

# USB Modem

U S E R G U I D E



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## What you will need

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Make sure that you have received the following items:

- USB modem with built-in USB cable
- Phone cord
- CD containing installation and communications software.

## You also need the following:

- A PC running Windows® Vista, XP, 2000, Me, or 98SE  
or  
a Macintosh running OS X or 9.x  
or  
a Linux-based computer
- Available USB port on your computer
- DVD or CD drive
- A telephone jack to plug the modem into, so the modem can dial out and receive calls.

**Windows Me and 98 users:** Please go to page 10.

**Macintosh users:** Please go to page 12.

**Linux users:** Please go to page 17.

# Installing and connecting on Windows Vista, XP, 2000

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**Note:** If you have a PC and are replacing an existing *internal* modem, turn to page 31 for instructions.

## First, install the software

- 1 Your computer should be turned on. Close any applications you have running.
- 2 Insert the CD that came with your modem into your CD or DVD drive.

*Windows Vista:*

If the **AutoPlay** dialog box appears, click **Run Setup.exe**.

If the **User Account Control** dialog box appears, select **Allow**.

The CD should start automatically after a few seconds and display an installation screen. If the CD does not start automatically, on your desktop select **Computer** or **My Computer** and double-click your CD or DVD drive icon.

- 3 When the installation screen appears, select your language.
- 4 On the V. 92 Modems menu, click **Install Modem Drivers** and then **USB Drivers**.
- 5 The installation program begins.

*Windows Vista:* If a message appears saying that Windows can't verify the publisher of this driver software, click **Install this driver software anyway**.

*Windows XP:* If you message appears saying that the software has not passed the Windows logo test, click **Continue Anyway**.

*Windows 2000:* You may see a dialog box stating that the Digital Signature was not found. You can safely ignore this message and click **Yes**.

- 6 When the **USB Modem drivers are now installed** dialog box appears, click **OK** to install the NetWaiting Modem on Hold application, which will let you take a phone call while you are online. See page 8 below for more information on NetWaiting.
- 7 When the **Netwaiting InstallShield Wizard** dialog box appears, click **Next** and follow the prompts.
- 8 At the **NetWaiting InstallShield Wizard Complete** dialog box, leave the two check boxes unselected and click **Finish**.
- 9 At the **Modem Installation** menu, click **Main Menu**, and then **Exit**. Remove the installation CD and shut down your computer.

## Next, connect the modem to your computer

- 1 Your computer should be shut down.
- 2 Make a note of the modem's serial number, which is located on the bottom of the modem case, just under the barcode.
- 3 Connect the cable end of the modem to any USB port on your computer.



- 4 Turn your computer back on.

- 5 *Windows Vista:* In the *Windows needs to install driver software for your USB modem* message box, select **Locate and install . . .**
- Windows XP:* At the **Found New Hardware Wizard** dialog box, select **Install the software automatically**, click **Next**, and follow the prompts. You may see a message regarding Windows logo testing. You can safely disregard the message and click **Continue Anyway**.
- Windows 2000:* You may see a dialog box stating that the Digital Signature was not found. You can safely ignore this message and click **Yes**.
- 6 *Windows Vista:*  
In the **User Account Control** message box, click **Continue**.
- Windows XP:*  
In the **Completing the Found New Hardware Wizard** dialog box, click **Finish**.
- A popup notification message tells you that your new hardware is successfully installed.
- 7 Connect the supplied phone cord to the phone jack on the modem. Plug the other end of the cord into the wall jack just as you would a telephone.

## **Finally, confirm that the installation was successful**

- 1 Open **Control Panel** (*Vista:* select **Printers and Other Hardware**) and double-click the **Phone and Modem Options** icon.
- 2 Enter your **Location information** and then click the **Modems** tab.
- 3 On the **Modems** tab, where you see that the USB modem is installed, click the **Properties** button.
- 4 In the **USB Modem Properties** dialog box, click the **Modem** tab and verify that the **Maximum Port Speed** is set to 115,200.

- 5 On the **Modem** or **Diagnostics** tab click **Query Modem**. You will see a list of AT commands and responses, indicating that your modem is properly connected.

That's it! Your installation is complete.

Now read **If Your PC Already Had a Modem** below.

#### **Important—If Your PC Already Had a Modem**

You must redirect your application software so that it recognizes your new modem.

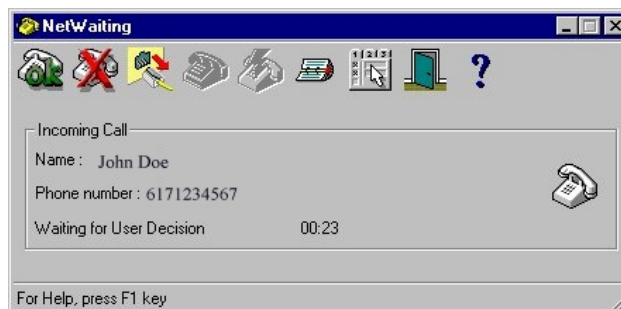
- *America Online 9.0* users: On the AOL **Sign on** screen, click the **Connect Options** button. On the Connect Options dialog box, select **Advanced Settings**. On the Advanced Settings dialog box, click the **Modems tab**, and then, in the list of modems, select your new USB Modem. Click **Close** to exit.
- *Windows Vista* users: Select **Start**→**Control Panel**→**Network and Sharing Center**→**Manage Network Connections**→**Dial-up Connection**→**Properties**. In the **Connect using** box make sure that your new USB modem is selected.
- *Windows XP and 2000* users: Select **Start**→(Windows 2000: **Settings**)→**Control Panel**→**Network Connections**→**Dial-up Connection**→**Properties**. In the **Connect using** box make sure that your new USB modem is selected.

## **Taking a phone call while you're online**

**Windows Vista, XP and 2000 users:** Your modem includes the NetWaiting™ Modem-on-Hold™ program, which notifies you when you have an incoming telephone call and lets you put your Internet connection on hold while you take the call. Netwaiting is installed automatically as part of your modem software installation.

**Note:** If you want to use Modem-on-Hold, your Internet Service Provider (ISP) must support the V.92 dial-up modem standard. You can contact your ISP if you are unsure about this support. Also, you must have Call Waiting/Caller ID service from your telephone company to use the modem's Call Waiting/Caller ID feature.

From now on, if someone calls while you are online, the NetWaiting box appears on your computer screen, offering three choices:



- To place your Internet connection on hold and accept the call, click the green **OK** icon.
- To disconnect from the Internet and accept the call, click the yellow **Disconnect** icon
- To reject the call and remain connected to the Internet, click the red **X** icon.

For more details about NetWaiting, please refer to the program's built-in help.

## Fax software and additional applications

The modem CD includes software that lets Windows Vista, XP and 2000 users send, receive, and schedule faxes. If you use your modem for receiving faxes, keep in mind the following:

- Your computer must be running, and the communications software must be active.

- If you want to connect to your online service or ISP, you must exit the communications software first. Also, while you are on line you cannot receive calls or faxes.
- Some computers have a power saving option that may interfere with incoming faxes. If this happens, you should deactivate the feature of your power saving option that stops the hard drive. See your computer's documentation for details.

## Installing and connecting on Windows Me and 98SE

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**Note:** If you have a PC and are replacing an existing *internal* modem, turn to Appendix A on page 31 for instructions on removing the old modem.

### First, install the software

- 1 Your computer should be turned on. Close any applications you have running.
- 2 Insert the CD that came with your modem into your CD drive. The CD should start automatically after a few seconds and display an installation screen. If the CD does not start automatically, on your desktop select **My Computer** and double-click your CD drive icon.
- 3 When the installation screen appears, select your language.
- 4 On the V. 92 Modems menu, click **Install Modem Drivers** and then **USB Drivers**.
- 5 The installation program begins. Click **Next** or **OK** and follow the on-screen instructions.

*Windows Me:* You may see a dialog box stating that the Digital Signature was not found. You can safely ignore this message and click **Yes**.
- 6 When the installation is complete, follow these steps:
  - Click **Finish**.

- On the **Modem Installation** menu, click **Main Menu**, and then **Exit**. (If the menu is minimized, click the USB modem button on the taskbar to display the menu.)
- Remove the installation CD.
- Shut down your computer.

## Next, connect the modem to your computer

Your computer should be shut down.

- 1 Connect the cable end of the modem to any USB port on your computer.
- 2 Turn your computer back on.
- 3 Windows will install the hardware on your system.  
*Windows 98:* A message appears indicating that Windows is installing software for the V92 USB Faxmodem.
- 4 Connect the supplied phone cord to the phone jack on the modem. Plug the other end of the cord into the wall jack just as you would a telephone.

## Finally, confirm a successful installation

Your computer should be turned on.

- 1 Open **Control Panel** and double-click the **Phone and Modem Options** or the **Modems** icon.
- 2 If prompted, enter your **Location Information** and then click the **Modems** tab.
- 3 In the **Modems Properties** dialog box, click the entry for your modem and then click **Properties**.
- 4 Click the **Diagnostics** or **Modem** tab and then click **More info** or **Query Modem**. You will see a list of AT commands and responses, indicating that your modem is properly connected.
- 5 Click **OK** or **Close** twice to exit.

That's it! Your installation is complete. If your PC had a modem already installed, please read the note below.

**Important—If Your PC Already Had a Modem**

You must redirect your application software so that it recognizes your new modem.

- *America Online 9.0* users: On the AOL Sign on screen, click the Connect Options button. On the Connect Options dialog box, select Advanced Settings. On the Advanced Settings dialog box, click the Modems tab, and then, in the list of modems, select your new USB Modem. Click Close to exit.
- *Dial-up Networking* users: From your computer's desktop, double-click My Computer and then Dial-up Networking. Double-click the Make New Connection icon, select your new modem from the drop-down list, and follow the prompts.

## Installing the modem on a Macintosh

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*If you have Mac OS X, continue below.*

*If you have Mac OS 9, please go to page 15.*

### Mac OS X

#### Installing the Modem Script File

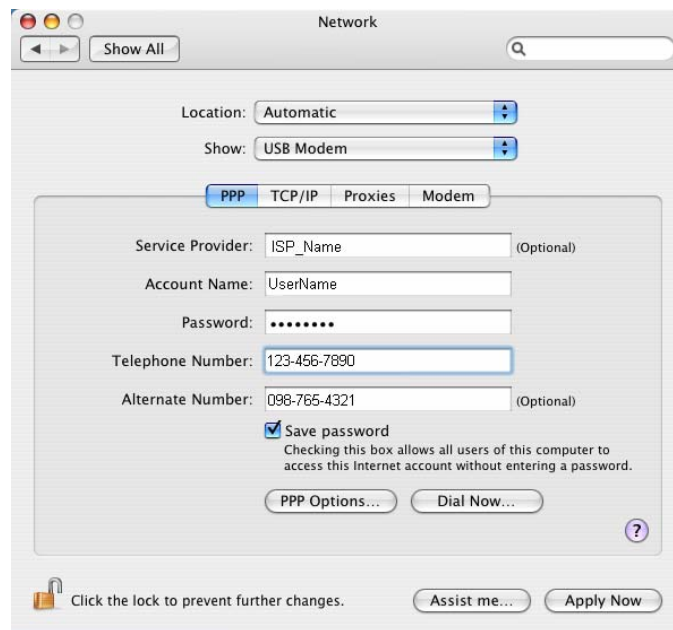
- 1 Your computer should be on. Double-click your hard drive icon, open the **Library** folder and then the **Modem Scripts** folder.
- 2 Insert the modem CD into your CD-ROM drive and open it by double-clicking its icon.
- 3 Open the **Mac** folder and drag the **Universal (115k)** file into the **Modem Scripts** folder on your hard drive.
- 4 Close all open windows.

## Next, connect the modem to your computer

- 1 Connect the cable end of the modem to any USB port on your computer.
- 2 Connect the phone jack on the modem to the supplied phone cord, and plug the other end of the cord into the wall telephone jack.

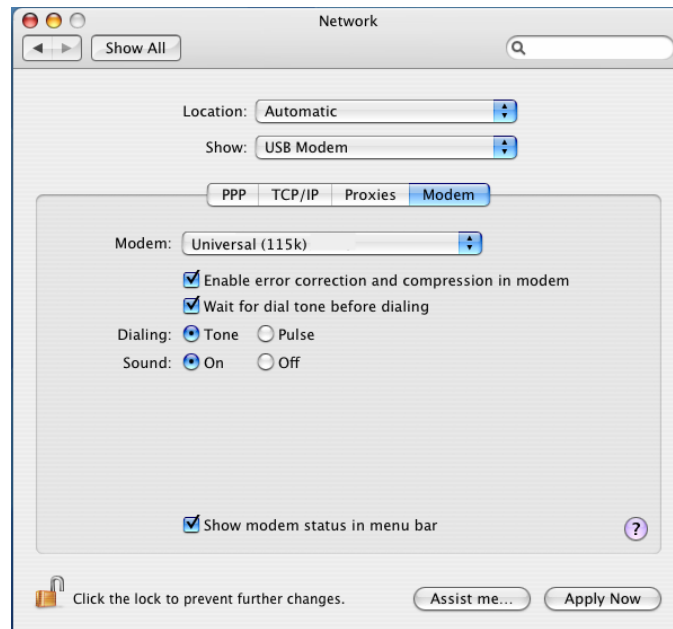
## Configure the modem

- 1 On the Dock, select **System Preferences** and then **Network** to display the **Network** dialog box.
- 2 In the **New Port Detected** message box, click **OK**.
- 3 In the **Network** dialog box, open the **Show** list and select **USB Modem**.



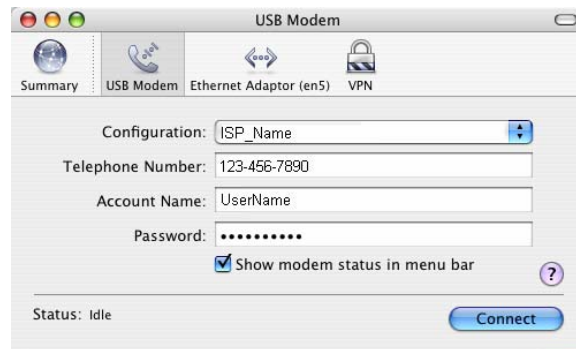
- 4 On the **PPP** tab, enter the information that your Internet Service Provider (ISP) has given to you.

- 5 If your ISP has given you TCP/IP or Proxies information, open those tabs and enter the information.
- 6 On the **Modem** tab, click open the **Modem** list, select **Universal (115k)**, accept the defaults for the additional options and click **Apply Now**.



- 7 On the **PPP** tab, click **Dial Now** to launch the Internet Connect application.

8 In the **USB Modem** dialog box, click **Connect**:



9 When you finish your Internet session, click the **Disconnect** button.

Congratulations! Your installation and setup are complete.

**Important**—If you use America Online for OS X, you must redirect your application software so that it recognizes your new modem. On the AOL **Welcome** screen, click the **Setup** button. On the **America Online Setup** dialog box, select **Add or change a modem or other connection**. On the **New Modem Results** dialog box, at the **Modem option**, select **Universal (115K)** and at the **Port** option, select **USB Modem**.

## Mac OS 9.x

### Install the Modem Script file

Your computer should be on. Close any applications you have running.

- 1 Insert the CD that came with your modem into your CD-ROM drive and open it by double-clicking its icon.
- 2 Open your hard drive; then open the **System** folder, the **Extensions** folder, and the **Modem Scripts** folder.

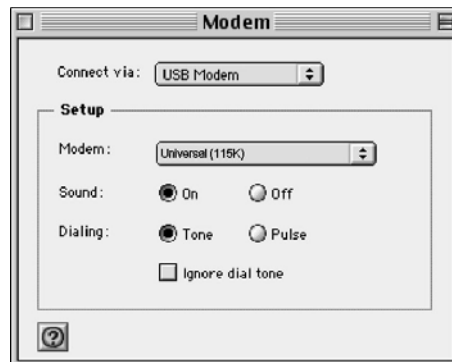
- 3 On your CD, open the **Mac** folder and drag the **Universal (115k)** file into the **Modem Scripts** folder.
- 4 Close all open windows.

There is no need to restart your computer. Continue with *Connect and Configure the Modem* below.

## Connect and Configure the Modem

- 1 Connect the modem to an available USB port.
- 2 Connect the supplied phone cord to the phone jack on the modem. Plug the other end of the cord into the wall jack just as you would a telephone.
- 3 From the **Apple** menu, select **Control Panels**, then **Modem**.
- 4 On the **Modem** control panel, at the **Connect via** option, select **USB Modem**.

Under **Setup**, open the **Modem** list and select **Universal (115K)**:



- 5 Click the Close box, and in the **Save changes to the current configuration?** message, click **Save**.

## Configure TCP/IP

- 1 From the **Apple** menu select **Control Panels**, then **TCP/IP**.
- 2 In the **TCP/IP** dialog box, at **Connect via**, select **PPP**.  
Under **Setup**, accept **Using PPP Server** (the default).

- 3 Click the Close box.
- 4 In the **Save changes to current configuration?** query box, click **Save**.

## Configure Remote Access

- 1 From the **Apple** menu select **Control Panels**, then **Remote Access**.
- 2 In the **Remote Access** dialog box, enter your user **Name**, **Password** and dial-up access **Number**, and click **Connect**.

That's it! Your installation is complete.

**Important**—If you are an America Online 5.0 user, you must redirect your application software so that it recognizes your new modem. On the AOL **Welcome** screen, click the **Setup** button. In the **America Online Setup** dialog box, select **Configure a new modem**. In the **New Modem Results** dialog box, at the **Modem option**, accept the default (Unknown - Hayes Error Correcting) and at the **Port option**, select **USB Modem**.

## Installing the Modem on a Linux PC

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- 1 Plug the modem into any USB port on your computer.
- 2 Connect one end of the supplied telephone cable to the phone jack on the modem, and the other end of the cable to a wall telephone jack.
- 3 Insert the modem CD into your CD-ROM drive, double-click the CD icon, and open the **Linux** folder.  
You will see three folders containing Linux drivers: **rpm**, **debian**, and **tar**.
- 4 Select the appropriate folder for your version of Linux, and copy the folder to your computer.
- 5 From the command prompt, access the folder containing the driver.

- *To install the driver in .rpm or .deb format:*
  - a Type su (for .rpm) or sudo (for debian) and press Enter.
  - b At the prompt, enter your super user password.
  - c Next, for .rpm, enter
 

```
rpm -i dgcmodem.i386.rpm
```

 For .deb, enter
 

```
dpkg -i dgcmodem_i386.deb
```
  - d At the prompt, enter the Linux source build directory that matches your running kernel.
  - e If necessary, run dgccconfig to complete the installation.
- *To install the driver in .tar format:*
  - a Extract the driver with
 

```
tar -xzf dgcmodem-1.01.tar.gz
```
  - b Change to the driver directory with
  - c 

```
cd dgcmodem-1.01
```
  - d Enter
 

```
su make install
```

 or
 

```
sudo make install
```
  - e At the prompt, enter your super user password.
  - f Next, enter
 

```
dgccconfig
```
  - g At the prompt, enter the Linux source build directory that matches your running kernel, and wait while the driver is installed.
  - h Configure your PPP client program to use the USB modem.

That's it! Your installation is complete.

## About Your Modem

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### Communication Setup Options

If you run into configuration difficulties with your communication software, it may be helpful to read the following section.

In setting up some older software programs, you may be asked to enter certain information. Most programs have default settings that are correct for use with this modem, and there is no need to change them. However, you should be aware of the following items:

If you are asked to select the “modem type” from a menu, and you don’t see this modem listed by name, select the most descriptive name such as **V.92 modem**, **56K modem**, or generic **Class 1 Modem**.

In the dialing directory, set all entries to the highest possible baud rate, if your software and serial port support these speeds (do not go over 115,200 bps). All communications between the computer and the faxmodem take place at this higher speed, independent of the modem-to-modem speed.

If your fax software gives you the option of selecting **Class 1** or **Class 2** fax drivers, select **Class 1**.

### Initialization strings and AT commands

An initialization string is a group of **AT** command settings that is sent to the modem as soon as you start up the software. The software determines which commands should be included in the initialization string, based on the device you select during installation. The commands remain in effect throughout the communications session, unless the software sends other commands to override them.

The software uses other **AT** command strings for all commands sent to the modem. This is transparent to you—the software does this in the background without you being aware of it.

It is sometimes necessary, however, to add other **AT** commands to initialization strings. You can find a table of **AT** commands on the

World Wide Web at **www.modems.com**. Click **Technical Reference Infobase** and then **AT Command Sets** under **Communications and Software Issues**.

If your software suggests an initialization string for this modem, you should use it. If your software does not list this modem and no initialization string is suggested, use the following: **AT &F**.

Your telephone service may include Call Waiting that you can temporarily suspend by using your phone to dial a special code. (For example, in the U.S., you can disable call waiting by adding \*70 to your dialing prefix; please check with your local phone company for the correct code for your area.) You can include that code, followed by a comma, in the dial string or dial prefix in your software.

If your software does not handle **AT** commands automatically, it should provide a place to enter **AT** commands in its setup menus. However, in some cases you may need to enter **AT** commands directly to the modem. You must do so from a data program's terminal mode.

#### ***Using Terminal Mode to Enter AT Commands***

Start your data communications program.

Change to terminal mode (also called command, local, direct, or dumb mode). Check your software documentation for additional instructions.

Type **AT** plus the command you need and press **Enter**. You will see an **OK** response.

When you finish, you can return to the data communications program's standard user interface. See the software program's documentation if you need help.

To return to the factory default settings for the modem, in terminal mode, type **AT &F** and press **Enter**.

Refer to the Troubleshooting section for more tips about AT commands.

## **Using Video**

Your faxmodem supports video applications through the V.80 standard protocol so that it can be used for high-quality modem-to-modem videoconferencing. The modem is compatible with H.324 point-to-point and H.323 Internet video conferencing standards. To send videos, you need a camera and video software.

## Troubleshooting

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If your modem stops working, please read this section carefully before calling Customer Support. In addition, your modem CD includes a list of Frequently Asked Questions (FAQs).

### Plug and Play Setup Problems with Windows

Under some circumstances, the Plug and Play setup under Windows may not resolve all installation problems. The Windows Help system has an excellent tool for thoroughly diagnosing and solving many problems.

- 1 On your desktop, double-click the **Computer** or **My Computer** icon.
- 2 Choose the **Help Topics** command in the **Help** menu. Windows displays the **Windows Help** dialog box.
- 3 Select the **Contents** tab. Note: Windows Vista, XP, 2000 and Me include a Help Search option, which you can use instead. Search for "hardware conflict" or "USB," for example.
- 4 Click **Troubleshooters**. (For Windows 98, you will also have to click **Windows 98 Troubleshooters**.) Then click the hardware conflict help entry.
- 5 Follow the instructions for determining and resolving a hardware conflict.

This should solve your problem. Remember to write down your COM port setting.

### Other Troubleshooting Tips

- |                  |  |
|------------------|--|
| <b>Problem:</b>  | <b>Your modem seems to install under Windows, but Windows cannot find it later.</b>  |
| <b>Solution:</b> | If your computer has a built-in modem on the motherboard, Windows may reinstall it the next time you start up. Consult your computer's |

documentation or call your computer's manufacturer to get instructions on how to disable the built-in modem.

**Problem:**     **The software cannot find the modem and the modem does not respond to AT commands. (The following comment applies to many other problems as well.)**

**Solution:**    The most common problem with modems is that the communications software is not configured for the same COM port as the modem.

Check which COM port the modem is using. Make sure that the software's COM port setting matches the modem's COM port setting. From the Windows Toolbar, go to **Start | Settings | Control Panel | Modems | Diagnostics**. Click the **COM port** for your modem, then click **More info**. If Windows displays the modem's ATI responses, the modem is working.

Another problem is that COM port resources may be in use by another device. Make sure that the COM port resources used by the modem are not being used by any other device, such as a soundcard.

**Problem:**     **You type an AT command line in a terminal application and press Enter, but your modem fails to execute the command line. Or there was no response after executing a command.**

**Solution:**    Be sure you type AT at the beginning of the command line.

Make sure the communications software is configured for the same COM port as your modem.

Be sure your modem is not in data mode when you type the command. Use the escape character sequence to switch to terminal mode (The default escape sequence is to wait at least one second, type **+++**, and wait another second or more.)

If you typed a command but did not receive an **OK** response from your modem, the **E0** and **Q1** commands may be in effect, disabling echo and responses. Verify this with the **&V** command. To enable echo and responses, type **ATE1Q0** and press **Enter**.

**Problem:**     **The modem speaker volume is too low or too high.**

**Solution:**    Your modem has a small speaker on board that provides audible feedback of dial tones and remote connection signals ("handshaking"). This is not the same as the speaker that you may have connected to your sound card.

If the software allows you to control the volume, make sure the speaker is enabled and set to a comfortable volume.

If the software does not have speaker settings, add one of the **AT** commands listed below to the initialization string:

**L1** for low volume

**L2** for medium volume

**L3** for highest volume

**M0** to turn the speaker off entirely

For example, if you want the volume low and the software uses the initialization string **AT &F**, change it to **AT &F L1**.

**Problem:**     **The modem does not automatically dial a call when you send a Dial command.**

**Solution:**    Make sure the modem speaker is turned on in your software so that you can hear dialing sounds. Also, make sure that the phone line is plugged in.

Make sure that you are dialing a valid phone number, including any required dial prefixes.

If you are using tone dialing on a line that requires

pulse dialing, the line may not be able to accept tone-dialed calls. Select Pulse dialing in your software, or make sure the software dialing prefix is **ATDP** (for pulse dialing).

Make sure your communications software and modem are configured for the same COM port.

Make sure your modem has hung up from the previous call. Select **Hang Up** in your software; or type **ATH** in terminal mode.

**Problem:**     **The modem can connect to some modems, but not to others.**

**Solution:**     A remote modem does not respond because of the extended negotiation process by which modems determine the best common connection between them. If this is the case, you may have to disable part or all of the negotiation process. In the following table, “protocol” means error correction and data compression.

To force different communication speeds	Type these AT commands and press Enter
Negotiate speed and protocol (default setting)	<b>AT &amp;F</b>
To force protocol	<b>AT \N3</b>
Dualmode (V.90 or V.92)—56000 bps	<b>AT+MS=V92,1</b>
V92 only (disable V.90)—56000 bps	<b>AT+MS=V92,0</b>
V.90 only (disable V.92)—56000 bps	<b>AT+MS=V90,0</b>
Disable both 56K and aurate on V.34—33600 bps	<b>AT+MS=V34,1</b>
V.34—33600 bps	<b>AT+MS=V34,0</b>
V.32bis—14400 bps	<b>AT+MS=V32B,0</b>
V.32—9600 bps	<b>AT+MS=V32,0</b>
2400 bps	<b>AT+MS=V22B,0</b>
1200 bps	<b>AT+MS=V22,0</b>

**Notes:** Some software allows these commands to be added to the list of dial prefixes or the initialization string.

When the protocol is forced, the modem will not attempt to connect at other protocols if it cannot connect at the forced protocol. It will try to connect at the fastest speed available within the forced protocol.

There are other configurations that can be forced as well. If you need to select a particular configuration, use the AT command strings shown below. You can always return to the modem's default configuration by typing **AT &F** and pressing the **Enter** key.

Remember that if you do this, the modem will not have received the commands in your software's initialization string as it normally would. Using the **ATZ** command overcomes this problem if you have saved all of your setup parameters in nonvolatile memory. (To save setup parameters in nonvolatile memory in **AT** terminal mode: Type **AT**, followed by the parameter settings you desire, followed by **&W**, and press **Enter**. For example, if you type **AT &C1 &D2 &W** and press **Enter**, the **&C1** and **&D2** parameter settings are stored.)

To force	Type command & press Enter
MNP 5/MNP 4 operation	<b>AT \N5</b>
LAPM only (V.42)	<b>AT \N4</b>
MNP 4 only	<b>AT \N5%C0</b>
V.42bis data compression	<b>AT+DS=3</b>
V.44 data compression only	<b>AT+DS44=3</b>
Auto-answer	<b>ATS0=1</b>

**Problem:**      **Your V.92 modem does not connect reliably at V.92.**

**Solution:**      First be sure that you have the latest modem firmware downloaded from our Web site. Also make sure that your ISP offers V.92 at the

number you are calling.

If you still have a V.92 problem, you may want to modify your Internet Connection string in Windows: On your desktop, double-click the **My Computer** icon, and then double-click **Dial-up Networking**. Right-click the existing Internet Connection that you wish to modify and select **Properties**. Click **General | Configure | Connection | Advanced**.

You can add initialization (init) strings on the line labeled **Extra Settings**. Enter *one* of the init strings listed below. Try these commands one at a time until you find the one that gives you the highest possible connection rate for your telephone line conditions.

Init String	Definition	
ATW2S7=150+MS=V90 <b>OR</b> AT&F+MS=V92	S7	Sets wait time for remote carrier, wait time can be 1-255 seconds
AT&FS7=150	&F	Sets factory defaults
AT&F&C1&D2\N5=1S7=100	&C1	DCD (Data Carrier Detect) follows the remote carrier signal
	&D2	DTR (Data Terminal Ready) reacts with a disconnect, sends "OK" response and disables auto-answer while DTR signal is OFF
	\N5	MNP Error Correction Only
	\A2	Maximum block size: 192 characters

**Problem:**      **Modem-on-Hold is not working.**

**Solution:**      You may have disabled Call Waiting in your dial up networking settings. For example, in the US, if you included **\*70**, in your phone number to dial, you have disabled Call Waiting.

Your ISP may not support V.92. Check with your ISP.

Confirm that you have established a V.92 connection. Modem-on-Hold will not work with a V.90 connection.

Your phone line may not have Call Waiting enabled. In order to use Modem-on-Hold, your phone must support Call Waiting. Please check with your local telephone company.

Your firmware might be out of date. Please visit our Web site to upgrade your modem's firmware.

**Problem:**      **You are using V.92 Modem-on-Hold but it disconnects you as soon as you are notified of an incoming call.**

**Solution:**      Your ISP may have set your modem "on hold" time to zero. This means that you are disconnected immediately after accepting an incoming call.

Your Modem-on-Hold software might be set to automatically disconnect. Please consult the online help included with your Modem-on-Hold software.

**Problem:**      **Your modem disconnects while communicating with a remote system.**

**Solution**      The remote system has hung up, and you need to reconnect. The other most common sources of interruptions are Call Waiting or someone picking up an extension phone.

If you have Call Waiting, you can usually temporarily disable it by including a prefix such as **\*70**,

(including the comma) in the U.S., or by selecting it as a prefix in the software's dialing directory.

Depending on your service, you may not be able to disable Call Waiting for incoming calls. If your incoming data calls are frequently disrupted by Call Waiting, you should consider dropping the service or installing a separate phone line without Call Waiting.

**Note:** Disabling Call Waiting prevents your V.92 Modem-on-Hold feature from working.

**Problem:** **Your modem does not make a connection.**

**Solution:** If your modem places calls but never connects, make sure you are dialing the right number and that the remote modem is turned on.

**Problem:** **Modem performance seems sluggish.**

**Solution:** If you are connected to the Internet, there may be a lot of traffic at the Web sites you are visiting. Other possible causes are lack of sufficient memory in your computer (insufficient RAM) or a slow processor (you need a Pentium® 266 or faster, or equivalent, when using Windows 98SE, Me, or 2000).

**Problem:** **Data appears garbled on the screen.**

**Solution:** Your communications software character set-up (start bit, data bits, stop bits, and parity bit) does not match that of the remote system. Check your settings against those used by the remote system and make sure they match. Pay particular attention to the parity setting, as this is the most common difference among systems. You should normally use 8 data bits, NO parity, and 1 stop bit (**8, NONE, 1** or **8N1**). Another common setting is 7 data bits, EVEN parity, and 1 stop bit (**7, EVEN, 1** or **7E1**).

**Problem:**     **You encounter communications problems with your modem.**

**Solution:**    Check that your communications software has been set up properly. Recheck the initialization string and dial string specified in your software manual.

Memory-resident programs can cause a variety of problems. Try starting up your computer without them. Programs that can cause problems include antivirus programs and screen savers.

## Appendix A: Removing an Internal Modem

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If you are replacing an external modem or if your computer does not have an internal modem installed, you do not need this section.

- 1 Before you take out the modem, you must inform Windows that you are going to remove it. Follow these steps:

*Windows Vista, XP and 2000:* Open **Control Panel** and select **Phone and Modem Options**. If prompted, enter your Location information. Then click the **Modems** tab, select your old modem, and click **Remove**.

*Windows Me and 98:* Click **Start**→**Settings**→**Control Panel** and select **Modems**. If prompted, enter your Location information. In the **Modems Properties** dialog box, select your old modem, and click **Remove**.

- 2 Physically remove the old modem as follows:
  - Shut down and turn off the computer.
  - Remove any cables connected to the modem.
  - Open the case of the computer.
  - If applicable, remove the screw that attaches the modem bracket to the computer.
  - Pull the modem out of its slot.
  - Replace the computer's case.

Return to the installation instructions.

## Appendix B: Regulatory Information

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### 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 warrantee 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.

#### **Industry Canada CS03 Statement**

NOTICE: This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

The Ringer Equivalence Number (REN) for this terminal equipment is identified on the bottom label of the equipment. The REN assigned to each terminal equipment 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 five.

AVIS : Le présent matériel est conforme aux spécifications techniques d'Industrie Canada applicables au matériel terminal. Cette conformité est confirmée par le numéro d'enregistrement. Le sigle IC, placé devant le numéro d'enregistrement, signifie que l'enregistrement s'est effectué conformément à une déclaration de conformité et indique que les spécifications techniques d'Industrie Canada ont été respectées. Il n'implique pas qu'Industrie Canada a approuvé le matériel.

L'indice d'équivalence de la sonnerie (IES) du présent matériel est montré sur l'étiquette inférieure du produit. L'IES assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

#### **US 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.

#### **Electrostatic Discharge Statement**

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

#### **Safety Notices**

**CAUTION:** To reduce the risk of fire, use the supplied phone cord or an AWG 26 or larger UL listed or CSA certified telecommunication line cord.

Do not use this product near water – for example, in a wet basement or near a swimming pool.

Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

## Declaration of Conformity



Declaration of Conformity  
Déclaration de conformité  
Konformitätserklärung  
Dichiarazione di conformità  
Declaração de Conformidade  
Konformitetsdeklaration

Overensstemmelseserklæring  
Conformiteitsverklaring van de EU  
Δήλωση Συμμόρφωσης  
Deklaracja zgodności  
Declaración de conformidad  
Cam kết về sự tuân thủ ở Châu Âu

Manufacturer/Producent/Fabrikant/ Constructeur/Hersteller/Κατασκευαστής/ Fabbicante/ Fabricante/Tillverkare/ Nhà sản xuất	Zoom Technologies, Inc. 207 South Street Boston, MA 02111 USA / 617-423-1072 www.zoom.com
Brand/Varemærke/Merk/Marque/Marke/ Μάρκα/Marchio/Marca/Marca/Thương hiệu	Zoom/Hayes V.92/V.90 USB Modem
Type/Typ/Μάρκα/Τipo/Kiểu mẫu	Series 1063, Model 3095, 08-15356

The manufacturer declares under sole responsibility that this equipment is compliant to Directive 1999/5/EC via the following. This product is CE marked.

Producenten erklærer under eneansvar, at dette udstyr er i overensstemmelse med direktivet 1999/5/EC via følgende. Dette produkt er CE-mærket.

De fabrikant verklaart geheel onder eigen verantwoordelijkheid dat deze apparatuur voldoet aan Richtlijn 1999/5/ EC op grond van het onderstaande. Dit product is voorzien van de CE-markering.

Le constructeur déclare sous son entière responsabilité que ce matériel est conforme à la Directive 1999/5/EC via les documents ci-dessous. Ce produit a reçu le marquage CE.

Hiermit erklärt Zoom die Übereinstimmung des Gerätes modem mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EC. Dieses Produkt ist das gekennzeichnete CE.

Ο κατασκευαστής δηλώνει με αποκλειστική του ευθύνη ότι αυτό το προϊόν συμμορφώνεται με την Οδηγία 1999/5/EC μέσω των παρακάτω. Αυτό το προϊόν φέρει τη Σήμανση CE.

Il fornitore dichiara sotto la sola responsabilità che questa apparecchiatura è compliant a 1999/5/EC direttivo via quanto segue. Questo prodotto è CE contrassegnato.

Producent stwierdza że to urządzenie zostało wyprodukowane zgodnie z Dyrektywą 1999/5/EC. Jest to potwierdzone poprzez umieszczenie znaku CE na urządzeniu.

O fabricante declara sob sua exclusiva responsabilidade que este equipamento está em conformidade com a Directiva 1999/5/EC através do seguinte. Este produto possui Marcação CE.

El fabricante declara bajo su exclusiva responsabilidad que este equipo satisface la Directiva 1999/5/EC por medio de lo siguiente. Este producto tiene marca CE.

Nhà sản xuất cam kết với trách nhiệm của mình là thiết bị này tuân theo Hướng dẫn 1999/5/EC thông qua các mục sau. Sản phẩm này được đánh dấu là CE.

73/23/EEC – LVD	EN60950-1:2001
89/336/EEC – EMC	EN55022:1998+A1, 2000+A2, 2003 EN55024:1998+A1, 2001+A2, 2003



Andy Pollock  
15 June, 2007  
1063/TF, Boston, MA, USA

Director, Hardware Engineering/Direktør, Hardware Engineering/Director, Sustaining Engineering  
/Directeur, Ingénierie de soutien/Direktør, Sustaining Engineering /Διευθυντής, Μηχανικής Διατήρησης /Direttore, Hardware Engineering /Dyrektor, Inżynieria ciągła/Director, Engenharia de Manutenção/Director, Ingeniería de apoyo/Giám Đốc Kỹ thuật Phần cứng

## Appendix C: Reference Information

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We recommend that you take a few moments to fill in the following information for your future reference. In the event you need to call Technical Support or Customer Service, you will need the information below.

**Modem Model**

*(located on the box)*

\_\_\_\_\_

**Serial Number**

*(located on the bottom of the modem under the bar code)*

\_\_\_\_\_

**COM Port**

\_\_\_\_\_

**Date of Purchase**

\_\_\_\_\_

**Store or Dealer**

\_\_\_\_\_