

BR-6428nS V3 BR-6228nS V3

User Manual

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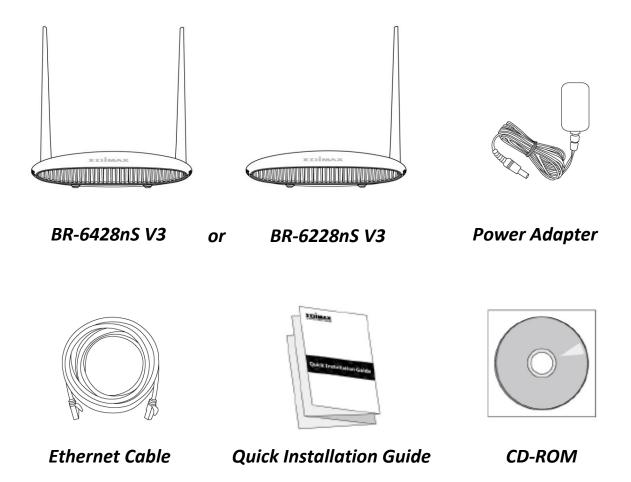
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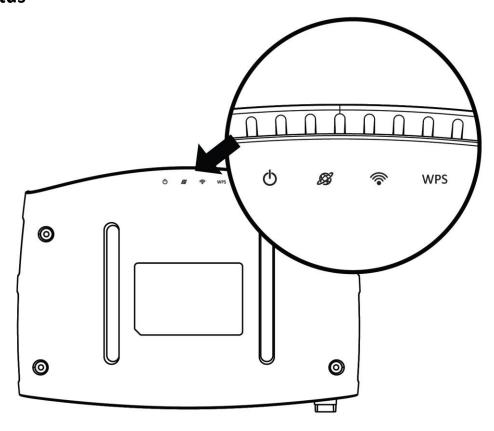
I. Product Information

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):

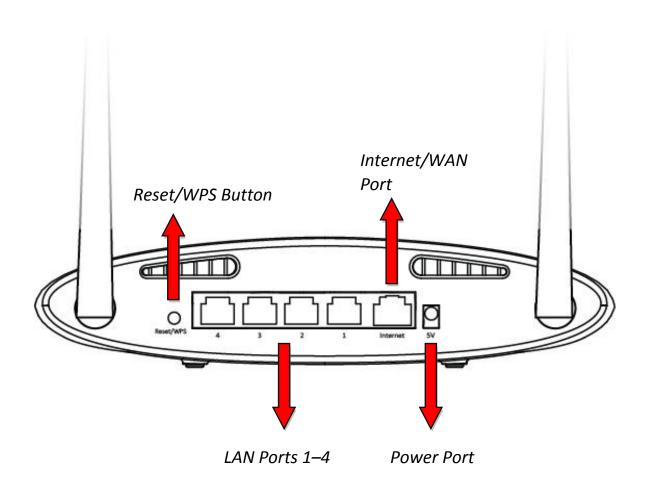


I-2. LED Status



LED	Color	LED Status	Description
Power	White	On	Device is on.
Ф		Off	Device is off.
Internet	net Blue	On	Internet is connected.
S		Flashing	No Internet connection.
Wi-Fi Blue	Rlue	On	Wi-Fi activity (transferring/receiving data).
	blue	Off	Wi-Fi not active.
WPS	Blue	On	WPS connection established (displays on for one minute).
WPS		Flashing	WPS in progress.
		Off	No WPS connection.

I-3. Back Panel



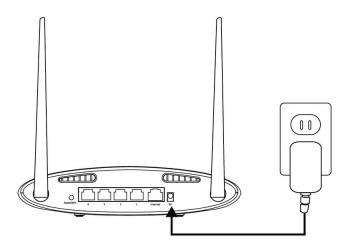
I-4. Safety Information

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

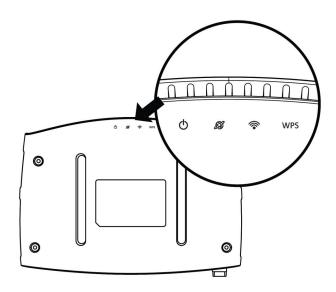
- 1. The device is designed for indoor use only; do not place it outdoors.
- 2. Do not place the device in or near hot/humid places, such as a kitchen or bathroom.
- 3. Do not pull any connected cable with force; carefully disconnect it from the BR-6428nS V3/BR-6228nS V3.
- 4. Handle the device with 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.

II. Installation

1. Plug the included power adapter into the device's 5V DC power port and the other end into an electrical socket.



2. Ensure that the power LED is lit. If not, the device is not properly connected.



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



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

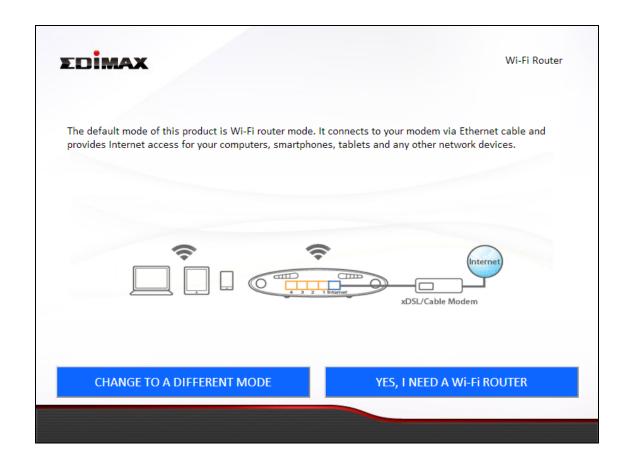
4. Open a web browser and if you do not automatically arrive at the "Get Started" screen shown below, enter the URL http://edimax.setup and click "Get Started" to begin the setup process.



If you cannot access http://edimax.setup, please make sure your computer is set to use a dynamic IP address. Refer to IV-1.

Configuring your IP address for more information.

5. Choose if you want to use your product in its default Wi-Fi router mode or in a different mode.



The device's five available modes are outlined below:

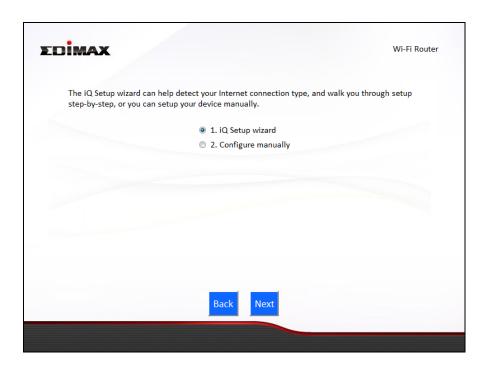
Wi-Fi Router Mode	The device connects to your modem and provides 2.4GHz Internet (wireless and Ethernet) access for your network devices.
Access Point Mode	The device connects to an existing router via Ethernet cable and provides 2.4GHz Internet (wireless and Ethernet) access for your network devices.
Range Extender Mode	The device connects wirelessly to your existing 2.4GHz network and repeats the wireless signal(s).
Wireless Bridge Mode	The device connects to a network device for example: TV, gaming console, or media player via Ethernet cable and acts as a wireless receiver, allowing the network device to join your Wi-Fi network.
WISP Mode	The device connects wirelessly to your Wireless Internet Service Provider and provides 2.4GHz Internet (wireless and Ethernet) access for your network devices.

II-1. Wi-Fi Router Mode

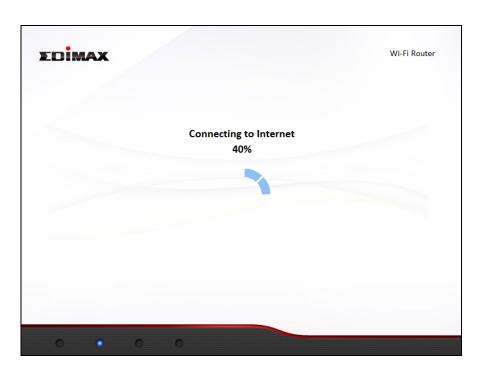
1. Select whether to use the iQ Setup wizard (recommended) to detect your Internet connection type, or enter the settings manually.



Manual configuration is only recommended for advanced users.



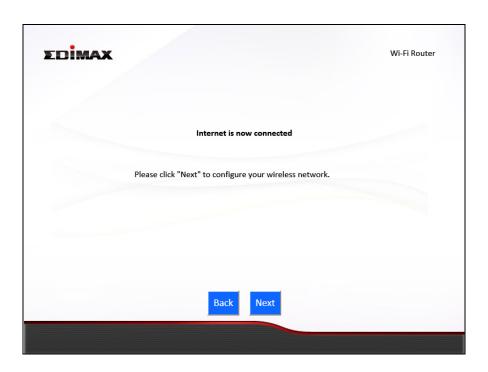
2. Connect the Internet port of your device to the LAN port of your modem using an Ethernet cable, and then click "Next".



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



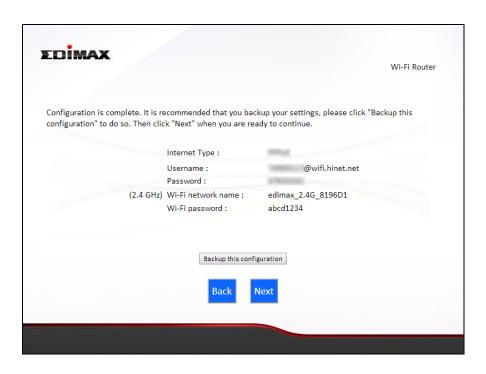
4. Click "Next" to continue and configure the device's wireless network.



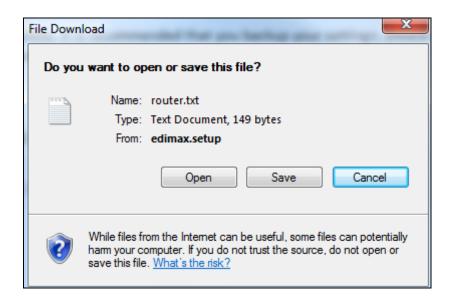
5. Enter a name and password for your 2.4GHz wireless network, then click "Next" to continue.



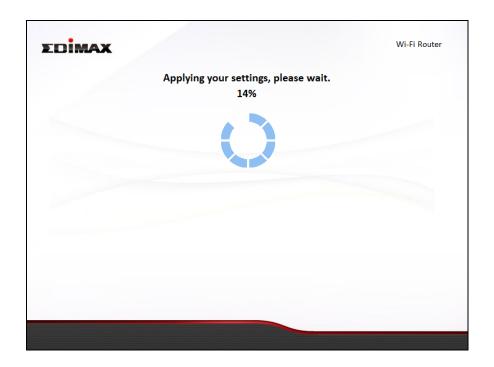
6. A summary of your configuration will be displayed, as shown below depending on your Internet type. Check that all of the details are correct and then click "Next" to proceed.



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.



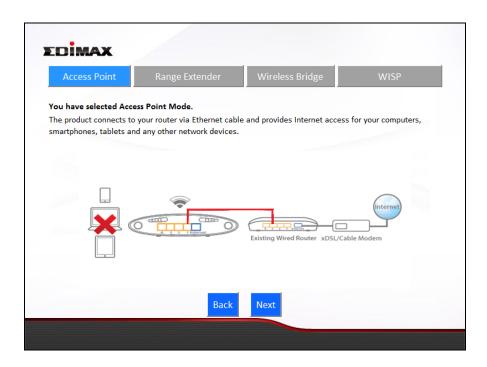
7. Please wait while the device applies your settings.



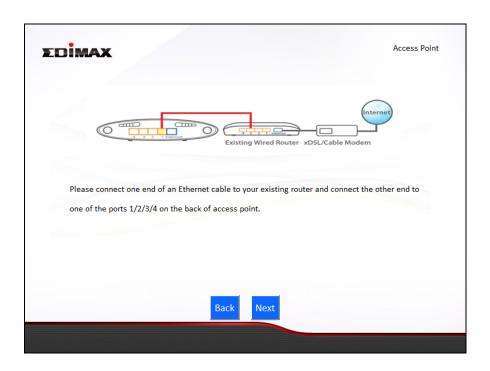
8. A final congratulations screen will indicate that setup is complete. You can now connect to the device's new SSID(s) which are shown on the screen then close the browser window.

II-2. Access Point Mode

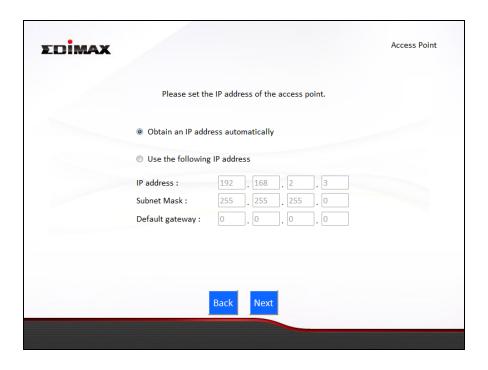
1. Select "Access Point" from the top menu and click "Next".



2. Connect the LAN port of your BR-6428nS V3/BR-6228nS V3 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 BR-6428nS V3/BR-6228nS V3. If you are using a static IP, enter the IP address, subnet mask and default gateway. Click "Next" to proceed to the next step.



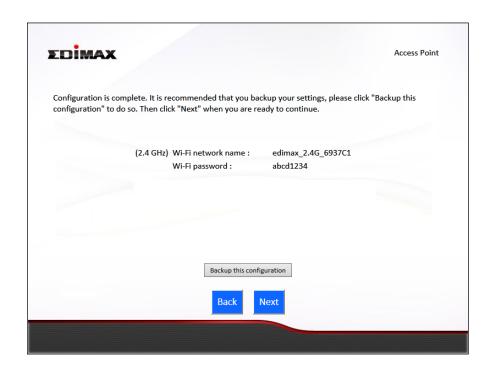


"Obtain an IP address automatically" is the recommended setting for most users. For more guidance on static IP addresses, please refer to IV-1. Configuring your IP address.

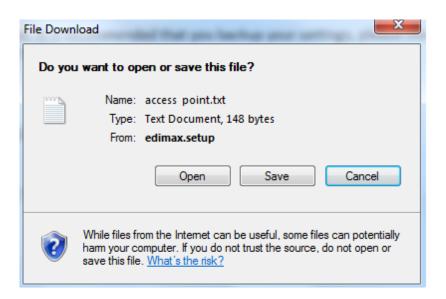
4. Enter a name and password for your 2.4GHz wireless network, then click "Next" to continue.



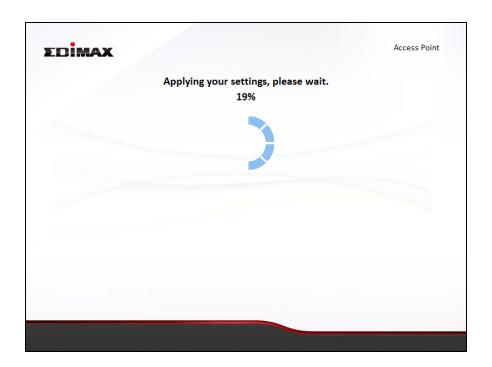
5. A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click "Next" to proceed.



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 BR-6428nS V3/BR-6228nS V3 is ready.



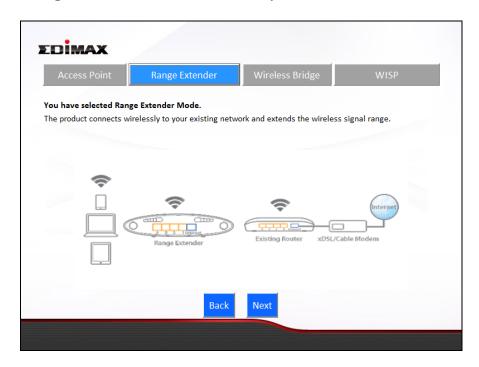
8. A final congratulations screen will indicate that setup is complete. You can now connect to the device's new SSID(s) which are shown on the screen then close the browser window.



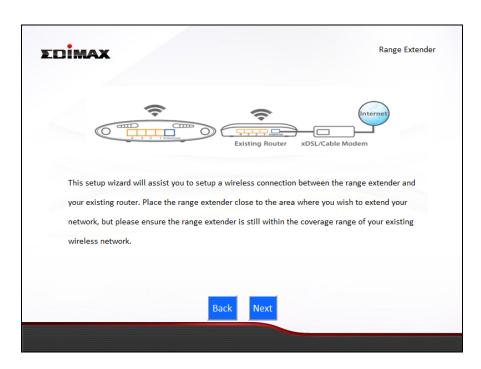
9. The BR-6428nS V3/BR-6228nS V3 is working and ready for use. Refer to IV-2. Connecting to a Wi-Fi network if you require more guidance.

II-3. Range Extender Mode

1. Select "Range Extender" from the top menu and click "Next".



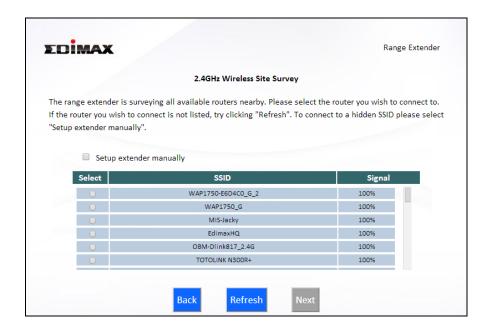
2. Please ensure your BR-6428nS V3/BR-6228nS V3 is within Wi-Fi range of your existing wireless router. Click "Next" to continue.



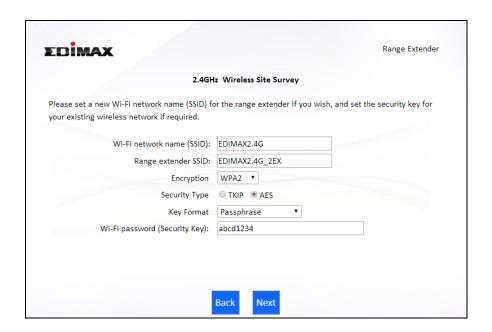
3. Select the Wi-Fi network name (SSID) which you wish to connect to for the specified frequency and click "Next" to continue.



If the Wi-Fi network you wish to connect to does not appear, try clicking "Refresh".



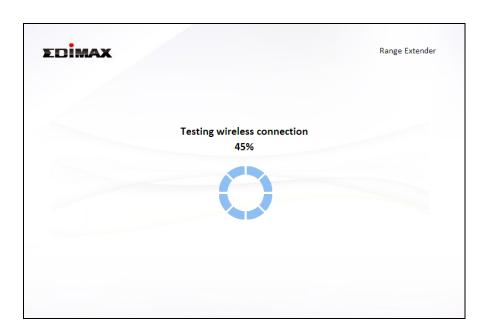
To connect to a hidden SSID, check the "Setup extender manually" 📤 box and enter the details manually on the next page, as shown below.



4. Enter your existing wireless network's security key/password in the "Security Key" field and click "Next" to continue.

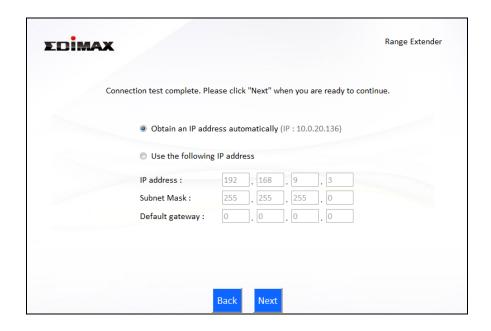


5. Wait a moment while the BR-6428nS V3/BR-6228nS V3 tests the wireless connection.



6. Select "Obtain an IP address automatically" or "Use the following IP address" for your BR-6428nS V3/BR-6228nS V3. If you are using a static IP, enter the IP address, subnet mask and default gateway. Click "Next" to proceed to the next step.

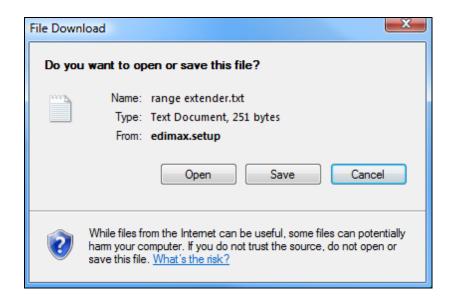
"Obtain an IP address automatically" is the recommended setting for most users. The IP address will be displayed in brackets.



- **7.** 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.
 - The device will use the same wireless password/security key as the existing wireless network.



If you wish to backup the BR-6428nS V3/BR-6228nS V3's settings, click "Backup this configuration" to open a new window and save your current configuration to a .txt file.



8. Please wait a moment until the BR-6428nS V3/BR-6228nS V3 is ready.



9. 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.



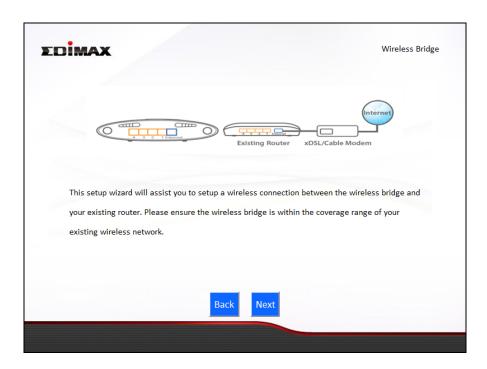
10. The BR-6428nS V3/BR-6228nS V3 is working and ready for use. Refer to IV-2. Connecting to a Wi-Fi network if you require more guidance.

II-4. Wireless Bridge Mode

1. Select "Wireless Bridge" from the top menu and click "Next".

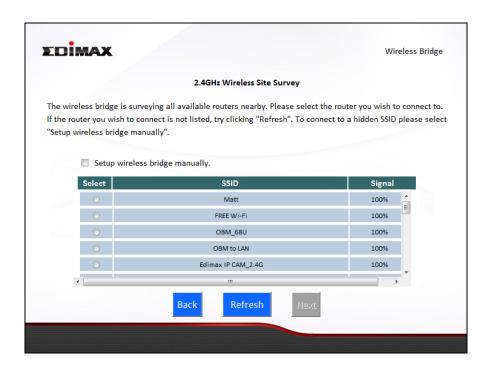


2. Please ensure your BR-6428nS V3/BR-6228nS V3 is within Wi-Fi range of your existing wireless router. Click "Next" to continue.

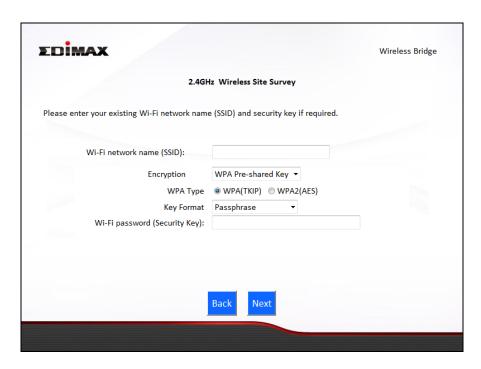


3. Select the Wi-Fi network name (SSID) which you wish to connect to and click "Next" to continue.

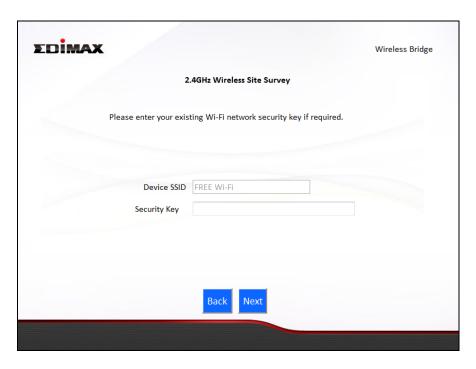
If the Wi-Fi network you wish to connect to does not appear, try clicking "Refresh".



To connect to a hidden SSID, check the "Setup extender manually" 📤 box and enter the details manually on the next page, as shown below.



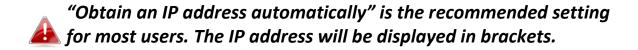
4. Enter your existing wireless network's security key/password in the "Security Key" field and click "Next" to continue.

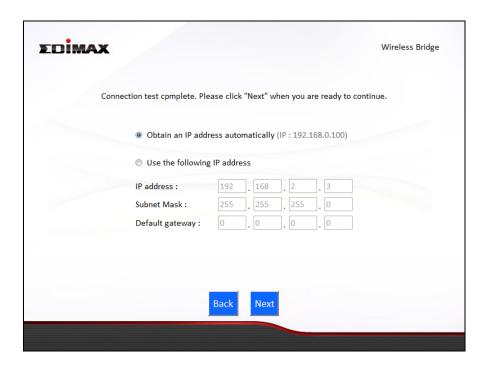


5. Wait a moment while the BR-6428nS V3/BR-6228nS V3 tests the wireless connection.

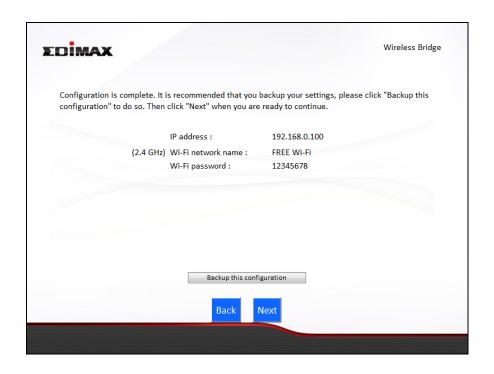


7. Select "Obtain an IP address automatically" or "Use the following IP address" for your BR-6428nS V3/BR-6228nS V3. If you are using a static IP, enter the IP address, subnet mask and default gateway. Click "Next" to proceed to the next step.

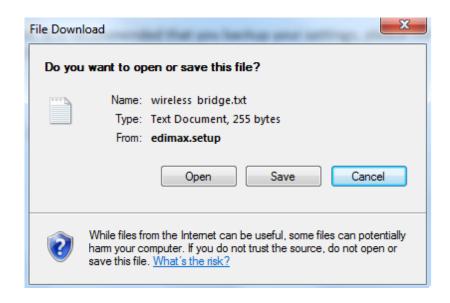




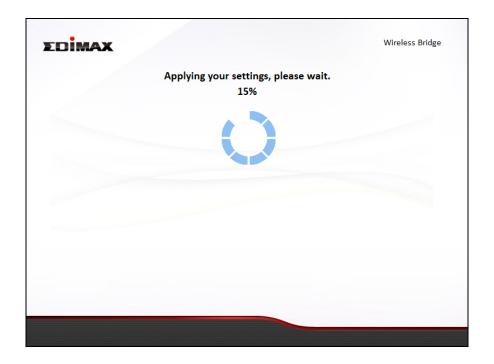
8. A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click "Next" to proceed.



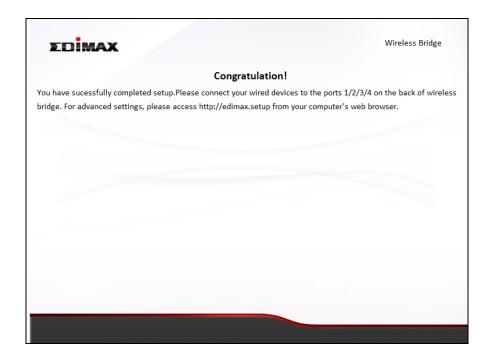
If you wish to backup the BR-6428nS V3/BR-6228nS V3's settings, 📤 click "Backup this configuration" to open a new window and save your current configuration to a .txt file.



9. Please wait a moment until the BR-6428nS V3/BR-6228nS V3 is ready.



10. A final congratulations screen will indicate that setup is complete. Please close the browser window.



11. The BR-6428nS V3/BR-6228nS V3 is working and ready for use. You can now connect the BR-6428nS V3/BR-6228nS V3 to your network device using an Ethernet cable and connect to your network as usual.

II-5. WISP Mode

1. Select "WISP" from the top menu and click "Next".



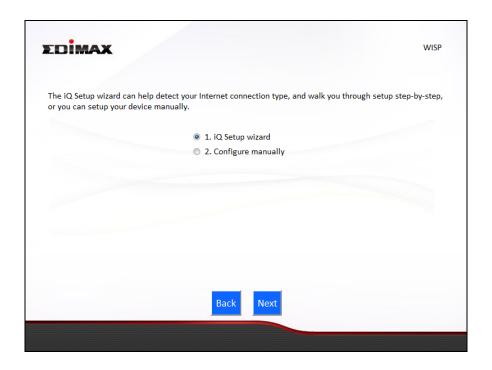
2. Please ensure your BR-6428nS V3/BR-6228nS V3 is within Wi-Fi range of your WISP network and click "Next" to continue.



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



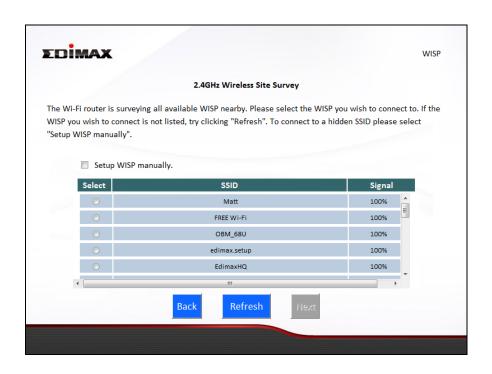
Manual configuration is only recommended for advanced users.



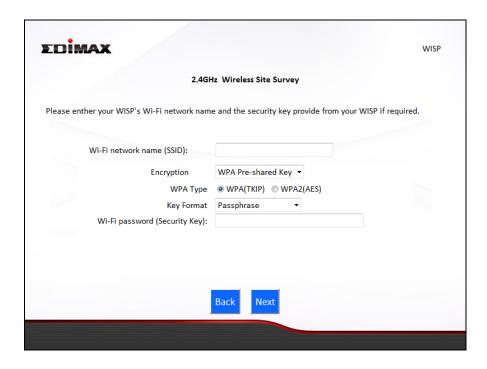
5. Select the WISP SSID which you wish to connect to and click "Next" to continue.



If the Wi-Fi network you wish to connect to does not appear, try clicking "Refresh".



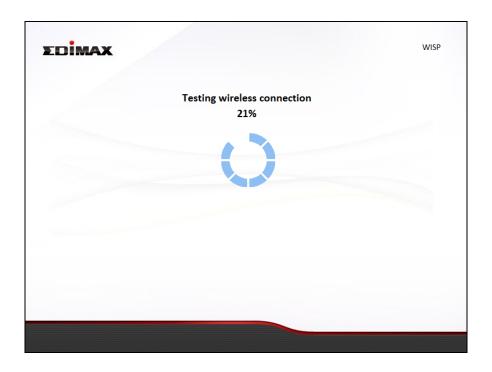
To connect to a hidden SSID, check the "Setup extender manually" 📤 box and enter the details manually on the next page, as shown below.



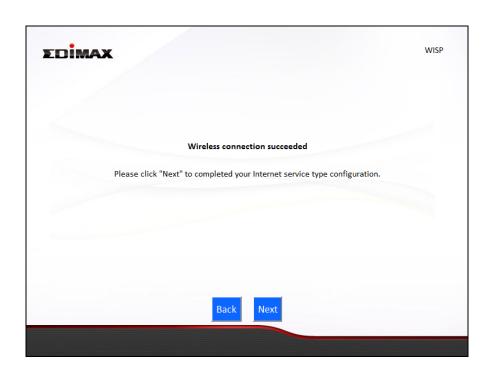
6. Enter your existing wireless network's security key/password in the "Security Key" field and click "Next" to continue.



7. Wait a moment while the BR-6428nS V3/BR-6228nS V3 tests the wireless connection.



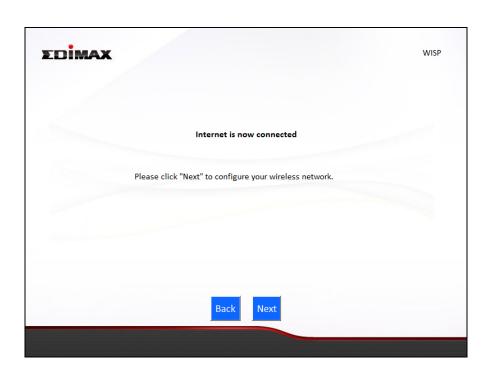
8. Click "Next" to continue your Internet service type configuration.



9. Wait a moment while the BR-6428nS V3/BR-6228nS V3 connects to the Internet.



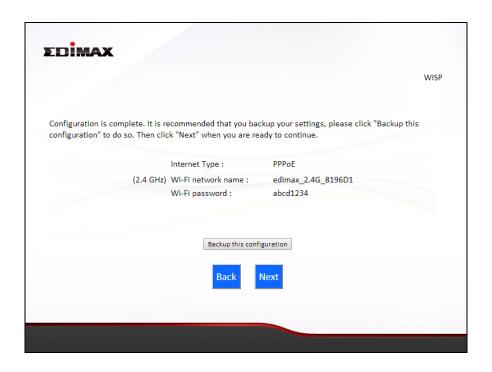
10. When the Internet is connected, click "Next" to configure your wireless network.



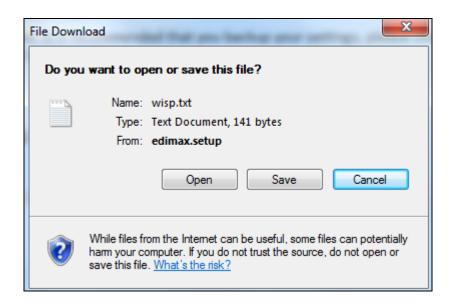
11. Enter a name and password for your 2.4GHz wireless network, then click "Next" to continue.



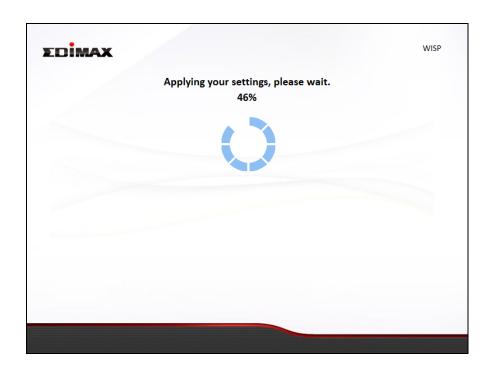
12. A summary of your configuration will be displayed according to your connection type, as shown below. Check that all of the details are correct and then click "Next" to proceed.



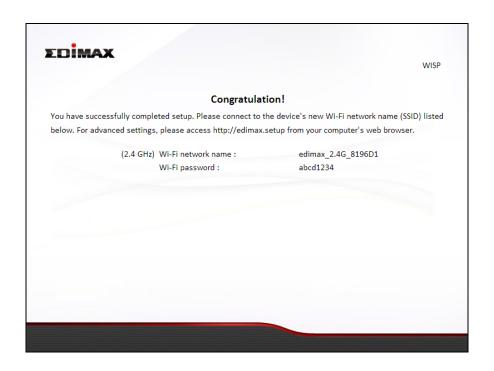
If you wish to backup the device's settings, click "Backup this configuration" to open a new window and save your current configuration to a .txt file.



13. Please wait a moment until the BR-6428nS V3/BR-6228nS V3 is ready.



14. 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.

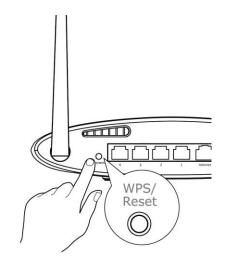


15. The BR-6428nS V3/BR-6228nS V3 is working and ready for use. Refer to IV-2. Connecting to a Wi-Fi network if you require more guidance.

II-6. WPS Setup

If your wireless device supports WPS (Wi-Fi Protected Setup) then you can use this method to connect to the BR-6428nS V3/BR-6228nS V3's Wi-Fi network.

- 1. Press the WPS button on the BR-6428nS V3/BR-6228nS V3 for 2 5 seconds to activate WPS. The WLAN LED will flash to indicate that WPS is active.
- **2.** Within two minutes, press the WPS button on the wireless device/client to activate its WPS.
- **3.** The devices will establish a connection. Repeat for additional wireless devices.





Please check the instructions for your wireless device for how long you need to hold down its WPS button to activate WPS.

II-7. Reset to Factory Default Settings

If you experience problems with your BR-6428nS V3/BR-6228nS V3, 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 back panel for at least 10 seconds, until the power LED begins to flash.
- **2.** Release the button when the power LED is **flashing**.
- **3.** Wait for the BR-6428nS V3/BR-6228nS V3 to restart. The BR-6428nS V3/BR-6228nS V3 is ready for setup when the power LED displays **on.**

III. Browser Based Configuration Interface

After you have setup the BR-6428nS V3/BR-6228nS V3 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 <u>IV-1</u>. <u>Configuring your IP address</u> 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 BR-6428nS V3/BR-6228nS V3.



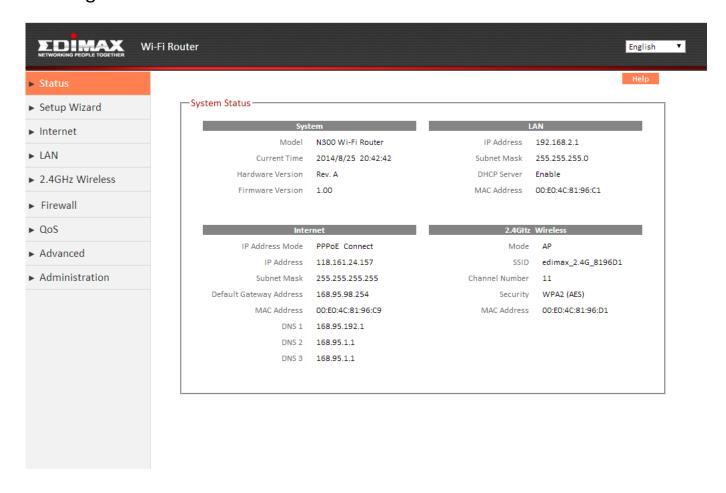


If you can not access http://edimax.setup, connect the device to a computer using an Ethernet cable and try again.

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 "Save Settings" 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. Then, click "Click here to restart" in order to restart the device and bring the changes into effect.

Settings have been saved. Pleas click here to restart the router and bring the new settings into effect.

3. To make several changes at once, use the "Save Settings" button after each change and then click "click here to restart" after your final change. Only one restart is necessary as long as each change is saved with the "Save Settings" button.



After you click "click here to restart", all saved changes will come into effect.

III-3. Main Menu

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



For Range Extender mode: WPS **please refer to** 2.4GHz Wireless → WPS

Wi-Fi Router

➤ Status ➤ Setup Wizard ➤ Internet ► LAN ► 2.4GHz Wireless ► Firewall ► QoS ► Advance ► Administration

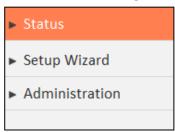
Access Point

▶ Status
► Setup Wizard
► LAN
➤ 2.4GHz Wireless
► Advance
► Administration

Range Extender



Wireless Bridge



WISP

➤ Status
► Setup Wizard
► WISP
► LAN
▶ 2.4GHz Wireless
► Firewall
► QoS
► Advanced
► Administration

III-3-1. Status



The "Status" page displays basic system information about the device, arranged into four categories:

System, LAN, Internet & 2.4GHz Wireless.



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

Syst	tem	L	AN
Model	N300 Wi-Fi Router	IP Address	192.168.2.1
Current Time	2014/8/25 20:42:18	Subnet Mask	255.255.255.0
Hardware Version	Rev. A	DHCP Server	Enable
Firmware Version	1.00	MAC Address	00:E0:4C:81:96:C1
Inte	rnet	2.4GHz	Wireless
Inte	rnet	2.4GHz	Wireless
IP Address Mode	PPPoE Connect	Mode	AP
IP Address	118.161.24.157	SSID	edimax_2.4G_8196D1
Subnet Mask	255.255.255.255	Channel Number	11
fault Gateway Address	168.95.98.254	Security	WPA2 (AES)
MAC Address	00:E0:4C:81:96:C9	MAC Address	00:E0:4C:81:96:D1
DNS 1	168.95.192.1		
DNS 2	168.95.1.1		
DNS 3	168.95.1.1		

III-3-2. Setup Wizard

You can run the setup wizard again to reconfigure the basic settings of the device, or you can run a wizard to help you switch the device to a different operating mode. Select "Setup Wizard" or "Switch to Router/AP/Range Extender/Wireless Bridge/WISP mode" and then click "Run Wizard" to begin.

d
Setup Wizard
This setup wizard is an intelligent and easy tool for you to complete the basic settings of the device
quickly.
Switch to Router/Access Point/Range Extender/Wireless Bridge/WISP mode
This setup wizard will guide you to switch the device to another mode.
Run Wizard
-

Setup Wizard	This wizard will help you to set up the basic
	functions and settings of the device. For
	guidance about using the setup wizard, please
	refer to <u>II. Installation</u> .
Switch to Router/Access	This wizard will help you to switch the device
Point/ Range Extender/	to a different operating mode: Wi-Fi router
Wireless Bridge/ WISP	mode, access point mode, range extender,
mode	wireless bridge, or WISP mode (see below).

Switch to Router/Access Point/ Range Extender/ Wireless Bridge/ WISP mode:

- **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.

Reset to Defaults

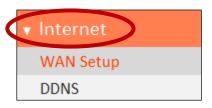
You have successfully reset the device to factory defaults. Please close the browser and open it again. This device will start running the setup wizard for you to switch the mode.

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/WISP

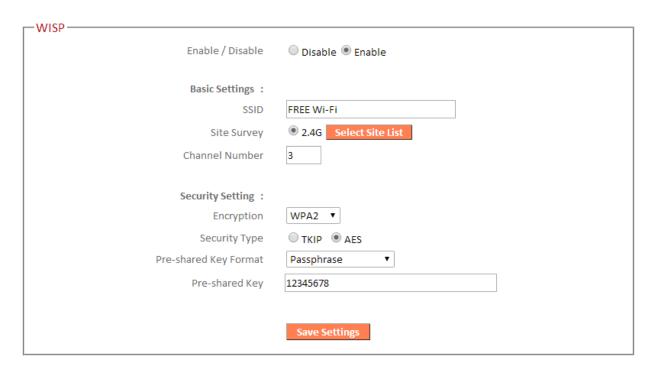


The "Internet" menu provides access to WAN and DDNS settings. Click on an item from the submenu to view and/or configure the settings.





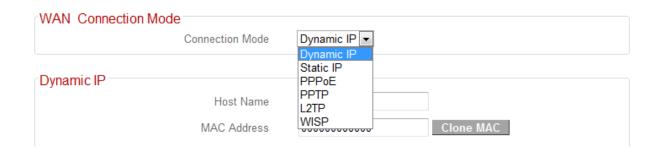
In WISP mode, the screen below will be displayed:



Enable / Disable	Enable or disable your WISP connection.
SSID	The name of the WISP network which your
	BR-6428nS V3/BR-6228nS V3 is connected to.
	Manually enter an SSID if you wish or use
	"Site Survey" below.
Site Survey	Select wireless frequency and click "Select
	Site List" to open a new window and select
	your WISP network.
Security Setting	Please refer to III-3-5-1. Basic for a
	description of security settings.

III-3-3-1. WAN Setup

Select a Wide Area Network (WAN) connection mode and configure the settings. If you are unsure about your connection type, contact your ISP.





In WISP mode, only Dynamic IP, Static IP & PPPoE are available for WAN Connection Mode.

III-3-3-1-1. 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.
DNS Address	Select "Obtain an IP address automatically" or
	"Use the following IP address". Check with
	your ISP if you are unsure.
DNS Address 1,2 & 3	Enter the DNS address(es) assigned by your
	ISP here.
DNS Proxy	Enable or disable a DNS proxy server.
DNS Proxy Rules	When DNS proxy is enabled, enter the URL of
(URL)	a DNS proxy server.
MTU	Enter the maximum transmission unit (MTU)
	value of your network connection. The
	default value is 1500.
TTL	Enable/Disable time to live (TTL) function
	which limits the lifespan of network data to
	improve performance.

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

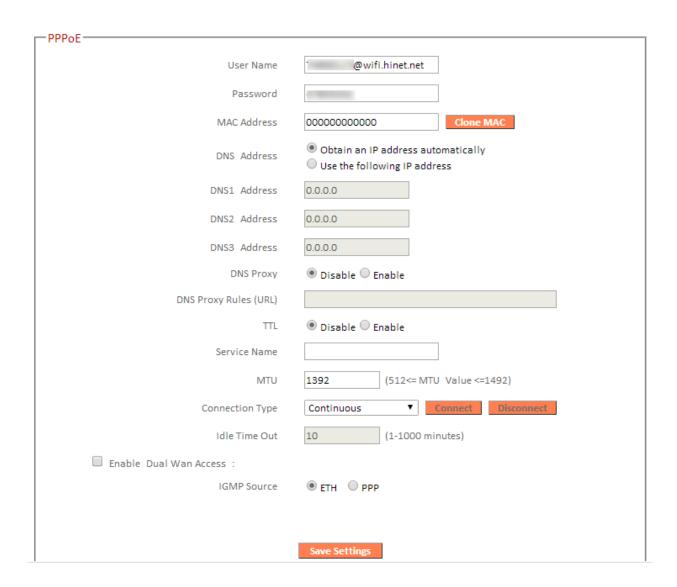
Select "Static IP" if your ISP provides Internet access via a fixed IP address. Your ISP will provide you with such information as IP address, subnet mask, gateway address, and DNS address.

Static IP	
Fixed IP IP Address	172.1.1.1
Subnet Mask	255.255.0.0
Default Gateway Address	172.1.1.254
MAC Address	000000000000 Clone MAC
DNS1 Address	0.0.0.0
DNS2 Address	0.0.0.0
DNS3 Address	0.0.0.0
DNS Proxy	Disable Enable
DNS Proxy Rules (URL)	
МТИ	1500 (512<= MTU Value <=1500)
πι	Disable Enable
	Save Settings

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
Address	ISP here. Some ISPs may call this "Default
	Route".
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.
DNS Address 1, 2 &	Enter the DNS address(es) assigned by your
3	ISP here.
DNS Proxy	Enable or disable a DNS proxy server.
DNS Proxy Rules	When DNS proxy is enabled, enter the URL of
(URL)	a DNS proxy server.
TTL	Enable/Disable time to live (TTL) function
	which limits the lifespan of network data to
	improve performance.

III-3-3-1-3. PPPoE

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

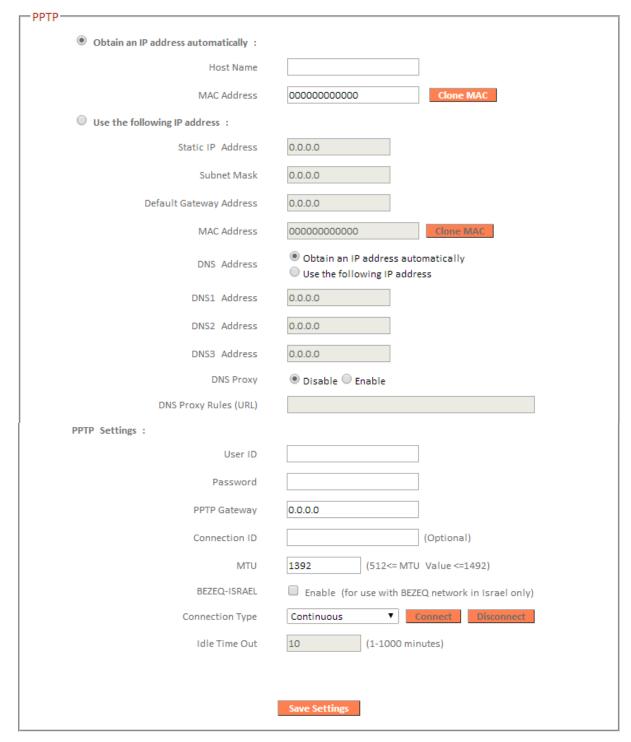


User Name	Enter the user name assigned by your ISP here.
Password	Enter the password assigned by your ISP here.
MAC Address	For some applications, you may need to designate a specific MAC address for the router. Please enter the MAC address here. If you are connecting the router to a computer, press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

DNS Address	Select "Obtain an IP address automatically" or "Use the following IP address". Check with your ISP if you are unsure.
DNS Address 1, 2 & 3	Enter the DNS address(es) assigned by your ISP here.
DNS Proxy	Enable or disable a DNS proxy server.
DNS Proxy Rules (URL)	When DNS proxy is enabled, enter the URL of a DNS proxy server.
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: "Continuous": Connected all the time. "Connect on Demand": Connect when you initiate an Internet connection. "Manual": Connect/disconnect manually using the "Connect" and "Disconnect" buttons.
Idle Time Out	Specify the amount of time the router waits before shutting down an idle connection. Only available when "Connect on Demand" (above) is selected.
Enable Dual-WAN Access	Enable/disable dual WAN access. When you enable dual WAN access, select an IGMP source and enter a "Host Name" and "MAC Address".

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.	
Static 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	
Address	here. Some ISPs may call this "Default Route".	
MAC Address	If your ISP filters access by MAC addresses, enter	
	your computer's MAC address here. Click "Clone	
	MAC" to automatically enter your computer's MAC	
DAIG A L L	address.	
DNS Address	Select "Obtain an IP address automatically" or "Use	
	the following IP address". Check with your ISP if you	
	are unsure.	
DNS Address 1,2 & 3	Enter the DNS address(es) assigned by your ISP	
	here.	
DNS Proxy	Enable or disable a DNS proxy server.	
DNS Proxy Rules	When DNS proxy is enabled, enter the URL of a DNS	
(URL)	proxy server.	
User ID	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.	
BEZEQ-ISRAEL	Check the "Enable" box if you are using BEZEQ	
	network services (Israel users only).	
Connection Type	Specify a connection type:	
	1. "Continuous": Connected all the time.	
	2. "Connect on Demand": Connect when you	
	initiate an Internet connection.	
	3. "Manual": Connect/disconnect manually using	
	the "Connect" and "Disconnect" buttons.	
Idle Time Out	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).

[P	
Obtain an IP address automatically:	
Host Name	
MAC Address	00000000000 Clone MAC
Use the following IP address:	
Static IP Address	0.0.0.0
Subnet Mask	0.0.0.0
Default Gateway Address	0.0.0.0
MAC Address	00000000000 Clone MAC
DNS Address	Obtain an IP address automaticallyUse the following IP address
DNS1 Address	0.0.0.0
DNS2 Address	0.0.0.0
DNS3 Address	0.0.0.0
DNS Proxy	Disable Enable
DNS Proxy Rules (URL)	
L2TP Settings :	
User ID	
Password	
L2TP Gateway	0.0.0.0
MTU	1392 (512<= MTU Value <=1492)
Connection Type	Continuous ▼ Connect Disconnect
Idle Time Out	10 (1-1000 minutes)
	Save Settings

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.

Static 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	
Address	here. Some ISPs may call this "Default Route".	
MAC Address	If your ISP filters access by MAC addresses, enter	
	your computer's MAC address here. Click "Clone	
	MAC" to automatically enter your computer's MAC	
	address.	
DNS Address	Select "Obtain an IP address automatically" or "Use	
	the following IP address". Check with your ISP if you	
	are unsure.	
DNS Address 1,2 & 3	Enter the DNS address(es) assigned by your ISP	
	here.	
DNS Proxy	Enable or disable a DNS proxy server.	
DNS Proxy Rules	When DNS proxy is enabled, enter the URL of a DNS	
(URL)	proxy server.	
User ID	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.	
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. "Continuous": Connected all the time.	
	2. "Connect on Demand": Connect when you	
	initiate an Internet connection.	
	3. "Manual": Connect/disconnect manually using	
Idlo Timo Out	the "Connect" and "Disconnect" buttons.	
Idle Time Out	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. WISP

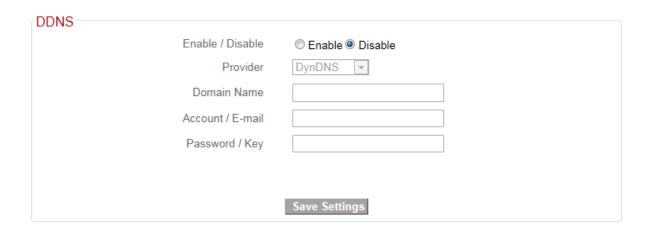
Select "WISP" if you use a wireless internet service from Internet Service Provider (WISP).



WISP	Enable or disable the WISP function.
SSID	Enter the SSID of the WISP network, or click
	"Select Site Survey" below to view all
	available networks in a new window and
	select the WISP network from there.
Select Site Survey	Click "Select Site Survey" to display all
	available wireless SSIDs in a new window and
	select your WISP network.
Channel Number	Enter the channel number of the WISP
	network.
Security Settings	Enter the security information required by
	your ISP.

III-3-3-2. 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:

3322 *http://www.3322.org*

DHS http://www.dhs.org

DynDNS http://www.dyndns.org

ODS http://ods.org

TZO http://www.tzo.com

GnuDIP http://gnudip2.sourceforge.net

DyNS http://www.dyns.cx/

ZoneEdit http://www.zoneedit.com

CyberGate http://cybergate.planex.co.jp/ddns/

NS2GO http://www.ns2go.com/
NO-IP http://www.noip.com/

III-3-4. LAN

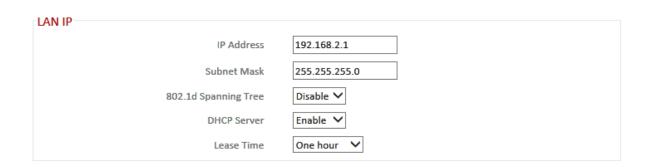


You can configure your Local Area Network (LAN) on this page. You can enable the router to dynamically allocate IP addresses to your LAN clients, and you can

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 BR-6428nS V3/BR-6228nS V3 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.
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.

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



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.

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	Enable/disable static DHCP leases. This must
Leases	be enabled in order to assign any network
	device a static IP address.
MAC Address	Enter the specified network device's MAC
	address here.
IP Address	Assign a fixed IP address for the specified
	network device here.
Add	Add the information to the "Static DHCP
	Leases Table".
Clear	Clear the MAC address and IP address fields.
Delete Selected /	Delete selected or all entries from the table.
Delete All	



The LAN IP page will be displayed as below when your device is set to access point mode. You can set the BR-6428nS V3/BR-6228nS V3 to obtain an IP address automatically or you can specify an IP address.

LAN IP	
Obtain	an IP address automatically
Use the	e following IP address
IP Address	192.168.2.1
Subnet Mask	255.255.255.0
Default Gateway Address	

III-3-5. 2.4GHz Wireless



The "2.4GHz Wireless" 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.

Access Point Mode:

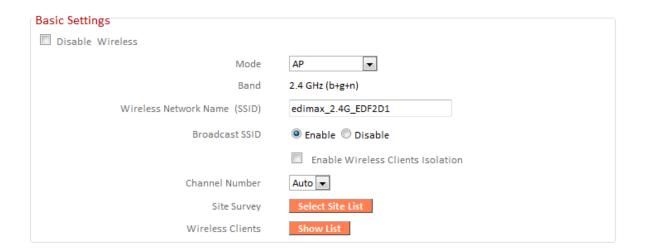




In Access Point mode, the "Guest" feature in the menu is replaced by "Multiple SSID".

III-3-5-1. Basic

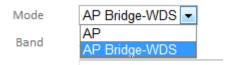
The "Basic" screen displays settings for your primary 2.4GHz Wi-Fi network.



Disable Wireless	Check the box to disable the wireless function of your device.
Mode	Keep the default "AP" value for the device to act as a standard wireless access point, or

	select "AP Bridge-WDS" for the device to
Band	function in WDS mode (see below). Displays the wireless standard used for the BR-6428nS V3/BR-6228nS V3's "2.4GHz (B+G+N)" means that 802.11b, 802.11g, and 802.11n wireless clients can connect to the BR-6428nS V3/BR-6228nS V3.
Wireless Network Name (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.
Broadcast SSID	Enable or disable SSID broadcast. When enabled, the SSID will be visible to clients as an available Wi-Fi network. When disabled, 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 (disabled) SSID is typically more secure than a visible (enabled) SSID.
Enable Wireless Clients Isolation	Check the box to enable wireless clients isolation. This prevents wireless clients connected to the BR-6428nS V3/BR-6228nS V3 from communicating with each other and improves security. Typically, this function is useful for corporate environments or public hot spots and can prevent brute force attacks on clients' usernames and passwords.
Channel Number	Select a wireless radio channel or use the default "Auto" setting from the drop-down menu.
Site Survey	Click "Select Site List" to display a new window showing information about the surrounding wireless environment. This information is useful to select an effective wireless channel number.
Wireless Clients	Click "Show List" to display a new window showing information about wireless clients. Please disable any pop-up blockers if you have difficulty using this function.

AP Bridge-WDS:



Wireless Distribution System (WDS) can bridge/repeat access points together in an extended network. WDS settings can be configured as shown below.



When using WDS, configure the IP address of each access point to be in the same subnet and ensure there is only one active DHCP server among connected access points, preferably on the WAN side.

WDS must be configured on each access point, using correct MAC addresses. All access points should use the same wireless channel.

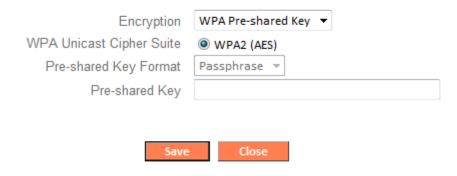


MAC Address 1 - 4	Enter the correct MAC address for other
	access points in WDS mode.
Set Security	Click "Set Security" to open a new window
	and enter the security settings for WDS
	(shown below). Click "Save" when finished.



Please ensure you setup and save wireless security settings before you click "Set Security" to set WDS security settings.

AP Bridge-WDS Security Setting



Wireless Security:



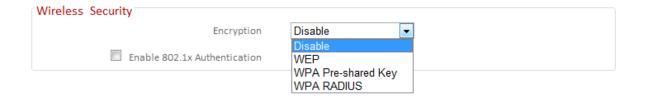
Select an encryption type from the drop-down menu:



"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-3-5-1-1. Disable

Encryption is disabled and no password/key is required to connect to the BR-6428nS V3/BR-6228nS V3.



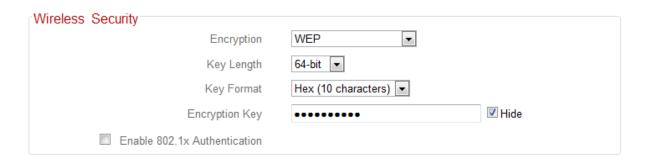
Disabling wireless encryption is not recommended. When disabled, anybody within range can connect to your device's SSID.

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

Enable 802.1x Authentication	
RADIUS Server IP address	
RADIUS Server Port	1812
RADIUS Server Password	

III-3-5-1-2. WEP

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

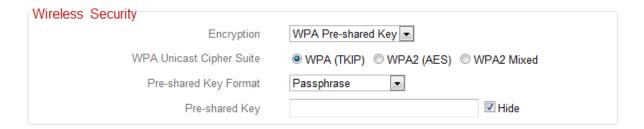


Key Length	Select 64-bit or 128-bit. 128-bit is more secure than 64-bit.
Key Format	Choose from "ASCII" (any alphanumerical character 0-9, a-z and A-Z) or "Hex" (any characters from 0-9, a-f and A-F).
Encryption Key	Enter your encryption key/password according to the format you selected above. A complex, hard-to-guess key is recommended. Check the "Hide" box to hide your password from being displayed on-screen.
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).

☑ Enable 802.1x Authentication	
RADIUS Server IP address	
RADIUS Server Port	1812
RADIUS Server Password	

III-3-5-1-3. WPA Pre-Shared Key

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



WPA Unicast Cipher Suite Pre-shared Key	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). Choose from "Passphrase" (8-63
Format	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-3-5-1-4. 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 Unicast Cipher Suite RADIUS Server IP	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). Input the IP address of the RADIUS
RADIUS Server Port RADIUS Server Password	authentication server here. Input the port number of the RADIUS authentication server here. The default value is 1812. Input the password of the RADIUS authentication server here.

III-3-5-2. Guest/ Multiple SSID

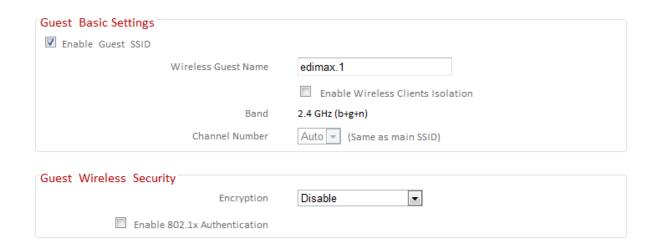
You can setup an additional "Guest" Wi-Fi network so guest users can enjoy Wi-Fi connectivity without accessing your primary network. The "Guest" screen displays settings for your guest Wi-Fi network.



The guest network is separate from your primary network. The settings for your primary network can be found in the "Basic" menu.



In access point mode, the "Guest" feature in the menu is replaced 👠 by "Multiple SSID". The BR-6428nS V3/BR-6228nS V3 supports up to four additional SSIDs for each wireless band in access point mode.





802.1x authentication is unavailable in WISP mode for the wireless band that is used to connect to WISP's AP.

Enable Guest SSID	Check/uncheck the box to enable/disable the
	guest Wi-Fi network.
Wireless Guest	Enter a reference/ID name for your guest
Name	wireless network.
Enable Wireless	Check the box to enable wireless clients
Clients Isolation	isolation. This prevents wireless clients
	connected to the BR-6428nS V3/BR-6228nS V3
	from communicating with each other and
	improves security. Typically, this function is
	useful for corporate environments or public
	hot spots and can prevent brute force attacks
	on clients' usernames and passwords.

Band	Displays the wireless standard used for the BR-6428nS V3/BR-6228nS V3's frequency band: 2.4GHz (B+G+N): Allows 802.11b, 802.11g, and 802.11n wireless clients to connect to the BR-6428nS V3/BR-6228nS V3.
Channel Number	Channel number for the guest network is the same as the main SSID and cannot be adjusted independently.

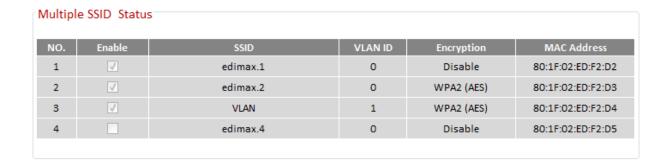
Encryption	Please refer to III-3-5-1 . Basic: Wireless
	Security for details about security settings.



WPA RADIUS encyrption type is not available for the guest network.

MULTIPLE SSID:

The BR-6428nS V3/BR-6228nS V3 supports up to four additional SSIDs for each wireless band in access point mode. Once configured, these SSIDs are displayed in the "Multiple SSID Status" table as shown below. Use the "Multiple SSID Basic Settings" box to configure additional SSIDs.





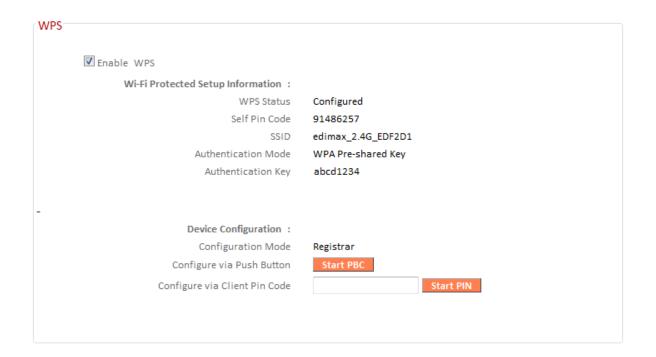
Multiple SSID	Use the drop down menu to select which SSID (numbered 1 – 4) to configure.
Wireless Network Name (SSID)	Enter a reference/ID name to separate your wireless network.
Enable Multiple SSID	Check/uncheck this box to enable/disable the specified SSID. Must be checked for the SSID to function.
Enable Wireless Clients Isolation	Check the box to enable wireless clients isolation. This prevents wireless clients connected to the BR-6428nS V3/BR-6228nS V3 from communicating with each other and improves security. Typically, this function is useful for corporate environments or public hot spots and can prevent brute force attacks on clients' usernames and passwords.
Band	Displays the wireless standard used for the BR-6428nS V3/BR-6228nS V3's frequency band: 2.4GHz (B+G+N): Allows 802.11b, 802.11g, and 802.11n wireless clients to connect to the BR-6428nS V3/BR-6228nS V3.
Channel Number	Channel number for the guest network is the same as the main SSID and cannot be adjusted independently.
VLAN ID	Set a VLAN ID for the specified SSID (see below).



A VLAN is a local area network which maps workstations virtually instead of physically and allows you to group together or isolate users from each other. VLAN IDs 1 – 4094 are supported.

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.



Enable WPS	Check/uncheck this box to enable/disable WPS.
WPS 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.
Authentication Key	Displays the wireless security authentication key.
Configuration Mode	The configuration mode of the device's WPS setting is displayed here. "Registrar" means the device acts as an access point for a wireless client to connect to and the wireless client(s) will follow the device's wireless settings.

Configure via Push	Click "Start PBC" (Push-Button Configuration)
Button	to activate WPS on the access point. WPS will
	be active for 2 minutes.
Configure via Client	Enter the wireless client's PIN code here and
PIN Code	click "Start PIN" to activate PIN code WPS.
	Refer to your wireless client's documentation if
	you are unsure of its PIN code.

III-3-5-4. Access Control

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 to connect to the BR-6428nS V3/BR-6228nS V3. Devices are each identified by their unique MAC address. If a device which is not on the list of permitted MAC addresses attempts to connect to the BR-6428nS V3/BR-6228nS V3, it will be denied.

To enable this function, check the box labeled "Enable Wireless Access Control".



MAC address	Select a PC name from the drop-down list and click ">>" to add enter it into the blank field to the right.
	Click "Refresh' in the drop-down menu to refresh the list of available MAC addresses. If the address you wish to add is not listed, enter

	it manually.
	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
Add	characters. Click "Add" to add the MAC address to the MAC address filtering table.

MAC address entries will be listed in the table as shown below. Select an entry using the "Select" checkbox.

MAC Address	Device Name	IP Address	Comment	Select
00:1b:63:cb:4c:b5	MACBOOK-4729BA	192.168.2.101		
			Delete Selected	Delete All
			Delete Selected	Delete /

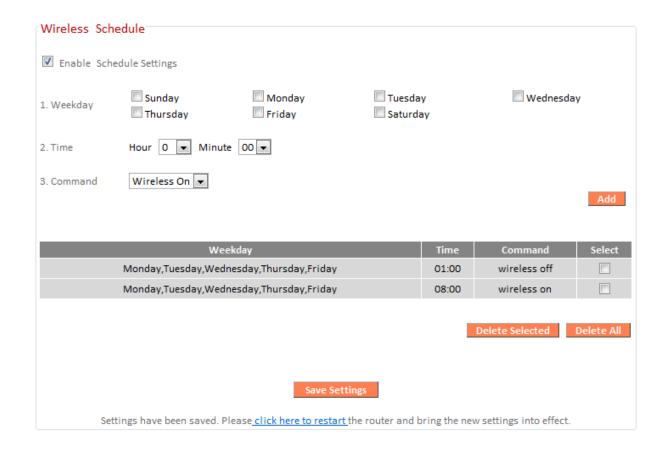
Delete Selected/	Delete selected or all entries from the table.
Delete All	

III-3-5-5. Schedule

The schedule feature allows you to automate the wireless radio to switch on/off at specified times. Multiple schedules can be configured. Check/uncheck the box "Enable Schedule Settings" to enable/disable the wireless on/off scheduling function.



The BR-6428nS V3/BR-6228nS V3 must remain connected to the Internet and use an NTP server for the schedule feature to function correctly.





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

- 1. Use the checkboxes to select which day(s) to include in the schedule.
- **2.** Specify a time (hour and minute) for the schedule using the drop-down menu.
- **3.** Select which command applies to this schedule from the drop-down menu, either "Wireless On" or "Wireless Off".

Add	Add the schedule to the table of active
	schedules.

Active schedules will be displayed in the table as shown below. Select an entry using the "Select" checkbox.



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

III-3-6. Firewall



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



SPI firewall	Enable or disable the Stateful Packet
	Inspection (SPI) firewall.

III-3-6-1. URL Blocking

This function can block Internet access by either specific URLs or keywords. Check/uncheck the "Enable URL Blocking" box to enable/disable URL blocking.



URL/Keyword	Enter the URL or keyword to be blocked.
Add	Add the URL or keyword to the blocked table.

Blocked URLs/keywords entries will be listed in the table as shown below. Select an entry using the "Select" checkbox.



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

III-3-6-2. Access Control

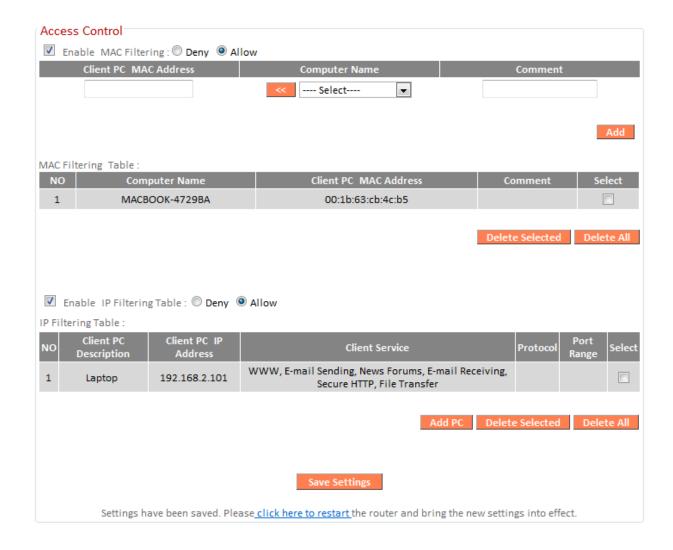
A

Access Control (MAC filtering) can also be configured from III-3-5-4. Access Control.

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 BR-6428nS V3/BR-6228nS V3. 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.



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'.
Computer Name	Select a computer name from the drop-down list and click "<<" to add its MAC address into the "Client PC Mac Address" field. Click "Refresh' in the drop-down menu to refresh the list of available MAC addresses. If the address you wish to add is not listed, enter it manually.
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 as shown below. Select an entry using the "Select" checkbox.



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

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.

Access Control Add PC

This page allows users to define service limitations of client PCs, including IP address and service type.

Access Control Add PC:

Client PC Description	Laptop		
Client PC IP address	192.168.2.101] -	

Client PC Service:

Service Name	Detail Description	Select
WWW	HTTP, TCP Port 80, 3128, 8000, 8080, 8081	V
E-mail Sending	SMTP, TCP Port 25	V
News Forums	NNTP, TCP Port 119	V
E-mail Receiving	POP3, TCP Port 110	V
Secure HTTP	HTTPS, TCP Port 443	V
File Transfer	FTP, TCP Port 21, 20	V
MSN Messenger	TCP Port 1863	
Telnet Service	TCP Port 23	
AIM	AOL Instant Messenger, TCP Port 5190	
NetMeeting	H.323, TCP Port 389,522,1503,1720,1731	
DNS	UDP Port 53	
SNMP	UDP Port 161, 162	
VPN-PPTP	TCP Port 1723	
VPN-L2TP	UDP Port 1701	
TCP	All TCP Port	
UDP	All UDP Port	

User Define Service:

Protocol	Both 🔻
Port Range	
	Add

Client PC	Enter a description for reference/identification
Description	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.

IP filtering entries will be listed in the IP filtering table shown below.



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

III-3-6-3. 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.
Computer Name	Select a computer name from the list and click "<<" to enter its IP address into the "Client PC" field (above).
Add	Click "Add" to add the client to the "Current DMZ Table".

DMZ entries will be displayed in the table shown below:

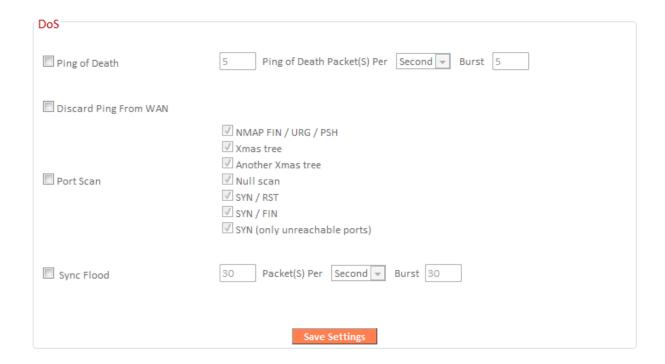


Delete Selected/	Delete selected or all entries from the table.
Delete All	

III-3-6-4. 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	Check this box and the router will not answer
WAN	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-3-7. 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

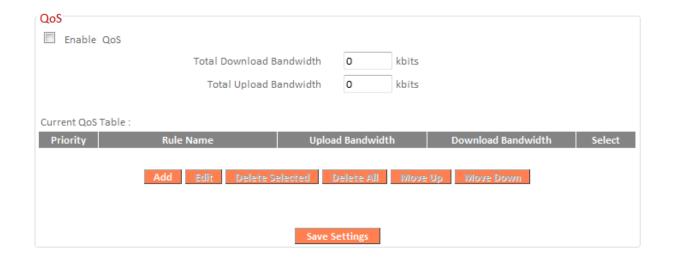
bandwidth is available. Minimum or maximum bandwidth can be guaranteed for a specified application.



QoS can improve the BR-6428nS V3/BR-6228nS V3's performance. QoS is recommended to optimize performance for online gaming.

III-3-7-1. 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	Enter your total upload bandwidth limit from
Bandwidth	your Internet service provider (ISP) in kbits.
Add	Opens a new window to add a new QoS rule
	to the current QoS table.

QoS

This page allows users to add/modify the QoS rule's settings.

Rule Name					
Bandwidth	Download 🔻		kbits	Guarantee	•
Local IP Address]-[
Local Port Range					
Remote IP Address]-[
Remote Port Range					
Traffic Type	None 🔻				
Protocol	TCP ▼				
	Save				

Dula Nama	Futor a name for the OoC mula for		
Rule Name	Enter a name for the QoS rule for		
	reference/identification.		
Bandwidth	Set the bandwidth limits for the QoS rule:		
	Bandwidth: Download V Kbps guarantee V		
	(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.		
	ir 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.

Current QoS Tabl	e:			
Priority	Rule Name	Upload Bandwidth	Download Bandwidth	Select
	Add Edit Delete	Selected Delete All Move	Uo - Move Down	
	Add Edit Delete	Selected Delete All Move	top Move Down	

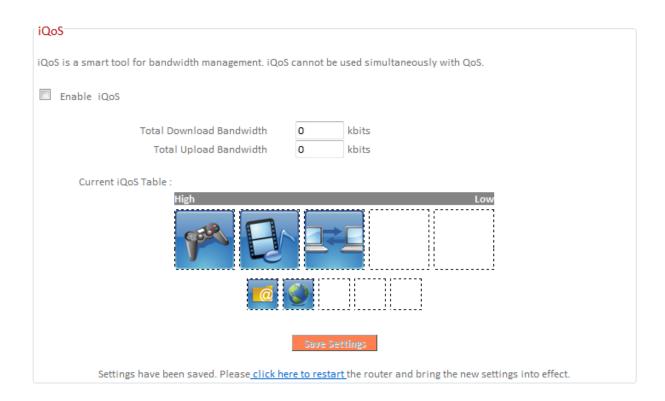
Edit	Edit a selected rule.
Delete Selected/	Delete selected or all entries from the
Delete All	table.
Move Up/Down	Move selected rule up or down the list.

III-3-7-2. iQoS

iQoS is a more intuitive and automated tool to manage internet bandwidth than manually configuring the settings using QoS. For online gamers or users with bandwidth requirements for audio/video, iQoS is a useful function.



iQoS cannot be used in conjunction with QoS and vice-versa. When one is enabled, the other is automatically disabled.



Check/uncheck the box "Enable iQoS" to enable/disable the iQoS function, and then enter your bandwidth limits and arrange the network application icons in priority order in the "Current iQoS Table". Icons with higher priority will be assigned bandwidth more efficiently for better performance.

Total Download Bandwidth	Enter your total download bandwidth limit from your Internet service provider (ISP) in kbits.
Total Upload	Enter your total upload bandwidth limit from
Bandwidth	your Internet service provider (ISP) in kbits.

The icons represent the following categories:



Internet Browsing



P2P/BT Downloads



FTP



Multimedia



Online Gaming

The iQoS table is ordered left to right, high to low priority. Click a small icon below the table to insert it into the table, and click a large icon in the table to remove it. All spaces in the priority table must be filled.

III-3-8. Advanced



Advanced features of the BR-6428nS V3/BR-6228nS V3 can be configured from the "Advanced" menu.

III-3-8-1. 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.
Hop Count	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.

Static Routing Table entries will be displayed in the table shown below:



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

III-3-8-2. 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.



Private IP	Enter the IP address of the computer on the local network.
Computer Name	Windows computers on the local network will be listed here – select a computer from the list and click << to automatically add the IP address to the "Private IP" field.
Туре	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.

Port Forwarding Table entries will be displayed in the table shown below:

Private IP	Туре	Port Range	Comment	Select
			Delete Celested	Delete All
	Private IP	Private IP Type	Private IP Type Port Range	Private IP Type Port Range Comment Delete Selected

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

III-3-8-3. 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.



Private IP	Specify the IP address of the computer on your local network.
Computer Name	Select the name of a Windows computer from the drop-down menu and click to auto-input its IP address in the "Private IP" field.
Private Port	Specify the private port you wish to use on the computer in your local network.
Туре	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.

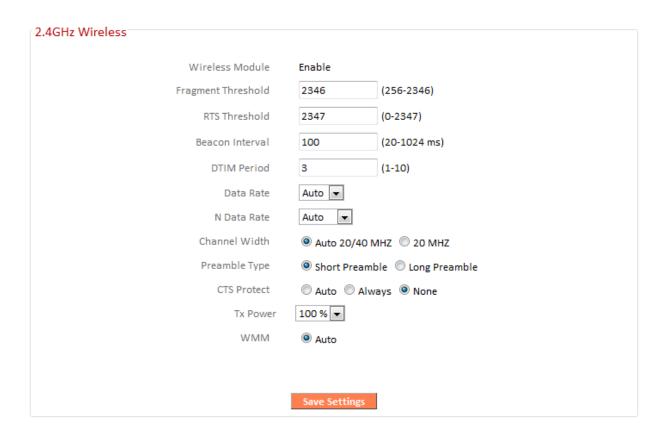
Current Virtual Table entries will be displayed in the table shown below:



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

III-3-8-4. 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.

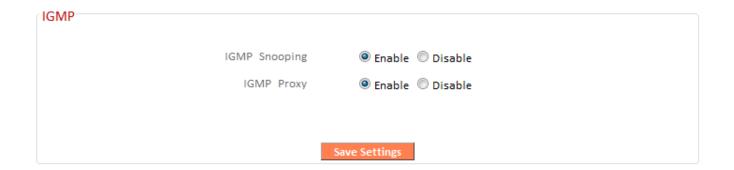


Fragment Threshold	Set the Fragment threshold of the wireless
	radio. The default value is 2346.
RTS Threshold	Set the RTS threshold of the wireless radio.
	The default value is 2347.
Beacon Interval	Set the beacon interval of the wireless radio.
	The default value is 100.
DTIM Period	Set the DTIM period 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 Width	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 Protect	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.
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.

III-3-8-5. 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.



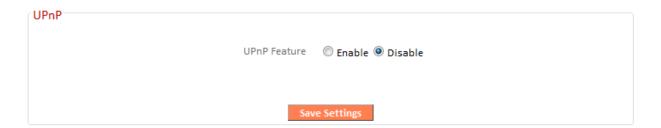
IGMP Snooping	IGMP snooping monitors traffic between hosts and multicast routers to facilitate bandwidth conservation. Select enable or disable.
IGMP Proxy	IGMP proxy enables intelligent multicast forwarding based on IGMP snooping information. Select enable or disable.



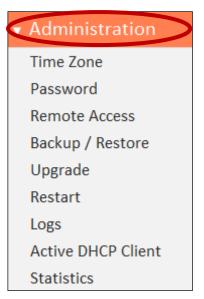
It is recommended to set "IGMP Snooping" and "IGMP Proxy" to "Enable".

III-3-8-6. 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".

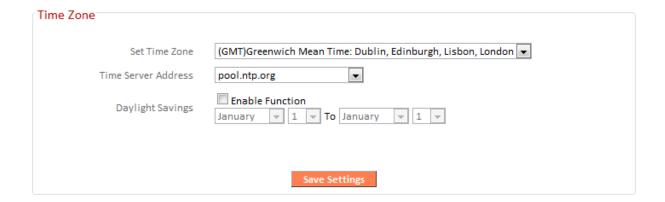


III-3-9. Administration



Various administrative functions can be accessed from the "Administration" menu.

III-3-9-1. Time Zone



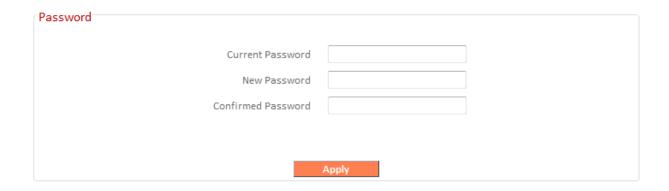
Set Time Zone	Select the time zone of your country or
	region.
Time Server Address	The travel router supports NTP (Network
	Time Protocol) for automatic time and date
	setup. Input the host name of the IP server
	manually.
Daylight Saving	If your country/region uses daylight saving
	time, please check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

III-3-9-2. 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.



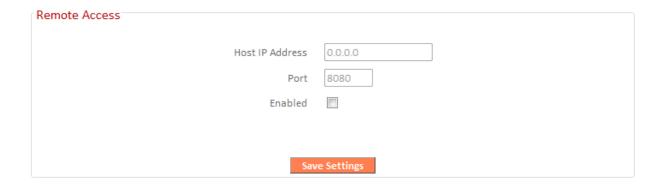
Please make a note of the new password. In the event that you forget the password and are unable to login to the browser based configuration interface, see <u>II-7. Reset to factory default settings</u> for how to reset the device.



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

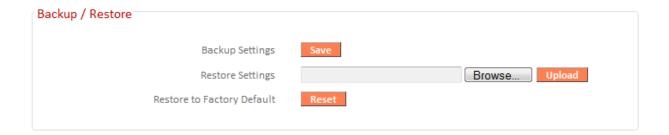
III-3-9-3. Remote Access

Check "Enabled" 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-3-9-4. 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	Click "Reset" to restore settings to the factory
Factory Default	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-3-9-5. Upgrade

The upgrade page allows you to upgrade the system firmware to a more recent version. You can download the latest firmware from the Edimax website. After the upgrade, the system will restart.

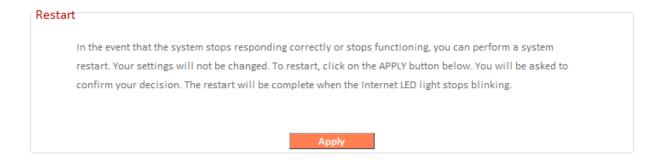


Do not switch off or disconnect the device during a firmware upgrade, as this could damage the device. It is recommended that you use a wired Ethernet connection for a firmware upgrade.



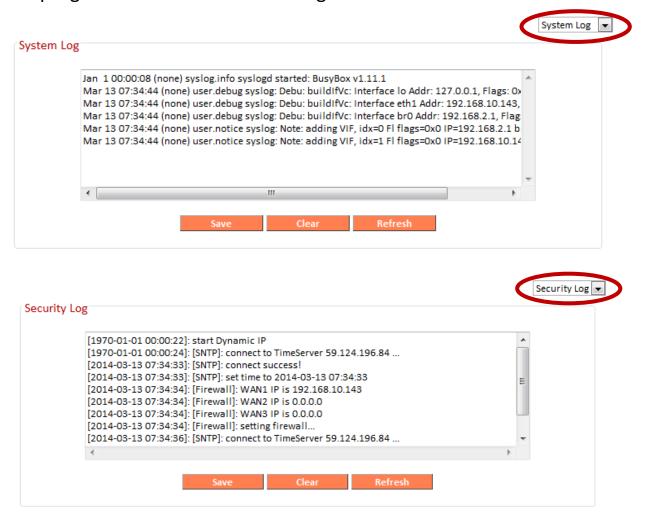
III-3-9-6. Restart

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



III-3-9-7. Logs

You can view the system log and security log here. Use the drop down menu in the top-right corner to select which log to view.



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.

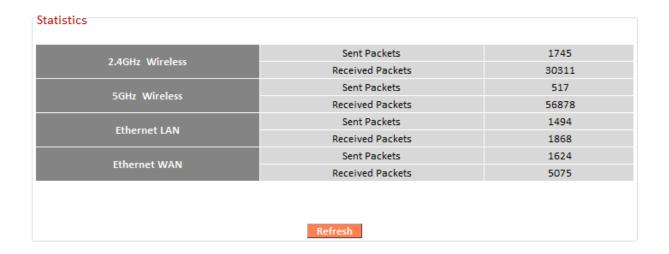
III-3-9-8. Active DHCP Client

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.

ive DHCP Client		
IP Address	MAC Address	Time Expired (Sec)
192.168.2.101	00:1b:63:cb:4c:b5	forever
	Refresh	

III-3-9-9. Statistics

Displays sent and received packet network statistics.



IV. 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 BR-6428nS V3/BR-6228nS V3 in order to access http://Edimax.Setup.



The BR-6428nS V3/BR-6228nS V3'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.



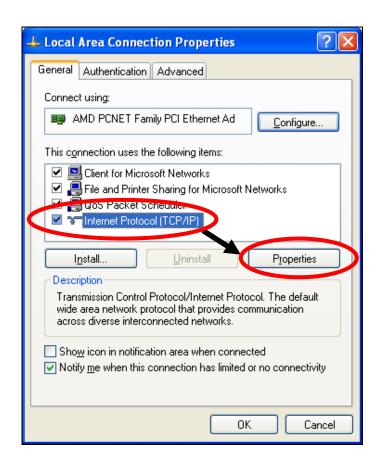
Please remember to change your IP address back to its original value after the device is properly configured.

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

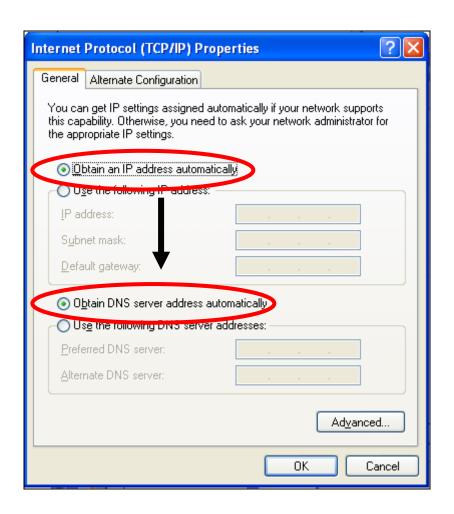
Please follow the instructions appropriate for your operating system.

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".

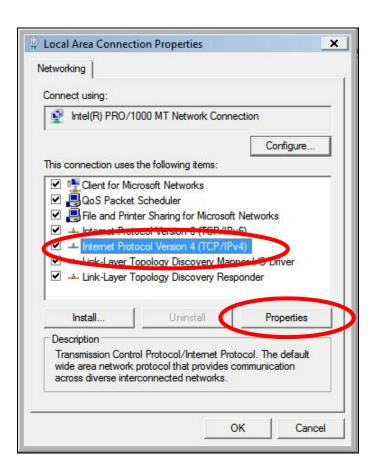


2. "Obtain an IP address automatically" and "Obtain DNS server address automatically" should be selected.

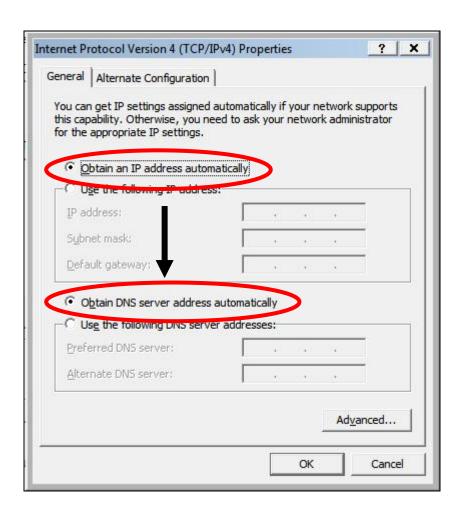


IV-1-1-2. Windows Vista

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".

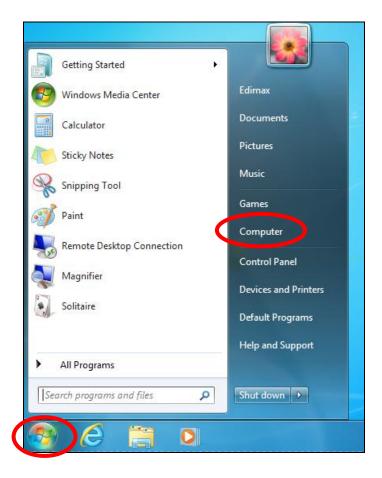


2. Select "Obtain an IP address automatically" and "Obtain DNS server address automatically" should be selected.



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".

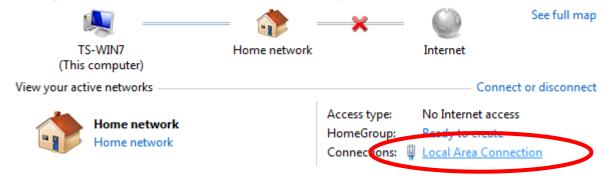


2. Under "Network and Internet" click "View network status and tasks".

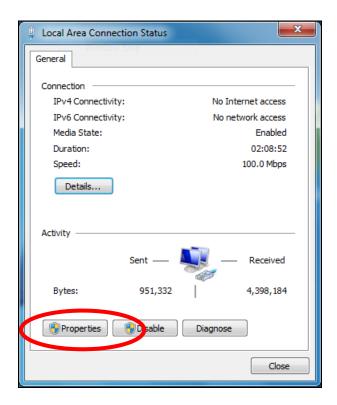


3. Click "Local Area Connection".

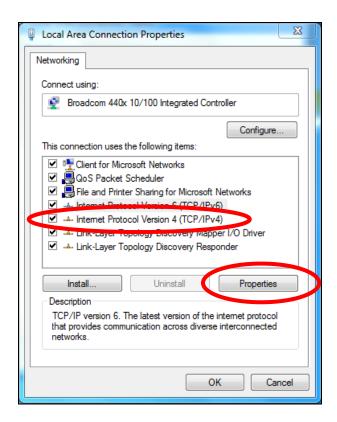
View your basic network information and set up connections



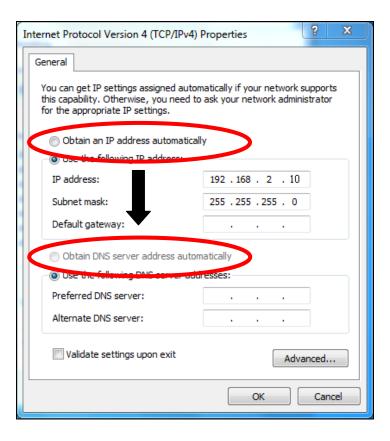
4. Click "Properties".



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

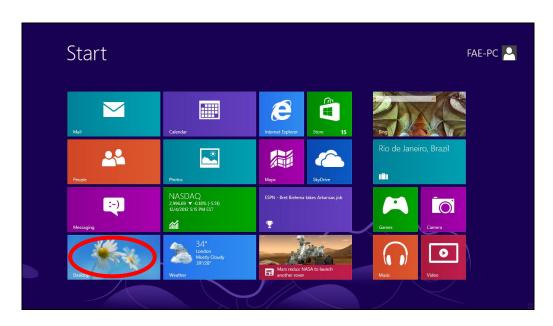


6. Select "Obtain an IP address automatically" and "Obtain DNS server address automatically" should be selected.

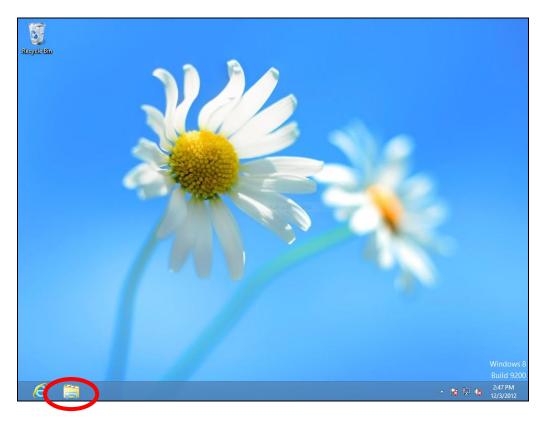


IV-1-1-4. Windows 8

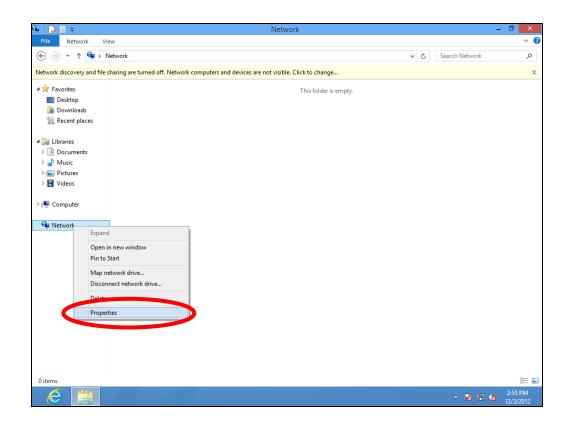
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



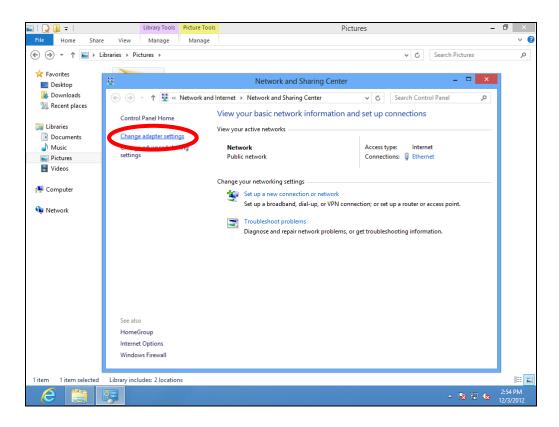
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



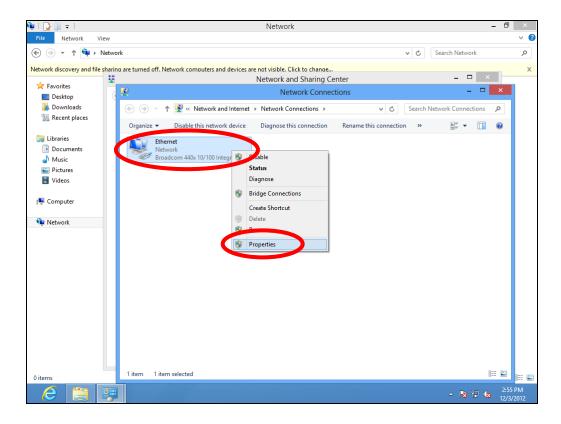
3. Right click "Network" and then select "Properties".



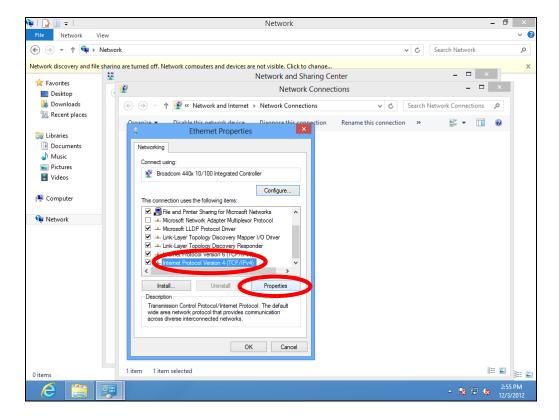
4. In the window that opens, select "Change adapter settings" from the left side.



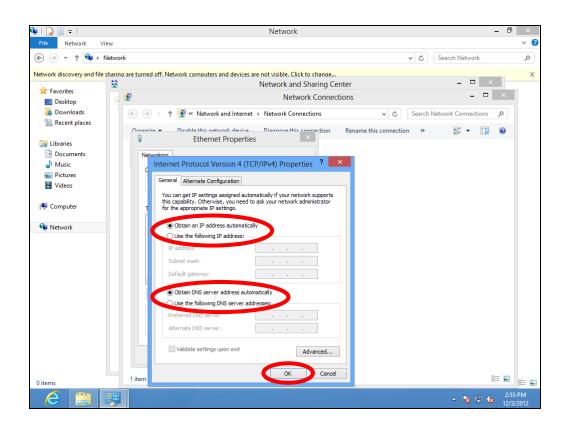
5. Choose your connection and right click, then select "Properties".



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.



IV-1-1-5. Mac OS

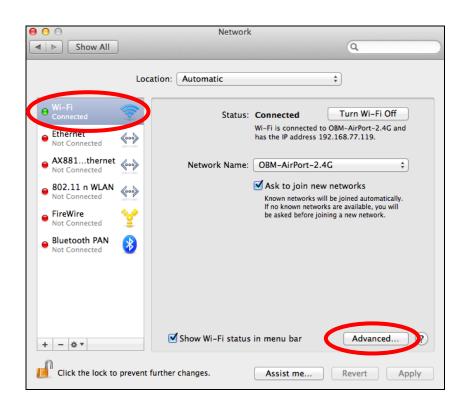
1. Have your Macintosh computer operate as usual, and click on "System Preferences".



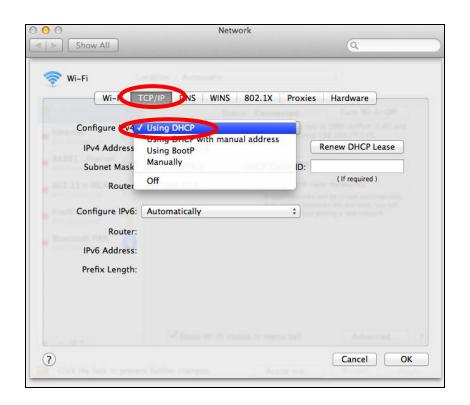
2. In System Preferences, click on "Network".



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.



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

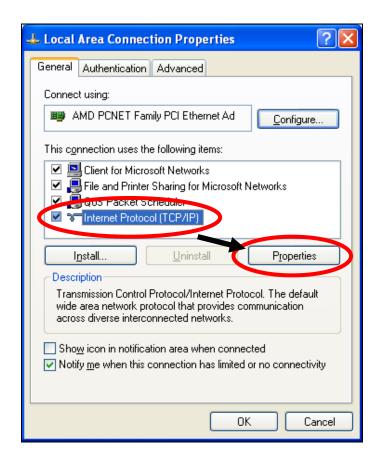
Please follow the instructions appropriate for your operating system. In the following examples we use the IP address **192.168.2.10** though you can use any IP address in the range **192.168.2.x** (x = 3 - 254) in order to access iQ Setup/browser based configuration interface.



🦺 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.

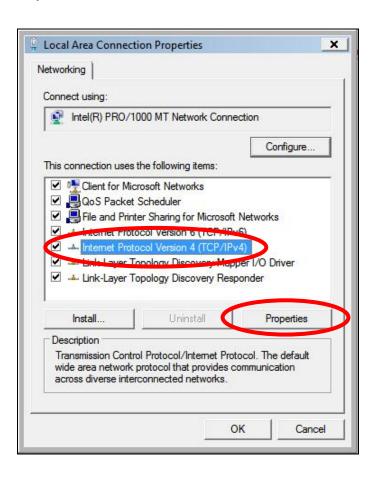
IP address: 192.168.2.10 **Subnet Mask**: 255.255.255.0

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.

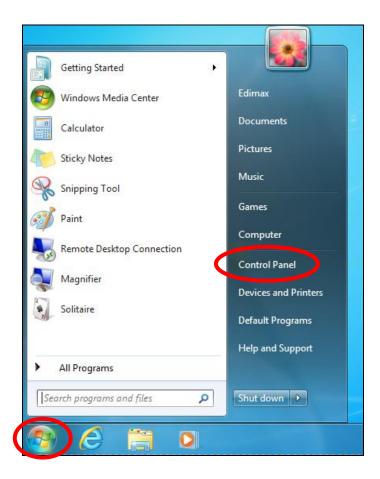
IP address: 192.168.2.10 Subnet Mask: 255.255.255.0

Preferred DNS Server: 192.168.2.1

Click 'OK' when finished.

IV-1-2-3. Windows 7

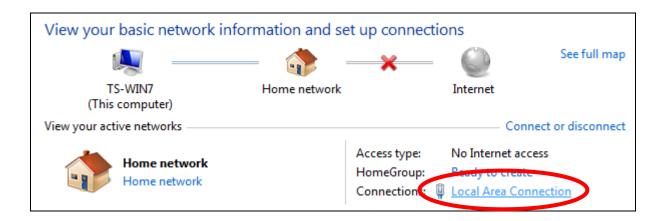
1. Click the "Start" button (it should be located in the lower-left corner of your computer), then click "Control Panel".



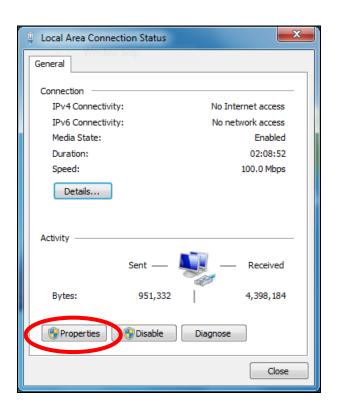
2. Under "Network and Internet" click "View network status and tasks".



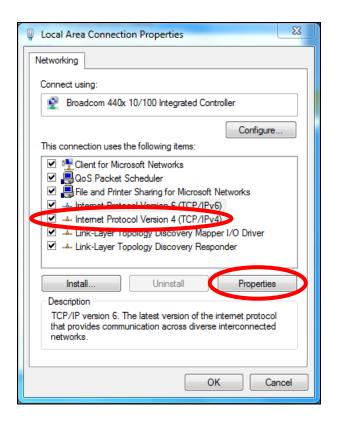
3.Click "Local Area Connection".



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

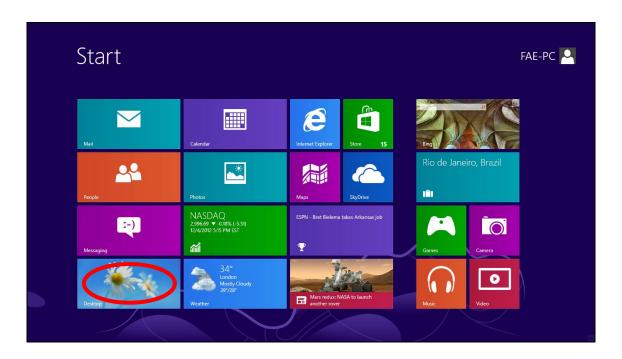
Subnet Mask: 255.255.255.0

Preferred DNS Server: 192.168.2.1

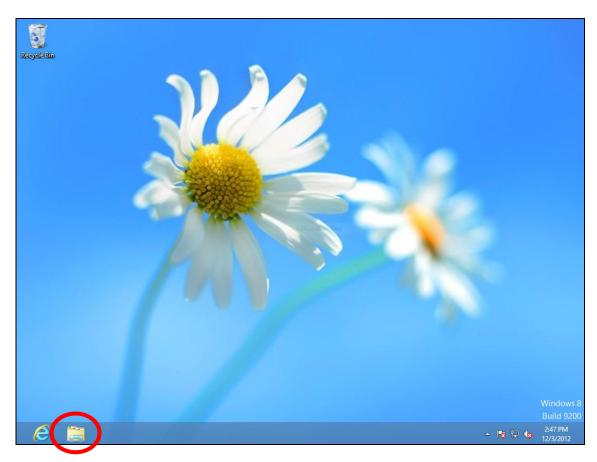
Click 'OK' when finished.

IV-1-2-4. Windows 8

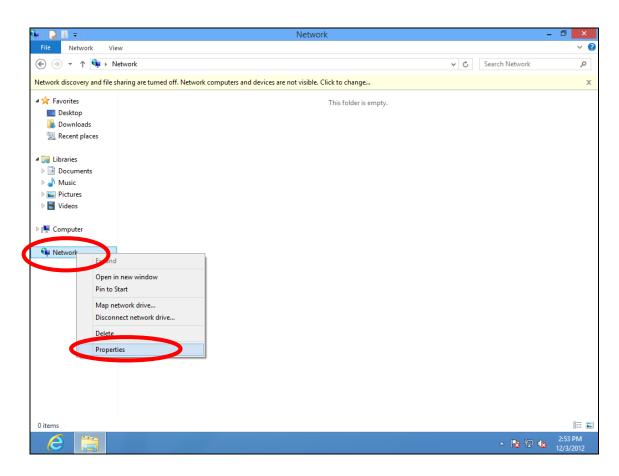
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



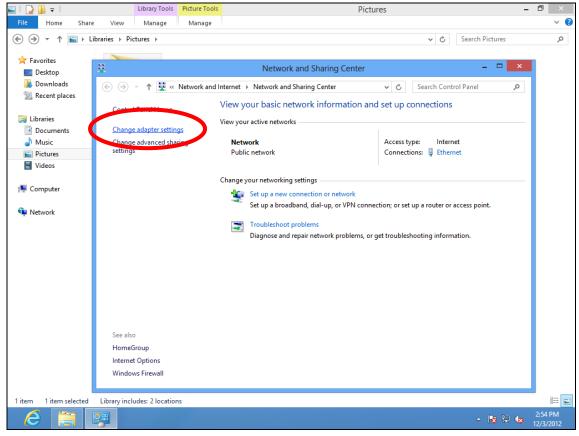
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



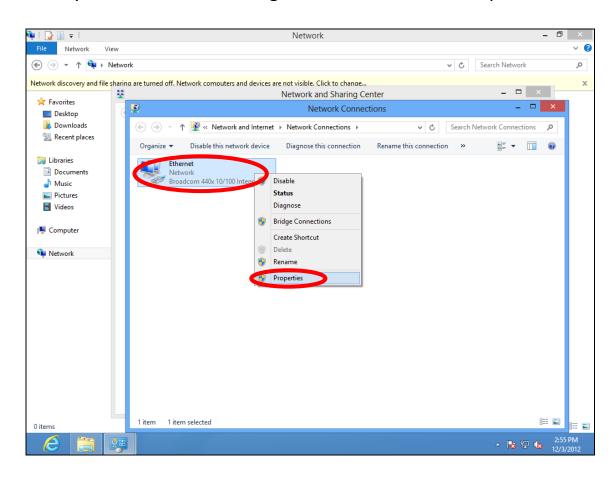
3. Right click "Network" and then select "Properties".



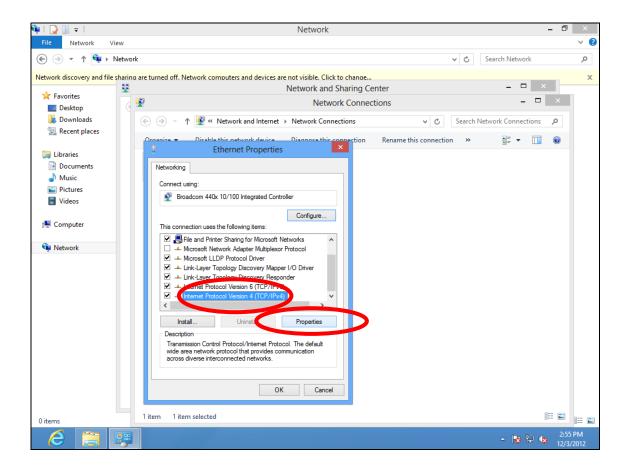
4. In the window that opens, select "Change adapter settings" from the left side.



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

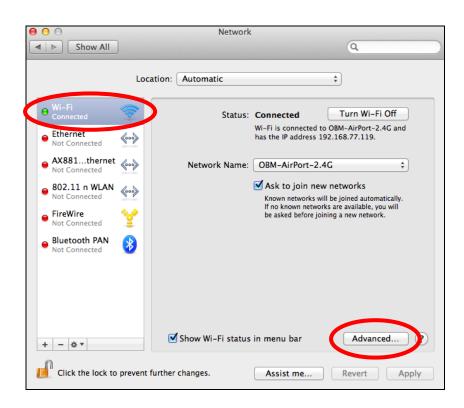
1. Have your Macintosh computer operate as usual, and click on "System Preferences"



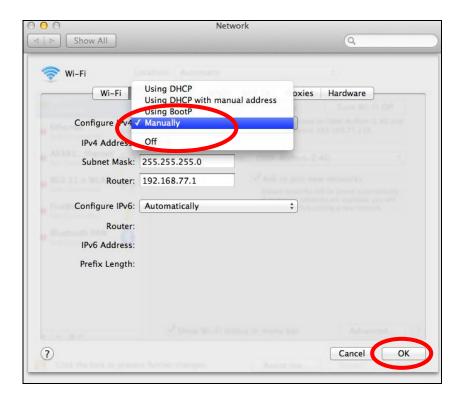
2. In System Preferences, click on "Network".



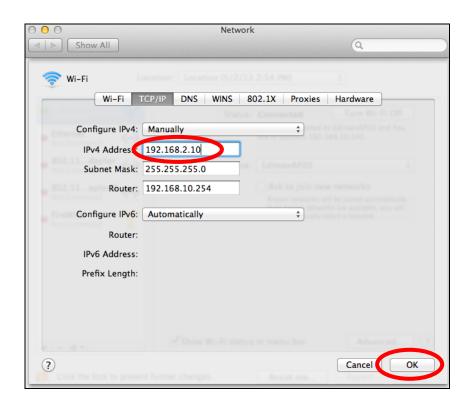
3. Click on "Wi-Fi" in the left panel and then click "Advanced" in the lower right corner.



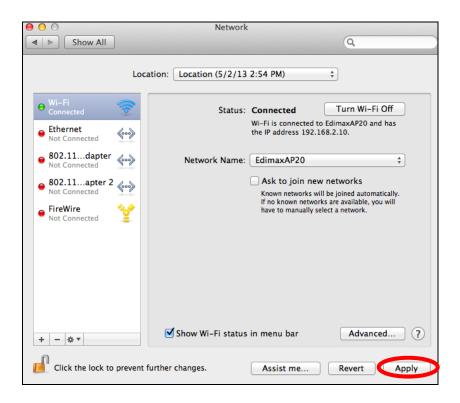
4. Select "TCP/IP" from the top menu and select "Manually" from the drop down menu labeled "Configure IPv4", then click "OK".



- A
- 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.



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

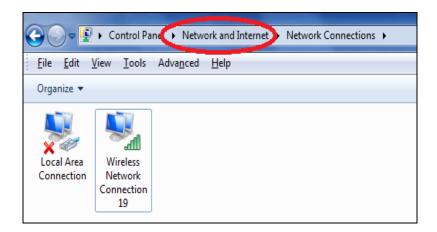
To find your network security key, please follow the instructions appropriate for your operating system.



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.



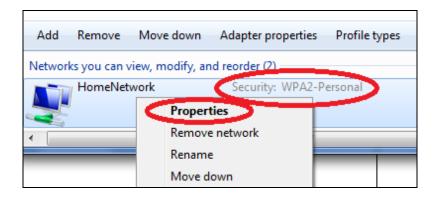
2. Click on "View network status and tasks" which is under the heading "Network and Sharing Center".



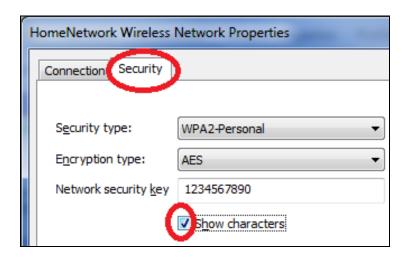
3. Click on "Manage wireless networks" in the left menu.



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".

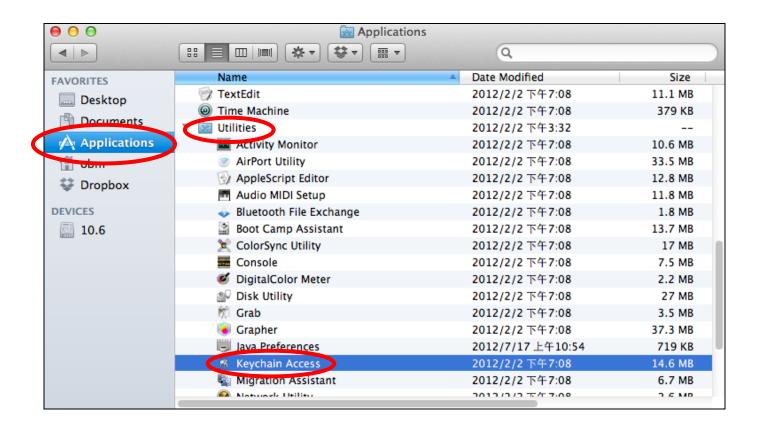


5.Click on the "Security" tab, and then check the box labeled "Show characters". This will show your network security key. Click the "Cancel" button to close the window.

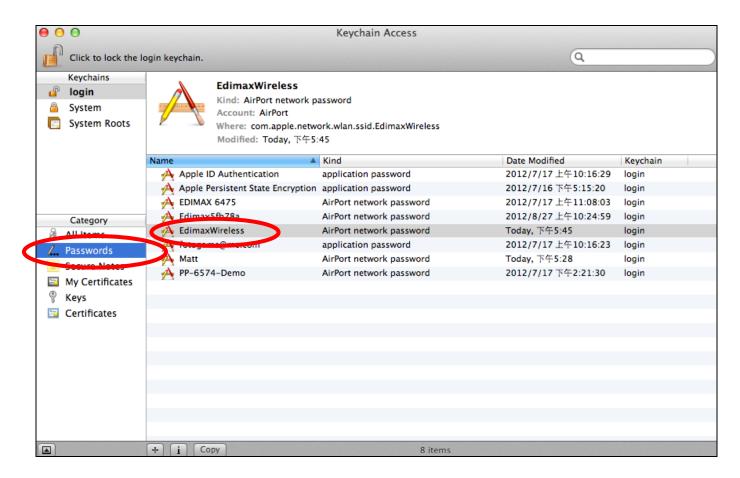


IV-1-3-2. Mac

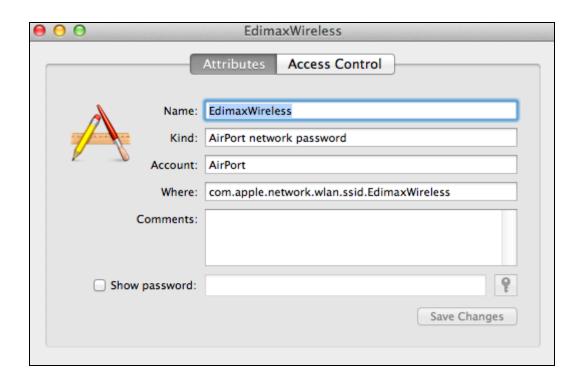
1. Open a new Finder window, and select "Applications" from the menu on the left side. Open the folder labeled "Utilities" and then open the application "Keychain Access".



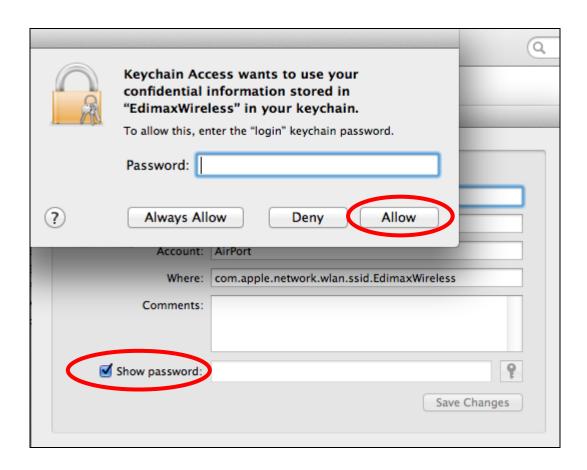
2. Select "Passwords" from the sub-menu labeled "Category" on the left side, as shown below. Then search the list in the main panel for the SSID of your network. In this example, the SSID is "EdimaxWireless" – though your SSID will be unique to your network.



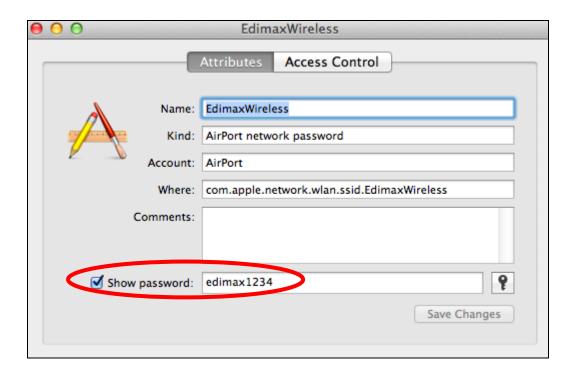
3. Double click the SSID of your network and you will see the following window.



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.

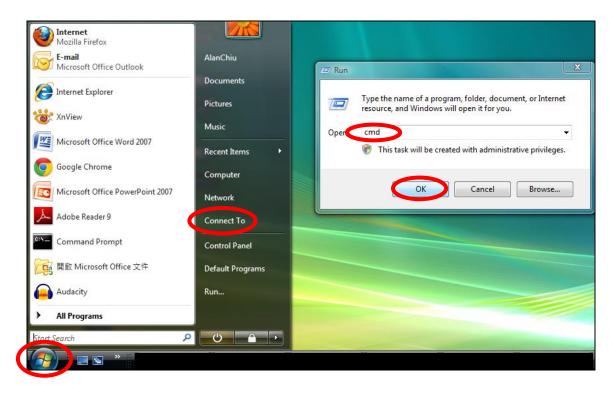


IV-1-4. How to Find Your Router's IP Address

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.

```
Administrator C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.

C:\Users\AlanChia\ipconfig
```

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

```
Administrator: C:\Windows\system32\cmd.exe
Ethernet adapter 區域連線:
    Connection-specific DNS Suffix .:
 Link-local IPv6 Address . . . : fe80::4cdc:3e90:ba56:1722x9
IPv4 Address . . . . : 192.168.10.14

Colonet mask . . . . : 255.255.255.0

Default Gateway . . . . : fe80::4cdc:3e90:ba56:1722x9

IPv4 Address . . . . . : fe80::4cdc:3e90:ba56:1722x9

IPv4 Address . . . . : fe80::4cdc:3e90:ba56:1722x9

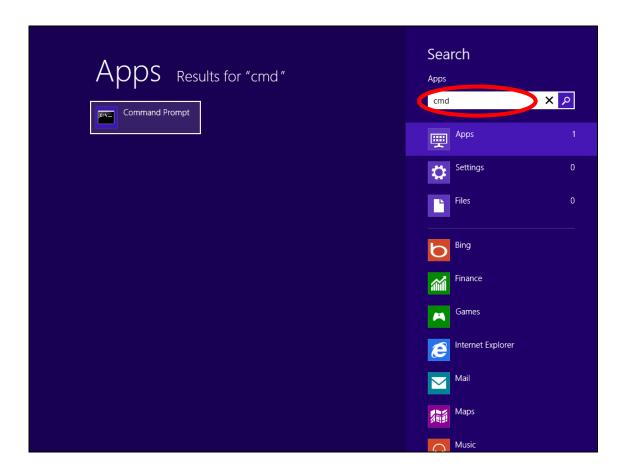
IPv4 Address . . . . : fe80::4cdc:3e90:ba56:1722x9
                                                         192.168.10.254
Wireless LAN adapter 無線網路連線:
    Media State . . . . . . . . : Media disconnected
    Connection-specific DNS Suffix . : edimax.com
Tunnel adapter 區域連線* 6:
    Media State . . . . . . . . . : Media disconnected Connection—specific DNS Suffix . :
Tunnel adapter 區域連線* 7:
                                               . . . : Media disconnected
    Media State . . .
    Connection-specific DNS Suffix .:
C:\Users\AlanChiu>_
```

IV-1-4-2. Windows 8

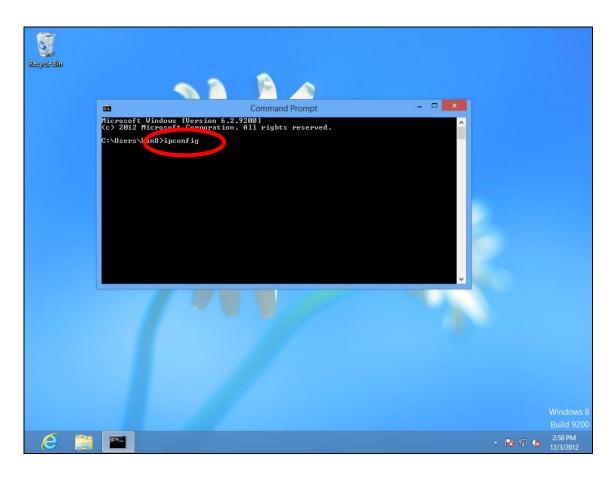
1. From the Windows 8 Start screen, move your curser to the top right corner of the screen to display the Charms bar.



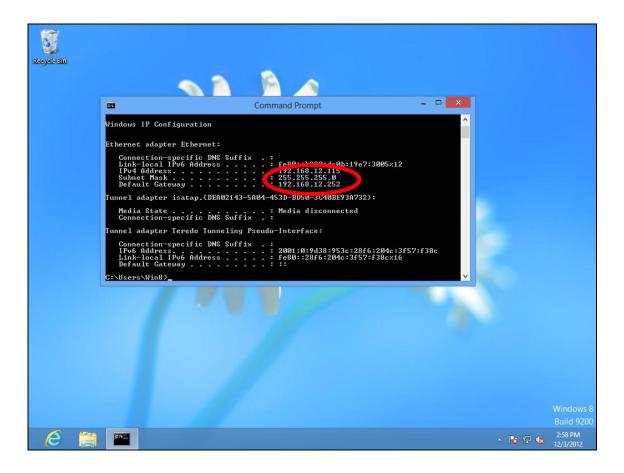
2. Click "Search" and enter "cmd" into the search bar. Click the "Command Prompt" app which be displayed on the left side.



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

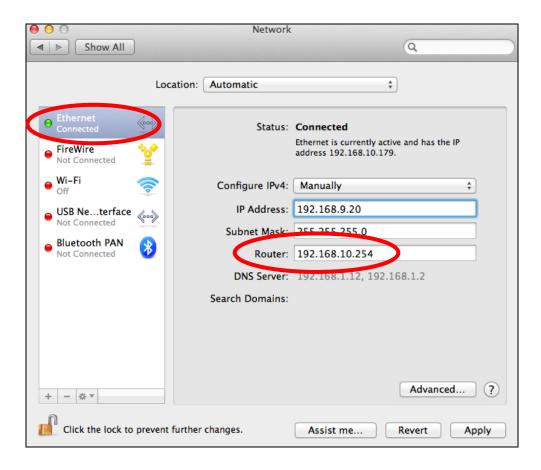


4. Your router's IP address will be displayed next to "Default Gateway".

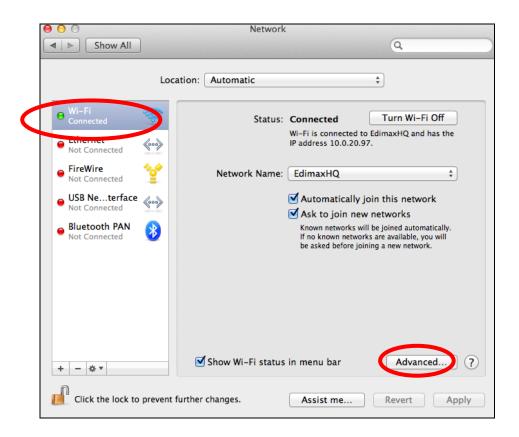


IV-1-4-3. Mac

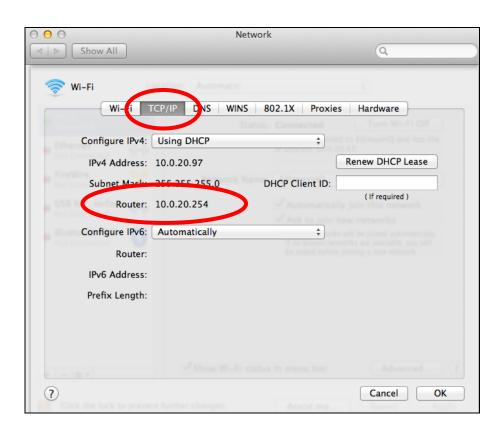
- 1. Launch "System Preferences" and click on "Network".
- 2. If you are using an Ethernet cable to connect to your network, your router's IP address will be displayed next to "Router".



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".



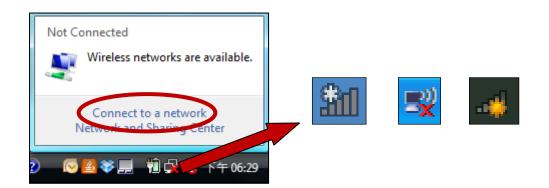
IV-2. Connecting to a Wi-Fi network

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:

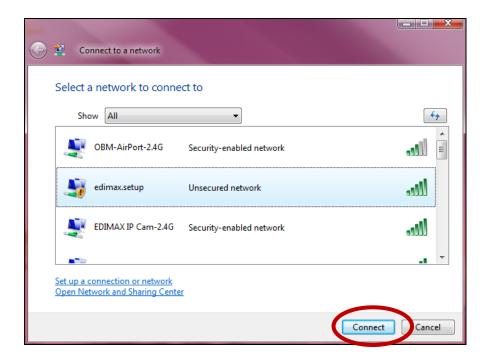


Below is an example of how to connect using Windows Vista – the process may vary slightly for other versions of Windows.

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



2. Search for the SSID of your BR-6428nS V3/BR-6228nS V3 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 BR-6428nS V3/BR-6228nS V3's wireless network.



IV-3. Troubleshooting

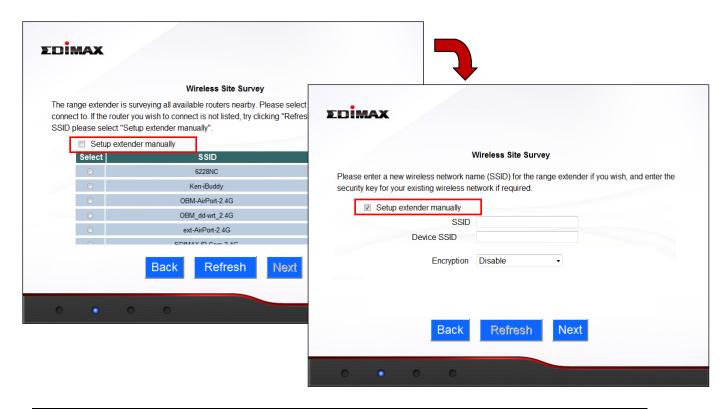
If you are experiencing problems with your BR-6428nS V3/BR-6228nS V3, please check below before contacting your dealer of purchase for help.



If you are experiencing problems immediately after a firmware upgrade, please contact your dealer of purchase for help.

1. In range extender mode, how do I connect to a network which has a hidden SSID?

a. During iQ Setup select "Setup extender manually" as shown below. Manually enter the SSID of the hidden network, an SSID for your device and the encryption information for the hidden network.



SSID	Enter the SSID (network name) of your existing, hidden		
	network.		
Device SSID	Enter an SSID for the BR-6428nS V3/BR-6228nS V3 or leave		
	it blank to use a default which consists of your existing		
	router's SSID (above) +"_2EX".		
Encryption	Enter the encryption information for your existing, hidde		
	network.		

2. I can't access the Internet.

- a. Ensure that all cables are connected properly. Try a different Ethernet cable.
- b. Switch your BR-6428nS V3/BR-6228nS V3 and network device off and back on again. Check the LED status of the BR-6428nS V3/BR-6228nS V3.
- c. Check if you can access the web based configuration interface. If not, please ensure your computer is set to use a dynamic IP address.
- d. Login to the web based configuration interface and go to **Internet > WAN Setup** and check that the connection type is correct. If you are unsure which internet connection type you have, please contact your Internet Service Provider (ISP).
- e. 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 browser based configuration interface.

- a. Please ensure your computer is set to use a dynamic IP address. Refer to the user manual for guidance if you are unsure how to do this.
- b. Ensure you enter the correct password. The password is case-sensitive.

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 power 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, as shown below:





Router Login	Enter this URL in a web browser to run iQ Setup configure advanced settings. You must be	
	connected to the device by Wi-Fi or Ethernet cable.	
Haarraana /Daaarrand		
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	This is the default Wi-Fi network name for the	
Name	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 address is displayed here.	
PIN CODE	This is your device's PIN code for Wi-Fi Protected	
	Setup (WPS).	

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. My BR-6428nS V3/BR-6228nS V3 has a weak wireless signal in range extender mode.

- a. Weak signals are usually caused by interference from other devices or obstacles blocking the BR-6428nS V3/BR-6228nS V3's wireless signal:
- b. Keep the device away from other radio devices such as microwaves or wireless telephones.
- c. Do not put the device in the corner of a room or under/nearby metal.
- d. Ensure there are as few obstacles as possible between the BR-6428nS V3/BR-6228nS V3 and your wireless network device.

In range extender mode, the BR-6428nS V3/BR-6228nS V3'S weak wireless signal may be in turn caused by a weak signal from your existing router. It's important to choose a good location for the BR-6428nS V3/BR-6228nS V3 in relation to your existing wireless router. The best location is roughly in the middle between your existing wireless router and the area you would like to be covered by the BR-6428nS V3/BR-6228nS V3. If you are too far away from your existing router, then it is difficult for the BR-6428nS V3/BR-6228nS V3 to receive a wireless signal.

7. Do the WAN and 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.
- c. In *range extender* mode, the *WAN port* is not functional and the *LAN ports* are for wired network clients. Do not connect your existing router to the device's *WAN* or *LAN ports*, as this can cause the device to malfunction.

8. My network is configured to use static IP addresses. How can I assign a static IP address to my BR-6428nS V3/BR-6228nS V3?

a. You can modify the device's IP address using the browser based configuration interface. Please refer to III-3-4. LAN.

IV-4. 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 192.34.45.8). 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.

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	ТСР	23
FTP	TCP	21
SMTP	ТСР	25
POP3	ТСР	110
H.323	ТСР	1720
SNMP	UCP	161
SNMP Trap	UDP	162
HTTP	ТСР	80
PPTP	ТСР	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 Unreliable 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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The product you have purchased and the setup screen may appear slightly different from those shown in this QIG. The software and specifications are subject to change without notice. Please visit our website www.edimax.com for updates. All brand and product names mentioned in this manual are trademarks and/or registered trademarks of their respective holders.

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 2.5cm (1 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.

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 Dyrektywa UE 1999/5/EC, 2009/125/EC.

Acest echipament este în conformitate cu cerințele esențiale și alte prevederi relevante ale Română:

Directivei 1999/5/CE, 2009/125/CE.

Русский: Это оборудование соответствует основным требованиям и положениям Директивы

1999/5/EC, 2009/125/EC.

Ez a berendezés megfelel az alapvető követelményeknek és más vonatkozó irányelveknek Magyar:

(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/ЕС, 2009/125/ЕС.

Slovenčina: Toto zariadenie spĺňa základné požiadavky a ďalšie príslušné ustanovenia smerníc

1999/5/ES, 2009/125/ES.

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

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

2009/125/EC.

Questo apparecchio è conforme ai requisiti essenziali e alle altre disposizioni applicabili Italiano:

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.

Dette udstyr er i overensstemmelse med de væsentligste krav og andre relevante Dansk:

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.

AT BE CY CZ DK EE FD FR RU FOR USE IN





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.

Equipment: 5-in-1 N300 Wi-Fi Router, Access Point & Range Extender

Model No.: BR-6428nS V3

Equipment: 5-in-1 N150 Wi-Fi Router, Access Point & Range Extender

Model No.: BR-6228nS V3

The following European standards for essential requirements have been followed:

AN/NZS CISPR 22: 2009+A1:2010

EN 300 328 V1.8.1 (2012-06)

EN 301 489-1 V1.9.2 (2011-09)

EN 301 489-17 V2.2.1 (2012-09)

EN 55022: 2010+AC:2011 Class B

EN 55024: 2010

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

EN 61000-3-2: 2006+A1:2009+A2:2009 Class A

EN 61000-3-3: 2013

IEC 61000-4-2: 2008 / EN 61000-4-2:2009

IEC 61000-4-3: 2006+A1: 2008+A2: 2010 / EN 61000-4-3: 2006+A1: 2008+A2: 2010

IEC 61000-4-4: 2012 / EN 61000-4-4: 2012

IEC 61000-4-5: 2005 / EN 61000-4-5: 2006

IEC 61000-4-6: 2008 / EN 61000-4-6: 2009

IEC 61000-4-11: 2004 / EN 61000-4-11: 2004

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CE

Date of Signature: July, 2014

Signature:

Printed Name: Albert Chang

Title: Director

Edimax Technology Co., Ltd.

