

ADSL Modem

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

USB



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Getting Started

*Congratulations on purchasing your Zoom ADSL USB modem.
This Guide 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 a contract 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 to 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	PPPoE LLCSNAP (RFC 2516)
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 a USB port: 200 MHz or faster PC for Windows 98/2000/Me; 350 MHz or faster PC for Windows XP.
- 32 MB of RAM or greater.

What Your Package Contains

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

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

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

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 USB modem involves the following tasks:

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

Installing the Software

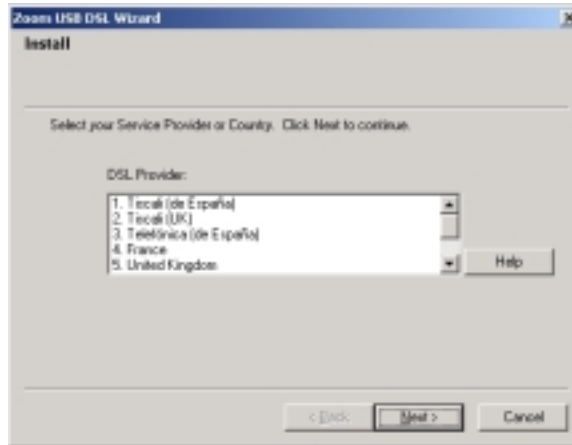
Note: The dialog boxes shown here are typical of Windows 98. Depending on your computer's operating system, your dialog boxes may look slightly different.

- 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 Click the **ADSL Modem Installation Wizard** button.

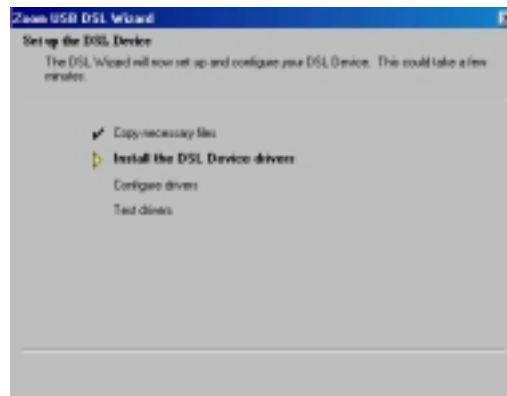


- 3 Click the **USB** option.
- 4 When the following dialog box displays, select your service provider or country from the dropdown list and click **Next**.

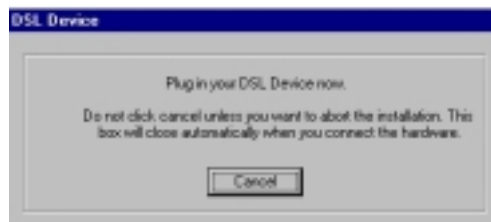
Note! If you do not see your service provider or country listed, turn to page 15 for instructions.



5 A dialog box displays, tracking the installation sequence.



No action is required on your part until another dialog box displays, prompting you to install the hardware.



Keep your computer on and continue below.

Connecting the Hardware

All connections originate from the back panel of your modem.

- 1 Using the supplied USB cable, plug the cable's square end into the modem's USB jack. Plug the cable's rectangular end into your computer's USB port.

Tip: You can identify the USB jack and cable by the USB symbol:



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

- 2 Plug one end of the supplied phone cord into one of the modem's two phone jacks and plug the other end into the telephone wall jack. **Note:** If there any phones on the premises sharing this DSL-enabled phone line, we recommend the use of filters. See page 10 for instructions.
- 3 Once you've performed Step 2, the computer automatically installs the necessary programs required by the hardware. (You will see another tracking box.) When the process is complete, you will be prompted to click **Finish**.



Windows 98/98SE and Me Users: Your computer will restart automatically to enable the new settings.

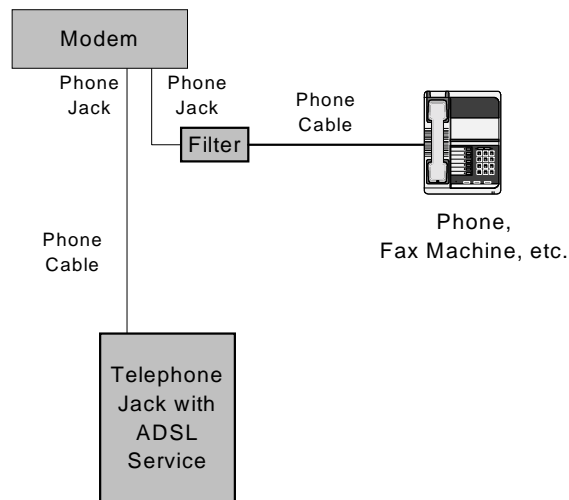
Windows XP and 2000 Users: A restart is not necessary. Close or minimize the Zoom ADSL user interface box.

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.

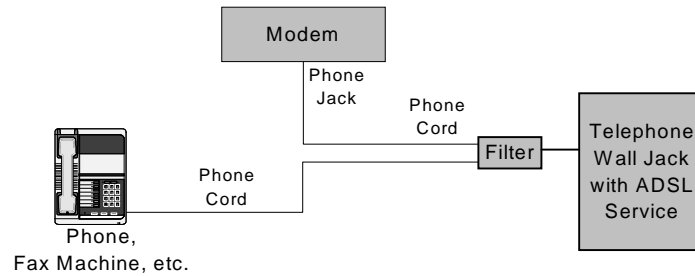


1: Plug the filter's **LINE** end into one of the modem's **PHONE** jacks.

2: Plug the telephone's cord into the filter's **PHONE** end.

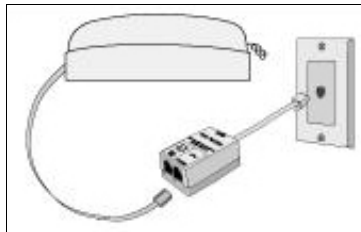
If you have a filter with two jacks:

- To use a phone near your modem, 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 one of the modem's phone jacks.

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.



The final stage is to connect to the Internet. Continue below.

Connecting to the Internet

If You Don't Have a Username or Password:

If your DSL service provider instructed 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.

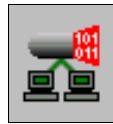
- 1 Now that you have installed the hardware—and your computer is on—the modem's front panel **PWR** light is lit.
The **LINK** light flashes while the modem is establishing a connection; it remains constantly on once it has connected successfully. When the light remains constantly on (this may take several minutes), you are ready to log on to the Internet.
(There is a third LED, **DATA**, which blinks when the modem is transferring or receiving data.)

- 2 Notice that there is now a **Zoom PPP DSL** icon on your computer desktop.

- Double-click the **PPP DSL** 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 USB DSL Control Panel**.

From the desktop, select **Start | Programs | Zoom USB DSL | Control Panel**. The **General** dialog box displays.



In addition, there are several more tabs that provide details about your DSL connection, including

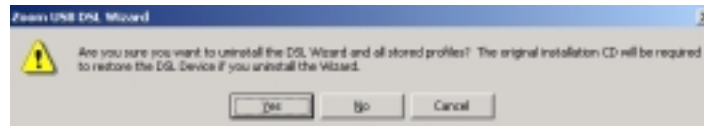
- **ATM Link Statistics**
- **AAA Link Statistics**
- **Connection**
- **Protocol Setup.**

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 desktop, select **Start | Programs | Zoom USB DSL | Uninstall**.

2 When prompted to confirm your choice, click **Yes**.



3 Unplug your modem hardware.

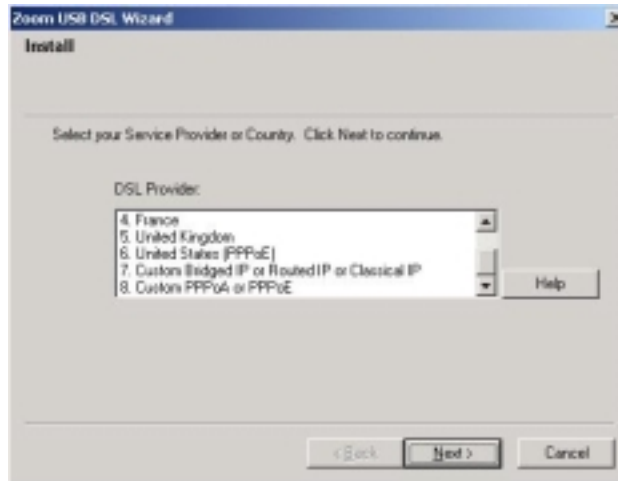
Appendix A

Custom Installation Instructions

Most users will follow the installation instructions on page 7. Follow these instructions only if you do not see your service provider or your country listed in the Zoom DSL Installation Wizard box depicted on that page.

Installing the Software

- 1 The **Zoom USB DSL Wizard** dialog box should be open.
(If it isn't, make sure the Zoom CD-ROM is inserted in your computer, then go to **Start | Run**, type **E:\setup.exe**, where **E** is the letter of your CD-ROM drive, and click **OK**. Then select **Install Software**.)



You have two basic choices:

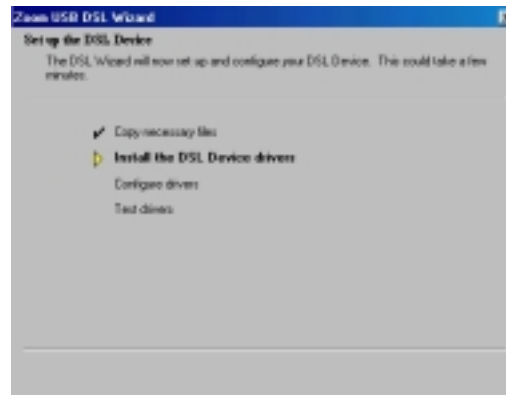
- **Custom PPPoA or PPPoE**
- **Custom Bridged IP or Routed IP or Classical IP.**

Your service provider should have provided you with your protocol type, if not, you will have to request it. **Note:** There are several protocol variations, but they fall into two categories: PPP (Point-to-Point Protocol) or 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

2 A dialog box displays, tracking the installation sequence.



No action is required on your part until another dialog box displays, prompting you to install the hardware.



Keep your computer on and continue below.

Connecting the Hardware

All connections originate from the back panel of your modem.

- 1 Using the supplied USB cable, plug the cable's square end into the modem's USB jack. Plug the cable's rectangular end into your computer's USB port.

Tip: You can identify the USB jack and cable by the USB symbol:



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

- 2 Plug one end of the supplied phone cord into one of the modem's two phone jacks and plug the other end into the telephone wall jack.

Note: If there any phones on the premises sharing this DSL-enabled phone line, we recommend the use of filters. See page 10 for instructions.

- 3 Once you've performed Step 2, the computer automatically installs the necessary programs required by the hardware. (You will see another tracking box.) When the process is complete, you will be prompted to click **Finish**.



Windows 98/98SE and Me Users: Your computer will restart automatically to enable the new settings.

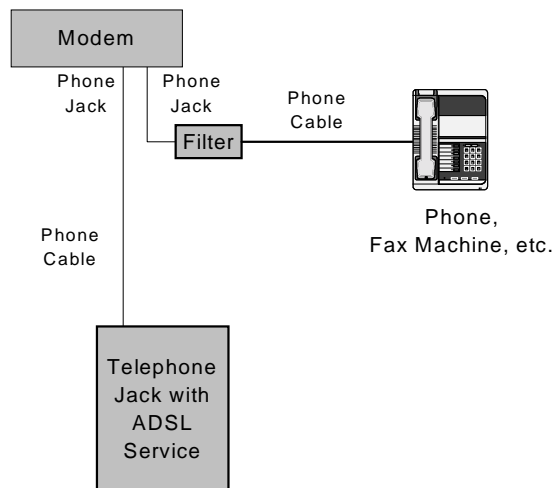
Windows XP and 2000 Users: A restart is not necessary. Close or minimize the Zoom ADSL user interface box.

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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.

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

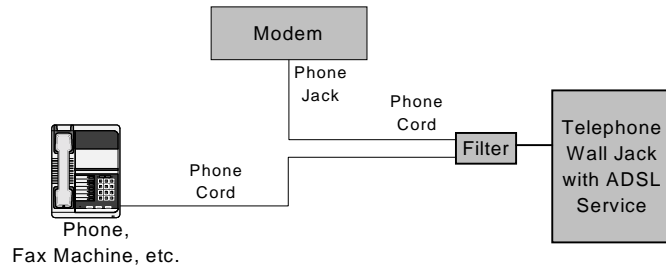


1: Plug the filter's **LINE** end into one of the modem's **PHONE** jacks.

2: Plug the telephone's cord into the filter's **PHONE** end.

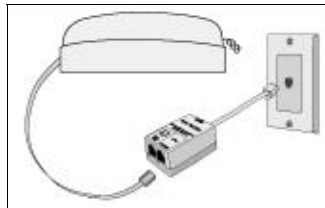
If you have a filter with two jacks:

- To use a phone near your modem, 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 one of the modem's phone jacks.

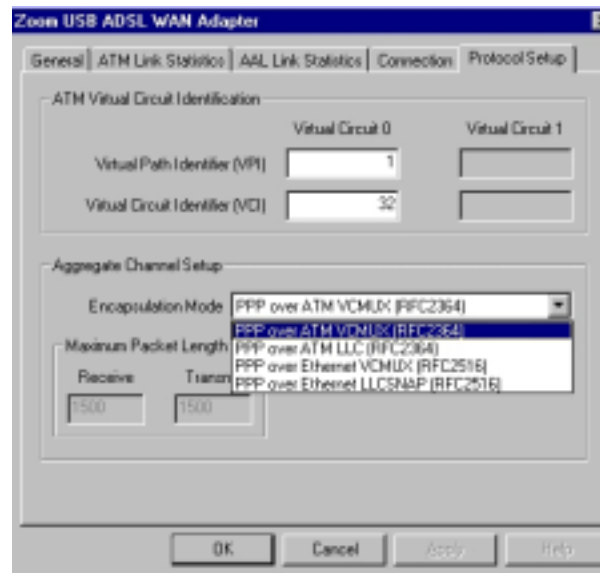
Note: In addition to the filter used in conjunction with your modem, you should install a filter on each phone on the premises that is sharing the DSL-enabled line. Plug the phone's cord into the filter's **PHONE** end and plug the filter's **LINE** end into the wall jack.



Completing the Software Installation

- 1 From the desktop, select **Start | Programs | Zoom USB DSL | Control Panel** and click the **Protocol Setup** tab.
- 2 **If you selected Custom PPPoA or PPPoE in Step 1 on page 15:**

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



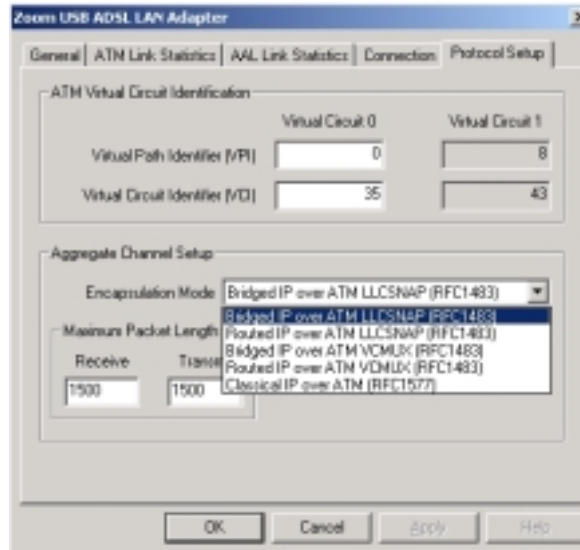
- Select the **Encapsulation Mode**.
- Enter the **VPI** and **VCI** numbers.

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 16.

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

3 **If you selected Custom Bridged IP or Routed IP or Classical IP in Step 1 on page 15:**

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 16.

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

4 You're done! Turn to page 12 to connect to the Internet.

Appendix B

Troubleshooting

*Our Technical Support staff is ready to help you with any questions you may have about your DSL modem or Internet connection options. You may, however, find an easy solution to your problem by referring to these troubleshooting tips. 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 your modem's USB cord is securely plugged into your computer's USB port.

SOLUTION: Make sure, if you are using phone filters, that they are installed correctly (see page 10).

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.

PROBLEM: I accidentally unplugged the USB cable while using my modem, which resulted in a general protection fault (GPF) error message. What should I do?

SOLUTION: You must plug the modem back in and restart your computer to rectify this problem. **Remember:** Be careful not to unplug the USB cable while using your modem.

Appendix C

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 located on the CD.