

# *Prestige 630*

*ADSL USB Modem*

## *User's Guide*

Version 1.1

April 2002

# **ZyXEL**

TOTAL INTERNET ACCESS SOLUTION

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## Information for Canadian Users

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective operation and safety requirements. The Industry Canada does not guarantee that the equipment will operate to a user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

For their own protection, users should ensure that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

### **Caution**

Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.

### **Note**

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the radio interference regulations of Industry.

# Federal Communications Commission (FCC) Interference Statement

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operations.

This equipment has been tested and found to comply with the limits for a CLASS B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

If this equipment does cause harmful interference to radio/television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and the receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

## **Notice 1**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **Certifications**

Refer to the product page at [www.zyxel.com](http://www.zyxel.com).

# Customer Support

When contacting your Customer Support Representative, please have the following information ready:

- ◆ Product model and serial number.
- ◆ Warranty Information.
- ◆ Date you received your Product.
- ◆ Brief description of the problem and the steps you took to solve it.

METHOD	E-MAIL SUPPORT/ SALES	TELEPHONE/FAX	WEB SITE/ FTP SITE	REGULAR MAIL
LOCATION				
Worldwide	<a href="mailto:support@zyxel.com.tw">support@zyxel.com.tw</a>  <a href="mailto:sales@zyxel.com.tw">sales@zyxel.com.tw</a>	+886-3-578-3942  +886-3-578-2439	<a href="http://www.zyxel.com">www.zyxel.com</a>  <a href="http://www.europe.zyxel.com">www.europe.zyxel.com</a>  <a href="ftp://ftp.europe.zyxel.com">ftp.europe.zyxel.com</a>	ZyXEL Communications Corp., 6 Innovation Road II, Science- Based Industrial Park, HsinChu, Taiwan 300, R.O.C.
North America	<a href="mailto:support@zyxel.com">support@zyxel.com</a>  <a href="mailto:sales@zyxel.com">sales@zyxel.com</a>	+1-714-632-0882 800-255-4101  +1-714-632-0858	<a href="http://www.zyxel.com">www.zyxel.com</a>  <a href="ftp://ftp.zyxel.com">ftp.zyxel.com</a>	ZyXEL Communications Inc., 1650 Miraloma Avenue, Placentia, CA 92870, U.S.A.
Scandinavia	<a href="mailto:support@zyxel.dk">support@zyxel.dk</a>  <a href="mailto:sales@zyxel.dk">sales@zyxel.dk</a>	+45-3955-0700  +45-3955-0707	<a href="http://www.zyxel.dk">www.zyxel.dk</a>  <a href="ftp://ftp.zyxel.dk">ftp.zyxel.dk</a>	ZyXEL Communications A/S, Columbusvej 5, 2860 Soeborg, Denmark.
Austria	<a href="mailto:support@zyxel.at">support@zyxel.at</a>  <a href="mailto:sales@zyxel.at">sales@zyxel.at</a>	+43-1-4948677-0  +43-1-4948678	<a href="http://www.zyxel.at">www.zyxel.at</a>  <a href="ftp://ftp.zyxel.at">ftp.zyxel.at</a>	ZyXEL Communications Services GmbH. Thaliastrasse 125a/2/2/4 A-1160 Vienna, Austria
Germany	<a href="mailto:support@zyxel.de">support@zyxel.de</a>  <a href="mailto:sales@zyxel.de">sales@zyxel.de</a>	+49-2405-6909-0  +49-2405-6909-99	<a href="http://www.zyxel.de">www.zyxel.de</a>	ZyXEL Deutschland GmbH. Adenauerstr. 20/A4 D-52146 Wuerselen, Germany
Malaysia	<a href="mailto:support@zyxel.com.my">support@zyxel.com.my</a>  <a href="mailto:sales@zyxel.com.my">sales@zyxel.com.my</a>	+603-795-44-688  +603-795-34-407	<a href="http://www.zyxel.com.my">www.zyxel.com.my</a>	Lot B2-06, PJ Industrial Park, Section 13, Jalan Kemajuan, 46200 Petaling Jaya Selangor Darul Ehasn, Malaysia

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# About ADSL

## Your Prestige 630 ADSL USB Modem

Congratulations on the purchase of your new modem! Your modem combines the super-fast speed of state-of-the-art ADSL (Asynchronous Digital Subscriber Line) technology with the ease of setup and operation facilitated by a Plug and Play USB (Universal Serial Bus) interface.

## About ADSL

(ADSL) technology provides high-speed data access across regular telephone or ISDN lines by making use of previously unused high-frequency bandwidth. ADSL is asymmetric in the sense that it provides a higher downstream data rate transfer (up to 8Mbps), than in the upstream transfer (up to 832 Kbps). Asymmetric operation is ideal for typical home and small office use where files and information are downloaded more frequently than uploaded.

## Advantages of ADSL

1. ADSL provides a private (unlike cable telephone and modem services where the line is shared), dedicated and secure channel of communications between you and your service provider.
2. Because your line is dedicated (not shared), transmission speeds are not affected by other users. With cable modems, transmission speeds drop significantly as more users go on-line because the line is shared.
3. ADSL is "always on" (connected). This means that there is no time wasted dialing up the service several times a day and waiting to be connected; ADSL is on standby, ready for use whenever you need it.

# About USB

## **USB**

USB (Universal Serial Bus) is a data communications standard that allows your computer to recognize (auto-detect) new devices. No technical expertise is required to install your device. You simply plug your USB cable in and follow a limited set of easy-to-understand, automatically generated instructions. Set-up and operation has never been easier.

## **Advantages of USB**

1. There is no need for numerous different types of ports and connectors on your computer. Modems, printers, joysticks, keyboards, mice, audio devices, CD-ROMs, digital cameras and other devices can all be connected through USB.
2. With USB, installing adapter cards, changing dip switches and configuring IRQs (Interrupt Requests) does not require opening your computer.
3. USB has data transfer rates of up to 12 Mbps.
4. Multiple devices can be daisy-chained to a single port without restarting your computer.
5. USB can power some devices - eliminating the need for batteries or power adapters.

# Preface

This manual provides instructions for two Prestige 630 models, one for ADSL over POTS (Plain Old Telephone System) and one for ADSL over ISDN (Integrated Synchronous Digital System). Both models are discussed together in this guide.

## Features

The ZyXEL Prestige 630 ADSL USB Modem provides the following features:

- Compliant with Universal Serial Bus Specification Revision 1.1
- USB bus-powered; an external power supply is not required
- Compatible with all G.DMT compliant Central Office (CO) Digital Subscriber Line Access Multiplexer (DSLAM) equipment
- Software upgradable
- Includes a user interface screen for checking the status of the connection
- An RJ-11 port for ADSL connection
- Support for DSL downstream data rates of up to 8 Mbps
- Support for DSL upstream data rates of up to 800 Kbps.

## Related Documentation

➤ Included CD

More detailed information your modem and examples of its use can be found in our included disk. This disk contains the installation driver, release note, support note, supporting software and information on product registration.

➤ Quick Start Guide

Our Quick Start Guide is designed to help you get your modem up and running right away. It contains a detailed easy-to-follow connection diagram, handy checklists, and information on accessing your modem.

➤ ZyXEL Web Site

The ZyXEL download library at [www.zyxel.com](http://www.zyxel.com) contains additional support documentation.

➤ Glossary

Please refer to [www.zyxel.com](http://www.zyxel.com) for an online glossary of networking terms.

## About This Manual

A practical and comprehensive tool, this manual provides information about modem installation and operation. Familiarize yourself with the *Syntax Conventions* listed next for better and faster understanding.

### **Syntax Conventions**

- “Select” or “Choose” means for you to select one from the predefined choices.
- Window and command choices are in **Bold Times New Roman** font.

The “ZyXEL Prestige 630 ADSL USB Modem” is also referred to as the “modem” in this manual.



# Chapter 1

## Installing Your Modem

*This chapter introduces the ports and LED indicators; and shows you how to install your modem and software driver.*

### 1.1 Needed Information

Fill in the table below with information from your Internet Service Provider (ISP) and telephone company before installation. You may not need to fill in every blank.

**Table 1-1 Needed Information**

REQUIRED INFORMATION:	FILL IN THE BLANKS
<b>Driver:</b> RFC 1483, PPPoA or PPPoE.	
<b>RFC Mode</b> (with RFC 1483 only) <b>Bridged</b> or <b>Routed</b> .	
<b>VPI:</b> The Virtual Path Identifier number identifies a bundle of virtual channels.	
<b>VCI:</b> The Virtual Channel Identifier number identifies a logical connection between end stations.	
<b>Framing Type:</b> <b>LLC</b> or <b>VCMUX</b> .	
<b>User Name:</b> Lets your ISP know which account you are logging into.	
<b>Password:</b> Protects your account from unauthorized users.	

Your modem supports **RFC 1483**, **PPPoA** (Point to Point Protocol over ATM) and **PPPoE** (Point to Point Protocol over Ethernet) drivers. These refer to the underlying data transport protocols. Use the RFC 1483 driver with always-on accounts and the PPPoA and PPPoE drivers with dial-up PPPoA accounts.

When using the RFC 1483 driver, select the mode that your ISP uses, either **Bridged** or **Routed**.

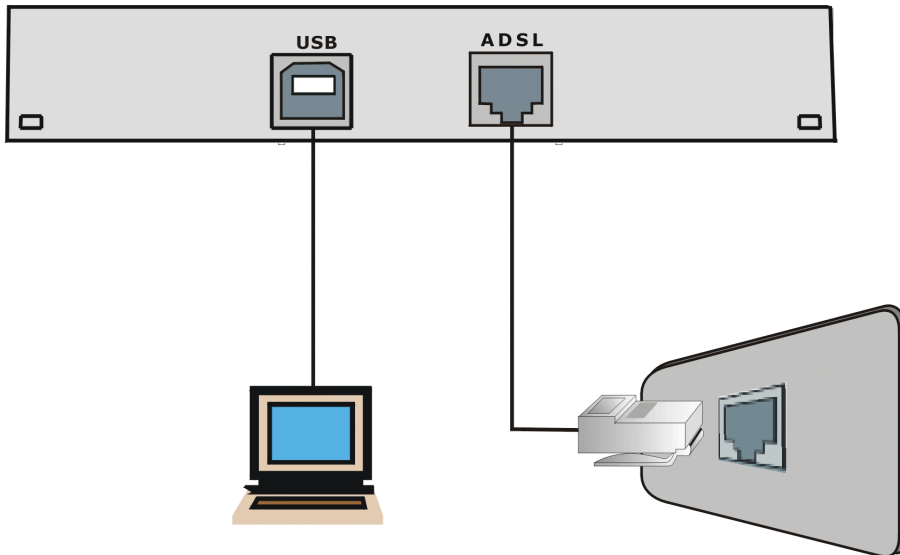
The setup type is also called encapsulation or multiplexing. Your modem supports both **LLC** and **VCMUX**.

See the appendix for more information about VPI and VCI.

## 1.2 Installation Procedure

Have your system operating disk handy during the installation, in case a specific file can not be found on your computer.

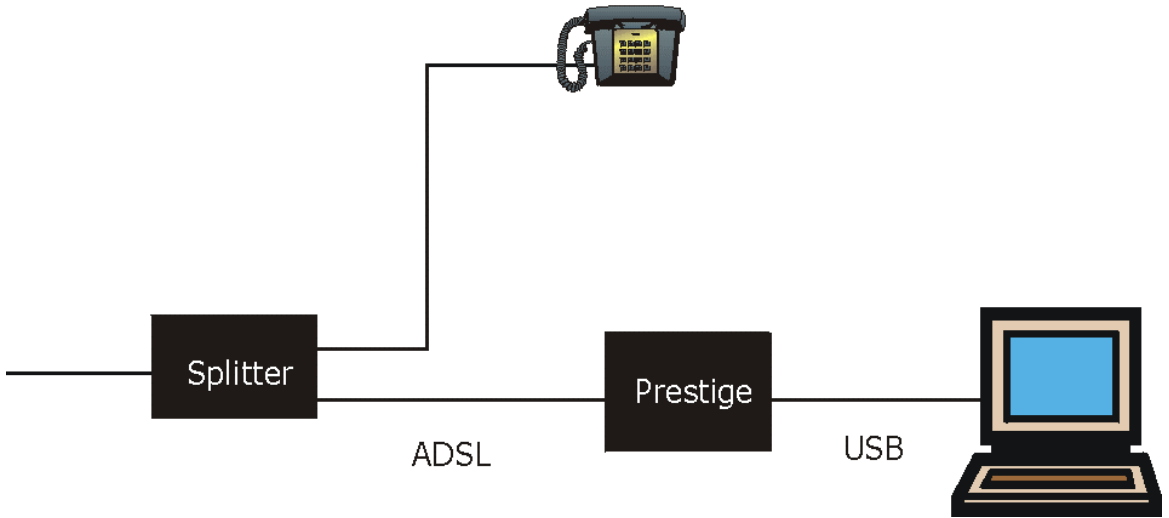
The back panel has two interfaces: a USB and an ADSL port as shown in the following figure.



**Figure 1-1 Back Panel Connections**

### 1.2.1 Splitter

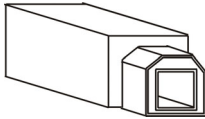
Use a splitter (optional) in order to plug a phone into the same ISDN or telephone line. See the following figure.



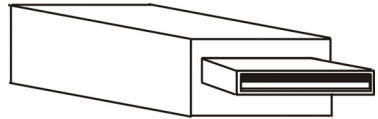
**Figure 1-2 Splitter**

**Step 1.** Close all Windows programs and applications.

**Step 2.** Plug the square end of the USB cable into the back of your modem (see figures), and then plug the rectangular end of the USB cable into the back of your computer.



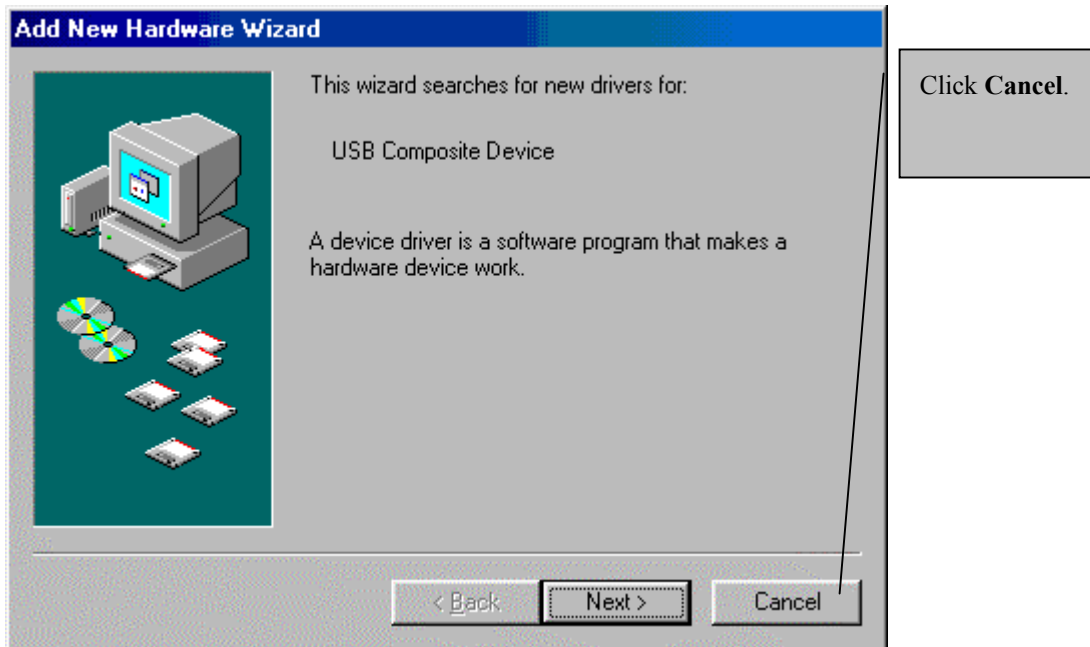
Plug this cable end into your modem



Plug this cable end into your computer

**Figure 1-3 USB Cable Connectors**

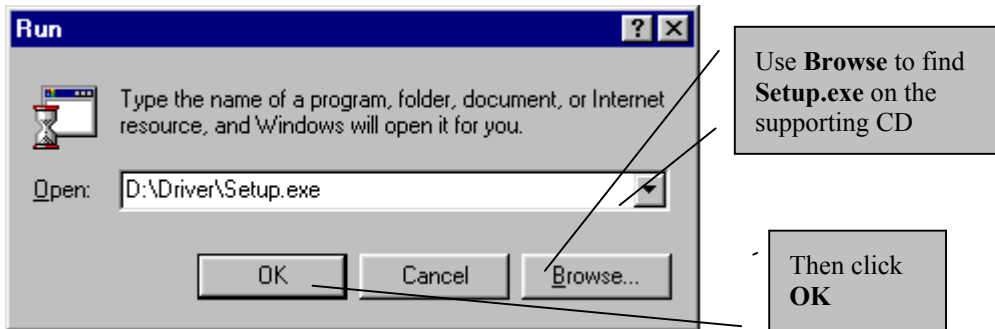
**These instructions show how to do a custom ZyXEL installation without using the Windows installation wizard.**



**Figure 1-4 Windows Installation Wizard**

**Click Yes or Continue Anyway if Windows 2000 or XP displays Digital Signature Not Found or Windows Logo Testing alerts.**

- Step 3.** Insert the supporting CD and click the Windows **Start** button (usually located in the bottom left corner) and select **Run**. Then do as shown next.

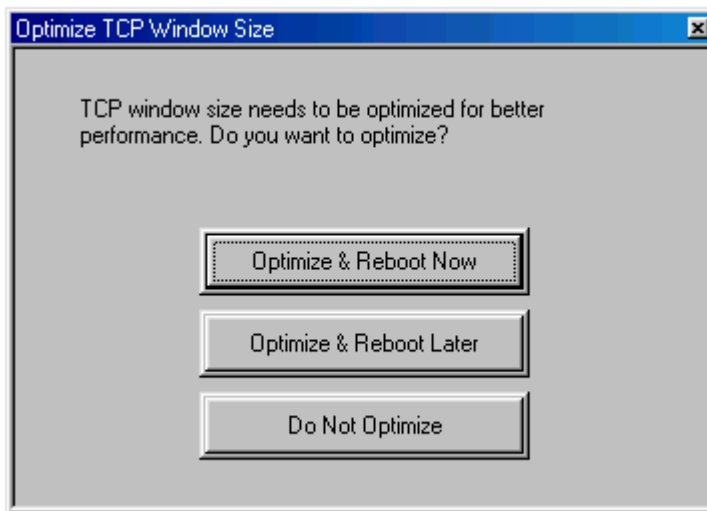


**Figure 1-5 Run Setup**

- Step 4.** Click **Next** in the **Welcome** screen to display the **License Agreement** screen.
- Step 5.** Read the license agreement and click **Yes** to agree to the terms and bring up the **Read Me** screen.
- Step 6.** The **Read Me** screen gives instructions for installing and uninstalling the modem, along with some troubleshooting information. Use the scroll bars to read the text and click **Next** to go to the **Driver Components** screen.

- Step 7.** In the **Driver Components** screen, select the driver if your ISP has not pre-configured it for you. Type the VPI and VCI specified by your telephone company and click **Next**.
- Step 8.** Select the framing type specified by your ISP and click **Next**.
- Step 9.** When using RFC 1483, the **RFC 1483 Modes** screen appears. Select the mode that your ISP supports and click **Next**. Just go to the next step for PPPoA or PPPoE.
- Step 10.** Screens pop up to report the progress of the installation. The **Setup Status** is displayed briefly. You do not need to click anything until the **Install Shield Wizard Complete** screen is displayed.
- Step 11.** Click **Finish** in the **Install Shield Wizard Complete** screen to bring up the **Rebooting Machine** screen.
- Step 12.** Click “Yes, I want to restart my computer now.” in the Rebooting Machine screen. Then click OK.
- Step 13.** The **Found New Hardware** screen appears, wait for it to disappear when the configuration is complete.

**If the Optimize TCP Window Size screen appears, click "Optimize & Reboot Now".**



**Figure 1-6 Optimize Screen**

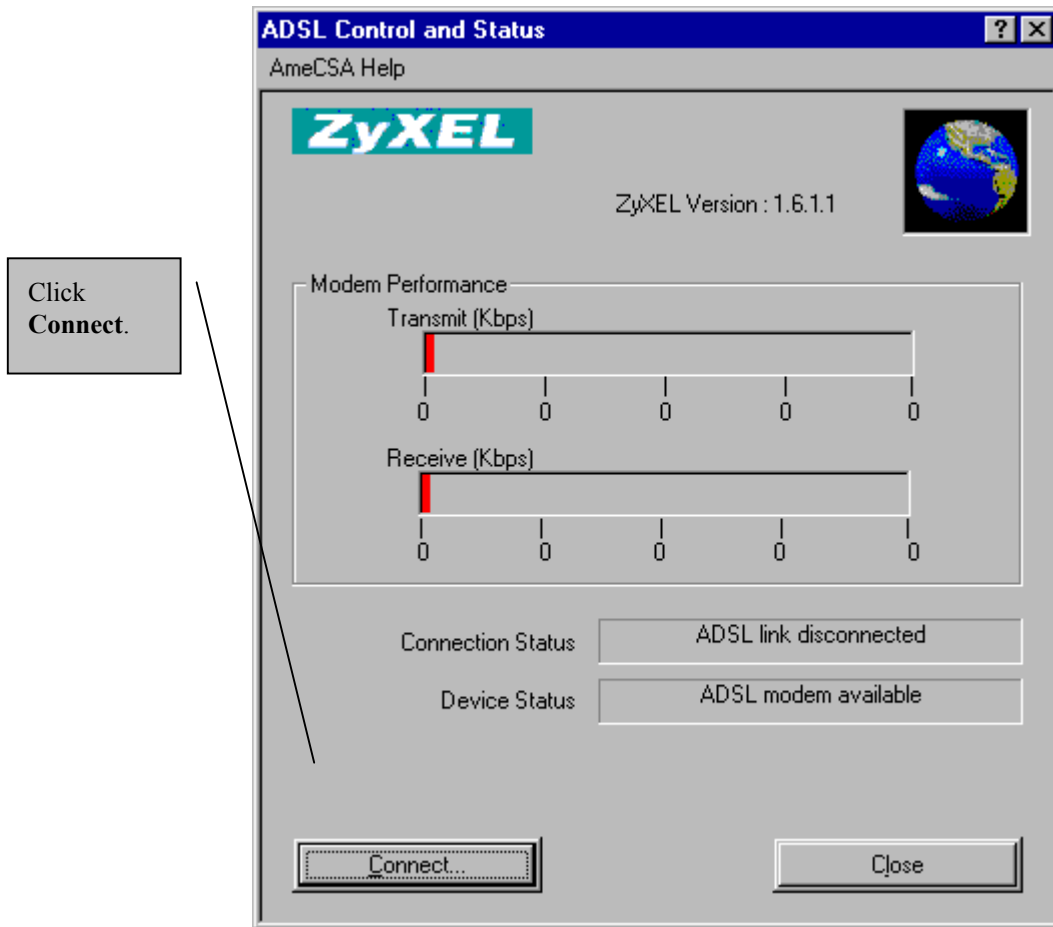
- Step 14.** Use a telephone wire to connect the ADSL port to the ISDN or wall jack.

**You may opt to buy a telephone microfilter to install between the wall jack and your telephone(s). A microfilter acts as a low pass filter that screens out possible interference.**

## 1.3 Connecting

- Step 1.** In Windows, click **Start** (usually in the bottom left-hand corner) ▶ **Settings** ▶ **Control Panel** and double-click the **ADSL Control and Status** icon to bring up the **ADSL Control and Status** window.

**Step 2.** Use the **Connect** button in the **ADSL Control and Status** window to initiate a connection with your ISP. The button text changes to **Disconnect** after a connection is established.



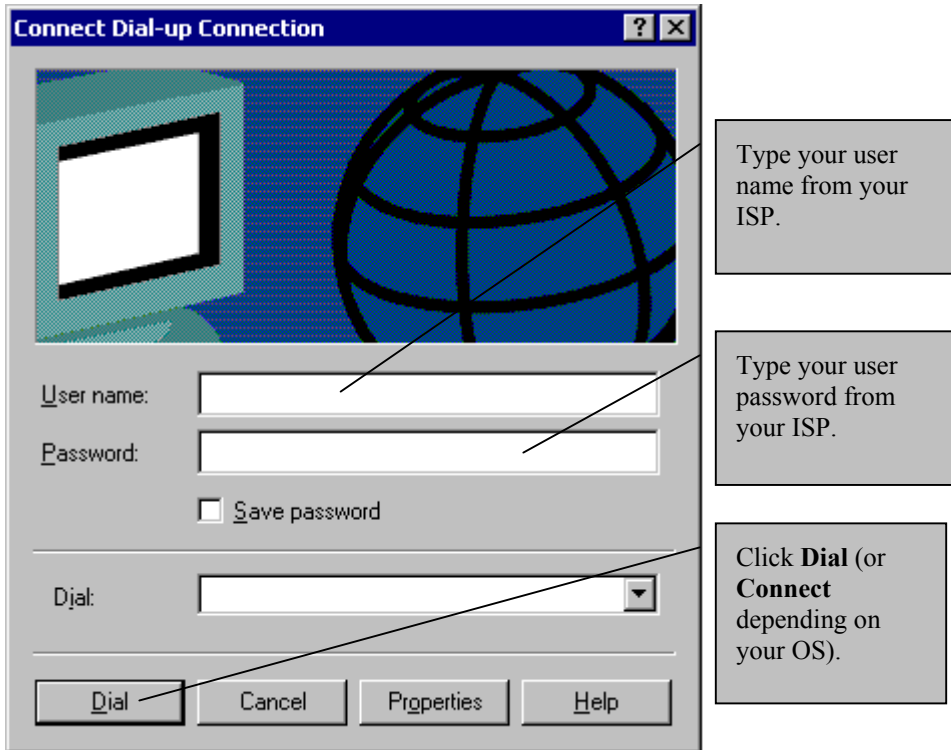
**Figure 1-7 ADSL Control and Status**

**Step 3.** Click **Close** to close the **ADSL Control and Status** window after your connection has been made (the modem stays connected).

If you are using RFC 1483, you are done installing your modem! Visit [www.zyxel.com](http://www.zyxel.com) to test your Internet connection and discover other exciting products from ZyXEL! If you are using PPPoA, go on to the next section.

## 1.4 PPPoA and PPPoE Setup

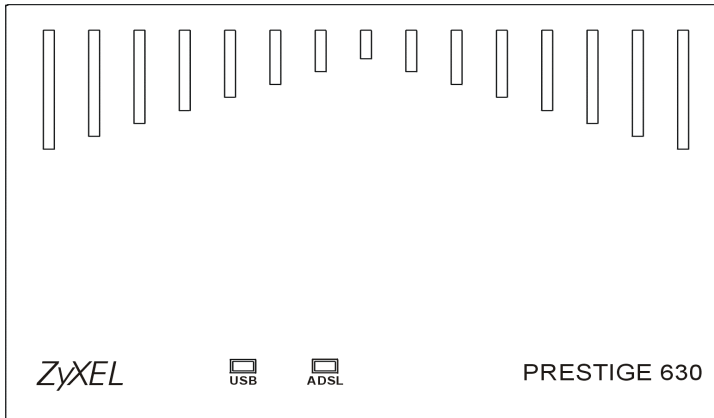
From the Windows desktop, double-click the **Shortcut to ZyXEL ADSL** icon. Configure the screen as follows (this screen varies slightly depending on OS).



**Figure 1-8 Connect Dial-up Connection**

## 1.5 Front Panel LEDs

The LEDs on the front panel of your modem indicate operational status. The table under the following figure describes the LED functions.



**Figure 1-9 Front Panel LEDs**

## 1.6 Front Panel LED Descriptions

**Table 1-2 LED Descriptions**

LED	FUNCTION	DESCRIPTION
<b>USB</b>	USB Interface and Modem Power Connection	This LED is off when the modem's USB port is not connected or not receiving power.
		The LED is on when the USB is connected, receiving power, and the driver software is installed.
		This LED blinks during data transfer or whenever the ADSL link is up.
<b>ADSL</b>	ADSL Interface	This LED is off when the software driver has not been installed or after you click the Disconnect button in the CSA interface.
		This LED is on when the ADSL link is up.
		This LED blinks when the ADSL link is connecting or waiting to connect.

# Chapter 2

## Modifying Dial-up Settings

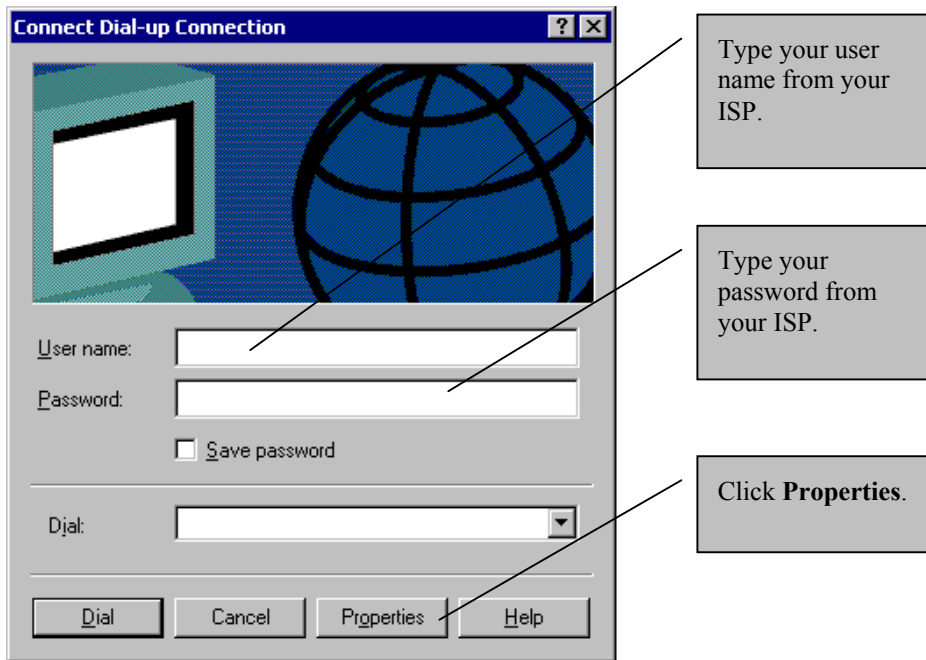
*This chapter shows you how to modify PPPoA and PPPoE settings in Windows.*

Use the following procedures to change the user name, password, VPI and VCI settings PPPoA or PPPoE dial-up connections.

Go to the **ADSL Control and Status** screen and click **Connect** before modifying your PPPoA or PPPoE settings, if the modem is disconnected. See 1.4 or Chapter 5 for details.

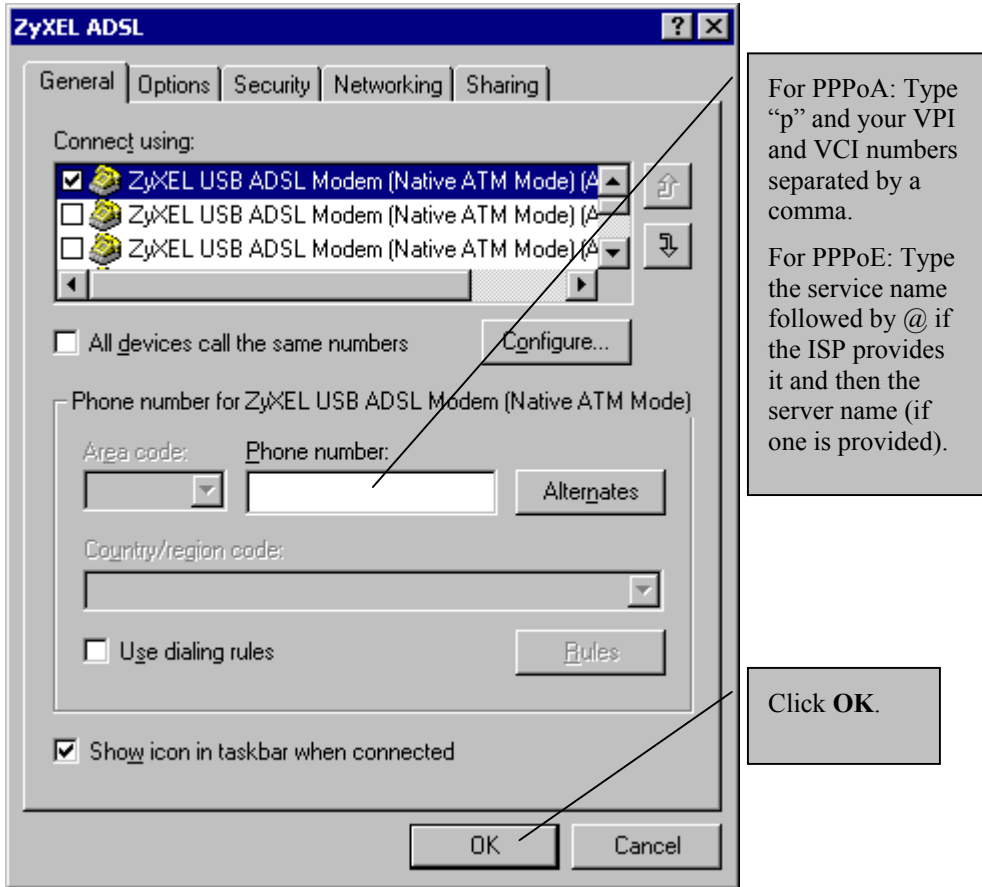
### 2.1 Windows 2000

**Step 1.** From the Windows desktop, double-click the **Shortcut to ZyXEL ADSL** icon to bring up the following screen.



**Figure 2-1 Connect Dial-up Connection Screen**

In the **Phone number** field, type “p” followed by the VPI and VCI numbers separated by a comma; for example “p8,35”.

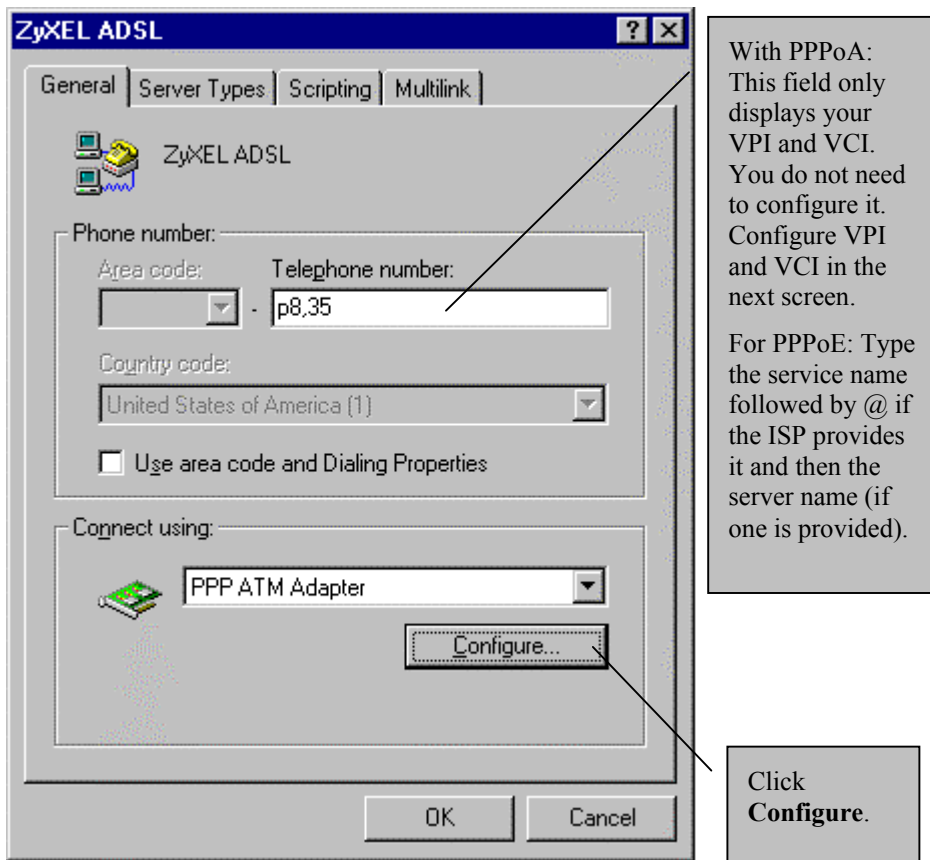


**Figure 2-2 Configure VPI and VCI in Windows 2000**

**Step 2.** Click **Dial** in the **Connect Dial-up Connection** screen to use your new settings.

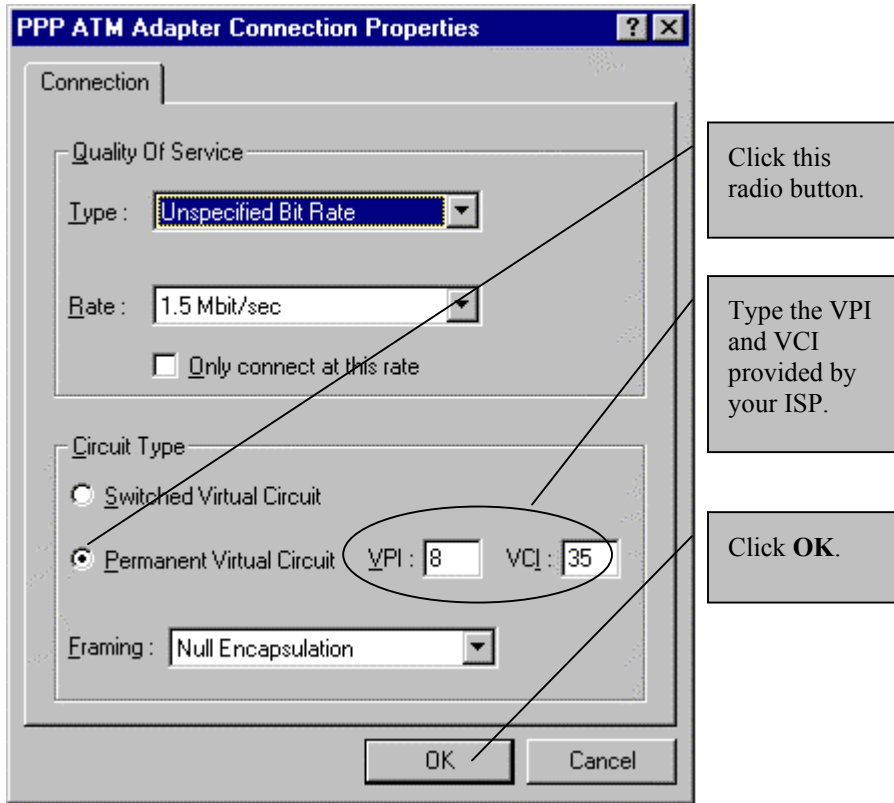
## 2.2 Windows ME and 98

- Step 1.** From the Windows desktop, double-click the **My Computer** icon and then the **Dial-up Networking** icon. Right-click the **ZyXEL ADSL** icon and then click **Properties** to bring up the following screen.



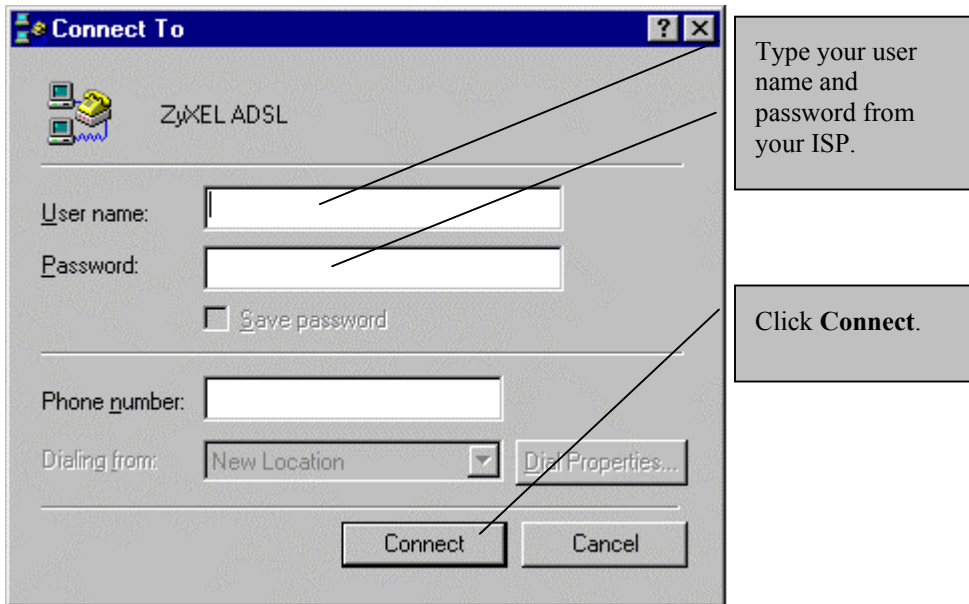
**Figure 2-3 General Tab**

**Step 2.** Configure the **Connection Properties** screen as follows:



**Figure 2-4 Configure VPI and VCI in Windows 98 or ME**

- Step 3.** From the Windows desktop, double-click the **Shortcut to ZyXEL ADSL** icon to bring up the following screen.

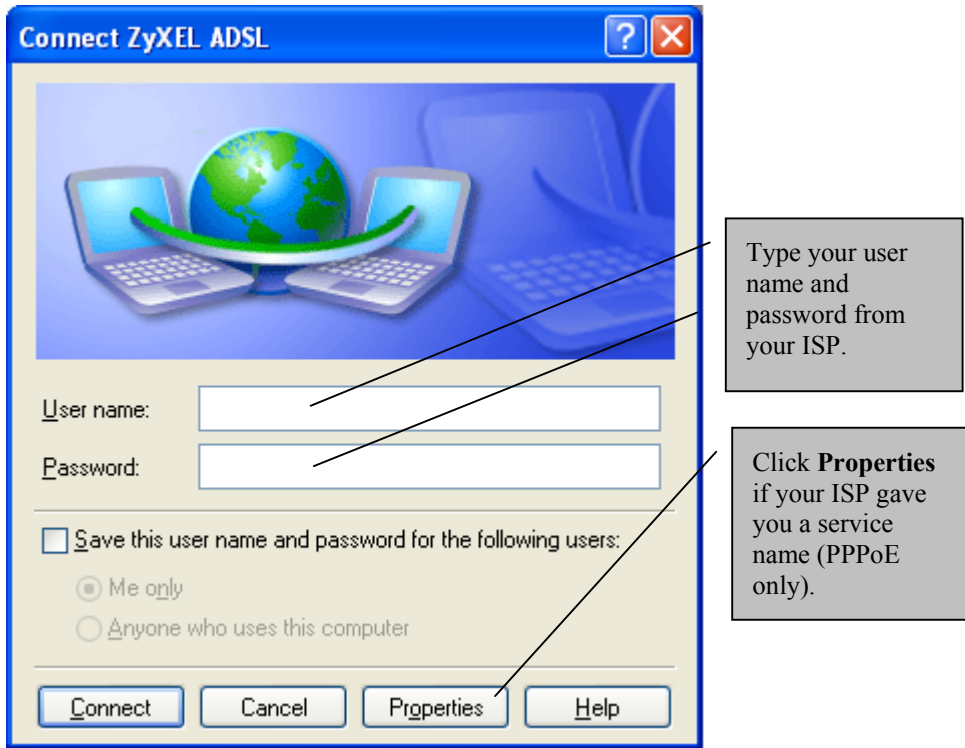


**Figure 2-5 Connect To Window**

- Step 3.** Click **Connect** to use your new settings.

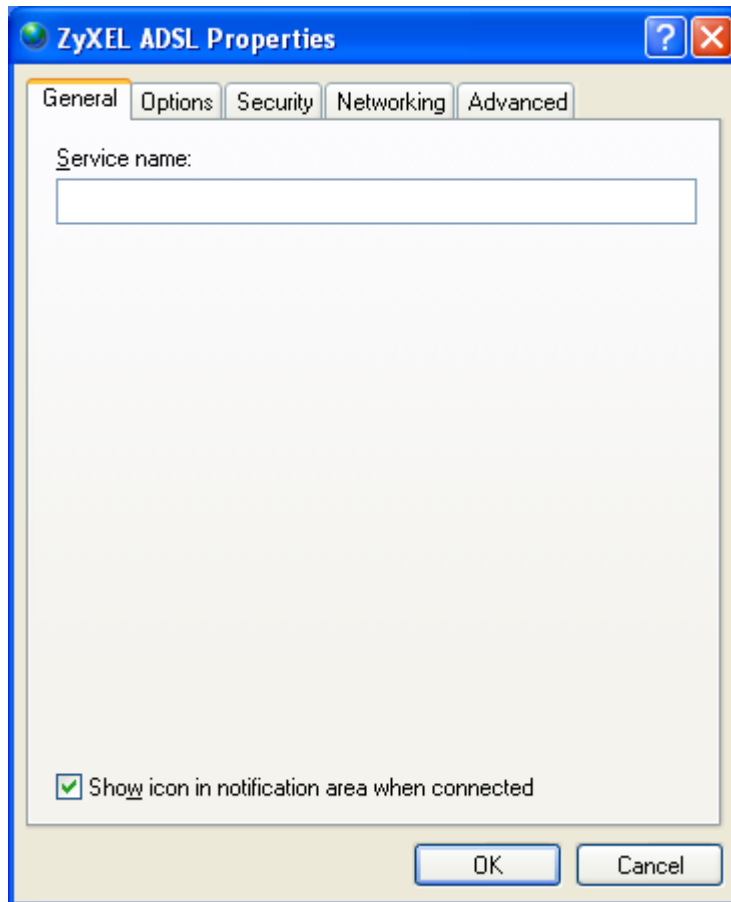
## 2.3 Windows XP

- Step 1.** From the Windows desktop, double-click the **Shortcut to ZyXEL ADSL** icon to bring up the following screen.



**Figure 2-6 XP Connect Window**

- Step 2.** Click the **General** tab in the properties window and type the service name from your ISP in the **Service name** field and click **OK**.



- Step 3.** Click **Connect** in the connect window.



# Chapter 3

## Dial-Up Set-Up

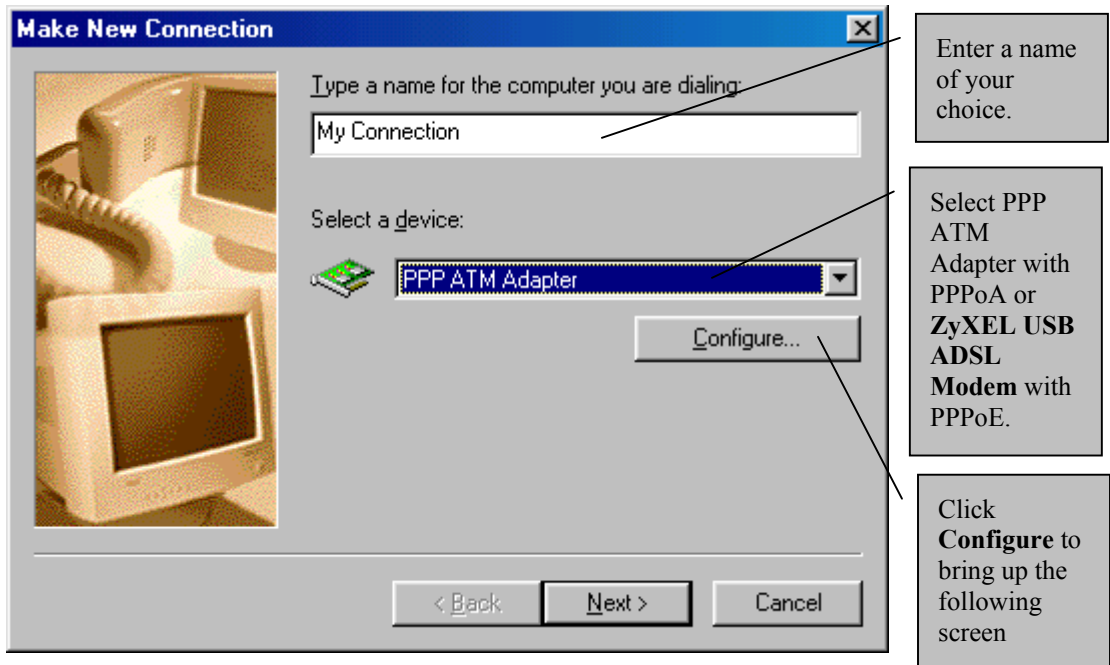
*This chapter shows you how to set up a new PPPoA or PPPoE connection in Windows .*

### 3.1 Windows Millennium and 98 Second Edition

Use the following procedure to set up Windows ME or 98 Second Edition for use with PPPoA or PPPoE.

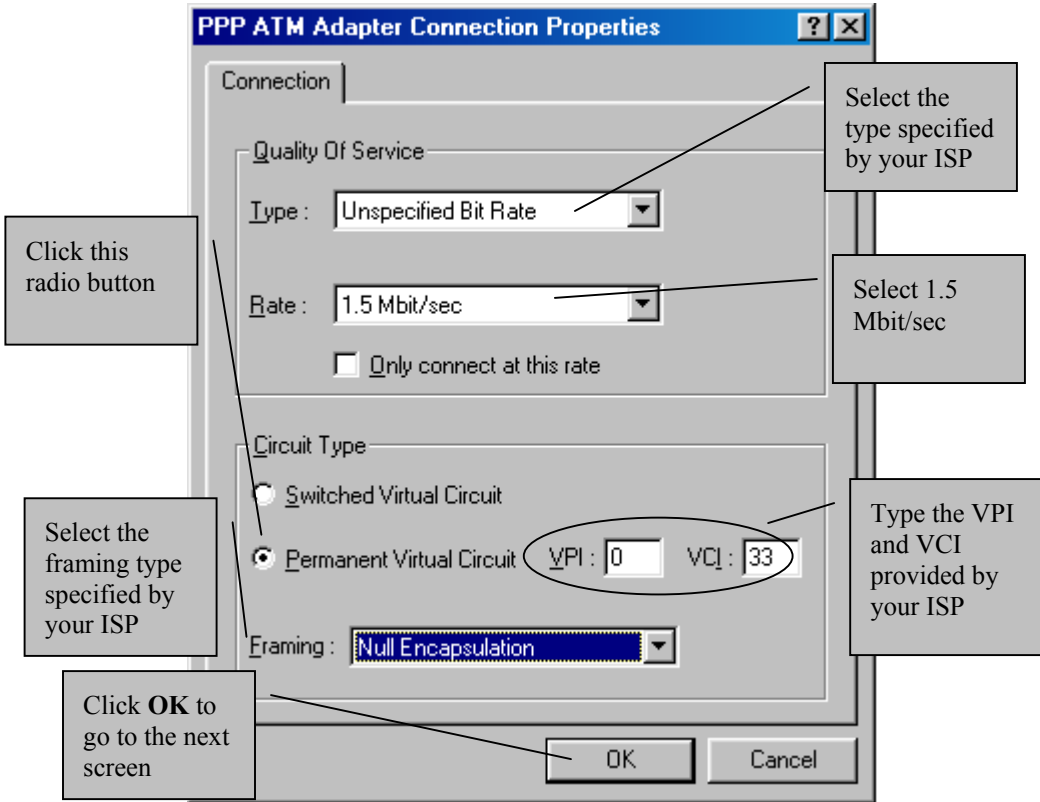
**Step 1.** In Windows, click **Start** (usually in the bottom left-hand corner) ▶ **Programs** ▶ **Accessories** ▶ **Communications** ▶ **Dial-Up Networking**.

**Step 2.** Double-click the **Make New Connection** icon. At the **Make New Connection** screen, do the following:



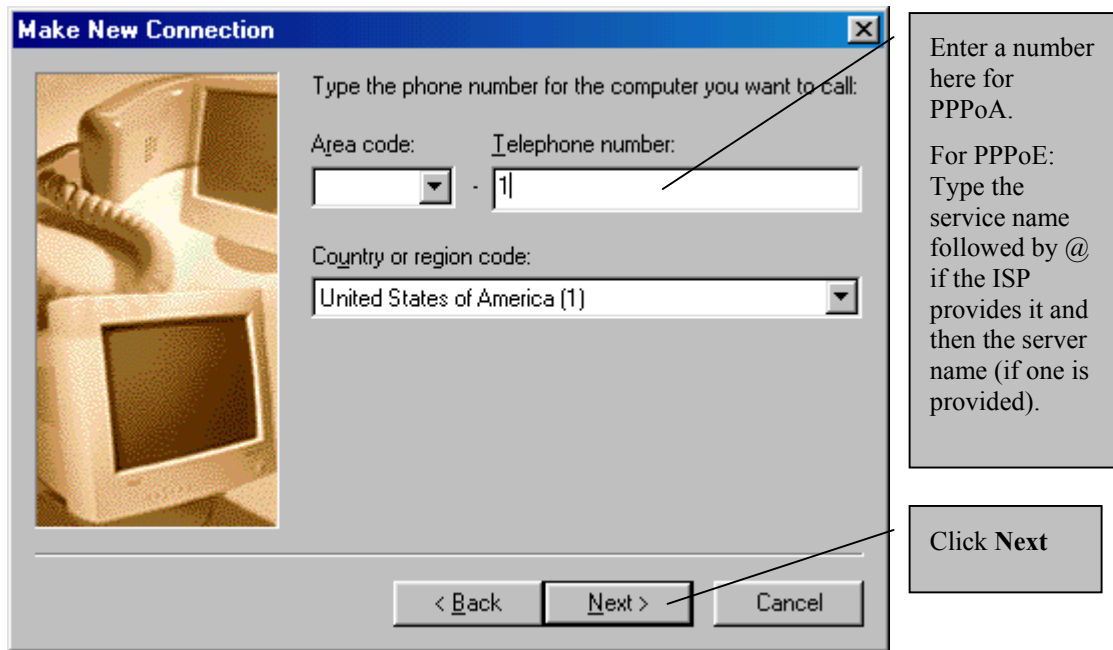
**Figure 3-1 Make New Connection Screen**

**Step 3.** Configure the **PPP ATM Adapter Connection Properties** screen as follows (PPPoE does not use this screen):



**Figure 3-2 PPP ATM Connection Properties Screen**

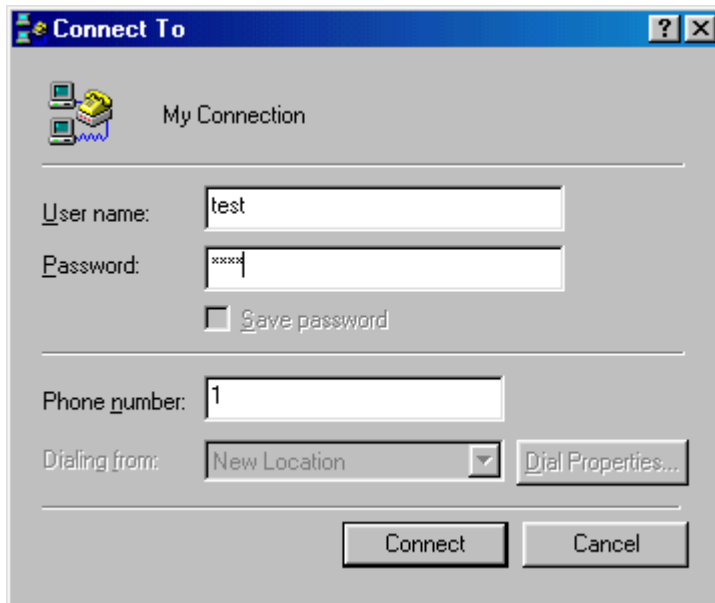
- Step 4.** In the next screen, enter the following information. PPPoA does not use the telephone number, but you must enter a number (any number will do).



**Figure 3-3 Phone Number Screen**

- Step 5.** Click **Finish** in the next screen to complete this procedure and return to the desktop.
- Step 6.** Go back to the **Dial-up Networking** window and double click the new icon with the name you specified. The **Connect To** screen is displayed.

**Step 7.** Input the **User Name** and **Password** that your ISP supplies.



**Figure 3-4 Connect To Screen**

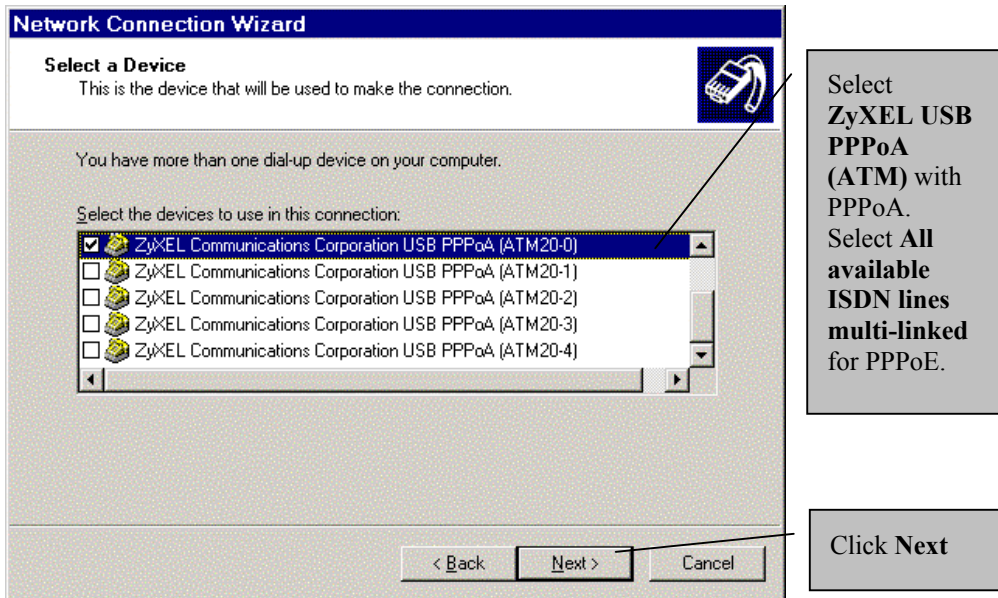
**Step 8.** Click **Connect** to set-up the connection.

## 3.2 Windows 2000

Use the following procedure to set up Windows 2000 for use for PPPoA or PPPoE.

- Step 1.** In Windows, click **Start** (usually in the bottom left-hand corner) ▶ **Programs** ▶ **Accessories** ▶ **Communications** ▶ **Network and Dial-Up Connections**
- Step 2.** Click the **Make New Connections** icon.
- Step 3.** This starts the **Network Connection Wizard**, click **Next**.
- Step 4.** In the **Network Connection Type** screen, click the **Dial-up to private network** option button. Then click **Next** to bring up the **Select a Device** screen.

- Step 5.** In the **Select a Device** screen, select the first listed ZyXEL Communications Corporation USB PPPoA (ATM) modem, as shown below and click **Next**.



**Figure 3-5 Select a Device Screen**

**Step 6.** The **Phone Number to Dial** screen is displayed next. Configure as shown below and then click **Next** to bring up the **Connection Availability** screen.

**Network Connection Wizard**

**Phone Number to Dial**  
You must specify the phone number of the computer or network you want to connect to.

Type the phone number of the computer or network you are connecting to. If you want your computer to determine automatically how to dial from different locations, check Use dialing rules.

Area code: [dropdown] Phone number: 0033

Country/region code: [dropdown]

Use dialing rules

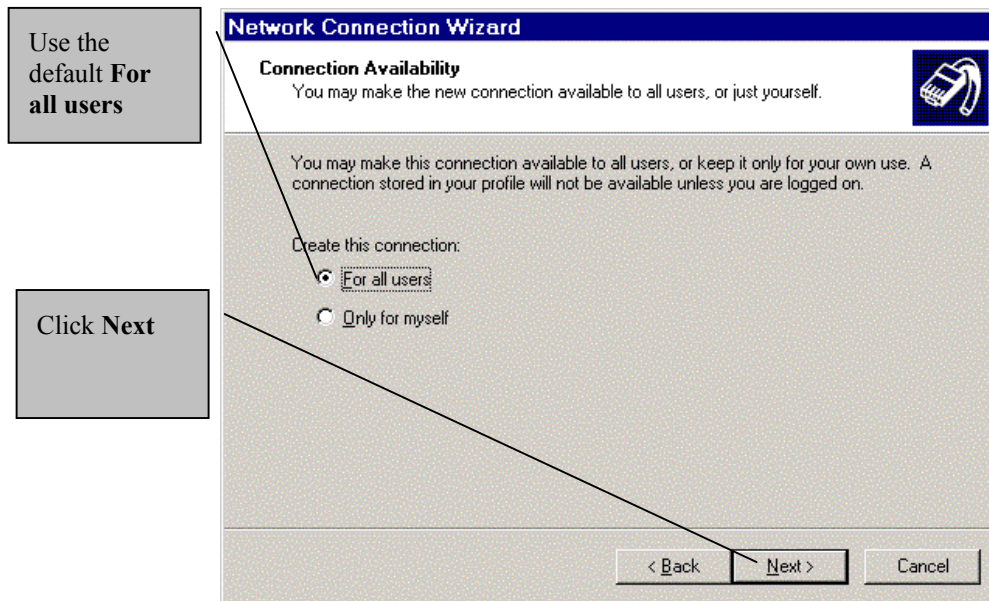
< Back Next > Cancel

For PPPoA:  
Type “p” and your VPI and VCI numbers separated by a comma.

For PPPoE:  
Type the service name followed by @ if the ISP provides it and then the server name (if one is provided).

**Figure 3-6 Phone Number to Dial Screen**

**Step 7.** In the **Connection Availability** screen, click **Next** to bring up the **Completing the Network Connection Wizard** screen.



**Figure 3-7 Connection Availability Screen**

- Step 8.** In the **Completing the Network Connection Wizard** screen, you can use the default connection name or type in one of your choice. Then click **Finish**.
- Step 9.** The **Connect ADSL Connection** screen appears. Type the User name and Password that your ISP gave you in the fields provided. Then click **Dial** to make the connection.
- Step 10.** The **Connection Complete** screen appears last, click **OK** to make the connection complete.

### 3.3 Windows XP

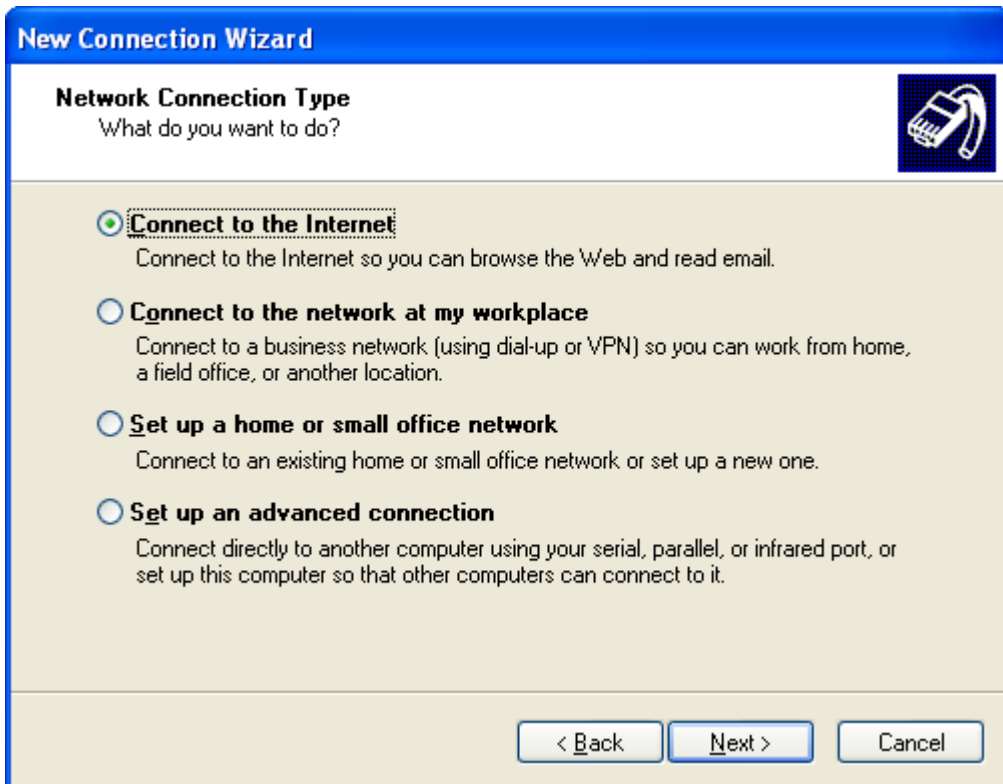
Use the following procedure to set up Windows XP for use with PPPoA or PPPoE.

- Step 1.** In Windows, click **Click start** (usually in the bottom left-hand corner) ▶ **Programs** ▶ **Accessories** ▶ **Communications** ▶ **Network Connections**.

**Step 2.** Double-click the **Create a new connection** icon.

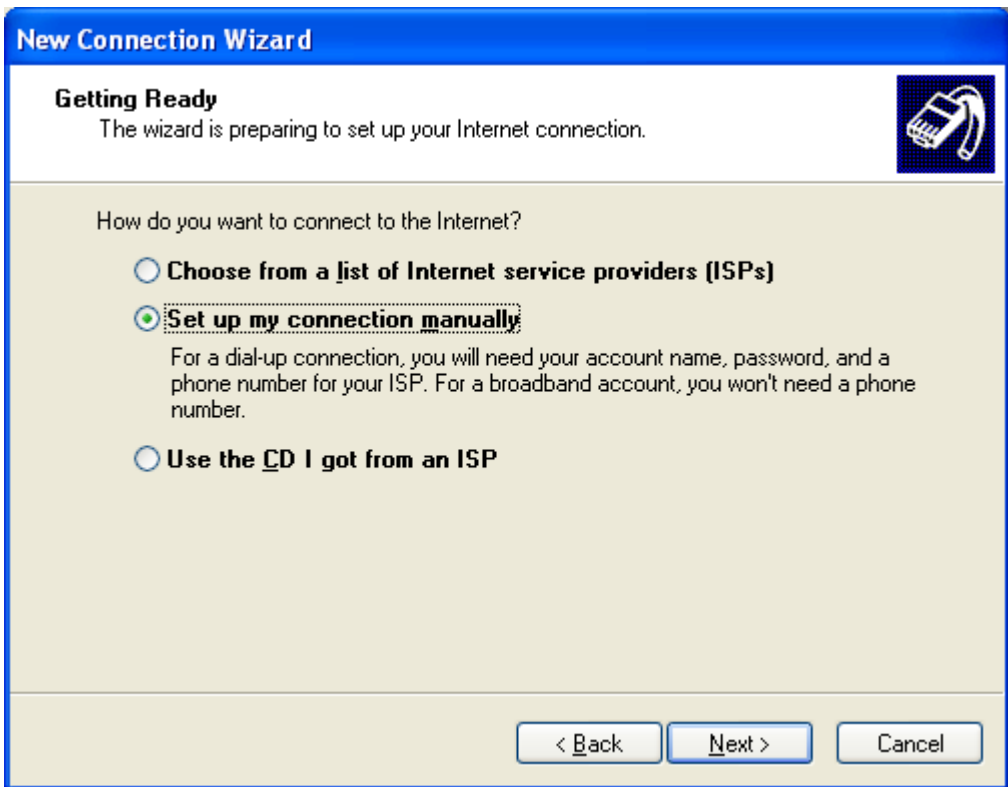
**Step 3.** In the **Welcome** screen, click **Next**.

**Step 4.** In the **Network Connection Type** screen, click the **Connect to the Internet** option button. Then click **Next** to bring up the **Getting Ready** screen.



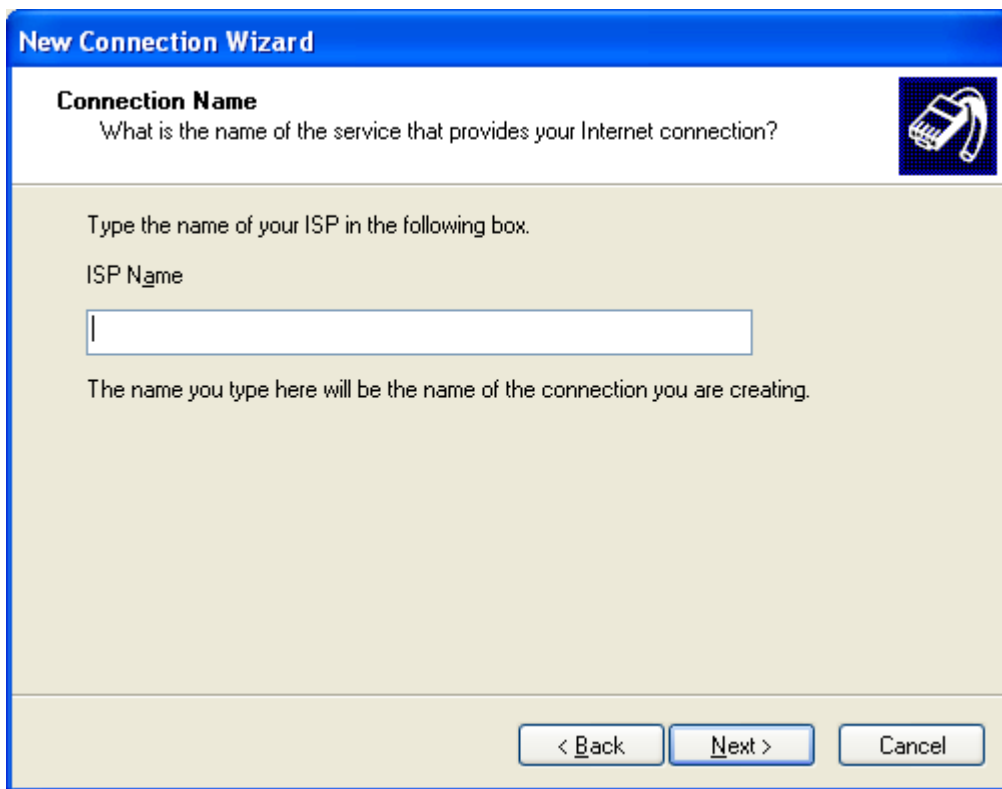
**Figure 3-8 Network Connection Type Screen**

- Step 5.** In the **Getting Ready** screen, select the **Set up my connection manually** option button, as shown below and click **Next**.



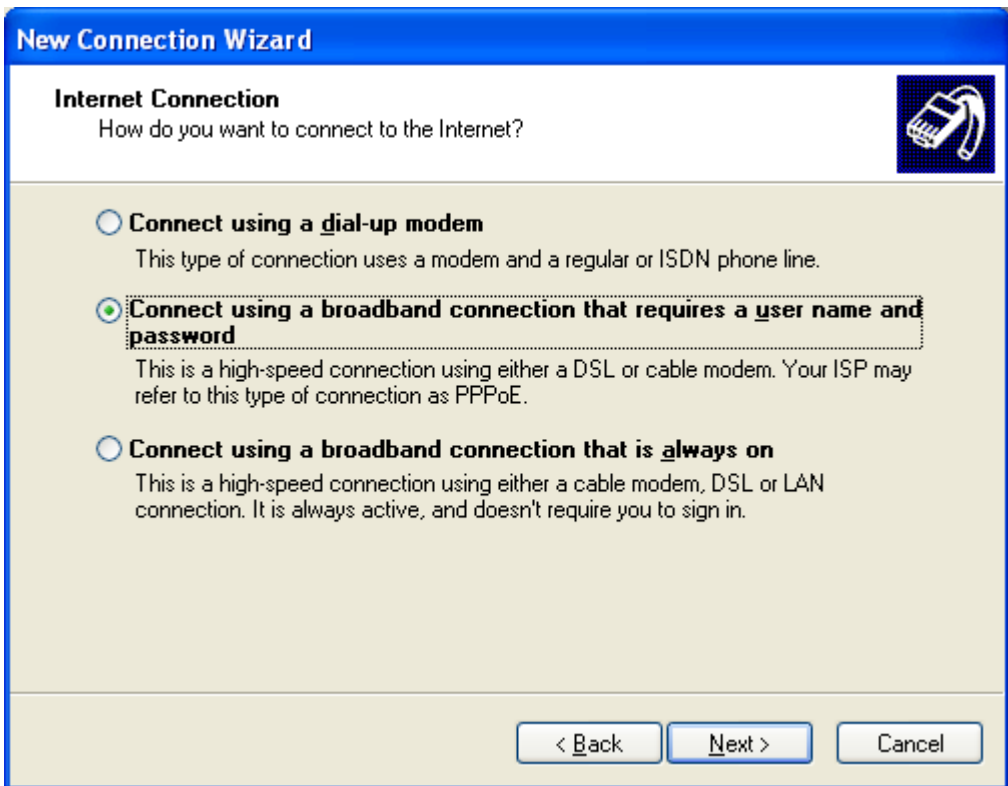
**Figure 3-9 Getting Ready Screen**

- Step 6.** The **Connection Name** screen is displayed next. Type the name of your ISP and then click **Next** to bring up the **Internet Connection** screen.



**Figure 3-10 Connection Name Screen**

- Step 7.** In the **Internet Connection** screen, click **Connect using a broadband connection that requires a user name and password** option button and then **Next** to bring up the **Internet Account Information** screen.



**Figure 3-11 Internet Connection Screen**

- Step 8.** Type your user name, name and password from your ISP in the **Internet Account Information** screen and then click **Next**.



The screenshot shows a Windows-style dialog box titled "New Connection Wizard" with a blue header. The main title is "Internet Account Information" in bold. Below the title is a sub-header "Internet Account Information" and a message: "You will need an account name and password to sign in to your Internet account." To the right of this message is a small icon of a modem. Below the message is a paragraph of instructions: "Type an ISP account name and password, then write down this information and store it in a safe place. (If you have forgotten an existing account name or password, contact your ISP.)" There are three text input fields: "User name:", "Password:", and "Confirm password:". Below these fields are three checked checkboxes: "Use this account name and password when anyone connects to the Internet from this computer", "Make this the default Internet connection", and "Turn on Internet Connection Firewall for this connection". At the bottom right are three buttons: "< Back", "Next >", and "Cancel".

**Figure 3-12 Internet Account Information Screen**

**Step 9.** Select the option button in the **Completing the New Connection Wizard** screen to have an icon for this connection added to your desktop. Then click **Finish**.



# Chapter 4

## User Interface Screens

*This chapter introduces the Control and Status Application and its System Tray icon.*

Install your software and modem (see *previous chapter*) before proceeding.

### 4.1 CSA

The CSA (Control and Status Application) displays information about your modem's status and performance, and also allows you to connect or disconnect it.

#### 4.1.1 Control Panel

From your computer desktop click **Start** (usually in the bottom left-hand corner) ▶ **Settings** ▶ **Control Panel** and double-click the **ADSL Control and Status** icon to open the **ADSL Control and Status** interface. After the first access, you should be able use the **System Tray** icon as described next.

#### 4.1.2 System Tray

After you accessing the **ADSL Control and Status** screen through the Windows **Control Panel**, a **System Tray** icon will be added to the task bar near the clock (bottom right-hand corner). The icon tells the status of the ADSL link. The color of the icon indicates the state of the modem connection. The following states can be indicated:

- Not available
- Disconnected
- Waiting to initialize
- Initializing
- Connected

The following colors represent the respective states:

- Black
- Red
- Blue

- Yellow
- Green

Leave your cursor on the tray icon to view a ToolTip pop-up text that indicates the current state of the modem when it is connected:

- Bytes received
- Bytes transmitted
- Connect rate

Double-click the system tray icon to bring up the **ADSL Control and Status** screen. If the icon is not present in the system tray, you can access the same screen by opening the **Control Panel** and double-clicking the **ADSL Control and Status** icon. The **ADSL Control and Status** screen will be discussed in more detail in the following chapter.

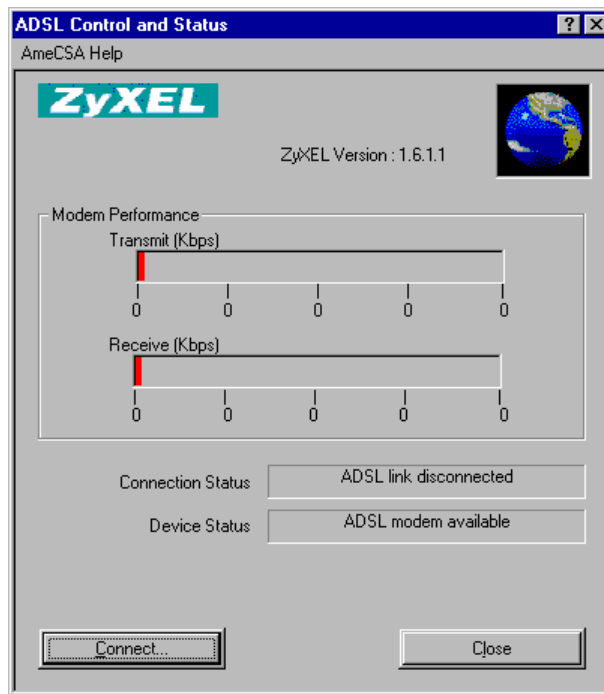
# Chapter 5

## ADSL Control and Status Interface

*This chapter introduces the features and uses of the ADSL Control and Status interface.*

### 5.1 Introduction

Use the **ADSL Control and Status** interface for connecting and disconnecting as well as monitoring status. From your computer desktop click **Start** (usually in the bottom left-hand corner) ▶ **Settings** ▶ **Control Panel** and double-click the **ADSL Control and Status** icon to open the **ADSL Control and Status** interface.<sup>1</sup>



**Figure 5-1 ADSL Control and Status Screen**

<sup>1</sup> Your ZyXEL Version number may differ from the one shown.

After the first access, just double-click the **System Tray** icon (in the bottom right-hand corner) to open the **ADSL Control and Status** interface.

## 5.2 Modem Performance

Two bar graphs indicate the throughput rates. One indicates the transmit rate (upstream) and the second indicates the receive rate (downstream).

## 5.3 Connection Status

This field reads “ADSL link connected” when the ADSL line is connected to a DSLAM and “ADSL link disconnected” when the ADSL is not connected to a DSLAM.

## 5.4 Device Status

This field reads “ADSL modem available” when the modem is properly connected to the computer and the modem driver is installed. The field reads “ADSL modem not available” when the modem is not connected to the computer or the modem driver is not properly installed.

## 5.5 Connect

The connect/disconnect functions are controlled by the **Connect/Disconnect** button. The button is disabled when the modem is unavailable. This happens when the modem driver fails to communicate properly or is disabled.

The status of the modem determines the button text. **Connect** is displayed when the modem is not connected and not cycling in order to connect. **Disconnect** is displayed when the modem is connected.

## 5.6 Close

The **Close** button closes only the main interface screen and does not have any affect on the ADSL connection. You can re-open the main interface screen through double-clicking the system tray icon. Terminating the application removes the system tray icon. Restart the **ADSL Control and Status** interface by clicking **Start ▶ Programs ▶ Settings** and then double-clicking on the **ADSL Control and Status** icon.

# Chapter 6

## Uninstalling Your Modem

*This chapter tells how to uninstall your modem's software driver.*

### 6.1 Uninstall Procedure

Use the following steps to completely uninstall your modem's software driver.

- Step 1.** Close all Windows programs and applications.
- Step 2.** In Windows, Click **Start ▶ Programs ▶ ADSL Modem Driver ▶ Remove ADSL Modem Driver**
- Step 3.** Click **Yes** in the **Question** screen to remove the driver.
- Step 4.** At the **Rebooting Machine** screen, unplug the USB cable from the computer.
- Step 5.** Click **“Yes, I want to restart my computer now.”** And then click **OK**.

After your computer has restarted, the uninstall process is complete. To verify that the software was successfully uninstalled, click **Start ▶ Programs**. The **ADSL Modem Driver** option should not be present.



# Chapter 7

## Modify TCP/IP Networking Options

*This chapter shows you how to modify TCP/IP networking options.*

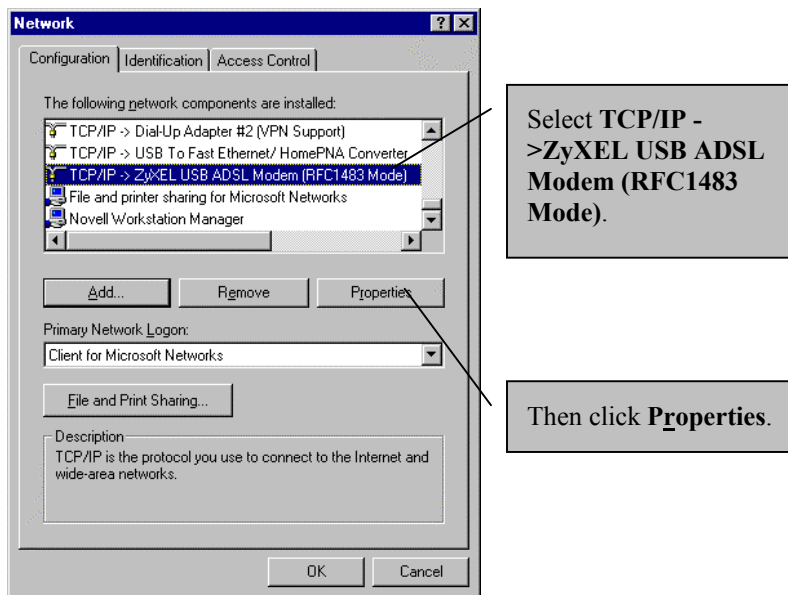
TCP/IP settings are automatically set-up during the software installation process. Use the following OS specific procedures to change TCP/IP settings (if necessary) when using the RFC 1483 driver. The procedures detail statically assigned, as opposed to dynamically assigned, information.

**Icon names in the Dial-up Networking and/or My Network Places windows may differ from those specified in this chapter.**

### 7.1 Windows 98 Procedure

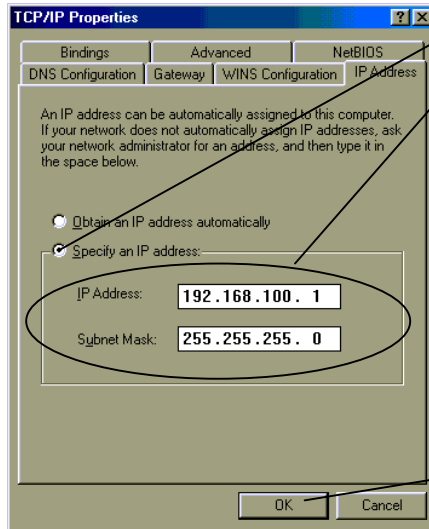
**Step 1.** Click **Start** ▶ **Settings** ▶ **Control Panel** and then double-click the **Network** icon.

**Step 2.** Use the **Configuration** tab to reach your TCP/IP networking properties.



**Figure 7-1 Network Window - Configuration Tab**

**Step 3.** Use the **IP Address** tab to configure TCP/IP Properties.

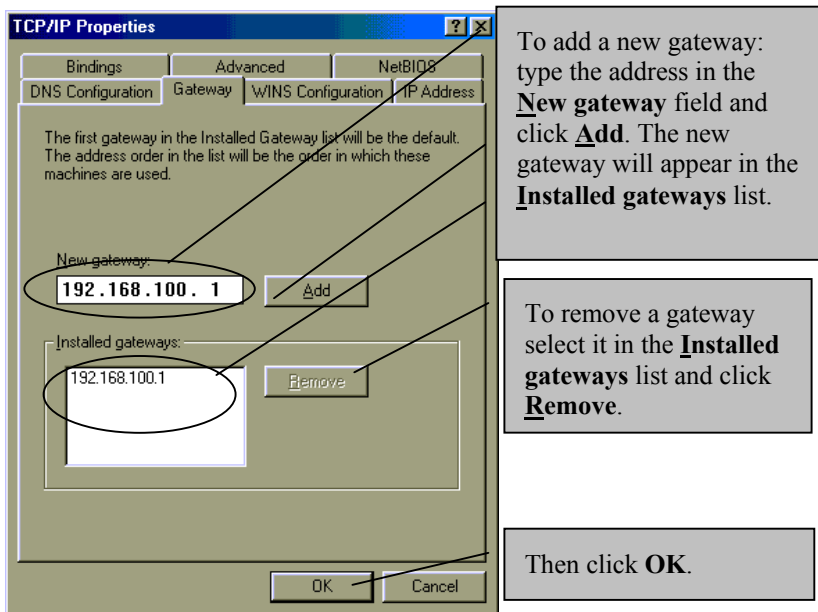


Click here and type your **IP Address** and **Subnet Mask** in the spaces provided.

Then click **OK**.

**Figure 7-2 TCP/IP Properties Window - IP Address Tab**

- Step 4.** Use this window to add or remove gateways. Consult with your network administrator to determine the appropriate addresses for your needs.



**Figure 7-3 TCP/IP Properties Window - Gateway Tab**

- Step 5.** Click **OK** to confirm changes and end this TCP/IP option modification session.
- Step 6.** Click **Yes** to restart your computer (if prompted).

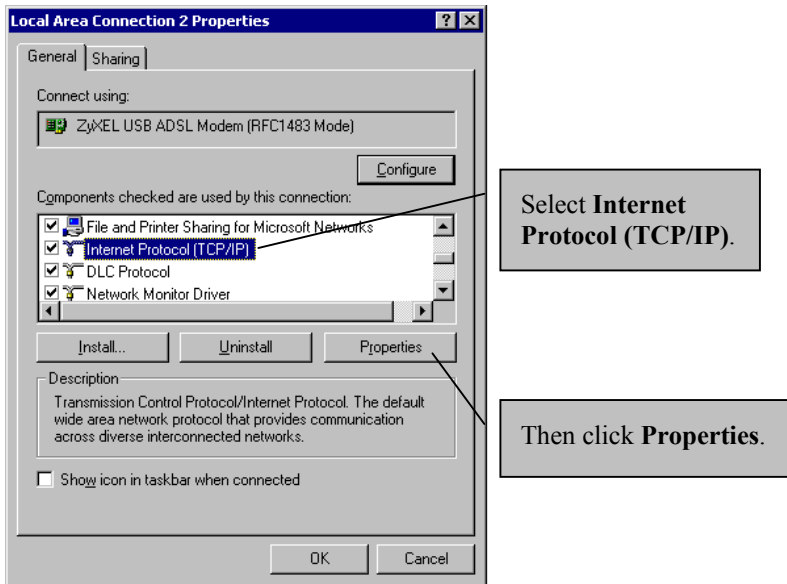
## 7.2 Windows 2000 and XP Procedures

The procedures for modifying TCP/IP settings in Windows 2000 and XP are very similar, only the Windows 2000 screens are shown.

- Step 1.** For Windows 2000, click **Start, Settings, Network and Dial-up Connections** and right-click **Local Area Connection** or the connection you want to configure and click **Properties**.

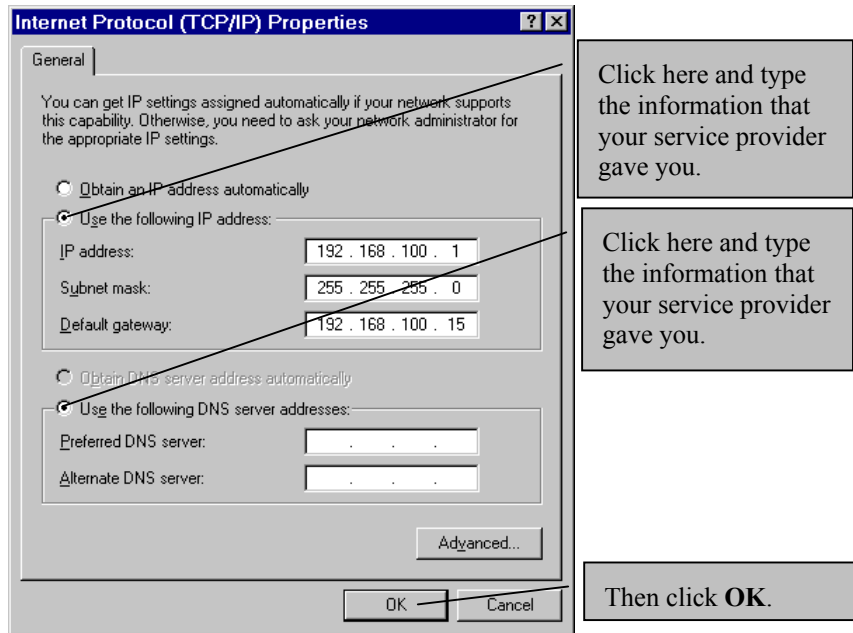
For Windows XP, click **start, Control Panel, Network and Internet Connections** and then **Network Connections**. Right-click the network connection you want to configure and then click **Properties**.

**Step 2.** Use the **General** tab to reach your TCP/IP networking properties.



**Figure 7-4 Local Area Connection 2 Properties Window - General Tab**

**Step 4.** Use the **General** tab to configure TCP/IP properties.



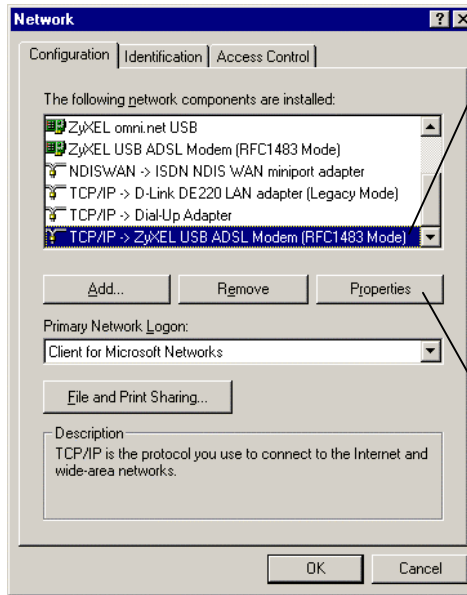
**Figure 7-5 Internet Protocol (TCP/IP) Properties Window - General Tab**

**Step 5.** At the next window, click **OK** to confirm changes and end this TCP/IP option modification session.

## 7.3 Windows Me Procedure

**Step 1.** From your computer desktop, right-click the **My Network Places** icon and click **Properties**.

**Step 2.** Use the **Configuration** tab to reach TCP/IP properties.

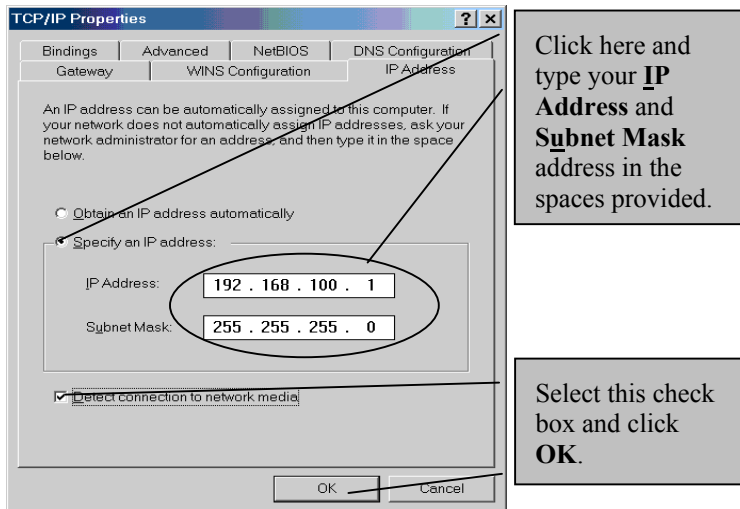


Select **TCP/IP -> ZyXEL USB ADSL Modem (RFC1483 Mode)**.

Then click **Properties**.

**Figure 7-6 Network Window - Configuration Tab**

**Step 3.** Use the **IP Address** tab to configure TCP/IP properties.



**Figure 7-7 TCP/IP Properties Window - IP Address Tab**

**Step 4.** Click **OK** and then click **Y**es to restart your computer.



# Chapter 8

## Troubleshooting

*This chapter covers potential problems and the possible solutions.*

**Table 8-1 Troubleshooting**

PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when I start the modem.	<p>Make sure your computer is turned on.</p> <p>Check the USB cable connections between the modem and your computer.</p> <p>Click <b>Start ▶ Programs</b>. Install the software driver if <b>ADSL Modem Driver</b> is not present.</p> <p>Carefully follow the instructions in this User's Guide to uninstall and reinstall the software driver.</p> <p>Contact technical support if these steps fail to solve the problem.</p>
I cannot access the modem via my computer.	<p>Make sure the modem's USB port is connected to your computer's USB port.</p> <p>Restart your computer.</p>
I cannot connect to the Internet.	<p>Make sure the ADSL port is properly connected to the wall jack.</p> <p>Restart the modem by using the <b>Connect/Disconnect</b> button in the <b>ADSL Control and Status</b> window.</p> <p>Restart your computer.</p>
I cannot get the software driver to uninstall and reinstall properly.	<p>Make sure you are using the ZyXEL installation program and not the Windows installation wizard.</p> <p>Close your Windows applications.</p> <p>Run Windows Explorer and go to the folder that contains the software driver (where you found the setup command).</p> <p>Double click RunSetup.exe.</p> <p>Wait a moment for your icon to show that the processing has stopped (the hourglass disappears) and double click Cleanup.exe.</p> <p>Restart your computer when prompted.</p>

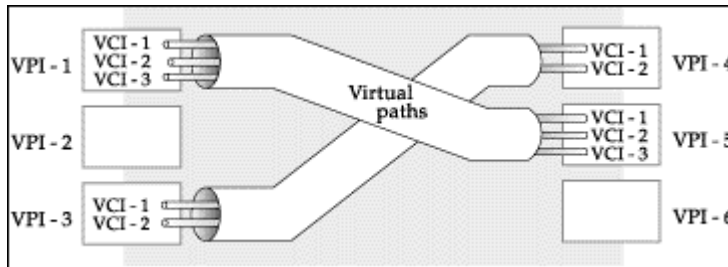


# Appendix VPI and VCI

ATM is a connection-oriented technology, meaning that it sets up virtual circuits over which end systems communicate. The terminology for virtual circuits is as follows:

- **VC (virtual channel)** Logical connections between end stations
- **VP (virtual path)** A bundle of VCs

Think of a VP as a cable that contains a bundle of wires. The cable connects two points, and wires within the cable provide individual circuits between the two points. In an ATM cell header, a **VPI** (Virtual Path Identifier) identifies a link formed by a virtual path and a **VCI** (Virtual Channel Identifier) identifies a channel within a virtual path. The **VPI** and **VCI** are identified and correspond to termination points at ATM switches as shown. Your telephone company should supply you with these numbers.



**Diagram 1 VPI's & VCI's.**



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