

Quick Start

ADSL USB Modem

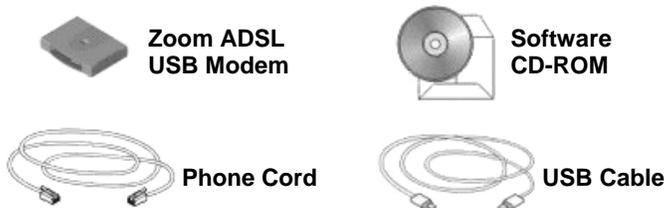
This Quick Start contains all the information you should need to install and use your Zoom ADSL USB modem. Instructions for both Windows and Macintosh computers are included.

Important! Before You Begin

Before you install your ADSL modem, you must have ADSL service enabled on your telephone line. To do this, you need to sign up with an ADSL service provider. Your service provider may refer to “ADSL service” as “DSL service.”)

Package Contents

Your package contains the items shown below:



The CD contains the installation software, documentation, warranty, and Customer Support information.

In addition, the package may include:

- Phone-jack adapter to adapt the phone cord to a particular phone jack (certain countries only)
- ADSL line filter(s) (certain modem model only).

If anything is missing or damaged, please contact Zoom Customer Support or your retailer or distributor.

You Will Also Need

- A Windows 98/98SE/Me/2000/XP or Macintosh computer equipped with a USB port.
- An ADSL-enabled telephone wall jack to plug the modem into.

Quick Start

If you have a Macintosh computer, please go to page 15. If you have a Windows computer, please continue below.

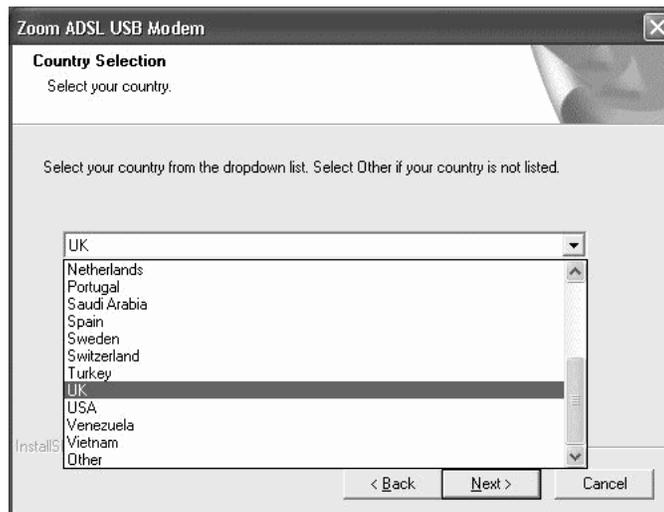
Step 1: Installing the Software and Hardware for Windows

- 1 Make sure that your computer is on.
- 2 Insert the supplied CD into the CD-ROM drive of your computer. The CD should start automatically and the **Language Selection** screen should appear. (If the CD does not start automatically, on the desktop, click the **Start** button, click **Run**, and then type **D:\setup.exe**, where **D** is the letter of your CD-ROM drive.)
- 3 Select your language. The **Main Menu** screen then opens.
- 4 Click **Installation Wizard**.
- 5 Click **USB** to start the software installation, then click **Next** when prompted.

6 In the **Country Selection** dialog box, select your country and click **Next**. If your country is not listed, select **Other**.

Depending on your selection, one of the following will happen:

- If your country only has one type of ADSL service, the **Start Copying Files** dialog box opens. Go to Step 9.
- If your country has more than one type of ADSL service, the **Service Provider Selection** dialog box opens. Go to Step 7.
- If you selected **Other**, the **Internet Settings Selection** dialog box opens. Go to Step 8.

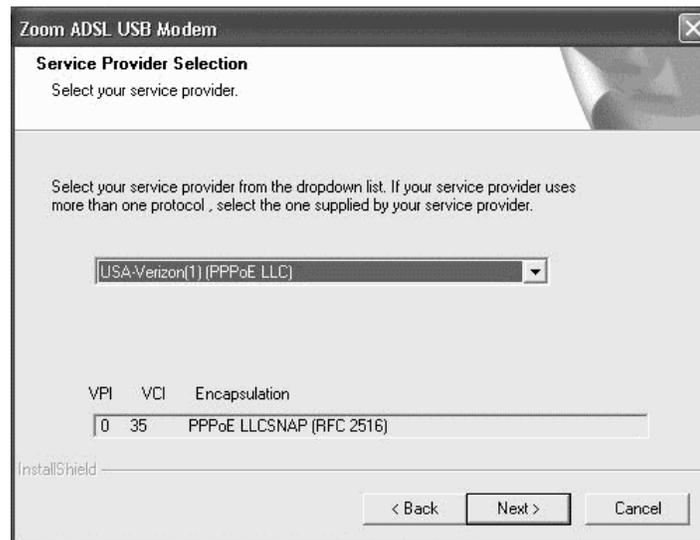


7 If your country has more than one type of ADSL service, the **Service Provider Selection** dialog box opens.

Select your service.

If you do not know which service to select, please contact your ADSL service provider to get the information. If you cannot or do not want to contact your service provider, we recommend that you first try the entry labeled (1). If you cannot connect once you have completed the installation, you will have to go to page 24 for additional instructions on changing your settings.

Go to Step 9.

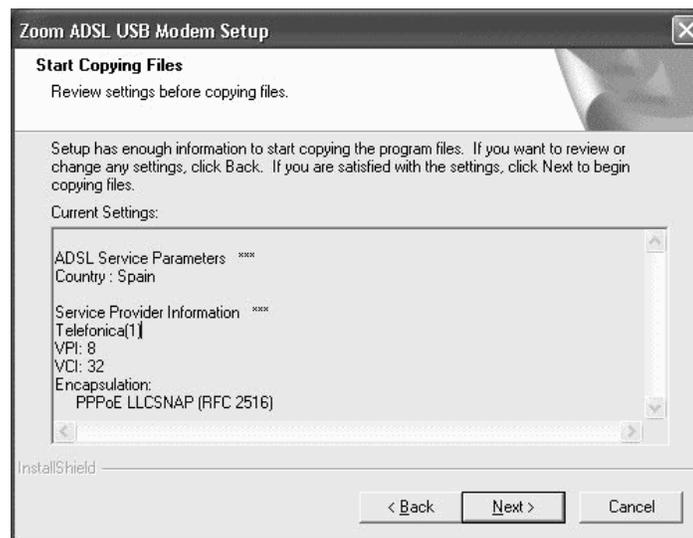


8 If you selected **Other** in Step 6, the **Internet Settings Selection** dialog box opens.

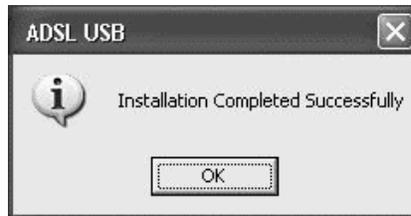
Enter the **VPI** and **VCI** numbers in their corresponding boxes, select the **Encapsulation Type** from the drop-down list, and click **Next**.

If you do not know your service provider's settings, please contact your provider and ask for them.

9 In the **Start Copying Files** dialog box, review the settings displayed. Click the **Back** button if you want to change anything, or click **Next** to begin the installation.



- 10 When the installation is complete, click **Finish** to restart your computer. As your computer restarts, do the following:
- a Click **OK** when you are prompted to connect the USB hardware, and then plug one end of the USB cable into the modem's **USB** port and the other end into your computer's USB port.
 - b Plug one end of the supplied phone cord into the modem's jack labeled **LINE** and the other end into the ADSL wall jack.
 - c As the modem performs a startup sequence, you may see a **Found New Hardware** box indicating the progression of the installation. Typically no user action is necessary. When the startup sequence is complete, you will see a message that you have successfully connected the USB hardware. Depending on your operating system, you may be prompted to restart your computer.



11 If you want to plug a phone in through the modem, you can do so by plugging it into the modem's jack labeled **PHONE**. If you do this, you should use a filter for that phone as discussed below.

We HIGHLY RECOMMEND that you install a filter for EVERY phone and fax that is sharing the ADSL phone line. (Do not plug a filter between the wall jack and the modem.) Phone filters block the ADSL frequencies so that someone making a phone call will not hear modem noise on the line. Filters also keep phone conversations from interfering with ADSL performance.

You may have received ADSL phone filters with your modem. If you did not, or if you need more filters, they are available at most retail stores that carry consumer electronics.

To attach a filter, plug the phone or fax machine's cord into the filter's **PHONE** end and plug the filter's **LINE** end into the wall jack.

Congratulations! You have installed the modem software and hardware. Now continue with the next section, **Configuring Your Web Browser**.

Step 2: Configuring Your Web Browser

The software that you use to make an Internet connection must be set for a **network connection**, not a **dial-up connection**.

This section includes instructions for recent versions of two popular Web browsers: Internet Explorer Version 5.0 (or later) and Netscape Navigator Version 7.2. Netscape Navigator instructions are on page 11, and Internet Explorer instructions are below.

Tip:

If you are using an earlier version of one of these browsers, the configuration may be slightly different from below. In those cases—or if you are using another browser altogether—configure the browser to use a **network connection** (this might be called a “Local Area Network” or “broadband” connection).

Configuring Internet Explorer

The following instructions are for Internet Explorer Version 5.0 or later. (If you do not have this version, you can get a free upgrade from Microsoft Corp. If you are not sure what version you have, open Internet Explorer and from the **Help** menu, choose **About Internet Explorer**. The version number is directly below the Microsoft Internet Explorer logo. You can ignore all the numbers after the period following the first digit.)

- 1 On the desktop, right-click the **Internet Explorer** icon, and select **Properties**.

Tip:

If you cannot access Internet Explorer in this way, open your computer’s **Control Panel** (click the **Start** button and then, depending on your computer, either click **Control Panel**, or click **Settings** and then **Control Panel**). In the **Control Panel**, double-click the **Internet Options** icon. If this icon does not appear, double-click the **Network and Internet Options** icon and then double-click the **Internet Options** icon.

2 On the **Internet Properties** dialog box, select the **Connections** tab, then click the **Setup** button.

3 The setup process will proceed differently, depending on your operating system. The following table details the process for your Windows computer.

Windows XP	Windows 98/Me/2000
<p>a. On the Welcome to the New Connection Wizard dialog box, click Next. (If you see a Location Information dialog box, click Cancel and then when asked if you are sure you want to cancel, click Yes to return to the Welcome dialog box.)</p> <p>b. On the Network Connection Type dialog box, select Connect to the Internet, then click Next.</p> <p>c. On the Getting Ready dialog box, select Set up my connection manually, then click Next.</p> <p>d. On the Internet Connection dialog box, select Connect using a broadband connection that is always on, then click Next.</p> <p>e. On the Completing the New Connection Wizard dialog box, click Finish.</p>	<p>a. On the Internet Connection Wizard dialog box, select I want to set up my Internet connection manually, or I want to connect through a local area network (LAN), then click Next.</p> <p>b. On the Setting up your Internet connection dialog box, I connect through a local area network (LAN), then click Next.</p> <p>c. On the Local area network Internet configuration dialog box, uncheck the Automatic discovery of proxy server check box, then click Next.</p> <p>d. On the Set Up Your Internet Mail Account dialog box select No, then click Next.</p> <p>e. On the Completing the New Connection Wizard dialog box, uncheck the To connect to the Internet immediately, select this box... check box (if it appears) and click Finish.</p>

- 4 If you accessed Internet Explorer's settings from the **Control Panel** (as explained in the "Tip" following step 1), the **Control Panel** window will still be open. Close it before continuing.

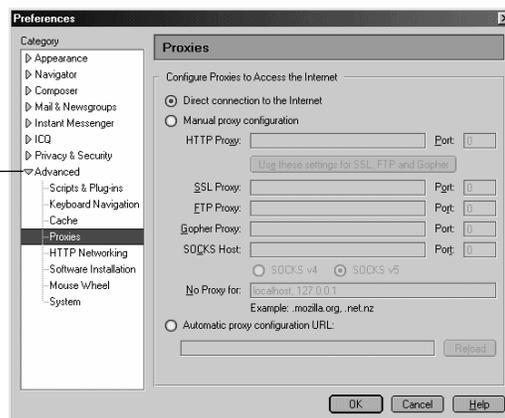
Congratulations! You have configured Internet Explorer. Now continue with **Connecting to the Internet**, starting on page 12.

Configuring Netscape Navigator

The following instructions are for Netscape Navigator Version 7.2. (If you do not have Version 7.2, you can get a free upgrade from Netscape Communication Corp. If you are not sure what version you have, open Netscape Navigator and from the **Help** menu, choose **About Netscape**. The version number is at the top of the screen.)

- 1 Double-click the **Netscape Navigator** icon on your desktop to open the browser.
- 2 From the **Edit** menu, choose **Preferences** to open the **Preferences** dialog box.
- 3 In the **Category** list, click the triangle to the left of **Advanced** to display a list of choices below it, then select **Proxies**. The **Preferences** dialog box changes to show the Proxies you can specify.

When you click this triangle, more options appear below **Advanced**.



4 Select **Direct connection to the Internet**, then click **OK**.

Congratulations! You have configured Netscape Navigator. Now continue with **Connecting to the Internet**, starting on page 12.

Step 3: Connecting to the Internet

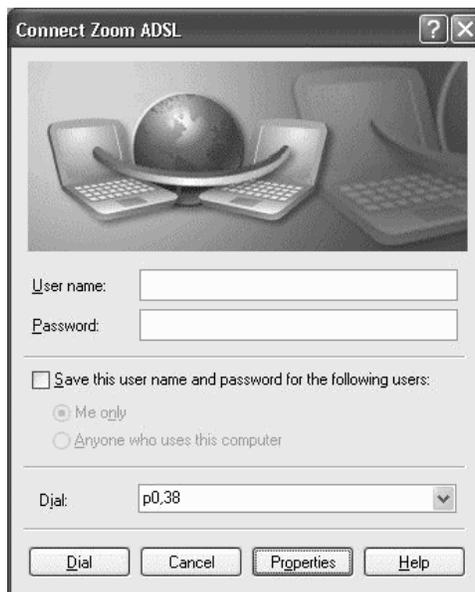
How you connect to the Internet depends on whether you have a **Zoom** icon on your computer desktop.

- **If you have a Zoom icon:** Follow the steps below.
- **If you do not have a Zoom icon:** Go to page 13.

If You Have a Zoom Desktop Icon

If you have a **Zoom** icon, it means that your service provider uses a form of PPP Encapsulation and you need to enter a Username and Password to connect to the Internet.

1 Click the **Zoom** icon to open a box that looks like this.



- 2 Enter your **User name** and a **Password**, then click **Dial** or **Connect**, depending on your operating system. Your service provider should have given you a User ID or Username (usually your email address or the characters preceding the @ sign in your email address) and a Password.

If you are using Windows Me, you may see a **Location Information** dialog box. Enter your area code and click **Close**.
- 3 Wait until the red triangular icon  on your computer's system tray turns green. This color indicates that the connection has been made. (The icon will be yellow while the modem is negotiating the connection.)
- 4 Verify that your Internet connection is working. Open your Web browser (i.e., Internet Explorer or Netscape Navigator) and try to connect to a familiar Web address.

If you connect successfully, your installation is complete and you are ready to browse the Web!

If you did not connect, see **Connection Troubleshooting Tips** on page 20.

If You Do Not Have a Zoom Icon

If you do not have a Zoom icon on your desktop, your service provider uses a form of 1483 Encapsulation, and typically no additional configuration is required.

Verify that your Internet connection is working. Open your Web browser (i.e., Internet Explorer or Netscape Navigator) and try to connect to a familiar Web address.

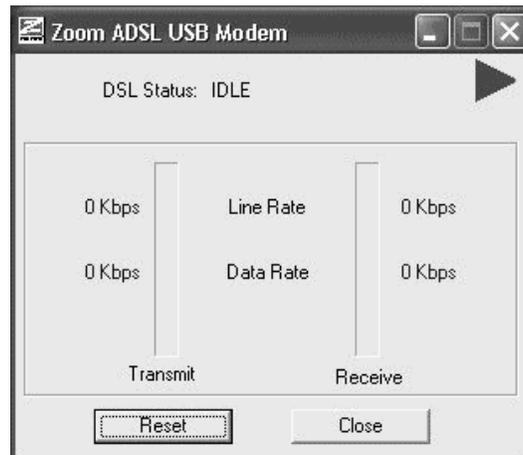
If you connect successfully, your installation is complete and you are ready to browse the Web!

If you did not connect, see **Connection Troubleshooting Tips** on page 20.

About the DSL Monitor

Your modem includes a DSL monitor application. This application lets you check the status of your Internet connection. Double-click the triangular icon  on your computer's system tray at the bottom of your desktop to open the application. You can:

- Check if your DSL connection is active or idle.
- View data transmit and receive rates.
- Disconnect and reconnect your DSL line by clicking the **Reset** button.



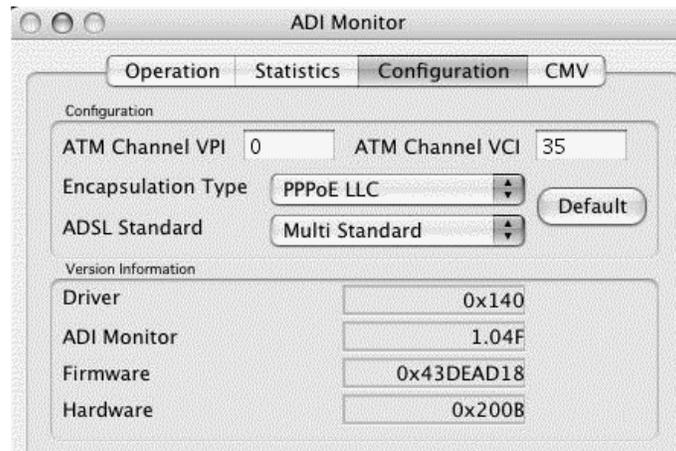
Macintosh Quick Start

- Mac OS X users, follow the steps below.
- Mac OS 9 users, go to page 18.

Mac OS X

- 1** Launch the CD and drag the Zoom ADSL USB OS X Installer onto the desktop. Double-click the **ADI USB ADSL OSX** icon.
- 2** Enter your Macintosh User Name and Password when the **Authenticate** box opens.
- 3** Double-click the **Install** application, and then click the **Install** button.
- 4** Once the software installation is complete, you will be prompted to restart your computer and connect the modem hardware. Plug one end of the USB cable into the modem's **USB** port and the other end into your computer's USB port.
- 5** Plug one end of the supplied phone cord into the modem's phone jack labeled **LINE** and the other end into the ADSL wall jack.

- 6 Double-click the triangular icon  on your computer's desktop to open the **ADI Monitor** application.



- 7 Click the **Configuration** tab, then enter the **VPI** and **VCI** numbers in the corresponding **ATM Channel VPI** and **ATM Channel VCI** boxes, select the **Encapsulation Type** from the drop-down list, and click **Save Changes**. Do not change any other fields. Restart your computer if you are prompted to do so.

Note:

If you do not know your ADSL service provider's settings, refer to the tables beginning on page 27 or contact your service provider.

- 8 From the **Dock**, click **System Preferences**, then **Network**.

9 What happens next depends on the type of encapsulation you selected above.

- **Bridged or Routed:** No additional configuration is usually required. Go to Step 10.
- **PPP:**
 - You must change the highlighted entry in the **Show** pulldown list from **Internal Modem** to **Ethernet Adaptor**. If you see two **Ethernet Adaptor** entries, select the first one. The screen will change so that the **Configure** pulldown entry says **Using PPP**. If it says **Using DHCP**, select the second **Ethernet Adaptor** entry to force the change to take effect.
 - At the **TCP/IP** tab, click the **PPPoE** tab and then click checkbox labeled **Connect Using PPPoE**.
 - Important!** This tab and checkbox covers **both PPPoE and PPPoA**, so click it if you are using either type of PPP. Then enter the **Username (Account Name)** and **Password** your service provider gave you, and click **Apply Changes**.
 - Click the **Internet Connect** icon from the **Dock**, select **Ethernet Adaptor** from the **Configuration** pulldown list, and click **Save Changes**.

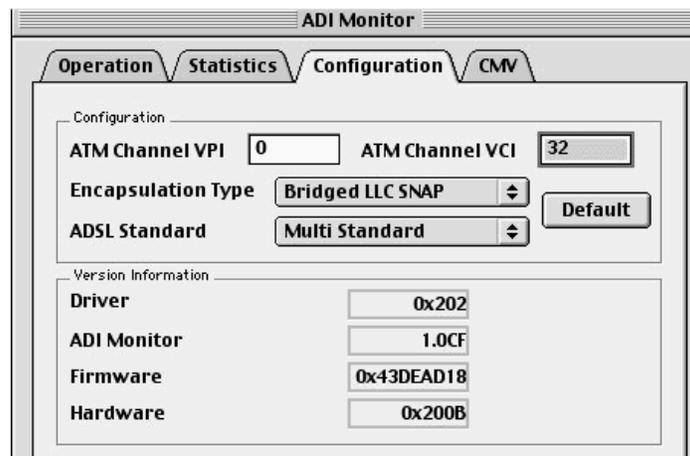
10 Verify that your Internet connection is working. Open your Web browser (i.e., Internet Explorer or Netscape Navigator) and try to connect to a familiar Web address.

If you connect successfully, your installation is complete and you are ready to browse the Web!

If you did not connect, see **Connection Troubleshooting Tips** on page 20.

Mac OS 9

- 1 Launch the CD and double-click the **ADI USB ADSL OS9 Installer**.
- 2 Double-click the **ADI USB ADSL Classic** application, and then click the **Install** button.
- 3 Once the software installation is complete, you will be prompted to restart your computer. Do not connect the modem hardware until the restart is complete. Then plug one end of the USB cable into the modem's **USB** port and the other end into your computer's USB port.
- 4 Plug one end of the supplied phone cord into the modem's phone jack labeled **LINE** and the other end into the ADSL wall jack.
- 5 Double-click the **ADI Monitor** icon on your computer's desktop to open the **ADI Monitor** application.



- 6 Click the **Configuration** tab, then enter the **VPI** and **VCI** numbers in the corresponding **ATM Channel VPI** and **ATM Channel VCI** boxes, select the **Encapsulation Type** from the drop-down list, and click **Save Changes**. Do not change any other fields. Restart your computer if you are prompted to do so.

Note:

If you do not know your ADSL service provider's settings, refer to the tables beginning on page 27 or contact your service provider.

- 7 What happens next depends on the type of Encapsulation you selected in the step above.
- **If you selected Bridged or Routed:** No additional configuration is usually required. Go to Step 8.
 - **If you selected PPP:** From the **Apple** menu, select **Control Panel** and then **Remote Access**. Then enter the **Username** and **Password** your ADSL service provider gave you, and click **Connect**.

Note:

If you change your Encapsulation settings in the ADI monitor from this point on, you must unplug your modem's USB cable and then plug it back in **after** you restart your computer.

- 8 Verify that your Internet connection is working. Open your Web browser (i.e., Internet Explorer or Netscape Navigator) and try to connect to a familiar Web address.
- If you connect successfully, your installation is complete and you are ready to browse the Web!**
- If you did not connect, see **Connection Troubleshooting Tips** on page 20.

Connection Troubleshooting Tips

The following are some problems you may experience and some possible solutions to remedy the situation.

Problem

My modem's **LINK** light continually blinks and does not stay solidly lit.

Solution

There are several issues that could cause this problem. Check these items:

- Ensure that the phone cord is firmly plugged into the wall jack and the **LINE** jack on the back of the modem.
- Verify that the jack the phone cord is connected to is enabled for ADSL service. Unless your service provider has enabled it, you cannot use a standard telephone jack for ADSL service.

Problem

My modem's **LINK** light is solidly lit, but I cannot connect to the Internet.

Solution

There are several issues that could cause this problem. Check these items:

- Ensure that you are using the correct **VPI**, **VCI** and **Encapsulation** settings.
- If your **Encapsulation** begins with **PPP**, ensure that you have typed your ADSL Username and Password correctly.

- Verify that your ADSL service provider's ADSL connection is functioning properly. (Place a call to your ISP's customer support department to verify this.)
- Verify that your computer's TCP/IP properties are correct. How you do this depends on your operating system:

Windows XP

- 1 Open the **Internet Protocol (TCP/IP) Properties** dialog box.
 - a From the desktop, click the **Start** button, point to **Control Panel**, and then click **Network and Internet Connections**.
 - b Click **Network Connections**.
 - c Right-click the **Local Area Connection** icon, and select **Properties**.
 - d Select your NIC card's TCP/IP entry (it should include "TCP/IP" in it, but not "AOL," "Dial-up," or "Adapter") and click the **Properties** button.
- 2 Ensure the following is selected, depending on whether you are using dynamic (DHCP) or static IP addressing:
 - **If you are using DHCP (most users):** Ensure that **Obtain an IP address automatically** is selected and that either **Obtain a DNS server address automatically** or **Enable DNS** is selected. All fields should be blank.
 - **If you are using a static IP address:** Ensure that **Use the following IP address** and **Use the following DNS server addresses** are selected. The **IP address**, **Subnet mask**, **Default gateway**, and **Preferred DNS server** settings should match those given to you by your Internet provider when you arranged for a static IP address.

Windows 2000

- 1 Open the **Internet Protocol (TCP/IP) Properties** dialog box.
 - a From the desktop, click the **Start** button, point to **Settings**, then **Network and Dial-up Connections**.
 - b Right-click the **Local Area Connection** icon, and select **Properties**.
 - c Select your NIC card's TCP/IP entry (it should include "TCP/IP" in it, but not "AOL," "Dial-up," or "Adapter") and click the **Properties** button.

- 2 Ensure the following is selected, depending on whether you are using dynamic (DHCP) or static IP addressing:
 - **If you are using DHCP (most users):** Ensure that **Obtain an IP address automatically** is selected and that either **Obtain a DNS server address automatically** or **Enable DNS** is selected. All fields should be blank.
 - **If you are using a static IP address:** Ensure that **Use the following IP address** and **Use the following DNS server addresses** are selected. The **IP address**, **Subnet mask**, **Default gateway**, and **Preferred DNS server** settings should match those given to you by your Internet provider when you arranged for a static IP address.

Windows 98/Me

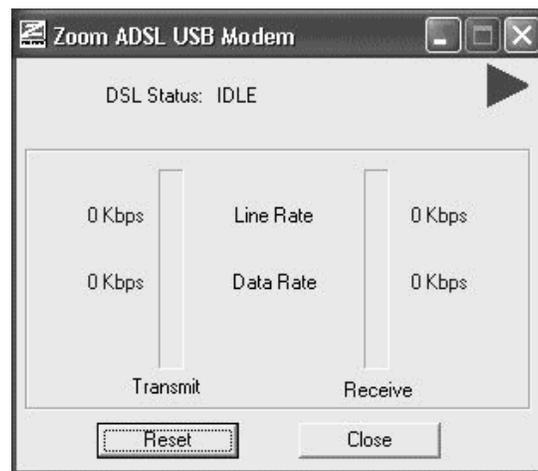
- 1 Open the **Internet Protocol (TCP/IP) Properties** dialog box.
 - a From the desktop, click the **Start** button, point to **Settings**, then **Control Panel**.
 - b Double-click the **Network** icon to display the **Network** dialog box.
 - c Select your NIC card's TCP/IP entry (it should include "TCP/IP" in it, but not "AOL," "Dial-up," or "Adapter") and click the **Properties** button and then click **OK**

- 2 Ensure the following is selected, depending on whether you are using dynamic (DHCP) or static IP addressing:
 - **If you are using DHCP (most users):** Ensure that **Obtain an IP address automatically** is selected and that either **Obtain a DNS server address automatically** or **Enable DNS** is selected. All fields should be blank.
 - **If you are using a static IP address:** Ensure that **Specify an IP address** is selected and that the **IP Address** and **Subnet Mask** settings match those given to you by your Internet service provider when you arranged for a static IP address. On the **DNS Configuration** tab, ensure that **Enable DNS** is selected and that something appears in the **Host** box. (If not, enter any name, word, or combination of letters and numbers.)

How To Determine Your Service Provider's Settings if You Do Not Know Them

This section is only for those Windows users who have more than one ADSL service listed in the **Service Provider Selection** dialog box on page 5, and who do not have their service's settings. If you selected an entry in the list (either your service's first PPP or first 1483 setting) and you cannot connect to the Internet, you can use your modem's DSL monitor application to change your settings to try to match your situation.

- 1 Double-click the triangular icon  on your computer's system tray at the bottom of your desktop to open the DSL monitor application.



- 2 Position your cursor anywhere inside the application screen, press the <alt> key and the "d" key **simultaneously** on your keyboard to open the **Administrative** dialog box, and then click the **CONFIG** tab.

3 Refer to the tables beginning on page 27 and find your service provider. You have already tried one or more entries, so now you should try the next entries in order until you are successful or you run out of settings to try. In the drop-down list, select the **Encapsulation Type** that matches your service provider's next entry (if any) in the table. If the Encapsulation type you are looking for is not there, see the **Note** box below. Otherwise, enter the **VPI** and **VCI** numbers in their corresponding boxes, and click **Apply**. Do not change any other fields.

Restart your computer and try to surf the Web. If you cannot surf the Web, repeat Step 3, working your way down the listed entries for your service provider. If none of these entries work, you will have to contact your service provider.

Note:

The **Administrative** dialog box displays one of two sets of Encapsulation settings, PPP or Bridged/Routed, depending on the type of Encapsulation used during the software installation. If you have tried all the settings for the PPP set and none has worked, you should try the other set. To do this, you will have to uninstall your modem as described below, and follow the Quick Start instructions again. This time, when the **Service Provider Selection** dialog box opens, select the first 1483 Bridged or Routed entry for your service provider.

To Uninstall Your Modem:

Click the **Start** button and then, depending on your computer, either click **Programs**, or **All Programs**, and then **Zoom ADSL USB**. Select **Uninstall** and follow the prompts.

If You Need Help

Zoom has many Technical Support services available to its customers. You can access these services in a variety of ways:

- Windows users: Insert the CD, select your language, and then click the **Customer Support** link to view comprehensive support information, including how to reach our support experts.
- Macintosh users: You will find Customer Support information and Documentation in the appropriately named folders in the CD-ROM's directory.
- Visit our Web site at **www.zoom.com** and select **Technical Support**. From here, you can send email to our technical support experts and/or do a smart search through our intelligent database by using **SmartFacts™**.

Tip:

From time to time, Zoom may release improved firmware. This is also available at **www.zoom.com**, along with upgrade instructions. We recommend that you check our Web site periodically for updates.

- Call our support office in the United States at **(561) 241-7170** or in the United Kingdom at **44 (0)1276 704440**.
- Some retailers of Zoom products provide support or can recommend a convenient support center.

Service Provider Settings Tables

These tables are for customers whose service providers do not supply them with the ADSL settings to connect to the Internet. Many ADSL providers use different settings depending on the region in which they are operating, which is why there may be more than one setting for your service provider. We post updated tables on our Web site. If your country is not listed in the tables below, please consult www.zoom.com

Note to USA customers

If your ADSL service provider is not shown below, first use the settings for **Service Provider Not Shown** at the bottom of the table. If those settings do not work, use the settings for the company that provides local telephone service in your area.

Table A: USA

Service Provider	VPI	VCI	Encapsulation
AllTel (1)	0	35	PPPoE LLC
AllTel (2)	0	35	1483 Bridged IP LLC
August.net (1)	0	35	1483 Bridged IP LLC
August.net (2)	8	35	1483 Bridged IP LLC
BellSouth	8	35	PPPoE LLC
CenturyTel (1)	8	35	PPPoE LLC
CenturyTel (2)	8	35	1483 Bridged IP LLC
Covad	0	35	PPPoE LLC
Earthlink (1)	0	35	PPPoE LLC
Earthlink (2)	8	35	PPPoE LLC
GWI	0	35	1483 Bridged IP LLC
Qwest (1)	0	32	PPPoA LLC
Qwest (2)	0	32	PPPoA VC-MUX
SBC (1)	0	35	PPPoE LLC
SBC (2)	0	35	1483 Bridged IP LLC
SBC (3)	8	35	1483 Bridged IP LLC
Sprint (1)	0	35	PPPoA LLC
Sprint (2)	8	35	PPPoE LLC
Verizon (1)	0	35	PPPoE LLC
Verizon (2)	0	35	1483 Bridged IP LLC
Service Provider Not Shown	0	35	PPPoE LLC

Table B: Countries Other Than The USA

Service Provider or Country	VPI	VCI	Encapsulation
Australia-Telstra	8	35	PPPoA LLC
Argentina	1	33	PPPoA VC-MUX
Belgium-ADSL Office	8	35	1483 Routed IP LLC
Belgium-Turboline	8	35	PPPoA LLC
Bolivia	0	34	1483 Routed IP LLC
Brazil-Brasil Telcom	0	35	PPPoE LLC
Brazil-Telefonica	8	35	PPPoE LLC
Brazil-Telmar	0	33	PPPoE LLC
Brazil-South Region	1	32	PPPoE LLC
Colombia-EMCALI	0	33	PPPoA VC-MUX
Denmark-Cybercity, Tiscali	0	35	PPPoA VC-MUX
France (1)	8	35	PPPoE LLC
France (2)	8	67	PPPoA LLC
France (3)	8	35	PPPoA VC-MUX
Germany	1	32	PPPoE LLC
Hungary-Sci-Network	0	35	PPPoE LLC
Iceland-Islandssimi	0	35	PPPoA VC-MUX
Iceland-Siminn	8	48	PPPoA VC-MUX
Israel	8	48	PPPoA VC-MUX
Italy	8	35	PPPoA VC-MUX
Jamaica (1)	8	35	PPPoA VC-MUX
Jamaica (2)	0	35	PPPoA VC-MUX
Jamaica (3)	8	35	1483 Bridged IP LLC SNAP
Jamaica (4)	0	35	1483 Bridged IP LLC SNAP
Kazakhstan	0	33	PPPoA VC-MUX
Mexico	8	35	PPPoE LLC
Netherlands-BBNED	0	35	PPPoA VC-MUX
Netherlands-MX Stream	8	48	PPPoA VC-MUX
Portugal	0	35	PPPoE LLC
Saudi Arabia (1)	0	33	PPPoE LLC
Saudi Arabia (2)	0	35	PPPoE LLC
Saudi Arabia (3)	0	33	1483 Bridged IP LLC
Saudi Arabia (4)	0	33	1483 Routed IP LLC
Saudi Arabia (5)	0	35	1483 Bridged IP LLC
Saudi Arabia (6)	0	35	1483 Routed IP LLC

Table B (Continued): Countries Other Than The USA

Service Provider or Country	VPI	VCI	Encapsulation
Spain-Albura, Tiscali	1	32	PPPoA VC-MUX
Spain-Colt Telecom, Ola Internet	0	35	PPPoA VC-MUX
Spain-EresMas, Retevision	8	35	PPPoA VC-MUX
Spain-Telefonica (1)	8	32	PPPoE LLC
Spain-Telefonica (2), Terra	8	32	1483 Routed IP LLC
Spain-Wanadoo (1)	8	35	PPPoA VC-MUX
Spain-Wanadoo (2)	8	32	PPPoE LLC
Spain-Wanadoo (3)	8	32	1483 Routed IP LLC
Sweden-Telenordia	8	35	PPPoE
Sweden-Telia	8	35	1483 Bridged IP LLC
Switzerland	8	35	PPPoE LLC
Turkey (1)	8	35	PPPoE LLC
Turkey (2)	8	35	PPPoA VC-MUX
UK	0	38	PPPoA VC-MUX
Venezuela-CANTV	0	33	1483 Routed IP LLC
Vietnam	0	35	PPPoE LLC

Regulatory Information

U.S. FCC Part 68 Statement

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. The unit bears a label on the back which contains among other information a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

This equipment uses the following standard jack types for network connection: RJ11C.

This equipment contains an FCC compliant modular jack. It is designed to be connected to the telephone network or premises wiring using compatible modular plugs and cabling which comply with the requirements of FCC Part 68 rules.

The Ringer Equivalence Number, or REN, is used to determine the number of devices which may be connected to the telephone line. An excessive REN may cause the equipment to not ring in response to an incoming call. In most areas, the sum of the RENs of all equipment on a line should not exceed five (5.0).

In the unlikely event that this equipment causes harm to the telephone network, the telephone company can temporarily disconnect your service. The telephone company will try to warn you in advance of any such disconnection, but if advance notice isn't practical, it may disconnect the service first and notify you as soon as possible afterwards. In the event such a disconnection is deemed necessary, you will be advised of your right to file a complaint with the FCC.

From time to time, the telephone company may make changes in its facilities, equipment, or operations which could affect the operation of this equipment. If this occurs, the telephone company is required to provide you with advance notice so you can make the modifications necessary to obtain uninterrupted service.

There are no user serviceable components within this equipment. See Warranty flyer for repair or warranty information.

It shall be unlawful for any person within the United States to use a computer or other electronic device to send any message via a telephone facsimile unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message and the telephone number of the sending machine or of such business, other entity, or individual. The telephone number provided may not be a 900 number or any other number for which charges exceed local or long distance transmission charges. Telephone facsimile machines manufactured on and after December 20, 1992, must clearly mark such identifying information on each transmitted message. Facsimile modem boards manufactured on and after December 13, 1995, must comply with the requirements of this section.

This equipment cannot be used on public coin phone service provided by the telephone company. Connection to Party Line Service is subject to state tariffs. Contact your state public utility commission, public service commission, or corporation commission for more information.

U.S. FCC Part 15 Emissions Statement

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 residential installation. This equipment generates, uses and can radiate radio frequency and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or 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 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.

Industry Canada Emissions Statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Industry Canada CS03 Statement

Notice: The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing the 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 concern. 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 coordinated by a representative 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.

Users should ensure for their own protection 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 electric inspection authority, or electrician, as appropriate.

Notice: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

European 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. This product is CE Marked.

Directive	Standard	Test Report
73/23/EEC-Low Voltage	EN 60950 : 2000 IEC 60950 : 3 ^e éd. 1999	electrical safety
89/336/EEC-EMC	EN 55024 : 1998 EN 55022 : 1998	EMC-immunity EMC-emissions

Electrostatic Discharge Statement

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

CAUTION: To reduce the risk of fire, use only No. 26 AWG or larger UL Listed or CSA Certified telecommunication line cord.

