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

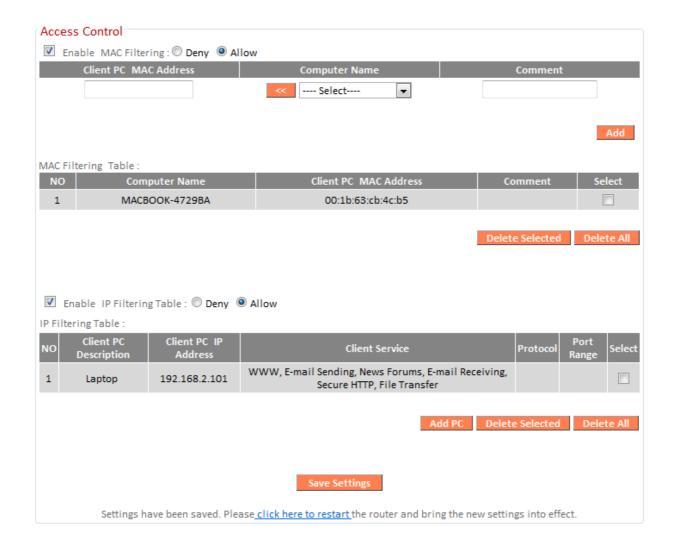


Access Control (MAC filtering) can also be configured from III-3-5-4. Access Control.

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.

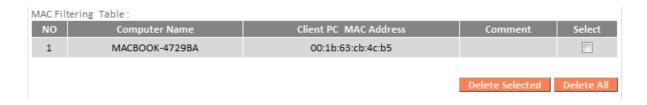
Check/uncheck the "Enable MAC Filtering" and/or "Enable IP Filtering" box to enable/disable MAC filtering and/or IP filtering.



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:

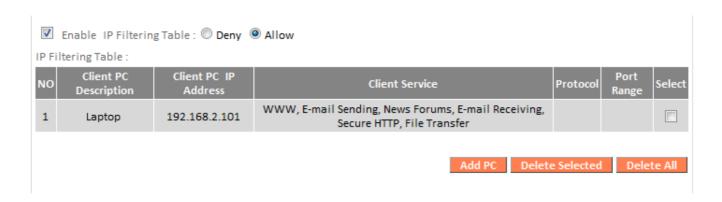
Service Name	Detail Description	Select
www	HTTP, TCP Port 80, 3128, 8000, 8080, 8081	V
E-mail Sending	SMTP, TCP Port 25	V
News Forums	NNTP, TCP Port 119	V
E-mail Receiving	POP3, TCP Port 110	V
Secure HTTP	HTTPS, TCP Port 443	V
File Transfer	FTP, TCP Port 21, 20	V
MSN Messenger	TCP Port 1863	
Telnet Service	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	

Client PC Description	Enter a description for reference/identification of up to 16 alphanumeric characters.
Client PC IP address	Enter a starting IP address in the left field and the end IP address in the right field to define a range of IP addresses; or enter an IP address in the left field only to define a single IP address.
Service Name	Various services are listed here with a short description. Check/uncheck the box for each service you wish to select.
Protocol	Select protocol "TCP" or "UDP" or "Both" for a service not included in the "Client PC Service" list.
Port Range	Enter the port range for the service not included in the "Client PC Service" list. Enter a single port number e.g. 110, a range of port numbers e.g. 110-120, or multiple port numbers separated by a comma e.g. 110,115,120.
Add	Click "Add" to add selected services or a user defined service to the IP filtering table.

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 DC	
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:

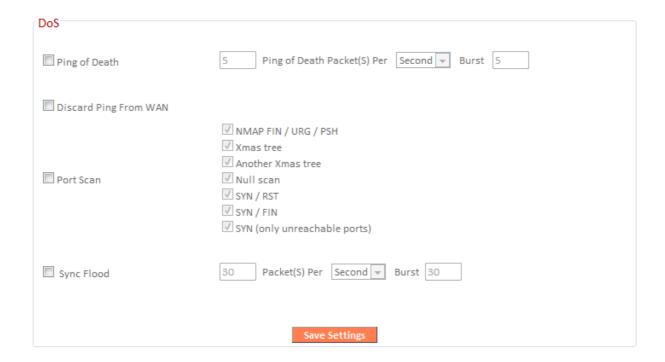


Delete Selected/	Delete selected or all entries from the table.
Delete All	

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

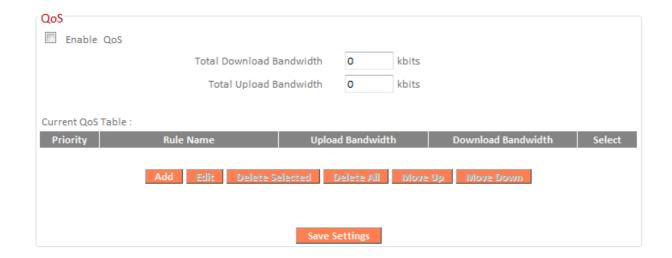
bandwidth is available. Minimum or maximum bandwidth can be guaranteed for a specified application.



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		

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.

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	le:			
Priority	Rule Name	Upload Bandwidth	Download Bandwidth	Select
Add Edit Delete Selected Delete All Move Up Move Down				
	Fill Delete	Perested Service Fill 1997	note somi	

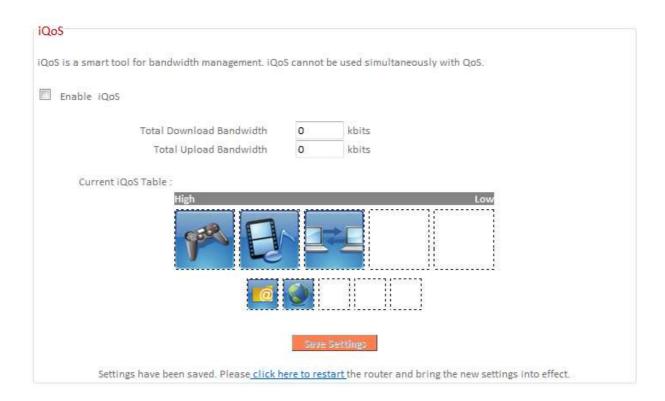
Edit	Edit a selected rule.
Delete Selected/	Delete selected or all entries from the
Delete All	table.
Move Up/Down	Move selected rule up or down the list.

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



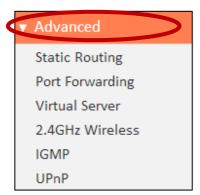
Multimedia



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

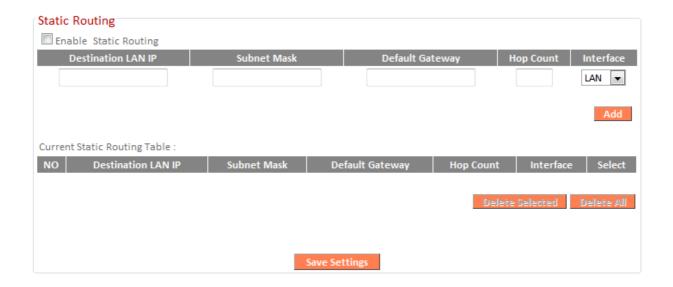


Advanced features of the BR-6428nS V3/BR-6228nS V3 can be configured from the "Advanced" menu.

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:

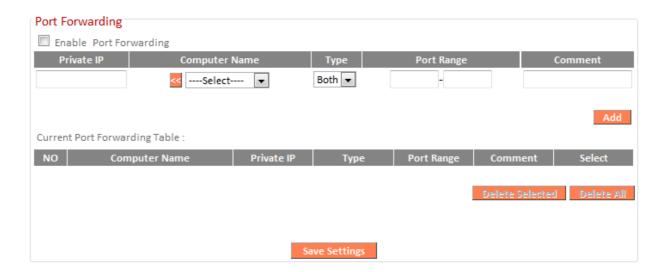


Delete Selected/	Delete selected or all entries from the table.
Delete All	

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:

					rt Forwarding Table :	Current Po
Select	Comment	Port Range	Туре	Private IP	Computer Name	NO
Delete Al	Delete Selected					
	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.

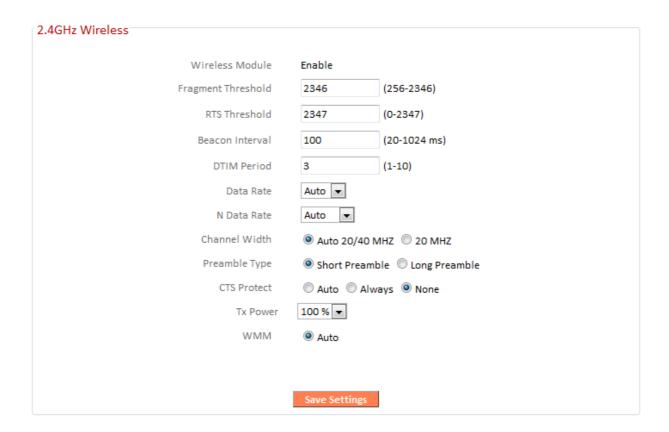
Current Virtual Table entries will be displayed in the table shown below:



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.

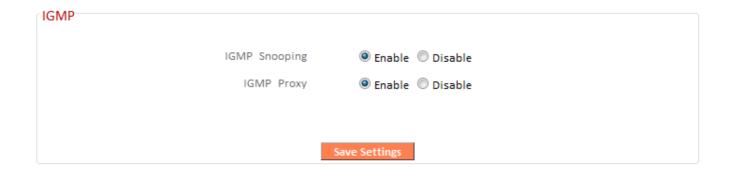


Fragment Threshold	Set the Fragment threshold of the wireless
	radio. The default value is 2346.
RTS Threshold	Set the RTS threshold of the wireless radio.
	The default value is 2347.
Beacon Interval	Set the beacon interval of the wireless radio.
	The default value is 100.
DTIM Period	Set the DTIM period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

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.



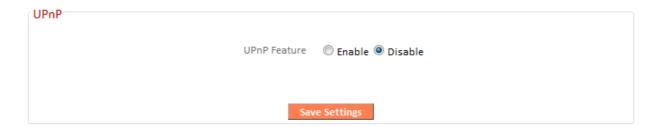
IGMP Snooping	IGMP snooping monitors traffic between hosts and multicast routers to facilitate bandwidth conservation. Select enable or disable.
IGMP Proxy	IGMP proxy enables intelligent multicast forwarding based on IGMP snooping information. Select enable or disable.



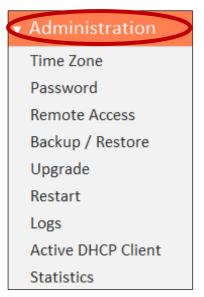
It is recommended to set "IGMP Snooping" and "IGMP Proxy" to "Enable".

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".

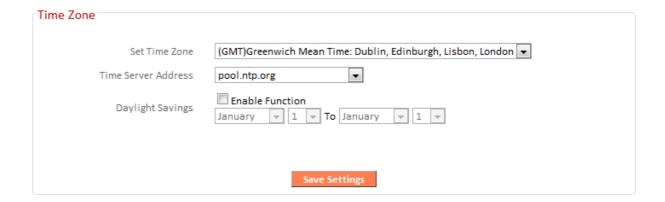


III-3-9. Administration



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

III-3-9-1. Time Zone



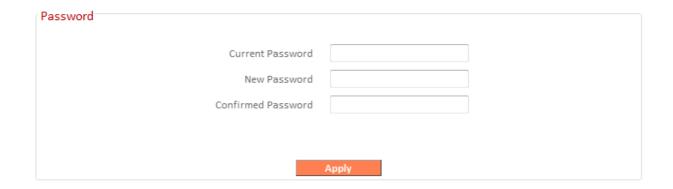
Set Time Zone	Select the time zone of your country or
	region.
Time Server Address	The travel router supports NTP (Network
	Time Protocol) for automatic time and date
	setup. Input the host name of the IP server
	manually.
Daylight Saving	If your country/region uses daylight saving
	time, please check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



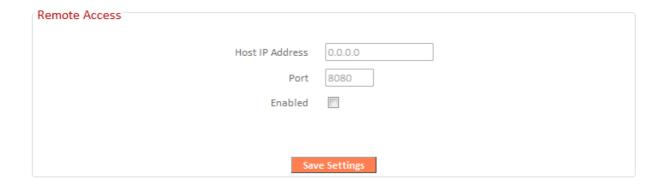
Please make a note of the new password. In the event that you forget the password and are unable to login to the browser based configuration interface, see <u>II-7</u>. Reset to factory default settings for how to reset the device.



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

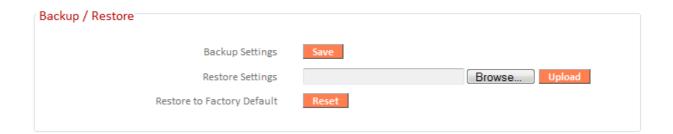
III-3-9-3. Remote Access

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.

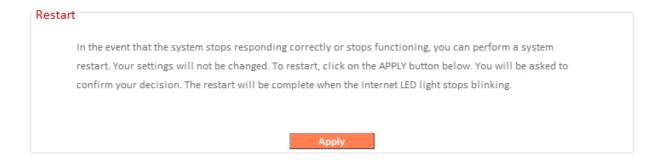


Do not switch off or disconnect the device during a firmware upgrade, as this could damage the device. It is recommended that you use a wired Ethernet connection for a firmware upgrade.



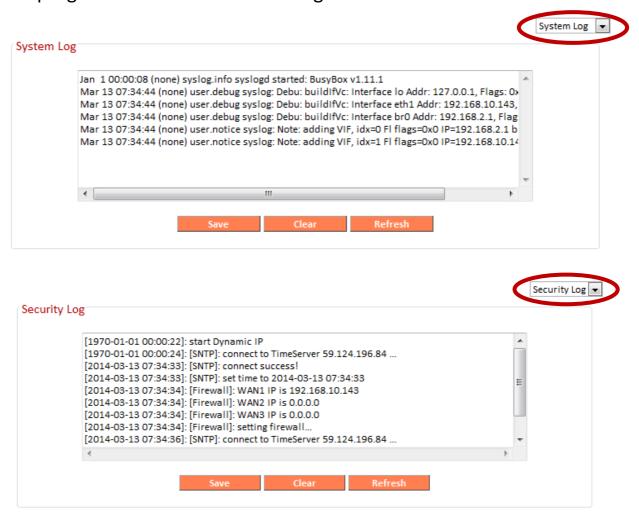
III-3-9-6. Restart

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.

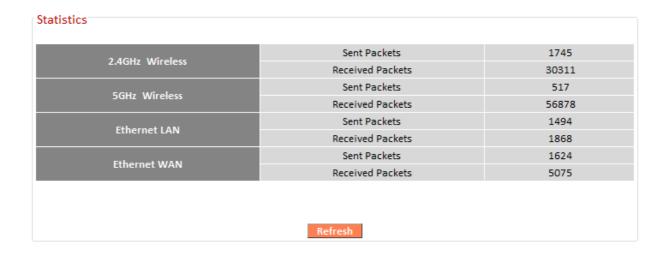
III-3-9-8. Active DHCP Client

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.

Active 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.



Appendix IV.

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.



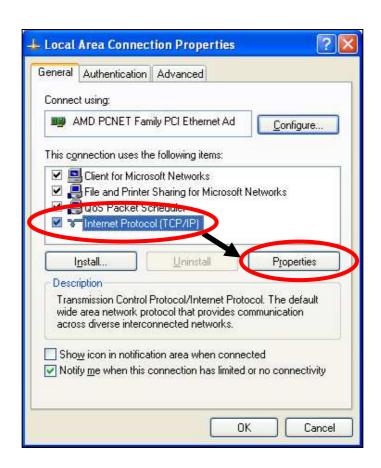
Please remember to change your IP address back to its original value after the device is properly configured.

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

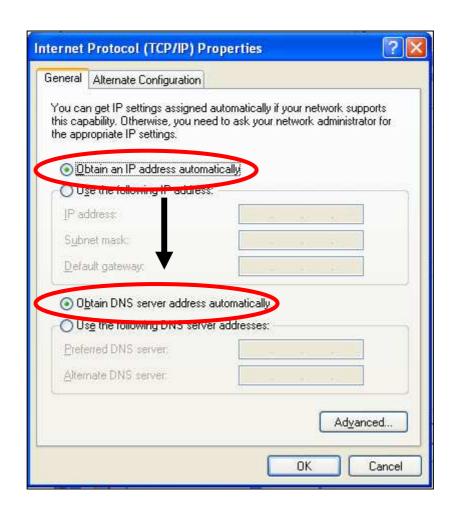
Please follow the instructions appropriate for your operating system.

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".

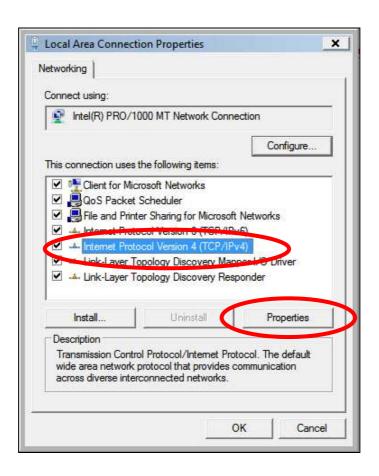


2. "Obtain an IP address automatically" and "Obtain DNS server address automatically" should be selected.

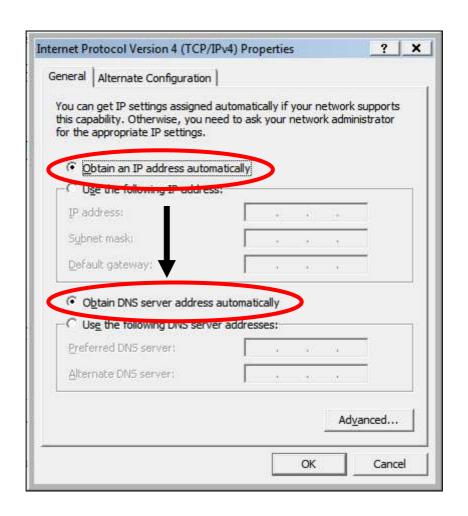


IV-1-1-2. Windows Vista

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".

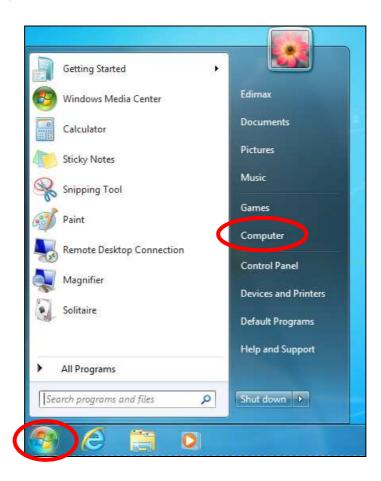


2. Select "Obtain an IP address automatically" and "Obtain DNS server address automatically" should be selected.



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".

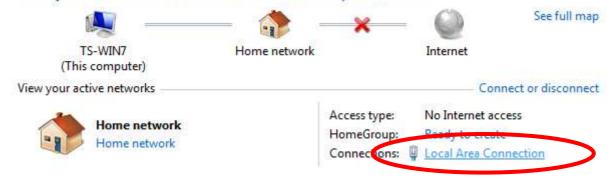


2. Under "Network and Internet" click "View network status and tasks".

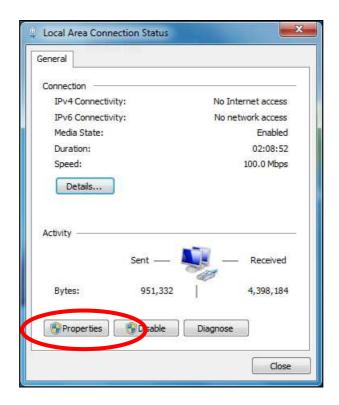


3. Click "Local Area Connection".

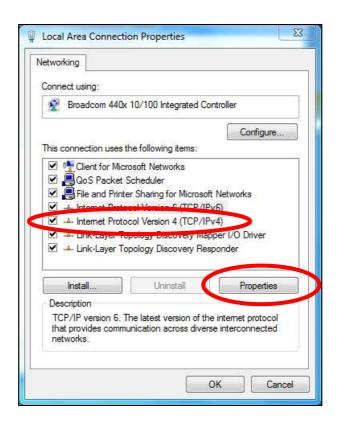
View your basic network information and set up connections



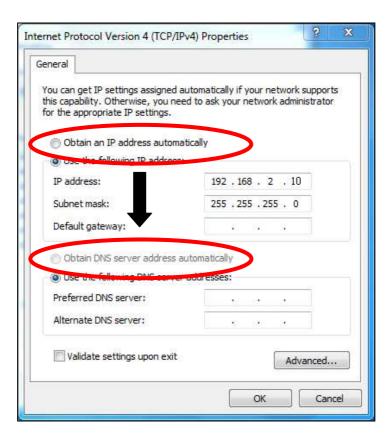
4. Click "Properties".



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

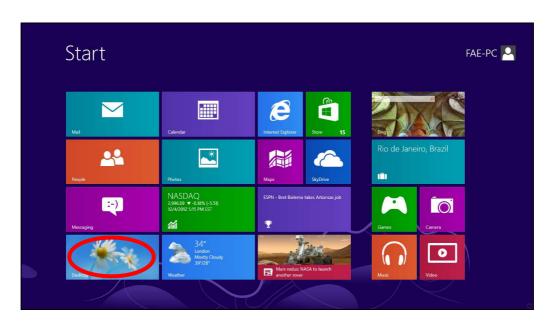


6. Select "Obtain an IP address automatically" and "Obtain DNS server address automatically" should be selected.

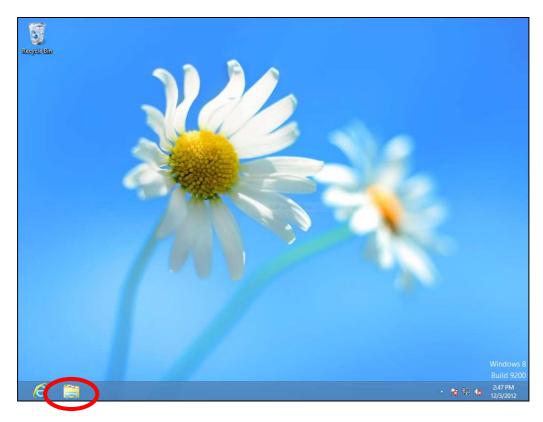


IV-1-1-4. Windows 8

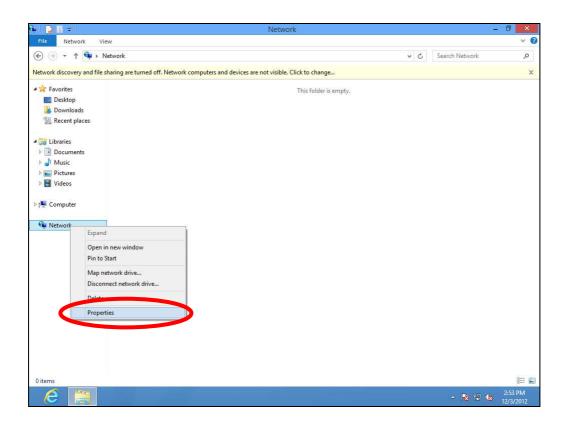
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



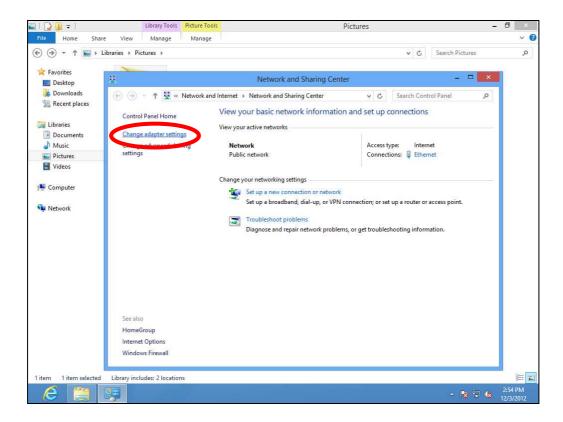
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



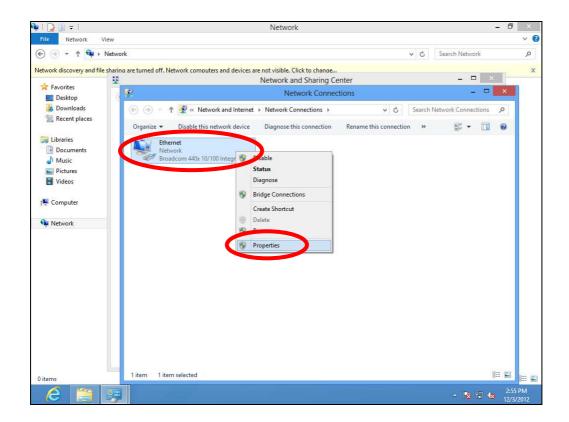
3. Right click "Network" and then select "Properties".



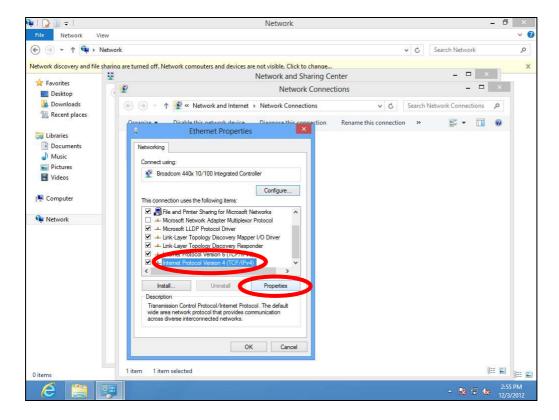
4. In the window that opens, select "Change adapter settings" from the left side.



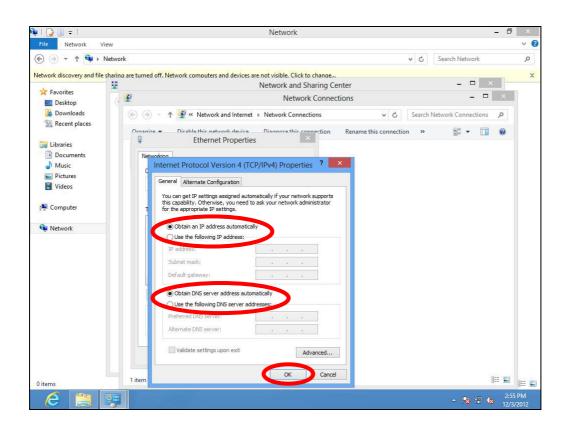
5. Choose your connection and right click, then select "Properties".



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

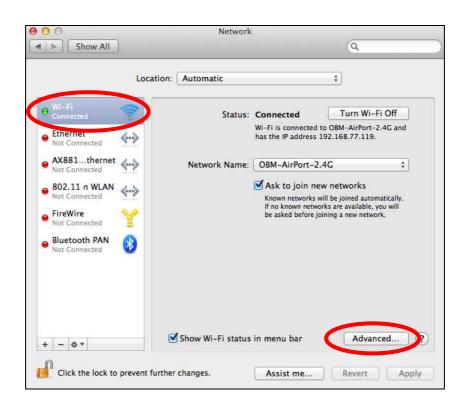
1. Have your Macintosh computer operate as usual, and click on "System Preferences".



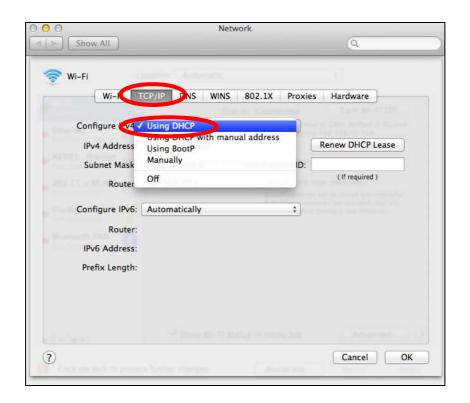
2. In System Preferences, click on "Network".



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

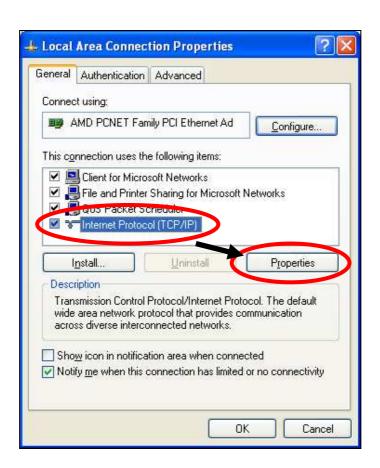
Please follow the instructions appropriate for your operating system. In the following examples we use the IP address **192.168.2.10** though you can use any IP address in the range **192.168.2.x** (x = 3 - 254) in order to access iQ Setup/browser based configuration interface.



🚹 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.

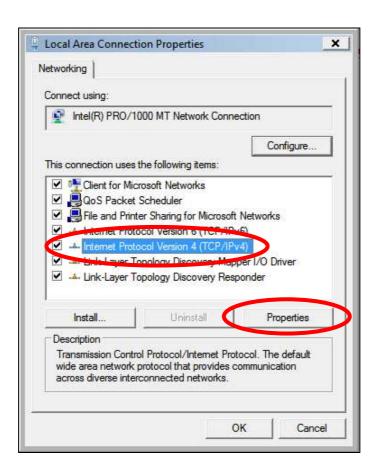
IP address: 192.168.2.10 **Subnet Mask**: 255.255.255.0

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.

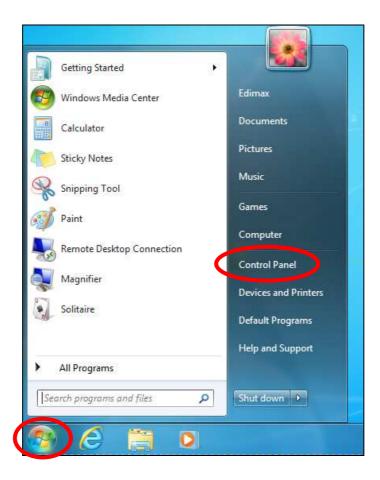
IP address: 192.168.2.10 Subnet Mask: 255.255.255.0

Preferred DNS Server: 192.168.2.1

Click 'OK' when finished.

IV-1-2-3. Windows 7

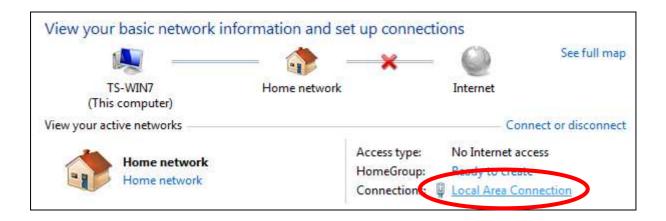
1. Click the "Start" button (it should be located in the lower-left corner of your computer), then click "Control Panel".



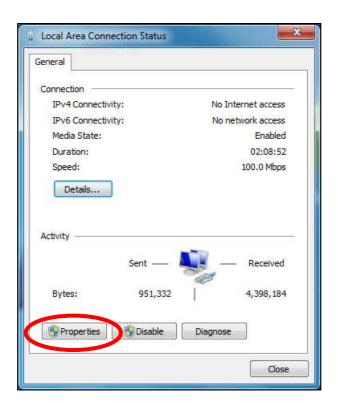
2. Under "Network and Internet" click "View network status and tasks".



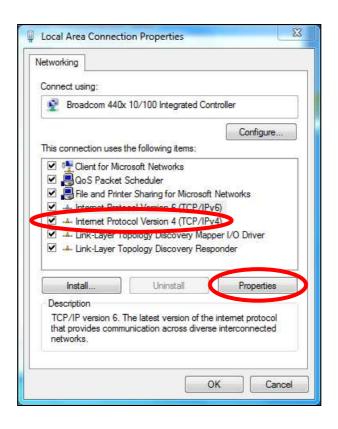
3.Click "Local Area Connection".



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

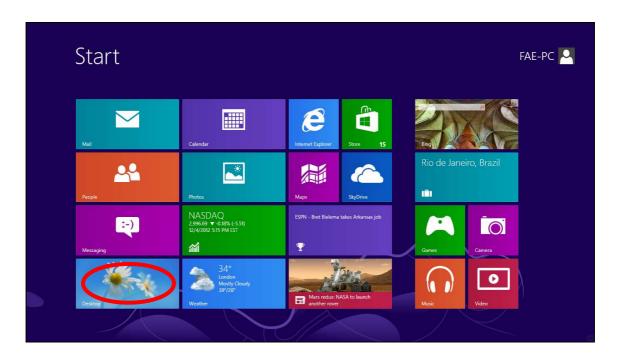
Subnet Mask: 255.255.255.0

Preferred DNS Server: 192.168.2.1

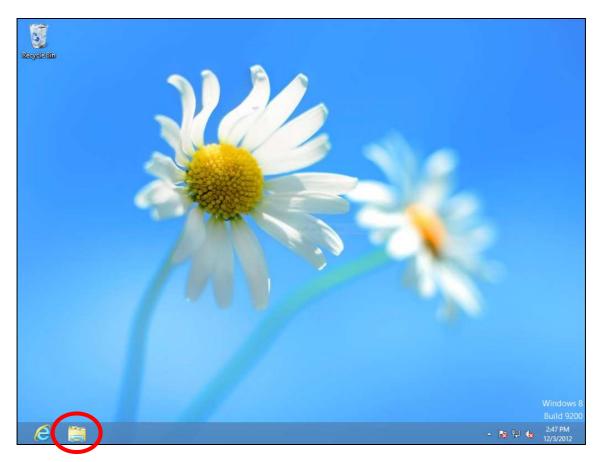
Click 'OK' when finished.

IV-1-2-4. Windows 8

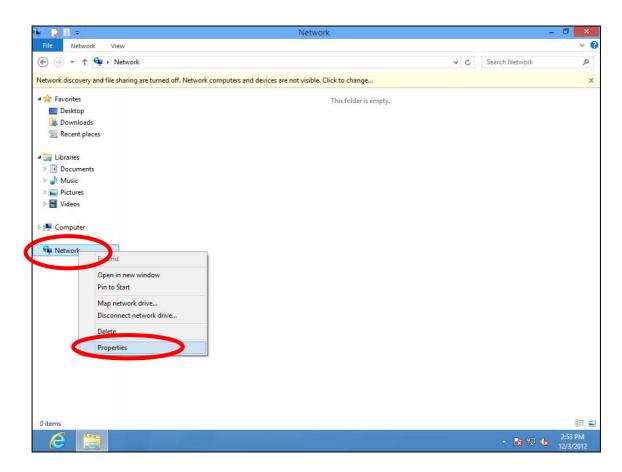
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



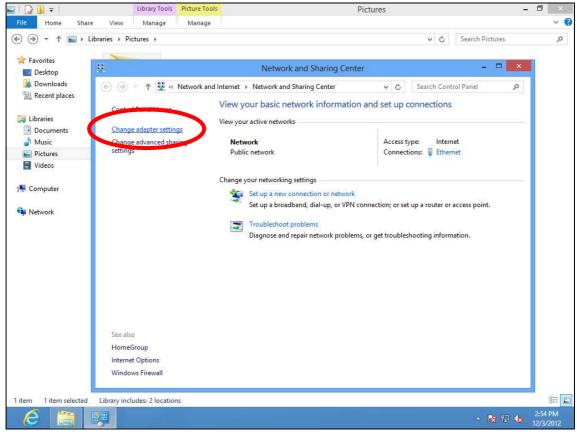
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



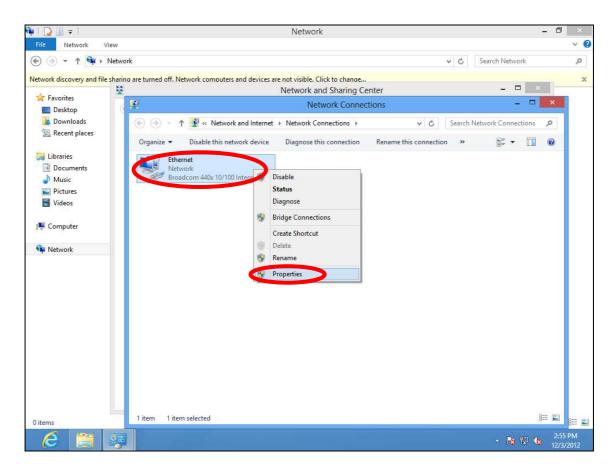
3. Right click "Network" and then select "Properties".



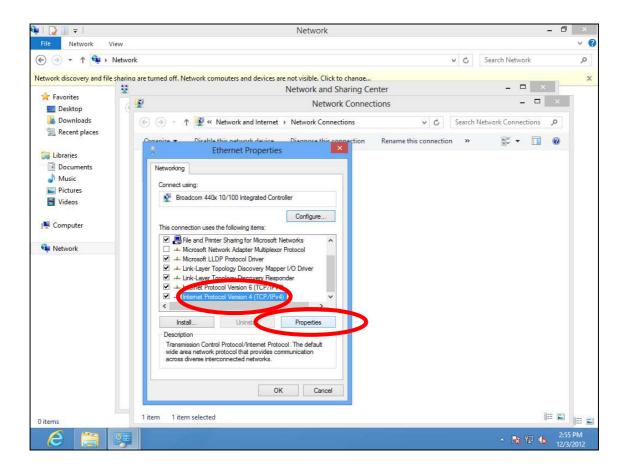
4. In the window that opens, select "Change adapter settings" from the left side.



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

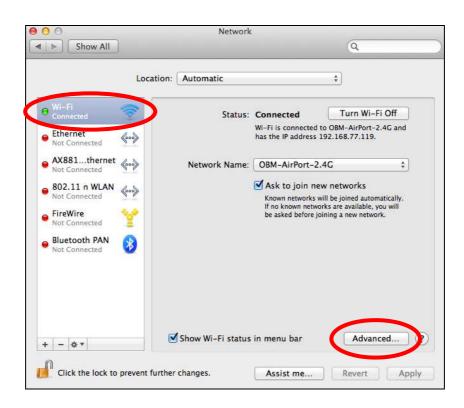
1. Have your Macintosh computer operate as usual, and click on "System Preferences"



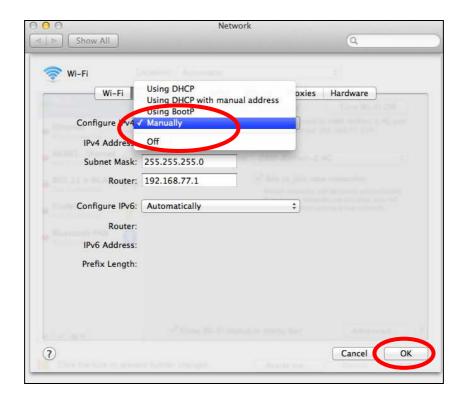
2. In System Preferences, click on "Network".



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



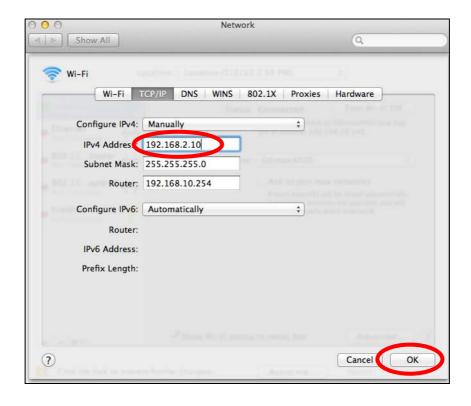
4. Select "TCP/IP" from the top menu and select "Manually" from the drop down menu labeled "Configure IPv4", then click "OK".



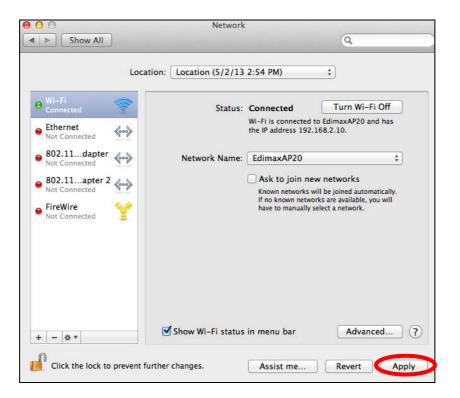
A

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

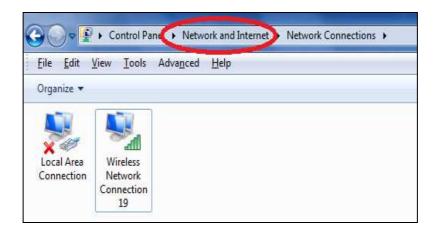
To find your network security key, please follow the instructions appropriate for your operating system.



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.



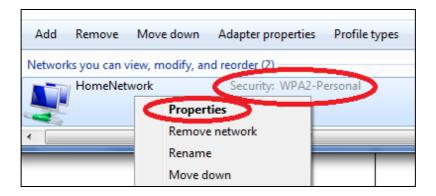
2. Click on "View network status and tasks" which is under the heading "Network and Sharing Center".



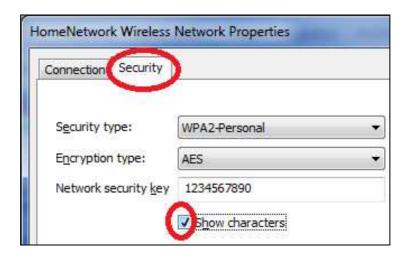
3. Click on "Manage wireless networks" in the left menu.



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".

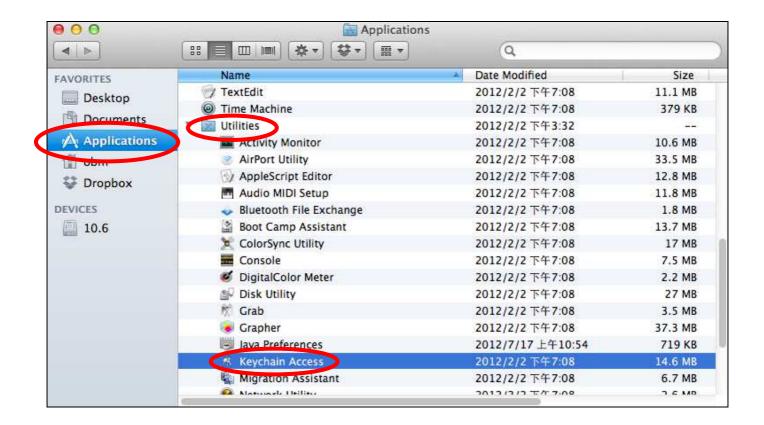


5.Click on the "Security" tab, and then check the box labeled "Show characters". This will show your network security key. Click the "Cancel" button to close the window.

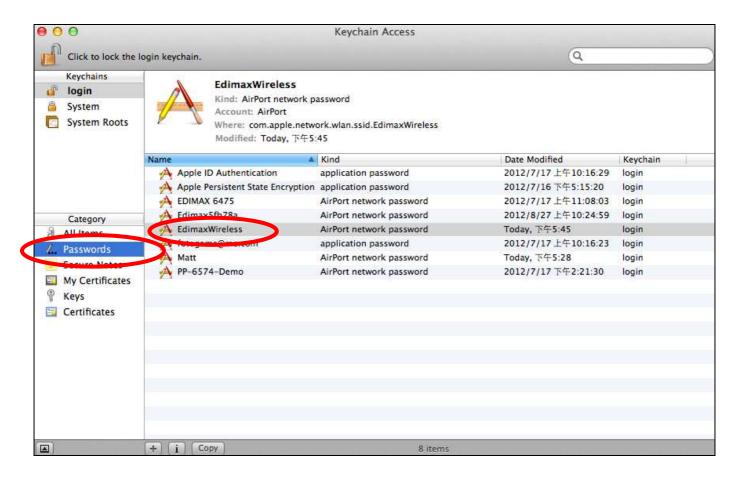


IV-1-3-2. Mac

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".



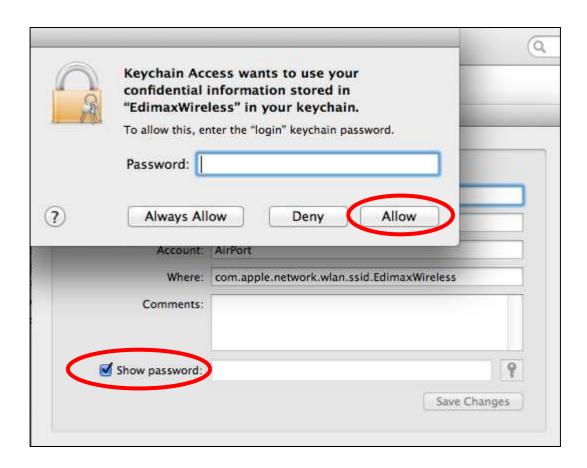
2. Select "Passwords" from the sub-menu labeled "Category" on the left side, as shown below. Then search the list in the main panel for the SSID of your network. In this example, the SSID is "EdimaxWireless" – though your SSID will be unique to your network.



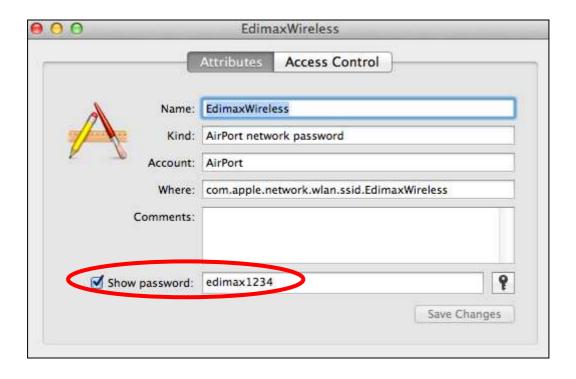
3. Double click the SSID of your network and you will see the following window.



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.

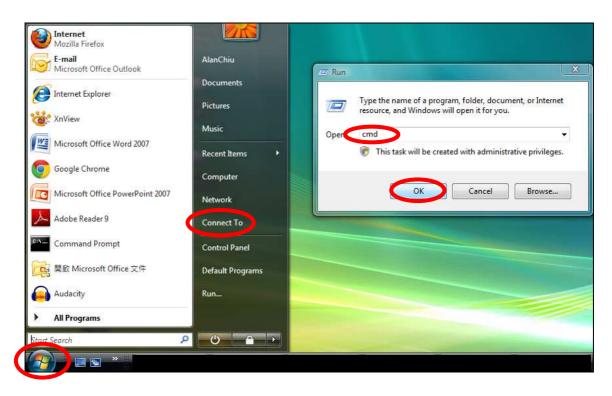


IV-1-4. How to Find Your Router's IP Address

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.

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

C: VIsers AlanCh: (a) ipconfig
```

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

```
Ethernet adapter 區域連線:

Connection—specific DNS Suffix :
Link—local IPv6 Address . . . : fe80::4cdc:3e90:ba56:1722%9
IPv4 Address . . . : 192.168.10.14
Semet max . . . : 255.255.255.0

Default Gateway . . . : 255.255.255.0

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 State . . . . . . . Media disconnected
Connection—specific DNS Suffix . :

C:\Users\AlanChiu>

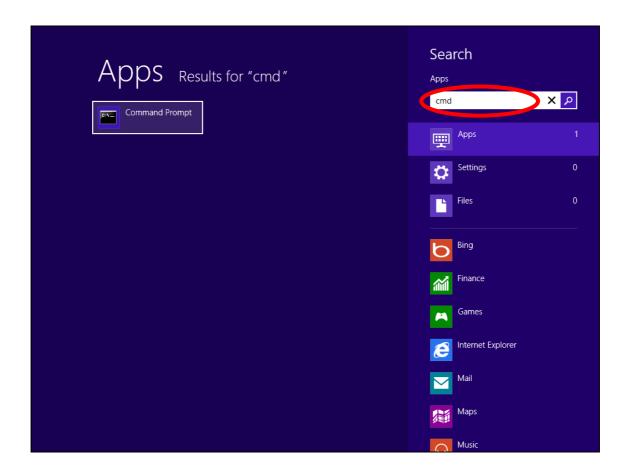
V
```

IV-1-4-2. Windows 8

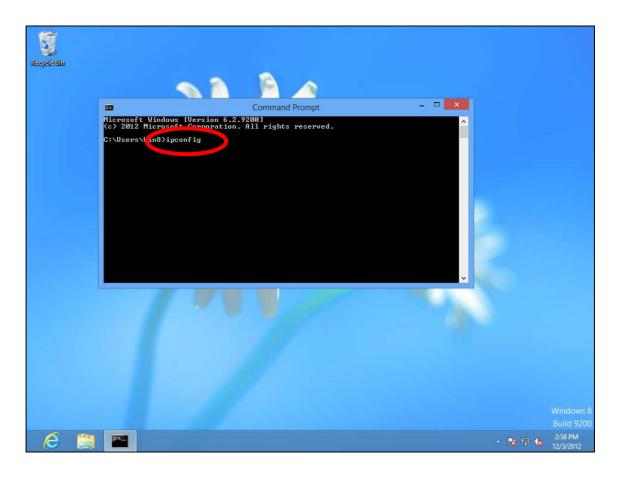
1. From the Windows 8 Start screen, move your curser to the top right corner of the screen to display the Charms bar.



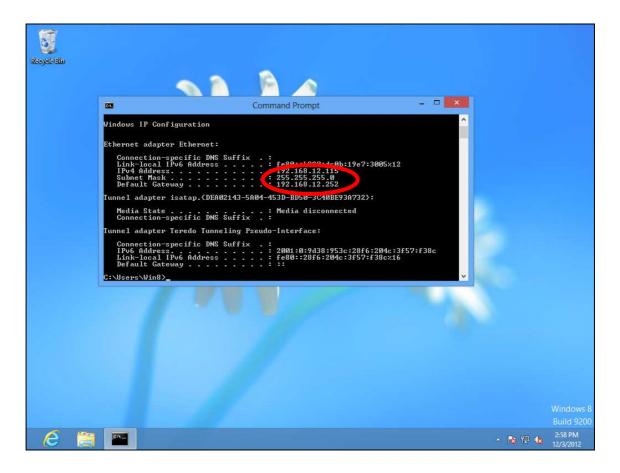
2. Click "Search" and enter "cmd" into the search bar. Click the "Command Prompt" app which be displayed on the left side.



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

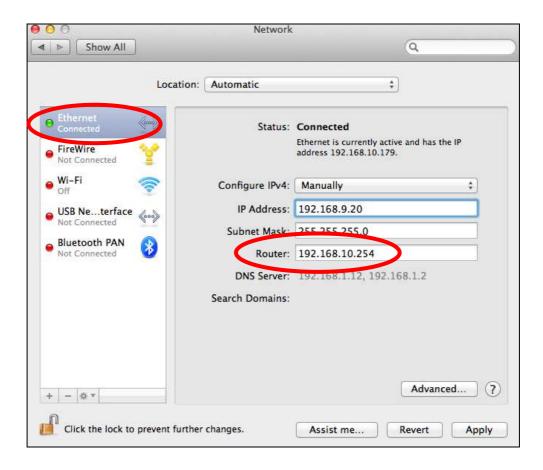


4. Your router's IP address will be displayed next to "Default Gateway".

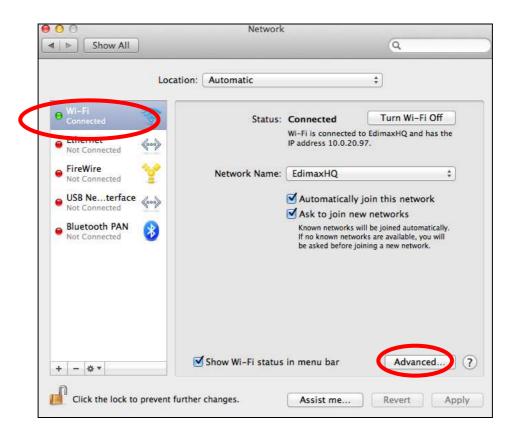


IV-1-4-3. Mac

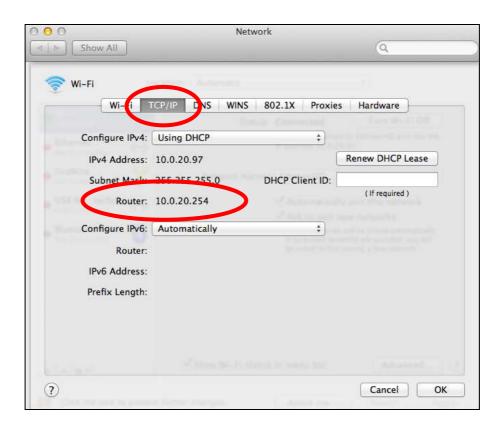
- 1. Launch "System Preferences" and click on "Network".
- 2. If you are using an Ethernet cable to connect to your network, your router's IP address will be displayed next to "Router".



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:

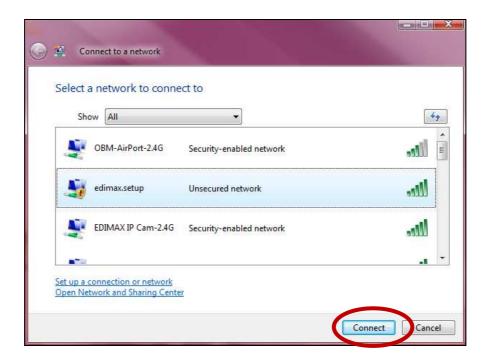


Below is an example of how to connect using Windows Vista – the process may vary slightly for other versions of Windows.

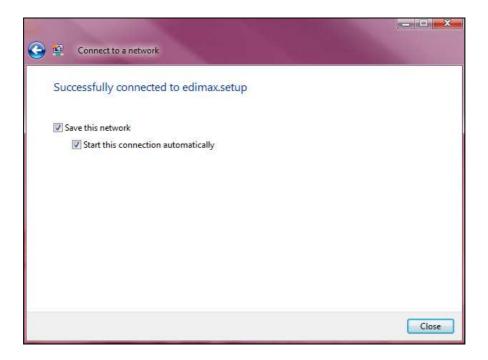
1. Click the network icon (■, □ or ≥) in the system tray and select "Connect to a network".



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

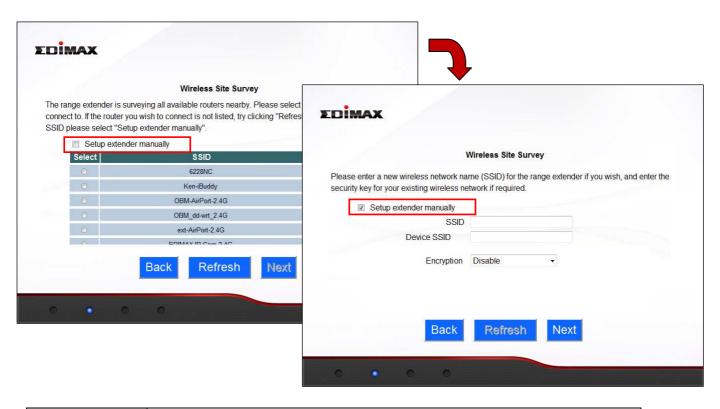
If you are experiencing problems with your BR-6428nS V3/BR-6228nS V3, please check below before contacting your dealer of purchase for help.



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, hidder		
	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 or configure advanced settings. You must be connected to the device by Wi-Fi or Ethernet cable.
Username/Password	This is the default username and password to access the browser based configuration interface when you go to the "Router Login" URL (above).
Wi-Fi Network	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	TCP	25
POP3	TCP	110
H.323	TCP	1720
SNMP	UCP	161
SNMP Trap	UDP	162
HTTP	TCP	80
PPTP	TCP	1723
PC Anywhere	TCP	5631
PC Anywhere	UDP	5632

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

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

TCP/IP, UDP: Transmission Control Protocol/Internet Protocol (TCP/IP) and 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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FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference

to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

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.

Caution!

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

EU Declaration of Conformity

English: This equipment is in compliance with the essential requirements and other relevant

provisions of Directive 1999/5/EC, 2009/125/EC.

Français: Cet équipement est conforme aux exigences essentielles et autres dispositions de la

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

Čeština: Toto zařízení je v souladu se základními požadavky a ostatními příslušnými ustanoveními

směrnic 1999/5/ES, 2009/125/ES.

Polski: Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami

określonymi Dyrektywą UE 1999/5/EC, 2009/125/EC.

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

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

Русский: Это оборудование соответствует основным требованиям и положениям Директивы

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

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

(1999/5/EK, 2009/125/EC).

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

uyumludur.

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

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

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

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

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

2009/125/EC.

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

della Direttiva 1999/5/CE, 2009/125/CE.

Nederlands: Dit apparaat voldoet aan de essentiële eisen en andere van toepassing zijnde bepalingen

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

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

Norsk: Dette utstyret er i samsvar med de viktigste kravene og andre relevante regler i Direktiv

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

Svenska: Denna utrustning är i överensstämmelse med de väsentliga kraven och övriga relevanta

bestämmelser i direktiv 1999/5/EG, 2009/125/EG.

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

forordninger i direktiv 1999/5/EC, 2009/125/EC.

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

asiaankuuluvat määräykset.

FOR USE IN AT BE CY CZ OK EE FI FR RU

DE GR HU E IT LY LT LU MT NL PL PT UA

SK SI ES SE GB IS LI NO CH BG RO TR



WEEE Directive & Product Disposal



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

Declaration of Conformity

We, Edimax Technology Co., Ltd., declare under our sole responsibility, that the equipment described below complies with the requirements of the European R&TTE directives.

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

Edimax Technology Co., Ltd. No. 3, Wu Chuan 3rd Road, Wu-Ku Industrial Park, New Taipei City, Taiwan

CE

Date of Signature: July, 2014

Signature:

Printed Name: Albert Chang

Title: Director

Edimax Technology Co., Ltd.

