

ADSL Modem

U S E R ' S M A N U A L

PCI



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Getting Started

Congratulations on purchasing your Zoom ADSL PCI modem.

This Manual is organized as follows:

- *Getting Started*
- *Installation*
- *Troubleshooting*
- *Regulatory Information.*

Important! Before You Begin

Before installing your modem, you must have DSL service enabled on your telephone line. To do this, you need to sign up with a DSL service provider. They will arrange to have DSL enabled, and provide you with a Username and Password (if required) and the Communications Settings necessary to log on to their network.

You will need your Username and Password to complete the installation, so please make sure you have them at hand.

Username _____

Password _____

The following table lists some of the more common DSL broadband communications settings. This table is intended for reference only. Typically you should not need to enter this information; it should be automatically supplied if needed as part of your service provider's installation procedure.

Service Provider	VPI	VCI	Protocol (Encapsulation)
France (1)	8	35	PPPoA LLCSNAP (RFC 2364)
France (2)	8	67	PPPoA VCMUX (RFC 2364)
Portugal	0	35	PPPoE LLCSNAP (RFC 2516)
Spain—Telefonica	8	32	PPPoE LLCSNAP (RFC 2516)
Spain—Tiscali	1	32	PPPoA VCMUX (RFC 2364)
U.K.	0	38	PPPoA VCMUX (RFC 2364)
U.S.A.	0	35	PPPoE LLCSNAP (RFC 2516)

System Requirements

- Windows 98/98SE, 2000, Millennium (Me), or XP operating system.
- PC-compatible with an available PCI slot
- 266 MHz or faster computer and minimum of 32 MB of RAM for Windows 98/2000/Me
- 400 MHz or faster computer and minimum of 64 MB of RAM for Windows XP.

You also need a telephone wall jack to plug the modem into. The associated phone line must be DSL enabled.

What Your Package Contains

In addition to this manual, your package includes the following items:

- ADSL PCI modem.
- RJ-11 phone cord.
- RJ-11-to-wall-jack adapter (certain models only).
- DSL phone filter(s) (certain models only).
- Installation software, Customer Support information, and Warranty on CD.

If You Need Help

- If you have hardware installation problems, our Technical Support Staff will be happy to assist you. Please see the Customer Support portion of the CD for contact information.
- If you have DSL service problems, you should contact your DSL service provider.

Installation

Setting up the Zoom ADSL PCI modem involves the following tasks:

- *Installing the software*
- *Installing the PCI hardware and installing phone filters (if applicable)*
- *Connecting to the Internet.*

Installing the Software

Note: The dialog boxes shown here are typical of Windows 98. Depending on your computer's operating system, your dialog boxes may look slightly different.

- 1 Insert the supplied CD into your CD-ROM drive. The CD should start automatically after a few seconds. If it doesn't, from the desktop click **Start | Run** and type **E:\setup.exe**, where **E** is the letter of your CD-ROM drive. Click **OK**.
- 2 When the **Main Menu** displays, click **ADSL Modem Installation Wizard**.



- 3 Click the **PCI** option. The software installation proceeds automatically.
- 4 When the process is complete, you will be prompted to click **Finish** and then **OK** to shut down your computer.
IMPORTANT: Be sure to remove the CD from the CD-ROM drive **after** clicking **OK**. Continue below to install the PCI card hardware.

Installing the PCI Card

- 1 Before you install the PCI card, make sure your computer is turned off.**
- 2 Take the cover off your computer. You will probably have to remove several screws on the back of the case; most likely, they are near the outer edges.
- 3 Remove the cover plate from an available PCI slot. (You'll have to remove another couple of screws.)

Electrostatic Discharge Protection



CAUTION

Static electricity can damage components on your modem or inside your computer. Before removing the board from its bag, touch the computer's metal chassis to statically discharge yourself.

- 4 Remove the ADSL PCI card from its antistatic bag and note its Serial Number (located on the side of the bracket) below: (Should you ever need to contact Customer Support, you will need this Serial Number and it won't be visible once you've completed the installation.)

PCI Serial Number _____

- 5 Insert the card firmly into an available PCI slot. See the following illustration:



Be sure the bracket is lined up properly, then screw the bracket into the computer using the screw you removed with the cover plate. Be sure that the back end of the card (smaller gold finger area) is properly seated into the connector.

Tip: If you have a tower or mini-tower computer case with a vertical main board, you may want to lay the computer down on its side so you can push straight down on the PCI card to seat it firmly in its slot.

- 6 Replace the computer cover, and plug in the computer, **but do not turn the power on yet.**
- 7 Plug one end of the supplied phone cord into the modem's ADSL port and plug the other end into your telephone wall jack.



Note: If you want to connect a phone to your modem—or if there are any phones on the premises sharing this DSL-enabled phone line, you should use phone filters. Refer to the Appendix on page 18 if you need instructions.

Continue below to complete the installation.

Completing the Installation

- 1 Turn your computer back on.
Windows XP Users Only: You may see one or more **Found New Device Hardware** dialog boxes; if prompted to do so, click **Next** or **Finish**.

When the following dialog box displays, select your service provider or country from the dropdown list, and click **Next**.

Note! If you do not see your service provider or country listed, turn to page 14 for instructions.



- 2 Another dialog box displays, tracking the installation sequence.



Windows 98 Users: You may be asked for your Windows installation CD. If so, insert it into your computer's CD-ROM drive and click **OK**.

- 3 When the process is complete, you will be prompted to click **Finish** and the computer will automatically restart itself so the new settings can take effect.



You're done with your ADSL modem installation! Continue below to connect to the Internet.

Connecting to the Internet

If You Don't Have a Username or Password:

If your DSL service provider told you that you do not need a Username or Password, skip the steps below. To connect to the Internet, simply double-click your desktop's Web browser icon.

Once your computer is back on, you will notice a **Zoom PPP DSL** icon on the desktop.

- Double-click this icon.
- Enter the Username and Password that your service provider has given you and click **Dial** or **Connect**.

Your Username and Password will be verified and your modem will be registered on the service provider's network.

You are now connected to the Internet! To verify that you're successfully connected, click the DSL icon that resides in your system tray.



You can start or stop your DSL connection by clicking the Start or Stop button, respectively.

Monitoring Your DSL Connection

You can review or monitor your DSL connection and setup via the **Zoom PCI ADSL Control Panel**.

From the desktop, select **Start | Programs | Zoom PCI ADSL | Control Panel**. The following dialog box displays.



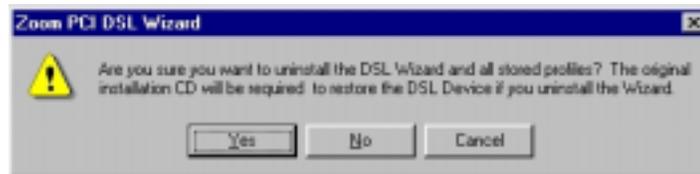
In addition, you can click on several other tabs that provide details about your DSL connection, including

- **ATM Link Statistics**
- **AAA Link Statistics**
- **Connection**
- **Protocol Setup.**

Removing Your Modem

If you ever want to remove your ADSL modem—for instance, if you move your computer to a location without ADSL service—you should remove the software before disconnecting the hardware. Follow the steps below.

- 1 From the computer desktop, select **Start | Programs | Zoom PCI ADSL | Uninstall**.
- 2 When prompted to confirm your choice of action, click **Yes**.



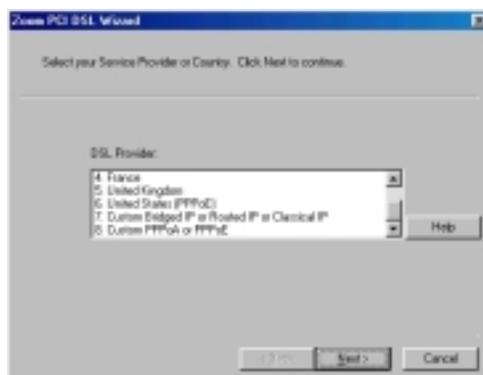
- 3 When the software removal process is complete, you will be prompted to restart your computer. Ignore this prompt and click **Cancel**. Shut down your computer and then remove the PCI modem hardware. Refer to the **Installing the PCI Card** section on page 8 if you need to.

Appendix A

Custom Installation Instructions

Most users will follow the installation instructions in the main manual. Follow these instructions only if you do not see your service provider or country listed in the Zoom PCI DSL Wizard box depicted on page 10.

- 1 When you turn the computer back on after installing the PCI Card, the **Zoom PCI DSL Wizard** dialog box displays.



You have two basic choices:

- **Custom PPPoA or PPPoE**
- **Custom Bridged IP or Routed IP or Classical IP.**

Your service provider should have provided you with your protocol type, if you don't know your protocol type, you will have to request it. **Note:** There are several protocol variations, but they fall into two categories: PPP (Point-to-Point Protocol) and IP (Internet Protocol). We have included the table below for reference.

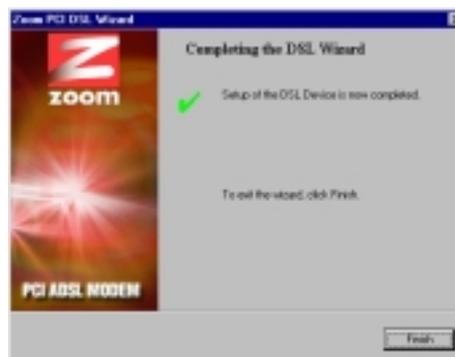
Once you make your selection, click **Next**.

If your provider specified one of these protocols, select PPPoA or PPPoE	If your provider specified one of these protocols, select Bridged IP or Routed IP or Classical IP
PPPoA LLC RFC 2364	Bridged IP over ATM LLC SNAP RFC 1483
PPPoA VCMUX RFC 2364	Bridged IP over ATM VCMUX RFC 1483
PPPoE LLC SNAP RFC 2516	Classical IP over ATM RFC 1577
PPPoE VCMUX RFC 2516	Routed IP over ATM LLC SNAP RFC 1483

2 A dialog box displays, tracking the installation sequence.



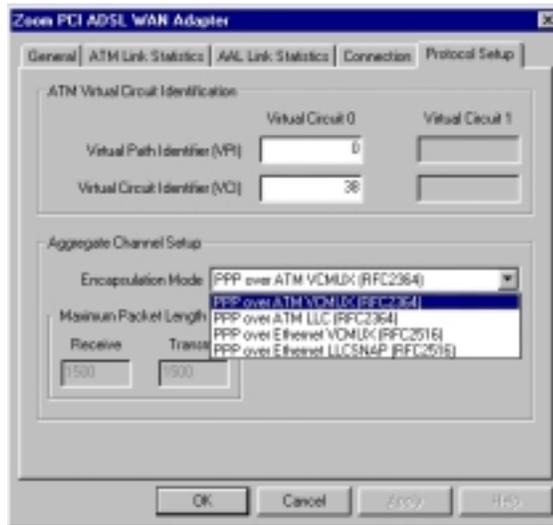
3 When the process is complete, you will be prompted to click **Finish** and the computer will automatically restart itself so the new settings can take effect.



4 From the desktop, select **Start | Programs | Zoom PCI ADSL | Control Panel** and click the **Protocol Setup** tab.

5 **If you selected Custom PPPoA or PPPoE in Step 1 on page 14:**

You'll see a dialog box with choices like those below.



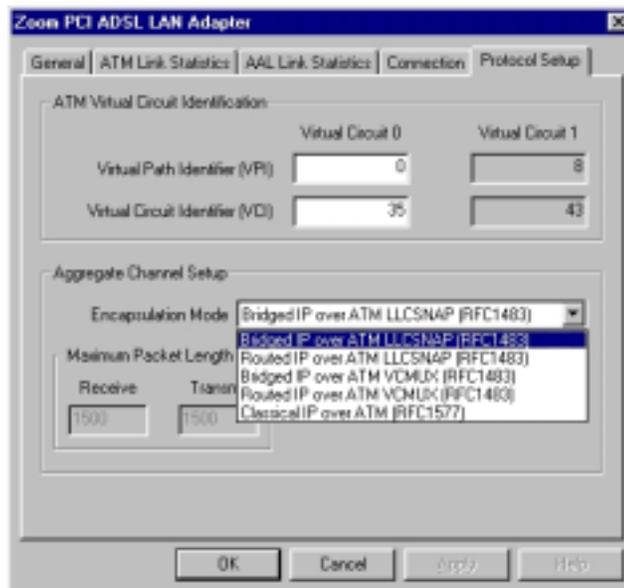
- Select the **Encapsulation Mode**.
- Enter the **VPI** and **VCI** numbers.

Note: Your provider should have supplied you with this information. If not, you will need to request it. You may also refer to the tables on page 5 and 15.

- Click **Apply** and then **OK**.

6 **If you selected Custom Bridged IP or Routed IP or Classical IP in Step 1 on page 14:**

You'll see a dialog box with choices like those below.



- Select the **Encapsulation Mode**.
- Enter the **VPI** and **VCI** numbers.

Note: Your provider should have supplied you with this information. If not, you will need to request it. You may also refer to the tables on page 5 and 15.

- Click **Apply** and then **OK**.

7 You're done with your ADSL modem installation! Now turn to page 11 to connect to the Internet.

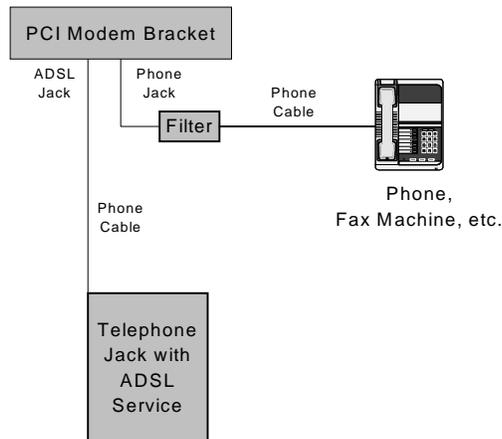
Appendix B

Installing Phone Filters

Phone filters prevent noise and interference if you are speaking on the telephone or otherwise using the phone line while your ADSL modem is on. Your modem package may include one or more filters. If not, you may need to purchase your own. Filters come in two types—with one jack or two. Follow the instructions below that match your filter type.

If you have a filter with one jack:

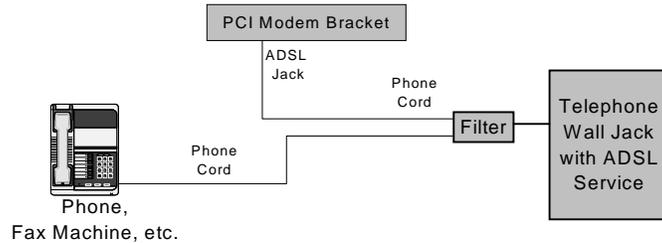
To connect a phone directly to your modem, attach the filter as shown below.



- 1:** Plug the filter's **LINE** end into the modem's telephone jack.
- 2:** Plug the telephone's cord into the filter's **PHONE** end.

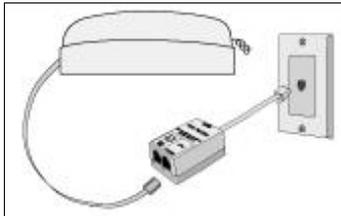
If you have a filter with two jacks:

To use a phone near your modem, you can connect the filter as shown below.



- 1: Plug the filter's **LINE** end into the phone wall jack.
- 2: Plug the telephone's cord into the filter's **PHONE** end.
- 3: Plug one end of the supplied phone cord into the filter's **DSL** jack and the other end into the modem's ADSL jack.

Note: In addition to the filter used in conjunction with your modem, you should install a filter on each phone on the premises that is sharing the DSL-enabled line. Plug the phone's cord into the filter's **PHONE** end and plug the filter's **LINE** end into the wall jack.



Appendix C

Troubleshooting

Our Technical Support staff is ready to help with any questions you may have about your ADSL modem. You may, however, find an easy solution to your problem by referring to this troubleshooting section.

*You should also refer to the Frequently Asked Questions (FAQs) on the CD (click on **Support**), and visit our web site for the latest tips: www.zoom.com.*

PROBLEM: I installed the software and connected the DSL modem to my phone line, but I cannot connect to the Internet.

SOLUTION: Make sure you've securely connected the RJ-11 phone cord from the wall jack to the DSL modem connector on the back of your computer.

SOLUTION: Make sure you've connected the RJ-11 phone cord to a DSL line, not a standard telephone jack. You cannot use a standard telephone jack for DSL service *unless* that phone line has been enabled for DSL by your phone service provider.

SOLUTION: Make sure, if you are using phone filters, that they are installed correctly (see page 18 for instructions if necessary).

SOLUTION: Make sure you have typed your Username and Password correctly.

SOLUTION: Contact your service provider to ensure that the DSL connection is functioning properly.

PROBLEM: Why do I hear static or noise when I'm using my telephone?

SOLUTION: If that phone does not have its own filter, you may hear static or high-pitched noise if you make a phone call while your ADSL modem is on. A filter also prevents a phone from interfering with, or dropping, your DSL connection.

Appendix D

Regulatory Information

E.U. Declaration of Conformity

The manufacturer declares under sole responsibility that this equipment is compliant to Directive 1999/5/EC (R&TTE Directive) via the following.

Directive	Standard	Test Report Issued
73/23/EEC – Low Voltage	EN 60950:1992, A1-A4, A11	electrical safety
89/336/EEC – EMC	EN 55024:1998 ^{ed}	EMC – immunity
	EN 55022:1998 ^{ed}	EMC – emissions

This product is CE Marked.

Electrostatic Discharge Statement

This unit may require resetting after a severe electrostatic discharge event.

Additional compliance information is included on the CD.

