READ ME FIRST!

Installation Guide For Macintosh

part number 1.024.1926-00

1 Prepare for installation.

Write the modem's serial number in the box below. The serial number is located on the white bar code sticker on the underside of the modem and on the modem's box.

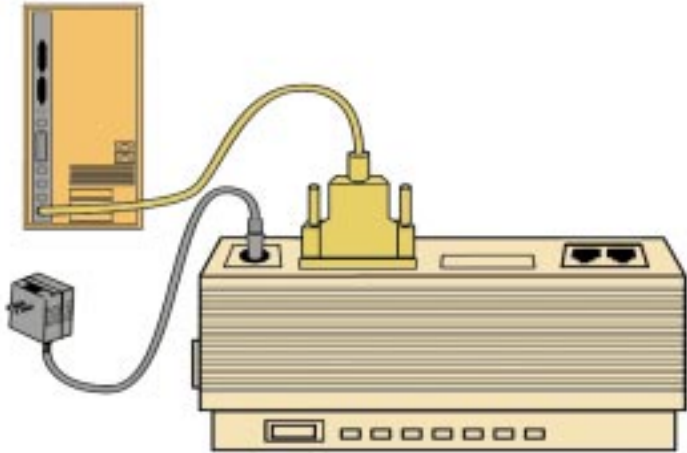## 2 Connect the modem to your computer.

Shut down your computer. Firmly attach the enclosed serial connecting cable to both the modem and the port on the back of your computer marked with [icon].
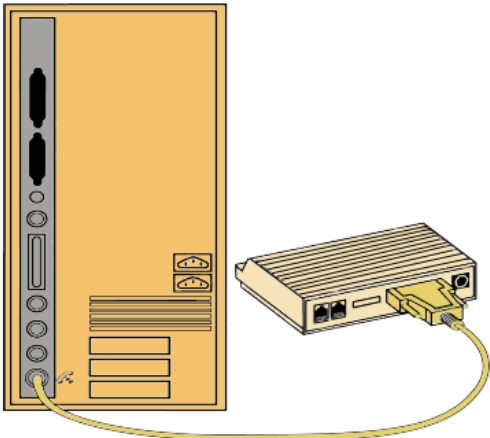
Connect the power adapter to your modem and plug it into the wall.

3 Connect the modem to an analog phone line.

Plug one end of the phone cord into the telephone jack of the modem (labeled [icon]) and the other end into the telephone wall jack.

WARNING: Many offices and some homes have digital phone lines. The modem will be damaged if you use a digital phone line. Call your phone company if you are unsure which type of line you have.
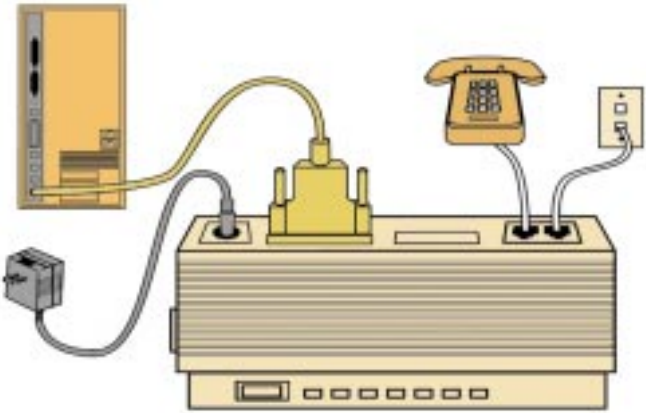
If you want to use your modem and phone with the same telephone wall jack, plug your phone's cord into the other available jack on the back of your modem.

Once your modem is connected, you may want to install the RapidComm™ software included with your modem. This allows you to send and receive faxes or call a local bulletin board service (BBS).

4 Install the *Connections*™ CD and register your modem.

Insert the *Connections* CD into your CD-ROM drive. The *Connections* CD icon will appear on your desktop, and then a window with a *Connections* icon and a Readme file inside it will open. Double-click the *Connections* icon within the window.

The Setup Wizard on the CD guides you through installing the *Connections* CD and registering your modem.

For instructions on how to install software from the CD, see the "Software Installation" chapter in the electronic *User's Guide & Reference* on the CD.

The Serial Interface

Macintosh computers require an 8-pin mini-DIN hardware handshaking cable for high-speed communications. This cable is included in your package.

Hardware Handshaking Cable Pin Assignments

Mini DIN-8		DB-25	Connector
Handshake Output	HSKo	1	4 RTS
			20 DTR
Handshake Input	HSKi	2	5 CTS
Transmit Data+	TXD-	3	2 TXD
Ground	GND	4	7 GND
Receive Data+	RXD+	8	7 GND
Receive Data-	RXD-	5	3 RXD
Transmit Data+	TXD+	6	not connected
Gen. Purpose Input	GPI	7	not connected

Note: The Handshake Output pin is connected to both pins 4 (RTS) and 20 (DTR) on the DB-25 connector.

Troubleshooting

Problem: The computer or software will not recognize or fails to initialize the modem.

Possible solution:
Make sure the modem is plugged in to both the power adapter and the serial cable and turned on. Use only the power adapter included with the modem. The CS and TR lights on the front panel should be illuminated.

Possible Solution:
If you have another modem installed in your computer, you may need to uninstall it before using your new 3Com modem.

Possible Solution:
Verify that your communications software is set to use the port to which your modem is attached, either the Printer or Modem port. If this is not the case, either change the setting in your software or physically change your modem's connection to your Macintosh. Refer to your software manual for information about changing modem settings.

Problem: The modem won't go off hook to dial or doesn't answer the phone.

Possible solution:
You may have plugged your modem's phone cord into the wrong jack on the modem. Make sure the phone cord is plugged into a jack labeled with the word TELCO (marked with ⬚ on the underside of your modem).

Possible solution:
You might have a bad phone cord connection to your modem. The phone cord should be plugged into the TELCO jack on the modem (marked with ⬚) and the wall phone jack. The phone cord should be no longer than 12 feet in length. Use the phone cord included in your modem's box if possible.

Possible solution:
You may have devices between the modem and the phone jack. There should be no line splitters, fax machines, or other devices between the modem and the wall jack.

Possible solution:
You may have a poor line connection. Place the call again. Calls are routed differently each time. To verify a valid phone connection, enter your communication software's terminal mode and dial the 3Com BBS: **ATX3DT18472626000**

If you must dial a number (such as "9") to reach an outside line, type that number right after **ATX3DT.**
This string bypasses the dial tone, allowing a connection if the modem is functioning properly.

Possible solution:
You may have plugged your modem's phone cord into a digital line. Plugging your modem's phone cord into a digital phone line can damage the modem. Call your phone company if you are unsure whether or not your phone line is digital.

Possible solution:
You may be using the wrong power adapter for your modem. Use only the power adapter that came with your modem.

Possible solution:
Your software may not have auto answer enabled. Enable the auto answer feature. In your communication software's terminal mode, type **ATS0=1** (ATS "zero"=1) and press **ENTER**.

You need to enable auto answer before every session unless you alter your software's initialization string to permanently enable auto answer.

Possible solution:
If you have voice mail, your dial tone may be altered because messages are waiting. Answer your voice mail to restore your normal dial tone.

Problem: Both modems sound like they exchange carrier signals, but they fail to establish a connection.

Possible solution:
You may have a poor line connection. Place the call again. Calls are routed differently each time.
To verify a valid phone connection, enter your communication software's terminal mode and dial the 3Com BBS: **ATX3DT18472626000**

If you must dial a number (such as "9") to reach an outside line, type that number right after **ATX3DT.**
This string bypasses the dial tone, allowing a connection if the modem is functioning properly.

Problem: Your 56K modem cannot achieve a 56K Internet connection.

Possible solution:
V.90 supports speeds of up to 56K. Due to phone line restrictions, actual speeds will vary; this does not mean you have not achieved a V.90 connection. Our research shows that the vast majority of telephone lines in North America support V.90 connections. However, due to unusual or old telephone line configurations, some users will not be able to take full advantage of this technology. If this is the case, your 3Com modem will use its backward compatibility to negotiate a speed compatible with your phone line, such as V.34.

It is important to remember that your line conditions may change, so you may be able to make faster connections in the future. To make sure that you can use V.90 or 3Com 56K technology, perform the following tests:

1. First, make sure your modem supports V.90. You can verify that your modem supports V.90 by opening a terminal application (RapidComm™), typing **ati7**, and pressing **ENTER**. If the Options line has V.90 listed, then your modem supports V.90 and 3Com 56K technology.
2. Make sure that the number you're dialing is an actual V.90 or 3Com 56K technology server. Some ISPs may have a mixture of V.90 and non-V.90 servers. You can check this by contacting your ISP and asking them about 56K technology or V.90 availability.
3. If it is a V.90 or 3Com 56K server, you may want to try calling it a few more times. Remember, the phone company routes each call differently. For testing purposes, you may want to call into the 3Com BBS at 847 262 6000, which has V.90 servers attached to it.
4. If you are able to connect at V.90 speeds on the 3Com BBS, there may be something between you and your ISP that is preventing a V.90 connection from being negotiated. Contact your ISP and see if they have received similar reports from other customers.
5. If you do not make a V.90 connection to our BBS, your phone line might not be capable of supporting V.90 or 3Com 56K technology speeds. If you are experiencing consistent problems with V.90 connections (i.e., not making a high speed connection, abrupt disconnections, etc.), you can call 3Com Technical Support for U.S. Robotics modems at 847 262 5151.

Support Resources

If you have not fixed a problem after trying the suggestions in the "Troubleshooting" section, you can receive additional help via one of these convenient resources:

World Wide Web
Provides the same information as the Internet on Demand listing. Log on to **www.usr.com/home/online**

Internet On Demand
Provides automatic technical support through a library containing product information, quick reference cards, and installation help.
• To obtain an index of available documents, send a blank e-mail to **support@usr.com**.
• To have a document e-mailed to you, send the document's number as the subject.

Internet FTP
Provides a free library containing the same files as the BBS site. FTP to **ftp.usr.com**.

The 3Com BBS
Gives you access to customer and technical support documents and hundreds of files and tips to help simplify using your modem. To connect to the 3Com Bulletin Board System, follow these steps:

1. Start your fax/data communications software. The software settings for the BBS are:
• ANSI terminal emulation
• Data Bits: 8
• Parity: None
• Stop Bits: 1
2. Put the software in terminal mode.
3. Type the BBS's number: **ATX3DT18472626000**

.
If this is your first time connecting to our BBS, you will be asked to enter your name, create a password of your choice, and to fill out a questionnaire.

When you are ready to leave the BBS, type **G** *(for "good-bye") from the main menu.*

America Online
Provides resources such as file libraries, message boards, online customer support, and product announcements. In the Keyword field, type **3COM**.

CompuServe
Provides resources such as file libraries, message boards, online customer support, and product announcements.

• Go to this address: **GO THREECOM**
• Address private messages to **76711,707**

Are You Still Having Problems?

1. Call the Dealer Who Sold You the Modem
The dealer may be able to troubleshoot the problem over the phone or may request that you bring the modem back to the store for service.

2. Call 3Com's Technical Support Department
In the United States:
847 262 5151
8:00 - 6:00 CST M-F

In Canada:
905 479 0231
8:30 - 6:00 EST

Manufacturer's Declaration of Conformity

3Com Corporation
3800 Golf Road
Rolling Meadows, IL 60008
U.S.A.

declares that this product conforms to the FCC's specifications:

Part 15:
Operation is subject to the following two conditions:

(1) this device may not cause harmful electromagnetic interference, and

(2) this device must accept any interference received including interference that may cause undesired operations.

Part 68:
This equipment complies with FCC Rules Part 68. Located on the bottom of the modem is the FCC Registration Number and Ringer Equivalence Number (REN). You must provide this information to the telephone company if requested.

The REN is used to determine the number of devices you may legally connect to your telephone line. In most areas, the sum of the REN of all devices connected to one line must not exceed five (5.0). You should contact your telephone company to determine the maximum REN for your calling area.

This equipment uses the following USOC jacks: RJ-11C.

An FCC compliant telephone cord and modular plug are provided with this equipment, which is designed to connect to the telephone network or premises wiring using a Part 68 compliant compatible jack. See installation instructions for details.

Caution to the User
The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Industry Canada (IC)
This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled *Digital Apparatus*, ICES-003 of Industry Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B préscrites dans la norme sur le matériel brouilleur: Appareils Numériques, NMB-003 édictée par l'Industrie Canada.

UL Listing/CSA Certified
This information technology equipment is UL-Listed and CSA Certified for the uses described in the *Users Guide*.

Fax Branding
The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in the 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, an identification of the business or other entity, or other 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.)

In order to program this information into your modem, refer to the RapidComm manual on the CD-ROM that shipped with your modem. If you are using a different communication software program, refer to its manual.

Radio and Television Interference
This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. The modem has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio and television communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause interference to radio or television reception, which you can determine by monitoring reception when the modem is installed and when it is removed from the computer, try to correct the problem with one or more of the following measures:

· Reorient the receiving antenna (for televisions with antenna reception only) or cable input device.
· Relocate the computer with respect to the receiver.
· Relocate the computer and/or the receiver so that they are on separate branch circuits.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the following booklet, prepared by the Federal Communications Commission, helpful:

How to Identify and Resolve Radio-TV Interference Problems
Stock No. 004-000-0345-4
U.S. Government Printing Office
Washington, DC 20402

In accordance with Part 15 of the FCC rules, the user is cautioned that any changes or modifications to the equipment described in this manual that are not expressly approved by 3Com could void the user's authority to operate the equipment.

For Canadian Modem Users
NOTICE: The Industry Canada (IC) label identifies certified equipment. This certification means the equipment meets certain 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.

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. Please see the bottom of the modem for the REN.

Before installing this 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 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. Currently, telecommunication companies do not allow users to connect their equipment to jacks except in precise situations that are spelled out in tariffing arrangements with those companies.

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.

For your own protection, make sure 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: Do *NOT* attempt to make such connections yourself. Instead, contact an electric inspection authority or electrician, as appropriate.

3Com Corporation Limited Warranty