WHAT'S NEW IN VERSION 3.0

As usual, much of what hass happened with WinModem in version 3.0 is a result of what you, our users, have requested. The feedback is invaluable and helps us improve the product. Thank you.

1. WinModem can now operate in one of two presentations. The vertical presentation is the same presentation that was used in version 2.0. A new, user-selectable horizontal presentation has been added that some user's may find less obtrusive.

2. WinModem will now remember its last position on the screen. This was the most frquently requested new feature. In addition, WinModem also remembers its last, selected presentation, either horizontal or vertical.

3. WinModem's menu has been expanded to include the management of the horizontal/vertical presentation.

INTRODUCTION

One of the most popular accessories on modern PC's is the internal modem. Internal modems offer several advantages. They take no additional space on the desktop. They do not require additional power cords. And because they are internal, there is one less cable to add to the rats nest in the back of the computer.

Internal modems do have a drawback, however. **THEY HAVE NO STATUS LIGHTS**. Just as with a hard disk drive, there is something reassuring about seeing the lights flickering on and off. Without them, all is quiet and it may be difficult to determine what is going on. WinModem remedies this problem by providing a graphic representation of a modem's front panel, complete with status lights. With WinModem running, the internal modem is no longer a mystery.

By the way, even if you have an external modem or no modem at all, WinModem may be of value to you. Some PC users have located their external modems out of sight to regain that precious space. If that is your situation, WinModem can help. And due to its design, WinModem can monitor activity on any of the serial ports, even if there is no modem connected to the port at all.

SYSTEM REQUIREMENTS

WinModem is a Microsoft Windows application. To use WinModem Version 3, you must have installed either Windows 3.0 or Windows 3.1. And you must be running Windows on at least an 80286-based system. Since WinModem is a Windows application, it will not operate in the DOS box of Windows. And it doesn't work with applications that run in a DOS box. But it will work with any Windows communication application that employs the standard Windows serial port driver. There are no other special requirements.

USING WINMODEM

Using WinModem is simple. The single requirement is that WinModem must be started **BEFORE** any other application that will use the internal modem. You can do this in one of two ways.

When you installed WinModem, an icon was placed in the accessories group. You may start WinModem by clicking or selecting that icon.

If you prefer, you can tell Windows to load WinModem when Windows is started. The following paragraph, from Windows 3.1 Help tells you how:

"During Windows Setup, a StartUp group is created. When you add an application to the StartUp group, the application starts whenever you start Windows. You can add an application to a group by creating a program item, or by copying or moving an existing program item. "

For more information about this approach, consult your Windows User's Guide.

Only Windows 3.1 has the StartUp group. If you are using Windows 3.0, you may edit the WIN.INI file, located in your Windows directory, using an ASCII text editor. Locate the [windows] legend or section of WIN.INI. It is probably the first section of the file. Then insert a new line in this section similar to the example below. Be sure to specify the FULL PATH NAME of the winmodem.exe file, otherwise Windows will not be able to load the program on startup. Again, if you have any questions, consult your Windows User's Guide.

> [windows]
> spooler=yes
> **load=c:\winmodem\winmodem.exe   <= Insert a line like this**
> run=

Switching Ports

Once WinModem is running, you must select the port that you wish to monitor. Unlike Verison 1, WinModem will remember this setting from session to session. For many users, you will only need to select the port once, although you may change the port setting at any time. By default, WinModem immediately begins to monitor **COM1.**

If you want to monitor a port other than COM1, you must make your selection in WinModem's System menu. In the System menu, the port currently being monitored is checked. Since WinModem does not intrude on the running application, you can switch ports at any time through the System menu. WinModem Version 3 always displays the currently active port in its title bar.

If you want to change WinModem's presentation, you must click on the word that follows COM 4 in the system menu. If the current presentation is vertical, you will find the word 'Horizontal' in the menu. If the current presentation is horizontal, you will find the word 'Vertical' in the menu.

You may access the system menu in two ways. Using a mouse, click on the small square box on the upper left corner of WinModem's Window. Using the keyboard, press **ALT-SPACE** to open the system menu. Figure 1 shows WinModem's system menu.

Figure 1

<u>A BRIEF MODEM PRIMER</u>

Figure 2

Figure 3

Figures 2 and 3 shows WinModem's available windows. Each of the white circles respresents a particular modem signal. If the circle is white, the signal is off. If the circle is red, the signal is on. That seems simple enough. But what do each of the signals mean? We will attempt to give a layman's definition of each.

CTS - Clear To Send
   The CTS signal is often referred to as one of the handshaking or flow control
   signals. It is the way in which the modem tells the computer when it is ready to

accept more data. The modem raises or asserts this signal when data can be transmitted to it. CTS is often used in conjunction with another signal, RTS or Request To Send, that is asserted by the computer. The "handshake" occurs when the computer raises the RTS signal, seeking permission from the modem to send data. The modem gives permission by asserting the CTS signal.

CD - Carrier Detect

The CD signal is used by the modem to indicate that a connection with another modem has been established, and that a good carrier signal has been detected. The carrier signal acts in much the same fashion as signals transmitted by your local radio or TV station. Data is impressed onto this signal so that it can be sent over telephone lines. No carrier, no data. This signal may also be referred to as DCD or RLSD (Data Carrier Detect or Receive Line Signal Detect).

RI - Ring Indicate

Many modern modems, particularly those that comply with the Hayes specifications, have several two methods of alerting the computer when the modem detects an incoming call. One method used by Hayes-type modems is a status code, either a number or the phrase "RING", that is sent to the computer as data. But not all modems comply with the Hayes specification. Virtually all modems, even the Hayes type modems, raise the RI signal to indicate the presence of an incoming call. The "Ring Indicate" is probably a misnomer, since few, if any, modems actually require that a telephone be connected to the modem. What the modem actually detects is the presence, on the telephone line, of a ring current.

MR - Modem Ready

As with CD, this signal also has another name. That name is DSR or Data Set Ready. Whatever you call it, MR is another handshaking signal. It is the modem's method of informing the computer that the modem has been turned on and is ready to accept instructions. Since it is a handshaking signal, you might suspect that the computer can assert a similar signal to let the modem know of its presence. And that is the case. The signal is called DTR or Data Terminal Ready. At least in theory, nothing else is supposed to happen between the computer and the modem until this first-level handshake takes place.

TD - Transmit Data

This signal indicates when the modem has received data from the computer to be sent over the telephone line.

RD - Receive Data

This signal indicates that the modem has received data from the telephone line that it is passing on to the computer.

Have you ever wondered why, if you have an external modem, the cable between the modem and the computer is so thick? The answer lies in the technical specification for the connections that are made between a computer and a modem. This specification is often termed the RS-232 standard. It makes provision for 25 separate signal lines. But on

modern PC's, that number has been reduced to 9 or fewer lines. The RS-232 standard was designed to accomodate a variety of connections and situations, not just computers connected to modems. Of course, if you have an internal modem, the thick cable has been replaced by the simple connection directly to the computer through the modem's card slot.

NOTES AND WARNINGS

Problems with Windows serial port drivers have been reported on the Digital Equipment series 4xx PC's. If you have such a system and are experiencing difficulty, you should contact your DEC representative for assistance.

The RI (Ring Indicate) signal may or may not appear to function. This is the result of a combination of several circumstances, including timing considerations within WinModem and the Windows serial port drivers. We are investigating this anaomoly, but otherwise you should have no difficulty with WinModem.

The CD signal may be lit, even when your system is not connected to another. This is usually the result of the way options for the modem have been set. If you are using a Hayes-type modem, try typing this command to the modem while WinModem is running:

AT&C1<cr>

If the CD signal goes out, your modem has been set up to have the CD (or DCD or RLSD) signal always high or on. The above command instructs your modem to only turn on the CD signal when a connection has actually been made. On older modems, this setting may be made with either jumpers or dip switches inside the modem. To permanently set this option, please consult your modem's reference manual. Due to differences among the various modem manufacturers we cannot reliable give you advice on how to make the setting permanent.

WinModem has been tested on a variety of hardware. If you have difficulty on your particular system, please contact us for support.

OBTAINING ASSISTANCE

Registered users of WinModem can obtain direct telephone support by calling Information Technology at (401) 724-2730 from 8:30 AM to 5:00 PM, EST. We regret that we cannot provide telephone assistance to unregistered users. For information about registration, see the file REGISTER.DOC that accompanies this package.

Registered users can also request assistance either by US Mail or electronic mail. Please

see below for additional information.

Unregistered users also request assistance either by US Mail or electronic mail. We are only able to respond to requests from unregistered users on an as available basis.

If you request assistance by mail, be certain to include enough information so that we can help in a timely fashion. We will need to know:

1. The version of Windows you are using.
2. The version of DOS you are using.
3. The number of serial ports on your system.
4. A complete description of the problem you are encountering. Be sure to identify the software with which WinModem fails, e.g. Procomm, Windows Terminal.

Send your requests for assistance to:
Information Technology
5 Park Blvd.
Lincoln, RI 02865

By electronic mail, send your request to
Compuserve: 70166,1152
GEnie   I.TECH