

Prestige 630-C Series

ADSL USB Modem

User's Guide

August 2003



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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:

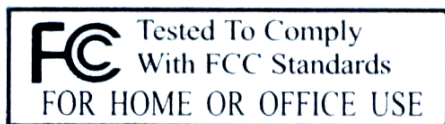
1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and the receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

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.



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	support@zyxel.com.tw sales@zyxel.com.tw	+886-3-578-3942 +886-3-578-2439	www.zyxel.com www.europe.zyxel.com ftp.europe.zyxel.com	ZyXEL Communications Corp., 6 Innovation Road II, Science- Based Industrial Park, Hsinchu 300, Taiwan
NORTH AMERICA	support@zyxel.com sales@zyxel.com	1-800-255-4101	www.us.zyxel.com ftp.zyxel.com	
SCANDINAVIA	support@zyxel.dk sales@zyxel.dk	+45-3955-0700 +45-3955-0707	www.zyxel.dk ftp.zyxel.dk	ZyXEL Communications A/S, Columbusvej 5, 2860 Soeborg, Denmark
FINLAND	sales@zyxel.fi	+359-9-4780-8400 +359-9-4780-8448	http://www.zyxel.fi/	ZyXEL Communications Oy, Malminkaari 10 00700 Helsinki, Finland
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Preface

Congratulations on your purchase from the Prestige 630-C ADSL USB Modem Series.

Your USB-powered Prestige supports an upstream data rate of up to 1Mbps and is compatible with all G.DMT compliant Central Office (CO) Digital Subscriber Line Access Multiplexer (DSLAM) equipment.

Your Prestige is easy to install and configure. All functions are configurable via the ZyXEL configuration wizard and web configurator.

Related Documentation

➤ Support Disk

Refer to the included CD for support documents.

➤ Quick Start Guide

The Quick Start Guide is designed to help you get up and running right away. It contains general connection and initial configuration instructions.

➤ Certifications

Refer to the product page at www.zyxel.com for information on product certifications.

➤ ZyXEL Web Site

The ZyXEL download library at www.zyxel.com contains additional support documentation as well as an online glossary of networking terms.

Help us help you. E-mail all User Guide-related comments, questions or suggestions for improvement to techwriters@zyxel.com.tw or send regular mail to The Technical Writing Team, ZyXEL Communications Corp., 6 Innovation Road II, Science-Based Industrial Park, Hsinchu, 300, Taiwan. Thank you.

About This User's Guide

A practical and comprehensive tool, this *User's Guide* provides information about modem installation and operation for computers running Windows 98/2000/Me/XP.

All graphics in this *User's Guide* show the Windows XP interface. They illustrate the setup procedure for the Prestige 630-C1 USB ADSL modem.

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-C Series ADSL USB Modem” is also referred to as the “modem” and the “Prestige” in this manual.

About ADSL

ADSL Overview

Asynchronous Digital Subscriber Line (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 adaptors.

Chapter 1

Getting to Know Your Prestige

This chapter covers the key features and main applications of your modem.

1.1 Introducing the Prestige 630-C Series ADSL USB Modem

The Prestige 630-C Series 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 USB (Universal Serial Bus) interface.

The ZyXEL configuration wizard provides an easy-to-use interface to configure your Prestige. You can also configure the modem through the embedded web configurator, which is totally independent of your operating system platform.

1.2 Features

This section describes the router's key 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 upgradeable
- Includes a user interface screen for checking the status of the connection
- An RJ-11/RJ45 port for ADSL connection
- Support for DSL downstream data rates of up to 8 Mbps
- Support for DSL upstream data rates of up to 1 Mbps

Chapter 2

Hardware Installation

This chapter introduces the ports and LED indicators.

2.1 Hardware Overview

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

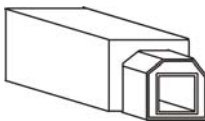
The back panel has two interfaces: a USB port and a DSL port as shown in the following figure.



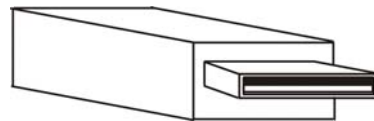
Figure 2-1 Back Panel Connections

2.1.1 USB Connectors

See the following figure for an explanation of USB connectors.



This cable end will plug into your modem's USB port.



This cable end will plug into your computer's USB port.

Figure 2-2 USB Cable Connectors

2.2 Splitter and Microfilter

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

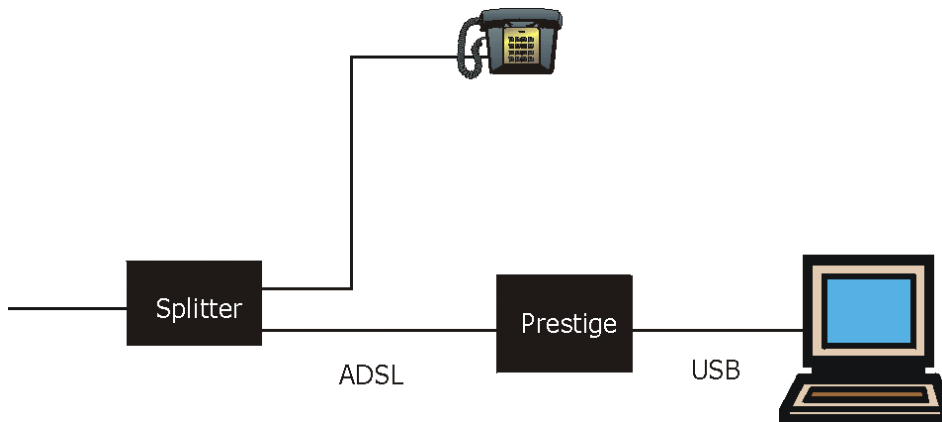


Figure 2-3 Splitter

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. See the following figure.

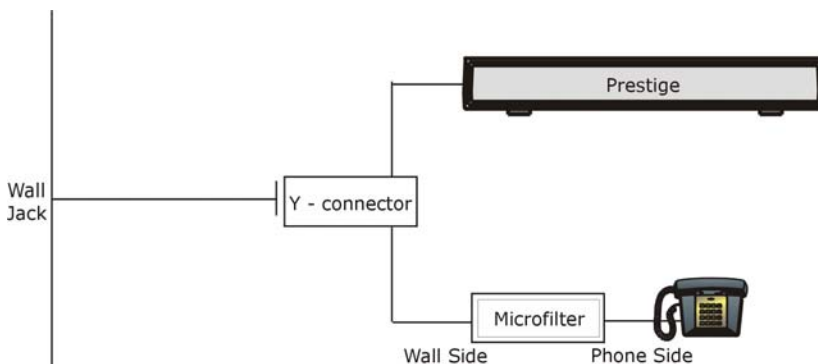


Figure 2-4 Microfilter

2.3 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.

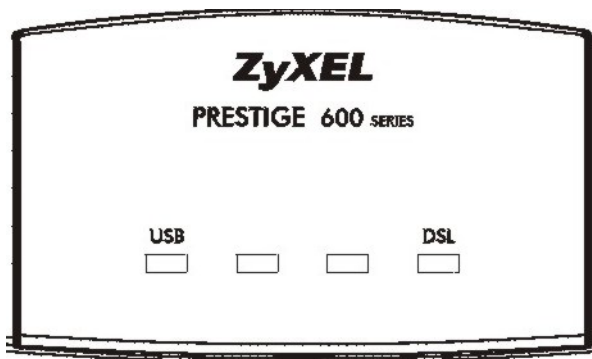


Figure 2-5 Front Panel LEDs

The following table describes the functions of the LEDs.

Table 2-1 LED Descriptions

LED	FUNCTION	DESCRIPTION
USB	USB Interface and Modem Power Connection	<p>This LED is off when the modem's USB port is not connected or not receiving power.</p> <p>The LED is on when the USB is connected and receives power.</p> <p>This LED blinks during data transfer or whenever the DSL link is up.</p>
DSL	DSL Interface	<p>This LED is off when there is no DSL connection.</p> <p>This LED is on when the ADSL link is up.</p> <p>This LED blinks when the ADSL link is connecting, and the driver software is installed.</p>

Chapter 3

Modem Setup

This chapter shows you how to set up your modem for ADSL Internet access.

3.1 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 3-1 Needed Information

REQUIRED INFORMATION	FILL IN THE BLANKS
RFC CLIP, Bridged IP over ATM (RFC1483), PPPoA or PPPoE.	
RFC Mode (with Classical and Bridged IP over ATM only) Bridged or Routed.	
VPI: The Virtual Path Identifier number identifies a bundle of virtual channels.	
VCI: The Virtual Channel Identifier number identifies a logical connection between end stations.	
Framing Type: LLC or VCMUX.	
Modulation: Your ISP will tell you which type of ADSL modulation it uses. The default is Automatic . Wiring Selection: This is the type of wire being used for the connection: Line Tip/Ring (default), Line A/A1 , or Automatic .	
User Name / Password: Lets your ISP know which account you are logging into and protects your account from unauthorized users.	
Vendor Name: The name of your vendor is also known as the ADSL Head End.	
ADSL Head End Env: Your ISP will provide you with this information: Non-Specific or No Line Driver (BNA)	

REQUIRED INFORMATION	FILL IN THE BLANKS
IP Address (if given)	

Your modem supports **CLIP** (Classical IP over ATM), **Bridged IP over ATM**, **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 driver specified by your ISP.

When using the CLIP or Bridged IP over ATM driver, select the mode that your ISP uses, either **Bridged** or **Routed**.

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

See the appendix for more information about VPI and VCI.

3.2 Installing the Prestige and the ZyXEL Configuration Wizard

DO NOT connect the modem to your computer at this time.

- Step 1.** Close all Windows programs and applications.
- Step 2.** Insert the disk that came with your modem into your computer. It should automatically run the driver setup program. If the setup is not automatically run, you can open the CD on your computer and double click the **Setup.exe** icon.

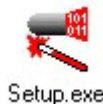


Figure 3-1 Setup.exe Icon

- Step 3.** When the following window appears, click **Next**.

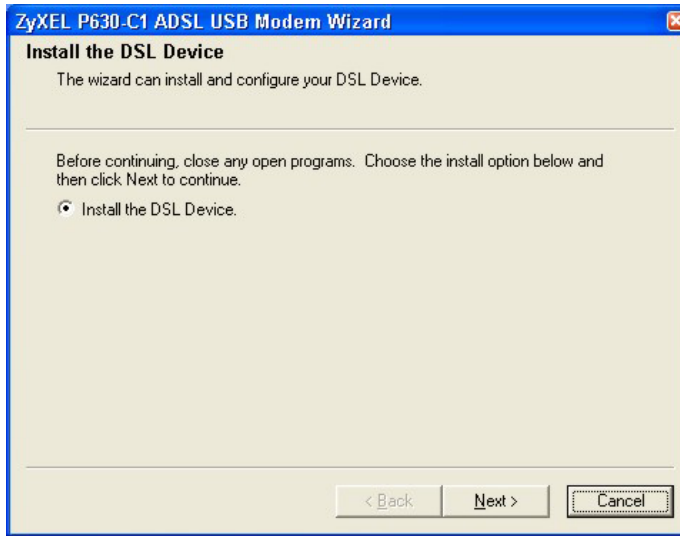


Figure 3-2 Install DSL Device

- Step 4.** Next, select the **DSL Provider** (Encapsulation) mode that your ISP uses. If your ISP has given you a disk containing files for other modes, insert it in your computer and click the **Have File** button. The following figures show setup for **PPPoE(RFC2516)** mode.

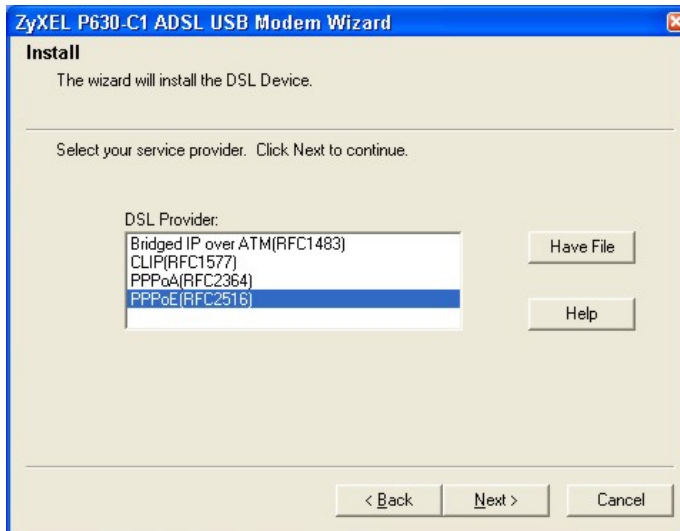


Figure 3-3 Select DSL Provider

- Step 5.** Screens pop up to report the progress of the installation. You do not need to click anything until you are prompted to plug in your modem. Connect your modem to the computer with the USB cable (see section 2.1.1) and plug the cable into the Prestige's DSL port.

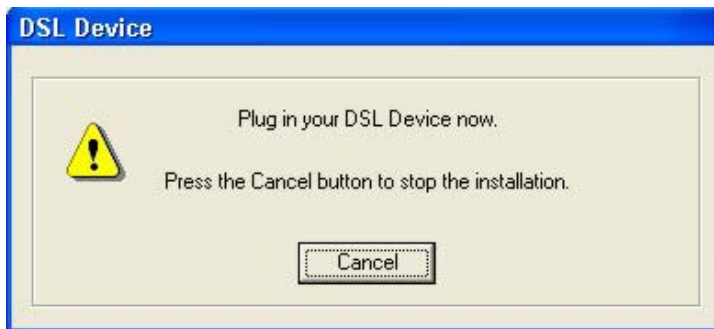


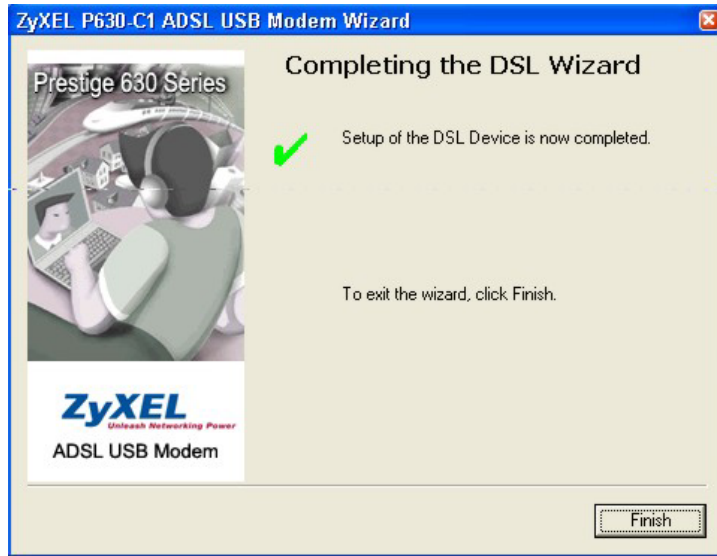
Figure 3-4 Modem Plug in Prompt

During the setup process, the following window will remain on the screen to show the progress of installation.



Figure 3-5 Installation Progress

When the installation has successfully completed, you will see this window. Click **Finish** to close the wizard.



3.3 Setting Up Your USB Computer's IP Address

This section is relevant when you select RFC 1483 Route or RFC 1577 encapsulation (mode) using a given IP address on.

Follow the steps to set up your USB computer to use a static IP address given by your ISP. Windows 2000 screen shots are shown. Steps and screen shots may vary depending on the version of Windows.

- Step 1.** Click Start, Control Panel and Network and Dial-up Connections.
- Step 2.** Right-click on the icon that corresponds to your new USB connection (not the one that corresponds to your Ethernet NIC) and select **Properties**.

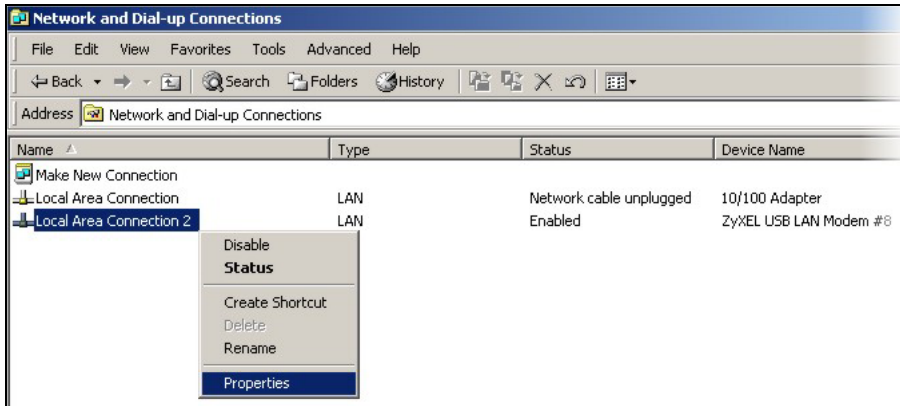


Figure 3-6 USB Computer: IP Setup

Step 3. In the Properties screen, make sure the **Connect Using** field displays “ZyXEL USB LAN Modem #n” (where n is a number).

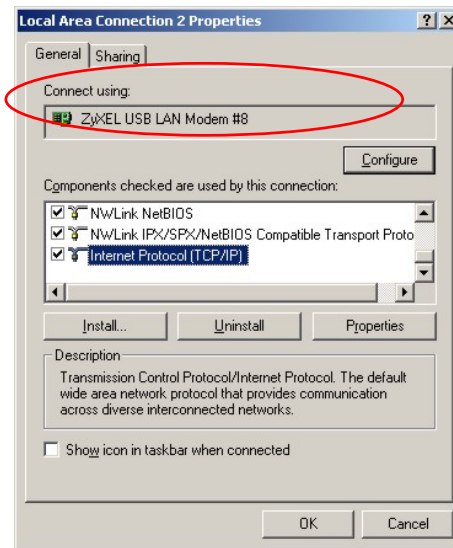


Figure 3-7 USB Computer: Local Area Connection Properties

Step 4. Select **Internet Protocol (TCP/IP)** and click **Properties**. Refer to the *Setting Up Your Computer's IP Address* section for more information.

- Step 5.** Click **Use the following IP Address** and fill in the IP address (given by your ISP), Subnet mask, and Default gateway fields.

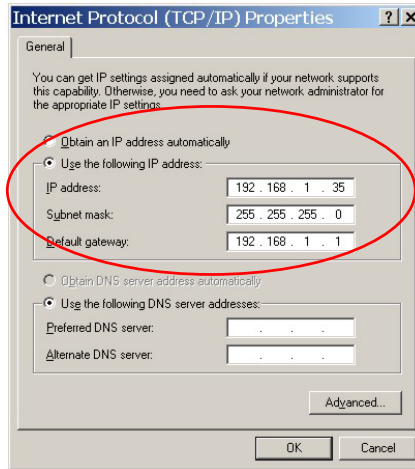


Figure 3-8 USB Computer: Internet Protocol (TCP/IP) Properties

3.4 Internet Access Settings

- Step 1.** If you selected **PPPoE** or **PPPoA** mode, the two icons below will appear on your desktop. If you selected **Bridged** or **CLIP (Classical IP over ATM)** mode, only the **Control Panel** icon will appear. In this case, skip ahead to *Step 3*.

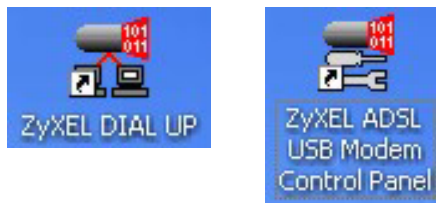


Figure 3-9 Desktop Icons

- Step 2.** Double click the icon labeled **ZyXEL DIAL UP** to configure the dialup settings for your modem.



Figure 3-10 Dialup Settings

Step 3. Double click the **Control Panel** icon to open the next window. The following two buttons appear on all tabs:

Table 3-2 Control Panel Buttons

BUTTON NAME	DESCRIPTION
OK	Click this button to close the control panel.
Cancel	Click this button to cancel any changes made and close the control panel.

The **General** tab appears first as shown below. It provides an overview of the ADSL connection status.

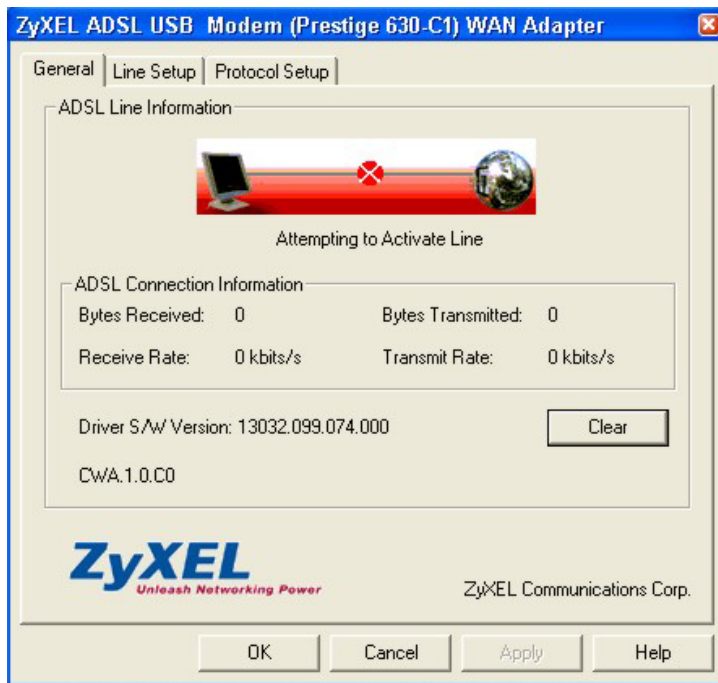


Figure 3-11 Control Panel: General

The following table describes the labels in this window.

Table 3-3 Control Panel: General

LABEL	DESCRIPTION
ADSL Line Information	This shows the current status of the ADSL connection. The status types are as follows.
ADSL Connection Information	
Bytes Received	This shows the total number of bytes received by the modem.
Bytes Transmitted	This shows the total number of bytes transmitted by the modem.
Receive Rate	This shows the rate of received data transmission in kbps.
Transmit Rate	This shows the rate of sent data transmission in kbps.
Driver S/W Version:	This shows the software version number.
Clear	Click this button to clear the Bytes Received and Bytes Transmitted fields.

Table 3-3 Control Panel: General

LABEL	DESCRIPTION
Help	Click this button to see help descriptions for each field.

Step 4. Click on the **Line Setup** tab to configure the ADSL line information.

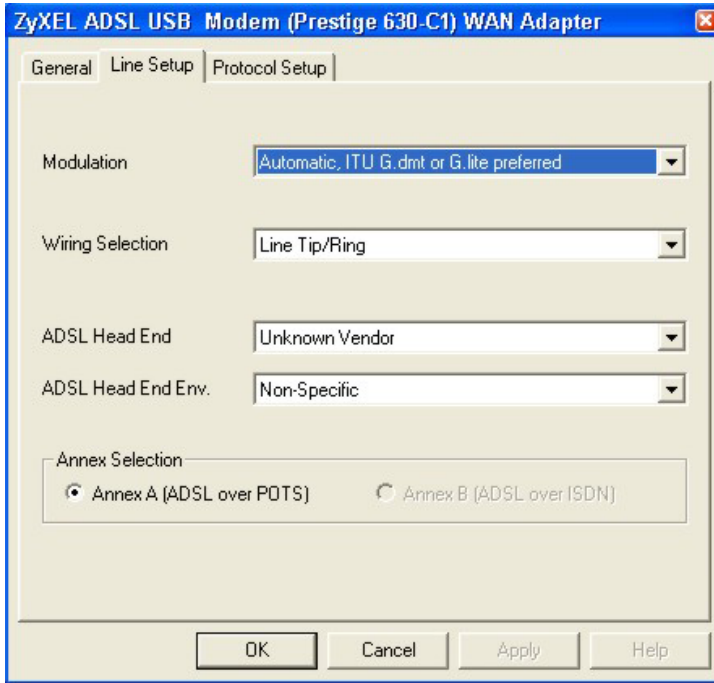


Figure 3-12 Control Panel: Line Setup

The following table describes the labels in this window.

Table 3-4 Control Panel: Line Setup

LABEL	DESCRIPTION
Modulation	This is the ADSL modulation type used to establish physical communications with the DSL provider. Select the modulation type used by your ISP.
Wiring Selection	Select the kind of wiring selection for your line. The default is Line Tip/Ring .

Table 3-4 Control Panel: Line Setup

LABEL	DESCRIPTION
ADSL Head End	Select your ISP vendor. If your vendor is not in this list, select Unknown Vendor (default). You don't need to configure this field.
ADSL Head End Env.	Select the head end environment given (Non-Specific or no Line Driver (BNA)). You don't need to configure this field.
Annex Selection	
Annex A (ADSL over POTS)	Select Annex A (ADSL over POTS) if your ADSL service is being provided over your usual telephone line.
Annex B (ADSL over ISDN)	Select Annex B (ADSL over ISDN) if your ADSL service is being provided over an existing ISDN line (this option may be grayed out if you purchased your modem in an area where ISDN service is not available).
Apply	Click this button to apply any changes made to the setup.

- Step 5.** Click on the **Protocol Setup** tab to configure parameters for Internet access. Be sure to use the correct Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) numbers given. The valid range for the VPI is 0 to 255 and for the VCI is 32 to 65535 (1 to 32 is reserved for local management of ATM traffic).

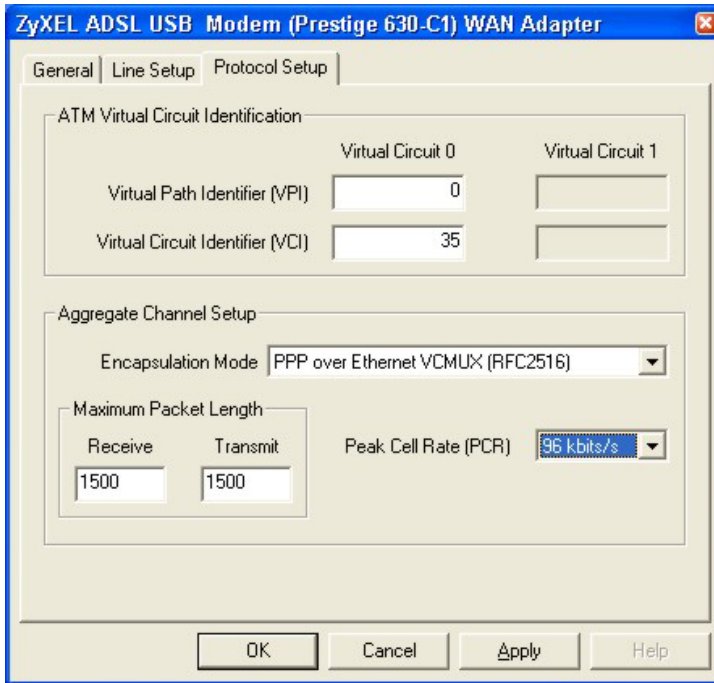


Figure 3-13 Control Panel: Protocol Setup

The following table describes the labels in this window.

Table 3-5 Control Panel: Protocol Setup

LABEL	DESCRIPTION
ATM Virtual Circuit Identification	
Virtual Path Identifier (VPI)	Enter the Virtual Path Identifier(s) (VPI) given.
Virtual Circuit Identifier (VCI)	Enter the Virtual Channel Identifier(s) (VCI) given.
Aggregate Channel Setup	
Encapsulation Mode	Select the method of encapsulation used by your ISP. The choices differ depending on the mode selected during the setup process.

Table 3-5 Control Panel: Protocol Setup

LABEL	DESCRIPTION
Maximum Packet Length Receive/Transmit	Enter the maximum packet length for both received and transmitted packets.
Peak Cell Rate (PCR)	This is the maximum rate at which the sender can send cells. Select the PCR rate from the drop-down list box.
Apply	Click this button to apply any changes made to the setup.

You are done installing your modem.

3.5 Reconfiguring or Updating the DSL Provider (Encapsulation) mode

If you wish at a later time to reconfigure or update the **DSL Provider** (Encapsulation) mode you selected during modem installation, follow these steps.

- Step 1.** Close all Windows programs and applications.
- Step 2.** Make sure the Installation CD is in your computer. Double click the **Setup.exe** icon as you did when you first set up the modem. The following window will appear. Select **Configure the DSL Device** to choose a new mode from the Prestige's default list. Choose **Update your DSL profile** if you have a new **DSL Provider** (Encapsulation) mode saved at another location, such as on a disk or on your computer's hard drive. Click **Next** to continue.

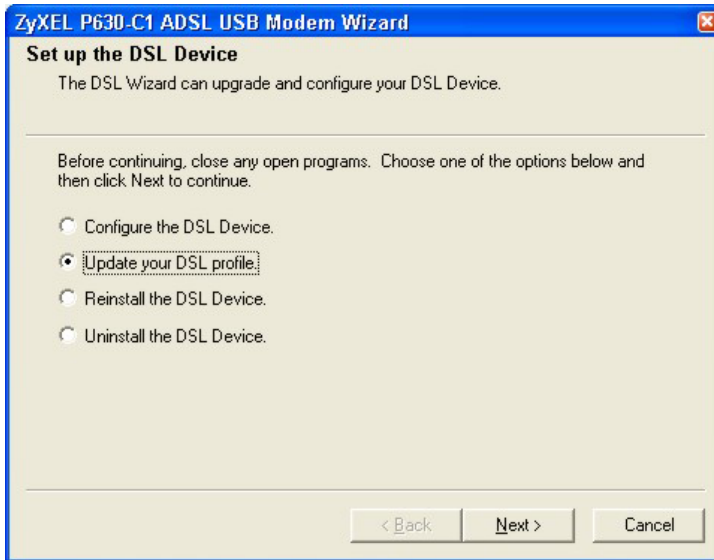


Figure 3-14 Updating DSL Profile

- Step 3.** If you selected Update your DSL profile, a window will open asking you to select a mode from a disk. If you do not have an updated DSL Service Provider mode, click cancel.
- Step 4.** You can then choose a new mode from the Prestige's Service Provider list (see *Figure 3-3 Select DSL Provider*) and continue the steps listed in the *Installing* section.

Chapter 4

Advanced Control Panel

This chapter shows you how view advanced modem information.

4.1 Advanced control panel

The advanced control panel provides additional information on specific connection performance. The following two buttons appear on all tabs:

Table 4-1 Advanced Control Panel Buttons

Button	Description
OK	Click this button to close the control panel.
Cancel	Click this button to cancel any changes made and close the control panel.
Help	Click this button to see descriptions of fields in the window.

4.2 Viewing General Statistics

- Step 1.** Double click on the **Control Panel** icon.
- Step 2.** Press the **ALT** and **A** keys simultaneously to bring up the following window. This is the General tab for the advanced control panel.

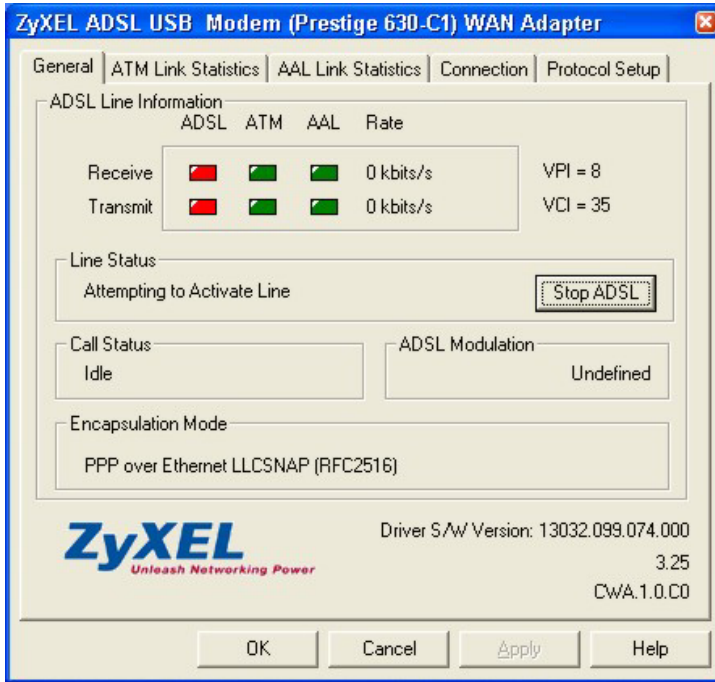


Figure 4-1 Advanced Control Panel: General

The following table describes the labels in this window.

Table 4-2 Advanced Control Panel: General

LABEL	DESCRIPTION						
ADSL Line Information	<p>These LEDs show the status of the links below. The LED descriptions are as follows:</p> <table border="1"> <tr> <td>Red</td> <td>Link Down</td> </tr> <tr> <td>Green (steady on)</td> <td>Link Up</td> </tr> <tr> <td>Green (flashing)</td> <td>Transmitting Data</td> </tr> </table>	Red	Link Down	Green (steady on)	Link Up	Green (flashing)	Transmitting Data
Red	Link Down						
Green (steady on)	Link Up						
Green (flashing)	Transmitting Data						
ADSL Receive/Transmit	This shows the status of the ADSL link.						
ATM Receive/Transmit	This shows the status of the ATM link.						
AAL Receive/Transmit	This shows the status of the AAL (ATM Adaption Layer) link.						

Table 4-2 Advanced Control Panel: General

LABEL	DESCRIPTION
Rate Receive/Transmit	These are the rates in kbps for data being received and transmitted.
VPI/VCI	These are the Virtual Path and Virtual Circuit Identifiers.
Line Status	This tells you the status of the ADSL line.
Start/Stop ADSL	Click this button to start or stop the ADSL connection.
Call Status	This shows the status of the ADSL line.
ADSL Modulation	This is the ADSL modulation type used to establish physical communications with the DSL provider.
Encapsulation Mode	This shows the mode of encapsulation chosen during modem installation (also referred to as the DSL Provider mode).
Apply	Click this button to apply any changes made to the setup.

4.3 Viewing ATM Link Statistics

Click the **ATM Link Statistics** tab to view ATM-related statistics as seen in this window. These statistics refer to data collected on all active virtual channels.

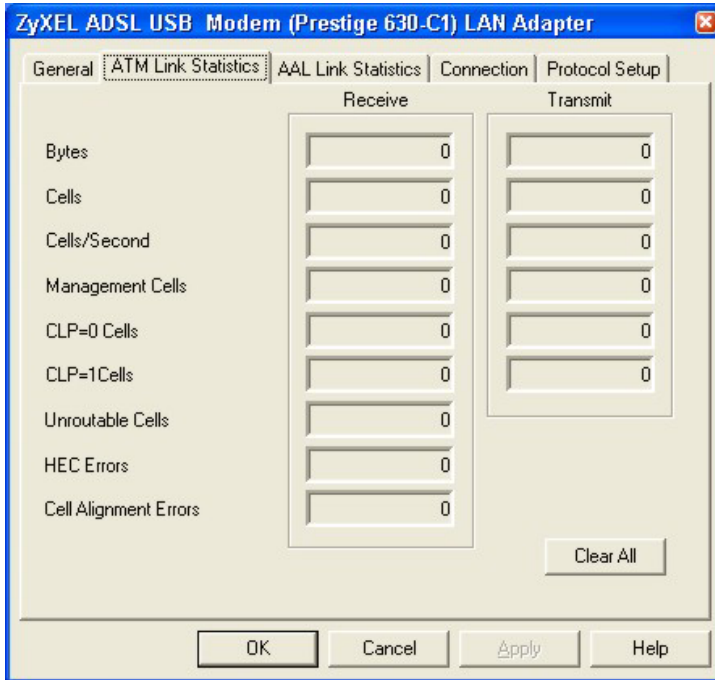


Figure 4-2 Advanced Control Panel: ATM Link Statistics

The following table describes the labels in this window.

Table 4-3 Advanced Control Panel: ATM Link Statistics

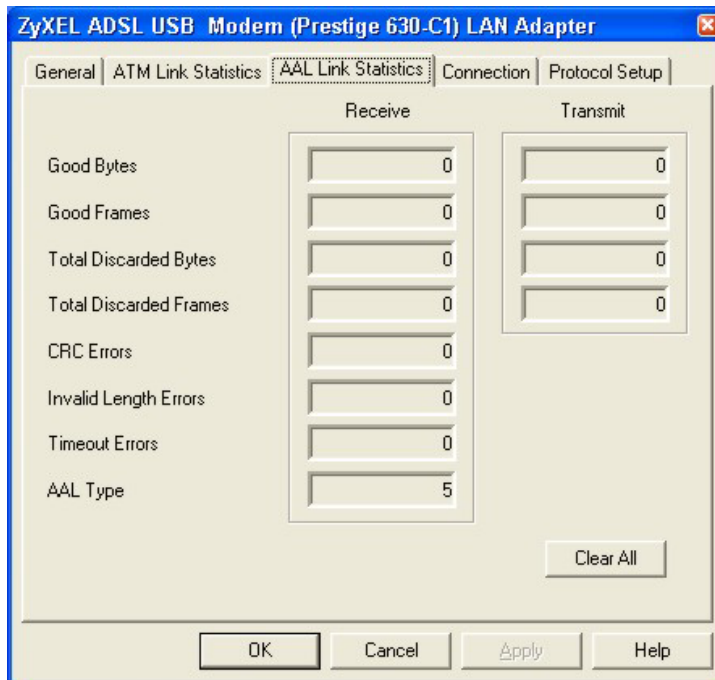
LABEL	DESCRIPTION
Bytes	This is the total number of bytes received and transmitted.
Cells	This is the total number of (53-byte octet) cells received and transmitted.
Cells/Second	This refers to the number of cells processed in a one-second period.
Management Cells	This refers to the number of management cells.
CLP=0 Cells	This refers to the number of cells processed with the CLP bit in the header set to zero.
CLP=1 Cells	This refers to the number of cells processed with the CLP bit in the header set to zero.

Table 4-3 Advanced Control Panel: ATM Link Statistics

LABEL	DESCRIPTION
Unroutable Cells	This refers to the number of cells received that had no active Virtual Channel to which they could be routed.
HEC Errors	This shows the number of HEC (Header Error Control) errors.
Cell Alignment Errors	This shows the number of cell alignment errors.
Clear All	Click this button to reset all statistics to zero.

4.4 Viewing AAL Link Statistics

Click the **AAL Link Statistics** tab to view AAL (ATM Adaption Layer)-related statistics as seen in this window.

**Figure 4-3 Advanced Control Panel: AAL Link Stats**

The following table describes the labels in this window.

Table 4-4 Advanced Control Panel: AAL Link Stats

LABEL	DESCRIPTION
Good Bytes	This is the total number of good bytes received and transmitted.
Good Frames	This is the total number of good frames received and transmitted.
Total Discarded Bytes	This is the total number of bytes discarded because of any error.
Total Discarded Frames	This is the total number of frames discarded because of any error.
CRC Errors	This is the total number of frames received with CRC errors.
Invalid Length Errors	This is the total number of frames received with an invalid length.
Timeout Errors	This is the total number of frames not reassembled within the time allowed.
AAL Type	This refers to the protocol that describes how the frames are to be built or reassembled.
Clear All	Click this button reset all statistics to zero.

4.5 Viewing Connection Statistics

Click the **Connection** tab to view information about the ADSL connection.

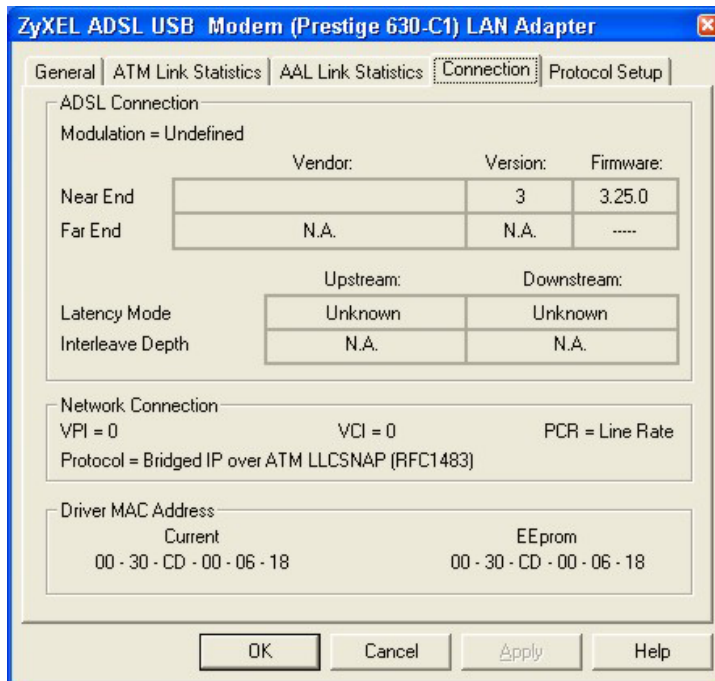


Figure 4-4 Advanced Control Panel: Connection

The following table describes the labels in this window.

Table 4-5 Advanced Control Panel: Connection

LABEL	DESCRIPTION
ADSL Connection	
Modulation	This displays the current modulation type being used by the Prestige. The modulation type identifies the modulation standard used to transfer data between the Prestige and the ADSL line provider's ADSL equipment.
Vendor Near End/Far End	The Near End Vendor is the manufacturer of the local ADSL chip/device. The Far End Vendor is the manufacturer of the remote ADSL chip/device.
Version Near End/Far End	The Near End Version is the version of the local ADSL chip/device. The Far End Version is the version of the remote ADSL chip/device.

Table 4-5 Advanced Control Panel: Connection

LABEL	DESCRIPTION
Firmware Near End/Far End	The Near End Firmware is the firmware on the local ADSL chip/device. The Far End Firmware is the firmware on the remote ADSL chip/device.
Latency Mode Upstream/Downstream	This is the type of latency being used.
Interleave Depth Upstream/Downstream	This is the interleave depth.
Network Connection	
VPI/VCI/PCR/ Protocol	These show the following: Virtual Path Identifier, Virtual Circuit Identifier, the Peak Cell Rate, and the encapsulation protocol.
Driver MAC Address Current Eeprom	The Driver MAC Address Current is the MAC address currently used by the modem driver. The Driver MAC Address Eeprom is the hardwired MAC address on the modem.

4.6 Viewing Protocol Setup

Click the **Protocol Setup** tab to view and modify the settings that were configured during modem installation.

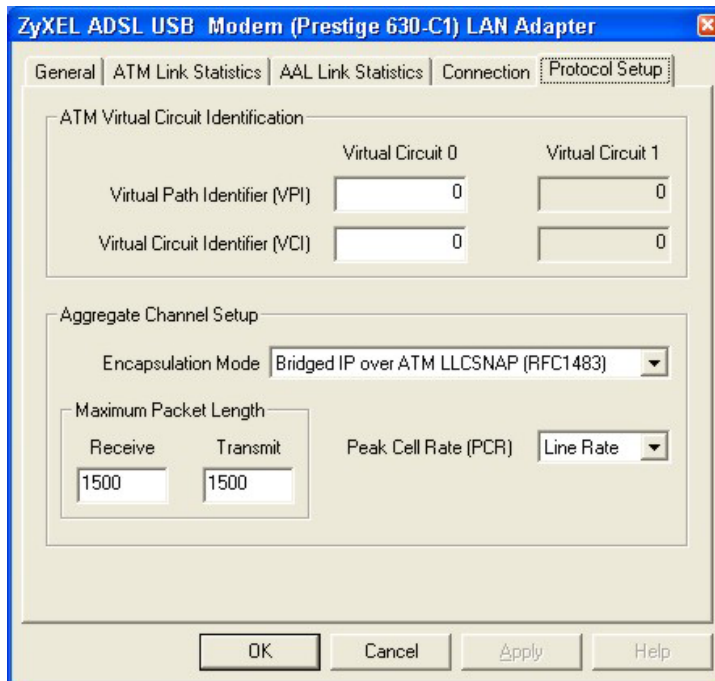


Figure 4-5 Advanced Control Panel: Protocol Setup

The following table describes the labels in this window.

Table 4-6 Advanced Control Panel: Protocol Setup

LABEL	DESCRIPTION
ATM Virtual Circuit Identification	
Virtual Path Identifier (VPI)	Enter the Virtual Path Identifier(s) (VPI) given.
Virtual Circuit Identifier (VCI)	Enter the Virtual Channel Identifier(s) (VCI) given.
Aggregate Channel Setup	
Encapsulation Mode	Select the method of encapsulation used by your ISP. The choices differ depending on the mode selected during the setup process.

Table 4-6 Advanced Control Panel: Protocol Setup

LABEL	DESCRIPTION
Maximum Packet Length Receive/Transmit	Enter the maximum packet length for both received and transmitted packets.
Peak Cell Rate (PCR)	This is the maximum rate at which the modem can send cells. Select the PCR rate from the drop-down list box.
Apply	Click this button to apply any changes.

Chapter 5

Uninstalling and Reinstalling Your Modem Driver

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

5.1 Uninstalling versus Reinstalling the Modem Driver

Uninstall the modem driver if you are no longer using the Prestige. Reinstall the modem driver if you are having trouble with modem (see the *Troubleshooting* section).

5.2 Uninstall Procedure

Follow these steps to completely uninstall your modem's software driver.

- Step 1.** Close all Windows programs and applications.
- Step 2.** Make sure the Installation CD is in your computer. Double click the **Setup.exe** icon as you did when you first set up the modem. The **Set Up DSL Device** window appears. Select **Uninstall the DSL Device** and click **Next**.

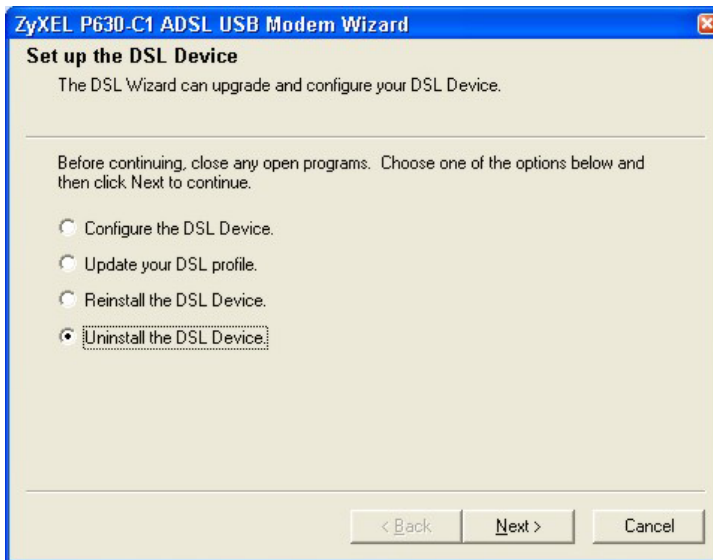


Figure 5-1 Uninstall the DSL Device

Step 3. Choose to uninstall the modem only or the Wizard and modem together. Selecting **Uninstall the Wizard and DSL Device** will cause all service provider information to be lost. Click **Next**.

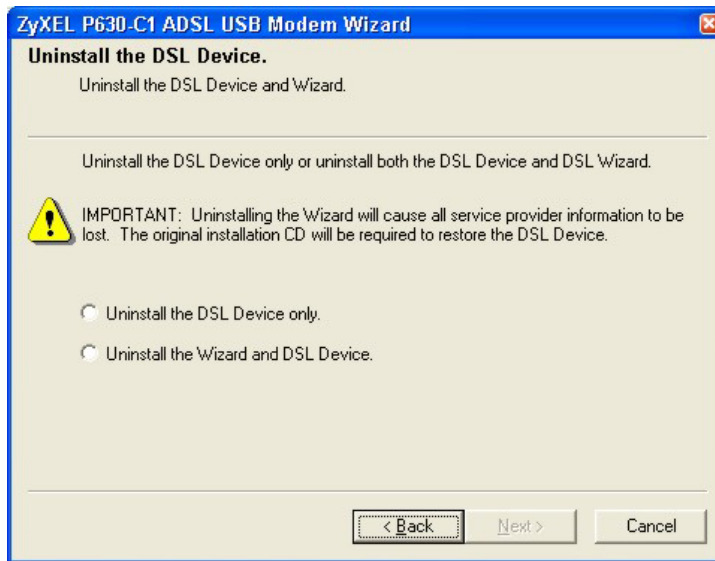


Figure 5-2 Uninstall the DSL Device Selection

Step 4. If you selected **Uninstall the Wizard and DSL Device**, a warning message displays prompting you to confirm your selection. Click **Yes** to confirm.



Figure 5-3 Uninstall Warning

After the driver has been successfully uninstalled the desktop icon(s) will not be present.

5.3 Reinstall Procedure

Follow these steps to reinstall your modem's software driver.

Step 1. Close all Windows programs and applications.

- Step 2.** Make sure the Installation CD is in your computer. Double click the **Setup.exe** icon as you did when you first set up the modem. The **Set Up DSL Device** window appears. Select **Reinstall the DSL Device** and click **Next**.

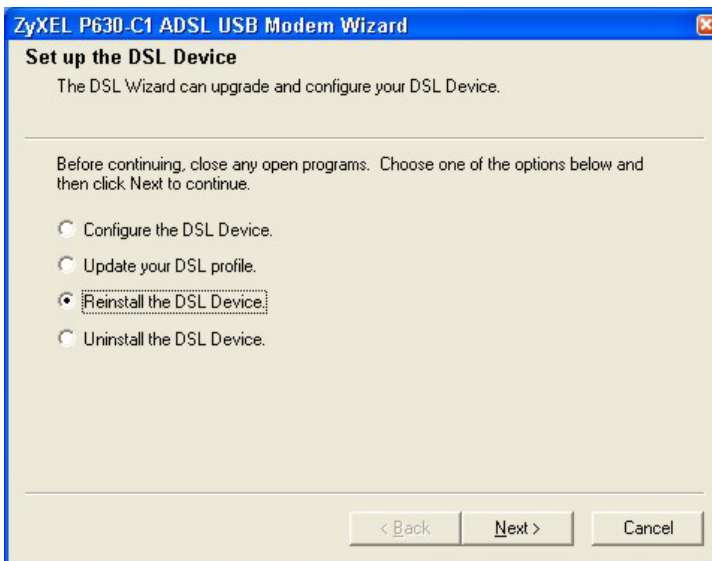


Figure 5-4 Uninstall the DSL Device

- Step 3.** Choose to reinstall the modem only or the Wizard and modem together. Selecting **Reinstall the Wizard and DSL Device** will take you back to the **DSL Provider** (Encapsulation) selection window (see *Section 2.2 Step 4*).

Appendix A

Troubleshooting

This chapter covers potential problems and the possible solutions.

Table A-1 Troubleshooting

PROBLEM	CORRECTIVE ACTION
None of the LEDs are on when you turn on the Prestige	<p>Make sure your computer is turned on.</p> <p>Check the USB cable connections between the Prestige and your computer.</p> <p>Carefully follow the instructions in this <i>User's Guide</i> to uninstall and reinstall the software driver.</p> <p>Contact your vendor if these steps fail to solve the problem.</p>
I cannot connect to the Internet.	<p>Make sure the ADSL port is properly connected to the wall jack.</p> <p>Check the status of the line in the General tab of the Advanced Control Panel. Try to stop and start the ADSL connection under Line Status.</p> <p>Check that the user name and password are correct in the PPP section in the WAN Configuration screen.</p> <p>Restart your computer. Contact your vendor if these steps fail to solve the problem.</p>
I cannot get the ZyXEL Configuration Wizard software driver to uninstall and reinstall properly.	<p>Make sure you are using the Prestige's installation program if you want to utilize the ZyXEL Configuration Wizard.</p> <p>Close your Windows applications.</p> <p>Run Windows Explorer and go to the folder that contains the software driver.</p> <p>Make sure the included CD is inserted in the disk drive. Double click Setup.exe.</p> <p>Contact your vendor if these steps fail to solve the problem.</p>

Appendix B

Virtual Circuit Topology

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:

- Virtual Channel Logical connections between ATM switches
- Virtual Path A bundle of virtual channels
- Virtual Circuit A series of virtual paths between circuit end points

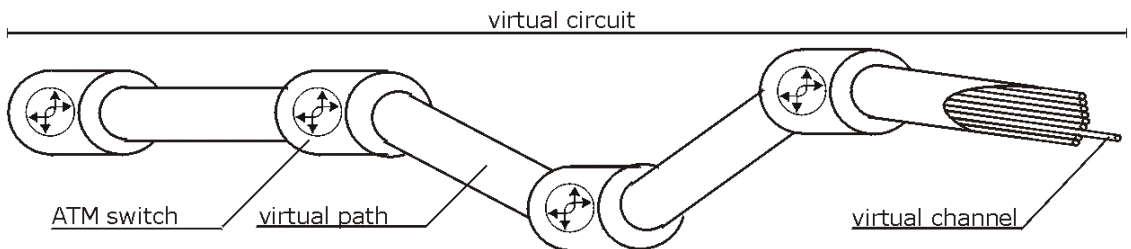


Diagram 1 Virtual Circuit Topology

Think of a virtual path 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; a VCI (Virtual Channel Identifier) identifies a channel within a virtual path.

The VPI and VCI identify a virtual path, that is, termination points between ATM switches. A series of virtual paths make up a virtual circuit.

Your service provider should supply you with VPI/VCI numbers.

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