U.S. Robotics®

READ ME FIRST!

PCI Faxmodem for Windows®

Installation Guide
For Windows
95, 98, and 2000
Operating Systems
(models 3CP5699A and
3CP325699A)

Before You Begin

Use the Modem Installation Assistant! The Modem Installation Assistant is a new software tool that will make the installation of your modem even easier in Windows 95, 98, and 2000. In addition, Windows 95 and 98 users can view a video presentation on installing the modem. In Windows 95 and 98, it will check for the system resources that your modem needs, help you free system resources if none are available, and give you step-by-step instructions or a video presentation on installing your modem.

To use the Modem Installation Assistant, insert the Installation CD included with your modem into your CD-ROM drive. The Modem Installation Assistant should run automatically. If it does not, click Windows **Start** and then click **Run**. In the "Run" dialog box, type **D:\setup.exe**. If your CD-ROM drive uses a different letter, type that letter in place of "D."

The Modem Installation Assistant will then go to work. Follow the onscreen instructions to use the Assistant. When the Assistant tells you to shut down your computer, refer to Step One of this Guide to continue the installation process.

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 modem and on the modem's box.

NOTE: It is very important that you have your serial number written down for future reference. If you ever need to call our Technical Support department, you will need this number to receive assistance.

Make sure you have run the Modem Installation Assistant. For information on the Assistant, see the "Before You Begin" section of this Guide. Once you have run the Assistant, make sure that your computer is shut down. Turn off your computer and all peripheral devices. Unplug your computer and remove the computer's cover.

② Remove the expansion slot cover.

CAUTION: To avoid the risk of electrical shock, make sure your computer and all peripheral devices are turned off and unplugged.
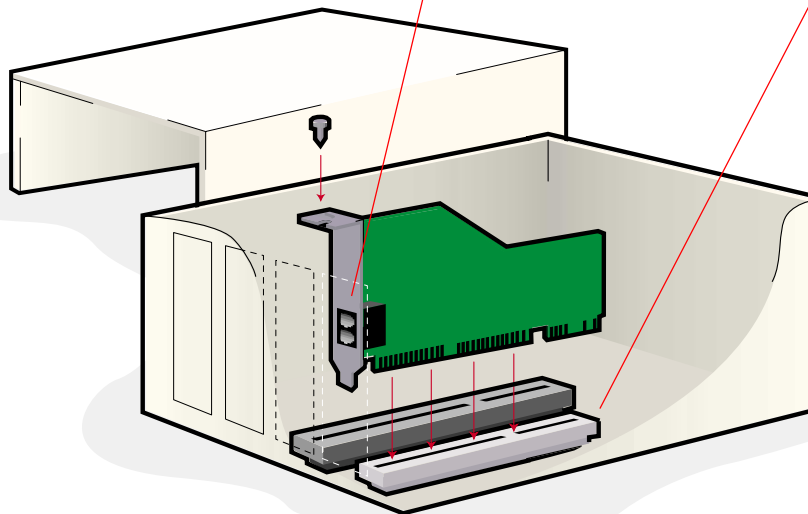
Unscrew and remove the expansion slot cover at the back of an empty PCI expansion slot. The slot cover is on the back of your computer and covers an opening on your computer's case. The opening lines up with the expansion slot inside the computer, which is 3.5 inches long and usually white plastic lined with metal.

③ Insert the modem into the empty PCI expansion slot.

Insert the modem, black edge first, into the slot. The modem will fit snugly. You may need to rock the modem back and forth firmly to properly seat it in the slot.

NOTE: Properly seating this modem in the slot can be difficult, because it requires more force than some other internal modems. Use firm downward pressure. When the modem is properly installed, you will no longer see any part of the black edge.

The modem's metal bracket will cover the opening on the back of the computer. Secure the modem with the screw you removed in step two. Replace the computer's cover.

④ Connect the modem to an analog phone line.

Plug one end of the provided phone cord into the jack on the modem labeled ⬛ and plug the other end into an analog phone wall jack.

When you are not using the modem, you can use a telephone on the modem's phone line. Plug the telephone's cord into the modem's jack labeled ☎.

⑤ Windows installs the drivers and the Modem Installation Assistant verifies the installation.

Make sure that the Installation CD is still in your CD-ROM drive, then turn on your computer. Windows will detect your modem and install its drivers.

Windows 95 and 98 Users
The Modem Installation Assistant will restart and verify that the modem is properly installed.

If the Assistant detects problems with your modem's installation, it will automatically provide troubleshooting advice. For further troubleshooting information and information on contacting technical support, see the other side of this Guide.

Windows 2000 Users
Windows 2000 should verify that your modem is properly installed.

For further troubleshooting information and information on contacting technical support, see the other side of this Guide.

The Installation CD includes the electronic User's Guide and Reference for your modem. The Connections™ CD contains a selection of Internet browsers, ISP offers, and other valuable software.

⑥ Install the *Connections* CD and register your modem.

Remove the Installation CD and insert the *Connections* CD. The *Connections* CD will start automatically once you have successfully installed your modem. It will guide you through installing the *Connections* program group and registering your modem. If it does not start automatically, click Windows **Start** and then click **Run**. In the "Run" dialog box, type **D:\setup.exe**. If your CD-ROM drive uses a different letter, type that letter in place of "D."

*Note: If at any time during the installation you are prompted to select the location of your installation drivers, the following are the correct locations on the Installation CD (assumes D: is your CD-ROM drive).

Windows 95/98 drivers: D:\
Windows 2000 drivers: D:\Win_2000
Windows NT drivers: Refer to "Installing Your New Modem in Windows NT" document included with your modem.

For troubleshooting help or to find out how to contact technical support, see the other side of this Guide.

Troubleshooting

1. Make sure that your phone cord is properly connected. Remove the phone cord from the modem and wall jacks. Clean any dirt or corrosion from the cord and jacks. Reinsert the cord securely in the wall jack and the modem's ☐ jack. Use the phone cord included with your modem, if possible.

2. Make sure that your internal modem is physically installed correctly in your computer. You will need to press the modem in firmly so that it is seated properly in its slot. When the modem is installed correctly, you will no longer see any part of the black edge. See the front of this guide for complete instructions. If your modem still does not work, with your computer off, remove the modem and reinstall it in another slot if possible.

PROBLEM:
My computer isn't recognizing my modem.

Possible solution:
You may be using an IRQ that is already in use. To work properly, your modem needs to be assigned to a free IRQ.

Windows 2000
If you set your modem's jumpers to Plug-and-Play mode, Windows should locate a free IRQ, if one exists, for your use by your modem.

If Plug-and-Play fails to install the modem, you need to determine IRQ availability. Right-click the **My Computer** icon on your desktop. Click **Properties**, and then the **Hardware** tab. In the Device Manager section, click **Device Manager**. From the **View** menu, select **Resources by type**. Click **Interrupt Request (IRQ)**. You will now see a listing of your system's IRQs and the devices to which they are assigned. If an IRQ is not present in this list, it indicates that Windows is not currently using it and the IRQ is considered available.

Locate your modem in the list of devices. If a yellow exclamation point appears over the modem's description, your modem is in conflict with another device. Either your modem or the other device will have to be reinstalled to another IRQ in order to resolve your conflict.

If a usable, free IRQ does not exist, you may need to remove, disable, or relocate another device. Refer to that device's documentation for more information about removing, disabling, or relocating it.

If Windows still fails to recognize your modem and it does not have a yellow exclamation point next to its IRQ, or if your modem doesn't appear in the list, another problem exists, and you may need to call 3Com Technical Support.

Windows 95/98
If Plug-and-Play fails to install the modem, you need to determine IRQ availability. Right-click the **My Computer** icon on your desktop. Click **Properties**, and then the **Device Manager** tab. Double-click the **Computer** icon at the top of the device list. You will now see a listing of your system's IRQs and the devices to which they are assigned. If an IRQ is not present in this list, it indicates that Windows is not currently using it, and the IRQ is considered available.

Locate your modem in the list of devices. If a yellow exclamation point appears over the modem's description, your modem is in conflict with another device. Either your modem or the other device will have to be reinstalled to another IRQ in order to resolve your conflict.

If a usable, free IRQ does not exist, you may need to remove, disable, or relocate another device. Refer to that device's documentation for more information about removing, disabling, or relocating it.

If Windows still fails to recognize your modem and it does not have a yellow exclamation point next to its IRQ, or if your modem doesn't appear in the list, another problem exists, and you may need to call 3Com Technical Support.

Windows NT
Turn off your computer and physically remove the modem. Restart your computer, and check for an available IRQ by clicking Windows **Start**, **Programs**, **Administrative Tools**, and **Windows NT Diagnostics**. Click the **Resources** tab and select **IRQ**. Take note of an available IRQ that your modem can use. If there are no IRQs available, you may have to remove, disable, or relocate another device in order to free an IRQ for use by your modem. Refer to that device's documentation for more information about removing, disabling, or relocating it.

Possible solution:
You may be using a COM port address that is either already in use or not configured correctly. To work properly, this modem needs to be assigned to a free COM port.

Windows 2000
Make sure your COM port is not already in use by another modem. Click Windows **Start**, **Settings**, and **Control Panel**, and then double-click **Phone and Modem Options**. Click the **Modems** tab. Look for another modem already in the machine. If there is another modem listed, check which COM port it is using. If a previous modem is already using the available COM port, you can either use another COM port or uninstall the previously installed modem. See your previous modem's manual for uninstallation instructions.

Right-click the **My Computer** icon on your desktop. Click **Properties**.

Click the **Hardware** tab. In the "Device Manager section", click the **Device Manager** button. Look under **Ports** (COM & LPT). If the Communications Ports have yellow exclamation points or red Xs over them, your COM ports may be configured incorrectly. If this is the case, you may need to contact your computer manufacturer.
It is also possible that you may be plugging an external modem's cable into a disabled serial port. Refer to your computer's manual for information about enabling COM ports. This usually involves altering the BIOS settings and possibly the operating system. You may need to call your computer's manufacturer to change your BIOS settings if they are incorrect.

Windows 95/98
Make sure your COM port is not already in use by another device. Click Windows **Start**, **Settings**, and **Control Panel**, and then double-click **Modems**. Look for another modem already installed in your computer. If there is another modem installed, click the **Diagnostics** tab to find out which COM port it is using. If a previously installed modem is already using the available COM port, you should uninstall that modem. See your previous modem's manual for uninstallation instructions.

Right-click the **My Computer** icon on your desktop. Click **Properties**. Click the **Device Manager** tab. Double-click **Ports**. If the Communications Ports have yellow exclamation points or red Xs over them, your COM ports may be configured incorrectly. If this is the case, you may need to contact your computer manufacturer.

Windows NT
Turn off your computer and remove your modem. Restart and click Windows **Start**, **Settings**, and then **Control Panel**. Double-click the **Ports** icon. Your modem must be set to a COM port setting that does not appear in this list.

PROBLEM:
My software isn't recognizing my modem.

Possible solution:
Your communications software may not function properly if you have more than one version of the software installed, you are using an older version, or you have more than one communications application installed on your system. We highly recommend using the communications software provided with your modem on the Installation CD-ROM.

Possible solution:
Your software's COM port settings may be incorrect. There should be a place in the Setup section of your software that addresses port settings. Make sure the software's port settings match those for your modem. To check which COM port your modem is using, click Windows **Start**, **Settings**, and **Control Panel**. Double-click **Modems**, select your modem, and select **Properties**. Check your communication software's documentation for instructions on adjusting the port settings in your software.

Possible solution:
You may not have the correct modem type selected in your software or in Windows. Click on Windows **Start**, **Settings**, and **Control Panel**. When Control Panel opens, click **Modems**. You will see a list of installed modems. You can also add, remove, or view the properties of modems from this window. The 3Com U.S. Robotics modem you have installed should be present in the list of installed modems. If none of the modem descriptions in the list match your 3Com U.S. Robotics modem or no modems are listed, your modem is not installed properly. Try reinstalling your modem.

Possible solution:
If you are using Dial-Up Networking, it may not be configured correctly. Check your configuration and make sure you have the correct modem selected. Double-click **My Computer**, double-click **Dial-Up Networking**, right-click the connection you are trying to use, and click **Properties**. Make sure that the description in the modem box matches the description of the modem you are using. If it doesn't match, select the proper modem description.

PROBLEM:
My modem won't dial out or doesn't answer incoming calls.

FOR BOTH DIALING AND ANSWERING PROBLEMS:
Possible solution:
You may have a bad phone cord connection to your modem, or your phone cord may be plugged into the wrong jack. The phone cord should be plugged into the ☐ jack on the modem and into the wall phone jack. 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.

OFFICE USERS:
Possible solution:
You may have plugged your modem's phone cord into a digital line. Contact the department responsible for your phone system if you are unsure whether or not your phone line is digital.

If your phone system requires dialing "9" to access an outside line, be sure to add "9" before the number you are dialing.

VOICE MAIL USERS:
Possible solution:
If you have voice mail provided by your local phone company, your dial tone may be altered when messages are waiting. Retrieve your voice mail to restore your normal dial tone.

PROBLEM:
My modem sounds like it's trying to connect to another modem but fails.

Possible solution:
You may have a poor connection. All calls are routed differently, so try placing the call again.

PROBLEM:
My modem isn't achieving a 56K Internet connection.

Note: Due to current FCC regulations, maximum download speed is limited to 53,333 bps.

Our research has shown that the vast majority of telephone lines in North America can and do support V.90 connections. The V.90 protocol allows for connection speeds of up to 56K, but line conditions may affect the actual speeds during a given connection. Due to unusual telephone line configurations, some users will not be able to take full advantage of V.90 technology at this time. In order to achieve a V.90 connection:

- The server you're dialing in to must support and provide a digital V.90 signal. Your ISP can provide you with a list of dial-up connections and information on what those connections currently support.
- The telephone line between your ISP and your modem must be capable of supporting a 56K connection and contain only one analog-to-digital conversion. The 56K signal from your ISP begins as a digital signal. Somewhere between the ISP and your modem, there will be a digital-to-analog signal conversion so that your modem can receive the data. There must be no more than one analog-to-digital signal conversion in the path from your ISP to your modem. If more than one analog-to-digital conversion occurs, your connect speeds will default to V.34 (33.6 Kbps). There may also be impairments on the local lines between your ISP and your modem. These impairments can prevent or limit V.90 connection speeds. All telephone calls are routed differently, so you should try making your 56K connection several times. One way to test this is to dial into a long distance location. Long distance lines are often much clearer than local lines. It is important to note that telephone companies are constantly upgrading their systems. Lines that do not support 56K today may support 56K in the near future.
- Your modem must be connecting to a V.90/56K server. A pair of 56K modems will not connect to each other at V.90/56K speeds.

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
Contains useful product information, documents, and manuals. Log on to:
http://consumer.3com.com/support/index.html

3Com Knowledgebase
A Web-based troubleshooting tool that will help you solve problems you may be having with your modem. Go to
http://knowledgebase.3com.com
When the page loads, click the **Modems** graphic. Then follow the onscreen directions.

Internet FTP
consumerftp.3com.com.

Fax on Demand
A 24 hour a day automated fax system that supplies user information. Dial **847 545 0859** to have an index of documents faxed to you.

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
Technical questions about 3Com modems can also be answered by technical support specialists.

In the United States:
847 262 5151
8:00 am - 6:00 pm CST Monday - Friday.
Automated service is available 24 hours a day, 7 days a week.

3Com also staffs its own fee-based 900 number for immediate assistance. These lines are staffed from:
8:00 am - 10:00 pm CST Monday - Friday
9:00 am - 5:00 pm CST Saturday - Sunday
No-Hold line   900 555 USR1

For a no-hold call, a $2.50 per minute charge (price subject to change without notice) will appear on your local phone bill. You must be 18 or older or have parental permission. (Service available in the U.S. only.)

In Canada:
Keating Technologies
905 479 0231
8:00 am - 8:00 pm EST Monday - Friday

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.

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

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.

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: RJ11C.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

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.

If you have an external modem:
UL Listing/CSA Certified
This information technology equipment is UL-Listed and CSA-Certified for the uses described in the users guide.

If you have an internal modem:
UL Listing/CUL Listing
This information technology equipment is UL-Listed and CUL-Listed for use with UL-Listed personal computers that have installation instructions detailing user installation of card accessories.

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 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 software (BVRP Phone Tools or Winphone) manual on the Installation 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.

For Canadian Modem Users
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.
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 devices does not exceed 5.
The Ringer Equivalence Number is located on the bottom of the modem.
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.
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.
»AVIS »: L'étiquette d'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.
Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées cidessus n'empêche pas la dégradation du service dans certaines situations.
Les réparations de matériel homologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Centre de garantie et de service après-vente:
Keating Technologies
25 Royal Crest Court, Suite 120
Markham, ONT L3R 9X4