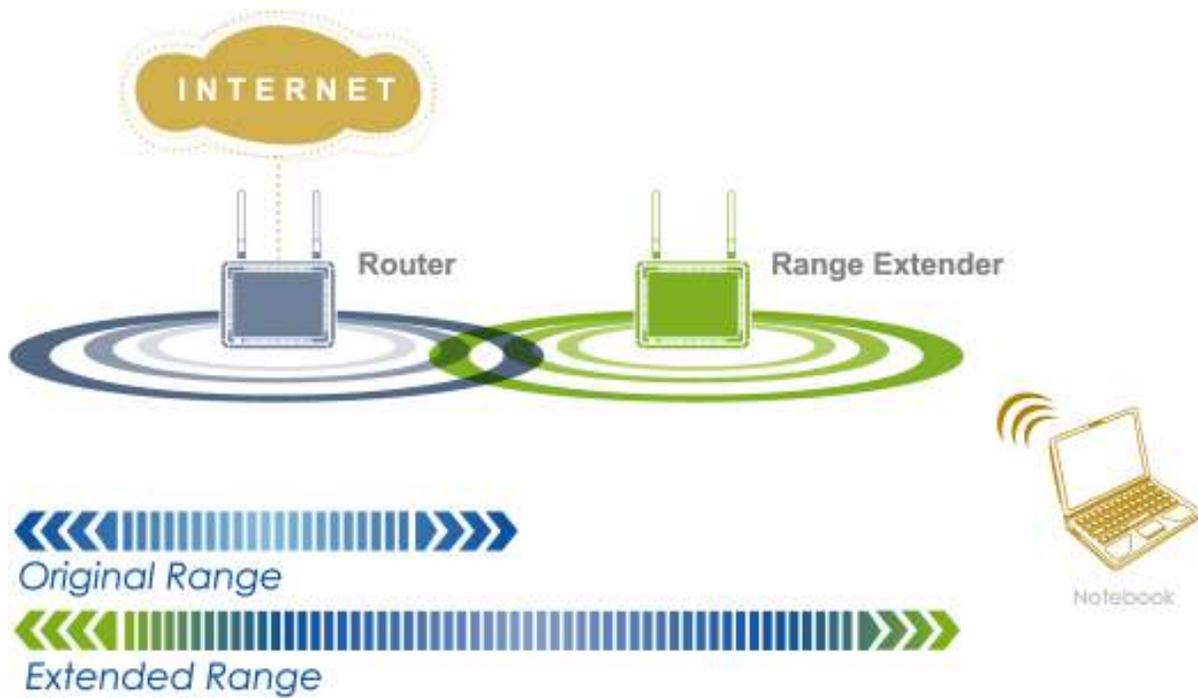


EnGenius ERB9250 300M Range Extender

Quick Start Guide

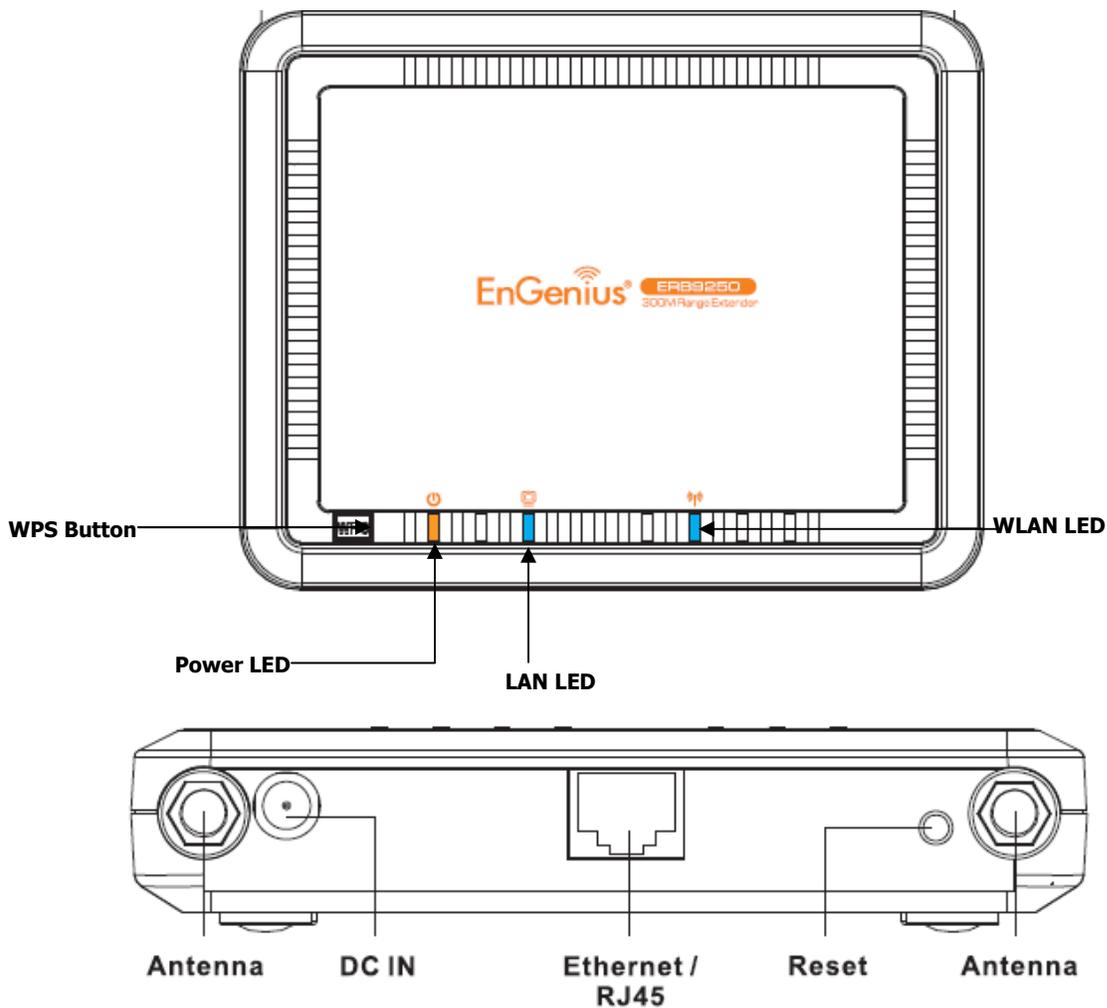


Package Contents

- One ERB9250 300M Range Extender
- One 12V/1A power adapter
- Two 2dBi 2.4GHz SMA antennas
- One Ethernet cable
- One CD-ROM with user's manual
- This Quick Start Guide



Hardware Overview



Getting Started

1. We suggest you place your Range Extender next to your router for the initial setup. After configuring the ERB92650 Range Extender with your router successfully, you can remove the Ethernet cable and move ERB9250 to the place where strong signal (at least 3 bars) is still available and in clear line of sight with your router (as less barriers as possible). Please see "Placing Your Range Extender in an Optimum Location," for how to find an optimal location for ERB9250 Range Extender to broadcast router's signal to extend wireless connection.
2. If you will set up the ERB9250 using manual configuration, assign a static IP address to your PC using your PC's Local Area Connection. The ERB9250 does not support DHCP for automatic IP address assignments.
3. The ERB9250's default IP address is **192.168.1.2**. Confirm that your router's IP address is in the same subnet as the ERB9250 (first three octets should be **192.168.1. x**). If your router's IP address is not **192.168.1.x**, your router and ERB9250 are on different subnets and you must change the IP address of one of these devices so they are on the same subnet. Please see "Troubleshooting" to find out how to find your router's IP address.

To use the ERB9250 with an EnGenius ESR9752, ESR9753, or ESR9850 Router whose default IP is **192.168.0.1**, either:

- Change the router's IP address to **192.168.1.x** to match the ERB9250's IP address
OR
 - Change the ERB9250's default IP to **192.168.0.x** to match the EnGenius router's IP address.
4. Confirm that your Internet and the wireless network are active before powering on your Range Extender.
 5. Connect the two antennas to the antenna connectors on the rear panel of your Range Extender.
 6. Decide whether to use the Range Extender's WPS or manual configuration:
 - WPS configuration. You can use this configuration method if your router supports WPS.
 - Manual configuration – use this configuration method if your router does not support WPS.

Using the Smart Wizard to Configure Your Range Extender

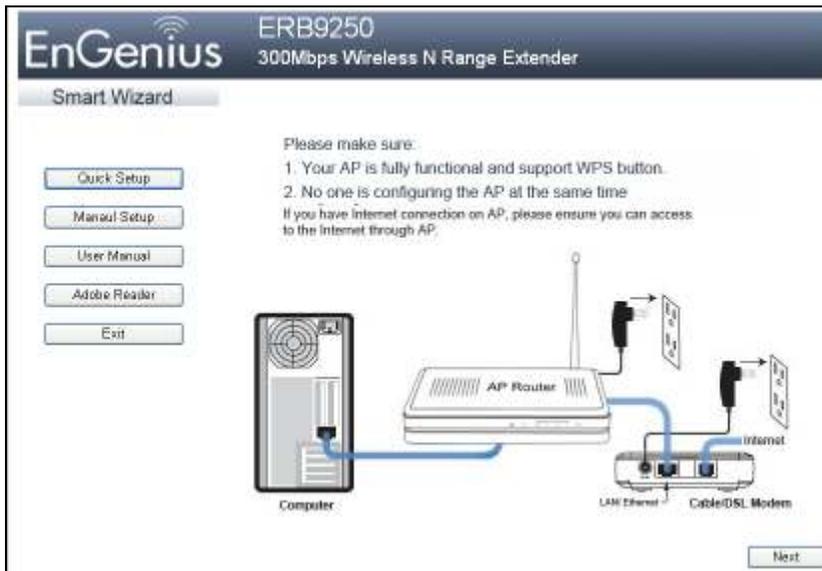
The provided Smart Wizard CD consists of a series of intuitive point-and-click pages that guide you through the first-time setup of your Range Extender.

To use the Smart Wizard to configure your Range Extender:

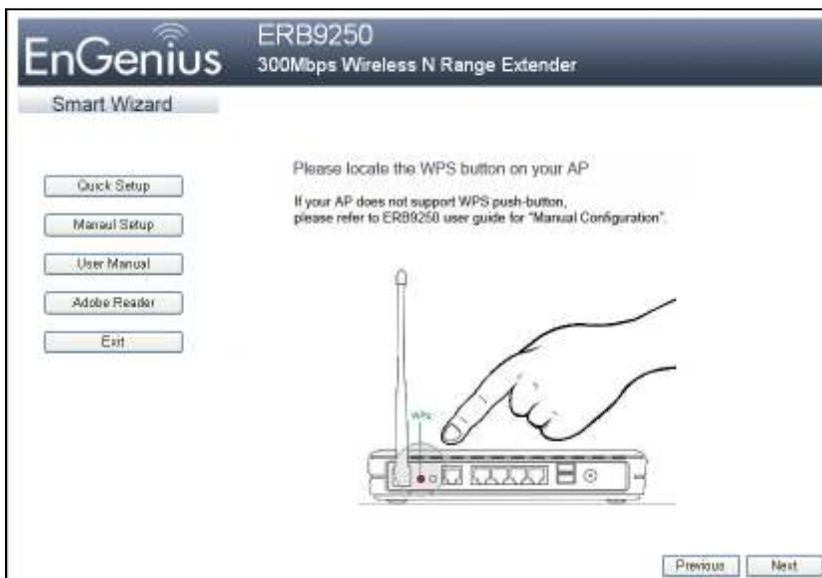
1. Insert the Smart Wizard CD into your computer's CD-ROM drive. The CD starts in a few seconds. (If the following screen does not appear, double-click the **index.html** file on the CD.)



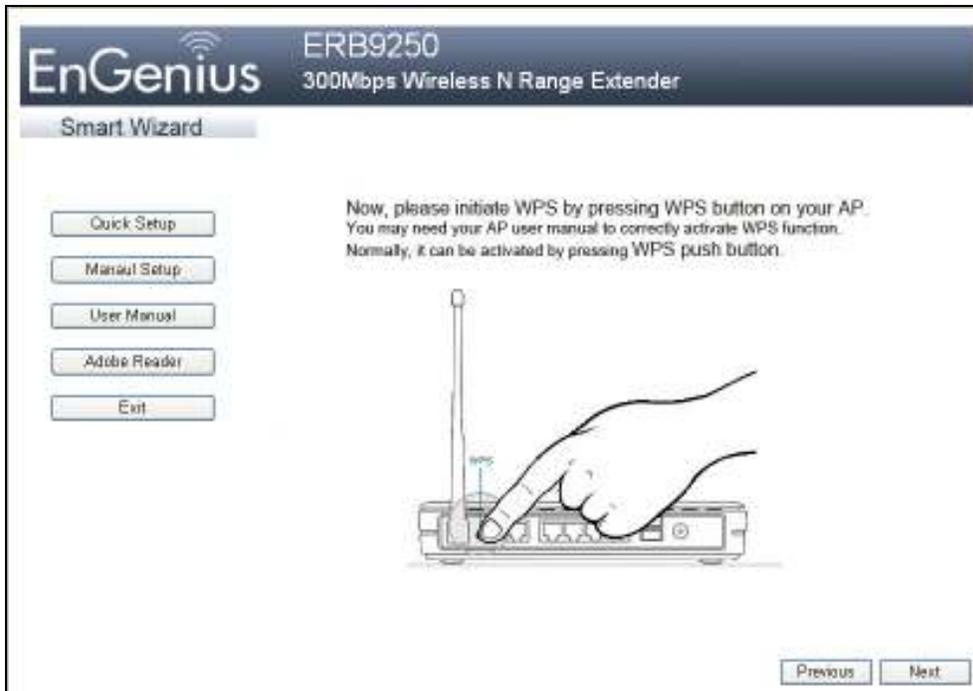
2. Click **Quick Setup**. The following screen appears.



3. Confirm that your router is functional and is not being configured, and that you can use it to access the Internet. Then click **Next**. The following screen appears.



4. Find the WPS button on your router (refer to the documentation for your router), and then click **Next**. The following screen appears.



5. Enable WPS on your router and ensure it is activated.
6. Click **Next**. The following screen appears.

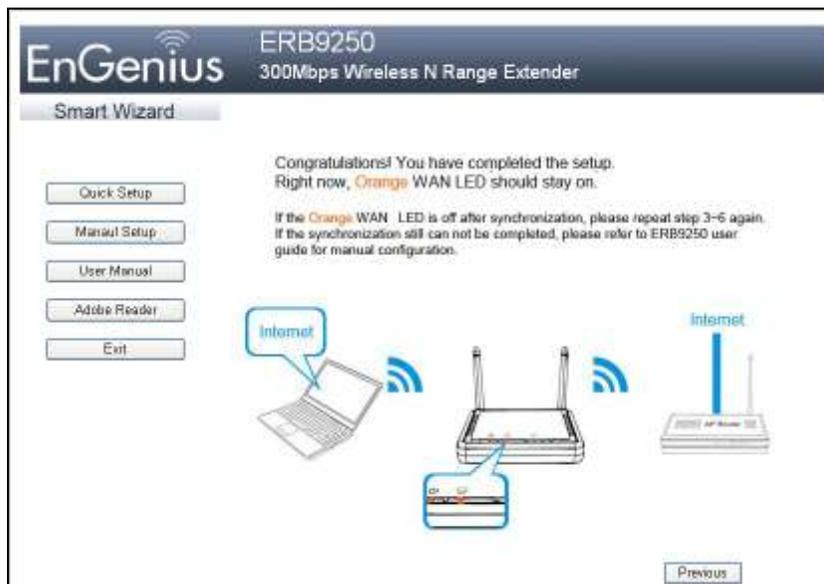


7. Attach the supplied power adapter to the rear panel of your Range Extender to power on the Range Extender and wait for the blue WLAN LED () to stop blinking. Then click **Next** to display the following screen.



8. Press the WPS button on the front panel of your Range Extender once. The orange LAN LED () blinks.

9. When the orange LAN LED () goes ON, it indicates that setup is complete. Click **Next**. The following screen appears.



10. Click **Exit** to exit the Smart Wizard.

If the orange LAN LED does not stay ON, the configuration is not successful. In this case:

- Move your Range Extender closer to your router.

- Be sure the antennas are connected securely to the Range Extender rear panel.
- Repeat steps 2 through 11

OR

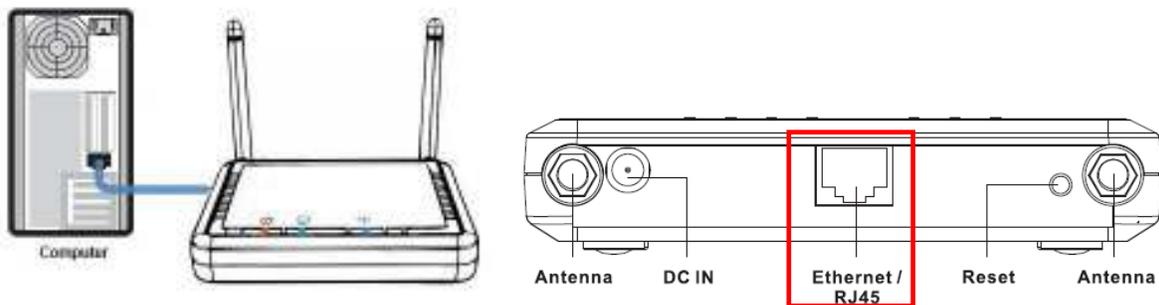
- Consider manual configuration if WPS configuration is not easy for you to set up.

This completes the Smart Wizard configuration procedure for your ERB9250 300M Range Extender. Proceed to, "Placing Your Range Extender in an Optimum Location"

Manual Configuration

If your router does not support WPS, please configure the Range Extender manually.

1. Connect one end of the supplied Ethernet cable to the **Ethernet/RJ45** connector on the rear panel of the Range Extender. Connect the other end to an Ethernet port on your desktop or laptop.



2. **Important:** Your Range Extender's default IP address is 192.168.1.2. Configure your PC (Local Area Connection) to use a static IP address that is on the same subnet as your Range Extender. This means the first three octets preceding the periods in your PC's IP address must be the same as those in the Range Extender's default IP address, with the last octet being different (for example, **192.168.1.10**).

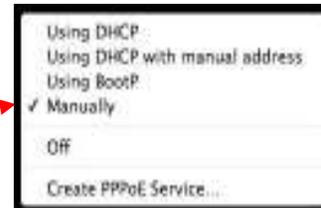
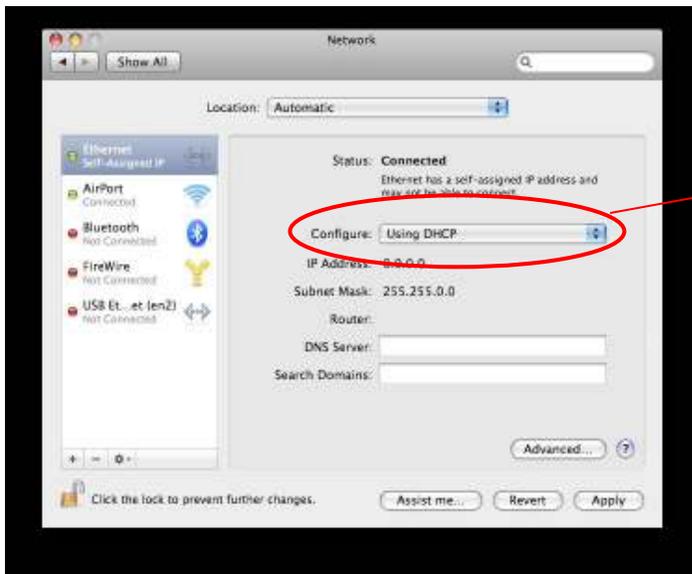
The procedure you use to configure your PC's IP address depends on the PC's operating system. Please follow the instructions appropriate for your PC's operating system.

Apple Mac

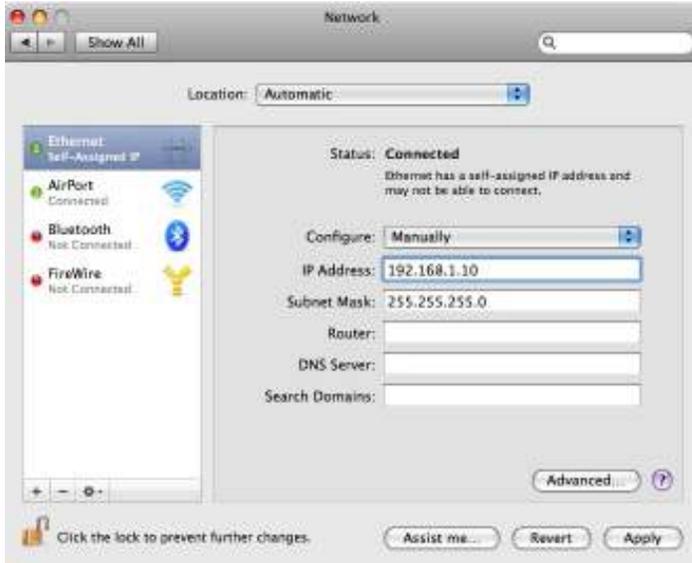
1. Go to **System Preferences > Network**



2. For **Configure**, select **Manually**.

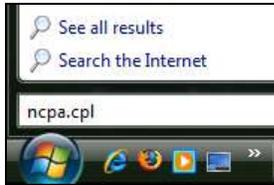


3. Type **192.168.1.10** in the **IP address** field. Click **Apply** and go to next section “Logging in to the Range Extender.”

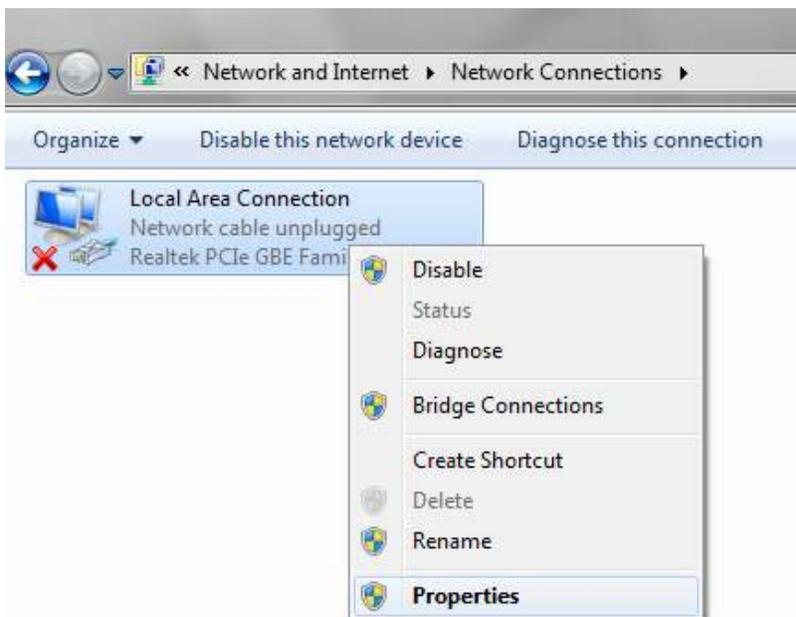


Windows 7 Operating System

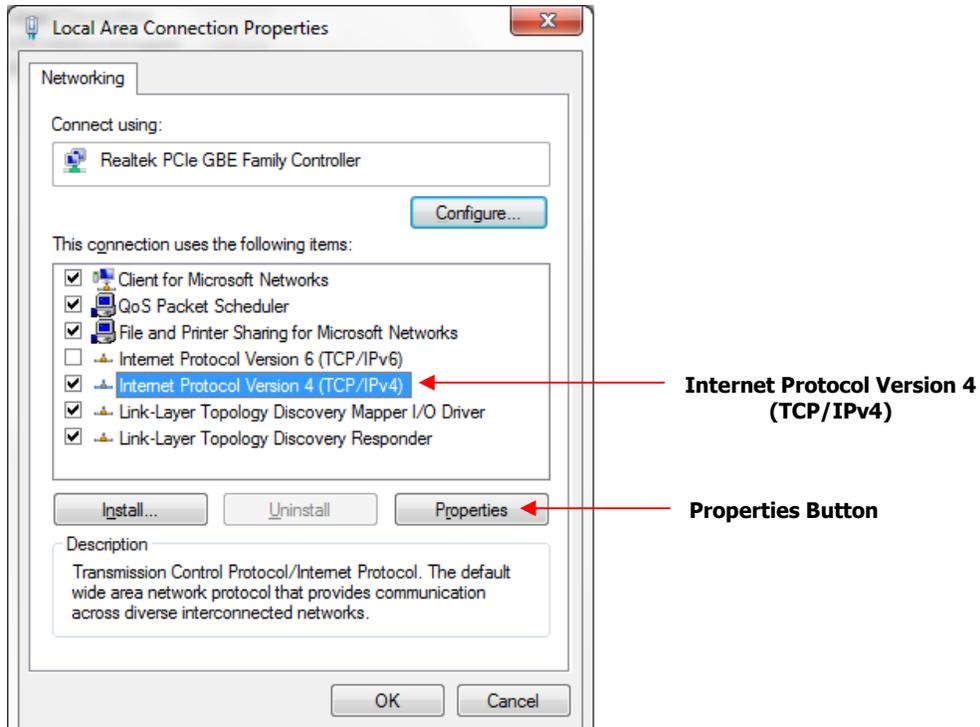
1. In the Start menu search box, type: **ncpa.cpl**



The Network Connections List appears.



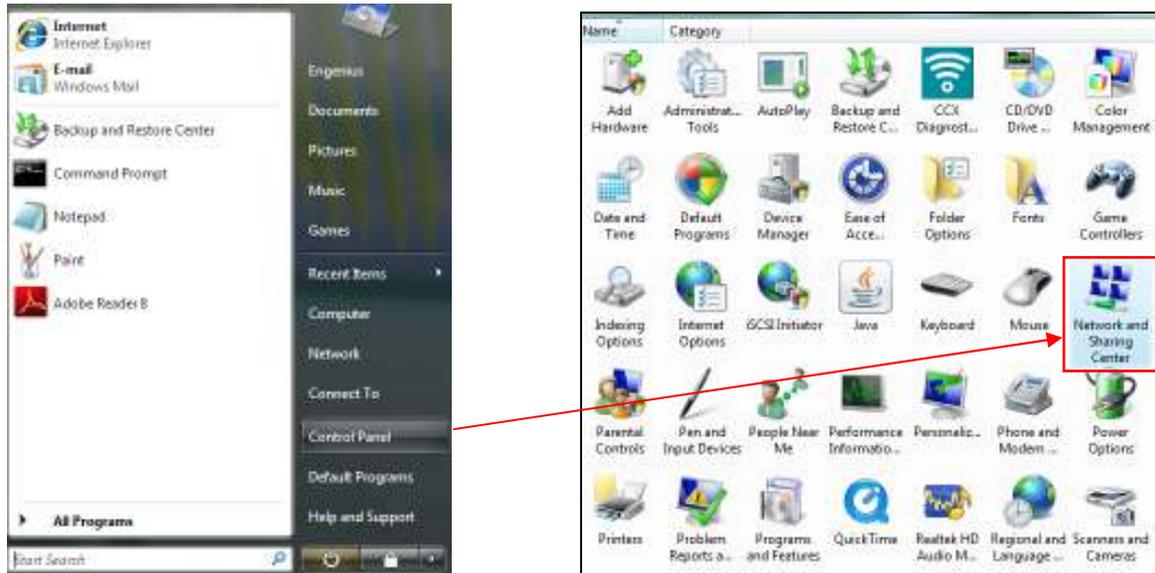
2. Right-click the **Local Area Connection** icon and click **Properties**.
3. In the **Networking** tab of the Local Area Connection Properties dialog box, click either **Internet Protocol Version 4 (TCP/IPv4)** or **Internet Protocol Version 6 (TCP/IPv6)**, and then click **Properties**.



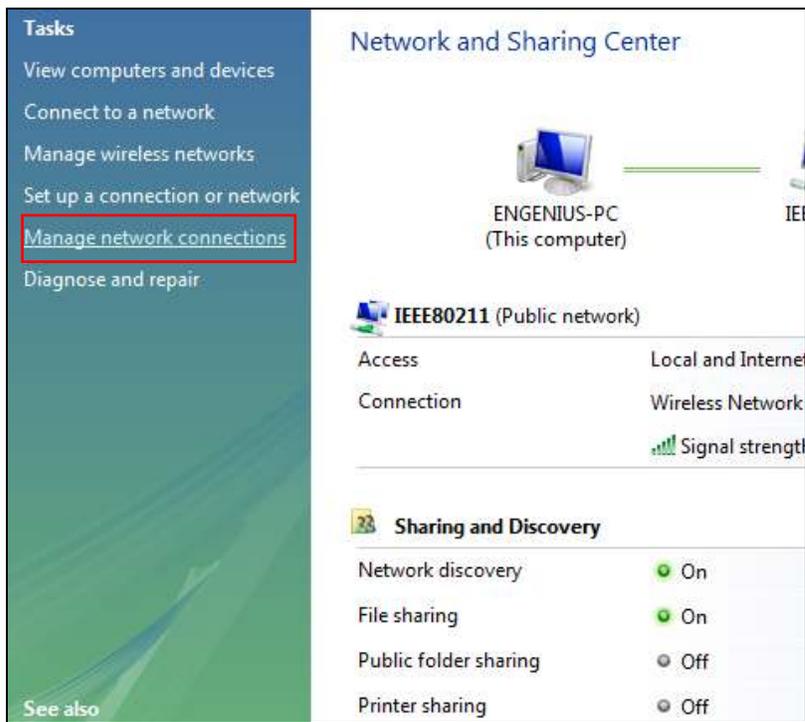
4. In the **General** tab, click **Use the following IP address**, type **192.168.1.10** in the **IP address** field. Click **OK** and go to next section "Logging in to the Range Extender."

Windows Vista Operating System

1. On the Windows taskbar, click **Start**, click **Control Panel**, and then click **Network and Sharing Center**.



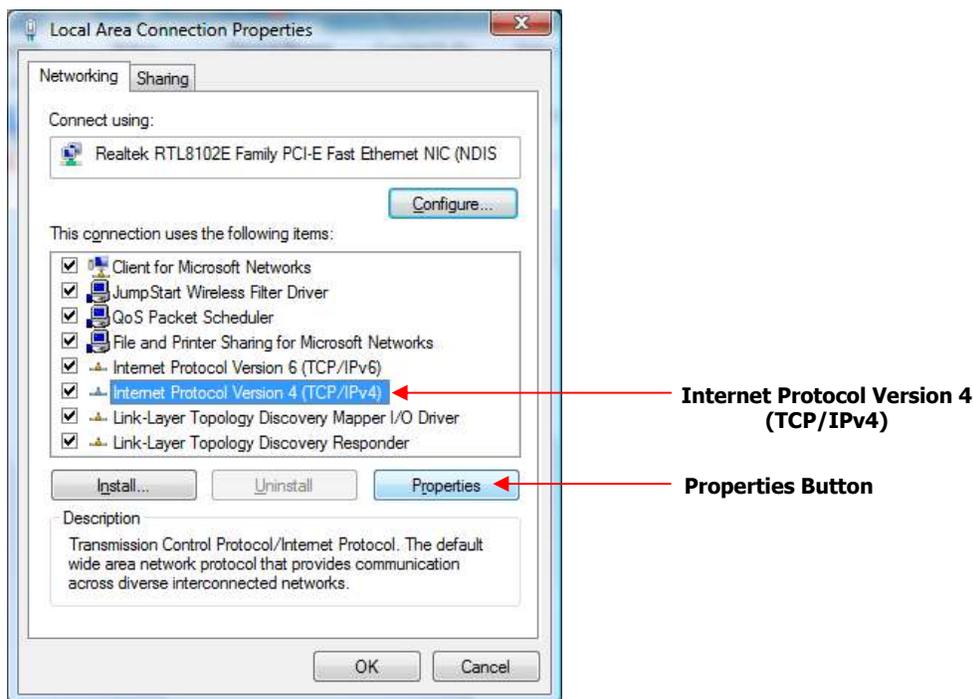
2. In the right pane, click **Manage network connections**.



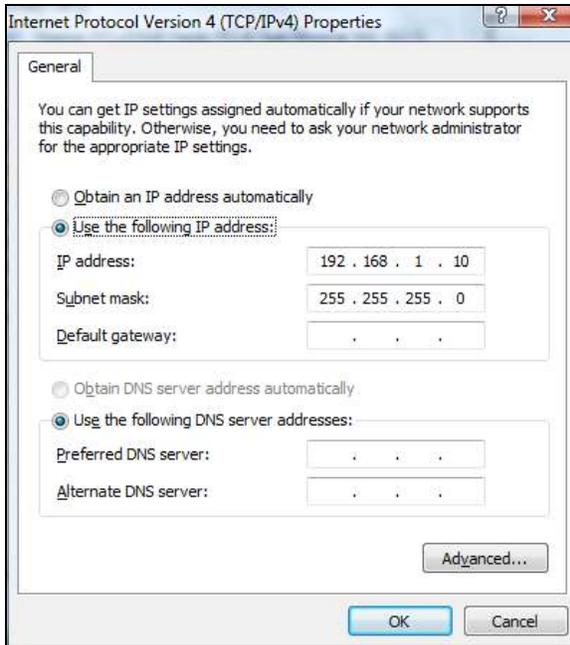
3. Right-click the **Local Area Connection** icon and click **Properties**.



4. Click **Continue**. The Local Area Connection Properties dialog box appears.
5. In the **Networking** tab, verify that **Internet Protocol (TCP/IPv4)** is checked. Then select **Internet Protocol (TCP/IPv4)** and click the **Properties** button. The Internet Protocol Version 4 Properties dialog box appears.

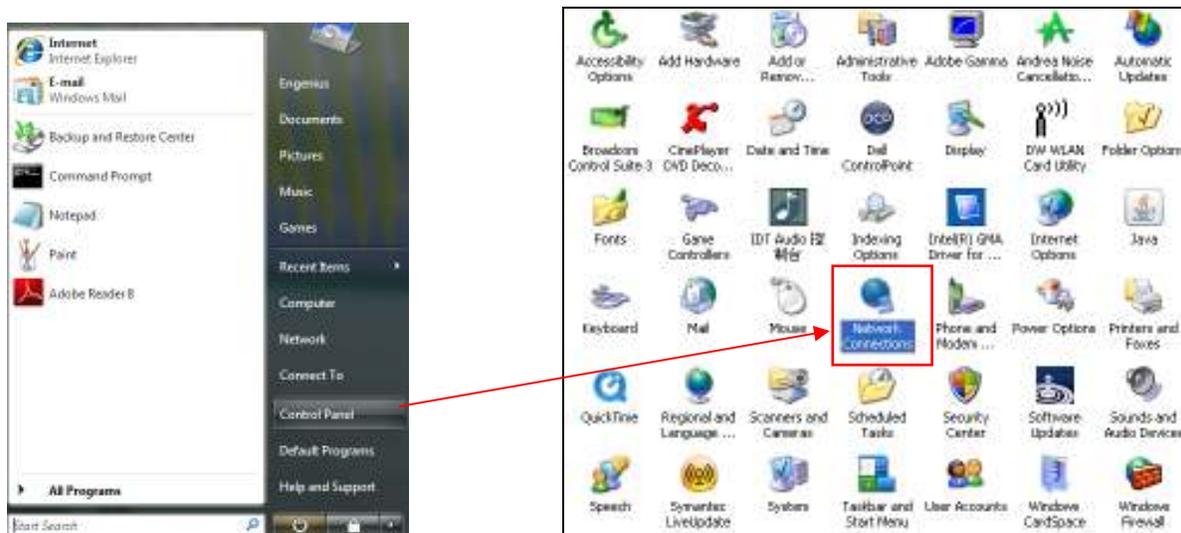


6. In the **General** tab, click **Use the following IP address**, type **192.168.1.10** in the **IP address** field, and click **OK**. Click **OK** and go to next section “Logging in to the Range Extender”



Windows XP Operating System

1. On the Windows taskbar, click **Start**, click **Control Panel**, and then click **Network Connections**.

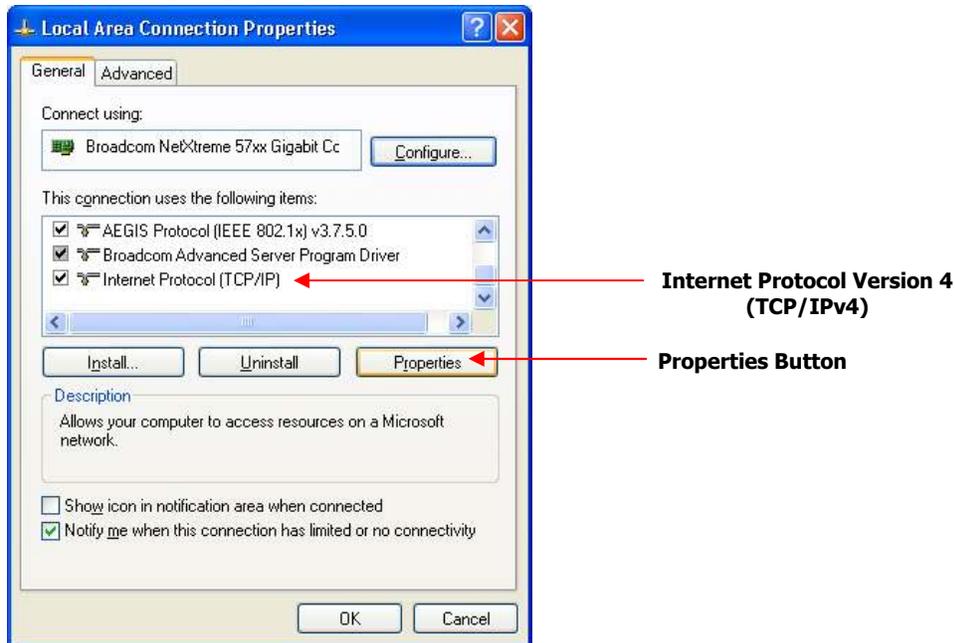


2. Right-click **Local Area Connection** and click **Properties**.

LAN or High-Speed Internet



3. When the Local Area Connection Properties dialog box appears, click **Internet Protocol (TCP/IP)** and click **Properties**. The Local Area Connection Properties dialog box appears.



4. In the **General** tab, click **Use the following IP address**, type **192.168.1.10** in the **IP address** field, and click **OK**.



5. Click **OK** and go to next section "Logging in to the Range Extender".

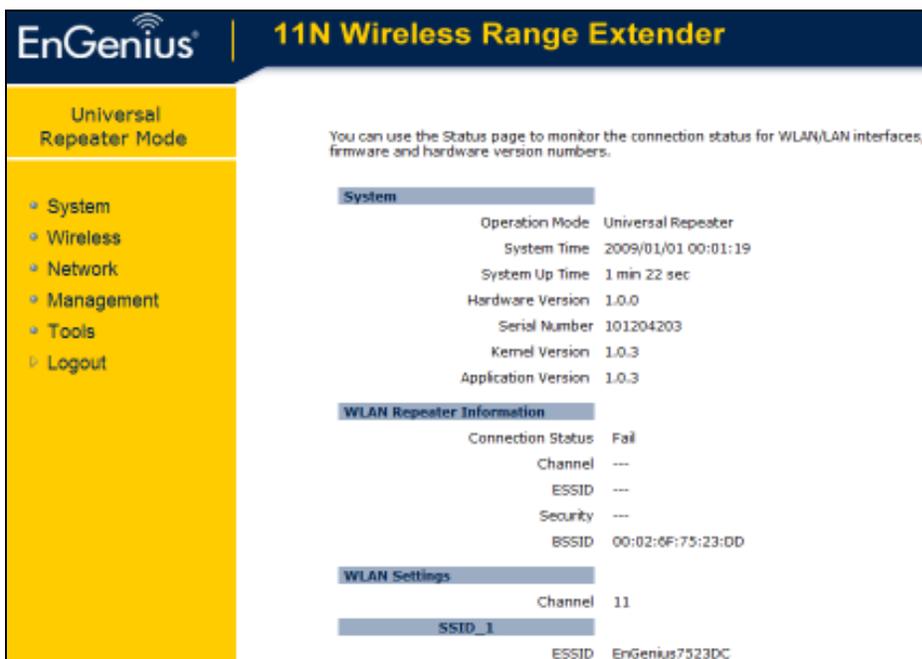
Logging in to the Range Extender

After configuring your PC for the same subnet used by your Range Extender, use the following procedure to log in to the Range Extender's manual configuration.

1. Start your Web browser. In the address bar, and type the default IP **192.168.1.2**. The following screen appears.



2. Type **admin** for the user name and **admin** for password, and then click **OK**. The Web Configuration screen appears.



You can use the Status page to monitor the connection status for WLAN/LAN interfaces, firmware and hardware version numbers.

System	
Operation Mode	Universal Repeater
System Time	2009/01/01 00:01:19
System Up Time	1 min 22 sec
Hardware Version	1.0.0
Serial Number	101204203
Kernel Version	1.0.3
Application Version	1.0.3

WLAN Repeater Information	
Connection Status	Fail
Channel	---
ESSID	---
Security	---
BSSID	00:02:0F:75:23:DD

WLAN Settings	
Channel	11

SSID_1	
ESSID	EnGenius7523DC

3. In the left pane, under **Wireless**, click **Basic**. The following screen appears.

4. Click **Site Survey** to search for the available access points/routers.
5. When a Site Survey window similar to the following shows the available access points/routers, select your access point or router and then click **Connect**.

Site Survey								
NO.	Select	Channel	SSID	BSSID	Encryption	Authentication	Signal(%)	Mode
1	<input checked="" type="radio"/>	2	EnGenius5A6C34	00:02:6F:5A:6C:34	AES	WPA2PSK	20	11b/g/n
2	<input type="radio"/>	7	EnGeniusCC002C	00:AA:BB:CC:00:2C	NONE	OPEN	10	11b/g/n

Refresh

Note: If no access points or routers appear in the Site Survey window, click the **Refresh** button in the window to search again.

6. If your router is encrypted with passwords, choose the selection with the appropriate security mode in the **Encryption** column and authentication type in the **Authentication** column, and then enter the designated passwords. Click **Save**.

7. When a pop-up box shows the connection established between your Range Extender and router, click **Close**.



8. Confirm that the router security information appears on the Range Extender status page.

WLAN Repeater Information	
Connection Status	Successful
Channel	2
ESSID	EnGenius5A6C34
Security	WPA2 pre-shared key
BSSID	00:02:6F:5A:6C:34
Frequency	2.417 GHz
Data Rate	150 Mbps
WLAN Settings	
Channel	2
SSID_1	
ESSID	EnGenius5A6C34
Security	WPA2 pre-shared key
BSSID	00:AA:BB:CC:DD:10

This completes the manual configuration procedure for your ERB9250 300M Range Extender. Proceed to “Placing Your Range Extender in an Optimum Location”.

Placing Your Range Extender in an Optimum Location

After configuring your Range Extender, place it in the best location that suits your needs to ensure optimum performance.

1. Remove the Ethernet cable from the Range Extender and from your desktop or laptop.
2. Using your PC's wireless utility software, find a location that receives a good-to-excellent signal (usually at least 3 bars of signal strength) from your router. Avoid dead spots or weak spots where signal strength is 2 bars or less and areas outside your router's coverage area.
3. Place your Range Extender in the location found in the previous step and plug it into the closest power source to power it on. Confirm that the WLAN LED goes ON to show that the Range Extender is broadcasting a wireless network signal.

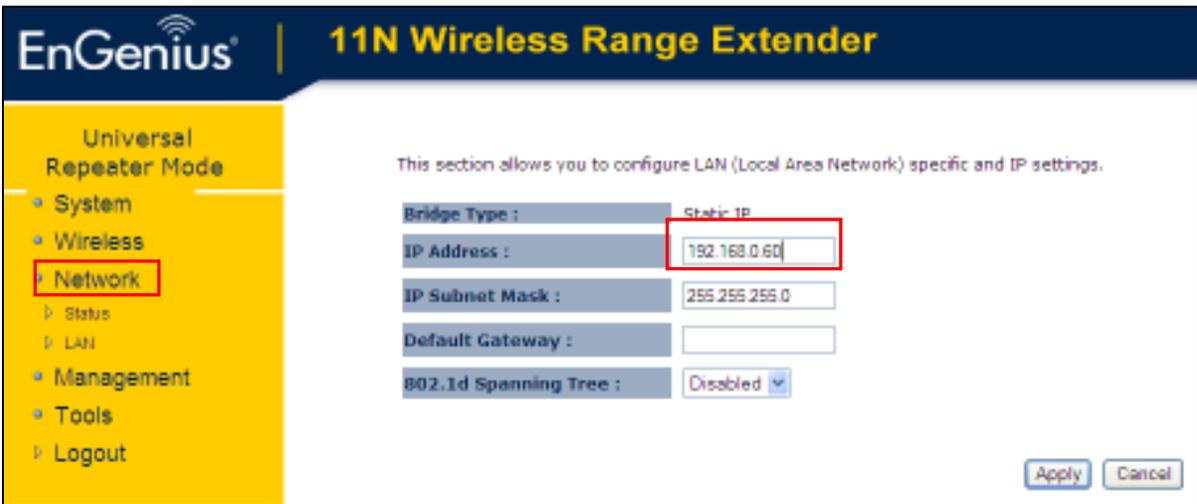
Troubleshooting

Cannot access the Internet after successfully setup ERB9250 with your router

After you set up ERB9250 with your router successfully, moved the ERB 9250 to the center of your home or office, and found that you could not surf Internet Web pages with your laptop even though the signal is strong, potentially your router and ERB9250 might be on different subnets. Check your router's IP address. If your router's IP is not **192.168.1.x**, change either your router's IP address or the ERB9250's IP address to place them on the same subnet. Please see the following instruction on how to change your ERB9250 IP address.

If you own EnGenius ESR9752, ESR9753, or ESR9850 Routers whose default IP address of **192.168.0.1** is on a different subnet than the ERB9250, you can change ERB9250's IP address using the Web-based configuration page.

1. Select **Network**, and click **LAN**.
2. In the **IP Address** field, type **192.168.0.x** where **x** is a number from 0 to 254 except 1. The last value, designated as **x** should be unique to each device on the same subnet. Do not use **1** as the last value, since EnGenius Routers use **1** as the last octet in their IP address.
3. Click **Apply**. The router and ERB9250 are now on the same subnet. Associate your router and connect the ERB9250 with your router again. You should now be able to access Internet.



The screenshot shows the web-based configuration page for an EnGenius 11N Wireless Range Extender. The page title is "EnGenius | 11N Wireless Range Extender". On the left, there is a navigation menu with "Universal Repeater Mode" and several options: "System", "Wireless", "Network" (highlighted with a red box), "Status", "LAN", "Management", "Tools", and "Logout". The main content area is titled "This section allows you to configure LAN (Local Area Network) specific and IP settings." and contains the following configuration fields:

Bridge Type :	Static IP
IP Address :	192.168.0.60
IP Subnet Mask :	255.255.255.0
Default Gateway :	
802.1d Spanning Tree :	Disabled

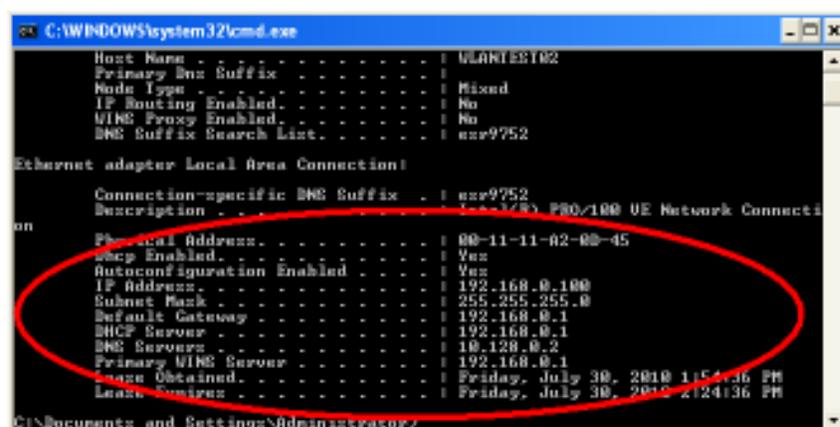
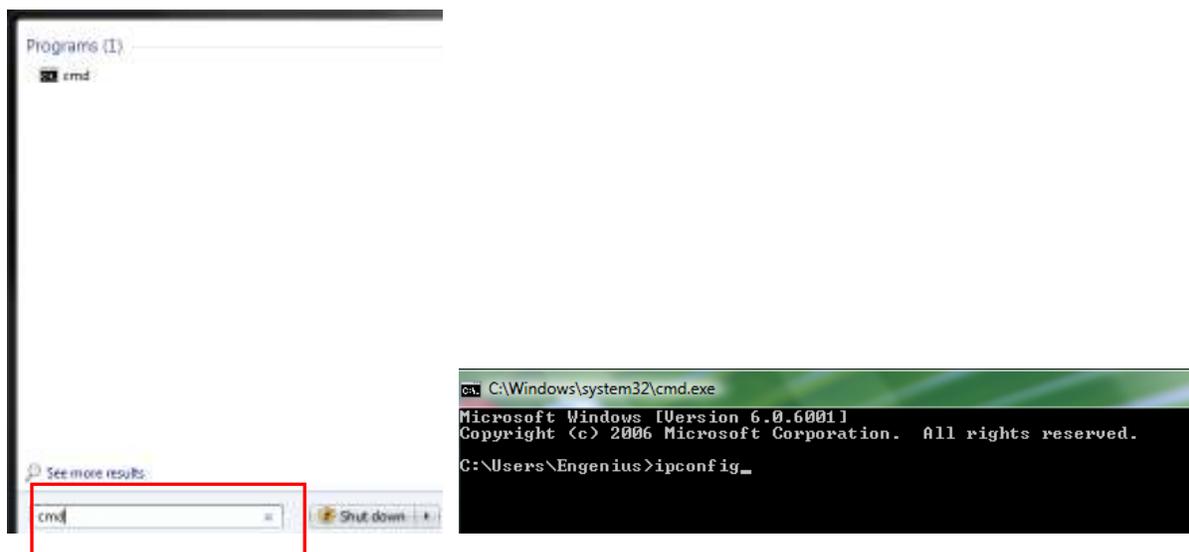
At the bottom right, there are "Apply" and "Cancel" buttons.

Cannot Obtain Broader Coverage

If you fail to get broader coverage, see “Placing Your Range Extender in an Optimum Location,” for suggestion about finding a better place to place the ERB9250 to extend wireless range.

How to find my Router’s IP address

If your PC’s operation system is Windows 7 or Vista, go to **Start**, type “cmd” in the search box and press **Enter**. A window will pop up, type in “ipconfig”, press **Enter**, and you will find your router’s IP address under **Default Gateway** field.



If your PC’s operation system is Windows XP, go to **Start**, select **Run**, type “cmd” in the search box and press **Enter**. A window will pop up, type in “ipconfig”, press **Enter**, and you will find your router’s IP address under **Default Gateway** field.