Prestige 623R-T

ADSL Dual-link Router

Quick Start Guide

Version 3.40

February 2004

ZyXEL
Unleash Networking Power

Introducing the Prestige

The Prestige 623R-T ADSL Dual-link Router is the ideal all-in-one device for small networks connecting to the Internet via ADSL. See your *User's Guide* for more details on all Prestige features.

You should have an Internet account already set up and have been given most of the following information.
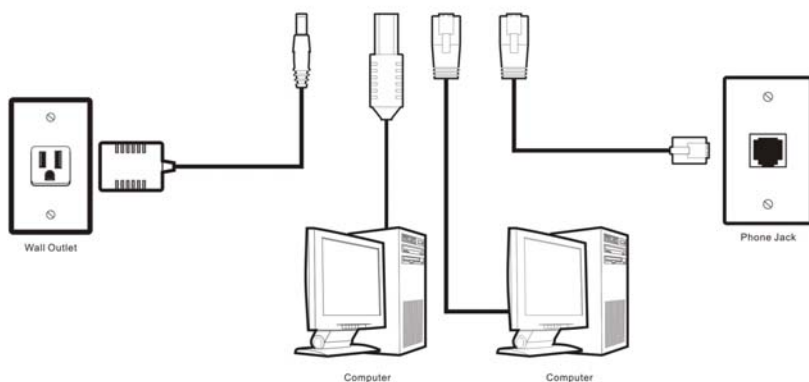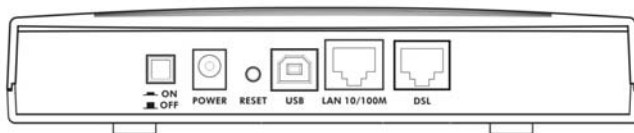
INTERNET ACCOUNT INFORMATION		
Virtual Path Identifier (**VPI**): _____		
Virtual Channel Identifier (**VCI**): _____		
Multiplexing (VC-based or LLC-based):	☐ **VC**	☐ **LLC**
Your device's WAN IP Address (if given): _____		
DNS Server IP Address (if given): Primary: _____		
Secondary: _____		
Encapsulation or Protocol (choose one below)		
☐ **RFC 1483**		
☐ **ENET ENCAP**	Ethernet Encapsulation Gateway IP Address: _____	
☐ **PPPoA**	User Name: _____	Password: _____
☐ **PPPoE**	(PPPoE) Service Name: _____	
	User Name: _____	Password: _____

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.

Hardware Connection

Rear Panel Connections

PORT	CONNECTION
1. DSL	Connect to a telephone jack using a telephone wire.
2. LAN 10/100M	Use an Ethernet cable to connect to a computer for initial configuration. The port is auto-negotiating (can connect at 10 or 100Mbps) and auto-sensing (automatically adjust to the type of Ethernet cable you use (straight-through or crossover)).
3. POWER	Connect to a power source using the power adaptor for your region (see your *User's Guide*).
After you've made the connections, connect the power cable to a power supply and push in the power button to turn on the Prestige. Look at the front panel LEDs.	

PORT	CONNE :TION
USB	The USB port is useful if you have a USB-enabled computer that does not have a network interface card for attaching to your Ethernet network. Refer to the *Installing the USB Driver* section.
RESET	You only need to use this button if you've forgotten the Prestige's password. It returns the Prestige to the factory defaults (password is 1234, LAN IP address 192.168.1.1 etc. see your *User's Guide* for details).

Front Panel LEDs

When the Prestige is turned on, the **PWR** LED turns on. The **SYS** and **USB** LEDs blink while performing system testing. The **SYS** LED then turns steady on if the testing is successful. The appropriate **LAN** and/or **USB** LEDs turn on if they are properly connected.

Prestige Factory Defaults

This *Quick Start Guide* provides a basic configuration that should be compatible with your home or small office network setup. Refer to the *User's Guide* for additional configuration instructions.

PRESTIGE FACTORY DEFAULTS			
USB/LAN IP Address	192.168.1.1	Default User name	admin
Subnet Mask	255.255.255.0	Default Password	1234
DHCP IP Pool	192.168.1.33 – 192.168.1.64		

Installing the USB Driver

System Requirement

- Windows 98 SE/Me/2000/XP

- An available USB port

DO *NOT* connect the USB port at this point.

Follow the steps for your version of operating system to install the USB driver.
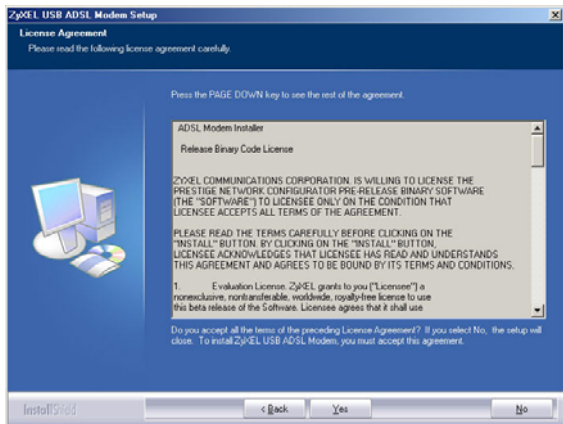
For Windows 98 SE/Me
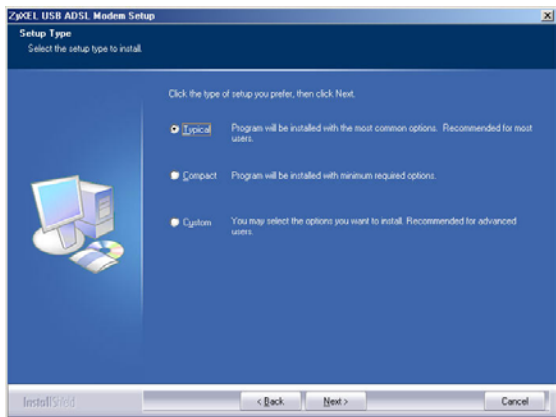
Screen shots for Windows Me are shown.

1. Save your work and close all other Windows applications.
2. Insert the included CD, the CD auto runs and the main screen displays.
3. Double-click **Install Driver** on the main screen.
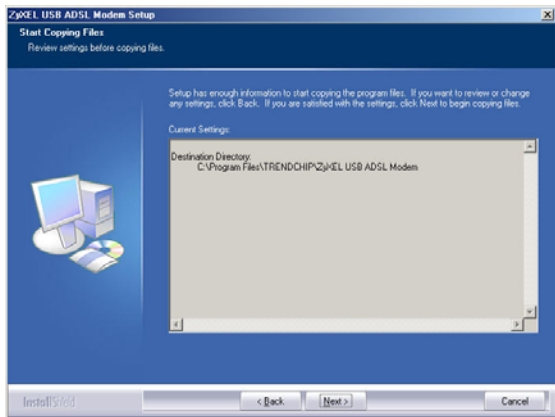4. A **Welcome** screen displays, click **Next**.
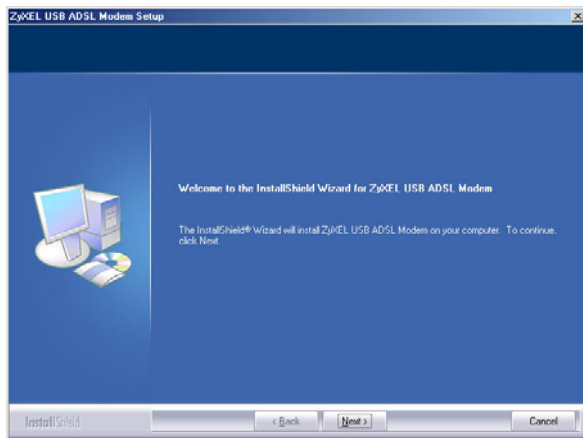
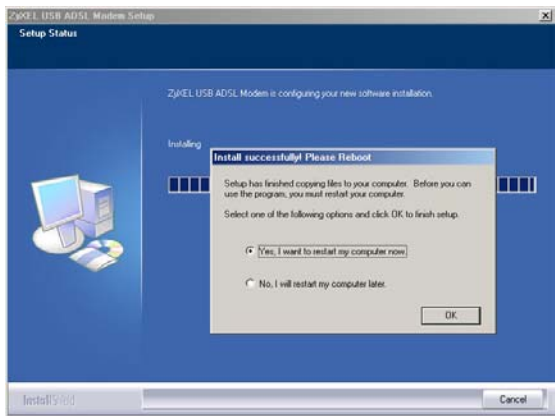5. Click **Yes** to agree to the license agreement.

6. Select the setup type (**Typical** is recommended) and click **Next**.

7. When a **Start Copying Files** screen displays, click **Next** to continue.

8. Click **OK** and restart the computer when prompted to complete the installation.

9. Plug the square end of the USB cable into the back of your Prestige and then plug the rectangular end of the USB cable into the back of your computer. A window displays briefly, indicating that the system has found a new hardware.
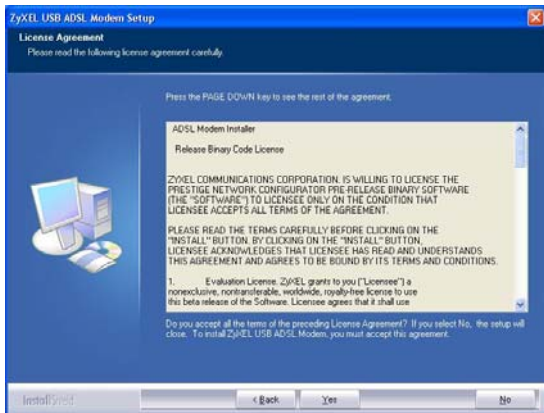
For Windows 2000/XP

Screen shots for Windows XP are shown.

1. Save your work and close all other Windows applications.

2. Insert the included CD, the CD auto runs and the main screen displays.

3. Double-click **Install Driver** on the main screen.

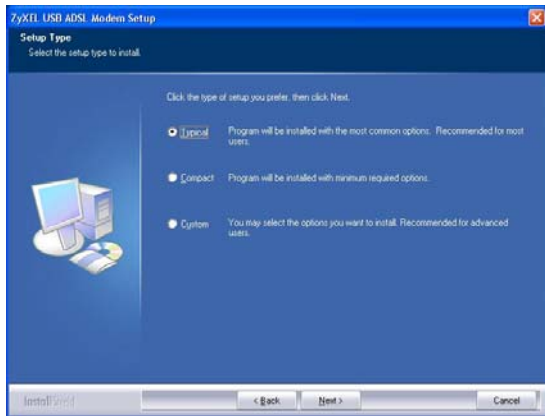4. A **Welcome** screen displays, click **Next**.
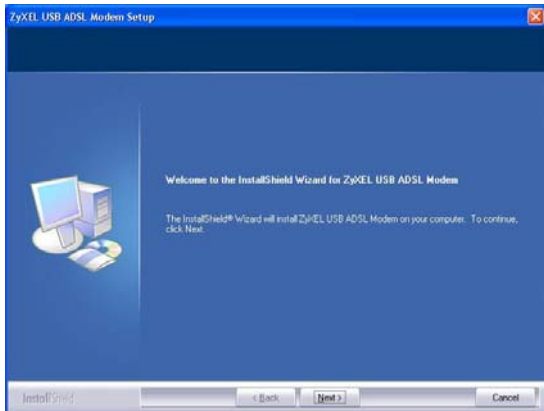
5. Click **Yes** to agree to the license agreement.
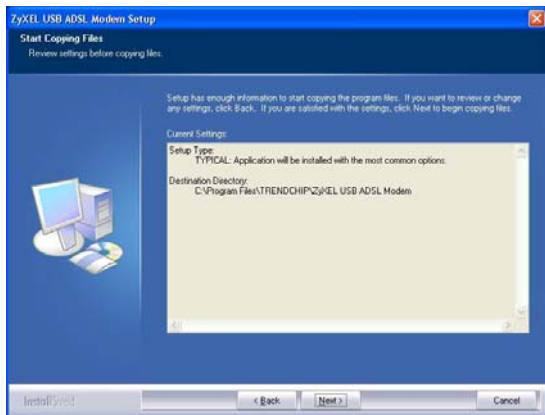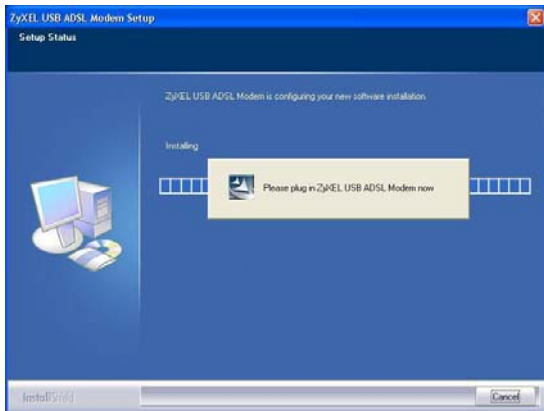
6. Select the setup type (**Typical** is recommended) and click **Next**.
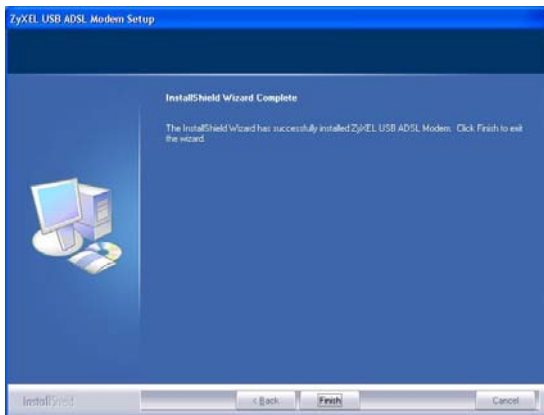

7. When a **Start Copying Files** screen displays, click **Next** to continue.

8. Connect the USB port to the computer when prompted. A window displays briefly, indicating that the system has found a new hardware.

9. Click **Finish** and restart the computer when prompted to complete the installation.

Verifying Your USB Installation

When your computer finishes rebooting, check the status of the Prestige in the **Device Manager** window. Click **Start**, **Settings**, **Control Panel**, **System**, **Hardware** and then click **Device Manager**. (Steps may vary depending on the version of Windows).

Verify the status of the Prestige under **Network Adapter**. Check that there is no question mark on the device icon for the Prestige.

Setting Up Your Computer's IP Address

Skip this section if your computer is already set up to accept a dynamic IP address. This is the default for most new computers.

The Prestige is already set up to assign your computer an IP address. Use this section to set up your computer to receive an IP address or assign it a static IP address in the 192.168.1.2 to 192.168.1.254 range with a subnet mask of 255.255.255.0. This is necessary to ensure that your computer can communicate with your Prestige.

Your computer must have a network card and TCP/IP installed. TCP/IP should already be installed on computers using Windows NT/2000/XP, Macintosh OS 7 and later operating systems.

Windows 98 SE/Me

1. Click **Start**, **Settings**, **Control Panel** and double-click the **Network** icon to open the **Network** window.

2. The **Network** window **Configuration** tab displays a list of installed components. You need a network adapter, the TCP/IP protocol and Client for Microsoft Networks.
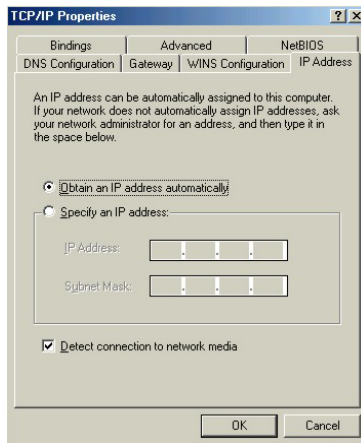
3. In the **Network** window **Configuration** tab, select your network adapter's TCP/IP entry and click **Properties**.
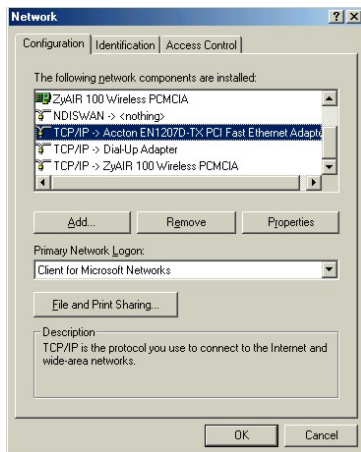
4. Click the **IP Address** tab.

    -If your IP address is dynamic, select **Obtain an IP address automatically**.
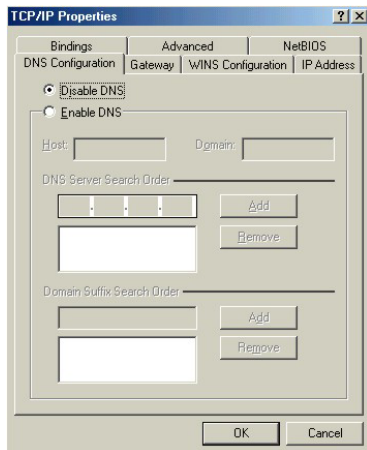
    -If you have a static IP address, select **Specify an IP address** and type your information into the **IP Address** and **Subnet Mask** fields.

5. Click the **DNS Configuration** tab.

    -If you do not know your DNS information, select **Disable DNS**.

    -If you know your DNS information, select **Enable DNS** and type the information in the fields below (you may not need to fill them all in).

6. Click the **Gateway** tab.

    -If you do not know your gateway's IP address, remove previously installed gateways.

    -If you have a gateway IP address, type it in the **New gateway field** and click **Add**.
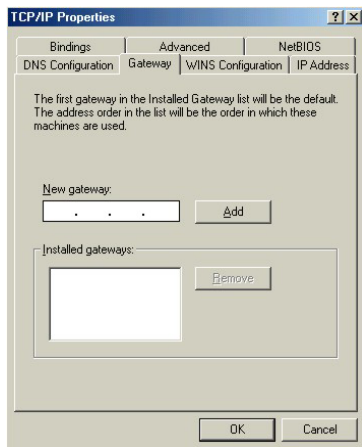
7. Click **OK** to save and close the **TCP/IP Properties** window.

8. Click **OK** to close the **Network** window. Insert the Windows CD if prompted.

9. Turn on your Prestige and restart your computer when prompted.

Verifying Your Computer's IP Address

1. Click **Start** and then **Run**.

2. In the **Run** window, type "winipcfg" and then click **OK** to open the **IP Configuration** window.

3. Select your network adapter. You should see your computer's IP address, subnet mask and default gateway.

Windows 2000/NT/XP

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).

    -To have your computer accept a dynamic IP address, click **Obtain an IP address automatically**.

    -If you want a static IP address, click **Use the following IP Address** and fill in the **IP address** (use one between192.168.1.2 and 192.168.1.254), **Subnet mask** (255.255.255.0), and **Default gateway** (192.168.1.1) fields.

    Click **Advanced**.
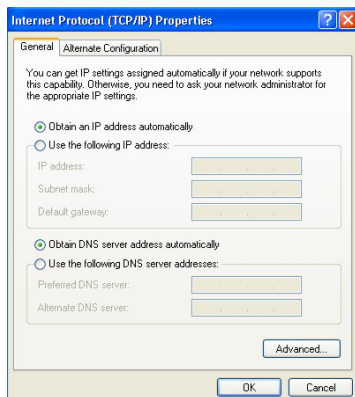
6. Remove any previously installed gateways in the **IP Settings** tab and click **OK** to go back to the **Internet Protocol TCP/IP Properties** screen.

7. Click **Obtain DNS server address automatically** if you do not know your DNS server IP address(es).

   If you know your DNS server IP address(es), click **Use the following DNS server addresses**, and type them in the **Preferred DNS server** and **Alternate DNS server** fields.

   If you have previously configured DNS servers, click **Advanced** and then the **DNS** tab to order them.
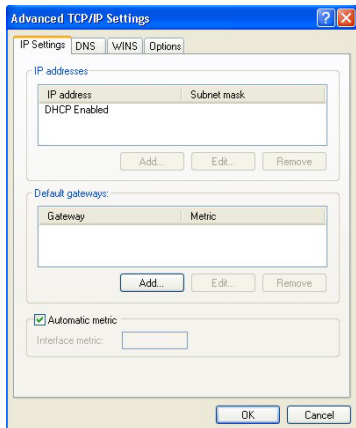
8. Click **OK** to close the **Internet Protocol (TCP/IP) Properties** window.

9. Click **OK** to close the **Local Area Connection Properties** window.

Refer to your *User's Guide* for detailed IP address configuration for other Windows and Macintosh computer operating systems.

Checking/Updating Your Computer's IP Address

1. In the computer, click **Start**, (**All) Programs**, **Accessories** and then **Command Prompt**.

2. In the **Command Prompt** window, type "ipconfig" and then press **ENTER** to verify that your computer's static IP address is in the correct subnet (in the range between 192.168.1.2 and 192.168.1.254 if using the default Prestige LAN IP address). Alternatively, to have the Prestige assign your computer a new IP address (from the IP pool), make sure your Prestige is turned on, type "ipconfig /renew" and then press **ENTER**.

Testing the Connection to the Prestige

1. Click **Start**, (**All**) **Programs**, **Accessories** and then **Command Prompt**.

2. In the **Command Prompt** window, type "ping" followed by a space and the IP address of the Prestige (192.168.1.1 is the default).

3. Press **ENTER**. You should see the reply messages displayed as shown. Your computer can now communicate with the Prestige using the **LAN** or the **USB** port.

```
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=10ms TTL=254
Reply from 192.168.1.1: bytes=32 time<10ms TTL=254
Reply from 192.168.1.1: bytes=32 time<10ms TTL=254
Reply from 192.168.1.1: bytes=32 time<10ms TTL=254

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 =  10ms, Average =  2ms

C:\>
```
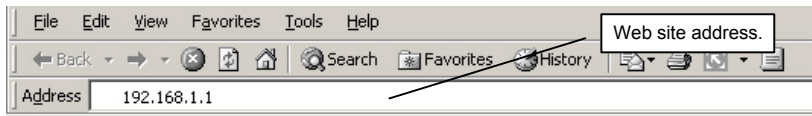
Configuring Your Prestige

This *Quick Start Guide* shows you how to use the web configurator only. See your *User's Guide* for background information on all Prestige features and SMT (System Management Terminal) configuration.

Accessing Your Prestige Via Web Configurator

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

2. An **Enter Network Password** window displays. Enter the user name ("admin" is the default), password ("1234" is the default) and click **OK**.

3. You should now see the web configurator **Site Map** screen.

- Click **Wizard Setup** to begin a series of screens to configure your Prestige for the first time.

- Click a link under **Advanced Setup** to configure advanced Prestige features.

- Click a link under **Maintenance** to see Prestige performance statistics, DHCP table and upload firmware.

- Click **Logout** in the navigation panel when you have finished a Prestige management session.
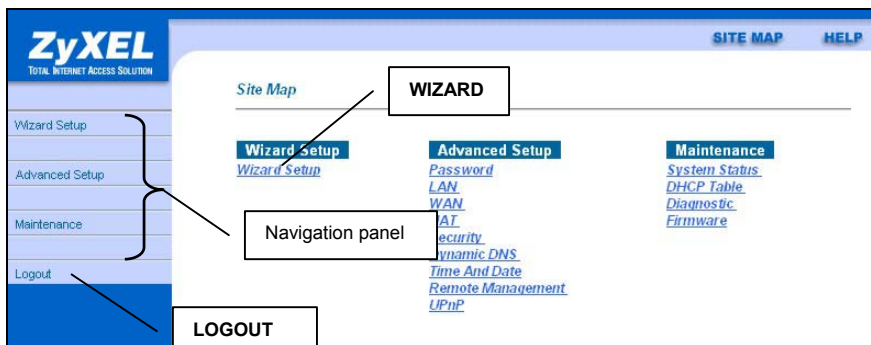
> **The Prestige automatically times out after five minutes of inactivity. Simply log back into the Prestige if this happens to you.**

Internet Access Using the Wizard

Use the Wizard Setup screens to configure your system for Internet access settings and fill in the fields with the information in the *Internet Account Information* table. Your ISP may have already configured some of the fields in the wizard screens for you.

1.   In the **Site Map** screen click **Wizard Setup** to display the first wizard screen.

Figure 1 Wizard Screen 1

From the **Mode** drop-down list box, select **Routing** (default) if your ISP allows multiple computers to share an Internet account. Otherwise select **Bridge**.

Select the encapsulation type your ISP uses from the **Encapsulation** drop-down list box. Choices vary depending on what you select in the **Mode** field.

Select the multiplexing method used by your ISP from the **Multiplex** drop-down list box.

Enter the correct Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) numbers supplied by your ISP in the **VPI** and **VCI** fields. These fields may already be configured.

Click **Next**.

2.   The second wizard screen varies depending on what mode and encapsulation type you use. All screens shown are with routing mode. Configure the fields and click **Next** to continue.

If your ISP provides the name of your PPPoE service provider, enter it in the **Service Name** field.

Enter the user name and password *exactly* as your ISP assigned them.

Select **Obtain an IP Address Automatically** if you have a dynamic IP address; otherwise select **Static IP Address** and type your ISP assigned IP address in the text box below.

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.

Figure 2 Internet Connection with PPPoE

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.

From the **Network Address Translation** drop-down list box, select **SUA Only**, **Full Feature** or **None**.

Enter the IP address given by your ISP in the **IP Address** field.

> **The** IP Address **field is not available for bridge mode.**

Refer to *Figure 2* for description of the **Network Address Translation** field.

Figure 3 Internet Connection with RFC 1483

Figure 4 Internet Connection with ENET ENCAP

In the **ENET ENCAP Gateway** field, enter the gateway IP address given by your ISP.

Refer to *Figure 2* for other field descriptions.

Figure 5 Internet Connection with PPPoA

Refer to *Figure 2* for field descriptions.

The IP Address **and** Network Address Translation **fields are** *not* **available for bridge mode.**

3. Verify the settings in the screen shown next. To change the LAN information on the Prestige, click **Change LAN Configurations**. Otherwise click **Save Settings** to save the configuration and skip to step 5.

Wizard Setup - ISP Parameters for Internet Access

WAN Information:
Mode: **Routing**
Encapsulation: **PPPoE**
Mutiplexing: **LLC**
VPI/VCI: **8/35**
Service Name:
User Name: **user@isp.ch**
Password: ********
IP Address: **Obtain an IP Address Automatically**
NAT: **SUA Only**
Connect on Demand: **Max Idle Timeout 1500 Secs.**

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

[Change LAN Configuration]

[Save Settings]

Figure 6 Wizard Screen 3

4. If you want to change your Prestige LAN settings, click **Change LAN Configuration** to display the screen as shown next.

Enter the IP address of your Prestige in dotted decimal notation in the **LAN IP Address** field. For example, 192.168.1.1 (factory default).

> **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.**

Enter a subnet mask in dotted decimal notation in the **LAN Subnet Mask** field.

Figure 7 Wizard: LAN Configuration

From the **DHCP Server** drop-down list box, select **On** to allow your Prestige to assign IP addresses, an IP default gateway and DNS servers to computer systems that support the DHCP client. Select **Off** to disable DHCP server.

When DHCP server is used, set the following items:

Specify the first of the contiguous addresses in the IP address pool in the **Client IP Pool Starting Address** field.

Specify the size or count of the IP address pool in the **Size of Client IP Pool** field.

Enter the IP address(es) of the DNS server(s) in the **Primary DNS Server** and/or **Secondary DNS Server** fields.

The Prestige automatically tests the connection to the computer(s) connected to the LAN ports. To test the connection from the Prestige to the ISP, click **Start Diagnose**. Otherwise click **Return to Main Menu** to go back to the **Site Map** screen.
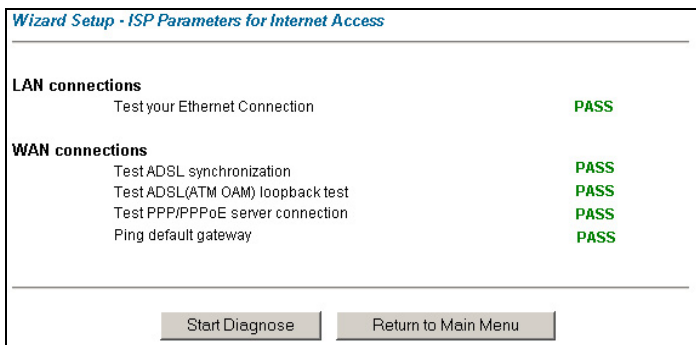
Figure 8 Wizard Screen 4

Test Your Internet Connection

Launch your web browser and navigate to www.zyxel.com. Internet access is just the beginning. Refer to the *User's Guide* for more detailed information on the complete range of Prestige features. If you cannot access the Internet, open the web configurator again to confirm that the Internet settings you configured in the Wizard Setup are correct.

Troubleshooting

PROBLEM	CORRECTIVE ACTION
The **PWR** and/or **SYS** LEDs are off.	Make sure the Prestige is connected to the correct power adaptor, the power adaptor is plugged into an adequate power supply and the Prestige power switch is turned on.
	Turn the Prestige off and on. If the error persists, you may have a hardware problem. In this case, you should contact your local vendor.
The **LAN 10/100M** LED won't turn on.	Check the cable connection to the Prestige **LAN 10/100M** port.
	Make sure your computer network card is working properly.
The **DSL** LED is off.	Check the connection between the Prestige DSL port and the wall jack.
Windows does not auto-detect the USB connection to the Prestige.	Make sure the Prestige is turned on and connected to the USB port on the computer.
	Perform a hardware scan by clicking **Start**, **Settings**, **Control Panel** and double-clicking **Add/Remove Hardware**. (Steps may vary depending on the version of Windows). Follow the on-screen instructions to search for the Prestige and install the driver.
	Check for possible hardware conflicts. In Windows, click **Start**, **Settings**, **Control Panel**, **System**, **Hardware** and then click **Device Manager**. Verify the status of the Prestige under **Network Adapter**. (Steps may vary depending on the version of Windows).
	Connect the Prestige to another computer. If the error persists, you may have a hardware problem. In this case, you should contact your local vendor.
USB driver installation crashes my computer.	You may have a sniffer program installed. Remove any sniffer applications on the computer and reboot the computer.
	Reinstall the USB driver again.

PROBLEM	CORRECTIVE ACTION
I cannot access the web configurator.	The default user name is "admin" and the default password is "1234". If you have changed the password and have forgotten, you need to reset the Prestige. See *User's Guide*. Make sure you type in the correct IP address. The default LAN and USB IP address is **192.168.1.1**. If you changed the Prestige default IP address then enter the new one as the URL. Check that your computer IP address and the Prestige IP address are on the same subnet.
I cannot ping any computer on the LAN.	If all of the LAN LEDs are off, check the cables between the Prestige and your computer or hub. Check the TCP/IP configuration on your computer. Make sure that the IP address and the subnet mask of the Prestige and the computer are in the same range.
I cannot get a WAN IP address from the ISP.	The WAN IP is provided after the ISP verifies the MAC address, host name or user ID. Find out the verification method used by your ISP and configure the corresponding fields.
I cannot access the Internet.	Make sure the Prestige is turned on and connected to the network. If the Prestige's **DSL** LED is off, check the cable between the Prestige and the telephone wall jack. Make sure you entered your user name correctly. A username may be case-sensitive.