GN-BR402W

FCC ID : JCK-GN-BR402W

Wireless Broadband Router

User's Guide

http://www.gigabyte.com.tw

Rev. 1.0 First Edition

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1. Product Introduction

1-1 About this Product

Thank you for using Gigabyte GN-BR402W Wireless Broadband Router. This product comes with high-performance transmission rate and compatible wireless connectivity for either your home or business and will allow you to access the data whenever you want. You will be able to enjoy the freedom that wireless networking delivers. Additionally, GN-BR402W enables you to easily setup all procedures in no time before using this product

1-2 Accessories

- Gigabyte GN-BR402W Broadband Router x 1
- Adapter (5V, 2A) x 1
- User's Guide x 1
- CD (including User's Guide and Software) x 1
- RJ45 Network Cable (Cross-Over) x 2

1-3 Specifications

GN-BR402W	Quantity	Description
LAN	4	10/100 Mbps, RJ-45 Insert Hole
USB	1	USB (B type) Insert Hole
WAN	1	10/100 Mbps, RJ-45 Insert Hole
COM	1	56K Modem Port
Printer	1	Printer Server Port

1-4 LED Status

LED	Status	Indication
Power	Lit Green Light	Power on
WAN	Lit Green Light	ADSL/Cable Modem is connected to WAN port.
	Blinking Green Light	Transmit or receive data via the WAN port.
Wireless	Lit Green Light Status	The PCMCIA Card is plugged in, than RED light will automatically turn off.
	Blinking Green Light	Package transmit
	Green Light Off	The green light off means No PCMCIA Card installed.
	Blinking Red Light	The blinking red light indicates that the GN-BR402W is being initialized.
LAN1	Lit Green Light	10/100 Mbps Network Connection
	Blinking Green Light	10/100 Mbps Data Transmission Rate
LAN2	Lit Green Light	10/100 Mbps Network Connection
	Blinking Green Light	10/100 Mbps Data Transmission Rate
LAN3	Lit Green Light	10/100 Mbps Network Connection
	Blinking Green Light	10/100 Mbps Data Transmission Rate
LAN4	Lit Green Light	10/100 Mbps Network Connection
	Blinking Green Light	10/100 Mbps Data Transmission Rate

2. System Connection & Installation

- The following lists the requirements for the hardware installation

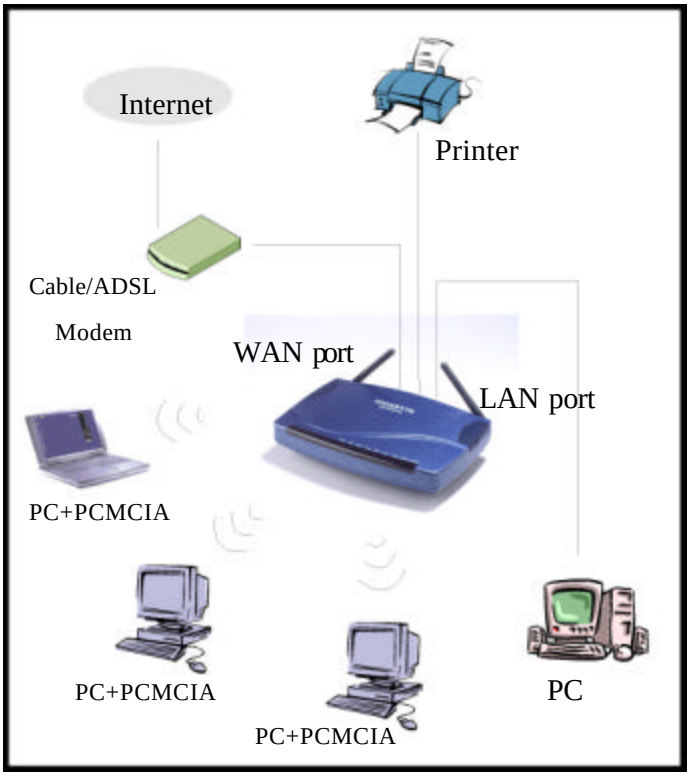
2-1 ADSL/Cable Modem Requirements

It needs to have ADSL/Cable Modem with RJ-45 connectors.

2-2 PC Hardware Requirement at the PC End

It needs a PC with Ethernet card connection, or PC with USB Port, or a PCMCIA wireless adapter.

The Diagram Showing the Ways of Installing the GN-BR402W



2-3 Connection for Ethernet User

Step 1. Please prepare an Ethernet cable (RJ- 45) first.

Step 2. Connect the Ethernet cable to the WAN port of the GN-BR402W.

Step 3. Connect an end of the network cable to the ADSL/Cable Modem of the Ethernet connection port.

Note: Please check if the light of the WAN port of the GN-BR402W is lit. If not, try to use the cross over (RJ- 45) Ethernet cable that comes with this product.

Step 4. Connect any port of the area network LAN1, 2, 3, & 4 of the GN-BR402W to your PC.

Step 5. Connect the adapter to the power connection slot of the GN-BR402W.

Step 6. Insert the adapter to the power socket.

Step 7. The connection procedure is completed.

2-4 Connection for USB Port User (If you use USB connection, please refer to this section.)

Please repeat Steps 1~3 of Section 2-3.

Step 4. Connect the USB transmission cable to the USB port of the GN-BR402W and the USB port at the PC end.

Step 5. Please install the USB driver program by the CD that comes with the GN-BR402W.

(Please refer to Appendix B for the installation of the USB driver program).

2-5 Connection for PCMCIA Wireless Adapter User

Please repeat Steps 1~3 of Section 2-3.

If you were using wireless connection , please refer to the wireless card manual which provider by your wireless card manufature . After installing and setting the PCMCIA Wireless Adapter , refer to PC configuration section in Chapter 3 , follow the instruction step by step to finish the TCP/IP Protocol setting (Setting PC) .

Note: The SSID of the PCMCIA Wireless Adapter should be the same as the SSID of GN-BR402W. The default value is “gigabyte” (or “any”, if your Wireless LAN Card can support.), please do notice the form of the SSID value whether is capital or not.

3. Configuration

3-1 Preparation

Generally speaking, using the GN-BR402W for Internet connection needs the ADSL or Cable service. We assume that you have already obtained the ADSL/Cable service from the local telephone company or the ISP Company, and get the related connection data ready.

Such data include

a. IP address provided by ISP
b. Subnet mask
c. Default gateway IP address
d. Domain Name System (DNS) Server IP address

- The ISP Company provides the above data.

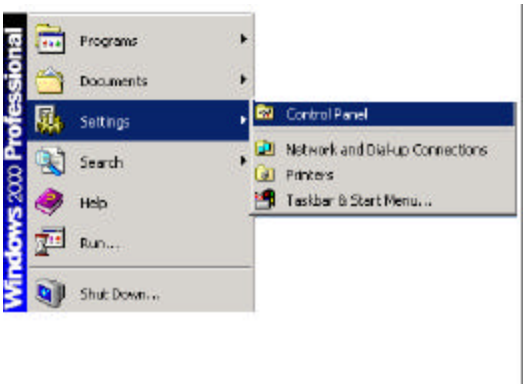
3-2 Setup at Your PC End

An easy-to-use web page setup interface is designed on the GN-BR402W, and the user can perform the setup by the browser. The Gigabyte GN-BR402W Broadband Router presets the IP address as "**192.168.1.254"**, and preset as a DHCP server Please follow the step below to perform the setup under the TCP/IP network environment. Please confirm the TCP/IP communication protocol is installed in your computer (Windows 95/98/Me/NT). If you have not installed the TCP/IP communication protocol, please install it now, and then select your operating system for the setup.

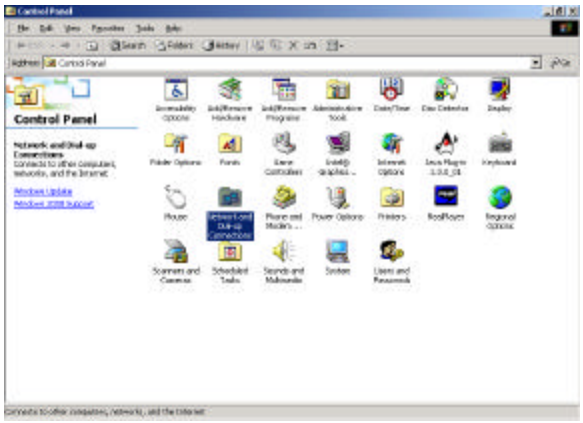
- For Windows 2000, please jump to 3-2-1.
- For Windows 95/98/Me, please jump to 3-2-2.
- For Windows XP, please jump to 3-2-3.

3-2-1 The Settings Under Windows2000

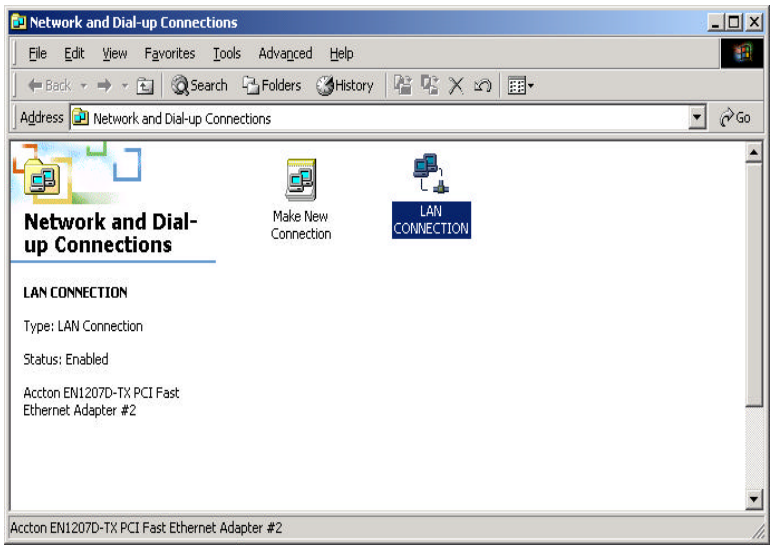
Step 1. Click "Start" in the desktop of the Windows to select "Settings", and then click "Control Panel".



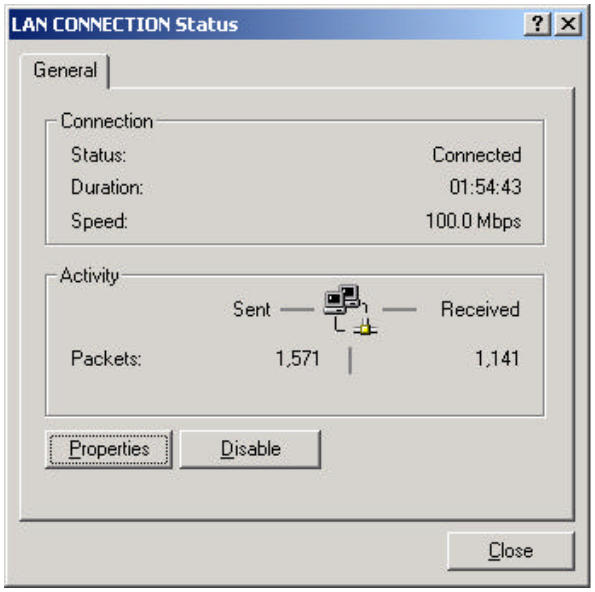
Step 2. Double click the “Network and Dial-up Connections”.



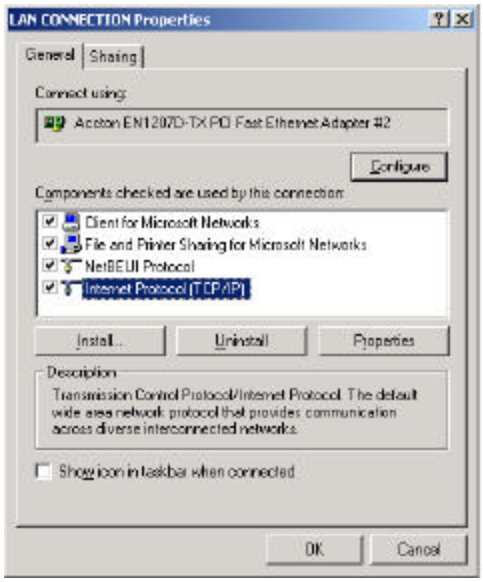
Step 3. Double click the “LAN CONNECTION”.



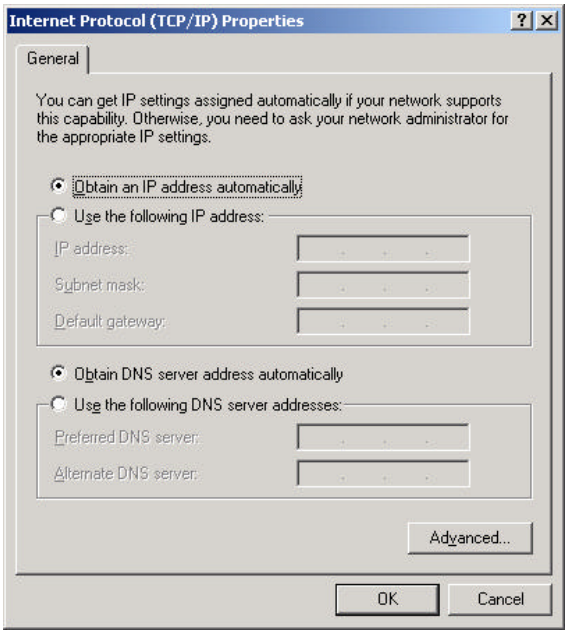
Step 4. Click “Properties” in the box under LAN CONNECTION Status.



Step 5. Double click “Internet Protocol (TCP/IP)”.

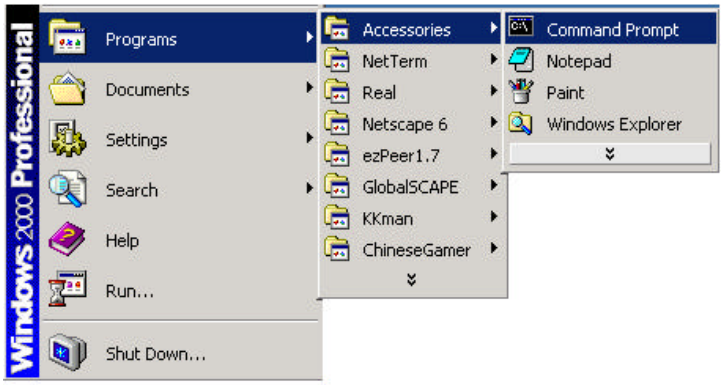


Step 6. Please select “Obtain an IP address automatically” and “Obtain DNS server address automatically”, and then enter “OK”.

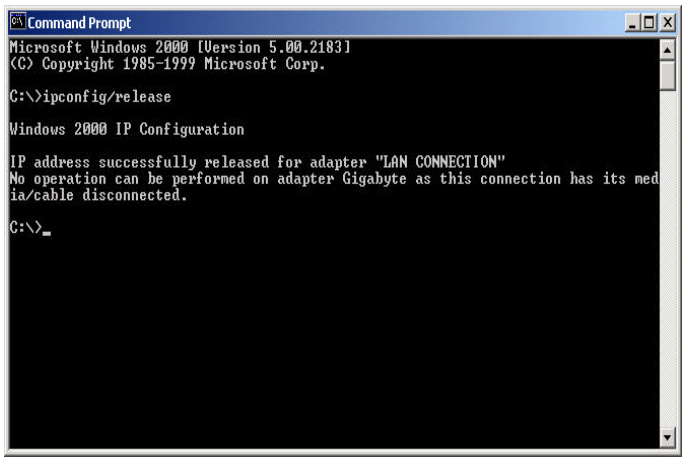


Now, the computer will obtain an IP address automatically from the GN-BR402W then you can go to Step11 directly. If you would like to obtain an IP address manually, please refer to Step7~Step10.

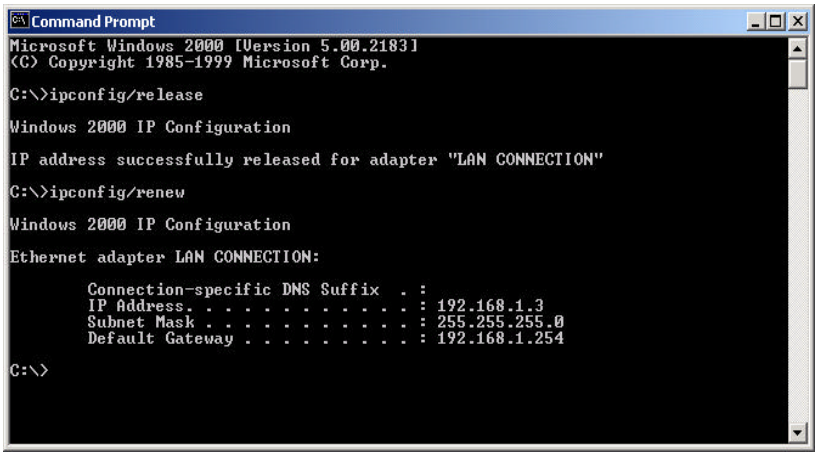
Step 7. Click “Start” at the desktop of the Windows, and then “Program”, “Accessories”, and “Command Prompt” in sequence.



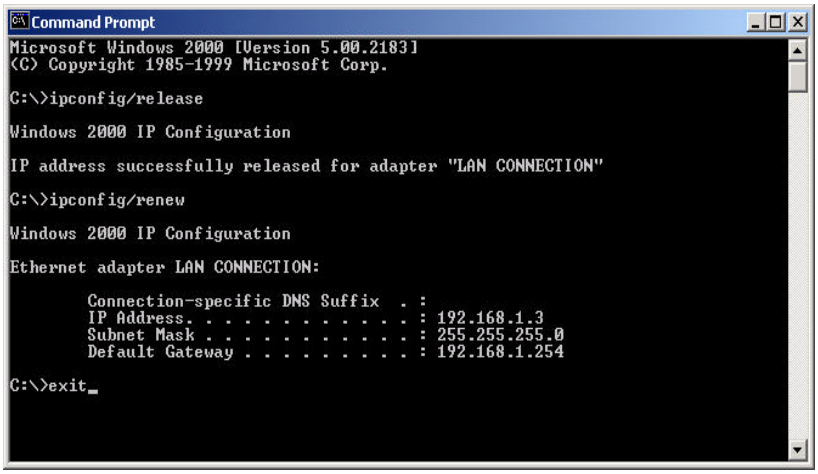
Step 8. Key in the command “ipconfig /release” in DOS mode, and then enter.



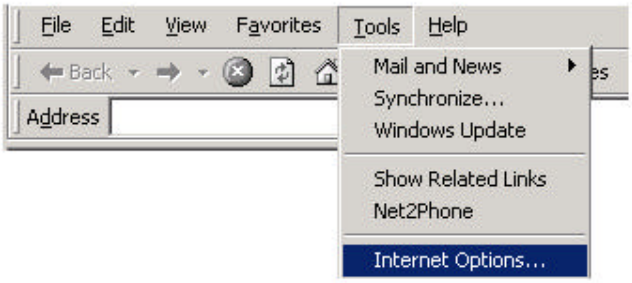
Step 9. Key in the command “ipconfig/renew”, and then enter.



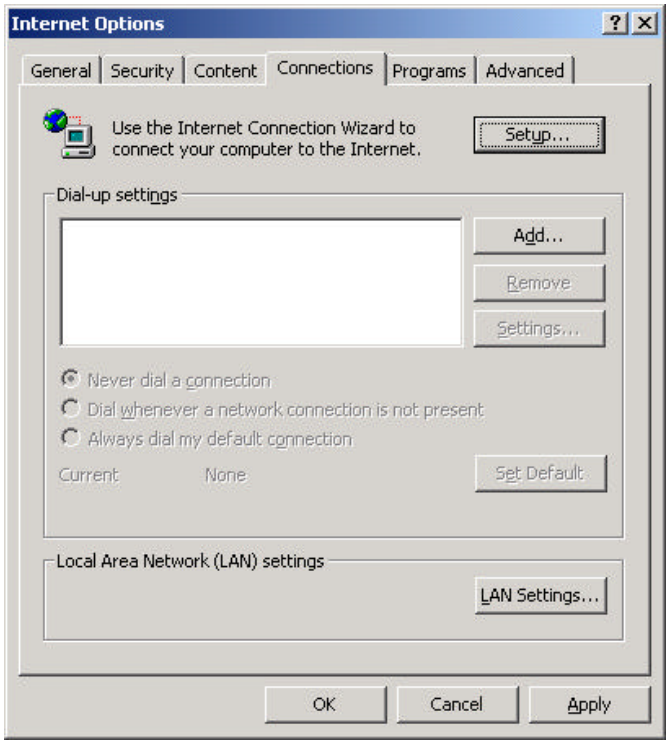
Step 10. Key in “exit”, and then enter.



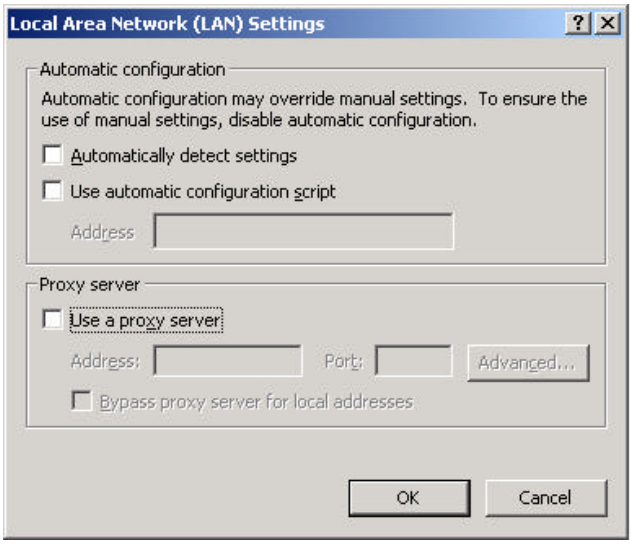
Step11. In your “IE Browser” select “Internet Options” under “Tools”.



Step 12. In this dialogue box, please click “Connections” in the “LAN Settings”.



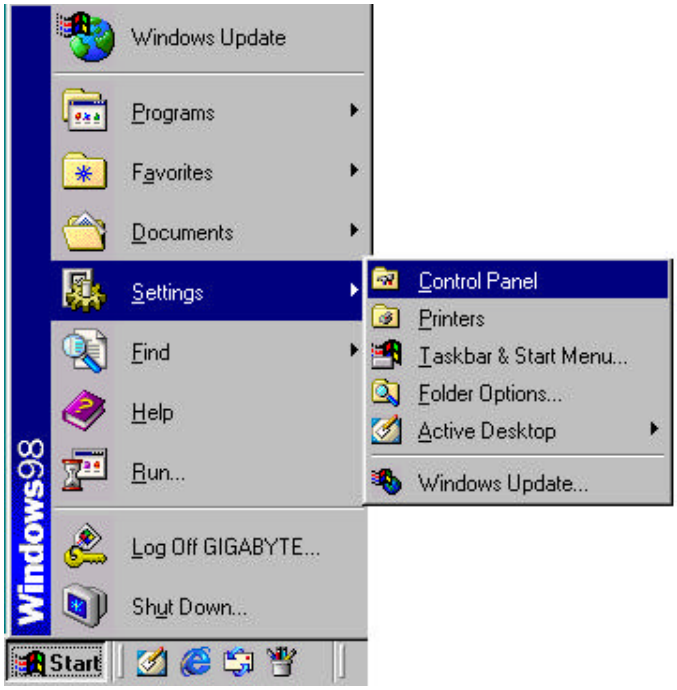
Step 13. Please **DO NOT** tick all of the selection boxes. Press "OK" after finishing with the setup, and refer to Section 3-3 for setup of broadband router.



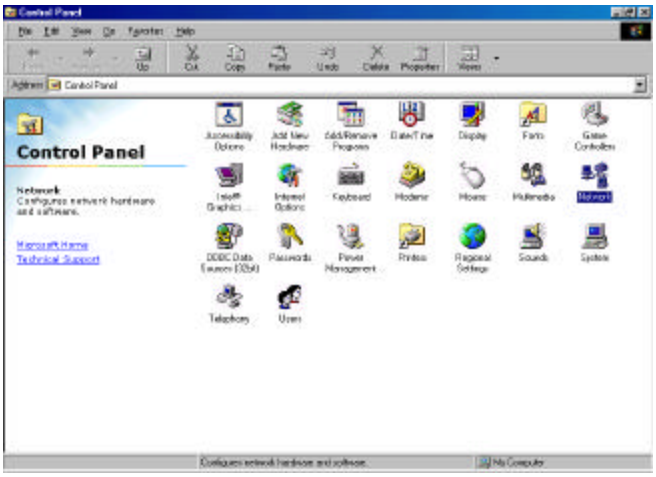
Note: If your ISP Company has a designated Proxy setting, key in the setting after you complete the GN-BR402W configuration **Please jump to Section 3-3 to setup broadband router.**

3-2-2 Setup Under the Windows 95/98/Me

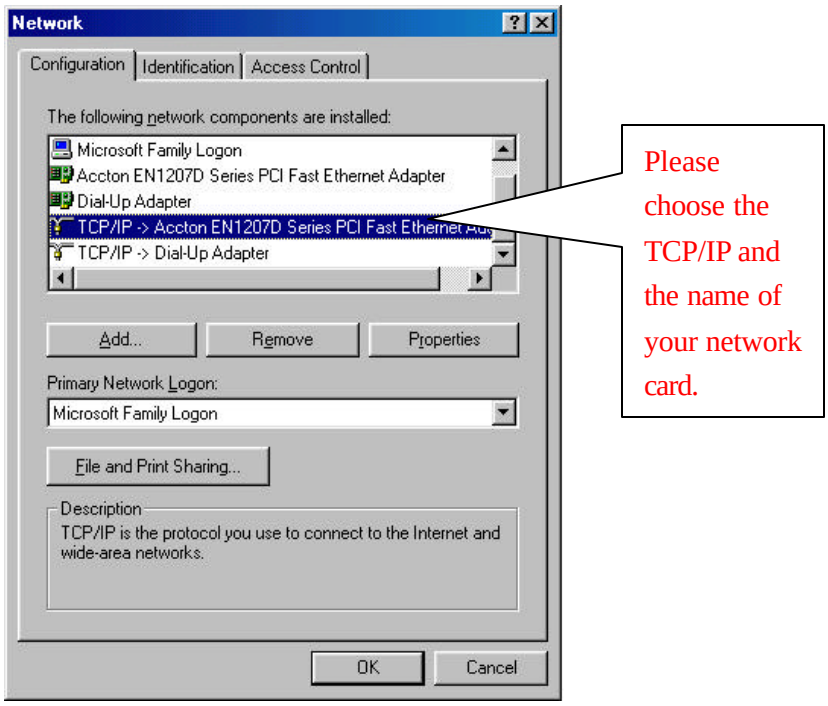
Step 1. Click “Start” at the desktop of the Windows, and select “Settings”, and then the “Control Panel”.



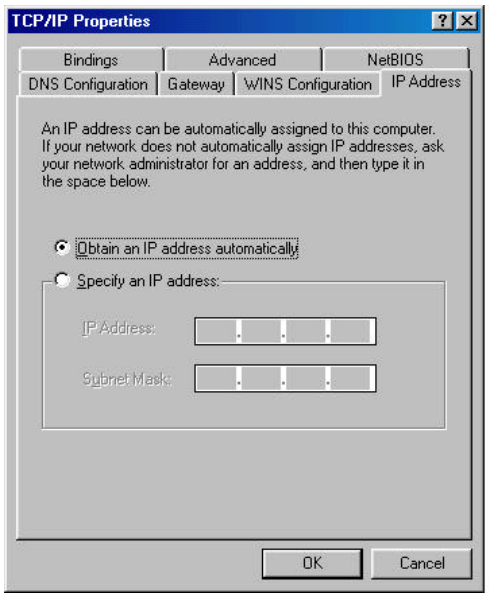
Step 2. Double click “Network”.



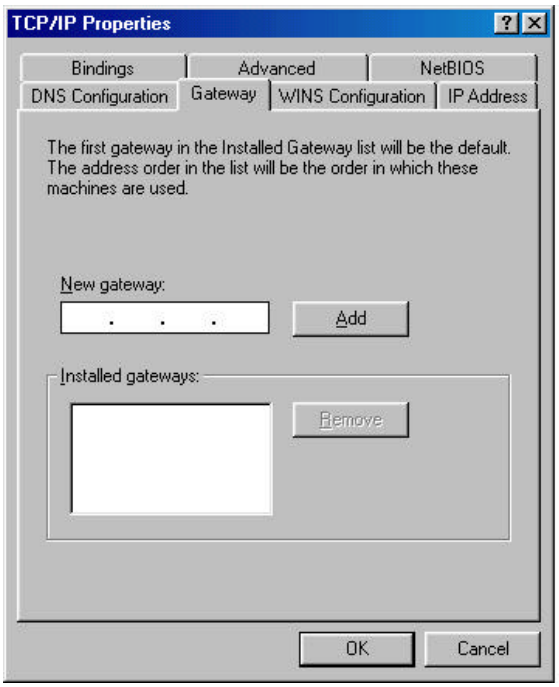
Step 3. Under Network, double click the “Configuration”, and choose your appropriate setting “TCP/IP -> and your network card” below.



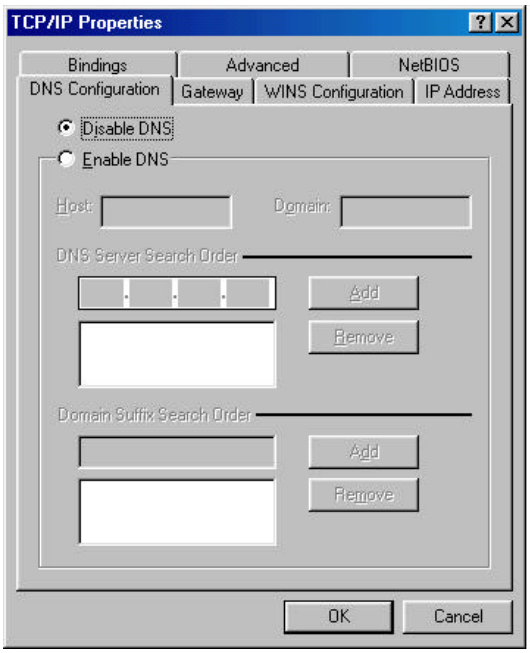
Step 4. Select IP Address. Please select “Obtain an IP address automatically”, and then press “OK”.



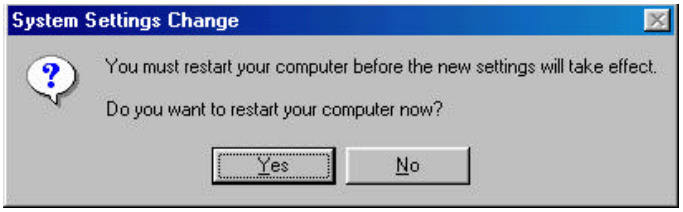
Step 5. In the window of “Gateway”, please clear all installed gateways and do not fill any of the blanks, and then press “OK”.



Step 6. In the window of “DNS Configuration”, please select “Disable DNS” and then press “OK”.

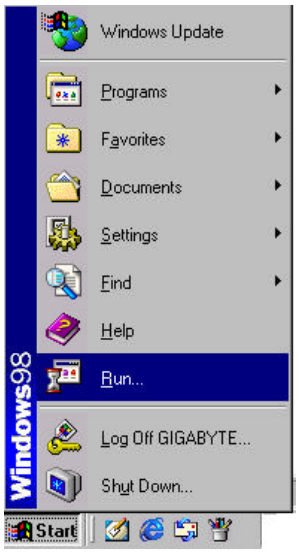


Step 7. Please press “Yes”, and reset the computer screen as follows:

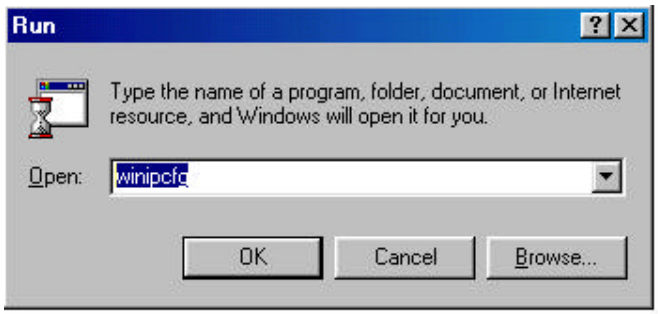


After booting the computer, the computer will obtain an IP address automatically from the GN-BR402W then you can go to Step11 directly. If you would like to obtain an IP address manually, please refer to Step8~Step10.

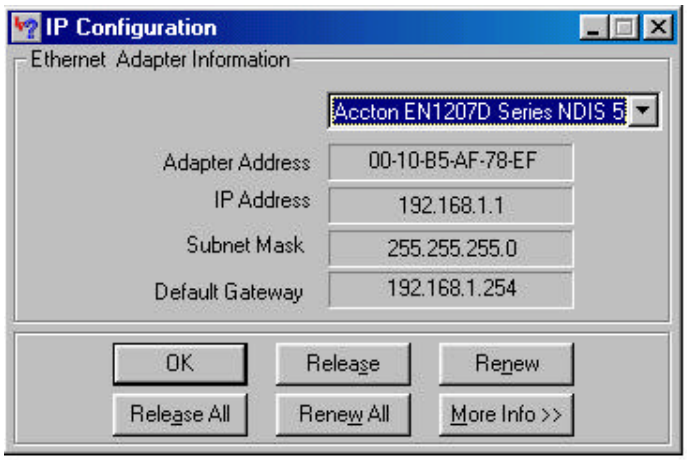
Step 8. After booting the computer, please click “Start” and choose “Run”.



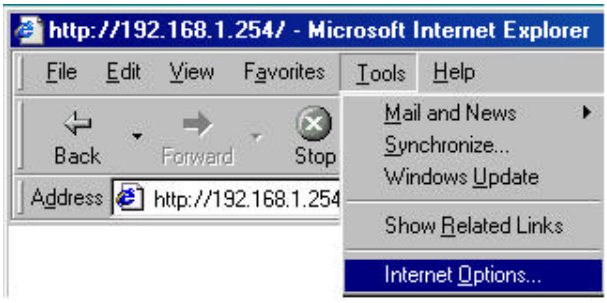
Step 9. Key in “winipcfg” , and press “OK”.



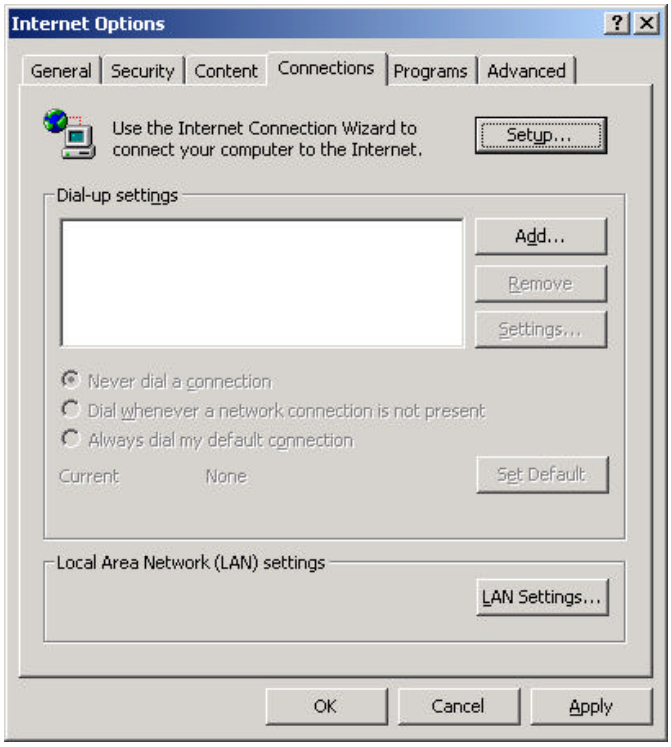
Step 10. In the pulled down menu, select your network card, press “Release All”, then press “Renew All”, and then press “OK”.



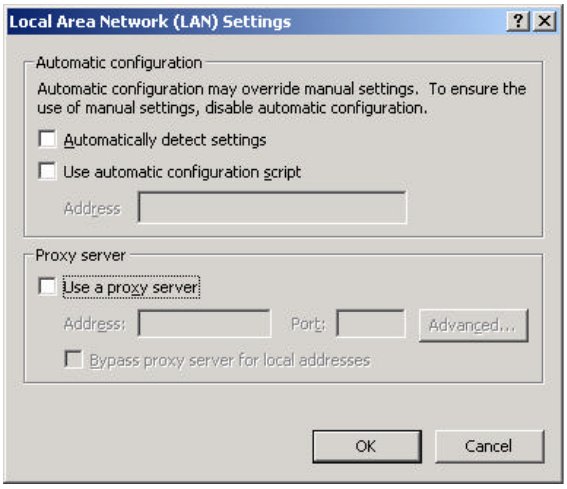
Step11. Please select “Internet Options” under “Tools” of your IE Browser.



Step 12. In this dialogue box, please select “Connections” in the “LAN Settings”.



Step 13. Please **DO NOT** tick all of the selection boxes. Press “OK” after finishing with the setup, and refer to Section 3-3 for setup of broadband router.

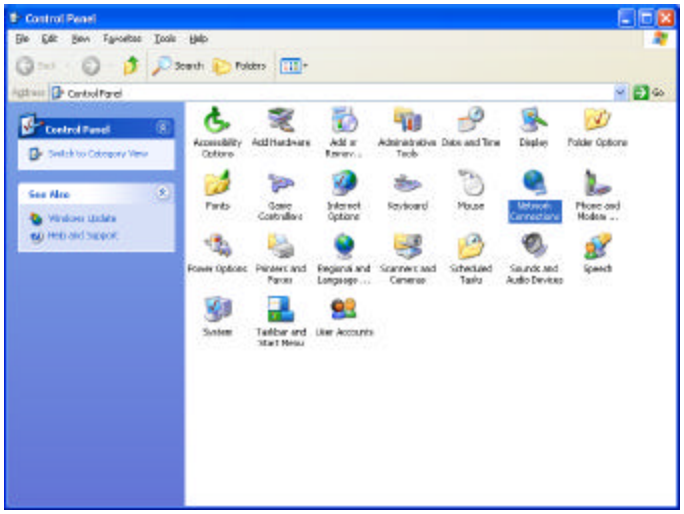


Note: If your ISP Company has a designated Proxy setting, key in the setting after you complete the GN-BR402W configuration **Please jump to Section 3-3 to setup broadband router.**

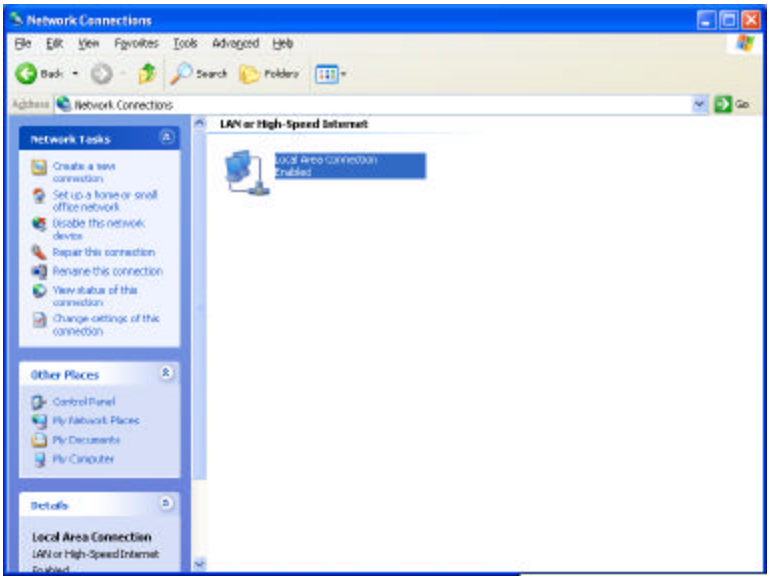
3-2-3 Set Up Under Windows XP

Step 1. Click the “Start” at the desktop of the Windows, and select the “Control Panel”.

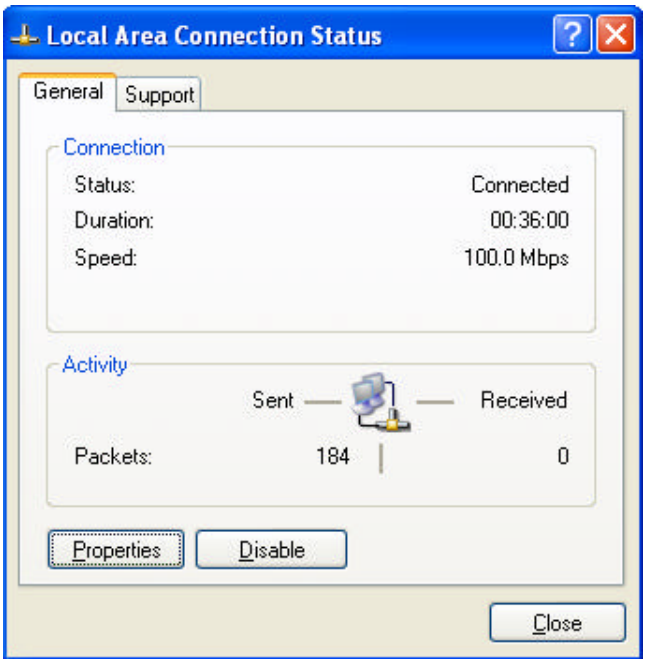
Step 2. Double click the “Network and Dial-up Connections”.



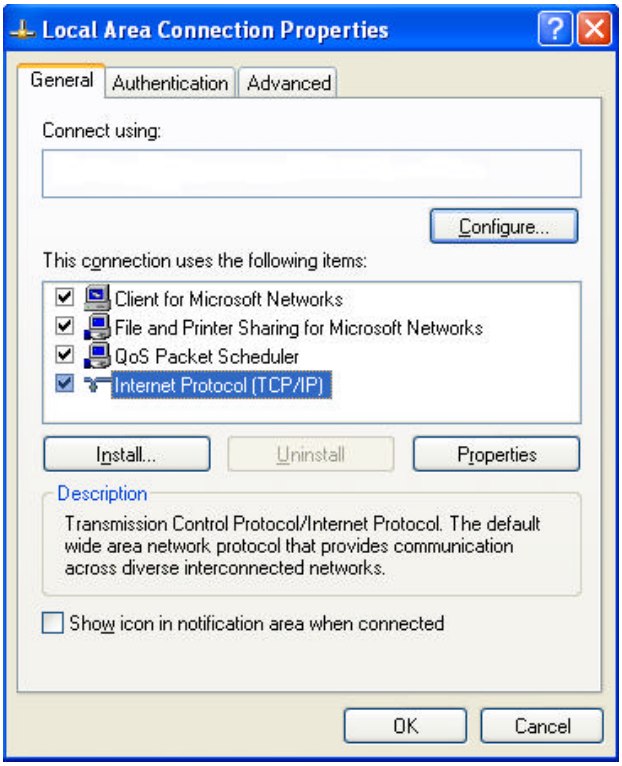
Step 3. Double click the “LAN CONNECTION”.



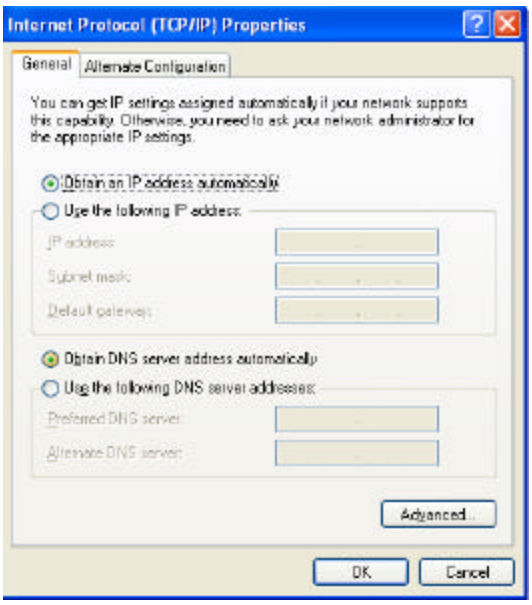
Step 4. Click the “Properties” in the box under LAN CONNECTION.



Step 5. Double click the “Internet Protocol(TCP/IP)”.



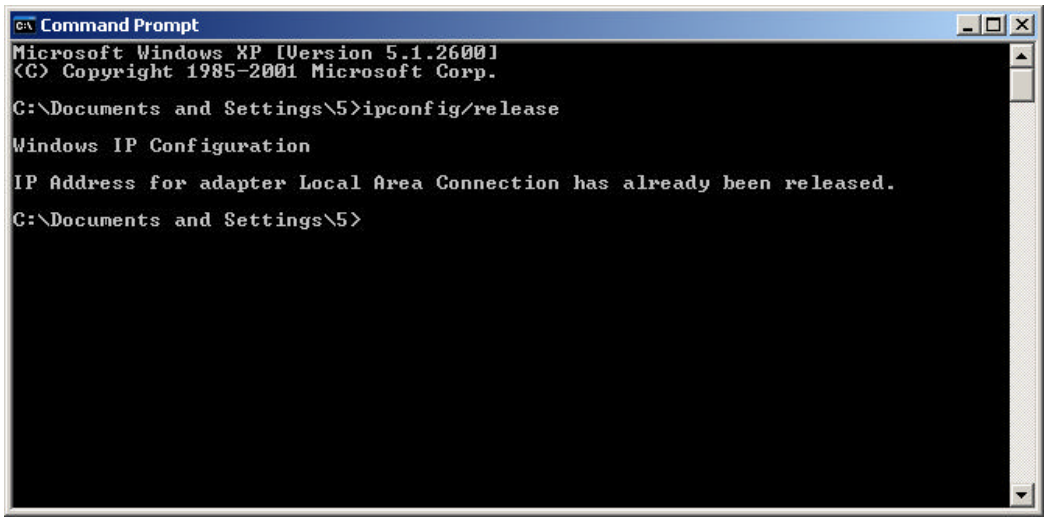
Step 6. Please select the “Obtain an IP address automatically” and “Obtain DNS server address automatically”, and then press “OK”.



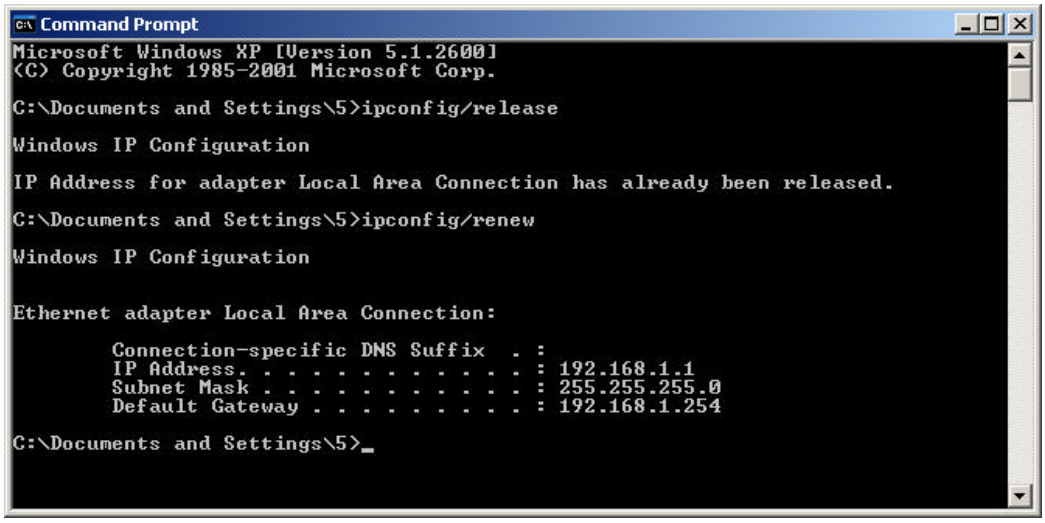
Now, the computer will obtain an IP address automatically from the GN-BR402W then you can go to Step11 directly. If you would like to obtain an IP address manually, please refer to Step7~Step10.

Step 7. Click the “Start” at the desktop of the Windows, and then the “Accessories”, and then the “Command Prompt”.

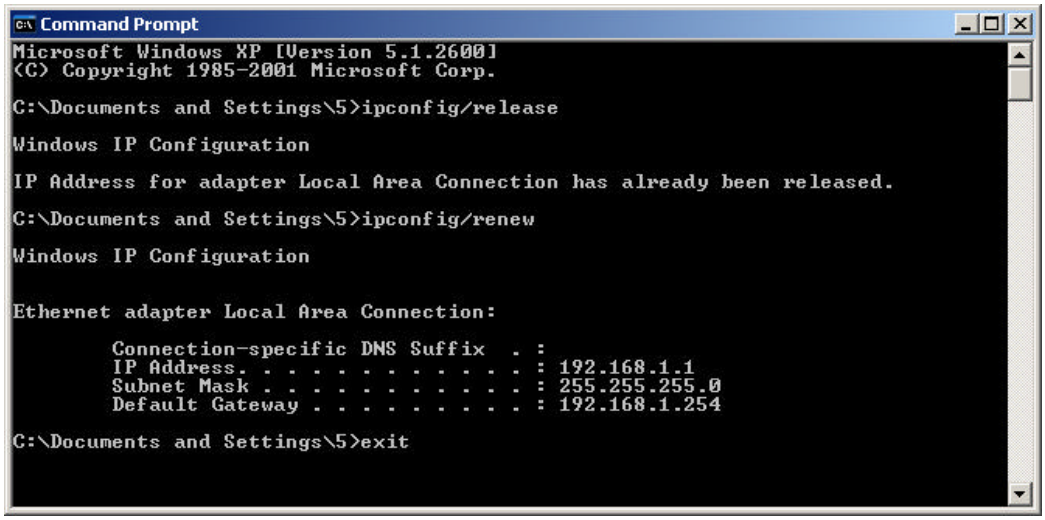
Step 8. Input the “ipconfig /release” in the box of Command Prompt, and then press “OK”.



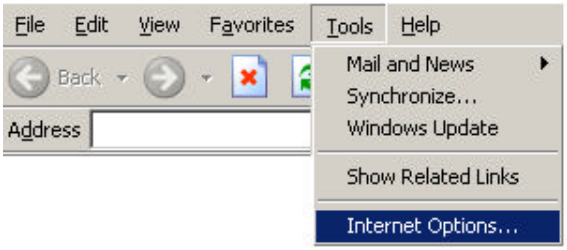
Step 9. Input “ipconfig/renew”, and then press “OK”.



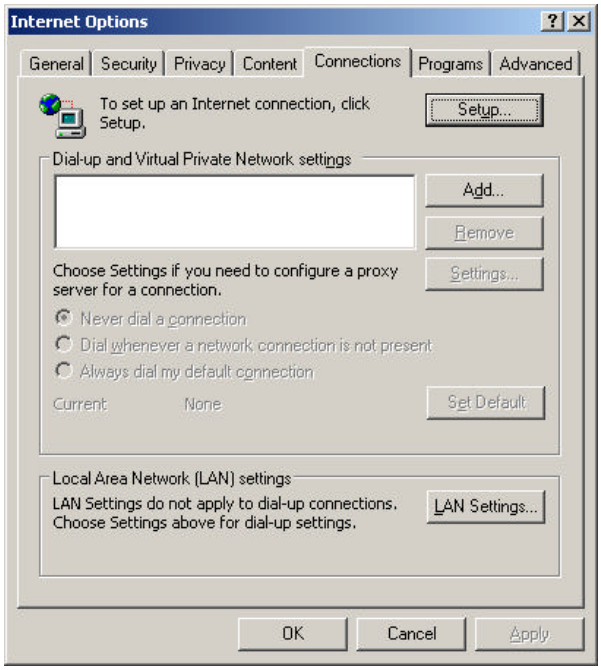
Step 10. Input “exit”, and then press <Enter>.



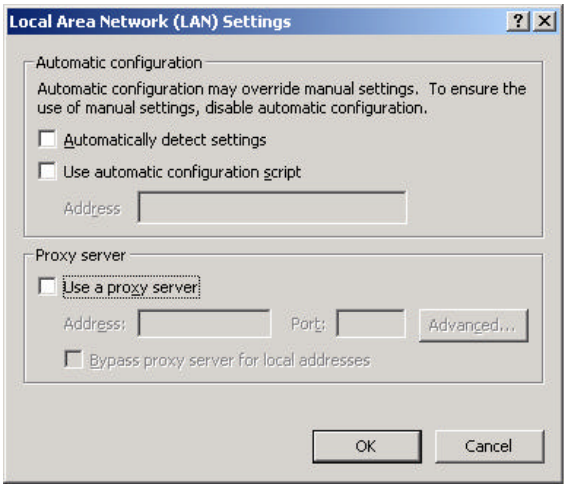
Step 11. Please select “Internet Options” under “Tools” of your IE Browser.



Step 12. In this dialogue box, please select “Connections” in the “LAN Settings”.



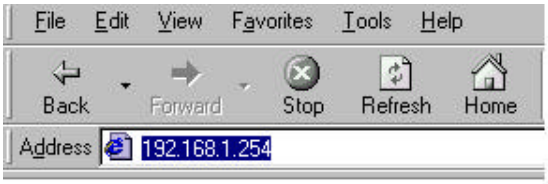
Step13. Please **DO NOT** tick all of the selection boxes. Press “OK” after finishing with the setup.



Note: If your ISP Company has a designated Proxy setting, key in the setting after you complete the GN-BR402W configuration **Please jump to Section 3-3 to setup broadband router.**

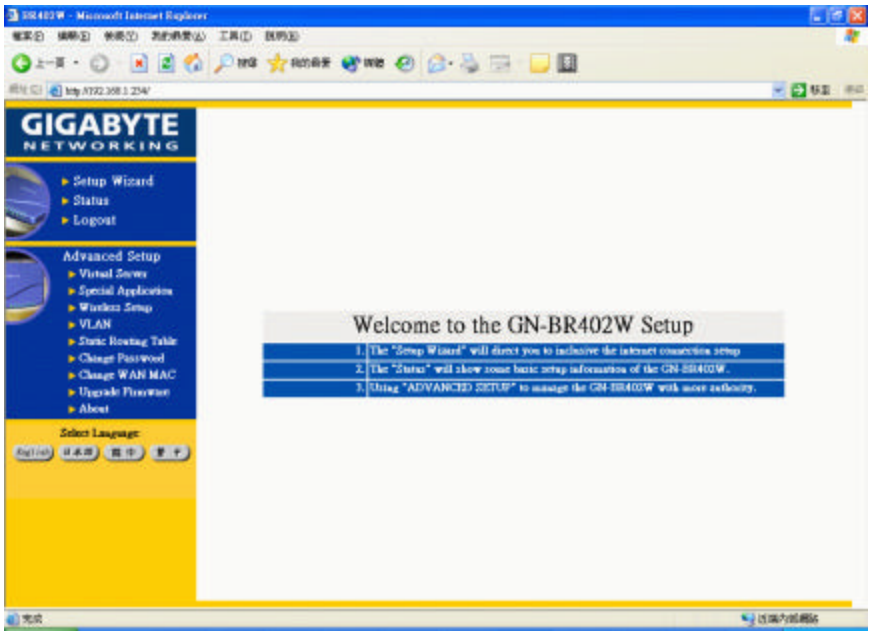
3-3 Setup for Broadband Router

Step 1. Key in the preset IP address“192.168.1. 254” in the address column in the browser, and then press enter.



Step 2. The dialogue box will appear as shown in the following diagram, and key in the default user name “admin” for the wideband network GN-BR402W and the default password “admin”, and then press “OK”:

Step 3. The homepage of the GN-BR402W will appear as shown below, and click the “Setup Wizard” on the screen, and such “Setup Wizard” will guide you to complete the necessary steps for the setup on screen as follows.



Step 4. "LAN Setup" is shown in the diagram. **Each setup item of the local area network is default setting, and is not necessary to make change to it** for normal operation. Please input the settings on your own if change is needed.

DHCP Setup:

- "enable" indicates that the DHCP function of the GN-BR402W is initialized, and will automatically assign an IP address to the computer that is connected to the LAN end of the GN-BR402W. (Configure the DHCP starting address and the DHCP allocation number on your own.)
- "disable" indicates that all IP addresses of all the computers connected to the LAN end of the GN-BR402W LAN. (It is not necessary to configure the DHCP starting address and the DHCP allocation number.)

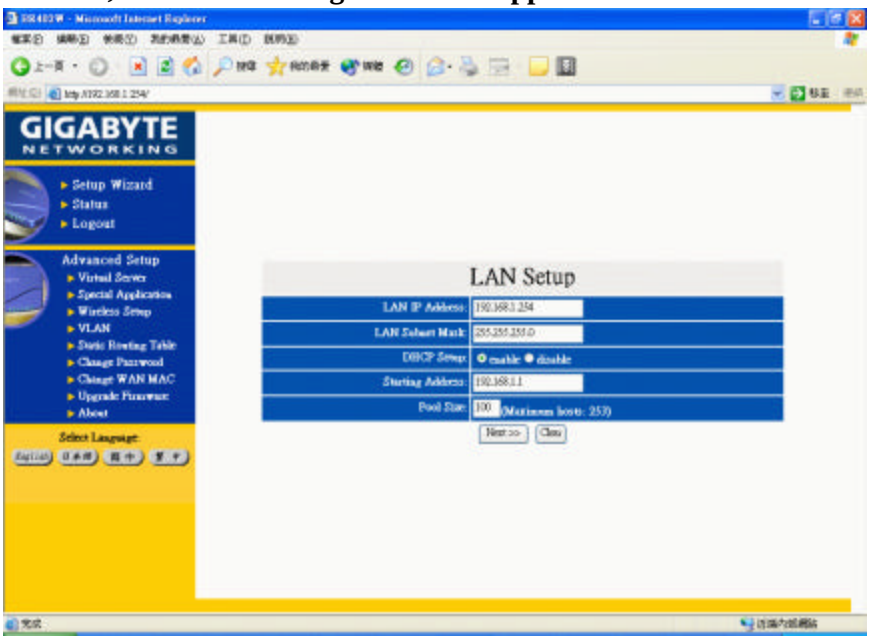
DHCP Starting Address**::**

When the DHCP setting is "enable", the GN-BR402W uses this address as the initial value to assign the IP to the PC connected to the LAN end.

For example, the DHCP starting address is 192.168.1.1
DHCP allocation number is 50.
The IP allocable range of the DHCP is from 192.168.1.1 to 192.168.1.50.

Note: The LAN IP address "192.168.1.254" is the default IP address of the GN-BR402W.

Click "Next", and the following screen will appear:



Step 5. "WLAN Setup" is shown in the diagram. **Each setup item of the Wireless local area network is default setting, and is not necessary to make change to it** for normal operation. Please input the settings on your own if change is needed.

DHCP Setup:

- "enable" indicates that the DHCP function of the GN-BR402W is initialized, and will automatically assign an IP address to the computer that is connected to the LAN end of the GN-BR402W. (Configure the DHCP starting address and the DHCP allocation number on your own.)
- "disable" indicates that all IP addresses of all the computers connected to the LAN end of the GN-BR402W LAN. (It is not necessary to configure the DHCP starting address and the DHCP allocation number.)

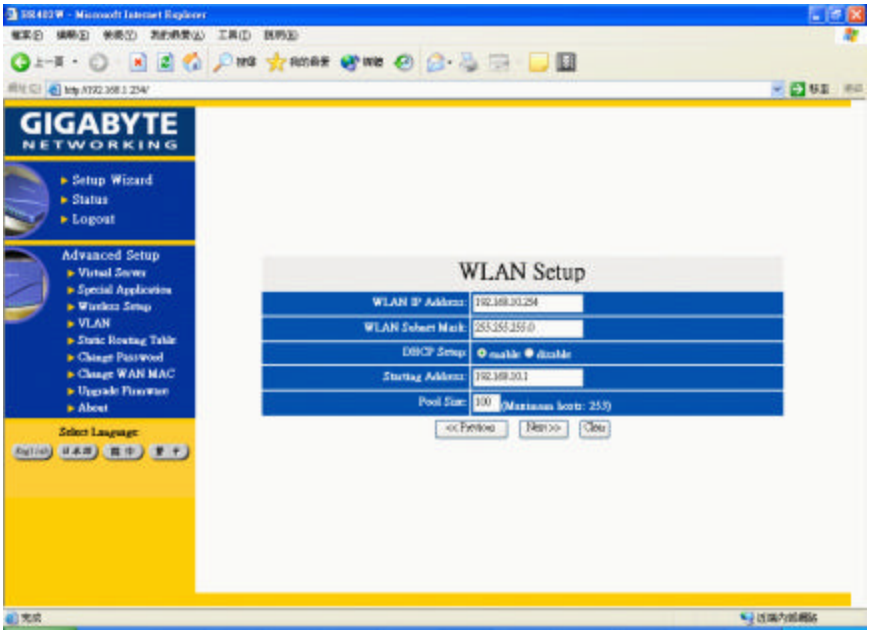
DHCP Starting Address**::**

When the DHCP setting is "enable", the GN-BR402W uses this address as the initial value to assign the IP to the PC connected to the LAN end.

For example, the DHCP starting address is 192.168.10.1
DHCP allocation number is 50.
The IP allocable range of the DHCP is from 192.168.10.1 to 192.168.10.50.

Note: The WLAN IP address "192.168.10.254" is the default IP address of the GN-BR402W.

Click "Next", and the following screen will appear:



Step 6. Choose your desired wide area network mode

PPPoE: If you are using the hourly rate for the ADSL, please select this item.

Note –PPPoE Please jump to Step 6

Dynamic IP Address: If you use the wideband fixed connection of ADSL/Cable Modem, but do not have a static IP, please select this item

Note –Dynamic IP Please jump to Step 10

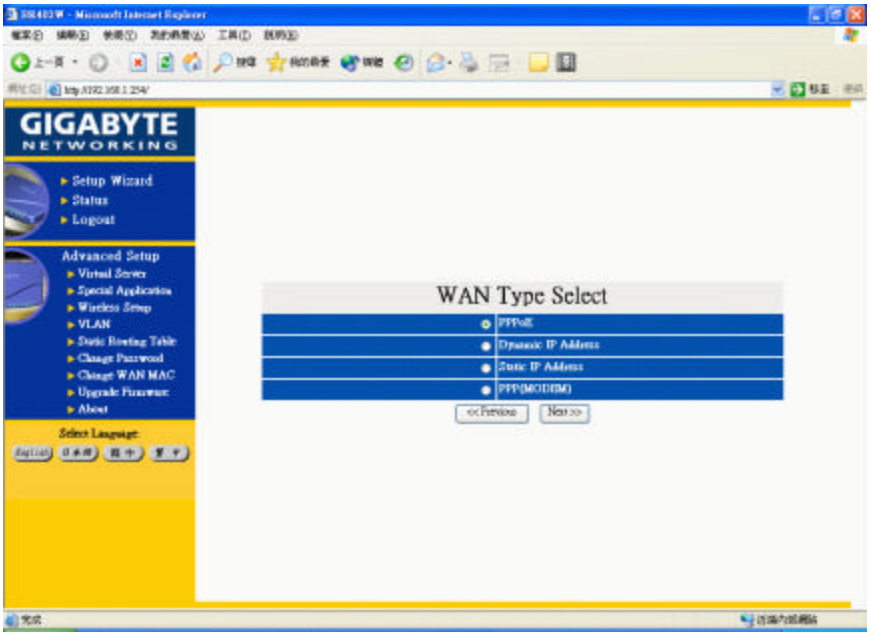
Static IP Address: If you use the wideband fixed connection of ADSL/Cable Modem, but have a static IP, please select this item..

Note –- Static IP Please jump to Step 14

Modem: If you use the wideband fixed connection of PPP(Modem) , please select this item .

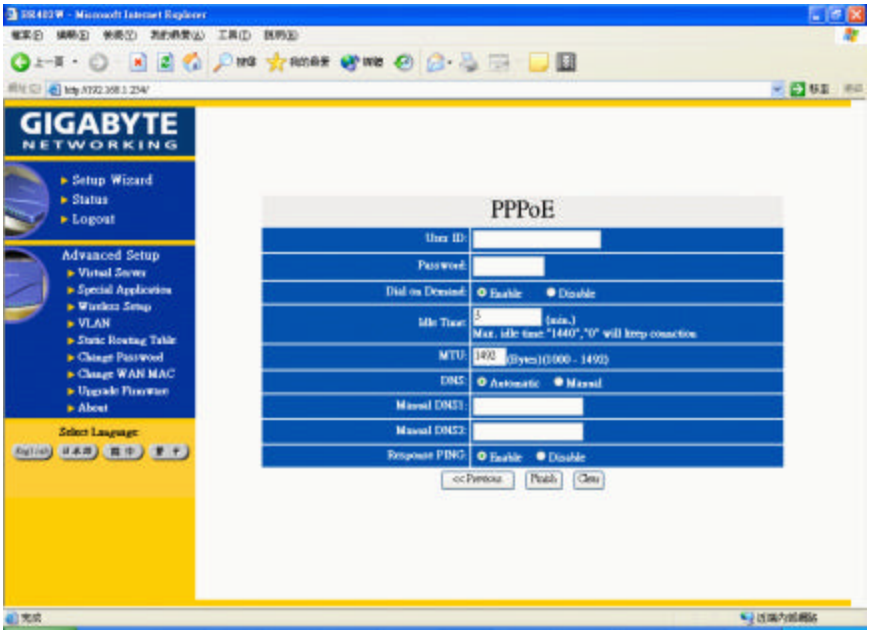
Note –- PPP(Modem) Please jump to Step 18

After your desired wide area network mode is selected, please press “Next”.

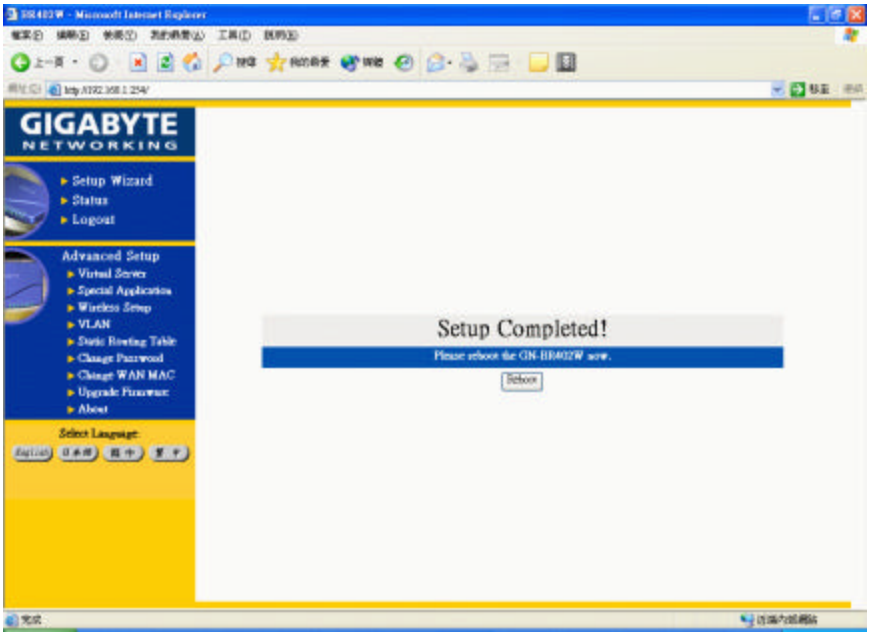


Step 7. If you select “PPPoE ” under the WAN TYPE SELECT, key in the User ID and password. The wideband company provides the above data, and press “Finish” to go to next step.

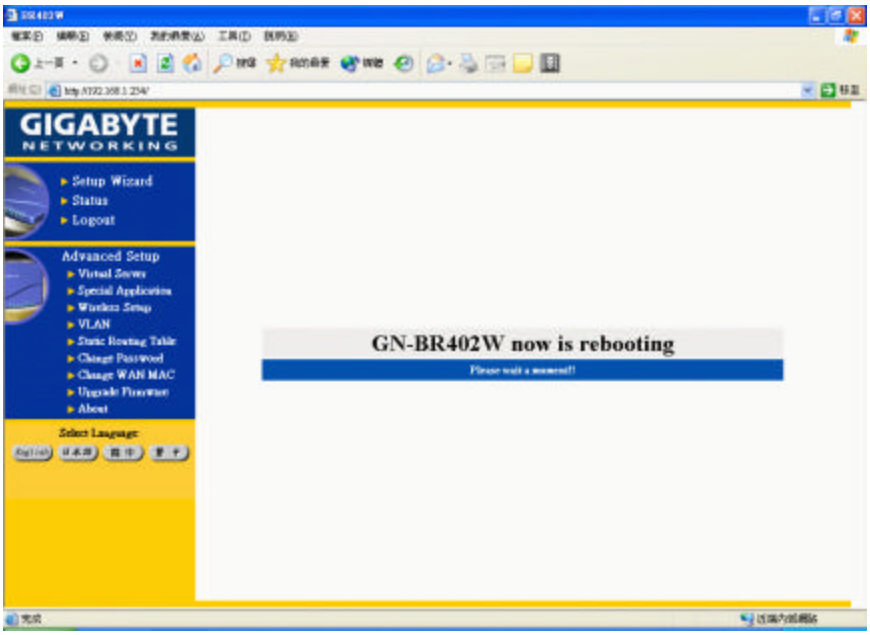
Note: The “Idle Time” means after this time period if you do not use the Internet for a while, the time expired, and the WAN connection will be auto disconnected. The on-line charge will be stopped. IF you want to use the Internet again then the WAN connection will be auto reconnected to WAN.



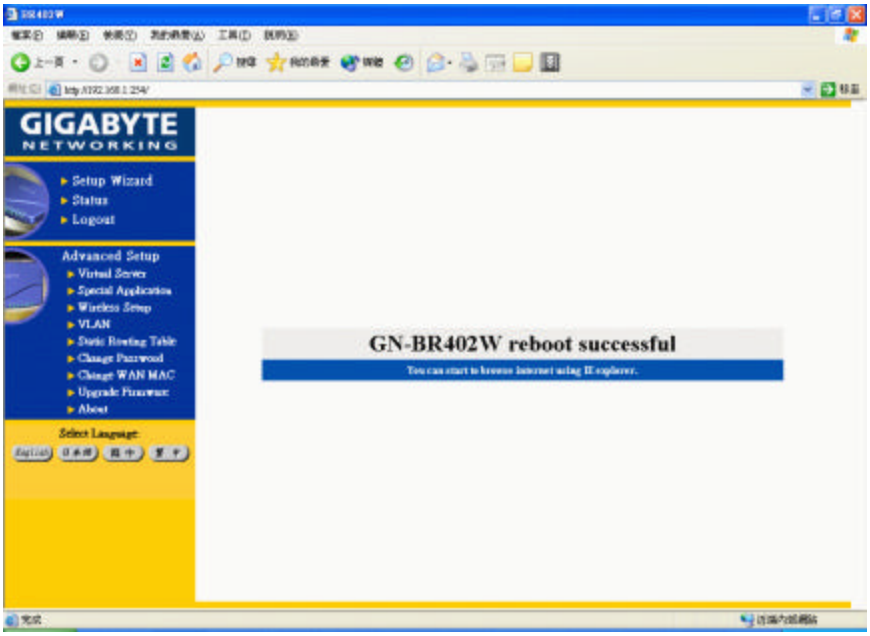
Step 8. Press “Reboot” to go to next step.



Step 9. Please wait a moment.



Step 10. The IE browser will be automatically connected to the main menu, and your setup has completed by then. Please use your IE connect to Internet.



If you can connect to the Internet , the setting is completed. If you use the Wireless Lan Card connection , please continue to section 3-4 Wireless Basic Setting.