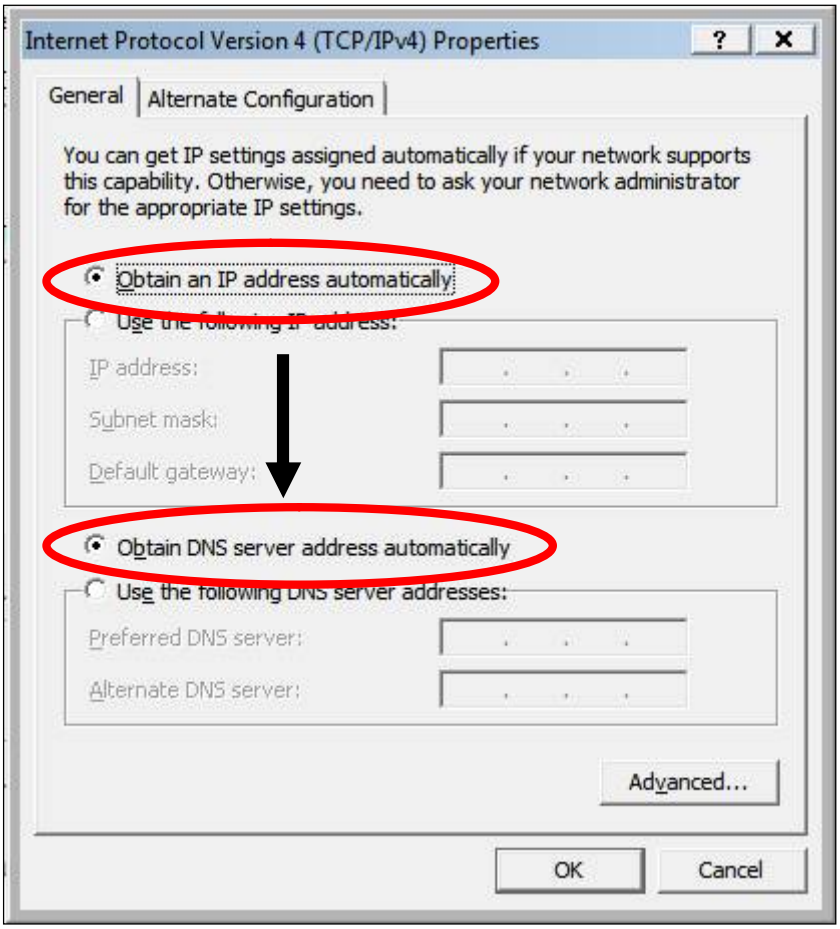

Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

IV-1-1-2. Windows Vista

1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”. Click “View Network Status and Tasks”, then click “Manage Network Connections”. Right-click “Local Area Network”, then select “Properties”. The “Local Area Connection Properties” window will then appear, select “Internet Protocol Version 4 (TCP / IPv4)”, and then click “Properties”.

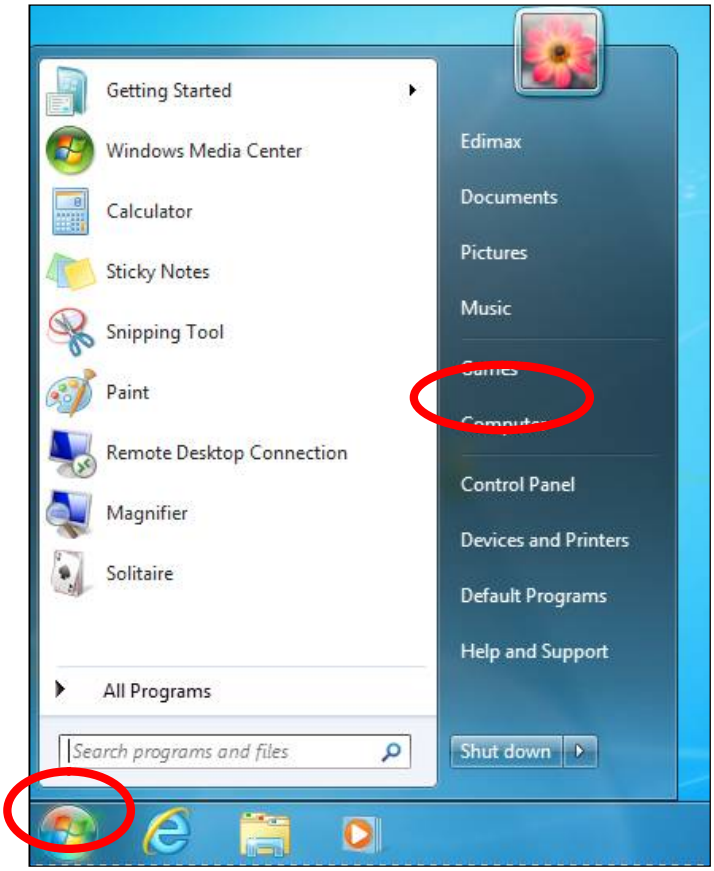


2. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

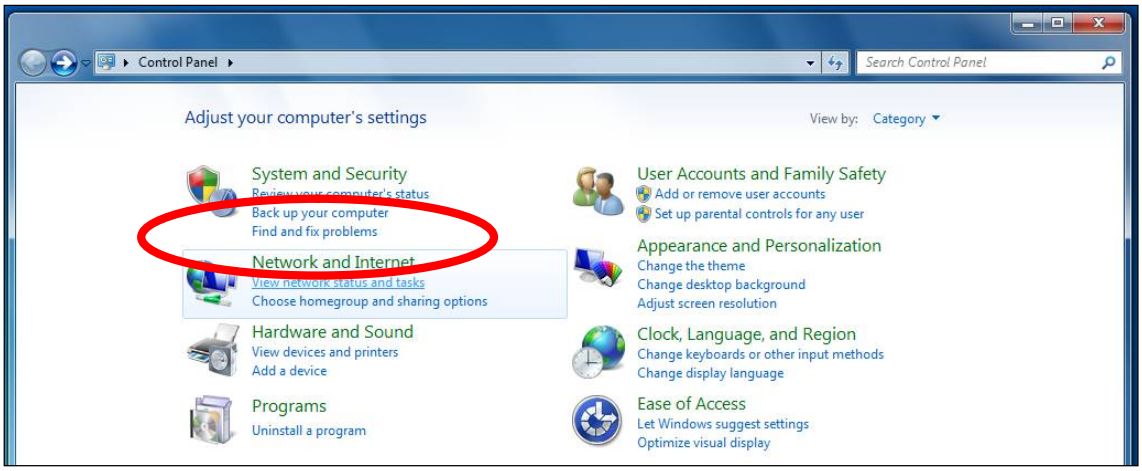

Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

IV-1-1-3. Windows 7

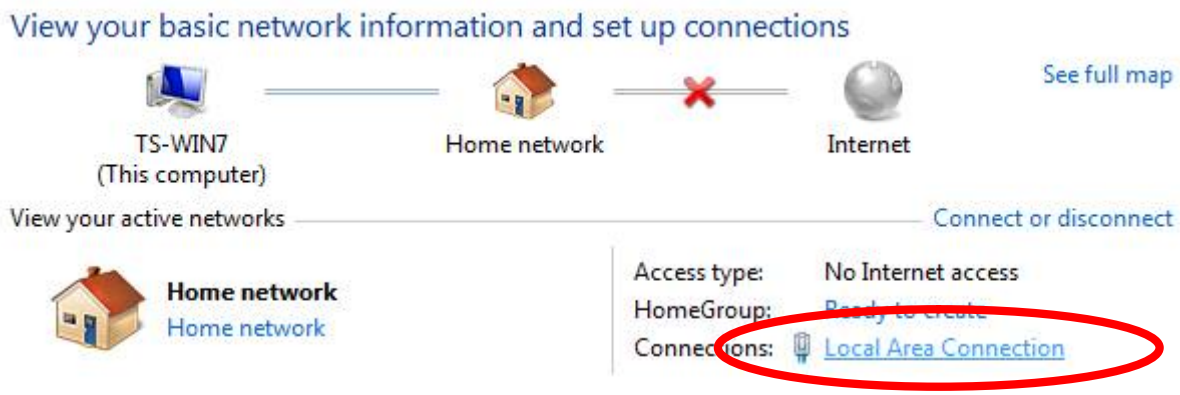
1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”.



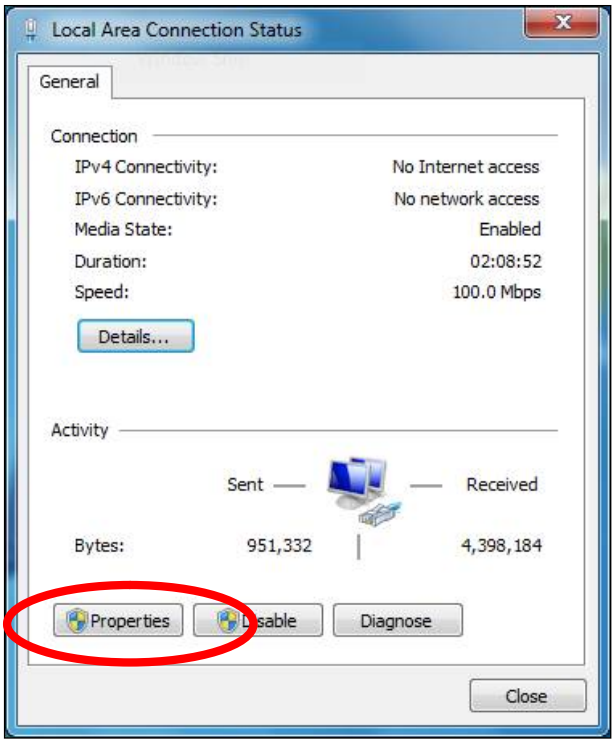
2. Under “Network and Internet” click “View network status and tasks”.



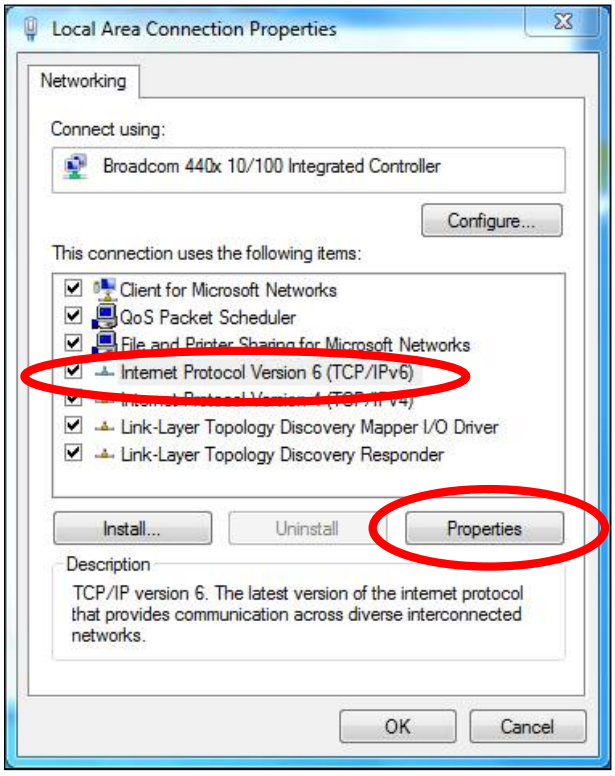
3. Click “Local Area Connection”.



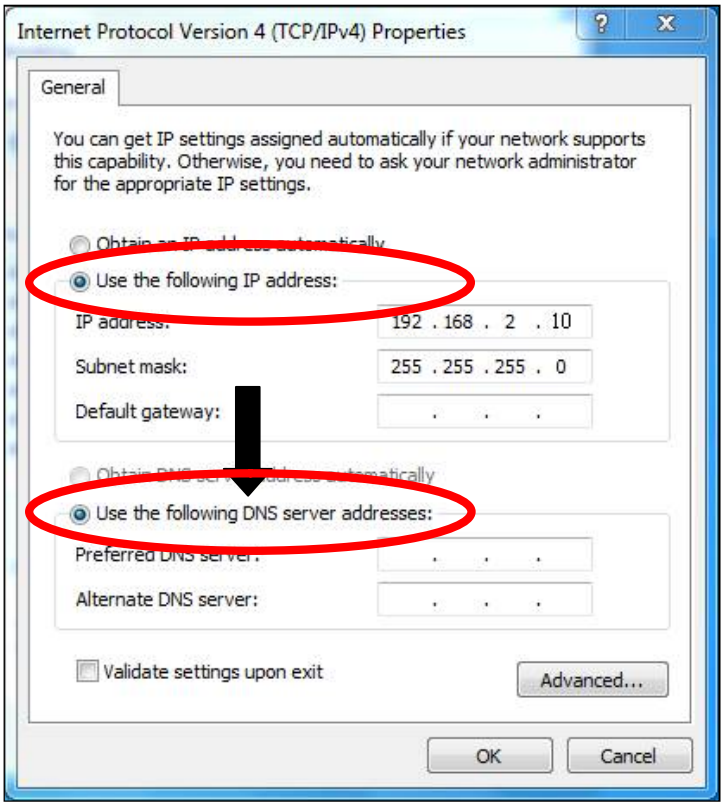
4. Click “Properties”.



5. Select “Internet Protocol Version 4 (TCP/IPv4) and then click “Properties”.

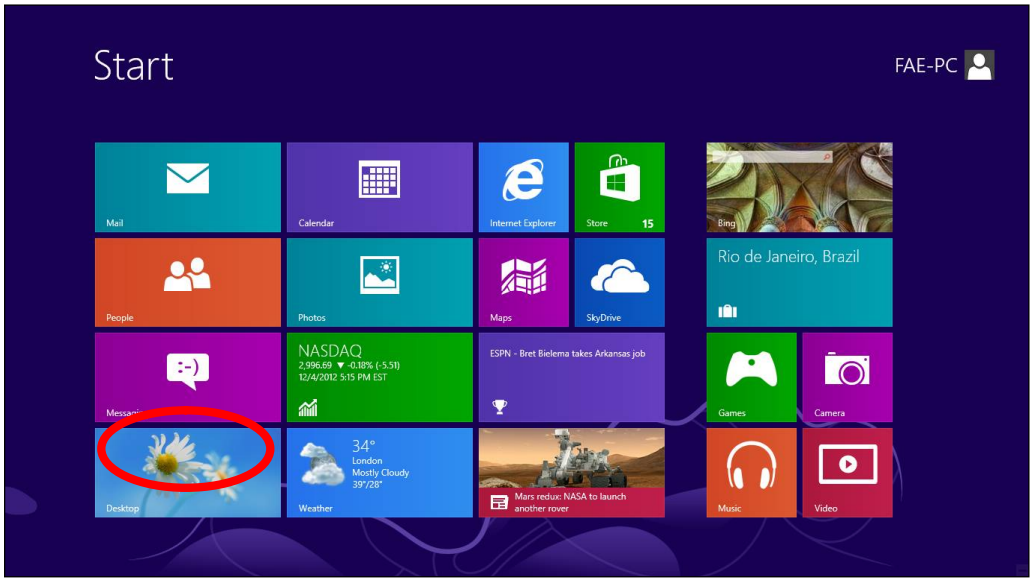


6. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

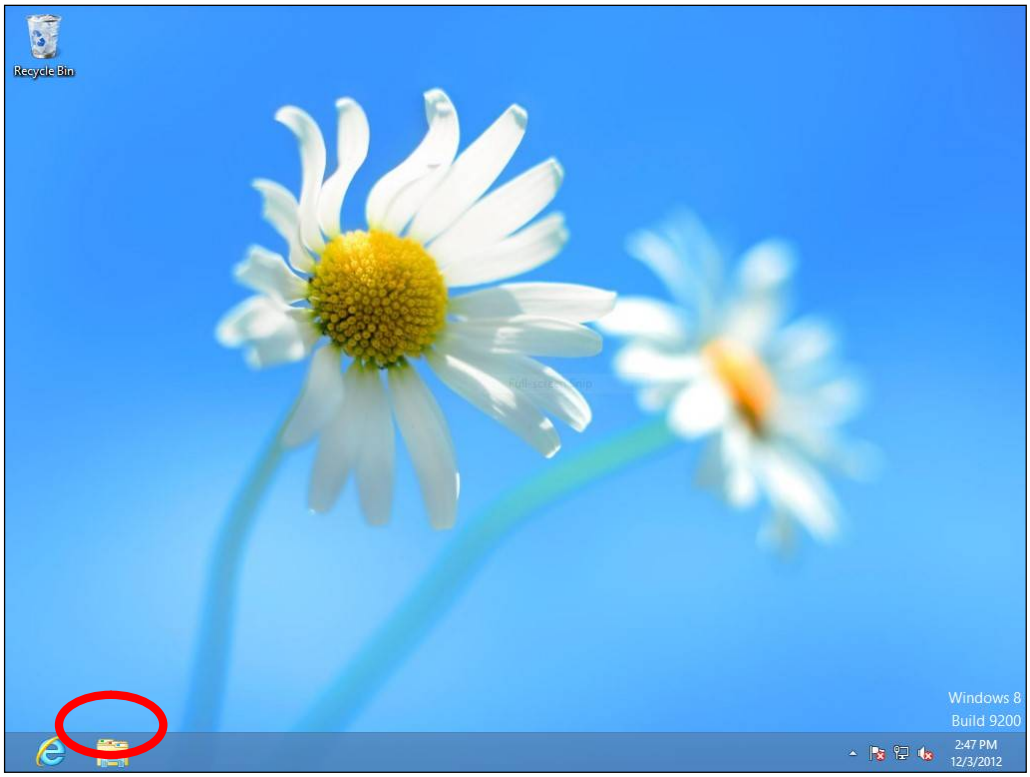


IV-1-1-4. Windows 8

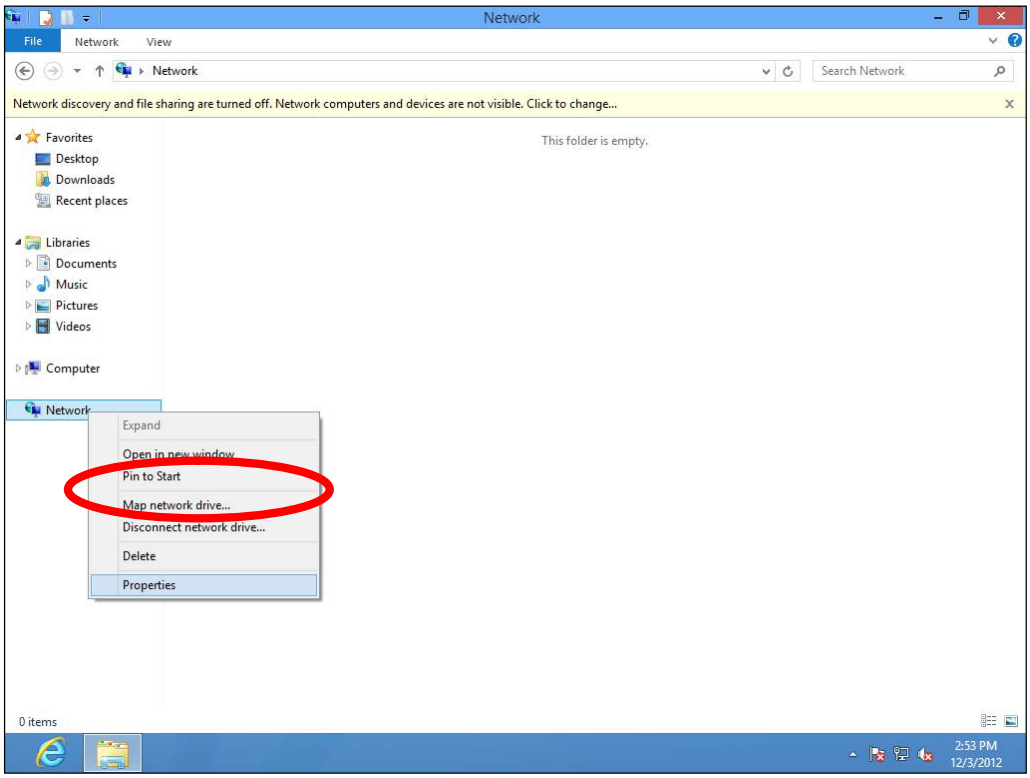
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



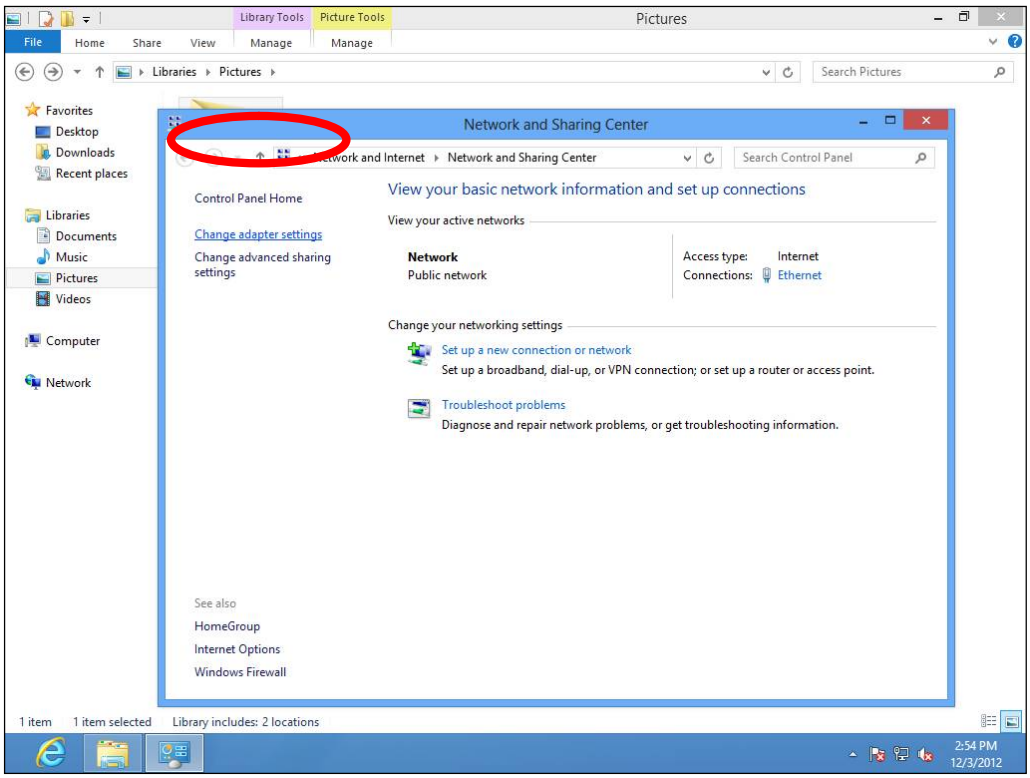
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



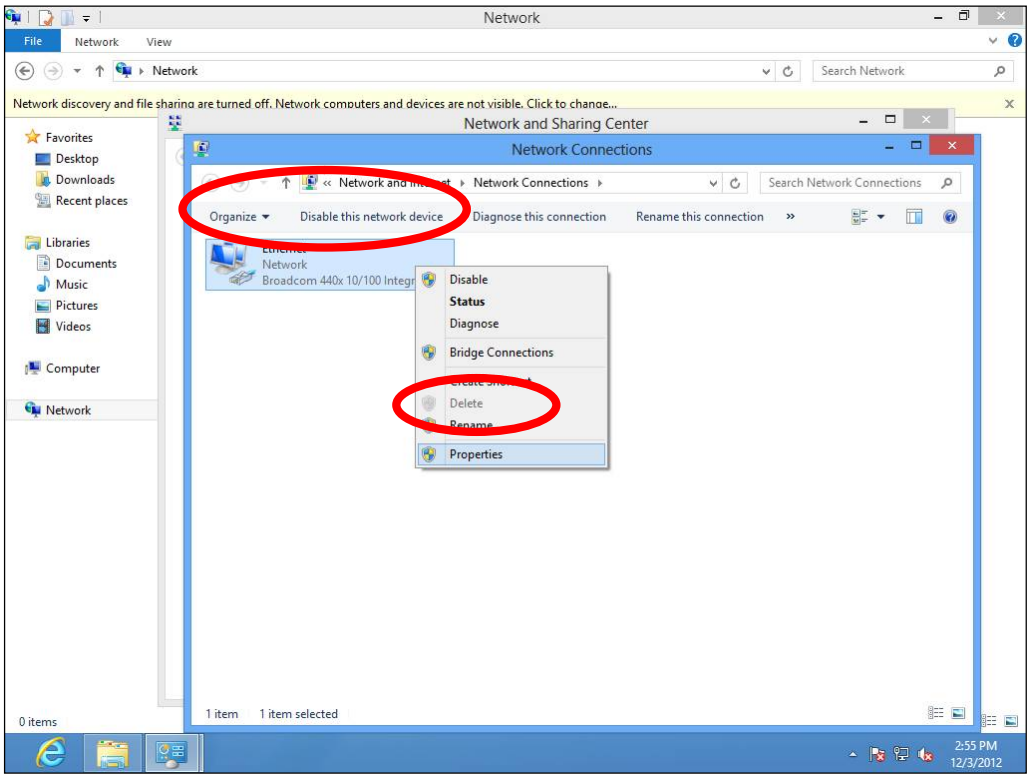
3. Right click “Network” and then select “Properties”.



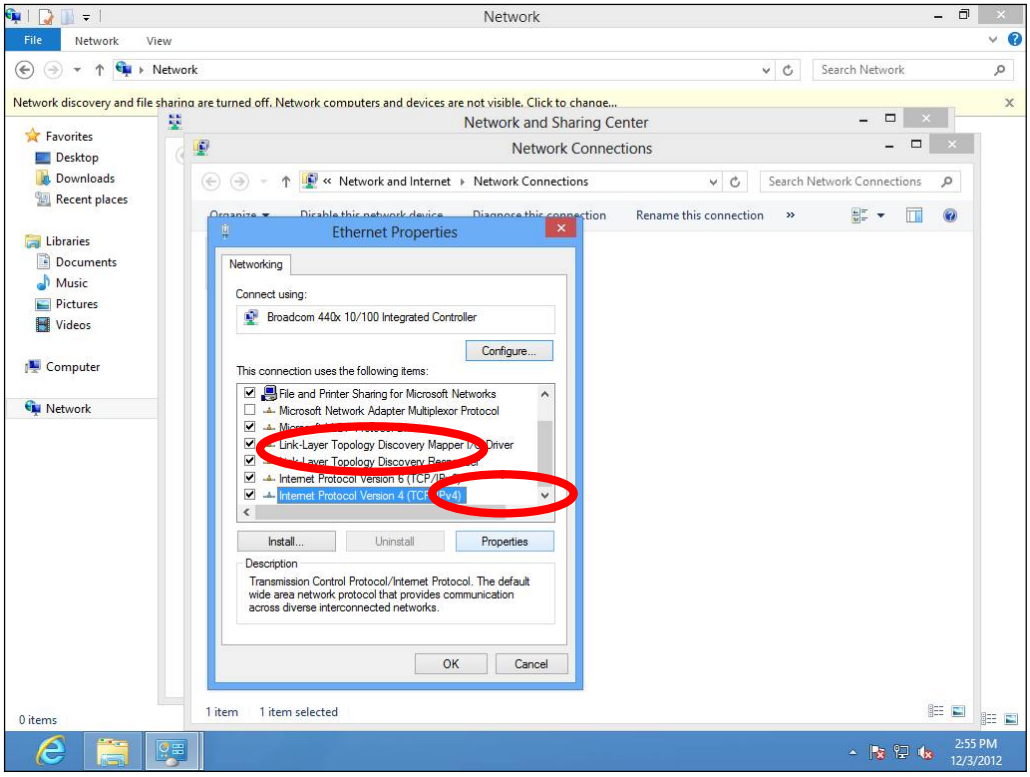
4. In the window that opens, select “Change adapter settings” from the left side.



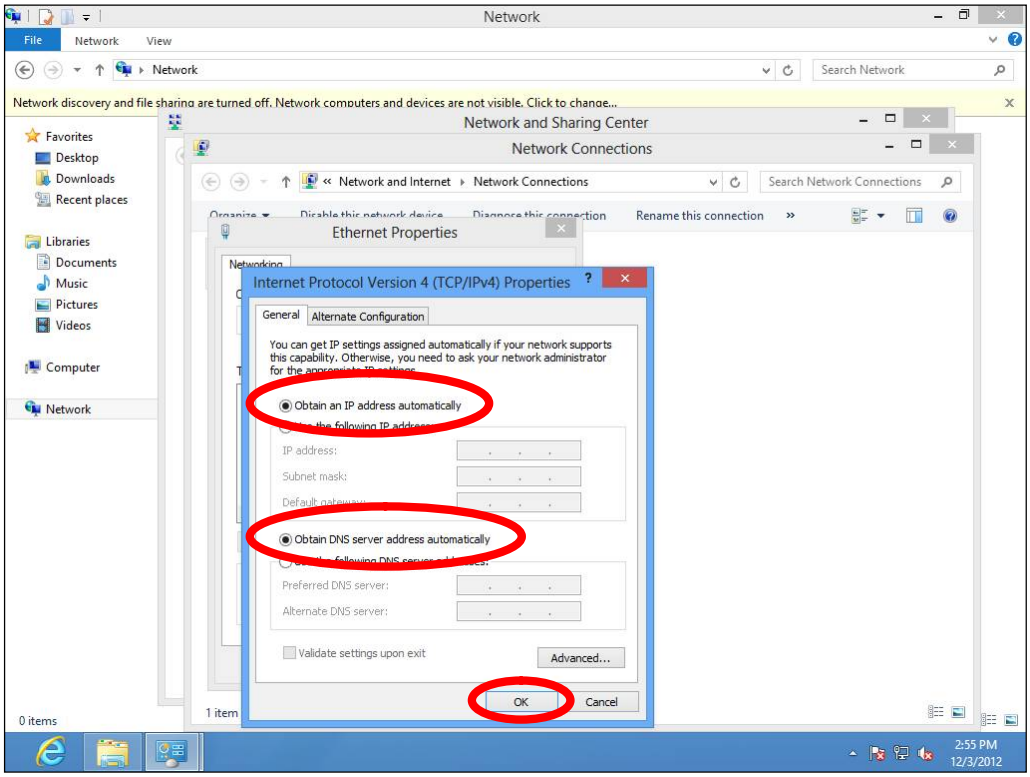
5. Choose your connection and right click, then select “Properties”.



6. Select “Internet Protocol Version 4 (TCP/IPv4) and then click “Properties”.



7. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

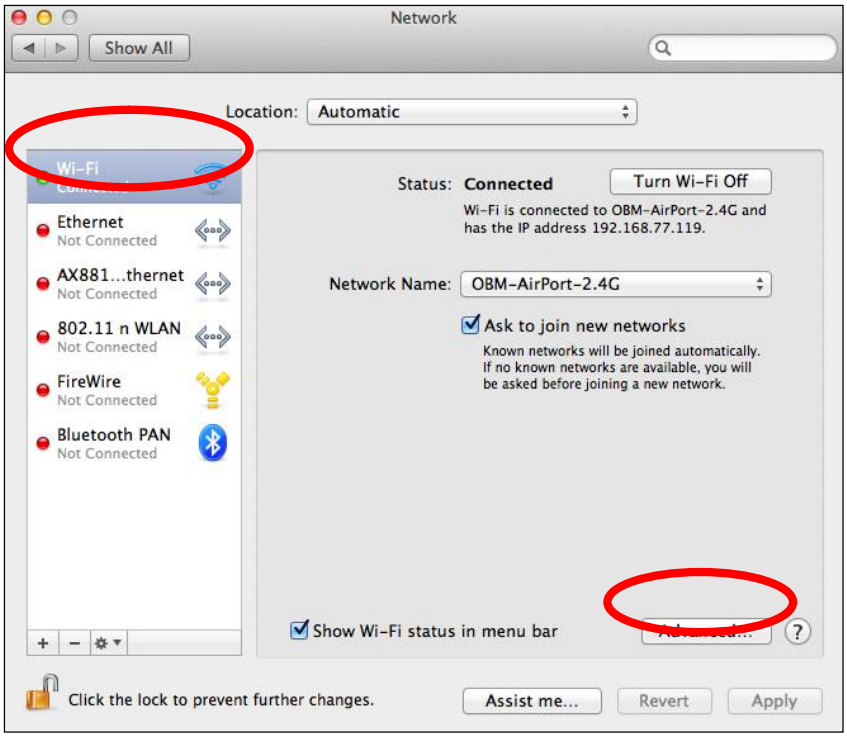

Network
File
Network
View
Network
Search Network
Network discovery and file sharing are turned off. Network computers and devices are not visible. Click to change...
Favorites
Desktop
Downloads
Recent places
Libraries
Documents
Music
Pictures
Videos
Computer
Network
0 items
Network and Sharing Center
Network Connections
Network and Internet
Network Connections
Search Network Connections
Rename this connection
Ethernet Properties
Networking
Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel
1 item
2:55 PM
12/3/2012

IV-1-1-5. Mac OS

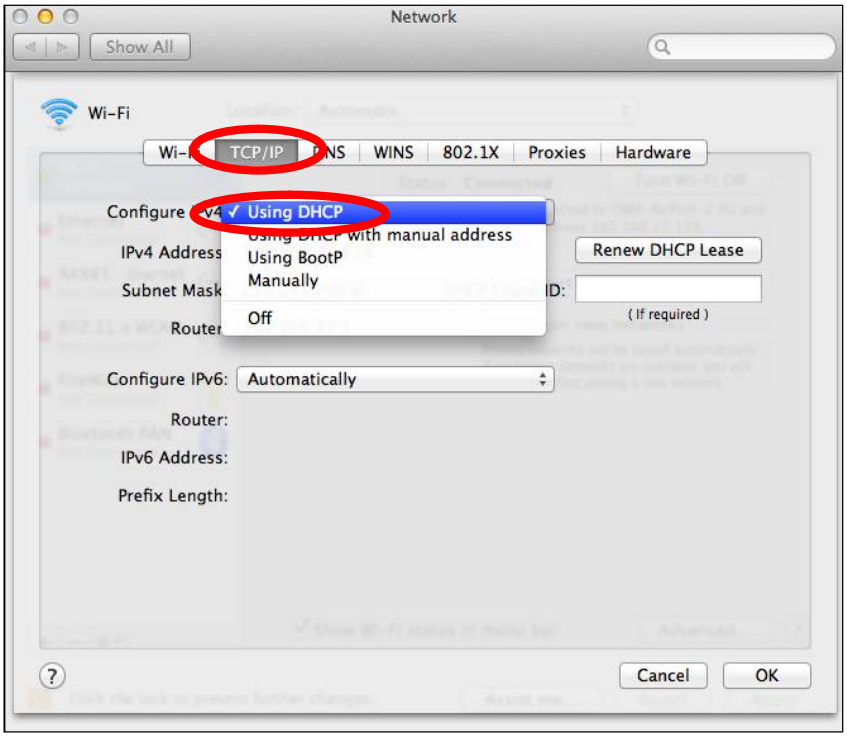
1. Have your Macintosh computer operate as usual, and click on “System Preferences”.

2. In System Preferences, click on “Network”.

3. Click on “Wi-Fi” in the left panel and then click “Advanced” in the lower right corner.



4. Select “TCP/IP” from the top menu and “Using DHCP” in the drop down menu labeled “Configure IPv4” should be selected.


Network
Show All
Wi-Fi
TCP/IP
DNS
WINS
802.1X
Proxies
Hardware
Using DHCP
Using BootP
Manually
Off
Renew DHCP Lease
(If required)
Configure IPv6:
Automatically
Router:
IPv6 Address:
Prefix Length:
Cancel
OK

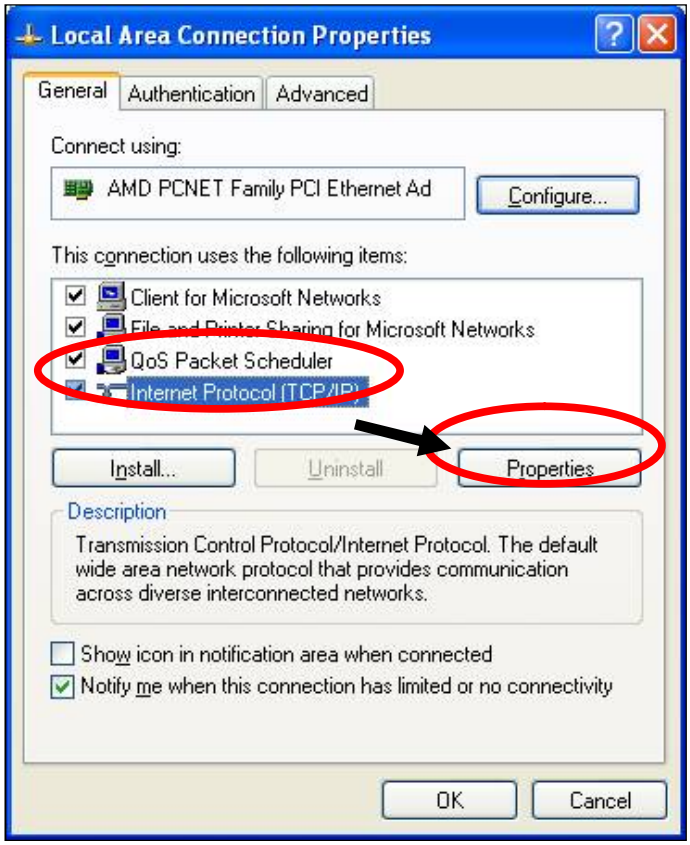
IV-1-2. How to modify the IP address of your computer

Please follow the instructions appropriate for your operating system. In the following examples we use the IP address **192.168.2.10** though you can use any IP address in the range **192.168.2.x (x = 3 – 254)** in order to access iQ Setup/browser based configuration interface.

Please make a note of your static IP before you change it.

IV-1-2-1. Windows XP

1. Click the "Start" button (it should be located in the lower-left corner of your computer), then click "Control Panel". Double-click the "Network and Internet Connections" icon, click "Network Connections", and then double-click "Local Area Connection". The "Local Area Connection Status" window will then appear, click "Properties".



2. Select "Use the following IP address" and "Use the following DNS server addresses", then input the following values:

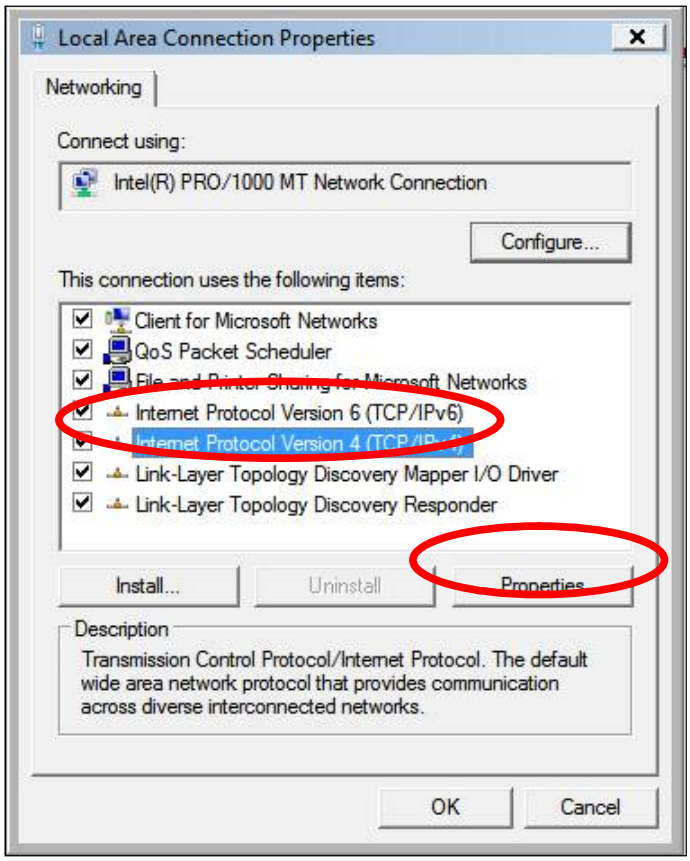
Your existing static IP address will be displayed in the "IP address" field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

IP address: 192.168.2.10
Subnet Mask: 255.255.255.0
Preferred DNS Server: 192.168.2.1

Click 'OK' when finished.

IV-1-2-2. Windows Vista

1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”. Click “View Network Status and Tasks”, then click “Manage Network Connections”. Right-click “Local Area Network”, then select “Properties”. The “Local Area Connection Properties” window will then appear, select “Internet Protocol Version 4 (TCP / IPv4)”, and then click “Properties”.



2. Select “Use the following IP address” and “Use the following DNS server addresses”, then input the following values:

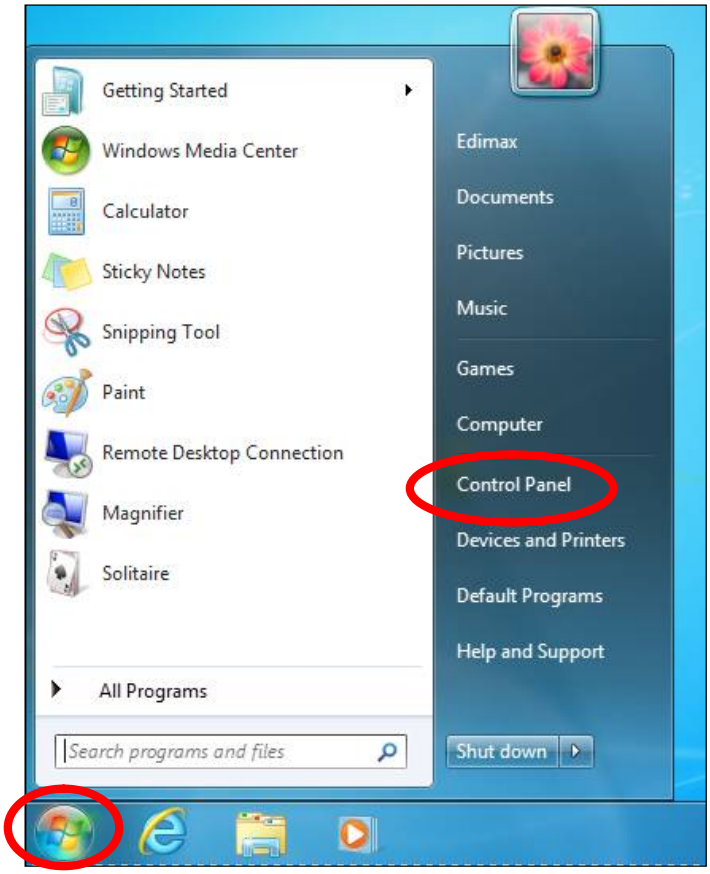
Your existing static IP address will be displayed in the “IP address” field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

IP address: 192.168.2.10
Subnet Mask: 255.255.255.0
Preferred DNS Server: 192.168.2.1

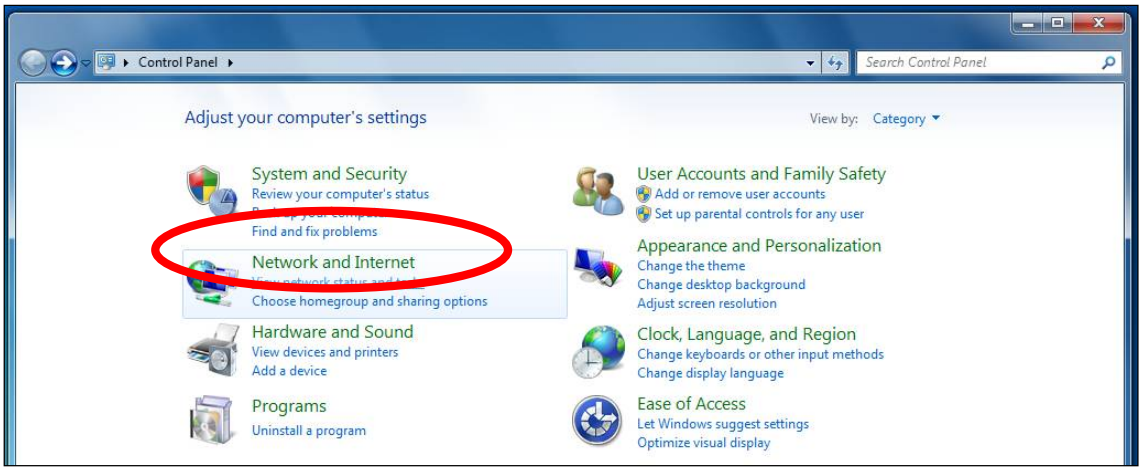
Click ‘OK’ when finished.

IV-1-2-3. Windows 7

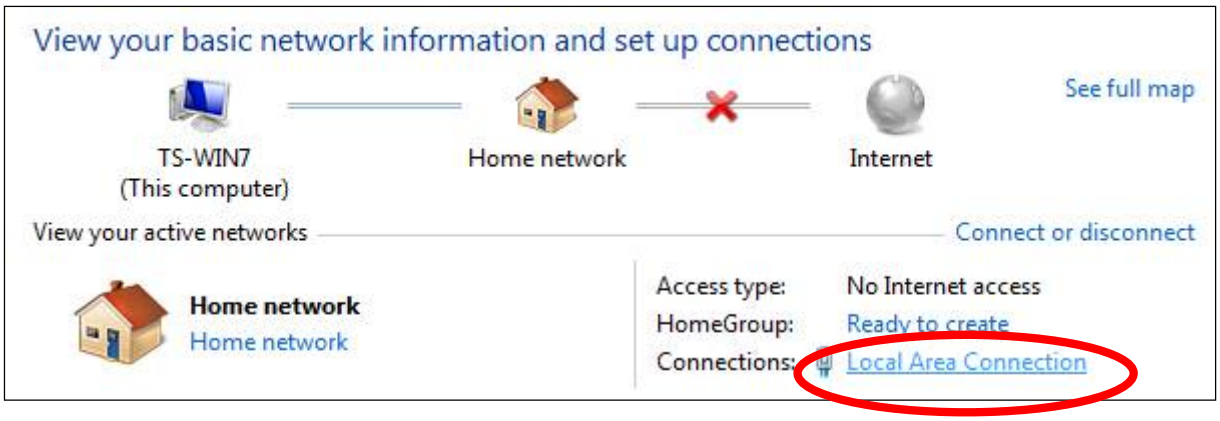
1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”.



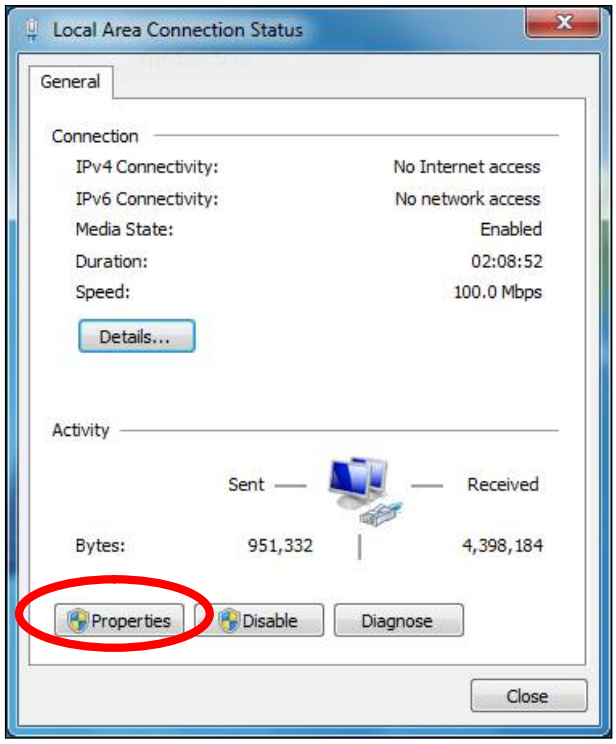
2. Under “Network and Internet” click “View network status and tasks”.



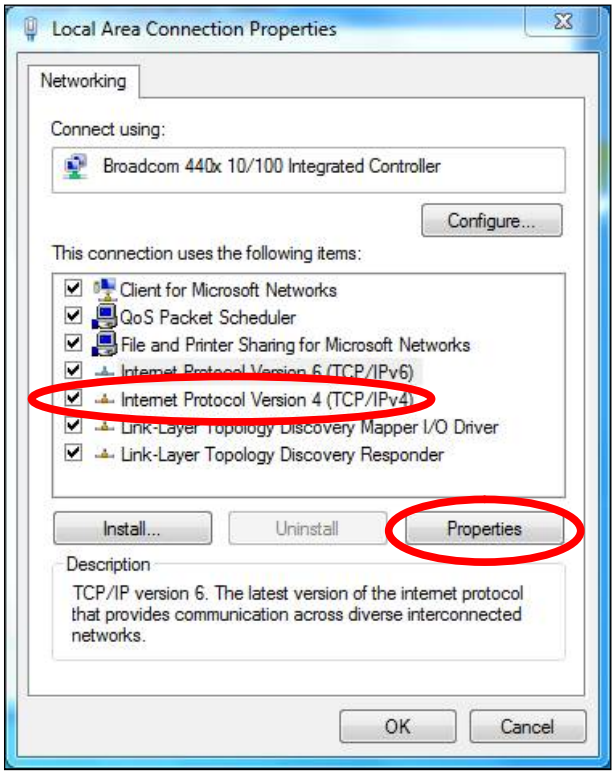
3.Click “Local Area Connection”.



4. Click “Properties”.



5. Select “Internet Protocol Version 4 (TCP/IPv4) and then click “Properties”.



6. Select “Use the following IP address” and “Use the following DNS server addresses”, then input the following values:

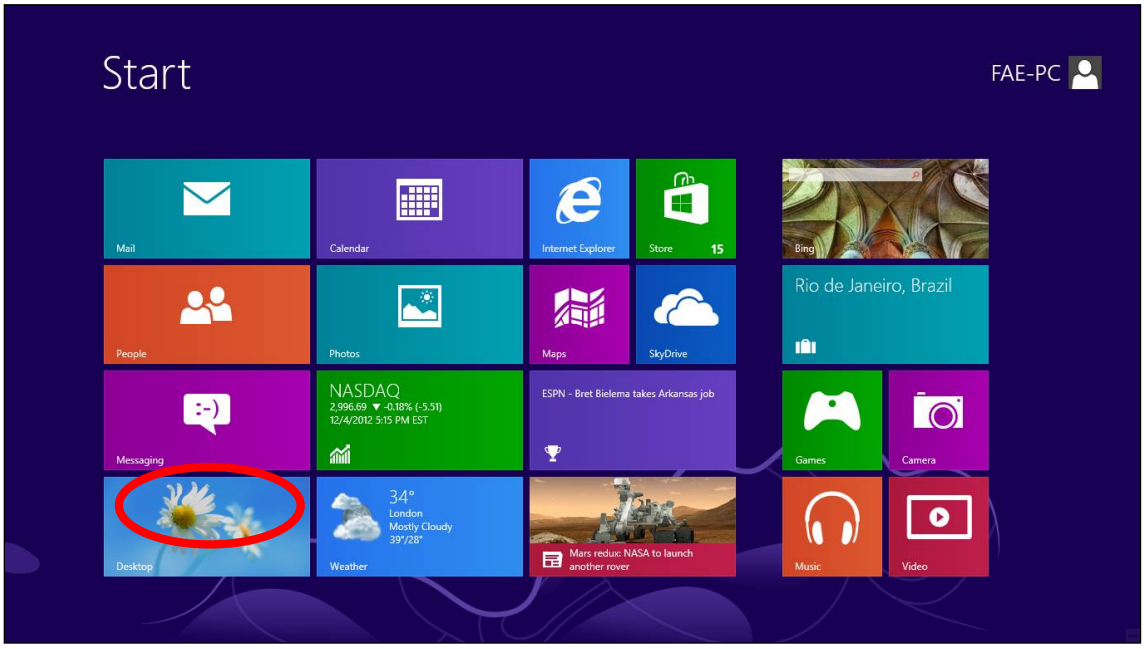
Your existing static IP address will be displayed in the “IP address” field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

IP address: 192.168.2.10
Subnet Mask: 255.255.255.0
Preferred DNS Server: 192.168.2.1

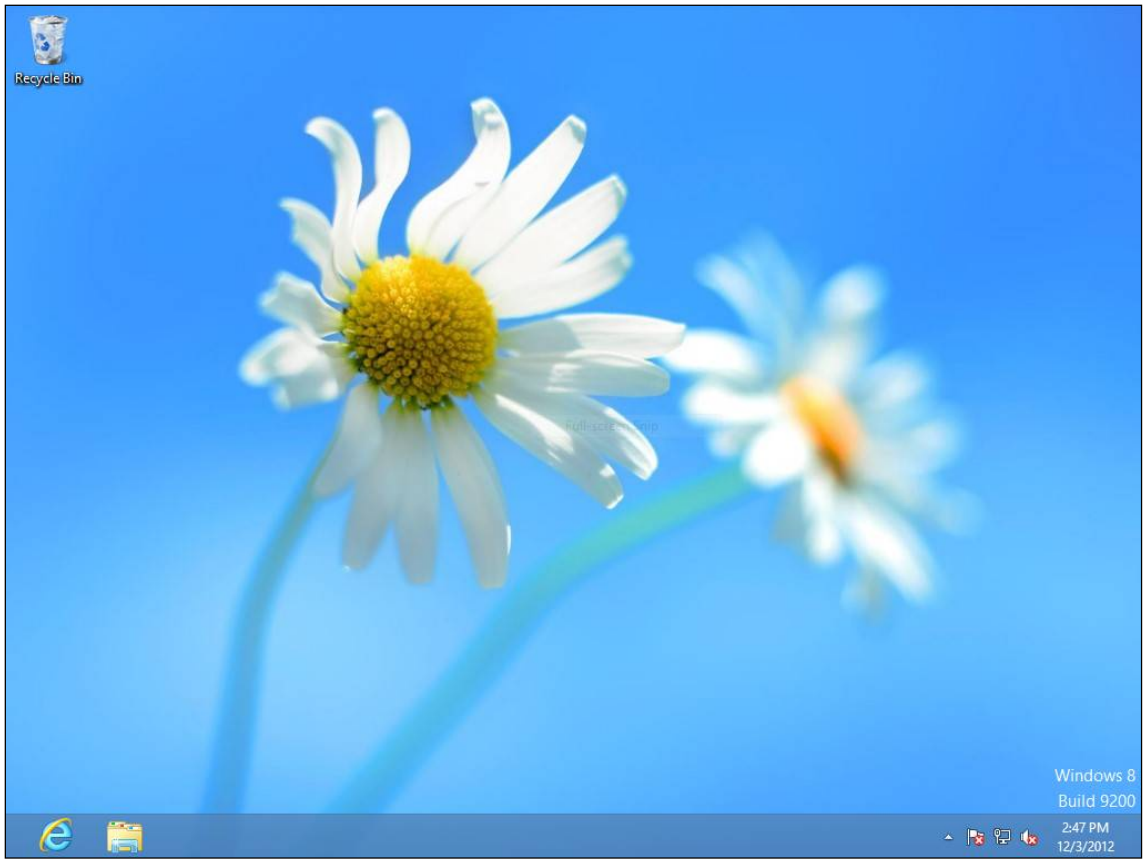
Click ‘OK’ when finished.

IV-1-2-4. Windows 8

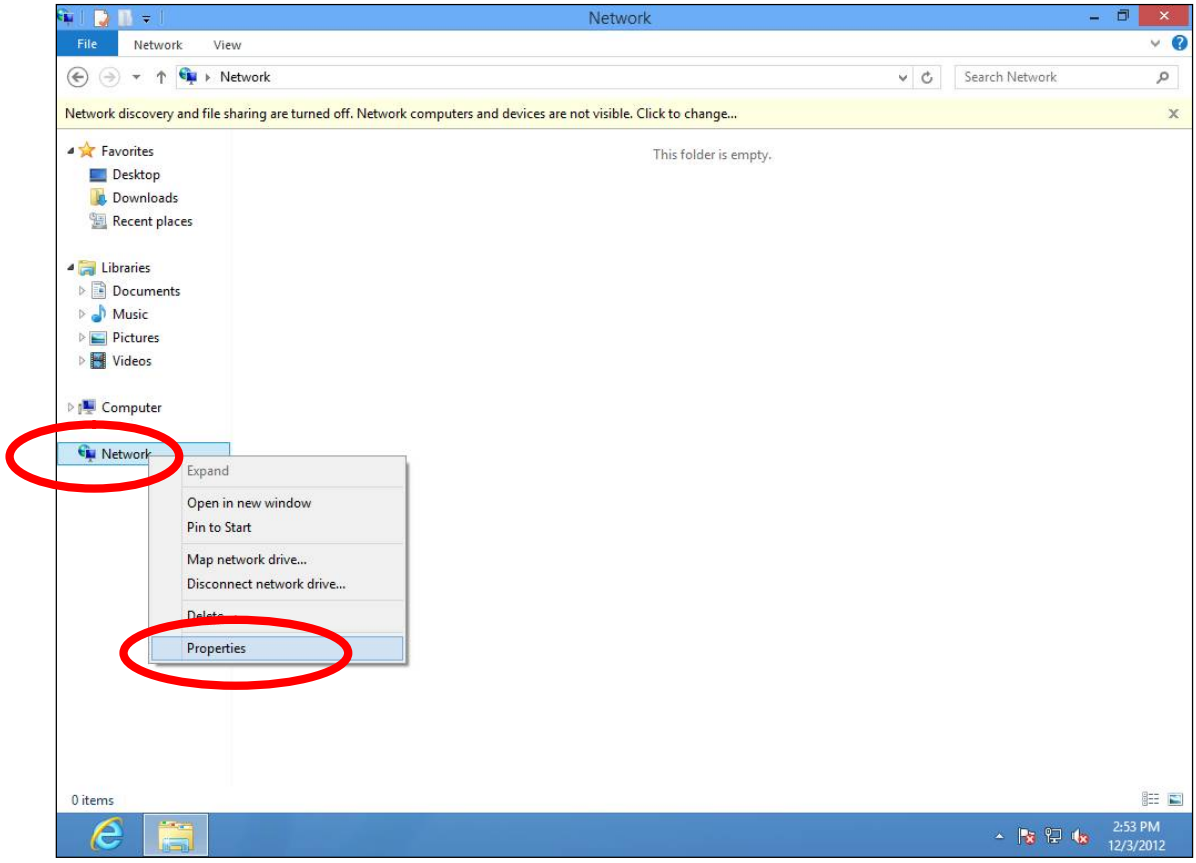
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



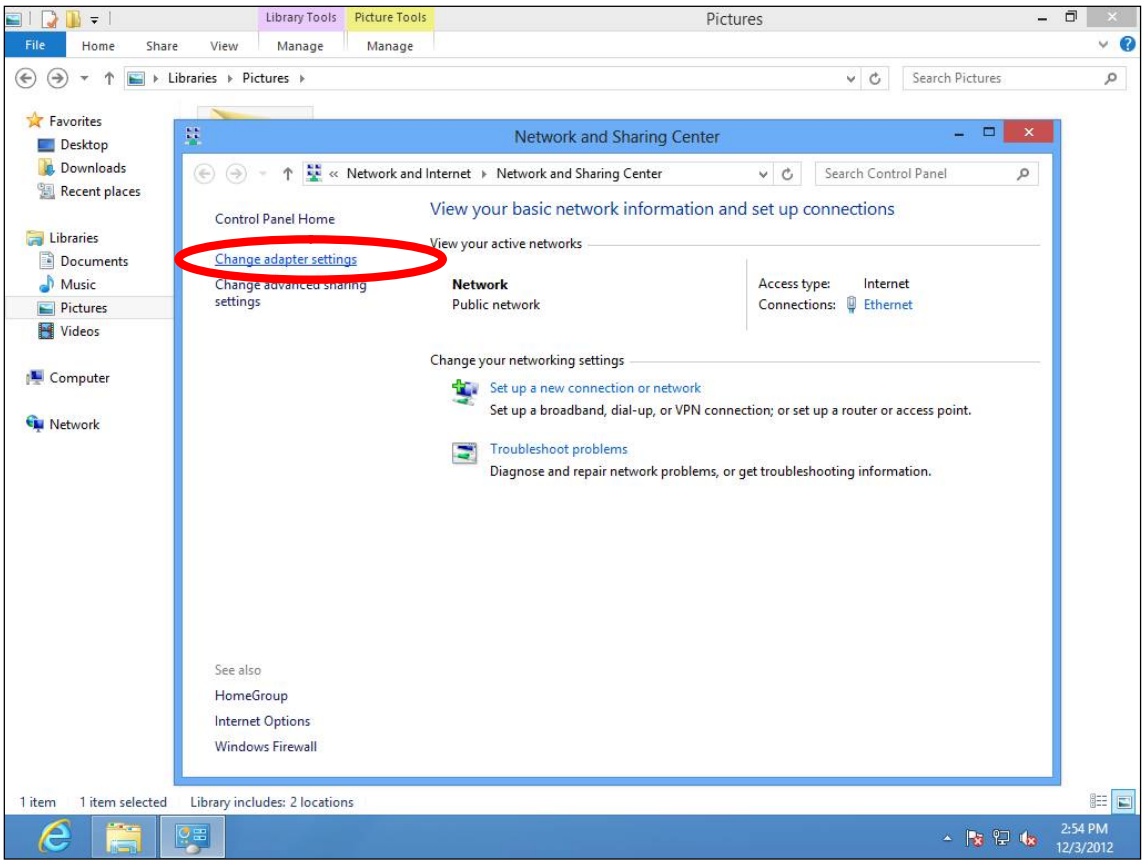
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



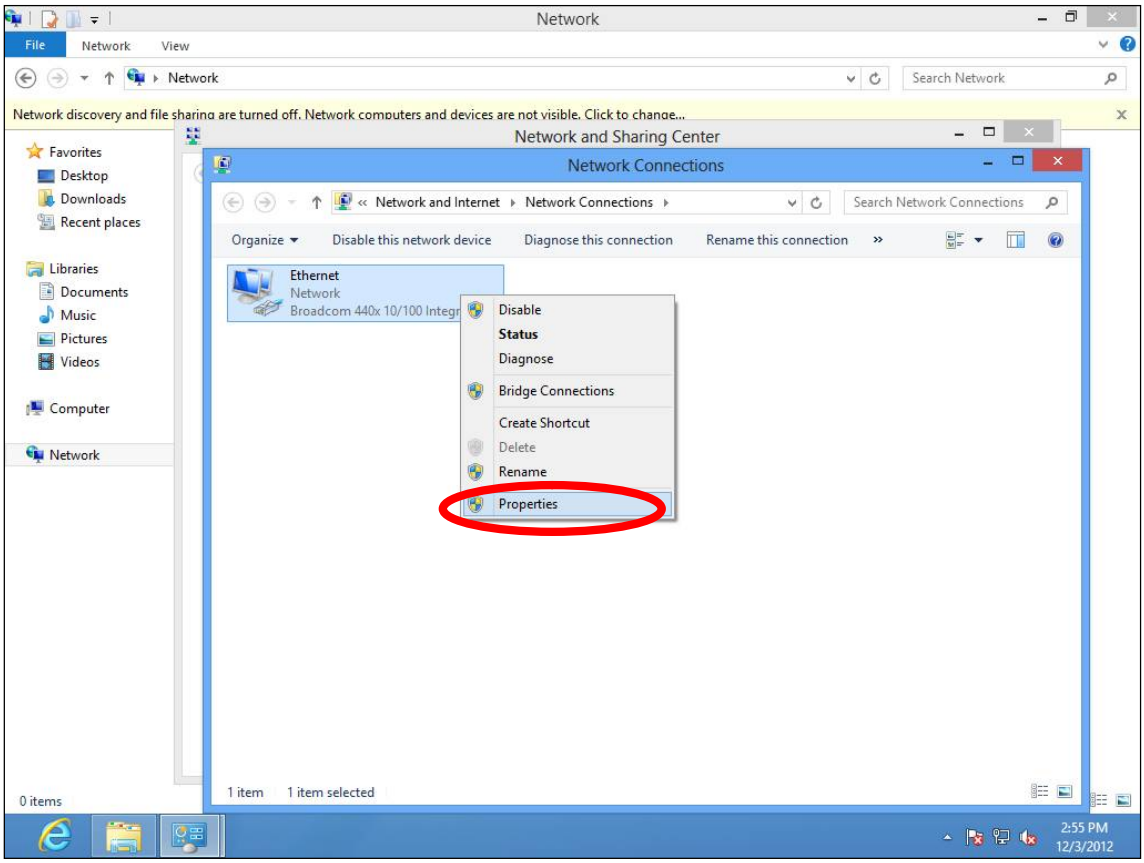
3. Right click “Network” and then select “Properties”.



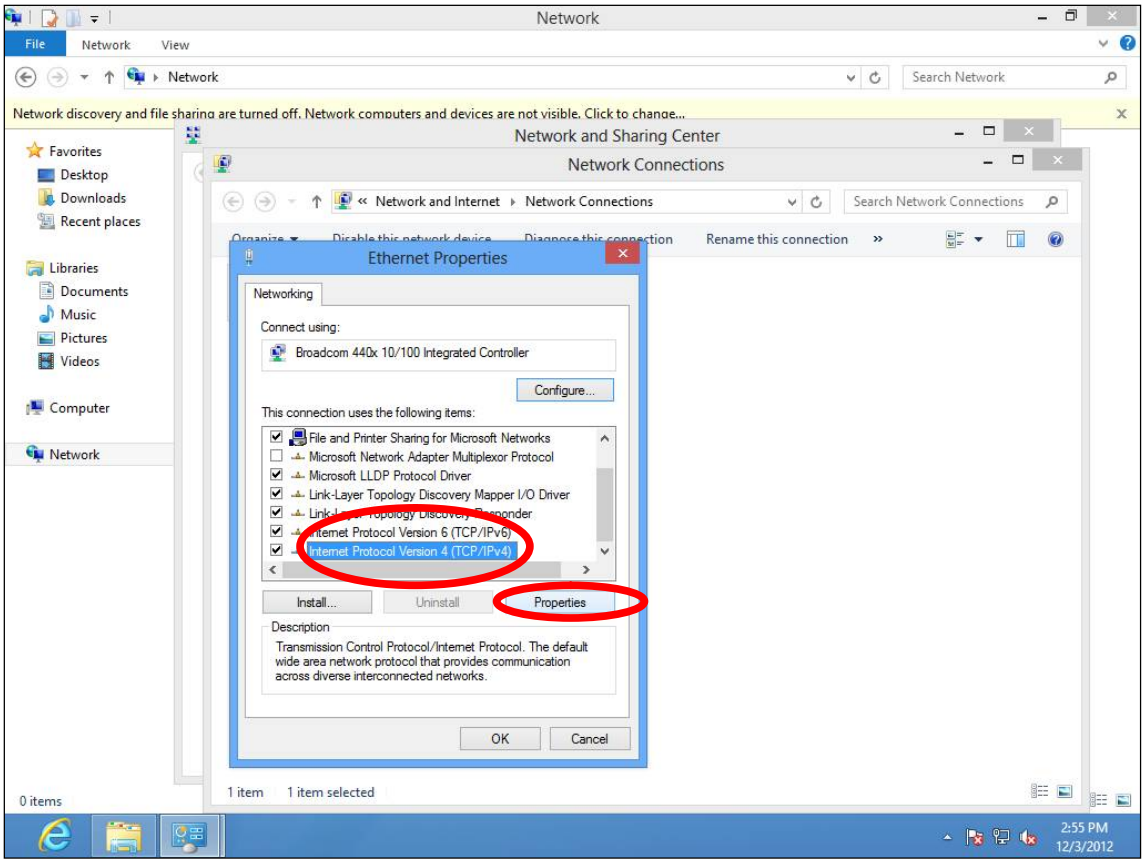
4. In the window that opens, select “Change adapter settings” from the left side.



5. Choose your connection and right click, then select “Properties”.



6. Select “Internet Protocol Version 4 (TCP/IPv4) and then click “Properties”.



7. Select “Use the following IP address” and “Use the following DNS server addresses”, then input the following values:

Your existing static IP address will be displayed in the “IP address” field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

IP address: 192.168.2.10
Subnet Mask: 255.255.255.0
Preferred DNS Server: 192.168.2.1

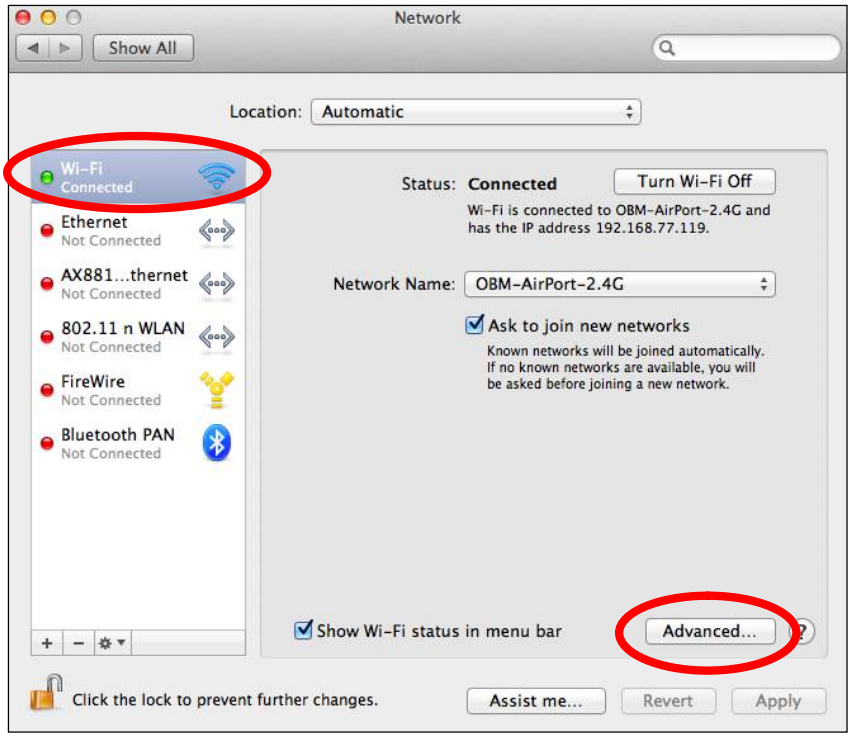
Click ‘OK’ when finished.

IV-1-2-5. Mac

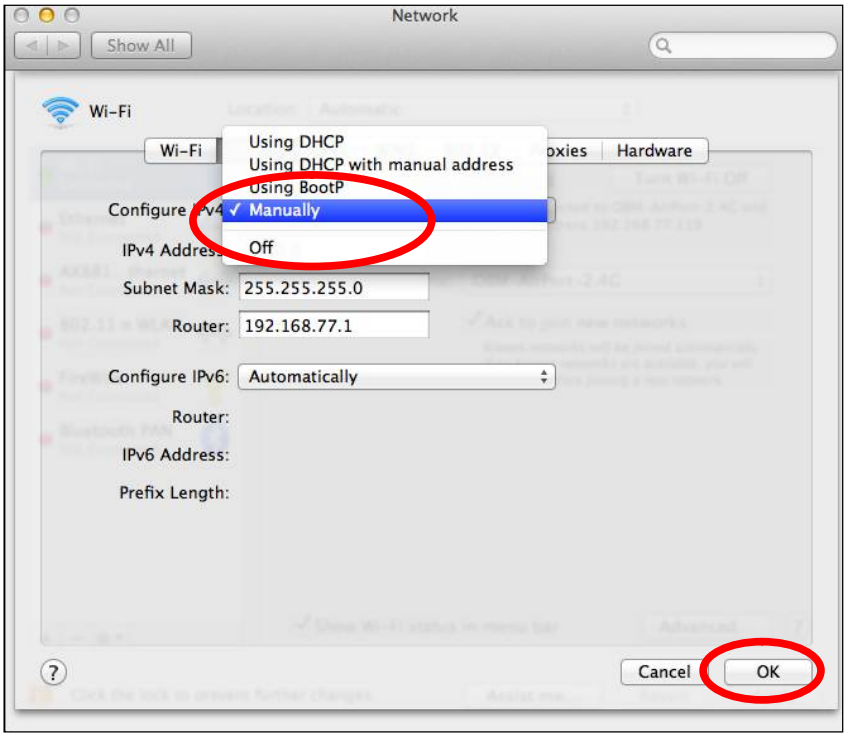
1. Have your Macintosh computer operate as usual, and click on “System Preferences”

2. In System Preferences, click on “Network”.

3. Click on “Wi-Fi” in the left panel and then click “Advanced” in the lower right corner.

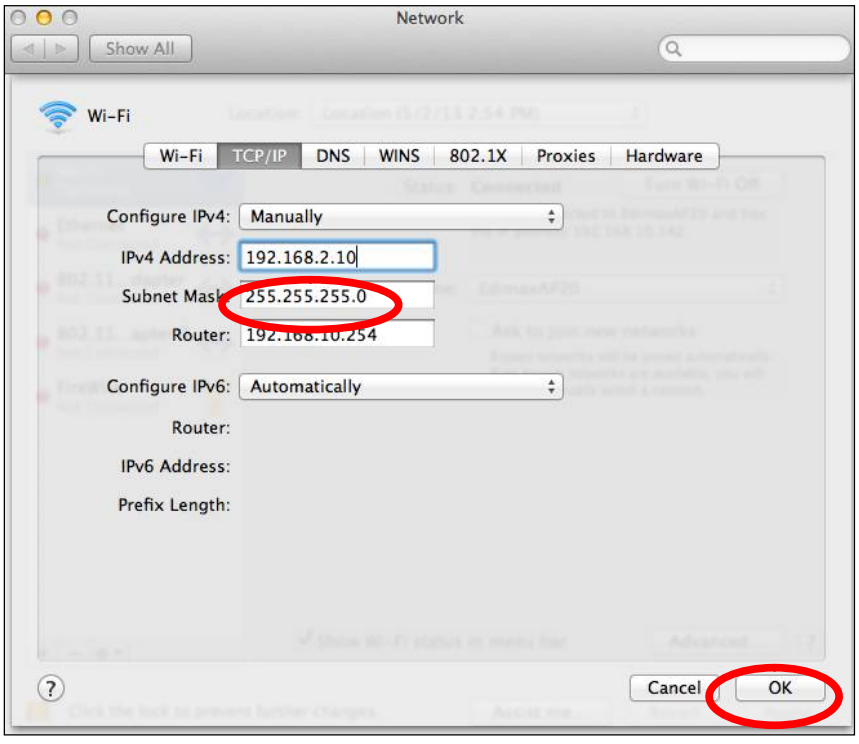


4. Select “TCP/IP” from the top menu and select “Manually” from the drop down menu labeled “Configure IPv4”, then click “OK”.

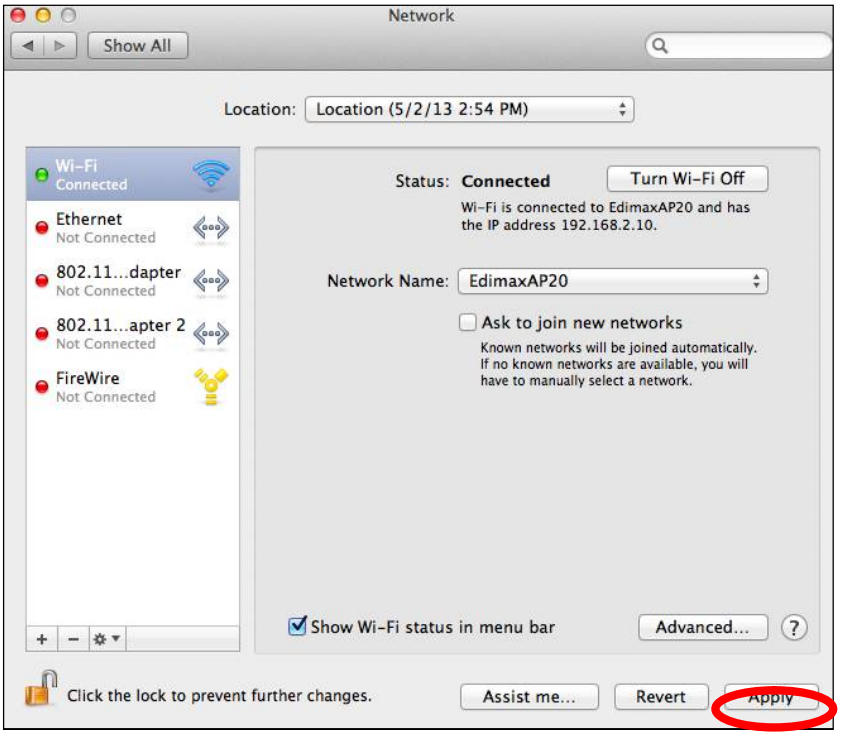


Your existing static IP address will be displayed in the "IP address" field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

5. In the "IPv4 Address" and "Subnet Mask" field enter IP address 192.168.2.10 and subnet mask 255.255.255.0. Click on "OK".



6. Click "Apply" to save the changes.


Network
Show All
Location: Location (5/2/13 2:54 PM)
Wi-Fi
Connected
Ethernet
Not Connected
802.11...dapter
Not Connected
802.11...apter 2
Not Connected
FireWire
Not Connected
Status: Connected
Turn Wi-Fi Off
Wi-Fi is connected to EdimaxAP20 and has the IP address 192.168.2.10.
Network Name: EdimaxAP20
Ask to join new networks
Known networks will be joined automatically. If no known networks are available, you will have to manually select a network.
Show Wi-Fi status in menu bar
Advanced...
Click the lock to prevent further changes.
Assist me...
Revert
Apply

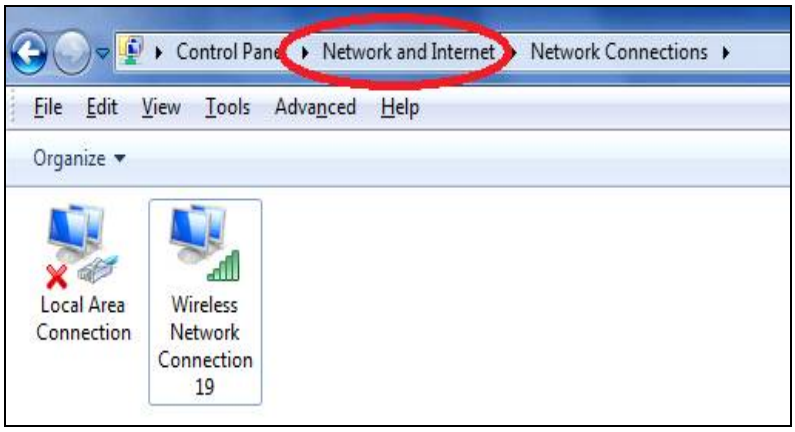
IV-1-3. How to Find Your Network Security Key

To find your network security key, please follow the instructions appropriate for your operating system.

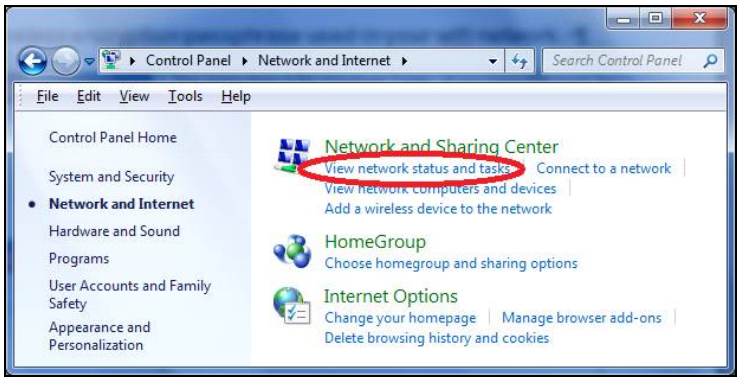
If you are using Windows XP or earlier, please contact your ISP or router manufacturer to find your network security key.

IV-1-3-1. Windows 7 & Vista

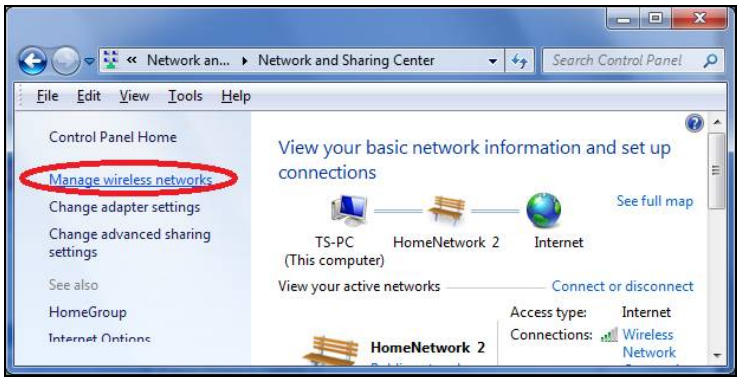
1. Open “Control Panel” and click on “Network and Internet” in the top menu.



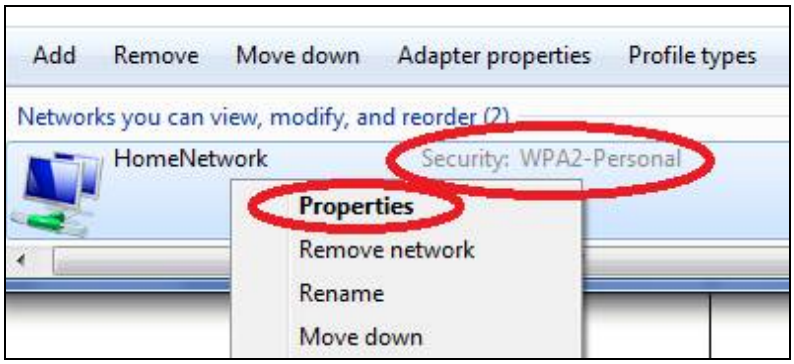
2. Click on “View network status and tasks” which is under the heading “Network and Sharing Center”.



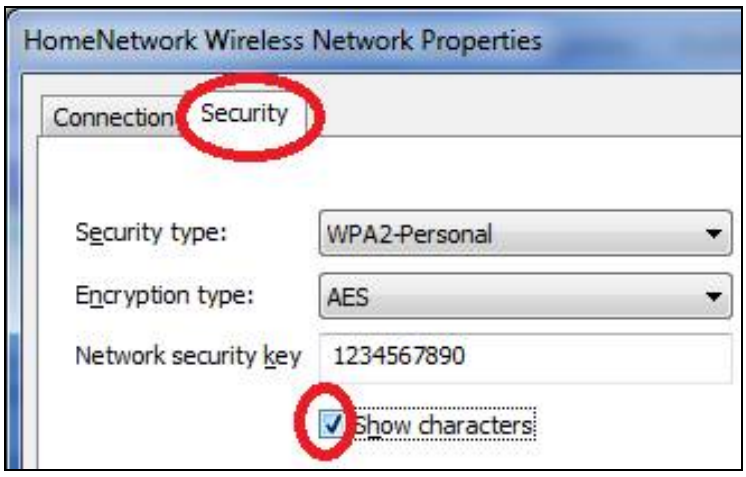
3. Click on “Manage wireless networks” in the left menu.



4. You should see the profile of your Wi-Fi network in the list. Right click on your Wi-Fi network and then click on “Properties”.

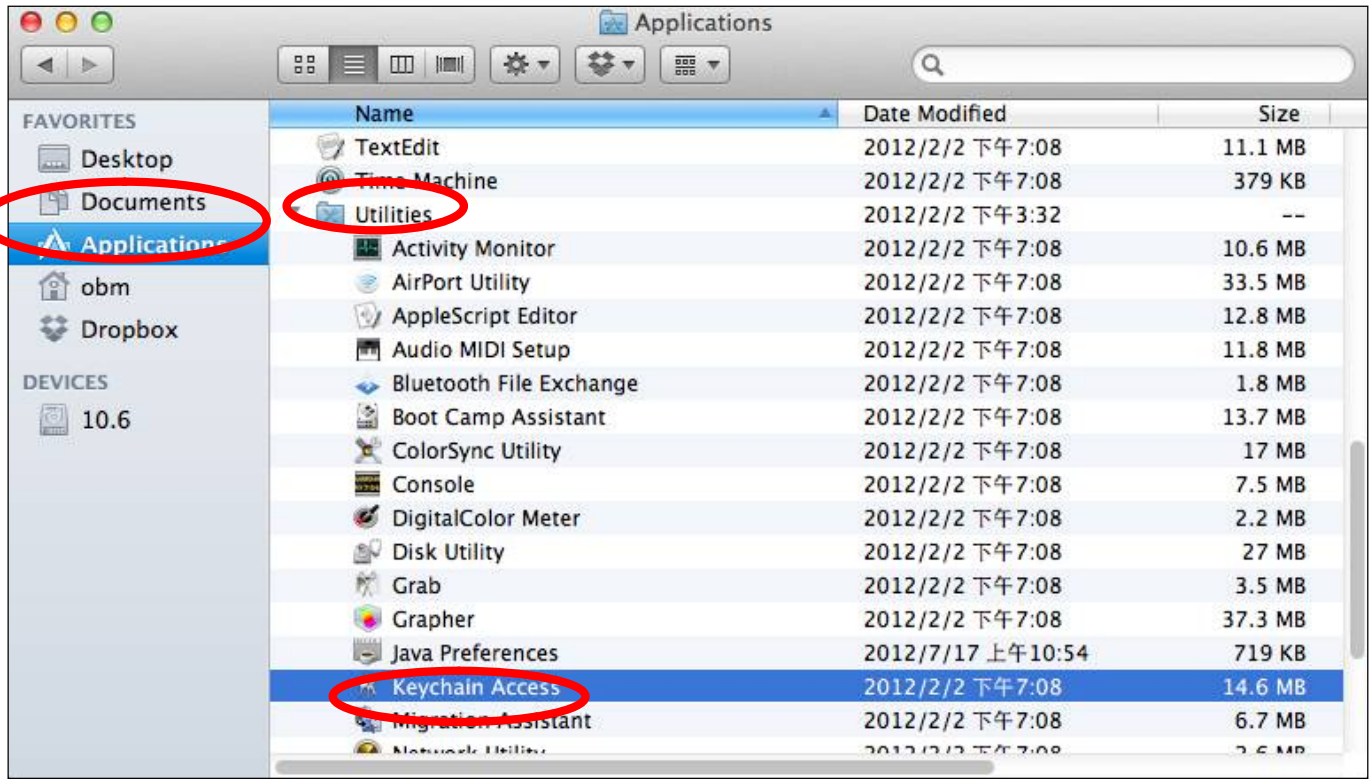


5. Click on the “Security” tab, and then check the box labeled “Show characters”. This will show your network security key. Click the “Cancel” button to close the window.

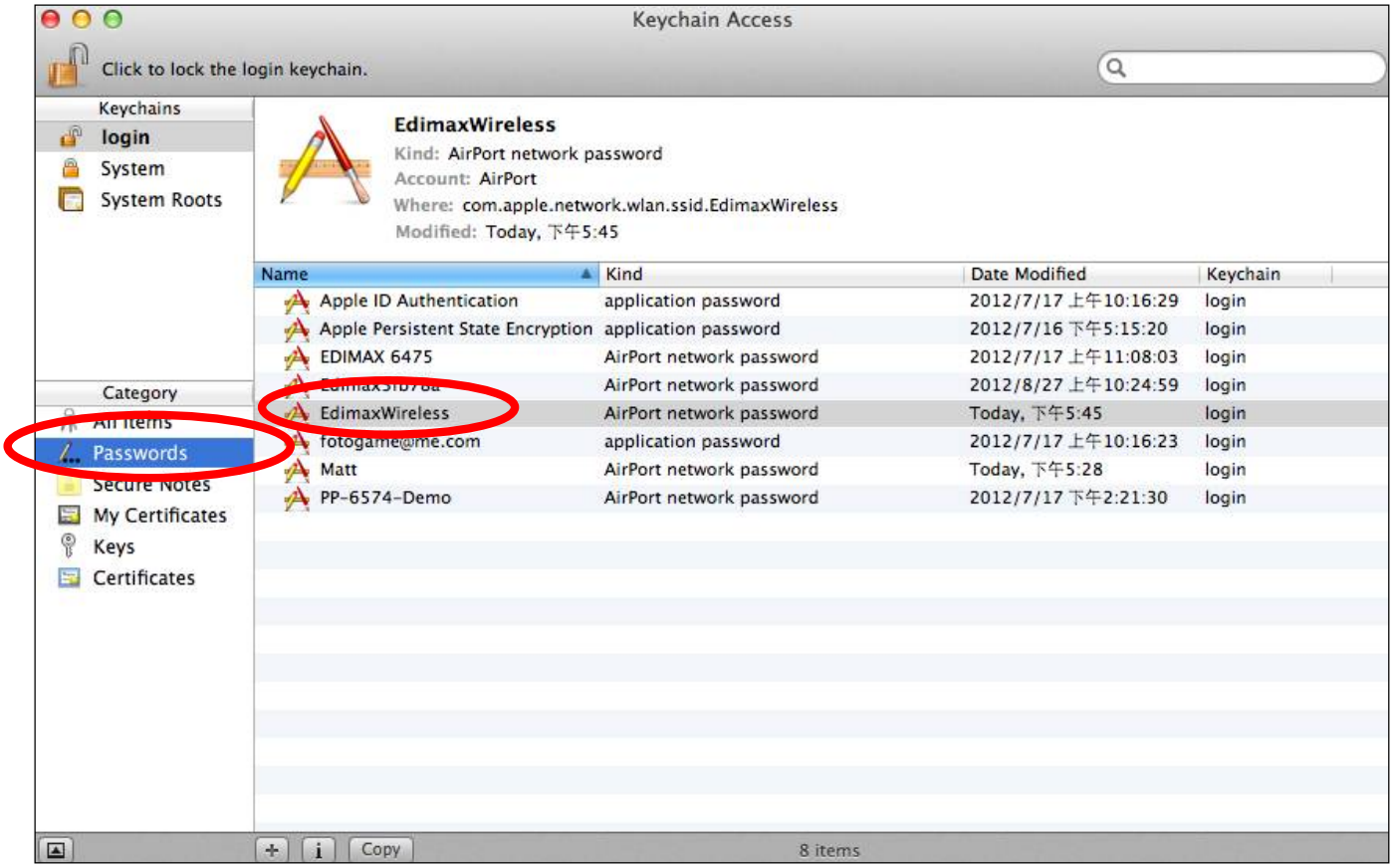


IV-1-3-2. Mac

1. Open a new Finder window, and select “Applications” from the menu on the left side. Open the folder labeled “Utilities” and then open the application “Keychain Access”.

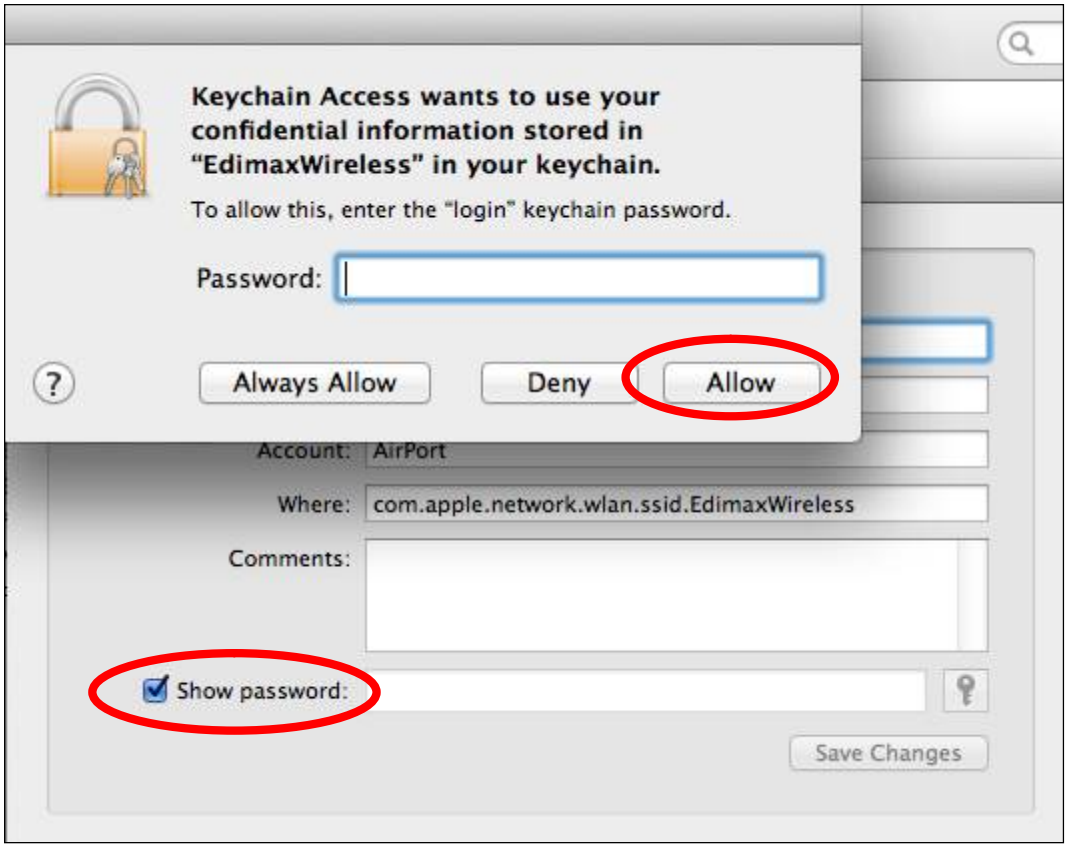


2. Select “Passwords” from the sub-menu labeled “Category” on the left side, as shown below. Then search the list in the main panel for the SSID of your network. In this example, the SSID is “EdimaxWireless” – though your SSID will be unique to your network.

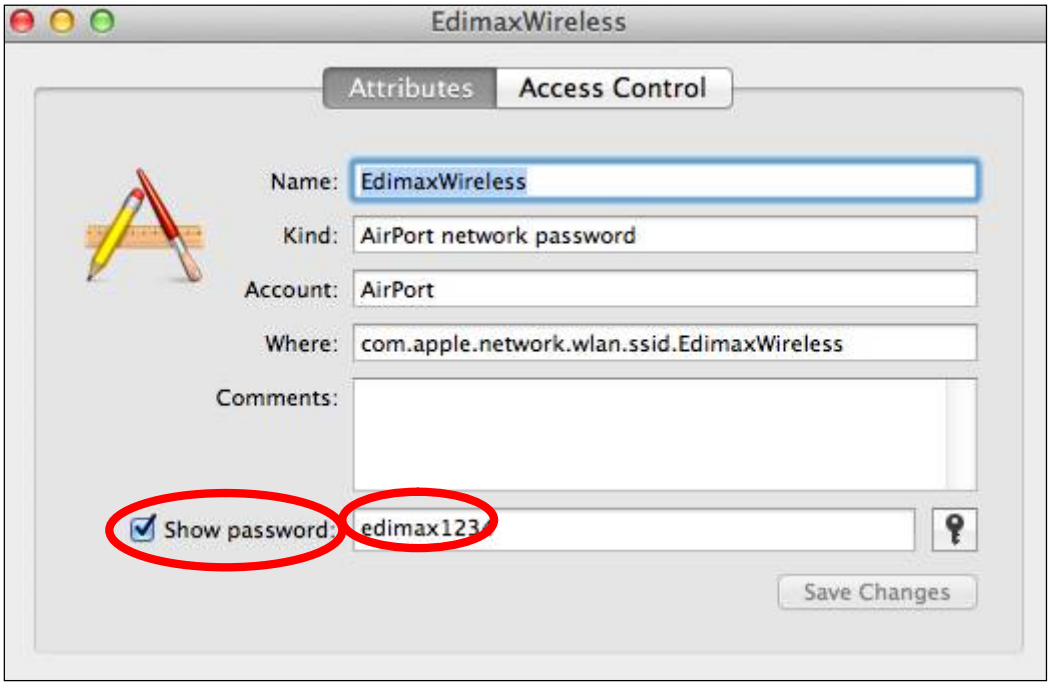


3. Double click the SSID of your network and you will see the following window.

4. Check the box labeled “Show password” and you will be asked to enter your administrative password, which you use to log into your Mac. Enter your password and click “Allow”.



Your network security password will now be displayed in the field next to the box labeled “Show password”. In the example below, the network security password is “edimax1234”. Please make a note of your network security password.

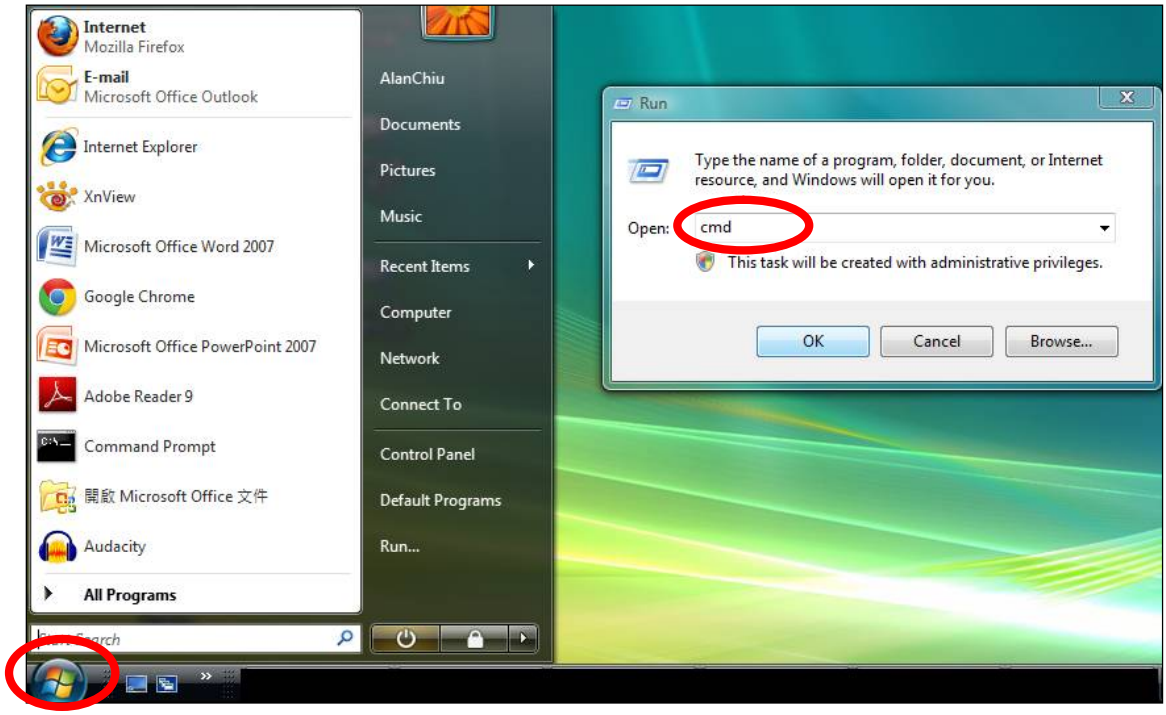


IV-1-4. How to Find Your Router's IP Address

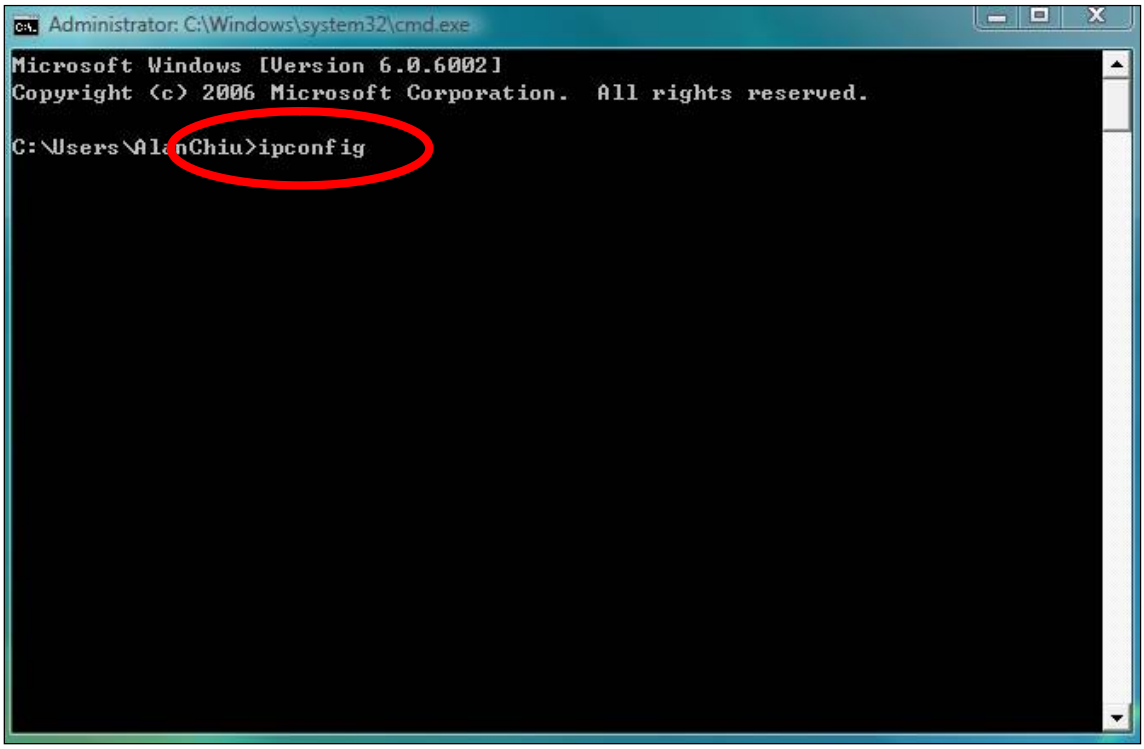
To find your router's IP address, please follow the instructions appropriate for your operating system.

IV-1-4-1. Windows XP, Vista & 7

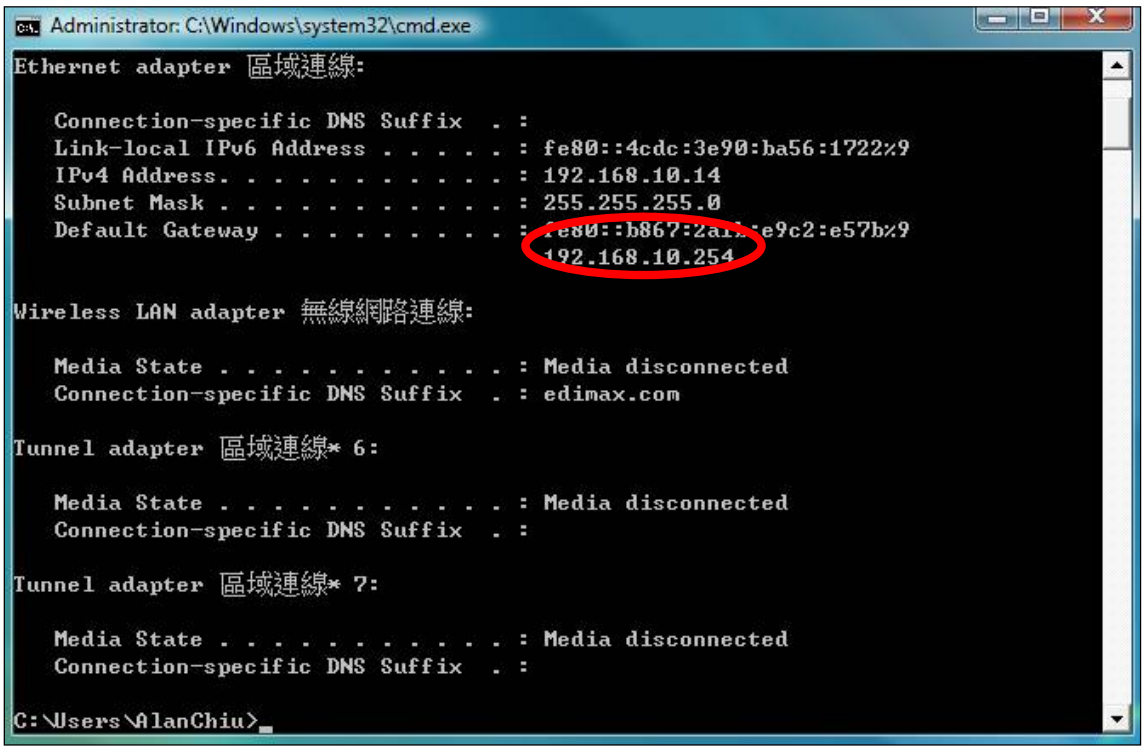
1. Go to "Start", select "Run" and type "cmd", then press Enter or click "OK".



2. A new window will open, type “ipconfig” and press Enter.



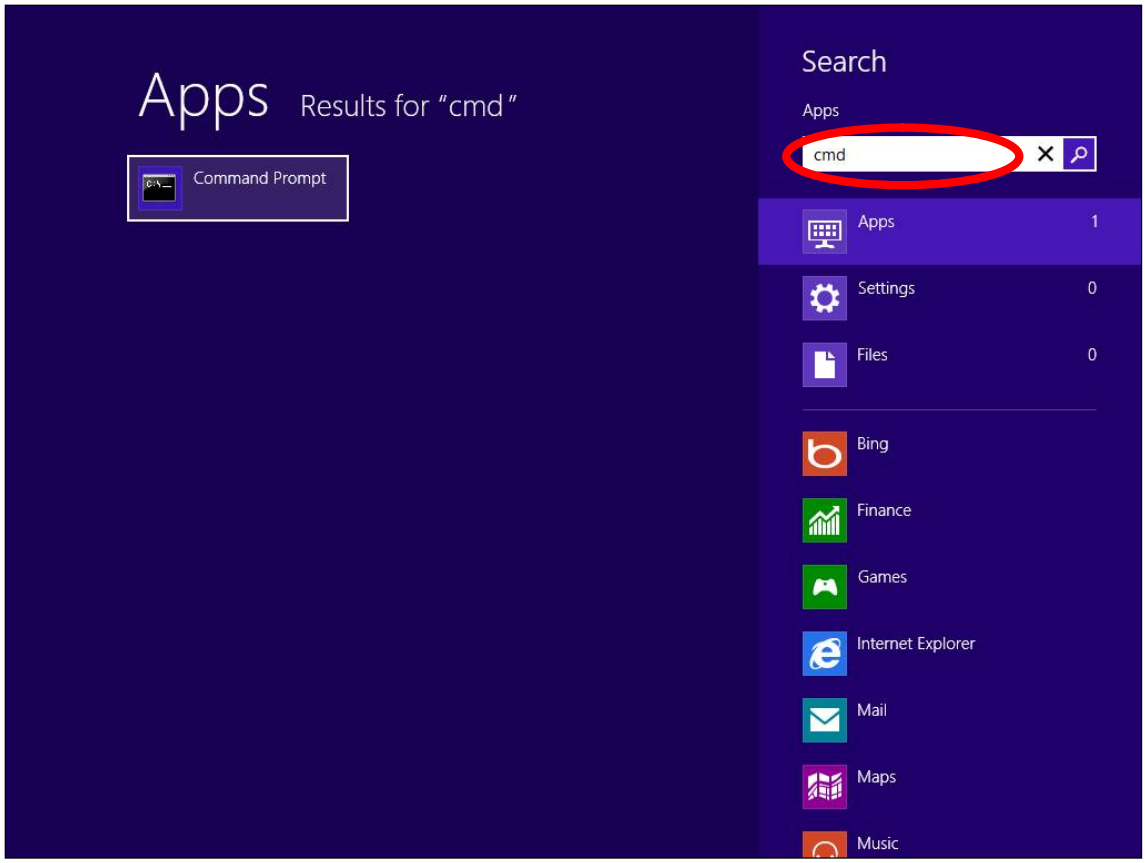
3. Your router’s IP address will be displayed next to “Default Gateway”.



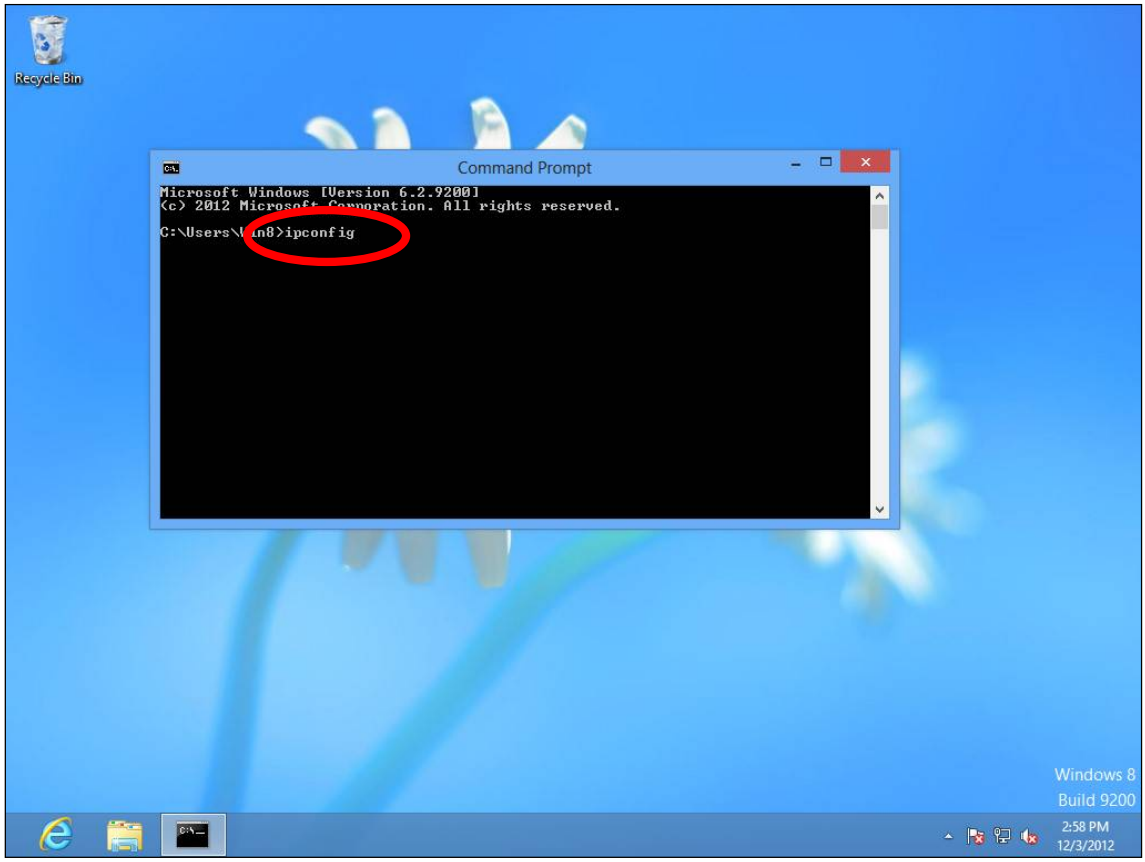
IV-1-4-2. Windows 8

1. From the Windows 8 Start screen, move your curser to the top right corner of the screen to display the Charms bar.

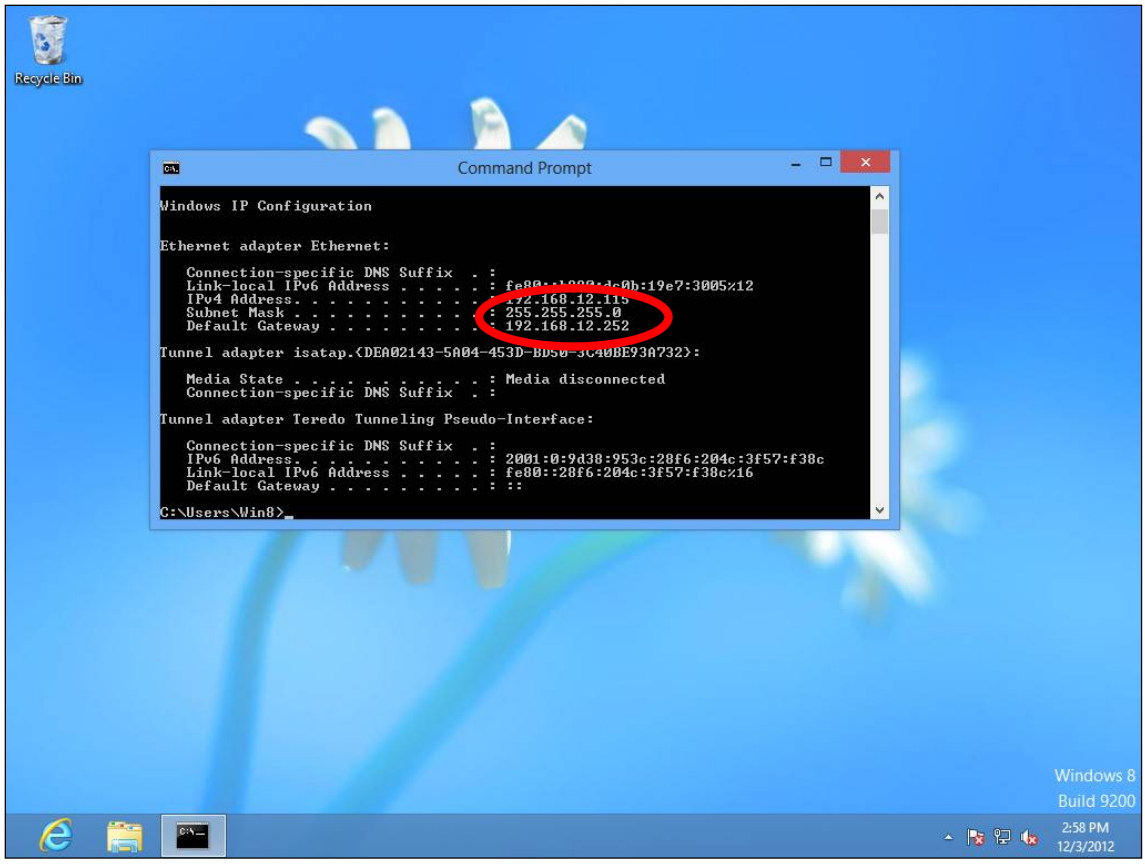
2. Click “Search” and enter “cmd” into the search bar. Click the “Command Prompt” app which be displayed on the left side.



3. A new window will open, type "ipconfig" and press Enter.



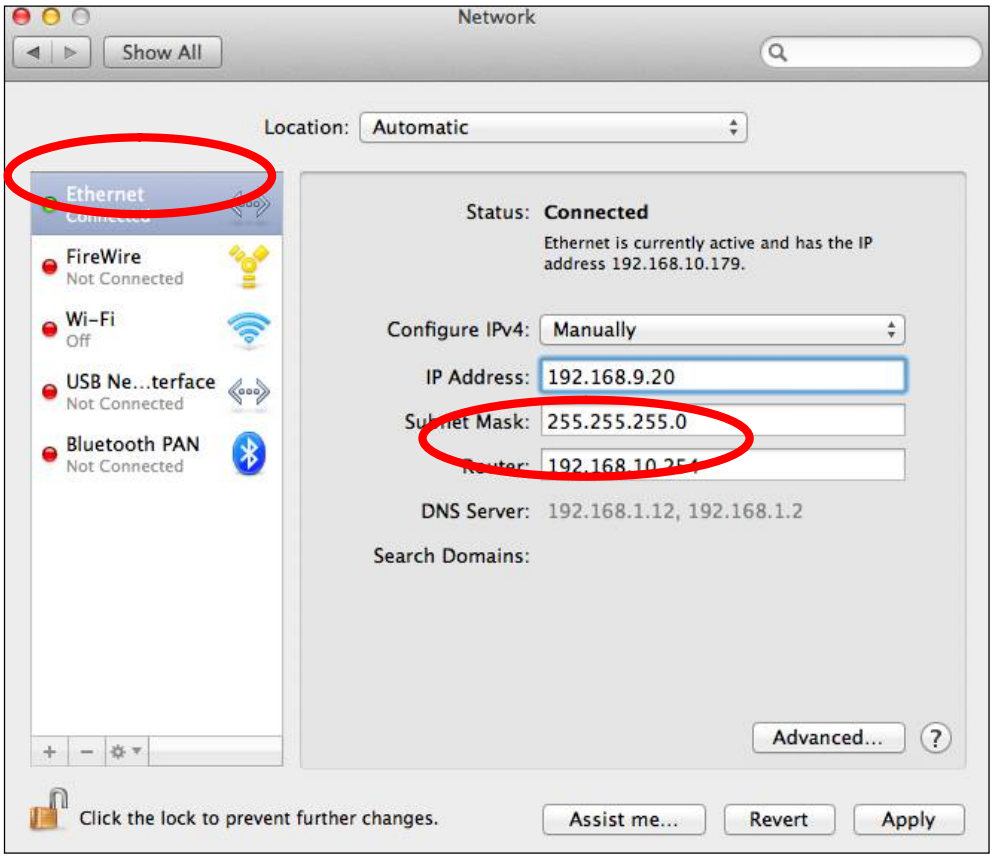
4. Your router's IP address will be displayed next to "Default Gateway".



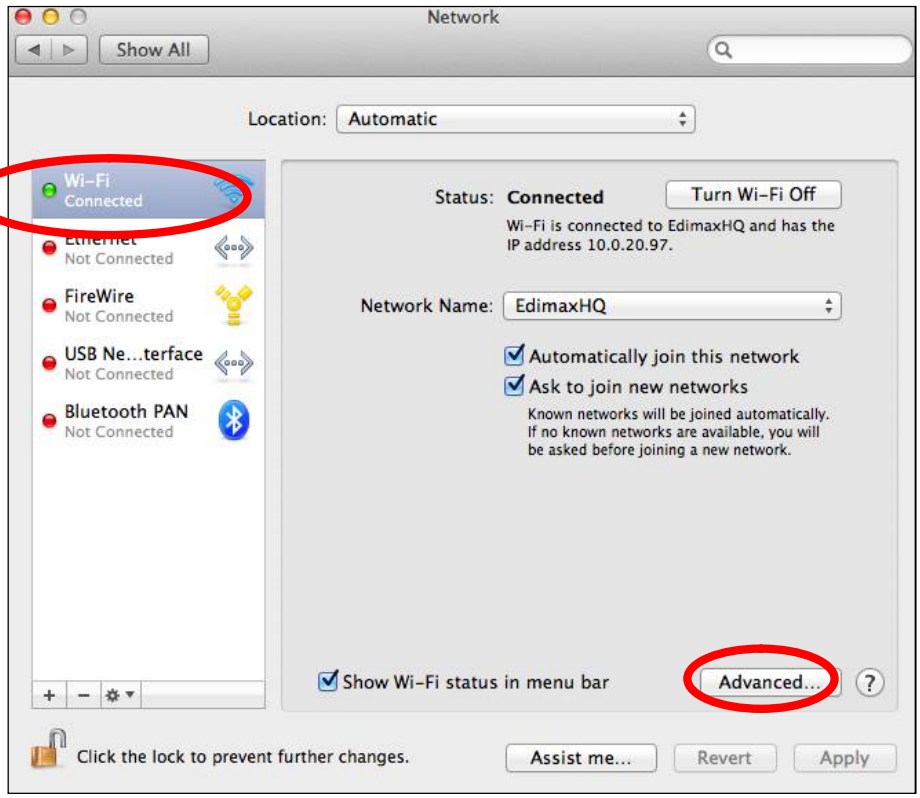
IV-1-4-3. Mac

1. Launch “System Preferences” and click on “Network”.

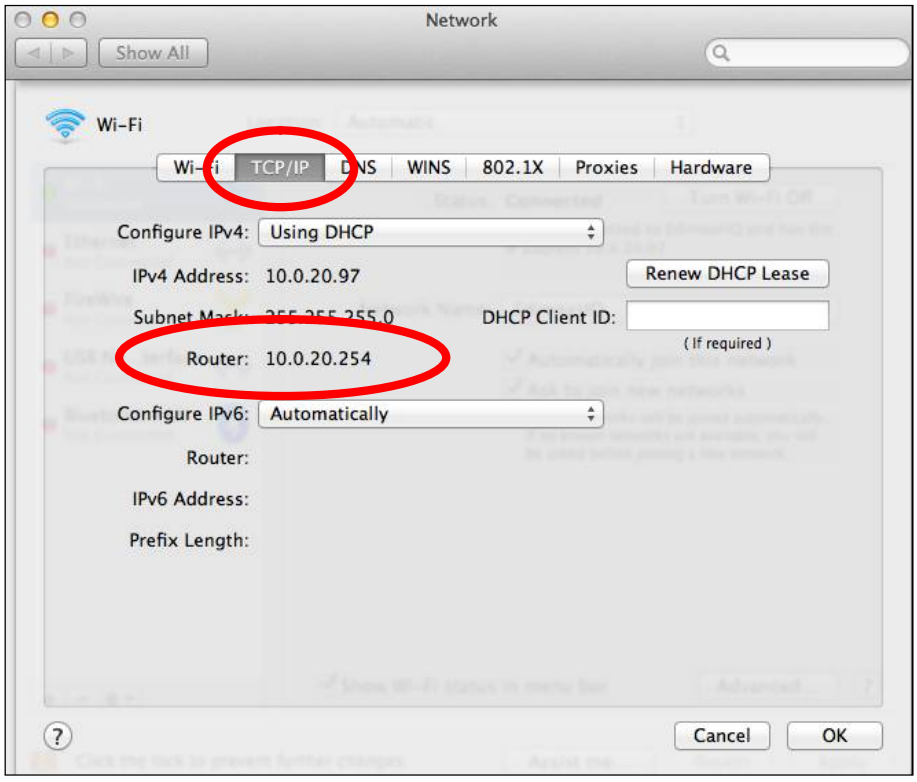
2. If you are using an Ethernet cable to connect to your network, your router’s IP address will be displayed next to “Router”.



3. If you are using Wi-Fi, click “Wi-Fi” in the left panel, and then “Advanced” in the bottom right corner.



4. Click the "TCP/IP" tab and your router's IP address will be displayed next to "Router".

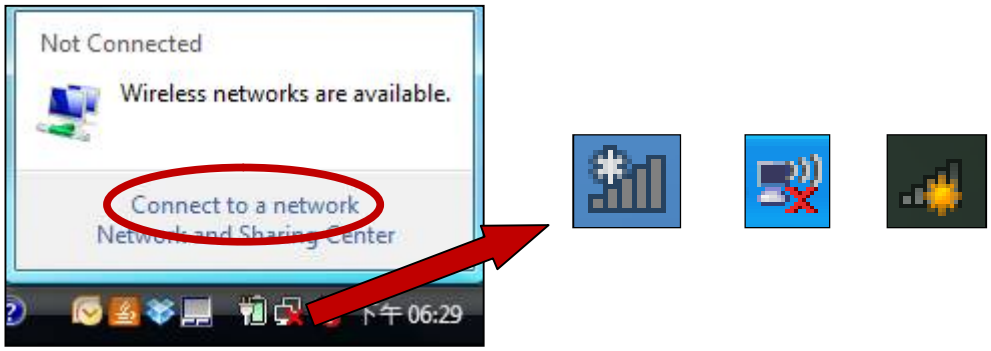


IV-2. Connecting to a Wi-Fi network

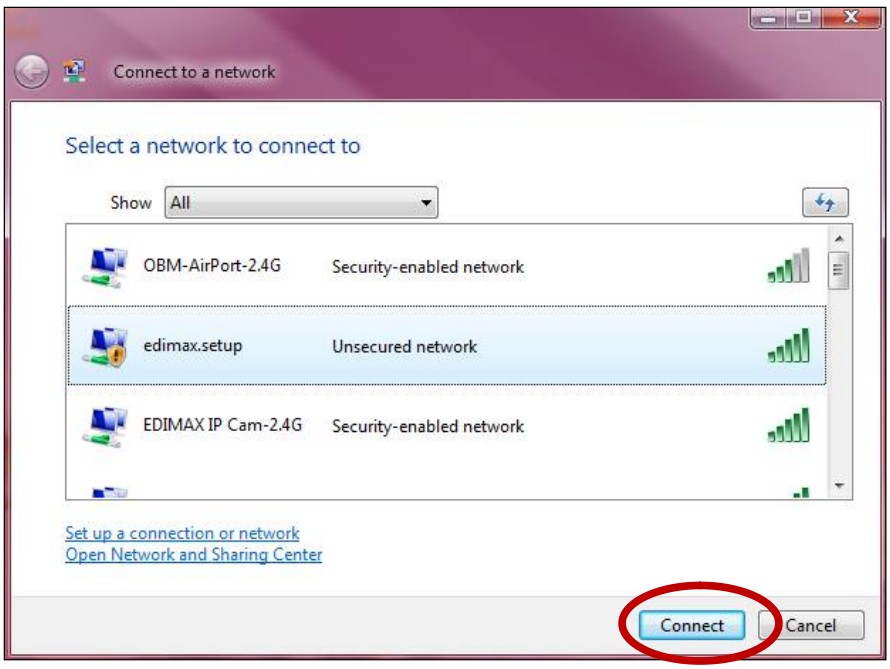
For help connecting to your device's ***Edimax.Setup*** SSID for initial setup, or to connect to your device's new Wi-Fi network (SSID) after setup is complete, follow the guide below:

> ***Below is an example of how to connect using Windows Vista – the process may vary slightly for other versions of Windows.***

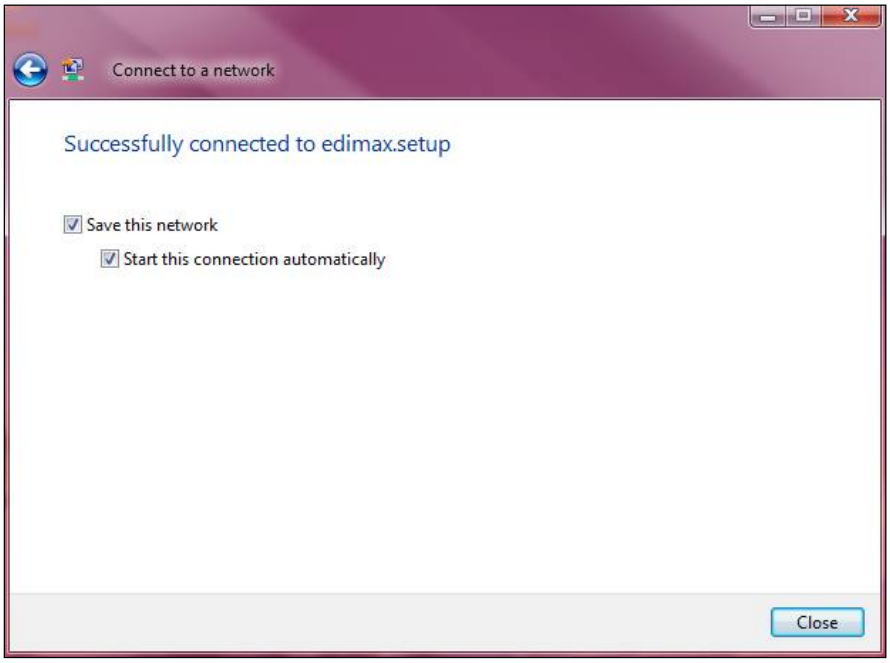
1. Click the network icon (, or) in the system tray and select **"Connect to a network"**.



2. Search for the SSID of your RG21S/RA21S and then click "Connect". If you set a password for your network, you will then be prompted to enter it.



3. After correctly entering your password, you will be successfully connected to the RG21S/RA21S's wireless network.



IV. FAQs

1. How do I setup a VPN server?(router mode only)

a. A VPN server can be used for remote access to your network as well as for additional security & privacy. Login to **http://edimax.setup** and go to **Internet** → **VPN Server** to setup the server. A VPN client such as OpenVPN is required on your network device to access the VPN remotely.

2. I can't access the Internet.

a. Ensure that all cables are connected properly. Try a different Ethernet cable.
b. Check if you can access the web based configuration interface. If not, please ensure your computer is set to use a dynamic IP address.
c. Login to the web based configuration interface and go to **Internet > IPv4 Settings** and check that the login method/connection type is correct. If you are unsure which internet connection type you have, please contact your Internet Service Provider (ISP).
d. Connect your computer directly to your modem and check if you can access the internet. If you can't, please contact your Internet service provider for assistance.

3. I can't open the web based configuration interface.

a. Please ensure your computer is set to use a dynamic IP address.

4. How do I reset my device to factory default settings?

a. To reset the device back to its factory default settings, press and hold the WPS/Reset button for over 10 seconds, until the Internet LED begins to flash. Please wait a few minutes for the product to restart. When the device restarts, all settings will be reset. Default settings are displayed on the product label on the back of the device.

Router Login	Enter this URL in a web browser to run iQ Setup or configure advanced settings. You must be connected to the device by Wi-Fi or Ethernet cable.
Username/Password	This is the default username and password to access the browser based configuration interface when you go to the “Router Login” URL (above).
Wi-Fi Network Name	This is the default Wi-Fi network name for the device. Search for this name (SSID) and connect to it in order to access the “Router Login” URL (above).
MAC	A MAC address is unique to every device and is used for identification within a network. Your device’s unique MAC addresses are displayed here.
PIN CODE	This is your device’s PIN code for Wi-Fi Protected Setup (WPS) for each wireless frequency.

5. I forgot my password.

a. Reset the router to its factory default settings and use the default username **admin** and default password **1234**. Default settings are displayed on the product label on the back of the device, as shown above.

6. Do the blue WAN port and yellow LAN ports work the same when the device is in different modes?

No, the WAN and LAN ports have slightly different functions depending on the operating mode of the device.

a. In ***Wi-Fi router*** mode, the ***WAN port*** is for a direct connection to your xDSL modem. The ***LAN ports*** are for wired network clients.
b. In ***access point*** mode, the ***WAN port*** is not functional. Connect your existing router to the device's ***LAN port***, and the other ***LAN ports*** can connect wired network clients.

V. Glossary

Default Gateway (Wireless bridge): Every non-access point IP device needs to configure a default gateway's IP address. When the device sends out an IP packet, if the destination is not on the same network, the device has to send the packet to its default gateway, which will then send it out towards the destination.

DHCP: Dynamic Host Configuration Protocol. This protocol automatically gives every computer on your home network an IP address.

DNS Server IP Address: DNS stands for Domain Name System, which allows Internet servers to have a domain name (such as www.Broadbandaccess point.com) and one or more IP addresses (such as 74.125.128.104). A DNS server keeps a database of Internet servers and their respective domain names and IP addresses, so that when a domain name is requested (as in typing "Broadbandaccess point.com" into your Internet browser), the user is sent to the proper IP address. The DNS server IP address used by the computers on your home network is the location of the DNS server your ISP has assigned to you.

DSL Modem: DSL stands for Digital Subscriber Line. A DSL modem uses your existing phone lines to transmit data at high speeds.

Ethernet: A standard for computer networks. Ethernet networks are connected by special cables and hubs, and move data around at up to 10/100 million bits per second (Mbps).

IP Address and Network (Subnet) Mask: IP stands for Internet Protocol. An IP address consists of a series of four numbers separated by periods, that identifies a single, unique Internet computer host in an IP network. Example: 192.168.2.1. It consists of 2 portions: the IP network address, and the host identifier.

The IP address is a 32-bit binary pattern, which can be represented as four cascaded decimal numbers separated by ".": aaa.aaa.aaa.aaa, where each "aaa" can be anything from 000 to 255, or as four cascaded binary numbers separated by ".": bbbbbbbb.bbbbbbbb.bbbbbbbb.bbbbbbbb, where each "b" can either be 0 or 1.

A network mask is also a 32-bit binary pattern, and consists of consecutive leading 1's followed by consecutive trailing 0's, such as 11111111.11111111.11111111.00000000. Therefore sometimes a network mask can also be described simply as "x" number of leading 1's.
When both are represented side by side in their binary forms, all bits in the IP address that correspond to 1's in the network mask become part of the IP network address, and the remaining bits correspond to the host ID.

For example, if the IP address for a device is, in its binary form, 11011001.10110000.10010000.00000111, and if its network mask is, 11111111.11111111.11110000.00000000
It means the device's network address is 11011001.10110000.10010000.00000000, and its host ID is, 00000000.00000000.00000000.00000111. This is a convenient and efficient method for access points to route IP packets to their destination.

ISP Gateway Address: (see ISP for definition). The ISP Gateway Address is an IP address for the Internet access point located at the ISP's office.

ISP: Internet Service Provider. An ISP is a business that provides connectivity to the Internet for individuals and other businesses or organizations.

LAN: Local Area Network. A LAN is a group of computers and devices connected together in a relatively small area (such as a house or an office). Your home network is considered a LAN.

MAC Address: MAC stands for Media Access Control. A MAC address is the hardware address of a device connected to a network. The MAC address is a unique identifier for a device with an Ethernet interface. It is comprised of two parts: 3 bytes of data that corresponds to the Manufacturer ID (unique for each manufacturer), plus 3 bytes that are often used as the product's serial number.

NAT: Network Address Translation. This process allows all of the computers on your home network to use one IP address. Using the broadband access point's NAT capability, you can access the Internet from any computer on your home network without having to purchase more IP addresses from your ISP.

Port: Network Clients (LAN PC) uses port numbers to distinguish one network application/protocol over another. Below is a list of common applications and protocol/port numbers:

Application	Protocol	Port Number
Telnet	TCP	23
FTP	TCP	21
SMTP	TCP	25
POP3	TCP	110
H.323	TCP	1720
SNMP	UCP	161
SNMP Trap	UDP	162
HTTP	TCP	80
PPTP	TCP	1723
PC Anywhere	TCP	5631
PC Anywhere	UDP	5632

Access point: A access point is an intelligent network device that forwards packets between different networks based on network layer address information such as IP addresses.

Subnet Mask: A subnet mask, which may be a part of the TCP/IP information provided by your ISP, is a set of four numbers (e.g. 255.255.255.0) configured like an IP address. It is used to create IP address numbers used only within a particular network (as opposed to valid IP address numbers recognized by the Internet, which must be assigned by InterNIC).

TCP/IP, UDP: Transmission Control Protocol/Internet Protocol (TCP/IP) and User Datagram Protocol (UDP). TCP/IP is the standard protocol for data transmission over the Internet. Both TCP and UDP are transport layer protocol. TCP performs proper error detection and error recovery, and thus is reliable. UDP on the other hand is not reliable. They both run on top of the IP (Internet Protocol), a network layer protocol.

WAN: Wide Area Network. A network that connects computers located in geographically separate areas (e.g. different buildings, cities, countries). The Internet is a wide area network.

Web-based management Graphical User Interface (GUI): Many devices support a graphical user interface that is based on the web browser. This means the user can use the familiar Netscape or Microsoft Internet Explorer to Control/configure or monitor the device being managed.

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

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

FCC Caution

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. 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. Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

Federal Communications Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inch) during normal operation.

Federal Communications Commission (FCC) RF Exposure Requirements

This EUT is compliance with SAR for general population/uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C. The equipment version marketed in US is restricted to usage of the channels 1-11 only. This equipment is restricted to ***indoor*** use when operated in the 5.15 to 5.25 GHz frequency range.

VII. R&TTE Compliance Statement

This equipment complies with all the requirements of DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of March 9, 1999 on radio equipment and telecommunication terminal equipment and the mutual recognition of their conformity (R&TTE). The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) As of April 8, 2000.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

EU Countries Intended for Use

The ETSI version of this device is intended for home and office use in Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, and United Kingdom. The ETSI

version of this device is also authorized for use in EFTA member states: Iceland, Liechtenstein, Norway, and Switzerland.

EU Countries Not Intended for Use
None

EU Declaration of Conformity

English: This equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC, 2009/125/EC.

Français: Cet équipement est conforme aux exigences essentielles et autres dispositions de la directive 1999/5/CE, 2009/125/CE.

Čeština: Toto zařízení je v souladu se základními požadavky a ostatními příslušnými ustanoveními směrnic 1999/5/ES, 2009/125/ES.

Polski: Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami określonymi Dyrektywą UE 1999/5/EC, 2009/125/EC.

Română: Acest echipament este în conformitate cu cerinţele esenţiale şi alte prevederi relevante ale Directivei 1999/5/CE, 2009/125/CE.

Русский: Это оборудование соответствует основным требованиям и положениям Директивы 1999/5/EC, 2009/125/EC.

Magyar: Ez a berendezés megfelel az alapvető követelményeknek és más vonatkozó irányelveknek (1999/5/EK, 2009/125/EC).

Türkçe: Bu cihaz 1999/5/EC, 2009/125/EC direktifleri zorunlu istekler ve diğer hükümlerle ile uyumludur.

Українська: Обладнання відповідає вимогам і умовам директиви 1999/5/EC, 2009/125/EC.

Slovenčina: Toto zariadenie spĺňa základné požiadavky a ďalšie príslušné ustanovenia smerníc 1999/5/ES, 2009/125/ES.

Deutsch: Dieses Gerät erfüllt die Voraussetzungen gemäß den Richtlinien 1999/5/EC, 2009/125/EC.

Español: El presente equipo cumple los requisitos esenciales de la Directiva 1999/5/EC, 2009/125/EC.

Italiano: Questo apparecchio è conforme ai requisiti essenziali e alle altre disposizioni applicabili della Direttiva 1999/5/CE, 2009/125/CE.

Nederlands: Dit apparaat voldoet aan de essentiële eisen en andere van toepassing zijnde bepalingen van richtlijn 1999/5/EC, 2009/125/EC.

Português: Este equipamento cumpre os requesitos essênciais da Directiva 1999/5/EC, 2009/125/EC.

Norsk: Dette utstyret er i samsvar med de viktigste kravene og andre relevante regler i Direktiv 1999/5/EC, 2009/125/EC.

Svenska: Denna utrustning är i överensstämmelse med de väsentliga kraven och övriga relevanta bestämmelser i direktiv 1999/5/EG, 2009/125/EG.

Dansk: Dette udstyr er i overensstemmelse med de væsentligste krav og andre relevante forordninger i direktiv 1999/5/EC, 2009/125/EC.

Suomi: Tämä laite täyttää direktiivien 1999/5/EY, 2009/125/EY oleelliset vaatimukset ja muut asiaankuuluvat määräykset.

FOR USE IN AT BE CY CZ DK EE FI FR RU DE GR HU IE IT LV LT LU MT NL PL PT UA SK SI ES SE GB IS LI NO CH BG RO TR

WEEE Directive & Product Disposal

At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

Declaration of Conformity

We, Edimax Technology Co., Ltd., declare under our sole responsibility, that the equipment described below complies with the requirements of the European R&TTE directives 1999/5/EC, directive 2011/65/EC (RoHS) and directive 2009/125/EC (ErP).

Equipment: Home Wi-Fi Roaming Router/Access Point
Model No.: RG21S/RA21S

The following European standards for essential requirements have been followed:

Directives 1999/5/EC

Spectrum	:	ETSI EN 300 328 V1.9.1 (2015-06);
		ETSI EN 301 893 V1.8.1 (2015-06)
EMC	:	EN 301 489-1 V1.9.2 (2011-09);
		EN 301 489-17 V2.2.1 (2012-09);
Safety (LVD)	:	IEC 60950-1:2005 (2nd Edition)+A1:2009+A2:2013
		EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

Recommendation 99/519/EC

EMF	:	EN 62311: 2008

Directives 2006/95/EC

Safety (LVD)	:	IEC 60950-1:2005 (2nd Edition)+A1:2009+A2:2013
		EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

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Date of Signature: Feb., 2017
Signature:
Printed Name: Albert Chang
Title: Director
Edimax Technology Co., Ltd.


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