

**FAXMODEM  
INSTALLATION  
GUIDE**

for

**PCI**

# Introduction

This **Faxmodem Installation Guide** provides easy installation instructions for your faxmodem and the communications software that came with it.

## What You Need to Use Your Faxmodem

**Make sure that you have received the following items:**

- Faxmodem
- Phone cord
- A CD-ROM disc containing installation software, modem drivers, and communications software.

**You also need the following:**

- IBM PC-compatible Pentium® 133 or faster (or equivalent), with 16 megabytes of RAM, an available PCI slot, and a tool for removing and replacing the computer cover
- Windows® 95 or 98 operating system
- A telephone jack to plug the modem into, so the modem can dial out and receive calls

# Chapter 1 Installing Your Faxmodem

## Easy Installation

You **must** run the installation software **before** you install your faxmodem. This program installs "driver" files and sets up your computer to recognize the new faxmodem. When you restart your computer after installing the faxmodem, your hard drive will already contain the files Windows needs to complete the installation.

## Installing the Drivers

- 1** Your computer should be turned on. Close any applications you have running.  
  
Follow the directions on the label of the CD-ROM disc that came with your faxmodem. On most computers, the CD will auto-run after a few seconds and display an installation screen.
- 2** When the installation interface appears, click on the **Install Modem Drivers** button. The installation program will run and automatically copy driver files to your hard drive. Do not install any of the other software at this time.
- 3** When the installation program has finished, shut down your computer. You may leave the CD in its drive. Continue with **Installing the Faxmodem Card** on the next page.

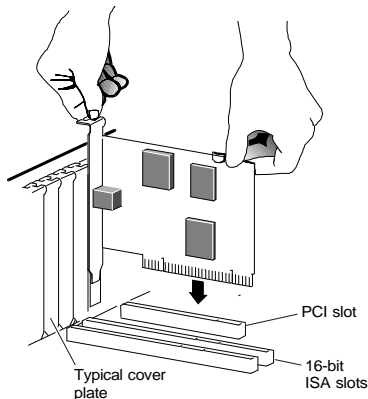
# Installing the Faxmodem Card



Do not handle any internal modem card when the phone line is plugged into it. The voltages present when the line is ringing are potentially harmful.

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

- 1** Make a note of the serial number on your new faxmodem. Record the number in the **Important Information** table on page 16.  
**Turn your computer off and unplug it.** Don't turn it on until you complete the faxmodem hardware installation.
- 2** Take the cover off your computer.
- 3** Unscrew and remove the metal cover plate on the rear of the computer that lines up with an available PCI slot.
- 4** Insert your new faxmodem firmly into an available PCI slot. See the following illustration.



- 5 Replace the computer cover.
- 6 Connect the telephone cord. Plug one end of the phone cord into the modem's jack. Plug the other end into a phone jack (typically the wall jack where you would normally connect a phone). If you want to use a phone on the same jack, you can purchase a low-cost adapter from any store that carries telephone equipment.



- 7 Plug in your computer and turn it on.
- 8 As the Windows operating system starts up, it will detect your new faxmodem. Because the installation program has already provided your computer with the required files, you will see Windows report on its progress, but it will not require any action on your part. Continue below with **Completing the Installation**.

## Completing the Installation

Once the system has completely started, do the following to determine your *COM* port and test the modem.

- 1 Open **Control Panel** in Windows and double-click on the **Modems** icon. Click on the entry for your new faxmodem and then click on **Properties**.
- 2 Click on the **Diagnostics** tab. Highlight the port next to the entry for your new faxmodem and click on **More info**.

Note the **Port** and **Interrupt (IRQ)** entries under **Port Information** and write the information in the **Important Information** table on page 16.

This step also tests the modem by querying it with **AT**

commands. A list of responses means that your new modem is properly connected.

**Note 1:** PCI devices, including your new faxmodem, use IRQs differently from the way older ISA devices use them. This may become an issue only for DOS programs. With the PCI faxmodem, DOS programs that require a modem must be run in a "DOS box" under Windows.

The setup routines for DOS programs running under Windows will occasionally report an IRQ assignment that is different from what is reported by Windows. In nearly all cases, you can accept the default assigned by your DOS software.

**Note 2:** If you ever need to remove or relocate your new PCI faxmodem, run the **lremove** program, which is installed on your computer when you install your PCI modem. To run the program, click **Start** and then **Run**. Type **lremove.exe** and press **Enter** or click **OK**.

**Even if you are simply relocating your PCI faxmodem to a different PCI slot, you must run lremove and then remove the modem. Reinstall the modem according to the instructions in this Guide.**

**Once you have determined that your faxmodem is working properly, go on to Chapter 2 to install your communications software.**

If you determine that your faxmodem is not working, first try shutting down your computer and restarting it. Sometimes this will help Windows identify and activate the correct drivers. If restarting your computer doesn't work, read Chapter 4, **Problems and Solutions**.

# Chapter 2 Installing COMMUNICATE! *LITE* Software

## Installing COMMUNICATE! *LITE*

You can install the communications software from the CD-ROM disc included in your package, using an easy point-and-click interface.

- 1** Follow the instructions on the CD-ROM label. On most Windows 95 and 98 computers the CD will start up automatically after a few seconds.

When the main installation screen appears, click on the **COMMUNICATE!** button to begin the installation.

- 2** Click on the **Install** button.
- 3** The **Install Configuration** dialog box will be displayed. Enter your company name (if applicable), your name, telephone, and fax number. This information will appear on the header of each of your outgoing faxes.
- 4** Click on the **Auto-load** checkbox if you want to have communications capabilities (for instance, for incoming faxes) available all the time when you are in Windows.
- 5** Click **OK** when you are ready to continue.
- 6** The default path for the source drive should be displayed; if it is not, select the correct source drive and click **OK**.
- 7** When **COMMUNICATE! LITE** has been successfully installed, you will be asked to restart Windows.

Click on **Yes**.

- 8** After Windows restarts:

If **COMMUNICATE! LITE** loads automatically, you can start it by clicking its icon in the taskbar.

If **COMMUNICATE! LITE** does not load automatically, start it by clicking on the **COMMUNICATE!** icon under **Start | Programs**.

The program's main interface, which looks like a telephone console, will be displayed.

**COMMUNICATE! LITE** is now installed and ready to send and receive faxes or voice messages.

## Running **COMMUNICATE! LITE**

**COMMUNICATE! LITE** comes with extensive on-line help to guide you through faxing, data calling, and many other features. The features supported by your faxmodem are listed on its box.

To learn how to use all the features of **COMMUNICATE! LITE**, click on the **Help** button to access the online documentation. A set of step-by-step instructions will be displayed.

# Chapter 3 Using the Faxmodem with Other Software

## Tips for Setting Up Communications Software

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 on the menu, select the most descriptive name such as **V.90 Modem**, **56K modem**, **Generic IS-101 modem**, **Hayes-compatible modem** (with or without a specific speed), or generic **Class 1 modem**.
- In the dialing directory, set all entries to the highest possible baud rate. All communications between the computer and the modem 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**.
- Finally, some programs ask **Send init if CD high?**, which you should set to **YES**. Otherwise, the modem may not receive the proper initialization string.

## Accessing the Internet

To access the Internet and the World Wide Web, use an on-line service, such as America Online (AOL), or an Internet Service Provider (ISP). ISPs typically supply or suggest the browser software needed to access their service, along with complete setup information and any other software you will need.

# Chapter 4 Problems and Solutions

**Problem:** Your modem seems to install under Windows 95 or 98, but Windows cannot find it later.

**Solution:** 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.

**Solution:** The most common error 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.

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 sound-card.

**Problem:** You encounter communications problems.

**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 and programs that start automatically can cause a variety of problems for some communications software. Try starting up your computer without them or deactivating them after your computer has started. Possible sources of problems are screen savers and virus scanners.

If you are using Dial-Up Networking for Windows 95 or 98, you may want to download and install the latest version. At the time this manual was printed, the latest version was available from the Microsoft Web site by following these steps:

1. In your browser, type **search.microsoft.com** (without the **www**) in the **Address** or **Location** window and press **Enter**.
2. In **Enter your search words(s) or phrase** type in **dial up networking upgrade**.
3. Click on the drop-down list under **search criteria** and select **All Words**.
4. Click on **Search Now!**.
5. The next page will display a list of networking upgrades, including the latest version of Dial-Up Networking.

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

**Solution:** Make sure that the phone line is plugged in. Make sure that you are dialing a valid phone number, including any required dial prefixes.

**Problem:** **Your modem doesn't make sounds during dialing.**

**Solution:** Your modem is not designed to make sounds, since almost all popular Windows software provides call progress information on-screen.

**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 **\*70**, (including the

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

You cannot 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.

**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:** **You receive bursts of errors occasionally, but otherwise data quality is good.**

**Solution:** The connection may have been established on poor-quality or noisy telephone lines. Hang up and place the call again to try to obtain a better connection.

Someone may be picking up an extension connected to the line that your modem is using. If your modem is sharing a telephone line with other telephones, inform the other users when you will be making a data call, or install a separate line dedicated to data calls.

Your telephone line may have a Call Waiting feature and a call is being received. See the Call Waiting discussion above.

**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. Also, each time you dial in to an online service or Internet Service Provider, the connection may be routed over different phone lines. Try logging off and dialing in again.

Other possible causes of sluggish performance are lack of sufficient memory in your computer (16 megabytes of RAM required) or a slow processor (you need a Pentium® 133 or faster, or equivalent).

# Appendix: Regulatory Information

## FCC Part 68 Telecommunications Statement

The Federal Communications Commission (FCC) has established rules which permit this device to be directly connected to the telephone network. This device is registered with the Federal Communications Commission (FCC) for direct connection to the telephone line using a standardized RJ11C telephone jack. This device complies with the Part 15, Subpart B, and Part 68 requirements of the FCC rules.

The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of the device, the telephone company is required to give adequate notice of the changes.

If the telephone company requests information on what equipment is connected to the line, provide the following information:

1. The telephone number that this unit is connected to,
2. The ringer equivalence number,
3. The USOC jack required [RJ11C], and
4. The FCC Registration Number.

Items (2) and (4) are indicated on the label attached to the bracket or the modem board. The ringer equivalence number is used to determine how many devices can be connected to your telephone line. In most cases, the sum of the RENs of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.

If this device should malfunction, it may also cause harm to the telephone network; should this occur, this device should be disconnected from the network until the source of the problem can be determined and repair has been made. If a device which harms the network is not removed, the telephone company may temporarily disconnect service.

In the event of equipment malfunction, all repairs should be performed at an authorized repair facility. It is the responsibility of users requiring service to report the need for service to such a facility. Service facilities are listed on the product's warranty flyer.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via telephone fax machine 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 sent, the identification of the business, entity, or individual sending the message, and the telephone number of the sending machine. In order to program this information into your fax machine, refer to your faxmodem software documentation for information on enabling fax branding.

## Industry Canada Attachment

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telephone company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. For locations of the authorized service facilities, please see the product's warranty card. 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 pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

*Caution:* Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate.

The Ringer Equivalence Number (REN) assigned to each terminal device helps to prevent overloading. You can use any combination of devices subject only to the requirement that the sum of the RENs of all devices on any one line should not exceed 5 (5.0). If too many devices are attached, they may not ring properly.

*The Ringer Equivalence Number for your internal modem is printed on a label on the modem bracket or on the modem board.*

## Canadian 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.

# Important Information

In the event you need to call for technical support or customer service, you will need the information below.

We recommend that you take a few moments to fill in the following information for your future reference.

**Faxmodem Model** \_\_\_\_\_

*(located on the box)*

**Serial Number** \_\_\_\_\_

*(located on the bracket or the board)*

**COM Port and IRQ** \_\_\_\_\_

**Date of Purchase** \_\_\_\_\_

**Store or Dealer** \_\_\_\_\_

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