EDIMAX
NETWORKING PEOPLE TOGETHER

EW-7438AC

User Manual

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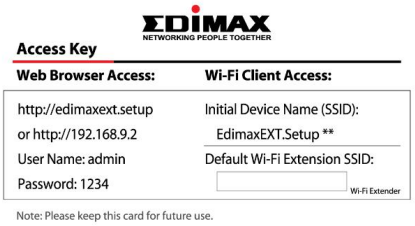
I. Product Information

I-1. Package Contents



- EW-7438AC
- CD with multi-language QIG & user manual
- Quick installation guide (QIG)
- Access key card

I-2. System Requirements

- Wi-Fi extender/Wi-Fi bridge mode: Existing 2.4GHz and/or 5GHz wireless network
- Access point mode: Cable/DSL modem router
- Computer with 802.11/b/g/n/a/ac Wi-Fi adapter, and web browser for software configuration (Internet Explorer, Google Chrome, Firefox, Opera or Safari latest version)
- Smartphone setup: iOS 6 or Android 4.x and above

I-3. LED Status

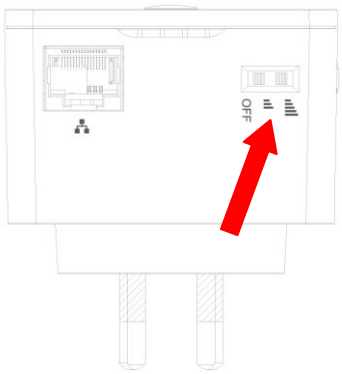
 ***All LEDs are disabled in green mode.***

LED	Color	Status	Description
5G	Blue	On	Excellent signal strength: 60 – 100%
		Slow Flashing	Good signal strength: 40 – 60%
		Quick Flashing	Device is starting up or waiting for setup
		Off	Wi-Fi is off, disconnected or in green mode
2.4G	Blue	On	Excellent signal strength: 60 – 100%
		Slow Flashing	Good signal strength: 40 – 60%
		Quick Flashing	Device is starting up or waiting for setup
		Off	Wi-Fi is off, disconnected, or in green mode
Signal indicator	Red	On	Signal strength for either 2.4GHz or 5GHz: 0 – 40%
		Slow Flashing	Signal strength for either 2.4GHz or 5GHz: 40 – 60%
		Quick Flashing	Signal strength for both 2.4GHz or 5GHz: 40 – 60%
		Off	Excellent signal strength for both 2.4GHz & 5GHz: 60 – 100%

Power 	**White**	On	Extender is on
		Flashing	Resetting to factory default settings, or system is booting up
		Off	Extender is off
	**Blue**	On	WPS connection established (LED will remain on for 30 seconds to indicate a successful connection)
		Flashing	WPS in progress (waiting for another WPS device)
		Off	No WPS in progress
LAN 	**Green**	On	LAN port connected
		Off	LAN port not connected

I-4. Switch

The EW-7438AC includes a hardware slide switch on the underside of the device which can switch between normal, green mode and off as shown in the table below. “Wi-Fi power” refers to the strength of the extender’s wireless radio signal.



If you are using the extender in a small or medium sized space, you may not need the full power of the wireless radio. Try it, and determine if you still have sufficient Wi-Fi coverage using green mode. If so, you can save some energy.

Mode	Switch Position	Description
Normal	Right	100% Wi-Fi power
Green Mode	Middle	25% Wi-Fi power
Off	Left	Power off

Tx power works in conjunction with the Tx power setting in the web-based configuration interface (*Advanced → 2.4GHz Wireless/5GHz Wireless****). The switch is the primary setting and the Tx power value will be a percentage of the slide switch setting. E.G If the slide switch is set to Green Mode (25%) and Tx power to 75%, the overall output will be 75% of 25%.***

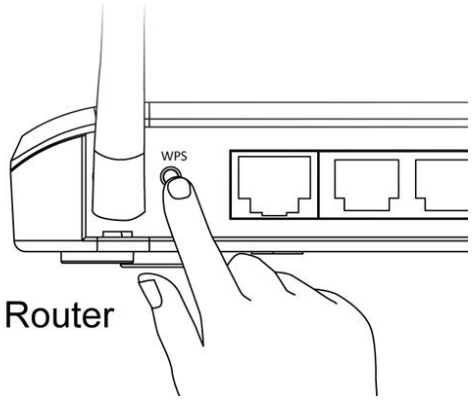
I-5. WPS Setup

The WPS button is a quick and easy method to establish a secure connection between your EW-7438AC and wireless router/access point.

If your wireless device supports WPS (Wi-Fi Protected Setup) then you can use this method to setup your wireless extender in extender or adapter/bridge mode, instead of the setup wizard described in **II. Installation.**

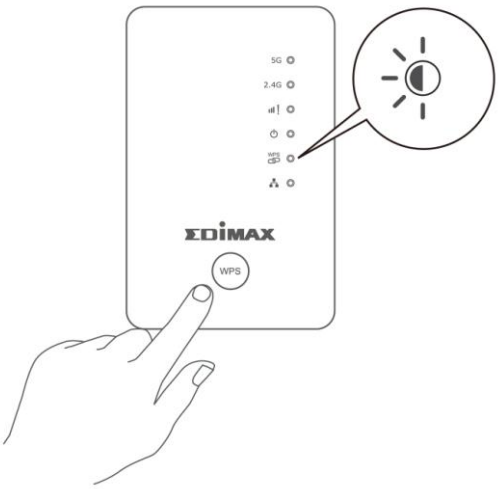
Please do not hold the WPS button for too long – this may reset your device.

1. Press the WPS button on your **wireless router/access point** for the correct length of time to activate its WPS.



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

2. **Within two minutes**, press and hold the WPS button on the wireless extender for two seconds. The extender's **blue** WPS LED should flash to indicate that WPS is in progress.



3. The devices will establish a connection. The extender's **blue** WPS LED should display on for 30 seconds to indicate a successful connection.

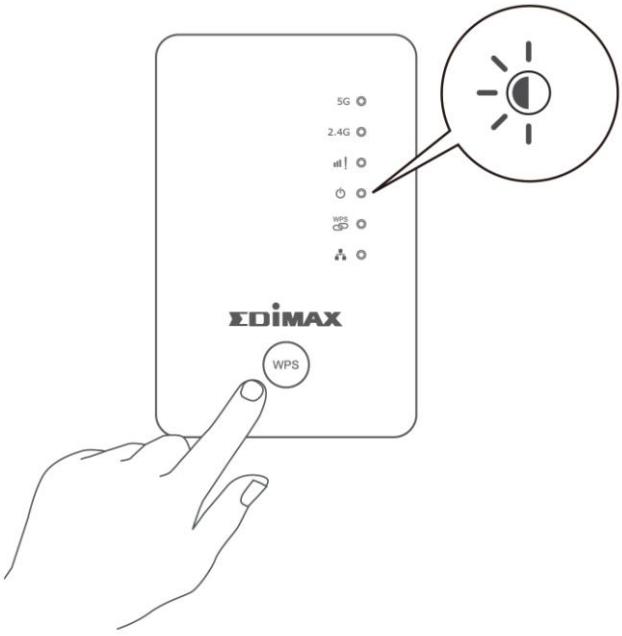
The extender can establish either a 2.4GHz or 5GHz connection using the WPS button. By default the extender will establish a 5GHz connection where available. Use iQ Setup to extend both 2.4GHz & 5GHz together.

I-6. Reset to Factory Default Settings

If you experience problems with your extender or if you want to change the extender to a different operating mode, you can reset the device back to its factory settings. This resets **all** settings back to default.

1. Press and hold the WPS button for at least 10 seconds and release when the **white** power LED is **flashing**.

2. Wait for the extender to restart. The extender is ready for setup when the **white** power LED displays **on**.



I-7. 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 EW-7438AC.

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.

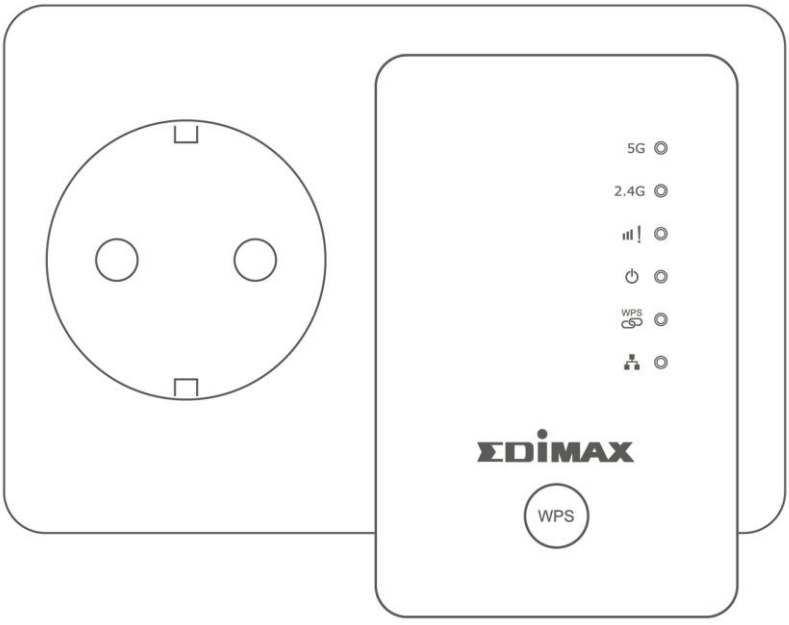
9. If you smell burning or see smoke coming from the EW-7438AC then unplug the device immediately, as far as it is safely possible to do so. Call your dealer of purchase for help.

II. Installation

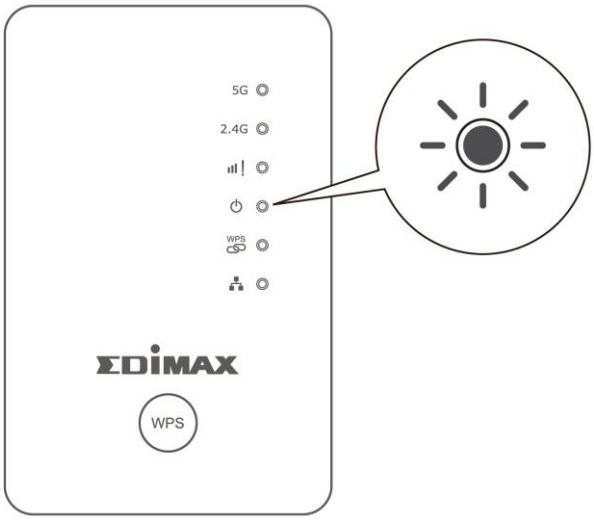
The EW-7438AC has three different operating modes:

Wi-Fi Extender	*The device connects wirelessly to your existing network and repeats the wireless signal.* **Location:** The best location for your extender is roughly in the middle between your existing wireless router/access point and the dead zone. The extender needs to receive a good Wi-Fi signal from your router/access point.
Wi-Fi Bridge (Wi-Fi Adapter)	*The device connects to an Ethernet device such as a games console or smart TV via Ethernet cable and provides wireless Internet access for that device.* **Location:** Within Wi-Fi coverage, close to your wired network device.
Wi-Fi Access Point	*The device connects to an existing router via Ethernet cable and provides wireless Internet access for your network devices.* **Location:** Connected to your router via Ethernet cable.

1. Plug the EW-7438AC into a power socket.

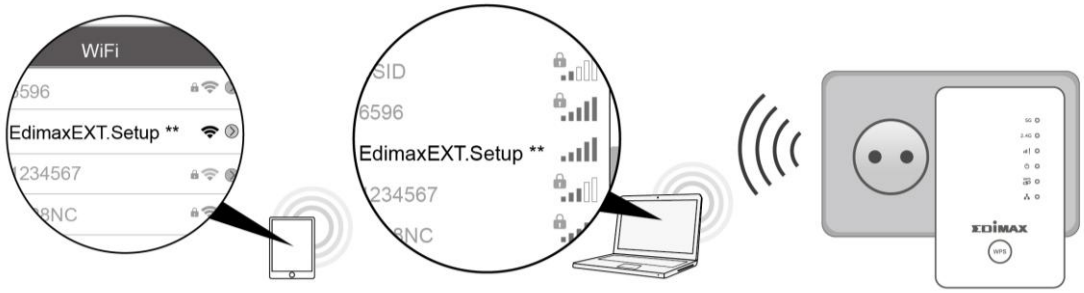


2. The **white** power LED will **flash** while the extender is starting up. The device is ready when the **white** power LED displays **on**.



3. Use a Wi-Fi device to connect to the SSID "**EdimaxEXT.Setup ****". The last two ** characters are unique according to your device.

If you are using a computer, please disconnect any Ethernet cables.



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Access Key

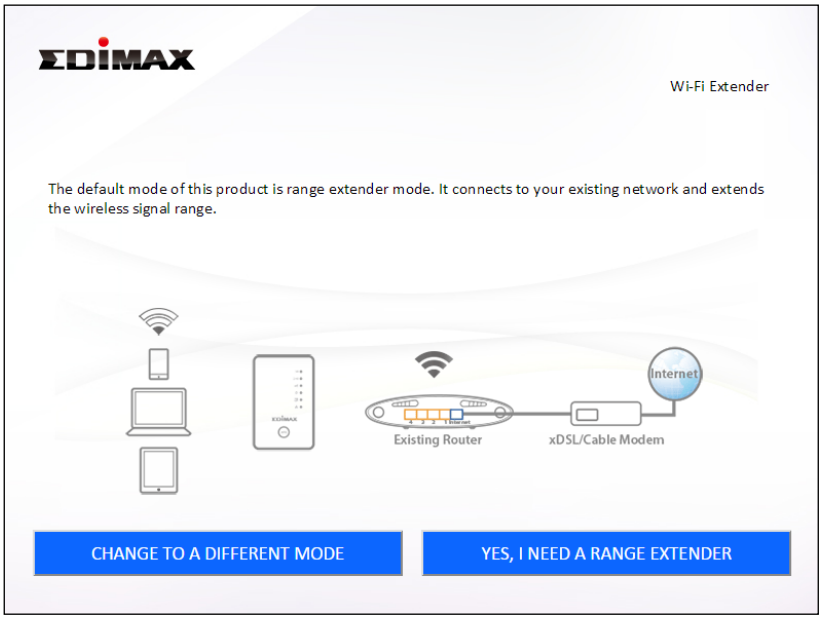
Web Browser Access:	**Wi-Fi Client Access:**
http://edimaxext.setup	Initial Device Name (SSID):
or http://192.168.9.2	EdimaxEXT.Setup **
User Name: admin	Default Wi-Fi Extension SSID:
Password: 1234	Wi-Fi Extender

Note: Please keep this card for future use.

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

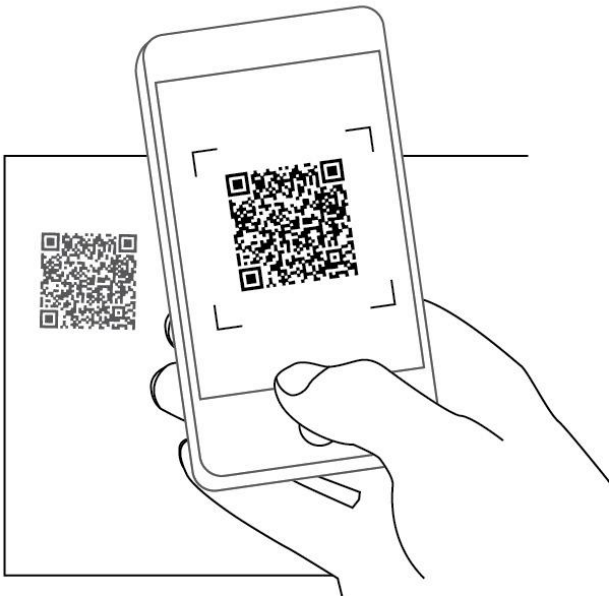
If you cannot access** http://edimaxext.setup**, please make sure your computer is set to use a dynamic IP address. For more information please refer to** Appendix**.

5. To use a different operating mode, click "Change to a Different Mode". Or select "Yes, I need a Range Extender" to continue setup as a Wi-Fi extender.



6. Follow the on-screen instructions for your selected mode to complete setup. You can configure the product for 2.4 GHz and/or 5GHz Wi-Fi. Refer to the appropriate chapter for each mode below if you need more help.

7. After setup, you can download the EdiRange app by scanning the QR code shown below. The EdiRange app allows you to control functions such as Wi-Fi scheduling and guest network when using range extender mode.



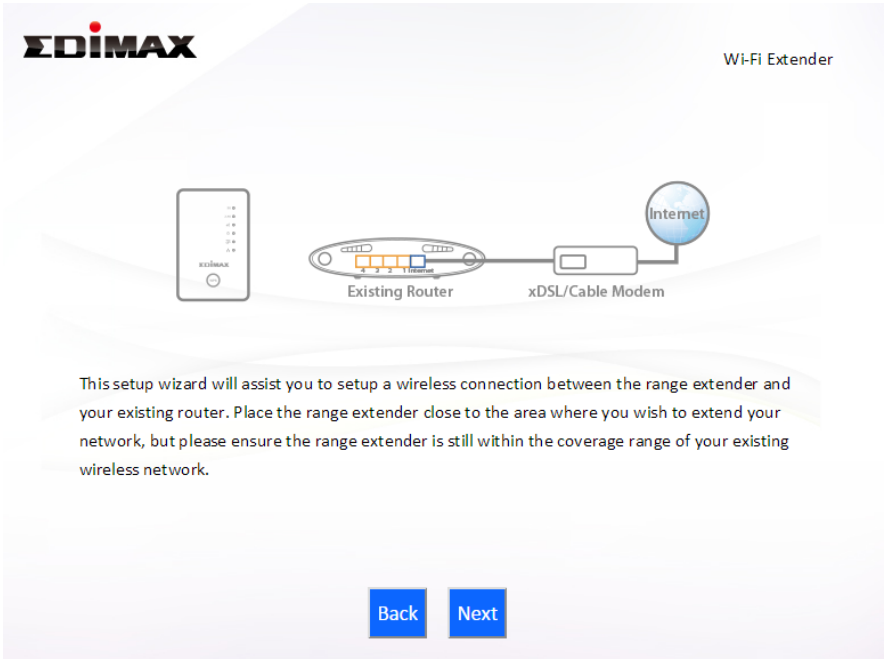
Android:

iOS:

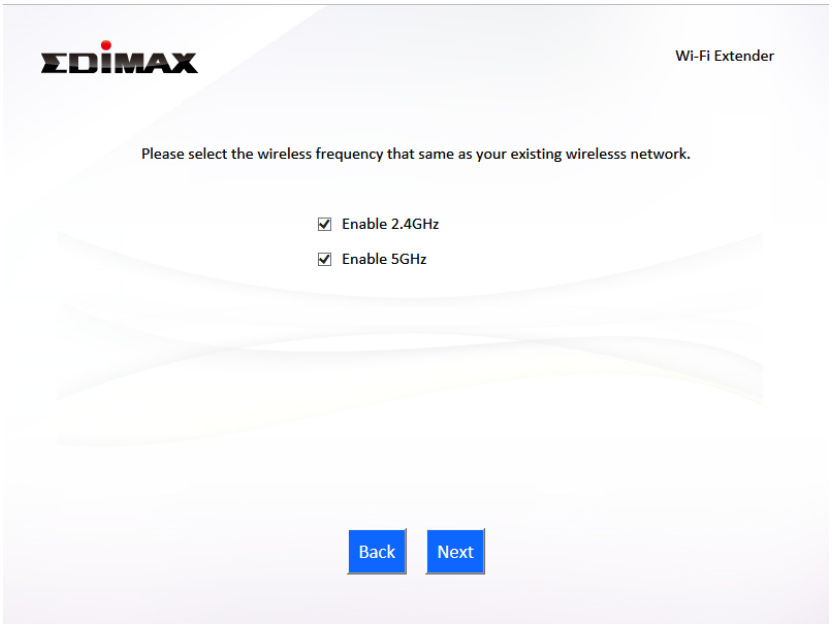
For more advanced configurations, use the browser based configuration interface at http://edimaxext.setup

II-1. Wi-Fi Extender Mode

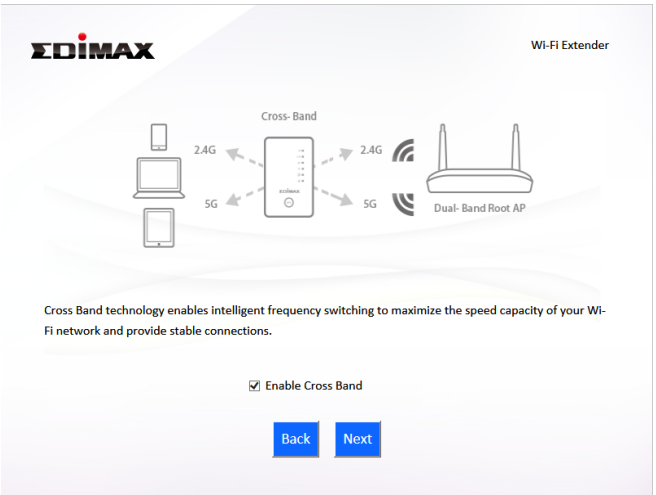
1. Please ensure your EW-7438AC is within Wi-Fi range of your existing wireless router. Click “Next” to continue.

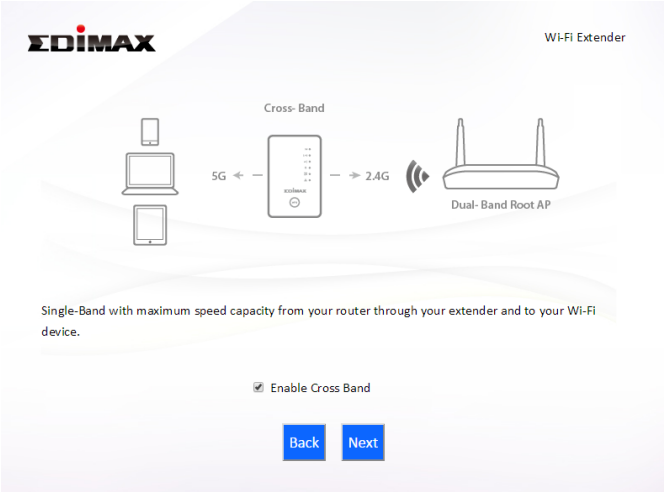


2. Select whether to use the 5GHz wireless frequency, 2.4GHz wireless frequency or both. If you are not sure, select both and then click “Next”.



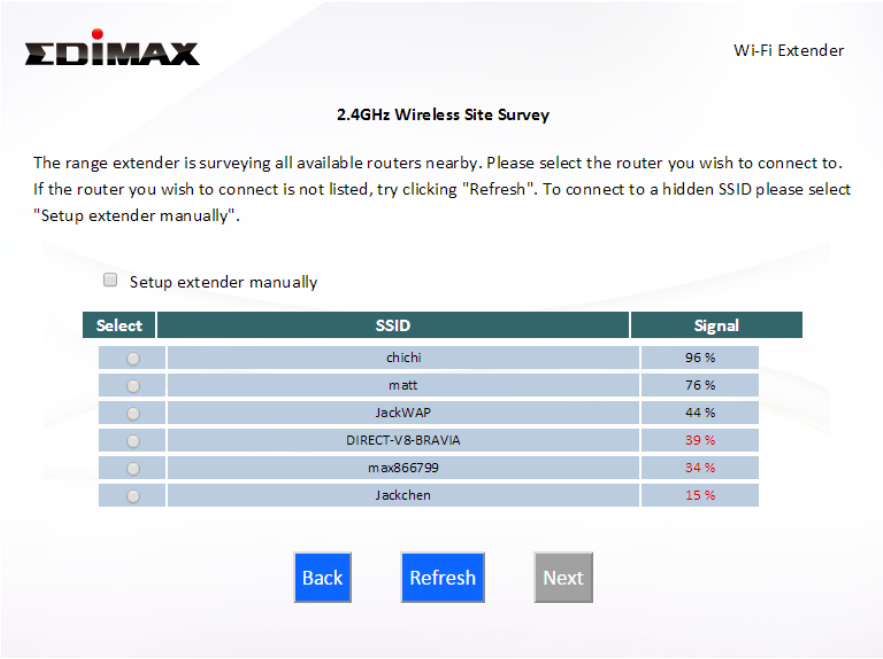
3. Select whether to enable Cross Band technology. This can help to maintain your router's maximum speed capacity as the Wi-Fi signal is extended.



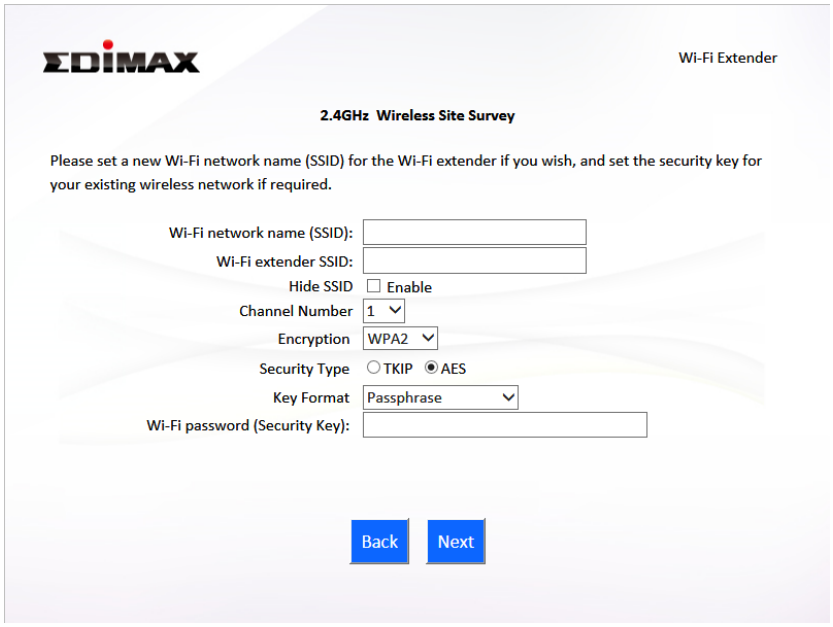


4. Select the Wi-Fi network name (SSID) which you wish to connect to for the specified frequency and click "Next" to continue.

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

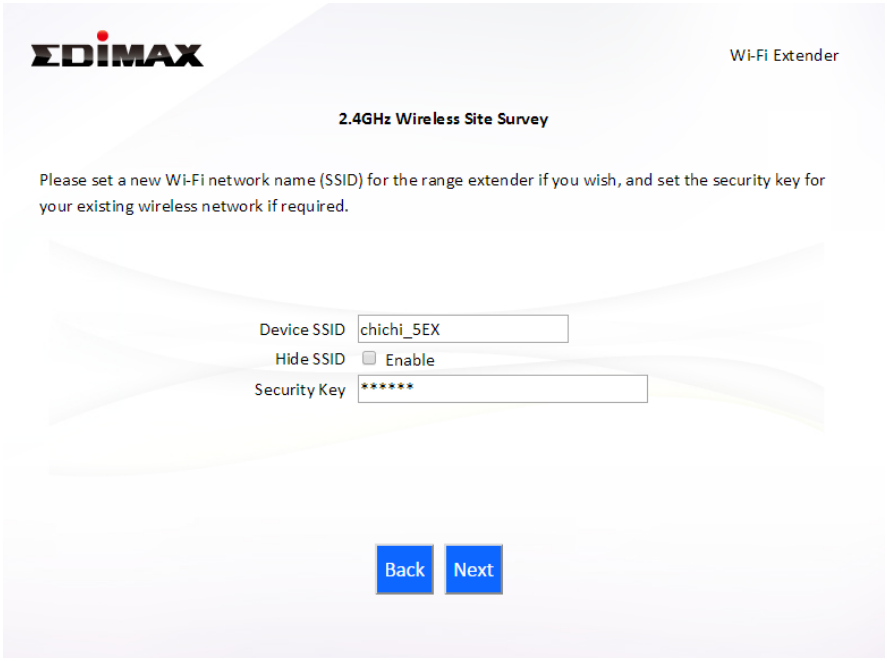


To connect to a hidden SSID, check the "Setup extender manually" box and enter the details manually on the next page, as shown below.

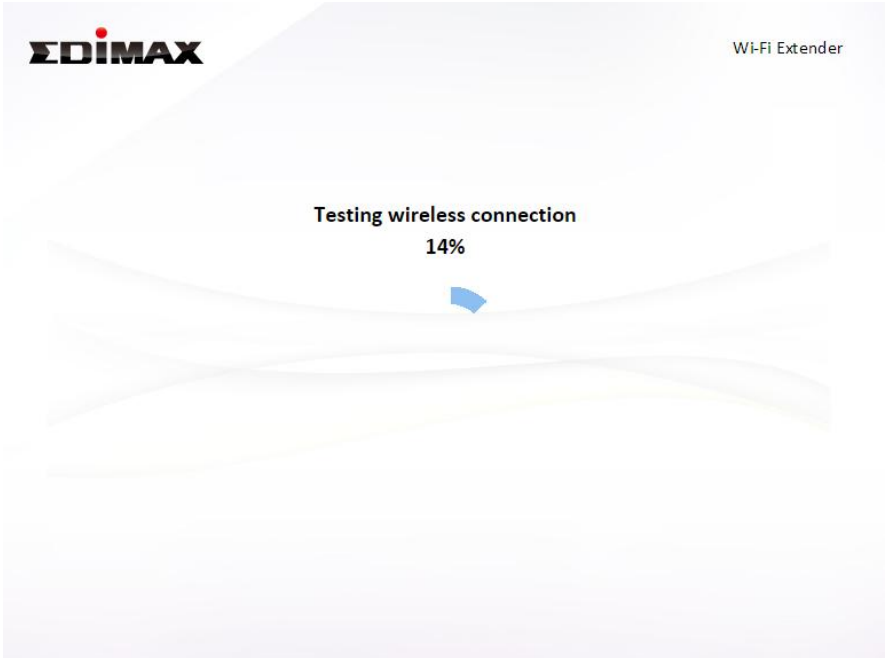


5. Enter your existing wireless network's security key/password in the "Security Key" field and click "Next" to continue.

Device SSID ***will be the SSID of your extender's Wi-Fi. If using cross-band technology this will be 5GHz Wi-Fi for your router's 2.4GHz signal and vice versa.***

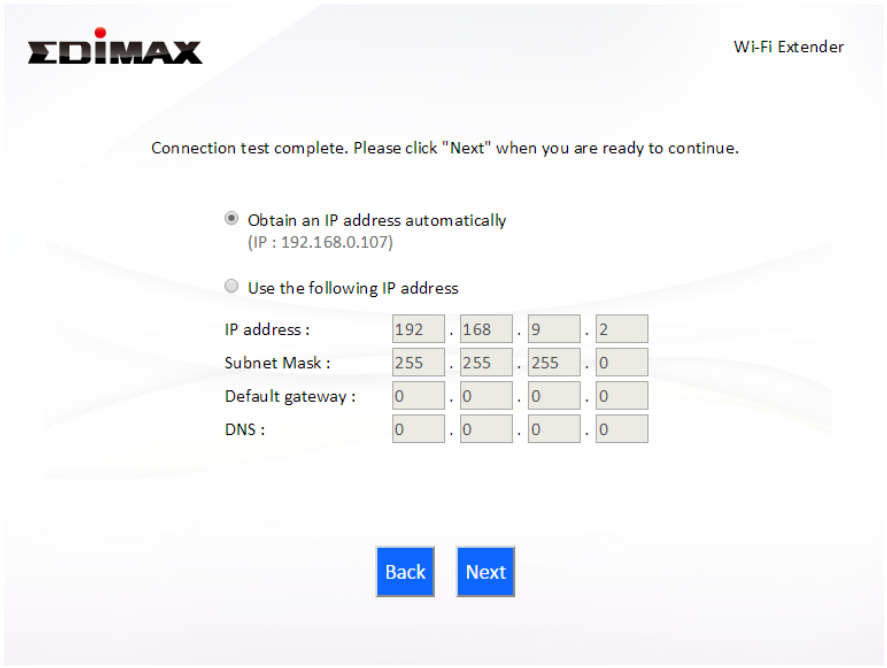


6. Wait a moment while the EW-7438AC tests the wireless connection.

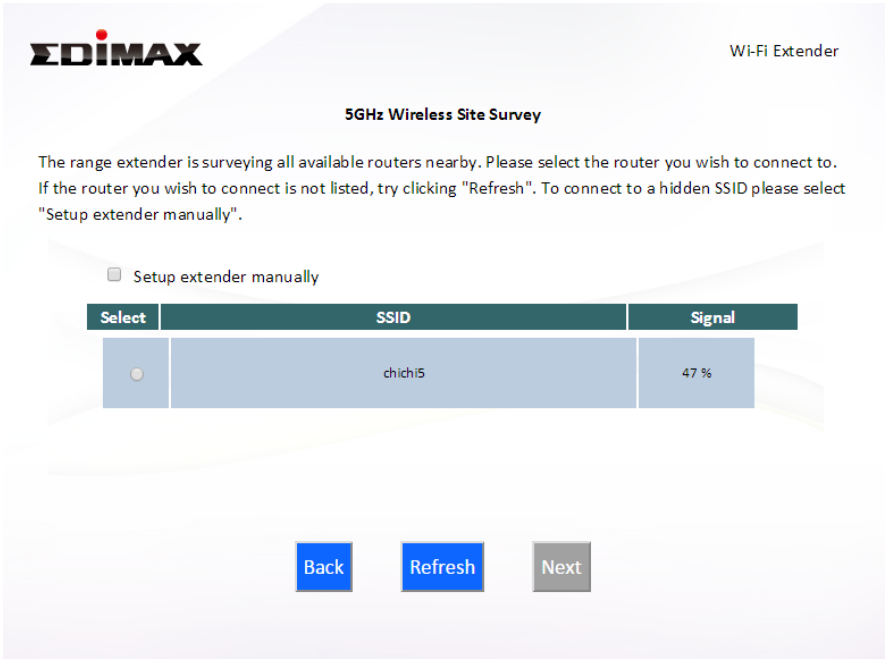


7. Select “Obtain an IP address automatically” or “Use the following IP address” for your EW-7438AC. If you are using a static IP, enter the IP address, subnet mask and default gateway. Click “Next” to proceed to the next step.

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

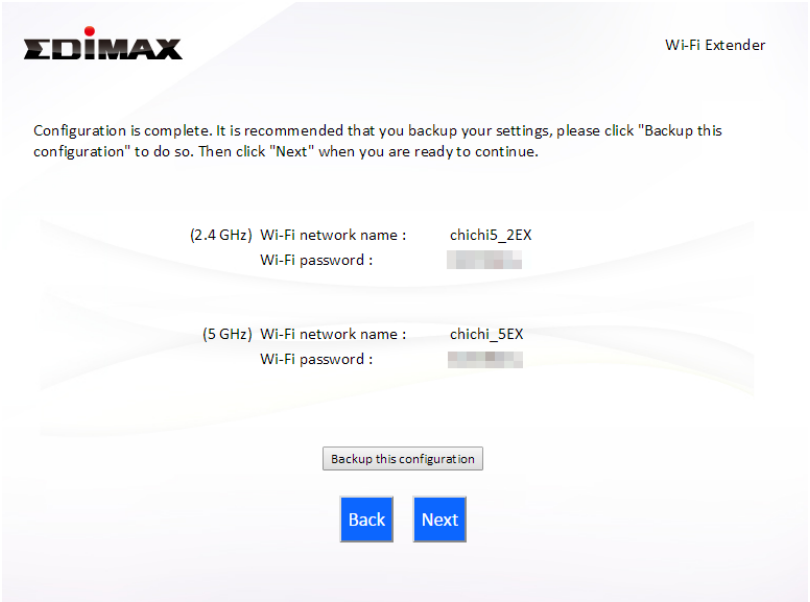


8. If you selected to use both 2.4GHz and 5GHz wireless frequencies in step 2, then repeat **steps 4 – 7** for the 5GHz wireless frequency.



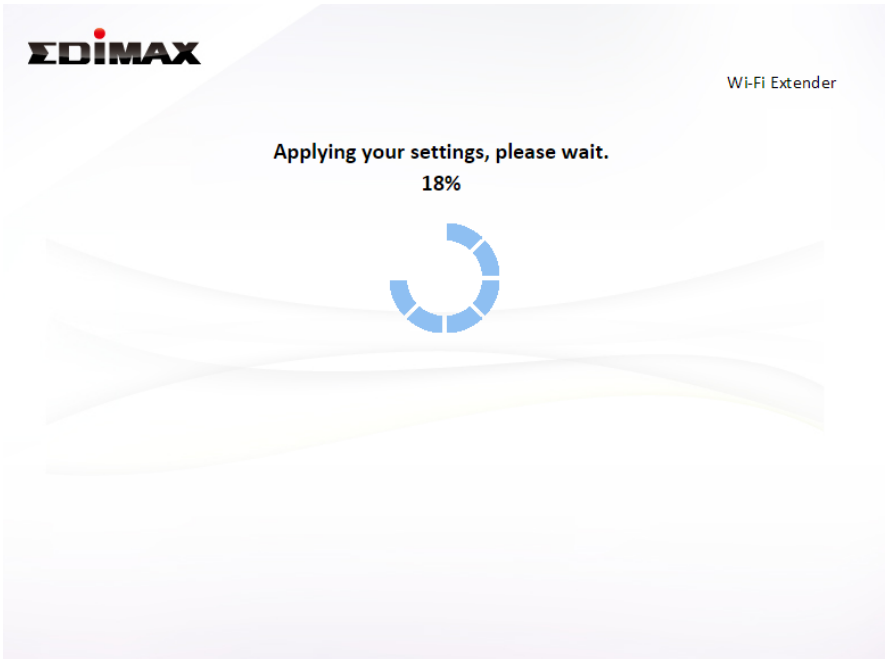
9. A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click “Next” to proceed.

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

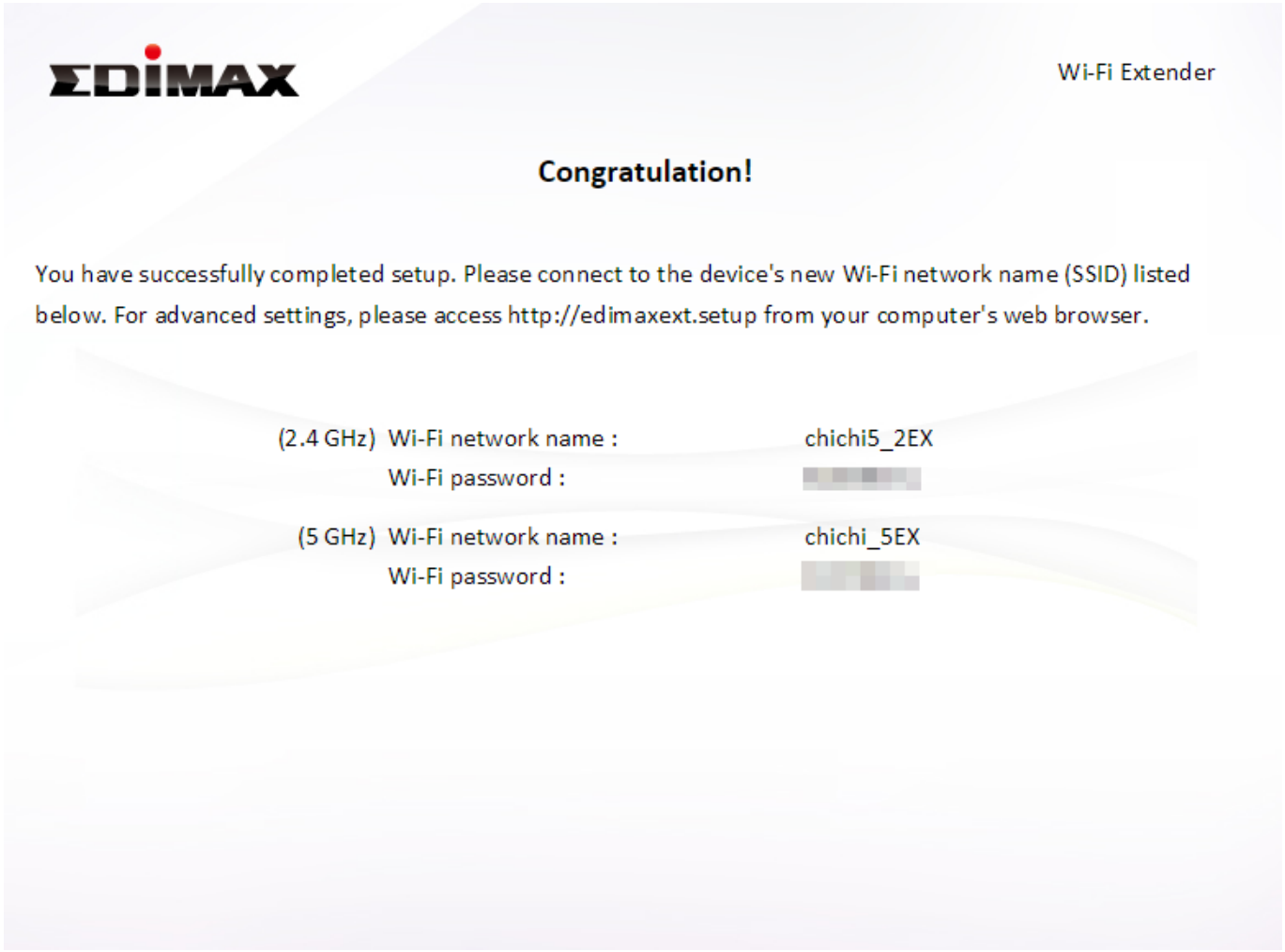


If you wish to backup the EW-7438AC’s settings, click “Backup this configuration” to save your current configuration to a .txt file.

10. Please wait a moment until the EW-7438AC is ready.



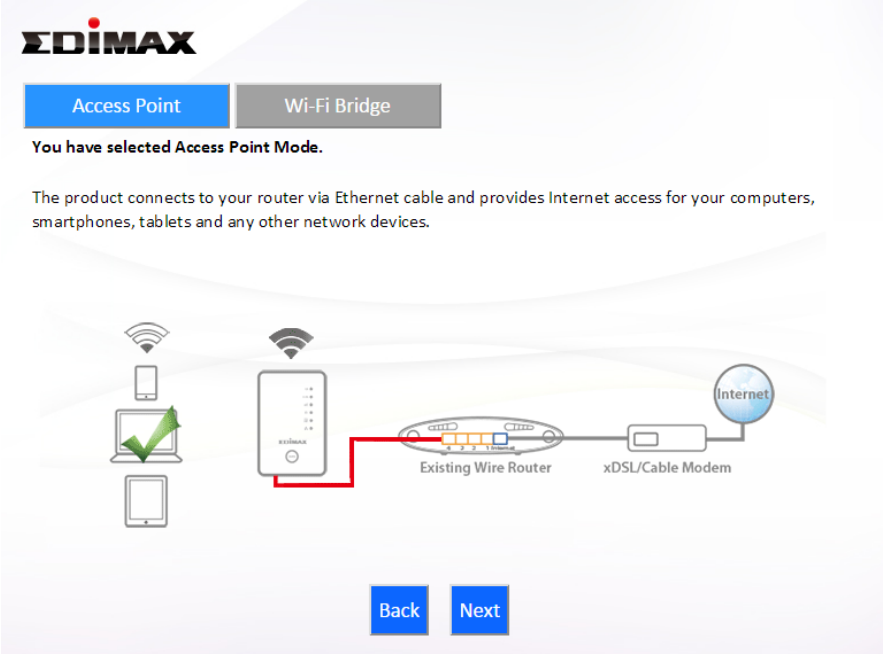
11. A final congratulations screen will indicate that setup is complete. You can now connect to the device's new SSID(s) which are shown on the screen then close the browser window.



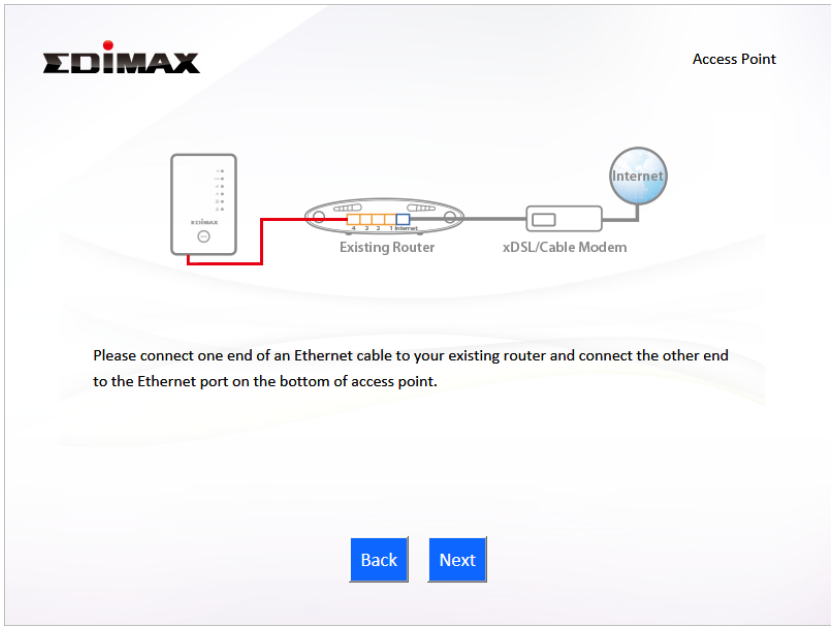
12. The EW-7438AC is working and ready for use. Refer to **V-2. Connecting to a Wi-Fi network** if you require more guidance.

II-2. Access Point Mode

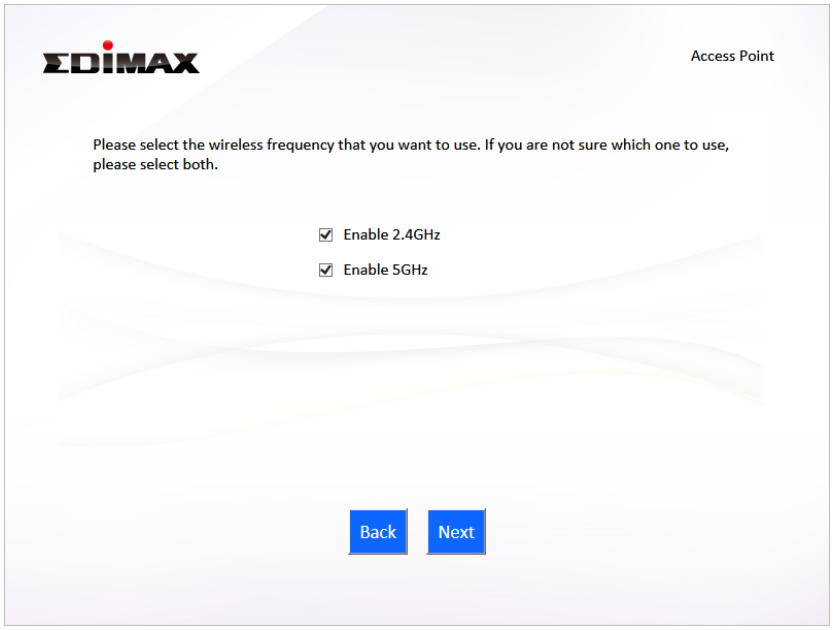
1. Select “Access Point” from the top menu and click “Next”.



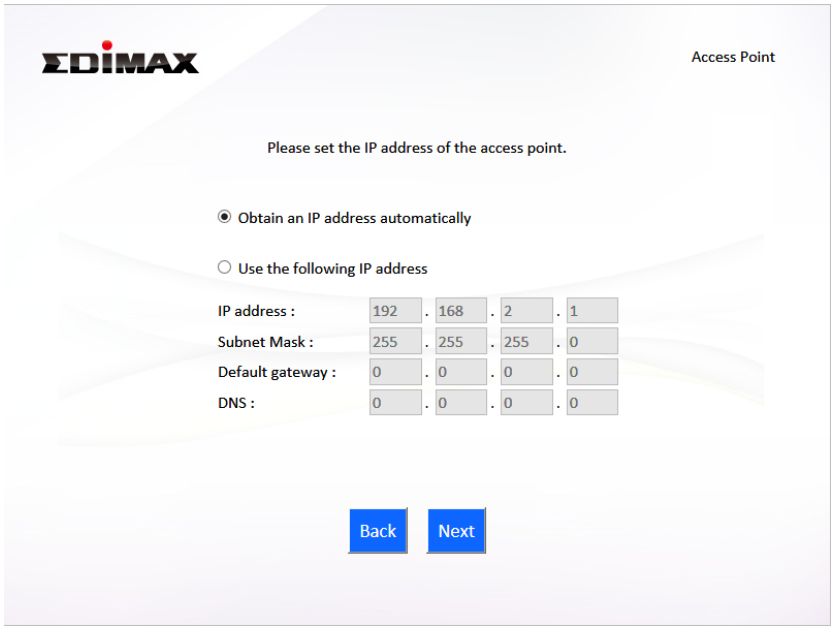
2. Connect the network port of your EW-7438AC to the LAN port of your existing router using an Ethernet cable, then click “Next”.



3. Select whether to use the 5GHz wireless frequency, 2.4GHz wireless frequency or both. If you are not sure, select both.

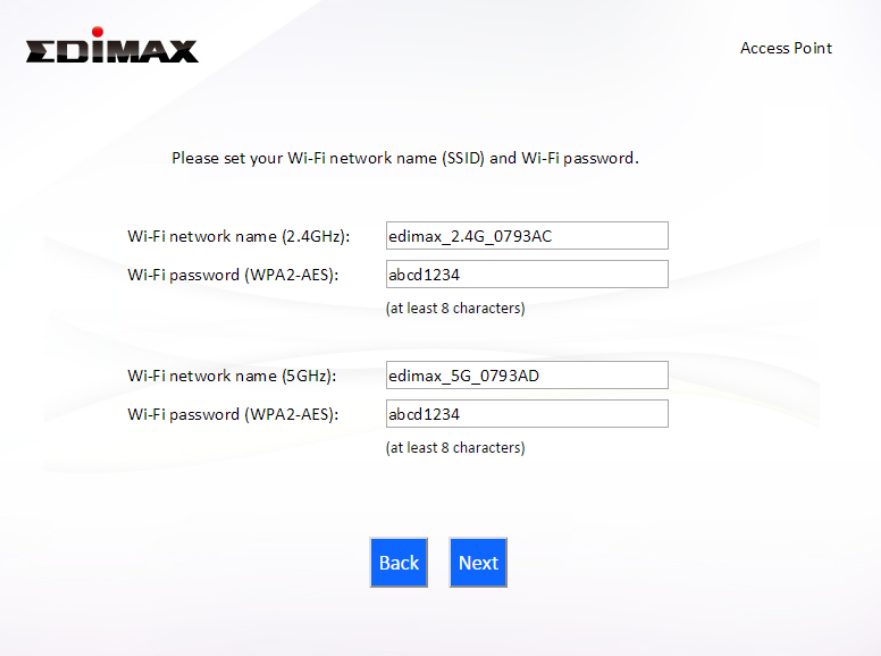


4. Select “Obtain an IP address automatically” or “Use the following IP address” for your EW-7438AC. If you are using a static IP, enter the IP address, subnet mask and default gateway. Click “Next” to proceed to the next step.

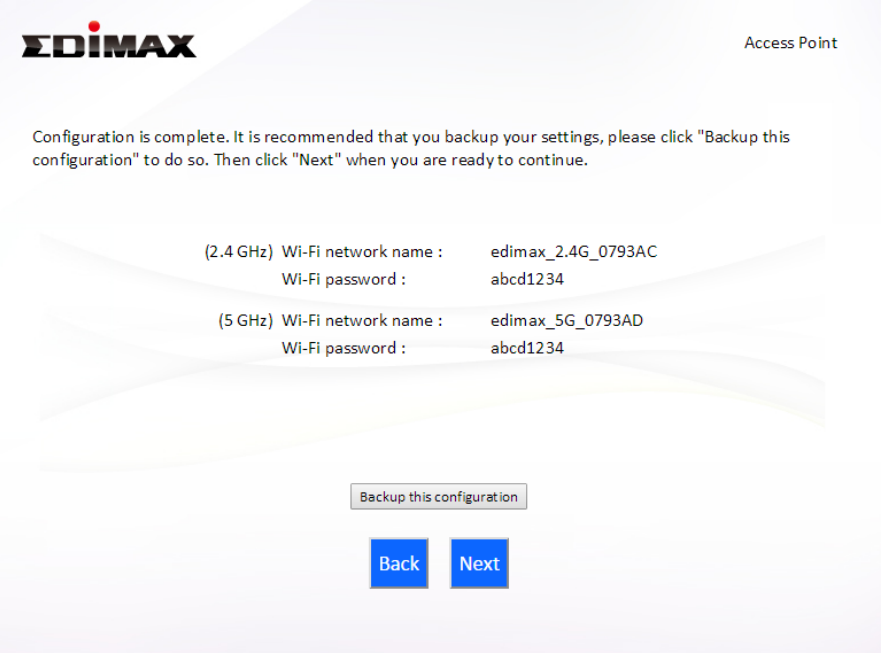


“Obtain an IP address automatically” is the recommended setting for most users. For more guidance on static IP addresses, please refer to V-1. Configuring your IP address.

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

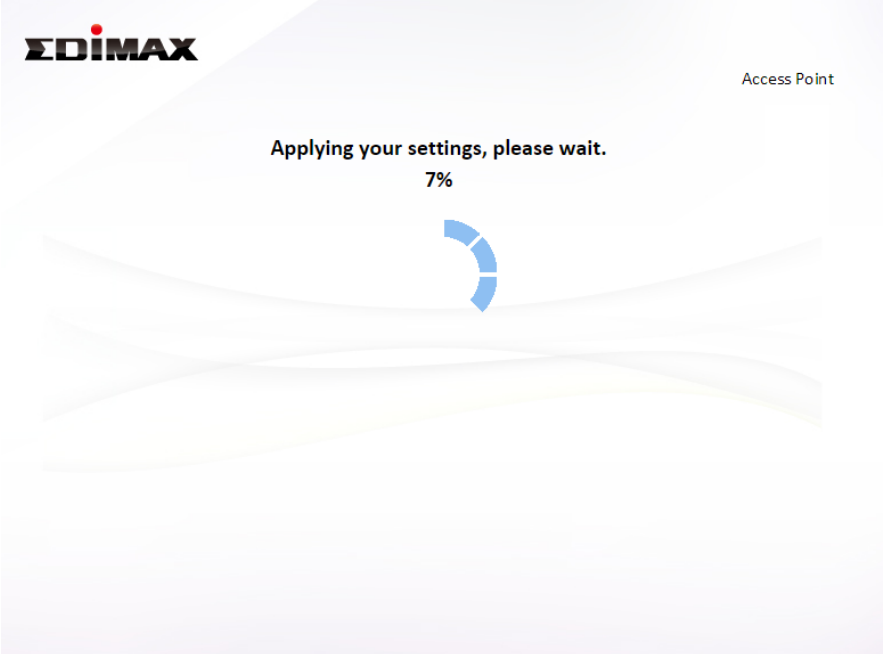


6. A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click “Next” to proceed.

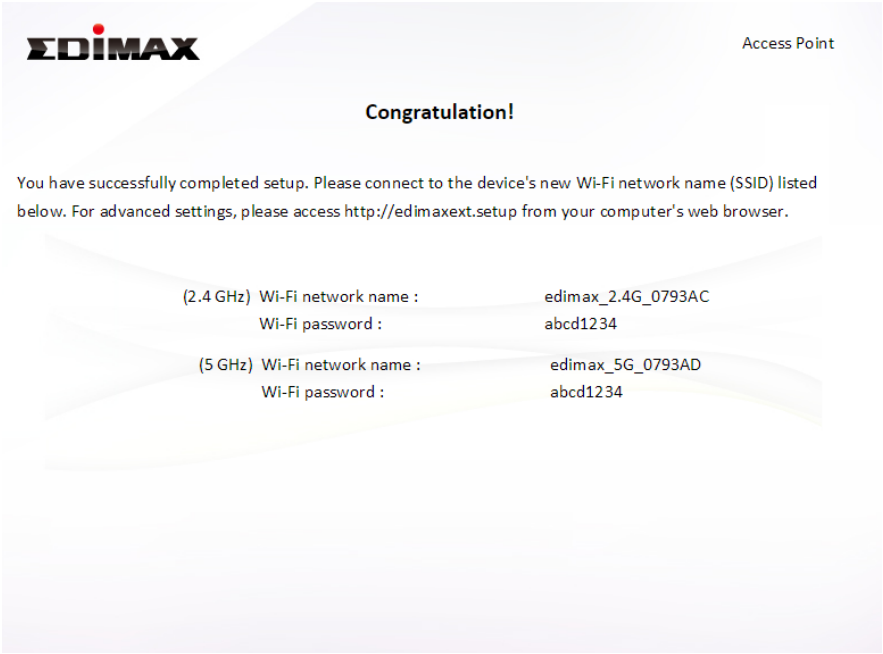


If you wish to backup the device’s settings, click “Backup this configuration” to save your current configuration to a .txt file.

7. Please wait a moment until the EW-7438AC is ready.



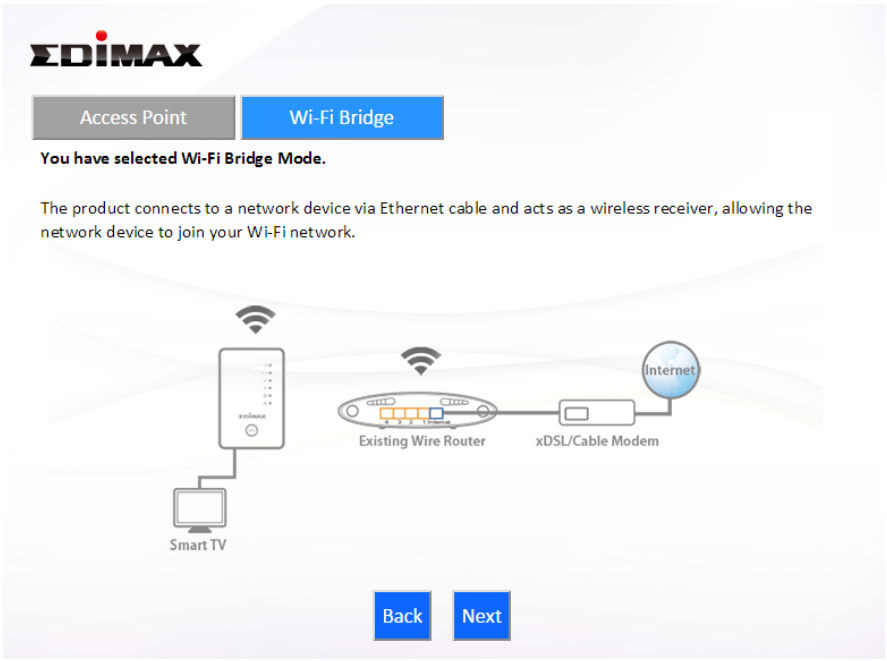
8. A final congratulations screen will indicate that setup is complete. You can now connect to the device's new SSID(s) which are shown on the screen then close the browser window.



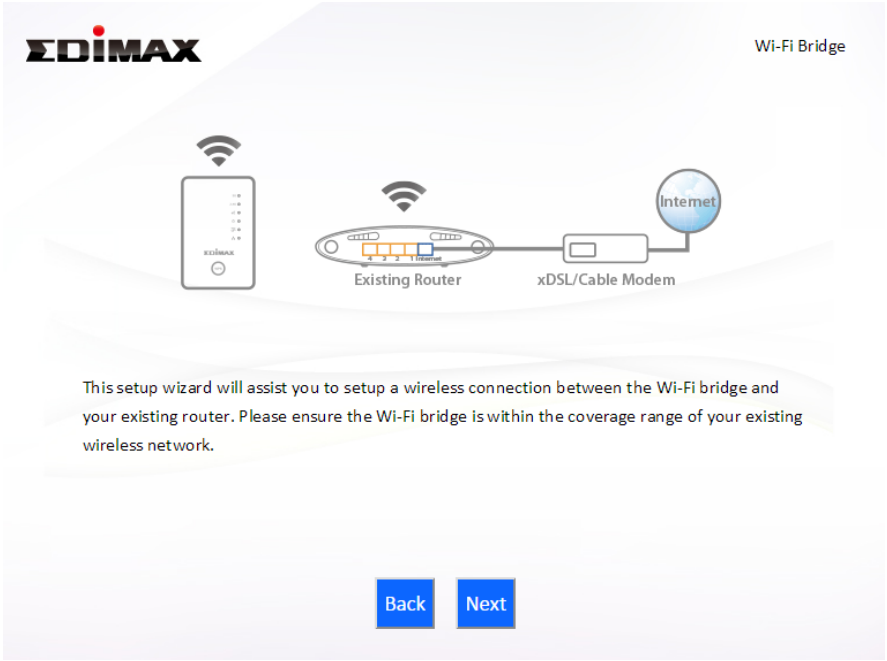
9. The EW-7438AC is working and ready for use. Refer to **V-2. Connecting to a Wi-Fi network** if you require more guidance.

II-3. Wi-Fi Bridge Mode

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

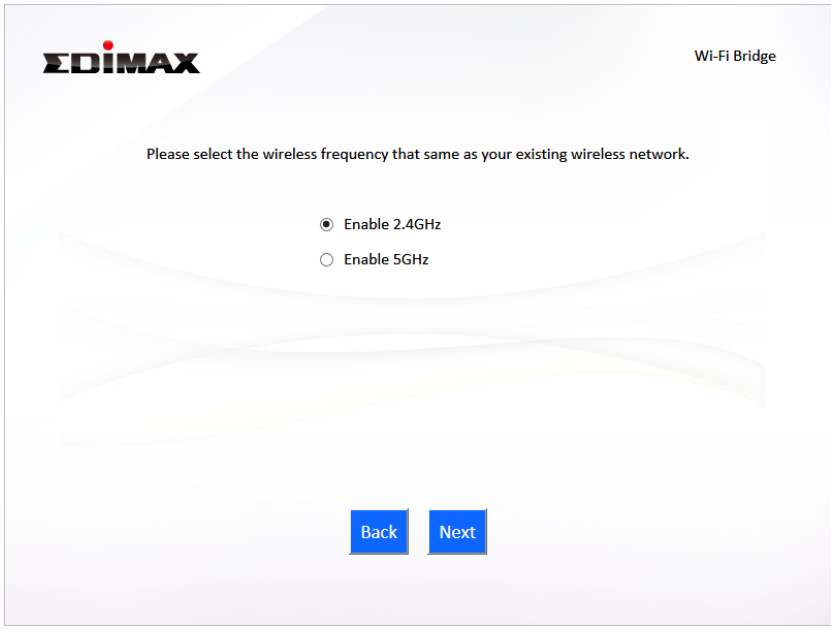


2. Please ensure your EW-7438AC is within Wi-Fi range of your existing wireless router. Click “Next” to continue.



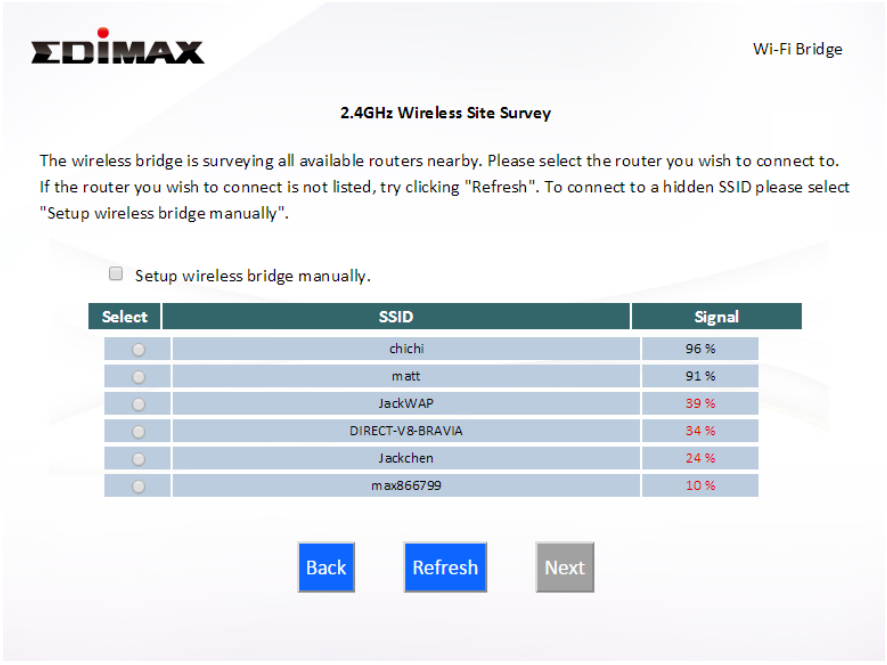
3. Select the frequency (2.4GHz or 5GHz) of your existing wireless network.

In wireless bridge mode, the EW-7438AC can only connect to one wireless network/frequency i.e. 2.4GHz or 5GHz.

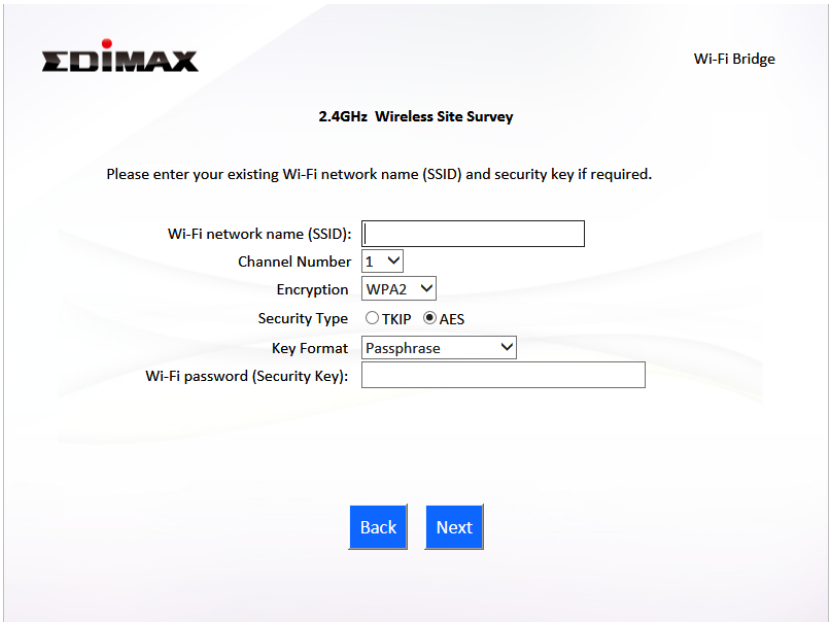


4. Select the Wi-Fi network name (SSID) which you wish to connect to and click “Next” to continue.

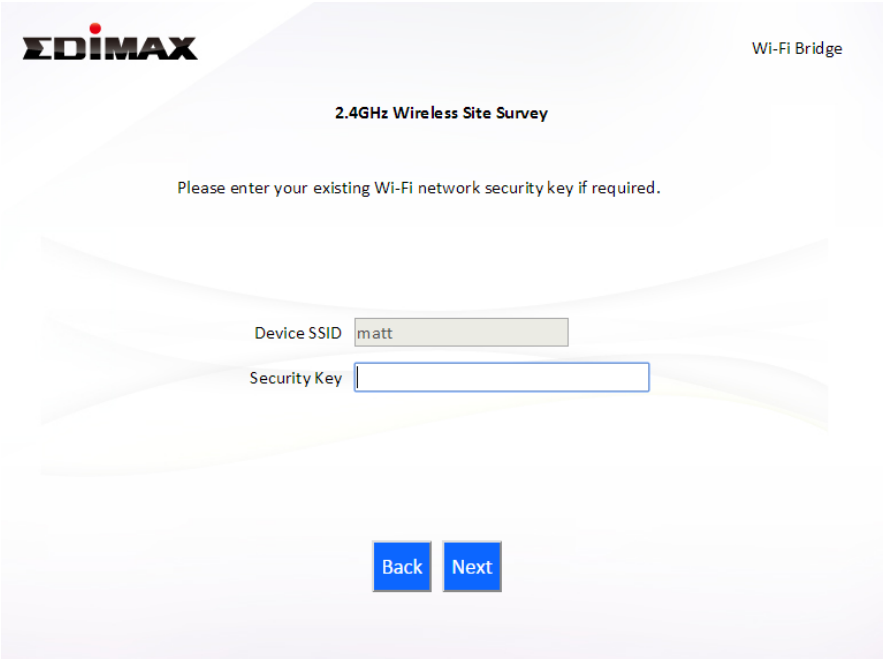
If the Wi-Fi network you wish to connect to does not appear, try clicking “Refresh”.



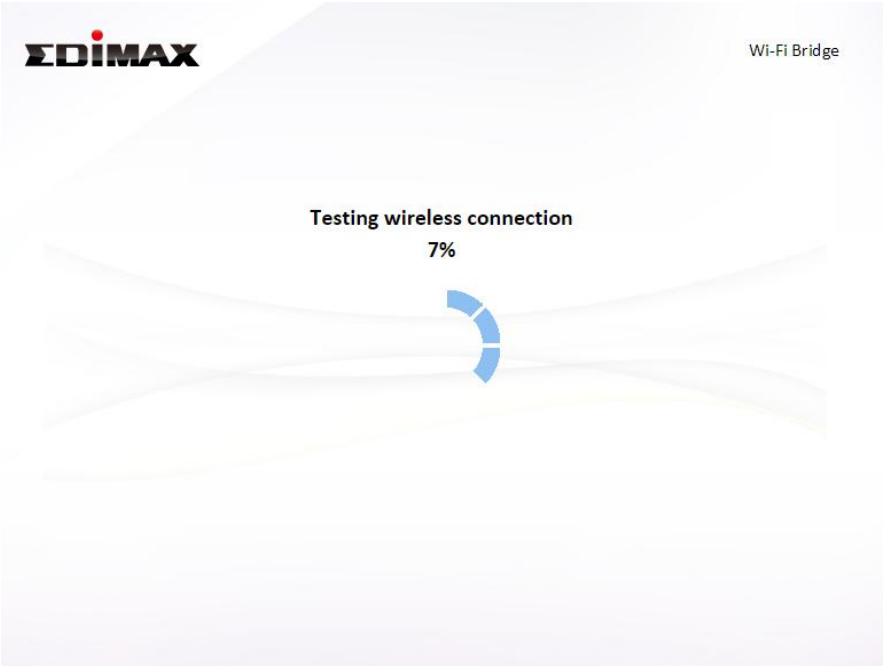
To connect to a hidden SSID, check the “Setup extender manually” box and enter the details manually on the next page, as shown below.



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

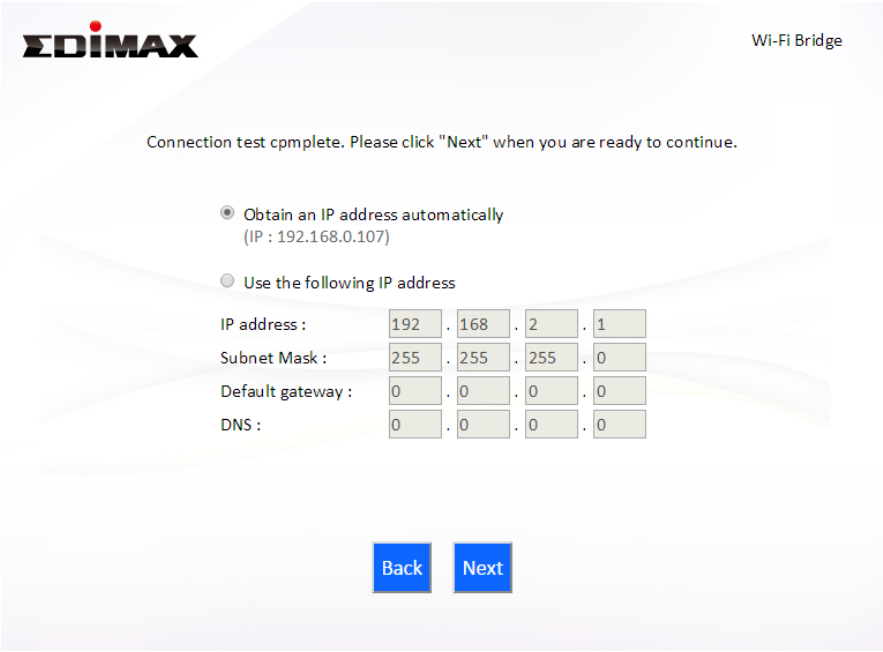


6. Wait a moment while the EW-7438AC tests the wireless connection.

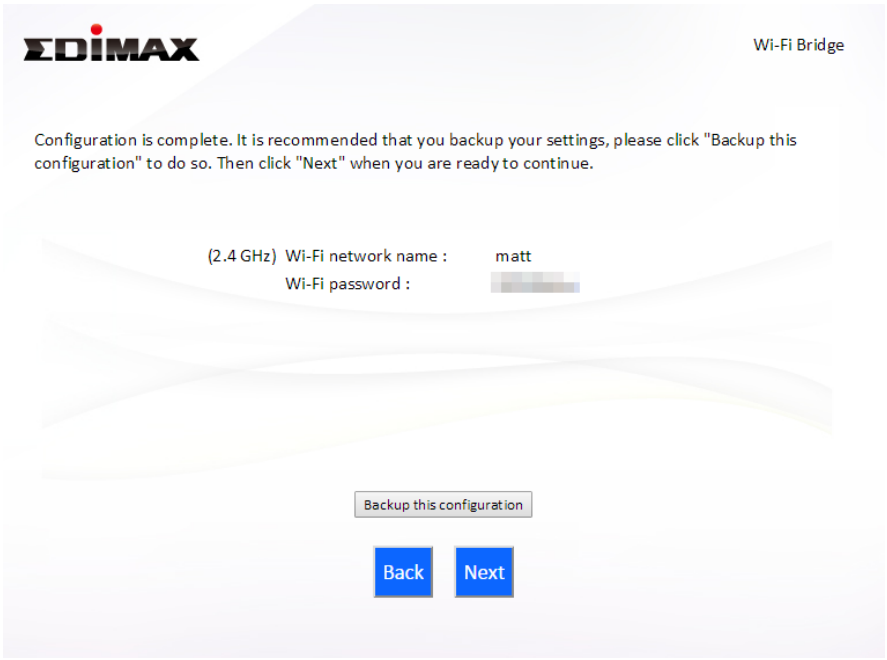


7. Select “Obtain an IP address automatically” or “Use the following IP address” for your EW-7438AC. If you are using a static IP, enter the IP address, subnet mask and default gateway. Click “Next” to proceed to the next step.

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

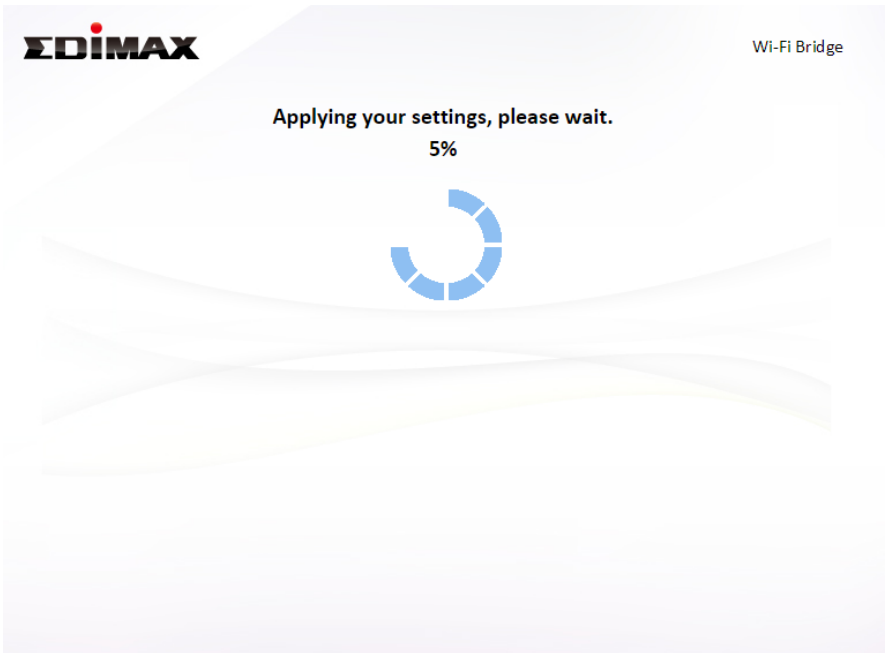


8. A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click “Next” to proceed.

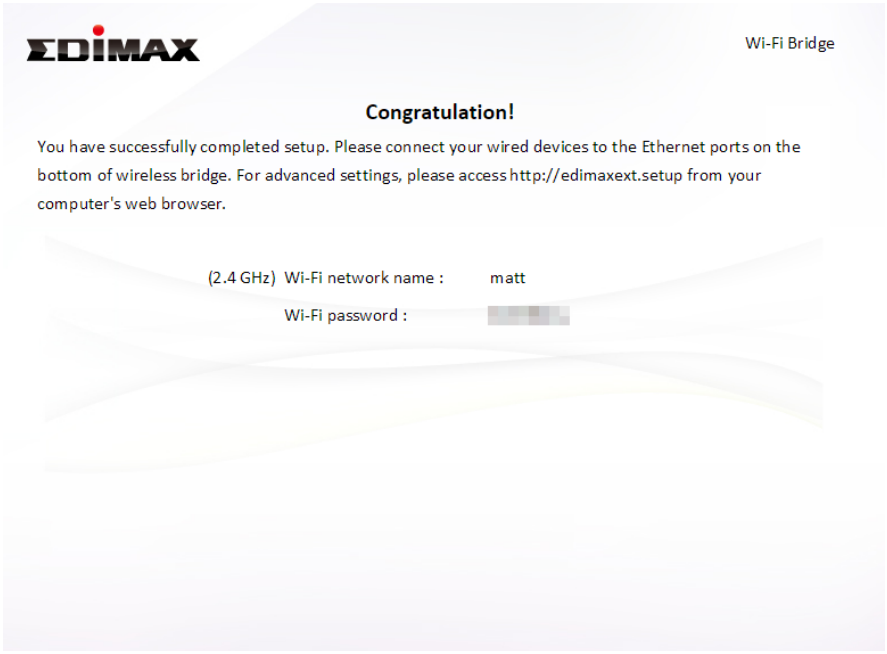


If you wish to backup the EW-7438AC's settings, click "Backup this configuration" to save your current configuration to a .txt file.

9. Please wait a moment until the EW-7438AC is ready.



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



11. The EW-7438AC is working and ready for use. You can now connect the EW-7438AC to your network device using an Ethernet cable and connect to your network as usual.

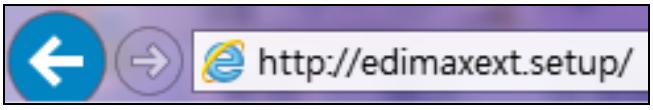
III. Browser Based Configuration Interface

After you have setup the EW-7438AC 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 V-1. Configuring your IP address for more information.***

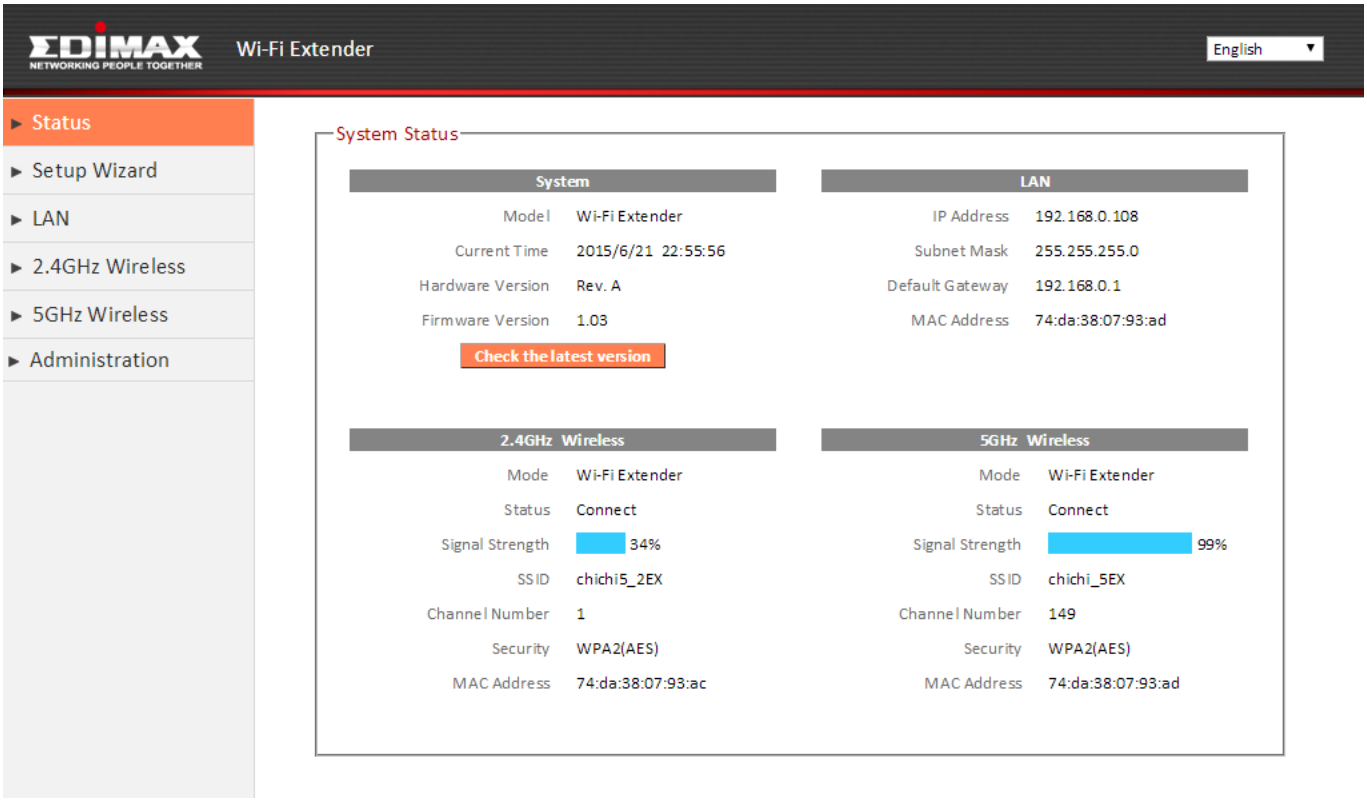
III-1. Login

1. To access the browser based configuration interface enter ***http://edimaxext.setup*** into the URL bar of a browser on a network device connected to the same Wi-Fi network as the EW-7438AC.



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 and Information” 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.

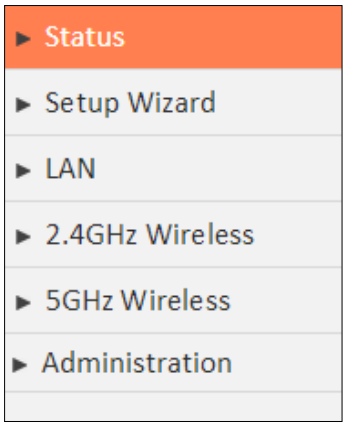
3. To make several changes at once, use the “Save Settings” button after each change and then click “click here to restart” after your final change. Only one restart is necessary as long as each change is saved with the “Save Settings” button.

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

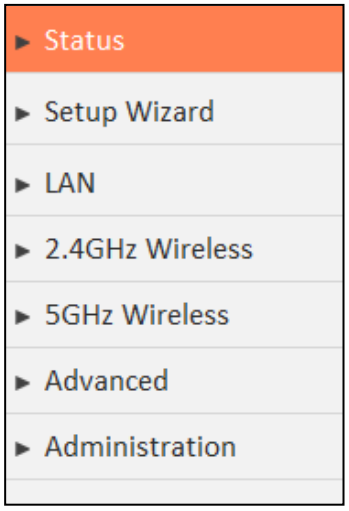
III-3. Main Menu

The main menu displays different options depending on your device's operating mode. Please refer to the following chapters for guidance on each mode.

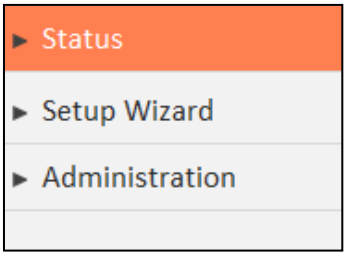
Wi-Fi Extender



Access Point



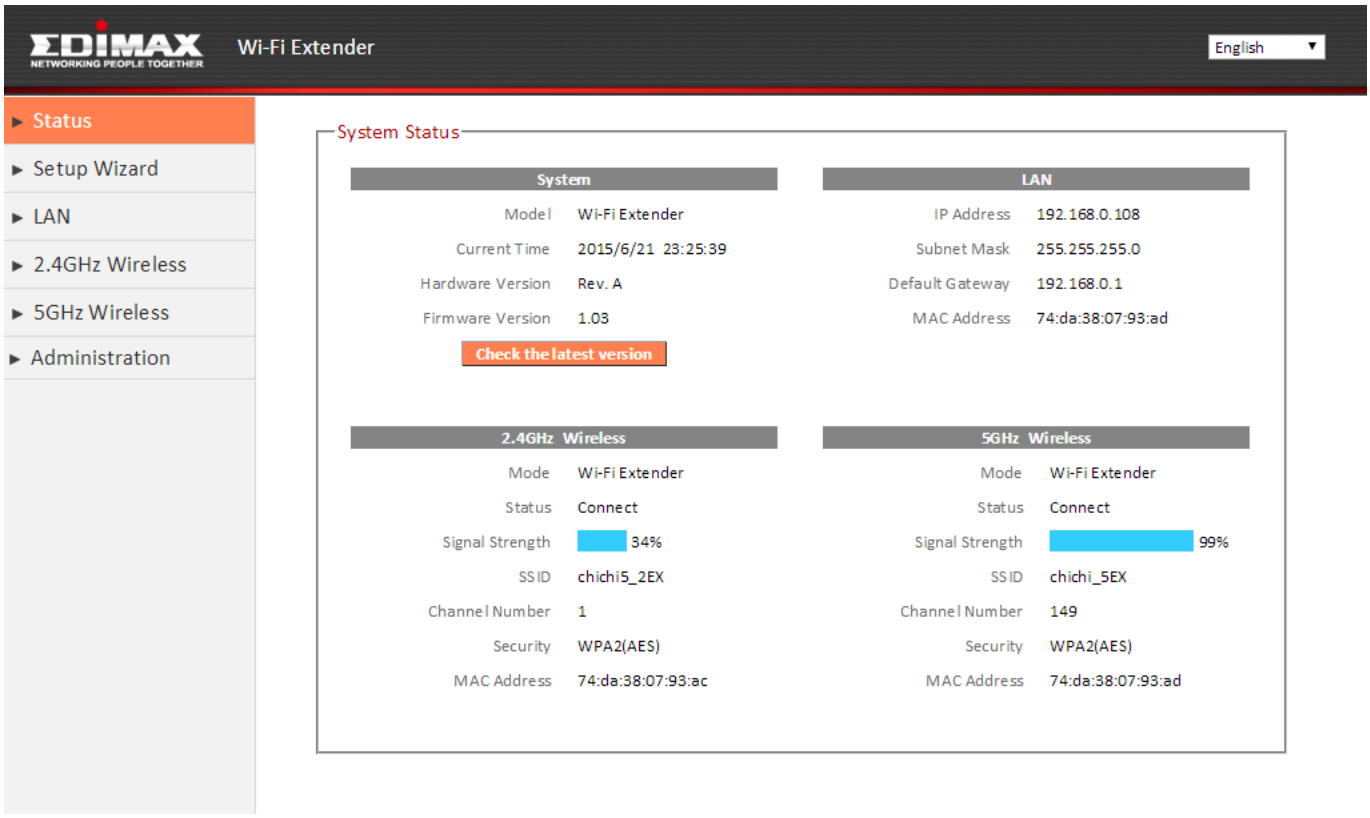
Wi-Fi Bridge



III-3-1. Status

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

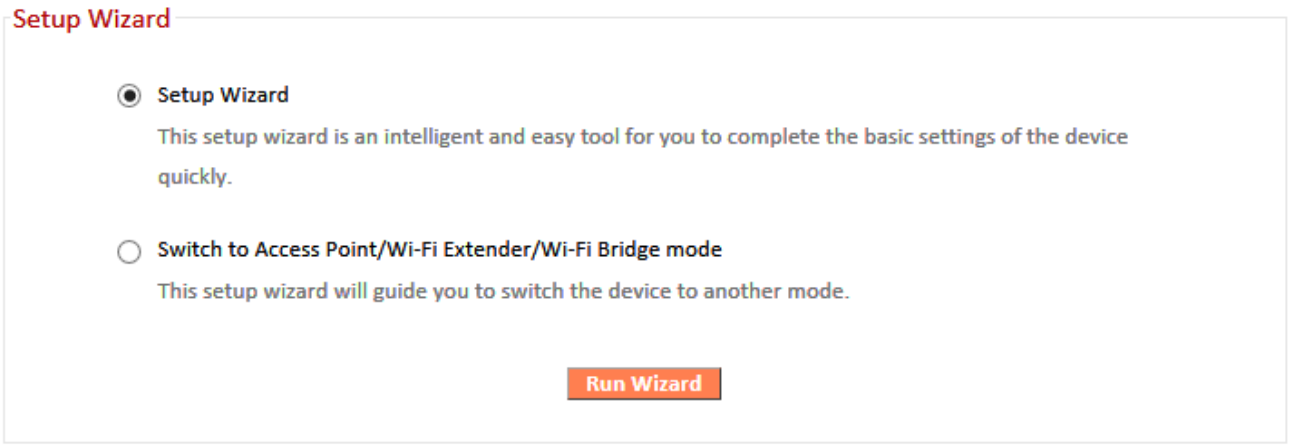
Screenshots displayed are examples.The information shown on your screen will vary depending on your configuration.



You can click the orange **Check the latest version** button to open a new screen and automatically upgrade firmware to the latest version. Click **Firmware auto-upgrade** to begin the process.

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/Access Point/Range Extender/Wireless Bridge/WISP mode” and then click “Run Wizard” to begin.

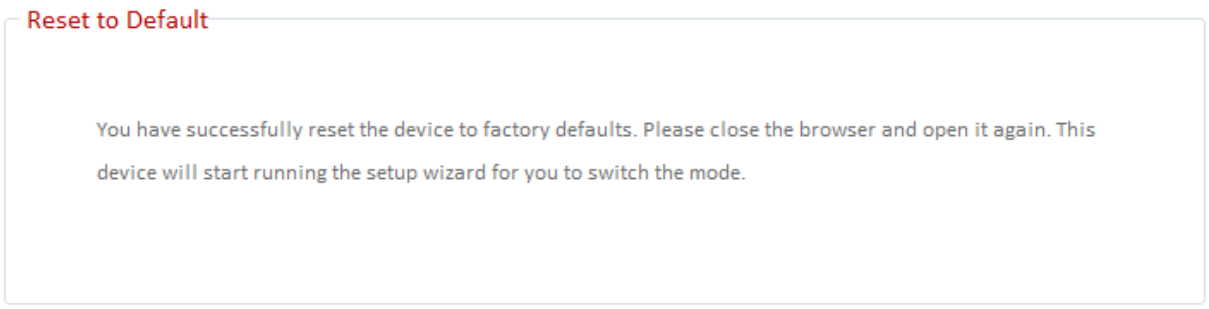


Setup Wizard	This wizard will help you to set up the basic functions and settings of the device. For guidance about using the setup wizard, please refer to **II. Installation**.
Switch to Access Point/ Wi-Fi Extender/ Wi-Fi Bridge mode	This wizard will help you to switch the device to a different operating mode: Access Point mode, Wi-Fi extender mode, Wi-Fi bridge mode (see below).

Switch to Access Point/ Wi-Fi Extender/ Wi-Fi Bridge mode:

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

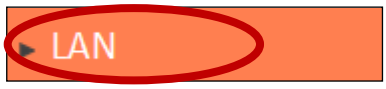
2. After the device has reset you will see the screen below. Close your browser and open it again.



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** edimaxEXT.setup * SSID and go to** http://edimaxext.setup **in a web browser.***

III-3-3. LAN

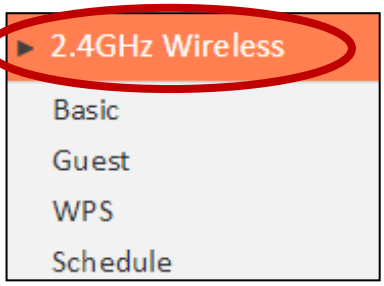


You can configure your Local Area Network (LAN) on this page. Set the device to automatically obtain an IP address from your router or assign an IP address manually.

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

IP Address	Specify the IP address here. This IP address will be assigned to the EW-7438AC and will replace the default IP address.
Subnet Mask	Specify a subnet mask. The default value is 255.255.255.0
Default Gateway Address	Enter a default gateway address.
DNS Address	Enter a DNS address.

III-3-4. 2.4GHz Wireless & 5GHz Wireless

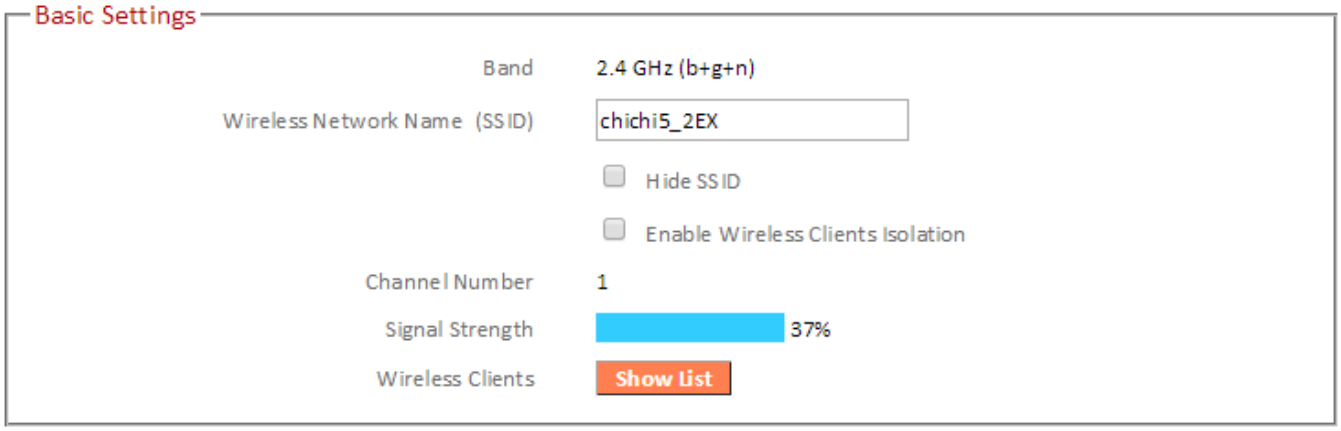


The “2.4GHz Wireless” & “5GHz Wireless” menu allows you to configure SSID and security settings for your Wi-Fi network along with a guest Wi-Fi network. WPS, access control (in access point mode) and scheduling functions can also be managed from here.

In Access Point mode, the “Guest” feature in the menu is replaced by “Access Control”.

III-3-4-1. Basic

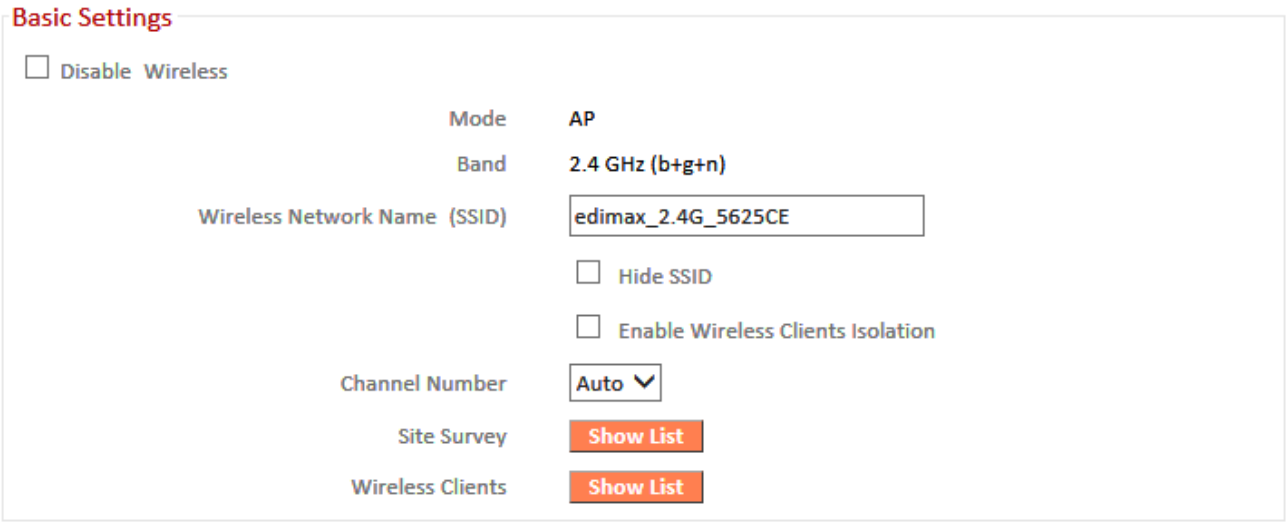
The “Basic” screen displays settings for your primary 2.4GHz or 5GHz Wi-Fi network.



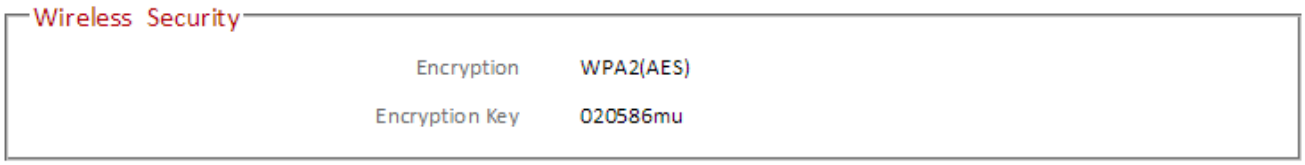
Band	Displays the wireless standard used for the EW-7438AC’s “2.4GHz (B+G+N)” means that 802.11b, 802.11g, and 802.11n wireless clients can connect to the EW-7438AC.
Wireless Network Name (SSID)	This is the name of your Wi-Fi network for identification, also sometimes referred to as “SSID”. The SSID can consist of any combination of up to 32 alphanumerical characters.
Hide SSID	Enable or disable hide SSID. When disabled, the SSID will be visible to clients as an available Wi-Fi network. When enabled, 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 EW-7438AC 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	Displays the channel number that used by your root AP or router
Signal Strength	Displays the signal strength from your extender to your router.
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.

"In access point mode, you can disable Wi-Fi by checking "Disable wireless", Select a wireless channel or use the default "Auto" setting from "Channel Number" drop-down menu or click "Site Survey" to show your local Wi-Fi environment."



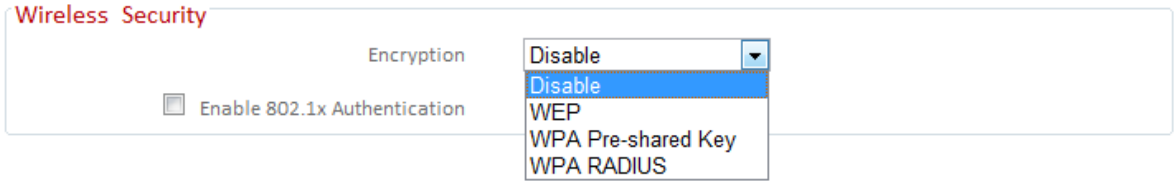
Wireless Security:



Access Point Mode:

Select an encryption type from the drop-down menu:

"WPA Pre-shared Key" is the recommended and most secure encryption type.

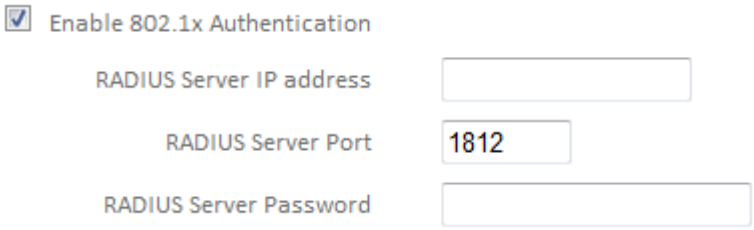


III-3-4-1-1. Disable

Encryption is disabled and no password/key is required to connect to the EW-7438AC.

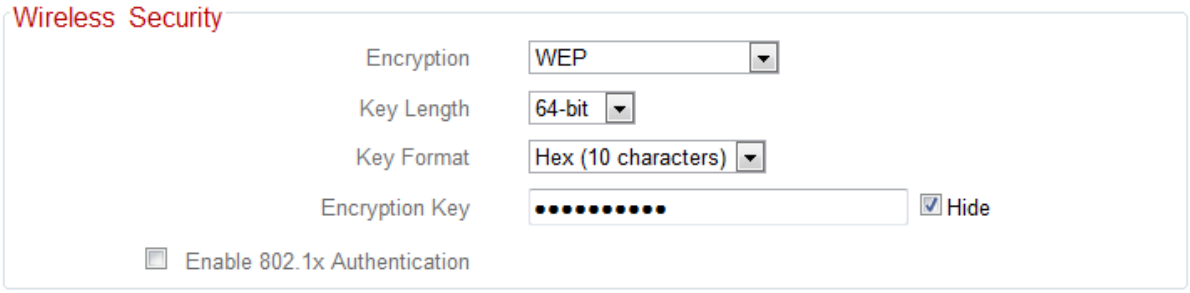
Disabling wireless encryption is not recommended. When disabled, anybody within range can connect to your device's SSID.

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

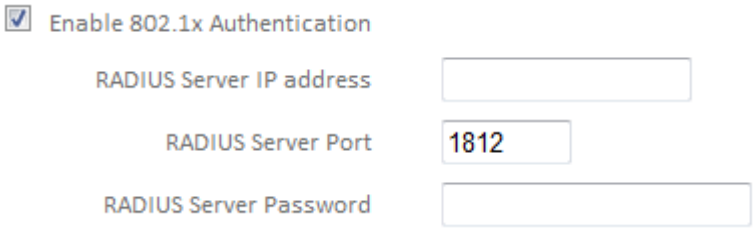


III-3-4-1-2. WEP

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

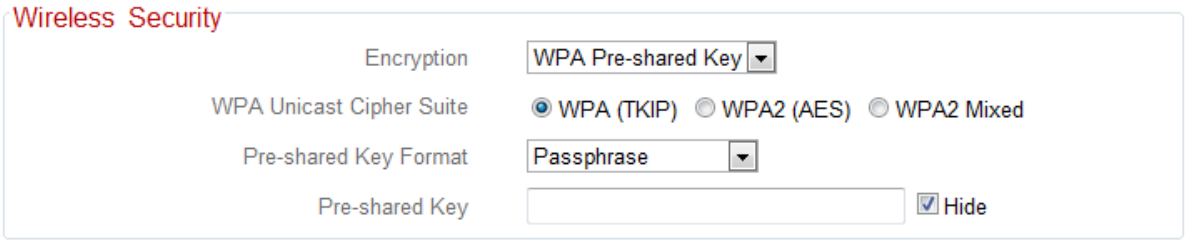


Key Length	Select 64-bit or 128-bit. 128-bit is more secure than 64-bit.
Key Format	Choose from “ASCII” (any alphanumerical character 0-9, a-z and A-Z) or “Hex” (any characters from 0-9, a-f and A-F).
Encryption Key	Enter your encryption key/password according to the format you selected above. A complex, 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).



III-3-4-1-3. WPA Pre-Shared Key

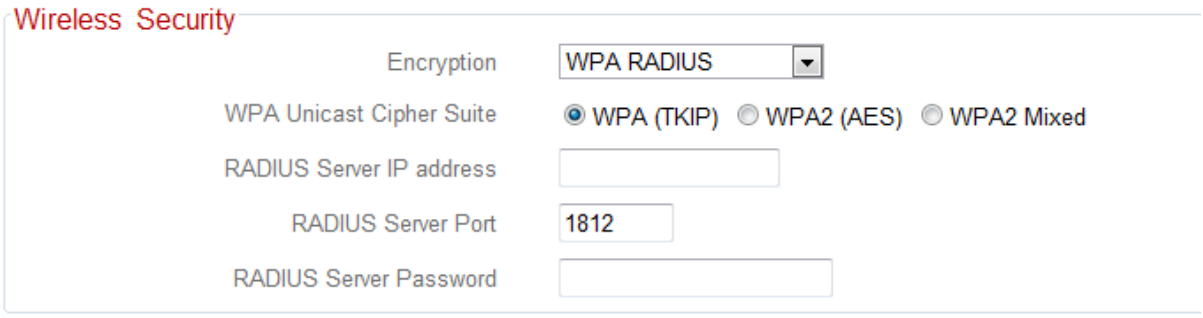
WPA pre-shared key is the recommended and most secure encryption type.



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

III-3-4-1-4. 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	Select from WPA (TKIP), WPA2 (AES) or WPA2 Mixed. WPA2 (AES) is safer than WPA (TKIP), but not supported by all wireless clients. Please make sure your wireless client supports your selection. WPA2 (AES) is recommended followed by WPA2 Mixed if your client does not support WPA2 (AES).
RADIUS Server IP address	Input the IP address of the RADIUS authentication server here.
RADIUS Server Port	Input the port number of the RADIUS authentication server here. The default value is 1812.
RADIUS Server Password	Input the password of the RADIUS authentication server here.

III-3-4-2. Guest

You can setup an additional “Guest” Wi-Fi network so guest users can enjoy Wi-Fi connectivity without accessing your primary SSID. 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.

Not available in access point mode

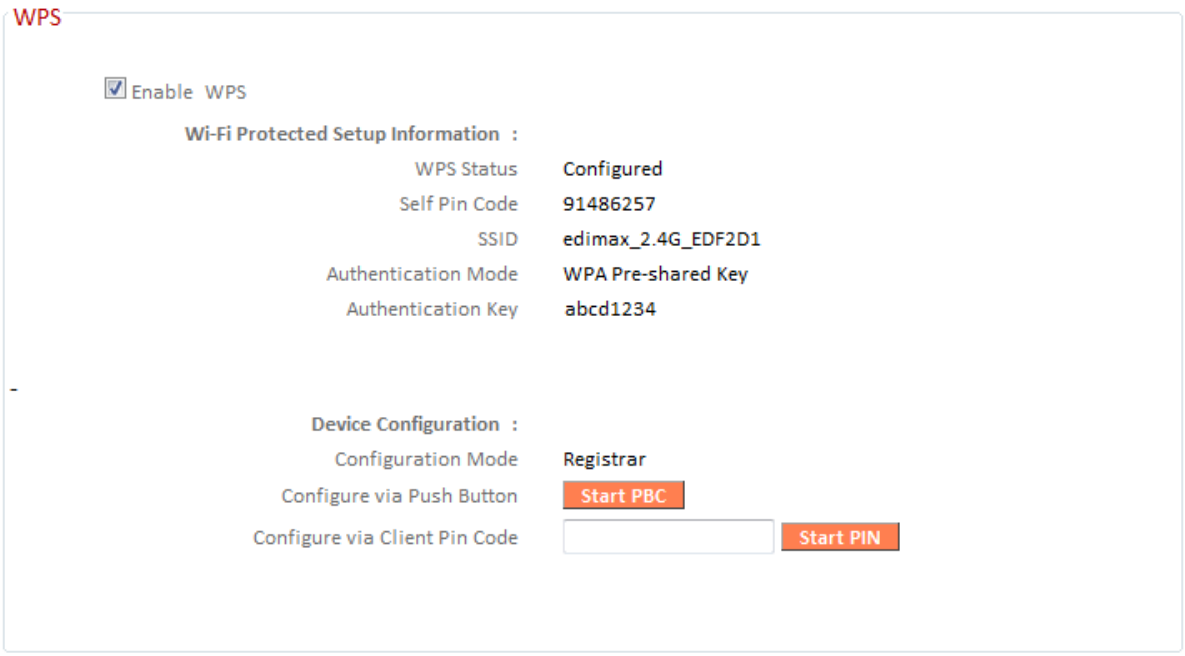
Enable Guest SSID	Check/uncheck the box to enable/disable the guest Wi-Fi network.
Wireless Guest Name	Enter a reference/ID name for your guest wireless network.
Hide SSID	Enable or disable hide SSID. When disabled, the SSID will be visible to clients as an available Wi-Fi network. When enabled, the 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 EW-7438AC 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 EW-7438AC's frequency band: 2.4GHz (B+G+N): Allows 802.11b, 802.11g, and 802.11n wireless clients to connect to the EW-7438AC.
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-3-4-1. Basic: Wireless Security*** for details about security settings.

III-3-4-3. 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 Button	Click “Start PBC” (Push-Button Configuration) to activate WPS on the access point. WPS will be active for 2 minutes.
Configure via Client PIN Code	Enter the wireless client’s PIN code here and click “Start PIN” to activate PIN code WPS. Refer to your wireless client’s documentation if you are unsure of its PIN code.

III-3-4-4. Access Control

Access Point mode only

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 EW-7438AC. 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 EW-7438AC, it will be denied.

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

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

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

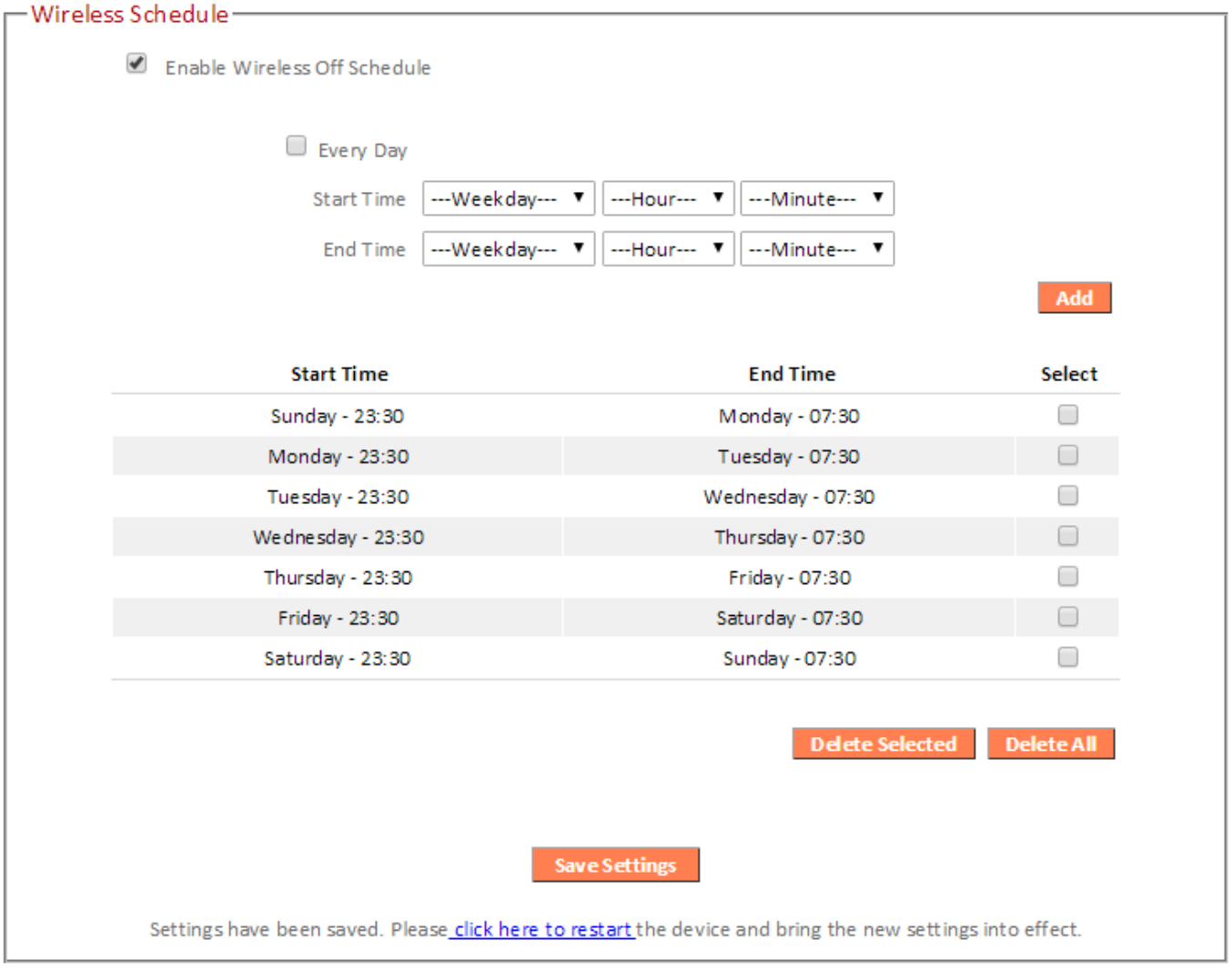
Delete Selected/ Delete All	Delete selected or all entries from the table.

III-3-4-5. Schedule

When Cross-Band is enabled, wireless scheduling is reversed according to frequency. Your 2.4GHz schedule will apply to your extender's 5GHz network and vice-versa.

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

The EW-7438AC must have time & date settings initially set to use scheduling.



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

1. Use the dropdown to select which day(s) to include in the schedule. Check "Every Day" as a shortcut for an every day schedule.

2. Specify a start and end time (hour and minute) for the wireless off schedule using the drop-down menu.

Add	Add the schedule to the table of active schedules.

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

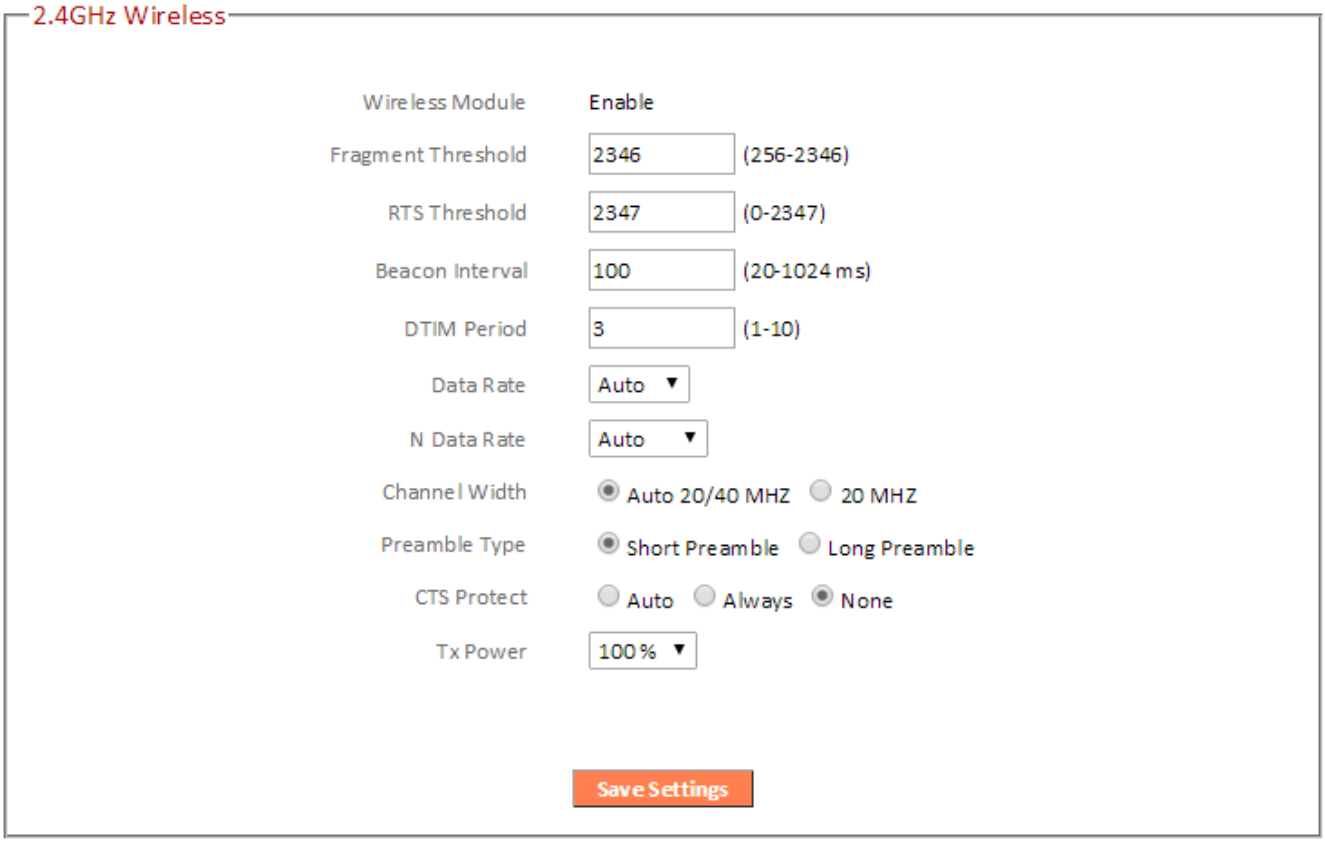
If you need to use the extender during a scheduled off period, press the WPS/Reset button once to "wake up" the extender and resume Wi-Fi coverage.

III-3-5. Advanced

Advanced features of the EW-7438AC can be configured from the “Advanced” menu.

III-3-5-1. 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.



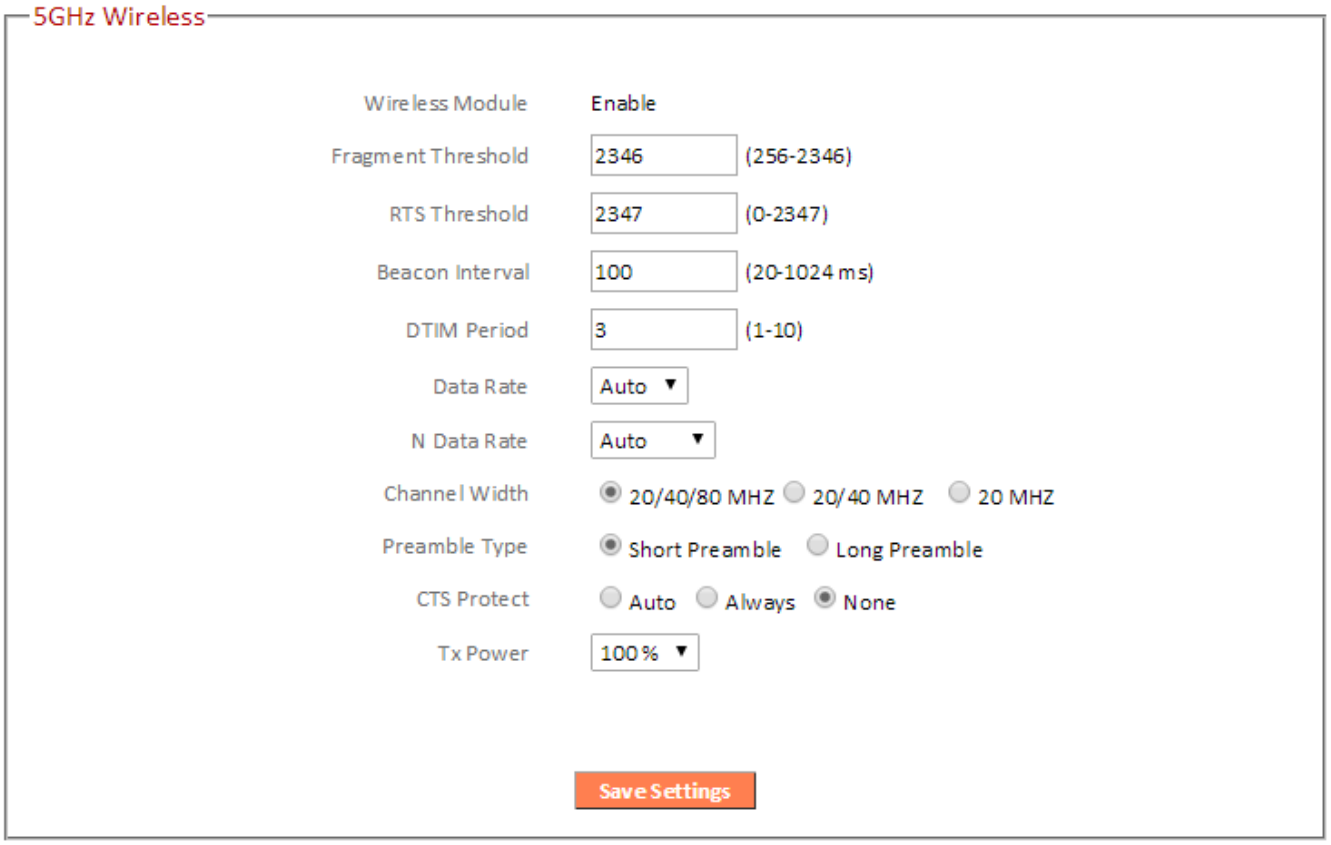
Fragment Threshold	Set the Fragment threshold of the wireless radio. The default value is 2346.
RTS Threshold	Set the RTS threshold of the wireless radio. The default value is 2347.
Beacon Interval	Set the beacon interval of the wireless radio. The default value is 100.
DTIM Period	Set the DTIM period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

Tx power works in conjunction with the switch on the underside of the device. The switch is the primary setting and the Tx power value here will be a percentage of the slide switch setting. E.G If the slide switch is set to Green Mode (25%) and Tx power to 75%, the overall output will be 75% of 25%.

III-3-5-2. 5GHz Wireless

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

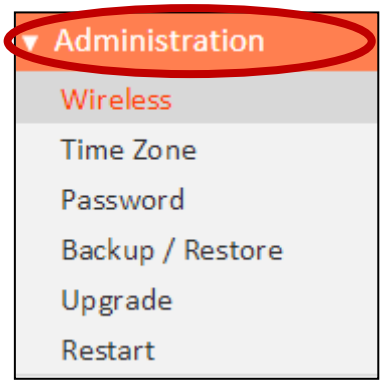


Fragment Threshold	Set the Fragment threshold of the wireless radio. The default value is 2346.
RTS Threshold	Set the RTS threshold of the wireless radio. The default value is 2347.
Beacon Interval	Set the beacon interval of the wireless radio. The default value is 100.
DTIM Period	Set the DTIM period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

Preamble Type	Set the wireless radio preamble type. The default value is “Short Preamble”.
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.

Tx power works in conjunction with the switch on the underside of the device. The switch is the primary setting and the Tx power value here will be a percentage of the slide switch setting. E.G If the slide switch is set to Green Mode (25%) and Tx power to 75%, the overall output will be 75% of 25%.

III-3-6. Administration



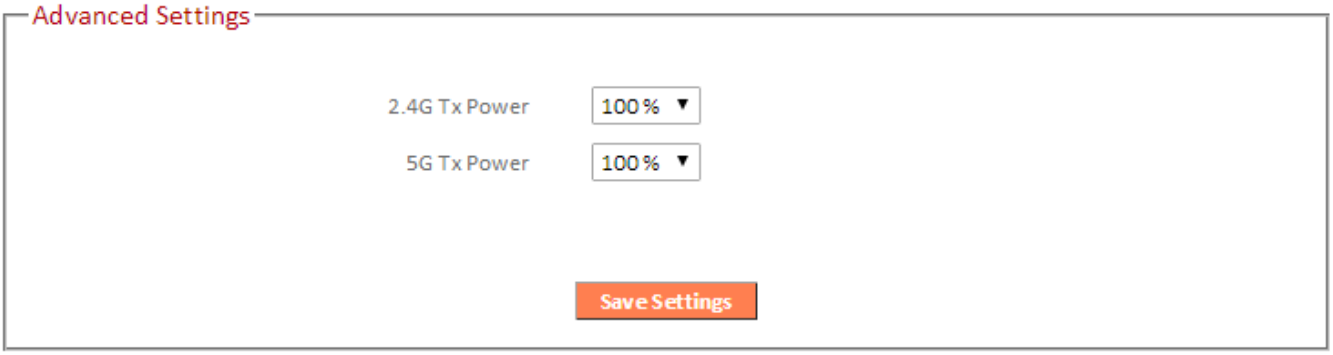
Various administrative functions can be accessed from the “Administration” menu.

III-3-6-1. Wireless

Range extender mode only

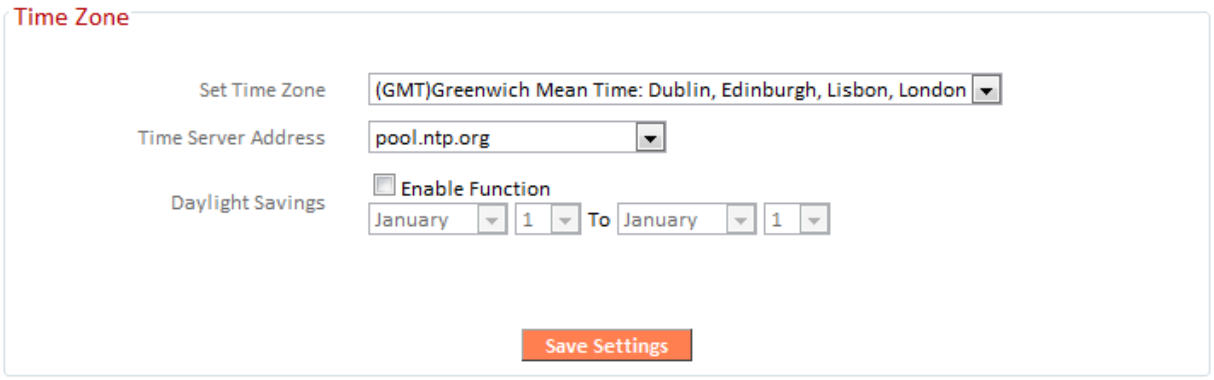
You can adjust the level of wireless output power as a percentage. Depending on the size of your location and required coverage, you may not require 100% output power. Reducing the output power can enhance security since your Wi-Fi signal will not extend to potential malicious/unknown users in distant areas.

Tx power can also be adjusted using the switch on the underside of the device. Refer to *I-4. Switch.*



2.4G Tx Power	Adjust the Wi-Fi output power for the 2.4GHz frequency.
5G Tx Power	Adjust the Wi-Fi output power for the 5GHz frequency.

III-3-6-2. Time Zone

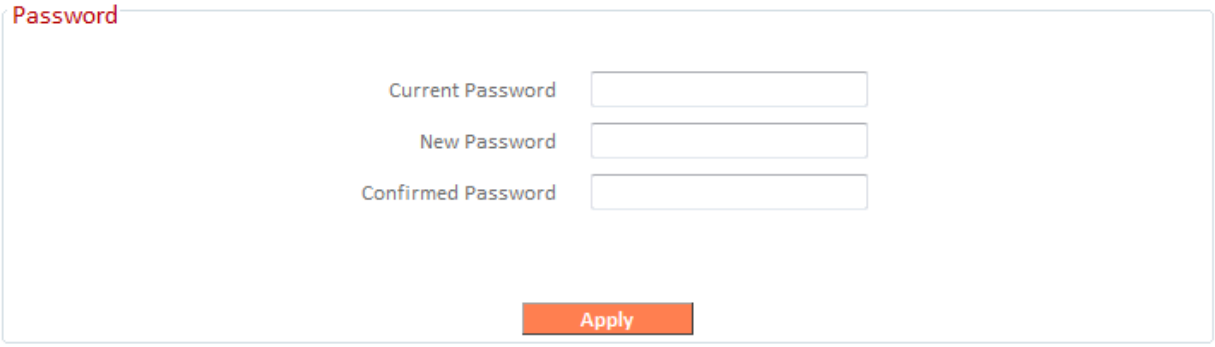


Set Time Zone	Select the time zone of your country or region.
Time Server Address	The travel router supports NTP (Network Time Protocol) for automatic time and date setup. Input the host name of the IP server manually.
Daylight Saving	If your country/region uses daylight saving time, please check the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

III-3-6-3. Password

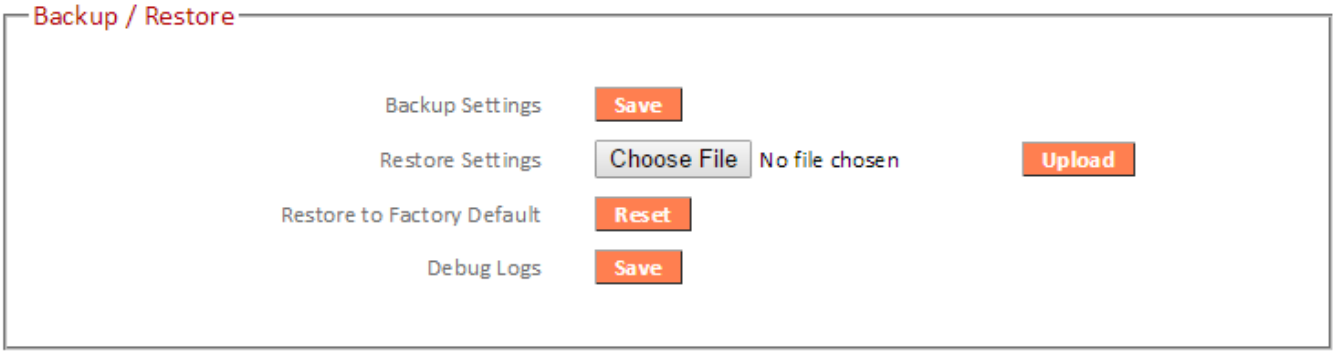
You can change the password used to login to the browser-based configuration interface here. It is advised to do so for security purposes.

Please make a note of the new password. In the event that you forget the password and are unable to login to the browser based configuration interface, see I-6. 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-3-6-4. Backup/Restore

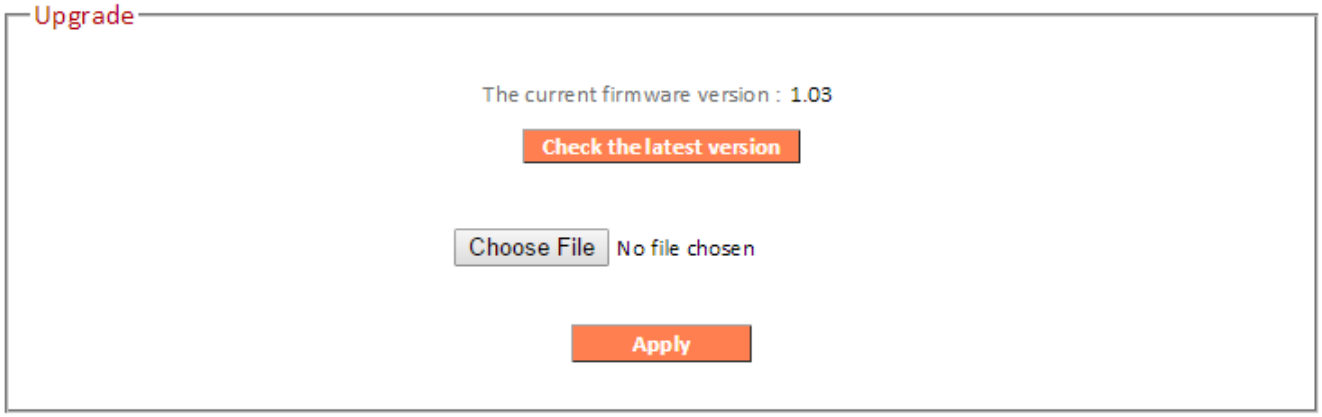


Backup Settings	Click “Save” to save the current settings on your computer as config.bin file.
Restore Settings	Click “Browse” to find a previously saved config.bin file and then click “Upload” to replace your current settings.
Restore to Factory Default	Click “Reset” to restore settings to the factory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

III-3-6-5. Upgrade

The upgrade page displays the current firmware version and allows you to upgrade the system firmware to a more recent version. You can download the latest firmware from the Edimax website and upgrade manually using the **Choose File** button or you can click the **Check the latest version** button to check your version and automatically upgrade if a newer version is available. After the upgrade, the system will restart.

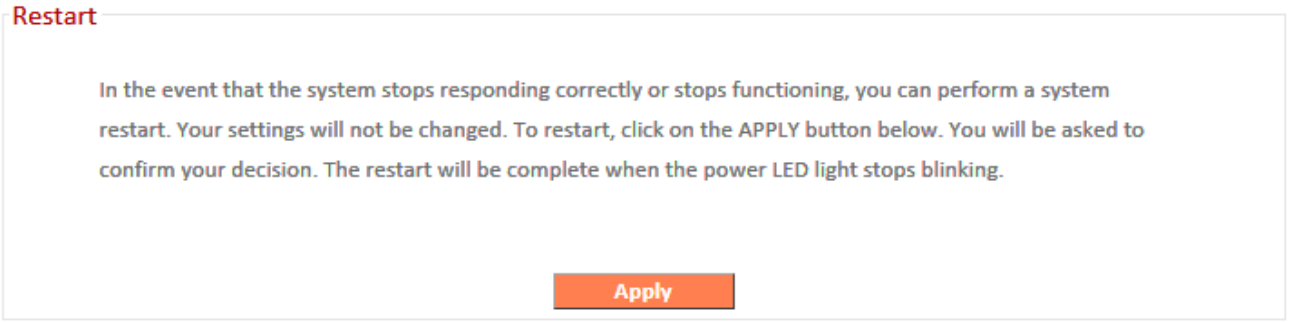
Do not switch off or disconnect the device during a firmware upgrade, as this could damage the device. It is recommended that you use a wired Ethernet connection for a firmware upgrade.



Click the orange **Check the latest version** button to open a new screen and automatically upgrade firmware to the latest version. Click **Firmware auto-upgrade** to begin the process or click **Save as file** to save the new firmware file to your computer and upgrade manually later.

III-3-6-6. Restart

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



IV. EdiRange App

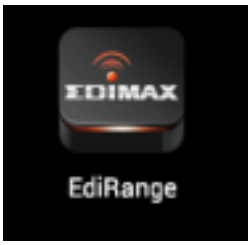
The EdiRange app is for range extender mode only.

The EdiRange app is a free smartphone app from which you can manage the extender's functions and check your local Wi-Fi environment.

Please ensure that your smartphone/tablet is connected to your extender's Wi-Fi (SSID).

IV-1. Login

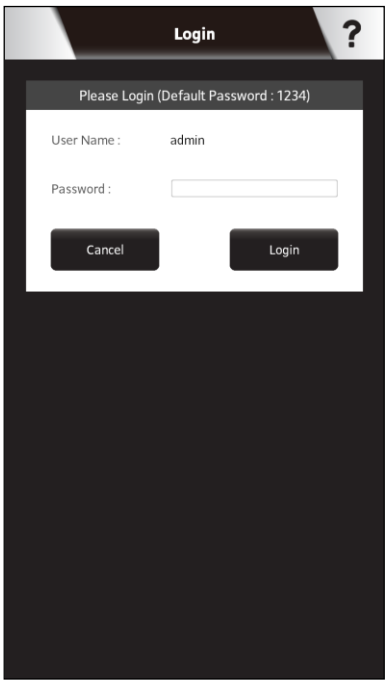
1. Open the EdiRange app.



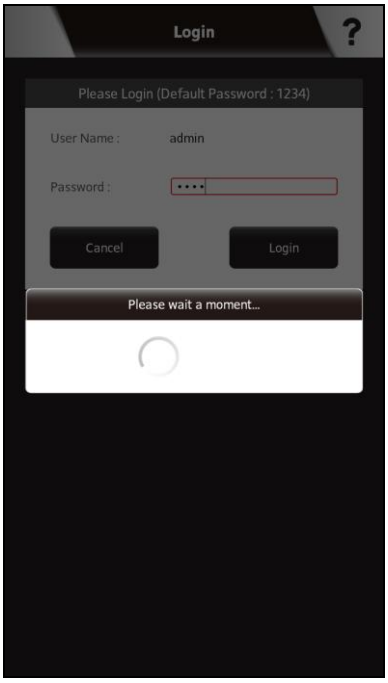
2. Select "Management".

3. Enter the username and password (default username: *admin* default password: *1234*).

The admin password is the same password used for the browser based configuration interface. It is recommended that you change the password from the default "1234". You can change the password in the "admin" page from the main menu.

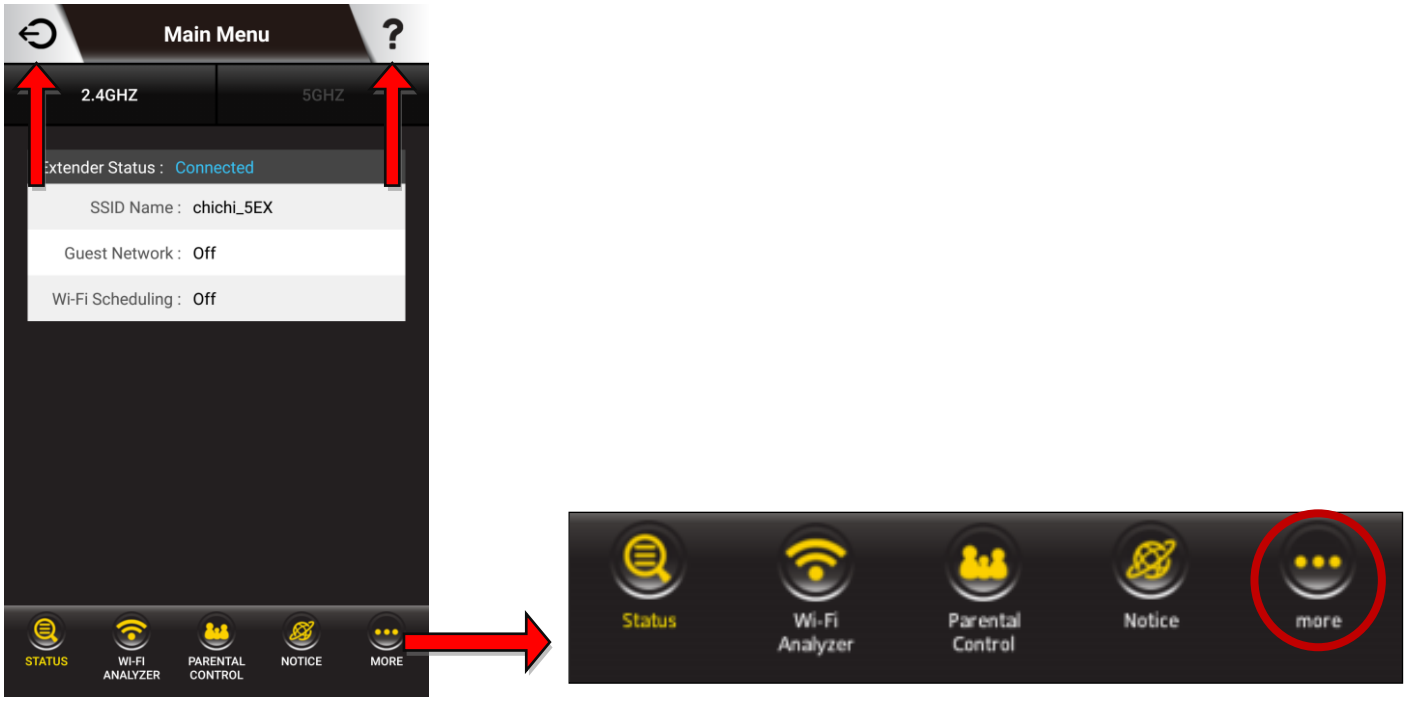


4. Wait for the app to log in.



IV-2. Main Menu

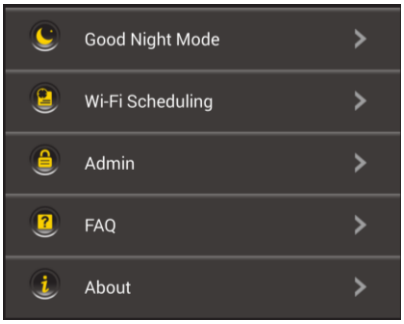
After you log in, the “Status” page will be displayed. You can see the extender status, SSID name, and guest network and schedule status here. Switch between 2.4GHz & 5GHz at the top. Use the menu of icons across the bottom of the screen to navigate around the app.



Logout
Click the logout icon in the top left corner of the app anytime to log out from the app.

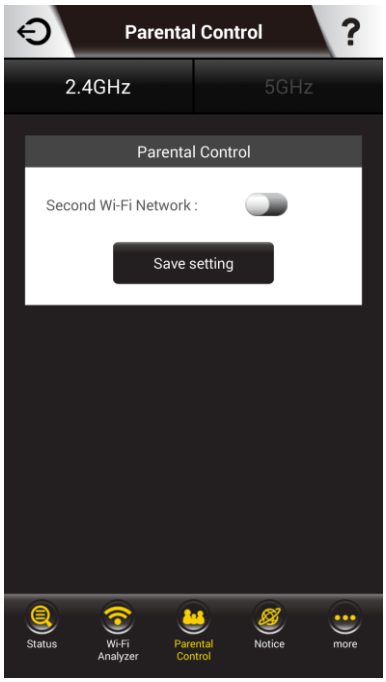
Help
Click the help icon in the top right corner of the app anytime to display help and tips about using the app.

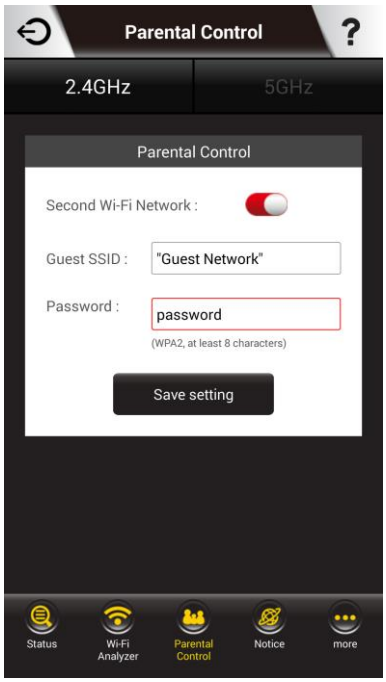
More
Click the “more” icon in the main menu to display an additional menu with more options:

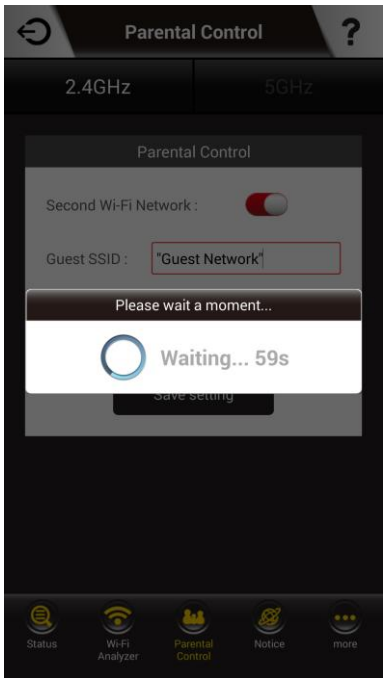


IV-3. Parental Control

The parental control function is a guest Wi-Fi network (SSID) which can be used for children, and switched on or off remotely using the EdiRange app independent from your extender's primary Wi-Fi network. Select "Second Wi-Fi Network" and then enter a name and password for the network.



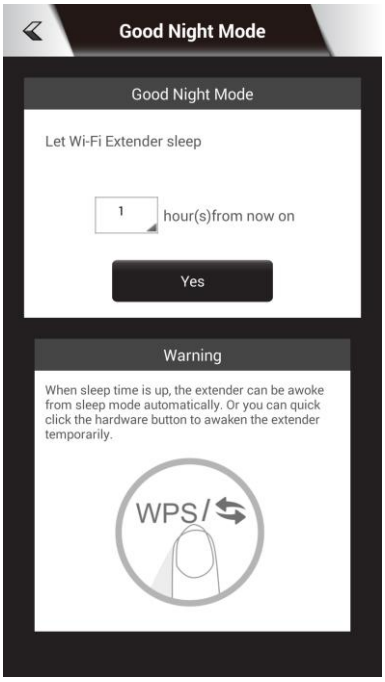


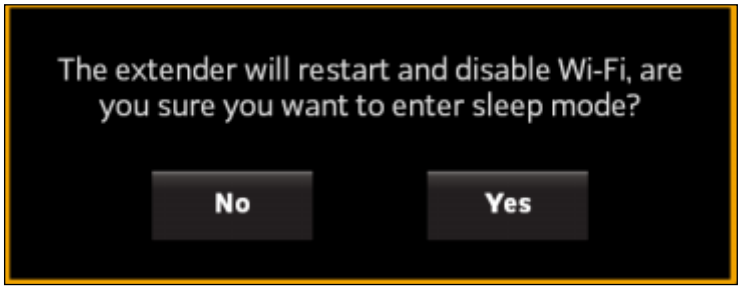


IV-4. Good Night Mode

Good Night Mode will put the extender to "sleep" (switch off Wi-Fi and LED) for a specified number of hours. Enter the number of hours and click "Yes" to activate Good Night Mode.

Your mobile device will be disconnected from the extender during sleep mode since Wi-Fi is disabled. You can wake the extender (back to its fully functional state) anytime by manually pressing the WPS/Reset button.

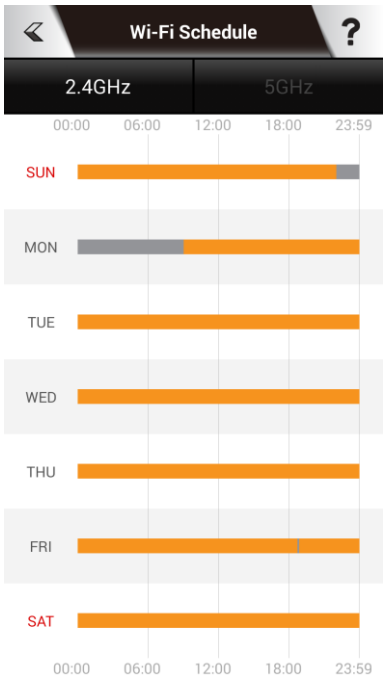


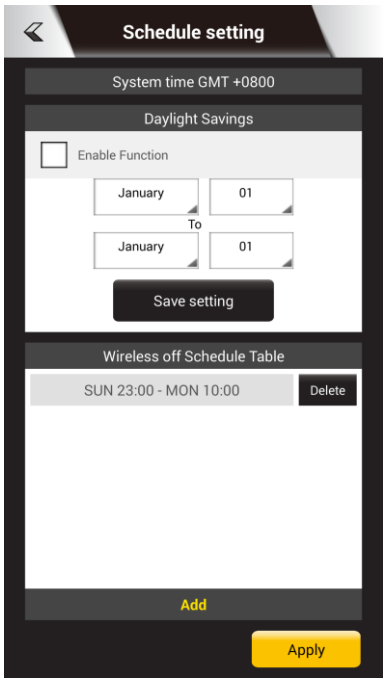


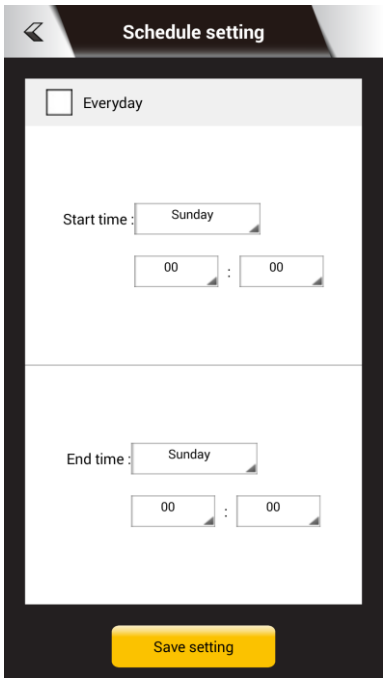
IV -5. Wi-Fi Scheduling

Wi-Fi can be scheduled to switch off according to your preference. Your current schedules are displayed in the table: grey areas indicate Wi-Fi is off and orange areas indicate Wi-Fi is on.

Touch the time bars on the screen to open the schedule settings, and then click “Add” or “Delete” to add a new or delete an existing schedule for Wi-Fi **off**. Daylight Savings can also be configured here.

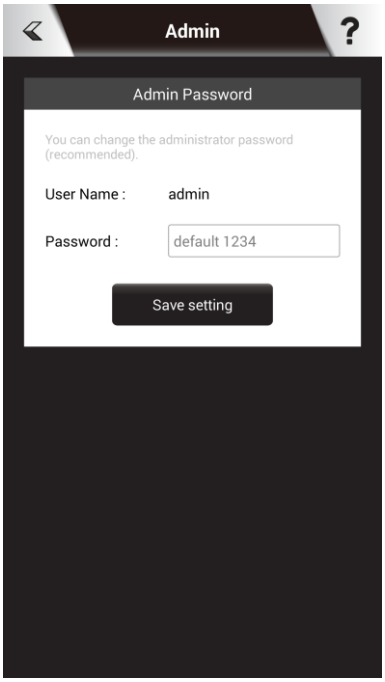






IV -6. Admin

You can change the extender's administrative password on the Admin page. This is the password to login to the EdiRange app and the browser based configuration interface.



V. Appendix

V-1. Configuring your IP address

For first time access to the URL ***http://edimaxext.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 **VII-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. **192.168.9.x (x = 3 – 254)** as the EW-7438AC in order to access ***http://edimaxext.setup***.

The EW-7438AC's default IP address is 192.168.9.2.

The procedure for modifying your IP address varies across different operating systems; please follow the guide appropriate for your operating system in **V-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, so that you can access the URL ***http://edimaxext.setup*** in future without modifying your IP address.

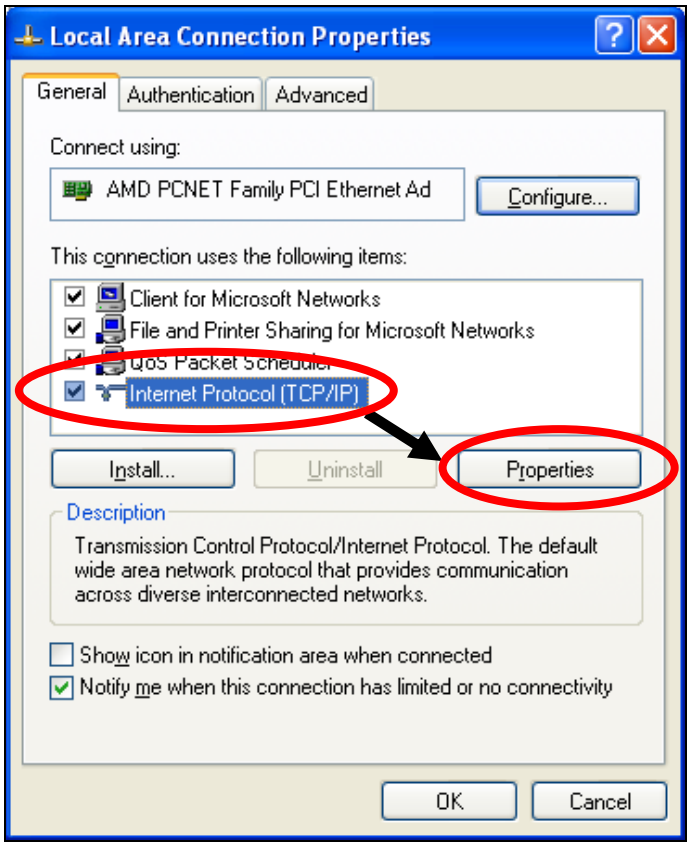
Please remember to change your IP address back to its original value after the device is properly configured.

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

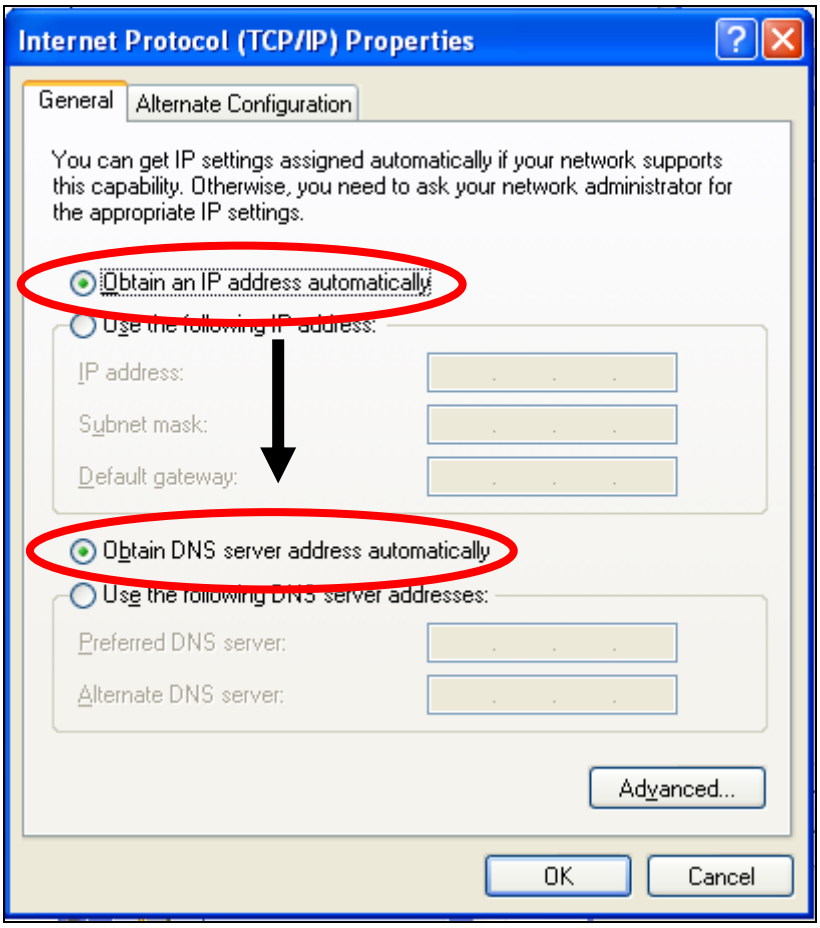
Please follow the instructions appropriate for your operating system.

V-1-1-1. Windows XP

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

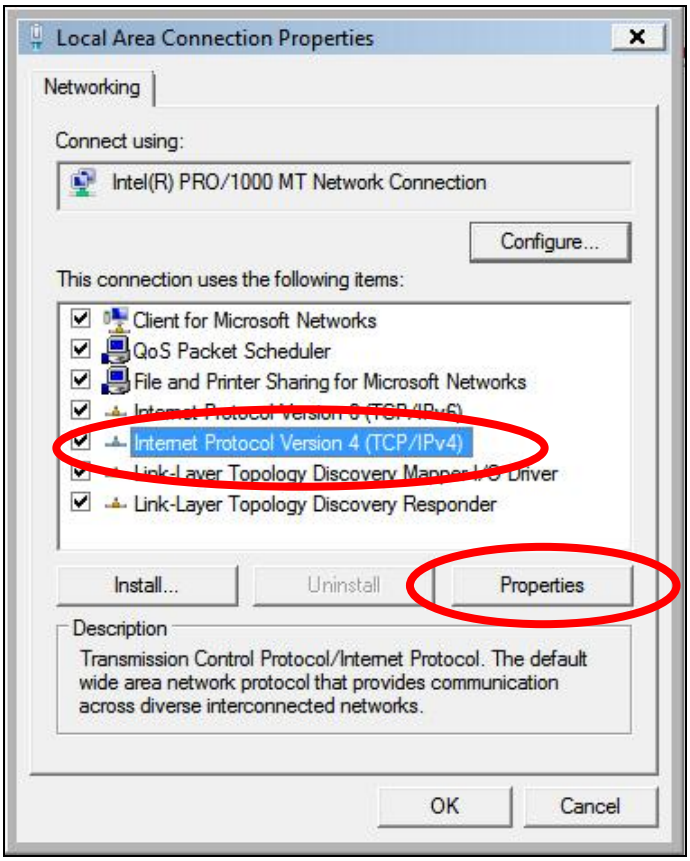


2. “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

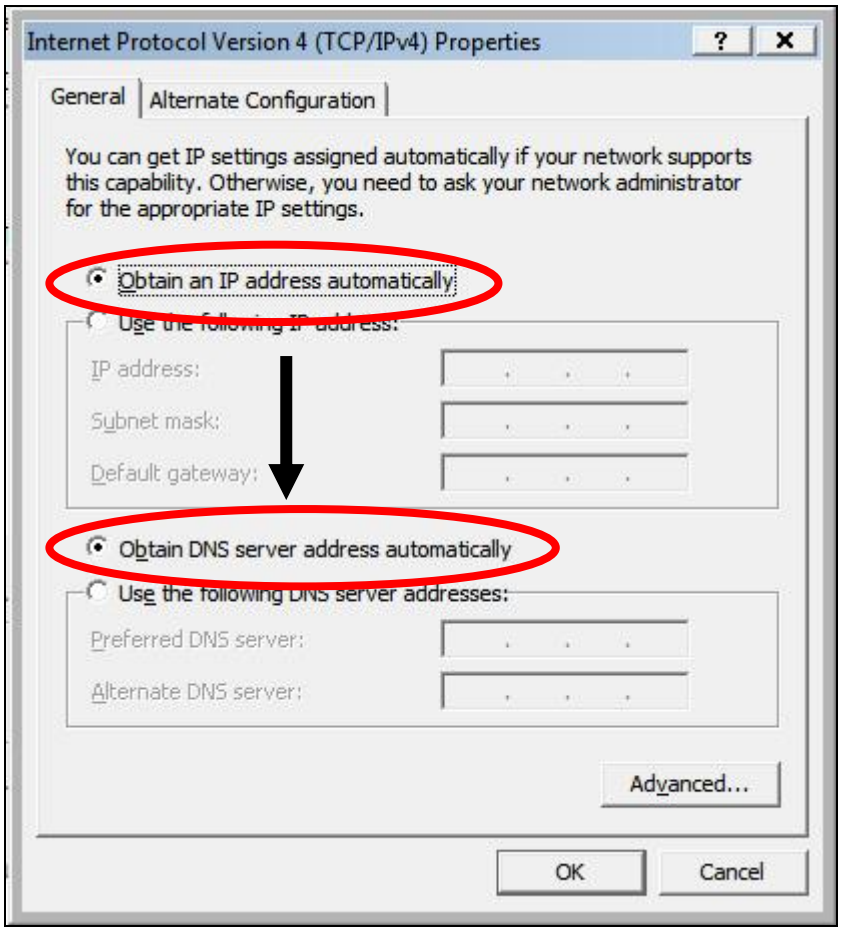

Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP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

V-1-1-2. Windows Vista

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

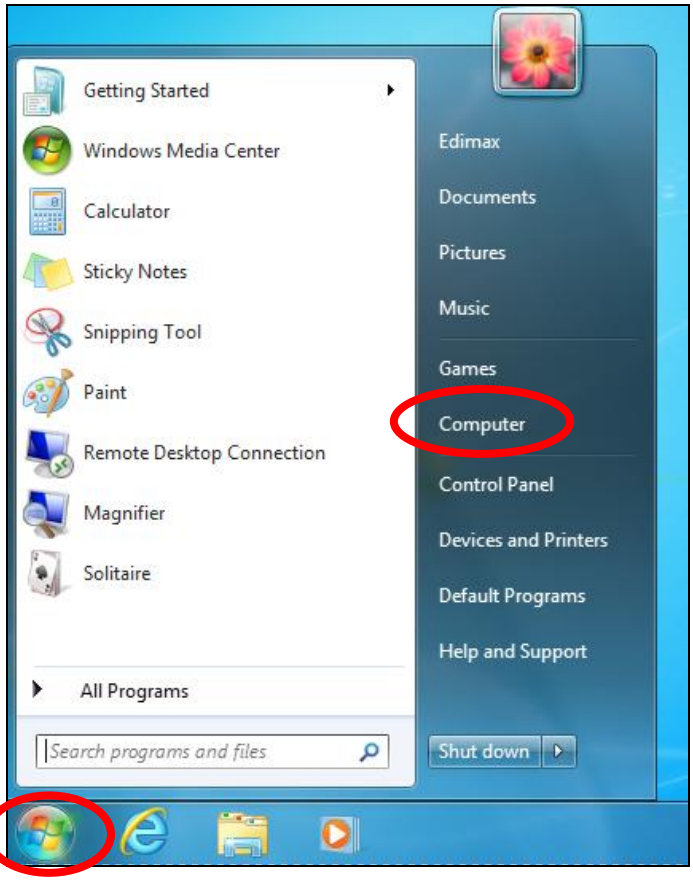


2. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

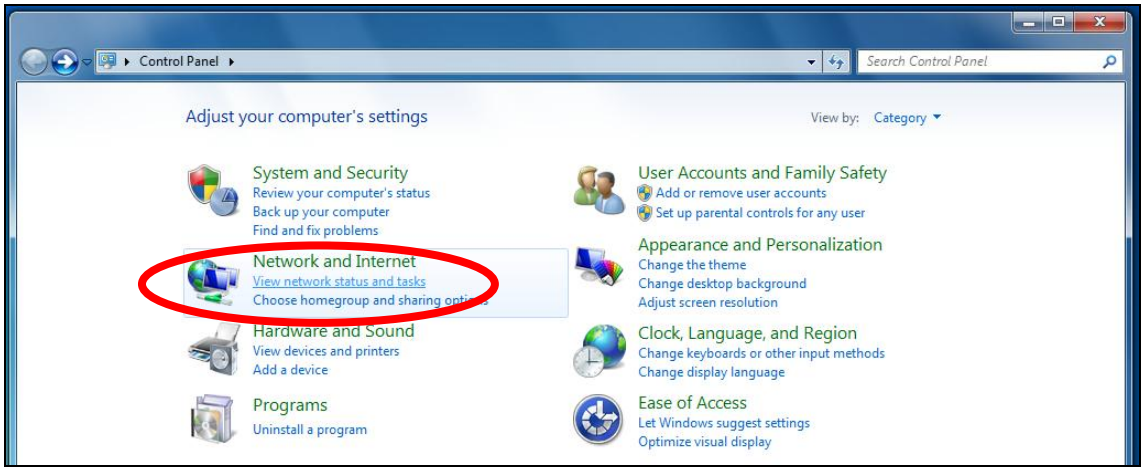

Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the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

V-1-1-3. Windows 7

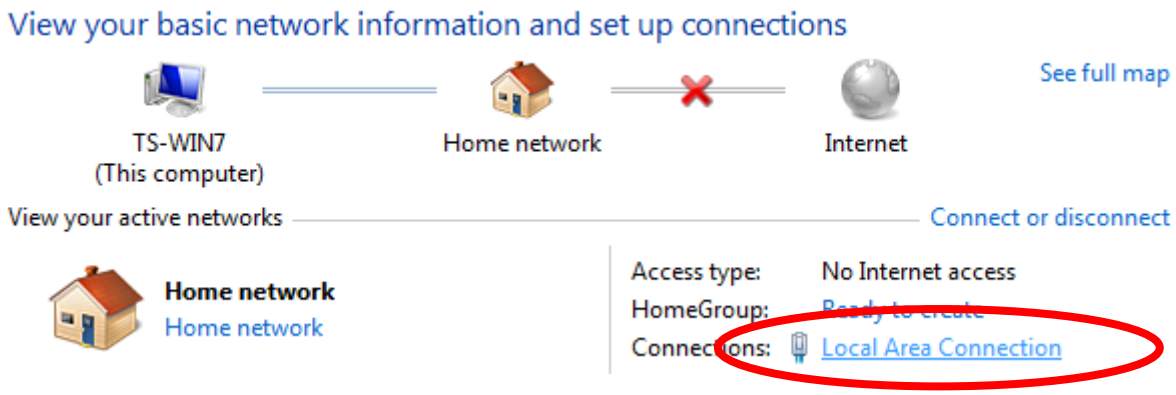
1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”.



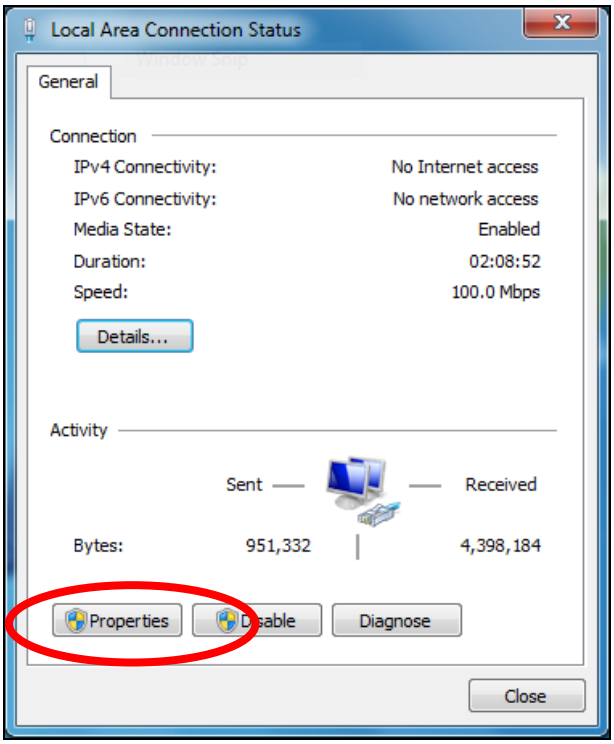
2. Under “Network and Internet” click “View network status and tasks”.



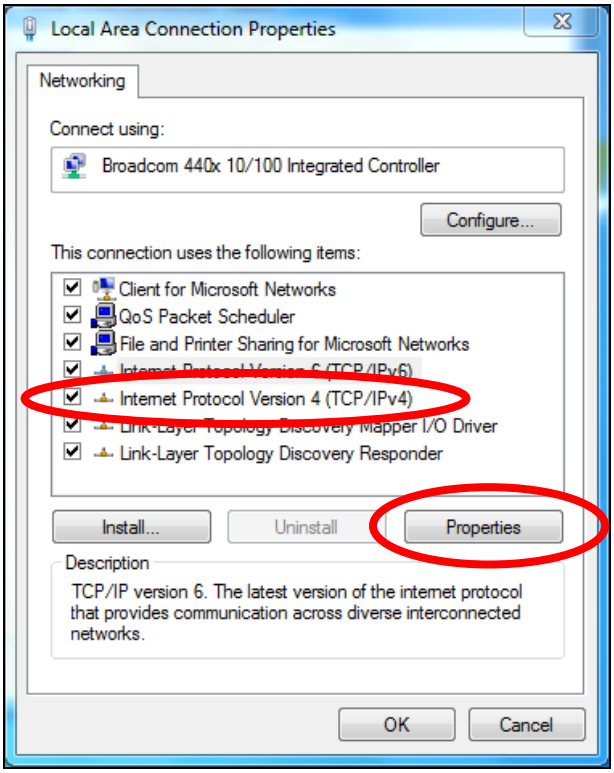
3. Click “Local Area Connection”.



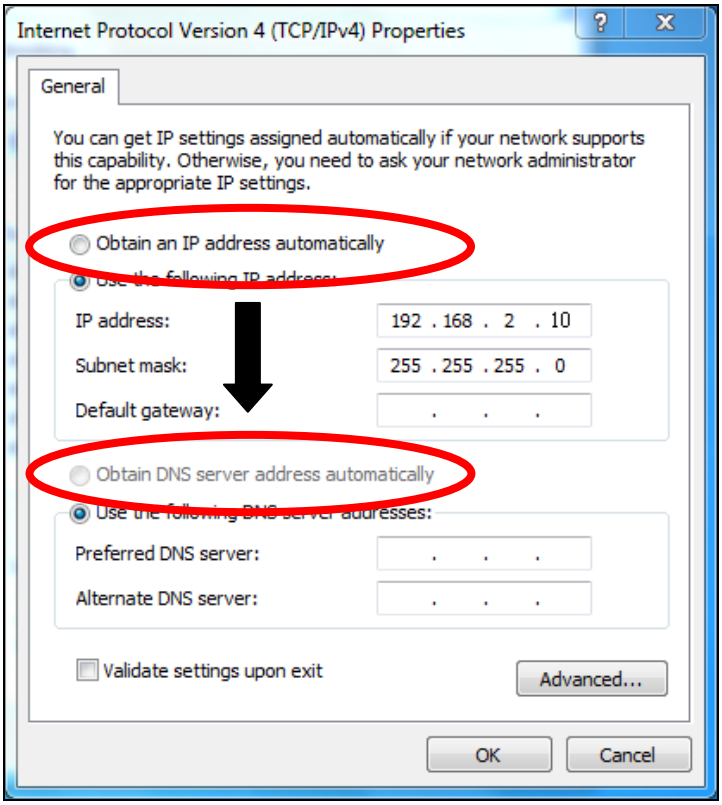
4. Click “Properties”.



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

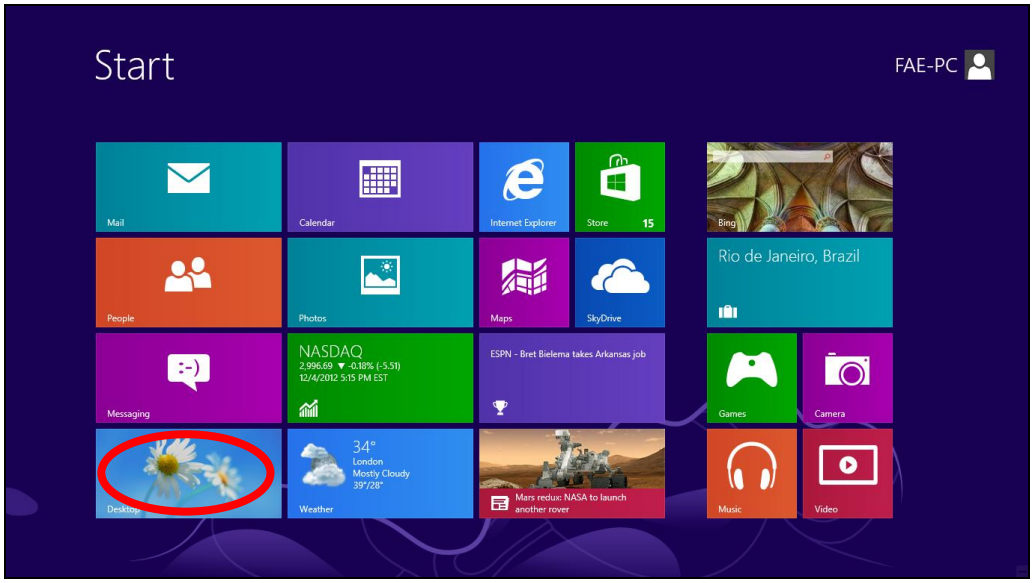


6. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

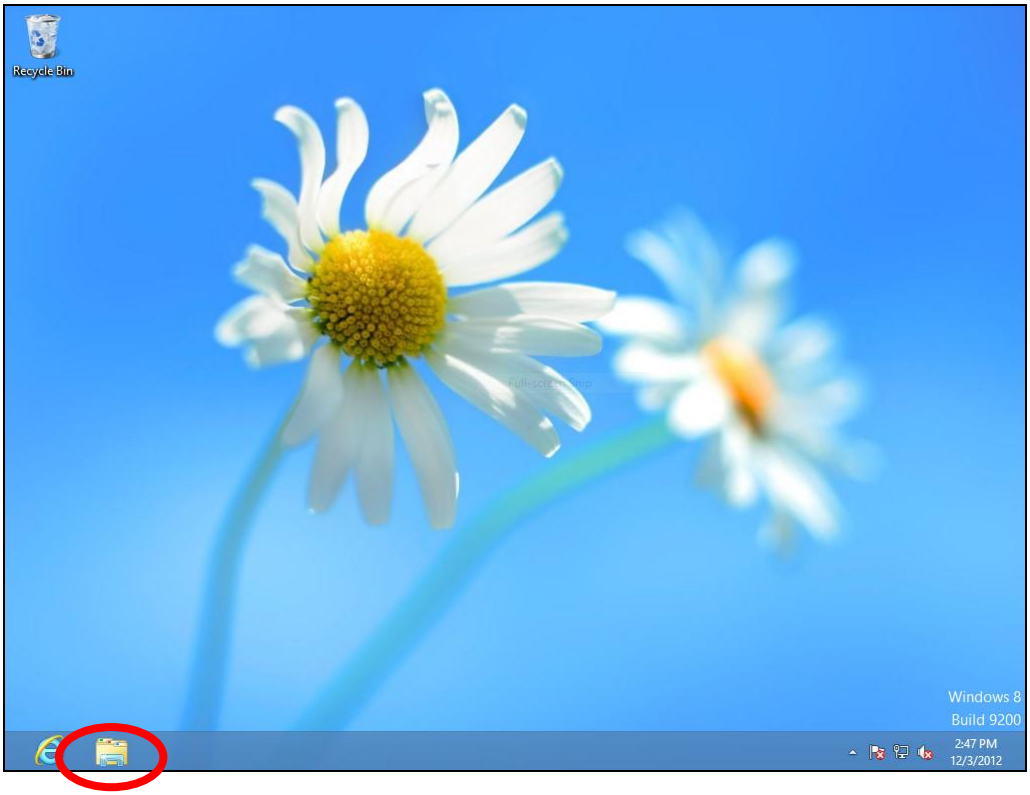


VII-1-1-4. Windows 8

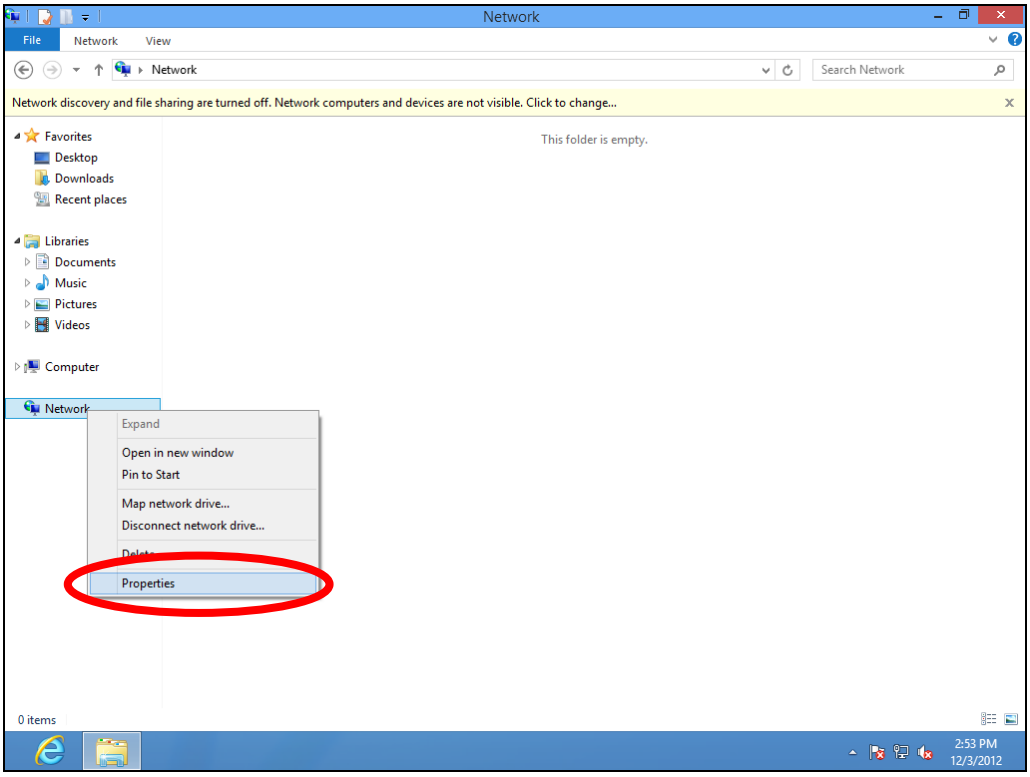
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



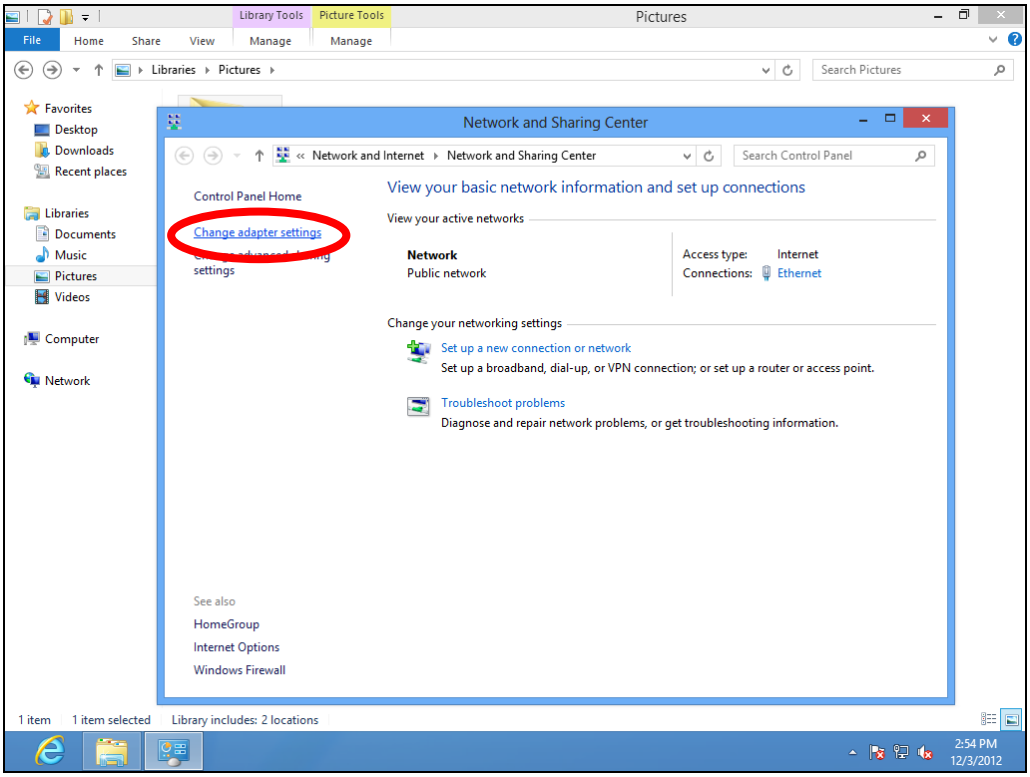
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



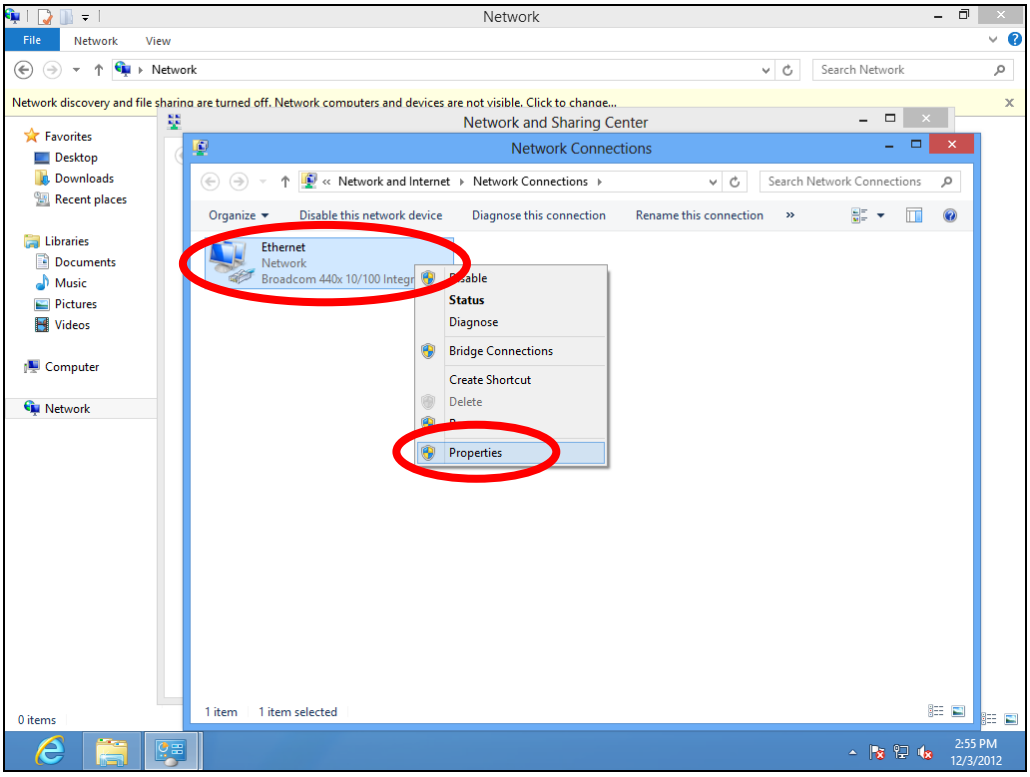
3. Right click “Network” and then select “Properties”.



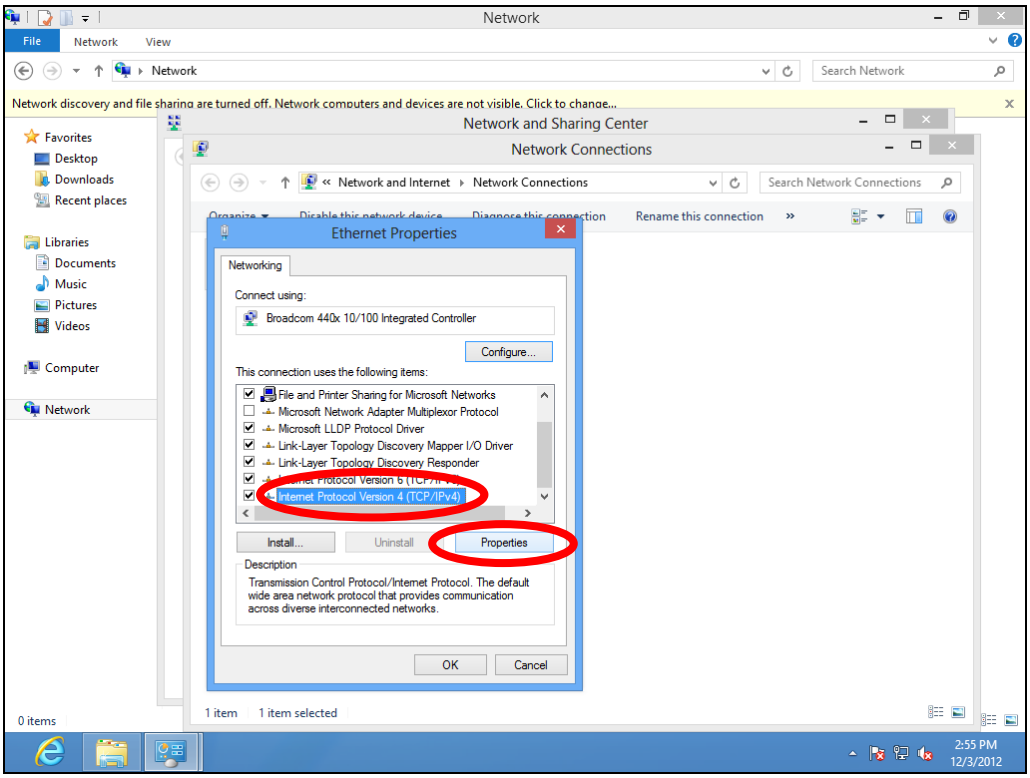
4. In the window that opens, select “Change adapter settings” from the left side.



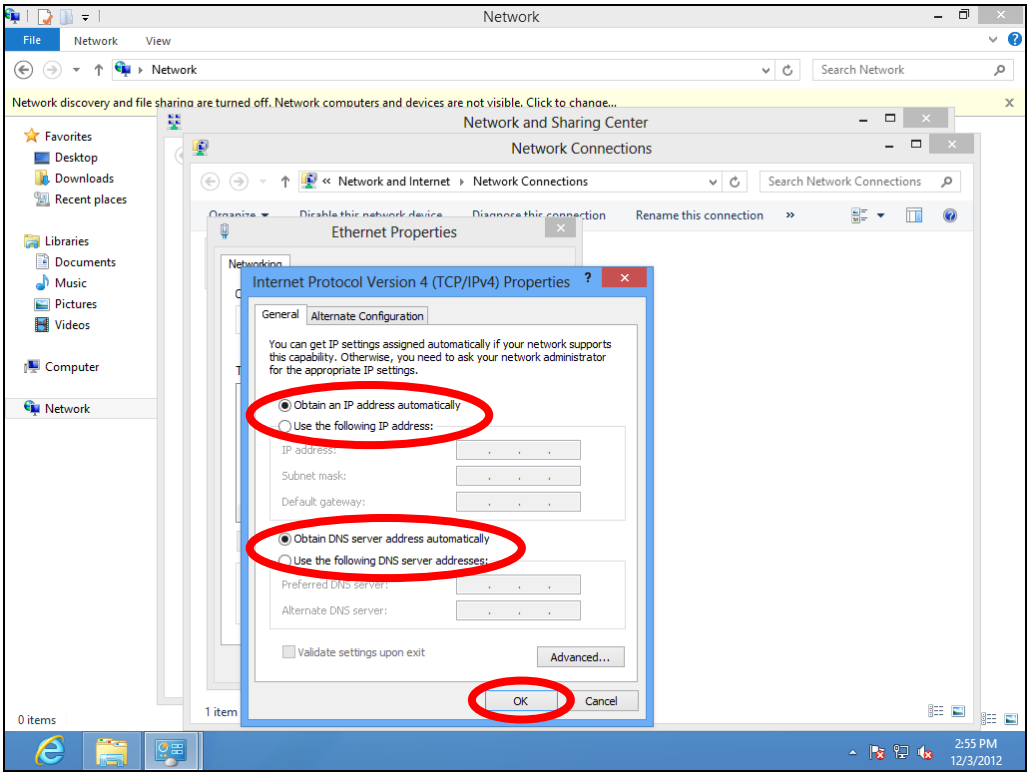
5. Choose your connection and right click, then select “Properties”.



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



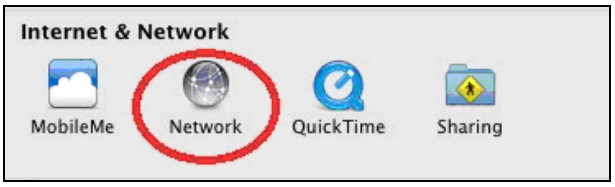
7. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.


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

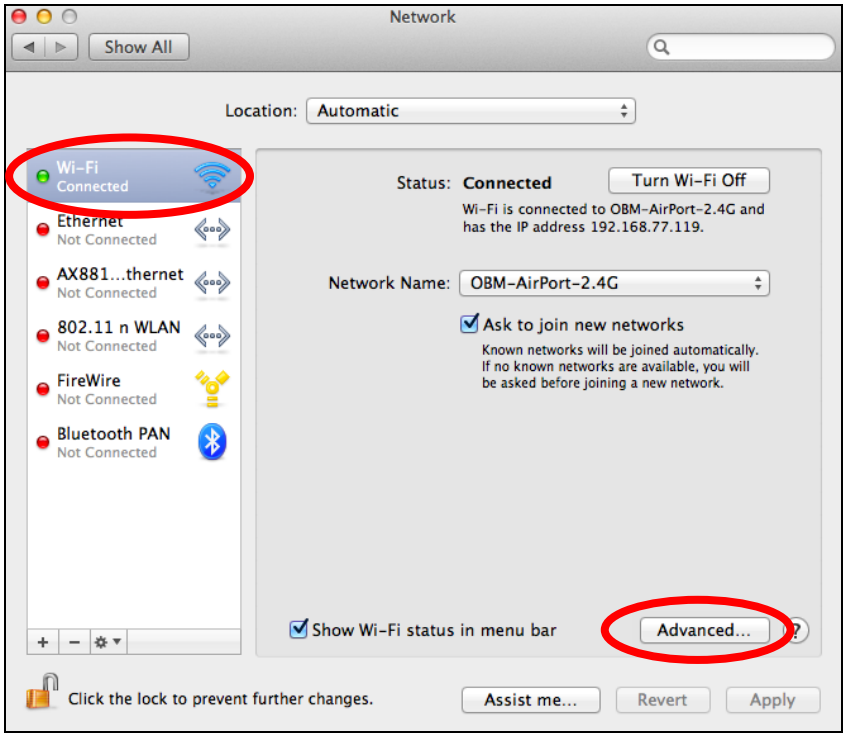
V-1-1-5. Mac OS

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

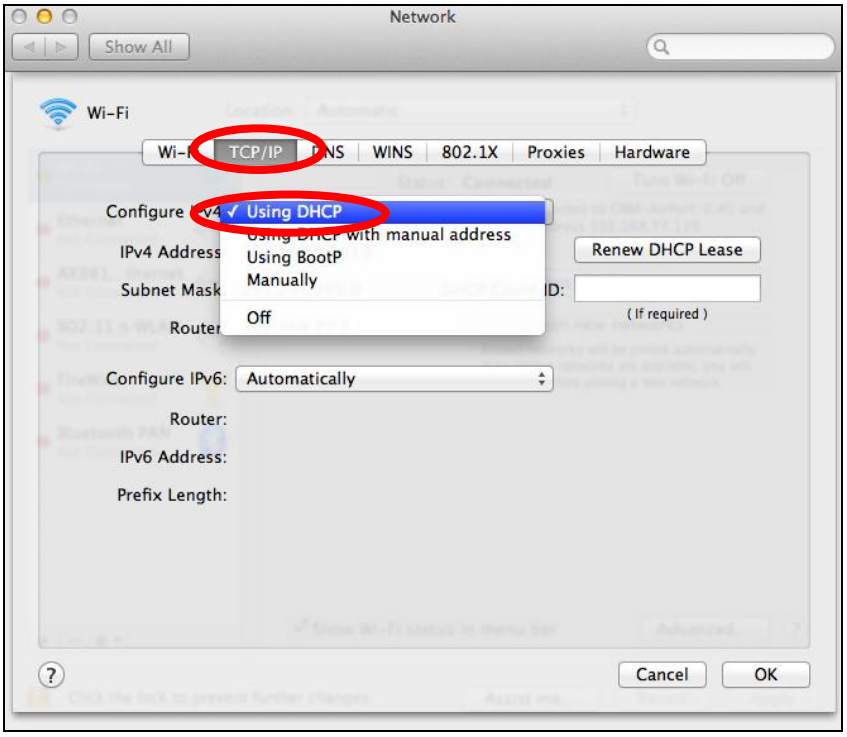
2. In System Preferences, click on “Network”.



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



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


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

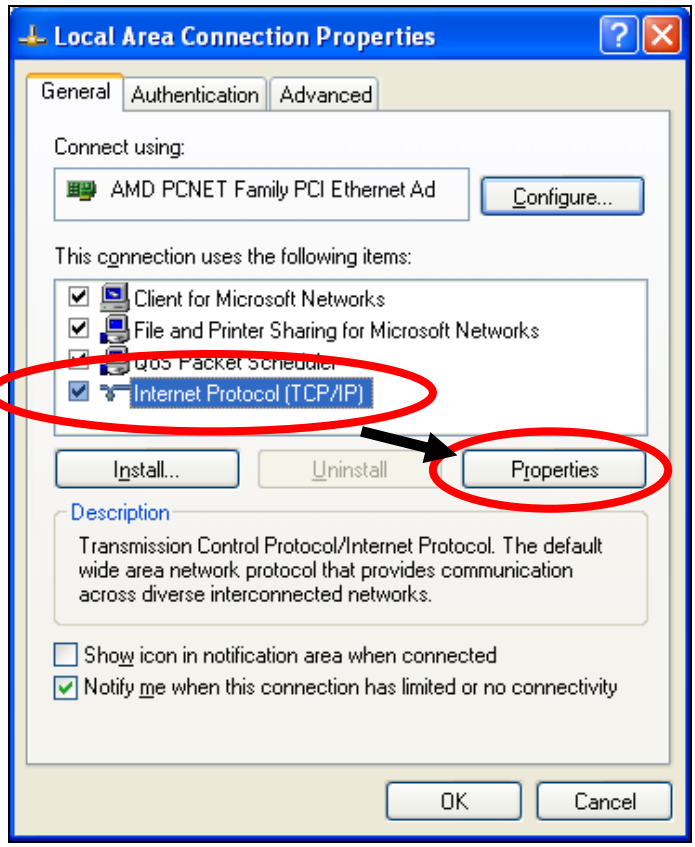
V-1-2. How to modify the IP address of your computer

Please follow the instructions appropriate for your operating system. In the following examples we use the IP address **192.168.9.20** though you can use any IP address in the range **192.168.9.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.

VII-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".



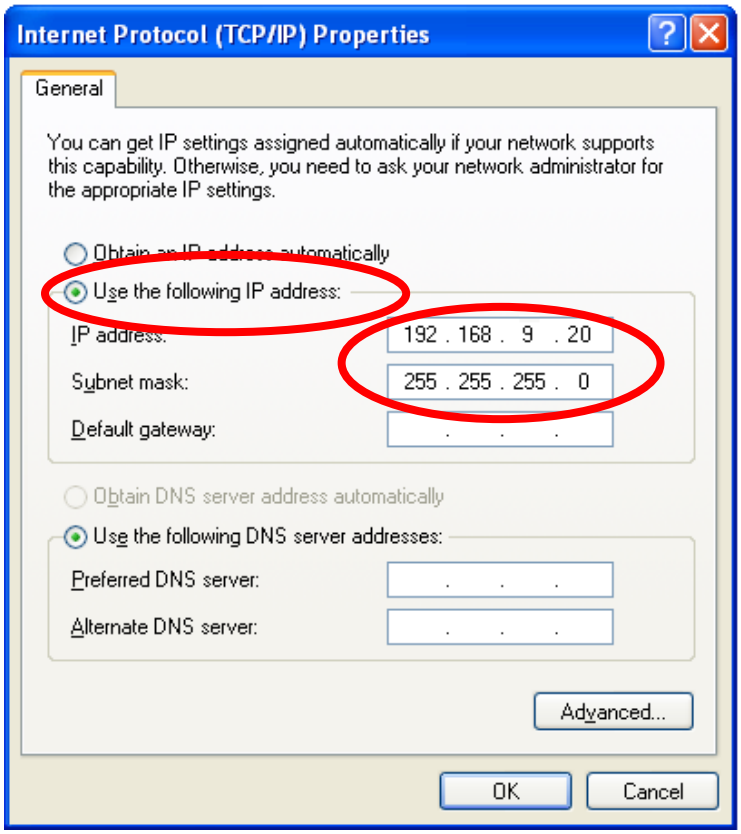
2. Select "Use the following IP address", then input the following values:

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.

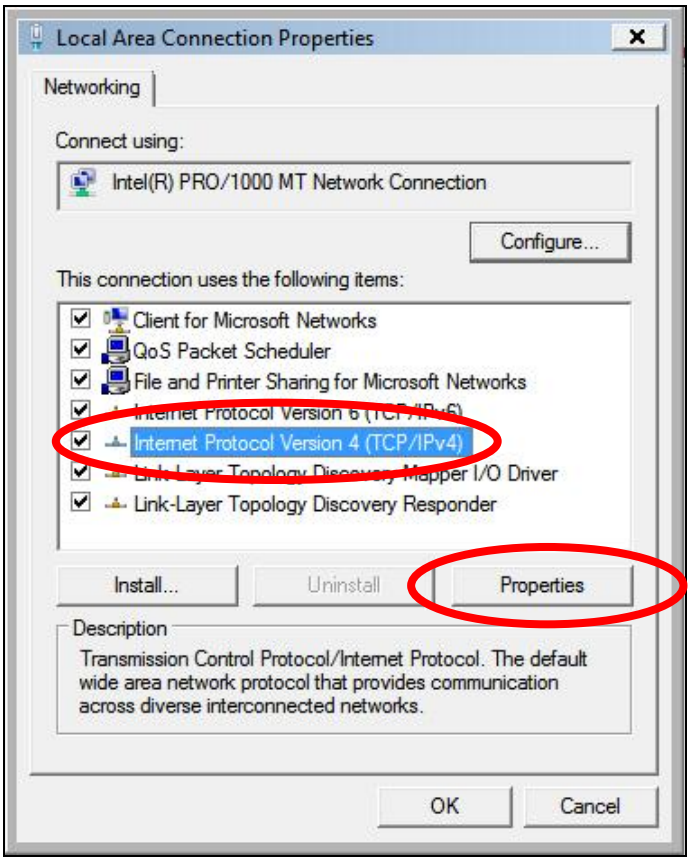
IP address: 192.168.9.20
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.



V-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”.

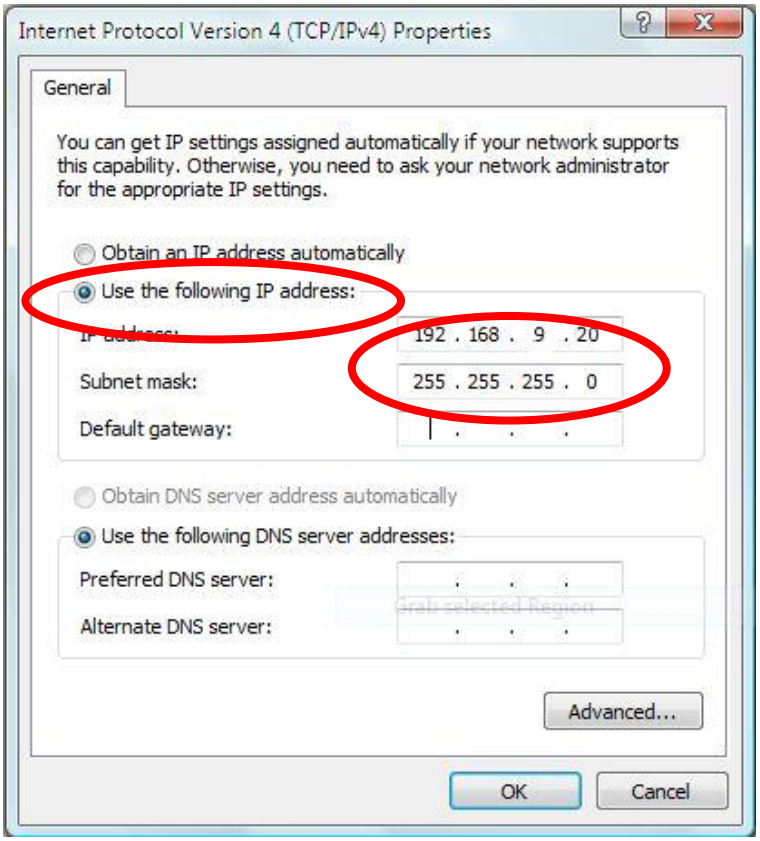


2. Select “Use the following IP address”, then input the following values:

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.

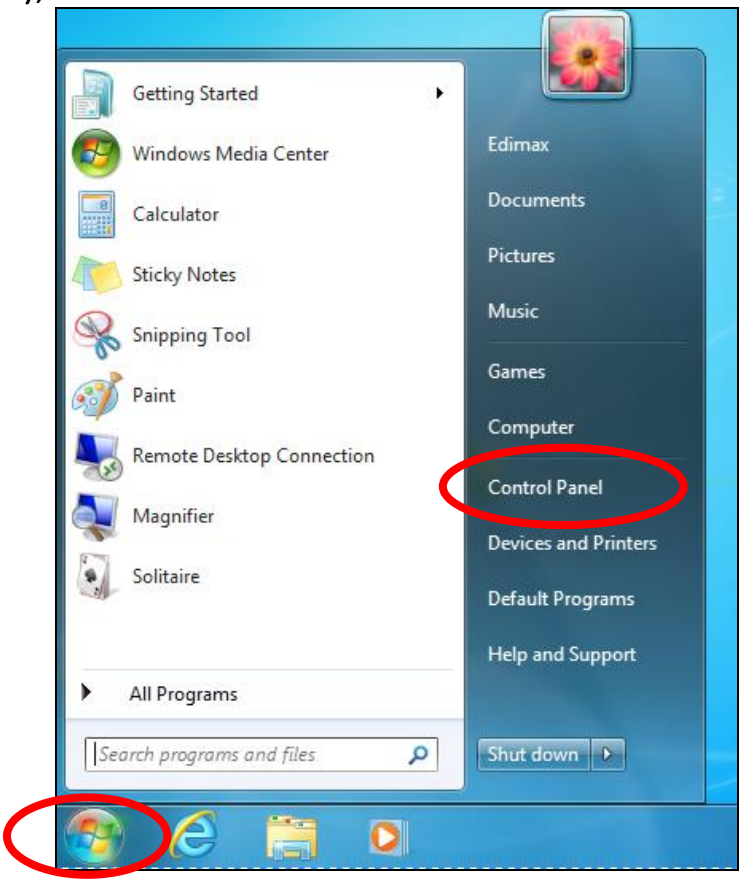
IP address: 192.168.9.20
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

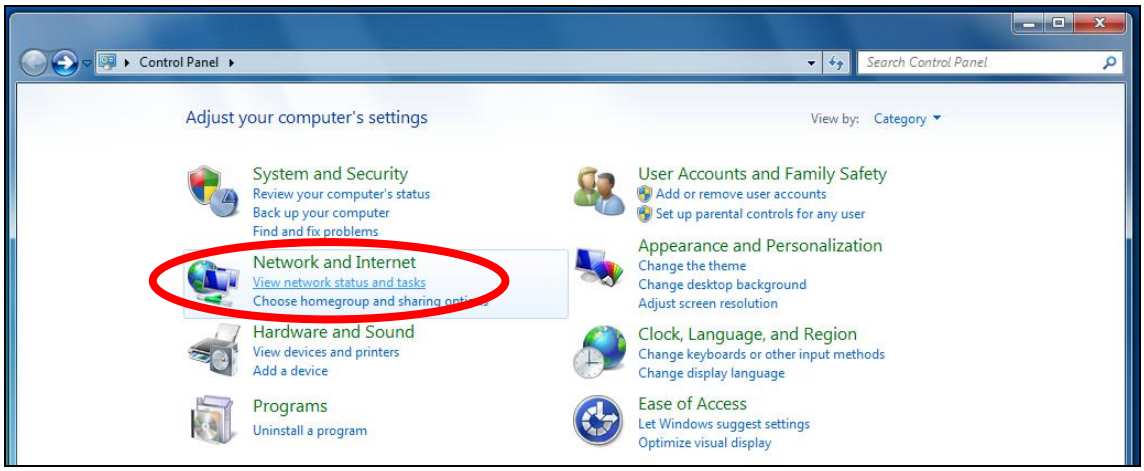


VII-1-2-3. Windows 7

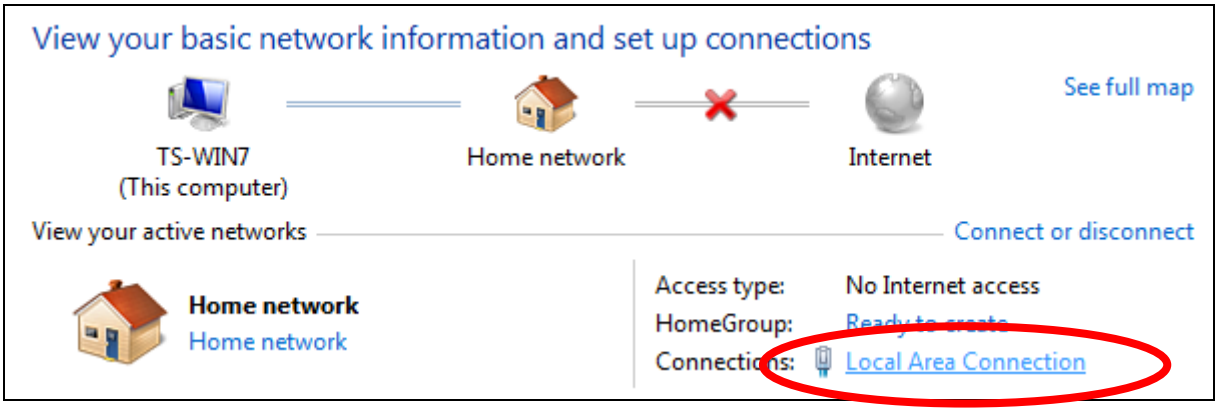
1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”.



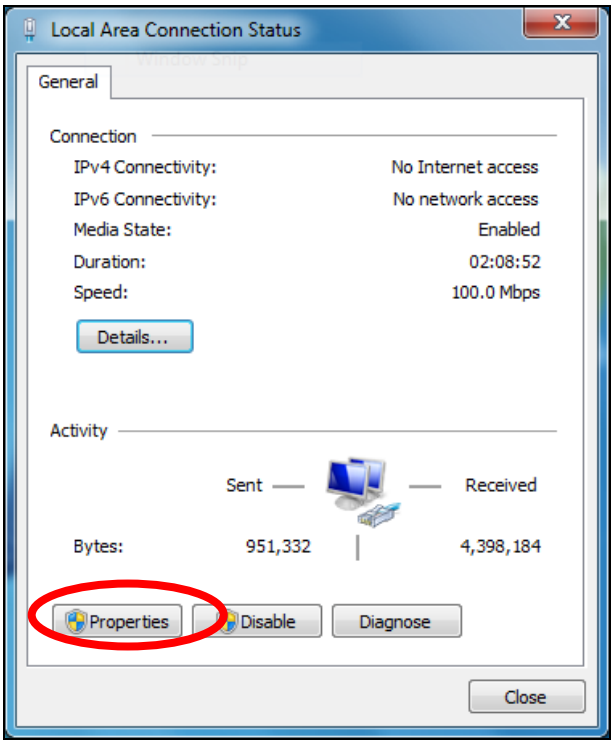
2. Under “Network and Internet” click “View network status and tasks”.



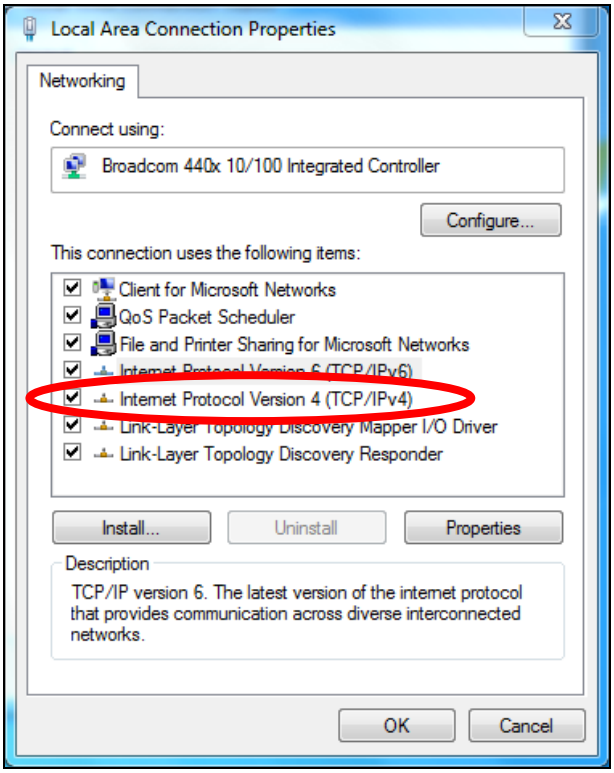
3. Click “Local Area Connection”.



4. Click “Properties”.



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

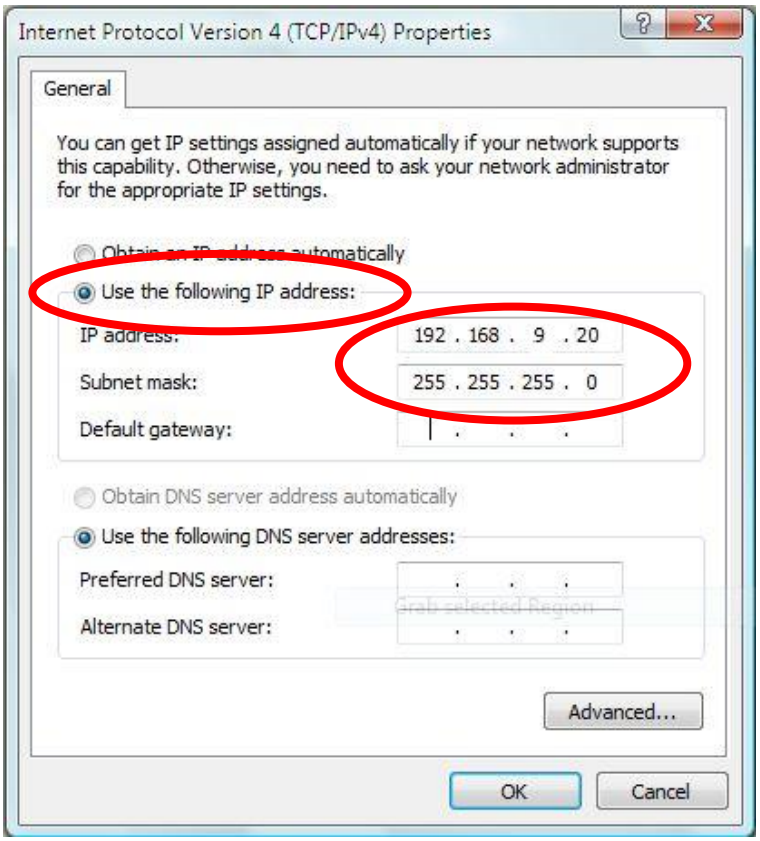


6. Select “Use the following IP address”, then input the following values:

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.

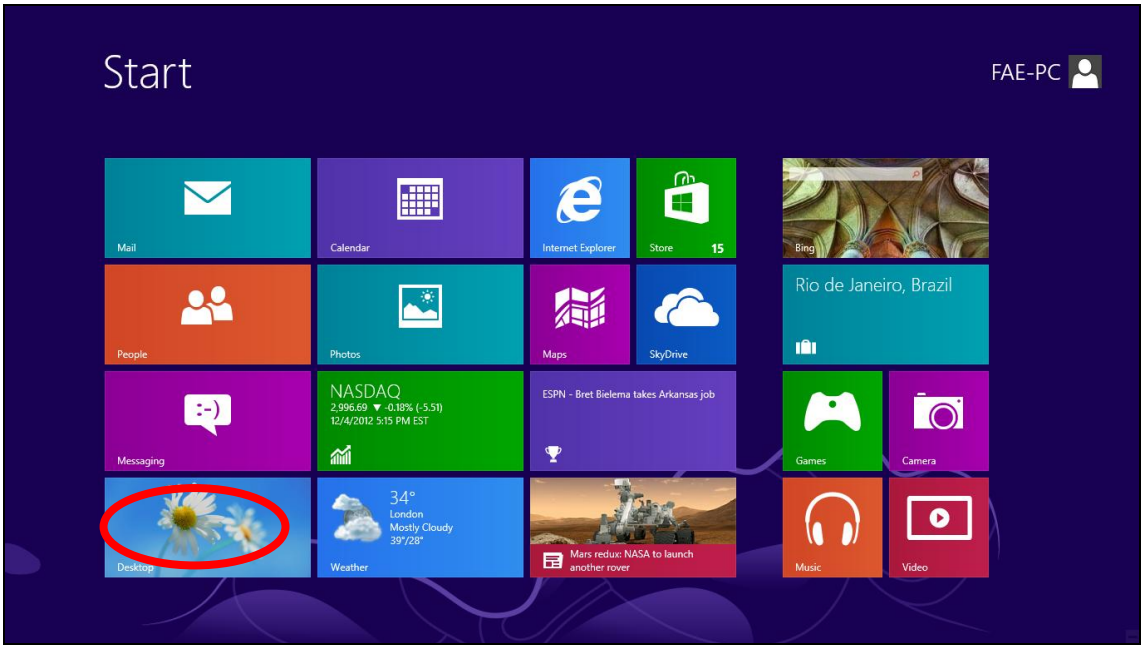
IP address: 192.168.9.20
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

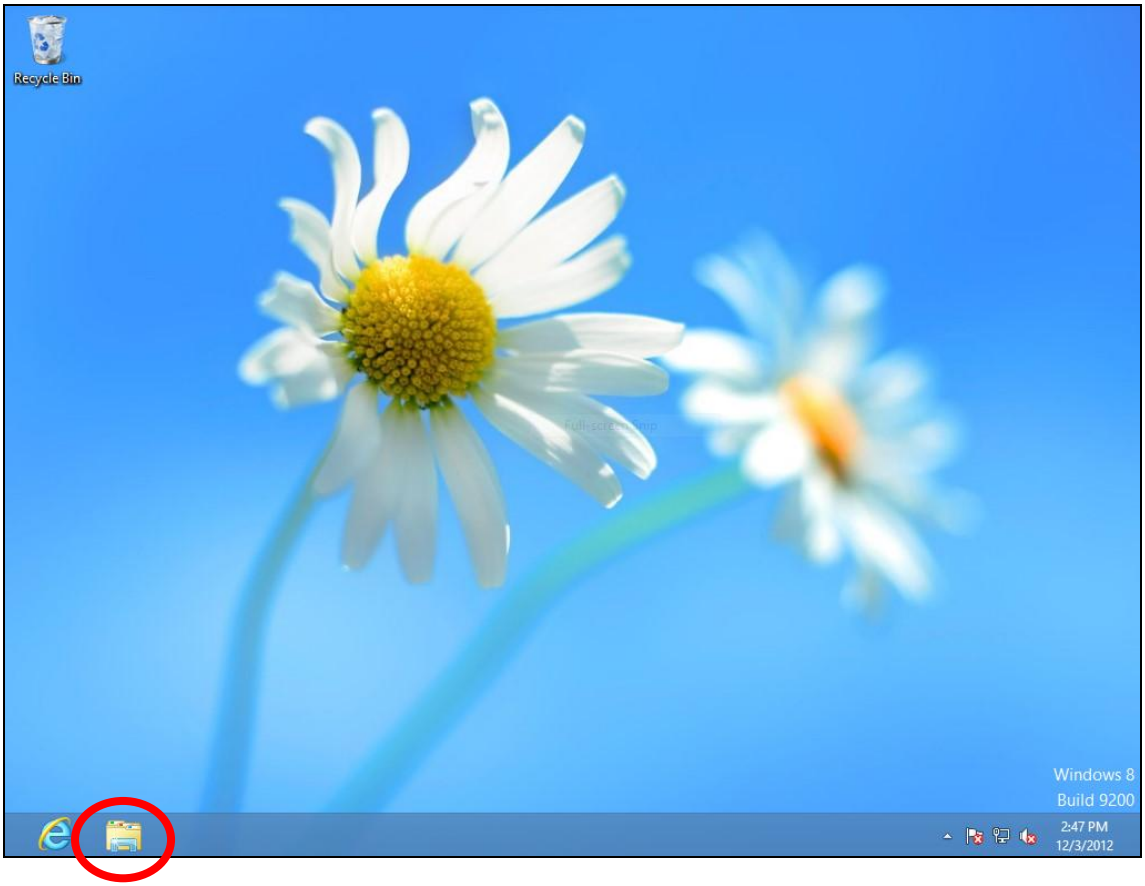


V-1-2-4. Windows 8

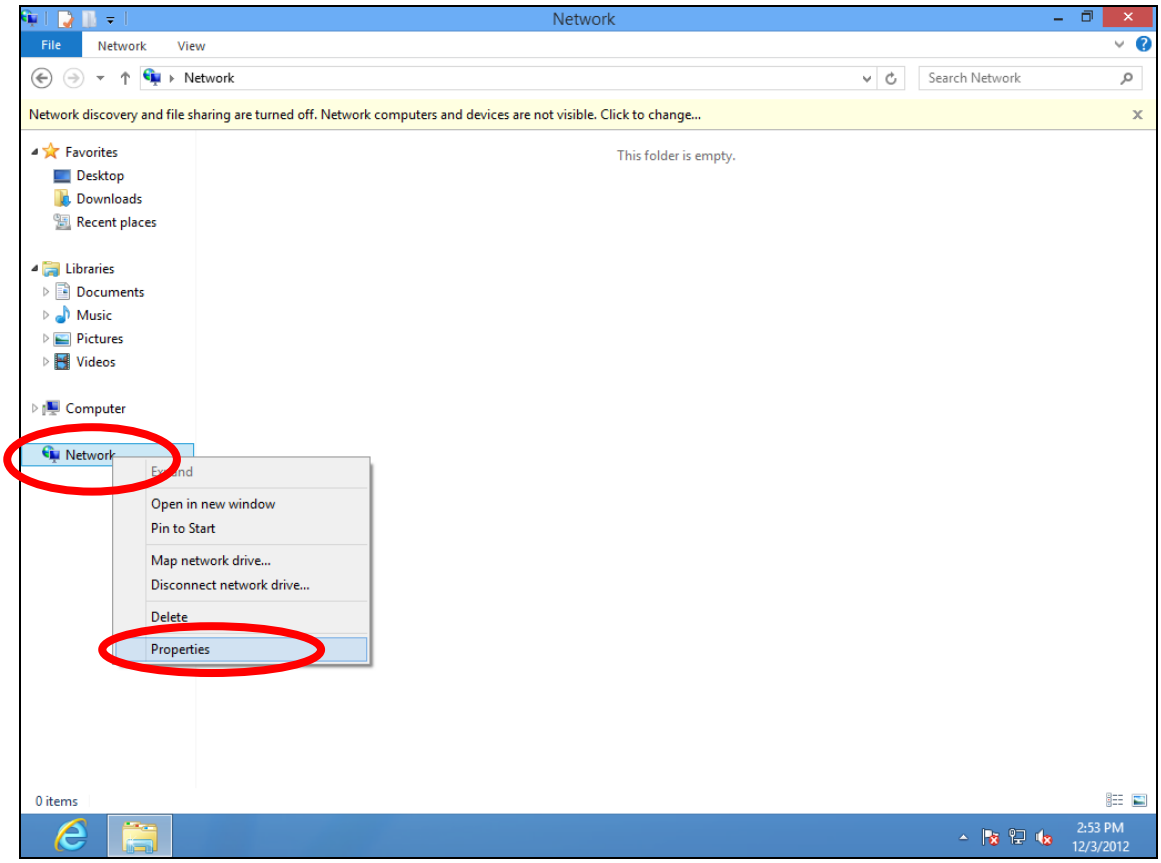
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your curser to the bottom left of the screen and click.



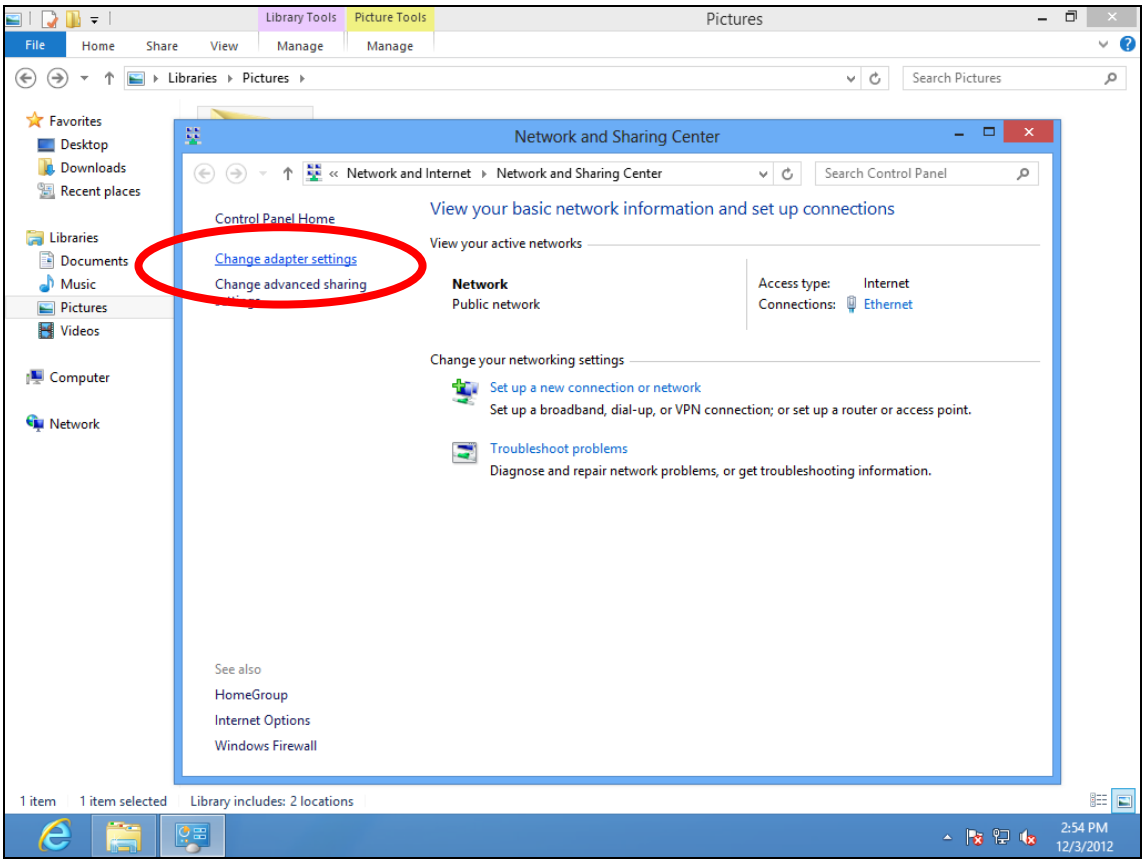
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



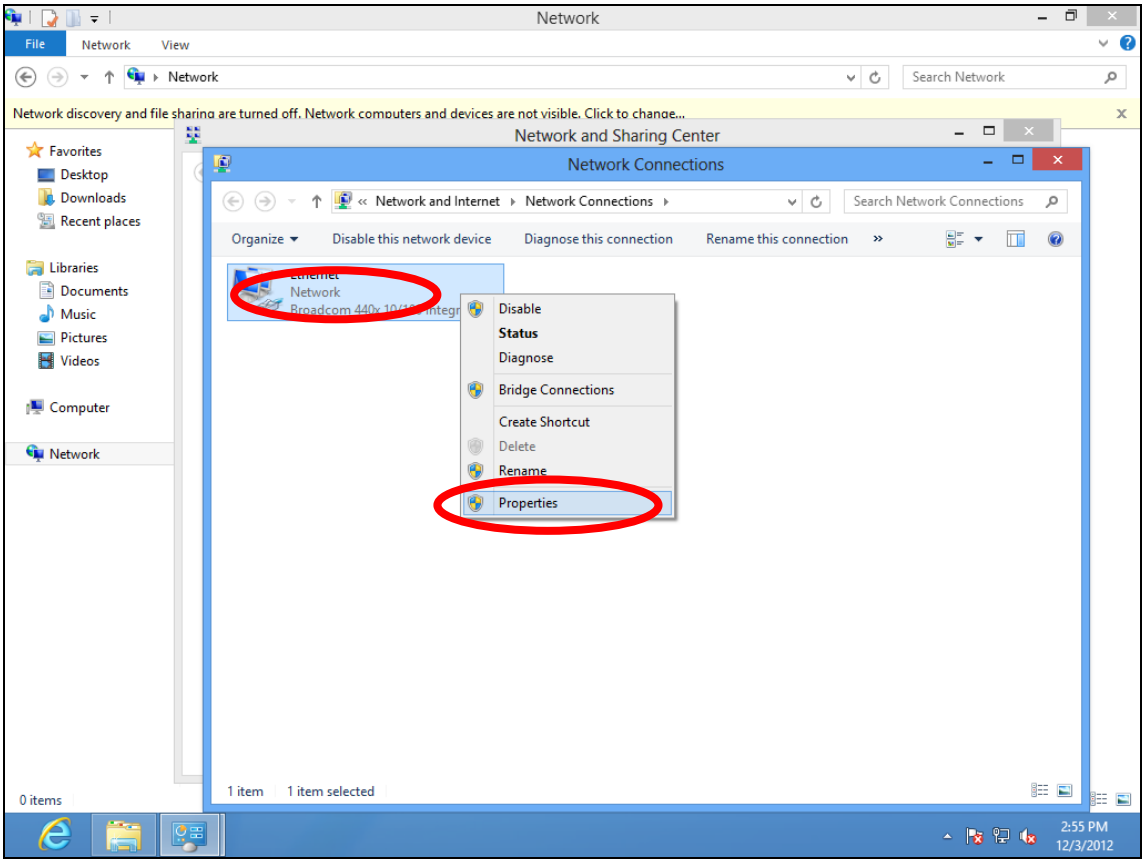
3. Right click “Network” and then select “Properties”.



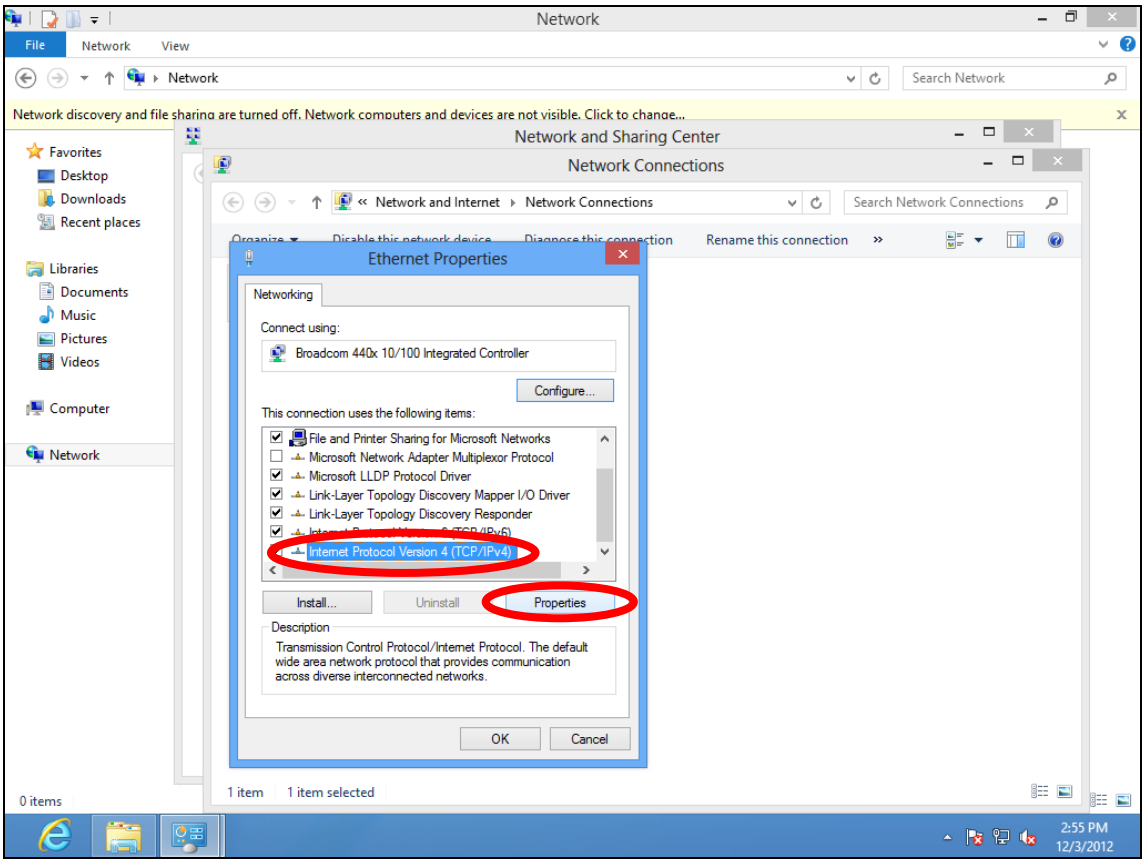
4. In the window that opens, select “Change adapter settings” from the left side.



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”, 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.

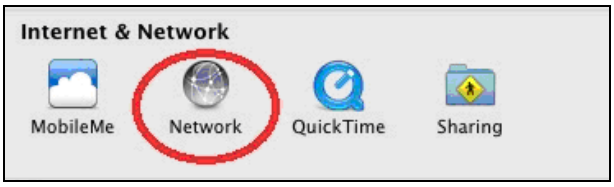
IP address: 192.168.9.20
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

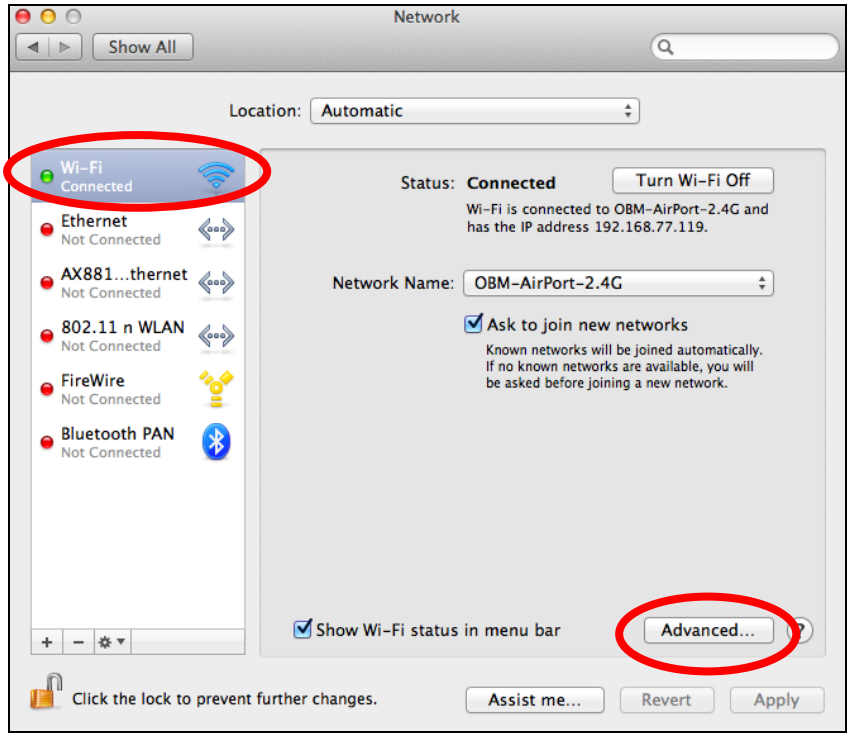
V-1-2-5. Mac

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

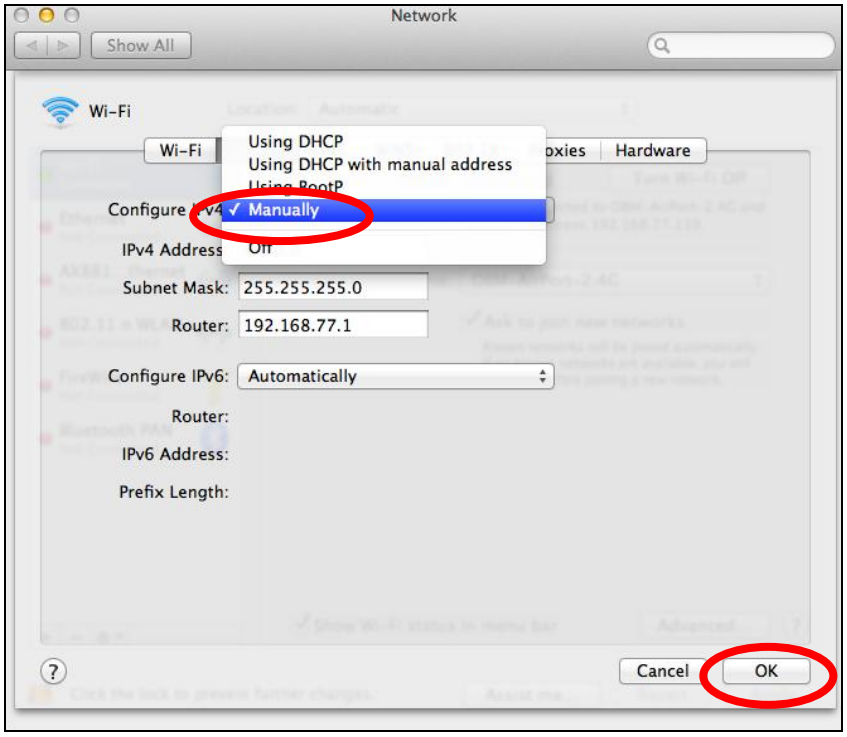
2. In System Preferences, click on “Network”.



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

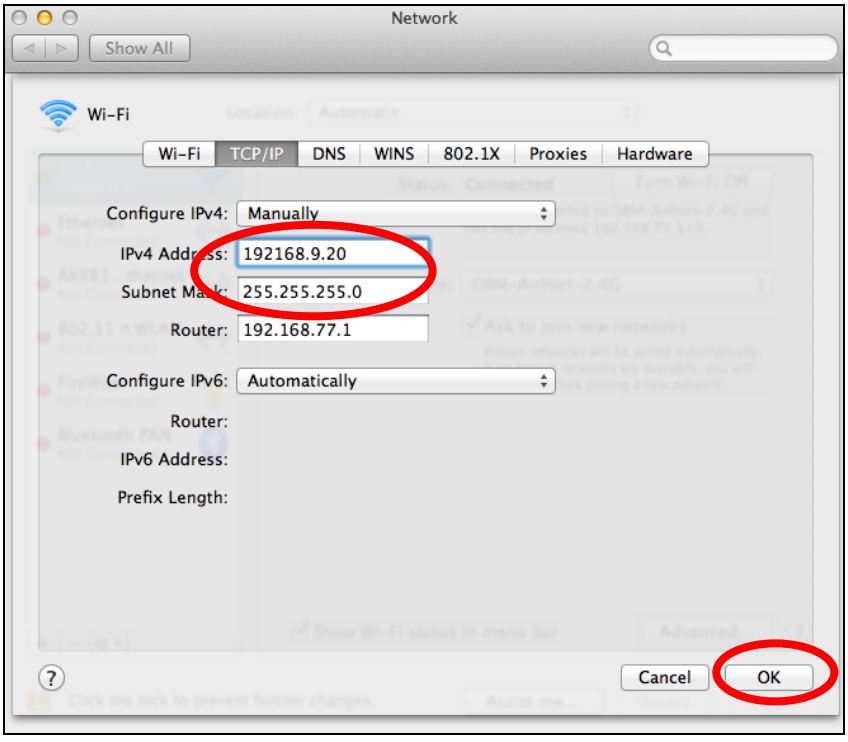


4. Select “TCP/IP” from the top menu and select “Manually” from the drop down menu labeled “Configure IPv4”, then click “OK”.

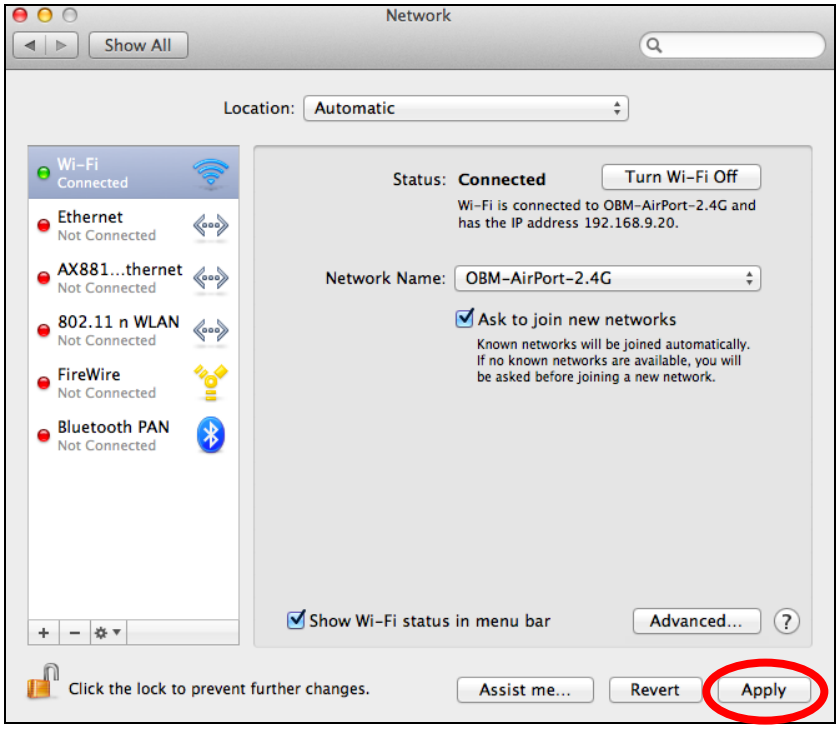


Your existing static IP address will be displayed in the "IP address" field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

5. In the "IPv4 Address" and "Subnet Mask" field enter IP address 192.168.9.20 and subnet mask 255.255.255.0. Click on "OK".



6. Click “Apply” to save the changes.



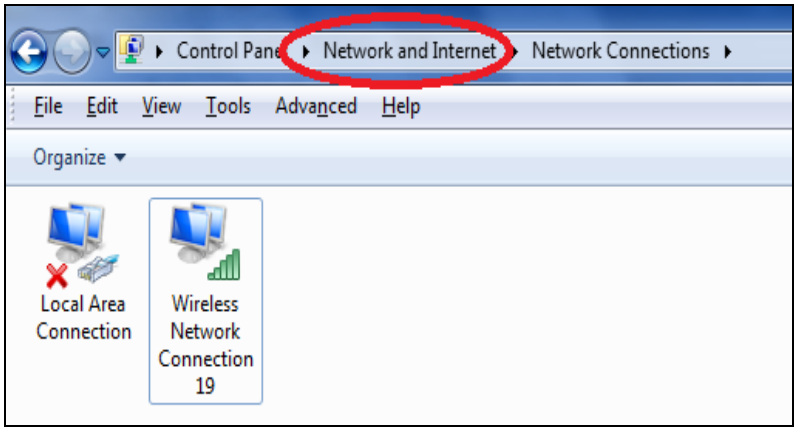
V-1-3. How to Find Your Network Security Key

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

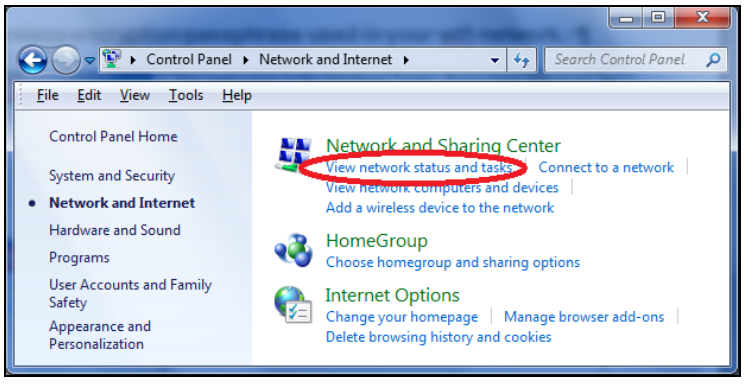
If you are using Windows XP or earlier, please contact your ISP or router manufacturer to find your network security key.

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

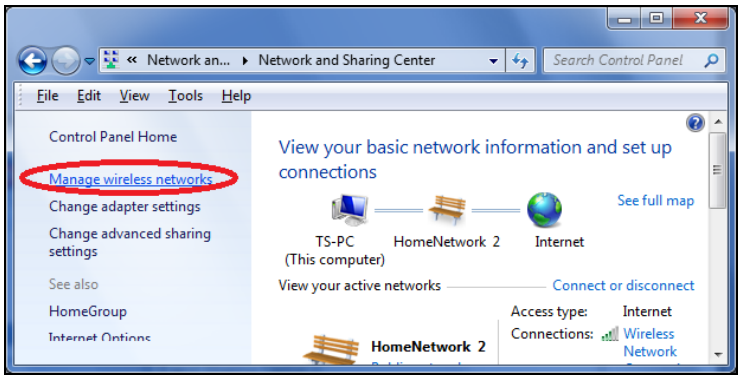
1. Open “Control Panel” and click on “Network and Internet” in the top menu.



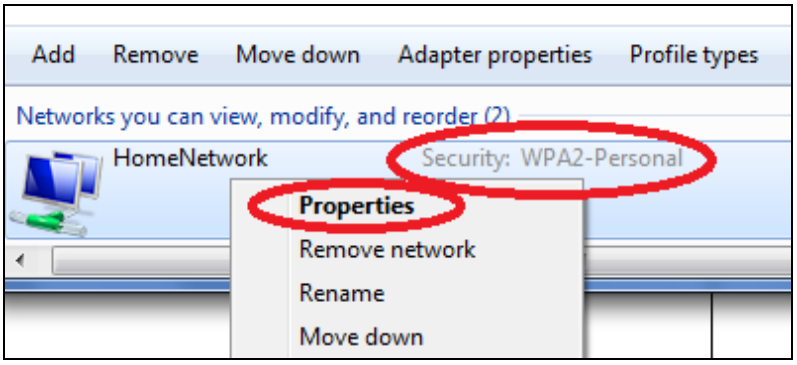
2. Click on “View network status and tasks” which is under the heading “Network and Sharing Center”.



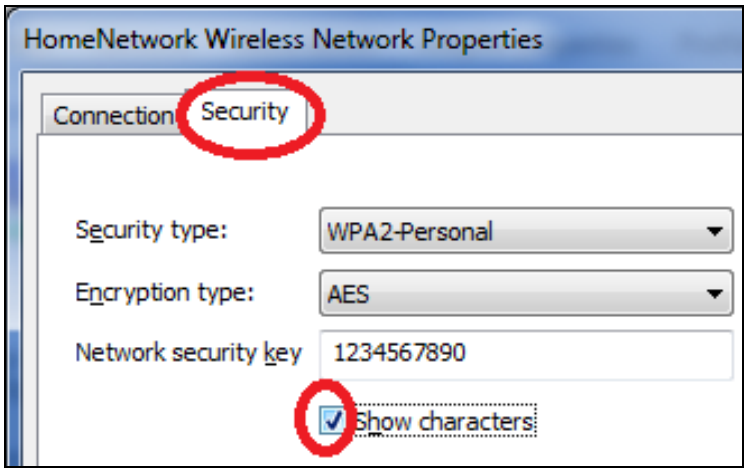
3. Click on “Manage wireless networks” in the left menu.



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”.

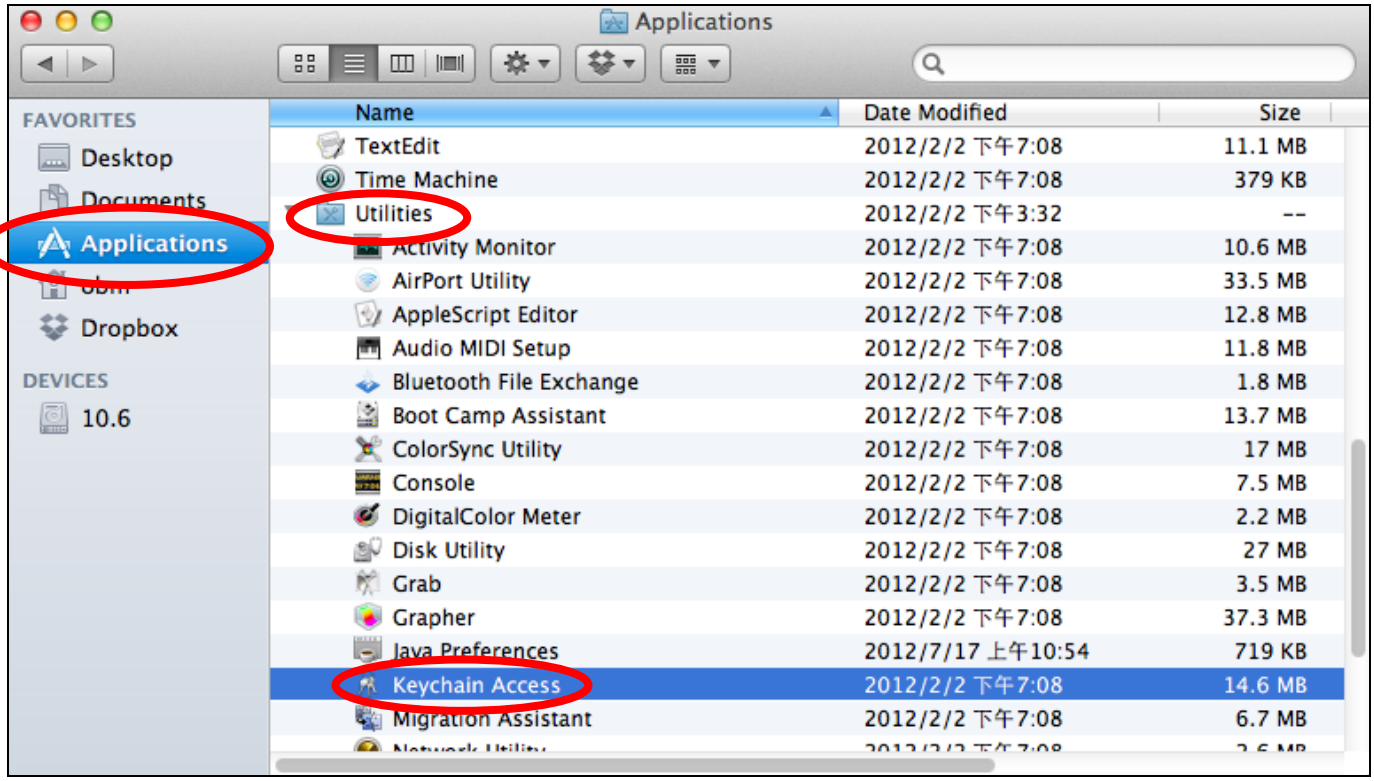


5. Click on the “Security” tab, and then check the box labeled “Show characters”. This will show your network security key. Click the “Cancel” button to close the window.

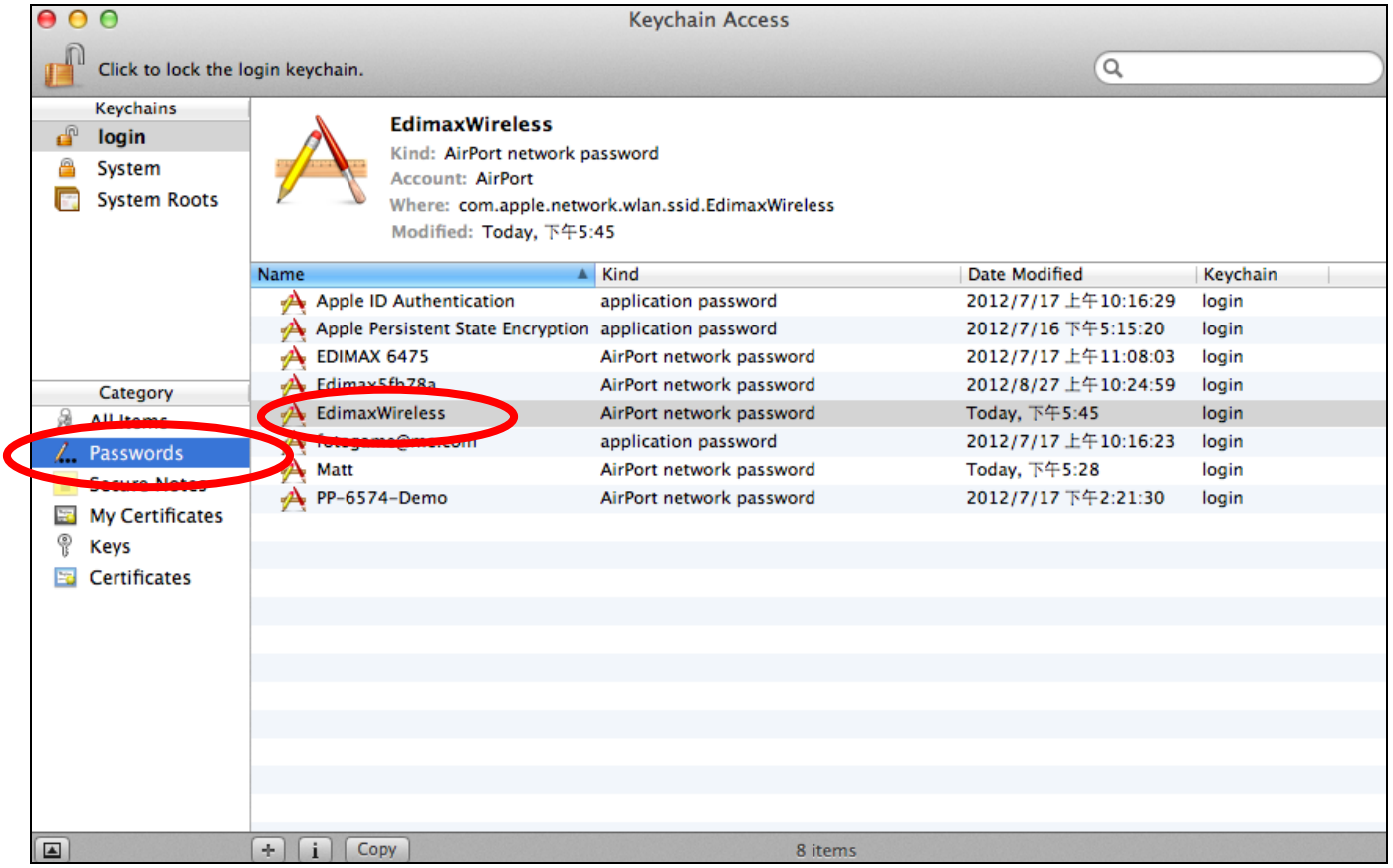


V-1-3-2. Mac

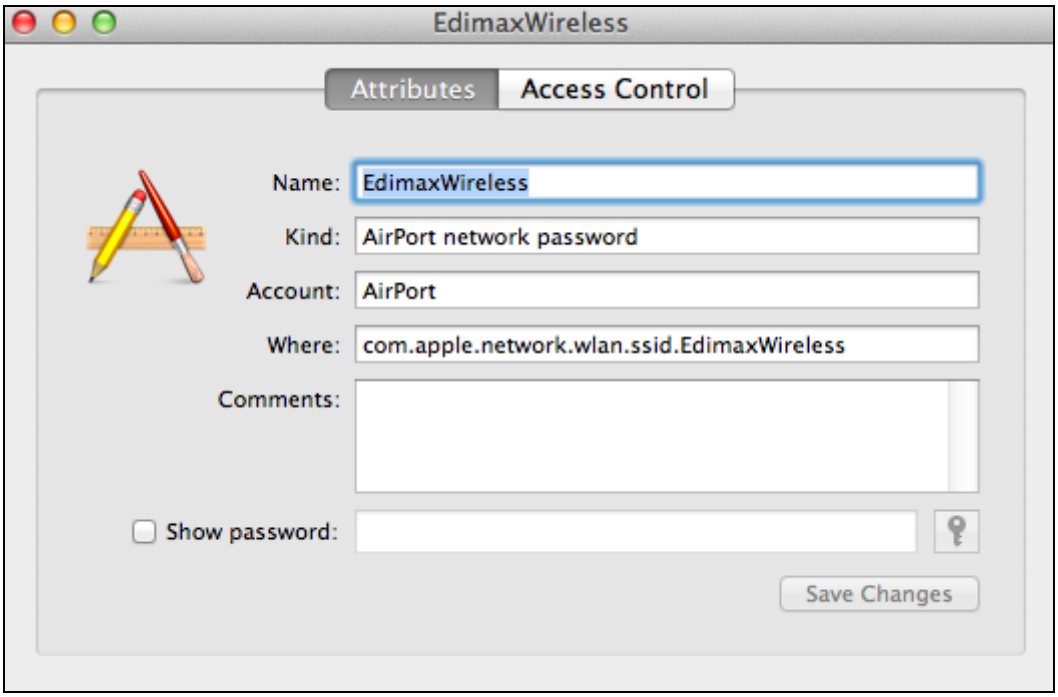
1. Open a new Finder window, and select “Applications” from the menu on the left side. Open the folder labeled “Utilities” and then open the application “Keychain Access”.



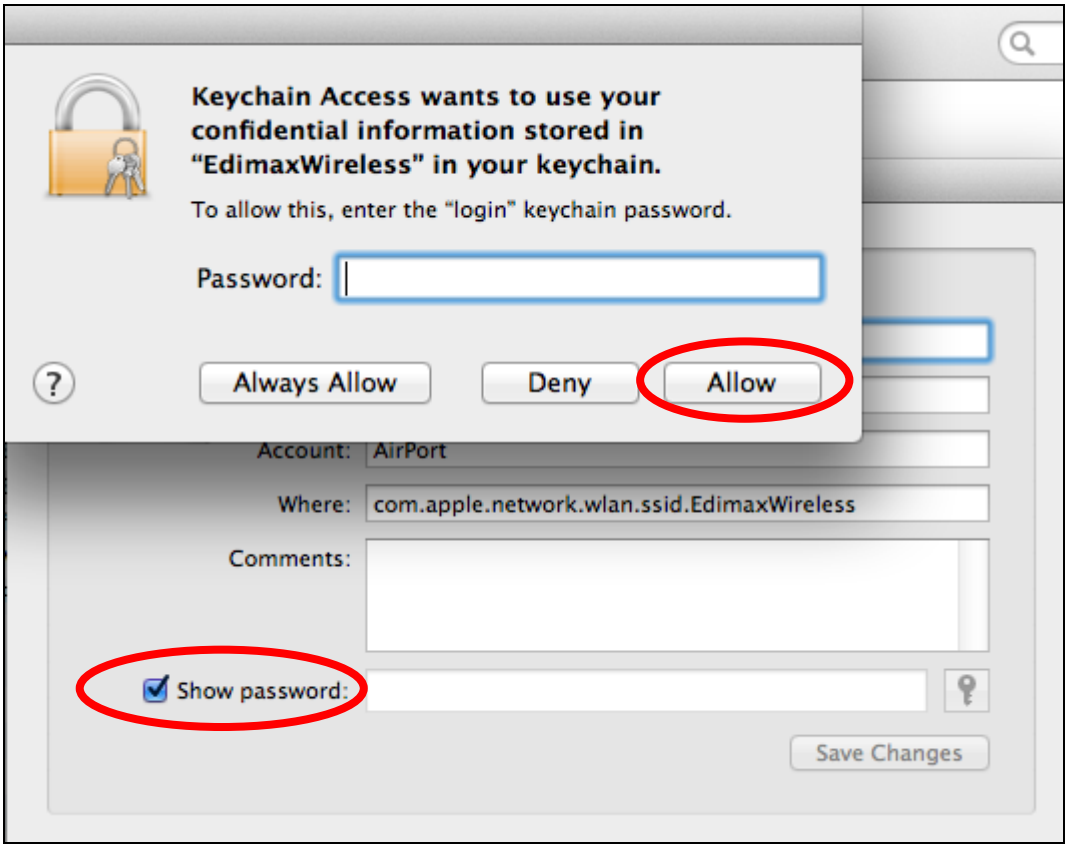
2. Select “Passwords” from the sub-menu labeled “Category” on the left side, as shown below. Then search the list in the main panel for the SSID of your network. In this example, the SSID is “EdimaxWireless” – though your SSID will be unique to your network.



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”.



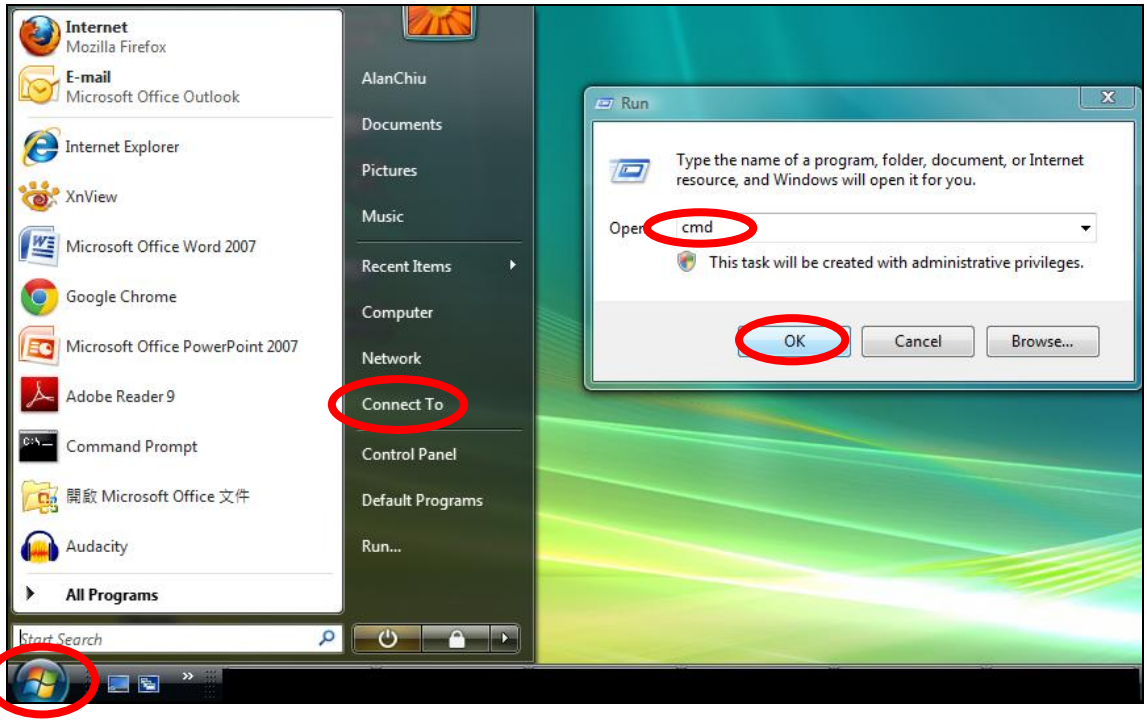
Your network security password will now be displayed in the field next to the box labeled “Show password”. In the example below, the network security password is “edimax1234”. Please make a note of your network security password.

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

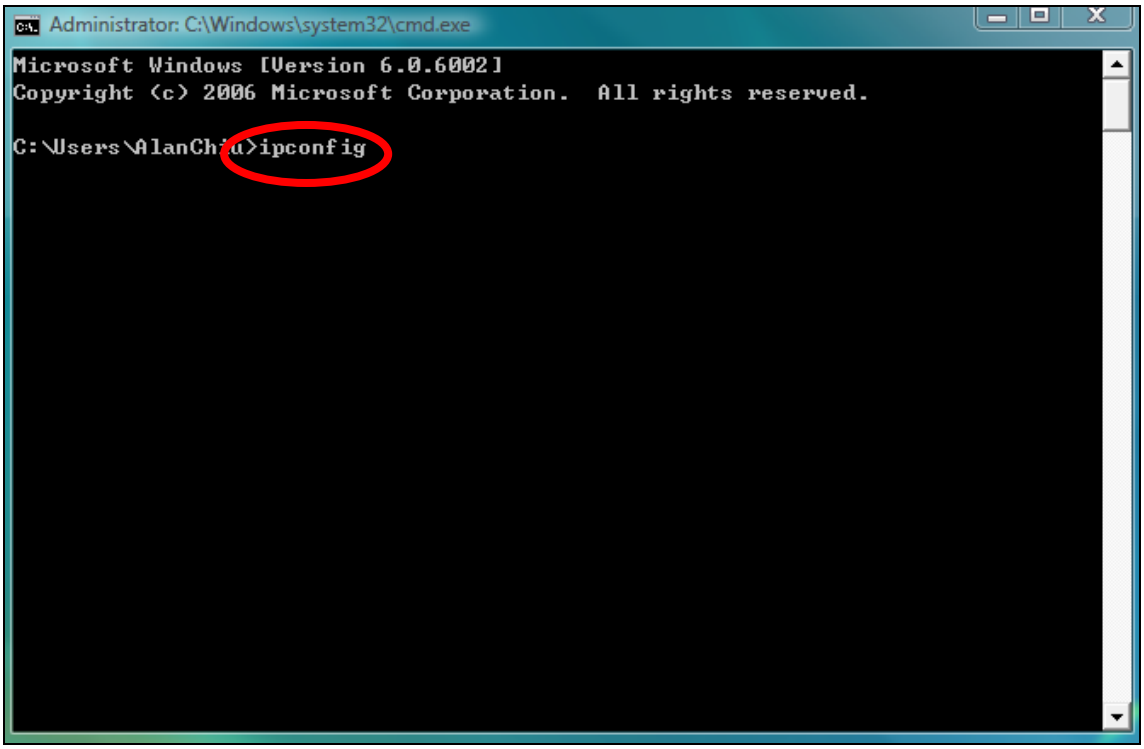
To find your router's IP address, please follow the instructions appropriate for your operating system.

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

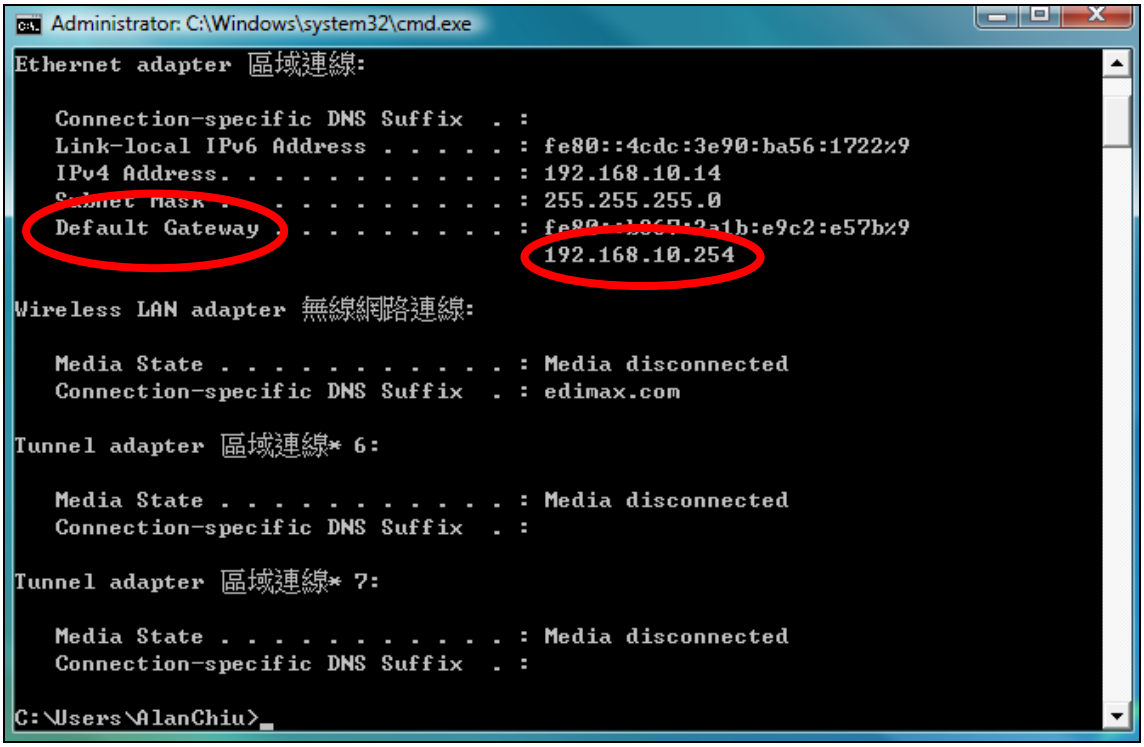
1. Go to "Start", select "Run" and type "cmd", then press Enter or click "OK".



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



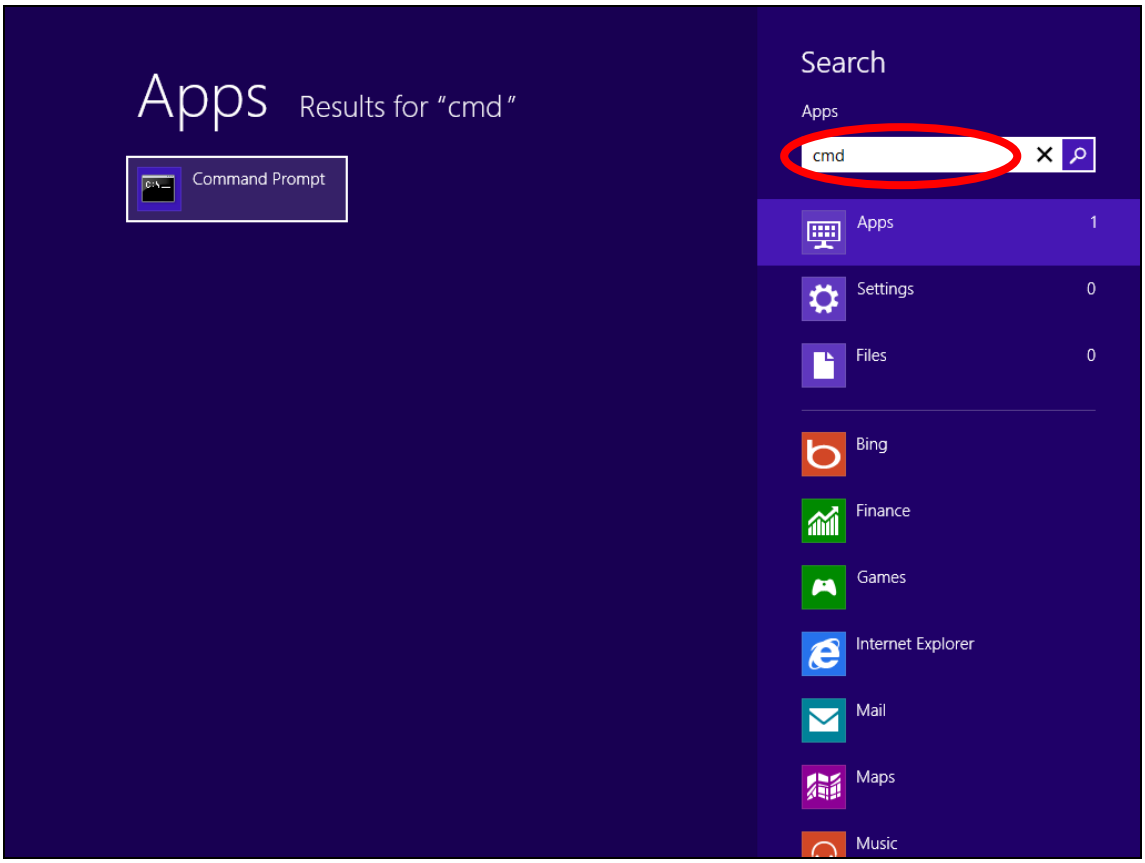
3. Your router's IP address will be displayed next to "Default Gateway".



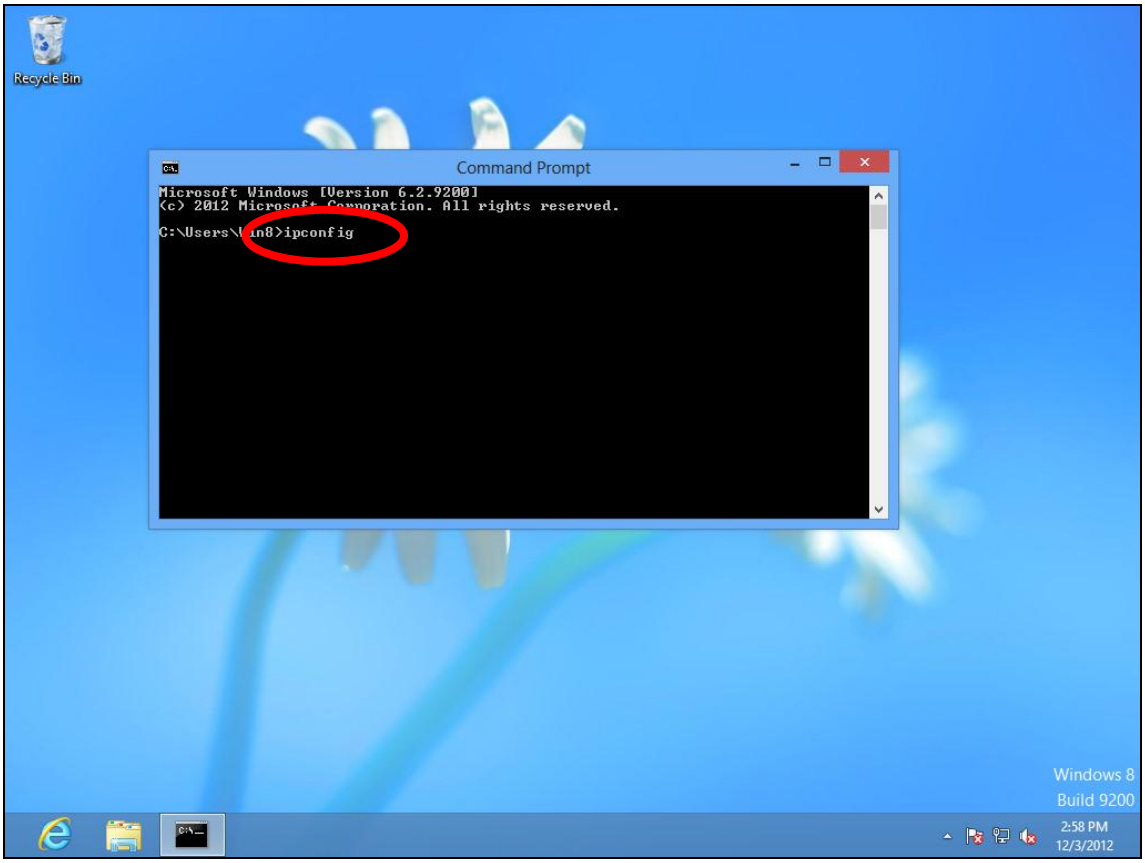
V-1-4-2. Windows 8

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

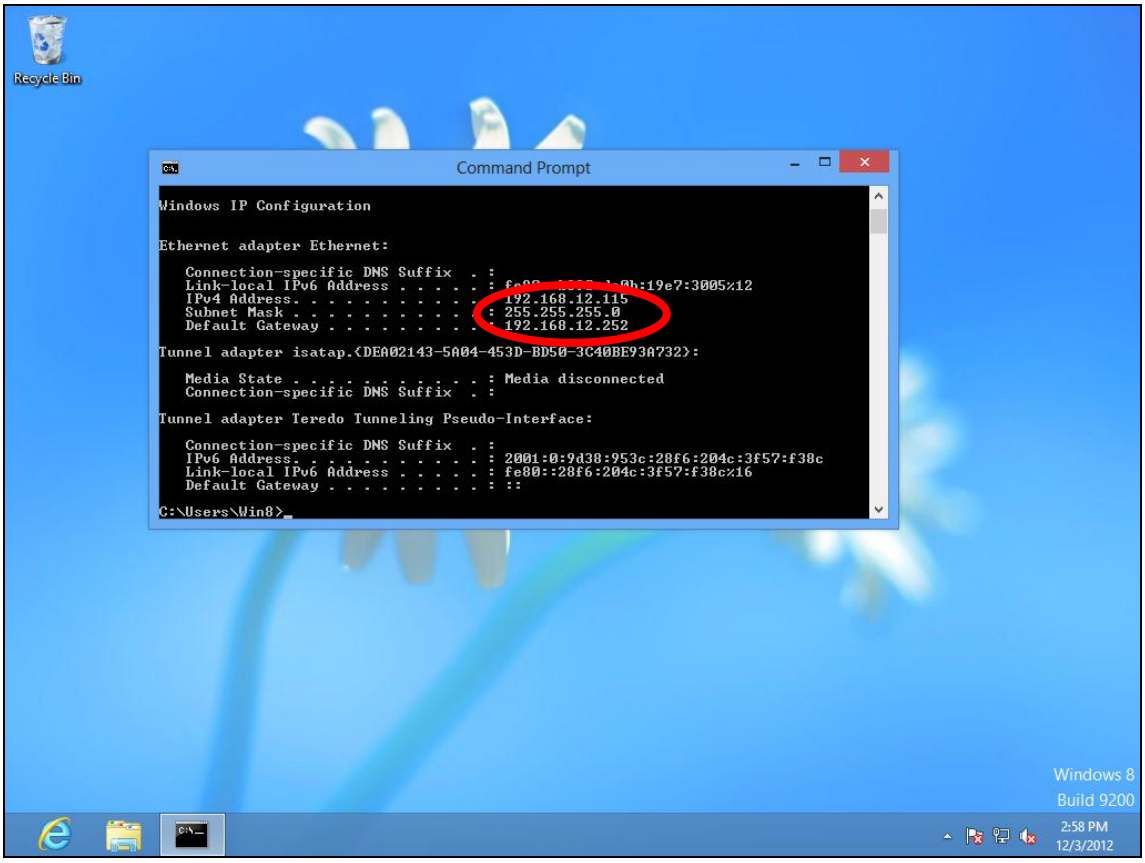
2. Click “Search” and enter “cmd” into the search bar. Click the “Command Prompt” app which be displayed on the left side.



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



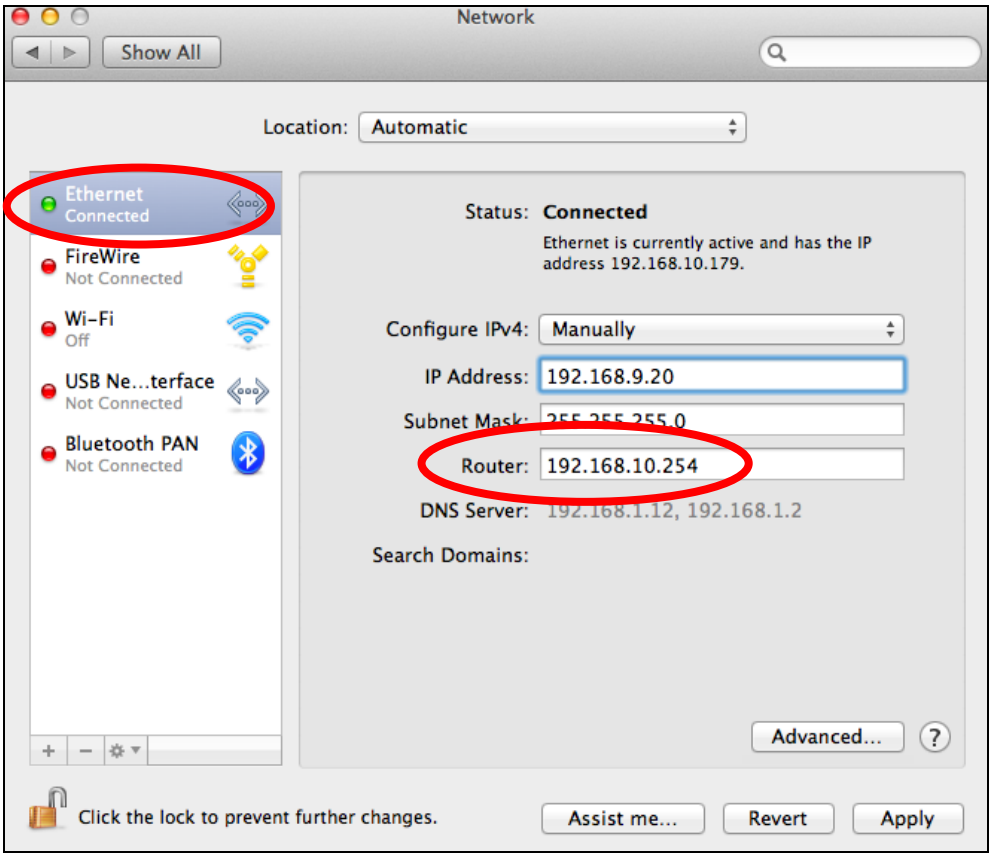
4. Your router's IP address will be displayed next to "Default Gateway".



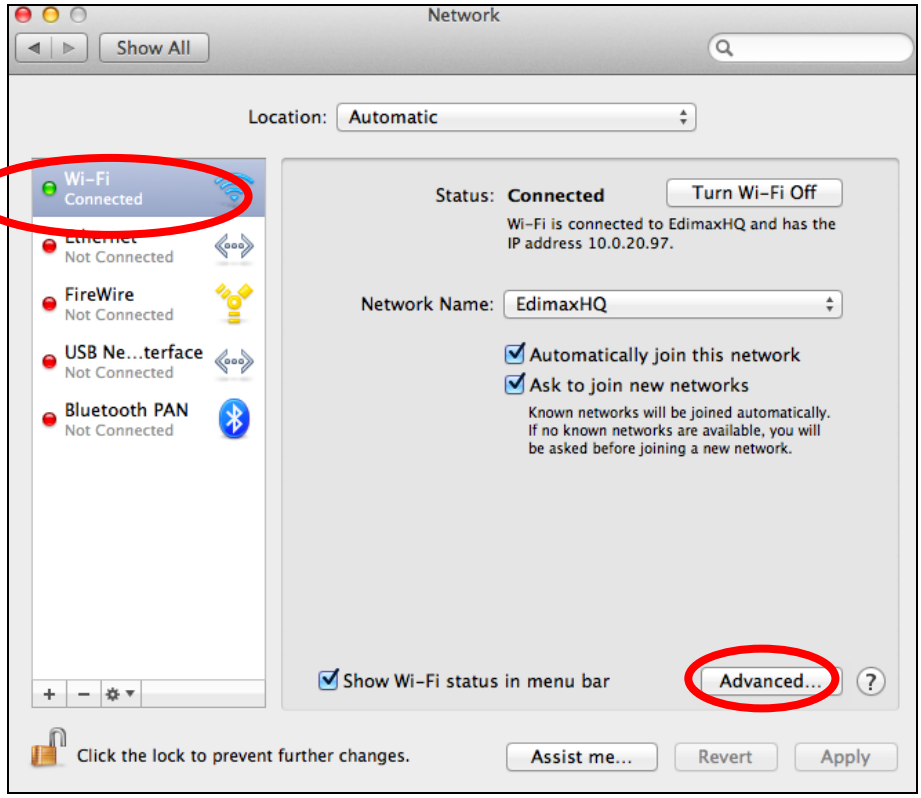
V-1-4-3. Mac

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

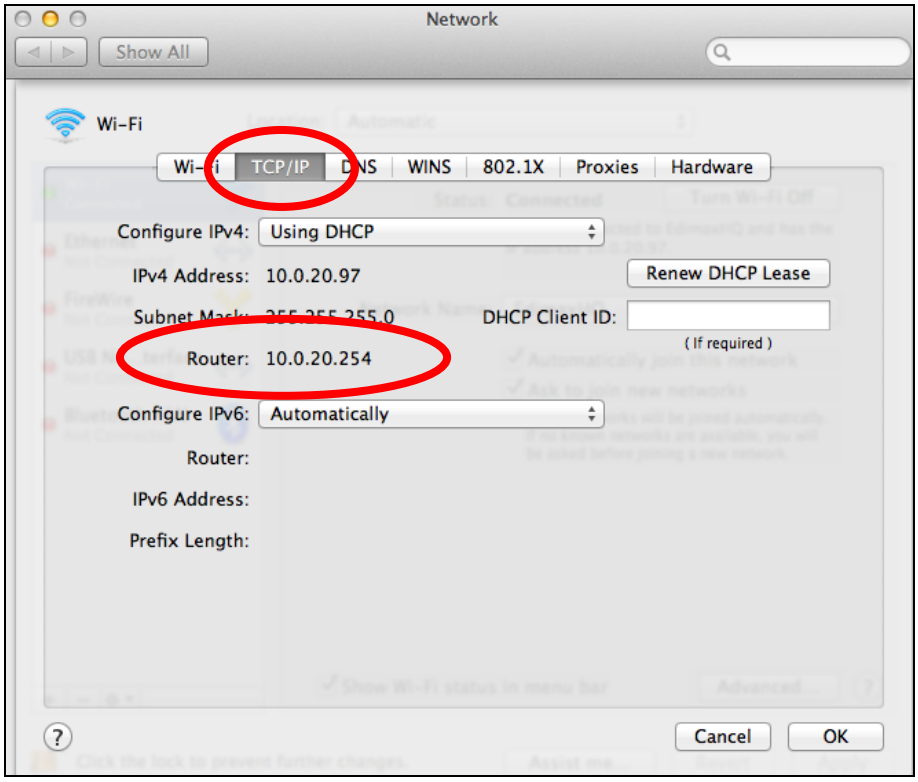
2. If you are using an Ethernet cable to connect to your network, your router’s IP address will be displayed next to “Router”.



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".

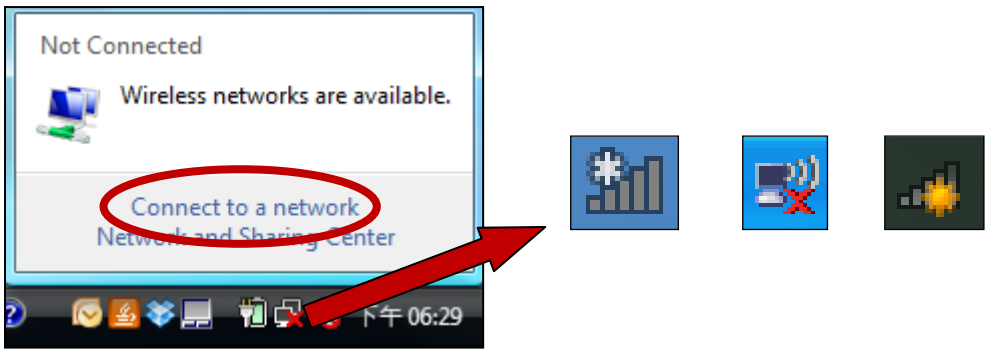


V-2. Connecting to a Wi-Fi network

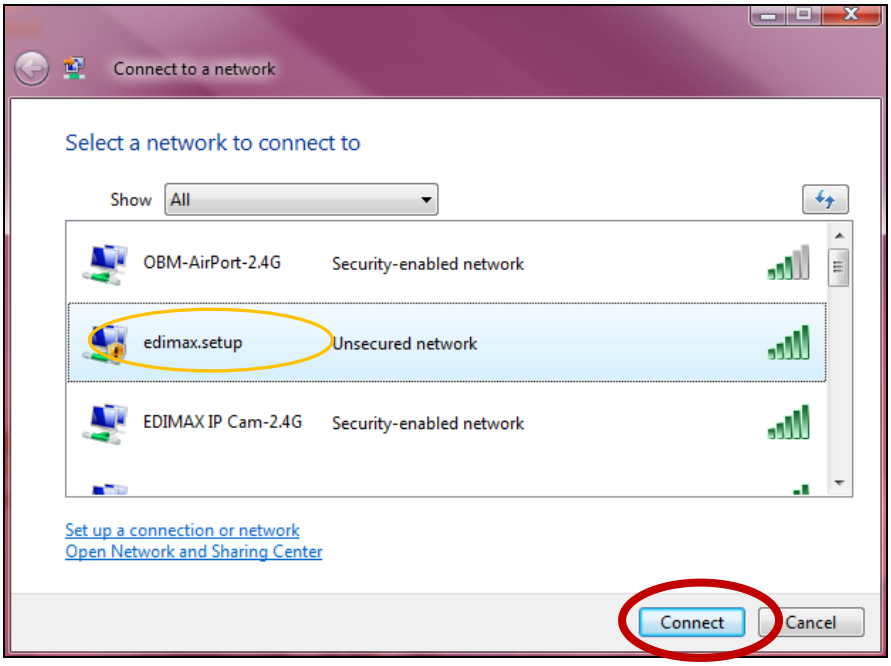
For help connecting to your device's ***edimaxext.setup*** SSID for initial setup, or to connect to your device's new Wi-Fi network (SSID) after setup is complete, follow the guide below:

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

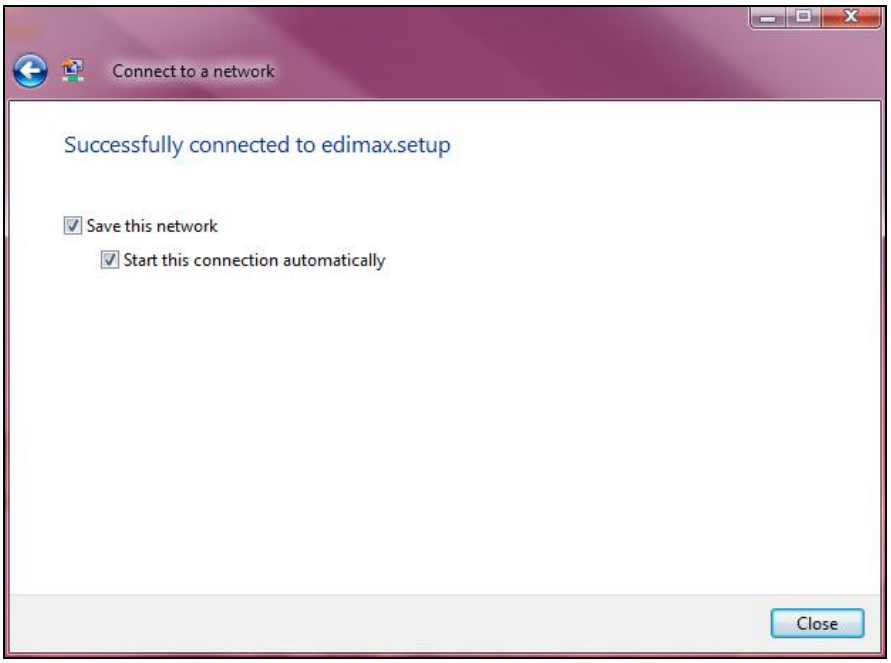
1. Click the network icon (, or) in the system tray and select **"Connect to a network"**.



2. Search for the SSID of your EW-7438AC 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 EW-7438AC's wireless network.



V-3. Troubleshooting

If you are experiencing problems with your wireless extender, please refer to this troubleshooting guide before contacting your dealer of purchase for help.

Scenario	Solution
I can't log onto the browser-based configuration interface.	a. Please check that the extender is correctly inserted into a power socket and check the LEDs on the front panel. If the extender is initializing after being switched off or restarted, wait for a 2 minutes and try again. b. Make sure you are using the full, correct URL: **http://edimaxext.setup** c. If you are using a MAC or IP address filter, try to connect the wireless extender using a different computer. d. Set your computer to obtain an IP address automatically (DHCP), and see if your computer can obtain an IP address. e. Ensure that all other Wi-Fi/Ethernet adapters are disabled or disconnected. f. Password is case-sensitive. Make sure the "Caps Lock" light is not illuminated. g. b. If you do not know your password, restore the device to factory settings.
I can't establish a connection to my wireless extender.	a. If encryption is enabled, please re-check WEP or WPA passphrase settings on your wireless client. The password is case-sensitive. Make sure the "Caps Lock" light is not illuminated. b. Try moving closer to the wireless extender. c. Switch off the extender and switch it back on after 10 seconds. d. Please check that the extender is correctly inserted into a power socket and check the LEDs on the front panel.
File downloads are very slow or frequently interrupted.	a. Reset the wireless extender b. Try again later. Your local network may be experiencing technical difficulties or very high usage. c. Change channel number.
The wireless extender	a. It is normal for the wireless extender to heat up

is extremely hot.	during frequent use. If you can safely place your hand on the wireless extender, the temperature of the device is at a normal level. b. If you smell burning or see smoke coming from wireless extender then disconnect the extender immediately, as far as it is safely possible to do so. Call your dealer of purchase for help.
My network device can't access the Internet.	a. Ensure that your broadband router is fully functional. b. Switch off both your network device and wireless extender and switch back on again. c. Ensure that the wireless extender is powered on (check the power LED). d. On the browser based configuration interface home page, check "Status" under "Wireless Configuration". It should be "Connected" – if it is "Disconnected" then this means the wireless extender is not connected to your router/access point.
My wireless extender has a poor signal from my access point/router.	The best location to place the Wi-Fi extender is one which is an open space, roughly in the middle between your router and the Wi-Fi dead zone, and where the Wi-Fi extender LED displays "Excellent" signal strength. a. Keep the extender away from other radio devices such as microwaves or wireless telephones. b. Do not put the extender in the corner of a room or under/nearby metal. c. It is recommended to plug the extender directly into a wall socket. d. Ensure there are as few obstacles as possible between the extender and the access point/router.
Can I use the same SSID as my current gateway router for my Wi-Fi extender?	Yes, but it is not recommended as it will be difficult to distinguish between two SSIDs with the same name.

V-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.

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

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

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

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

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

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

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

NAT: Network Address Translation. This process allows all of the computers on your home network to use one IP address. Using the broadband access point's NAT capability, you can access the Internet from any computer on your home network without having to purchase more IP addresses from your ISP.
Port: Network Clients (LAN PC) uses port numbers to distinguish one network application/protocol over another. Below is a list of common applications and protocol/port numbers:

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

Access point: An 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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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

FCC Caution

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

Federal Communications Commission (FCC) Radiation Exposure Statement

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

The equipment version marketed in US is restricted to usage of the channels 1-11 only. This equipment is restricted to ***indoor*** use when operated in the 5.15 to 5.25 GHz frequency range.

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, 2006/95/EC.

Français: Cet équipement est conforme aux exigences essentielles et autres dispositions de la directive 1999/5/CE, 2006/95/CE.

Čeština: Toto zařízení je v souladu se základními požadavky a ostatními příslušnými ustanoveními směrnic 1999/5/ES, 2006/95/ES.

Polski: Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami określonymi Dyrektywą UE 1999/5/EC, 2006/95/EC.

Română: Acest echipament este în conformitate cu cerinţele esenţiale şi alte prevederi relevante ale Directivei 1999/5/CE, 2006/95/CE.

Русский: Это оборудование соответствует основным требованиям и положениям Директивы 1999/5/EC, 2006/95/EC.

Magyar: Ez a berendezés megfelel az alapvető követelményeknek és más vonatkozó irányelveknek (1999/5/EK, 2006/95/EK).

Türkçe: Bu cihaz 1999/5/EC, 2006/95/EC direktifleri zorunlu istekler ve diğer hükümlerle ile uyumludur.

Українська: Обладнання відповідає вимогам і умовам директиви 1999/5/EC, 2006/95/EC.

Slovenčina: Toto zariadenie spĺňa základné požiadavky a ďalšie príslušné ustanovenia smerníc 1999/5/ES, 2006/95/ES.

Deutsch: Dieses Gerät erfüllt die Voraussetzungen gemäß den Richtlinien 1999/5/EC, 2006/95/EC.

Español: El presente equipo cumple los requisitos esenciales de la Directiva 1999/5/EC, 2006/95/EC.

Italiano: Questo apparecchio è conforme ai requisiti essenziali e alle altre disposizioni applicabili della Direttiva 1999/5/CE, 2006/95/CE.

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Português: Este equipamento cumpre os requesitos essênciais da Directiva 1999/5/EC, 2006/95/EC.

Norsk: Dette utstyret er i samsvar med de viktigste kravene og andre relevante regler i Direktiv 1999/5/EC, 2006/95/EC.

Svenska: Denna utrustning är i överensstämmelse med de väsentliga kraven och övriga relevanta bestämmelser i direktiv 1999/5/EG, 2006/95/EG.

Dansk: Dette udstyr er i overensstemmelse med de væsentligste krav og andre relevante forordninger i direktiv 1999/5/EC, 2006/95/EC.

Suomi: Tämä laite täyttää direktiivien 1999/5/EY, 2006/95/EY oleelliset vaatimukset ja muut asiaankuuluvat määräykset.

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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: AC750 Wireless LAN Repeater
Model No.: EW-7438AC

The following European standards for essential requirements have been followed:

Directives 1999/5/EC

Spectrum	:	ETSI EN 300 328 V1.8.1 (2012-06);
		ETSI EN 301 893 V1.7.1 (2012-06)
EMC	:	EN 301 489-1 V1.9.2 (2011-09);
		EN 301 489-17 V2.2.1 (2012-09);
Safety (LVD)	:	IEC 60950-1:2005 (2nd Edition);Am 1:2009
		EN 60950-1:2006+A11:2009+A1:2010+A12:2011

Recommendation1999/5/EC

EMF	:	EN 62311:2008

Directives 2006/95/EC

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

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New Taipei City, Taiwan

CE

Date of Signature: June, 2015
Signature:
Printed Name: Albert Chang
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