Vigor2600Ge introduction

Brief Overview

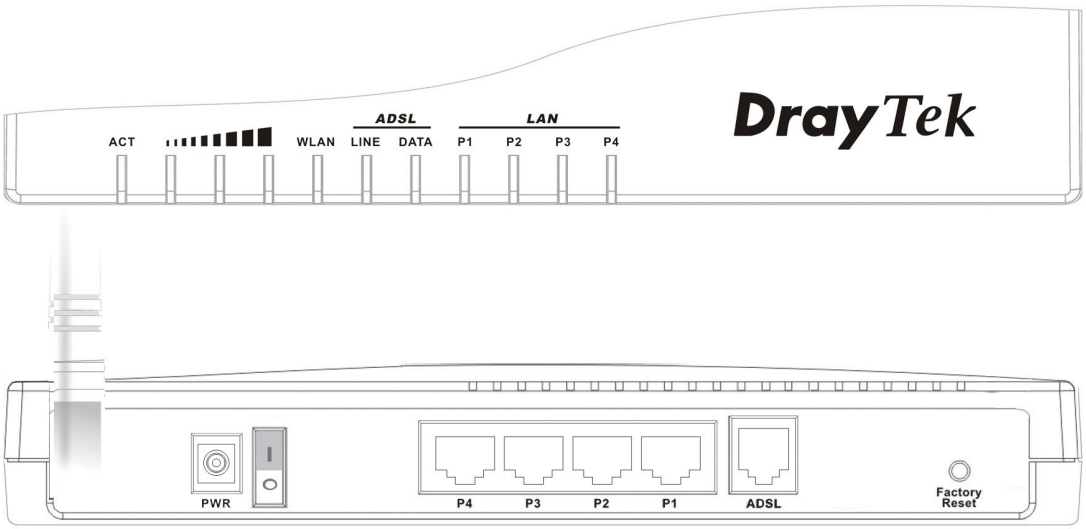
	Vigor2600Ge
ADSL Router	*
Annex A / Annex B	* / *
ISDN Backup	–
Wireless AP	*

The Vigor2600Ge WLAN ADSL router is an Internet access solution for your LAN which not only provides you with shared web surfing but also countless other value-added features such as Firewall / Security, VPN, multimedia support, and 54Mbps 802.11g Wireless LAN and all in a reliable one-box solution.

LED Indicators and Back Panels

Before you begin to install, please take a moment to become more familiar with the LED indicators and rear panels. The following section describes the model.

Vigor2600Ge



LED Indicators		Descriptions
ACT (Activity)		Blink when power is supplied to the router and the router is running normally.
		There are three LEDs below the bandwidth utilization bar. From left to right, they indicate bandwidth utilization, from low to high.
WLAN		ON when the wireless LAN is ready.
ADSL	**LINE**	ON when the ADSL network is showtime.
	DATA	Blinking indicates the DSL protocols start hankshaking. The light will remain still when data transmission is available.
LAN	**P1, P2, P3, P4**	These indicators are dual-colour LEDs: - OFF indicates that no device is connected to the LAN port. - Yellow indicates that the port is connecting to a 10Mbps device. - Green indicates that the port is connecting to a 100Mbps. - BLINKING indicates that Ethernet packets are passing through the port.

Back Panels	Descriptions
PWR	Only the power adapter comes with the package can be connected to the PWR.
P1, P2, P3, P4	These switch ports should be connected to your local PCs.
ADSL	To connect to the ADSL-enabled telephone line.
Factory Reset	The restore default settings : While the router is running (ACT LED blinking), press the button and hold for more than five seconds. The ACT LED begins to blink rapidly, then release the button. The router will restart with the factory default configuration.

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Safety Instructions

. Read the installation guide thoroughly before you set up the router.

. The router is a complicated electronic unit that may be repaired only be authorized and qualified personnel. Do not try to open or repair the router yourself.

. Do not place the router in a damp or humid place, e.g. a bathroom.

. The router should be used in a sheltered area, within a temperature range of +5 to +40 Celsius.

. Do not expose the router to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.

. Keep the package out of reach of children.

. When you want to dispose of the router, please follow local regulations on conservation of the environment.

Warranty

We warrant to the original end user (purchaser) that the router wil be free from any defects in workmanship or materials for a period of three (3) years from the date of purchase from the dealer. Please keep your purchase receipt in a safe place as it serves as proof of date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, we will, at our discretion, repair or replace the defective products or components, without charge for either parts or labor, to whatever extent we deem necessary tore-store the product to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be offered solely at our discretion. This warranty will not apply if the product is modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions. The warranty does not cover the bundled or licensed software of other vendors. Defects which do not significantly

affect the usability of the product will not be covered by the warranty.We reserve the right to revise the manual and online documentation and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.

European Community

Hereby, we declare that the router is in compliance with the essential requirements and other relevant provisions of R&TTE Directive 99/5/EC. The Vigor 2600Ge is designed for the WLAN 2.4Ghz network throughout EC region, Switzerland, and the restrictions of France.

Be A Registered Owner

Web registration is preferred. You can register your Vigor router via http://www.draytek.com.tw . Alternatively, fill in the registration card and mail it to the address found on the reverse side of the card.

Firmware & Tools Updates

Due to the continuous evolution of DrayTek ADSL & Router technology, all routers will be regularly upgraded. Please consult the DrayTek web site for more information on newest firmware, tools and documents.
http://www.draytek.com.tw

Vigor2600Ge Quick Start Guide

Aim of this chapter

Quickly connect your router to the Internet

Delivery check

Check your router package for the following items :

The Router
1 printed Quick Start Guide with warranty/ registration card
1 CD includes detailed User Manual in electronic form, released firmware and utilities
1 AC power supply adapter (black)
1 Ethernet LAN cable (blue) for connection to a computer or hub
1 ADSL line cable (RJ-11 to RJ-45 for Switzerland and the Netherlands only)
(RJ-11 to RJ-11 for other Annex A countries)
(RJ-45 to RJ-45 for Annex B countries)
1 Detachable antenna

Please read page 6,7

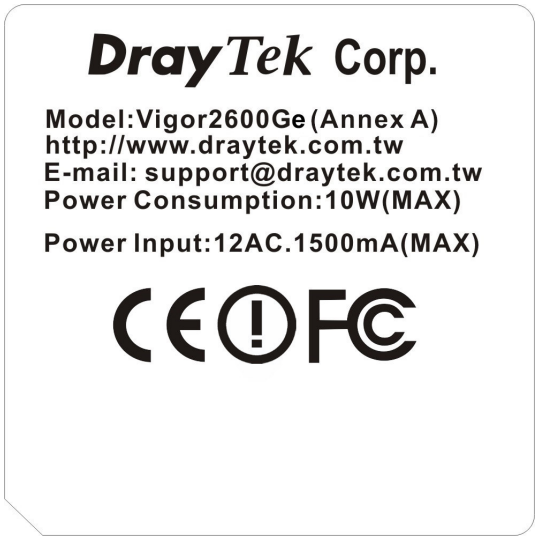
Identify your variant

Your router package should contain all these items. If any item is missing or damaged, contact your dealer or our Customer Service Department immediately.

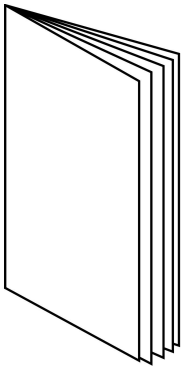
The Vigor2600Ge contain Annex A/Annex B models,
please check if the package is suitble for your use by checking the information from bottom of Vigor2600Ge router.

Annex A : is for connecting to an analog POTS line

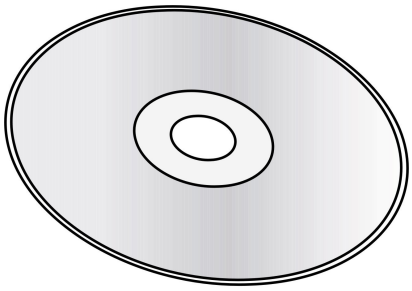
Annex B : is for connecting to a digital ISDN line



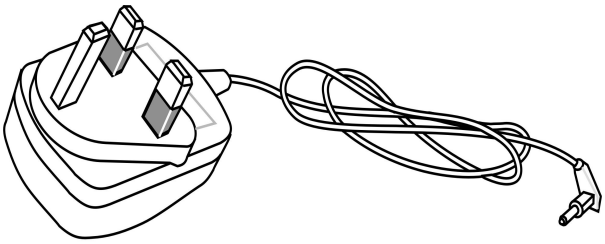
Package Contains



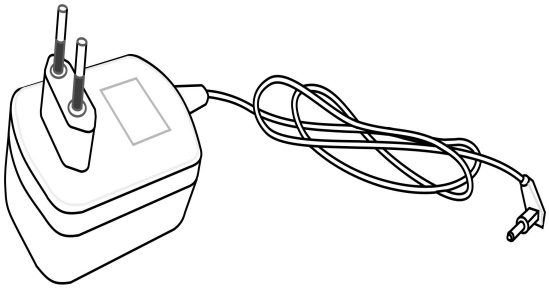
Manual



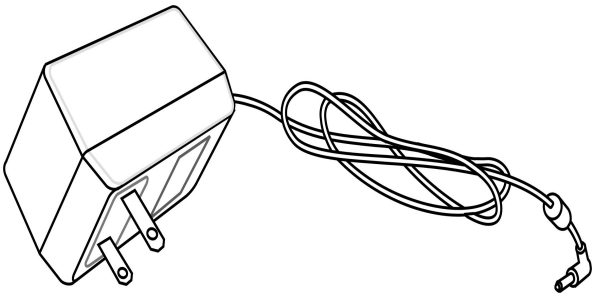
CD



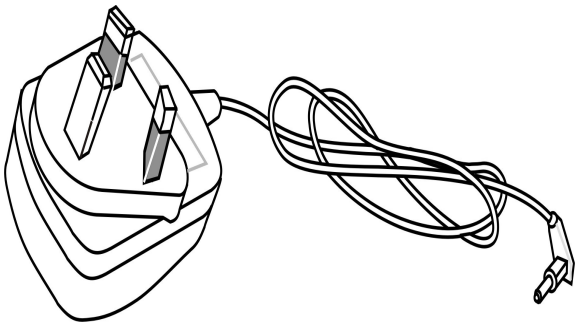
UK-type power adapter



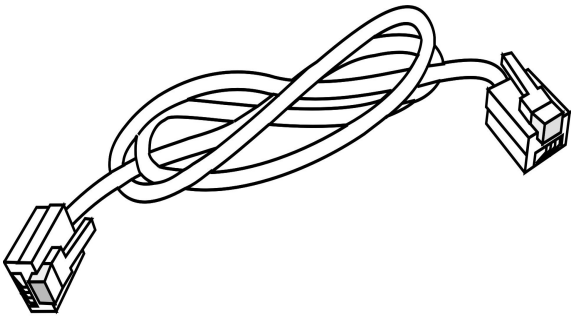
EU-type power adapter



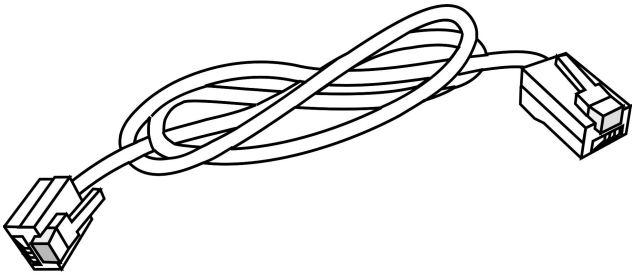
USA/Taiwan-type power adapter



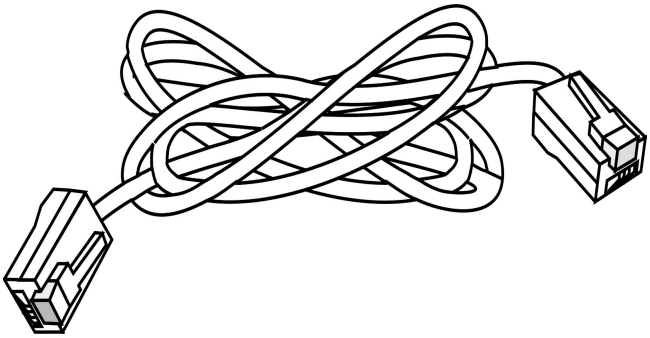
AU/NZ-type power adapter



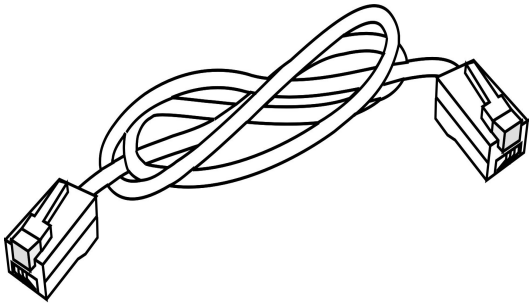
RJ-11 to RJ-11(Annex A)



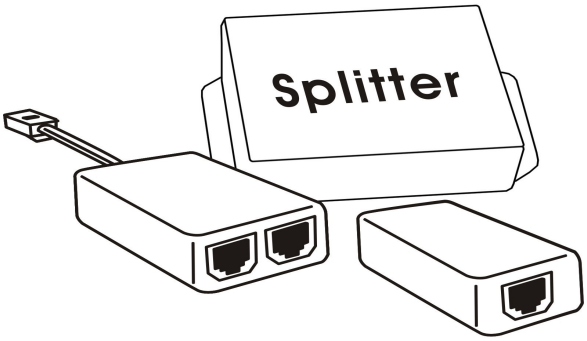
RJ-11 to RJ-45(Annex B)
Dutch/Swiss User



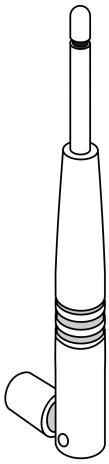
RJ-45(Enternet)



RJ-45 to RJ-45
(Annex B)



Filter/Splitter(Optional)



Antenna

Internet Cofiguration Requirements

DSL line

Depending on the variant Vigor2600Ge you purchased, the following DSL service must be available at your local premisses:

For Annex A : ADSL service must be enabled on your POTS telephone line.
For Annex B : ADSL service must be enabled on your ISDN telephone line.

DSL Parameters

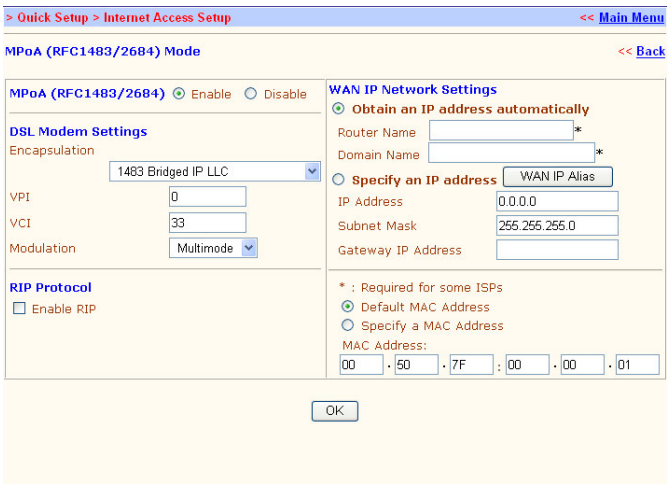
The following DSL parameters are required from your ISP :

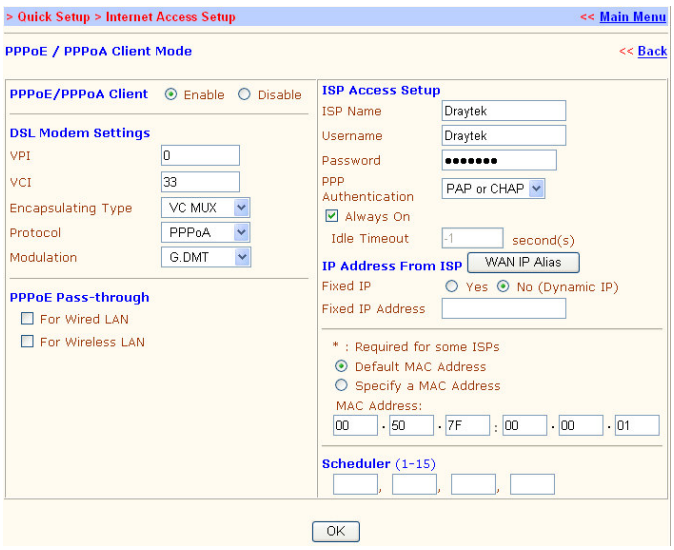
1. The VPI/VCI of the virtual channel to use on the DSL line

2. Protocol : PPPoE, PPPoA or MPoA (RFC1483/2684)

3. Encapsulation Method : LLC/SNAP or VCMUX

4. Modulation Method : T1.413, G.lite, G.dmt
   (Vgior2600Ge provides ***Multimode*** which can automatically detect)





Example:
VPI/VCI = 0/33
Protocol = PPPoA
Encapsulation Method = VCMUX
Modulation Method = G.dmt

Username/Password
Only for PPPoE/PPPoA mode users

Fixed IP Address/ Subnet Mask/ Gateway IP Address
Some ISP will use DHCP method to provide IP address for MPoA mode users, then users do not need to know the fixed IP address.

If you do not know these information in detail, please contact your ISP to get these informations.

How to Connect the Router

Local networking

To use the Ethernet port(s) you need at least:

One PC with an Ethernet Card installed.
One ethernet cat-5 UTP cable.

To use the Wireless LAN you need at least:

One PC with a Wireless LAN adaptor installed.

TCP/IP protocol suite
For TCP/IP, your PC can either be set to a static IP, or to get an IP automatically (from a DHCP server).

The default gateway IP address of the router is 192.168.1.1. If static IP is chosen, set your PCs IP address to 192.168.1.*x* , where *x* is any number in the range 2-254 inclusive.

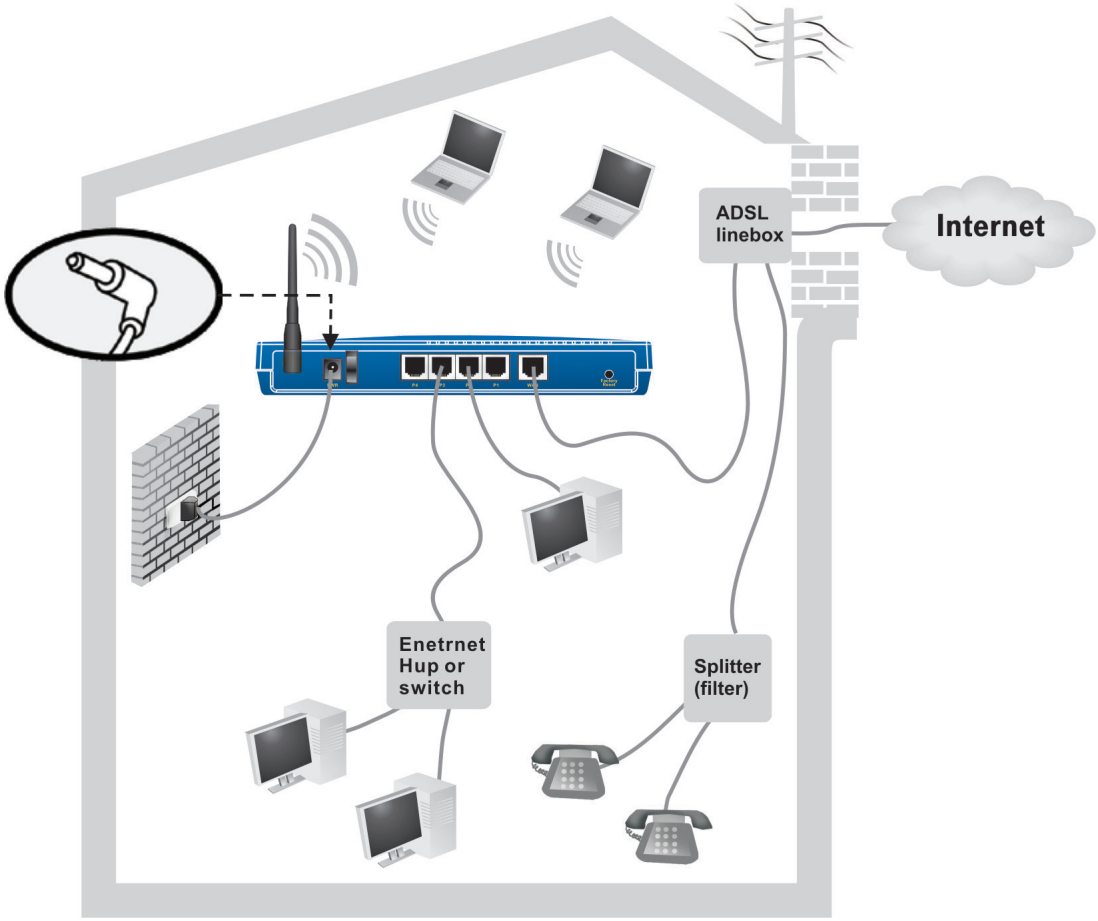
The wire installation

Connect the blue Ethernet cable between Vigor 2600Ge ports P1/P2/P3/P4 and any wired PCs.

Connect ADSL port to your ADSL-enabled telephone line. Remember that a Line Filter should be used for any telephones or fax machines also connected to the ADSL telephone line.

Connect AC Power adaptor to Power socket.

Ethernet port (between router and PC), DSL port, and Power port as below:



Install Router Tools

This tool which provides "Smart StartWizard" Firmware Upgrade Program and TFTP client is in the enclosed CD. It supportsWindows, Mac OS 8/9 and Mac OS X. Moreover, it provides "Syslog Tool" for Windows system.

Turn on your router

Once all previous steps are completed, turn on your router. After Power is on, the ACT LED will blink and corresponding LAN port LED will light.

If the LEDs do not light normally, please refer to section A, "Trouble Shooting" for furthur information.

Connecting the Router to the Internet via Quick Start Wizard

DrayTek provides firmware/router tool CD with Vigor2600Ge.
Please insert CD to your computer in order to run Quick Start Wizard which is an user-friendly application for setting up Internet access.

The Quick Start Wizard is now available for Windows operating system.

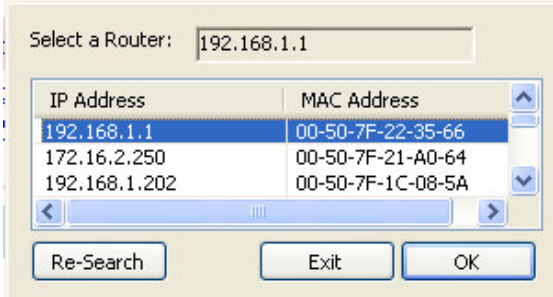
Procedure:

Connect your router

You shall connect your router to your PC as insert CD to your PC.
After auto-run screen pops out after inserting CD,please click **Run Quick Start Wizard**

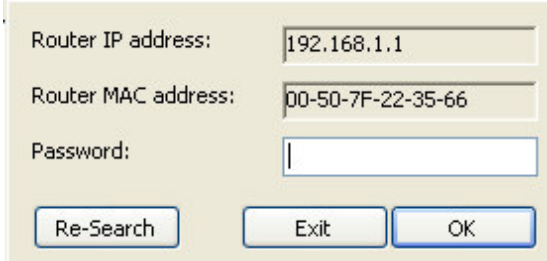
Detect the router

Quick Start Wizard will pop out with listed found routers if your network already have more then one Vigor routers.



Authentication of your ID

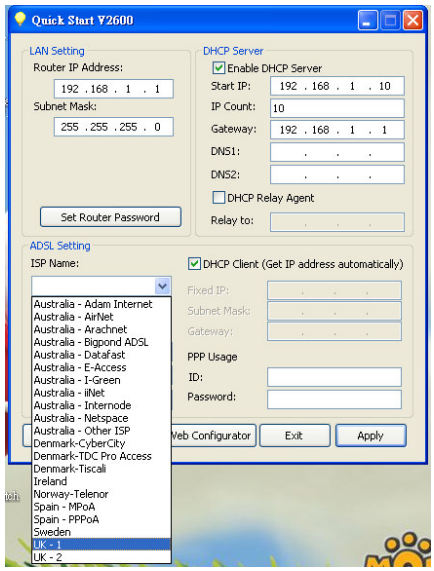
Onec you see following user name/password screen, the default value is null. Press OK to continue.



Set DSL parameters

The menu of Quick Start Wizard will be provided of your selection of ISP name(if already existed inside QSW) that contains default DSL parameters which are Encapsulation protocol, VPI, VCI, Modulation. If your ISP is not listed, you can still enter the DSL parameters provided by ISP.

Click the **Apply** button to save the settings to the router and then surf Internet!



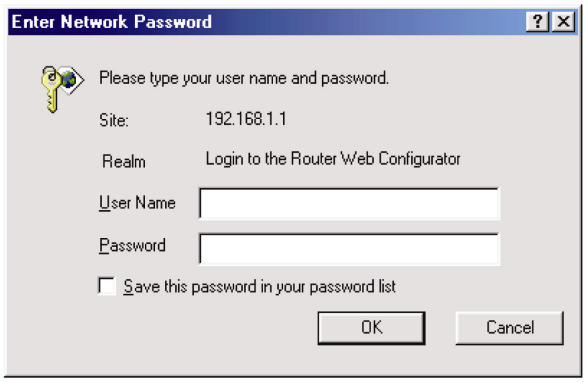
Using the Router Web Configurator

Connect to router

Start the web browser on a PC which is connected to the Vigor 2600Ge router, and type http://192.168.1.1 into the address box of your browser.

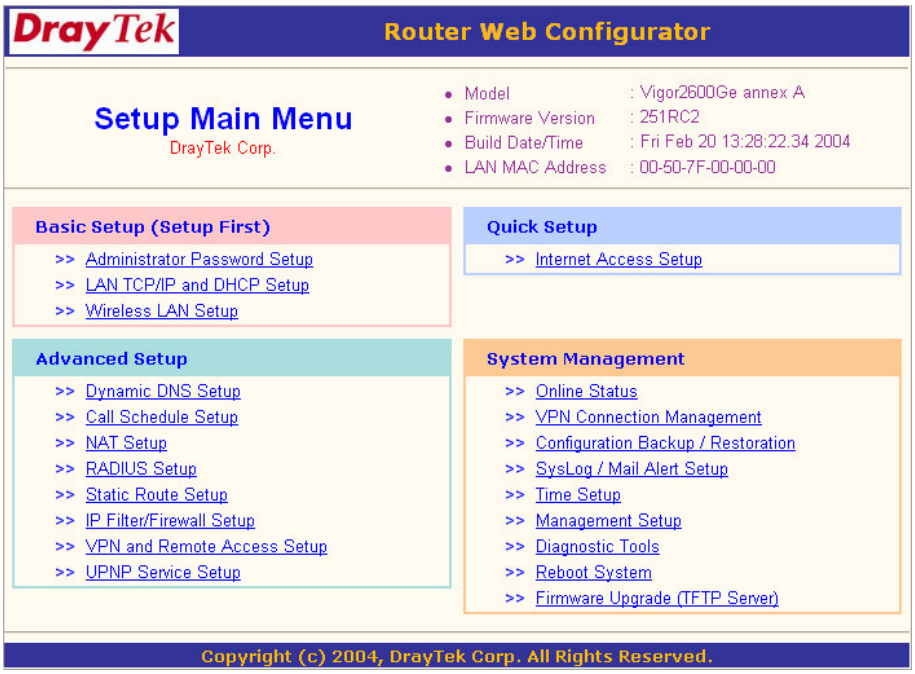
Password

The following window will open. The factory default User name and password are null. Press **OK** to continue.



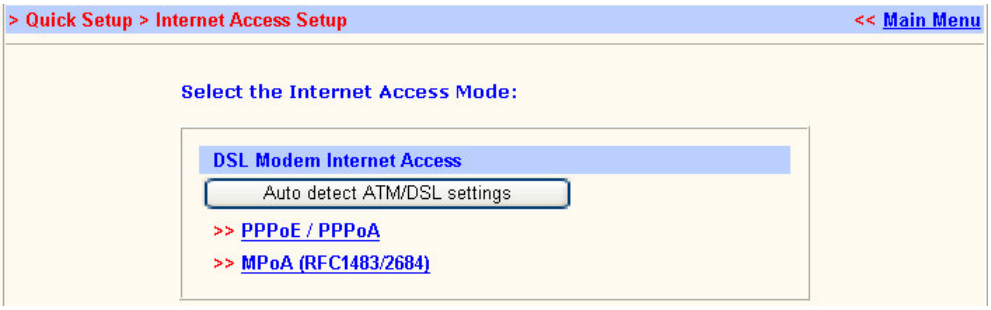
Enter Router Menu

The router main menu is now displayed:
(Example: Vigor2600Ge)



Set DSL Parameters

Click on **Internet Access Setup** in the right-hand menu.



Auto detect ATM/ DSL Setting

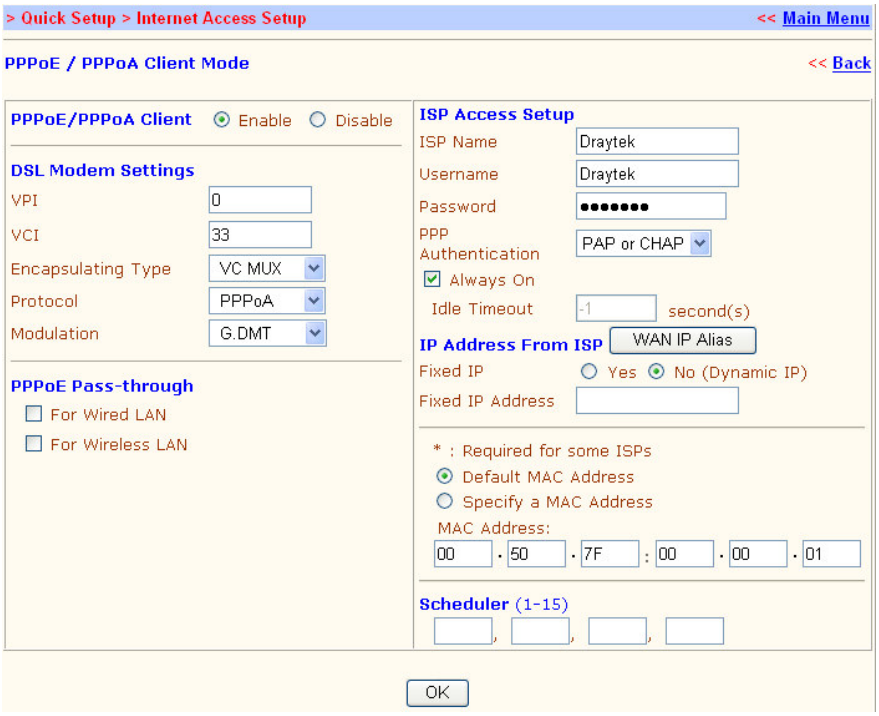
Use this function to automatically detect ATM/ DSL setting. Click the **Auto detect ATM/DSL settings** button, and follow the instructions until it asks whether you have a fixed IP or not.

- If your ISP has allocated you a fixed IP address, click to OK button.
- If your ISP has not allocated you a fixed IP address, click the **Cancel** button. This will not cancel the setup process.

Select your country from the list and click **OK** to start the ATM/DSL parameter detection. If your country is not in the list, it may take a longer time to detect.

It should now have detected the ATM/DSL settings, similar to the following example of a PPPoA connection:

You can set/edit these manually when adding your ISP account details. Type in the ISP name as well as the Username/Password provided by them. Also, you probably want to tick the **Always On** box as there's no reason to disconnect the router when you're not using the Internet. Ignore the fixed IP settings as an ISP will send then to you each time you login anyway.



Click the OK button to save changes,and go to Page 15 to **Surfing Internet**.

For PPPoE/PPPoA Users

Enter the username, password and DSL parameters given by your ISP.
To connect to Internet all the time, check **Always On**.

> Quick Setup > Internet Access Setup << Main Menu

PPPoE / PPPoA Client Mode << Back

PPPoE/PPPoA Client ◉ Enable ○ Disable

DSL Modem Settings

VPI 0

VCI 33

Encapsulating Type VC MUX

Protocol PPPoA

Modulation G.DMT

PPPoE Pass-through

☐ For Wired LAN

☐ For Wireless LAN

ISP Access Setup

ISP Name Draytek

Username Draytek

Password ●●●●●●●

PPP Authentication PAP or CHAP

☑ Always On

Idle Timeout -1 second(s)

IP Address From ISP WAN IP Alias

Fixed IP ○ Yes ◉ No (Dynamic IP)

Fixed IP Address

* : Required for some ISPs

◉ Default MAC Address

○ Specify a MAC Address

MAC Address:

00 · 50 · 7F : 00 · 00 · 01

Scheduler (1-15)

, , ,

OK

Click the OK button to save changes.

For MPoA (RFC 1483/2684) Users

Enter the WAN IP address allocated by your ISP, or click **Obtain an IP address automatically** according to the information provided by your ISP.

> Quick Setup > Internet Access Setup << Main Menu

MPoA (RFC1483/2684) Mode << Back

MPoA (RFC1483/2684) Enable Disable

DSL Modem Settings

Encapsulation: 1483 Bridged IP LLC

VPI: 0

VCI: 33

Modulation: Multimode

RIP Protocol

Enable RIP

WAN IP Network Settings

Obtain an IP address automatically

Router Name *

Domain Name *

Specify an IP address WAN IP Alias

IP Address: 0.0.0.0

Subnet Mask: 255.255.255.0

Gateway IP Address:

* : Required for some ISPs

Default MAC Address

Specify a MAC Address

MAC Address: 00 . 50 . 7F : 00 . 00 . 01

OK

Click the OK button to save changes.

Surfing Internet

You should be able to surf the Internet now from all PCs connected to the Vigor 2600 Ge.

You can also monitor the connection condition via the router **Online Status** option from the main Menu.

> System Management > Online Status << Main Menu

System Status

System Uptime: 0:1:45

LAN Status

IP Address	TX Packets	RX Packets
192.168.1.1	380	295

WAN Status GW IP Addr 61.224.112.254 >> Drop PPPoE/PPPoA

Mode	IP Address	TX Packets	TX Rate	RX Packets	RX Rate	Up Time
PPPoE	61.224.112.148	8	38	10	22	0:00:01

ADSL Information (ADSL Firmware Version : 40e2be29)

ATM Statistics	TX Blocks	RX Blocks	Corrected Blocks	Uncorrected Blocks
	231288	231081	58581	0

ADSL Status	Mode	State	Up Speed	Down Speed	SNR Margin	Loop Att.
	G.DMT	SHOWTIME	64000	512000	11.0	25.5

Wireless LAN settings

Wireless LAN Interface

The Vigor2600Ge is equipped with a wireless LAN interface compliant with the 54Mbps IEEE 802.11g protocol. The features of wireless LAN capability enable high mobility of several simultaneous users accessing all LAN facilities

Default Wireless LAN Settings

As supplied, the Vigor2600Ge wireless LAN is enabled, but without any security. The factory default settings of the Vigor2600Ge are:

Wireless LAN:	enabled
Frequency Domain:	Europe
channel:	6
SSID:	default
WEP encryption:	disabled
MAC access control:	disabled

This can be convenient for initially establishing the link with wireless workstations - but ***DrayTek strongly recommends that you enable the built-in security*** as soon as practical.

Wireless LAN Settings

From the Router Web Configurators Main Menu, select **Wireless LAN Setup**.

The Frequency Domain is set as Europe and the MAC address will show as above.

General Settings

Click **General Settings** to configure the Service Set Identifier (SSID) and wireless channel.

Mode: In Mixed(11b+11g) mode, the radio can support both IEEE802.11b and IEEE802.11g protocols simultaneously. In 11g-only mode, the radio only supports IEEE802.11g protocol. In 11b-only mode, the radio only supports IEEE802.11b protocol.

Scheduler: Used to set the wireless LAN to work at some time interval only. You may choose up to 4 schedules from the 15 schedules which are defined under **Advanced Setup >> Call Schedule Setup.** Please refer to the detailed manual on the attached CD. The default setting is always working.

SSID (Service Set Identification): This is used to name the wireless LAN, and must have the same value as the SSID setting in client PC/notebook wireless card(s). SSID can be any text numbers and various special characters. The default SSID is "**default**".

Channel: Select a wireless channel for Vigor2600Ge. The default channel is 6.

Hide SSID: Check to hide the SSID from wireless **sniffers**, and so make it harder for unauthorised clients to join your wireless LAN.

Security Settings Click **Security Settings** to configure the security options.

Mode:
To improve the security and privacy of your wireless data packets one of the following encryption feature can be used.

- **Disable:**Thurn off the encryption mechanism.
- **WEP Only:** Accepts only WEP clients and the encryption key should be entered in WEP Key.
- **WEP/802.1x Only:** Accepts only WEP clients and the encryption key is got dynamically through 802.1x.
- **WEP or WPA/PSK:** Accepts WEP and WPA clients simultaneously and the encryption key should be entered in WEP Key and PSK respectively.
- **WEP/802.1x or WPA/802.1x:** Accepts WEP and WPA clients simultaneously and the encryption key is got dynamically through 802.1x.
- **WPA/PSK Only:** Accepts only WPA clients and the encryption key should be entered in PSK.
- **WPA/802.1x Only:** Accepts only WPA clients and the encryption key is got dynamically through 802.1x.

NOTE: You should also set RADIUS Server if **WEP/802.1x or WPA/802.1x** , **WEP/802.1x Only** or **WPA/802.1x Only** mode is selected.

WPA Encryption:
The WPA encrypts each frame transmitted from the radio using the pre-shared key (PSK) entered from this panel or a key got dynamically through 802.1x.

Pre-Shared Key (PSK): Either 8~63 ASCII characters or 64 Hexadecimal digits leading by 0x can be entered. For example "0123456789ABCD...." or "0x321253abcde.....".

WEP Encryption:

- **Disable:** Turns off the WEP encryption mechanism.
- **WEP 64 Bit:** For 64bits WEP key, either 5 ASCII characters or 10 hexadecimal digitals leading by **0x** can be entered. For example **ABCDE** or **0x4142434445.**
- **WEP 128 Bit:** For 128bits 13 ASCII characters or 26 hexadecimal digits leading by **0x** can be entered. For example, **ABCDEFGHIJKLM** or **0x41424344454647484 94A4B4C4D.**

128 bits WEP is most secure, but has more encryption/decryption overhead. Note that all wireless devices must support the same WEP encryption bit size and have the same key.

Four keys can be entered here, but only one key can be selected at a time. The keys can be entered in ASCII or Hexadecimal.

Click the circle under **Use** next to the key you wish to use.

OK: To save the WEP settings.

Access Control of Wireless LAN Interface

For additional security, **Access Control** allows restricting the network access to a list of pre-determined network clients.

Each Ethernet interface card has a unique serial number called a MAC address. With this feature enabled, only those network clients whose MAC addresses are listed here will be allowed to access the wireless LAN.

Enable Acces Control: Tick the **Enable Access Control** box to turn the MAC Address access control feature on.

MAC Address: To type the specific MAC Address which could be added on, removed from or edited from the access list above.

ADD: To add a MAC address on the list.

Remove: To remove the selected MAC address on the list.

Edit: To edit the selected MAC address on the list.

Cancel: To cancel the MAC address access control setup.

Clean All: To clean all of configured MAC address on the list.

OK: To save the access control list.

Trouble Shooting for "Can not get on to the Internet"

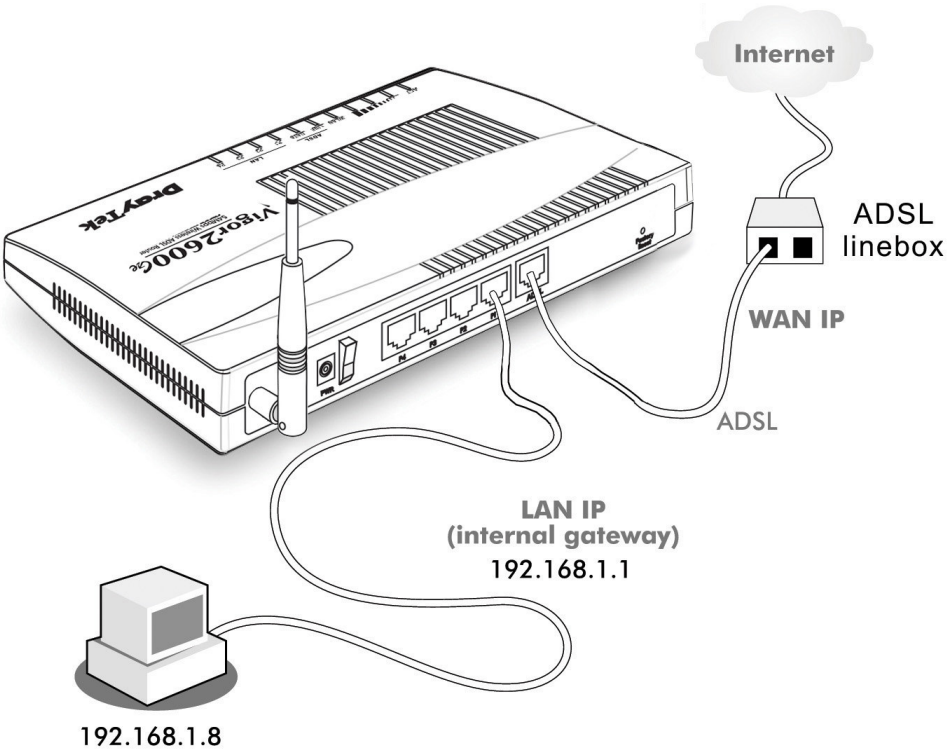
What to check

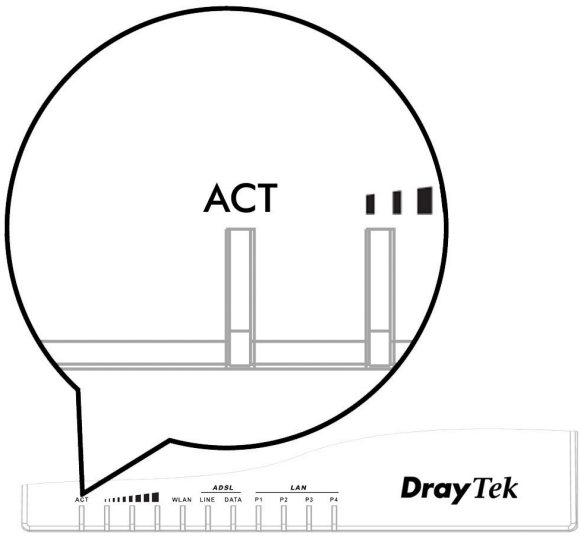
This section will guide you through:

1) Check that the power and LAN and telephone cables are connected correctly.
2) Check that the LAN from your PC to the router is working.
3) Check the ADSL settings (e.g. VPI, VCI, modulation etc...).
4) Refer to your ISP technical support.
5) Refer to your Vigor dealer technical support.

Check that the hardware is OK?

Check that the power and LAN line are connected correctly. After power is on, the **ACT LED** will blink once a second, and the correspondent **LAN LED** will light. Check that the ADSL line is connected to the telephone socket - but not through a line filter.



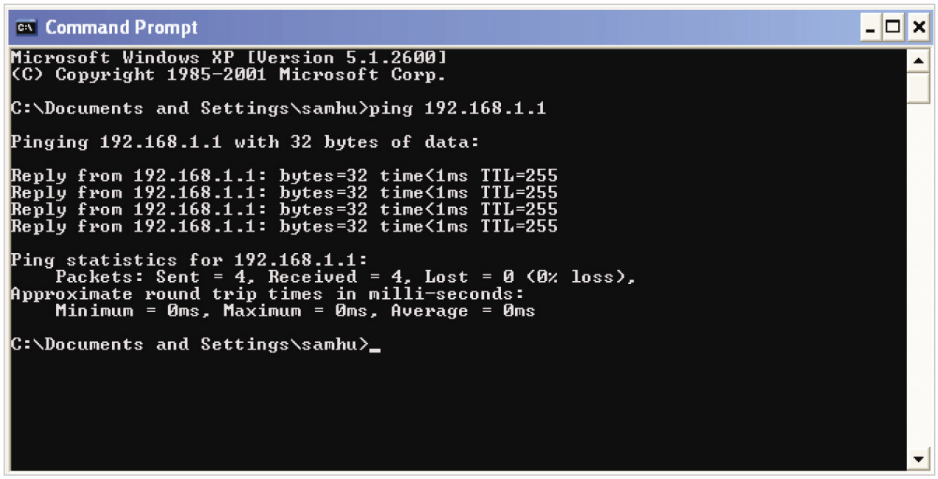


Can you ping the router from your PC?

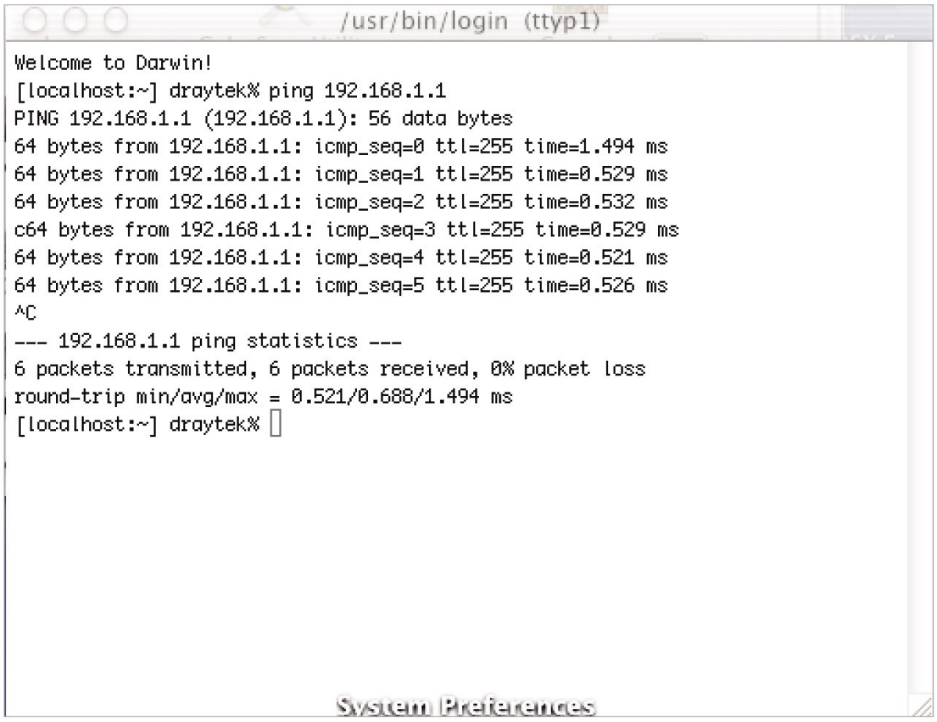
The default gateway IP of the Router is 192.168.1.1.
Please check that you can ping the Router correctly.

For Windows

1 Open the Command Prompt window (from the start menu, select Run...)
2 Enter **command** if you are using Windows 95, 98 or ME; or **cmd** if you are running Windows NT, 2000, or XP.
3 Type **ping 192.168.1.1** and press [Enter]



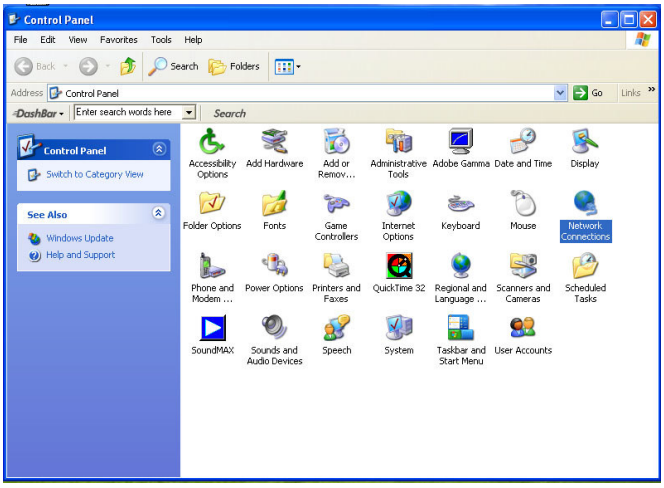
For Mac(Terminal)



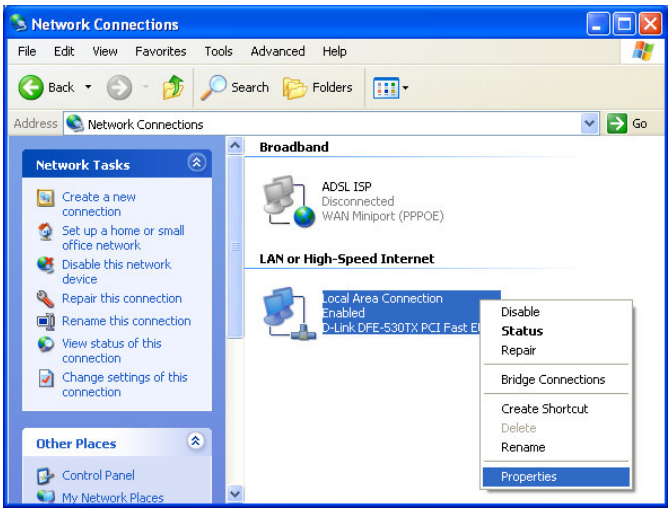
The important thing is that the computer receives a reply from 192.168.1.1. If not, please check the IP address of your PC. We suggest you set **get IP automatically**.

For Windows XP user

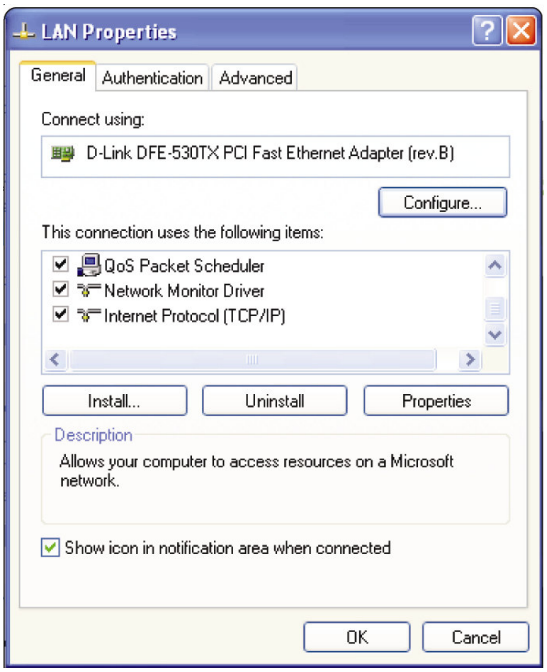
1. Go to **Control Panel** and then double-click on **Network Connections.**



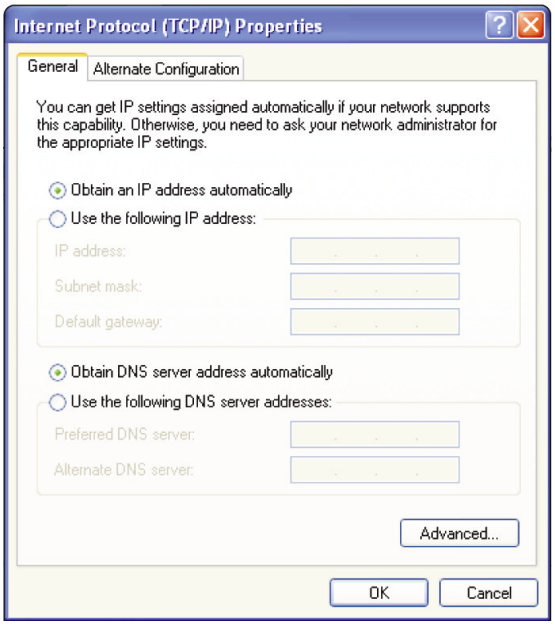
2. Right-click on **Local Area Connection** and Double-click on **Properties**.



3. Select on **Internet Protocol (TCP/IP)** and click **Properties**.

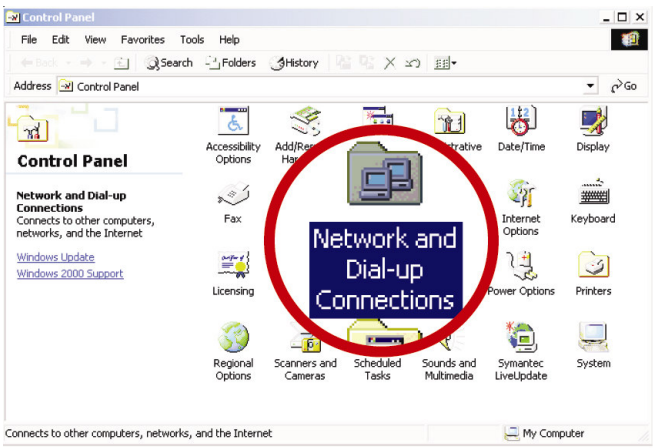


4. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**.

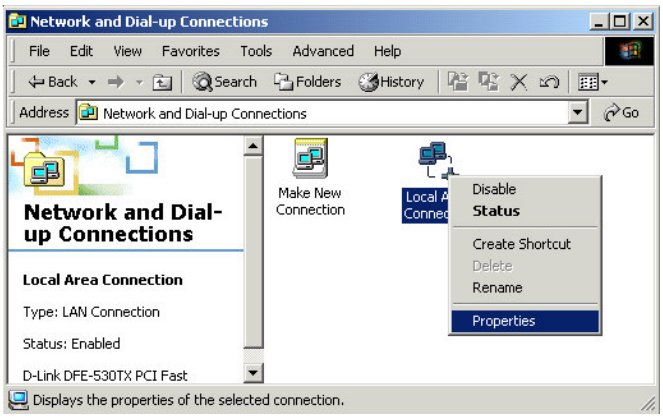


For Windows 2000 user

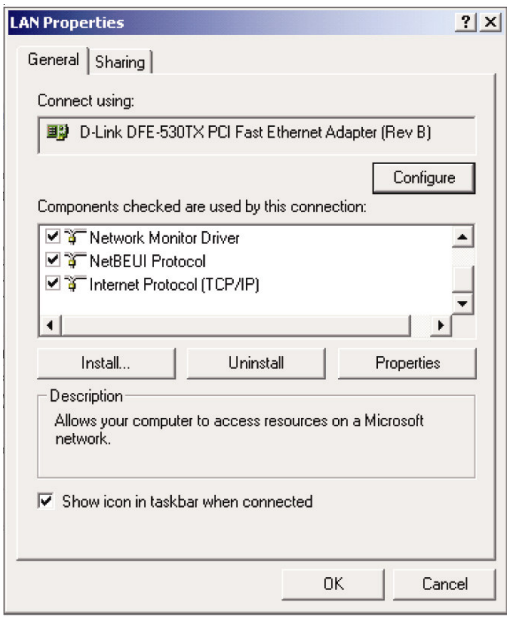
1.Go to **Control Panel** and then double-click on **Network and Dial-up Connections**.



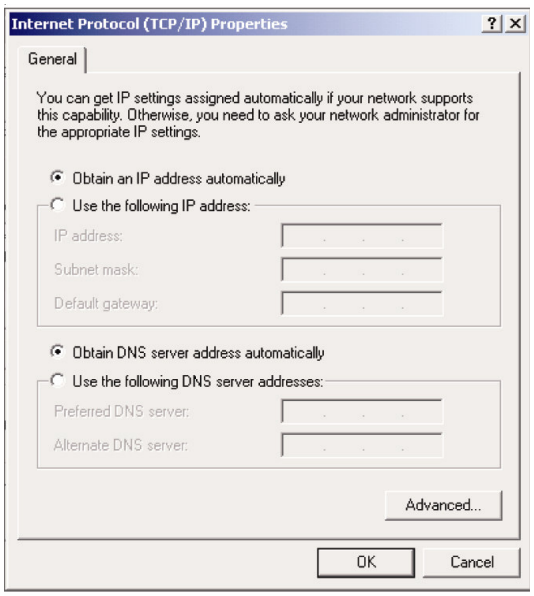
2. Right-click on **Local Area Connection** and double-click on **Properties**.



3. Select **Internet Protocol (TCP/IP)** and click **Properties**.



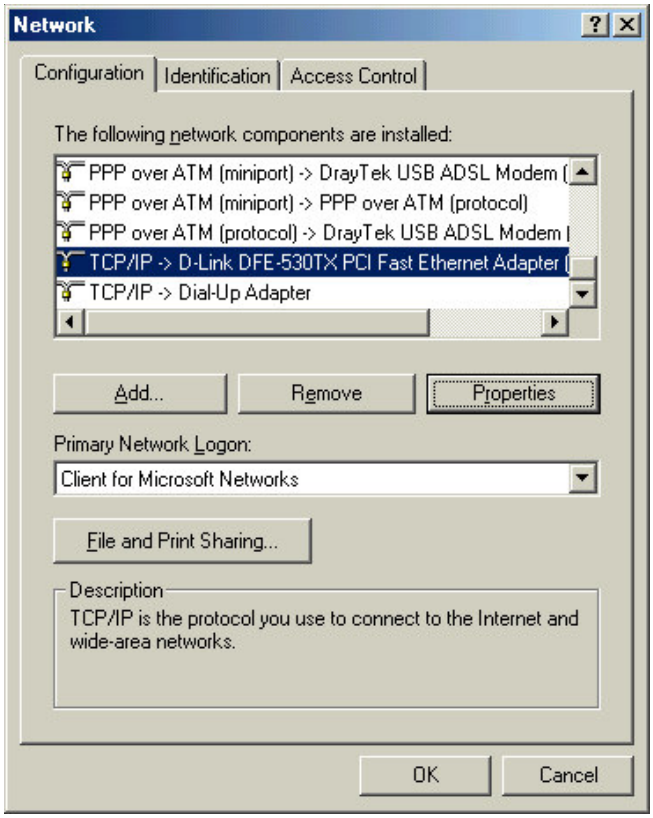
4. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**.



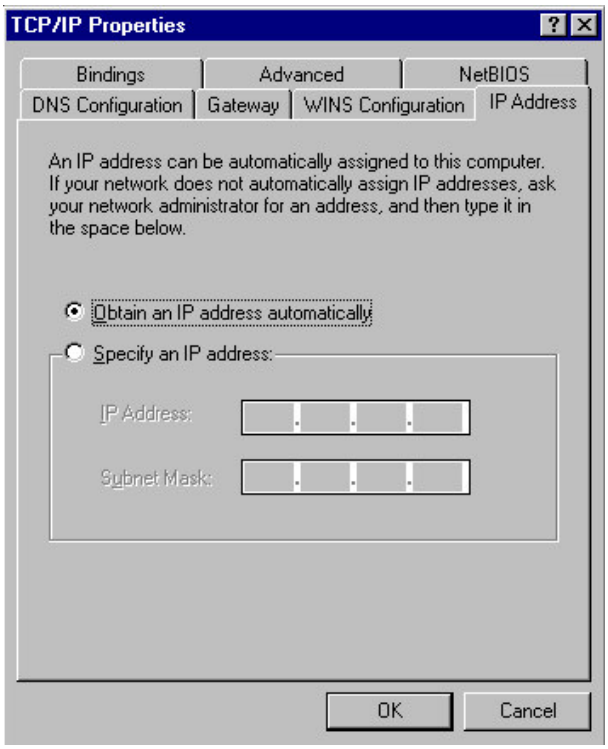
For Windows 98/Me user

1. Go to **Control Panel** and double-click on **Network**.

2. Select **TCP/IP of LAN device** and click the **Properties**.

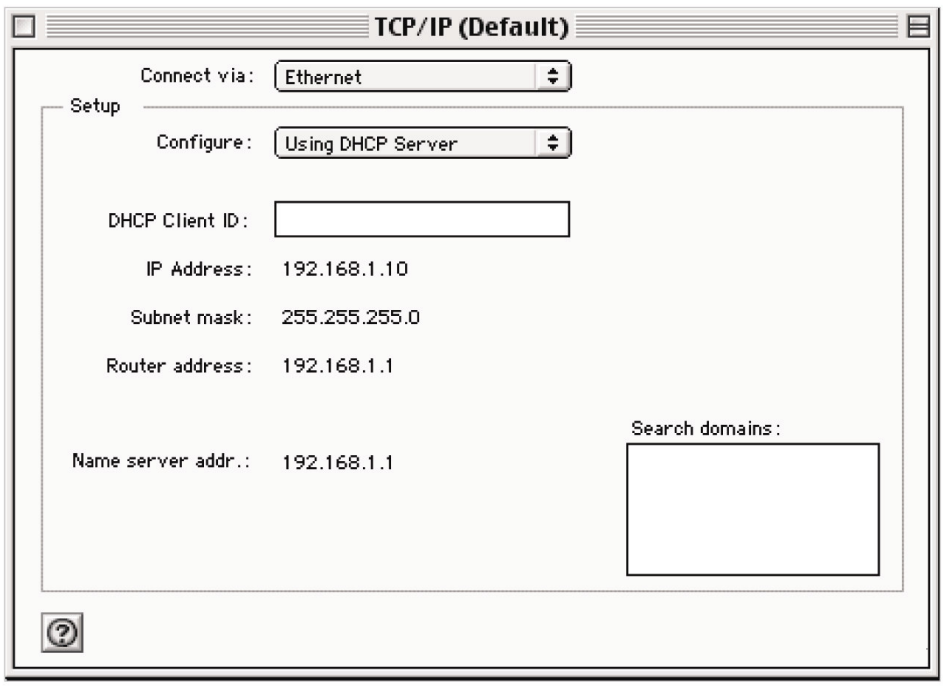


3. Click on the **IP Address** tab and select **Obtain an IP address automatically**.



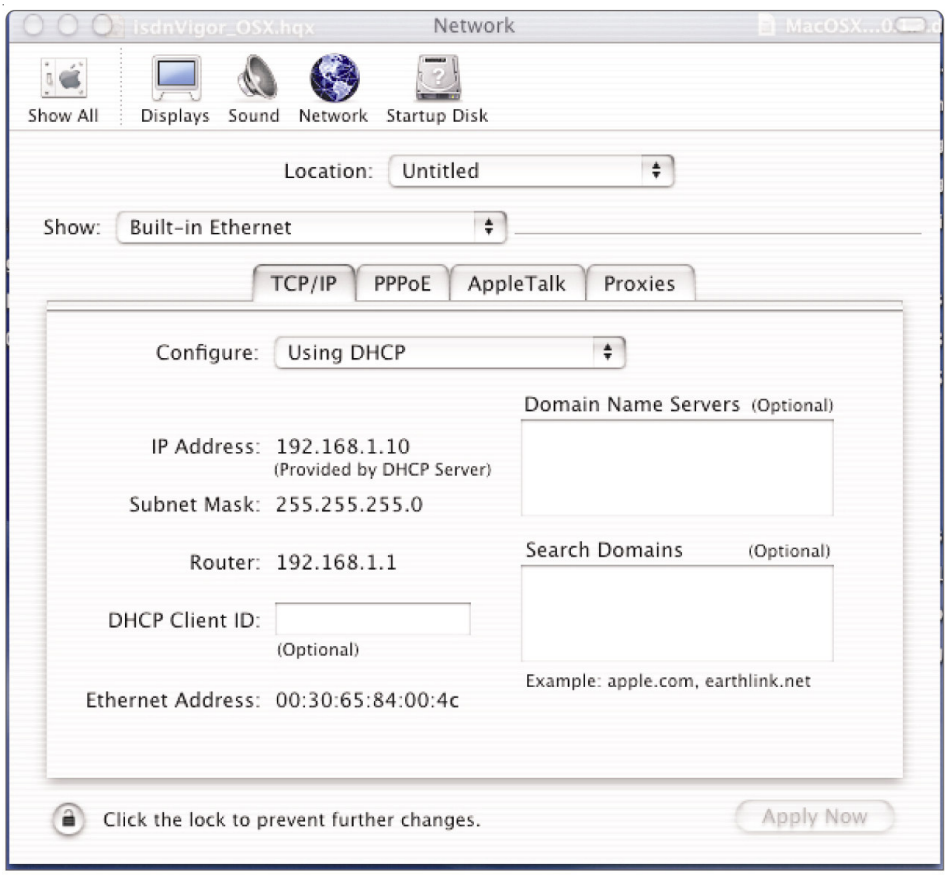
For Mac OS9.x user

Control Panel >> TCP/IP



For Mac OSX user

System Preferences >> Network

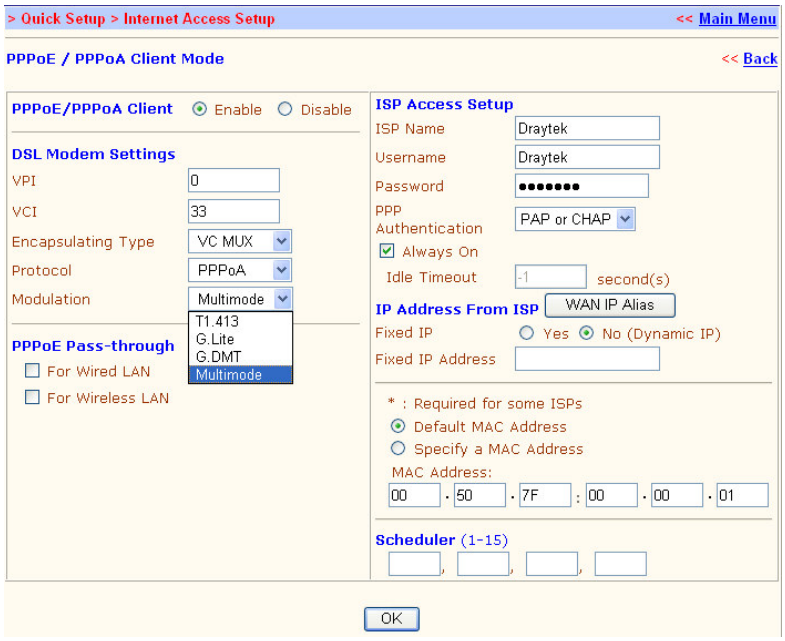


Are DSL and ISP settings OK?

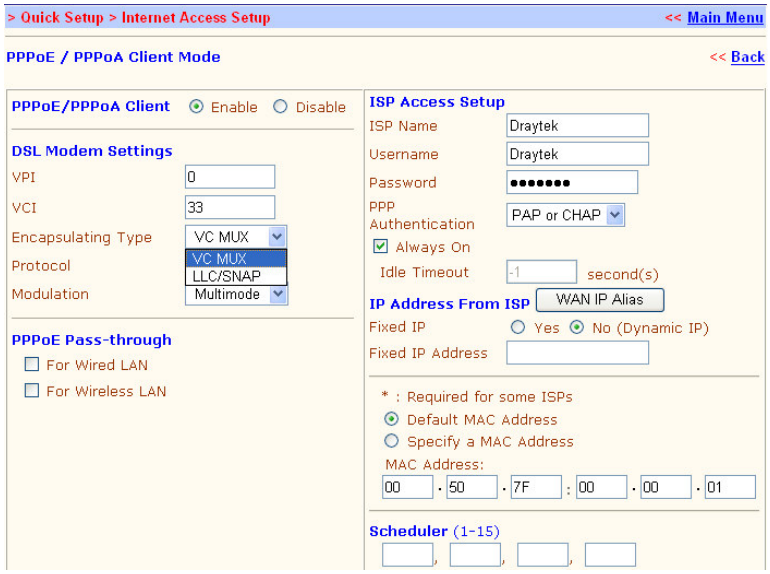
Connect to the router Web Configurator.

Check if the DSL setting are correct.(For MPoA user, please refer to the MPoA explanation on page 15)

>> VPI/VCI/Modulation mode: T1.413, G.Lite, G.DMT, Multimode



>>Encapsulation mode: VCMUX or LLC/SNAP



For PPPoE/PPPoA users, please check that the user name and password are correct, as provided by your ISP.

> Quick Setup > Internet Access Setup << Main Menu

PPPoE / PPPoA Client Mode << Back

PPPoE/PPPoA Client ◉ Enable ○ Disable

DSL Modem Settings
VPI 0
VCI 33
Encapsulating Type VC MUX
Protocol PPPoA
Modulation G.DMT

PPPoE Pass-through
☐ For Wired LAN
☐ For Wireless LAN

ISP Access Setup
ISP Name Draytek
Username Draytek
Password ●●●●●●●
PPP Authentication PAP or CHAP
☑ Always On
Idle Timeout -1 second(s)
IP Address From ISP WAN IP Alias
Fixed IP ○ Yes ◉ No (Dynamic IP)
Fixed IP Address

* : Required for some ISPs
◉ Default MAC Address
○ Specify a MAC Address
MAC Address:
00 . 50 . 7F : 00 . 00 . 01

Scheduler (1-15)
, , ,

OK

For MPoA (RFC1483/2684) mode users, please check that the WAN IP / Gateway / Subnet mask is set correctly, or that your ISP requires using DHCP client to obtain IP address automatically.

> Quick Setup > Internet Access Setup << Main Menu

MPoA (RFC1483/2684) Mode << Back

MPoA (RFC1483/2684) ◉ Enable ○ Disable

DSL Modem Settings
Encapsulation 1483 Bridged IP LLC
VPI 0
VCI 33
Modulation Multimode

RIP Protocol
☐ Enable RIP

WAN IP Network Settings
◉ Obtain an IP address automatically
Router Name *
Domain Name *
○ Specify an IP address WAN IP Alias
IP Address 0.0.0.0
Subnet Mask 255.255.255.0
Gateway IP Address

* : Required for some ISPs
◉ Default MAC Address
○ Specify a MAC Address
MAC Address:
00 . 50 . 7F : 00 . 00 . 01

OK

Check DSL Status

Check the DSL status via Router Web Configurators Online Status monitor.

> System Management > Online Status << Main Menu

System Status

System Uptime: 0:1:45

LAN Status

IP Address	TX Packets	RX Packets
192.168.1.1	380	295

WAN Status GW IP Addr 61.224.112.254 >> Drop PPPoE/PPPoA

Mode	IP Address	TX Packets	TX Rate	RX Packets	RX Rate	Up Time
PPPoE	61.224.112.148	8	38	10	22	0:00:01

ADSL Information (ADSL Firmware Version : 40e2be29)

ATM Statistics	TX Blocks	RX Blocks	Corrected Blocks	Uncorrected Blocks
	231288	231081	58581	0

ADSL Status	Mode	State	Up Speed	Down Speed	SNR Margin	Loop Att.
	G.DMT	SHOWTIME	64000	512000	11.0	25.5

ADSL status is shown on the bottom line in green. If this line is similar to the above example, then the DSL layer is operating, and the problem is at a higher level, such as incorrect login details.

Report to ISP and dealer technical support

If the router settings are correct, and the router still does not connect, please contact your ISP technical support representative to help you for configuration.

If the router does not work correctly, please contact your dealer for help. For any further questions, please e-mail support@draytek.com.tw.