

EW-7438RPn V2

User Manual

09-2013 / v1.0

CONTENTS

I. Product Information.....	1
I-1. Package Contents	1
I-2. System Requirements.....	1
I-3. LED Status	1
I-4. Hardware Overview	3
I-5. Safety Information	4
II. Installation.....	5
II-1. Wi-Fi Extender Mode	8
II-2. Wi-Fi Adapter/Bridge Mode	12
II-3. Wi-Fi Access Point Mode	15
II-4. WPS Setup.....	19
II-5. Reset to Factory Default Settings	21
III. Browser Based Configuration Interface.....	22
III-1. Login.....	22
III-2. Save Settings	24
III-3. Main Menu	25
IV. Extender Mode	26
IV-1. Home.....	26
IV-2. iQ Setup	28
IV-3. WPS Settings	29
IV-4. Wireless Advanced	30
IV-4-1. WLAN 2.4GHz Security.....	31
IV-4-2. Administration Utility	32
IV-4-3. Configuration Tools.....	33
V. Wi-Fi Adapter/Bridge Mode	37
V-1. Home.....	37
V-2. iQ Setup	39
V-3. Wireless Advanced	40
V-3-1. Administration Utility	41
V-3-2. Configuration Tools.....	42
VI. Access Point Mode	46
VI-1. Home.....	46
VI-2. iQ Setup	48
VI-3. Basic Settings	49

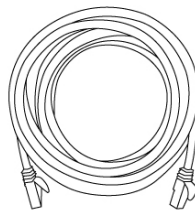
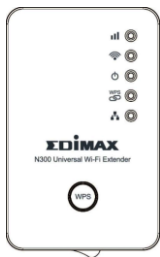
VI-4.	WPS Settings	52
VI-5.	Wireless Advanced	54
VI-5-1.	Security	56
VI-5-1-1.	Disable	57
VI-5-1-2.	WEP	57
VI-5-1-3.	WPA pre-shared key	58
VI-5-1-4.	WPA RADIUS	59
VI-5-2.	MAC Filtering	60
VI-5-3.	Administration Utility	62
VI-5-4.	Configuration Tools.....	64

VII. Appendix68

VII-1.	Configuring your IP address.....	68
VII-1-1.	How to check that your computer uses a dynamic IP address	69
VII-1-1-1.	Windows XP	69
VII-1-1-2.	Windows Vista	71
VII-1-1-3.	Windows 7	73
VII-1-1-4.	Windows 8	76
VII-1-1-5.	Mac OS.....	80
VII-1-2.	How to modify the IP address of your computer	82
VII-1-2-1.	Windows XP	82
VII-1-2-2.	Windows Vista	84
VII-1-2-3.	Windows 7	85
VII-1-2-4.	Windows 8	90
VII-1-2-5.	Mac	94
VII-1-3.	How to Find Your Network Security Key	97
VII-1-3-1.	Windows 7 & Vista.....	97
VII-1-3-2.	Mac	99
VII-1-4.	How to Find Your Router's IP Address.....	102
VII-1-4-1.	Windows XP, Vista & 7.....	102
VII-1-4-2.	Windows 8	104
VII-1-4-3.	Mac	107
VII-2.	Connecting to a Wi-Fi network.....	109
VII-3.	Troubleshooting.....	111
VII-4.	Glossary.....	113

I. Product Information

I-1. Package Contents

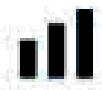






- EW-7438RPn
- CD with multi-language QIG & user manual
- Quick installation guide (QIG)
- RJ45 Ethernet cable
- Access key card


I-2. System Requirements

- Wi-Fi extender/Wi-Fi bridge mode: Existing 2.4GHz wireless network
- Access point mode: Cable/DSL modem
- Computer with 2.4GHz 802.11/b/g/n Wi-Fi adapter, and web browser for software configuration (Internet Explorer 8[®] or above, Google Chrome[®], Firefox[®] or Safari[®] latest version)

I-3. LED Status

LED	Color	Status	Description
Signal Strength  2.4GHz	Amber	On	Excellent signal Signal strength: 60 – 100%
		Slow Flashing	Good signal Signal strength: 40 – 60%
		Quick Flashing	Poor signal Signal strength: 0 – 40%
		Off	LAN port not connected

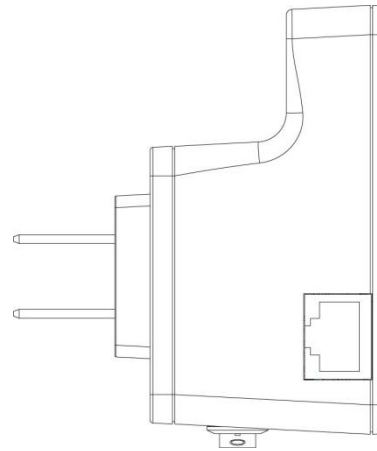
Wi-Fi 	Green	Flashing	Transferring data
		Off	Wi-Fi not active or in LED off mode
Power 	Green	On	Extender is on
		Flashing	Resetting to factory default settings, or system is booting up
		Off	Extender is off or in LED off mode
WPS 	Green	On	WPS connection established (LED will remain on for 5 minutes to indicate a successful connection)
		Flashing	WPS in progress (waiting for another WPS device)
		Off	No WPS in progress or in LED off mode
LAN 	Green	On	LAN port connected
		Flashing	LAN activity (transferring or receiving data)
		Off	LAN port not connected

 **LEDs can be disabled in “Wireless Advanced” in the browser based configuration interface. If LEDs are disabled, all LEDs will be off regardless of the extender’s status.**

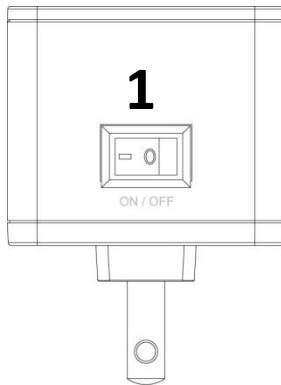
I-4. Hardware Overview



4



2



1. Power On/Off Switch

3. WPS/Reset Button

2. Ethernet Port

4. LEDs

I-5. 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.

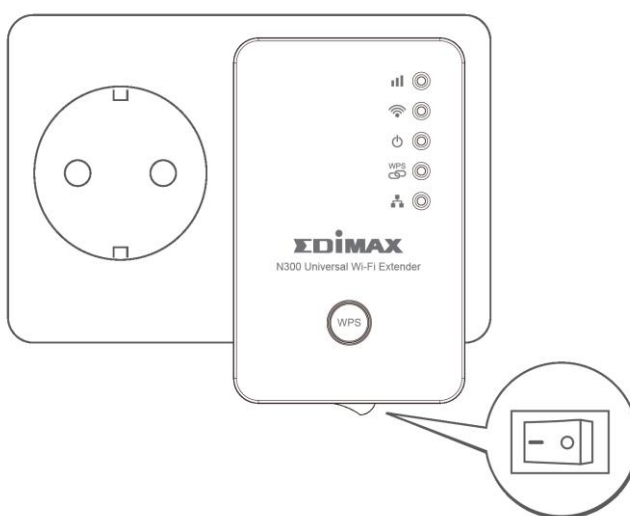
1. The device is designed for indoor use only; do not place it outdoors.
2. Do not place the device in or near hot/humid places, such as a kitchen or bathroom.
3. Do not pull any connected cable with force; carefully disconnect it from the EW-7438RPn.
4. Handle the device with care. Accidental damage 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-7438RPn then unplug the device immediately, as far as it is safely possible to do so. Call your dealer of purchase for help.
10. This product should work for a long time, and provide round-the-clock Wi-Fi service.

II. Installation

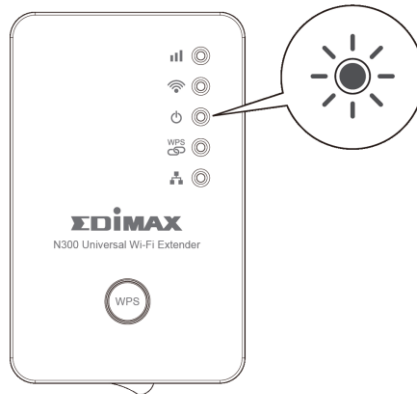
The EW-7438RPn has three different operating modes which you can choose depending on your network requirements. Each mode is described below:

Wi-Fi Extender	<p><i>The device connects wirelessly to your existing network and repeats the wireless signal.</i></p> <p>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.</p>
Wi-Fi Adapter/ Wi-Fi Bridge	<p><i>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.</i></p> <p>Location: Within Wi-Fi coverage, close to your wired network device.</p>
Wi-Fi Access Point	<p><i>The device connects to an existing router via Ethernet cable and provides wireless Internet access for your network devices.</i></p> <p>Location: Connected to your router via Ethernet cable.</p>

1. Plug the EW-7438RPn into a power socket and switch it on.



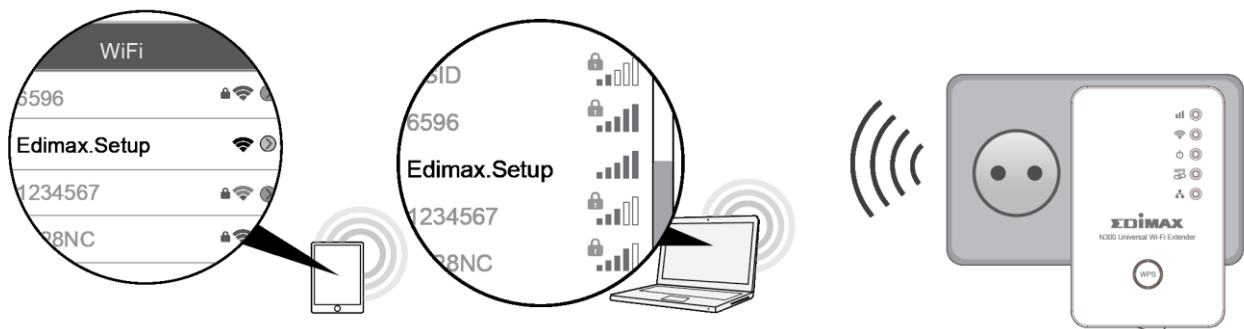
- The **green** power LED will **flash** while the system is booting up. The device is ready when the **green** power LED displays **on**.



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

! *If you are using a computer, please disconnect any Ethernet cables. For mobile devices, iOS 4.3 or Android 4.x or above is required.*


! *The last two characters of the SSID (Edimax.Setup**) will be unique numbers according to your device e.g. "Edimax.Setup c1". Your unique SSID is displayed on the product label along with the included access key card.*



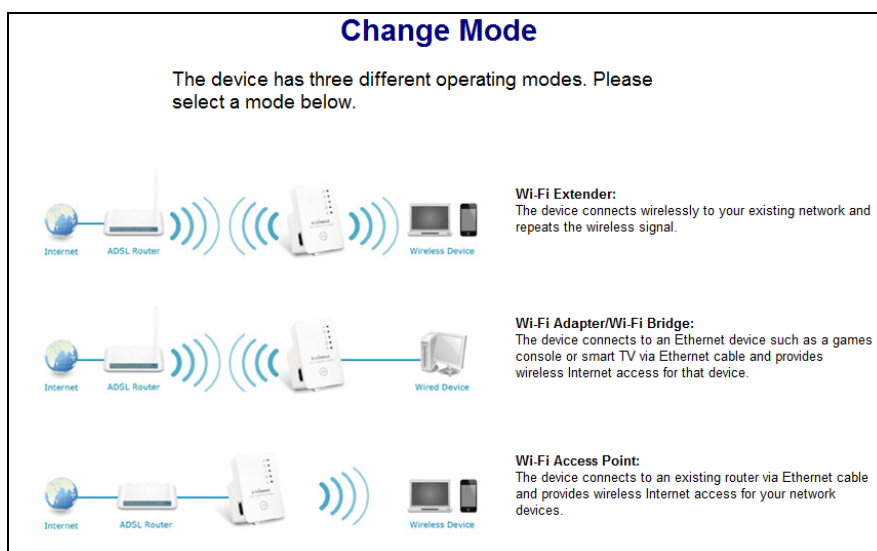
EDIMAX NETWORKING PEOPLE TOGETHER	
Access Key	
Web Browser Access:	Wi-Fi Client Access:
http://edimax.setup or http://192.168.9.2	Initial Device Name (SSID): Edimax.Setup **
User Name: admin	Default Wi-Fi Extension SSID: <input type="text"/> _2EX
Password: 1234	
<small>Note: Please keep this card for future use.</small>	

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



 ***If you cannot access <http://edimax.setup>, please make sure your computer is set to use a dynamic IP address. For more information please refer to [VII-1. Configuring your IP address](#).***

5. Select an operating mode for your EW-7438Rp and follow the on-screen instructions for your selected mode to complete setup. Refer to the appropriate chapter for more guidance on setup for each mode.



II-1. Wi-Fi Extender Mode

1. Please read the on screen instructions about selecting a good location for your wireless extender and then click “NEXT” to continue. You can check your signal strength on the next page.



2. Select your Wi-Fi network from the list and enter the security key/password. You can also enter a new Wi-Fi network name (SSID) if you wish. Click “Next” to continue.



By default, the Wi-Fi extender’s new wireless network name (SSID) is your existing router/access point’s SSID + _2EX. For example if your router’s SSID is “Your SSID” then the EW-7438RPn ’s SSID will be “Your SSID_2EX”. You can change your extender’s new SSID in the “Extender Device SSID” field.

<input type="radio"/>	EdimaxHQ	76%
<input checked="" type="radio"/>	OBM-AirPort-2.4G	76%
Security Key(your existing network security key)		*****
Extender device SSID		OBM-AirPort-2.4G_2EX
<input type="radio"/>	6428nS	52%

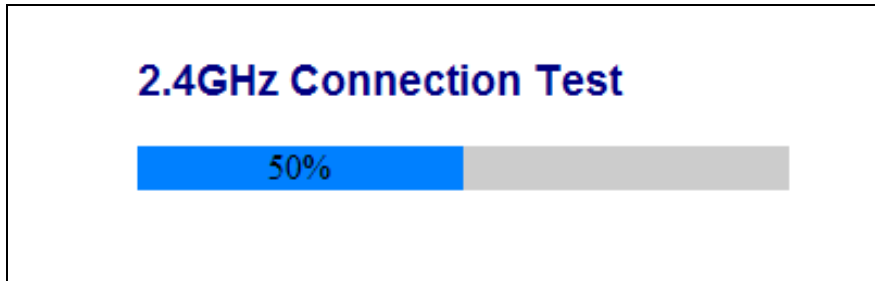


If the Wi-Fi network you wish to connect to does not appear, try clicking “Refresh”.



Do not check “Connect to a hidden network” unless you wish to connect to a hidden SSID instead.

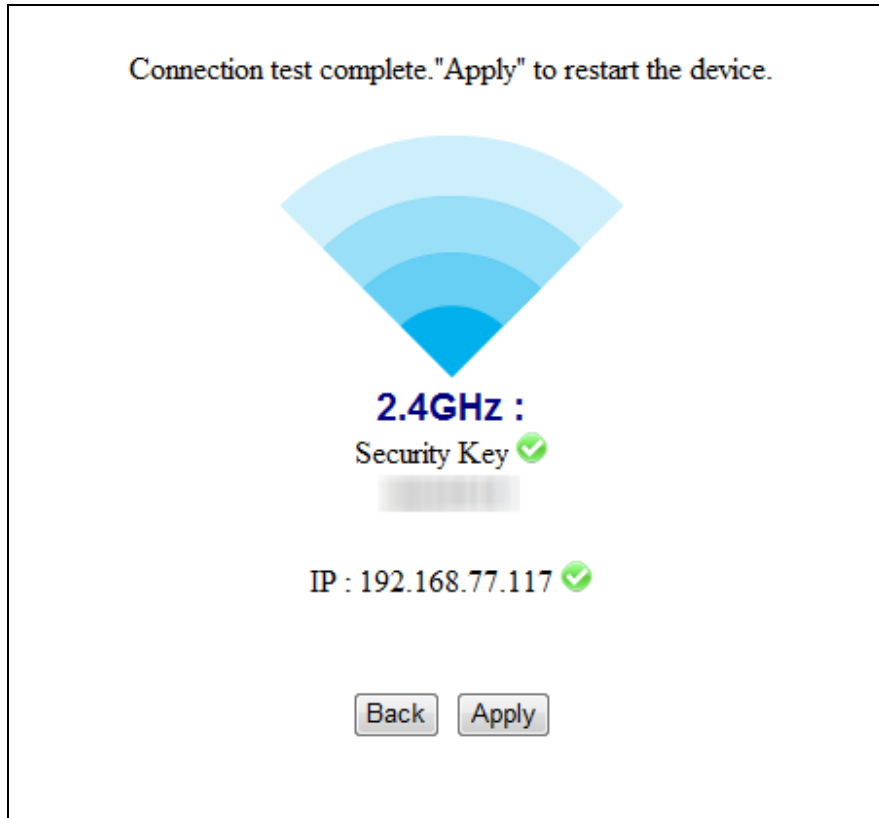
3. Please wait while the EW-7438RPn tests the connection.



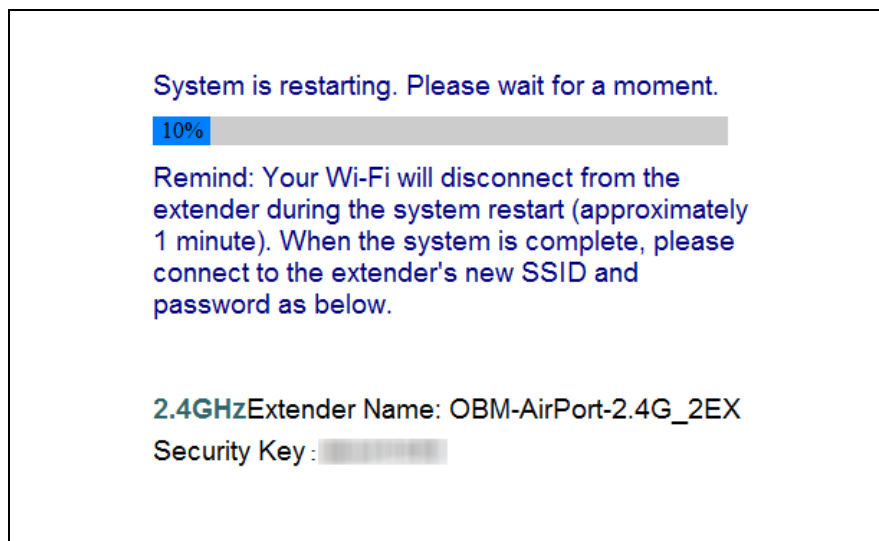
If your Wi-Fi extender cannot obtain an IP address (below) from your existing router/access point then click the “Static IP” button to assign an IP address to the extender. For more guidance please refer to the [VII-1. Configuring your IP address.](#)



4. When the connection test is complete, click “Apply” to restart the extender.



5. Please wait a moment until the extender is ready.



6. A final congratulations screen will indicate that setup is complete. The EW-7438RPn is working and ready for use - the **amber** signal strength LED should display **on** or **flash** depending on your signal strength.

Congratulations.

Your extender has successfully established a connection. You can reconnect to Extender by new SSID name/security key listed as below.

2.4GHz Extender Name: OBM-AirPort-2.4G_2EX

Security Key: [REDACTED]

7. Please close the browser window. You can now connect to the **extender's new SSID** on a wireless device within range such as a computer, smartphone or tablet. Do not connect to your router's SSID instead!



The password for your Wi-Fi extender's SSID is the same as for your router's SSID.

For more advanced configurations, use the browser based configuration interface (refer to [III. Browser Based Configuration Interface](#)).



II-2. Wi-Fi Adapter/Bridge Mode

1. Select your Wi-Fi network from the list and enter the security key/password.

<input type="radio"/>	OBM-AirPort-2.4G	84%
<input checked="" type="radio"/>	Your SSID	68%
Security Key(your existing network security key)		
<input type="radio"/>	EdimaxHQ	68%

Add <http://edimax.setup> to your bookmarks (IE and Firefox only).

Yes

(Please copy <http://edimax.setup> to bookmark manually if you use other browser)

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

 **Do not check “Connect to a hidden network” unless you wish to connect to a hidden SSID instead.**

Connect to a hidden network


Connect to root AP's SSID


Encryption	WPA pre-shared key <input type="button" value="v"/>
WPA Type	<input checked="" type="radio"/> WPA(TKIP) <input type="radio"/> WPA2(AES)
Key Format	Passphrase <input type="button" value="v"/>
Security Key	<input type="text"/>

2. Please wait while the EW-7438RPn tests the connection.

2.4GHz Connection Test

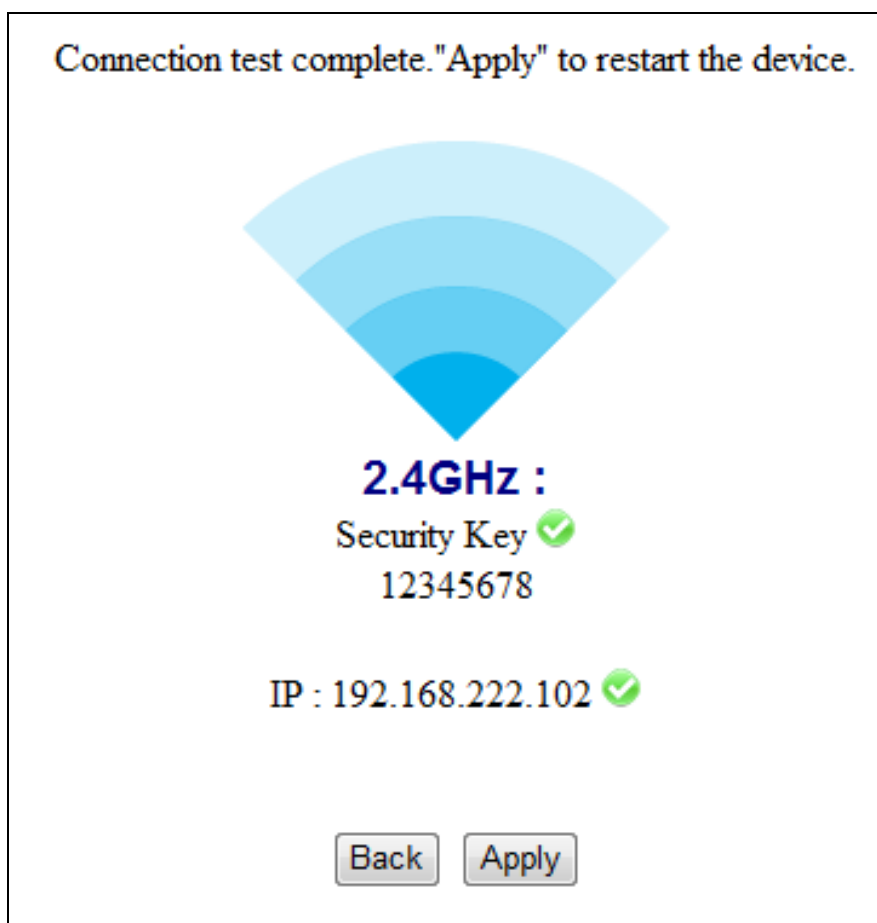
50%



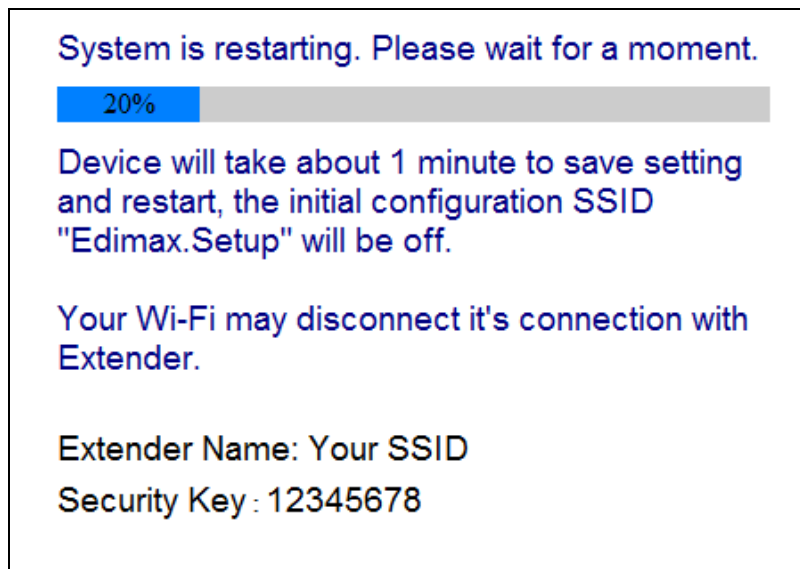
 **If your Wi-Fi extender cannot obtain an IP address (below) from your existing router/access point then click the “Static IP” button to assign an IP address to the extender. For more guidance please refer to [VII-1. Configuring your IP address](#).**



3.When the connection test is complete, click “Apply” to restart the extender.



4.Please wait a moment until the EW-7438RPn is ready.



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



- 6.** The EW-7438RPn is working and ready for use as a wireless bridge. Use an Ethernet cable to connect the EW-7438RPn to the Ethernet port on your network device.

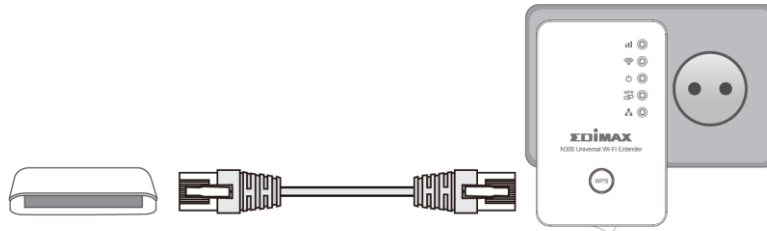
(example)



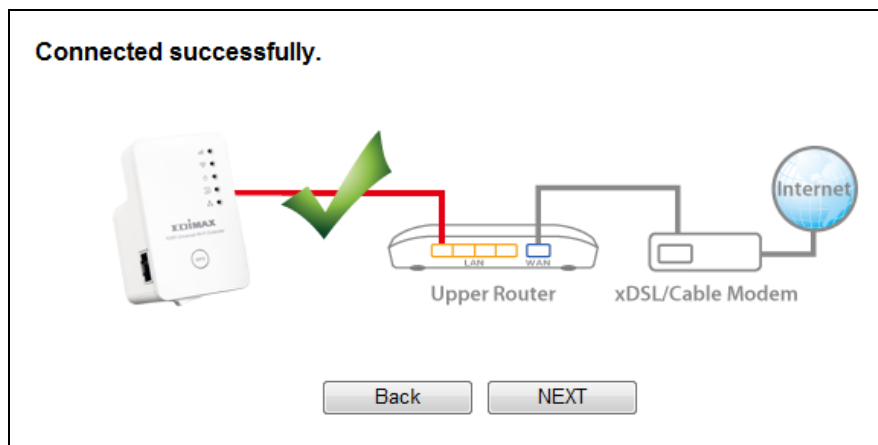
- 7.** Ensure the EW-7438RPn is switched on, and then use your network device to connect to your network as usual.

II-3. Wi-Fi Access Point Mode

1. Connect the LAN port of your EW-7438RPn to the LAN port of your existing router using an Ethernet cable, and then click “Next”.



2. Click “Next” to continue.



3. Select “Obtain an IP address automatically” or “Use the following IP address” for your EW-7438RPn. 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 [VII-1. Configuring your IP address.](#)

Management IP

Please set the IP address of the access point. 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.

Use the following IP address.

IP Address : . . .

Subnet Mask : . . .

Gateway Address : . . .

Back

NEXT

4. Enter a name and password for your wireless network, then click “Next” to continue.

Change basic Setting

Wi-Fi Network Name	<input type="text" value="EdimaxAPc1"/>
Wi-Fi Network Password	<input type="text" value="password"/> Enable <input type="button" value="v"/>
Enable Guest Network	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Back

NEXT

Change basic Setting

Wi-Fi Network Name	EdimaxAPc1
Wi-Fi Network Password	Enable <input type="button" value="v"/> password
Enable Guest Network	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Guest Network name	Guest Network
Guest Wi-Fi password	Enable <input type="button" value="v"/> guestpassword

- 5.** A summary of your configuration will be displayed, as shown below. Check that all of the details are correct and then click “Apply” to restart the EW-7438RPn.

Settings saved successfully!

Please click APPLY to restart the system and make the changes take effect.

Wi-Fi Network Name :	EdimaxAPc1
Wi-Fi Network Password :	password

- 6.** Please wait a moment until the EW-7438RPn is ready.

System is restarting. Please wait for a moment.

20%

Remind: Your Wi-Fi will disconnect from the extender during the system restart (approximately 1 minute). When the system is complete, please connect to the extender's new SSID and password as below.

Wi-Fi Network Name : EdimaxAPc1
Wi-Fi Network Password : password

- 7.** A final congratulations screen will indicate that setup is complete. ***Please close the browser window.*** The EW-7438RPn is working and ready for use. You can now connect to the device's new SSID.

Congratulations.

You have successfully completed the configuration. You can close this browser window and reconnect to this AP device with new wireless security key now.

Wi-Fi Network Name : EdimaxAPc1

Wi-Fi Network Password : password

II-4. WPS Setup

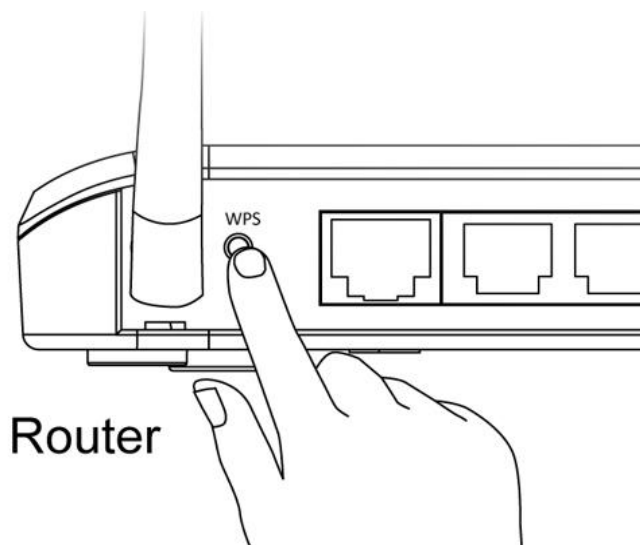
The WPS button is a quick and easy method to establish a secure connection between your EW-7438RPn and wireless router/access point.

If your wireless device supports WPS (Wi-Fi Protected Setup) then you can use this method to setup the EW-7438RPn in extender or adapter/bridge mode, instead of the setup wizard described in [II. Installation](#).

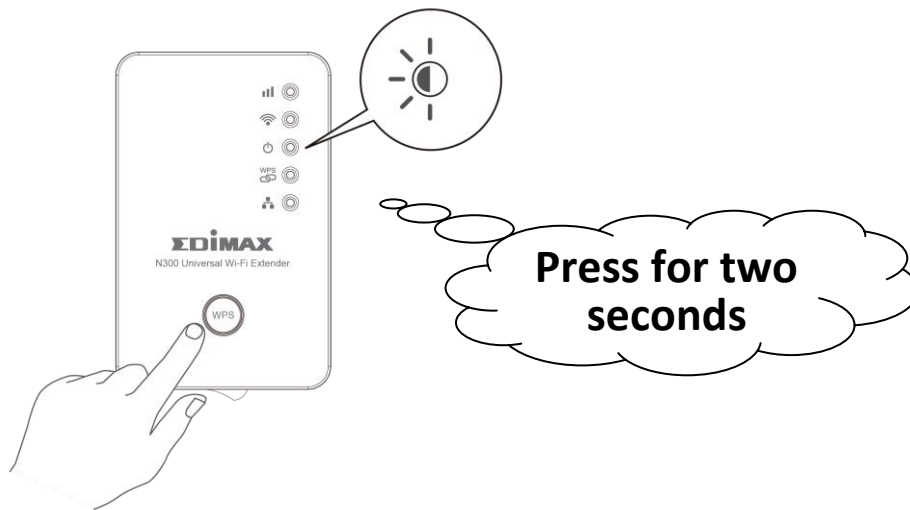
 ***Please do not hold the WPS button for too long – this may reset your device.***

- 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 the WPS button on the EW-7438RPn for 2 – 5 seconds to activate WPS. The **green** WPS LED will **flash** to indicate that WPS is active.

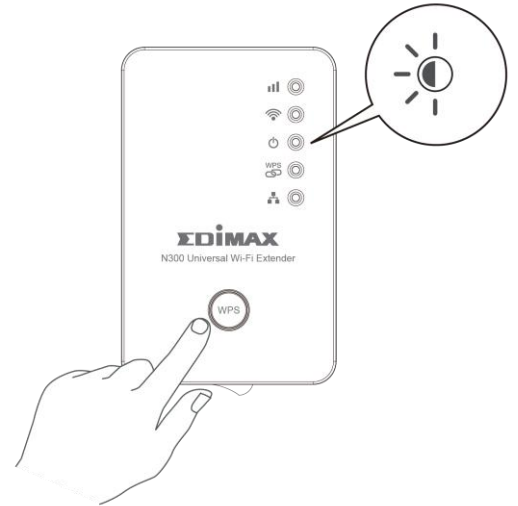


- 3.** The devices will establish a connection. The **green** WPS LED on the EW-7438RPn will display **on** for 5 minutes to indicate a successful connection.

II-5. 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/Reset button for at least 10 seconds until the **green** power LED is **flashing**.



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

III. *Browser Based Configuration Interface*

After you have setup the EW-7438RPn 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 [VII-1. Configuring your IP address](#) for more information.

III-1. Login

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



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.

EDIMAX
NETWORKING PEOPLE TOGETHER

English

◦ Home
• IQ Setup
• WPS Settings
• **Advanced Settings**

Status and Information

You can check the device's MAC address, runtime code, hardware version, and network status below.

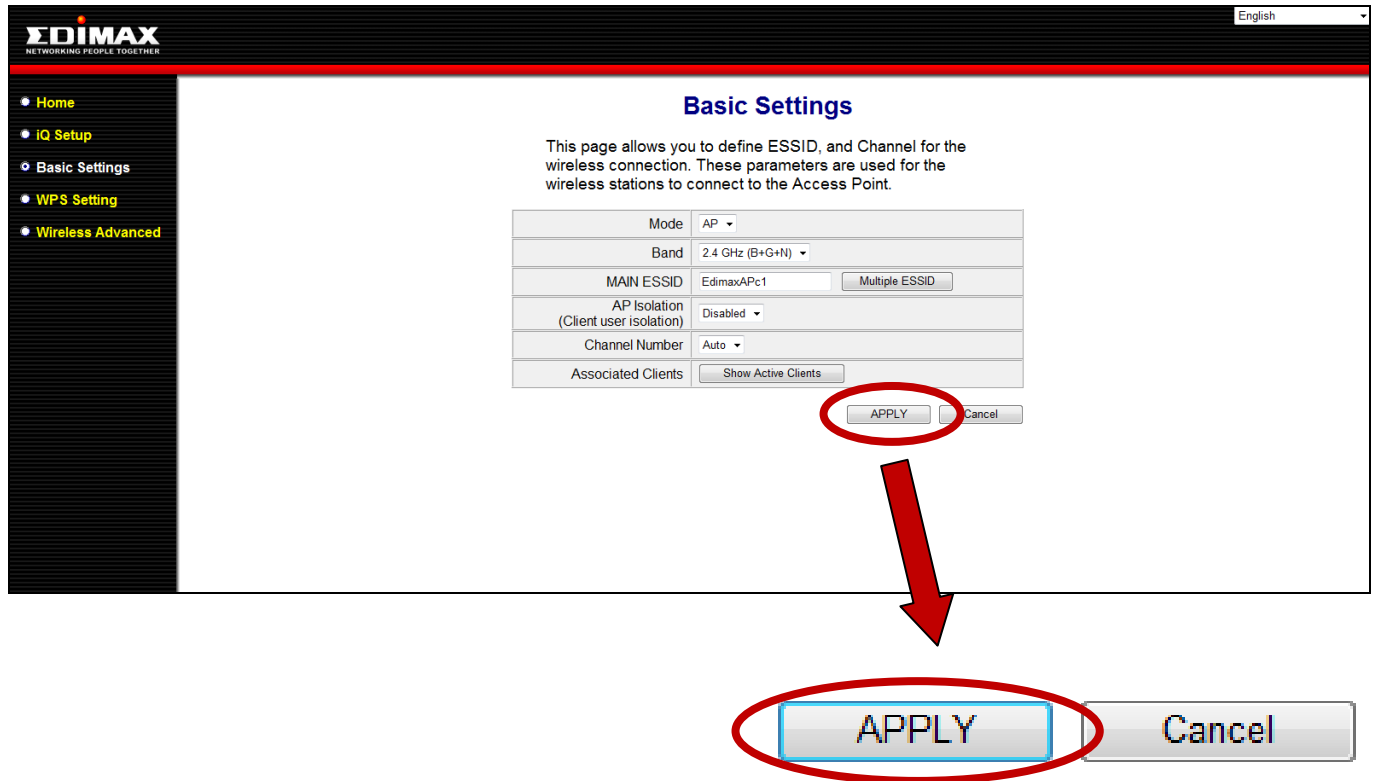
System	
Uptime	0Day:0h:3m:10s
Hardware Version	Rev. v2
Firmware version	1.02
	<input type="button" value="Upgrade Firmware"/>
Mode	Universal Repeater

Wireless Configuration	
ESSID	OBM-AirPort-2.4G_2EX
Channel Number	5
Security	WPA-Shared Key
BSSID (MAC)	00:E0:4C:81:96:C9
Associated Clients	1 <input type="button" value="Show Active Clients"/>
Status	Connected
Signal Strength	<div style="width: 80%; background-color: blue; height: 10px;"></div> 80%

LAN Configuration	
IP Address	192.168.77.117
Subnet Mask	255.255.255.0
Default Gateway	
MAC Address	00:E0:4C:81:96:C9

III-2. Save Settings

1. After you make any changes to the EW-7438RPn's settings, please click "APPLY".



The screenshot shows the Edimax Basic Settings page. The left sidebar contains navigation links: Home, IQ Setup, Basic Settings, WPS Setting, and Wireless Advanced. The main content area is titled "Basic Settings" and includes a description: "This page allows you to define ESSID, and Channel for the wireless connection. These parameters are used for the wireless stations to connect to the Access Point." Below the description is a form with the following fields:

Mode	AP
Band	2.4 GHz (B+G+N)
MAIN ESSID	EdimaxAPc1 <input type="button" value="Multiple ESSID"/>
AP Isolation (Client user isolation)	Disabled
Channel Number	Auto
Associated Clients	<input type="button" value="Show Active Clients"/>

At the bottom of the form, there are two buttons: "APPLY" and "Cancel". A red circle highlights the "APPLY" button, and a red arrow points from it to a larger "APPLY" button shown in a separate callout below.

2. Then, select "CONTINUE" to save changes but not apply them yet, or select "APPLY" to restart the EW-7438RPn and bring the changes into effect.

Settings saved successfully!

Click CONTINUE to continue other configuring settings, or click APPLY to restart the system and make the changes take effect.



The EW-7438RPn needs to restart in order to apply and bring any changes into effect. Use the "CONTINUE" button to make several changes and apply them all together in one restart.

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

- Home
- iQ Setup
- WPS Setting
- Wireless Advanced

Wi-Fi Adapter/Bridge

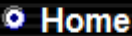
- Home
- iQ Setup
- Wireless Advanced

Access Point

- Home
- iQ Setup
- Basic Settings
- WPS Setting
- Wireless Advanced

IV. Extender Mode

IV-1. Home

 The “Status” page displays basic system information about the device, arranged into three categories: system, wireless configuration & LAN configuration.



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

System	
Uptime	0Day:0h:3m:10s
Hardware Version	Rev. v2
Firmware version	1.02 <input type="button" value="Upgrade Firmware"/>
Mode	Universal Repeater
Wireless Configuration	
ESSID	OBM-AirPort-2.4G_2EX
Channel Number	5
Security	WPA-Shared Key
BSSID (MAC)	00:E0:4C:81:96:C9
Associated Clients	1 <input type="button" value="Show Active Clients"/>
Status	Connected
Signal Strength	<div style="width: 80%; background-color: blue; height: 10px; display: inline-block;"></div> 80%
LAN Configuration	
IP Address	192.168.77.117
Subnet Mask	255.255.255.0
Default Gateway	
MAC Address	00:E0:4C:81:96:C9

Uptime	Displays the total time since the device was turned on.
Hardware Version	Displays the hardware version.
Firmware Version	Displays the firmware version.

Mode	Displays the operating mode.
ESSID	Displays the EW-7438RPn's ESSID, sometimes also known as SSID. The ESSID/SSID is the name used to identify a wireless network.
Channel Number	Displays the current wireless channel number.
Security	Displays the current wireless security setting.
BSSID (MAC)	Displays the device's BSSID. The BSSID identifies the EW-7438RPn in the network, and is the same as the device's MAC address.
Associated Clients	Displays the number of clients connected to the EW-7438RPn. Click "Show Active Clients" to display a new window showing information about wireless clients.
Status	Displays the current connection status of the EW-7438RPn.
Signal Strength	Displays the signal strength for the specified Wi-Fi network.
IP Address	Displays the IP address of this device.
Subnet Mask	Displays the subnet mask of the IP address.
Default Gateway	Displays the IP address of the default gateway.
MAC address	Displays the device's MAC address. The MAC address is a unique, fixed ID for this device, it cannot be modified.

IV-2. iQ Setup

iQ Setup

You can run the setup wizard again to reconfigure the basic settings of the device. Please refer to [II-1. Wi-Fi Extender Mode Step 2](#) onwards for guidance.



If you wish to change the operating mode, please reset the EW-7438RPn back to factory default settings.

IV-3. WPS Settings

WPS Setting

Wi-Fi Protected Setup is a simple way to establish connections between WPS compatible devices. 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.

The WPS Settings page displays settings for WPS between your extender and a **wireless client**. For WPS Setup between your extender and **router/access point**, please use the WPS button as described in [II-4. WPS Setup](#).

• 2.4G Wi-Fi Protected Setup Information

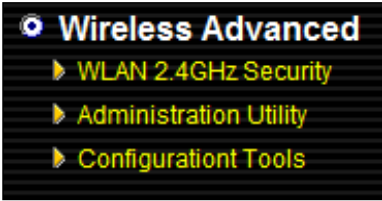
WPS Status	Configured
Self PinCode	35611530

• Device Configure

Configuration Mode Device is as an AP	Registrar
Configure via Push Button	<input type="button" value="Start PBC"/>
Input Client PIN Code	<input type="text"/> <input type="button" value="Send PIN"/>

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.
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.
Input 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.

IV-4. Wireless Advanced



In “Wireless Advanced” you adjust the power output and LED operation of the EW-7438RPn. The submenu also allows you to configure security, as well as various administrative and management functions.



This product should work for a long time, and provide round-the-clock Wi-Fi service.

Advanced functions of the extender can be configured below.

Tx Power	100 % ▾
----------	---------

- Enable LED Off Mode**
- Turn off all LED indicators
 - Turn off all LED indicators except the power LED

Tx Power	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.
Enable LED Off Mode	Check this box to enable “LED Off Mode” which allows you to select “Turn off all LED indicators” or “Turn off all LED indicators except the power LED” accordingly.

IV-4-1. WLAN 2.4GHz Security

Broadcast SSID	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Device SSID	EdimaxHQ_2EX
Security Type	Open Security

Broadcast SSID	Enable or disable ESSID broadcast. When enabled, the ESSID will be visible to clients as an available Wi-Fi network. When disabled, the ESSID will not be visible as an available Wi-Fi network to clients – clients must manually enter the ESSID in order to connect. A hidden (disabled) ESSID is typically more secure than a visible (enabled) SSID. WPS (Wi-Fi Protected Setup) is also disabled when SSID broadcast is disabled.
Device 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 alphanumeric characters.
Security Type	The security/encryption type of your EW-7438RPn’s wireless network is displayed here. The security/encryption type is the same as your existing router/access point.

IV-4-2. Administration Utility

You can change the password used to login to the browser-based configuration interface here. It is advised to do so for security purposes. You can also configure the EW-7438RPn's IP address.



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 [II-5. Reset to factory default settings](#) for how to reset the device.

• Password Settings

Current Password	<input type="text"/>
New Password	<input type="text"/>
Re-Enter Password	<input type="text"/>

• 2.4GHZ.

<input checked="" type="radio"/> Obtain an IP address automatically
<input type="radio"/> Use the following IP address

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

IP Address	Specify an IP address here. This IP address will be assigned to your EW-7438RPn.
Subnet Mask	Input the subnet mask of the new IP address.
Gateway Address	Input the network's gateway IP address.

IV-4-3. Configuration Tools

The “Configuration Tools” menu allows you to backup the EW-7438RPn’s settings, restore the settings to a previous version or restore the EW-7438RPn back to its factory default state. You can also upgrade the firmware, reboot the device and export the system log.

Manage Settings

Save the current settings of the device to a .bin file, restore the settings of the device to a previously saved .bin file or reset the device to its factory default settings.

Backup Settings :

Restore Settings :

Restore to Factory Defaults :

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.

Upgrade Firmware

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

Upgrade Firmware

Upgrade the firmware to the most recent version - it is recommended that you use a wired connection for the procedure.



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 computer for a firmware upgrade.

Browse	Open a new window to locate and select the firmware file in your computer.
---------------	--

Reboot

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

Reboot

In the event that the device malfunctions or is not responding, you can perform a system reboot. Click on Apply - this will reboot the device, without affecting your existing settings.

APPLY



Rebooting the EW-7438RPn will not affect the current configuration/settings of the device.

Apply	Click "Apply" to reboot the device. A status bar will indicate the progress of the reboot and you will see a confirmation screen when the reboot is complete.
--------------	---

System Log

You can export the system log to a separate file if you require.

System Log


Export system log

Export system log

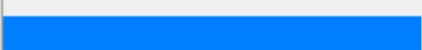
Click to open a new window and select a location to save the log file.

V. Wi-Fi Adapter/Bridge Mode

V-1. Home

 The “Status” page displays basic system information about the device, arranged into three categories: system, wireless configuration & LAN configuration.

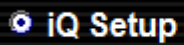
 **Screenshots displayed are examples. The information shown on your screen will vary depending on your configuration.**

System	
Uptime	0Day:0h:5m:31s
Hardware Version	Rev. v2
Firmware version	1.03 <input type="button" value="Upgrade Firmware"/>
Mode	Station-Infrastructure
Wireless Configuration	
ESSID	EdimaxHQ
Channel Number	9
Security	Disable
BSSID (MAC)	00:E0:4C:81:96:C1
State	Connected
Signal Strength	 84%
LAN Configuration	
IP Address	10.0.20.178
Subnet Mask	255.255.255.0
Default Gateway	
MAC Address	00:E0:4C:81:96:C1

Uptime	Displays the total time since the device was turned on.
Hardware Version	Displays the hardware version.
Firmware Version	Displays the firmware version.

Mode	Displays the operating mode.
ESSID	Displays your router/access point's ESSID, sometimes also known as SSID. The ESSID/SSID is the name used to identify a wireless network.
Channel Number	Displays the current wireless channel number.
Security	Displays the current wireless security setting.
BSSID (MAC)	Displays the device's BSSID. The BSSID identifies this device in the network, and is the same as the device's MAC address.
State	Displays the current connection state of the EW-7438RPn.
Signal Strength	Displays the signal strength for the specified Wi-Fi network.
IP Address	Displays the IP address of this device.
Subnet Mask	Displays the subnet mask of the IP address.
Default Gateway	Displays the IP address of the default gateway.
MAC address	Displays the device's MAC address. The MAC address is a unique, fixed ID for this device, it cannot be modified.

V-2. iQ Setup

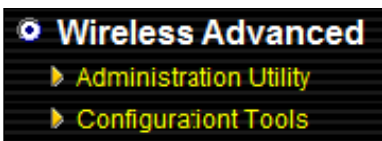
The icon consists of a white circle with a dot inside, followed by the text "iQ Setup" in white on a black rectangular background.

You can run the setup wizard again to reconfigure the basic settings of the device. Please refer to [II-2. Wi-Fi Adapter/Bridge Mode](#) for guidance.



If you wish to change the operating mode, please reset the EW-7438RPn back to factory default settings.

V-3. Wireless Advanced



In “Wireless Advanced” you adjust the power output and LED operation of the EW-7438RPn. The submenu also allows you to configure security, as well as various administrative and management functions.

Advanced functions of the extender can be configured below.

Tx Power 100 % ▾

- Enable LED Off Mode**
 - Turn off all LED indicators
 - Turn off all LED indicators except the power LED

Tx Power	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.
Enable LED Off Mode	Check this box to enable “LED Off Mode” which allows you to select “Turn off all LED indicators” or “Turn off all LED indicators except the power LED” accordingly.

V-3-1. Administration Utility

You can change the password used to login to the browser-based configuration interface here. It is advised to do so for security purposes. You can also configure the EW-7438RPn's IP address.



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 [II-5. Reset to factory default settings](#) for how to reset the device.

• Password Settings

Current Password	<input type="text"/>
New Password	<input type="text"/>
Re-Enter Password	<input type="text"/>

• 2.4GHZ.

<input checked="" type="radio"/> Obtain an IP address automatically
<input type="radio"/> Use the following IP address

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

IP Address	Specify an IP address here. This IP address will be assigned to your EW-7438RPn.
Subnet Mask	Input the subnet mask of the new IP address.
Gateway Address	Input the network's gateway IP address.

V-3-2. Configuration Tools

The “Configuration Tools” menu allows you to backup the EW-7438RPn’s settings, restore the settings to a previous version or restore the EW-7438RPn back to its factory default state. You can also upgrade the firmware, reboot the device and export the system log.

Manage Settings

Save the current settings of the device to a .bin file, restore the settings of the device to a previously saved .bin file or reset the device to its factory default settings.

Backup Settings :

Restore Settings :

Restore to Factory Defaults :

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.

Upgrade Firmware

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

Upgrade Firmware

Upgrade the firmware to the most recent version - it is recommended that you use a wired connection for the procedure.



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 computer for a firmware upgrade.

Browse	Open a new window to locate and select the firmware file in your computer.
---------------	--

Reboot

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

Reboot

In the event that the device malfunctions or is not responding, you can perform a system reboot. Click on Apply - this will reboot the device, without affecting your existing settings.

APPLY



Rebooting the EW-7438RPn will not affect the current configuration/settings of the device.

Apply	Click "Apply" to reboot the device. A status bar will indicate the progress of the reboot and you will see a confirmation screen when the reboot is complete.
--------------	---

System Log

You can export the system log to a separate file if you require.

System Log


Export system log

Export system log

Click to open a new window and select a location to save the log file.

VI. Access Point Mode

VI-1. Home

 The “Status” page displays basic system information about the device, arranged into three categories: system, wireless configuration & LAN configuration.


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

System	
Uptime	0Day:0h:55m:17s
Hardware Version	Rev. v2
Firmware version	1.03 <input type="button" value="Upgrade Firmware"/>
Mode	AP
Wireless Configuration	
ESSID	EdimaxAPc1
Channel Number	13
Security	WPA-Shared Key
BSSID (MAC)	00:E0:4C:81:96:C1
Associated Clients	1 <input type="button" value="Show Active Clients"/>
State	Connected
LAN Configuration	
IP Address	192.168.10.128
Subnet Mask	255.255.255.0
Default Gateway	
MAC Address	00:E0:4C:81:96:C1

Uptime	Displays the total time since the device was turned on.
Hardware Version	Displays the hardware version.
Firmware Version	Displays the firmware version.
Mode	Displays the operating mode.

ESSID	Displays the access point's ESSID, sometimes also known as SSID. The ESSID/SSID is the name used to identify a wireless network.
Channel Number	Displays the current wireless channel number.
Security	Displays the current wireless security setting.
BSSID (MAC)	Displays the device's BSSID. The BSSID identifies this access point in the network, and is the same as the device's MAC address.
Associated Clients	Displays the number of clients connected to the access point. Click "Show Active Clients" to display a new window showing information about wireless clients.
State	Displays the current connection state of the EW-7438RPn.
IP Address	Displays the IP address of this device.
Subnet Mask	Displays the subnet mask of the IP address.
Default Gateway	Displays the IP address of the default gateway.
MAC address	Displays the device's MAC address. The MAC address is a unique, fixed ID for this device, it cannot be modified.

VI-2. iQ Setup

 You can run the setup wizard again to reconfigure the basic settings of the device. Please refer to [II-3. Wi-Fi Access Point Mode Step 3](#) onwards for guidance.



If you wish to change the operating mode, please reset the EW-7438RPn back to factory default settings.

VI-3. Basic Settings

Basic Settings

The “Basic Settings” screen displays various settings for your wireless network.

Mode	AP ▾
Band	2.4 GHz (B+G+N) ▾
MAIN ESSID	EdimaxAPc1 <input type="button" value="Multiple ESSID"/>
AP Isolation (Client user isolation)	Disabled ▾
Channel Number	Auto ▾
Associated Clients	<input type="button" value="Show Active Clients"/>

Mode	The EW-7438RPn’s mode is displayed here.
Band	Displays the wireless standard used for the EW-7438RPn. “2.4GHz (B+G+N)” means that 802.11b, 802.11g, and 802.11n wireless clients can connect to the EW-7438RPn.
MAIN ESSID	This is the name of your Wi-Fi network for identification, also sometimes referred to as “SSID”. The ESSID can consist of any combination of up to 32 alphanumeric characters.
Multiple ESSID	Click “Multiple ESSID” to open a new window and assign up to four ESSIDs to this access point. Please see the following page for more details.
AP Isolation	When “Enabled”, wireless clients will be able to access the Internet, but will not be able to communicate with each other. This applies to clients connected to the MAIN ESSID only.
Channel Number	Select a wireless radio channel or use the default “Auto” setting from the drop-down menu.
Associated 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.

Multiple ESSID

This page allows you to configure the wireless settings for multiple ESSID's.

Multiple ESSID

This page allows you to configure the wireless settings for Multiple ESSIDs. The wireless security settings for these ESSIDs can be configured in Security page.

No.	Enable	Associated Clients	Basic Settings	Advanced Setting			
			SSID	Broadcast SSID	WMM	Band	AP Isolation (Client user isolation)
ESSID1	<input checked="" type="checkbox"/>	Show Active Clients	Guest Network	Enable ▾	Enable ▾	2.4 GHz (B+G+N) ▾	Disable ▾
ESSID2	<input type="checkbox"/>	Show Active Clients		Enable ▾	Enable ▾	2.4 GHz (B+G+N) ▾	Disable ▾
ESSID3	<input type="checkbox"/>	Show Active Clients		Enable ▾	Enable ▾	2.4 GHz (B+G+N) ▾	Disable ▾
ESSID4	<input type="checkbox"/>	Show Active Clients		Enable ▾	Enable ▾	2.4 GHz (B+G+N) ▾	Disable ▾

No.	Identification number of each additional ESSID.
Enable	Check the box to enable or disable an ESSID.
SSID	Enter the SSID (the name used to identify this wireless access point) here. You can input up to 32 alphanumerical characters. Please note that the ESSID is case sensitive.
Broadcast SSID	Enable or disable ESSID broadcast. When enabled, the ESSID will be visible to clients as an available Wi-Fi network. When disabled, the ESSID will not be visible as an available Wi-Fi network to clients – clients must manually enter the ESSID in order to connect. A hidden (disabled) ESSID is typically more secure than a visible (enabled) SSID.
WMM	WMM (Wi-Fi Multimedia) technology can improve the performance of certain network applications, such as audio/video streaming, network telephony (VoIP), and others. When WMM is enabled, the access point will prioritize different kinds of data and give higher priority to applications which require instant responses. This improves the performance of such network applications.
Band	Select the wireless band you wish to use for the access point: 802.11b, 802.11g, 802.11n

	or selected combinations of each. Only wireless clients of the same band(s) as you select will be able to connect.
AP Isolation	When “Enabled”, wireless clients will be able to access the Internet, but will not be able to communicate with each other.

VI-4. WPS Settings

WPS Setting

Wi-Fi Protected Setup is a simple way to establish connections between WPS compatible devices. 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.

The WPS Settings page displays settings for WPS between your extender and a **wireless client**.



Do not use the physical WPS button (described in [II-4. WPS Setup](#)) in access point mode. Use the settings below instead.

2.4G Wi-Fi Protected Setup Information

WPS Status	Configured
Self PinCode	35611530
Device SSID	EdimaxAPc1
Security Type	WPA pre-shared key
Passphrase Key	abcd1234

Device Configure

Configuration Mode Device is as an AP	Registrar
Configure via Push Button	<input type="button" value="Start PBC"/>
Input Client PIN Code	<input type="text"/> <input type="button" value="Send PIN"/>

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.
Device SSID	Displays the SSID (ESSID) of the device.
Security Type	Displays the wireless security authentication mode of the device.
Passphrase 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 EW-7438RPn. WPS will be active for 2 minutes.
Input 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.

VI-5. Wireless Advanced



Using the “Wireless Advanced” menu, you can configure security, MAC filtering and various other settings.

The settings on the “Wireless Advanced” page shown below are for experienced users only. Please do not change any of the values on this page unless you are already familiar with these functions.

 ***Changing these settings can adversely affect the performance of your access point.***

Fragment Threshold	<input type="text" value="2346"/> (256-2346)
RTS Threshold	<input type="text" value="2347"/> (0-2347)
Beacon Interval	<input type="text" value="100"/> (20-1024 ms)
DTIM Period	<input type="text" value="3"/> (1-10)
Data Rate	Auto ▾
N Data Rate	Auto ▾
Channel Width	<input checked="" type="radio"/> Auto 20/40MHz <input type="radio"/> 20MHz
Preamble Type	<input checked="" type="radio"/> Short Preamble <input type="radio"/> Long Preamble
Broadcast ESSID	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
WMM	<input type="radio"/> Enabled <input type="radio"/> Disabled
CTS Protect	<input checked="" type="radio"/> Auto <input type="radio"/> Always <input type="radio"/> None
Tx Power	<input type="text" value="100 %"/> ▾

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”.
Broadcast ESSID	Enable or disable ESSID broadcast. When enabled, the ESSID will be visible to clients as an available Wi-Fi network. When disabled, the ESSID will not be visible as an available Wi-Fi network to clients – clients must manually enter the ESSID in order to connect. A hidden (disabled) ESSID is typically more secure than a visible (enabled) SSID. WPS (Wi-Fi Protected Setup) is also disabled when SSID broadcast is disabled.
WMM	WMM (Wi-Fi Multimedia) technology can improve the performance of certain network applications, such as audio/video streaming, network telephony (VoIP) and others. When WMM is enabled, the device will prioritize different kinds of data and give higher priority to applications which require instant responses for better performance.
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.

VI-5-1. Security

The access point provides a variety of wireless security options (wireless data encryption). When data is encrypted, information transmitted wirelessly cannot be read by anyone who does not know the encryption key. The “Security” screen displays security settings for your EW-7438RPn.

• Select SSID

Device SSID	EdimaxAPc1 ▾
-------------	--------------

• Security Settings


Security Type	WPA pre-shared key ▾
WPA Unicast Cipher Suite	<input type="radio"/> WPA(TKIP) <input checked="" type="radio"/> WPA2(AES) <input type="radio"/> WPA2 Mixed
Pre-Shared Key Format	Passphrase ▾
Security Key	abcd1234

SSID choice	Select which SSID to configure security settings for.
--------------------	---

Encryption	Select an SSID from the drop down menu to configure security for. Refer to the next sections for more details about each security type.
-------------------	---

VI-5-1-1. Disable

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

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

• Security Settings

Security Type	Disable ▼
<input type="checkbox"/> Enable 802.1x Authentication	

Enable 802.1x Authentication	Check the box to enable the 802.1x authentication. A RADIUS server is required to perform 802.1x authentication.
-------------------------------------	--

VI-5-1-2. WEP

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

 **WEP supports data rates up to 54Mbps.**

• Security Settings

Security Type	WEP ▼
Key Length	64-bit ▼
Key Format	HEX (10 Characters) ▼
Default Key	Key 1 ▼
Security Key	<input type="text"/>
<input type="checkbox"/> Enable 802.1x Authentication	

Key Length	Select 64-bit or 128bit. 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.

VI-5-1-3. WPA pre-shared key

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

 **WPA (TKIP) supports data rates up to 54Mbps.**

• Security Settings

Security Type	WPA pre-shared key ▾
WPA Unicast Cipher Suite	<input type="radio"/> WPA(TKIP) <input checked="" type="radio"/> WPA2(AES) <input type="radio"/> WPA2 Mixed
Pre-Shared Key Format	Passphrase ▾
Security Key	abcd1234

WPA Unicast Cipher Suite	Select from WPA (TKIP), WPA2 (AES) or WPA2 Mixed. WPA2 (AES) is safer than WPA (TKIP). 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.

VI-5-1-4. WPA RADIUS

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

• Security Settings

Security Type	WPA RADIUS ▾
WPA Unicast Cipher Suite	<input type="radio"/> WPA(TKIP) <input checked="" type="radio"/> WPA2(AES) <input type="radio"/> WPA2 Mixed
RADIUS Server IP Address	<input type="text"/>
RADIUS Server Port	1812
RADIUS Server Password	<input type="text"/>

WPA Unicast Cipher Suite	Select from WPA (TKIP), WPA2 (AES) or WPA2 Mixed. WPA2 (AES) is safer than WPA (TKIP). 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.

VI-5-2. MAC Filtering

The MAC filtering feature allows you to define a list of wireless devices permitted to connect to this access point, identified by their unique MAC address. When this feature is enabled, devices which are not on the list of permitted MAC addresses cannot connect to the access point.

Select SSID
EdimaxAPc1 ▾

• **MAC Address Filtering Table**
 Only 20 entries are allowed.

NO.	MAC Address	Comment	Select
1	aa:bb:cc:dd:ee:ff	Edimax	<input type="checkbox"/>

Delete Selected
Delete All
Reset

Enable Wireless Access Control

New	MAC Address: <input style="width: 90%;" type="text"/>	Comment: <input style="width: 90%;" type="text"/>	<input type="button" value="Add"/> <input type="button" value="Clear"/>
-----	--	--	---

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

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

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

MAC address	Enter a MAC address of computer or network device 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.
Clear	Clear all fields.

VI-5-3. Administration Utility

You can change the password used to login to the browser-based configuration interface here. It is advised to do so for security purposes. You can also configure the EW-7438RPn's IP address.



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 [II-5. Reset to factory default settings](#) for how to reset the device.

• Password Settings

Current Password	<input type="text"/>
New Password	<input type="text"/>
Re-Enter Password	<input type="text"/>

• Management IP

<input checked="" type="radio"/> Obtain an IP address automatically	
<input type="radio"/> Use the following IP address	
IP Address	<input type="text" value="192.168.9.2"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Gateway Address	<input type="text"/>

• DHCP Server

DHCP Server	<input type="text" value="Disabled"/>
Default Gateway	<input type="text" value="192.168.9.2"/>
Start IP	<input type="text" value="192.168.9.100"/>
End IP	<input type="text" value="192.168.9.200"/>
Lease Time	<input type="text" value="Forever"/>

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

IP Address	Specify an IP address here. This IP address will be assigned to yourEW-7438RPn.
Subnet Mask	Input the subnet mask of the new IP address.
Gateway Address	Input the network's gateway IP address.



Please refer to [VII-1. Configuring your IP address](#) for more information about changing the access point's IP address.

VI-5-4. Configuration Tools

The “Configuration Tools” menu allows you to backup the EW-7438RPn’s settings, restore the settings to a previous version or restore the EW-7438RPn back to its factory default state. You can also upgrade the firmware, reboot the device and export the system log.

Manage Settings

Save the current settings of the device to a .bin file, restore the settings of the device to a previously saved .bin file or reset the device to its factory default settings.

Backup Settings :

Restore Settings :

Restore to Factory Defaults :

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.

Upgrade Firmware

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

Upgrade Firmware

Upgrade the firmware to the most recent version - it is recommended that you use a wired connection for the procedure.



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.

Browse	Open a new window to locate and select the firmware file in your computer.
---------------	--

Reboot

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

Reboot

In the event that the device malfunctions or is not responding, you can perform a system reboot. Click on Apply - this will reboot the device, without affecting your existing settings.

APPLY



Rebooting the EW-7438RPn will not affect the current configuration/settings of the device.

Apply	Click "Apply" to reboot the device. A status bar will indicate the progress of the reboot and you will see a confirmation screen when the reboot is complete.
--------------	---

System Log

You can export the system log to a separate file if you require.

System Log

Export system log

Export system log

Click to open a new window and select a location to save the log file.

VII. Appendix

VII-1. Configuring your IP address

For first time access to the URL ***http://Edimax.Setup*** please ensure your computer is set to use a dynamic IP address. This means your computer can obtain an IP address automatically from a DHCP server. You can check if your computer is set to use a dynamic IP address by following [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-7438RPn in order to access ***http://Edimax.Setup***.



The EW-7438RPn'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 [IV-1-2. How to modify the IP address of your computer.](#)



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

You can assign a new IP address to the device which is within the subnet of your network during setup or using the browser based configuration interface, so that you can access the URL ***http://Edimax.Setup*** in future without modifying your IP address.



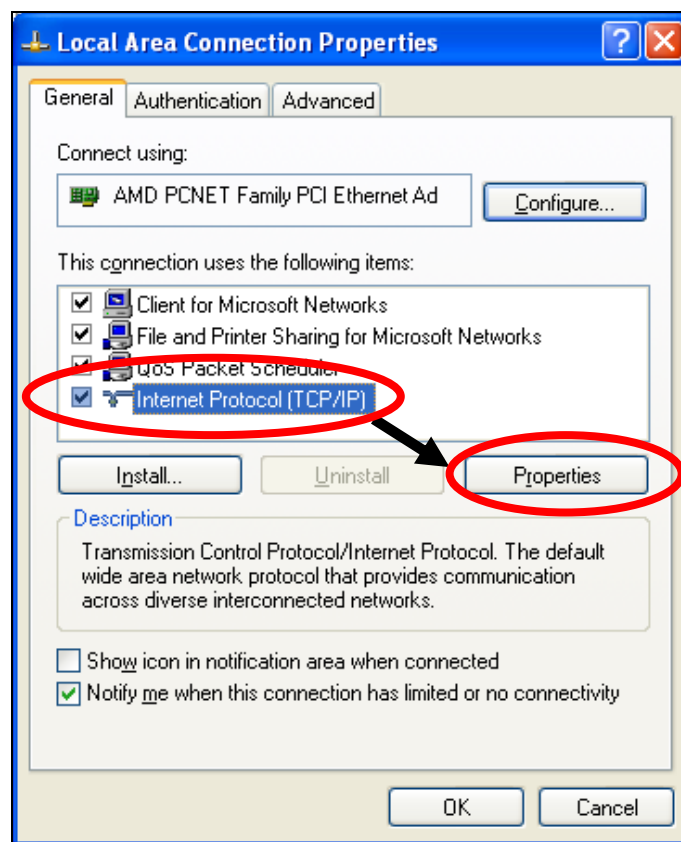
Please remember to change your IP address back to its original value after the device is properly configured.

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

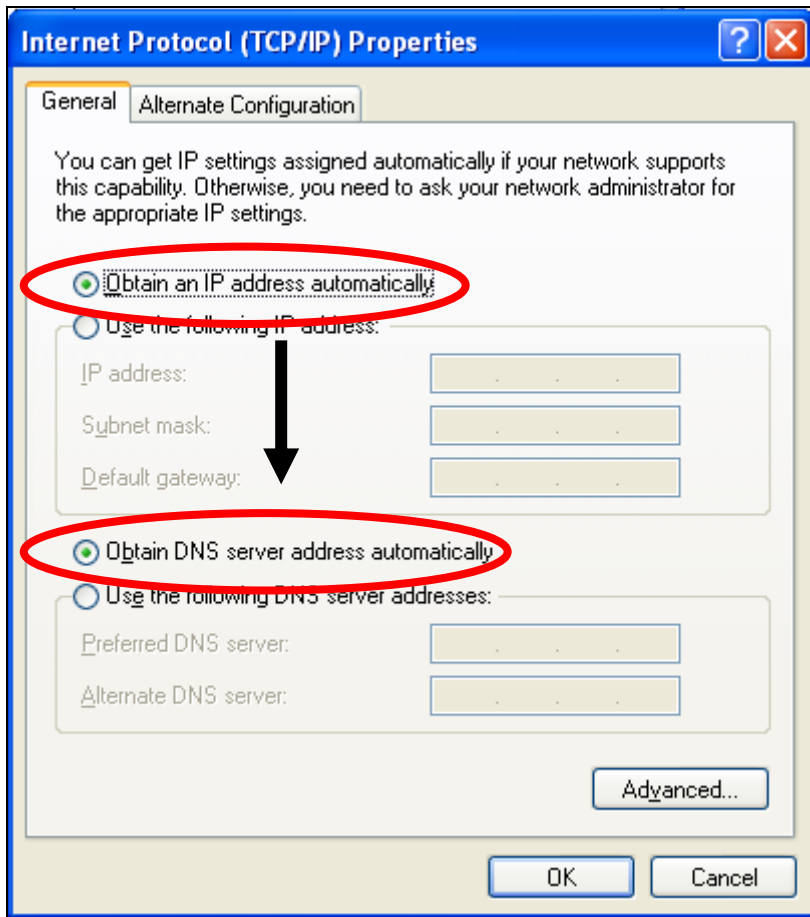
Please follow the instructions appropriate for your operating system.

VII-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”.

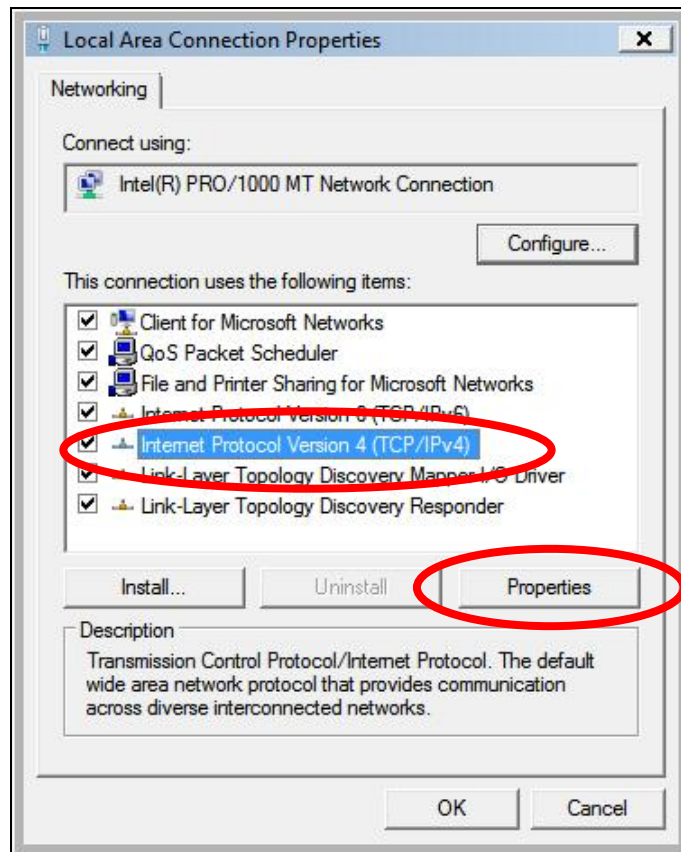


2. “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

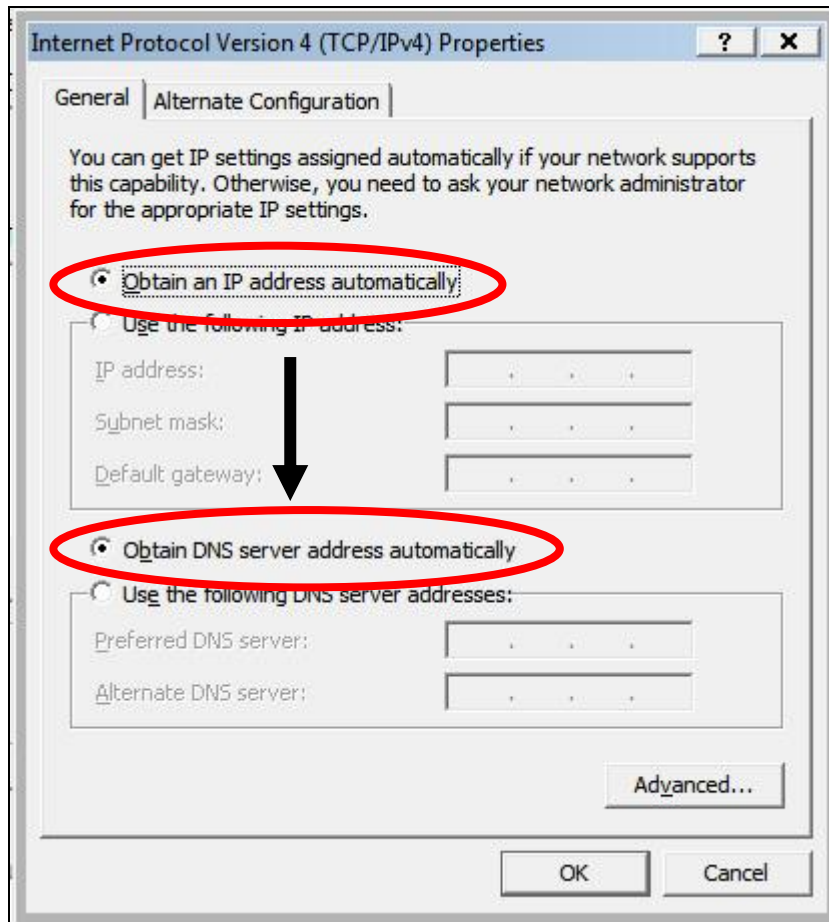


VII-1-1-2. Windows Vista

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”.

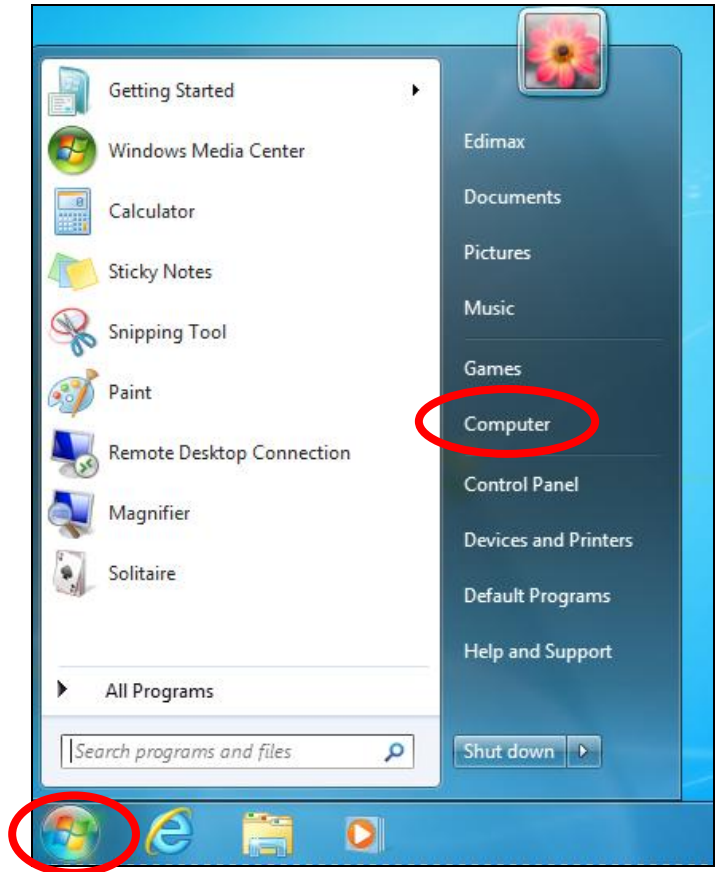


2. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

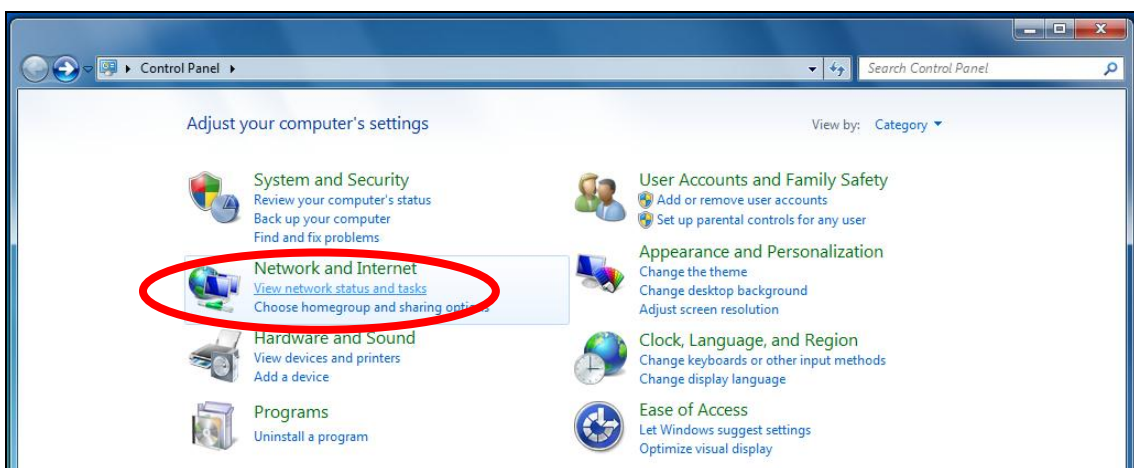


VII-1-1-3. Windows 7

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



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



3. Click “Local Area Connection”.

View your basic network information and set up connections

TS-WIN7 (This computer) — Home network — ~~Internet~~ [See full map](#)

View your active networks [Connect or disconnect](#)

Home network
Home network

Access type: No Internet access
HomeGroup: [Ready to create](#)
Connections: [Local Area Connection](#)

4. Click “Properties”.

Local Area Connection Status

General

Connection

IPv4 Connectivity: No Internet access
IPv6 Connectivity: No network access
Media State: Enabled
Duration: 02:08:52
Speed: 100.0 Mbps

[Details...](#)

Activity

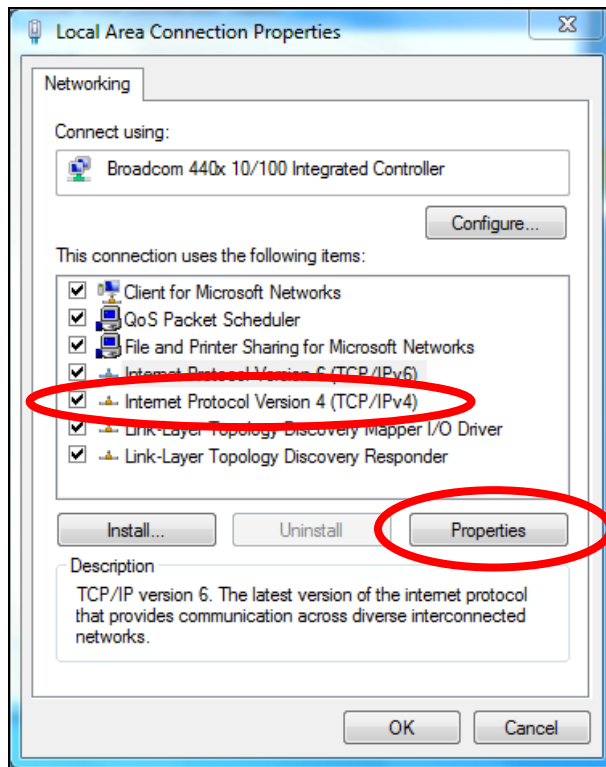
Sent — Received

Bytes: 951,332 | 4,398,184

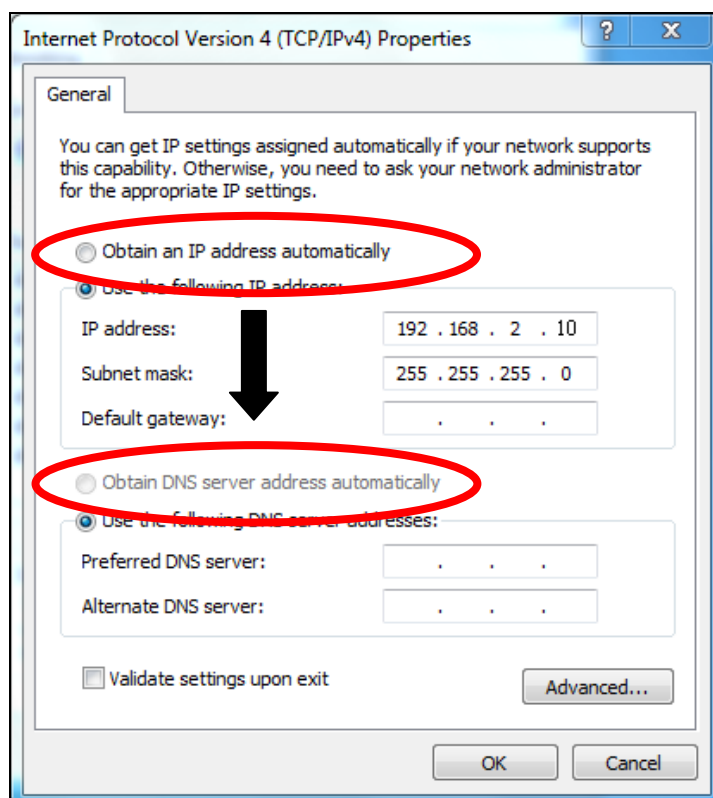
[Properties](#) [Disable](#) [Diagnose](#)

[Close](#)

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

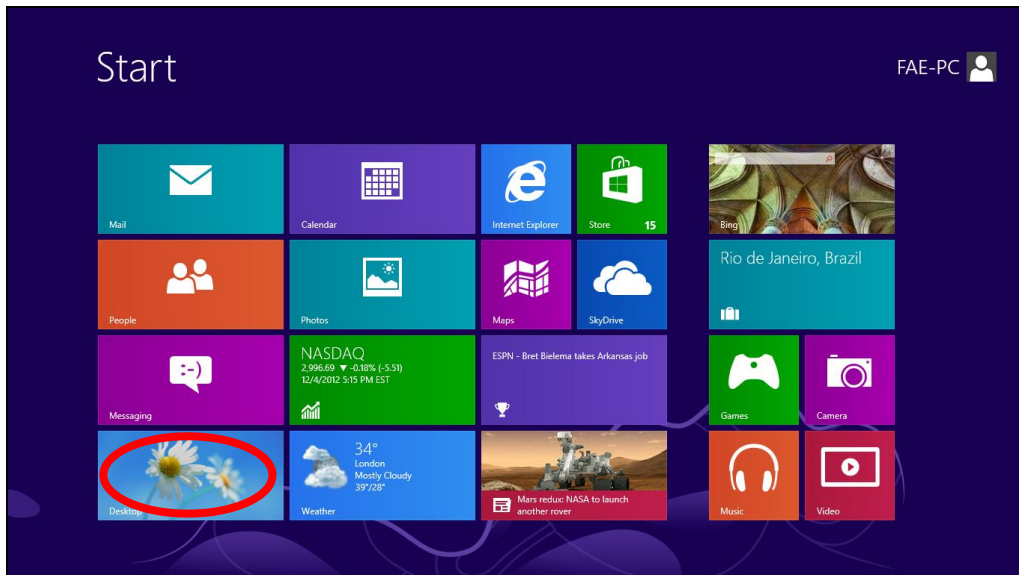


6. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.

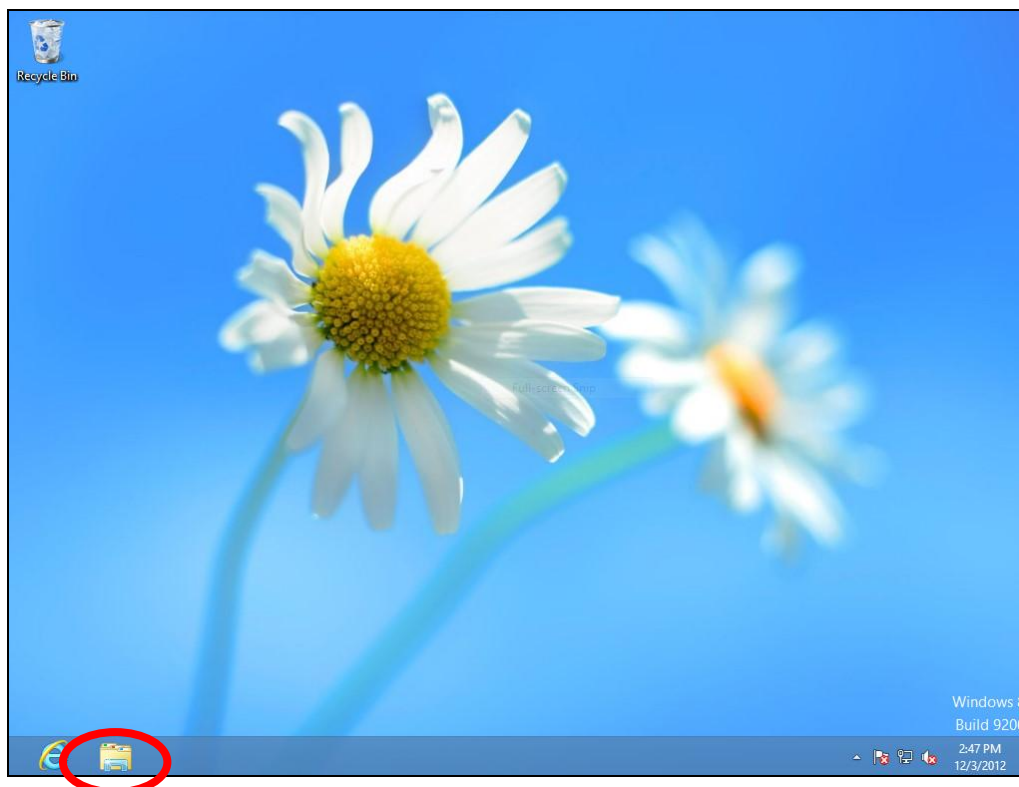


VII-1-1-4. Windows 8

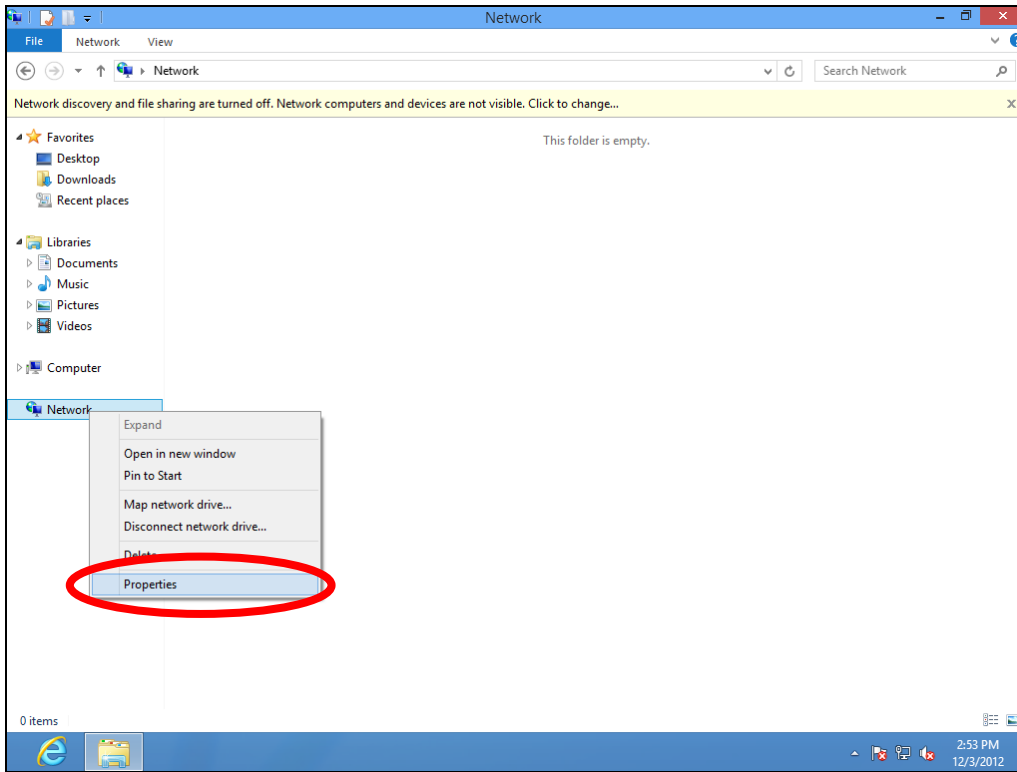
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your cursor to the bottom left of the screen and click.



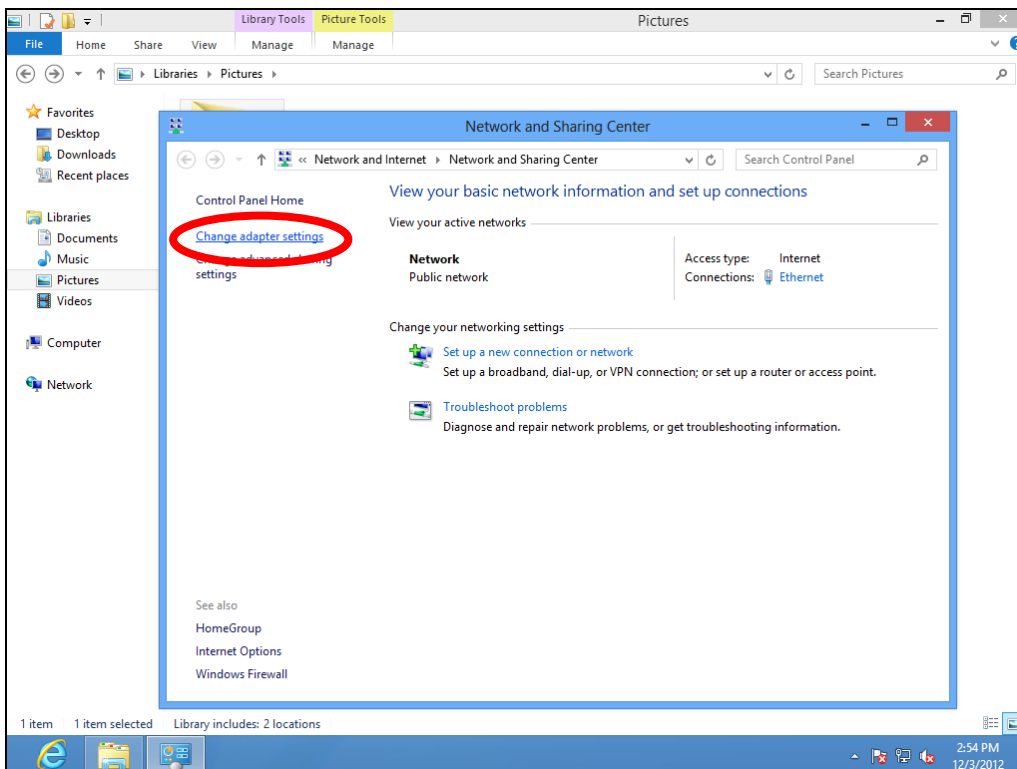
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



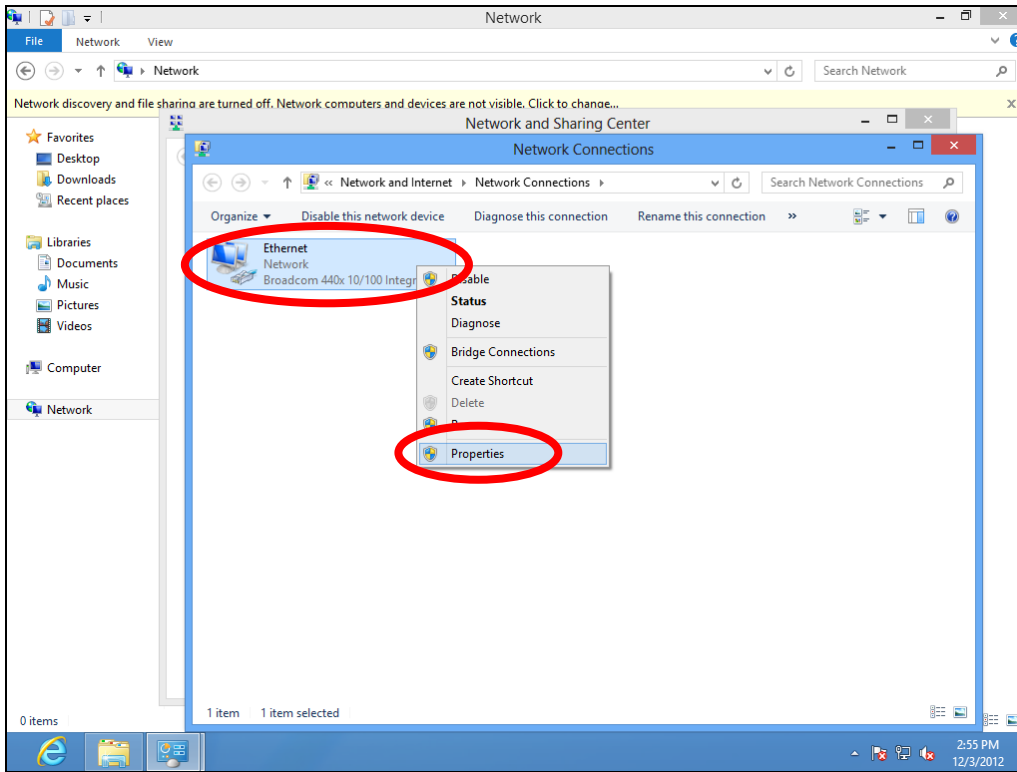
3. Right click "Network" and then select "Properties".



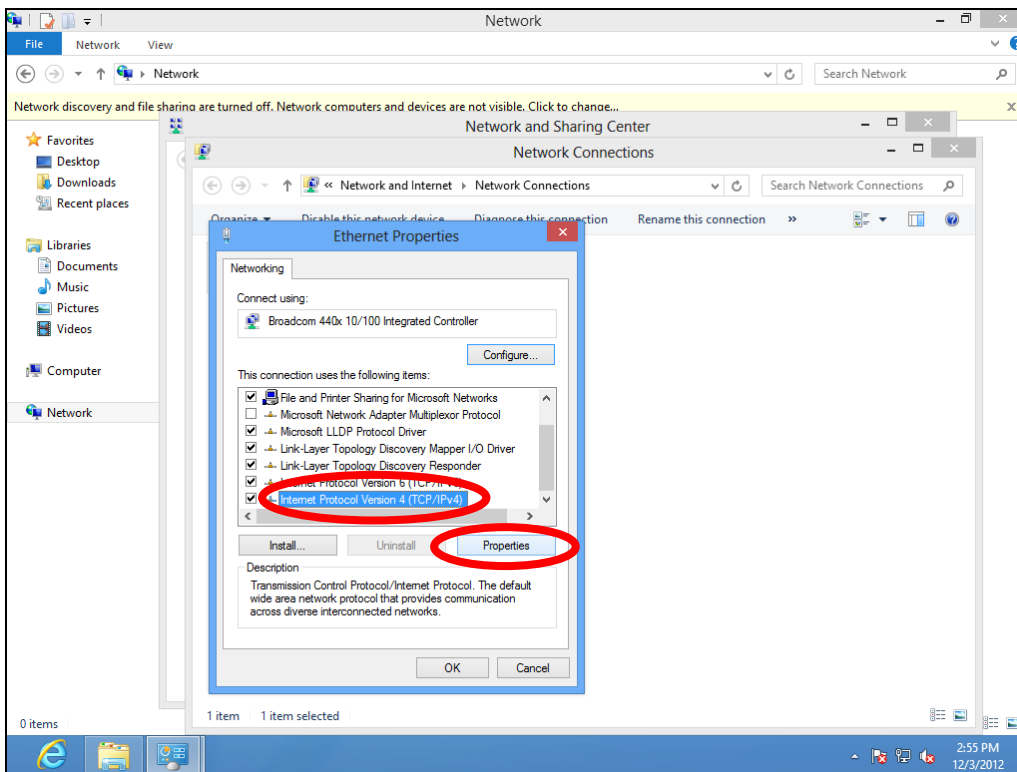
4. In the window that opens, select "Change adapter settings" from the left side.



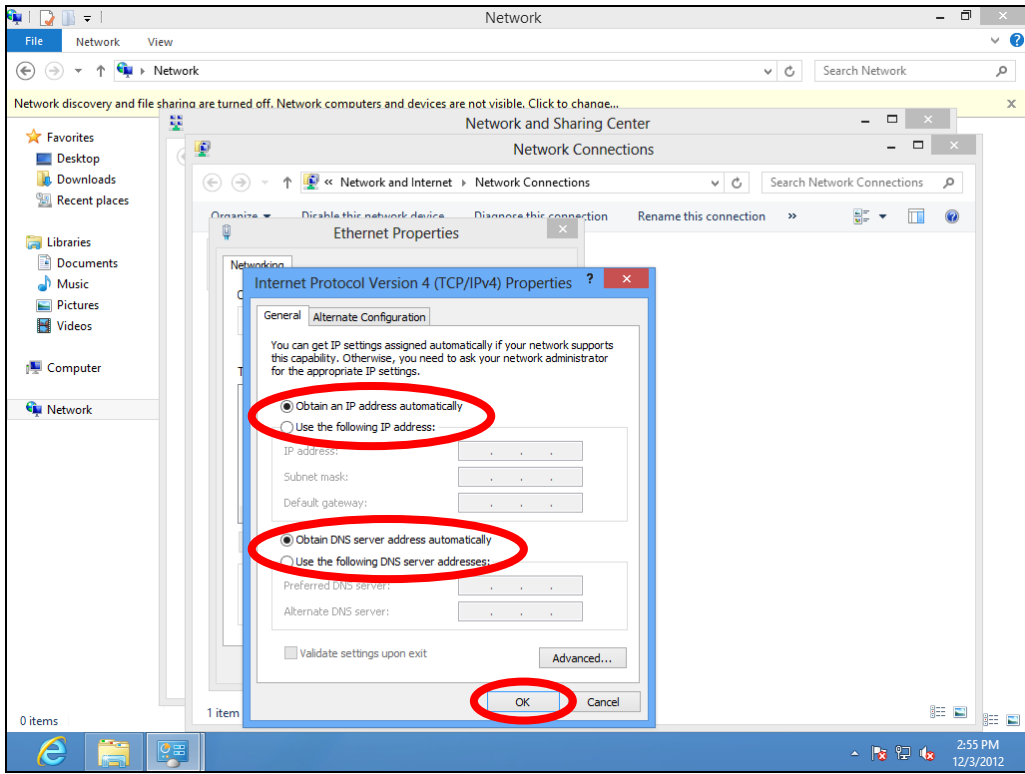
5. Choose your connection and right click, then select "Properties".



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

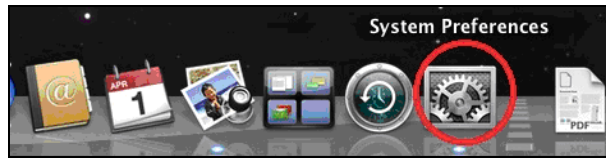


7. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically” should be selected.



VII-1-1-5. Mac OS

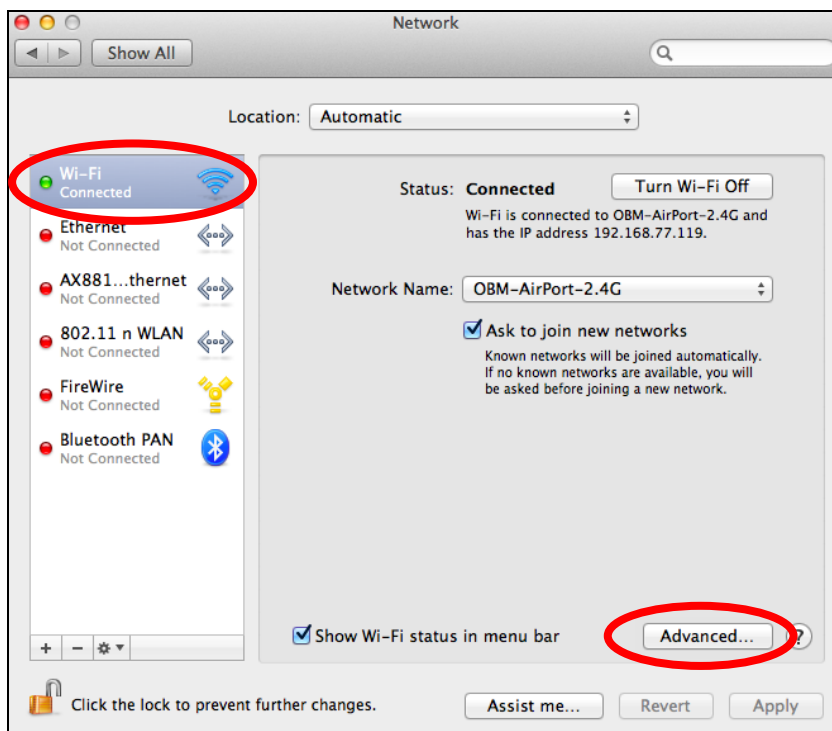
1. Have your Macintosh computer operate as usual, and click on “System Preferences”.



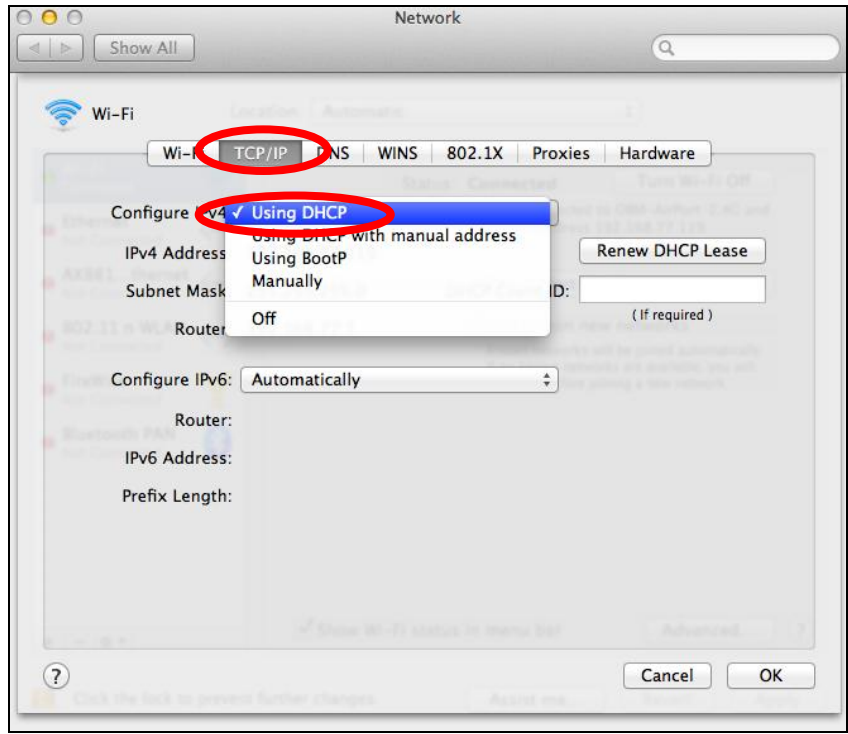
2. In System Preferences, click on “Network”.



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.



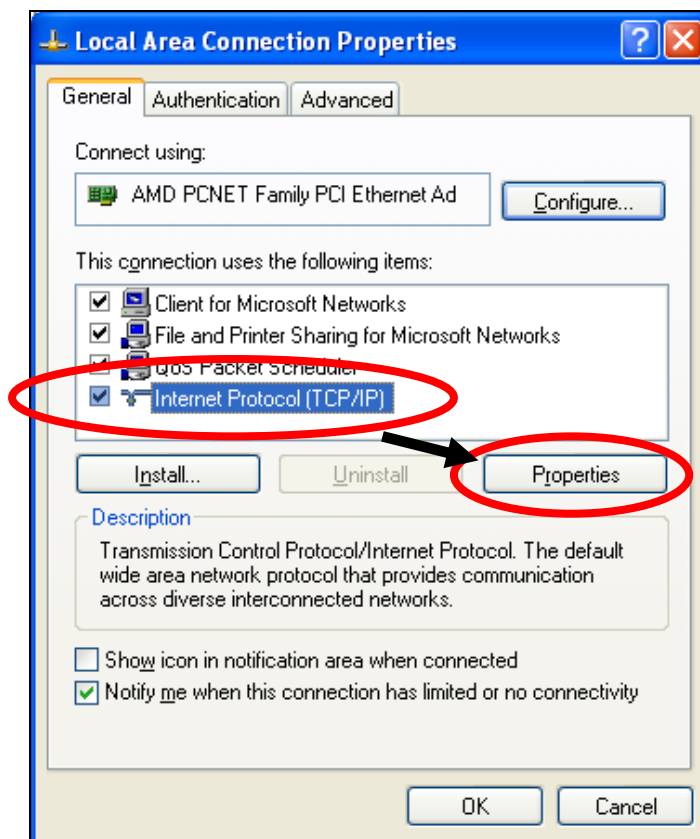
VII-1-2. How to modify the IP address of your computer

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:

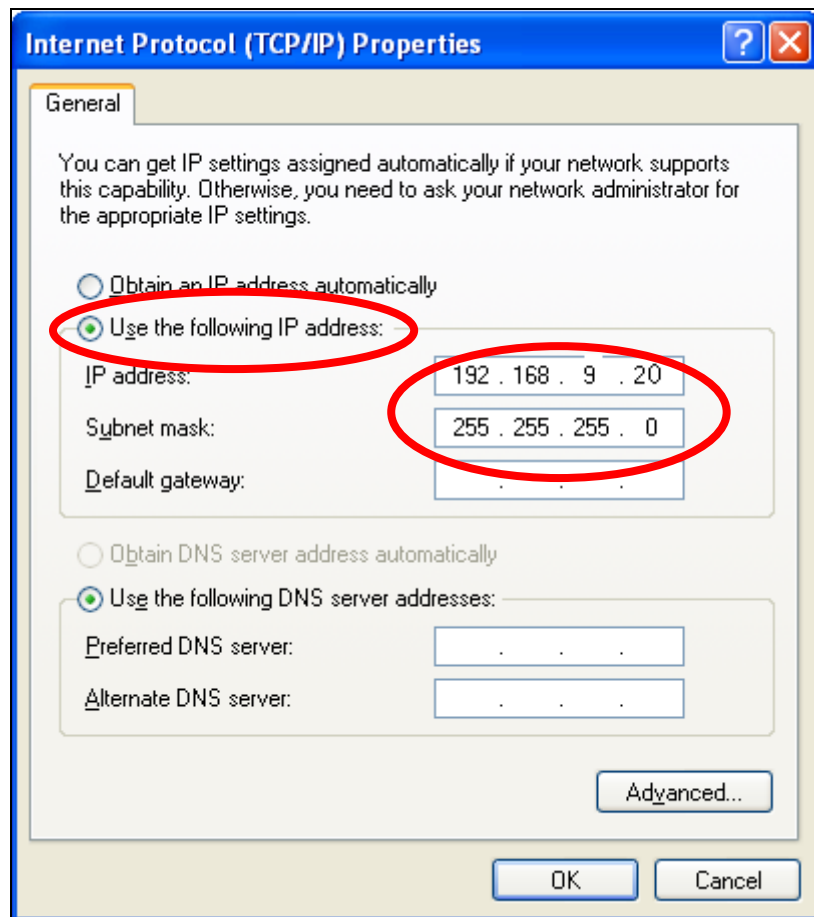
 **Your existing static IP address will be displayed in the “IP address” field before you replace it. Please make a note of this IP**

address, subnet mask, default gateway and DNS server addresses.

IP address: 192.168.9.20

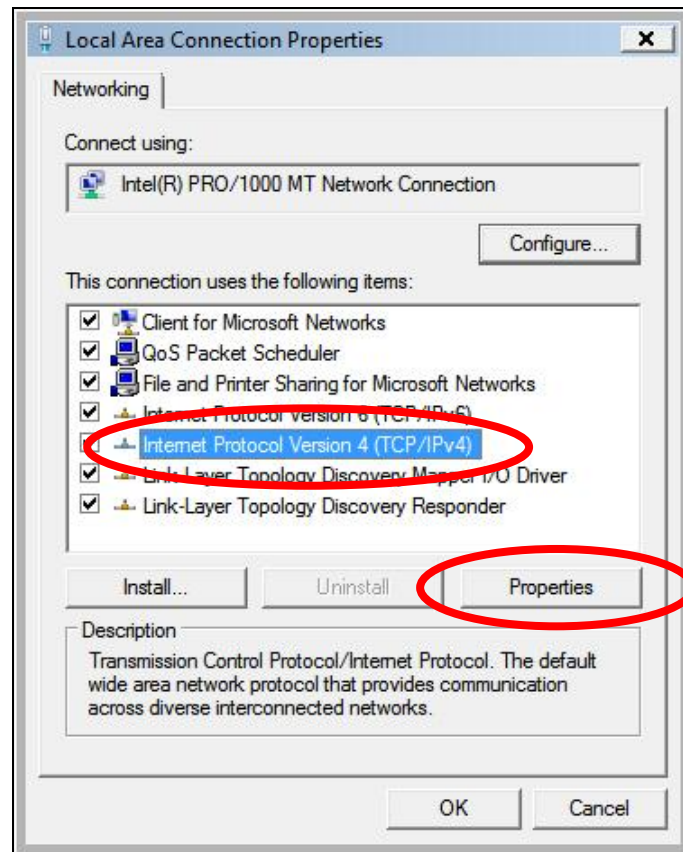
Subnet Mask: 255.255.255.0

Click 'OK' when finished.



VII-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:

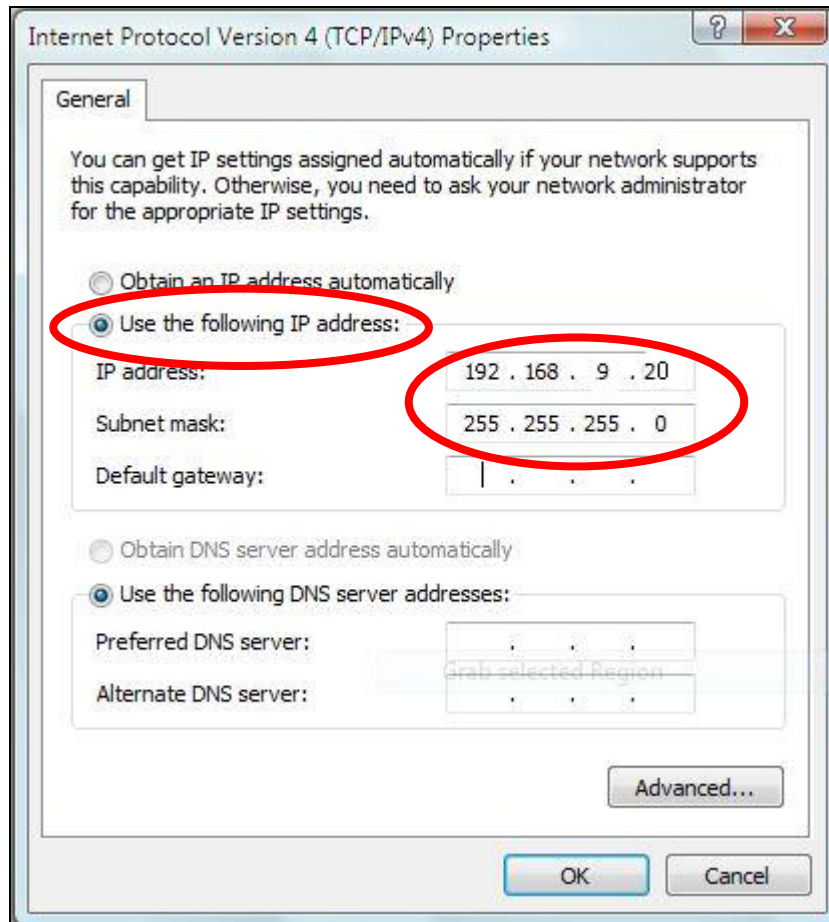


Your existing static IP address will be displayed in the “IP address” field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

IP address: 192.168.9.20

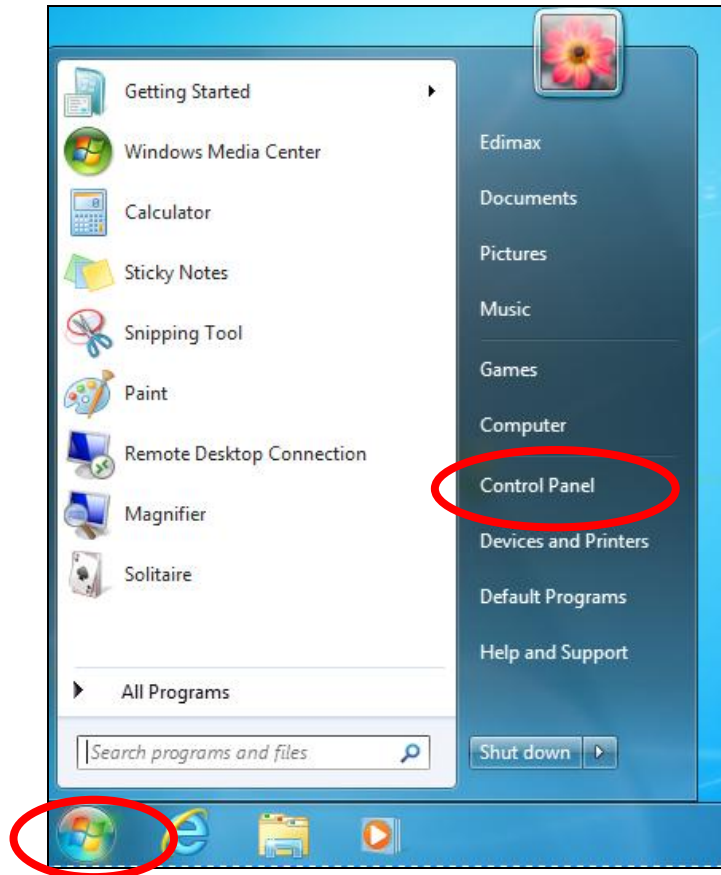
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

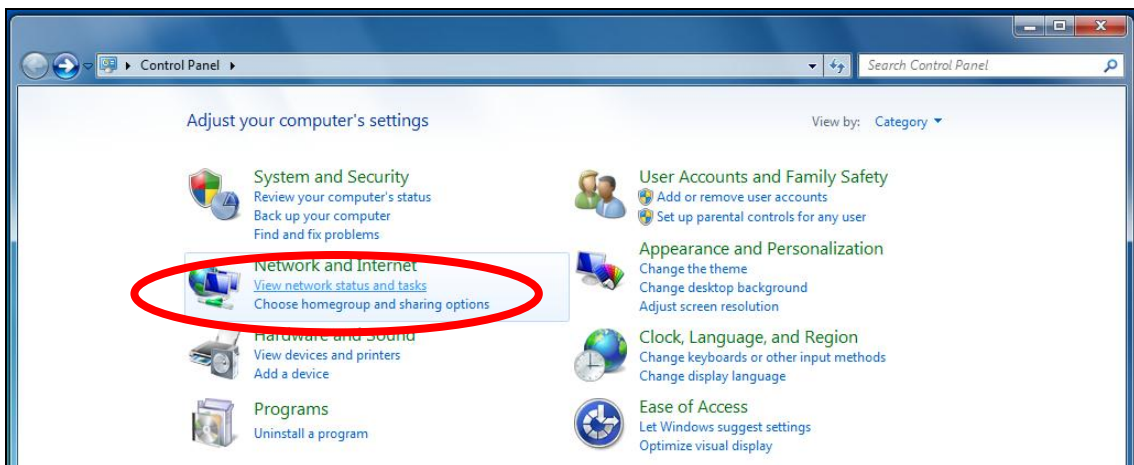


VII-1-2-3. Windows 7

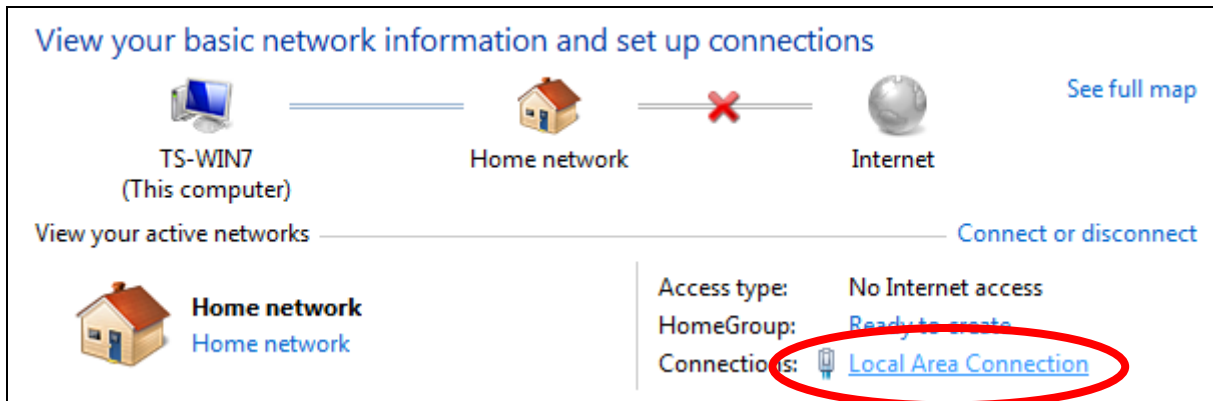
1. Click the “Start” button (it should be located in the lower-left corner of your computer), then click “Control Panel”.



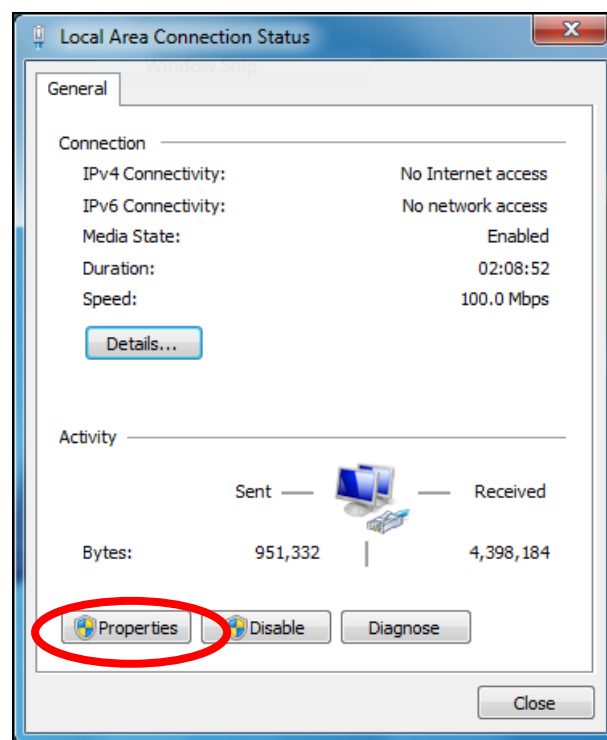
2. Under “Network and Internet” click “View network status and tasks”.



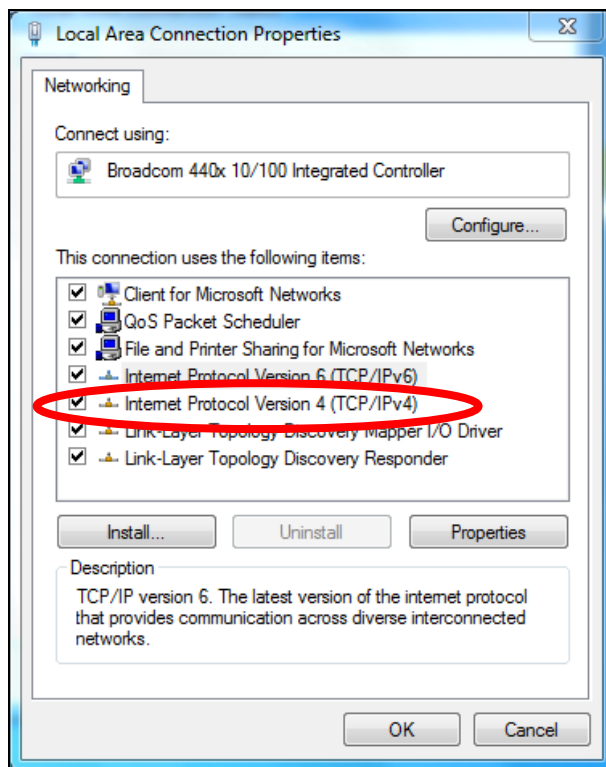
3. Click “Local Area Connection”.




4. Click “Properties”.



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



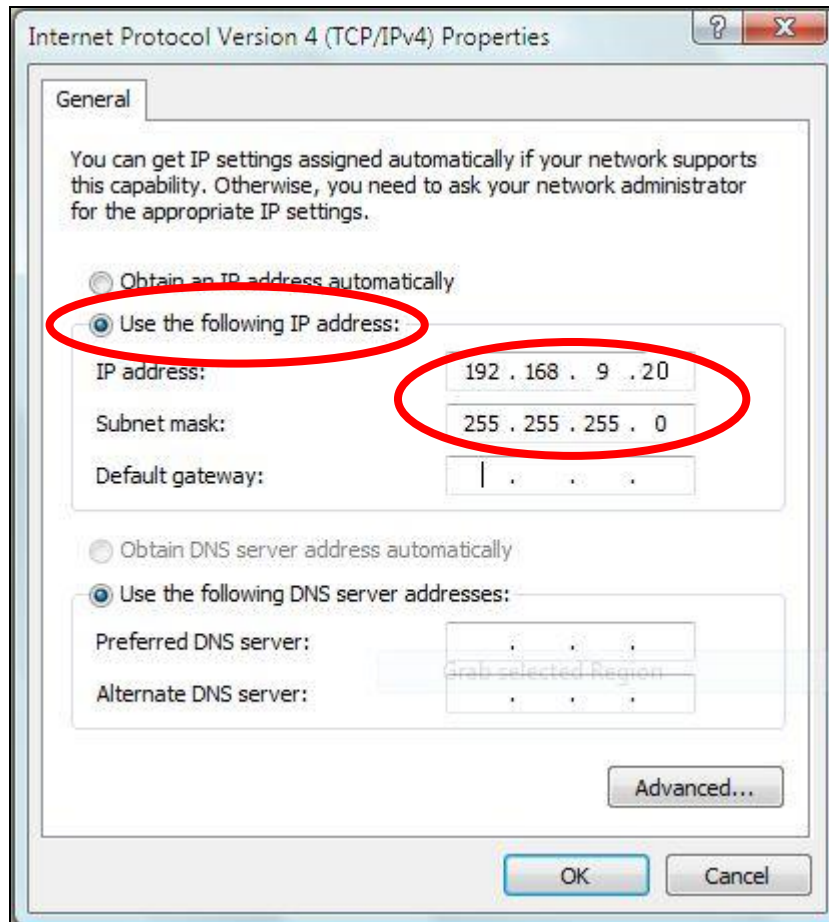
6. Select “Use the following IP address”, then input the following values:

 ***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

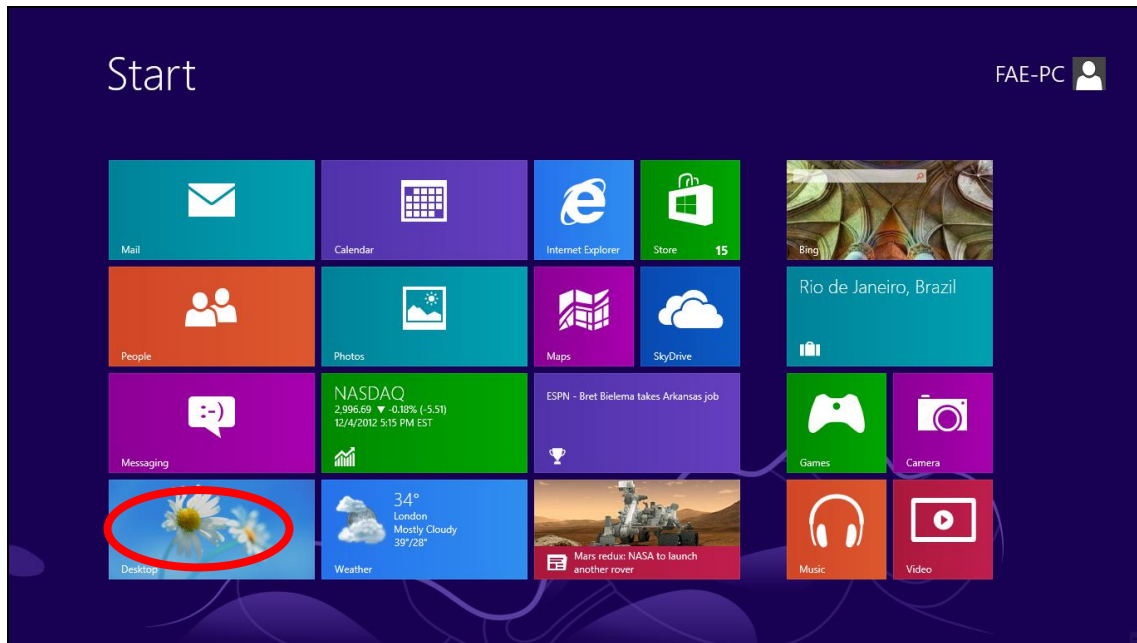
Subnet Mask: 255.255.255.0

Click ‘OK’ when finished.

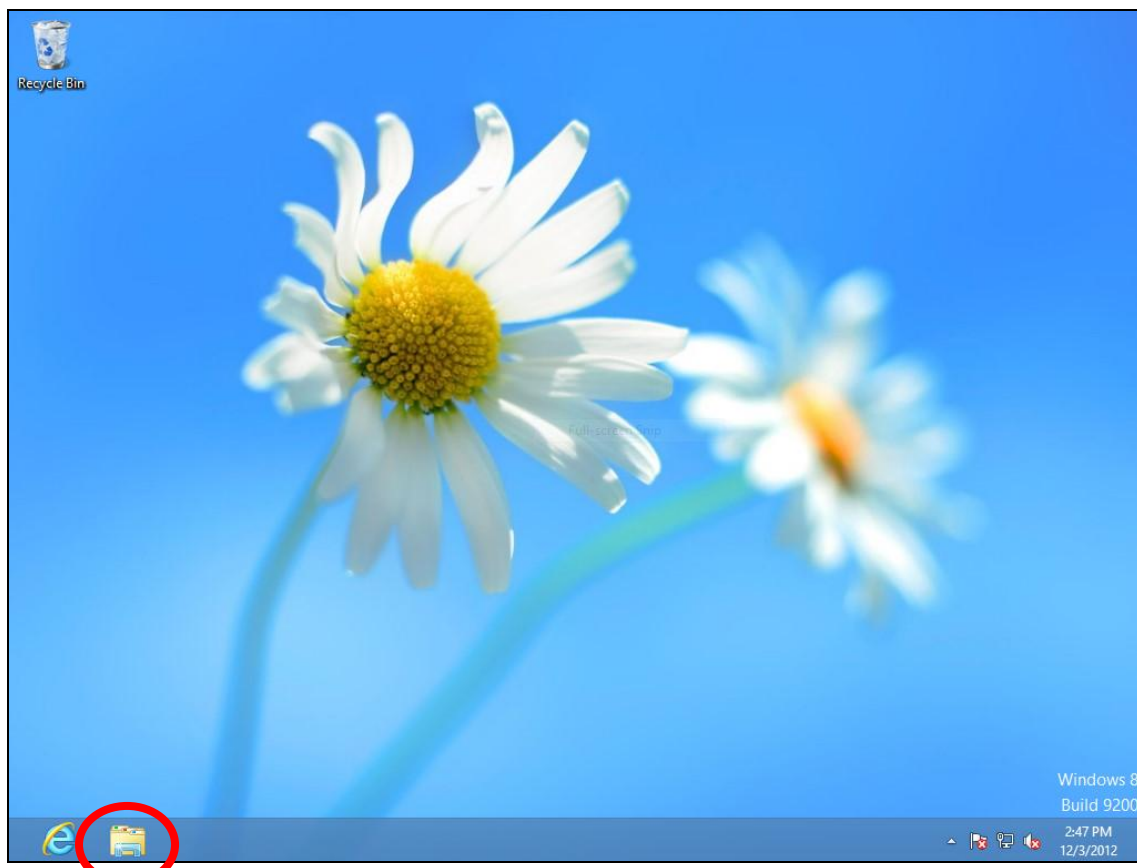


VII-1-2-4. Windows 8

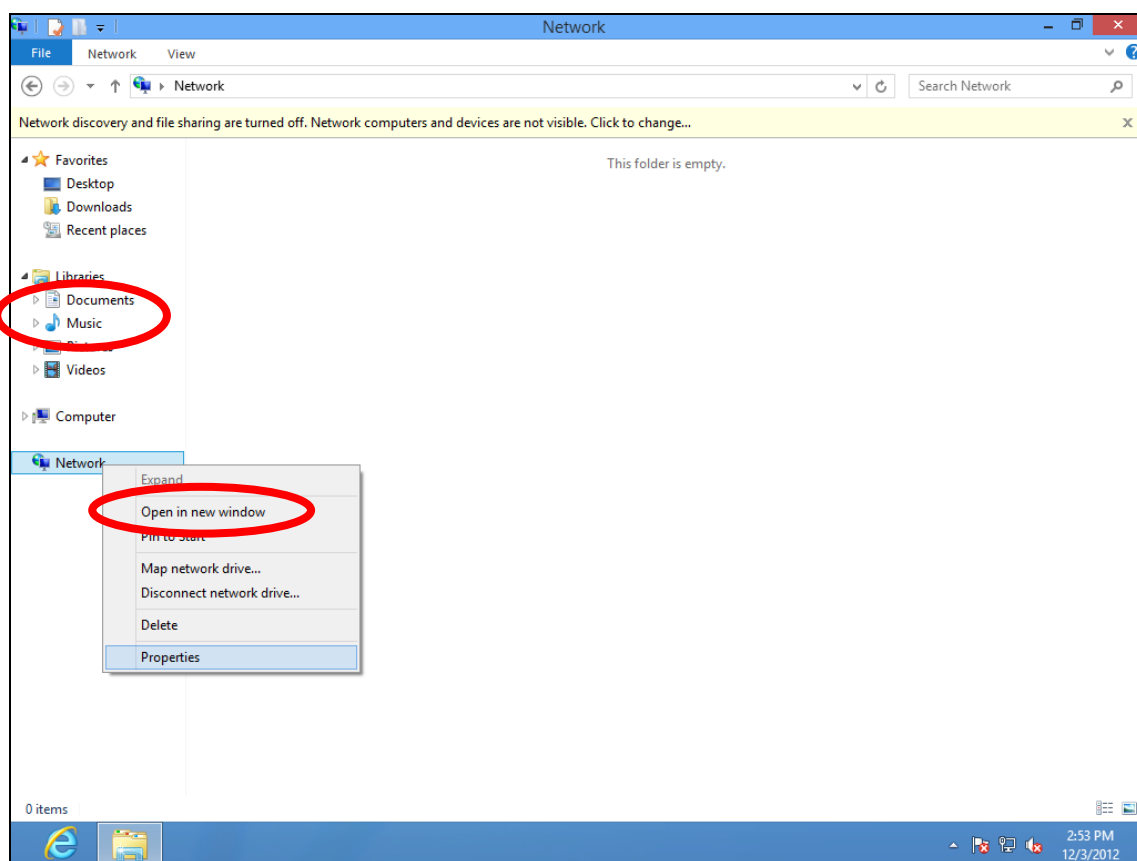
1. From the Windows 8 Start screen, you need to switch to desktop mode. Move your cursor to the bottom left of the screen and click.



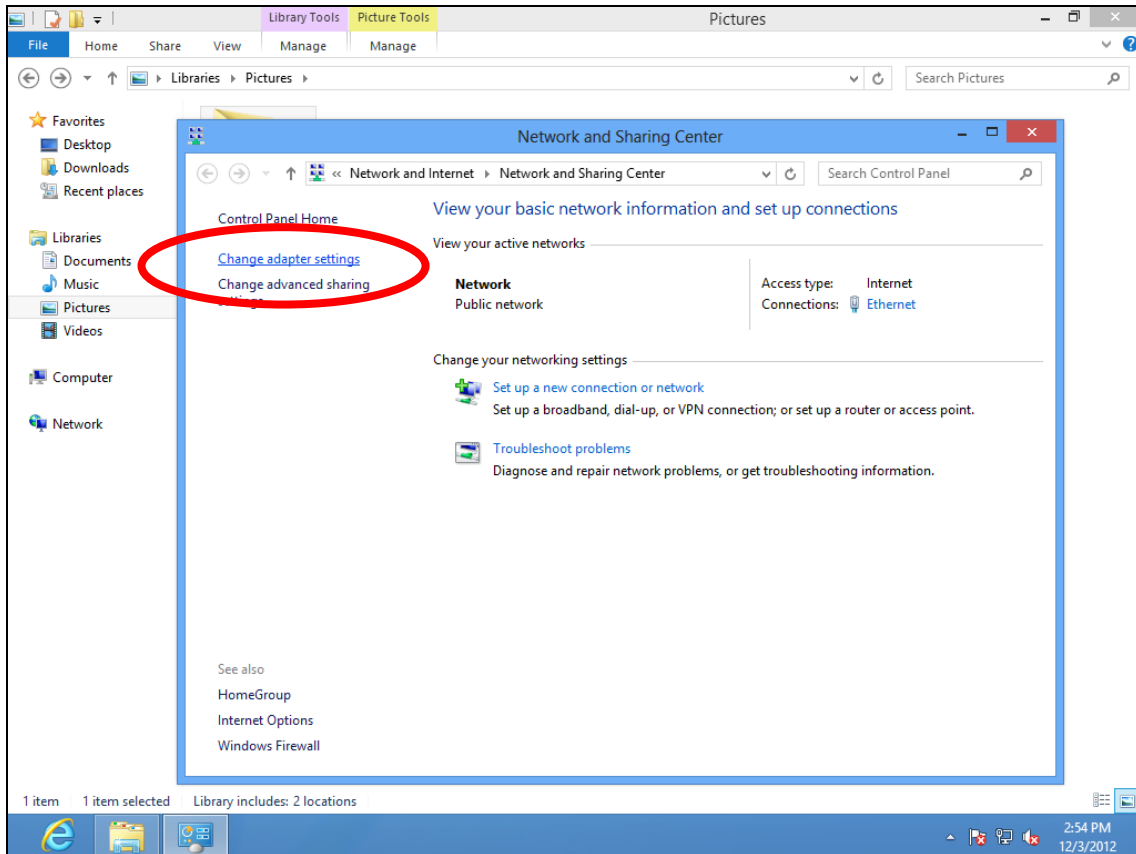
2. In desktop mode, click the File Explorer icon in the bottom left of the screen, as shown below.



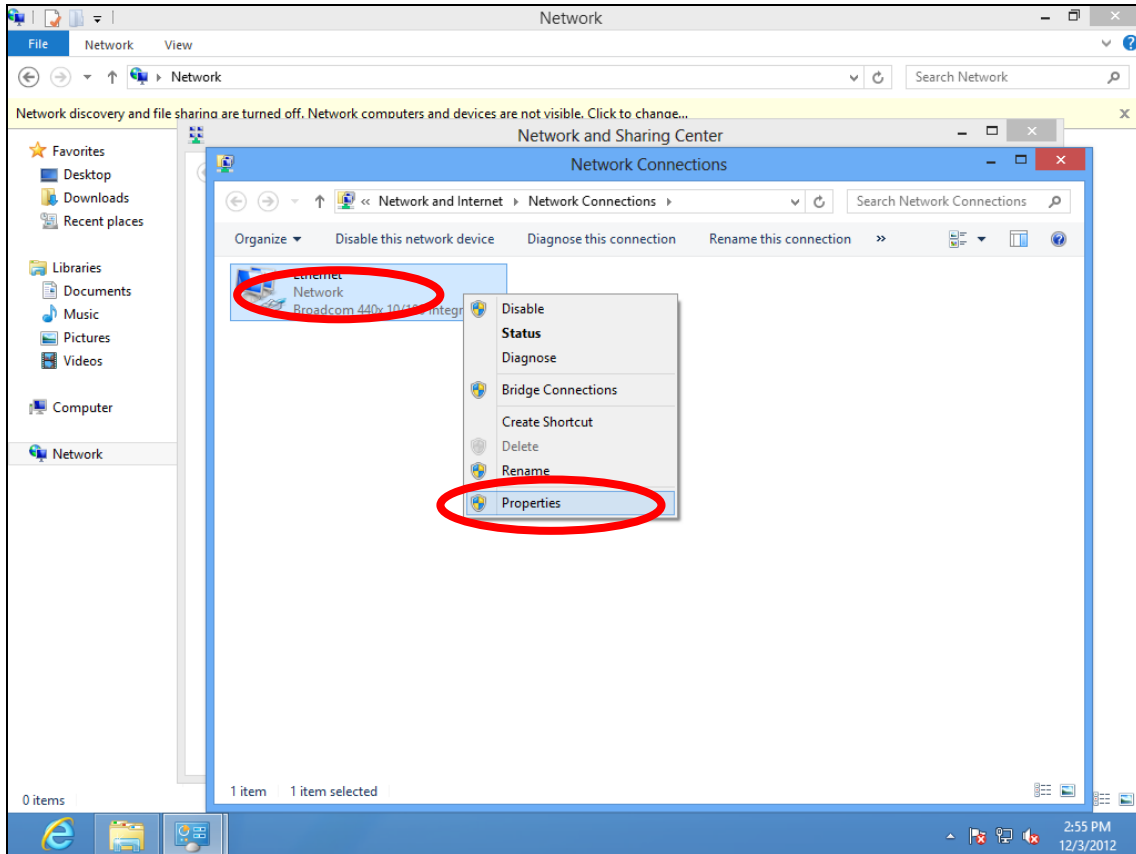
3. Right click “Network” and then select “Properties”.



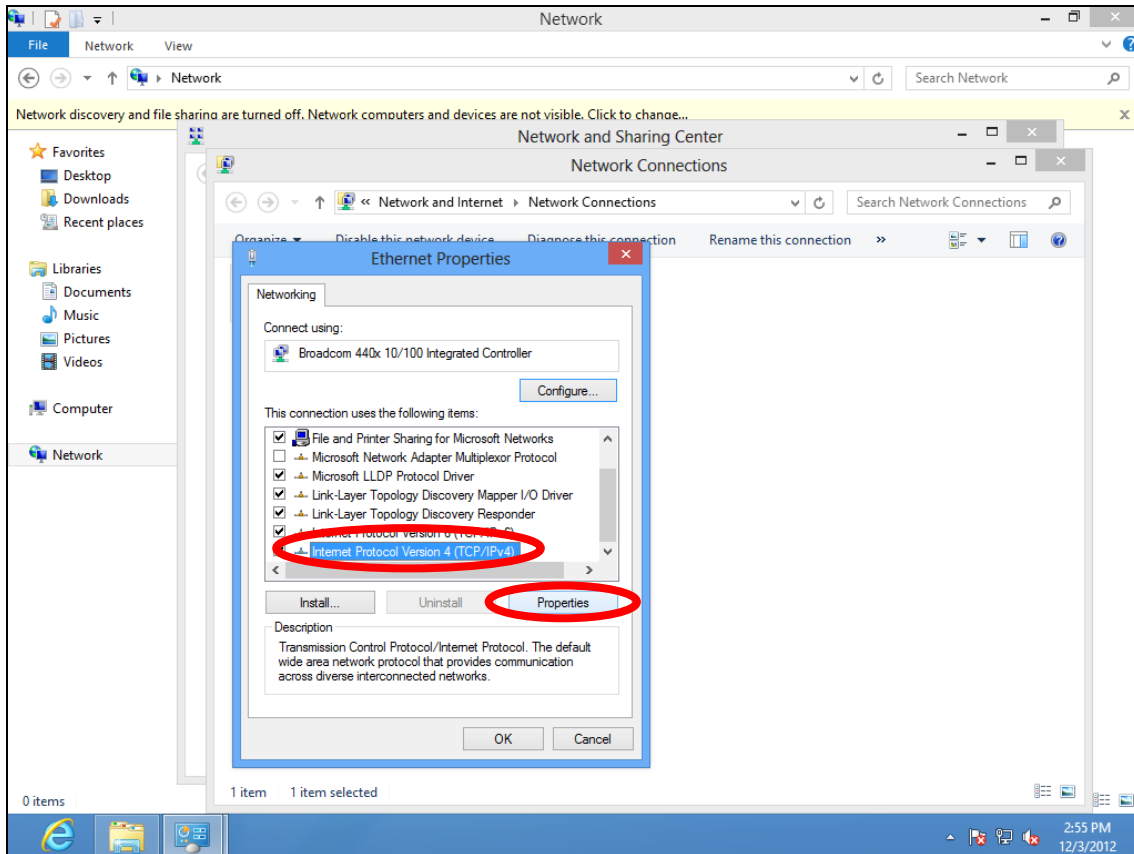
4. In the window that opens, select “Change adapter settings” from the left side.



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.

VII-1-2-5. Mac

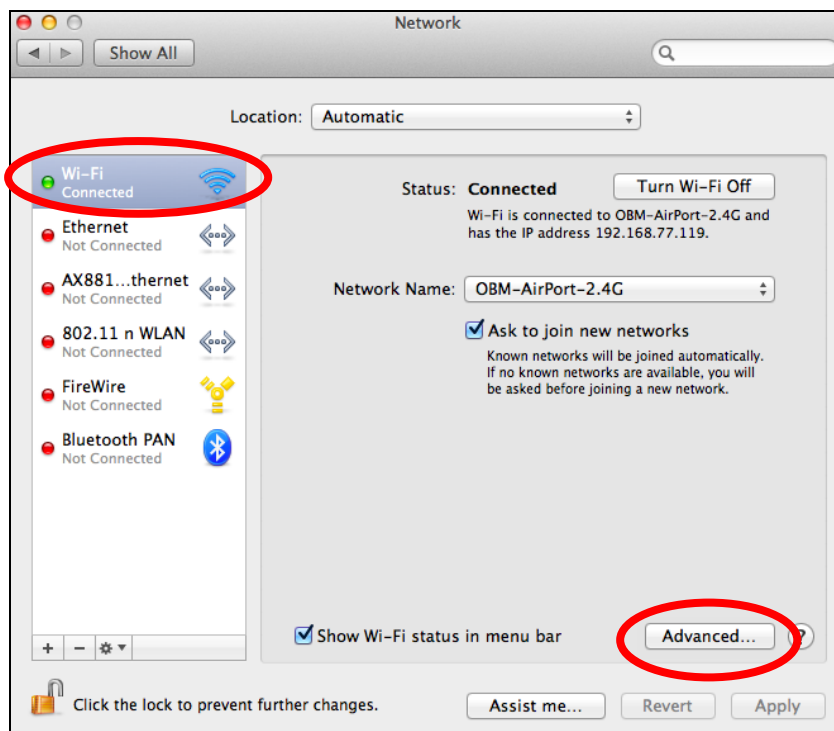
1. Have your Macintosh computer operate as usual, and click on “System Preferences”



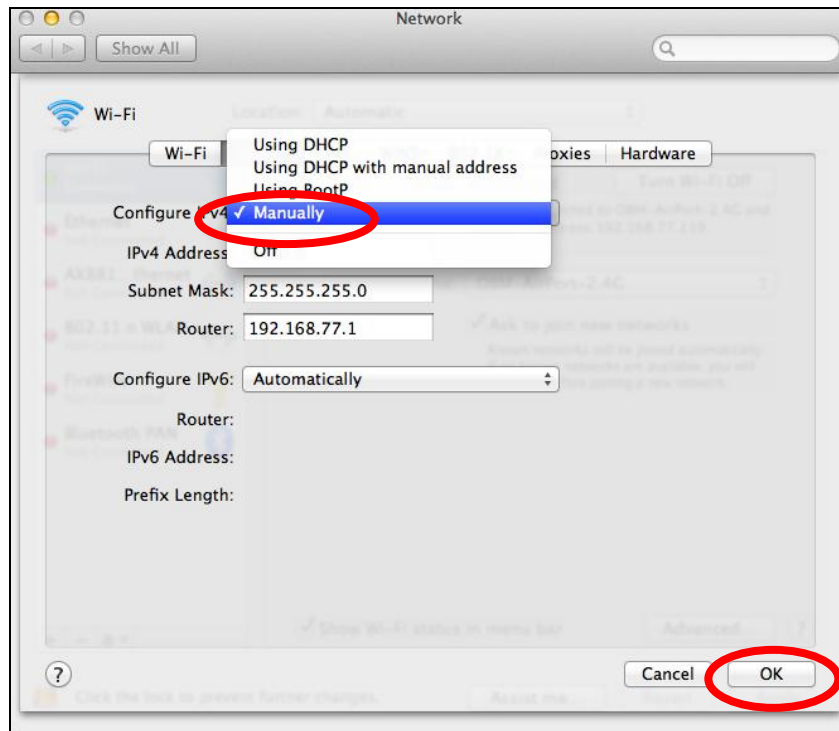
2. In System Preferences, click on “Network”.



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

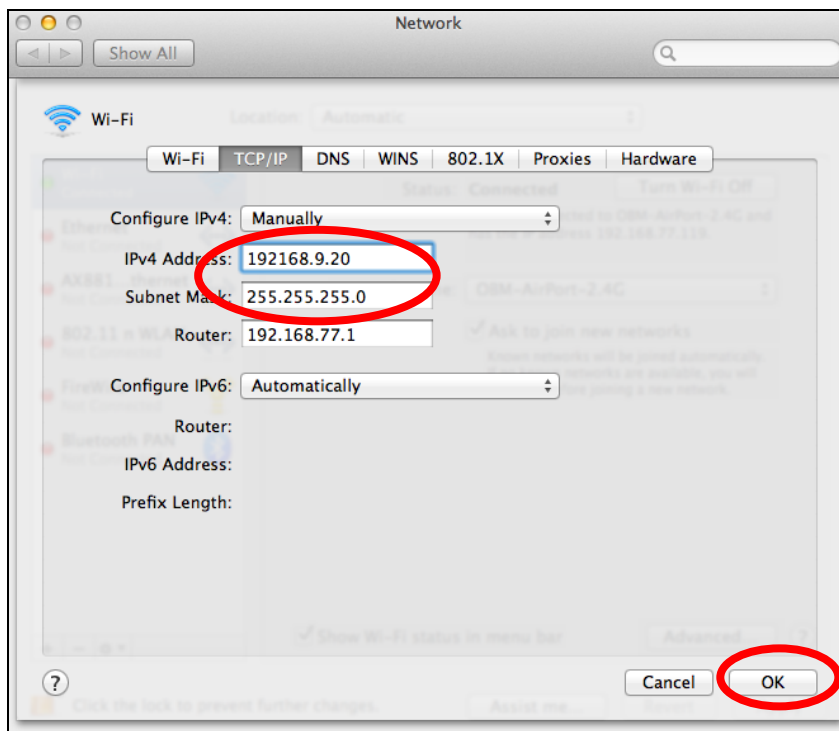


4. Select “TCP/IP” from the top menu and select “Manually” from the drop down menu labeled “Configure IPv4”, then click “OK”.

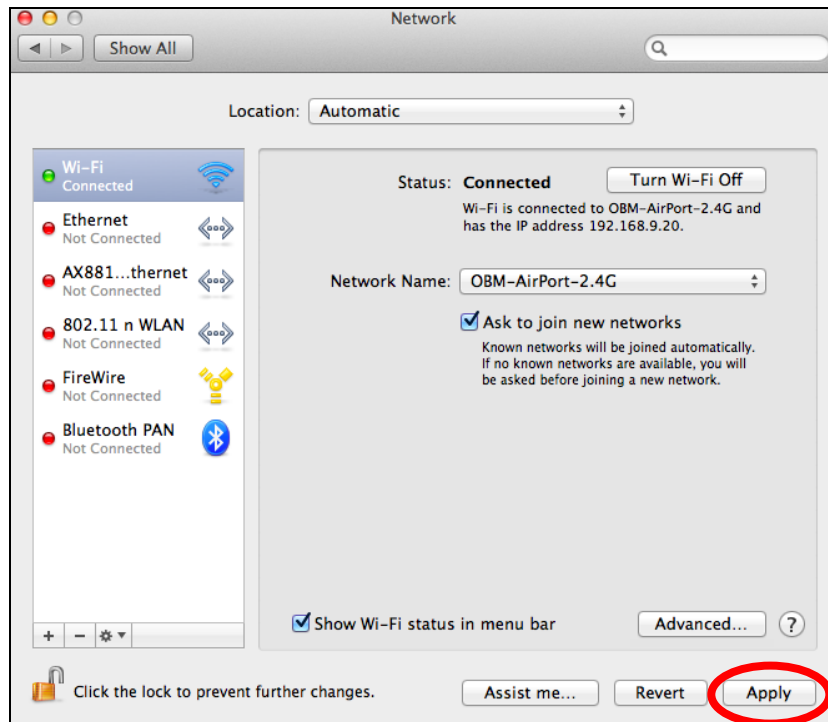


Your existing static IP address will be displayed in the “IP address” field before you replace it. Please make a note of this IP address, subnet mask, default gateway and DNS server addresses.

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.



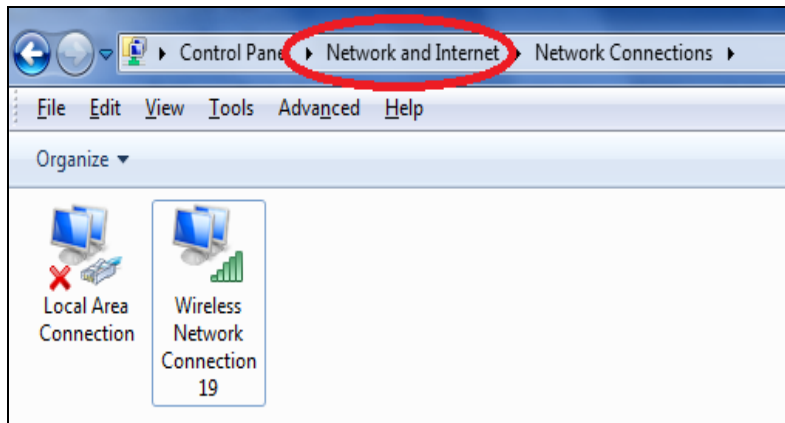
VII-1-3. How to Find Your Network Security Key

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

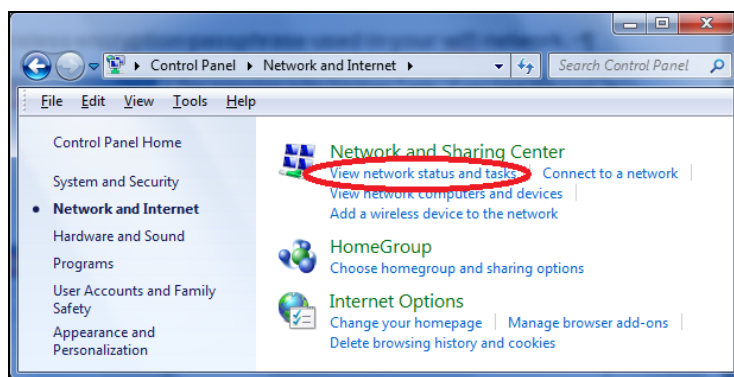
 ***If you are using Windows XP or earlier, please contact your ISP or router manufacturer to find your network security key.***

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

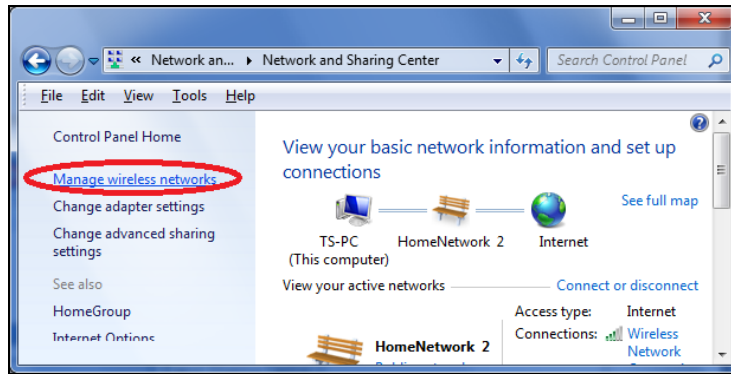
1. Open “Control Panel” and click on “Network and Internet” in the top menu.



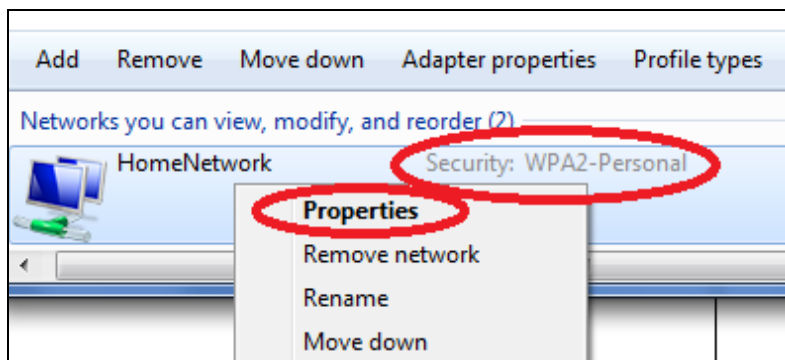
2. Click on “View network status and tasks” which is under the heading “Network and Sharing Center”.



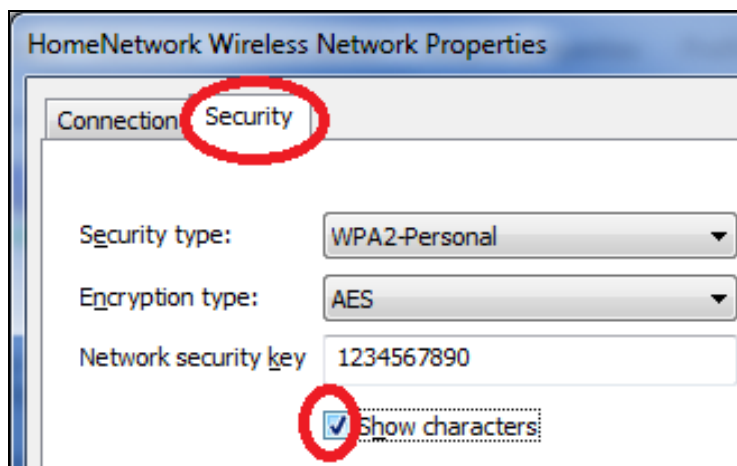
3. Click on “Manage wireless networks” in the left menu.



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”.

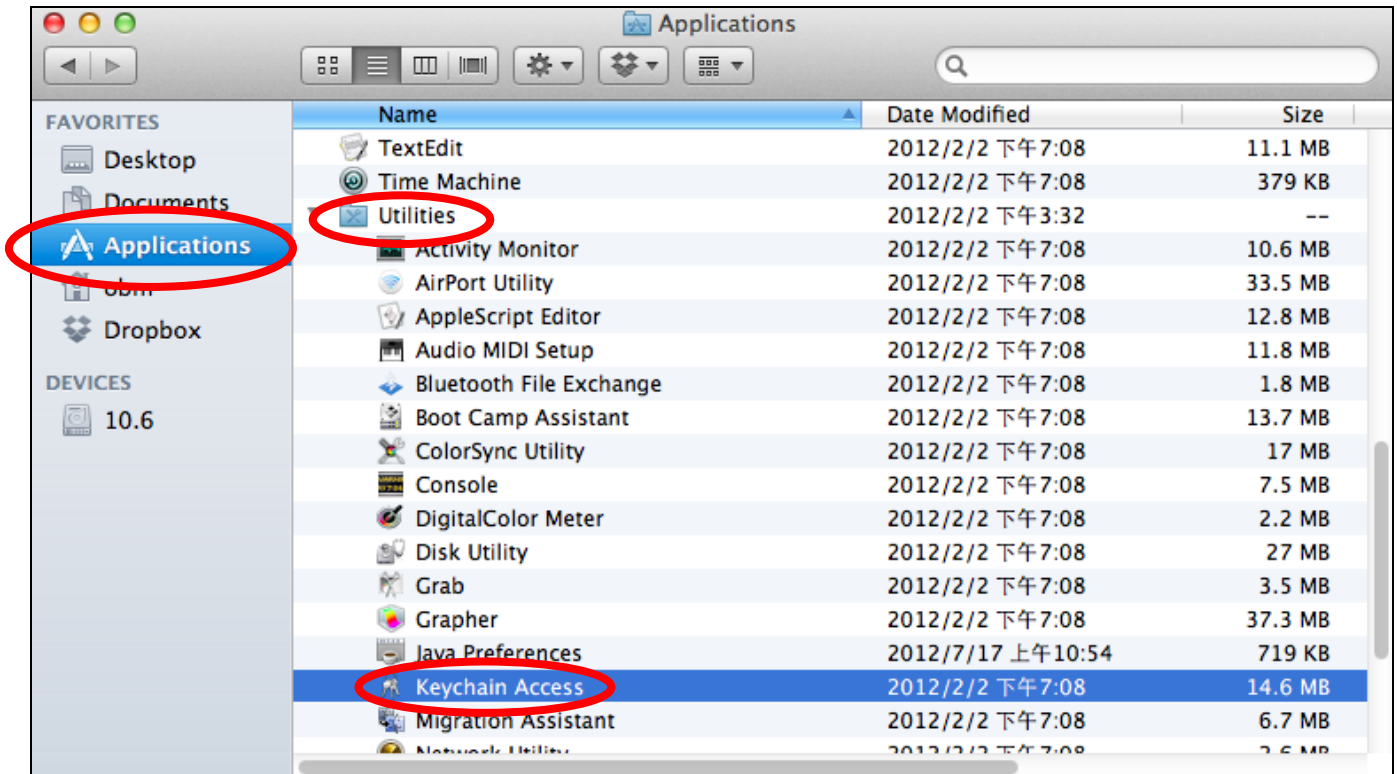


5. Click on the “Security” tab, and then check the box labeled “Show characters”. This will show your network security key. Click the “Cancel” button to close the window.

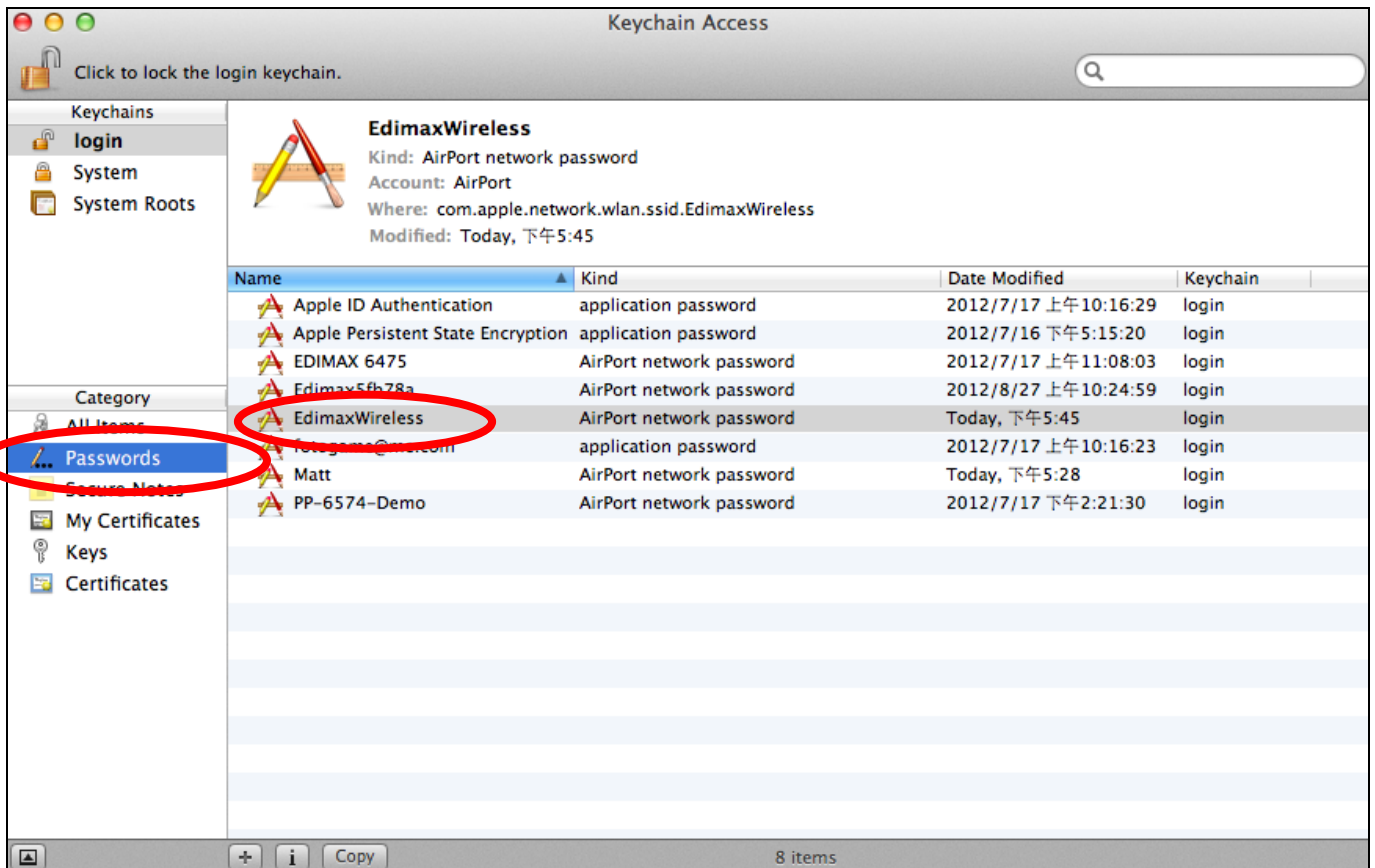


VII-1-3-2. Mac

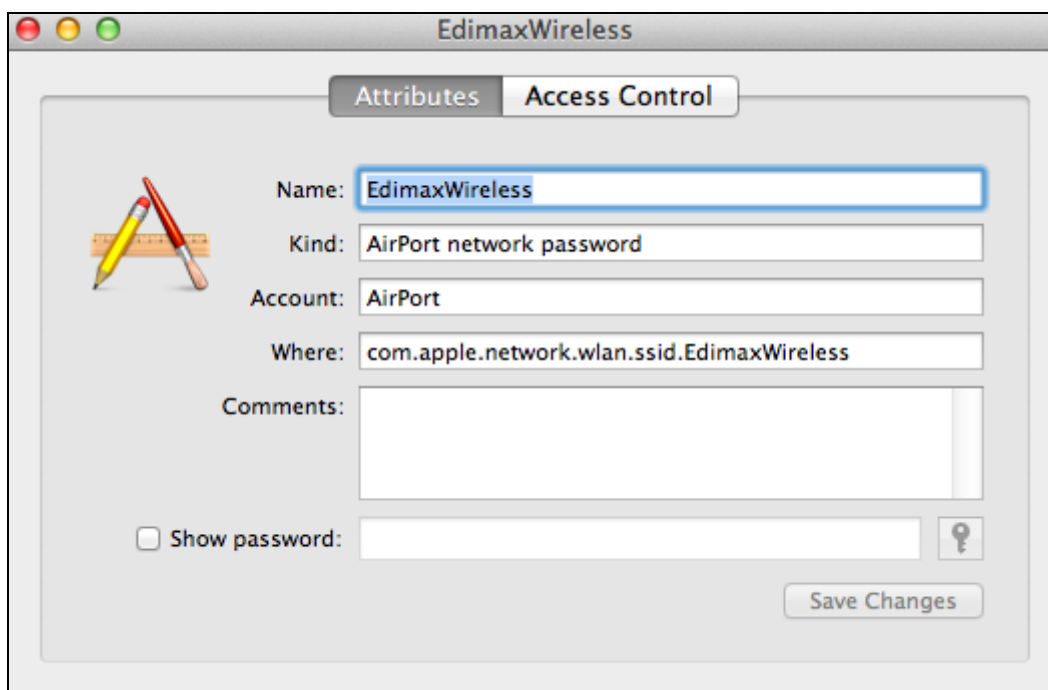
1. Open a new Finder window, and select “Applications” from the menu on the left side. Open the folder labeled “Utilities” and then open the application “Keychain Access”.



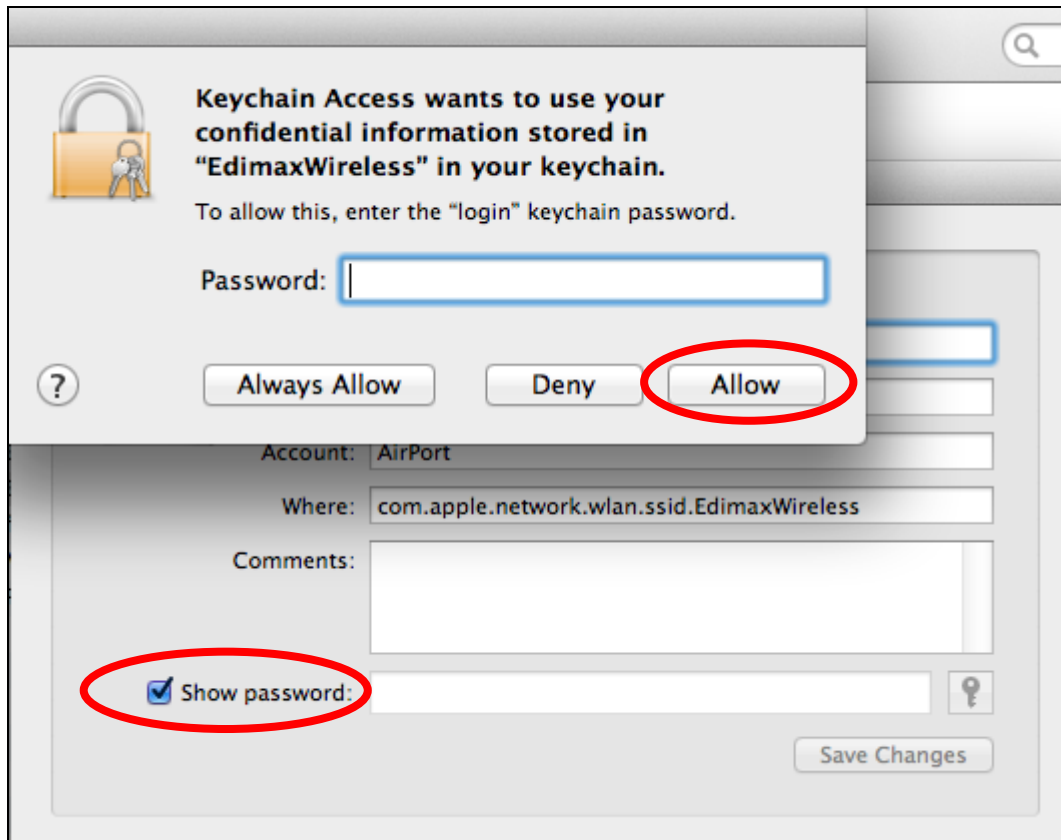
2. Select “Passwords” from the sub-menu labeled “Category” on the left side, as shown below. Then search the list in the main panel for the SSID of your network. In this example, the SSID is “EdimaxWireless” – though your SSID will be unique to your network.



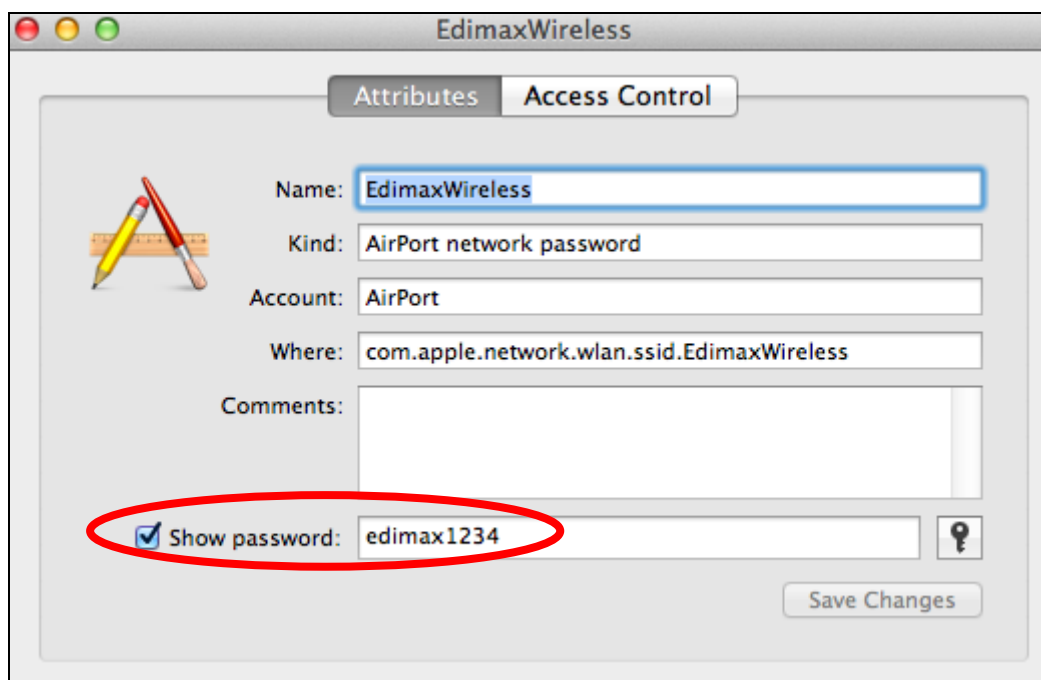
3. Double click the SSID of your network and you will see the following window.



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.

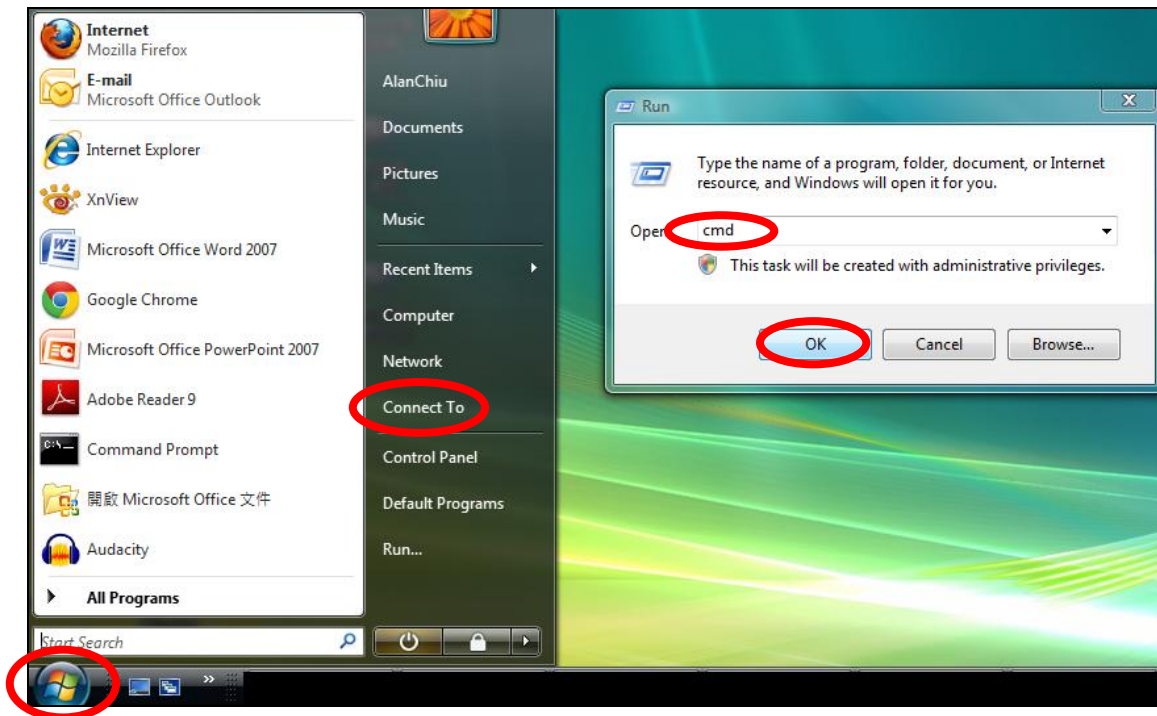


VII-1-4. How to Find Your Router's IP Address

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

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

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



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

```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.

C:\Users\AlanChiu>ipconfig
```

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

```
Administrator: C:\Windows\system32\cmd.exe
Ethernet adapter 區域連線:

    Connection-specific DNS Suffix . . . :
    Link-local IPv6 Address . . . . . : fe80::4cdc:3e90:ba56:1722%9
    IPv4 Address. . . . . : 192.168.10.14
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : fe80::1867:2a1b:e9c2:e57b%9
                                192.168.10.254

Wireless LAN adapter 無線網路連線:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . : edimax.com

Tunnel adapter 區域連線* 6:

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

Tunnel adapter 區域連線* 7:

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

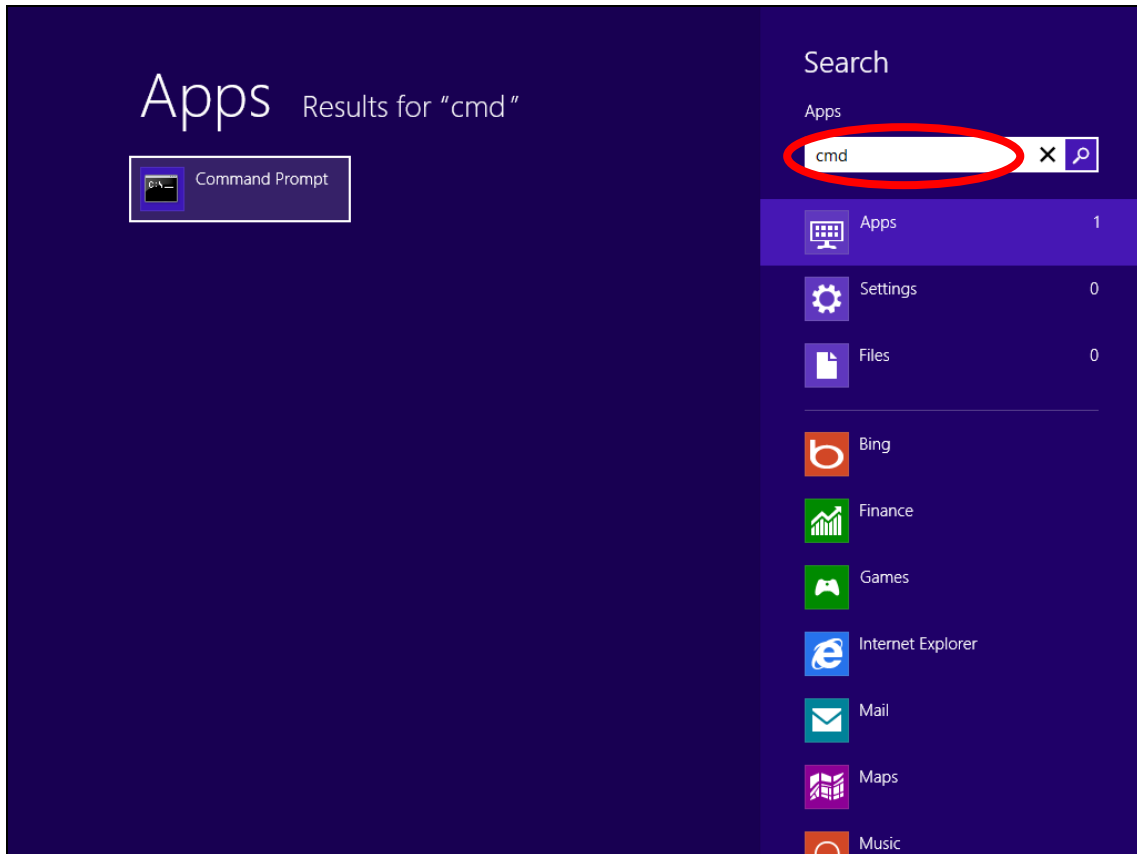
C:\Users\AlanChiu>
```

VII-1-4-2. Windows 8

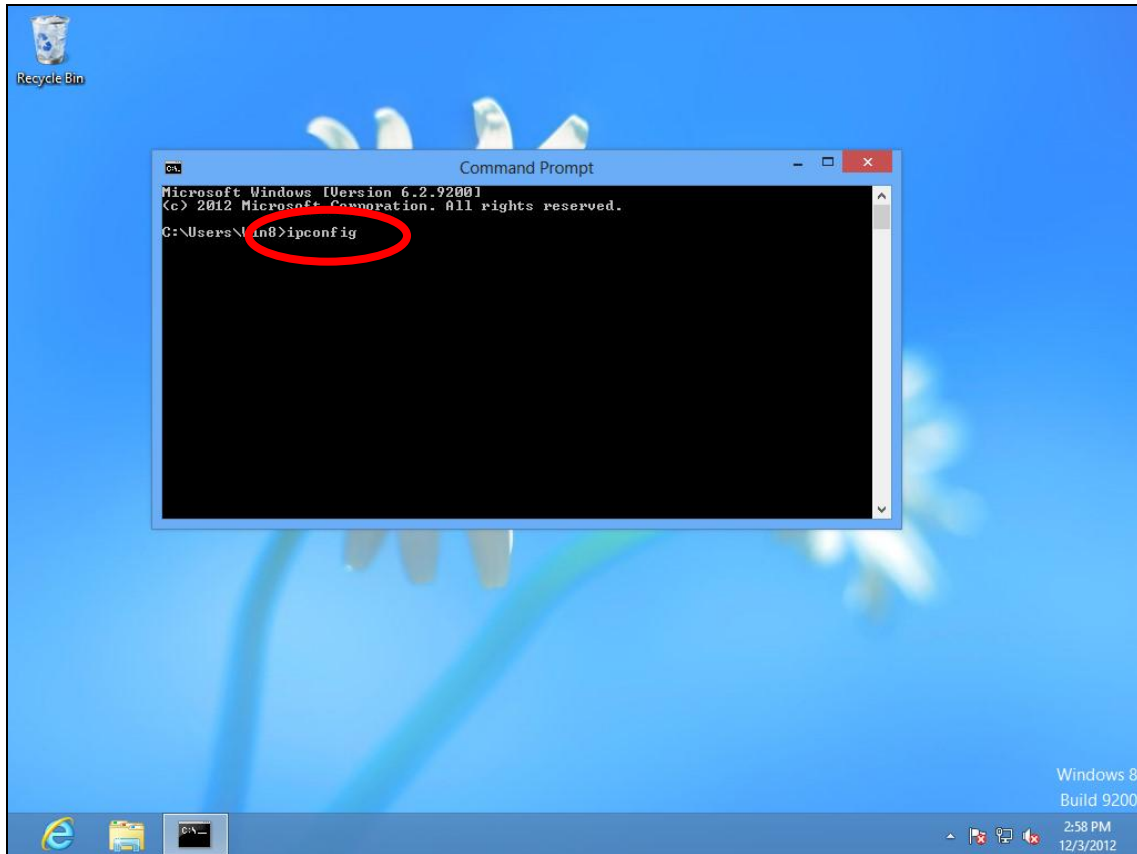
1. From the Windows 8 Start screen, move your cursor to the top right corner of the screen to display the Charms bar.



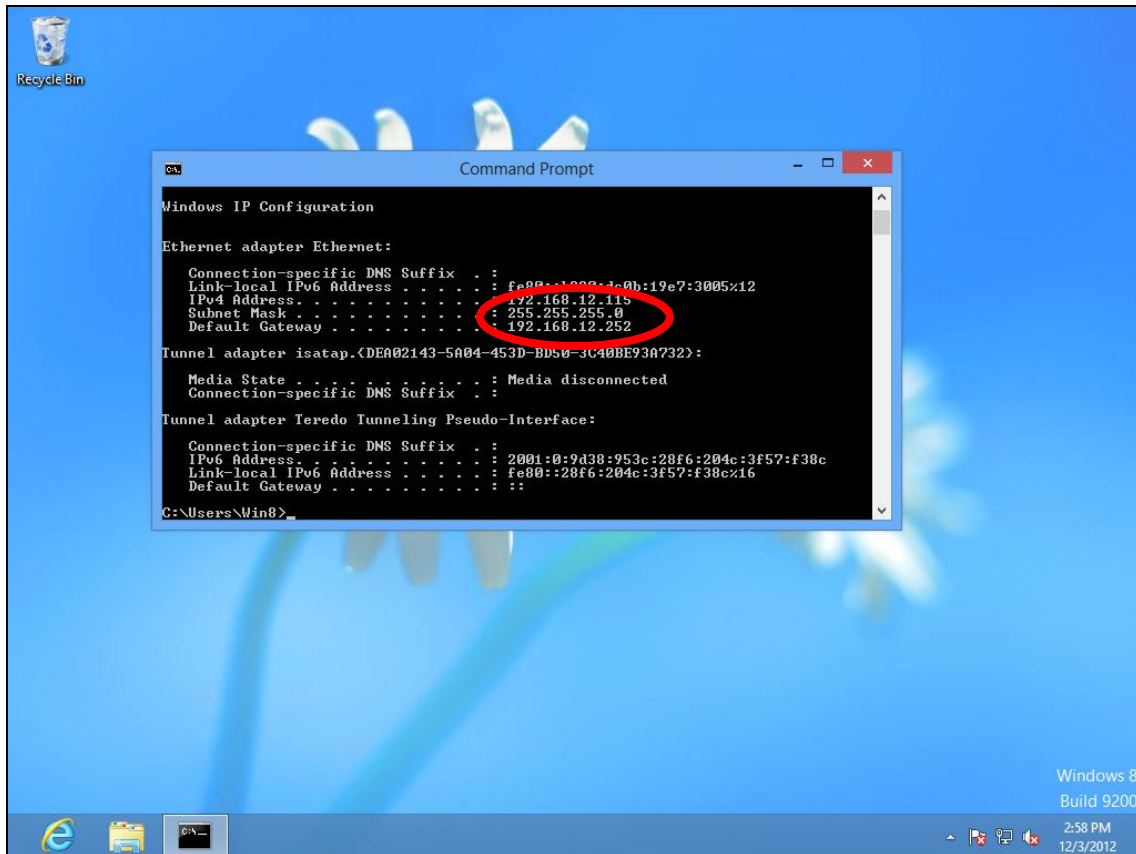
2. Click "Search" and enter "cmd" into the search bar. Click the "Command Prompt" app which be displayed on the left side.



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

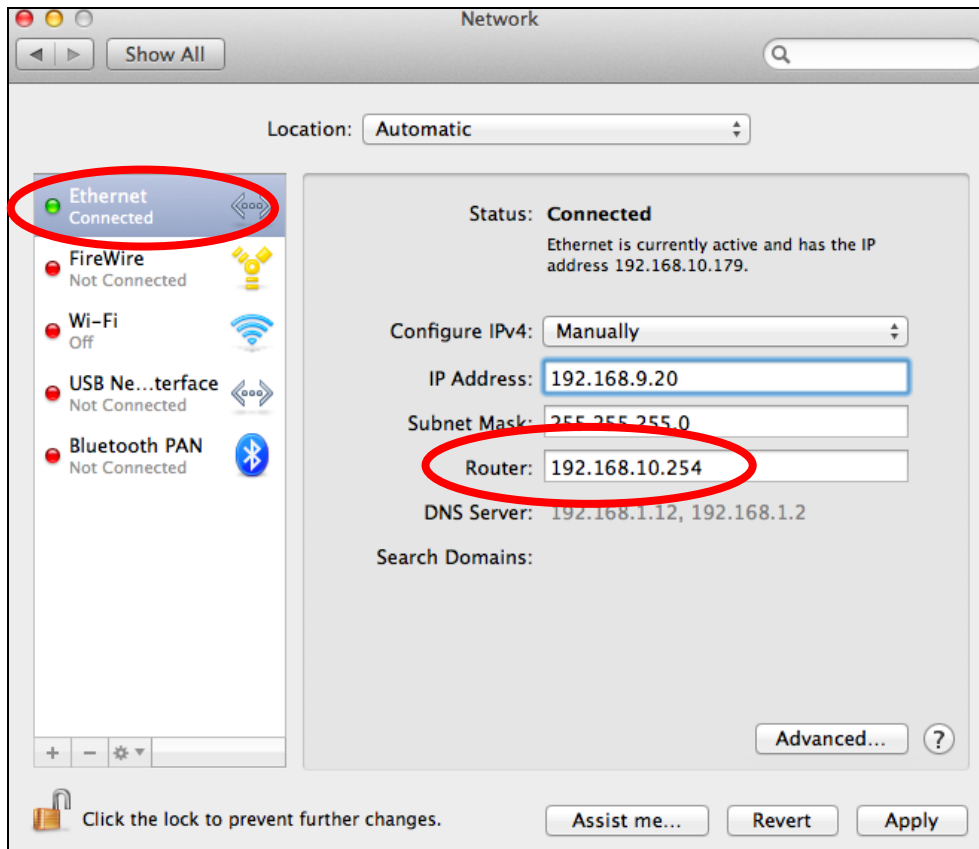


4. Your router's IP address will be displayed next to "Default Gateway".

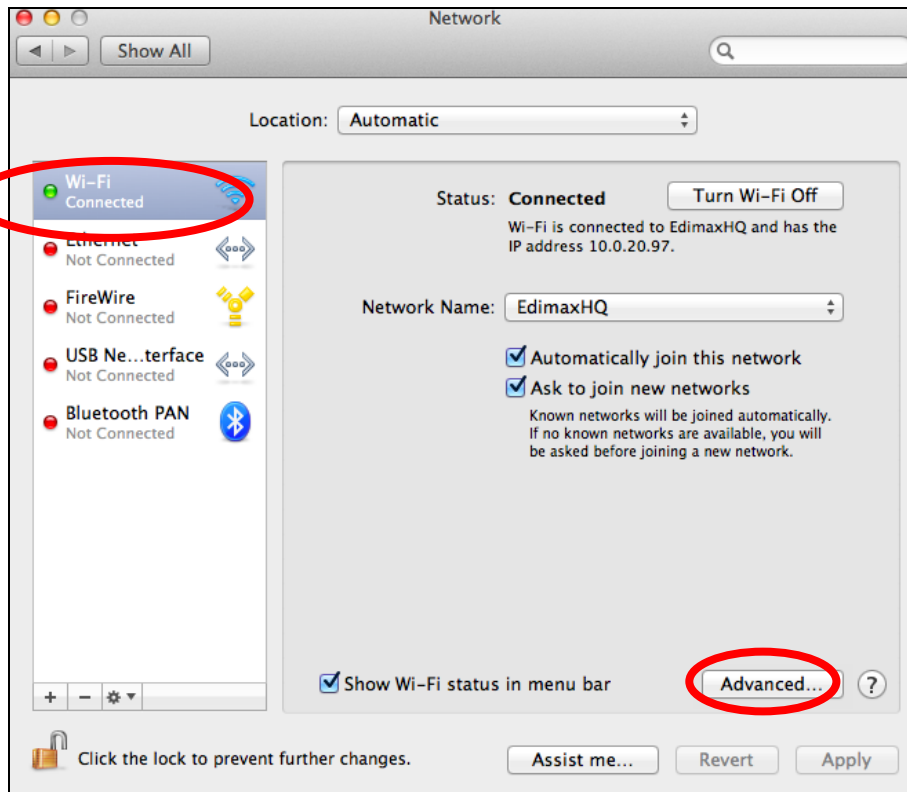


VII-1-4-3. Mac

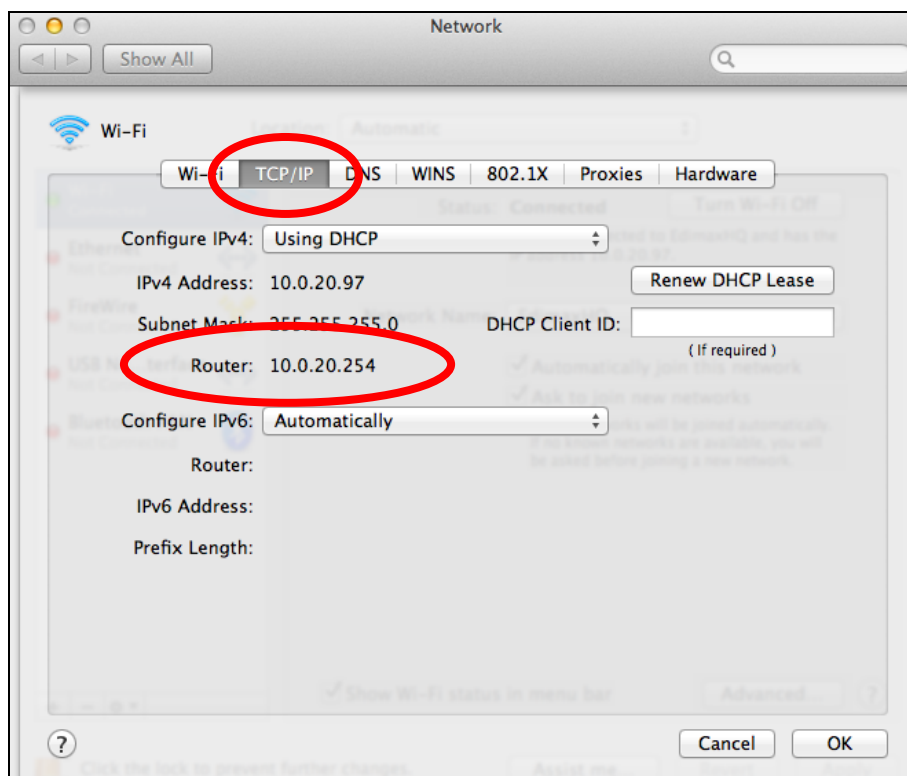
1. Launch “System Preferences” and click on “Network”.
2. If you are using an Ethernet cable to connect to your network, your router’s IP address will be displayed next to “Router”.



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".

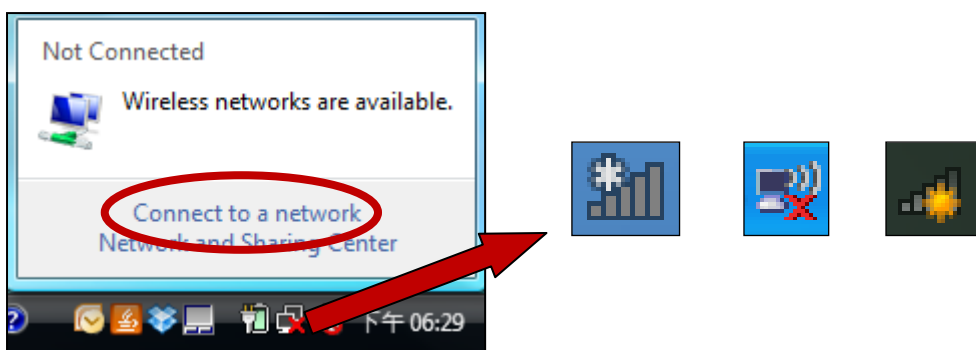


VII-2. Connecting to a Wi-Fi network

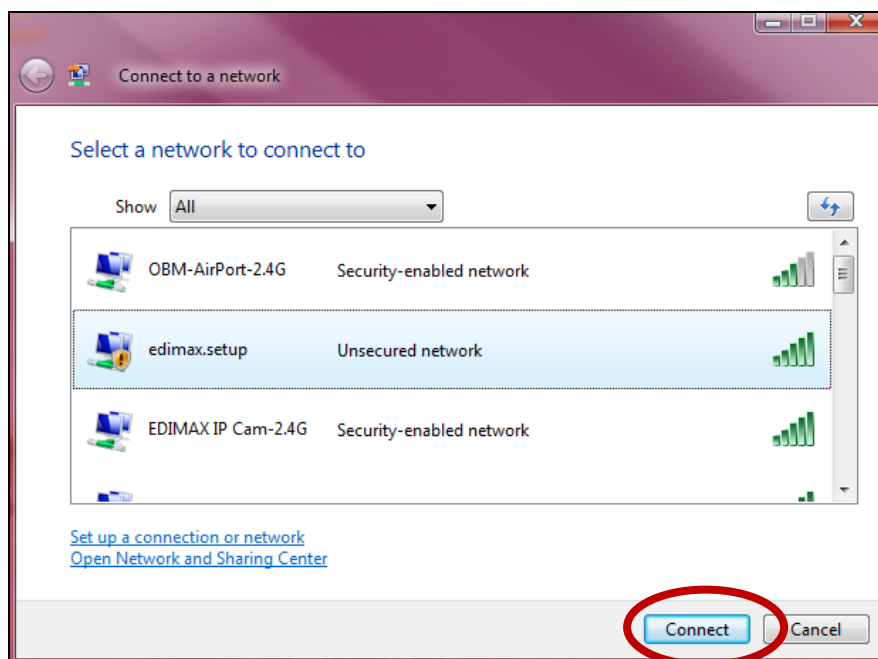
For help connecting to your device's **Edimax.Setup** SSID for initial setup, or to connect to your device's new Wi-Fi network (SSID) after setup is complete, follow the guide below:

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

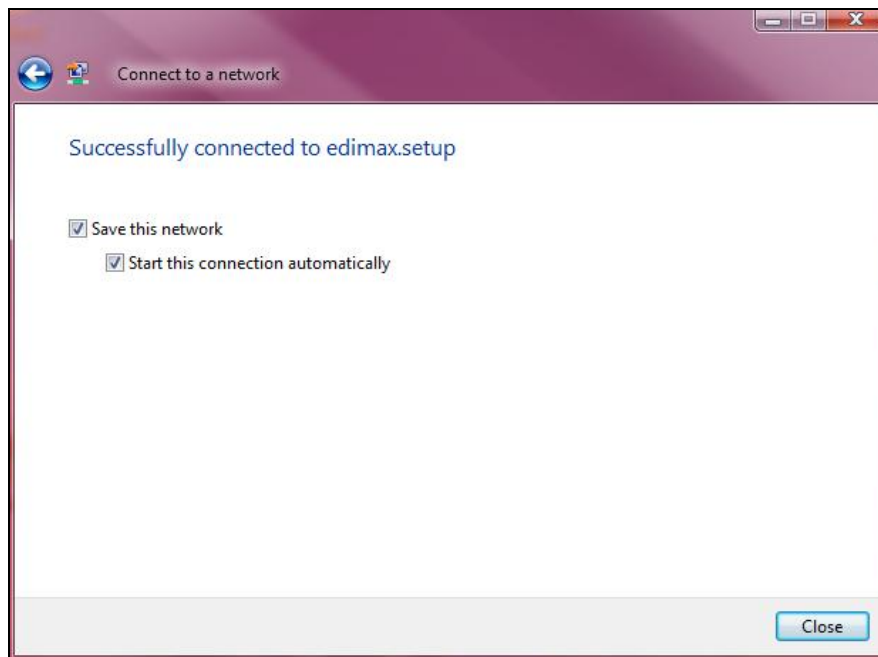
1. Click the network icon (,  or ) in the system tray and select “Connect to a network”.



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



VII-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.	<ul style="list-style-type: none">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://edimax.setupc. 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.	<ul style="list-style-type: none">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.	<ul style="list-style-type: none">a. Reset the wireless extenderb. Try again later. Your local network may be experiencing technical difficulties or very high usage.c. Change channel number.
The wireless extender	<ul style="list-style-type: none">a. It is normal for the wireless extender to heat up

is extremely hot.	<p>during frequent use. If you can safely place your hand on the wireless extender, the temperature of the device is at a normal level.</p> <p>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.</p>
My network device can't access the Internet.	<p>a. Ensure that your broadband router is fully functional.</p> <p>b. Switch off both your network device and wireless extender and switch back on again.</p> <p>c. Ensure that the wireless extender is powered on (check the PWR LED).</p> <p>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.</p>
My wireless extender has a poor signal from my access point/router.	<p>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.</p> <p>a. Keep the extender away from other radio devices such as microwaves or wireless telephones.</p> <p>b. Do not put the extender in the corner of a room or under/nearby metal.</p> <p>c. It is recommended to plug the extender directly into a wall socket.</p> <p>d. Ensure there are as few obstacles as possible between the extender and the access point/router.</p>
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.

VII-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.Broadbandaccesspoint.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 "`Broadbandaccesspoint.com`" into your Internet browser), the user is sent to the proper IP address. The DNS server IP address used by the computers on your home network is the location of the DNS server your ISP has assigned to you.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

COPYRIGHT

Copyright © Edimax Technology Co., Ltd. all rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission from Edimax Technology Co., Ltd.

Edimax Technology Co., Ltd. makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability, or fitness for any particular purpose. Any software described in this manual is sold or licensed as is. Should the programs prove defective following their purchase, the buyer (and not this company, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Edimax Technology Co., Ltd. reserves the right to revise this publication and to make changes from time to time in the contents hereof without the obligation to notify any person of such revision or changes.

The product you have purchased and the setup screen may appear slightly different from those shown in this QIG. The software and specifications are subject to change without notice. Please visit our website www.edimax.com for updates. All brand and product names mentioned in this manual are trademarks and/or registered trademarks of their respective holders.

Federal Communication Commission Interference Statement

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

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

FCC Caution

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

Federal Communications Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 2.5cm (1 inch) during normal operation.

Federal Communications Commission (FCC) RF Exposure Requirements

SAR compliance has been established in the laptop computer(s) configurations with PCMCIA slot on the side near the center, as tested in the application for certification, and can be used in laptop computer(s) with substantially similar physical dimensions, construction, and electrical and RF characteristics. Use in other devices such as PDAs or lap pads is not authorized. This transmitter is restricted for use with the specific antenna tested in the application for certification. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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 2006/95/EC, 2011/65/EC.
- Français:** Cet équipement est conforme aux exigences essentielles et autres dispositions de la directive 2006/95/CE, 2011/65/CE.
- Čeština:** Toto zařízení je v souladu se základními požadavky a ostatními příslušnými ustanoveními směrnic 2006/95/ES, 2011/65/ES.
- Polski:** Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami określonymi Dyrektywą UE 2006/95/EC, 2011/65/EC..
- Română:** Acest echipament este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivei 2006/95/CE, 2011/65/CE.
- Русский:** Это оборудование соответствует основным требованиям и положениям Директивы 2006/95/EC, 2011/65/EC.
- Magyar:** Ez a berendezés megfelel az alapvető követelményeknek és más vonatkozó irányelveknek (2006/95/EK, 2011/65/EK).
- Türkçe:** Bu cihaz 2006/95/EC, 2011/65/EC direktifleri zorunlu istekler ve diğer hükümlerle ile uyumludur.
- Українська:** Обладнання відповідає вимогам і умовам директиви 2006/95/EC, 2011/65/EC.
- Slovenčina:** Toto zariadenie spĺňa základné požiadavky a ďalšie príslušné ustanovenia smerníc 2006/95/ES, 2011/65/ES.
- Deutsch:** Dieses Gerät erfüllt die Voraussetzungen gemäß den Richtlinien 2006/95/EC, 2011/65/EC.
- Español:** El presente equipo cumple los requisitos esenciales de la Directiva 2006/95/EC, 2011/65/EC.
- Italiano:** Questo apparecchio è conforme ai requisiti essenziali e alle altre disposizioni applicabili della Direttiva 2006/95/CE, 2011/65/CE.
- Nederlands:** Dit apparaat voldoet aan de essentiële eisen en andere van toepassing zijnde bepalingen van richtlijn 2006/95/EC, 2011/65/EC..
- Português:** Este equipamento cumpre os requisitos essenciais da Directiva 2006/95/EC, 2011/65/EC.
- Norsk:** Dette utstyret er i samsvar med de viktigste kravene og andre relevante regler i Direktiv 2006/95/EC, 2011/65/EC.
- Svenska:** Denna utrustning är i överensstämmelse med de väsentliga kraven och övriga relevanta bestämmelser i direktiv 2006/95/EG, 2011/65/EG.
- Dansk:** Dette udstyr er i overensstemmelse med de væsentligste krav og andre relevante forordninger i direktiv 2006/95/EC, 2011/65/EC.
- suomen kieli:** Tämä laite täyttää direktiivien 2006/95/EY, 2011/65/EY oleelliset vaatimukset ja muut asiaankuuluvat määräykset.

FOR USE IN

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



WEEE Directive & Product Disposal



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

Declaration of Conformity

We, Edimax Technology Co., Ltd., declare under our sole responsibility, that the equipment described below complies with the requirements of the European R&TTE directive 2006/95/EC, and directive 2011/65/EC(RoHS) .

Equipment: N300 Universal Wi-Fi Extender
Model No.: EW-7438RPn

The following European standards for essential requirements have been followed:

Spectrum: ETSI EN 300 328 V1.8.1
EMC: EN 301 489-1 V1.9.2 (2011-09);
EN 301 489-17 V2.2.1 (2012-09)
EMF: EN 50385:2002
Safety (LVD): IEC 60950-1:2005 (2nd Edition);
EN-60950-1:2006+A11:2009+A1:2010+A12:2011

Edimax Technology Europe B.V.
Nijverheidsweg 25,
5683 CJ BEST
THE NETHERLANDS

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

Printed Name: Vivian Ma
Title: Director
Edimax Technology Europe B.V.

Date of Signature: October 15, 2013

Signature:



Printed Name: Albert Chang

Title: Director

Edimax Technology Co., Ltd.



Notice According to GNU General Public License Version 2

This product includes software that is subject to the GNU General Public License version 2. The program is free software and distributed without any warranty of the author. We offer, valid for at least three years, to give you, for a charge no more than the costs of physically performing source distribution, a complete machine-readable copy of the corresponding source code.

Das Produkt beinhaltet Software, die den Bedingungen der GNU/GPL-Version 2 unterliegt. Das Programm ist eine sog. „Free Software“, der Autor stellt das Programm ohne irgendeine Gewährleistungen zur Verfügung. Wir bieten Ihnen für einen Zeitraum von drei Jahren an, eine vollständige maschinenlesbare Kopie des Quelltextes der Programme zur Verfügung zu stellen – zu nicht höheren Kosten als denen, die durch den physikalischen Kopiervorgang anfallen.

GNU GENERAL PUBLIC LICENSE Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep

intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.



ΣDIMAX
NETWORKING PEOPLE TOGETHER

Edimax Technology Co., Ltd.

No.3, Wu-Chuan 3rd Road, Wu-Gu,
New Taipei City 24891, Taiwan

Edimax Technology Europe B.V.

Nijverheidsweg 25 5683 CJ Best
The Netherlands

Edimax Computer Company

3350 Scott Blvd., Bldg.15 Santa Clara,
CA 95054, USA