
Vigor2600 V Series introduction

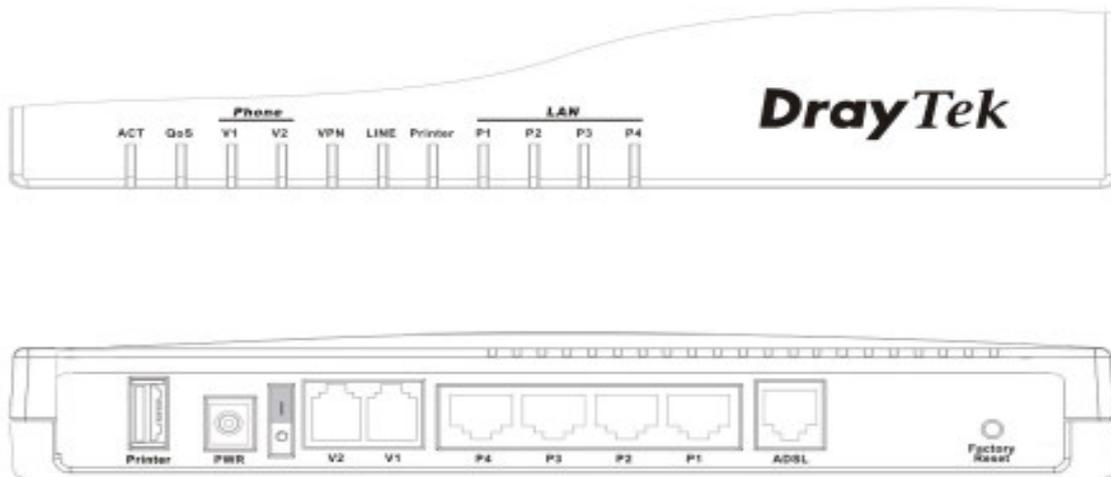


	<i>Vigor2600 V</i>	<i>Vigor2600VG</i>	<i>Vigor2600VGi</i>	<i>Vigor2600Vi</i>
ADSL Routers	*	*	*	*
Annex A / Annex B	* / *	* / *	* / *	* / *
ISDN Backup	—	—	*	*
Wireless AP	—	*	*	—
VoIP	*	*	*	*

The Vigor2600 V series is an Internet access solution for your LAN which not only provides shared web surfing but countless other value-added features such as Firewall / Security, VPN, multimedia support, USB interface printer server, and 54Mbps 802.11g Wireless LAN and VoIP all in a reliable one-box solution.

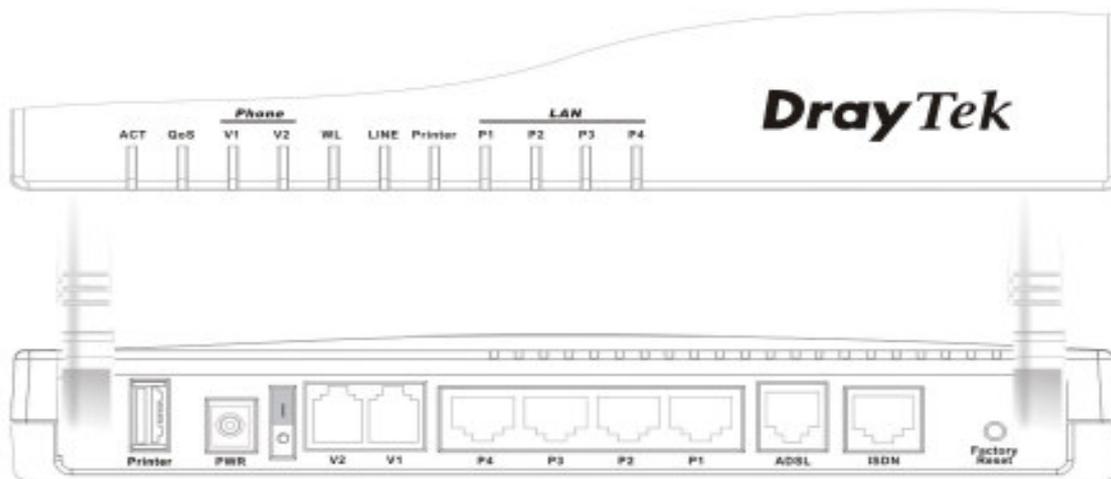
LED Indicators and Back Panels

Each of the Vigor2600 V series router has different front and rear panels. Before you begin to install, please take a moment to become more familiar with the LED indicators and rear panels. The following sections describe the models individually.



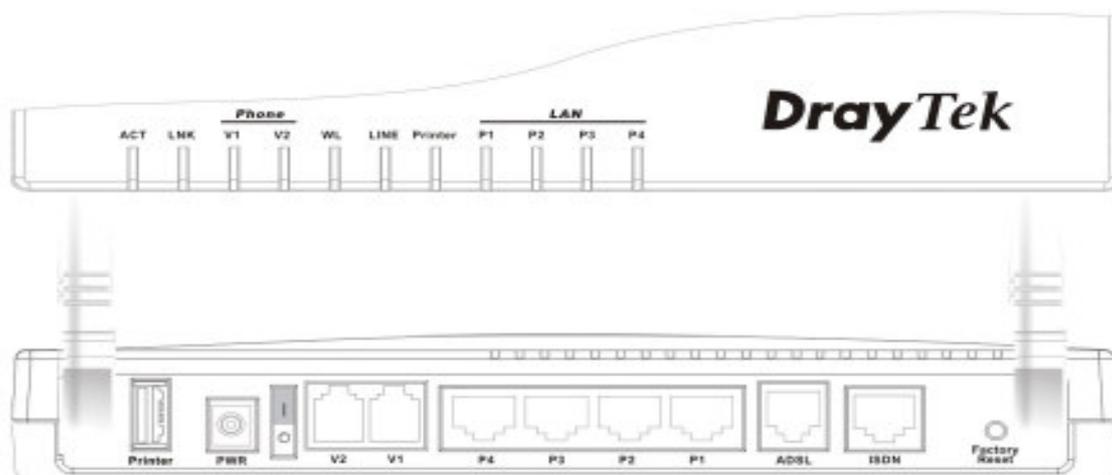
LED Indicators	Descriptions
ACT (Activity)	Blink when power is supplied to the router and the router is running normally.
QoS	ON when the QoS function is active.
Phone(V1, V2)	ON when you off hook the phone Blink when a phone call coming
VPN	ON when the VPN is active.
Printer	ON when the USB interface printer is ready.
LINE	ON when the ADSL line is showtime.
LAN	These indicators are dual-color LEDs : Yellow means the port is connected to a 10Mbps device, and Green indicates the connected device is 100Mbps.
P1, P2, P3, P4	ON when the connected network device has been linked up correctly. Blinking when there are Ethernet packets passing through the switch port.

Back Panels	Descriptions
Printer	To connect a USB based printer.
PWR	Only the power adapter comes with the package can be connected to the PWR.
V1, V2	To connect analog phone.
P1, P2, P3, P4	These switch ports should be connected to your local PCs.
ADSL	To connect the ADSL cable to your telephone jack.
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.



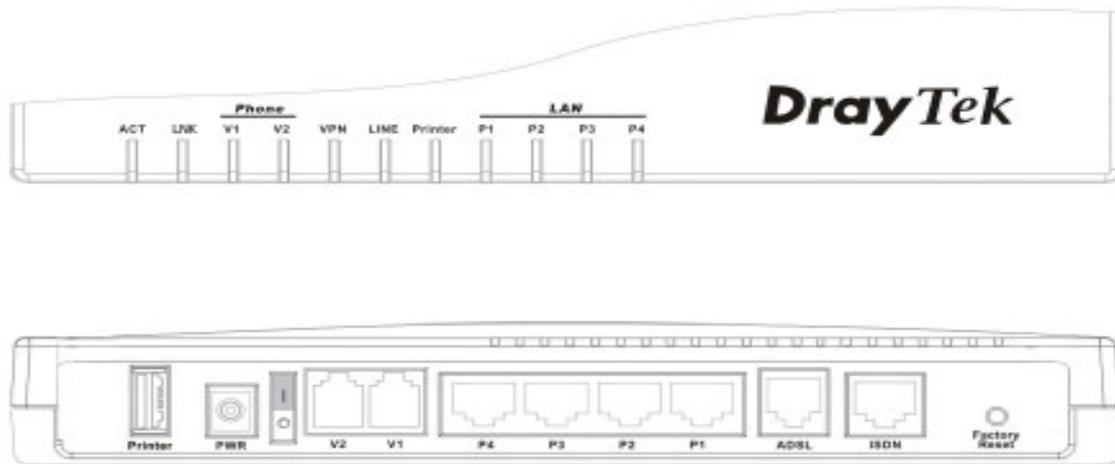
LED Indicators	Descriptions
ACT (Activity)	Blink when power is supplied to the router and the router is running normally.
QoS	ON when the QoS function is active.
Phone(V1, V2)	ON when you off hook the phone Blink when a phone call coming
WL	ON when the wireless LAN is ready
LINE	ON when the ADSL line is showtime.
Printer	ON when the USB interface printer is ready.
LAN	These indicators are dual-color LEDs : Yellow means the port is connected to a 10Mbps device, and Green indicates the connected device is 100Mbps.
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LED Indicators	Descriptions
ACT (Activity)	Blink when power is supplied to the router and the router is running normally.
LNK	Blinking when there is a successful remote connection on the ISDN BRI B1 / B2 channel. ON when the ISDN network is correctly setup.
Phone(V1, V2)	ON when you off hook the phone Blink when a phone call coming
WL	ON when the ADSL line is showtime.
LINE	ON when the ADSL line is showtime.
Printer	ON when the USB interface printer is ready.
LAN	These indicators are dual-color LEDs : Yellow means the port is connected to a 10Mbps device, and Green indicates the connected device is 100Mbps.
P1, P2, P3, P4	ON when the connected network device has been linked up correctly. Blinking when there are Ethernet packets passing through the switch port.

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ADSL	To connect the ADSL cable to your telephone jack.
ISDN	Connected to an external NT1 (or NT1+) box provided by your ISDN service provider.
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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LINE	ON when the ADSL line is showtime.
Printer	ON when the USB interface printer is ready.
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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 by 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.
- . When the 2600V contain FXS module, please do not connect V1, V2 ports with phone line.

Warranty

We warrant to the original end user (purchaser) that the router will 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 to restore 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.

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>

Vigor2600 V Series 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 ISDN line cable (RJ-45, black) for Vigor2600Vi and VGi only

2 external antennas for 2600VG and 2600VGi only.

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 Vigor2600 V series all contain Annex A/Annex B models, please check if the package is suitable for your using.

You can get the information from bottom of Vigor2600 V series router.

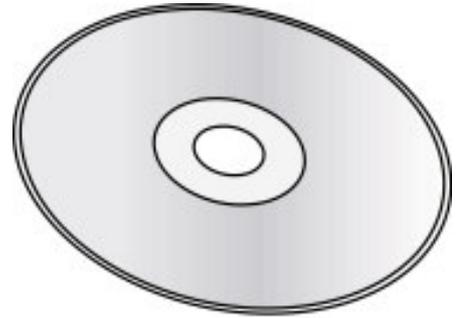
Annex A : connecting to an analog POTS line

Annex B : connecting to a digital ISDN line

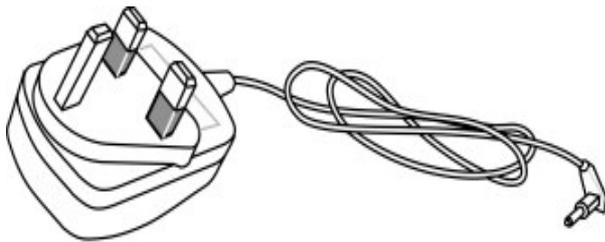




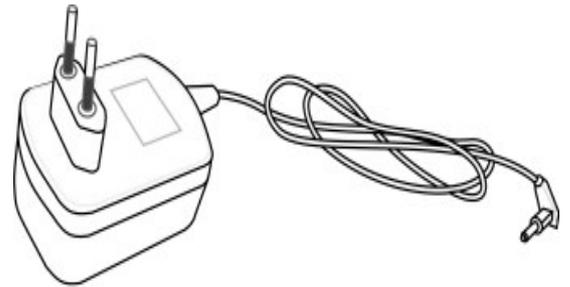
Manual



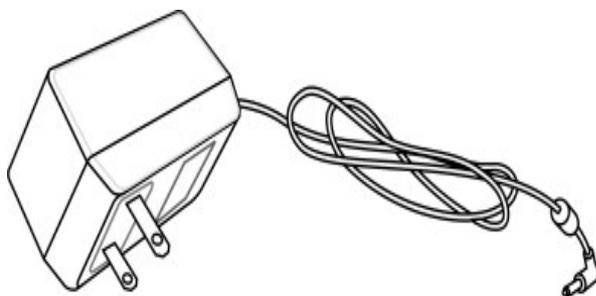
CD



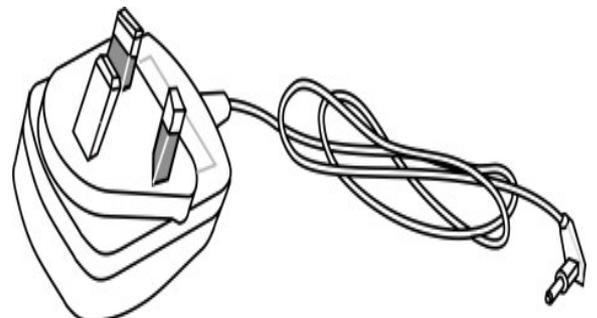
UK-type power adapter



EU-type power adapter



USA/Taiwan-type power adapter



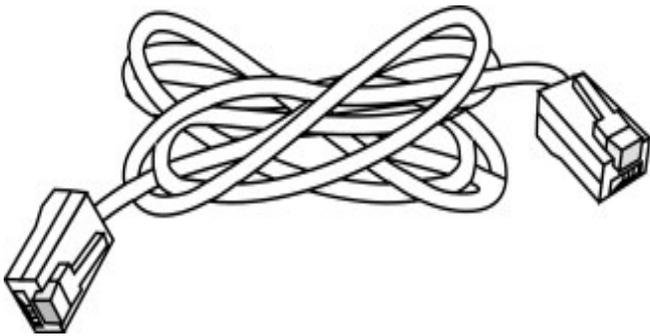
AU/NZ-type power adapter



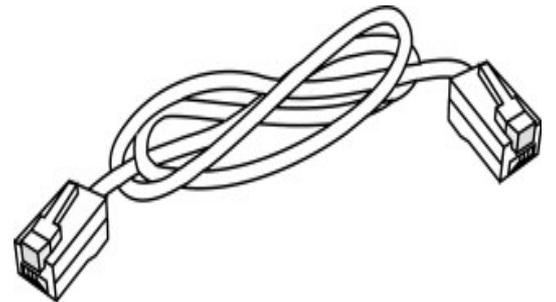
RJ-11 to RJ-11(Annex A)



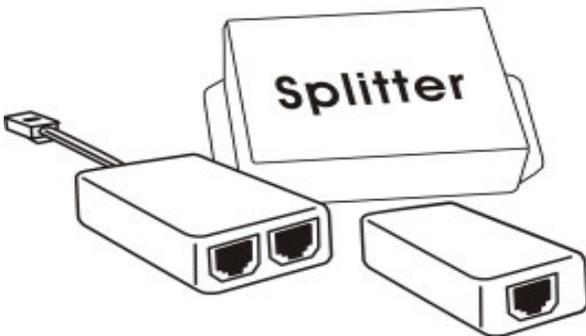
**RJ-11 to RJ-45(Annex B)
Dutch/Swiss User**



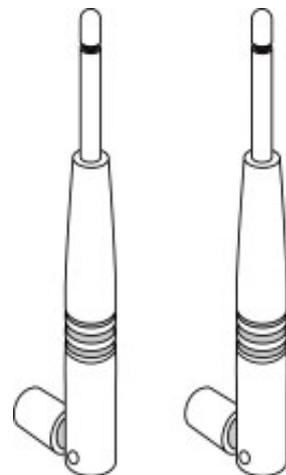
RJ-45(Ethernet)



**RJ-45 to RJ-45
(Annex B, ISDN)**



Filter/Splitter(Optional)



Antennas for VG/VGi only

**What you
need from ISP**

DSL line

Depending on the variant Vigor2600V series you purchased, the following DSL service must be available at your local premisses:

ADSL over POTS [Annex A] :

ADSL service must be enabled on your POTS telephone line.

ADSL over ISDN [Annex B] :

ADSL service must be enabled on your ISDN telephone line.

DSL Parameters

It should provide at least the following information from 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
(Vgior2600 Plus series provides ***Multimode*** which can automatically detect)

DrayTek Router Web Configurator

> Quick Setup > Internet Access Setup << Main Menu

MPOA (RFC1483/2684) Mode << Back

MPOA (RFC1483/2684) Enable Disable

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: 0.0.0.0

Gateway IP Address: _____

* : Required for some ISPs

Default MAC Address

Specify a MAC Address

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

DSL Modem Settings

Multi-PVC channel: Select M-PVCs channel

Encapsulation: 1483 Bridged IP VC-Mux

VPI: 0

VCI: 33

Modulation: G.DMT

RIP Protocol

Enable RIP

OK

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DrayTek Router Web Configurator

> Quick Setup > Internet Access Setup << Main Menu

PPPoE / PPPoA Client Mode << Back

PPPoE / PPPoA Client Enable Disable

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: 0.0.0.0

Gateway IP Address: _____

* : Required for some ISPs

Default MAC Address

Specify a MAC Address

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

DSL Modem Settings

Multi-PVC channel: Channel 1

Encapsulating Type: VC MUX

Protocol: PPPoA

Modulation: G.DMT

PPPoE Pass-through

For Wired LAN

ISP Access Setup

ISP Name: _____

Username: T0177921

Password: _____

PPP Authentication: PAP Only

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

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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

Only for MPoA mode users. 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.

What you need in your side

Local networking

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

One PC with an Ethernet Card installed.

TCP/IP protocol suite

For TCP/IP, your PC can set either static IP or DHCP to ask IP from router. The default gateway of router is 192.168.1.1. If static IP is chosen, you can set 192.168.1.x for your PC.

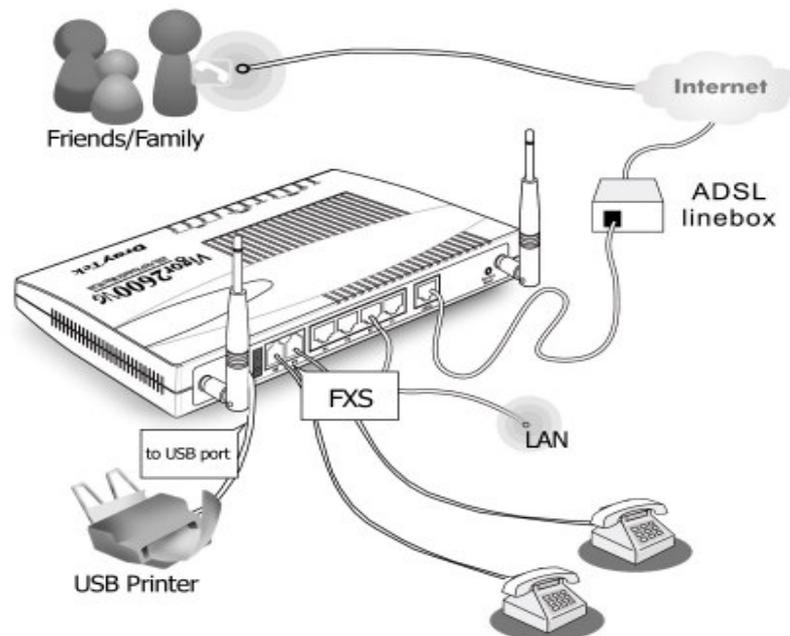
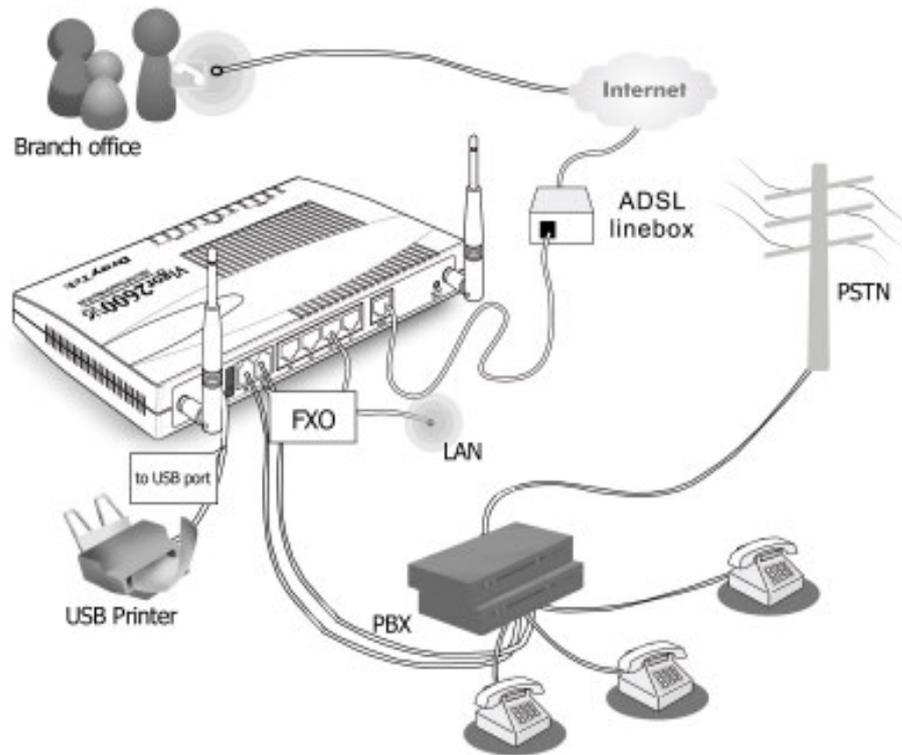
A Web browser

VoIP

One analog telephone(FXS) or one telephone Line(Fxo).

The wire installation

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



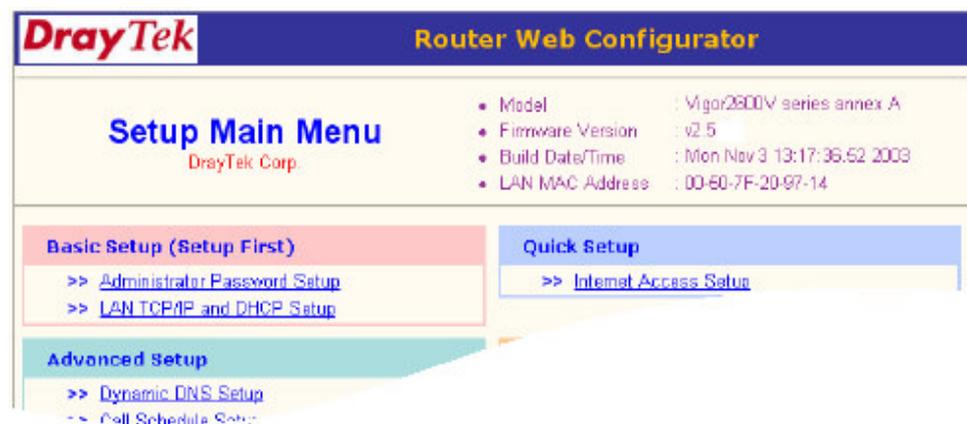
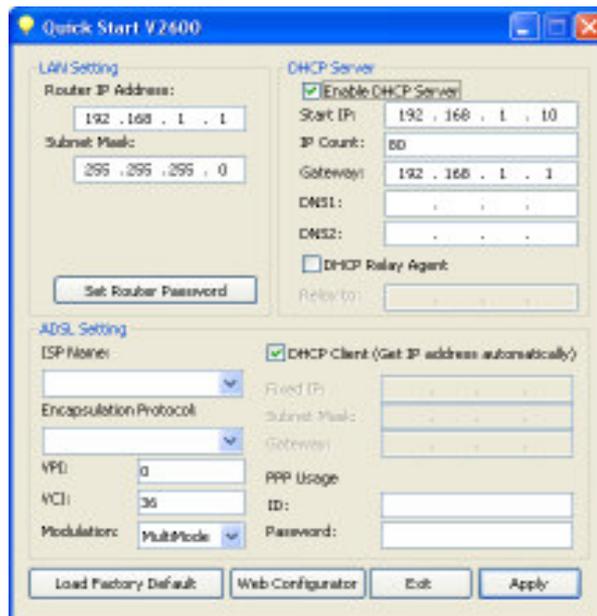
Install ‘ Router Tools ‘ This tool which provides “Smart StartWizard” Firmware Upgrade Program and FTP client is in the attached CD. It supports Windows, Mac OS 8/9 and Mac OS X. Moreover, it provides “Syslog Tool” for Windows system. For Vigor2600Vi / VGi models, there is virtual TA program for the usage of ISDN AP.

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

If the LEDs do not light normally, please refer to section A, “Trouble Shooting” for further information.

Connect to router If the PC is set to obtain IP address automatically (recommended), you can use Windows winipcfg.exe or ipconfig.exe to check if it has obtained an IP address from the router. If not, please reboot PC and ensure that it has obtained an IP address from the router.

Then you can use “Quick Start Wizard” to config router or connect to router via Web browser directly. The default IP of router is 192.168.1.1.



Password

The default password is null. You can press “OK” to skip it.



The dialog box titled "Enter Network Password" contains the following fields and options:

- Site: 192.168.1.1
- Realm: Login to the Router Web Configurator
- User Name: [text input field]
- Password: [password input field]
- Save this password in your password list
- Buttons: OK, Cancel

Enter Router Menu

Once past the password prompt, you will now see the router’s main menu:
(Example: Vigor2600V)



The main menu of the DrayTek Router Web Configurator for a Vigor2600V series router. It includes the following sections:

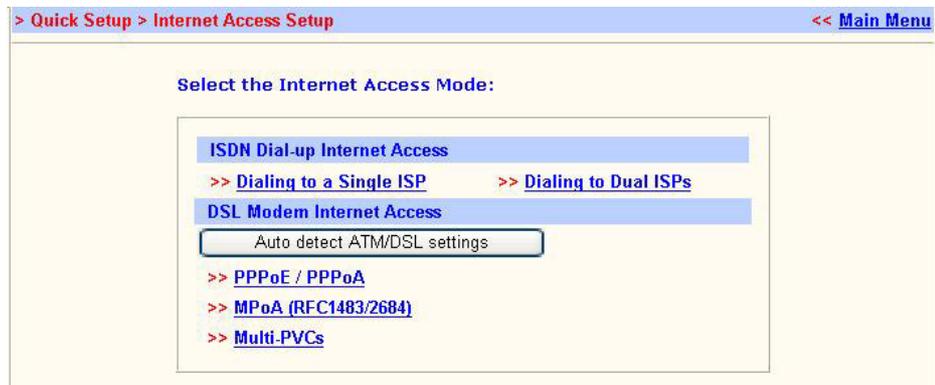
- Setup Main Menu** (DrayTek Corp.)
- Basic Setup (Setup First)**
 - Administrator Password Setup
 - LAN TCP/IP and DHCP Setup
- Advanced Setup**
 - Dynamic DNS Setup
 - Call Schedule Setup
 - NAT Setup
 - RADIUS Setup
 - Static Route Setup
 - IP Filter/Firewall Setup
 - VPN and Remote Access Setup
 - UPnP Service Setup
 - VoIP Settings
 - VLAN/Rate Control
- Quick Setup**
 - Internet Access Setup
- System Management**
 - Online Status
 - VPN Connection Management
 - Configuration Backup / Restoration
 - SysLog Setup
 - Time Setup
 - Management Setup
 - Diagnostic Tools
 - Reboot System
 - Firmware Upgrade (TFTP Server)

Model: Vigor2600V series annex A
Firmware Version: v2.5
Build Date/Time: Mon Nov 3 13:17:35 2003
LAN MAC Address: 00-50-7F-20-97-14

Set DSL Parameters

Click on ‘Internet Access Setup’ on the right-hand menu.

You will find three items : PPPoE/PPPoA ,MPoA (RFC 1483/2684), and Multi-PVCs.



The "Internet Access Setup" screen displays the following options:

- Select the Internet Access Mode:
- ISDN Dial-up Internet Access
 - Dialing to a Single ISP
 - Dialing to Dual ISPs
- DSL Modem Internet Access
 - Auto detect ATM/DSL settings
 - PPPoE / PPPoA
 - MPoA (RFC1483/2684)
 - Multi-PVCs

Then click Multi-PVCs to Enter your DSL parameters according to the information provided by your ISP. Please select "UBR" QoS Type if your ISP only support one PVC channel on ADSL line.

Then you can continually enter setting menu according to the protocol which ISP assigns.

Channel	Enable	VPI	VCI	QoS Type	Protocol	Encapsulation
1.	<input checked="" type="checkbox"/>	0	33	UBR	PPPoA	LLC/SNAP
2.	<input checked="" type="checkbox"/>	0	34	UBR	MPoA	1483 Bridged IP LLC
3.	<input type="checkbox"/>	0	35	UBR	PPPoA	VC MUX
4.	<input type="checkbox"/>	0	36	UBR	PPPoA	VC MUX
5.	<input type="checkbox"/>	0	37	UBR	PPPoA	VC MUX
6.	<input type="checkbox"/>	0	38	UBR	PPPoA	VC MUX
7.	<input type="checkbox"/>	0	39	UBR	PPPoA	VC MUX
8.	<input type="checkbox"/>	0	40	UBR	PPPoA	VC MUX

For PPPoE/PPPoA Users

Select your active PVC channel by Multi-PVC channel item.

Enter your allocated username, password according to the information provided by your ISP.

If you want to connect to Internet all the time, you can check 'Always On'.

For MPoA (RFC 1483/2684) Users

Select your active PVC channel by Multi-PVC channel item.
Enter your allocated WAN IP address(or enabling DHCP client to get IP from ISP) and DSL parameters according to the information provided by your ISP.

The screenshot shows the DrayTek Router Web Configurator interface. The main title is "DrayTek Router Web Configurator". Below the title, there are navigation links: "> Quick Setup > Internet Access Setup" and "<< Main Menu". The current page is titled "MPoA (RFC1483/2684) Mode" with a "<< Back" link.

The settings are organized into several sections:

- MPoA (RFC1483/2684)**: Enable Disable
- DSL Modem Settings**:
 - Multi-PVC channel: Select M-PVCs channel (dropdown)
 - Encapsulation: 1483 Bridged IP VC-Mux (dropdown)
 - VPI: 0 (input)
 - VCI: 33 (input)
 - Modulation: G.DMT (dropdown)
- RIP Protocol**: Enable RIP
- WAN IP Network Settings**:
 - Obtain an IP address automatically
 - Router Name: (input field with asterisk)
 - Domain Name: (input field with asterisk)
 - Specify an IP address (with a "WAN IP Alias" button)
 - IP Address: 0.0.0.0 (input)
 - Subnet Mask: 0.0.0.0 (input)
 - Gateway IP Address: (input)
- MAC Address**:
 - Default MAC Address
 - Specify a MAC Address
 - MAC Address: 00 . 50 . 7F : 00 . 00 . 01 (input)

An "OK" button is located at the bottom center of the form. At the very bottom of the page, there is a copyright notice: "Copyright (c) 2002, DrayTek Corp. All Rights Reserved."

Auto detect ATM/DSL Setting

You can also use this function to detect ATM/DSL setting. Please follow the instructions to operate. If your country is not in the list, it may take longer time to detect.

Click the "Internet Access Setup" option, and select "Auto Detect ATM/DSL Settings". Follow the prompts until it asks you whether you have a fixed IP or not, if you are not then click Cancel.

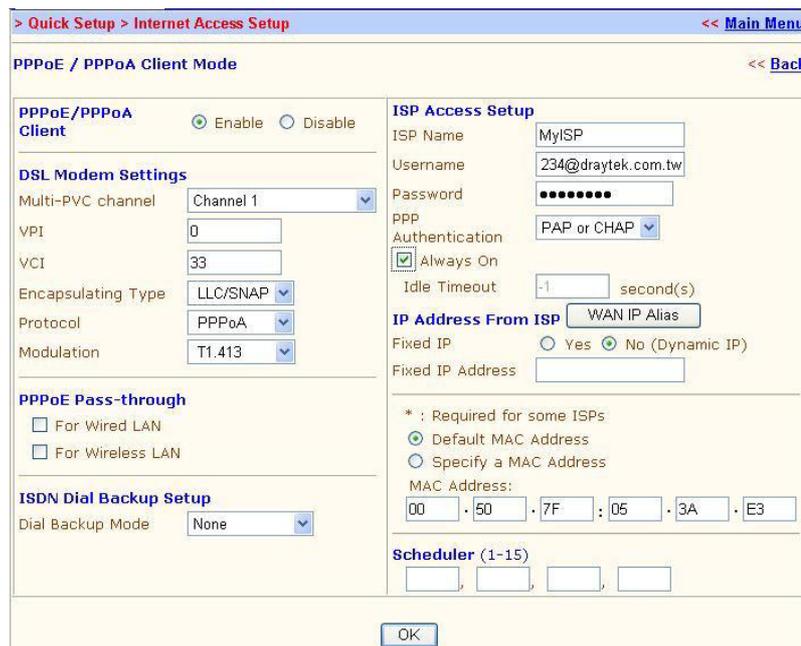
Please select the country from the window. When you click OK it will go to detect the ATM/DSL setting.

The screenshot shows a web browser window with the address bar displaying "http://192.168.1.1/doc/country.htm...". The main content area of the browser contains a dialog box with the text "Please select your country area :". Below this text is a dropdown menu with "UK" selected. At the bottom of the dialog box is an "OK" button.

Example for PPPoA:
It should now have detected the settings:



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 them to you each time you login anyway.



Surfing Internet

Once all previous steps are completed, you can surf Internet now. You can also monitor the connection condition via router management function.

(Example: Vigor2600V)

DrayTek		Router Web Configurator					
> 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		

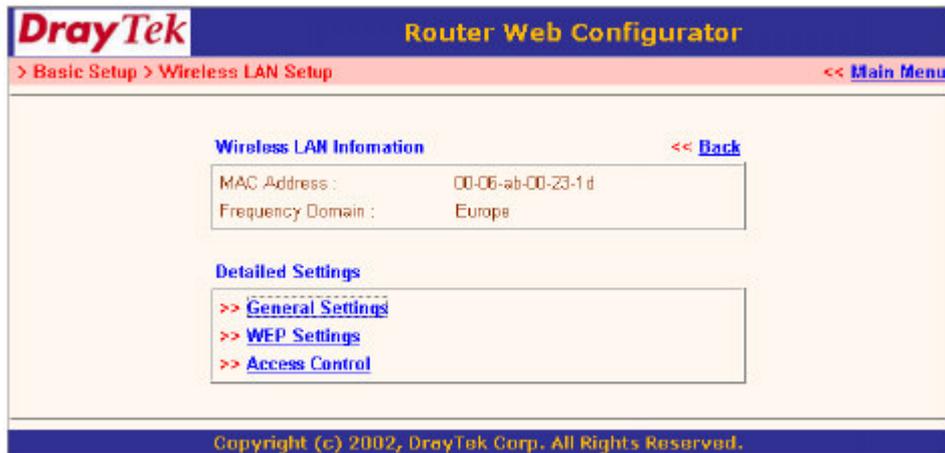
Wireless LAN Setting

If you want to connect your wireless supported devices to Vigor2600VGi or Vigor2600VG, you need to configure the router before you start to use it.



Wireless LAN Interface

The Vigor2600VGi and Vigor2600VG are equipped with a wireless LAN interface compliant with the 54Mbps IEEE 802.11g protocol. They are also interoperable with 802.11b compliant wireless devices. The features of wireless LAN capability enable high mobility of several simultaneous users accessing all LAN facilities just like on a wired LAN as well as Internet and WAN access.



DrayTek Router Web Configurator

> Basic Setup > Wireless LAN Setup << Main Menu

Wireless LAN Information << Back

MAC Address : 00-06-ab-00-23-1d
Frequency Domain : Europe

Detailed Settings

>> General Settings
>> WEP Settings
>> Access Control

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The Frequency Domain is set as Europe and the MAC address will show as above. Click **General Settings**, you could configure the SSID and wireless channel.



> Basic Setup > Wireless LAN Setup > General Settings << Main Menu

General Setting (IEEE 802.11) << Back

Enable Wireless LAN
 Enable 802.1x
You should setup [RADIUS Server](#) if enabled

Scheduler (1-15) [] , [] , [] , []

SSID : default

Channel : Channel 6, 2437MHz

Hide SSID

SSID :
wireless LAN Service Set ID.
Hide SSID :
the scanning tool can't read the SSID when sniffing radio.
Channel :
Select the frequency channel of wireless LAN.

Cancel OK

Scheduler: You can set wireless device to work at some time interval only. These are 4 intervals you can choose: schedule1, schedule2, schedule3, and schedule4. The default setting is always working. You can set the schedule under **Advanced Setup >> Call Schedule Setup. (Please refer to detail manual on the attached CD)**

SSID(Service Set Identification): You should set the SSID same as your note book wireless card to allow the client PCs to access the network via the wireless LAN interface. The default SSID is "default".

Channel: To select a wireless channel for Vigor2600Gi / Vigor2600G. The default channel is 6.

Hide SSID: To check it to hide SSID when the wireless clients sniffing radio.

WEP Security of Wireless LAN Interface

WEP Encryption:

To improve the security and privacy of your wireless data packets the WEP encryption feature can be used. The WEP encrypts each frame transmitted from the radio using one of the keys entered from this panel. WEP encryption can be enabled by selecting 64 bits or 128 bits from pull down menu. These are 4 key sets can be entered and only one key can be selected. The key can be entered by ASCII or Hexadecimal.

The screenshot shows the 'WEP Settings' page in the DrayTek Router Web Configurator. The breadcrumb trail is '> Basic Setup > Wireless LAN Setup > WEP Settings'. The 'WEP Encryption' dropdown menu is set to 'Disable'. There are four radio buttons for 'Key 1', 'Key 2', 'Key 3', and 'Key 4', each with a 'WEP Key' input field. Below the keys, there are instructions for 64-bit and 128-bit WEP keys. The 64-bit key instruction says: 'Type 5 ASCII character or 10 Hexadecimal digits leading by "0x", for example "AB312" or "0x4142333132"'. The 128-bit key instruction says: 'Type 13 ASCII character or 26 Hexadecimal digits leading by "0x", for example "0123456789abc" or "0x30313233343536373839414243"'. At the bottom, there are 'Cancel' and 'OK' buttons. The footer of the page reads 'Copyright (c) 2002, DrayTek Corp. All Rights Reserved.'

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 **0x4142434445464748494A4B4C4D**.

Access Control of Wireless LAN Interface

For additional security of wireless access, the **Access Control** allows your to restrict the network access rights by the wireless LAN MAC address of client. Only the valid MAC address which has been configured can allow to access the wireless LAN interface.

The screenshot shows a web interface for configuring wireless LAN access control. The breadcrumb navigation at the top reads: > Basic Setup > Wireless LAN Setup > Access Control. There is a link for << Main Menu in the top right. The main heading is Access Control, with a << Back link. A checkbox labeled 'Enable Access Control' is present. Below it is a table with two columns: 'Index' and 'Must use VPN' (with a checkbox), and 'MAC Address'. The table is currently empty. Below the table is a 'MAC Address' input field with six boxes separated by colons. There is also a checkbox for 'Must Use VPN over WLAN'. Below these are buttons for 'Add', 'Remove', 'Edit', and 'Cancel'. At the bottom of the table area is a 'VPN server IP address for WLAN' field with four boxes separated by dots. A 'Note' section states: 'Add or remove the wireless user's MAC address to accept or deny the access to the network.' At the very bottom are 'Clear All' and 'OK' buttons.

Enable Access Control: To check the **Enable Access Control** to enable the MAC Address access control feature.

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.

VoIP Setting

This session will explain each settings in VoIP and will have a sample setting for reference.

VoIP Settings

After you click VoIP Settings link, you will enter the page like following:

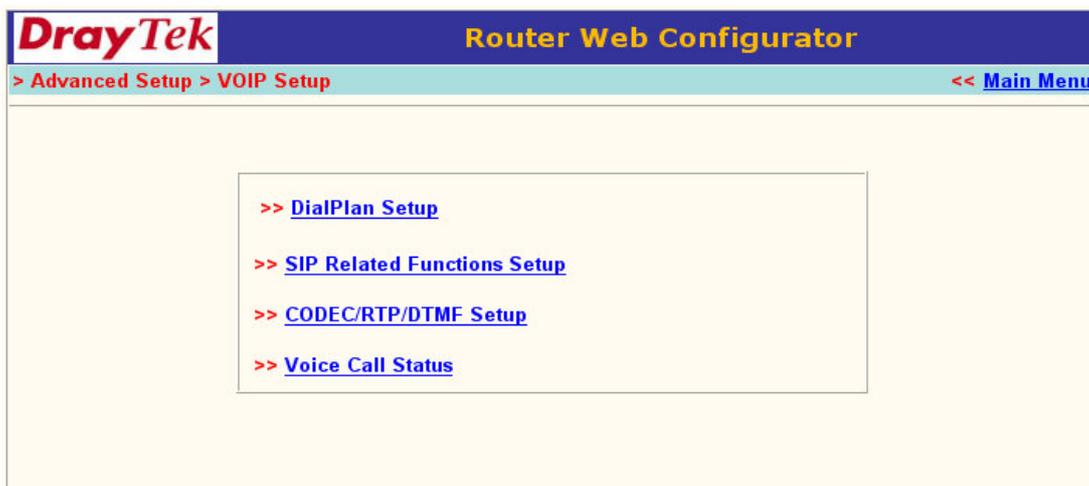


Fig. 1 The VoIP setting page

DialPlan Setup

Click the Dial-Plan Setup, you can setup speed dial phone book up to sixty entries.

The screenshot shows the 'DialPlan Configuration' page. At the top left is the title 'DialPlan Configuration' and at the top right is a '<< Back' link. Below the title is a table with five columns: 'Index', 'Phone number', 'Name', 'IP Address / Domain', and 'Status'. The table contains 12 rows of data, with the first 8 rows having data and the last 4 rows having empty cells for the first three columns and 'x' for the status.

Index	Phone number	Name	IP Address / Domain	Status
1.	12	63065	fwd.pulver.com	v
2.	11	89721287	snom.info	v
3.	10	sophia.hsieh	iptel.org	v
4.	13	kevin.yu	iptel.org	v
5.	614	spider	151.38.167.148	v
6.	12	123	203.69.175.20	v
7.	222	GY	203.219.147.170	v
8.	223	DV	203.219.99.194	v
9.				x
10.				x
11.				x
12.				x

Fig. 2 DialPlan setup page

Click each index number to edit fields.

The screenshot shows a web interface for editing a DialPlan entry. The title is 'Index No. 1'. There is a '<< Back' link in the top right. The main content area is a white box with a black border containing the following fields:

- Enable
- Phone Number :
- Name :
- IP Address / Domain :

Below the white box is an 'OK' button.

Fig. 3 DialPlan edit page

Enable: to enable this entry for mapping phone number when you dial the keypad on the phone.

Phone Number: a speed dial number. you can choose any number from 0~9 and*

Name: This field can fill with name (when using SIP protocol) or number. The number or name you filled must be the same as called party's setting.

IP Address / Domain: You can enter either IP address or domain name.

Example 1: if Tom give you a SIP URL as sip:63065@fwd.pulver.com then you can input the number just as Fig3, except you can change any number in the PhoneNumber field.

Example 2: if Aaron give you a sip url as sip:aaron@203.69.175.19 then you can enter the DialPlan as:

Phone Number: 1234 (any number you like)

Name: aaron

IP Address / Domain: 203.69.175.19

Example 3: if Calvin give you an IP address "203.69.175.16" only, and it is not in your dialplan, you still can use keypad on the phone to dial as #203*69*175*19#

Sip related function setup

SIP << [Back](#)

SIP Port : 5060
Registrar : fwd.pulver.com

Ports Setting

Port 1	Port 2
<input checked="" type="checkbox"/> Use Registrar	<input type="checkbox"/> Use Registrar
Name : 56984	Name : p1
Password : ●●●●●●●	Password :
Expiry Time : 1 hour	Expiry Time : 10 mins

Cancel OK

Fig. 4 SIP Related Function Setup Page

SIP Port: The port number used to send/receive sip message for build a session. The default value is 5060, you can change to other number but it needs other party also change to the same number.

Registrar: you can enter domain name or IP address of SIP Registrar server. For example, iptel.org or 195.37.77.101 are identical. You have to apply an account of SIP Registrar server before you can use it. However, it is not necessary to use sip registrar server function in order to use VoIP function.

Use Register: check this box then you can use register function to register your 2600V with an sip registrar server.

Name: You can enter a name or a number in this field. this field is the name part of sip url.

Password: enter the password when you use a sip registrar server which needs password.

Expire Time: The time duration that sip registrar server keep your registration record. before the time expired, 2600V will issue another register message to registrar server again.

CODEC/RTP/DTMF Setup

Codecs << [Back](#)

Default Codec : G.729A/B (8Kbps) ▼
Packet Size : 20ms ▼

DTMF

InBand OutBand Payload Type: 101

RTP

Dynamic RTP port start : 10050
Dynamic RTP port end : 15000

Fig. 5 CODEC/RTP/DTMF setup page.

Default Codec: there are five different CODECs you can choose as your prefer CODEC that you wish to use. However, the real CODEC be used was negotiate with peer party before session was established. The default CODEC is G.729A/B; it occupied less bandwidth while still have good voice quality.

NOTE: if your ADSL up stream speed only have 64Kbps, do not use G.711 CODEC.

Packet Size: the amount of data contains in a single packets. The default value is 20 ms, it means the data packet will contains 20 ms voice information. The more data contains in a single packet the less overhead it create but may increase .

DTMF InBand: Choose this one then the 2600V will send the DTMF tone as audio directly when you press the keypad on the phone

DTMF OutBand: Choose this one then the 2600V will capture the keypad number you pressed and transform it to digital form then send to the other side;the receiver will generate the tone according to the digital form it receive. This function is very useful when the network traffic congestion occur and it still can remain the accuracy of DTMF tone.

DTMF Payload type: Choose a number between 96 to 127, the default value was 101.

RTP: Specify the start and end port for RTP stream. The default values are 10050 and 15000.

Calling scenario

There are two people ,say Kevin and Aaron. They both have 2600V in hand, so here's their settings in order to call each other.

Kevin's IP address is :214.61.172.53

Aaron's IP address is : 203.69.175.19

1. Kevin's setting:

1-1 DialPlan index 1

Phone Number: 1234 (any number you like)

Name: aaron

IP Address /Domain: 203.69.175.19

1-2 Sip related

SIP Port: 5060

Registrar: (leave blank, don't fill any thing)

Port 1:

Enable Register:

Name:kevin

Password: (leave blank, don't fill any thing)

Expire Time: use default value

1-3 CODEC/RTP/DTMF

Use default value.

2. Aaron's setting:

2-1 DialPlan index 1

Phone Number: 123 (any number you like)

Name: kevin

IP Address /Domain: 214.61.172.53

2-2 Sip related

SIP Port: 5060

Registrar: (leave blank, don't fill any thing)

Port 1:

Enable Register:

Name:aaron

Password: (leave blank, don't fill any thing)

Expire Time: use default value

2-3 CODEC/RTP/DTMF

Use default value.

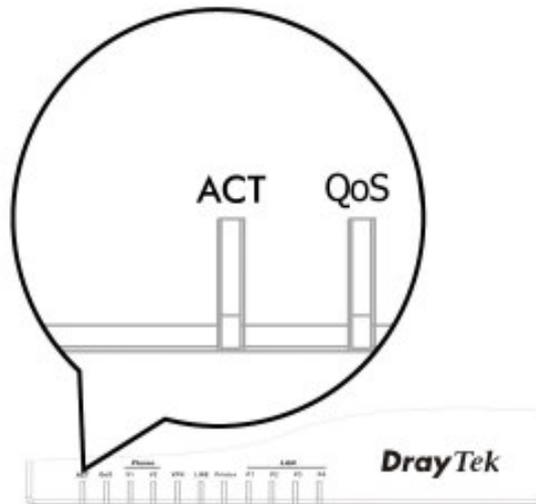
3. Now, when Kevin wants to call Aaron, he picks up the phone and dials 1234.

4. When Aaron wants to call Kevin, he picks up the phone and dials 123

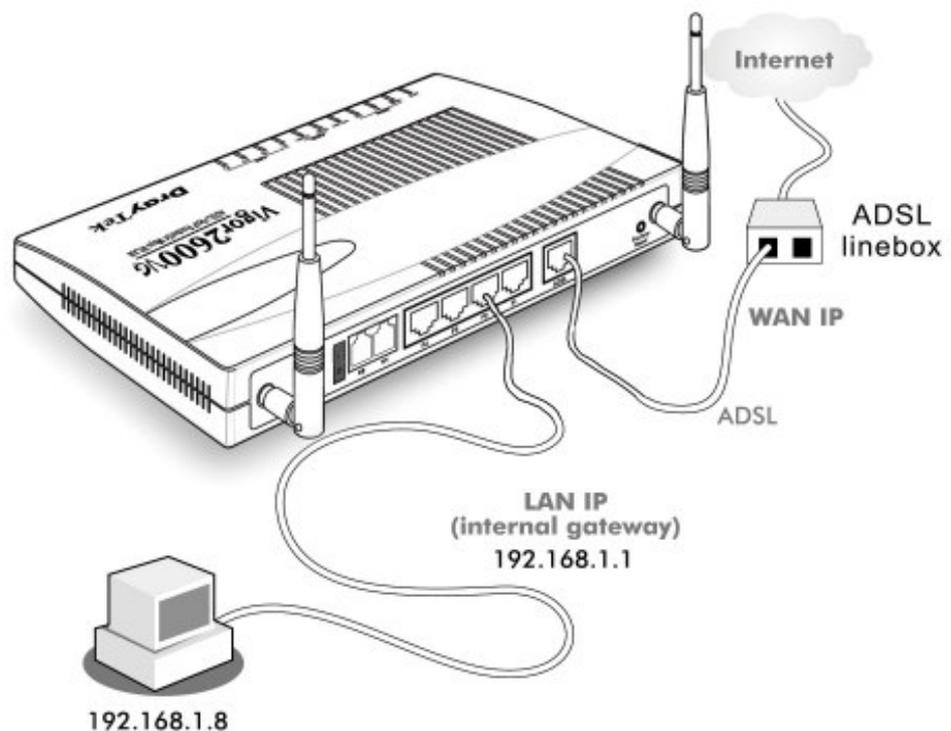
Trouble Shooting for Can not get on to the Internet'

**Check if the
hardware is OK?**

Check if the power and LAN line are connected correctly. After power is on, the 'ACT' LED will blink once a second, and the correspondent LAN port will light.

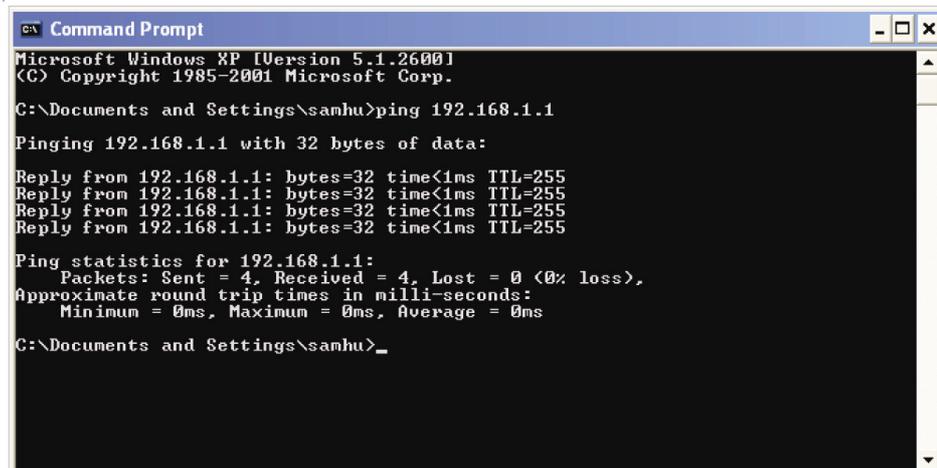


**Can you ping the
router from your
PC?**



The default gateway IP of router is 192.168.1.1.
Please check if you can ping router correctly.

For Windows



```
CA Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\samhu>ping 192.168.1.1

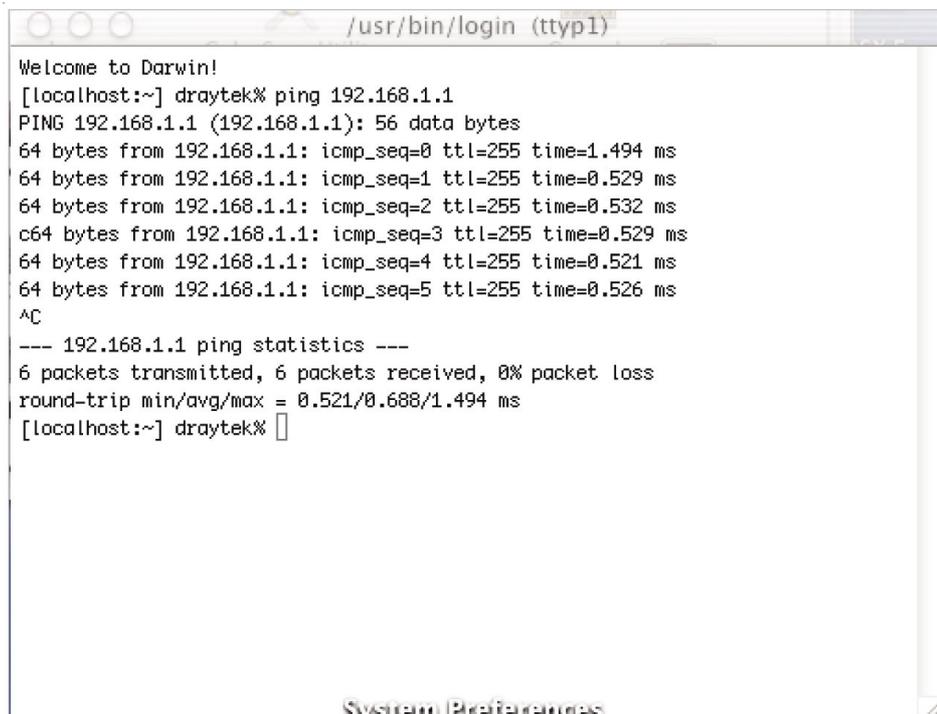
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\samhu>
```

For Mac(Terminal)



```
/usr/bin/login (tty1)

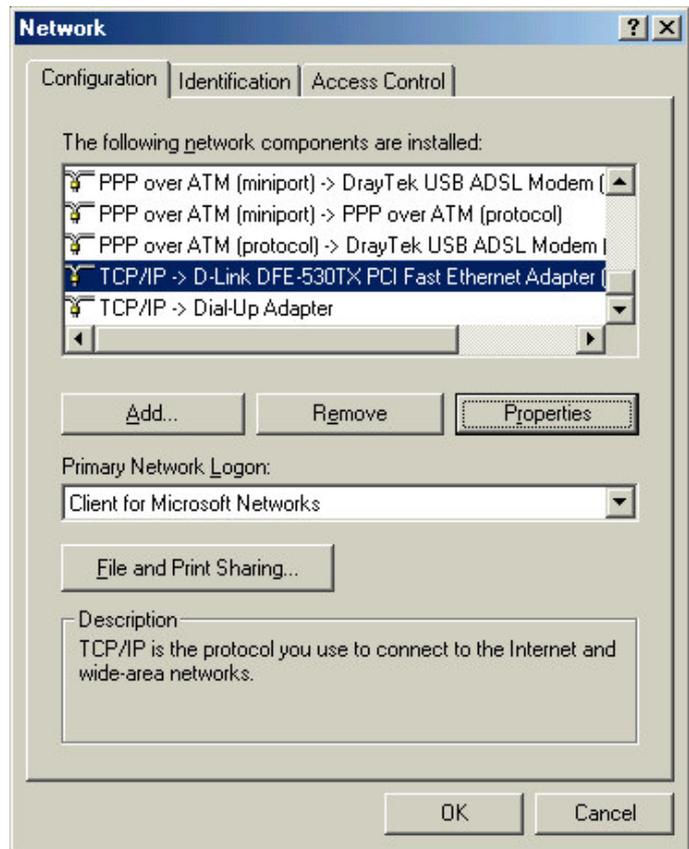
Welcome to Darwin!
[localhost:~] draytek% ping 192.168.1.1
PING 192.168.1.1 (192.168.1.1): 56 data bytes
64 bytes from 192.168.1.1: icmp_seq=0 ttl=255 time=1.494 ms
64 bytes from 192.168.1.1: icmp_seq=1 ttl=255 time=0.529 ms
64 bytes from 192.168.1.1: icmp_seq=2 ttl=255 time=0.532 ms
64 bytes from 192.168.1.1: icmp_seq=3 ttl=255 time=0.529 ms
64 bytes from 192.168.1.1: icmp_seq=4 ttl=255 time=0.521 ms
64 bytes from 192.168.1.1: icmp_seq=5 ttl=255 time=0.526 ms
^C
--- 192.168.1.1 ping statistics ---
6 packets transmitted, 6 packets received, 0% packet loss
round-trip min/avg/max = 0.521/0.688/1.494 ms
[localhost:~] draytek%
```

If not, please check the IP address of your PC. We suggest you set ‘get IP automatically’

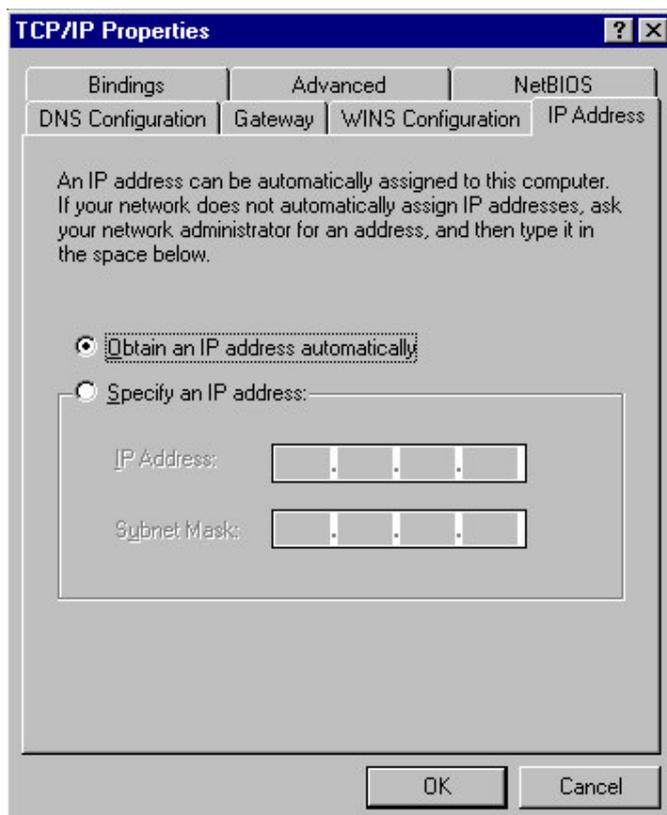
For Windows 98/Me user

1. Enter “Control Panel” and double click “Network”.

2. Choose “TCP/IP of LAN device” and press “Properties”.



3. Choose “Obtain an IP address automatically”

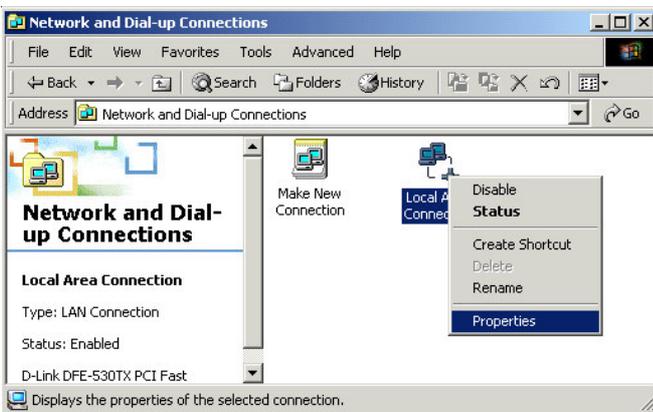


For Windows 2000 user

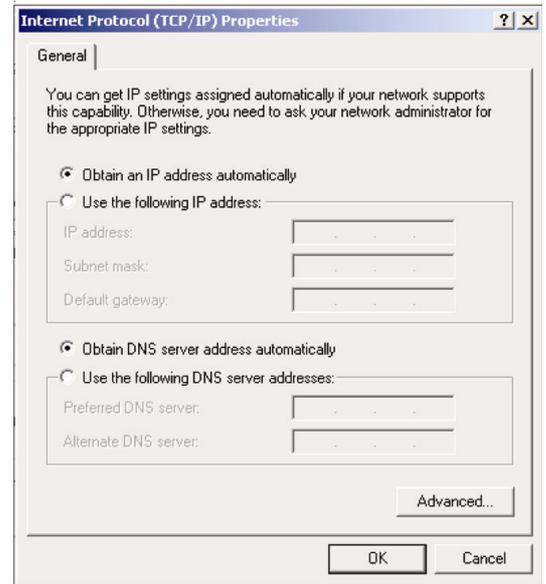
1. Enter “Control Panel” and double click “Network and Dial-up Connections”.



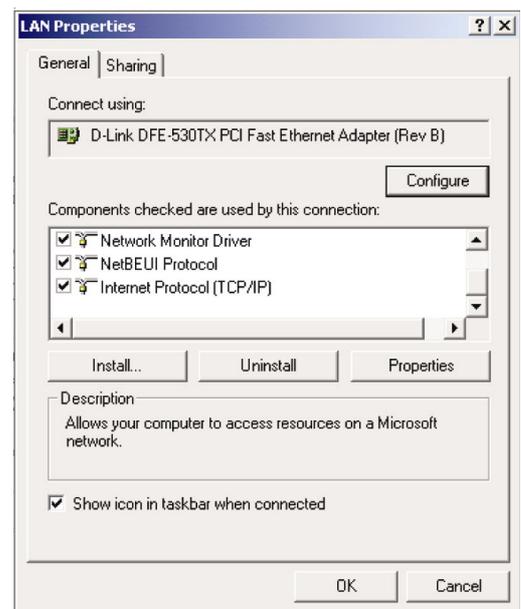
2. Right click “Local Area Connection” and choose “Properties”.



4. Select ‘Obtain an IP address automatically’

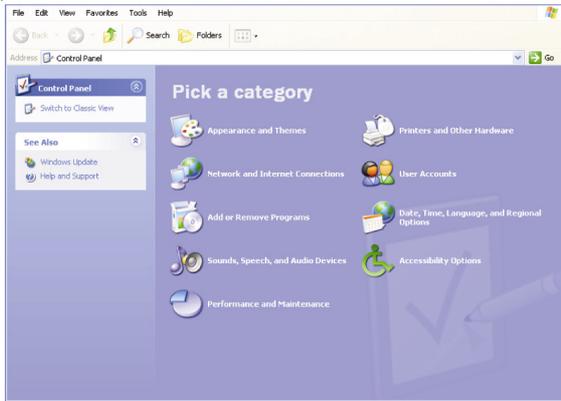


3. Choose “TCP/IP” and press “Properties”.

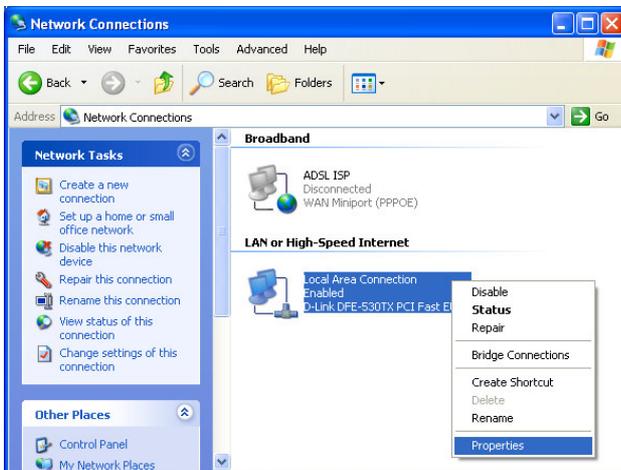


For Windows XP user

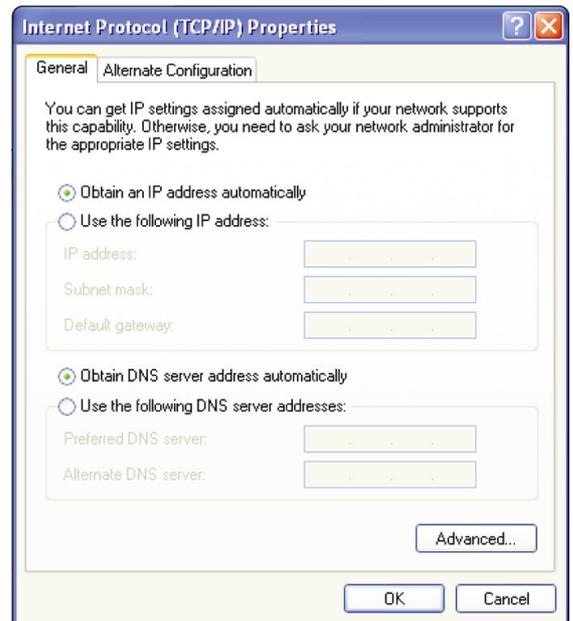
1. Enter “Control Panel” and double click “Network Connections”.



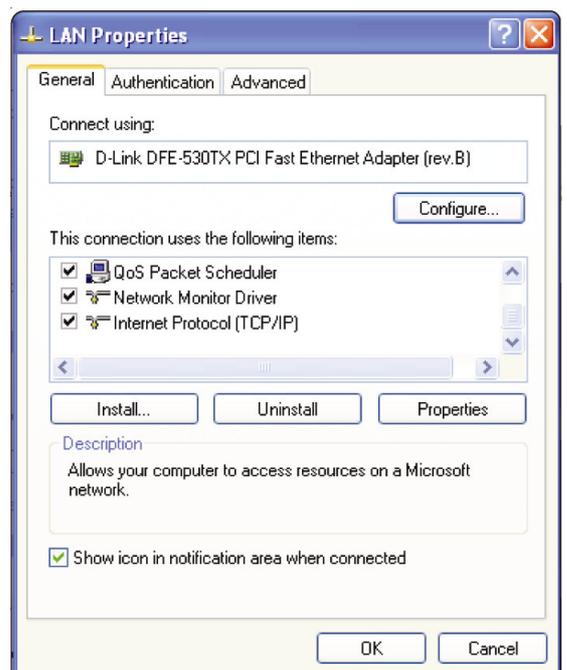
2. Right click LAN icon and choose “Properties”.



4. Select “Obtain an IP address automatically”

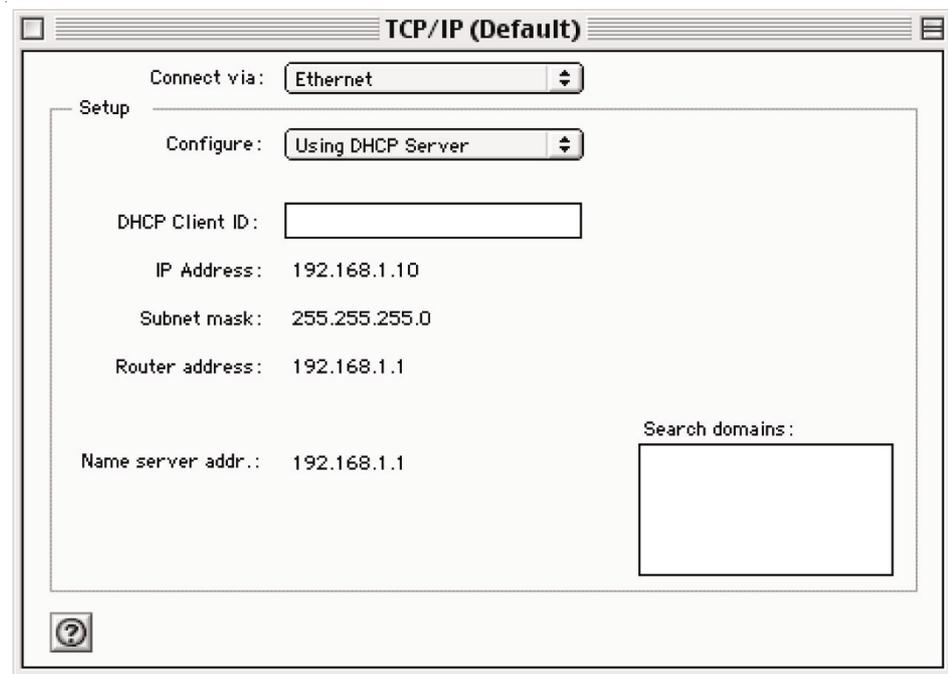


3. Choose “TCP/IP” and press “Properties”.



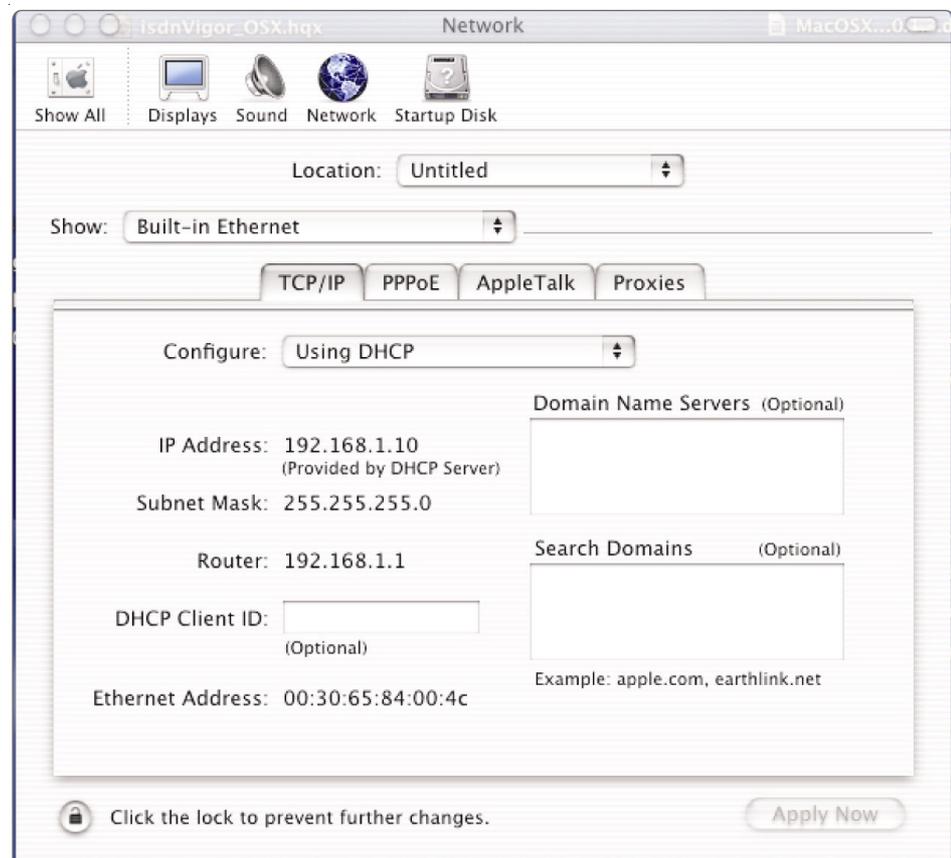
For Mac OS9.x user

Control Panel → TCP/IP



For Mac OSX user

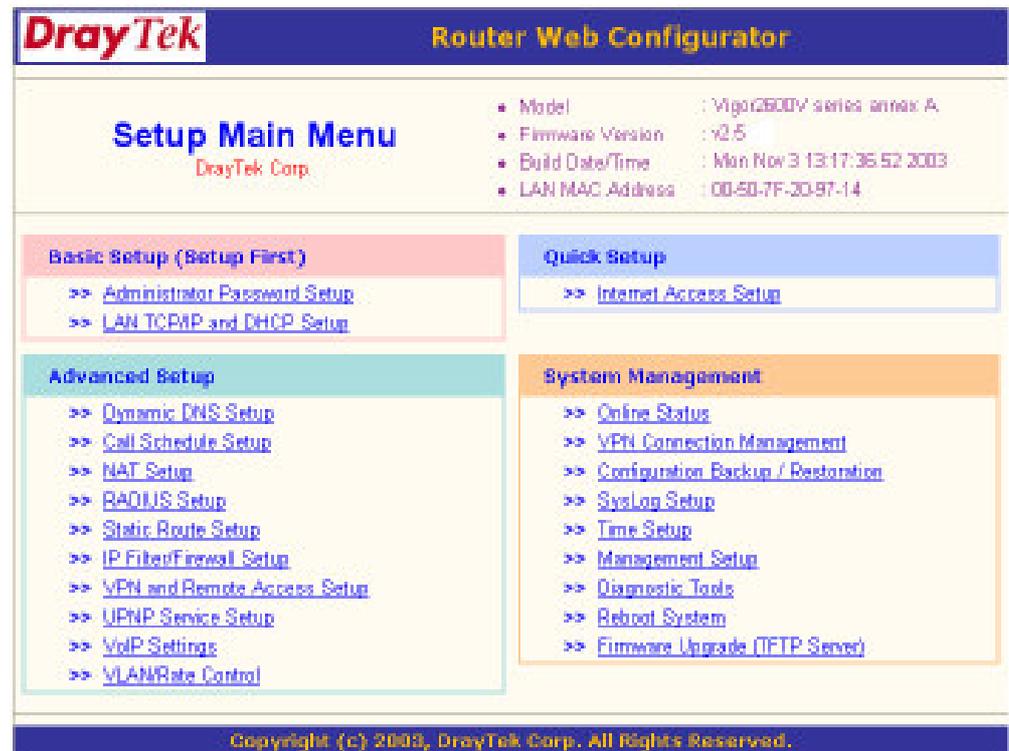
System Preferences → Network



Are DSL/ISP settings Ok?

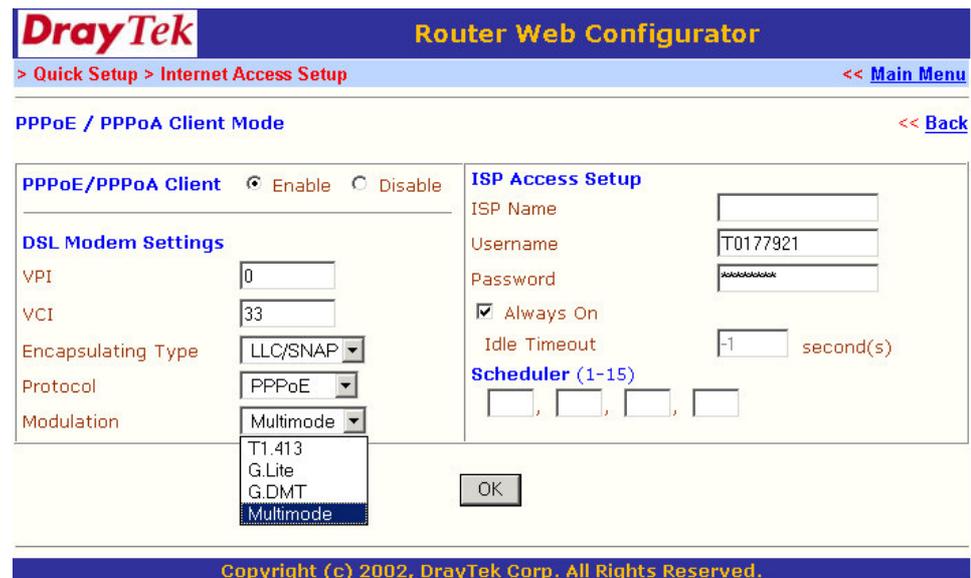
Connect to router Web Configurator.

(Example: Vigor2600)



Check if the setting of DSL is OK. (For MPoA users, please refer to the MPoA explanation on page 12)

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



—>Encapsulation mode: VCMUX or LLC/SNAP

The screenshot shows the DrayTek Router Web Configurator interface. The breadcrumb trail is > Quick Setup > Internet Access Setup. The page title is Router Web Configurator. The current page is PPPoE / PPPoA Client Mode. The PPPoE/PPPoA Client section has radio buttons for Enable (selected) and Disable. Under DSL Modem Settings, VPI is 0, VCI is 33, Encapsulating Type is VCMUX, Protocol is VCMUX, and Modulation is Multimode. The ISP Access Setup section includes fields for ISP Name, Username (T0177921), and Password. There is a checked box for Always On and an Idle Timeout of -1 second(s). A Scheduler section has four empty input boxes. An OK button is at the bottom. The footer contains Copyright (c) 2002, DrayTek Corp. All Rights Reserved.

For PPPoE/PPPoA user, please check if user name/ password provided by ISP are correct or not.

The screenshot shows the DrayTek Router Web Configurator interface. The breadcrumb trail is > Quick Setup > Internet Access Setup. The page title is Router Web Configurator. The current page is PPPoE / PPPoA Client Mode. The PPPoE/PPPoA Client section has radio buttons for Enable (selected) and Disable. Under DSL Modem Settings, VPI is 0, VCI is 33, Encapsulating Type is LLC/SNAP, Protocol is PPPoE, and Modulation is Multimode. The ISP Access Setup section includes fields for ISP Name, Username (T0177921), and Password. There is a checked box for Always On and an Idle Timeout of -1 second(s). A Scheduler section has four empty input boxes. An OK button is at the bottom. The footer contains Copyright (c) 2002, DrayTek Corp. All Rights Reserved.

For MPoA (RFC1483/2684) mode users, please check if the WAN IP/ Gateway/ Namemask is set or ISP requires you to use DHCP client to get WAN IP.

DrayTek Router Web Configurator

> Quick Setup > Internet Access Setup << Main Menu

MPoA (RFC1483/2684) Mode << Back

MPoA (RFC1483/2684) Enable Disable

Encapsulation: 1483 Bridged IP LLC

DSL Modem Settings

VPI: 0
VCI: 33
Modulation: Multimode

RIP Protocol
 Enable RIP

WAN IP Network Settings

Obtain an IP address automatically

Router Name: *
Domain Name: *

* : Required for some ISPs

Specify an IP address

IP Address: 0.0.0.0
Subnet Mask: 255.255.255.0
Gateway IP Address:

OK

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Check DSL Status

You can know the DSL status via status monitor.

(Example: Vigor2600)

DrayTek Router Web Configurator

> 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

Report to people who concerned if still can not work

If the router setting is OK and your PC on the LAN can also talk to router successfully, there may be wrong settings on DSL (eg. VPI, VCI, modulation etc...) when there is still no ADSL Internet connection. Please contact local ISP representatives to help you for configuration. If the router does not work correctly, please contact your dealer for help. For any further questions, please write email to support@draytek.com.tw.