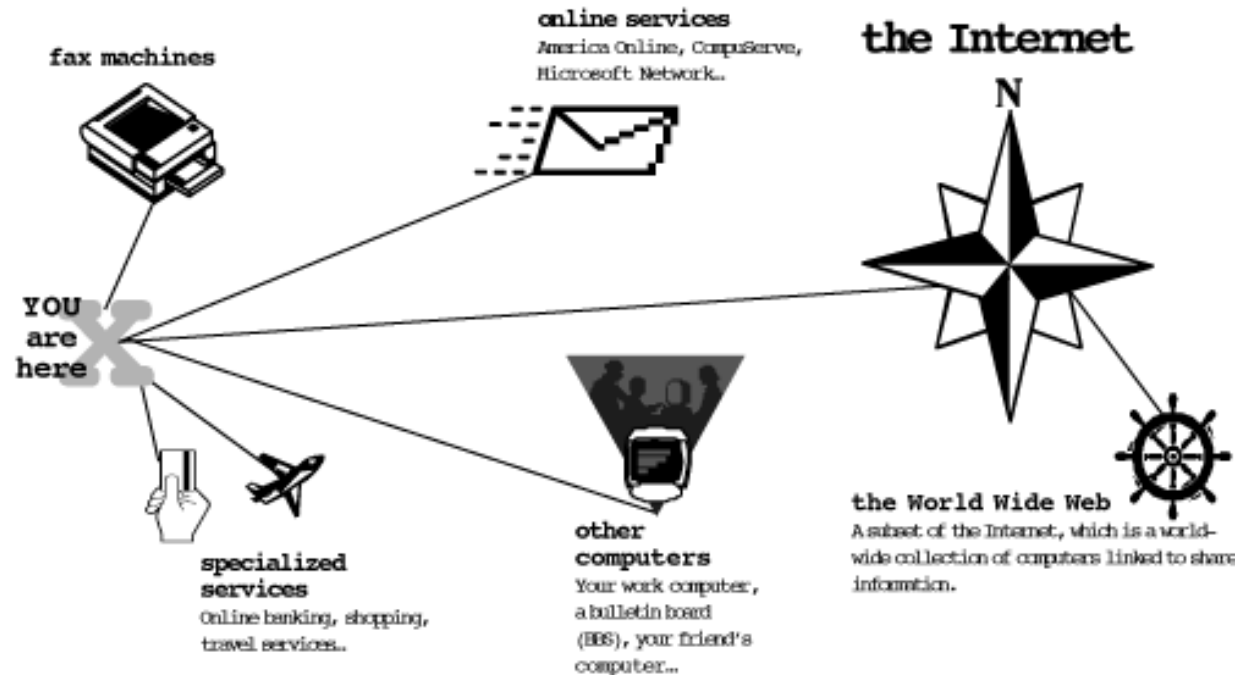


Introduction

Introduction provides a general overview of your new Sportster and where it can take you. Also included: information about U.S. Robotics, tips concerning the use of this manual, and where to go next to start hooking up and trying out your new Sportster modem.

Connect with your Sportster to...



U.S. Robotics: The Intelligent Choice in Information Access

Congratulations! You have just purchased the Sportster faxmodem. Since 1976, U.S. Robotics has grown to become a key manufacturer and developer of information access technology. U.S. Robotics' advanced technology allows you to use your faxmodem to open up a new world of information access.

As an innovator in the data communications field, U.S. Robotics has a history of bringing the latest technology to market at an affordable price.

U.S. Robotics owns the core technology, known as the data pump, that works in its access products. This allows U.S. Robotics to bring new technologies and features to market faster and at a lower cost while passing the savings on to you.

For more information on U.S. Robotics, visit the U.S. Robotics World Wide Web Home Page at:
<http://www.usr.com>



Welcome to the World of Information Access

With your Sportster faxmodem, you can move beyond the boundaries of your computer—around the world if you like.

Because ordinary telephone lines cannot carry digital information, a modem changes the digital data from your computer into analog data, a format that can be carried. In a similar manner, a modem receiving a call from another modem changes the analog signal back into digital data that a computer can digest. This changing of digital data into analog data and back again allows two computers to “speak” to each other. Called modulation/demodulation, this transformation of signals is how the modem received its name.

With a modem and a standard telephone line, you can send faxes to the office or important customers without leaving your computer. And with an online or Internet connection, you can share recipes with fellow gourmets, catch up on the latest news, view a weather map from Singapore, keep in touch with distant friends by electronic mail, surf the World Wide Web, and much more.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Read This First!

If you have an internal modem and are using the Windows 3.x operating system, start at [Part I, Section A: Internal Modem Installation with Windows 3.x.](#)

If you have an internal modem and are using the Windows 95 operating system, start at [Part I, Section B: Internal Modem Installation with Windows 95.](#)

If you have an external modem and are using the Windows 3.x operating system, start at [Part II, Section A: External Modem Installation with Windows 3.x.](#)

If you have an external modem and are using the Windows 95 operating system, start at [Part II, Section B: External Modem Installation with Windows 95.](#)

Part I - Internal Modem Installation

This part of the manual covers the installation of your internal Sportster and the accompanying fax/data software. The instructions are provided for both Windows 3.1 and 3.11 (hereafter jointly referred to as Windows 3.x) and Windows 95 users. Please refer to the section dealing with the operating system your computer uses. The two sections are:

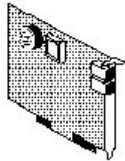
[Section A: Internal Modem Installation with Windows 3.x](#)

[Section B: Internal Modem Installation with Windows 95](#)

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Section A: Internal Modem Installation with Windows 3.x

You'll need these items from your Sportster box:



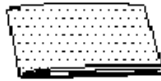
the modem



a phone cord



the Connections CD



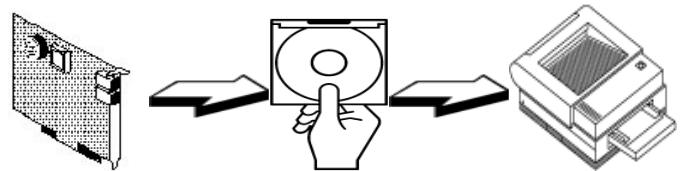
this manual

Plus:

a screwdriver



THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.



HARDWARE

SOFTWARE

TESTING

A Word about COM Ports and IRQs

Most computer accessories — a mouse, sound card, enhanced graphics card, scanner, etc. — require a special connection through which they can communicate with the computer. For an internal modem, it's called a communications (COM) port. Most computers have 2 to 4 COM ports. On an internal modem, a COM port is built into the modem itself.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Each COM port uses an IRQ (interrupt request). An accessory's IRQ tells the computer that the accessory needs to do something. The computer will stop what it's doing to help the accessory perform its task. If two accessories tried to share an IRQ, it would be like two people asking different questions — in unison — to a third person. The person being asked the questions would not be able to understand either request.

KEY POINT:

Accessories cannot share COM ports and should not share IRQs. When accessories try to share settings, they will either not work properly or not work at all. This section of the manual will help you understand the COM/IRQ settings on your new Sportster.

U.S. Robotics has set your Sportster to use COM 2 and IRQ 3. This is the industry standard for modem settings. In most cases, these settings will work. In some instances, however, these settings are already being used by another accessory, like a sound card. We recommend that you run the comtest program (on the *Connections* CD) to determine what settings your modem should use.

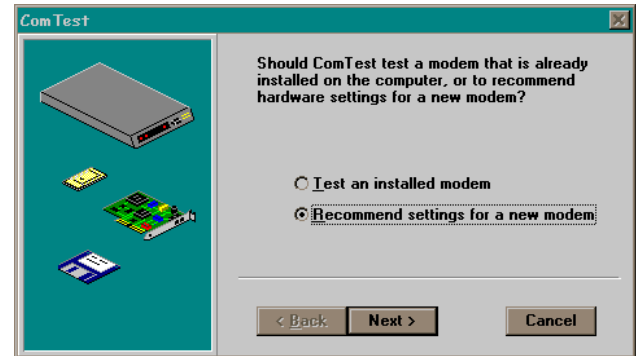
Note:

Some communications software programs require a particular setting for your modem. (RapidComm, which shipped with your modem, does not.) If you're going to use a program other than RapidComm, now is a good time to read your software manual to determine what setting is required.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

How to Use comtest to Determine Your Modem's Settings

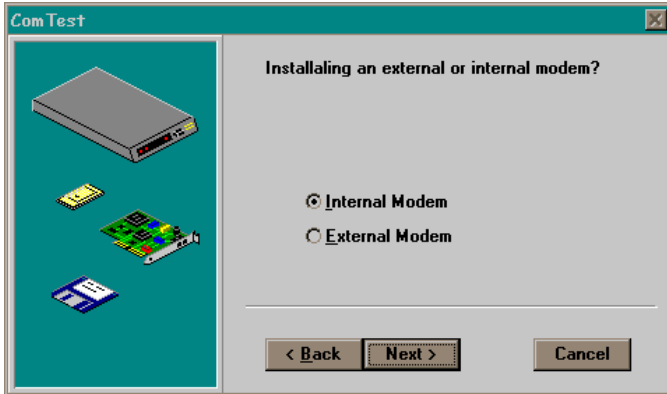
1. Insert your *Connections* CD into your CD-ROM drive.
2. In the Windows *Program Manager*, select Run from the File menu. Enter the file name as **d:\comtest.exe**. This starts comtest, the program that determines which COM ports and IRQs are available for use by your modem.
3. The screen at the top of the next page appears when comtest starts.
 - If there is a modem in your computer which you are replacing with your new Sportster, you need to go to “Testing an Installed Modem” on page 13 to see which options to select so that comtest can determine what the older modem's COM and IRQ settings are.
 - If a modem is NOT currently installed in your computer, choose the *Recommend settings for a new modem* option.



Then click on the *Next* button.

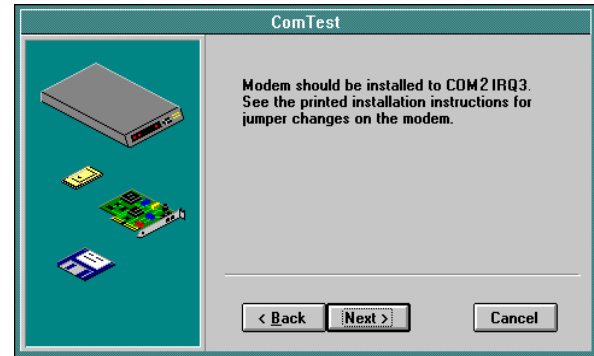
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

4. If it's not already selected, choose the *Internal Modem* option.



Then click on the *Next* button.

5. If you have a free setting, you will see a screen like this:

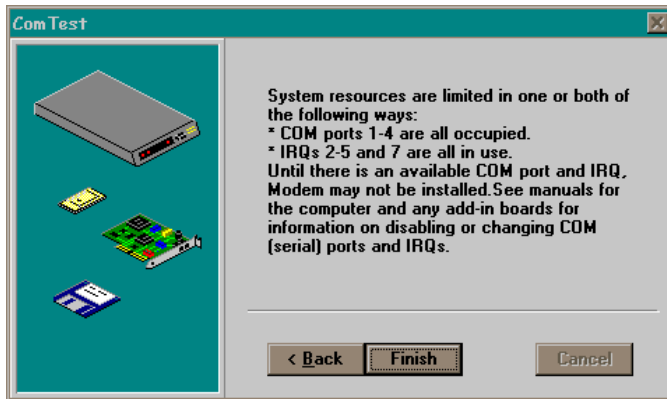


COM2/IRQ3 is free in this example. Comtest might instead recommend COM1/IRQ4, COM3/IRQ4, or COM4/IRQ3 for your modem.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

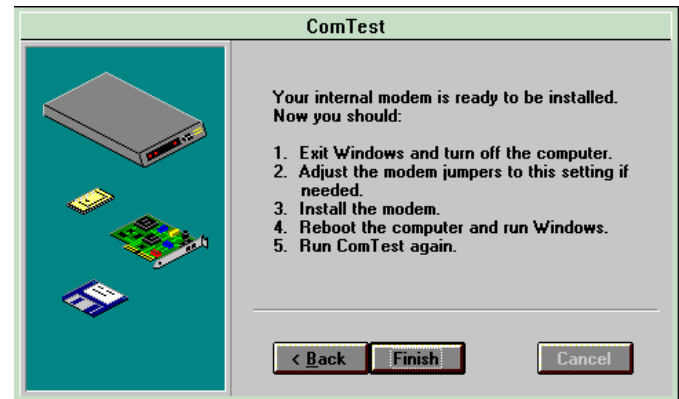
- Write down the setting you're given in the spaces provided on the first page of this manual. You'll need to know the setting later.
- Click on the *Next* button.

If you DO NOT have a free setting, you will see a screen like this:



Click on the *Finish* button to exit comtest. Go to [“What to Do with comtest’s Recommendation”](#).

6. When you see this screen, click on the *Finish* button to exit comtest.



Go to [“What to Do with comtest’s Recommendation”](#).

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Testing an Installed Modem

If there is a modem already installed in your computer, you can determine its COM and IRQ settings by selecting the *Test an installed modem option*. Follow the instructions on screen until you see the screen that tells you “Testing is complete.” This screen will also tell you which COM and IRQ settings your present modem is using. These are the settings you want to use for your new Sportster. Write the settings down in the spaces provided on the first page of this manual.

After turning off your computer and removing your present modem

- If your present modem is using COM2/IRQ3, go to “How to Insert the Modem.”
- If your present modem uses settings other than COM2/IRQ3, go to “How to Change the Fac-

tory Settings.”

Note:

If your communications software requires a setting for your modem that comtest does not recommend, there is a good chance that the setting is being used by another device in your system. To find out how to free that setting in your system, consult your computer manufacturer’s manual. If the communications software requires COM2/IRQ3, go to “How to Insert the Modem” on page 19. If the communications software requires different settings, go to [“How to Change the Factory Settings”](#).



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

What to Do with comtest's Recommendation

If comtest recommended COM1/IRQ4

You will have to change the factory settings on your modem.

Write “COM1” and “IRQ4” in the spaces provided on the first page of this manual. Go to “[How to Change the Factory Settings](#)”.

If comtest recommended COM2/IRQ3

You can insert the modem, as is, into your computer.

Write “COM2” and “IRQ3” in the spaces provided on the first page of this manual. Go to “[How to Insert the Modem](#)”.

If comtest recommended COM3/IRQ4 or COM4/IRQ3

Do not use either of these settings.

While the COM port part of the setting is okay (comtest only recommends COM ports that are not being used), the IRQ part of the setting is NOT okay. When comtest recommends either COM1/IRQ4 or COM4/IRQ3, the IRQ in the setting is being used by another accessory. You *could* use the suggested IRQ for the modem, but you run the risk that the modem and/or the other accessory sharing the IRQ might not work properly.

If you do NOT have a sound card, use COM3/IRQ5. Write “COM3” and “IRQ5” in the spaces provided on the first page of this manual. You will have to change the factory settings on your modem. Go to “[How to Change the Factory Settings](#)”.

If you do have a sound card, use COM2/IRQ3. To use this setting, you have to first disable your computer's second serial port (COM2). This is a pronged socket on the back of your computer.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Go to your computer manufacturer's manual:

- Find out which of the sockets on the back of your computer is the second serial port.
- If you have something plugged into that port, find out if you can plug it in somewhere else. Any accessory plugged into that port after the port has been disabled will NOT work.
- Find out how to disable the COM port.
- Then return to this point in this manual to continue.

After disabling COM2, you can use the COM2/IRQ3 setting.

Write "COM2" and "IRQ3" on the first page of this manual and go to "[How to Insert the Modem](#)".

If comtest tells you that You do not have any available COM ports and/or IRQs

We recommend you disable COM1 or COM2.

When you disable one of these COM ports, you can use it and its default IRQ for your modem. Go to your computer manufacturer's manual.

- Find out which socket is COM1 and which is COM2.
- If nothing is plugged into either port, you can choose either of the ports to disable. Your computer manufacturer's manual will tell you how to disable the COM port.
- If one port does not have anything plugged into it, note if the port is COM1 or COM2. This is the port you'll want to disable for your modem.
- If both ports are being used, you may be able to attach one of the plugged-in accessories else-



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

where so that you can disable its COM port. The accessory will NOT work once its port is disabled.

If you've disabled COM1, you can now use the COM1/IRQ4 setting. Write it down on the first page of this manual. Go to "[How to Change the Factory Settings](#)" in the next column.

If you've disabled COM2, you can now use the COM2/IRQ3 setting. Write it down on the first page of this manual. Go to "[How to Insert the Modem](#)".

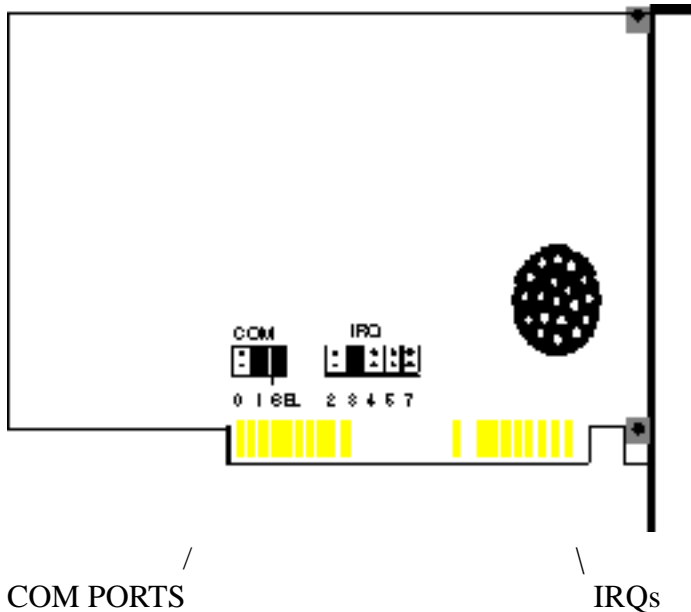
How to Change the Factory Settings

Note:

If comtest recommended COM2/IRQ3 for your modem, you can skip this step.

1. Touch an unpainted metal part of your computer (the back is usually unpainted) to discharge static from your hands. Static can damage your modem.
2. Take the modem out of its plastic bag.
3. Find the COM port and IRQ shunts (small black plastic pieces) on your modem. They should be in roughly the area indicated in the following illustration.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

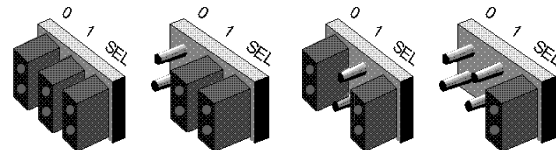


Tip:

Try grasping the shunt with a tweezers or a needle-nosed pliers. DO NOT grasp too firmly, however, because you could crush the shunt. If the shunt seems stuck, try gently rocking it back and forth as you lift.

5. Move the shunt to the new setting:

- The COM port setting can involve one to three shunts. The four possible COM port settings are as follows:



COM1

COM2

COM3

COM4

- To change the COM port and IRQ settings, you have to move the shunts on the COM port and IRQ pins. To do this, lift the shunts off the pins.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

- Unlike most of the COM port settings, the IRQ setting only involves one shunt. Simply move the shunt to the pin labeled with the IRQ you want.

How to Insert the Modem

Note:

Before installing your modem, write your modem's serial number on the first page of this manual. (You'll find the serial number underneath the bar code on the white sticker on the modem and on the outside of the box the modem came in.) If you ever need to call our technical support department, the technical support representative will ask you for the serial number. This will help him or her identify the type of modem you have.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

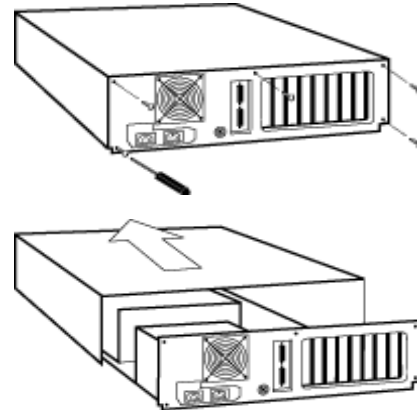
1. Turn off your computer and unplug it from the electrical outlet.
2. Unplug any peripheral devices (printer, monitor, keyboard, mouse, etc.) from the computer.
3. Remove the screws from your computer's cover and then remove the cover. Your computer may look different than this drawing, but the basic principle for removing the cover should be the same. Refer to your computer manufacturer's manual if you need further instructions.

Tip:

Before you unplug anything, label the cords or make a sketch of how things are connected. This can be helpful when you want to plug things back in later.

CAUTION:

To avoid getting shocked, make sure your computer and all peripheral devices are turned off and unplugged.

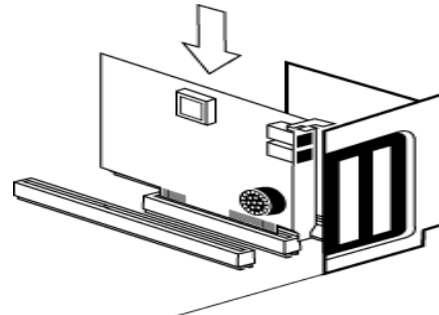
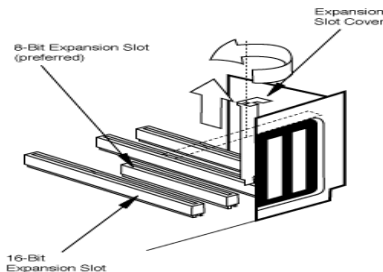


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

4. Find an empty ISA expansion slot that's at least as long as the gold edge of your modem. (ISA slots are black plastic grooves lined with silver.) Unscrew and remove the expansion slot cover (the long narrow piece of metal that keeps dust from entering through the opening that's perpendicular to the slot).
5. Holding the modem at each corner, with the gold edge facing the slot, push the modem down as gently as possible until it snaps into the expansion slot.

Note:

The drawings show horizontally aligned expansion slots. Some computers have vertically aligned slots. The instructions apply to both styles.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

You'll have to apply a little pressure to seat the modem properly. Sometimes a gentle back-and-forth motion helps get the modem all the way into the slot. If you feel resistance, the modem may not be properly lined up with the slot. Do not force it. Take the modem all the way out and try again.

6. Once the modem is in place, fasten it firmly into place using the screw that you removed in step 4.
7. Put the computer's cover back on and fasten it with the screws.
8. If you currently have a phone plugged into the wall jack you're going to use for the modem, disconnect the phone from the jack.
9. Plug one end of the phone cord that came with the modem into the TELCO jack at the rear of the modem.

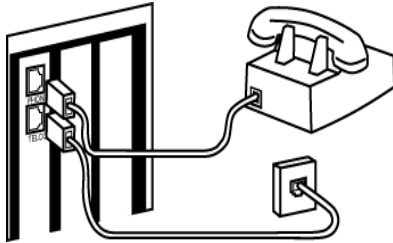
Warning:

The phone jack you use must be for an ANALOG phone line. Most offices use digital lines. Be sure you know what type of line you have. The modem will be damaged if you use a digital phone line.

10. Plug the other end of the cord into the wall jack.

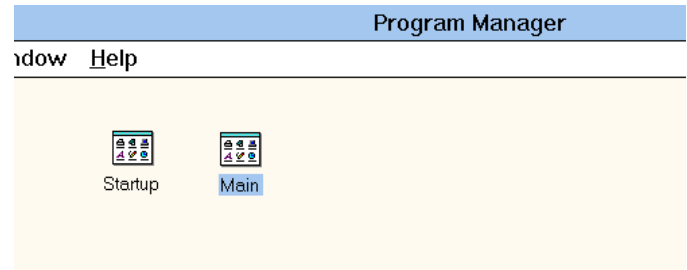
(If you want to use a telephone on that line when you're not using the modem, plug the telephone's cord into the modem's PHONE jack.)

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems



Go to “[Installing RapidComm with the Setup Wizard](#)”.

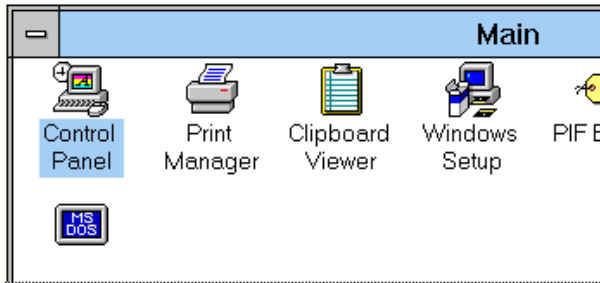
14. If you have your modem set to a setting that is not in the preceding list, get into your *Program Manager* and double-click on the Main icon.



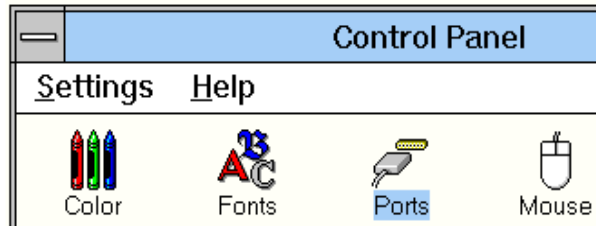
11. Plug the power cords, cables, and peripherals back into the computer and turn the computer on.
12. Start Windows.
13. If you have your modem set to one of these settings:
- COM1/IRQ4
 - COM2/IRQ3
 - COM3/IRQ4
 - COM4/IRQ3

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

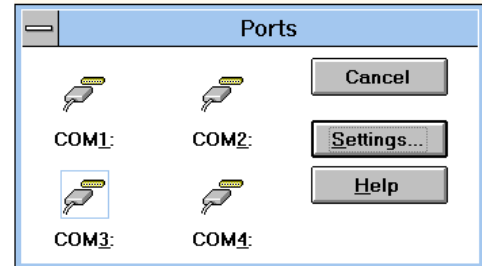
15. Double-click on the *Control Panel* icon.



16. Double-click on the *Ports* icon.

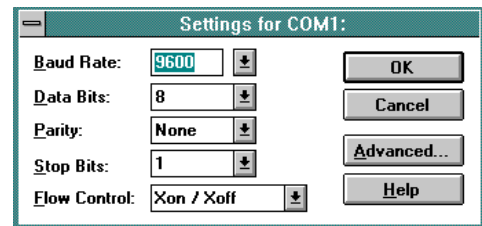


17. If it's not already selected, select the COM port for your modem.



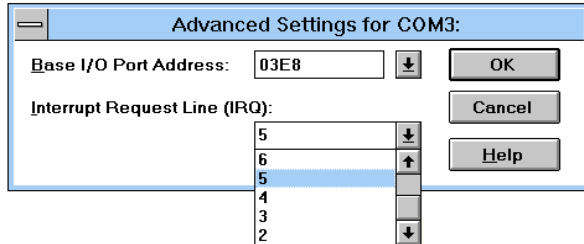
Click on the Settings button.

18. Click on the Advanced button.

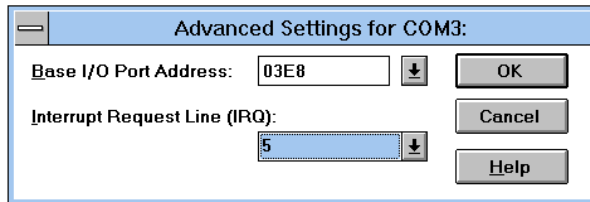


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

19. Scroll to change the IRQ to the IRQ number you've set your modem for.

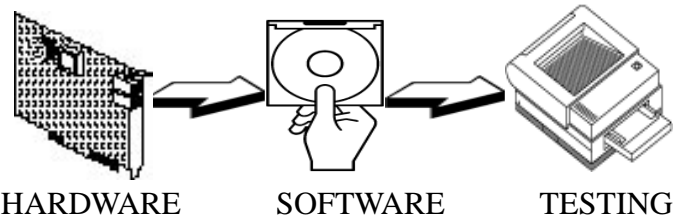


20. Click the *OK* button.



Keep clicking on *OK* buttons and until you see a *Close* button. Click on the *Close* button to exit *Program Manager*.

THIS NEXT SECTION WALKS YOU THROUGH THE STEPS INVOLVED IN INSTALLING THE FAX/DATA SOFTWARE FROM THE *CONNECTIONS* CD ONTO YOUR COMPUTER.



Installing RapidComm with the Setup Wizard

This section will walk you through the basics of running the U.S. Robotics Setup Wizard, which installs RapidComm (fax/data software) and other useful software programs. It also allows you to register your new Sportster modem.

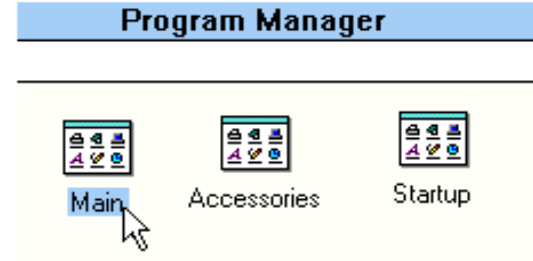
The RapidComm fax/data software simplifies send-

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

ing and receiving faxes directly from your computer desktop. You can send faxes to specified groups of numbers after building your own fax directory and specify individual cover pages when necessary. And you can send individual faxes without exiting your word processing program.

Additionally, the RapidComm fax/data software works with your modem to connect to BBSs, online services, and Internet providers. Combine this access with the enclosed *Discover the World Wide Web With Your Sportster* book to enter a new world of information and entertainment.

1. Start the *Connections* CD by double-clicking on the Main icon in Program Manager.

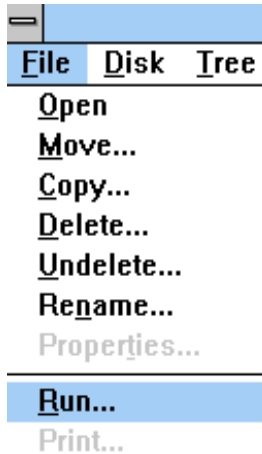


2. Double-click on the File Manager icon.

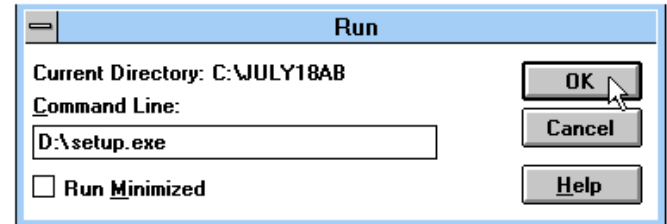


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

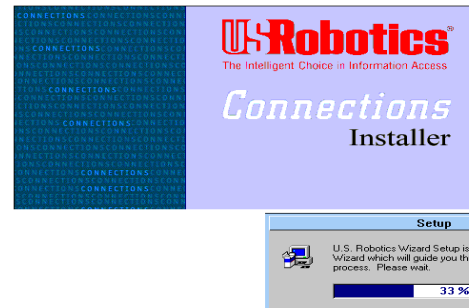
3. Under the File menu, choose Run.



Then click the *OK* button.



5. You will see a screen that looks like this:

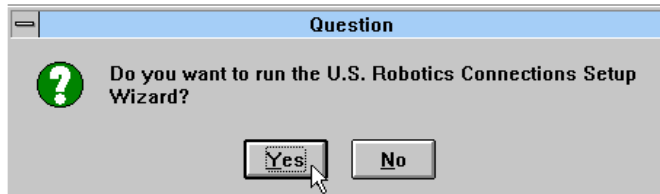


4. In the box, type: **D:\setup.exe**
(If your CD-ROM drive has a letter name other than **D**, type that letter in place of **D**.)

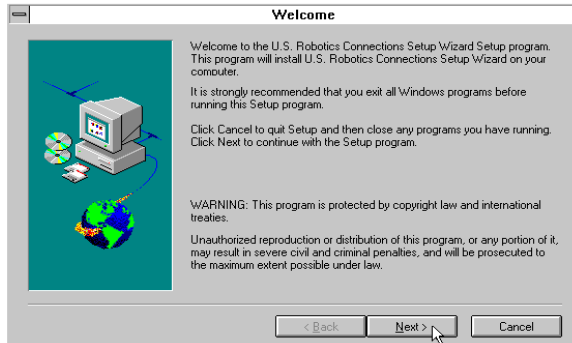


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

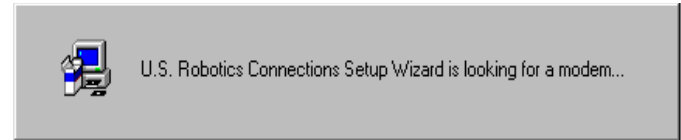
6. When you see this screen, click on the *Yes* button:



7. When you see this screen, click on the *Next* button



8. You will see this screen for a moment:



9. When you see this screen, if the selection is correct, click on the *Next* button. If not, make the correct selection and then click on the *Next* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

10. When you see this screen, fill in the blank boxes and then click on the *Next* button:

U.S. Robotics Connections Setup Wizard - Local Demographics

Please enter your name and the name of your organization.

First Name: John

Middle Initial: Q.

Last Name: Public

Organization: ACME Products

< Back Next > Cancel

11. When you see this screen, fill in the blank boxes and then click on the *Next* button:

U.S. Robotics Connections Setup Wizard - Local Demographics

Please enter your address and phone number.

Street Address: 1234 Pleasant Drive

City: Springfield State: IL

Zip: 60123 Country: United States

Phone Number: 123-456-7890 Extension: 123

Fax Number: 987-654-3210

E-mail address: jpublic@acme.com

< Back Next > Cancel

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

12. Un-check any software you do not want by clicking on the name of the software.

Note:

We recommend you install all the software listed.

Then click on the *Next* button:



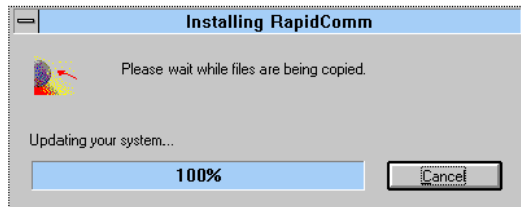
13. As the CD installs the software on your system, you will see a series of screens that guide you through the installation. Please follow the on-screen directions.

14. When you see this screen, click on the *Install* button, unless you want to copy the RapidComm files to a different directory. (Your screen may show a path that differs from what appears on the screen below.)

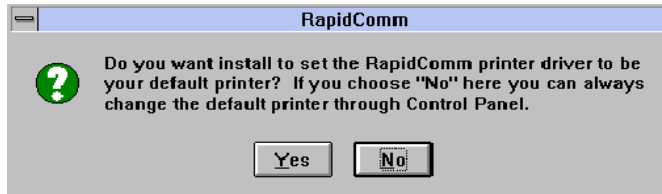


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

15. You will see this screen for a moment:



16. When you see this screen, click on either the *Yes* or *No* button:



- If you click on the Yes button, every document you print will be treated as a fax unless you change the printer selection in the program from which you're trying to print.

- If you click on the No button, RapidComm will not be chosen as the default printer. When you want to send a fax, you will have to select RapidComm as the printer in the program from which you're trying to print.

17. When you see this screen, click on the *OK* button:

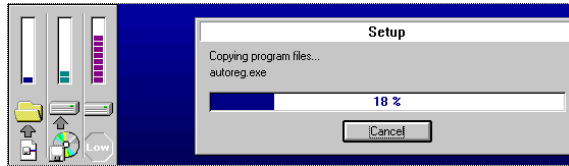


18. When you see this screen, click on the *OK* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

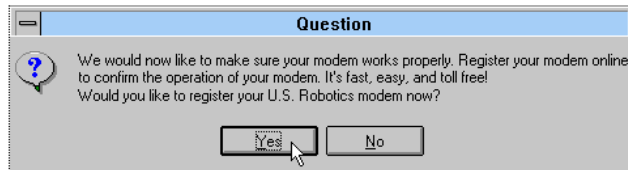
19. You will see this screen for a moment:



21. When you see this screen, click on the *Next* button.



20. When you see this screen, we recommend you click on the *Yes* button:



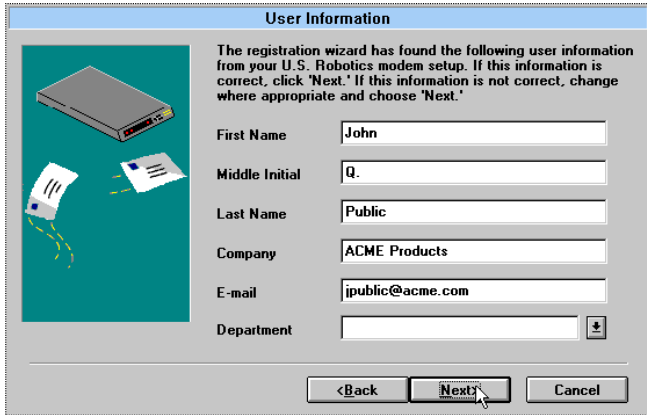
Note:

If you click on “No,” the registration screens will appear upon your next restart.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

22. When you see this screen, click on the *Next* button.

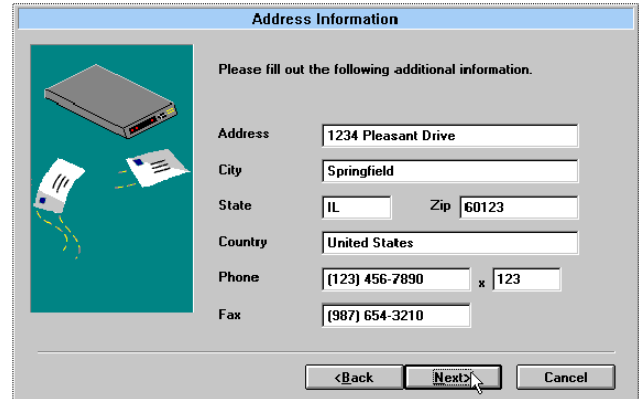


The registration wizard has found the following user information from your U.S. Robotics modem setup. If this information is correct, click 'Next.' If this information is not correct, change where appropriate and choose 'Next.'

First Name: John
Middle Initial: Q.
Last Name: Public
Company: ACME Products
E-mail: jpublic@acme.com
Department: [empty]

<Back Next> Cancel

23. When you see this screen, click on the *Next* button.



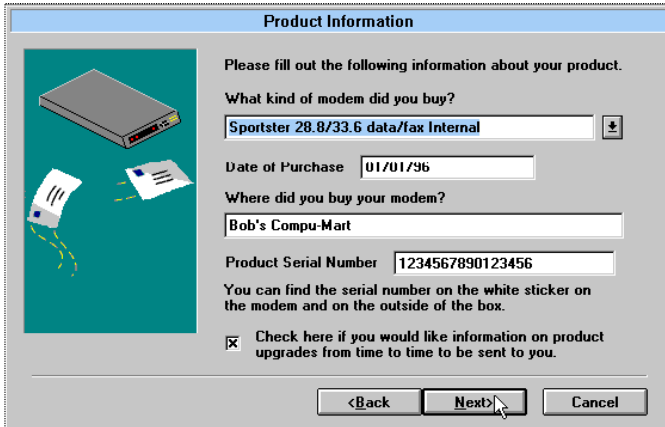
Please fill out the following additional information.

Address: 1234 Pleasant Drive
City: Springfield
State: IL Zip: 60123
Country: United States
Phone: (123) 456-7890 x 123
Fax: (987) 654-3210

<Back Next> Cancel

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

24. When you see this screen, click on the *Next* button:



The 'Product Information' window has a blue title bar. On the left is a teal box with an illustration of a modem and two documents. The main area contains the following text and form fields:

Please fill out the following information about your product.

What kind of modem did you buy?

Date of Purchase

Where did you buy your modem?

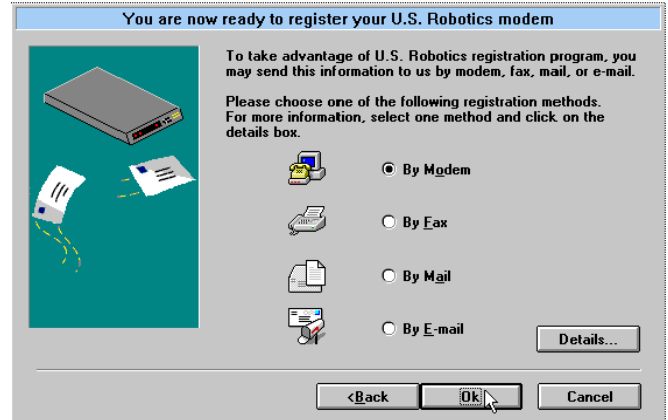
Product Serial Number

You can find the serial number on the white sticker on the modem and on the outside of the box.

☒ Check here if you would like information on product upgrades from time to time to be sent to you.

At the bottom are three buttons: '<Back', 'Next>', and 'Cancel'. A mouse cursor is pointing at the 'Next>' button.

25. When you see this screen, *By Modem* will already be selected. We recommend you choose the *By Modem* option because it's a great way to try out your Sportster. Choose *By Modem* by clicking on the *OK* button.



The registration window has a blue title bar. On the left is a teal box with an illustration of a modem and two documents. The main area contains the following text and form fields:

You are now ready to register your U.S. Robotics modem

To take advantage of U.S. Robotics registration program, you may send this information to us by modem, fax, mail, or e-mail.

Please choose one of the following registration methods. For more information, select one method and click on the details box.

Four radio buttons are listed with corresponding icons: 'By Modem' (selected), 'By Fax', 'By Mail', and 'By E-mail'. To the right of these is a 'Details...' button.

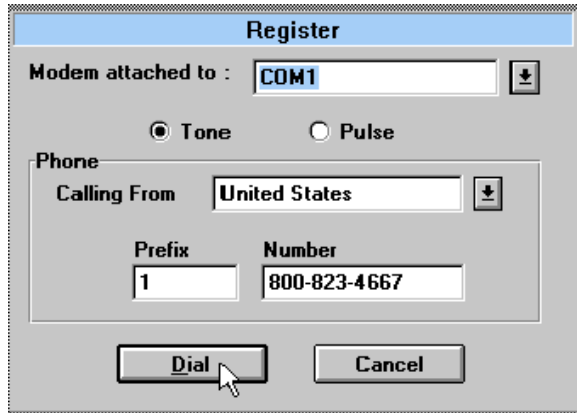
At the bottom are three buttons: '<Back', 'OK', and 'Cancel'. A mouse cursor is pointing at the 'OK' button.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

26. When you see this screen, we recommend you click on the *Yes* button:



27. When you see this screen:

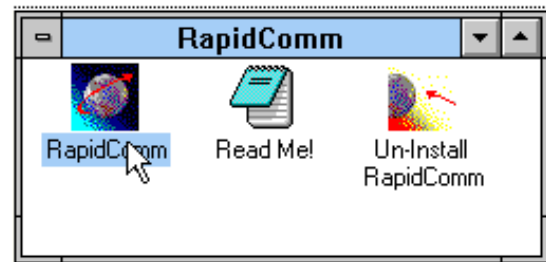


- If you have to dial a prefix (such as 9) to make a call outside your building, type the prefix before the 1 in the Prefix box and then click on the *Dial* button.
- If you do NOT have to dial a prefix, simply click on the *Dial* button.

28. Finally, you will see screens indicating that the registration information is being sent.

29. Restart Windows.

30. Double-click on the RapidComm icon.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

31. When you see this screen, click on the *Next* button.



32. When you see this screen, you should only have to fill in the Data box (if you have a third phone number for your modem) and the area code box before clicking on the *Next* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

33. When you see this screen, click on the *Next* button.



The RapidComm Setup Wizard window displays a form for entering address information. On the left, there is a graphic of a yellow lightning bolt with purple spheres and a globe showing the Americas. The form fields are as follows:

Field	Value
Address 1:	1234 Pleasant Drive
Address 2:	
City:	Springfield
State:	IL
Country:	United States
Zip/Post Code:	60123
E-Mail Address:	jpublic@acme.com

At the bottom, there are four buttons: "< Back", "Next >", "Cancel", and "Help". A mouse cursor is pointing at the "Next >" button.

34. When you see this screen:



The RapidComm Setup Wizard window displays a screen for selecting a COM port. On the left, there is a graphic of a yellow lightning bolt with purple spheres and a modem cable connector. The text "What COM port would you like to use?" is displayed. There are two buttons at the top right: "Auto Detect..." and "Other Port...". The COM port selection options are:

- ☒ COM 1
- ☐ COM 2
- ☐ COM 3
- ☐ COM 4
- ☐ Other

At the bottom, there are four buttons: "< Back", "Next >", "Cancel", and "Help". A mouse cursor is pointing at the "Next >" button.

Check the COM port your modem is connected to.

- If you know your modem is on COM 2 (which is selected by default), click on the *Next* button. Then go to step 35 of this guide.
- If you know your modem is connected to another COM port, select that port on screen and then

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

click on the *Next* button.

- If you're not sure which port your modem is on, click on the *Auto Detect* button and read the following sidebar.

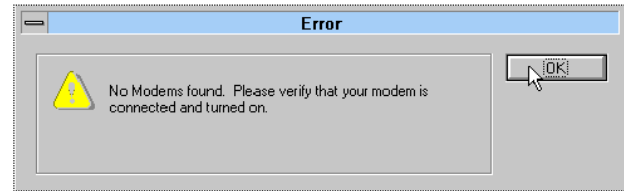
If you click on the *Auto Detect* button

The Auto Detect program will search your system to see which COM port your modem is attached to. You'll see a screen like this:



Click on the Next button. Then go to step 35 after this sidebar.

If you get this screen instead:



Go to the "[Troubleshooting and Online Help Resources](#)" section.

35. When you see this screen:

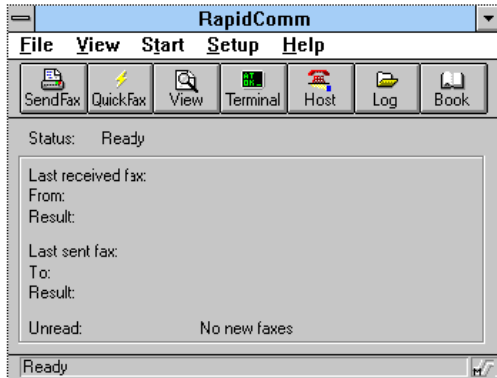


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

- If you want RapidComm to start up every time you start Windows, select the box to the left of Run RapidComm at Windows startup. Then click on the *Next* button.
- If you do not want RapidComm to start up every time you start Windows, simply click on the *Next* button.

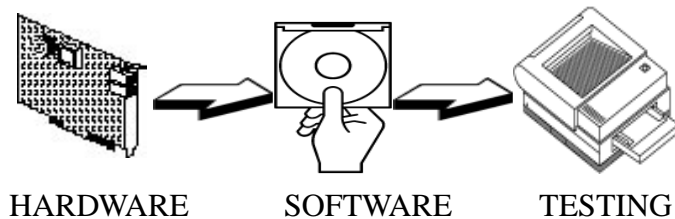
This is the main RapidComm screen, the first screen you will see when you start RapidComm. For sending your first fax, keep this screen open. (For later faxes, you do not have to have RapidComm running in order to send a fax.)

36. After a moment, you will see this screen:



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

THIS SECTION WALKS YOU THROUGH TESTING THE MODEM AND THE FAX/DATA SOFTWARE WHILE SENDING YOUR FIRST FAX WITH YOUR NEW SPORTSTER.

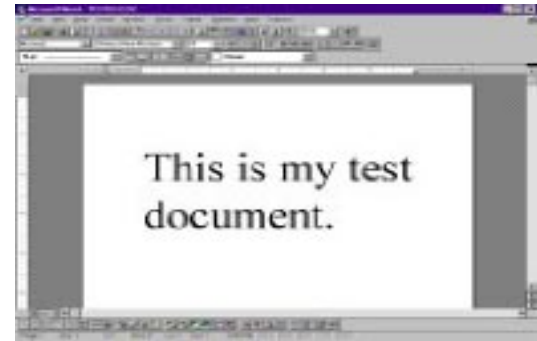


Sending Your First Fax

Using RapidComm, you can send and receive faxes directly from your computer and eliminate the need for an expensive fax machine. Once you learn the basics of sending faxes, you can learn more involved fax functions (such as sending documents to groups of numbers at assigned times) and learn how to transfer data files by referring to the electronic

RapidComm manual that's on your *Connections* CD. This section will walk you through sending your first fax.

1. Open an application in which you can create documents that you might want to fax (e.g. a word processing application). Create a document containing only a sentence or two. Name the document something like "tester." Keep the document open.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

2. From the File menu, select Print.
3. If it's not already selected as the printer driver, select *RapidComm* as the printer. This can be changed in the Control Panel or in the print dialog box of most Windows applications.
4. Click on the *OK* button or the *Print* button (whichever button you click in that application to indicate you're ready to print) in the print dialog box.
5. When you see this screen, fill in the information shown below in the white boxes. The U.S. Robotics fax number is 847-676-3559. This will send your "tester" document to a U.S. Robotics fax machine.



When you've finished, click on the *Send Fax* button.

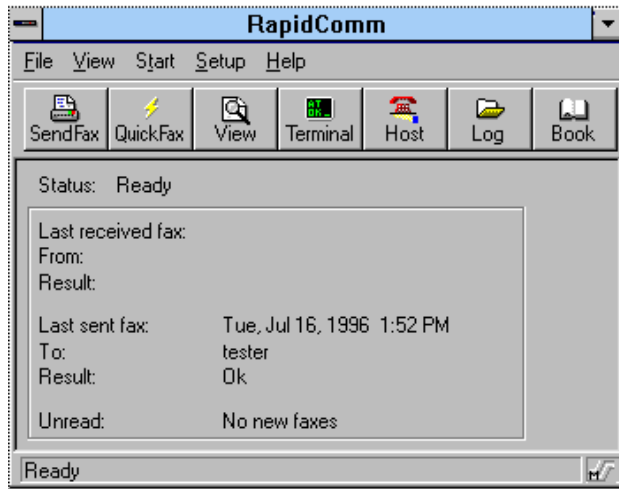
Note:

If you have to dial a special prefix (such as 9) to connect to a telephone number outside of your building, make sure you type that prefix in before the telephone number.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

6. You will see a series of screens as the fax is being transmitted. When the fax has been successfully transmitted, you will see a screen that looks like this:

**Congratulations—you are
ready to start using
your Sportster!**



You can now go to the “[Troubleshooting and Online Help Resources](#)” section of this guide for information on how to contact U.S. Robotics using your Sportster.

You can also go to the electronic [RapidComm manual](#) on your *Connections* CD for more detailed instructions on sending faxes and other things you can do with your Sportster and RapidComm.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Section B: Internal Modem Installation with Windows 95

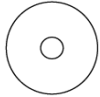
You'll need these items from your Sportster box:



the modem



a phone cord



the Connections CD



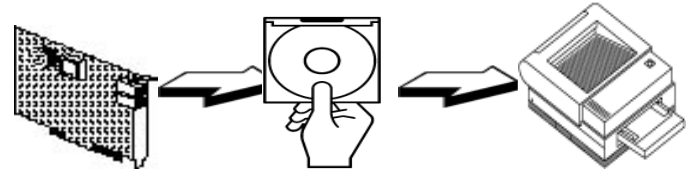
this manual

Plus:

a screwdriver



THIS SECTION WALKS YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.



HARDWARE

SOFTWARE

TESTING

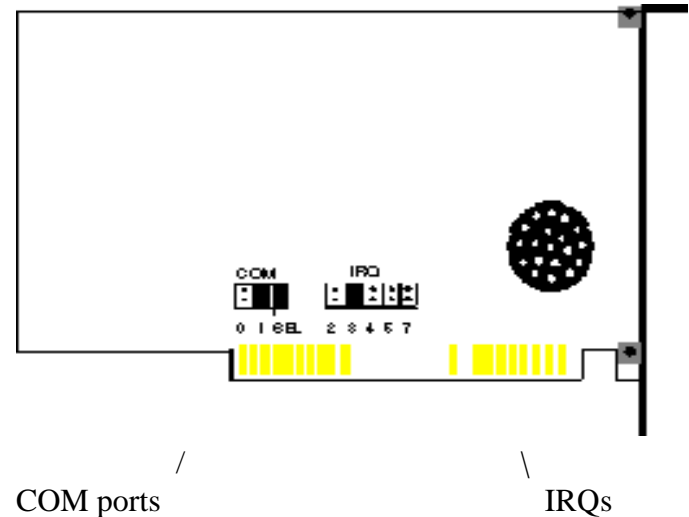
Plug and Play Installation

With Windows 95, you may be able to simply plug the modem into your computer, power up, and be ready to work. The operating system does all the work of recognizing the modem for you. This section will walk you through this “Plug and Play” installation.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

How to Prepare for Plug and Play Installation

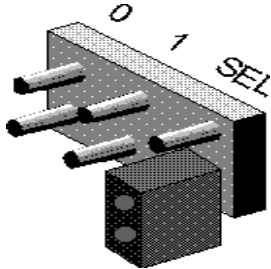
1. Touch an unpainted metal part of your computer (the back is usually unpainted) to discharge static from your hands. Static can damage your modem. Take the modem out of its plastic bag.
2. Find the COM port and IRQ shunts (small black plastic pieces) on your modem. They should be in roughly the area indicated in the illustration at the right.



3. When doing a “Plug and Play” installation, you need to take all the shunts off of the COM and IRQ jumpers. Remove them, and then replace them so each is sitting on one jumper pin as shown in the illustration on the next page.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

How to Insert the Modem



Tip:

Try grasping the shunt with a tweezers or a needle-nosed pliers. DO NOT grasp too firmly, however, because you could crush the shunt. If it seems stuck, try gently rocking it back and forth as you lift.

Note:

Before installing your modem, write your modem's serial number on the first page of this manual. (You'll find the serial number underneath the bar code on the white sticker on the modem and on the outside of the box the modem came in.) If you ever need to call our technical support department, the technical support representative will ask you for the serial number. This will help him or her identify the type of modem you have.

4. Once you have placed ALL the shunts on single jumper pins, you should be ready to insert the modem into your computer.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

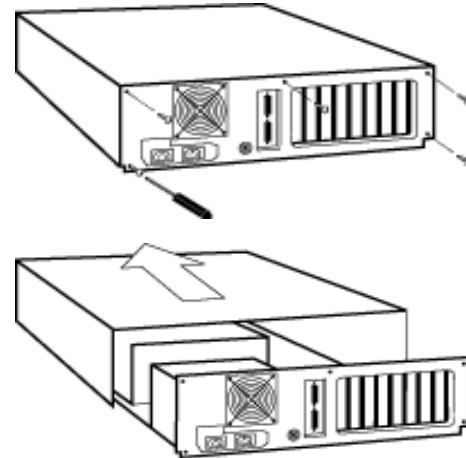
1. Turn off your computer and unplug it from the electrical outlet.
2. Unplug any peripheral devices (printer, monitor, keyboard, mouse, etc.) from the computer.
3. Remove the screws from your computer's cover and then remove the cover. Your computer may look different from this drawing, but the basic principle for removing the cover should be the same. Refer to your computer manufacturer's manual if you need further instructions.

Tip:

Before you unplug anything, label the cords or make a sketch of how things are connected. This can be helpful when you want to plug things back in later.

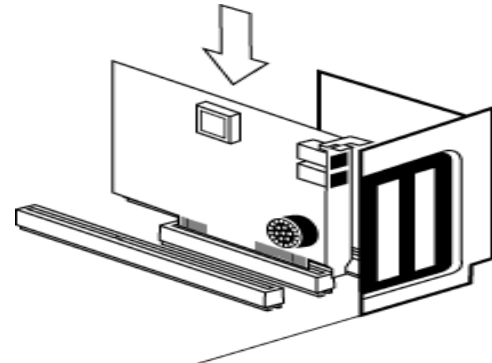
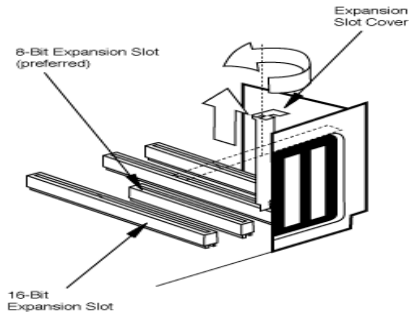
Caution:

To avoid being shocked, make sure your computer and all peripheral devices are turned off and unplugged.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

4. Find an empty ISA expansion slot that's at least as long as the gold edge of your modem. (ISA slots are black plastic grooves lined with silver.) Unscrew and remove the expansion slot cover (the long narrow piece of metal that keeps dust from entering through the opening that's perpendicular to the slot).
5. Holding the modem at each corner, with the gold edge facing the slot, push the modem down as gently as possible until it snaps into an expansion slot. (Note: The drawing shows horizontally aligned expansion slots. Some computers have vertically aligned slots. The instructions apply to both styles.)



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

You'll have to apply a little pressure to seat the modem properly. Sometimes a gentle back-and-forth motion helps get the modem all the way into the slot. If you feel resistance, the modem may not be properly lined up with the slot. Do not force it. Take the modem all the way out and try again.

6. Once the modem is in place, screw the modem firmly into place using the screw that you removed in step 4.
7. Put the computer's cover back on and fasten it with the screws.
8. If you currently have a phone plugged into the wall jack you're going to use for the modem, disconnect the phone's cable from the jack.

9. Plug one end of the phone cable that came with the modem into the TELCO jack at the rear of the modem.

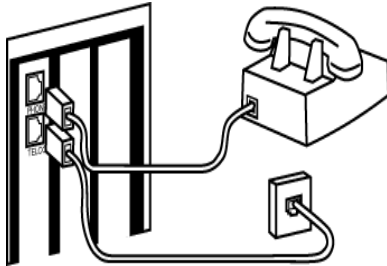
Warning:

The phone jack you're going to use must be for an **ANALOG** phone line. Most office phones are wired through digital lines. Be sure you know what type of line you have. The modem will be damaged if you use a digital phone line.

10. Plug the other end of the cable into the wall jack.

(If you want to use a telephone on the same line as the modem, plug the telephone's cable into the modem's PHONE jack.)

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems



11. Plug the power cords, cables, and peripherals back into the computer and turn the computer on.

How to Move Through the “New Hardware Found” Screens

1. When Windows restarts, after about a minute you will see this screen pop up automatically:

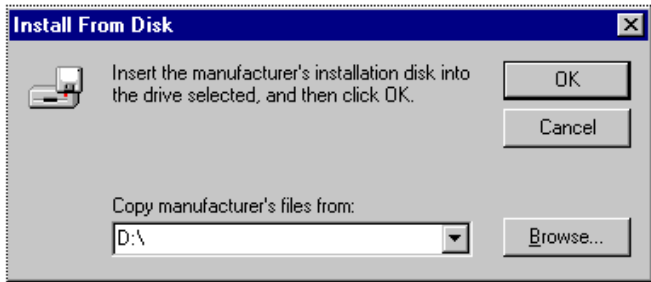


If the *Driver from disk...* option is not already selected, select it.

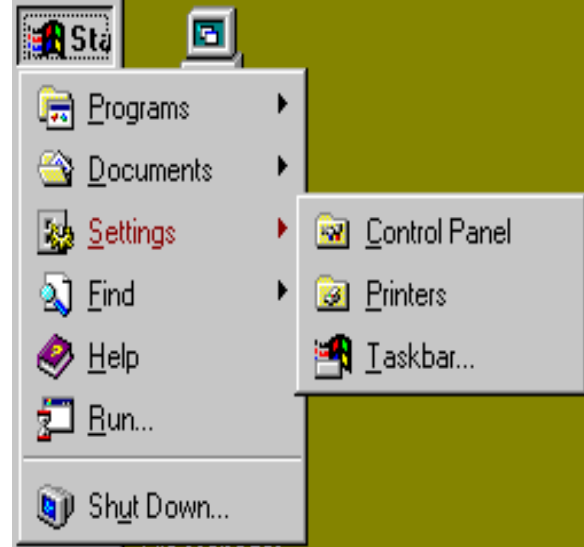
Click on the *OK* button.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

2. Insert the *Connections* CD into your CD-ROM drive.
3. When you see this screen, type in **D:** to replace the **A:**. (Note: If your CD-ROM drive has a different letter name, type that letter instead of **D**.)
4. When your desktop returns, click on the *Start* button and scroll up to *Settings*:

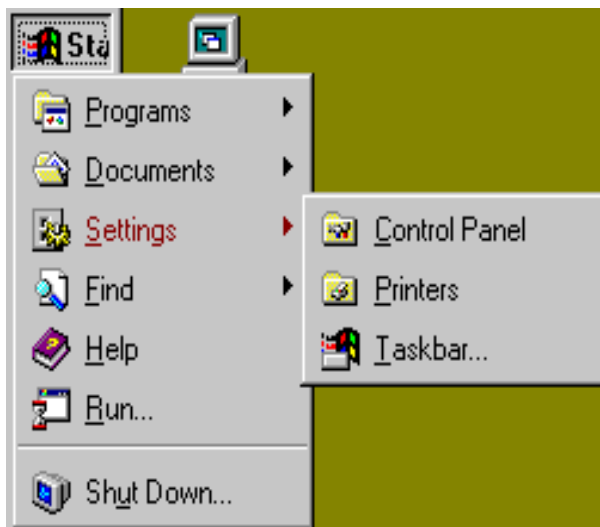


Click on the *OK* button.

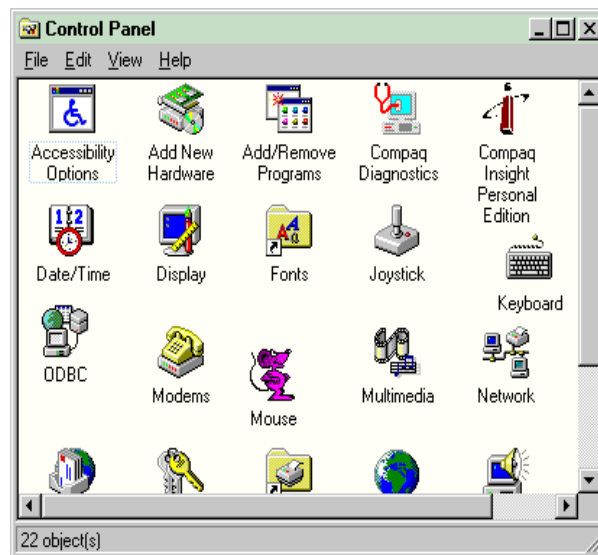


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

5. Scroll over to select *Control Panel*.

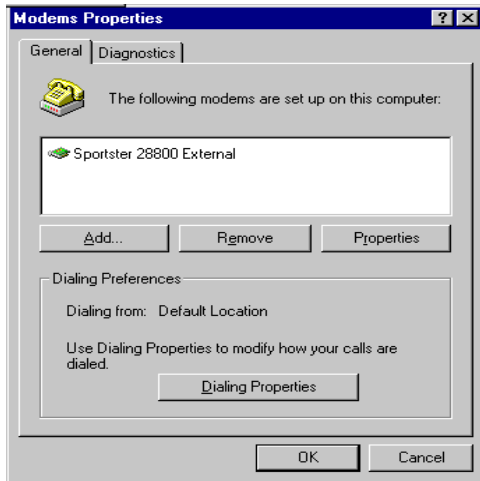


6. Double-click on the *Modems* icon.



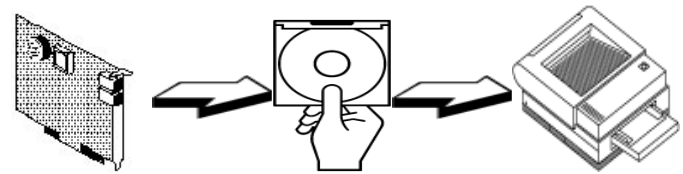
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

7. In the *Modem Properties* screen, you should see *Sportster 28800 Internal or Sportster 14400 V.42bisPC* listed.



Click the *OK* button.
Now you should be ready to use your modem.

THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.



HARDWARE SOFTWARE TESTING

Installing RapidComm with the Setup Wizard

This section will walk you through the basics of running the U.S. Robotics Setup Wizard, which installs RapidComm (fax/data software) and other useful software programs. It also allows you to register your new Sportster modem.

The RapidComm fax/data software simplifies sending and receiving faxes directly from your computer

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

desktop. You can send faxes to specified groups of numbers after building your own fax directory and specify individual cover pages when necessary. And you can send individual faxes without exiting your word processing program.

Additionally, the RapidComm fax/data software works with your modem to connect to BBSs, online services, and Internet providers. Combine this access with the enclosed *Discover the World Wide Web With Your Sportster* book to enter a new world of information and entertainment.

1. Start the Connections CD by double-clicking on the My Computer icon.



2. Then double-click on the D drive (your CD-ROM drive might have a different letter name).

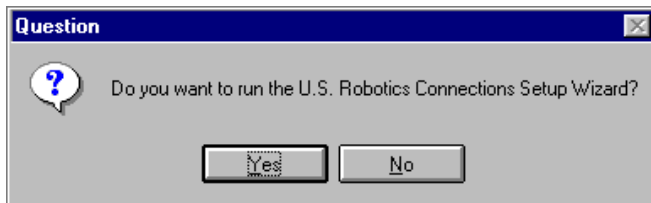


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

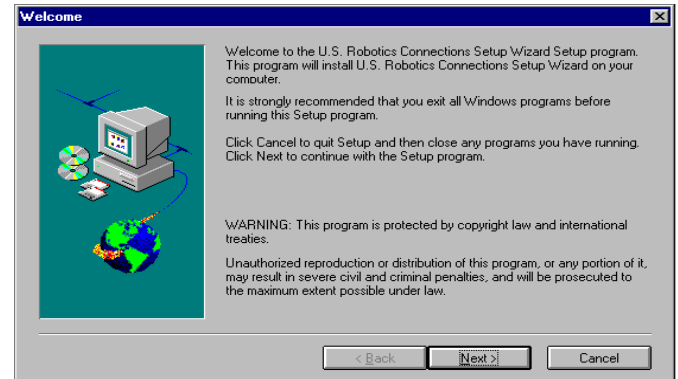
3. You will see a screen that looks like this.



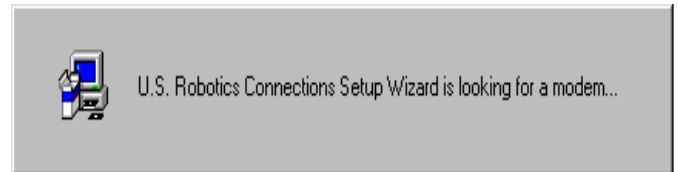
4. When you see this screen, click on the Yes button.



5. When you see this screen, click on the Next button.

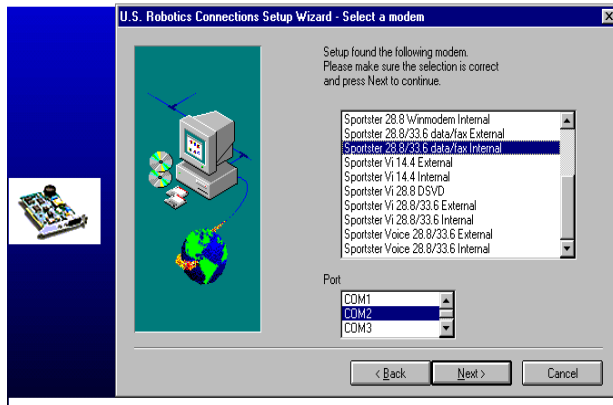


6. You will see this screen for a moment:

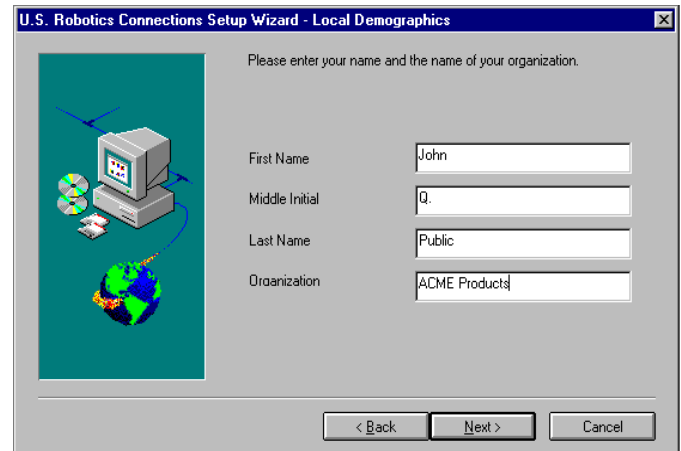


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

7. When you see this screen, if the selection is correct, click on the Next button. If not, choose the correct selection and then click on the Next Button.



8. When you see this screen, fill in the blank boxes and then click on the Next button:



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

9. When you see this screen, fill in the blank boxes and then click on the *Next* button:

U.S. Robotics Connections Setup Wizard - Local Demographics

Please enter your address and phone number.

Street Address: 1234 Pleasant Drive

City: Springfield State: IL

Zip: 60123 Country: United States

Phone Number: 123-456-7890 Extension: 123

Fax Number: 987-654-3210

E-mail address: jpublic@acme.com

< Back Next > Cancel

10. When you see this screen, fill in the blank boxes and then click on the *Next* button:

U.S. Robotics Connections Setup Wizard

Please enter your address and phone number.

What kind of modem did you buy?
Sportster 28.8/33.6 data/fax Internal

Date of purchase (MM/DD/YY) 01/01/96

Where did you buy your modem?
Bob's Compu-Mart

Product Serial Number
1234567890123456

You can find your serial number on the white sticker on the modem and on the outside of the box.

< Back Next > Cancel

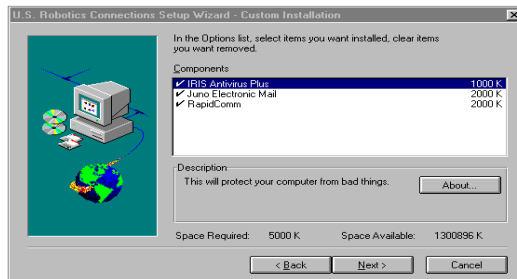
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

11. Un-check any software you do not want by clicking on the name.

Note:

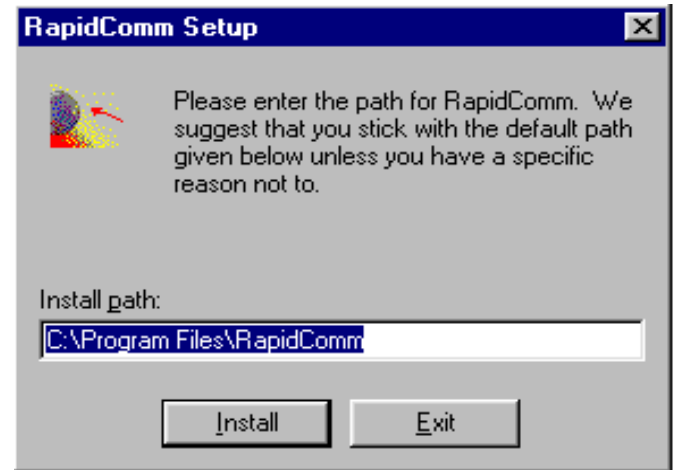
We recommend you install all the software listed.

Then click on the *Next* button:



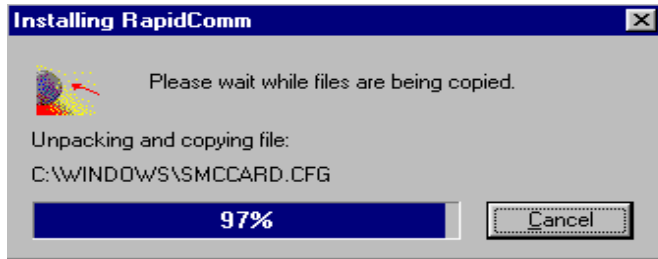
12. As the CD installs the software on your system, you will see a series of screens guiding you through the installation. Please follow the on-screen directions.

13. When you see this screen, click on the *Install* button, unless you want to copy the RapidComm files to a particular directory.

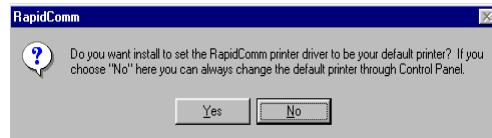


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

14. You will see this screen for a moment.



15. When you see this screen, click on either the *Yes* or *No* button.



- If you click on the Yes button, every document you print will be treated as a fax unless you change the printer selection in the program from which you're trying to print.

- If you click on the No button, RapidComm will not be selected as the default printer. When you want to send a fax, you will have to select RapidComm as the printer in the program from which you're trying to print.

16. When you see this screen, click on the *OK* button.

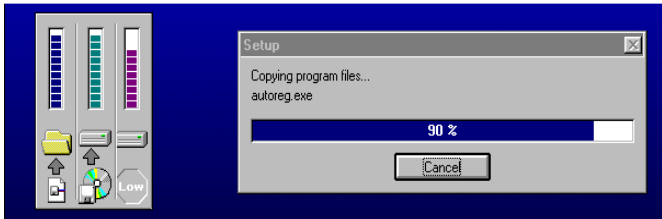


17. When you see this screen, click on the *OK* button.

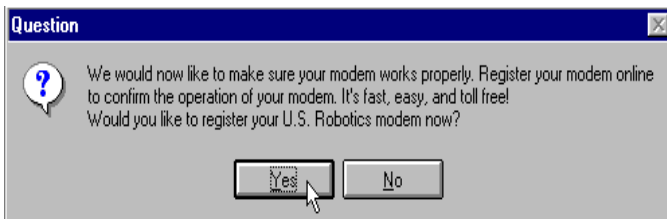


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

18. You will see this screen for a moment.



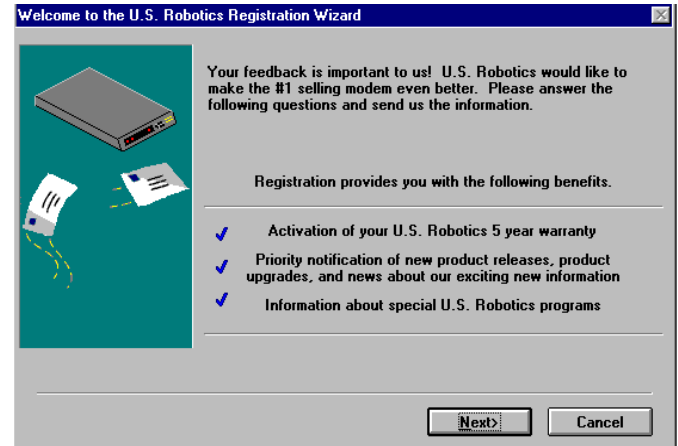
19. When you see this screen, we recommend you click on the Yes button.



Note:

If you click on "No," the registration screens will appear upon your next restart.

20. When you see this screen, click on the *Next* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

21. When you see this screen, click on the *Next* button:



The registration wizard has found the following user information from your U.S. Robotics modem setup. If this information is correct, click 'Next.' If this information is not correct, change where appropriate and choose 'Next.'

First Name: John

Middle Initial: Q.

Last Name: Public

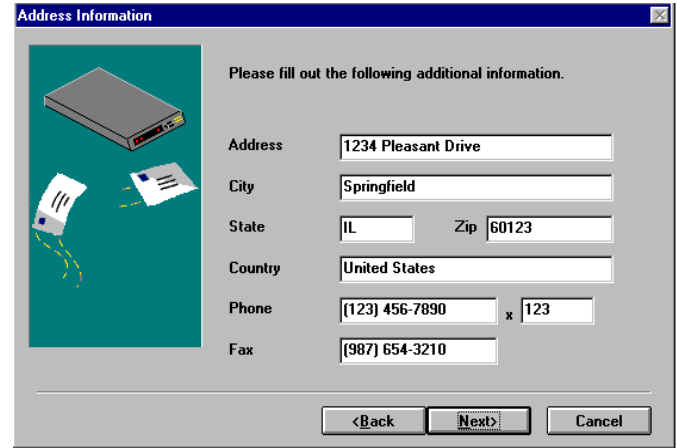
Company: ACME Products

E-mail: jpublic@acme.com

Department:

<Back Next> Cancel

22. When you see this screen, click on the *Next* button.



Please fill out the following additional information.

Address: 1234 Pleasant Drive

City: Springfield

State: IL Zip: 60123

Country: United States

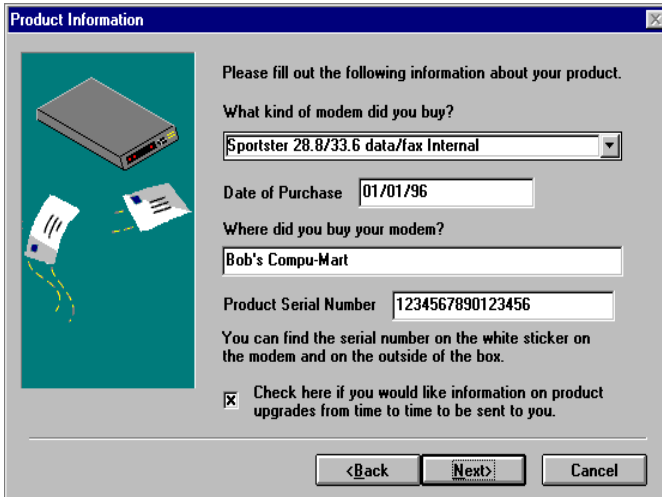
Phone: (123) 456-7890 x 123

Fax: (987) 654-3210

<Back Next> Cancel

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

23. When you see this screen, click on the *Next* button.



The 'Product Information' dialog box has a blue title bar and a close button. On the left is a teal panel with an illustration of a modem and a document. The main area is white and contains the following text and controls:

Please fill out the following information about your product.

What kind of modem did you buy?
Sportster 28.8/33.6 data/fax Internal

Date of Purchase 01/01/96

Where did you buy your modem?
Bob's Compu-Mart

Product Serial Number 1234567890123456

You can find the serial number on the white sticker on the modem and on the outside of the box.

☒ Check here if you would like information on product upgrades from time to time to be sent to you.

At the bottom are three buttons: <Back, Next>, and Cancel.

24. When you see this screen, *By Modem* will already be selected. We recommend you choose the *By Modem* option because it's a great way to try out your Sportster. Choose *By Modem* by clicking on the *OK* button:



The 'You are now ready to register your U.S. Robotics modem' dialog box has a blue title bar and a close button. On the left is a teal panel with an illustration of a modem and a document. The main area is white and contains the following text and controls:

To take advantage of U.S. Robotics registration program, you may send this information to us by modem, fax, mail, or e-mail.

Please choose one of the following registration methods. For more information, select one method and click on the details box.

By Modem (selected with radio button)

By Fax

By Mail

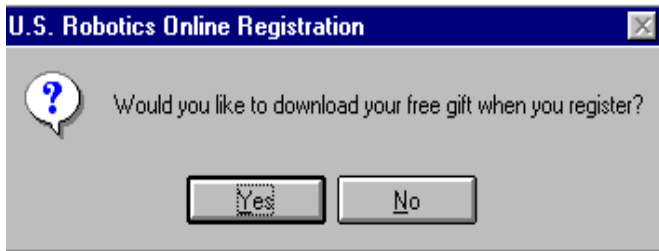
By E-mail

Details...

At the bottom are three buttons: <Back, Ok, and Cancel.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

25. When you see this screen, we recommend you click on the *Yes* button.



26. When you see this screen:



- If you have to dial a prefix (such as 9) to make a call outside your building, type the prefix before the 1 in the Prefix box and then click on the *Dial* button.
- If you do NOT have to dial a prefix, simply click on the *Dial* button.

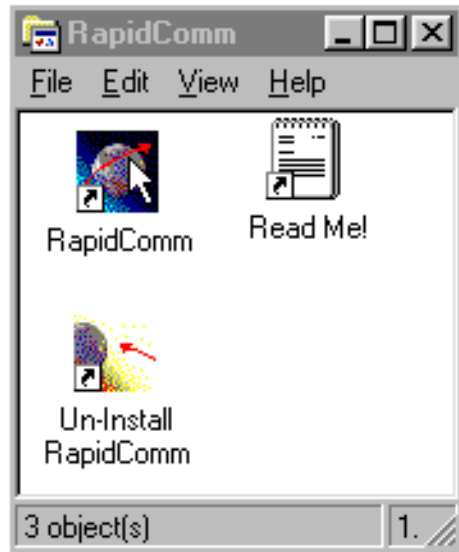
27. Finally, you will see a screen indicating that the registration information has been sent.

28. Restart Windows.

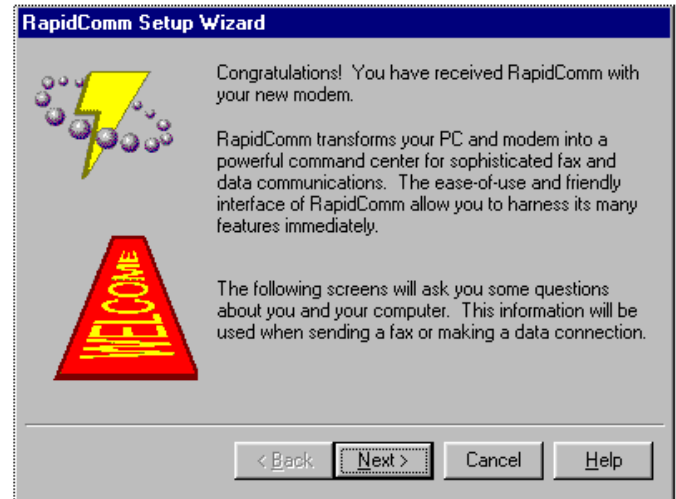


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

29. Double-click on the *RapidComm* icon.

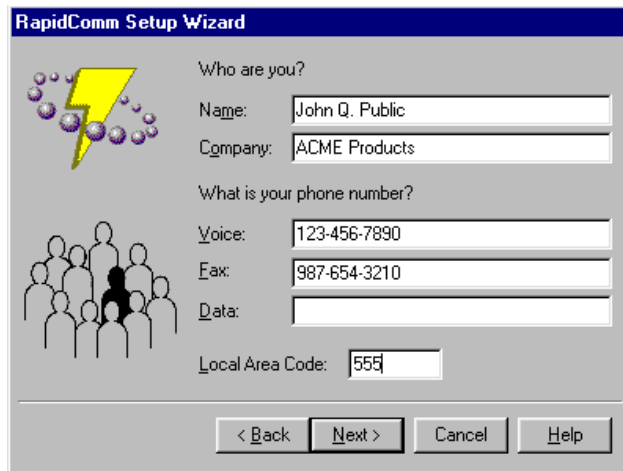


30. When you see this screen, click on the *Next* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

31. When you see this screen, you should only have to fill in the Data box (if you have a third phone number just for your modem) and the area code box before clicking on the *Next* button.



The screenshot shows the 'RapidComm Setup Wizard' window. On the left, there is a yellow lightning bolt icon surrounded by purple spheres and an icon of a group of people. The main area contains the following text and input fields:

Who are you?

Name:

Company:

What is your phone number?

Voice:

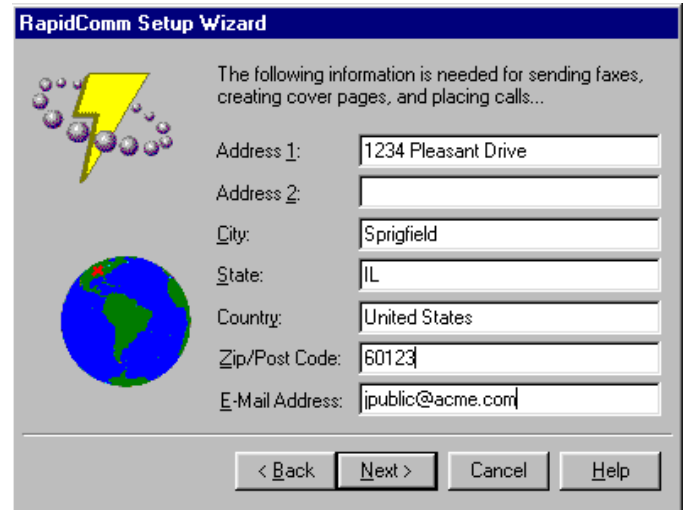
Fax:

Data:

Local Area Code:

At the bottom are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

32. When you see this screen, click on the *Next* button.



The screenshot shows the 'RapidComm Setup Wizard' window. On the left, there is a yellow lightning bolt icon surrounded by purple spheres and a globe icon. The main area contains the following text and input fields:

The following information is needed for sending faxes, creating cover pages, and placing calls...

Address 1:

Address 2:

City:

State:

Country:

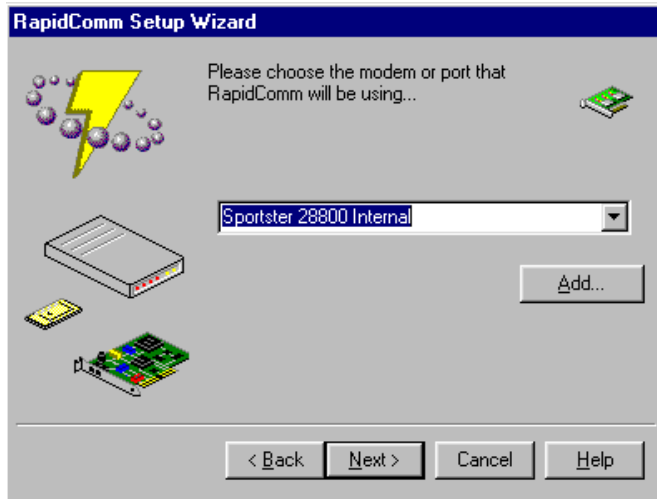
Zip/Post Code:

E-Mail Address:

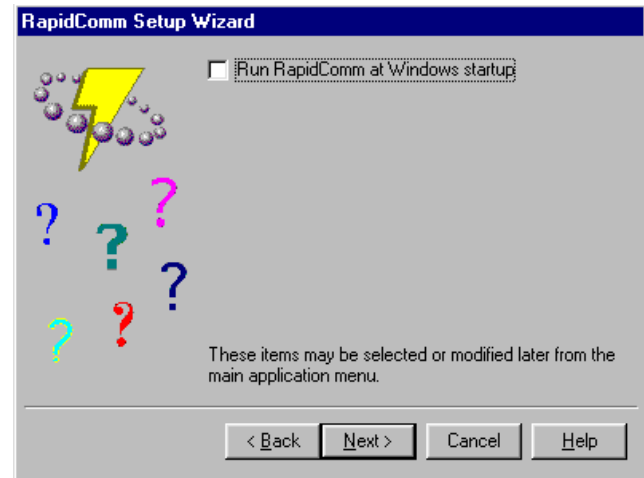
At the bottom are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

33. When you see this screen, click on the *Next* button.



34. When you see this screen:

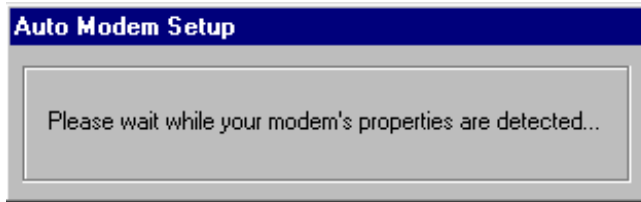


- If you want RapidComm to start up every time you start Windows, select the box to the left of *Run RapidComm at Windows startup*. Then click on the *Next* button.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

- If you do not want RapidComm to start up every time you start Windows, simply click on the *Next* button.

35. You will see this screen for a moment.



36. You will see this screen.



This is the main RapidComm screen, the first screen you will see when you start RapidComm. To send your first fax, keep this screen open. (For later faxes, this screen does not have to be open in order to send a fax.)

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.

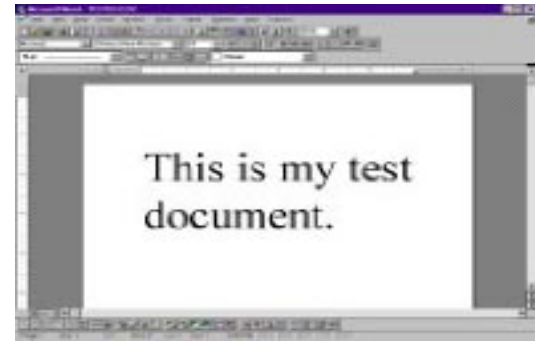


Sending Your First Fax

Using RapidComm, you can send and receive faxes directly from your computer and eliminate the need for an expensive fax machine. Once you learn the basics of sending faxes, you can learn more involved fax functions (such as sending documents to groups of numbers at assigned times) and how to transfer data files. (These more advanced functions are explained in the electronic RapidComm manual

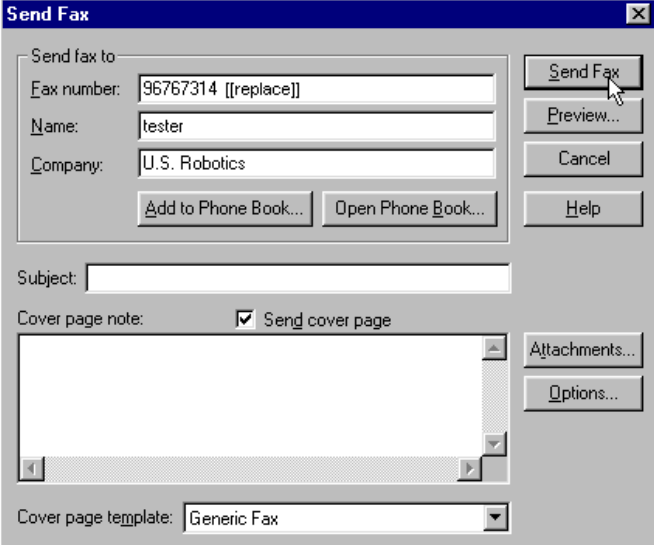
that's on your *Connections* CD.) This chapter will walk you through sending your first fax.

1. Open an application in which you can create documents that you might want to fax (e.g. a word processing application). Create a document containing only a sentence or two. Name the document something like "tester." Keep the document open.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

2. From the File menu, select Print.
3. If it's not already selected as the printer, select *RapidComm*. This can be changed in most Windows applications in the print dialog box.
4. Click the *OK* button or the *Print* button (whichever button you click in that application to indicate you're ready to print) in the print dialog box.
5. When you see this screen, fill in the information shown in below in the white boxes. The U.S. Robotics fax number is 847-676-3559. This will send your "tester" document to a U.S. Robotics fax machine.



The image shows a Windows-style dialog box titled "Send Fax". It contains several input fields and buttons. The "Fax number:" field is pre-filled with "96767314" and has a placeholder "[[replace]]". The "Name:" field is pre-filled with "tester". The "Company:" field is pre-filled with "U.S. Robotics". Below these fields are two buttons: "Add to Phone Book..." and "Open Phone Book...". To the right of these fields are three buttons: "Send Fax", "Preview...", and "Cancel". Below the input fields is a "Subject:" label followed by an empty text box. Below the subject box is a "Cover page note:" label, a checked checkbox labeled "Send cover page", and a large empty text area with scrollbars. To the right of the text area are two buttons: "Attachments..." and "Options...". At the bottom is a "Cover page template:" label followed by a dropdown menu currently showing "Generic Fax".

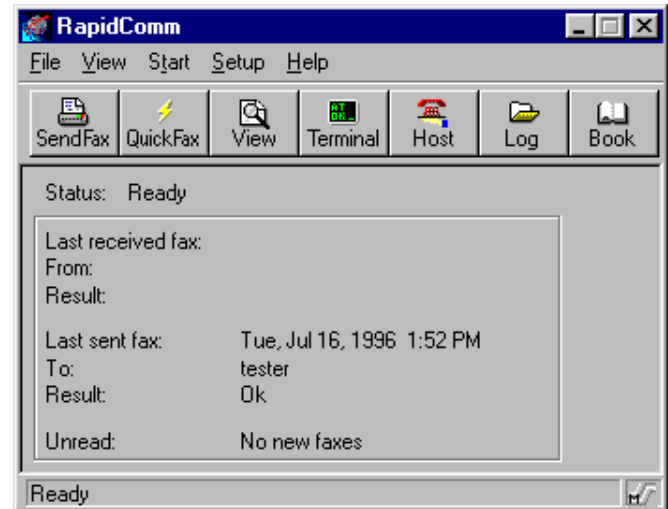
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Note:

If you have to dial a special prefix (such as 9) to connect to a telephone number outside of your building, make sure you type that prefix in before the telephone number.

When you've finished, click on the *Send Fax* button.

6. You will see a series of screens as the fax is being transmitted. When the fax has been successfully transmitted, you will see a screen that looks like this:



**Congratulations—you are
now ready to start
using your Sportster!**

You can now go to the “[Troubleshooting and Online Help Resources](#)” section in this guide for information on how to contact U.S. Robotics by using your Sportster.

Go to electronic [RapidComm Manual](#) on your Connections CD for more detailed instructions on sending faxes and other things you can do with your Sportster and RapidComm.

Part II - External Modem Installation

This part of the manual covers the installation of your external Sportster and the accompanying fax/data software. The instructions are provided for both Windows 3.1 and 3.11 (hereafter jointly referred to as Windows 3.x) and Windows 95 users. Please refer to the section dealing with the operating system your computer uses. The two sections are:

[Section A: External Installation with Windows 3.x](#)

[Section B: External Installation with Windows 95](#)

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Section A: External Modem Installation with Windows 3.x

You'll need these items from your Sportster box:



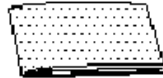
the modem



a phone cord



*the Connections CD
a power adapter*



this manual



Plus:

A serial cable (This must be purchased. See column to the right.)

THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.

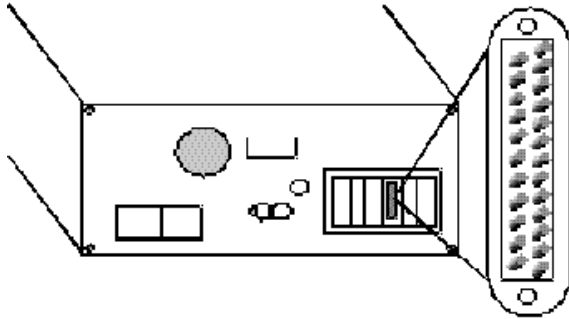


How to Determine Which Serial Cable to Buy

Before you can begin installation, you need to purchase an RS-232 serial cable. The following section will help you to determine which serial cable to purchase.

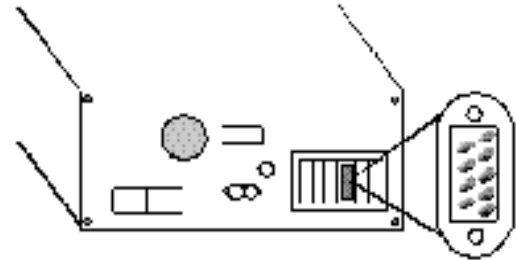
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

If your PC's serial connector looks like this



you need a shielded serial cable with a 25-pin female to 25-pin male connector.

If your PC's serial connector looks like this



you need a shielded serial cable with a 9-pin female to 25-pin male connector.

Note:

Your computer's rear panel may not be identical to the diagrams above. However, you should look for connectors that match the enlarged portions of the diagrams. If you cannot locate the proper connector, refer to your computer's manual.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

How to Hook Up the Modem

1. Turn off your computer and any attached devices, such as a printer.
2. Connect the serial cable to the modem and to the computer. When looking for the serial port label on the back of your computer, look for ports labeled COM, MODEM, RS-232, or SERIAL. **DO NOT** select AUX, GAME, LPT, or PARALLEL.
3. Plug the power adapter into the power jack on the modem and into a standard wall outlet.
4. Plug one end of the phone cord into the telephone jack (labeled with a wall plug icon on the bottom of the case) and the other end into a phone wall jack.

Note:

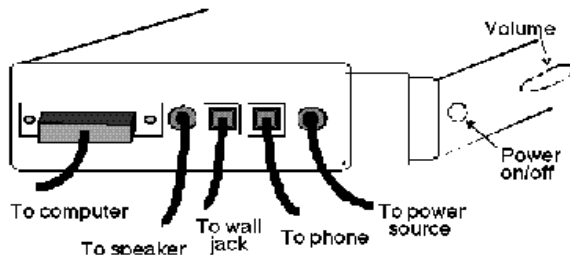
Remember which serial port you selected. This information will be necessary when installing your communications software.

Warning:

The phone jack you use must be for an **ANALOG** phone line. Most office phones are wired through digital lines. Be sure you know what type of line you have. The modem will be damaged if you use a digital phone line.

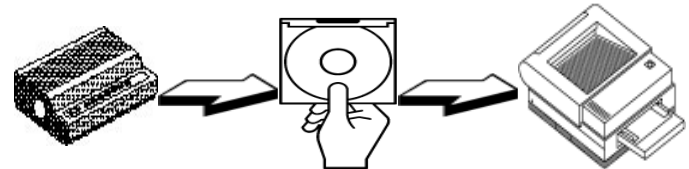
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

5. If you wish to use your modem and phone through the same phone wall jack, plug your phone's cord into the modem's other jack (labeled with a phone icon on the bottom of the case). Use an adapter cable if necessary.



6. Turn your modem on.
7. Turn your computer on.
8. Start Windows.

THIS NEXT SECTION WALKS YOU THROUGH THE STEPS INVOLVED IN INSTALLING THE FAX/DATA SOFTWARE FROM THE *CONNECTIONS* CD ONTO YOUR COMPUTER.



HARDWARE SOFTWARE TESTING

Installing RapidComm with the Setup Wizard

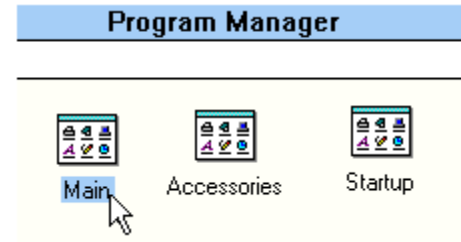
This section will walk you through the basics of running the U.S. Robotics Setup Wizard, which installs RapidComm (fax/data software) and other useful software programs. It also allows you to register your new Sportster modem.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

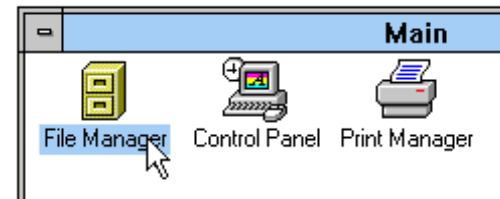
The RapidComm fax/data software simplifies sending and receiving faxes directly from your computer desktop. You can send faxes to specified groups of numbers after building your own fax directory and specify individual cover pages when necessary. And you can send individual faxes without exiting your word processing program.

Additionally, the RapidComm fax/data software works with your modem to connect to BBSs, online services, and Internet providers. Combine this access with the enclosed *Discover the World Wide Web With Your Sportster* book to enter a new world of information and entertainment.

1. Start the *Connections* CD by double-clicking on the Main icon in *Program Manager*.

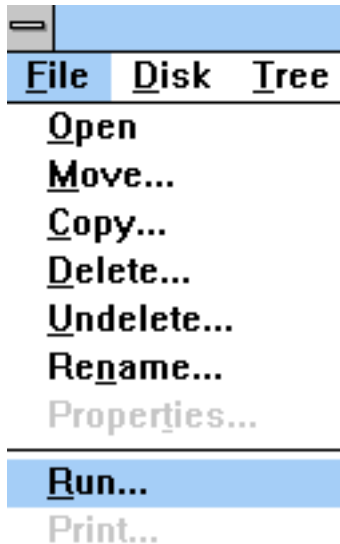


2. Double-click on the File Manager icon.

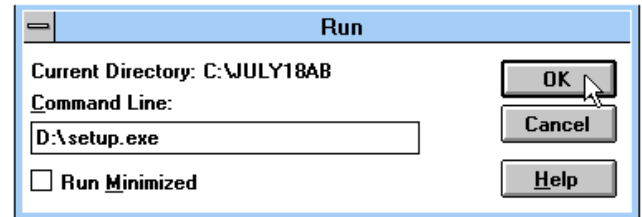


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

3. Under the *File* menu, choose *Run*.



4. In the box, type: **D:\setup.exe**
(If your CD-ROM drive has a letter name other than **D**, type that letter in place of **D**.)
Then click the *OK* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

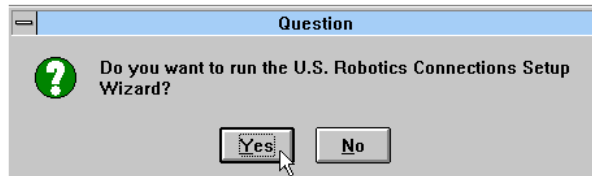
5. You will see a screen that looks like this:



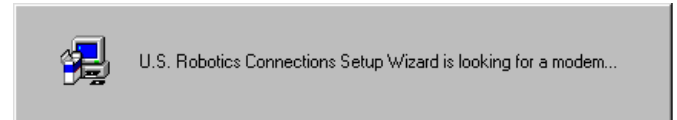
7. When you see this screen, click on the *Next* button



6. When you see this screen, click on the *Yes* button:

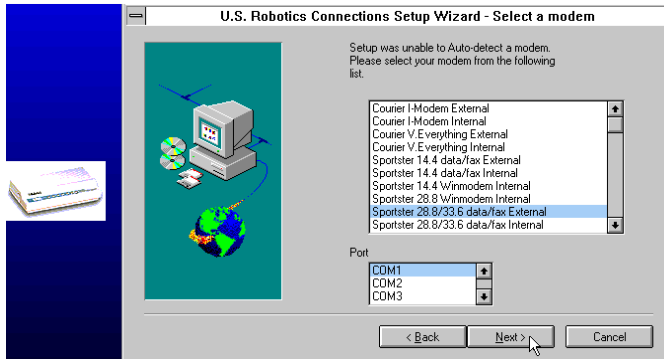


8. You will see this screen for a moment:

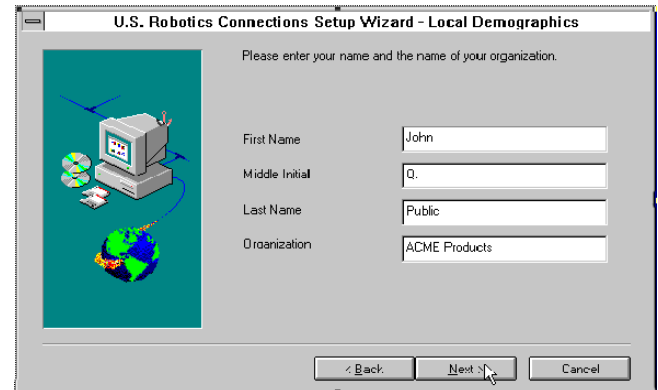


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

9. When you see this screen, if the selection is correct, click on the *Next* button. If not, make the correct selection and then click on the *Next* button.

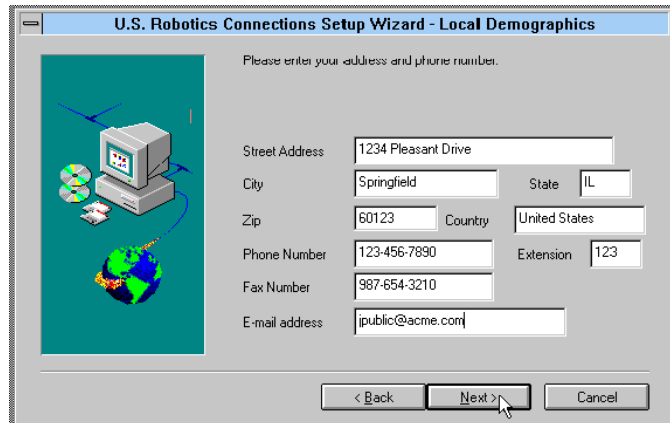


10. When you see this screen, fill in the blank boxes and then click on the *Next* button:



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

11. When you see this screen, fill in the blank boxes and then click on the *Next* button:



The screenshot shows the 'U.S. Robotics Connections Setup Wizard - Local Demographics' window. It features a teal background with a computer and modem icon on the left. The main area contains several text input fields for personal information. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. A mouse cursor is pointing at the 'Next >' button.

U.S. Robotics Connections Setup Wizard - Local Demographics

Please enter your address and phone number.

Street Address: 1234 Pleasant Drive

City: Springfield State: IL

Zip: 60123 Country: United States

Phone Number: 123-456-7890 Extension: 123

Fax Number: 987-654-3210

E-mail address: jpublic@acme.com

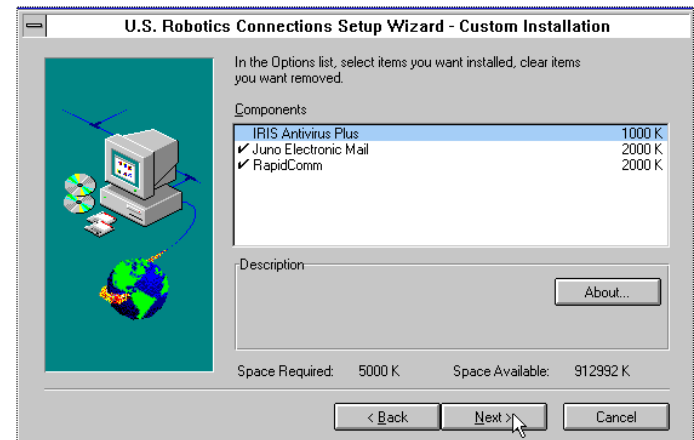
< Back Next > Cancel

12. Un-check any software you do not want by clicking on the name of the software.

Note:

We recommend you install all the software listed.

Then click on the *Next* button:



The screenshot shows the 'U.S. Robotics Connections Setup Wizard - Custom Installation' window. It features a teal background with a computer and modem icon on the left. The main area contains a list of components to be installed, with checkboxes next to each. Below the list is a description field and an 'About...' button. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. A mouse cursor is pointing at the 'Next >' button.

U.S. Robotics Connections Setup Wizard - Custom Installation

In the Options list, select items you want installed, clear items you want removed.

Components

Component	Size
IRIS Antivirus Plus	1000 K
<input checked="" type="checkbox"/> Juno Electronic Mail	2000 K
<input checked="" type="checkbox"/> RapidComm	2000 K

Description

About...

Space Required: 5000 K Space Available: 912992 K

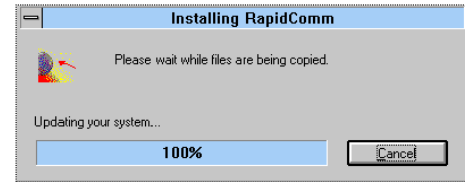
< Back Next > Cancel

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

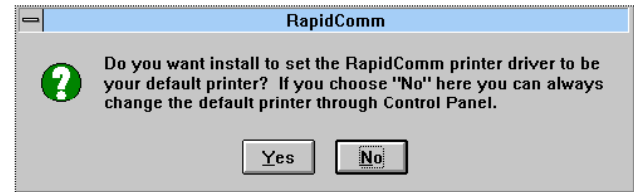
13. As the CD installs the software on your system, you will see a series of screens that guide you through the installation. Please follow the on-screen directions.
14. When you see this screen, click on the *Install* button, unless you want to copy the RapidComm files to a different directory. (Your screen may show a path that differs from what appears on the screen below.)



15. You will see this screen for a moment:



16. When you see this screen, click on either the *Yes* or *No* button:



- If you click on the Yes button, every document you print will be treated as a fax unless you change the printer selection in the program from which you're trying to print.

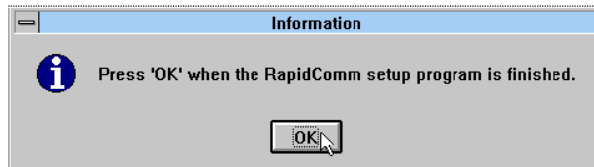
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

- If you click on the No button, RapidComm will not be chosen as the default printer. When you want to send a fax, you will have to select RapidComm as the printer in the program from which you're trying to print.

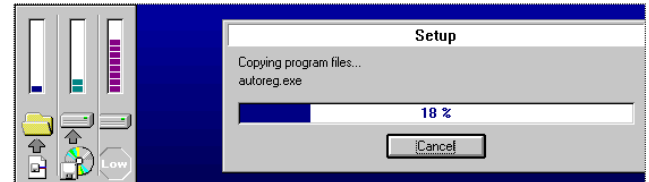
17. When you see this screen, click on the *OK* button:



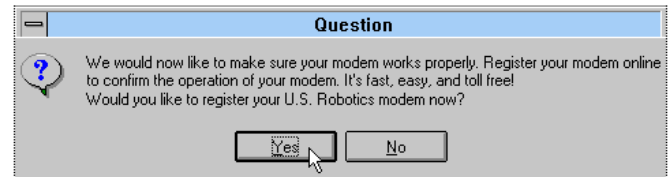
18. When you see this screen, click on the *OK* button.



19. You will see this screen for a moment:



20. When you see this screen, we recommend you click on the *Yes* button:



Note:

If you click on "No," the registration screens will appear upon your next restart.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

21. When you see this screen, click on the *Next* button.

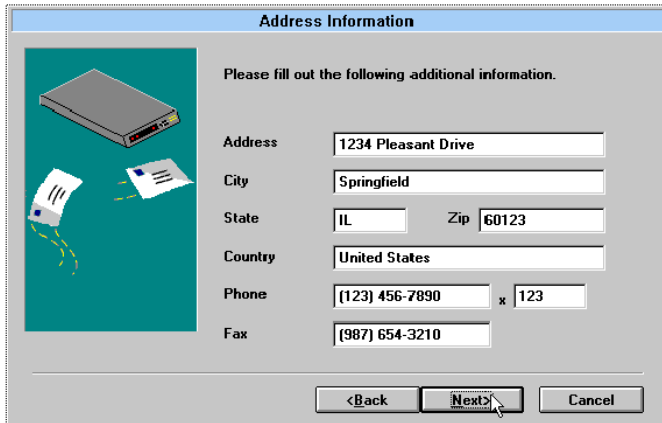


22. When you see this screen, click on the *Next* button.

The screenshot shows a window titled "User Information". On the left is a graphic of a modem and two documents. The text on the right says: "The registration wizard has found the following user information from your U.S. Robotics modem setup. If this information is correct, click 'Next.' If this information is not correct, change where appropriate and choose 'Next.'" Below this are several input fields: "First Name" with the value "John", "Middle Initial" with the value "Q.", "Last Name" with the value "Public", "Company" with the value "ACME Products", "E-mail" with the value "jpublic@acme.com", and "Department" which is empty. At the bottom are three buttons: "<Back", "Next>", and "Cancel". A mouse cursor is pointing at the "Next>" button.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

23. When you see this screen, click on the *Next* button.



The "Address Information" dialog box has a blue header bar. On the left is a teal square containing an illustration of a modem and two documents with arrows pointing to them. The main area is light gray and contains the text "Please fill out the following additional information." followed by several input fields: "Address" (1234 Pleasant Drive), "City" (Springfield), "State" (IL) and "Zip" (60123), "Country" (United States), "Phone" ((123) 456-7890) x 123, and "Fax" ((987) 654-3210). At the bottom are three buttons: "<Back", "Next>", and "Cancel". A mouse cursor is clicking the "Next>" button.

Address Information

Please fill out the following additional information.

Address: 1234 Pleasant Drive

City: Springfield

State: IL Zip: 60123

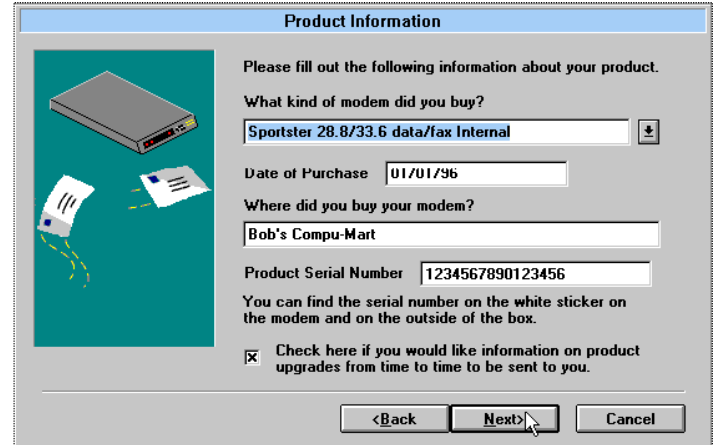
Country: United States

Phone: (123) 456-7890 x 123

Fax: (987) 654-3210

<Back Next> Cancel

24. When you see this screen, click on the *Next* button:



The "Product Information" dialog box has a blue header bar. On the left is a teal square containing an illustration of a modem and two documents with arrows pointing to them. The main area is light gray and contains the text "Please fill out the following information about your product." followed by several input fields: "What kind of modem did you buy?" (Sportster 28.8/33.6 data/fax Internal), "Date of Purchase" (01/01/96), "Where did you buy your modem?" (Bob's Compu-Mart), and "Product Serial Number" (1234567890123456). Below these is a checkbox labeled "Check here if you would like information on product upgrades from time to time to be sent to you." which is checked. At the bottom are three buttons: "<Back", "Next>", and "Cancel". A mouse cursor is clicking the "Next>" button.

Product Information

Please fill out the following information about your product.

What kind of modem did you buy?
Sportster 28.8/33.6 data/fax Internal

Date of Purchase: 01/01/96

Where did you buy your modem?
Bob's Compu-Mart

Product Serial Number: 1234567890123456

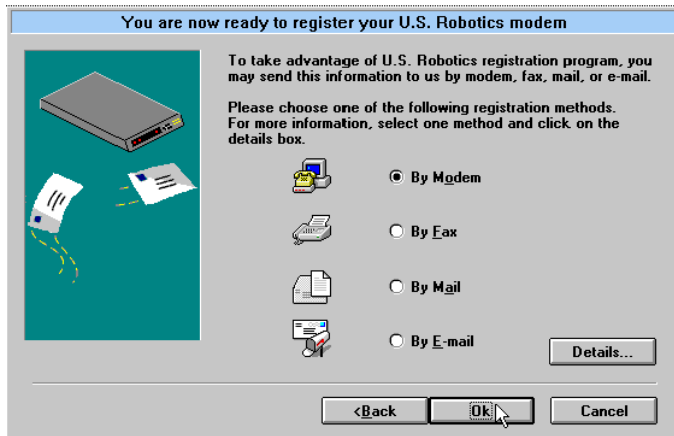
You can find the serial number on the white sticker on the modem and on the outside of the box.

☒ Check here if you would like information on product upgrades from time to time to be sent to you.

<Back Next> Cancel

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

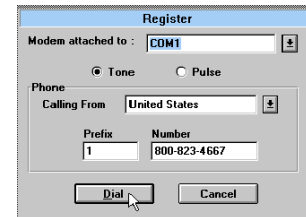
25. When you see this screen, *By Modem* will already be selected. We recommend you choose the *By Modem* option because it's a great way to try out your Sportster. Choose *By Modem* by clicking on the *OK* button.



26. When you see this screen, we recommend you click on the *Yes* button:



27. When you see this screen:



- If you have to dial a prefix (such as 9) to make a call outside your building, type the prefix before the 1 in the Prefix box and then click on the *Dial* button.

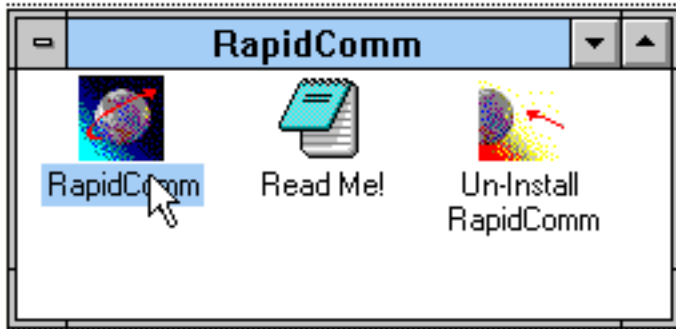
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

- If you do NOT have to dial a prefix, simply click on the Dial button.

28. Finally, you will see screens indicating that the registration information is being sent.

29. Restart Windows.

30. Double-click on the RapidComm icon.

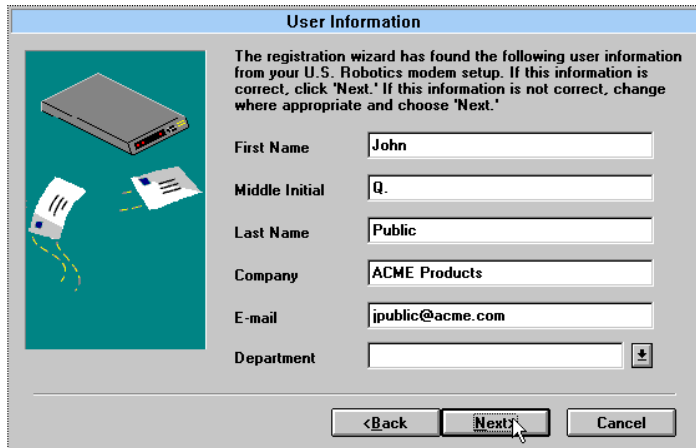


31. When you see this screen, click on the *Next* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

32. When you see this screen, you should only have to fill in the Data box (if you have a third phone number for your modem) and the area code box before clicking on the *Next* button.



The registration wizard has found the following user information from your U.S. Robotics modem setup. If this information is correct, click 'Next.' If this information is not correct, change where appropriate and choose 'Next.'

User Information

First Name: John

Middle Initial: Q.

Last Name: Public


Company: ACME Products

E-mail: jpublic@acme.com

Department: []

<Back Next Cancel

33. When you see this screen, click on the *Next* button.



The following information is needed for sending faxes, creating cover pages, and placing calls...

RapidComm Setup Wizard

Address 1: 1234 Pleasant Drive

Address 2: []

City: Springfield

State: IL

Country: United States

Zip/Post Code: 60123

E-Mail Address: jpublic@acme.com

< Back Next Cancel Help

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

34. When you see this screen:



Check the COM port your modem is connected to.

- If you know your modem is on COM 2 (which is selected by default), click on the *Next* button. Then go to step 35 on page 38 of this guide.
- If you know your modem is connected to another COM port, select that port on screen and then click on the *Next* button.

- If you're not sure which port your modem is on, click on the *Auto Detect* button and read the following sidebar.

If you click on the *Auto Detect* button

The Auto Detect program will search your system to see which COM port your modem is attached to. You'll see a screen like this:



Click on the *Next* button. Then go to step 35 on the next page of this guide.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

If you get this screen instead:



Go to the "[Troubleshooting and Online Help Resources](#)" section.

35. When you see this screen:

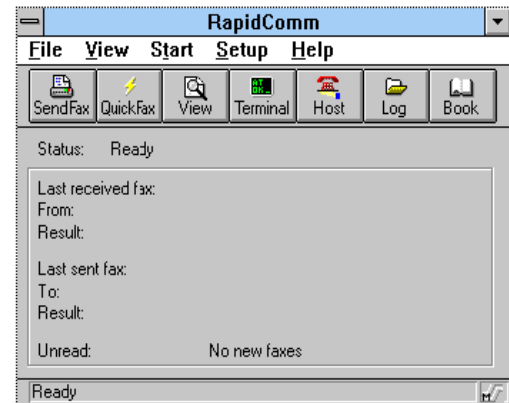


- If you want RapidComm to start up every time you start Windows, select the box to the left of

Run RapidComm at Windows startup. Then click on the *Next* button.

- If you do not want RapidComm to start up every time you start Windows, simply click on the *Next* button.

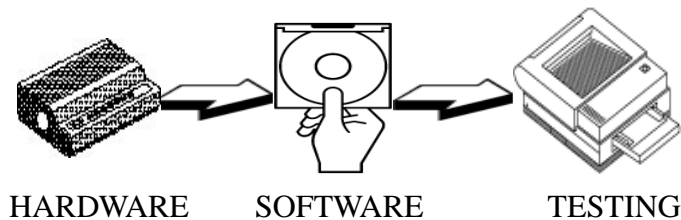
36. After a moment, you will see this screen:



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

This is the main RapidComm screen, the first screen you will see when you start RapidComm. For sending your first fax, keep this screen open. (For later faxes, you do not have to have RapidComm running in order to send a fax.)

THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.

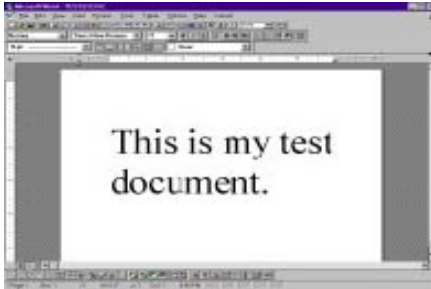


Sending Your First Fax

Using RapidComm, you can send and receive faxes directly from your computer and eliminate the need for an expensive fax machine. Once you learn the basics of sending faxes, you can learn more involved fax functions (such as sending documents to groups of numbers at assigned times) and learn how to transfer data files by referring to the electronic RapidComm manual that's on your *Connections* CD. This section will walk you through sending your first fax.

1. Open an application in which you can create documents that you might want to fax (e.g. a word processing application). Create a document containing only a sentence or two. Name the document something like "tester." Keep the document open.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems



- When you see this screen, fill in the information shown below in the white boxes. The U.S. Robotics fax number is 847-676-3559. This will send your "tester" document to a U.S. Robotics fax machine.



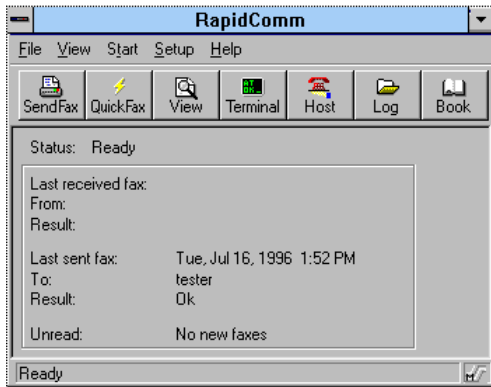
When you've finished, click on the *Send Fax* button.

Note:

If you have to dial a special prefix (such as 9) to connect to a telephone number outside of your building, make sure you type that prefix in before the telephone number.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

6. You will see a series of screens as the fax is being transmitted. When the fax has been successfully transmitted, you will see a screen that looks like this:



Congratulations—you are ready to start using your Sportster!

You can now go to the “[Troubleshooting and Online Help Resources](#)” section of this guide for information on how to contact U.S. Robotics using your Sportster.

You can also go to the electronic [RapidComm manual](#) on your *Connections* CD for more detailed instructions on sending faxes and other things you can do with your Sportster and RapidComm.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Section B: External Modem Installation with Windows 95

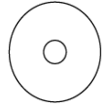
You'll need these items from your Sportster box:



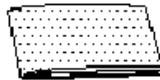
the modem



a phone cord



*the Connections CD
a power adapter*



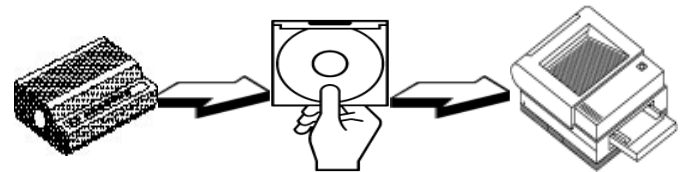
this manual



Plus:

A serial cable (This must be purchased. See column to the right.)

THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.



HARDWARE

SOFTWARE

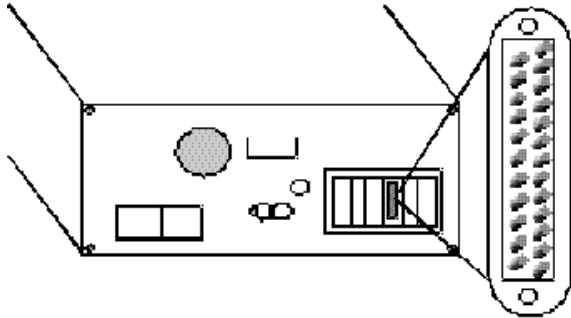
TESTING

How to Determine Which Serial Cable to Buy

Before you can begin installation, you need to purchase an RS-232 serial cable. The following section will help you to determine which serial cable to purchase.

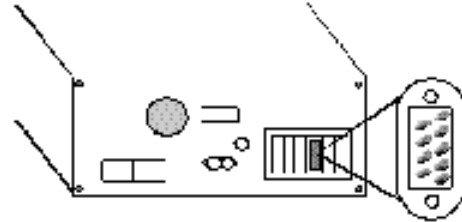
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

If your PC's serial connector looks like this



you need a shielded serial cable with a 25-pin female to 25-pin male connector.

If your PC's serial connector looks like this



you need a shielded serial cable with a 9-pin female to 25-pin male connector.

Note:

Your computer's rear panel may not be identical to the diagrams above. However, you should look for connectors that match the exploded portions of the diagrams. If you cannot locate the proper connector, refer to your computer's manual.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

How to Hook Up the Modem

1. Turn off your computer and any attached devices, such as a printer.
2. Connect the serial cable to the modem and to the computer. When looking for the serial port label on the back of your computer, look for ports labeled COM, MODEM, RS-232, or SERIAL. **DO NOT** select AUX, GAME, LPT, or PARALLEL.

Note:

Remember which serial port you selected. This information will be necessary when installing your communications software.

3. Plug the power adapter into the power jack on the modem and into a standard wall outlet.
4. Plug one end of the phone cord into the telephone jack (labeled with a wall plug icon on the bottom of the case) and the other end into a phone wall jack.

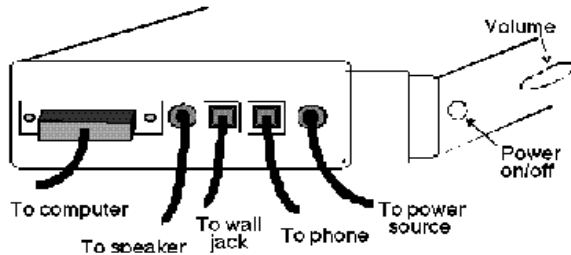
Warning:

The phone jack you use must be for an **ANALOG** phone line. Most office phones are wired through digital lines. Be sure you know what type of line you have. The modem will be damaged if you use a digital phone line.

5. If you wish to use your modem and phone through the same phone wall jack, plug your

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

phone's cord into the modem's other jack (labeled with a phone icon on the bottom of the case). Use an adapter cable if necessary.



6. Turn your modem on.
7. Turn your computer on.
8. Start Windows.

How to Move Through the “New Hardware Found” Screens

1. When Windows restarts, after about a minute you will see this screen pop up automatically:

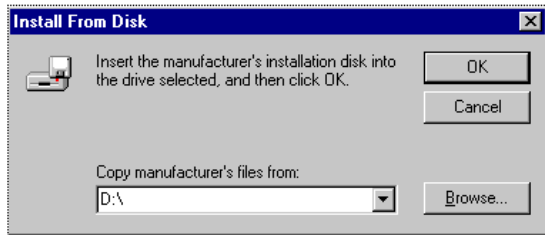


If the *Driver from disk...* option is not already selected, select it.

Click on the *OK* button.

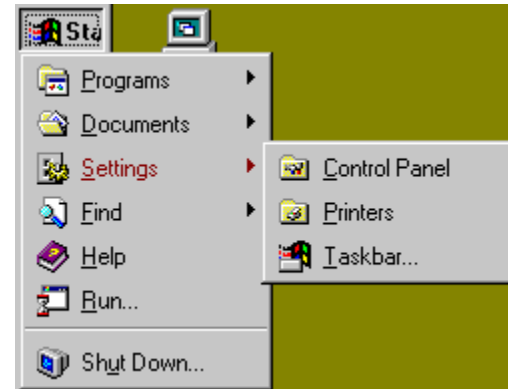
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

2. Insert the *Connections* CD into your CD-ROM drive.
3. When you see this screen, type in **D:** to replace the **A:**. (Note: If your CD-ROM drive has a different letter name, type that letter instead of **D**.)



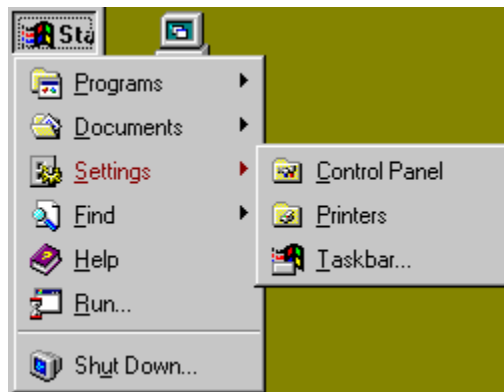
Click on the *OK* button.

4. When your desktop returns, click on the *Start* button and scroll up to *Settings*:

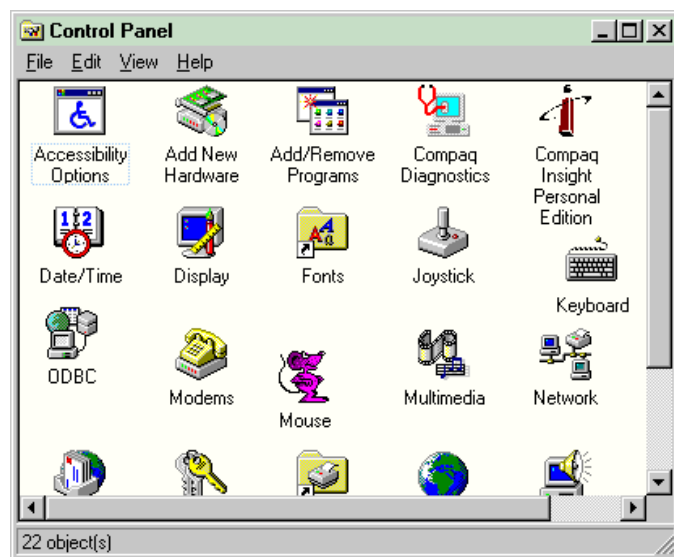


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

5. Scroll over to select *Control Panel*.

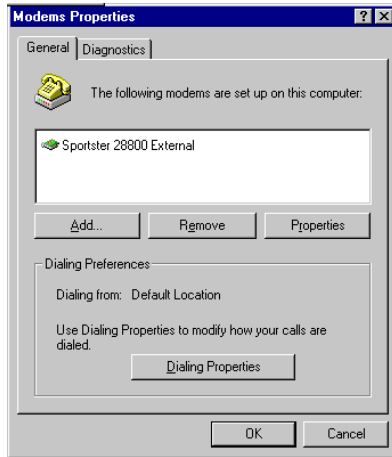


6. Double-click on the *Modems* icon.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

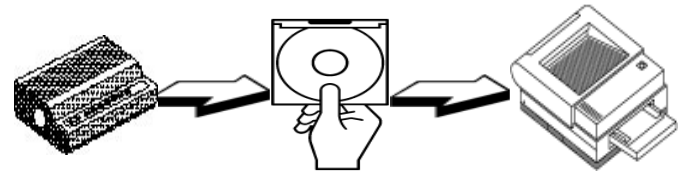
7. In the *Modem Properties* screen, you should see *Sportster 28800 Internal or Sportster 14400 V.42bisPC* listed.



Click the *OK* button.

Now you should be ready to use your modem.

THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.



HARDWARE SOFTWARE TESTING

Installing RapidComm with the Setup Wizard

This section will walk you through the basics of running the U.S. Robotics Setup Wizard, which installs RapidComm (fax/data software) and other useful software programs. It also allows you to register your new Sportster modem.

The RapidComm fax/data software simplifies sending and receiving faxes directly from your computer



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

desktop. You can send faxes to specified groups of numbers after building your own fax directory and specify individual cover pages when necessary. And you can send individual faxes without exiting your word processing program.

Additionally, the RapidComm fax/data software works with your modem to connect to BBSs, online services, and Internet providers. Combine this access with the enclosed *Discover the World Wide Web With Your Sportster* book to enter a new world of information and entertainment.

1. Start the Connections CD by double-clicking on the My Computer icon.



2. Then double-click on the D drive (your CD-ROM drive might have a different letter name).

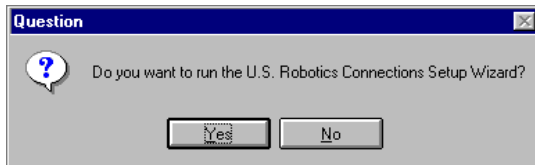


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

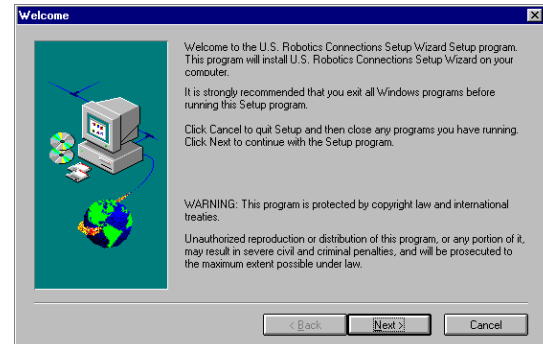
3. You will see a screen that looks like this.



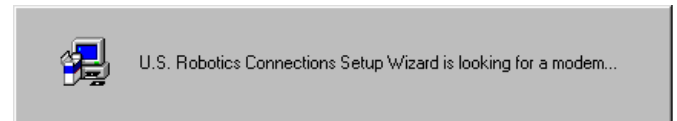
4. When you see this screen, click on the Yes button.



5. When you see this screen, click on the Next button.

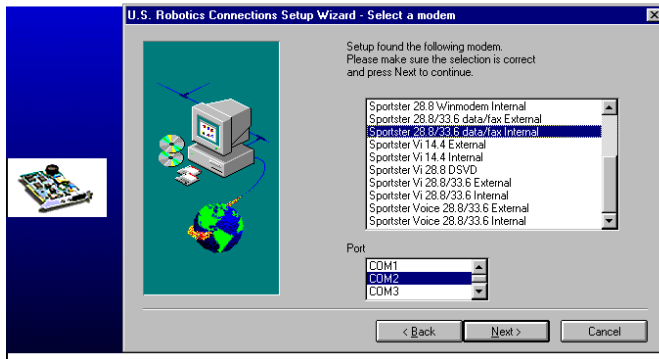


6. You will see this screen for a moment:

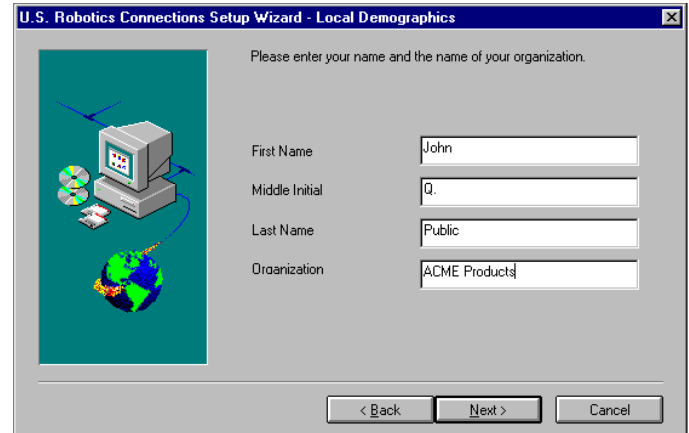


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

7. When you see this screen, if the selection is correct, click on the Next button. If not, choose the correct selection and then click on the Next Button.



8. When you see this screen, fill in the blank boxes and then click on the Next button:



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

9. When you see this screen, fill in the blank boxes and then click on the *Next* button:

U.S. Robotics Connections Setup Wizard - Local Demographics

Please enter your address and phone number.

Street Address: 1234 Pleasant Drive

City: Springfield State: IL

Zip: 60123 Country: United States

Phone Number: 123-456-7890 Extension: 123

Fax Number: 987-654-3210

E-mail address: jpublic@acme.com

< Back Next > Cancel

10. When you see this screen, fill in the blank boxes and then click on the *Next* button:

U.S. Robotics Connections Setup Wizard

Please enter your address and phone number.

What kind of modem did you buy?
Sportster 28.8/33.6 data/fax Internal

Date of purchase (MM/DD/YY): 01/01/96

Where did you buy your modem?
Bob's Compu-Mart

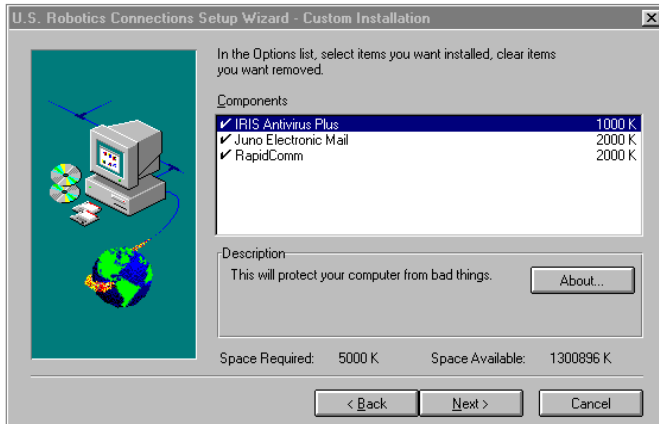
Product Serial Number
1234567890123456

You can find your serial number on the white sticker on the modem and on the outside of the box.

< Back Next > Cancel

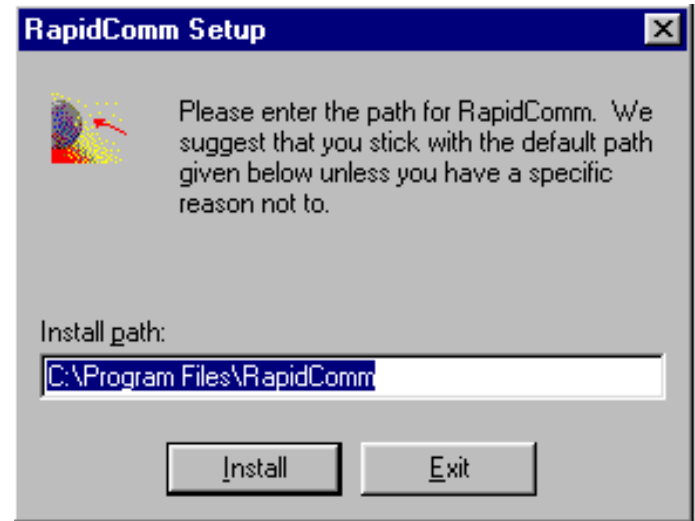
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

11. Un-check any software you do not want by clicking on the name. Then click on the *Next* button:



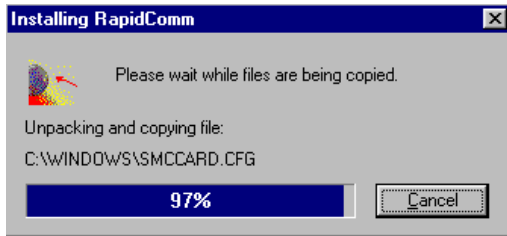
12. As the CD installs the software on your system, you will see a series of screens guiding you through the installation. Please follow the on-screen directions.

13. When you see this screen, click on the *Install* button, unless you want to copy the RapidComm files to a particular directory.

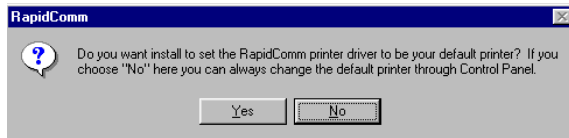


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

14. You will see this screen for a moment.



15. When you see this screen, click on either the *Yes* or *No* button.



- If you click on the Yes button, every document you print will be treated as a fax unless you change the printer selection in the program from which you're trying to print.

- If you click on the No button, RapidComm will not be selected as the default printer. When you want to send a fax, you will have to select RapidComm as the printer in the program from which you're trying to print.

16. When you see this screen, click on the *OK* button.

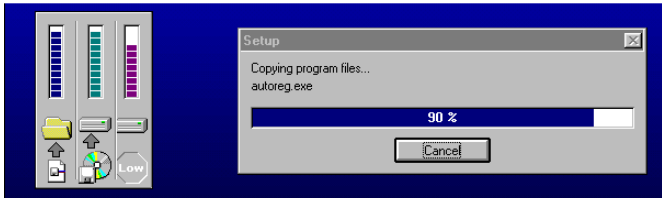


17. When you see this screen, click on the *OK* button.

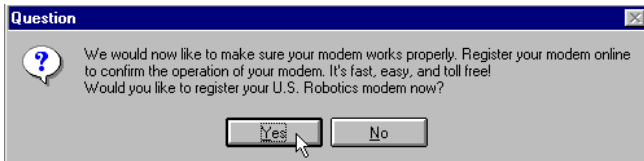


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

18. You will see this screen for a moment.



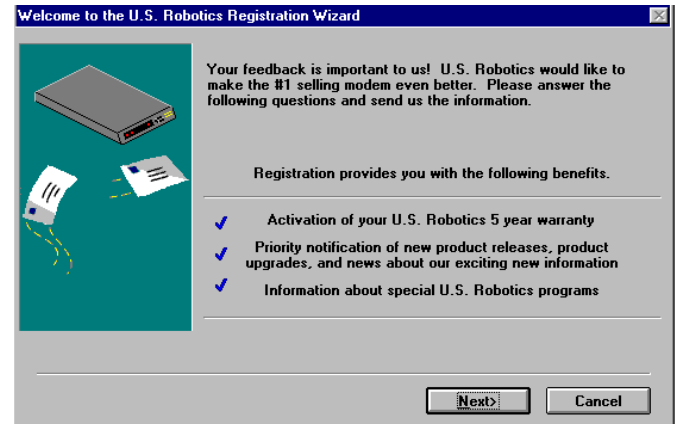
19. When you see this screen, we recommend you click on the Yes button.



Note:

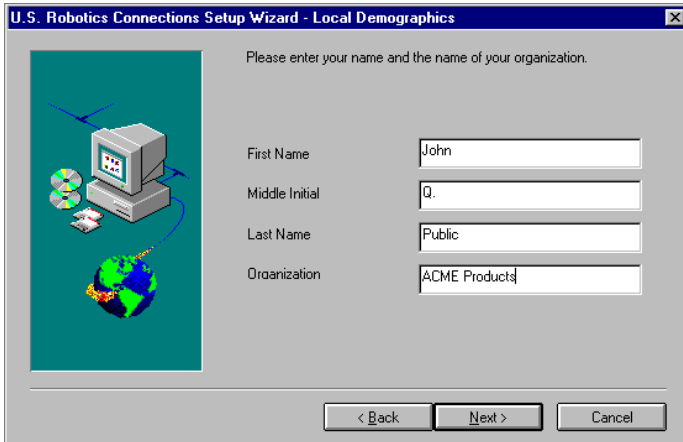
If you click on “No,” the registration screens will appear upon your next restart.

20. When you see this screen, click on the *Next* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

21. When you see this screen, click on the *Next* button:



U.S. Robotics Connections Setup Wizard - Local Demographics

Please enter your name and the name of your organization.

First Name: John

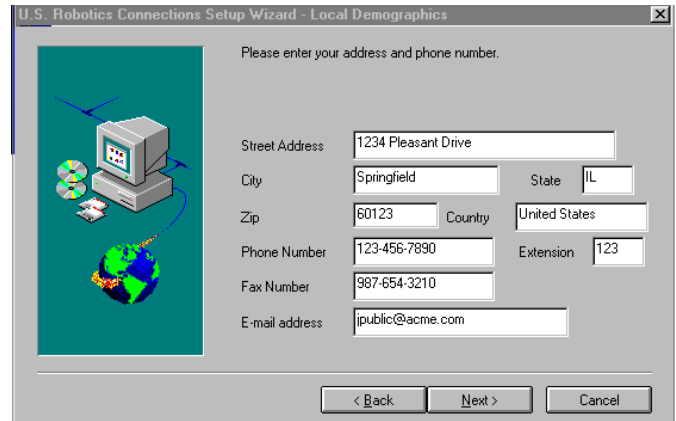
Middle Initial: Q

Last Name: Public

Organization: ACME Products

< Back Next > Cancel

22. When you see this screen, click on the *Next* button.



U.S. Robotics Connections Setup Wizard - Local Demographics

Please enter your address and phone number.

Street Address: 1234 Pleasant Drive

City: Springfield State: IL

Zip: 60123 Country: United States

Phone Number: 123-456-7890 Extension: 123

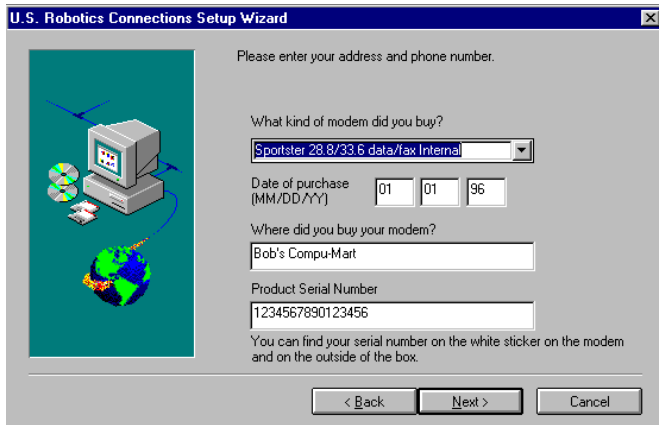
Fax Number: 987-654-3210

E-mail address: jpublic@acme.com

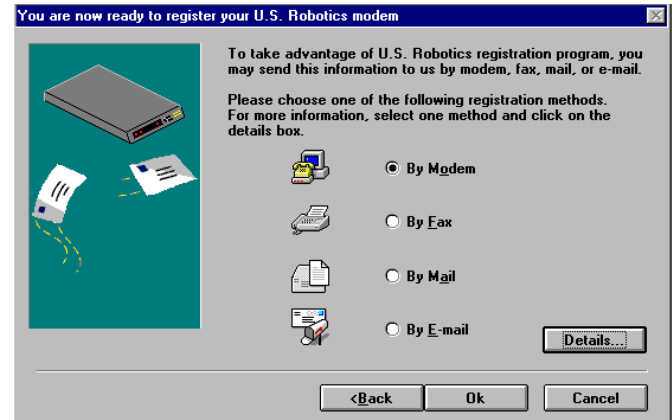
< Back Next > Cancel

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

23. When you see this screen, click on the *Next* button.

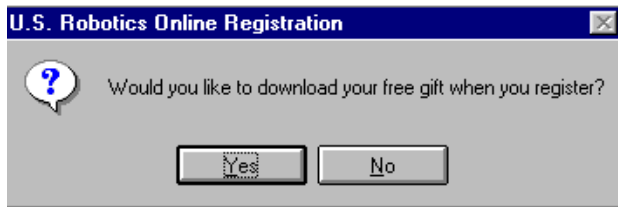


24. When you see this screen, *By Modem* will already be selected. We recommend you choose the *By Modem* option because it's a great way to try out your Sportster. Choose *By Modem* by clicking on the *OK* button:

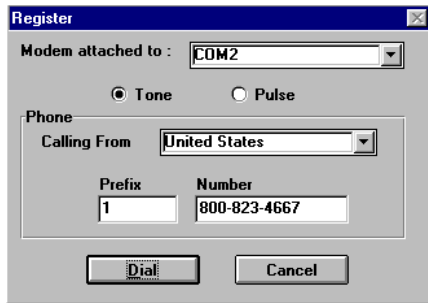


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

25. When you see this screen, we recommend you click on the *Yes* button.



26. When you see this screen:



- If you have to dial a prefix (such as 9) to make a call outside your building, type the prefix before the 1 in the Prefix box and then click on the *Dial* button.
- If you do NOT have to dial a prefix, simply click on the *Dial* button.

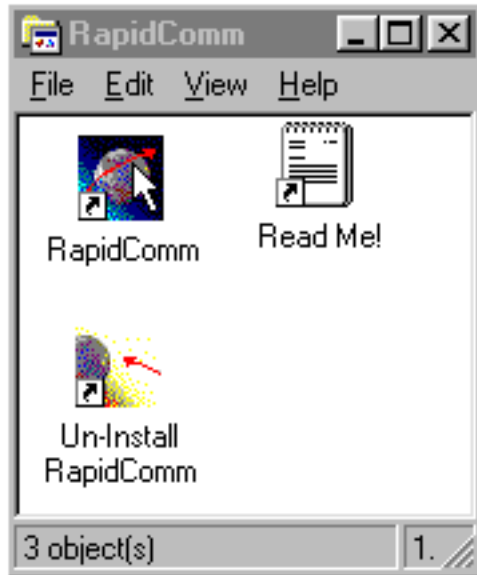
27. Finally, you will see a screen indicating that the registration information has been sent.

28. Restart Windows.

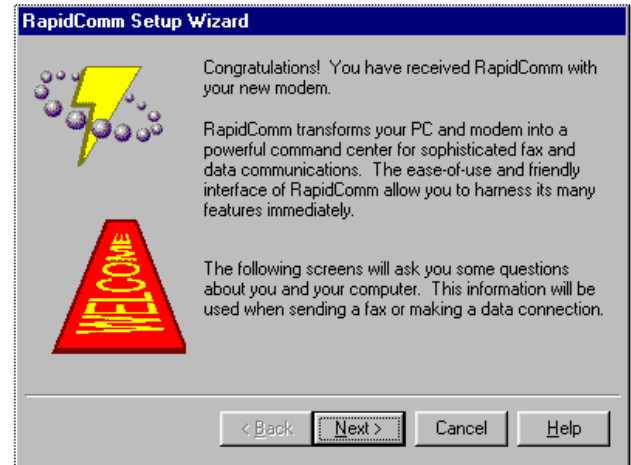


U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

29. Double-click on the *RapidComm* icon.

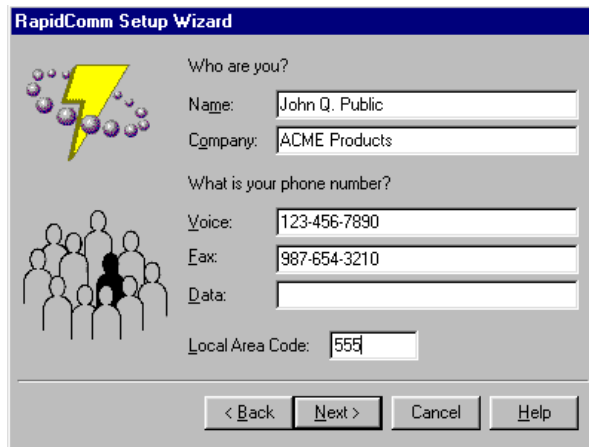


30. When you see this screen, click on the *Next* button.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

31. When you see this screen, you should only have to fill in the Data box (if you have a third phone number just for your modem) and the area code box before clicking on the *Next* button.

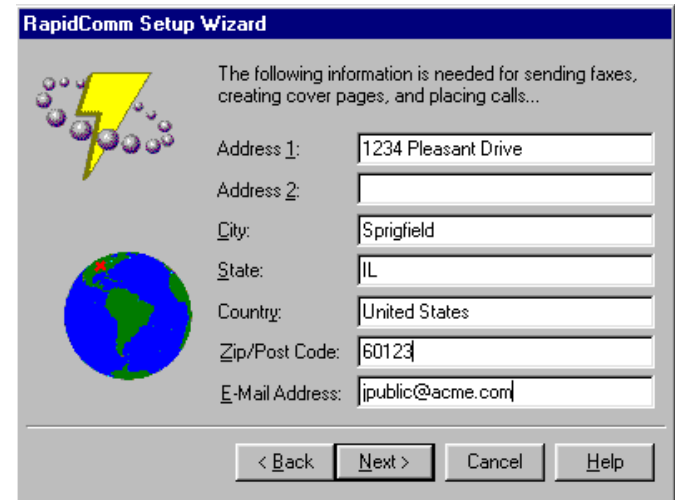


The screenshot shows the 'RapidComm Setup Wizard' window. On the left, there is a yellow lightning bolt icon surrounded by purple bubbles and an icon of a group of people. The main area contains the following fields:

- Who are you?**
 - Name: John Q. Public
 - Company: ACME Products
- What is your phone number?**
 - Voice: 123-456-7890
 - Fax: 987-654-3210
 - Data: (empty)
 - Local Area Code: 555

At the bottom are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

32. When you see this screen, click on the *Next* button.



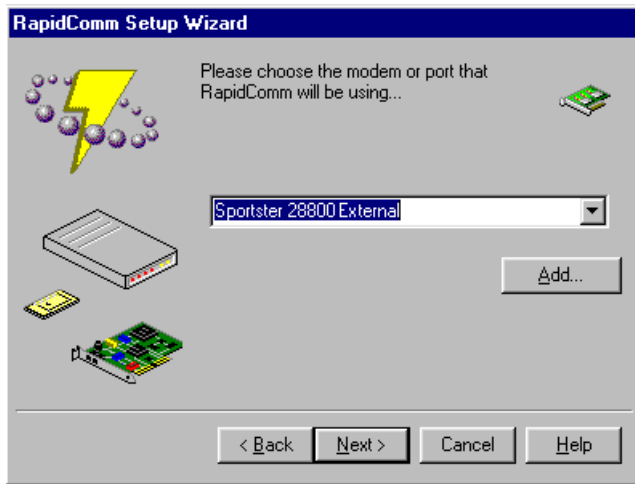
The screenshot shows the 'RapidComm Setup Wizard' window. On the left, there is a yellow lightning bolt icon surrounded by purple bubbles and a globe icon. The main area contains the following fields:

- The following information is needed for sending faxes, creating cover pages, and placing calls...**
 - Address 1: 1234 Pleasant Drive
 - Address 2: (empty)
 - City: Springfield
 - State: IL
 - Country: United States
 - Zip/Post Code: 60123
 - E-Mail Address: jpublic@acme.com

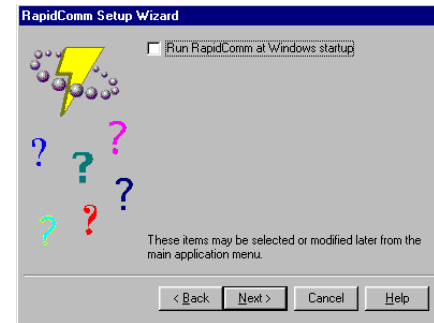
At the bottom are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

33. When you see this screen, click on the *Next* button.



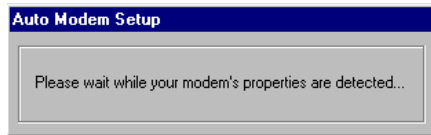
34. When you see this screen:



- If you want RapidComm to start up every time you start Windows, select the box to the left of *Run RapidComm at Windows startup*. Then click on the *Next* button.
- If you do not want RapidComm to start up every time you start Windows, simply click on the *Next* button.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

35. You will see this screen for a moment.

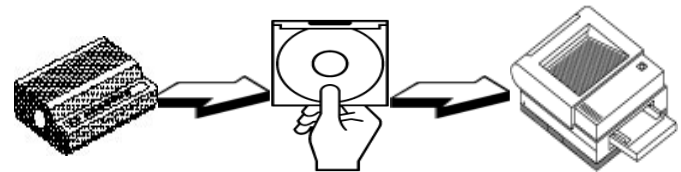


36. You will see this screen.



This is the main RapidComm screen, the first screen you will see when you start RapidComm. To send your first fax, keep this screen open. (For later faxes, this screen does not have to be open in order to send a fax.)

THIS FIRST SECTION WILL WALK YOU THROUGH THE STEPS INVOLVED IN CONNECTING YOUR SPORTSTER TO YOUR COMPUTER.



HARDWARE

SOFTWARE

TESTING

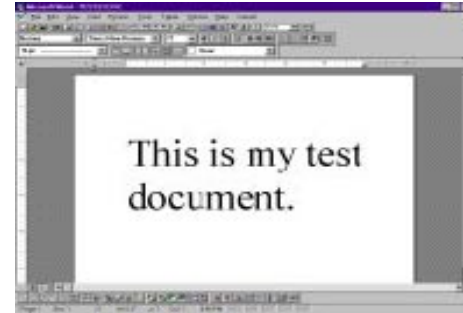
Sending Your First Fax

Using RapidComm, you can send and receive faxes directly from your computer and eliminate the need for an expensive fax machine. Once you learn the basics of sending faxes, you can learn more involved fax functions (such as sending documents to groups of numbers at assigned times) and how to transfer data files. (These more advanced functions are explained in the electronic RapidComm manual

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

that's on your *Connections* CD.) This chapter will walk you through sending your first fax.

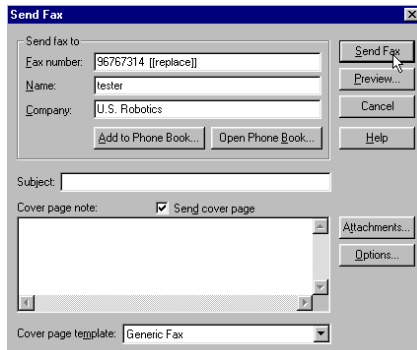
1. Open an application in which you can create documents that you might want to fax (e.g. a word processing application). Create a document containing only a sentence or two. Name the document something like "tester." Keep the document open.



2. From the File menu, select Print.
3. If it's not already selected as the printer, select *RapidComm*. This can be changed in most Windows applications in the print dialog box.
4. Click the *OK* button or the *Print* button (whichever button you click in that application to indicate you're ready to print) in the print dialog box.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

5. When you see this screen, fill in the information shown in below in the white boxes. The U.S. Robotics fax number is 847-676-3559. This will send your “tester” document to a U.S. Robotics fax machine.

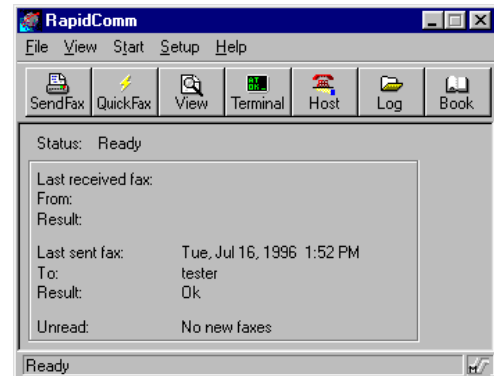


Note:

If you have to dial a special prefix (such as 9) to connect to a telephone number outside of your building, make sure you type that prefix in before the telephone number.

When you’ve finished, click on the *Send Fax* button.

6. You will see a series of screens as the fax is being transmitted. When the fax has been successfully transmitted, you will see a screen that looks like this:



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

**Congratulations—you are
now ready to start
using your Sportster!**

You can now go to the “[Troubleshooting and Online Help Resources](#)” section in this guide for information on how to contact U.S. Robotics by using your Sportster.

Go to electronic [RapidComm Manual](#) on your Connections CD for more detailed instructions on sending faxes and other things you can do with your Sportster and RapidComm.



Part II - Beyond Setup

This part includes information which may not be necessary for installing your modem or the fax/data software included with it, but will help to expand your knowledge of the modem and its capabilities.

The sections are:

[Section A: Installing Other Fax/Data Software](#)

[Section B: Troubleshooting and Online Help Resources](#)

[Section C: Glossary](#)

[Section D: Technical Quick Reference](#)

[Section E: Regulatory Information](#)



Section A: Installing Other Fax/Data Software

You do not have to use the QuickLink II Fax/Data software included with your new Sportster. Your [modem](#) has been designed and tested using a wide range of communications software on the market. This chapter will walk you through some of the details you may need to know when installing other communications software packages.

Type of Modem

Most communications software programs will ask you to select the type of [modem](#) you are using. Select a *U.S. Robotics Sportster high speed modem*. If that selection is not listed, pick *Courier Dual Standard, V.32bis, or V.34*.

Key Point:

Refer to the manual that came with your software for its installation instructions. The software's installation program will ask you questions about the modem you are using.

Initialization String

For hardware [flow control](#), a fixed serial port rate and full result codes type:

AT&F1<Enter>

If you must use software [flow control](#), type:

AT&F2<Enter>

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Flow Control

- For hardware [flow control](#) (highly recommended), select *RTS/CTS*.
- For software [flow control](#), select *XON/XOFF*.

NOTE:

Disable the type of [flow control](#) (hardware or software) that you are not using.

If this is your UART	Select this Serial Rate
16550*	1152.2 or 57.6 K bps
16450	38.4 K bps
8250	19.2 K bps

Find the ***UART Chip Used*** line and match it with the ***COM port*** column that your modem is attached to. That is your UART type.

Note:

DO NOT select a 28,800, 14,400, or 12,000 **[bps](#)** serial port rate, if offered. Your modem will NOT work correctly with one of these settings. Fix or lock the serial port (baud) rate (*if it's referred to as autobaud, select OFF*).

UART (External Modems Only)

1. In DOS, at the Windows directory type:
MSD
2. At the next prompt, type:
C



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Problem

The computer or software will not recognize the [modem](#).

Diagnosis

Your [modem](#) might not be turned on.

You may have a conflict between your COM and IRQ ports.

You might not be entering [modem](#) commands in the proper manner.

You may need to reset your COM and IRQ settings.

Possible Solution

Make sure the [modem](#) is turned on. The power switch is on top the external mdems. If you installed an internal modem, it should power up when the compute is turned on.

Check to make sure you have the correct COM port and IRQ settings in your software and/or in the Windows Control Panel.

Type in all upper (AT) or lower (at) case.

Refer to Part I (Internal [Modem](#) Installation) or the diagram on the following page.

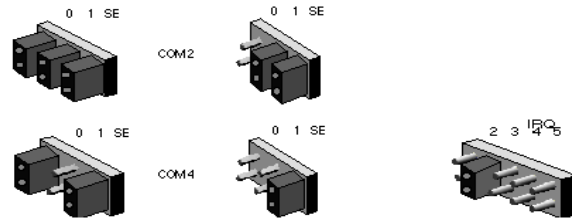
U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Problem

The computer or software will not recognize the [modem](#)

Possible Solution

To reset the COM port and IRQ settings, lift the black plastic shunts off the [modem](#) and replace the COM port shunt to 3 and the IRQ shunt to 5. Once you've changed the settings, be sure to make the same changes to your software and Windows settings. The illustration below shows various COM port and IRQ settings.



Power User Tip: Running a self-diagnostics test on your computer is an easy way to figure out whether or not you have a COM port/IRQ conflict. Go to the DOS or Windows directory located on your boot disk (typically C:\) and type **MSD**. From here, type **Q** to see the IRQ (Interrupt Request) information. Note the COM port and IRQ your modem is using. If your modem is sharing an IRQ with another device, you need to assign it to another IRQ through your software and Windows settings.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Problem

The [modem](#) displays double [character](#)s on your monitor.

The [modem](#) won't go [off hook](#) to dial or doesn't answer the phone.

Both modems exchange [carrier](#) signals but fail to establish a link.

Diagnosis

Both the [modem](#) and software's local [character](#) echoes are probably turned on.

You might have a bad phone cord connection to your [modem](#).

The software you are using might not have [auto answer](#) enabled.

You may have a poor line connection.

Possible Solution

You can turn the local commands off on both the software and computer by typing **ATEO** <enter> in the software terminal mode.

Make sure the phone cord is connected to the jack on the [modem](#) labeled TELCO on one end and to the wall phone jack at the other end.

Check to make sure the [auto answer](#) feature is enabled . In Quick Link II, type ATSO=1 in terminal mode.

Try placing the call again. The phone company routes calls differently each time.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Problem

Your modem won't connect at 2400 bps with a 2400 bps modem.

Diagnosis

The modem you're trying to connect with could be an older model that doesn't support error control.

Possible Solution

You can disable error control on your modem with the following command entered in the terminal mode: **AT&M0** <Enter>. Now try placing the call to the remote modem again. When finished, reset your modem to enable the error control features. Type **ATZ** <Enter> in terminal mode.

Your screen keeps displaying random garbage characters

You could have a conflict with the remote modem's settings for word length, parity, and stop bits.

Set your modem's word lengths, parity, and stop bits the same as the remote modem or BBS you are calling.

Your software and modem might not be set to the same flow control settings.

Make sure the software and modem have the same flow control rate settings.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Problem

You communications software is reporting many Cyclic Redundancy Check (CRC) errors and low Characters Per Second (CPS).

Diagnosis

The best flow control settings might not be enabled on your modem.

You might have a bad phone line.

The best flow control settings might not be enabled on your modem.

You might have the serial port rate in your communications software set too high for your area's phone lines.

The remote site you are dialing into might be having trouble with the file transfer protocol.

Possible Solution

Type this command in terminal mode to load the optimal settings:
AT&F1 <enter>.

Try placing the call again. The phone company routes calls differently each time.

Type this command in terminal mode to load the optimal settings:
AT&F1 <enter>.

Lower the serial port rate in your communications software to 38,400 bps or 19,200 bps.

Try using a different file transfer protocol. Do not use Xmodem if other protocols are available.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Problem	Diagnosis	Possible Solution
Errors are constantly occurring in your V.17 fax transmissions.	You may have a disruptive Terminate and Stay Resident (TSR) program running in the background.	Disable any Terminate and Stay Resident (TSR) programs running in the background.
	Your modem initialization string could be insufficient for fax transmissions.	Enter the following initialization string in your software setup screen: AT&H3&12&R2S7=90.
	<p>You could have a disruptive Terminate and Stay Resident (TSR) program running in your background.</p> <p>You could have an outdated comdriver on your system.</p>	<p>Disable any Terminate and Stay Resident (TSR) programs running in the background.</p> <p>Load the comdriver that came with your fax software. This may require you to re-install your internal modem.</p>
RapidComm fails to initialize the modem.	Your baud rate may be set too high.	Lower baud rate to 9600.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Internal modem users only

If you have run DOS 6.0's Double Spaced program, you may want to do the following before running any fax software.

1. Open the Windows SYSTEM.INI file.
2. Add the following line under the [386 Enh] header:
EMMEXCLUDE=C800-D1FF

When you are finished, reboot your computer.

If you are running DOS 6.0 or higher

You may want to run the following DOS program before you run your fax software.

1. Type **VER** at the DOS prompt to determine your version of DOS.
2. Run the program MEMMAKER.EXE from the DOS directory prompt. This program loads all of your Terminate and Stay Resident (TSR) programs in the most efficient order.

Online Help Resources

Connecting to the U.S. Robotics BBS

To connect to the U.S. Robotics Bulletin Board System, follow these steps:

1. Start your communications software. The software settings for the BBS are:

ANSI terminal emulation

Data Bits: 8

Parity: None

Stop Bits: 1

2. Put your computer in Terminal mode. Enter the following command: **ATDT DS0<Enter>**

Note:

ATDT DSO automatically dials 1-847-982-5092, the U.S. Robotics BBS.

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

missing graphic

The screen shot above is what the introduction screen of the U.S. Robotics BBS will look like. Follow the on-screen prompts to enter your name and



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

other relevant information to register your Sportster and have access to the BBS library. The library contains hundreds of helpful files and tips to make using your modem and computer a breeze.

Downloading the Technical Reference Guide

To download the *Technical Reference Guide*, follow these steps:

1. From the main menu, select **D** for Download a file.

missing graphic

(This is what the main menu will look like.)

2. *Enter filename to Download (Enter) = none?* appears on the screen.

missing graphic

3. Type the name of the file you wish to receive. You have three manual formats from which to choose:
 - SP_WORD.ZIP—The Guide in a zipped Word for Windows v6.0 format. You will need PKUNZIP.EXE to uncompress this file. PKUNZIP.EXE is also available on the BBS.
 - SP_HELP.ZIP—The Guide in a zipped Windows Help format.
 - SP_ASCII.TXT—The Guide in an uncom-



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

pressed ASCII format.

4. *Protocol Type for Transfer.* Your selection depends on what your software supports. If possible, make Zmodem your first choice. Xmodem should be your last choice since it is very slow.
5. Depending on the software you are using, you will either be prompted where you want the file placed, or the file will be placed in the directory where your communications software is loaded.
6. When the file transfer is complete, and you are ready to leave the BBS, select **G** for Good-bye from the main menu.

U.S. Robotics offers a number of other online technical support options. Choose any one of the following if you need help with your new Sportster or want to learn more about it.

Internet FTP

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

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 a document's 3-digit number as the subject.

World Wide Web

A U.S. Robotics Home Page containing the same information as the Internet on Demand listing as well as information about U.S. Robotics. Log on to **http://www.usr.com**.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

CompuServe

Access the same information as the Internet FTP site. Connect through the **Modem Vendor** Forum or e-mail us through CompuServe Mail for a response within 24 hours. Modem vendor forum address is **GO USROBOTICS**, Modem Vendor Section #4. Address message to **76711,707**.

America Online

Connect to U.S. Robotics through America Online. Go to the **Keyword** field and type **USROBOTICS** to connect to the U.S. Robotics BBS for Macintosh computer users.

Fax and Technical Support Hotline

Technical questions about U.S. Robotics modems can also be answered via fax or by technical support representatives.

Fax (847) 676-7323

Hotline (847) 982-5151

Priority “No Hold” Service

U. S. Robotics also staffs its own 900 toll number for immediate assistance. These lines are staffed from 8 a.m. - 6 p.m. CST Monday through Friday. **“No Hold” line 900-555-USR1**

Are you still having problems?

- Review this manual.
- Call or visit your modem dealer. They will be able to give you assistance. This is much more efficient and time-saving than returning the modem to U.S. Robotics.
- If your dealer can't help you, contact U.S. Robotics Customer Support. When you call, specify your modem serial number (found on the modem and on the outside of the box), the software being used, and, if possible, the contents of your ATI7 screen.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

If you must return the modem to us...

- Contact U.S. Robotics Customer Support. If the support representative determines that you need to return the modem, you will receive an SRO (Service Repair Order) number. You must have an SRO number before returning the modem to us.
- Ship the unit, postage paid, in a strong box made of corrugated cardboard with plenty of packing material.
- Include your SRO number, name, and address on the shipping label as well as inside the package.

- Ship to the following address:

Technical Support Department
SRO#
U.S. Robotics, Inc.
8100 N. McCormick Blvd.
Skokie, IL 60076-2999



Section C: Glossary

Cross references are printed in **boldface**. Cross references with items in the Command Summary chapter are printed in *italics*.

analog loopback

A modem self-test in which data from the keyboard or an internal test pattern is sent to the modem's transmitter, turned into analog form, looped back to the receiver, and converted back into digital form.

analog signals

A variety of signals and wavelengths that can be transmitted over communications lines such as the sound of a voice over the phone line. Contrast with [digital signals](#).

answer mode

The mode used by your modem when answering an incoming call from an originating modem. The transmit/receive frequencies are the reverse of the originating modem, which is in **originate mode**.

application

A computer program designed to perform a specific function, such as a word processing or organizing data into a spreadsheet.

ARQ

Automatic Repeat reQuest. A general term for a function that automatically allows your modem to detect flawed data and retransmit it. See [MNP](#) and [V.42](#).

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

ASCII

American Standard Code for Information Interchange. A code used to represent letters, numbers, and special [characters](#) such as \$, !, and /.

asynchronous transmission

Data transmission in which the length of time between transmitted [characters](#) may vary. Because the time lapses between transmitted [characters](#) are not uniform, the receiving modem must be signaled as to when the data bits of a character begin and when they end. The addition of **start/stop bits** to each character serves this purpose.

Auto Answer

Sets the modem to pick up the phone line when it detects a certain number of rings. See S-register S0 in the “Technical Quick Reference”.

auto dial

A process where your modem dials a call for you. The dialing process is initiated by sending an *ATDT* (dial tone) or *ATDP* (dial pulse) command followed by the telephone number to dial. Auto dial is used to dial voice numbers. See command *Dn*.

baud rate

A term used to measure the speed of an analog transmission from one point to another. Although not technically accurate, baud rate is commonly used to mean [bit rate](#).

binary digit

A 0 or 1, reflecting the use of the binary numbering system (only two digits). Used because the computer recognizes either of two states, OFF or ON. Shortened form of binary digit is bit.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

bit rate

Also referred to as transmission rate. The number of [binary digits](#), or bits, transmitted per second ([bps](#)). Communications channels using telephone channel modems are established at set bit rates, commonly 2400, 4800, 9600, 14,400, 28,800 and higher.

bits per second (BPS)

The bits ([binary digits](#)) per second rate. Thousands of bits per second are expressed as kilobits per second or Kbps.

buffer

A memory area set aside to be used as temporary storage during input and output operations. An example is the modem's command buffer.

byte

A group of [binary digits](#) stored and operated upon as a unit. In user documentation, the term usually refers

to 8-bit units or [characters](#). One kilobyte (KB) is equal to 1,024 bytes or characters; 640 KB indicates 655,360 bytes or characters.

carrier

A tone signifying a connection the modem can alter to communicate data across telephone lines.

character

A representation, coded in [binary digits](#), of a letter, number, or other symbol.

characters per second (CPS)

A data transfer rate generally estimated from the [bit rate](#) and the [character](#) length. For example, at 2400 [bps](#), 8-bit characters with **start/stop bits** (for a total of ten bits per character) will be transmitted at a rate of approximately 240 characters per second (cps). Some protocols, such as error-control protocols, employ advanced techniques such as longer trans-

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

mission [frames](#) and **data compression** to increase [cps](#).

Class 1 and 2.0

International standards used between fax [application](#) programs and fax modems for sending and receiving faxes.

cyclic redundancy checking (CRC)

An error-detection technique consisting of a test performed on each block or [frame](#) of data by both sending and receiving modems. The sending modem inserts the results of its tests in each data block in the form of a CRC code. The receiving modem compares its results with the received CRC code and responds with either a positive or negative acknowledgment.

data communications

A type of communications in which computers are able to exchange data over an electronic medium.

data compression table

A table containing values assigned for each [character](#) during a call under [MNP5](#) data compression. [Default](#) values in the table are continually altered and built during each call: The longer the table, the more efficient **throughput** gained.

data mode

The mode in which the fax modem is capable of sending and receiving data files. A standard modem without fax capabilities is always in data mode.

DCE

Data Communications (or Circuit-Terminating) Equipment, such as dial-up modems that establish and control the data link via the telephone network.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

default

Any setting assumed, at startup or reset, by the computer's software and attached devices. The computer or software will use these settings until changed by the user or other software.

detect phase

In the [ITU-T V.42](#) error-control protocol, the first stage in establishing if both modems attempting to connect have **V.42** capability.

dictionary

The term used for compression codes built by the **V.42 bis** data compression algorithm.

digital loopback

A test that checks the modem's RS-232 interface and the cable that connects the terminal or computer and the modem. The modem receives data (in the form of [digital signals](#)) from the computer or terminal,

and immediately returns the data to the screen for verification.

digital signals

Discrete, uniform signals. In this manual, the term refers to the [binary digits](#) 0 and 1. Contrast with [analog signals](#).

DTE

Data Terminal (or Terminating) Equipment. A computer that generates or is the final destination of data.

duplex

Indicates a communications channel capable of carrying signals in both directions. See [half duplex](#), [full duplex](#).

EIA

Electronic Industries Association, which defines electronic standards in the U.S.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

error control

Various techniques that check the reliability of [characters](#) (**parity**) or blocks of data. **V.42** and **MNP** error-control protocols use error detection ([CRC](#)) and retransmission of flawed [frames](#) ([ARQ](#)).

facsimile

A method for transmitting the image on a page from one point to another. Commonly referred to as fax.

fax mode

The mode in which the fax modem is capable of sending and receiving files in a [facsimile](#) format. See definitions for **V.17**, **V.27ter**, **V.29**.

flow control

A mechanism that compensates for differences in the flow of data into and out of a modem or other device. See commands *&Hn*, *&In*, *&Rn*.

frame

A [data communications](#) term for a block of data with header and trailer information attached. The added information usually includes a frame number, block size data, error-check codes, and Start/End indicators.

full duplex

Signal will flow in both directions at the same time over one line. In microcomputer communications, may refer to the suppression of the online [local echo](#).

half duplex

Signals will flow in both directions, but only one way at a time. In microcomputer communications, may refer to activation of the online [local echo](#), which causes the modem to send a copy of the transmitted data to the screen of the sending computer.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Hz

Hertz, a frequency measurement unit used internationally to indicate one cycle per second.

ITU-T

An international organization that defines standards for telegraphic and telephone equipment. For example, the Bell 212A standard for 1200-[bps](#) communication in North America is observed internationally as ITU-T V.22. For 2400-[bps](#) communication, most U.S. manufacturers observe V.22 bis. The initials ITU-T represent the French name. In English it is known as the International Telegraph and Telephone Consultative Committee.

LAPM

Link Access Procedure for Modems. An error-control **protocol** defined in [ITU-T](#) Recommendation V.42. Like the [MNP](#) protocols, LAPM uses [cyclic redundancy checking](#) ([CRC](#)) and retransmission of

corrupted data ([ARQ](#)) to ensure data reliability.

local echo

A modem feature that enables the modem to display keyboard commands and transmitted data on the screen. See command *Hn*.

MNP

Microcom Networking Protocol, an error-control protocol developed by Microcom, Inc., and now in the public domain. There are several different MNP protocols, but the most commonly used one ensures error-free transmission through error detection ([CRC](#)) and retransmission of erred [frames](#).

modem

A device that transmits/receives computer data through a communications channel such as radio or telephone lines. It also changes signals received from the phone line back to [digital signals](#) before

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

passing them to the receiving computer.

nonvolatile memory (NVRAM)

User-programmable random access memory whose data is retained when power is turned off. On the Sportster, it includes four stored phone numbers and the [modem](#) settings.

off/on hook

[Modem](#) operations that are the equivalent of manually lifting a phone receiver (taking it off-hook) and replacing it (going on-hook).

online fallback/fall forward

A feature that allows high-speed, error-control modems to monitor line quality and fall back to the next lower speed in a defined range if line quality diminishes. As line conditions improve, the modems switch up to the next higher speed.

originate mode

The mode used by your [modem](#) when initiating an outgoing call to a destination modem. The transmit/receive frequencies are the reverse of the called modem, which is in [answer mode](#).

parity

A simple error-detection method that checks the validity of a transmitted [character](#). Character checking has been surpassed by more reliable and efficient forms of error checking, including **V.42** and [MNP 2-4](#) protocols. Either the same type of parity must be used by two communicating computers, or both may omit parity.

protocol

A system of rules and procedures governing communications between two or more devices. Protocols vary, but communicating devices must follow the same protocol in order to exchange data. The format

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

of the data, readiness to receive or send, error detection and error correction are some of the operations that may be defined in protocols.

RAM

Random Access Memory. Memory that is available for use when the [modem](#) is turned on, but that clears of all information when the power is turned off. The modem's RAM holds the current operational settings, a [flow control buffer](#), and a command [buffer](#).

remote digital loopback

A test that checks the phone link and a remote [modem](#)'s transmitter and receiver.

remote echo

A copy of the data received by the remote system, returned to the sending system, and displayed on the screen. Remote echoing is a function of the remote system.

ROM

Read Only Memory. Permanent memory, not user-programmable.

serial transmission

The consecutive flow of data in a single channel. Compare to parallel transmissions where data flows simultaneously in multiple channels.

start/stop bits

The signaling bits attached to a [character](#) before the character is transmitted during [asynchronous transmission](#).

terminal

A device whose keyboard and display are used for sending and receiving data over a communications link. Differs from a microcomputer or a mainframe in that it has little or no internal processing capabilities.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

terminal mode

Software mode that allows direct communication with the [modem](#). Also known as command mode.

throughput

The amount of actual user data transmitted per second without the overhead of protocol information such as Start and Stop bits or [frame](#) headers and trailers. Compare with [characters per second](#).

V.8

The [ITU-T](#) standard specification that covers the initial handshaking process.

V.17 fax

An [ITU-T](#) standard for making [facsimile](#) connections at 14,400 [bps](#), 12,000 [bps](#), 9,600 [bps](#), 7,200 [bps](#).

V.21

An [ITU-T](#) standard for modems operating in asynchronous mode at speeds up to 300 [bps](#), full-duplex, on public switched telephone networks.

V.22

An [ITU-T](#) standard for [modem](#) communications at 1200 [bps](#), compatible with the Bell 212A standard observed in the U.S. and Canada.

V.22 bis

An [ITU-T](#) standard for [modem](#) communications at 2400 [bps](#). The standard includes an automatic link negotiation fallback to 1200 [bps](#) and compatibility with Bell 212A/V.22 modems.

V.27

An [ITU-T](#) standard for [facsimile](#) operations that specifies modulation at 4800 [bps](#), with fallback to 2400 [bps](#).



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

V.29

An [ITU-T](#) standard for [facsimile](#) operations that specifies modulation at 9600 [bps](#), with fallback to 7200 [bps](#).

V.32

An [ITU-T](#) standard for [modem](#) communications at 9600 [bps](#) and 4800 [bps](#). V.32 modems fall back to 4800 [bps](#) when line quality is impaired.

V.32 bis

An [ITU-T](#) standard that extends the V.32 connection range: 4800, 7200, 9600, 12,000, and 14,400 [bps](#). V.32 bis modems fall back to the next lower speed when line quality is impaired, fall back further as necessary, and also fall forward (switch back up) when line conditions improve.

V.34

An [ITU-T](#) standard that currently allows data rates as high as 33,600 [bps](#).

V.42

An [ITU-T](#) standard for [modem](#) communications that defines a two-stage process of detection and negotiation for [LAPM error control](#).

V.42 bis

An extension of [ITU-T](#) V.42 that defines a specific data compression scheme for use during V.42 connections.

Xmodem

The first of a family of [error control](#) software **protocols** used to transfer files between modems. These protocols are in the public domain and are available from many bulletin board services.

XON/XOFF

Standard [ASCII](#) control [character](#)s used to tell an intelligent device to stop/resume transmitting data.

Ymodem

An error-checking protocol that can send several files of data at a time in 1024-[byte](#) (1K) blocks. This protocol can use either checksums or [CRC](#) for error checking.

Ymodem G

Similar to **Ymodem**, except it includes no error checking, which makes it faster.

Zmodem

Similar to **Xmodem** and **Ymodem**, except it includes batch transfer, the ability to recover from a partially complete transfer, an autostart feature, and improved efficiency.

Section D: Technical Quick Reference

This section includes information about:

- *Front Panel Lights*
- *Command Summary*
- *Dip Switches*
- *S-Registers*
- *The Serial Interface (cable information)*

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Front Panel Lights

Symbol	Meaning	Status
AA	Auto Answer	Answer mode : ON when register S0 is set to 1 or higher (Auto Answer), and when answering a call; OFF when modem originates a call. Light flashes when there is an incoming call.
CD	Carrier Detect	ON if modem receives a valid data signal (carrier) from a remote modem , indicating that data transmission is possible. Always ON if CD override is ON (&C0).
RD	Received Data	Flashes when modem sends result codes or passes received data bits from remote.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Front Panel Lights

Symbol	Meaning	Status
SD	Send Data	Flashes when computer sends a data bit to modem .
TR	Data Terminal Ready	ON if modem receives a DTR signal from computer. Always ON (modem ignores DTR) if the DTR override is ON (&D0).
CS	Clear to Send	ON until modem lowers CTS when Transmit Data hardware flow control is enabled (&H1, &H3).
ARQ/	Error Control/	Data Mode : Automatic Repeat Request.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Front Panel Lights

FAX

Fax Operations

ON if [modem](#) is set to &M4 or &M5 and successfully establishes an [error control](#) connection.
Flashes when modem retransmits data to remote modem. [Fax Mode](#):
Flashes to indicate fax mode.

Command Summary

- Type commands in either upper or lower case, not a combination. Use the Backspace key to delete errors. (You cannot delete the original AT command since it is not stored in the [modem buffer](#).)
- If a command has numeric options and you don't include a number, zero is assumed. For example, if you type ATB, the command ATB0 is assumed.
- Every command except A/ and +++ must begin with the AT prefix and be entered by pressing <**Return**>.
- The maximum command length is 58 [characters](#). The modem doesn't count the AT prefix, carriage returns, or spaces.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Note:

All defaults are based on the & F1 - Hardware Flow Control template loaded in NVRAM when the modem is shipped. Defaults are listed in *italics*.

Command Set

\$	Displays a basic command list; online help.
A	Manual Answer: goes off hook in answer mode . Pressing any key aborts the operations.
A/	Re-executes the last issued command. Used mainly to redial. This does not require the AT prefix or a Carriage Return.
Any key	Aborts off-hook dial/answer operation and hangs up.
AT	Required command prefix, except with A/ and +++. Use alone to test for OK result code.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Bn	U.S./ ITU-T answer sequence.
BO	ITU-T <i>answer sequence</i>
B1	U.S. answer tone
Dn	Dials the specified phone number. Includes the following:
L	Dials the last dialed number.
P	Pulse (rotary) dial
R	Originates call using answer (reverse) frequencies.
Sn	Dials the phone number string stored in NVRAM at position n (n=0-3). Phone numbers are stored with the &Zn=s command.
T	Tone dial
,	(Comma) Pause, See S8 definition; which it's linked to.
;	(Semicolon) Return to Command mode after dialing.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

“	Dials the letters that follow (in an alphabetical phone number).
!	(Exclamation point) Flashes the switch hook.
/	Delays for 125 ms. before proceeding with dial string.
W	Wait for second dial tone (X2 or X4); linked to S6 register.
@	Dials, waits for quiet answer, and continues (X3 or higher).
\$	Displays a list of Dial commands.
En	Sets local echo .
E0	Echo OFF
E1	Modem <i>displays keyboard commands</i>
Fn	Sets online local echo of transmitted data ON/OFF.
F0	Local echo ON. Modem sends a copy of data it sends to the remote system to your screen.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

F1 [Local echo](#) OFF. Receiving system may send a remote echo of data it receives.

Hn Controls ON/[OFF hook](#).

H0 Hangs up (goes [on hook](#)).

H1 Goes [off hook](#).

In Displays the following information.

I0 Four-digit product code

I1 Results of ROM checksum

I2 Results of RAM checksum

I3 Product type

I4 Current [modem](#) settings

I5 Nonvolatile memory ([NVRAM](#)) settings

I6 Link diagnostics

I7 Product configuration

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Mn	Operates speaker.
M0	Speaker always OFF.
M1	<i>Speaker ON until CONNECT.</i>
M2	Speaker always ON.
M3	Speaker ON after dial, until CONNECT.
On	Returns online.
O0	Returns online.
O1	Returns online retrains.
P	Sets pulse dial (for phone lines that don't support touch-tone dialing).
Qn	Displays/suppresses result codes.
Q0	<i>Displays result codes.</i>
Q1	Quiet mode; no result codes.
Q2	Displays result codes only in Originate mode.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Sr.b=n Sets bit *.b* of register *r* to *n* (0/OFF or 1/ON).

Sr=n Sets register *r* to *n*.

Sr? Displays contents of S-Register *r*.

S\$ Displays a list of the S-Registers.

T Sets tone dial.

Vn Displays verbal/numeric result codes.

 V0 Numeric codes

 V1 Verbal codes

Xn Sets result code displayed. [Default](#) is X4.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Xn Setting

Result Codes	X0	X1	X2	X3	X4
0/OK	•	•	•	•	•
1/CONNECT	•	•	•	•	•
2/RING	•	•	•	•	•
3/NO CARRIER	•	•	•	•	•
4/ERROR	•	•	•	•	•
5/CONNECT 1200		•	•	•	•
6/NO DIAL TONE			•		•
7/BUSY				•	•
8/NO ANSWER*				•	•
10/CONNECT 2400		•	•	•	•
13/CONNECT 9600		•	•	•	•

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

18/CONNECT 4800	•	•	•	•
20/CONNECT 7200	•	•	•	•
21/CONNECT 12000	•	•	•	•
25/CONNECT 14400	•	•	•	•
43/CONNECT 16800	•	•	•	•
85/CONNECT 19200	•	•	•	•
91/CONNECT 21600	•	•	•	•
99/CONNECT 24000	•	•	•	•
103/CONNECT 26400	•	•	•	•
107/CONNECT 28800	•	•	•	•
151/CONNECT 31200	•	•	•	•
155/CONNECT 33600	•	•	•	•



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Functions	X0	X1	X2	X3	X4
Adaptive Dialing			•	•	•
Wait for 2nd Dial Tone (W)			•		•
Wait for answer (@)				•	•
Fast Dial			•		•

Yn Selects power-on/reset [default](#) configuration.

Y0 [Default](#) is profile 0 setting [NVRAM](#)

Y1 [Default](#) is profile 1 setting in [NVRAM](#)

Z Resets [modem](#).

Z0 Resets [modem](#) to [NVRAM](#) profile selected by Y command or dip 7.

Z1 Resets [modem](#) to [NVRAM](#) profile 0

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Z2	Resets modem to NVRAM profile 1
Z3	Resets modem to factory default profile 0 (&F0)
Z4	Resets modem to factory default profile 1 (&F1)
Z5	Resets modem to factory default profile 2 (&F2)
&\$	Displays a list of ampersand (&) commands. &A enables/disables additional result code subsets (see Xn).
&A0	ARQ result codes disabled
&A1	ARQ result codes enabled
&A2	V.32 modulation indicator added
&A3	Protocol indicators added* LAPM / MNP /NONE (error control) and V42 bis/ MNP 5 (data compression)
&Bn	Manages modem's serial port rate.
&B0	Variable, follows connection rate

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

<i>&B1</i>	<i>Fixed serial port rate</i>
<i>&B2</i>	Fixed in ARQ mode, variable in non-ARQ mode
&Cn	Controls Carrier Detect (CD) signal.
<i>&C0</i>	CD Override
<i>&C1</i>	<i>Normal CD Operations</i>
&Dn	Controls Data Terminal Ready (DTR) operations.
<i>&D0</i>	<i>DTR override</i>
<i>&D1</i>	DTR toggle causes online <i>Command</i> mode
<i>&D2</i>	Normal DTR operations
<i>&D3</i>	Resets on receipt of DTR
&Fn	Loads a read-only (non-programmable) factory configuration.
<i>&F0</i>	Generic template
<i>&F1</i>	Hardware flow control template

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

&F2 Software [flow control](#) template

&Gn Sets Guard Tone.

&G0 *No guard tone, U.S. and Canada*

&G1 550[Hz](#) guard tone, some European countries, requires B0 setting.

&G2 1800 [Hz](#) guard tone, U.K., requires B0 setting.

&Hn Sets Transmit Data (TD) [flow control](#) (see also &Rn).

&H0 [Flow control](#) disabled

&H1 *Hardware [flow control](#), Clear to Send (CTS)*

&H2 Software [flow control](#), XON/XOFF

&H3 Hardware and software [flow control](#)

&In Sets Recieve Data (RD) software [flow control](#) (see also &Rn).

&I0 *Software [flow control](#) disabled*

&I1 XON/XOFF signals to your [modem](#) and remote system

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

&I2	XON/XOFF signals to your modem only
&Kn	Enables/disables data compression.
&K0	Data compression disabled
&K1	<i>Auto enable/disable</i>
&K2	Data compression enabled
&K3	MNP5 compression disabled
&Mn	Sets Error Control (ARQ) for connections at 1200 bps and higher.
&M0	Normal mode, error control disabled
&M1	Reserved
&M2	Reserved
&M3	Reserved
&M4	Normal, ARQ
&M5	ARQ mode

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

&Nn Sets connect speed. If connection cannot be established at this speed, the [modem](#) will hang up. Sets ceiling connect speed if &Un is greater than 0. See & Un.

&N0 *Variable rate*

&N1 300 [bps](#)

&N2 1200 [bps](#)

&N3 2400 [bps](#)

&N4 4800 [bps](#)

&N5 7200 [bps](#)

&N6 9600 [bps](#)

&N7 12,000 [bps](#)

&N8 14,400 [bps](#)

&N9 16,800 [bps](#)

&N10 19,200 [bps](#)

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

&N11 21,600 [bps](#)

&N12 24,000 [bps](#)

&N13 26,400 [bps](#)

&N14 28,800 [bps](#)

&N15 31,200 [bps](#)

&N16 33,600 [bps](#)

&Pn **Sets pulse (rotary) dial make/break ratio.**

&P0 *U.S./Canada ratio, 39%/61%*

&P1 *U.K. ratio, 33%/67%*

&Rn **Sets Recieve Data (RD) hardware [flow control](#), Request to Send (RTS) (see also &Hn).**

&R0 *Reserved*

&R1 [Modem](#) ignores RTS

&R2 *Recieved Data to computer only on RTS*

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

&Sn **Controls Data Set Ready (DSR) operations.**

&S0 *DSR override; always ON*

&S1 [Modem](#) controls DSR

&Tn **Begins test modes.**

&T0 Ends testing

&T1 [Analog Loopback](#)

&T2 Reserved

&T3 Local [Digital Loopback](#)

&T4 Enables Remote [Digital Loopback](#)

&T5 *Prohibits Remote* [Digital Loopback](#)

&T6 Initiates Remote [Digital Loopback](#)

&T7 Remote Digital with self-test and error detector

&T8 [Analog Loopback](#) with self-test and error detector

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

&Un Sets floor connect speed when &Un is set greater than 0. &Nn is the ceiling connect speed. See &Nn.

&U0	<i>Disabled</i>
&U1	300 bps
&U2	1200 bps
&U3	2400 bps
&U4	4800 bps
&U5	7200 bps
&U6	9600 bps
&U7	12,000 bps
&U8	14,400 bps
&U9	16,800 bps
&U10	19,200 bps

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

&U11 21,600 [bps](#)

&U12 24,000 [bps](#)

&U13 26,400 [bps](#)

&U14 28,800 [bps](#)

&U15 31,200 [bps](#)

&U16 33,600 [bps](#)

&Wn **Writes current configuration to [NVRAM](#) templates.**

&W0 Modifies the [NVRAM](#) 0 template (Y0)

&W1 Modifies the [NVRAM](#) 1 template (Y1)

&Yn **Sets break handling.**

&Y0 Destructive, but doesn't send break

&Y1 *Destructive, expedited*

&Y2 Nondestructive, expedited



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

- &Zn=s** Writes phone number string *s* to [NVRAM](#) at position *n*(*n*=0-3).
- &Zn=L** Writes last executed dial string to [NVRAM](#) at position *n*(*n*=0-3).
- &Zn?** Displays the phone number stored at position *n*(*n*=0-3).
- &ZL?** Displays the last executed dial string.
- +++** Escapes to online-command mode.

DIP Switches (modems with dip switches only)

NOTE:

If a DIP switch is on, it should be down. If a DIP switch is off, it should be up.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Switch	Factory Setting	Function
1	OFF	Data Terminal Ready (DTR) Override OFF Normal DTR operations: computer must provide DTR signal for modem to accept commands; dropping DTR terminates a call ON Modem ignores DTR (Override)
2	OFF	Verbal/Numeric Result Codes OFF Verbal (word) results ON Numeric results
3	ON	Result Code Display OFF Suppresses result codes ON Enables result codes
4	OFF	Command Mode Local Echo Suppression OFF Displays keyboard commands ON Suppresses echo
5	ON	Auto Answer Suppression OFF Modem answers on first ring, or higher if specified in NVRAM ON Disables auto answer

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

6	OFF	Carrier Detect (CD) Override OFF Modem sends CD signal when it connects with another modem, drops CD on disconnect
7	OFF	Power-on and ATZ Reset Software Defaults OFF Loads Y or Y1 configuration from user-defined nonvolatile memory (NVRAM) ON Loads & F0- Generic template from read only memory (ROM)
8	ON	AT Command Set Recognition OFF Disables command recognition (Dumb Mode) ON Enables recognition (Smart mode)

S-Registers

0 - 255 (unless otherwise indicated).

To change a setting, use the `ATSr =n` command,
where *r* is the register and *n* is a decimal value from

Register	Default	Function
S0	0	Sets the number of rings on which to answer in Auto Answer Mode. When set to 0, Auto Answer is disabled.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Register	Default	Function
S1	0	Counts and stores the number of rings from an incoming call. (S0 must be greater than 0.)
S2	43	Stores the ASCII decimal code for the escape code character . Default character is +. A value of 128 – 255 disables the escape code.
S3	13	Stores the ASCII code for the Carriage Return character . Valid range is 0 – 127.
S4	10	Stores the ASCII decimal code for the Line Feed character . Valid range is 0 – 127.
S5	8	Stores the ASCII decimal code for the Backspace character . A value of 128 * 255 disables the Backspace key's delete function.
S6	2	Sets the number of seconds the modem waits before dialing. If Xn is set to X2 or X4, this is the time-out length if there isn't a dial tone.
S7	60	Sets the number of seconds the modem waits for a carrier . May be set for much longer duration if, for example, the modem is originating an international connection.
S8	2	Sets the duration, in seconds, for the pause (,) option in the Dial command.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Register	Default	Function
S9	6	Sets the required duration, in tenths of a second, of the remote modem 's carrier signal before recognition by the Sportster.
S10	7	Sets the duration, in tenths of a second, that the modem waits to hang up after loss of carrier . This guard time allows the modem to distinguish between a line disturbance from a true disconnect (hang up) by the remote modem.

While we don't recommend connecting the [modem](#) to a line with call waiting, if you have it, you may wish to adjust this setting upward to prevent the modem from misinterpreting the second call signal as a disconnect by the remote modem.

Register	Default	Function
----------	-------------------------	----------

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

S10	7	(continued) A better alternative is to ask your phone company how to temporarily disable call waiting (usually *70W). For example: ATDT *70W phone number. Note: If you set S10 = 255, the modem will not hang up when carrier is lost. Dropping DTR hangs up the modem.
S11	70	Sets the duration and spacing, in milliseconds, for tone dialing.
S12	50	Sets the duration, in fiftieths of a second, of the guard time for the escape code sequence (+++).
S13	0	Bit-mapped register. Select the bit(s) you want on and set S13 to the total of the values in the Value column. For example, ATS13 = 17 enables bit 0 (value is 1) and bit 4 (value is 16).

S13 (*cont.*)

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Bt	Value	Result
0	1	Reset when DTR drops.
1	2	Reset non- MNP transmit buffer from 1.5K to 128 bytes .*
2	4	Set backspace key to delete
3	8	On DTR signal, auto dial stored in NVRAM at position 0.
4	16	At power on /reset, Auto Dial the number stored in NVRAM at position 0.
5	32	Reserved
6	64	Reserved
7	128	Disconnect on escape code.

* The 1.5K-[byte](#) non-[ARQ buffer](#) allows data transfer with Xmodem- and Ymodem-type file transfer protocols without using [flow control](#).

The 128-[byte](#) option lets remote users with slower modems keep data you're sending from scrolling off

their screens. When remote users send your computer an XOFF (Ctrl-S) and you stop transmitting, the data in transit from your [modem](#)'s [buffer](#) doesn't exceed the size of their screen.

This is also very helpful in situations when a remote



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

[modem](#)/printer [application](#) is losing [characters](#).

Register	Default	Function
S14	0	Reserved
S15	0	Bit-mapped register setup. To set the register, see instructions for S13.
Bit	Value	Result
0	1	Disable ARQ/MNP for V.22.
1	2	Disable ARQ/MNP for .22bis.
2	4	Disable ARQ/MNP V.32/V.32bis/V.32terbo.
3	8	Disable MNP handshake.
4	16	Disable MNP level 4.
5	32	Disable MNP level 3.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

6 64 [MNP](#) incompatibility.

7 128 Disable V.42 operation.

Register	Default	Function
-----------------	-------------------------	-----------------

S16	0	Bit-mapped register setup. To set the register, see instructions for S13.
-----	---	---

Bit	Value	Result
------------	--------------	---------------

0	1	Reserved
---	---	----------

1	2	Touch tone dialing test.
---	---	--------------------------

2-7	4-128	Reserved
-----	-------	----------

Register	Default	Function
-----------------	-------------------------	-----------------

S17	0	Reserved
-----	---	----------

S18	0	Test timer for &T loopback testing. Sets the time in seconds of testing before the modem automatically times out and terminates the test. When set to 0, the timer is disabled. Valid range is 1-255.
-----	---	---

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

S19	0	Sets the duration, in minutes, for the inactivity timer. The timer activates when there is no data activity on the phone line; at time-out the modem hangs up. S19 = 0 disables the timer.
S20	0	Reserved
S21	10	Sets the length, in 10-millisecond units, of breaks sent from the modem to the computer; applies to MNP or V.42 mode only.
S22	17	Stores the ASCII decimal code for the XON character .
S23	19	Stores the ASCII decimal code for the XOFF character .
S24	0	Reserved
S25	20	Sets the duration, in hundredths of a second, that DTR must be dropped so that the modem doesn't interpret a random glitch as a DTR loss. (Most users will want to use the default ; this register is useful for setting compatibility with older systems running under older operating software.)
S26	0	Reserved
S27	0	Bit-mapped register setup. To set the register, see instructions for S13.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Bit	Value	Result
0	1	Enables ITU-T V.21 modulation at 300 bps for overseas calls; in V.21 mode, the modem answers both overseas and domestic (U.S. and Canada) calls, but only originates V.21 calls. (Default Bell 103)
1	2	Enables unencoded (non-trellis coded) modulation in V.32 mode.
2	4	Disables V.32 modulation
3	8	Disables 2100 Hz answer tone to allow two V.42 modems to connect faster.
4	16	Enables V.23 fallback mode.
5	32	Disables V.32 <i>bis</i> mode.
6	64	Reserved
7	128	Software compatibility mode. This setting disables the codes and displays the 9600 code instead. The actual rate of the call can be viewed on the ATI6 screen. Used for unusual software incompatibilities. Some software may not accept 7200, 12,000, and 14,400 bps or greater result codes.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

S28	0	Eliminates the V.32 answer tones for a faster connection.
	8	Default item, all times are in tenths of a seconds.
	255	Disables all connections except V.32 at 9600 bps .
S29	20	Sets the duration, in tenths of a second, of the V.21 answer mode fallback timer.
S30	0	Reserved
S31	128	Reserved
S32	2	Bit mapped register setup for the 28.8 speed modems only. To set the register, see the instructions for S13.

Bit	Value	Result
0	1	V.8 Call Indicate enabled.
1	2	Enables V.8 mode.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

3	8	Disable V.34 modulation.
4	16	Disable 33.6 Kbps support.
5-7	32-128	Reserved
Register	Default	Function
S33	0	Bit mapped register setup for the 28.8 speed modems only. To set the register, see the instructions for S13.
Bit	Value	Result
0	1	Disable 2400 symbol rate.
1	2	Disable 2743 symbol rate.
2	4	Disable 2800 symbol rate.
3	8	Disable 3000 symbol rate.
4	16	Disable 3200 symbol rate.
5	32	Disable 3429 rate.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

6	64	Reserved
7	128	Disable shaping.
Register	<u>Default</u>	Function
S34	0	Bit mapped register setup for the 28.8 speed modems only. To set registers, see instructions for S13.
Bit	Value	Result
0	1	Disable 8S-2D trellis encoding.
1	2	Disable 16S-4D trellis encoding.
2	4	Disable 32S-2D trellis encoding.
3	8	Disable 64S-4D trellis encoding.
4	16	Disable non-linear coding.
5	32	Disable TX level deviation.
6	64	Disable Pre-emphasis.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

7	128	Disable Pre-coding.
Register	<u>Default</u>	Function
S35-S37		Reserved
S38	0	Sets an optional delay, in seconds, before a forced hang-up and clearing of the Transmit <u>buffer</u> when DTR drops during an <u>ARQ</u> call. This allows time for a remote <u>modem</u> to acknowledge receipt of all transmitted data before it is disconnected. The <u>modem</u> immediately hangs up when DTR drops.

This option only applies to connections terminated by dropping DTR. If the [modem](#) receives the ATH command, it ignores S38 and immediately hangs up.

Note:

[Default](#) value is in italic text.



The Serial Interface

The serial interface is a standard developed by the Electronic Industries Association ([EIA](#)). It defines the signals and voltages used when data is exchanged between a computer and a [modem](#) or serial printer.

The entire standard covers many more functions than are used in most [data communications applications](#). Data is transmitted between the devices over a shielded serial cable with a 25-pin male (DB-25P) connector to the [modem](#) and a 25-pin, 9-pin, 8-pin, or custom-built connector to the computer.

FCC regulations require the use of a shielded cable when connecting a [modem](#) to a computer to ensure minimal interference with radio and television.

Pin assignments are factory-set in the Sportster [modem](#) to match the standard DB-25 assignments in the following table. DB-9 connectors for IBM/AT-compatible computers should be wired at the computer end of the cable as shown in the DB-9 column.

Note:

For pin definitions to be used with Macintosh computers, see [Macintosh Users](#) section.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Serial Interface Pin Definitions

DB-25	DB-9	Circuit	Function	Signal Source Computer/ Modem
1	--	AA	Chassis Ground	Both
2	3	BA	Transmitted Data	Computer
3	2	BB	Received Data	Modem
4	7	CA	Request to Send	Computer
5	8	CB	Clear to Send	Modem
6	6	CC	Data Set Ready	Modem
7	5	AB	Signal Ground	Both
8	1	CF	Carrier Detect	Modem
12	--	SCF	Speed Indicate	Modem
20	4	CD	Data Terminal Ready	Computer

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

22 9 CE Ring Indicate

[Modem](#)

Section E: Regulatory Information

dards: V.34+, V.32 *bis*, V.32, V.22 *bis*, Bell 212A/V.22, V.23, V.25, and Bell 103/V.21 modems.

[Data Communications](#)

Your [modem](#) offers a range of internationally accepted standard modulation methods and protocols. It utilizes hardware-based V.42/[MNP](#) 2-4 [error control](#) and V.42 *bis*/[MNP](#) 5 data compression.

Your 14.4 modem will transmit at speeds up to 14,400 [bps](#) with throughput to 57,600 [bps](#). Also, it is universally compatible with the following standards: V.32 *bis*, V.32, V.22 *bis*, Bell 212A/V.22, V.23, V.25 and Bell 103/V.21 modems.

Your 33.6 [modem](#) will transmit at speeds up to 33,600 [bps](#) with throughput to 115,200 [bps](#). Also, it is universally compatible with the following stan-

Fax Capability

You can use your [modem](#) with [Class 1](#) or [Class 2.0](#) fax software to exchange faxes with Group III fax machines worldwide at speeds up to 14,400 [bps](#).



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

FCC Registration

This device complies with Parts 15 and 68 of the FCC rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received including interference that may cause undesired operations.

See the bottom of your [modem](#) or your modem board for the FCC ID code and the FCC 68 number.

RINGER EQUIVALENCE: 0.2B

UL Listing/CSA Approval

This information technology equipment is UL-listed and CSA-approved for the uses described in this manual.

Connecting to the Telephone Company

It is not necessary to notify the telephone company before installing the [modem](#). However, the telephone company may request the telephone number(s) to which the Sportster is connected and the FCC information printed on this page.

Be sure that the telephone line you are connecting the modem to is a standard analog line and not a digital (PBX), party, or coin telephone line.

If the modem is malfunctioning, it may affect the telephone lines. In this case, disconnect the modem until the source of the difficulty is traced.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

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 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, 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.)

For instructions on how to program this information into your Sportster Fax [modem](#), refer to the online QuickLink manual on the *Connections* CD-ROM that shipped with your Sportster. If you're using a

different communications 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 Sportster [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.

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



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

removed from the computer, try to correct the problem with one or more of the following measures.

- Reorient the receiving antenna.
- 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 U.S. Robotics could void the user's authority to operate the equipment.

IC (Canada)

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 ne dépasse pas les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: *Appareils Numériques*, NMB-003 édictée par l'Industrie Canada.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

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. 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. Cur-

rently, telecommunications 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 made by an authorized Canadian maintenance facility 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 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.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

CAUTION:

Do **NOT** attempt to make such connections yourself. Instead contact the appropriate electric inspection authority, or electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to the telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices, subject only to the requirement that the total of the Load Numbers of all the devices not exceed 100. The Load Number is located on the bottom of your [modem](#).

AVIS: L'étiquette d'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télé-

communications. Toutefois, le Ministère n'assure pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit assurer qu'il soit permis de le raccorder aux installations de l'entreprise locale de télécommunications. Le matériel doit également être installé en suivant une méthode de acceptée raccordement. Dans certains cas, les fils intérieurs de l'entreprise utilisés pour un service individuel à ligne unique peuvent être prolongés au moyen d'un dispositif de raccordement homologué (cordon rallonge téléphonique interne). L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêchent pas la dégradation du service dans certaines situations. Actuellement, les entreprises de télécommunication ne permettent pas que l'on raccorde leur matériel à des jacks d'abonné, sauf dans les cas précis prévus pas les tarifs particuliers de ces entreprises.

U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Les réparations de matériel homologué doivent être effectuées par un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie 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.

Pour sa propre protection, l'utilisateur doit assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

AVERTISSEMENT: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours aux services d'un électricien.

L'indice de charge (IC) assigné à chaque dispositif terminal indique, pour éviter toute surcharge, le pourcentage de la charge totale qui peut être raccordée à un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit bouclé peut être constituée de n'importe quelle combinaison de dispositifs, pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100. L'indice de charge se trouve sur le [modem](#).

LIMITED WARRANTY

U.S. Robotics Access Corp. warrants to the original end-user purchaser that this product will be free from defects in materials and workmanship for a period of five years from the date of purchase. During the limited warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or a similar model, which may be a refurbished model) at U.S. Robotics' option, without charge for either parts or labor. This limited warranty shall not apply if the product is modified, tampered with, misused, or subjected to abnormal working conditions (including, but not limited to, lightning and water damage).

THIS LIMITED WARRANTY DOES NOT GUARANTEE YOU UNINTERRUPTED SERVICE. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. U.S. ROBOTICS SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, INCLUDING, WITHOUT LIMITATION, LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, LOSS OF DATA OR USE, DAMAGE TO EQUIPMENT, AND CLAIMS AGAINST THE PURCHASER BY ANY THIRD PERSON, EVEN IF U.S. ROBOTICS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This limited warranty gives you specific legal rights. You may have others, which vary from state to state.



U.S. Robotics Sportster 14.4, 28.8 External and Internal Modems

Some states do not allow limitations on duration of an implied warranty, or the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

To obtain service under this limited warranty, contact the U.S. Robotics Technical Support Department at 847-982-5151 or by mail at U.S. Robotics, 7770 N. Frontage Road, Attn.: Technical Support Dept., Skokie, Illinois 60077-2690. You will be given a Service Repair Order (“SRO”) number to help U.S. Robotics keep track of your limited warranty request. Once you have received your SRO number, take or send the product, postage prepaid and insured, to U.S. Robotics at 8100 N. McCormick Blvd., U1 Receiving, Skokie, Illinois 60076-2999. Include proof of the date of purchase.

Important:

If you send your unit, pack it securely, and be sure that your SRO number is visible on the outside of the package.



Copyright

This manual covers installation and operating instructions for the following U.S. Robotics modems:

- Sportster 14.4 external and internal
- Sportster 28.8 external and internal

U.S. Robotics and the U.S. Robotics logo are registered trademarks of U.S. Robotics. Any trademarks, trade names, service marks, or service names owned or registered by any other company and used in this manual are the property of their respective companies.

© 1996 by U.S. Robotics
7770 North Frontage Road
Skokie, IL 60077-2690
All Rights Reserved

