Prestige 2602HW-C Series

802.11g Wireless ADSL VoIP IAD

Prestige 2602HWL-C Series

802.11g Wireless ADSL VoIP IAD with Lifeline

Quick Start Guide

Version 3.40
3/2005

**ZyXEL**
Unleash Networking Power

Overview

The Prestige 2602HW or 2602HWL ADSL VoIP IAD (Integrated Access Device) is an ADSL router with two phone ports for Voice over IP (VoIP) calls. The Prestige also has a built-in switch and IEEE 802.11g wireless capability. The Prestige 2602HWL's lifeline feature adds regular phone services (that do not use the Internet).

See the User's Guide for more information on all features.

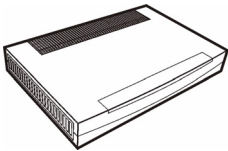The following figure shows your Prestige (A) connected to the Internet.
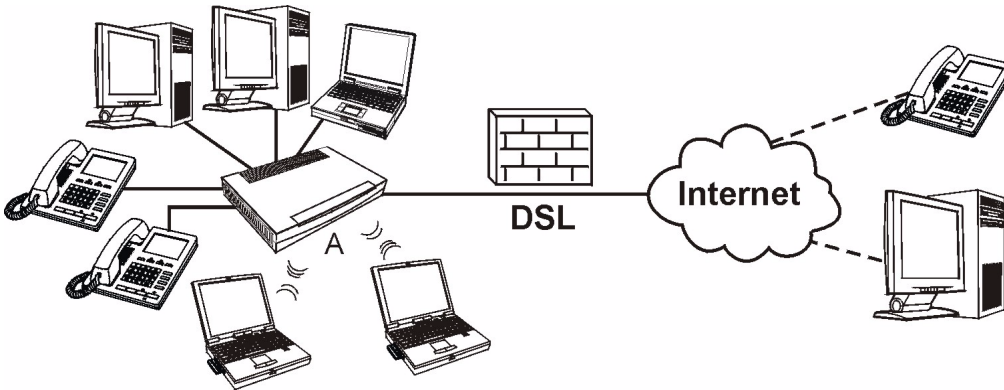
1 Hardware Connections

You need the following before you start:

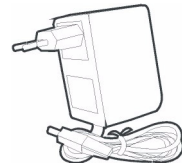**Note:** You may need your Internet access and voice account information.

Prestige
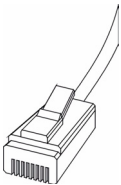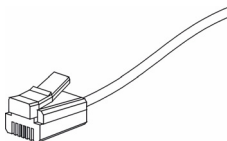

Computer

Telephone
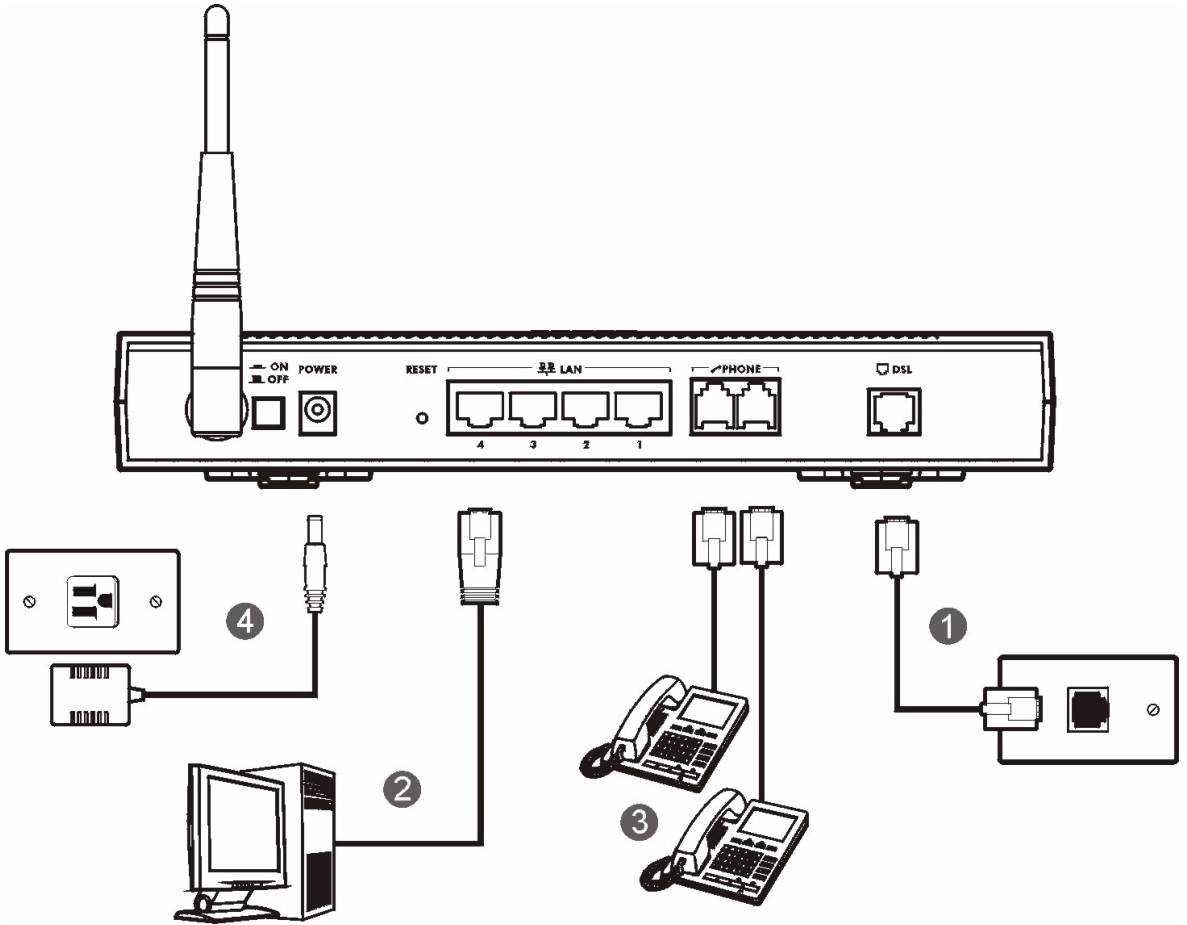

Power Adaptor

Ethernet Cable

Telephone Cable

Do the following to make hardware connections for initial setup.

1 DSL: Connect the Prestige to a telephone jack using the included telephone wire.

In the P2602HWL, the **DSL** port handles both the ADSL and regular telephone service connections. Connect the included v-shaped cable (with one gray wire and one green wire) to the P2602HWL's **DSL** port. Connect the gray wire to the "modem" jack on a telephone or ISDN splitter (not included) and the green wire to the splitter's "phone" jack or a telephone wall jack. This is a FXO (Foreign Exchange Office) port.
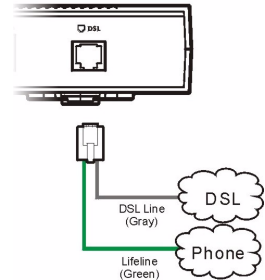
Note: If you are using T-ISDN (UR-2), connect the green wire to the (included) UR-2 to TAE connector before connecting it to the telephone splitter's "phone" jack or a telephone wall jack.

2 LAN: Use an Ethernet cable to connect a computer to a **LAN** port for initial configuration and/or Internet access.

3 PHONE: Connect one or more analog telephones to these ports using telephone wires. These are FXS (Foreign Exchange Station) ports.

4 POWER: Use the included power adaptor to connect this power socket to an appropriate power source (see the User's Guide for power adaptors by region).

After you've made the connections, push in the power button to turn on the Prestige.

The **PWR/SYS** LED blinks during system testing and turns steady green if the testing is successful.

The **LAN** turns on if the **LAN** port is properly connected and blinks while sending or receiving data.

The **DSL** LED blinks during DSL line initialization and turns steady green when the Prestige has a DSL connection.

The **INTERNET** LED turns steady green if the Prestige can access the Internet. It blinks when the Prestige is sending or receiving data.

A **PHONE** LED turns steady green if a SIP account is registered for the corresponding **PHONE** port and blinks when a call comes in or one of the connected phones is off hook.

• If a **PHONE** LED is on, skip to Section 2.7 to see how to make calls through the Internet.

• If the **INTERNET** LED is on but the **PHONE** LEDs are off, go to Section 2.2 and access the web configurator. Then go to Section 2.4 and configure the **Voice Configuration** wizard screen.

• If the **INTERNET** LED is off but the **DSL** LED is on, go to Section 2 to configure your Internet access settings.

• If the **DSL** LED is off, there is a problem with the hardware or the phone line connection to the ISP.
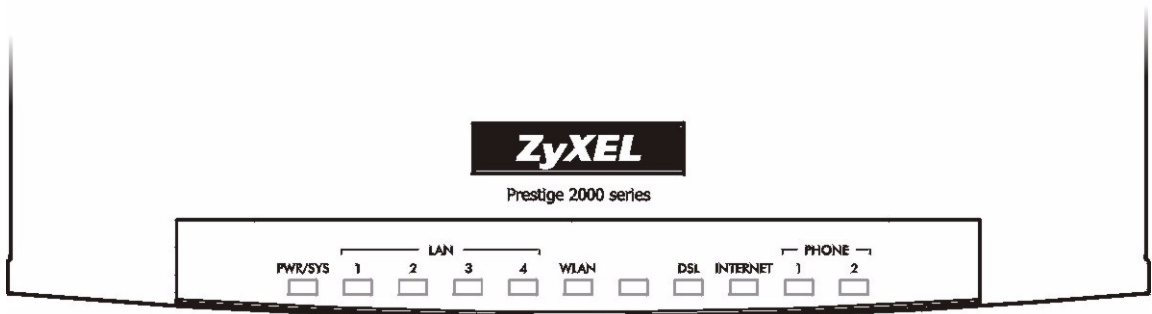
2 Initial Configuration

You may configure the Prestige for Internet access in any *one* of these ways:

• **Zero Configuration**

- **Web Configurator Internet Access Wizard**

2.1 Zero Configuration

Launch your web browser and navigate to any web site (for example, www.zyxel.com). The Prestige automatically detects and configures your Internet connection. This may take about two minutes.

If you have a **PPPoE** or **PPPoA** connection, a screen displays prompting you to enter your Internet account information.

Your PPPoE login username and password are wrong.

Enter the system password and username and password exactly as your ISP assigned them.

System Password
User Name
Password

Apply

Enter the username, password and/or service name exactly as provided. Click **Apply**.

Note: Zero Configuration can only automatically configure the device for Internet access if you are using **PPPoE**, **PPPoA** or **ENET ENCAP** encapsulation with a dynamically-assigned IP address from your ISP. If you're not using these Internet access settings, then access the web configurator and use the wizard screens (see the following section) to configure your settings.

You also need to use the wizard screens if you want to configure the Prestige for making Internet calls.

2.2 Web Configurator Access

1 Launch your web browser. Enter **192.168.1.1** as the web site address.

Note: If you do not see the next screen, then please read Section 3.1 on page 12.

File   Edit   View   Favorites   Tools   Help
Address http://192.168.1.1/
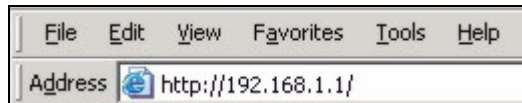
2 Click **Login** (the default password 1234 is already entered).

Prestige 2602HW-61C
Enter Password and click Login.
Password:
Login   Cancel

3 Type a new password (retype it to confirm) and click **Apply**. You then see the main web configurator screen

Use this screen to change the password.
We recommend that you personalize the system administrator password by changing it to something besides the default '1234'.
The administrator password should must be between 1 - 30 characters.
New Password:
Retype to Confirm:
Apply   Ignore

2.3 Wizard Setup

1 In the **Site Map** screen, click **Wizard Setup**.
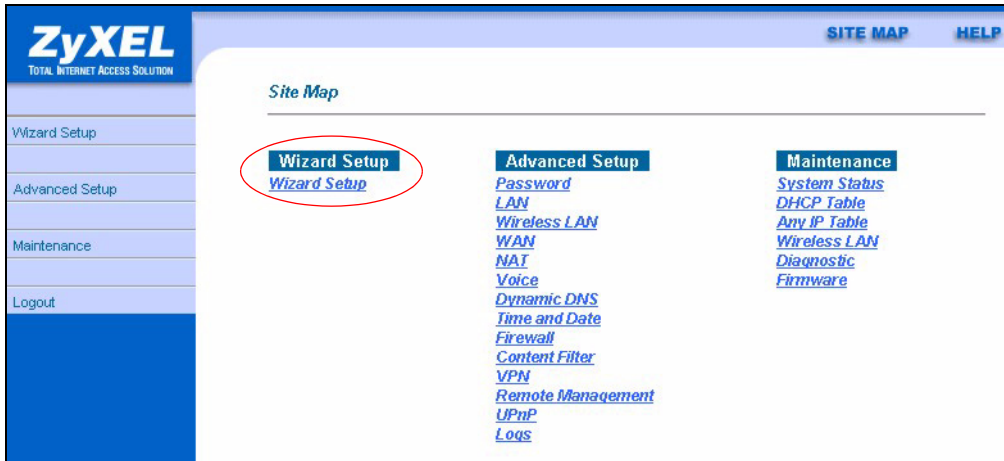
Note: Enter the Internet access information given to you by your ISP exactly in each wizard screen and then click **Next** to continue or click **Back** to return to the previous screen.

Screen information is not saved when you click **Back**.

2 From the **Mode** drop-down list box, select **Routing** (default) if you want to use routing features such as NAT.

3 The next wizard screen varies depending on the **Encapsulation** you chose in the first wizard screen. From the **Network Address Translation** drop-down list box, select **SUA Only** if you have one public IP address, **Full Feature** if you have more than one public IP address (for translation) or **None** to disable NAT.

• **PPPoE**

Select **Connect on Demand** when you don't want the connection up all the time and specify an idle time-out period (in seconds) in the **Max. Idle Timeout** field.

Select **Nailed-Up Connection** when you want your connection up all the time. The Prestige will try to bring up the connection automatically if it is disconnected.

• **ENET ENCAP**

Note: You will only see the next two screens in **Routing** mode.

• **PPPoA**

• **RFC1483**

4 Fill in the fields with information from your voice service provider. Leave the default settings in fields for which no information was provided (except if otherwise specified).

Note: You should have a voice account already set up.

This screen configures SIP account 1. Use the VoIP screens to configure SIP account 2.

If you have a SIP account like 1234@VoIP-provider.com,"1234" would be the **SIP Number** and "VoIP-provider.com" would be the **SIP Service Domain**.

REGISTER Server Address/Port: If you have no registrar server information, copy what you entered in the **SIP Server Address/Port** fields.

Caller ID: If you want to show identification information when you make VoIP calls, select **Send Caller ID**.

Wizard Setup - Voice Configuration	SIP Account :SIP1
SIP Settings	
Active	☑
SIP Number	52823
SIP Local Port	5060 (1024-65535)
SIP Server Address	172.22.1.17
SIP Server Port	5060 (1024-65535)
REGISTER Server Address	172.22.1.17
REGISTER Server Port	5060 (1024-65535)
SIP Service Domain	172.22.1.17
Authentication	
User-ID	Rudi_3
Password	********
Caller ID	☑ Send Caller ID

Back   Next

5 Verify your LAN, WAN and SIP settings. To change the LAN settings, click **Change LAN Configuration**; otherwise click **Save Settings** to save the configuration and go to the final wizard screen. If you change the Prestige's LAN IP address, you must use the new IP address if you want to access the web configurator again.

Wizard Setup - ISP Parameters for Internet Access

WAN Information:
Mode: **Routing**
Encapsulation: **PPPoE**
Multiplexing: **LLC**
VPI/VCI: **8/35**
Service Name :
User Name : **user@isp.com**
Password : ********
IP Address : **Obtain an IP Address Automatically**
Network Address Translation: **SUA Only**
Connect on Demand: **Max Idle Timeout 0 sec.**

Voice Information:
Active : **Yes**
SIP Number: **ChangeMe**
SIP Local Port: **5060**
SIP Server Address: **192.168.1.33**
SIP Server Port: **5060**
REGISTER Server Address: **192.168.1.33**
REGISTER Server Port: **5060**
SIP Service Domain: **192.168.1.33**
Authentication User-ID: **ChangeMe**
Authentication Password: ********
Caller ID: **Send Caller ID**

LAN Information:
IP Address: **192.168.1.1**
IP Mask: **255.255.255.0**
DHCP: **ON**
Client IP Pool Starting Address: **192.168.1.33**
Size of Client IP Pool: **32**

Change LAN Configuration

Save Settings

6 Click **Save Settings** in the screen shown in step 4 to go to the final wizard screen.The Prestige automatically tests the connection to the computer(s) connected to the LAN port(s). To test the connection from the Prestige to the ISP, click **Start Diagnose**. Otherwise click **Return to Main Menu** to go back to the main screen.

Wizard Setup - ISP Parameters for Internet Access

Your DSL Gateway is now configured. Your device is capable of testing your DSL service. The individual tests are listed below. Click "Start Diagnose" button if you want to test; otherwise, click "Return to Main Menu" button.

LAN connections	
Test your Ethernet Connection	**PASS**
WAN connections	
Test ADSL synchronization	**N/A**
Test ADSL(ATM OAM) loopback test	**N/A**
Test PPP/PPPoE server connection	**N/A**
Ping default gateway	**N/A**
Voice connections	
Test Voice Registration	**N/A**

Start Diagnose   Return to Main Menu

2.4 Speed Dial Configuration

Click **Voice** in the navigation panel and then **Speed Dial** to display the following screen.

Speed dial provides shortcuts for dialing frequently used (VoIP) phone numbers.

You can use speed dial entries for peer-to-peer calls or SIP numbers that use letters.

Select a speed dial key combination.

Enter the SIP number of the party you will call and a name to identify them.

Select **Use Proxy** if calls to this party use your SIP account.

Select **Non-Proxy (Use IP or URL)** if calls to this party use a different SIP server or go directly to the callee's VoIP phone (peer-to-peer). Enter the SIP server's or the party's IP address or domain name.

Click **Add**.

2.5 Lifeline Configuration (Prestige 2602HWL)

With the **Lifeline** feature, you can use both VoIP and regular phone services.

Click **Voice** in the navigation panel and then **Lifeline**.

PSTN Pre-fix Number: If you want to make a regular call when the **PWR/SYS** LED is orange, dial the prefix number that you configure here and the phone number.

If the **PWR/SYS** LED is green or off, make regular calls without a prefix number.

Relay to PSTN: Enter phone numbers that should use the regular phone service (without the prefix number). Do this for emergency numbers. The numbers must be for regular phones (not VoIP phones).

Click **Apply**.

2.6 Make Calls Through the Internet

When the **VoIP** LED turns on, your SIP account is registered successfully. Dial a numerical SIP number (like "12345" for example) on your phone's keypad.

Use speed dial entries for peer-to-peer calls or SIP numbers that use letters. Dial the speed dial entry on your telephone's keypad.

Use your voice service provider's dialing plan to call regular telephone numbers.

2.7 Wireless Configuration

WPA-PSK encryption is preferred to WEP because it has user authentication and improved data encryption. If you don't have WPA-capable wireless clients, configure WEP encryption.

Note: Wireless clients and the Prestige must use the same SSID, channel ID, WEP or WPA-PSK key (if enabled).

**1** Click the **Wireless LAN** link under **Advanced Setup.**
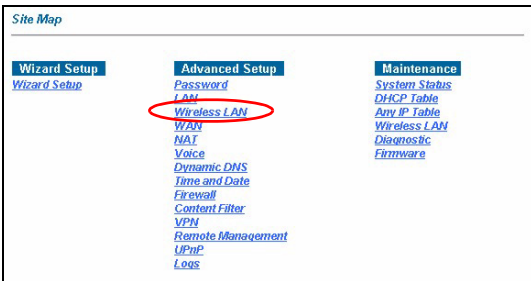
2 Click **802.1x/ WPA**. Select **Authenticati on Required**, then select **WPA-PSK** and type a **Pre-shared Key**.
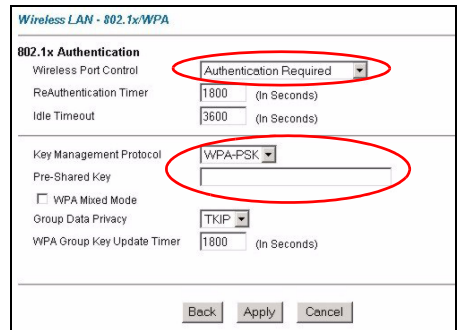
3 Click **Advanced Setup**, **Wireless LAN, Wireless**. In the **ESSID** field, enter up to 32 printable characters to uniquely identify the Prestige.

If you didn't configure **WPA-PSK**, configure **WEP** in this screen (not visible if you've configured **WPA-PSK**).
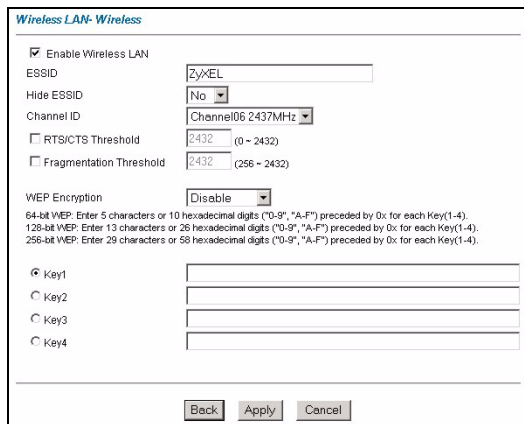
2.8 NAT

NAT (Network Address Translation - NAT, RFC 1631) means the translation of an IP address in one network to a different IP address in another. For example, you could translate one public IP address to multiple private IP addresses on your LAN (SUA Only).

Click **Advanced Setup** and then **NAT** to open the **NAT-Mode** screen. Select **SUA Only** if you have one public IP address and **Full Feature** if you have multiple public IP addresses (for address translation.
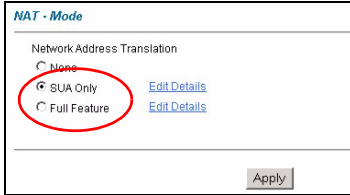

If you want to make LAN servers publicly accessible, configure SUA server sets. From the **NAT - Mode** screen click **Edit Details** and fill in the fields as shown.

2.9 Firewall

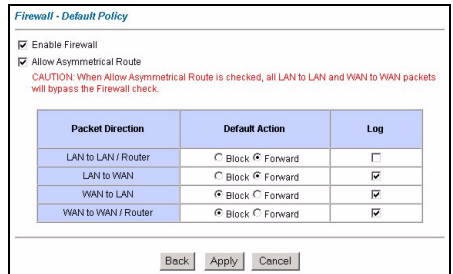Click **Advanced Setup** and then **Firewall** to open the firewall screen. The firewall protects your LAN from attacks from the Internet. No traffic can enter your LAN unless a request was generated on the LAN first.
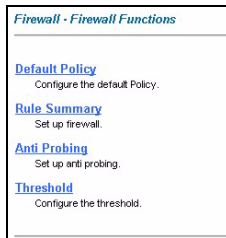
Click **Default Policy** to see rule direction information. You can also disable the firewall here if you want.

3 Troubleshooting

| PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when you press the Prestige's power button.	Make sure that you have the correct power adaptor connected to the Prestige and an appropriate power source. Make sure that the power source is turned on. Check all cable connections.
	If the LEDs still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.

PROBLEM	CORRECTIVE ACTION
Cannot access the Prestige from my computer.	Check the cable connection from your computer to the Prestige.
	Make sure your computer's IP address is in the same subnet as the Prestige's IP address (see Section 3.1).
	Make sure your computer's Ethernet adapter is installed and functioning properly.
	If the Prestige's IP address has changed, then enter the new one as the URL.
	Use Internet Explorer 6.0 and later or Netscape Navigator 7.0 and later with JavaScript enabled.
	Make sure you enter the password correctly (the field is case sensitive).
	If you've changed the Prestige's password and forgotten it, use the **RESET** button. Press the button in for about 10 seconds (or until the **PWR/SYS** LED starts to blink), then release it. It returns the Prestige to the factory defaults (password is 1234, LAN IP address 192.168.1.1 etc.).
Cannot access the Internet.	Verify the Internet connection settings in the wizard. Make sure you entered the correct user name and password if you are using PPPoE or PPPoA.
There is no dial tone.	Check the telephone connections.
	You can test the telephone wire by using it to connect a telephone to a regular telephone outlet and checking for a dial tone.
Cannot make voice calls.	Make sure you have the wizard screens properly configured.
	You can also check the Prestige's IP addresses and VoIP status in the **Maintenance Status** screen.
	If the VoIP settings are correct, use speed dial to make peer-to-peer calls. If you can make a call using speed dial, there may be something wrong with the SIP server, contact your voice service provider.

3.1 Set Up Your Computer's IP Address

This section shows you how to set your Windows NT/2000/XP computer to automatically get an IP address. This ensures that your computer can with your Prestige. Refer to your *User's Guide* for detailed IP address configuration for other Windows and Macintosh computer operating systems.

1 In Windows XP, click **start**, **Control Panel**. In Windows 2000/NT, click **Start**, **Settings**, **Control Panel**.

2 In Windows XP, click **Network Connections**. In Windows 2000/NT, click **Network and Dial-up Connections**.

3 Right-click **Local Area Connection** and then click **Properties**.

4 Select **Internet Protocol (TCP/IP)** (under the **General** tab in Win XP) and click **Properties**.

5 The **Internet Protocol TCP/IP Properties** screen opens (the **General tab** in Windows XP).

6 Select the **Obtain an IP address automatically** and **Obtain DNS server address automatically** options.

7 Click **OK** to close the **Internet Protocol (TCP/IP) Properties** window.

8 Click **Close** (**OK** in Windows 2000/NT) to close the **Local Area Connection Properties** window.

9 Close the **Network Connections** screen.
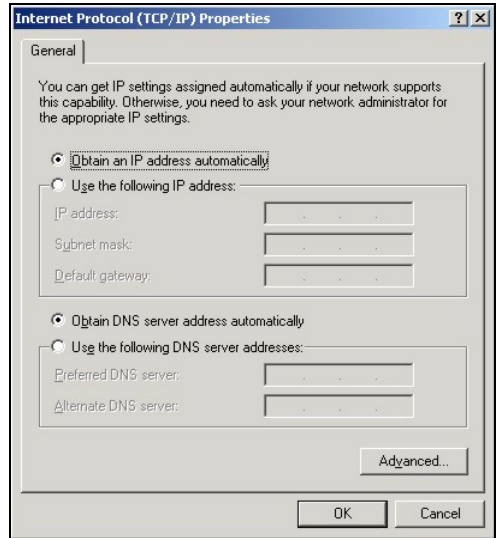
Viewing Your Product's Certifications

1 Go to www.zyxel.com.

2 Select your product from the drop-down list box on the ZyXEL home page to go to that product's page.

3 Select the certification you wish to view from this page.