

Modem Station User's Guide

This manual covers installation and operating instructions for the following U.S. Robotics software:

- U.S. Robotics Modem Station

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Section A — Installing Modem Station

Installing Modem Station

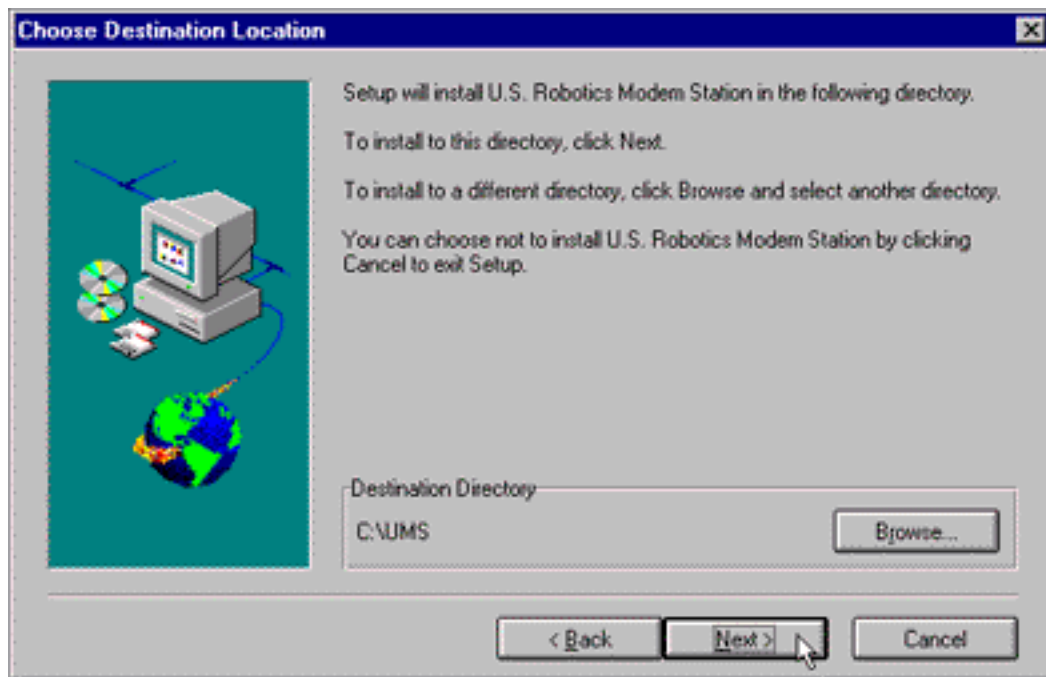
If you did not install Modem Station when you first installed the Connections CD, please do the following: place the Connections CD in your CD-ROM Drive.

1. Double-click the My Computer icon on your Desktop.
2. Double-click the icon for your CD-ROM drive.
3. Double click the USR Tools icon
4. Double click on the U.S. Robotics Modem Station icon.
5. Double click **Setup.exe**.
6. Wait a few moments for the Installation Wizard to load.

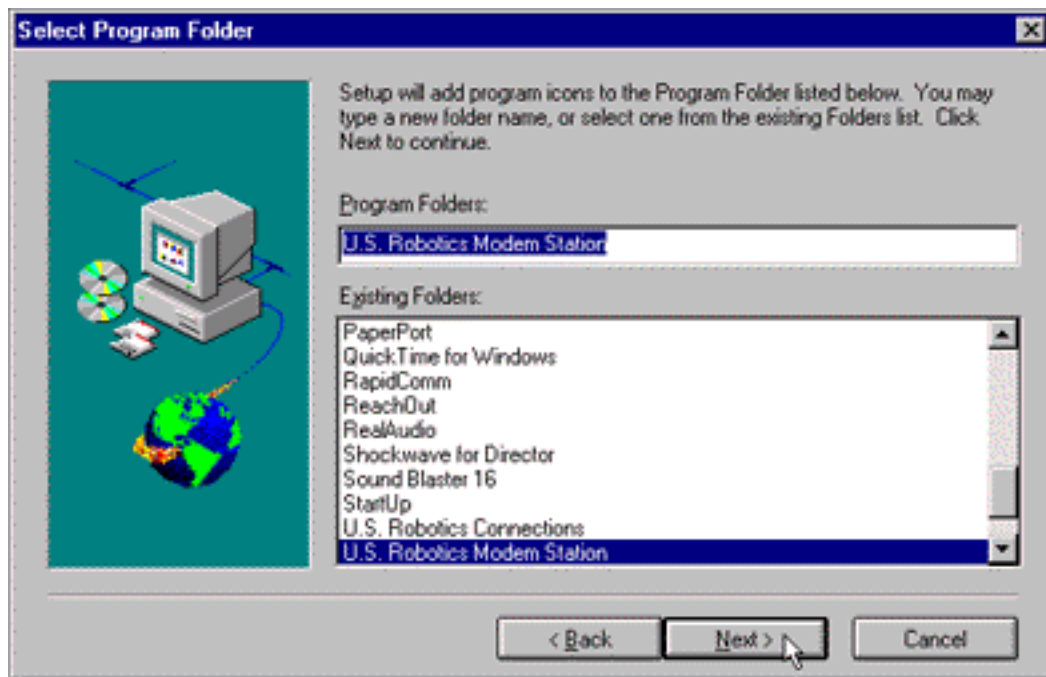
7. After reading the information on the Welcome Screen, click NEXT to continue.



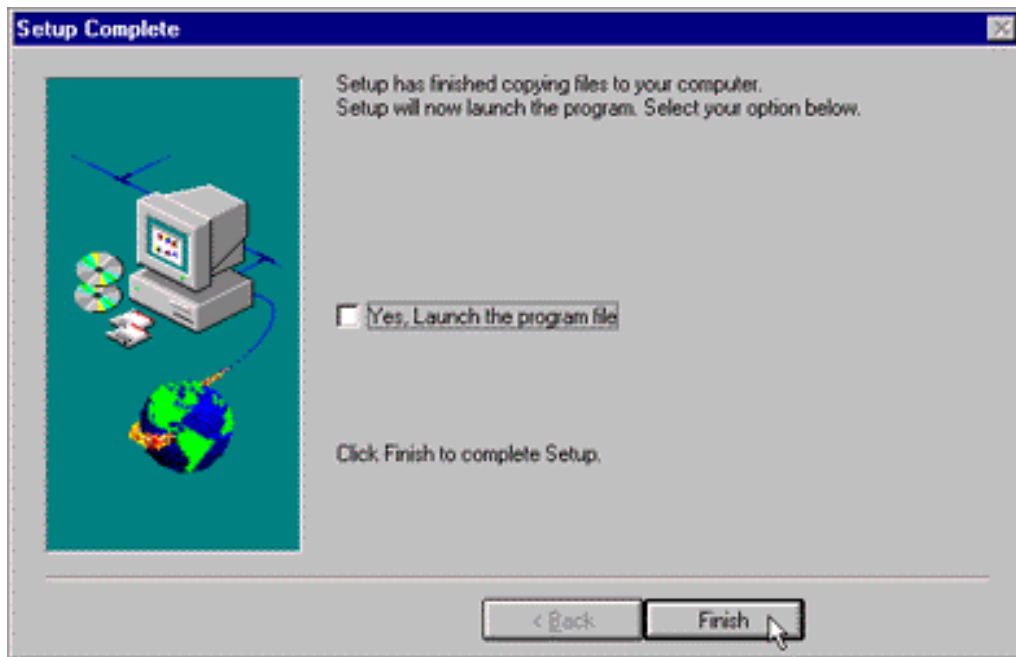
8. Click NEXT on this screen to accept the default directory, or choose BROWSE to change directories.



9. Click NEXT on this screen to accept the default program folder. You may place Modem Station in an existing folder by selecting one from the list.



10. Click FINISH on this screen to complete the installation.



If this is the first time you've installed Modem Station, you may be asked to restart your computer.

Section B — Using Modem Station

Starting Modem Station

1. If you didn't start Modem Station from the Setup Program, please start it now.
2. Click Start and then Programs. Point to U.S. Robotics Modem Station (or the folder you selected during installation).

3. Double-click the Modem Station icon. This brings up the Main Menu.



The Main Menu gives you direct access to the following functions:

- Detect New Modems
- Terminal
- Modem Configurator
- About
- Contact/Support
- Exit

Detect New Modems

Detects installed USR modems and shows what COM port they are using. Run this if you are running Modem Station for the first time, have changed modems, or simply need to know what port your modem is using.

Terminal

Terminal allows you to send commands directly to your modem and displays the responses. You can use Terminal to dial up BBSs. You CAN configure your modem using Terminal, but it is much easier to use the Modem Configurator.

Modem Configurator

Provides an easy-to-use interface for entering hard-to-remember commands. Use Modem Configurator for troubleshooting, initial configuration, and tuning your modem for optimum performance. Using the various options available in Modem Configurator, you can control nearly every aspect of your modem's performance. We'll discuss each of the parts of the Modem Configurator in more detail in later sections.

About

The usual copyright and version information is found here.

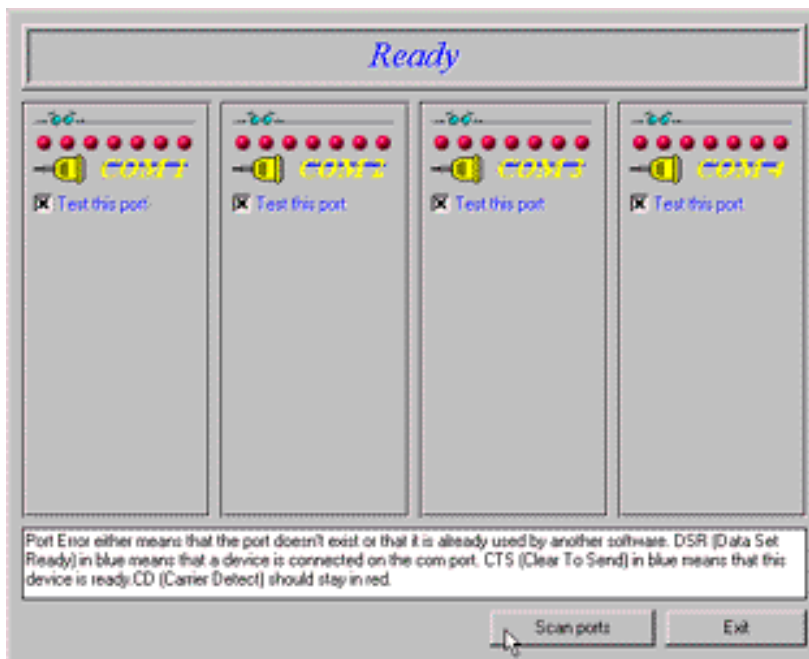
Contact/Support

How to get in touch with us. We recommend using one of our on-line support services. Before calling, please check your manual for the correct number.

Tip! We highly recommend trying one of our many on-line support avenues before calling us. For specific questions, our fax-on-demand service is a good place to start. You can download FAQs, software and help files from our Websites and BBS, or receive individualized support via support@usr.com. Put '0000' (4 zeroes) in the subject line of your e-mail.

Detect New Modems

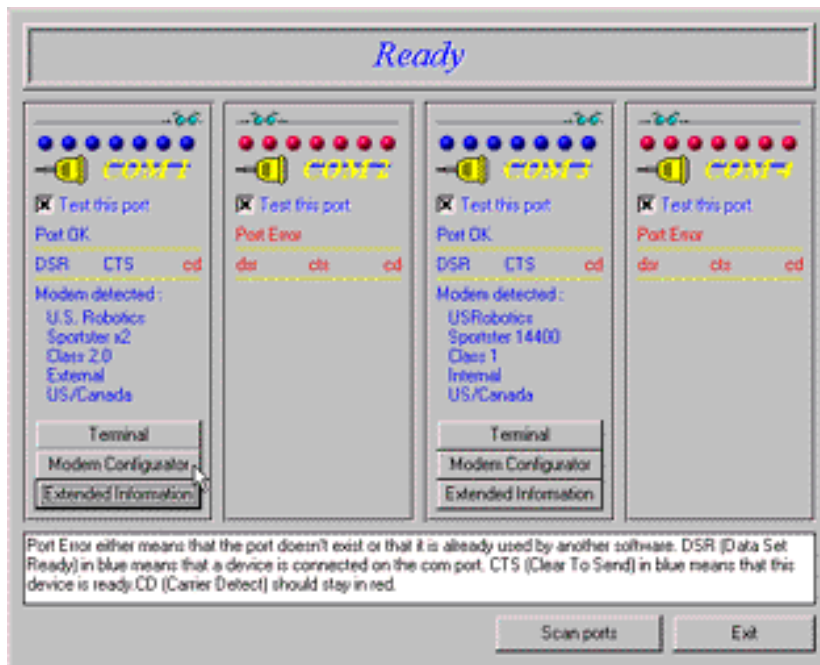
1. Click Detect New Modems to bring up this screen.



The screen consists of four columns, one for each possible COM port on a PC. You may choose a specific port(s) to identify another modem for use in Terminal Mode by clicking the checkbox for that port.

2. Click SCAN to have Modem Station check for installed modems. This may take a few moments, so be patient.

When the Scan finishes, you will see the following display of results. See the bottom of the screen for information on how to interpret the results. Your display may vary, depending on the number and types of modems installed.



If your modem is installed and configured correctly, Modem Station will find the modem and display make and model information under the assigned port. All currently active ports should display 'Port OK' under the heading. If a port displays a 'Port Error', it usually means that the port has been disabled in system setup.

Note! Different systems and BIOSes use different methods of disabling COM ports. Because of this, we cannot provide support for enabling/disabling COM ports. Please refer to your system or motherboard documentation, or contact the reseller or manufacturer of your system.

If you look under the port your modem is using, you will see three buttons. These allow you to access Terminal and Modem Configurator without going back to the Main Menu.

Extended Information provides detailed information about your modem, previous connections, firmware dates, etc.

Technical Stuff Special ATI commands provide technical information about your modem. Extended Information grabs that stuff without you having to memorize weird commands. If you like that sort of thing, the right hand corner of each screen displays the equivalent ATI command.

Using Terminal

You may access Terminal from either the Main Menu, or from the Detect New Modems screen. Clicking the Terminal Button brings up the Terminal window.



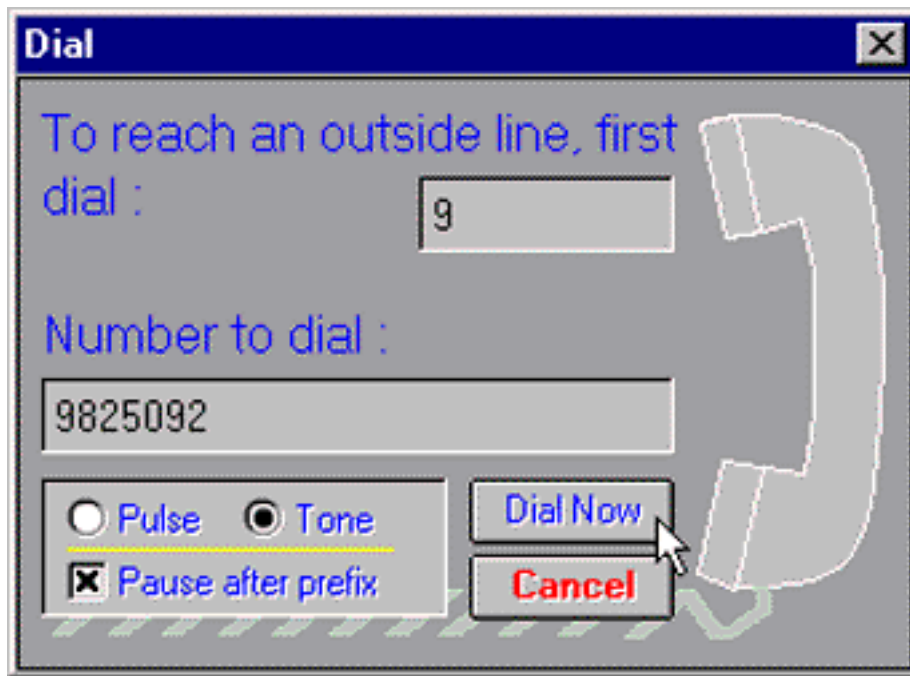
In addition to allowing you to enter modem commands directly, you can use Terminal to dial into Bulletin Boards, listing services, etc.

Note! Modem Station's Terminal window is provided primarily for convenience in troubleshooting. If you do a lot of BBS-ing, you will probably want to use a separate full-featured Terminal program such as that provided with our RapidComm Software.

On the lower part of the Terminal Screen, you will see the ComPort your modem is currently using. You can change the port to select another modem to use in Terminal by clicking the down arrow and selecting that modem's port.

To the right of the port settings, are the port speed settings. Port speed is the speed at which your computer sends data to the modem. We'll discuss port speed settings in detail later in this manual.

Terminal includes a basic autodialer. To have Terminal dial a number for you, click on DIAL to bring up the Dial screen.



You will have to tell the Dialer a few things about your phone system; such as whether it uses tone or pulse dialing, what digit, if any, you have to dial to get an outside line, and whether the dialer should wait between dialing that digit and the rest of the number. Once you've set all this up, simply enter the phone number just as if you were dialing a telephone. Click on **DIAL NOW** to dial the number.

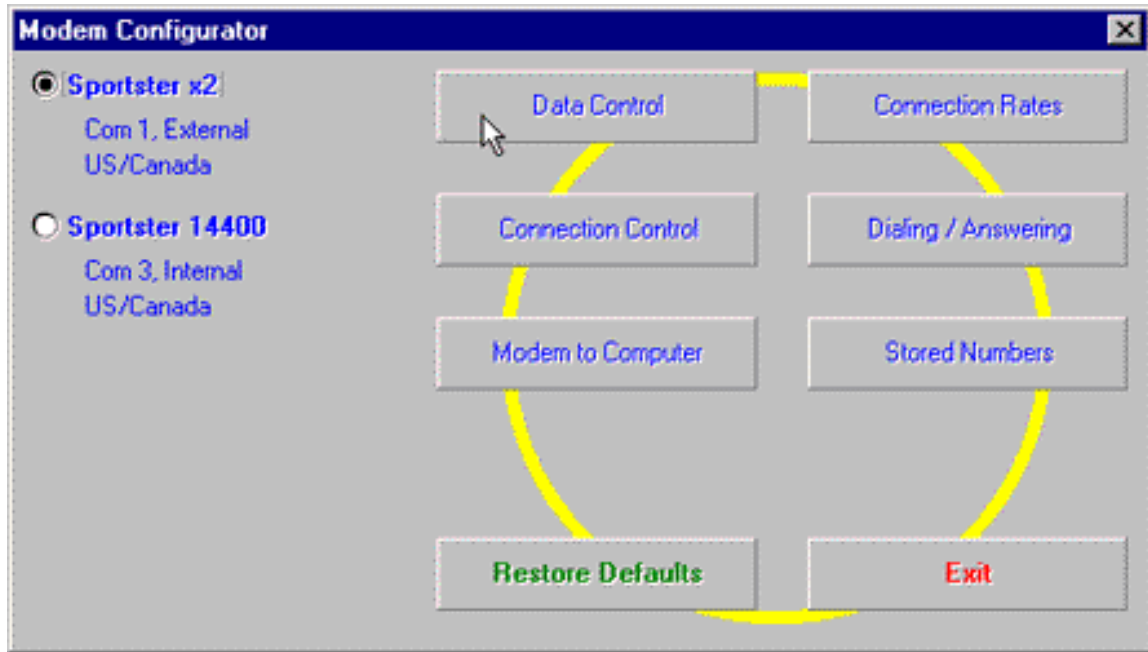
You can end a call by clicking **HANG UP** at the bottom of the screen.

When you've finished using Terminal, click on **EXIT** to return to the screen you accessed it from.

Using Modem Configurator

You may access Modem Configurator from either the Main Menu or the Detect New Modems screen.

Click on the Modem Configurator Button to bring up this menu.



The Modem Configurator Menu gives you access to the following functions:

- Data Control
- Connection Control
- Modem to Computer
- Connection Rates
- Dialing/Answering
- Stored Numbers
- Restore Defaults
- Exit

This is the Data Control screen:



The Data Control screen allows you to assign the following basic communications settings:

- Port Speed
- Parity
- Stop Bits
- Word
- Flow Control
- Serial Port Rate

For information on using these settings, please refer to the Glossary at the back of your Sportster manual.

Click HELP for quick definitions of the terminology used in this screen.

In the upper left-hand corner of the screen, you will see the data control commands currently in use.

Technical Stuff Dipswitches are tiny switches that control some basic functions of the modem. Not all modems have them; on those that don't, these functions are handled by modem commands.

Once you have the Data Control settings entered, click on Save to Modem. This stores the settings so that you do not have to re-enter them.

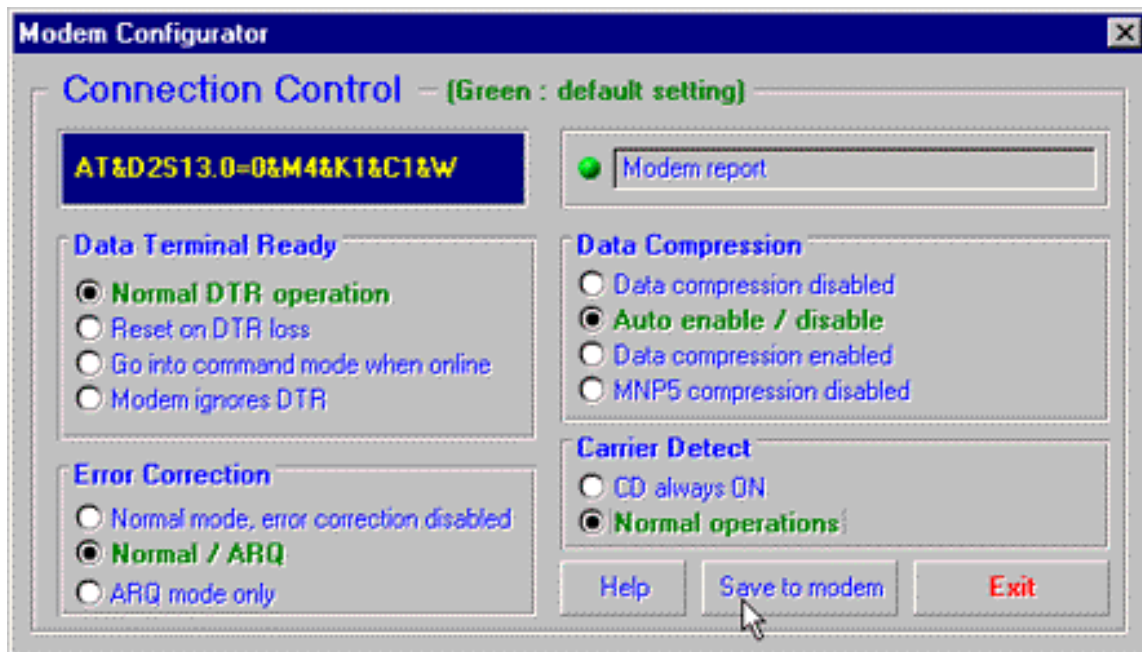
This screen also displays the default dipswitch settings.

Click EXIT to return to the Modem Configurator Menu.

Connection Control

Here is where you set up how your modem actually connects and starts a transmission.

Click the Connection Control button to bring up this screen.



In the upper left hand corner of the this screen, you will the current Connection Control settings.

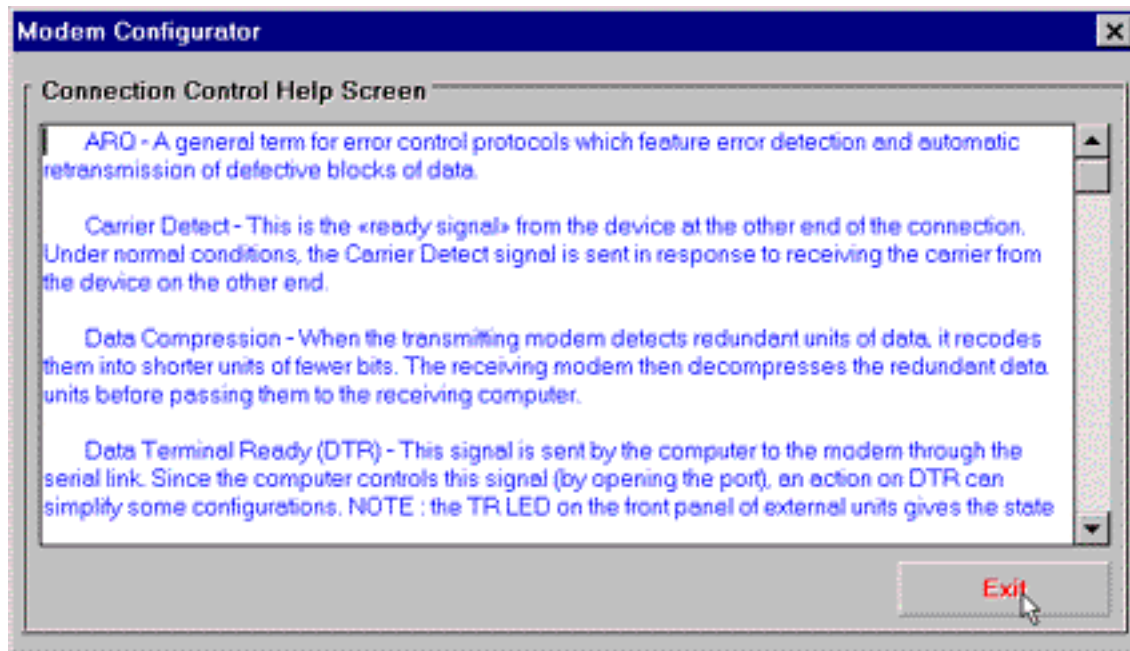
Use the Connections Control Screen to configure the following settings:

- Data Terminal Ready (DTR)
- Error Correction
- Data Compression
- Carrier Detect

Tip! In external modems, receiving a DTR signal causes the TR light to light up.

For detailed information and instruction on using Connection Control settings, refer to the Glossary and Technical information at the back of your Sportster manual.

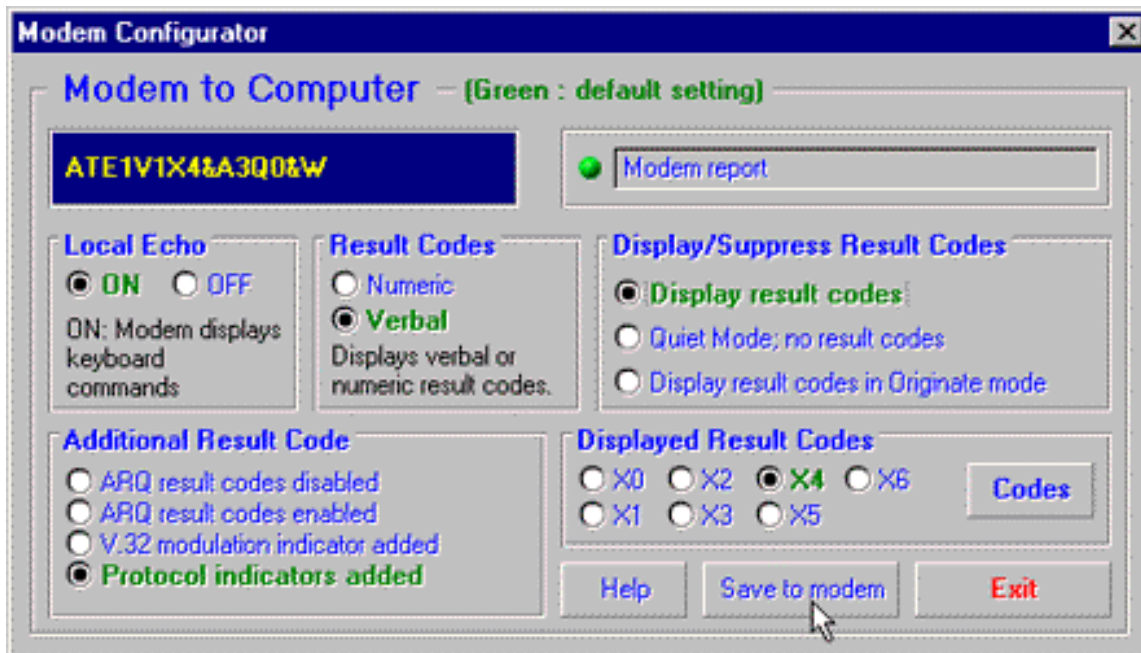
Click the HELP button for quick definitions of terminology used in this screen.



Once you have your Connection Control settings configured, click the Save to Modem button to save your settings.

Modem to Computer

These settings control how your modem and computer communicate with each other. They control what you see on your terminal screen, how results are displayed, etc.



If you look in the upper right hand corner of the display, you will see the commands currently in use.

The Modem to Computer screen allows you to configure the following settings:

- Local Echo
- Result Codes
- Result Code Displays
- Connection Rates

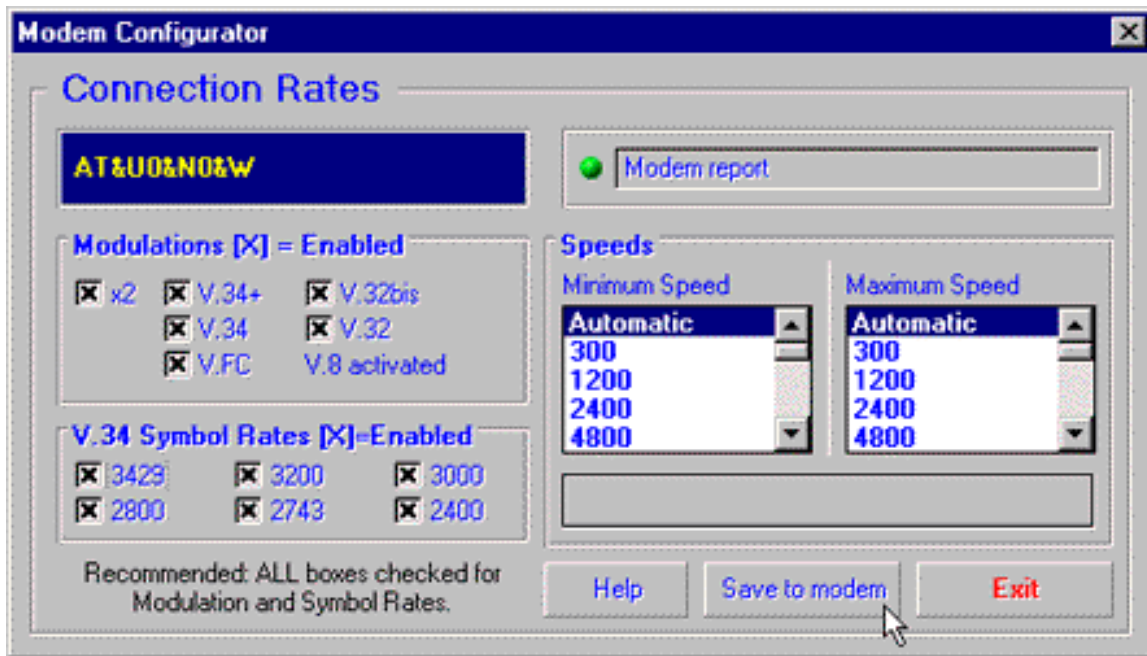
Tip! There are few things more obnoxious than typing in 'ATDT' and seeing 'AATDDTT' on your screen. This happens when both your software and the modem have Local Echo set to 'ON'. Set Local Echo 'OFF' on EITHER the modem or the software to get rid of this annoyance.

For details on using the commands in this screen, refer back to the Glossary and Technical information located at the back of your Sportster manual. Click HELP to see quick definitions of terminology used in this screen.

This screen also includes a chart of the various ways to display result codes. Click **CODES** to see a chart of the various display choices. Once you have your settings configured, click **Save To Modem** to save your choices.

Connection Rates

This allows you to configure modem speeds and protocols.



In the upper left hand corner of the screen you will see the current connection commands.

This screen allows you to configure the following settings:

- Modulations
- V.34 Symbol Rates
- Speeds

Again, once you have selected your settings, click **Save to Modem** to save them.

When you are finished, click **EXIT** to return to the Modem Configurator Menu.

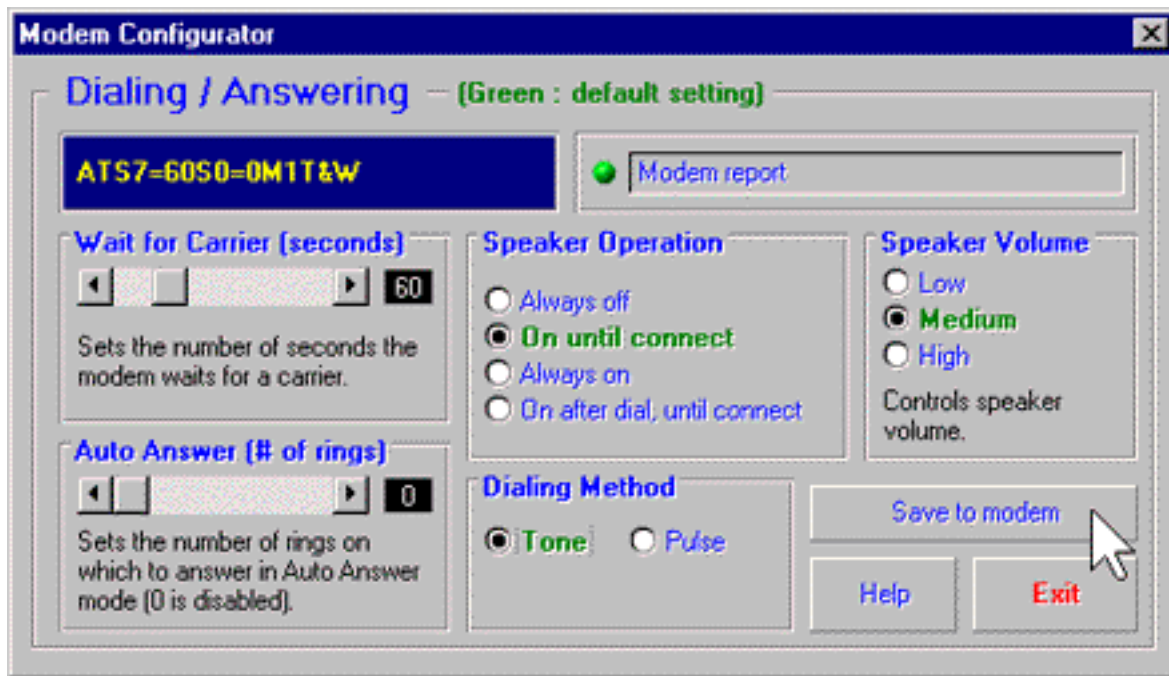
Again, refer to the main body of the manual and the Glossary for detailed information about the terminology and settings used in this screen.

Click **HELP** for quick definitions of terminology used in this screen.

Warning! Use caution when changing Connection Control settings. Improper settings may cause your modem to function erratically, disconnect, or be unable to connect at all.

Dialing/Answering

The next screen allows you to set up how your modem initiates and receives calls.



Using this screen, you can configure the following dial settings:

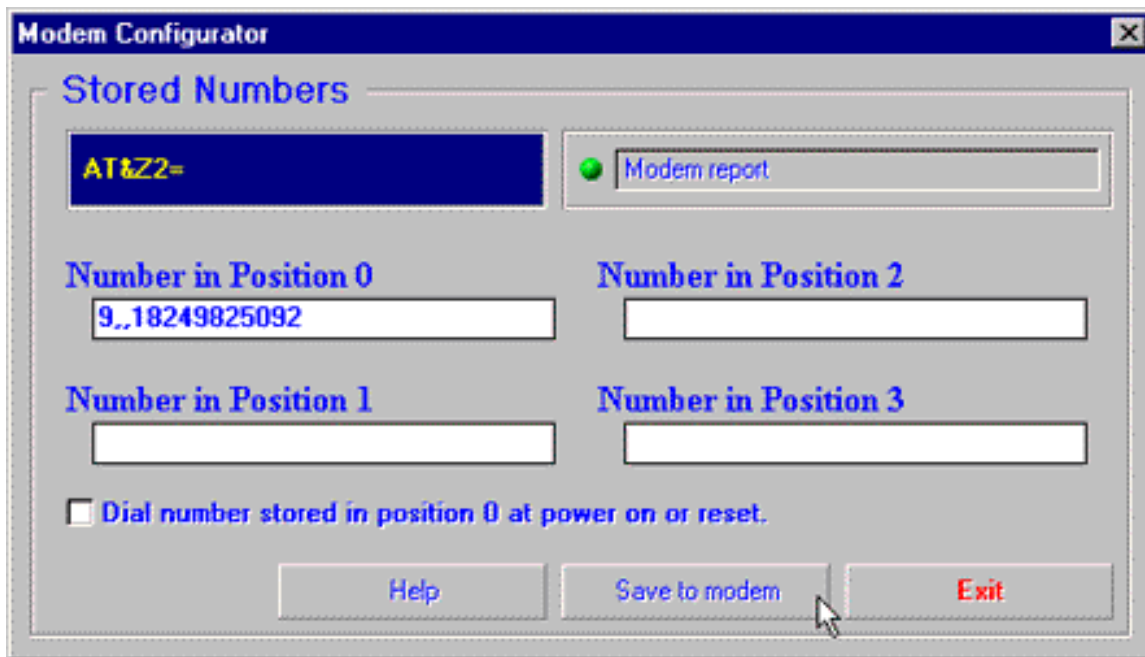
- Wait for Carrier (seconds)
- Auto-Answer (# of rings)
- Speaker Operation
- Speaker Volume
- Dialing Method

Technical Stuff “Negotiation” is what all that squawking is about when two modems first connect. The modems exchange information about their respective protocols and configurations. Once they’ve agreed on the fastest protocol they can both handle, transmission begins.

Stored Numbers

Clicking on this button displays the phone numbers currently stored in your modem’s memory.

Use this screen to edit or add numbers stored in the modem's memory.



To store a number in your modem's memory, simply click in one of the entry boxes. Type in the phone number exactly as you would dial it.

Note that Position Zero has a special feature: you can set your modem to automatically dial this one number at Power On, or at reset.

This is very useful if you're using your modem with a "dumb terminal" or know that you need to connect to a specific bulletin board or listing service.

You can change stored numbers by highlighting them and then typing the new numbers in their place.

Once you've stored your numbers, you can dial them by entering this command from Terminal Mode: <ATDS0> <ATDS1>, etc.

Your U.S. Robotics modem comes with one phone number already stored in Position 0; typing <ATDS0> will automatically dial up the U.S. Robotics BBS. You will want to change this if you are using a dumb terminal or online listing service, of course.

Once you've entered the numbers you wish to store, click Save To Modem to store them.

Click EXIT to return to the Main Menu.

The last option: Restore Defaults, resets your modem to factory specifications. This option is available from many of the screens within Modem Station.

Tip! **Restore Defaults** is the “Help!! Get me outta here!!!” option. When all else fails, or everything has so far and you're not sure what to do next, Restore Defaults will set your modem back to factory specifications. Also, since the default configuration is that most commonly used, it is a good starting place for trouble-shooting.

When you select Restore Defaults, you will see a confirmation screen asking if you are sure you want to Restore Defaults. Click OK to proceed.

Section C — Using the Extended Information Screens

This is where we have to get unavoidably technical. The Extended Information Screens provide a lot of important and useful information about your modem. Unfortunately, some of the information is very complex.

We've devoted a separate section to the Extended Information screens so that we can explain what you'll see (and why it is important to you) as fully as possible.

There are a series of commands used to get detailed information from our modems. Extended Information provides a convenient way to get that important information without memorizing the commands.

Let's get started...

From the Detect New Modems screen, click on Extended Information.

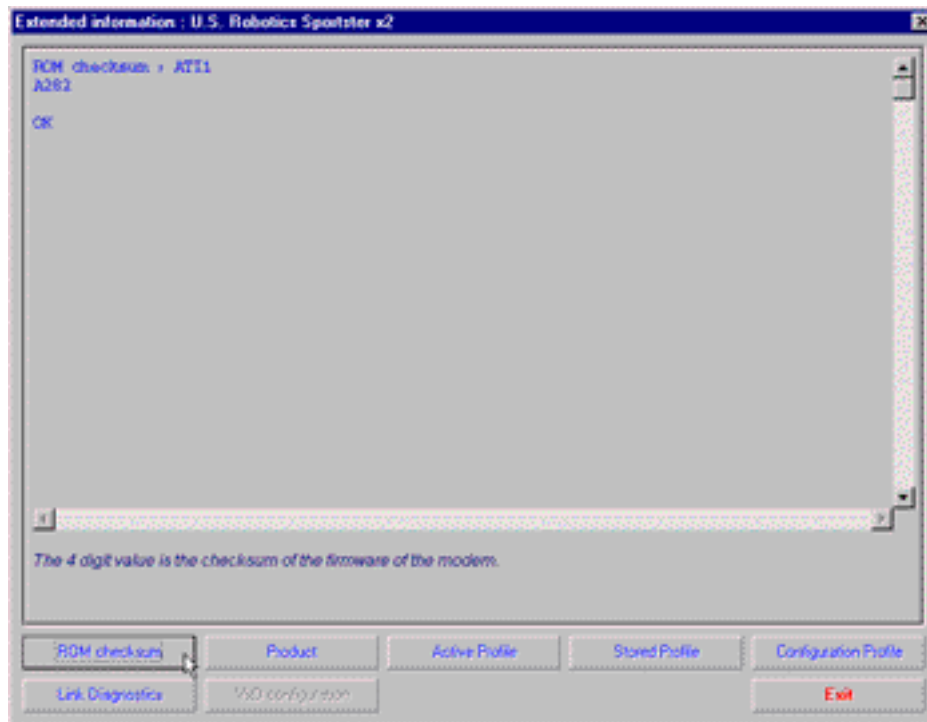
The Extended Information Screen provides access to the following information about your modem:

- ROM Checksum
- Product
- Active Profile
- Stored Profile
- Configuration Profile
- Link Diagnostics
- VxD Configuration
- Dial/Security

WinModem users will have access to VxD information via these screens.

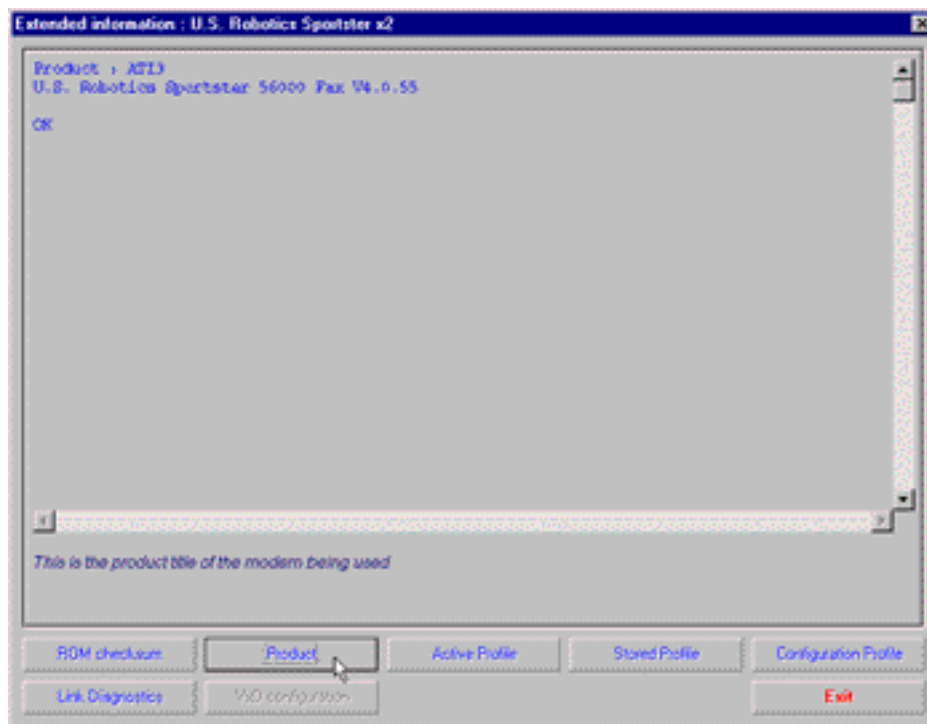
Courier users will have access to Dial/Security information.

Click ROM Checksum to bring up this screen.



Technicians use the ROM Checksum to verify information stored in the modem's Read Only Memory. You can check the ROM Checksum from any Terminal program by typing AT+I1 and pressing <ENTER>.

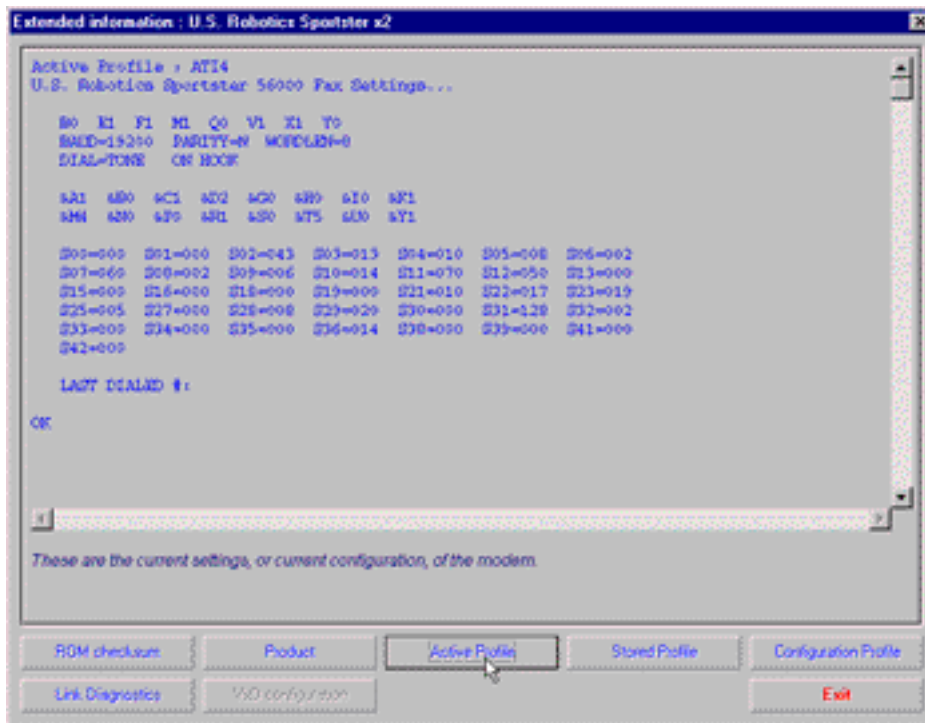
Click Product to bring up the next screen.



The Product screen displays the make and model of your modem. It is the equivalent of the AT+I3 command.

Your modem is able to store two configurations or “profiles.” Only one may be active at any time.

To see information about the profile in use, click Active Profile to bring up the next screen.



This screen contains a LOT of information about your modem's current configuration: Starting from the top, you will see the make and model of your modem.

Directly below that you will see basic commands currently in use.

Below that are the current connection settings.

The two lines below the connection settings are the advanced commands currently in use.

Below them is a display of the contents of the 'S-Registers' for your modem. These registers are special programmable areas of your modem's memory. They are used to store commands that are too complex to be handled by the standard (or 'AT') commands.

Just below that you will see the last number dialed.

You can also see this information by entering ATi4 from any Terminal program and pressing <ENTER>.

The next option displays the Stored Profile. This screen shows the configuration stored in your modem's NVRAM (special programmable memory). Note that any stored phone numbers are displayed on this screen as well. This is the equivalent of the ATi5 command.

The information displayed is in the same format as the Active Profile screen with the addition of stored phone numbers.

The next two screens contain information that may be needed by our technicians if you request support.

Click Configuration to bring up the first of these screens.



The Configuration screen also displays the make and model of your modem. Below that you will see your Product Type.

Options shows the various protocols available to your modem.

Fax Options shows your fax compatibility.

Clock Frequency shows the speed of the tiny “clock” that controls the timing of operations within the modem.

EPROM shows how much information can be stored in the EPROM (or Supervisor) chip.

RAM shows how much memory for processing commands and internal functions your modem has.

Supervisor Date (or EPROM Date) shows the version date of the ‘firmware’ stored in the Supervisor chip. (the Supervisor contains the special software used to control your modem’s functions.)

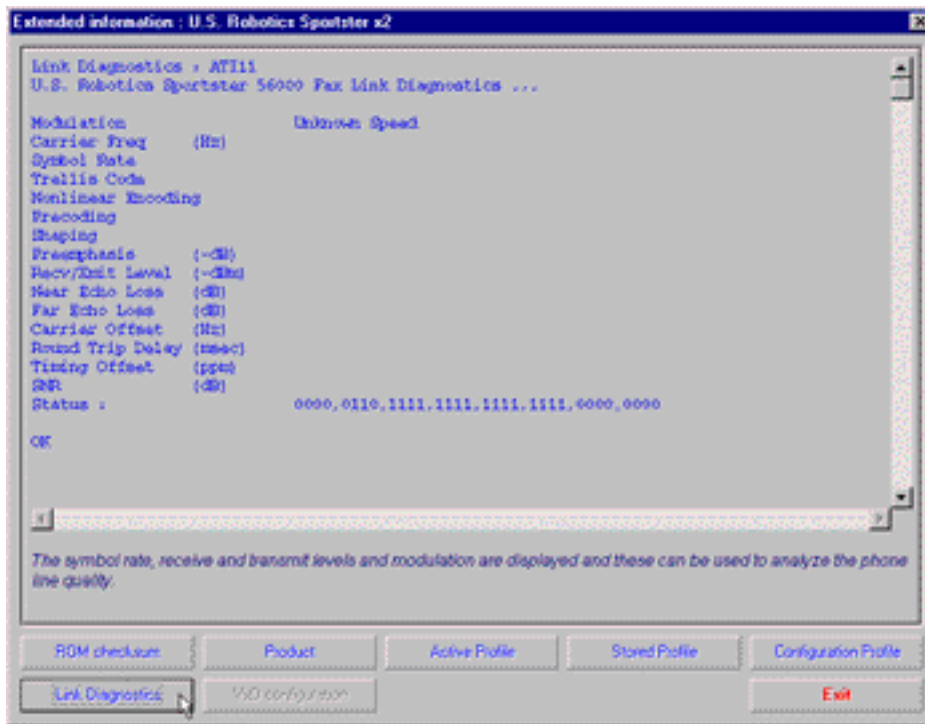
If a technician asks you for your Supervisor or EPROM date, here is where you’ll find it.

The DSP date is the date of the 'firmware' that controls the DSP in your modem. Supervisor and DSP rev (or revisions) are the equivalent of software version numbers.

Technical Stuff The Supervisor contains the commands that control your modem. The DSP controls execution of those commands. In other words, the Supervisor knows what to do, but it has to wait for orders from the DSP.

DAA Country displays the countries your modem is designed for. This is important because phone systems and telecommunications laws vary from country to country.

Click Link Diagnostics to bring up the second of these screens.



The Link Diagnostics screen displays various statistics about the LAST connection. This screen is most often used as an aid in diagnosing connection failures, but it also can provide information about connection speeds and phone line conditions.

Modulation shows the speed and type of connection.

Carrier Frequency shows the electrical frequency of the carrier signal.

Symbol Rate shows the speed of the transmission.

Trellis Code, Nonlinear Encoding, Shaping and Precoding all refer to various ways of handling high speed data transmission.

The various items followed by (dB) or something similar, refer to variations in the modulation tones that actually carry the information.

The rest of the screen contains information about CRC errors, Block Errors (Blerrs), resent data, etc.

This information is very important if you've experienced problems transmitting or receiving data, or if you suspect problems with your phone service.

Technically speaking; only our U.S. Robotics WinModems use VxDs, or Virtual Device Drivers.

The WinModem uses special software, called a 'driver' to manage many of the functions handled by hardware in our other modems.

If you are using a WinModem, the Extended Information Menu will offer you the option of clicking VxD to view information on the WinModem driver.

Please refer to your WinModem manual for detailed information on the WinModem drivers.

Courier users will see a display of current Dialback/Security settings.

Refer to the Courier documentation for instructions on configuring these special features.

Section D — Basic Tips and Pointers

Here are a few tips to help make setting up your new modem as painless as possible:

- Make certain you have everything you need before you get started.
- Take a few minutes to read through the manual(s) that came with your modem.
- Have a small jar or cup handy to hold screws and jumper shunts.
- Pick a time when you won't be interrupted.
- Check in advance to see what interrupts you have available.
- Remember to set the jumpers on your modem if needed before installing it.
- If you are doing a “plug and play” installation in Windows 95, remember to remove all jumper shunts first.
- Before putting your modem in the machine, or connecting an external, take a moment to write the serial number down in the manual.
- Once you've installed your modem, make a note of the COM port and IRQ settings you are using. You may need this information to set up your communications software.

- We hope that you will enjoy exploring the world of information and entertainment your new modem will open up for you.
- We hope that Modem Station will help make using and configuring your new modem a breeze.
- Remember, if you have any questions or problems, feel free to visit one of our many on-line forums.

For answers to specific questions, you can send email to support@usr.com, or try our BBS.