** USER'S MANUAL **

FCC ID : E2O5614MI

For equipment FCC ID: E2O5614MI

This device complies with Part 15 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 operation.

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.

Use only shielded cables to connect I/O devices to this equipment.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC   ID : E2O5614MI

This   file   include   :

(A) **FORM   159   &   US $940   CHECK**

(B) **FORM   731**

(C) **ANTI-DRUG   LETTER**

(D) **AUTHORIZATION   LETTER**

(E) FCC   ID.   LABEL

(F) BLOCK   DIAGRAM

(G) **PHOTOGRAPHS   (8″ x 10″   )**

(H) USER'S   GUIDE   MANUAL

(I) **OPEN   SITE   TEST   REPORT**

Look

I601 V.90 MODEM USER'S MANUAL

TABLE OF CONTENT

1. Contents of Package
2. Comprehensive Modem Installation Instructions

3. Troubleshooting

Section 1   Contents of Package

- One V.90 PCI bus window modem
- One telephone cable
- One CD-ROM disk comprises Communication software, Modem Driver & User's Manual
- Quick installation guide

- **Please contact the place of purchase if any of the above listed items are missing.**
- **Speaker and microphone are additional accessory. User can purchase seperately by personal favoriate.**

Section 2   Comprehensive Modem Installation Instructions

Section 2.1   System Requirements

The modem operates on a personal computer equipped with the following:

- Windows 95 or Windows 98 operating system

- Any of the following processor/cache memory configurations:

  - 150 MHz Pentium(r) or faster CPU (200 MHz, recommended for V.90 operation)
  - 233 MHz AMD K6(r) or faster CPU with 256K L2 cache memory
  - 266 MHz Cyrix(r) 6X86MX or faster CPU with 256K L2 cache memory
  - 266 MHz Intel(r) Celeron or faster CPU

- 8 MB hard disk space
- 16 MB RAM
- One vacant 32-bit PCI slot
- One available IRQ: 3 through 15

Section 2.2   Hardware Installation

Please refer to Fig. 2 - 1 and proceed to following steps for how to insert your modem into the computer and connect telephone wire and audio accessories.
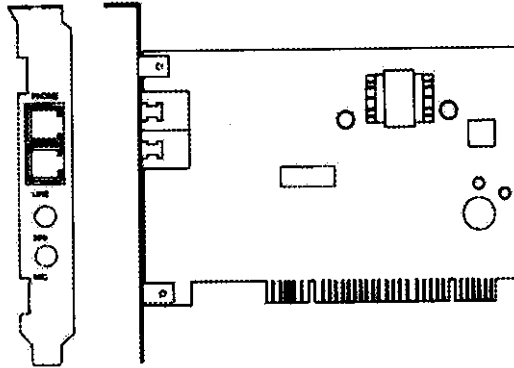

**FIGURE 2-1 Internal modem diagram**

1.   Turn off and unplug your computer from the AC outlet.
2.   Unplug any peripheral devices (keyboard, monitor, etc.) from your computer to avoid the risk of electric shock.
3.   Take the cover off your computer, review computer's manual if you need further instructions.
4.   Find an empty PCI slot.
5.   Unscrew the PCI slot bracket and save the screw, then remove the bracket.
6.   Plug the modem into the PCI slot carefully until the modem is properly seated.
7.   Fasten the modem bracket firmly with the screw saved in step 5.
8.   Reassemble your computer cover and re-plug cables for peripheral.
9.   Plug one end of telephone cord into the "LINE" jack at the modem's bracket. Plug another end of the telephone cord into the telephone wall jack
10.   Some models may comprise a phone jack for an optional telephone. If you wish to use a phone through the same telephone wall jack when the modem is not in use, plug the telephone cord of the phone into "PHONE" jack at the modem's bracket now. Lift the handset and listen for a dial tone to check for a properly connection.
11.   Connect the "SPK" and "MIC" jack to speaker and microphone respectively.
12.   Plug the power cord into the computer and turn the computer on.
13.   Up to now, the hardware installation has been finished. If you have not encountered any problems, you can go to **Section 2.3 System Setup**. If you are having problems, see **Section 3 Troubleshooting.**

NOTE : The telephone wall jack you use must be for an ANALOG phone line (the type found in most homes). Many offices are equipped with digital phone lines. Please be sure you know which type of line you have. The modem will be damaged if you use a digital phone line.

Section 2.3   System Setup

Section 2.3.1 Setup Instructions for Windows 98

STEP 1.   After you complete the modem hardware installation and turn on your PC, Windows system will automatically detect your new added devices. Windows system will then prompt you with a Add New Hardware Wizard screen as shown in figure.
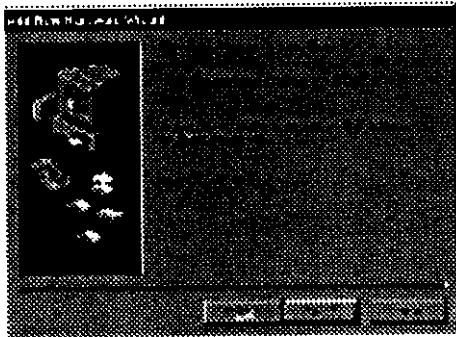
Then click on **Next.**

STEP 2.   A prompt screen will ask you to select **"search for the best driver for your device"** or display a list   of all the drivers in a specific location, so you can select the driver you want". Please select the recommended one as shown in figure.
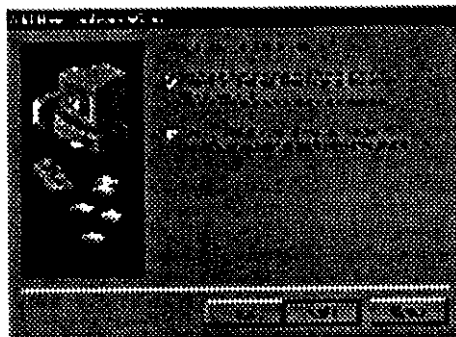
Then click on **Next**

STEP 3.   And then, a prompt screen will ask you to indicate where your driver is located, "floppy disk drives", **"CD-ROM drive"**, "Microsoft Windows Update" or "specify a location:". Please select "CD-ROM drive" as shown in figure.
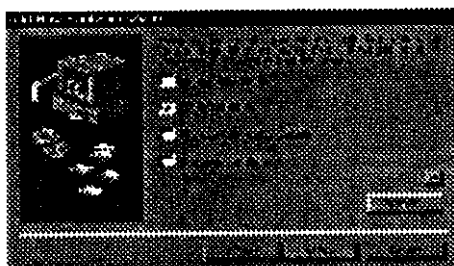
Insert the **Modem Driver** CD-ROM disk attached with your modem into the CD-ROM drive device then click on **Next.**

STEP 4. Click NEXT to update recommended driver.

STEP 5. Then, a prompt screen indicates Windows has found the best driver for your modem as shown in figure.
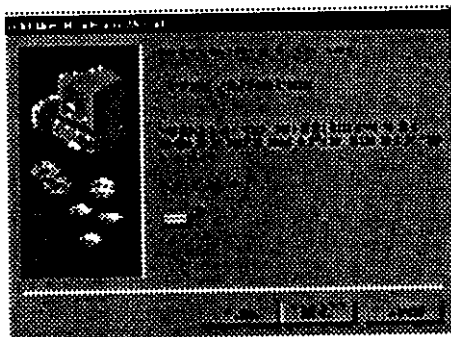
Please make sure the source of your driver is correct then click on **Next**.

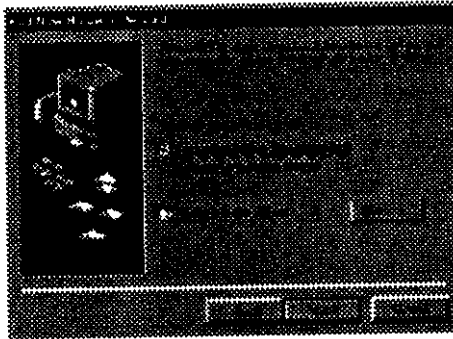**Note:** If installation wizard shows following prompt window, just click OK.
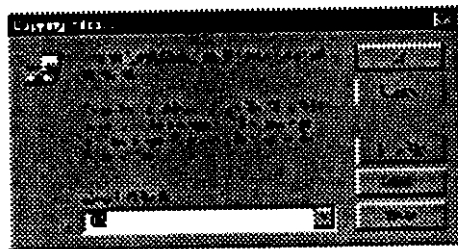
STEP 6. Click on **Finish** to complete the modem installation.

STEP 7. The system will prompt another **Add New Hardware Wizard** screen with the phrase **Wave Device for Voice Modem**. Please remain the **Modem Driver** CD-ROM disk attached with your modem in the CD-ROM drive device **D:**. Then go through the above **STEP 2** to **STEP 6** again.

STEP 8. Restart your system. If there is no error message while the system is re-booting, your modem has been set up properly and functionally.

Section 2.3.2 Setup Instructions for Windows 95

Before you start the installation for Windows 95, please check your version of Windows 95 prior to system setup. Please open **My Computer** window then click on **Control Panel**. When the **Control Panel** window opened, double click the **System** icon and click on the **General** tab. The **General** tab will show you that you have the **Windows 95 Version 4.00.950B"**, **Windows 95 Version 4.00.950A"** or **Windows 95 Version 4.00.950"**. Take note of the version and go to the next appropriate step.

Setup Instructions for Windows 95 Version 4.00.950B

STEP 1.   After you complete the modem hardware installation and turn on your PC. Windows system will automatically detect your new added devices. Windows system will then prompt you with an **Update Device Driver Wizard** screen, as shown in figure.
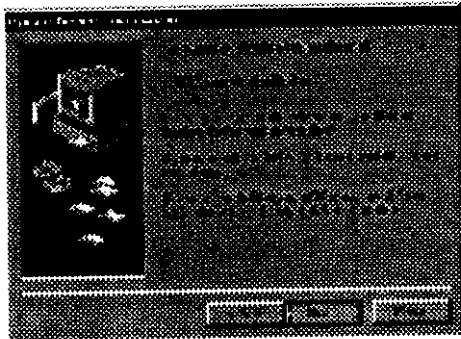
Please insert the **Modem Driver** CD-ROM disk into your CD-ROM drive device D:\, then click on the **Next**.

STEP 2.   Then a prompt screen will advise you the Windows system can not locate a driver for your modem, as shown in figure.
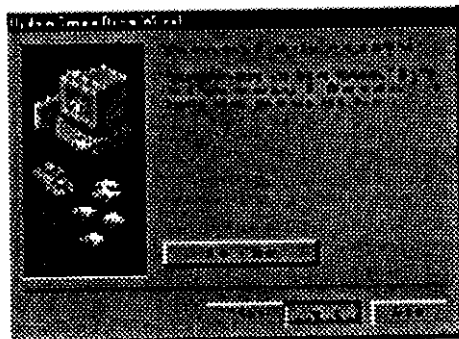
Please click on **Other Locations**.

STEP 3.   Then a prompt screen will ask you to locate the driver for your modem as shown in figure.
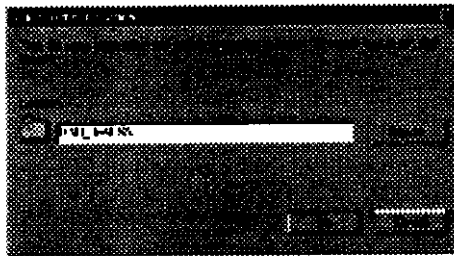
Please browse the CD-ROM disk directory at **D:** and select the exact driver by your location of country. Then click on **OK**.

STEP 4.   Then, a prompt screen will advise you and confirm the modem? driver has been found, as shown in figure.
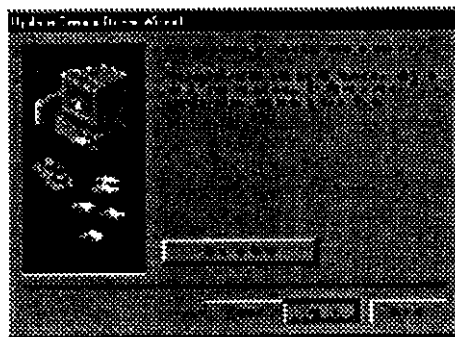
Then click on **Finish**.

STEP 5.   The system will prompt with another **Update Device Driver Wizard** screen with the phrase **Wave Device for Voice Modem**. Please insert the **Modem Driver** disk attached with your modem into the CD-ROM drive device **D:**. Then go through the **STEP 1** and **STEP 4** again.

STEP 6.   If you are not encountered any problem through the **STEP 1** to **STEP 5**, you will be prompted to restart system. If there is no error message, your modem has been set up properly and functionally.

Setup Instructions for Windows 95 Version 4.00.950(or .950A)

STEP 1. After you complete the modem hardware installation and turn on your PC. Windows system will automatically detect your new added devices. Windows system will then prompt you with a **New Hardware Found** screen as shown in figure.
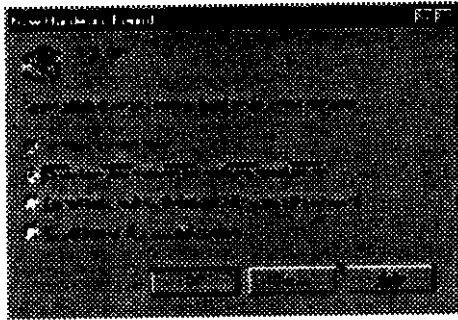
On this screen it will ask you **"elect which driver you want to install your new hardware"**,   please select **"river from disk provided by hardware manufacturer"**. Then click on **OK**.

STEP 2. And then, a prompt screen may ask you to locate where your driver is from, as shown in figure. Please insert the **Modem Driver** disk attached with your modem into CD-ROM drive device **D:**
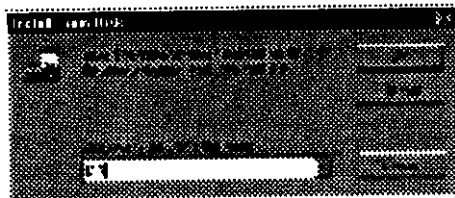
Then click on **OK**.

STEP 3. The system will prompt with another **"New Hardware Found"** screen with the phrase **"Have Device for Voice Modem"**. Please insert the **Modem Driver** disk attached with your modem into the CD-ROM drive device **D:** Then go through the **STEP 1** and **STEP 2** again

STEP 4. If you are not encountered any problem through the **STEP 1** to **STEP 3**, please turn off your PC and restart it. If there is no any error message, your modem has been set up properly and functionally.

Section 2.4 Testing and Your Modem

]Before you set up your software, start with a quick test to check that your modem is working. Once you have determined that your modem is setup properly, go on to **Section 2.6 Install Communication Software** to install your communications software. If you are having problems, see **Section 3 Troubleshooting**.

Click on **Start** and point to **Setting**. Then click on **Control Panel**. When the **Control Panel** window opens. Scroll down to the **Modem** icon and double click on it. Click on the **Diagnostics** tab and highlight the COM port for your modem. Then click on **More Info**, your computer will automatically communicate with your new modem using AT commands and receiving responses from your modem. A list of response means the modem is setup properly.

Section 2.5   Control Panel Application

The modem comes with a control panel application that lets you set modem options, view modem status, and access the Help topics.

To access the modem control panel:

1.   On the desktop, select **Start**; then **Settings**; then **Control Panel.**
2.   Double-click the **SM56 Modem** icon. The Modem Control Panel is active.

Make sure the language and country settings are correct (default Domestic English and USA). Changes of these settings will effect to modem performance. Please select a correct option match to your location.
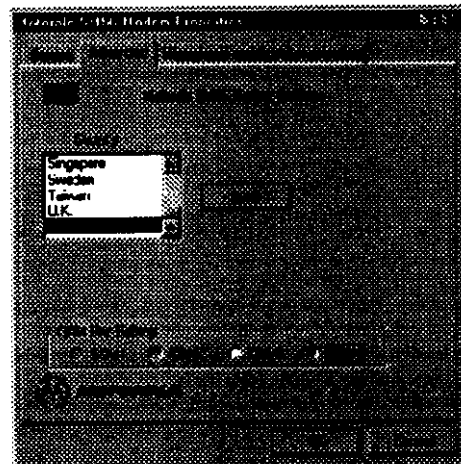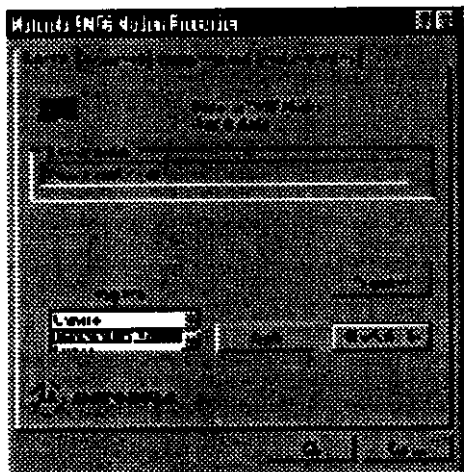
The default gain of microphone and speaker is set to low. Please adjust the value for comfert use.
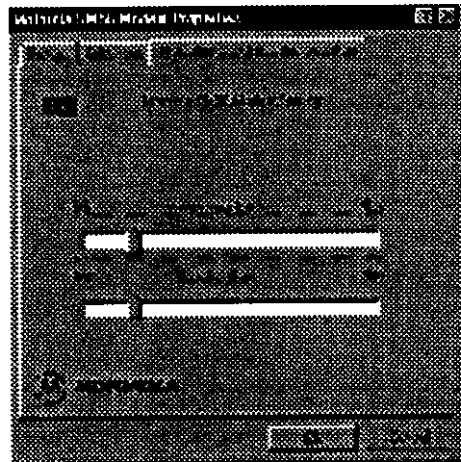
Section 2.6   Install Communication Software

You can install the communication software from the CD-ROM disc attached with your new modem. Please consult the software manual in the CD-ROM disc for the detail of software installation.

You do not have to use the communication software attached with your new modem. The modem was designed for and tested using a wide range of communications software packages. Many communication applications identify the modem automatically and configure themselves for the correct operating settings. Some of the communication applications will ask you to select the type of modem you are using. Select a **Generic Fax class 1 modem** will let you use basic communication and fax functions.

Section 3   Troubleshooting

Your modem is designed to provide reliable and trouble-free functionality, however, should you experience any difficulty, the information contained in this section will assist you in determining and resolving the source of the problem.

Problem: Modem does not respond to AT commands
Possible solutions:
1. Make sure the modem is not configured with a conflicting COM port and IRQ setting. Make sure the communication software is configured with the correct COM and IRQ settings (the same COM port and IRQ as the modem). Your communications software will not be able to send or receive any data if it is not configured to match the COM port and IRQ settings for the modem.

    DOS based communication program is not working with this modem neither can you operate the modem in MS-DOS prompt screen.

2. Make sure the modem is properly initialized using the driver software. The software may improperly initialize your modem because you have selected an incorrect modem type. You may also be prompted to enter an initialization string by the software. Use AT&F as your initialization string.

Problem: Modem dials but does not connect
Possible solutions:
1. Be sure the IRQ setting is identical on the modem and the software.
2. Make sure that the phone line is working properly. A noisy line will prevent proper modem operation.

Problem: Modem makes a connection but no data appears on screen
Possible solutions:
3. Make sure all communication parameters (baud rate, data, stop, and parity bits) are properly configured and are identical on both sides. Be certain hardware flow control (RTS/CTS - default) is enabled in both the modem and the communication software.
4. Press the ENTER key several times. The remote system may be waiting to receive your data before it begins.
5. Make sure the correct terminal emulation mode is being used in the software (refer to software manual).

Problem: Modem displays errors while on-line with a remote modem
Possible solutions:
6. Make sure Call Waiting is turned off.
7. Make sure RTS/CTS hardware flow control is enabled (do not use XON/XOFF software flow control when transferring binary files).

8. Make sure the data speed is not faster than your computer capability. Operating too many applications at the same time may cause communication problem. Close unnecessary application in your system.

Problem: Modem exhibits poor voice recording or playback
Possible solutions:

9. Make sure the correct modem type is selected in the Voice/FAX software. Volume adjustment is available in control panel.

10. Make sure your computer is fast enough to handle voice operations (38.4 Kbps). Voice operations are CPU intensive and require a better CPU sharing when running under Windows.

Problem: No dial tone
Possible solutions:

11. Ensure that the telephone cord it securely connected at both modem and wall outlet.

12. Unplug the telephone cord from the computer and connect it directly to a telephone from the wall outlet. Check for a dial tone. If there is none, the problem is in the telephone cord or system. Call your telephone service provider.

13. Double-check your country setting. Different country setting will cause different modem performance. Please select the correct country as you located.

14. Check modem performance with a direct line from your telephone company. Some PBXs may cause the telephone line condition change and affect modem performance.

Problem: The modem does not answer incoming calls
Possible solutions:

15. Ensure that the automatic answer parameter is set to one of the enabled options, using the ATS0 command (ATS0=1 to answer after one ring, and so on).

16. Ensure that no other devices, such as fax or answering machines, are answering calls before the modem does.

If you can not resolve your situation after reading this section, contact your dealer or vendor for assistance.

Appendix 1 Specifications

Modulation standard	: V.90, V.34+, V.34, V.32bis, V.32, V.29, V.27ter, V.22bis, V.23,V.22, V.21, V.17, Bell212/103
Compression	: V.42bis, MNP Class 5
Error Correction	: V.42, MNP Class 2-4
Host Interface	: PCI bus
FAX Group	: Group III
FAX Command	: EIA/TIA 578 class 1
VOICE Command	: IS - 101
Transmit level	: -10 dBm +/- 1 dB
Sensitivity	: -43 dBm
Power	: 0.75 W max
Temperature	: 0 to 55 degrees C, operating; -20 to 80 degrees C, non-operating

Appendix 2   Dial Modifiers and AT command set

Dial Modifiers

The modem supports the following dial modifier characters. Modifiers are used in a dial string to let the modem handle situations such as the use of a calling card, accessing outside lines when located within a PBX system, and using pulse dialing.

Modifier	Function	Description:
@	Quiet Answer	Wait for one or more rings then five seconds of silence; then proceed with dial string
H	Disconnect	Disconnect from the telephone line.
K	Pause Delay>	Pause; the default time is three seconds
P	Pulse Dial	Use pulse dialing
R	Reverse	Enter Answer mode immediately after dialing; use when the remote modem is originate-only
T	Tone Dial	Use tone dialing
W	Dial Wait	Pause until it detects a dial tone
;	Command Mode	Return to command mode after dialing, without breaking the connection established. Permits transmission of numbers as tones.

Executing AT commands

Your modem is in Command Mode upon power-on and is ready to receive and execute AT commands. The modem remains in Command Mode until it makes a connection with a remote modem. Commands may be sent to the modem from an attached terminal or a PC running a communication program.

AT commands and formats

All commands must begin with the AT prefix, followed by the command letter and ended with the ENTER key. All default settings are printed in bold text. Spaces are allowed in the command string to increase command line readability but are ignored by the modem during command execution. All commands may be typed in either upper or lower case, but not mixed. A command issued without any parameters is considered as specifying the same command with a parameter of "0".

Example: ATL [ENTER]

This command causes your modem to lower its speaker volume.

AT Command Summary

AT		Command prefix
A/		Repeat last command
A		Answer
D	(none) Dial a	Number Instructs the modem to dial the telephone number that you enter immediately after the ATD command. Example: ATD5554678. Note: if multiple ATD commands are used in voice mode, the modem must be forced to blind-dial after dial-tone detection.
E0		Disables echo
E1		*Enables echo*
H0		Hang up the telephone line
H1		Pick up the telephone line
I		Request Information From Modem
I0		"5600"
I1		"255"
I2		"OK"
I3		Software Version
I4		"OK"
I5		Disconnect Reason
I6		Country Code
I7		Product Code
L0		Low speaker volume
L1		Low speaker volume
L2		*Medium speaker volume*
L3		High speaker volume
M0		Speaker always off
M1		*Speaker on until carrier present*
M2		Speaker always on
M3		Speaker off during dialing; speaker on until carrier present
O0		Return to data mode
O1		Retrain and return to data mode
O2		Initiate Rate Renegotiations
O3		Rate re-negotiation and return to data mode
P		Select pulse dialing
Q0		*Enables result code*
Q1		Disables result code
Sn		Select S-register n; refer to S-register summary for the details
Sn=x		Write x to S-register n; refer to S-register summary for the details
Sn?		Read from S-register n; refer to S-register summary for the details

T	*Select tone dialing*
V0	Choose numeric form result code
V1	*Choose verbose form result code*
X	Select Call-Progress Result Codes to Return
X0	No Carrier; Connect. Modem reports lack of a carrier signal; connection success/ failure; modem dials without waiting for a dial tone
X1	No Carrier; Connect; Connect <rate>. Modem reports lack of a carrier signal; connection success/failure, and the computer data rate established
X2	No Carrier; Connect; Connect <rate>; No Dial Tone. Modem reports lack of a carrier signal; connection success/failure; the computer data rate established; and the lack of a dial tone
X3	No Carrier; Connect; Connect <rate>; Busy-tone. Modem reports lack of a carrier signal; connection success/failure; the computer data rate established; and the presence of a busy signal
X4	No Carrier; Connect; Connect <rate>; No Dial-tone; Busy-tone. Modem reports lack of a carrier signal; connection success/failure; the computer data rate established; the lack of a dial tone; and the presence of a busy signal
Z	Reset modem and recalls user profile
&C0	Ignores carrier status; CD always ON
&C1	*CD set according to carrier status*
&D0	Ignores DTR
&D1	Modem switches from data mode to command mode when an ON-to-OFF transition of DTR occurs
&D2	*When DTR switches OFF , the modem goes on-hook and disables auto-answer*
&D3	Reset modem and recall user profile when DTR switches OFF
&G0	*Disables guard tone*
&G1	Enables 550 Hz guard tone
&G2	Enables 1800 Hz guard tone
&In	Dial TX Lavel; Level n; n = 0 to 15. Default = 9
&I99	Automatic Level
&P0	*Select 10 pps pulse dial with 39%/61% make/break ratio*
&P1	Select 10 pps pulse dial with 33%/67% make/break ratio
&P2	Select 20 pps pulse dial with 33%/67% make/break ratio
&R0	CTS Control Normal
&R1	CTS Control Always On
&TDn	Dial TX Level; Level n; n = 0 to 15
&TD99	Automatic Level
&S0	*DSR always ON*
&S1	DSR ON only during handshaking and when carrier is lost
&T0	Terminates test in progress

&T1	Initiates local analog loop back(LAL)
&V	View active profile, stored user profile and stored telephone number
&V0	Short Form Report
&V1	Current or Last Connection Report
&V2	Long Form Report

AT% (Percent) and AT\ (Backslash) Commands

The modem responds to the following AT% and AT\ command options.
The letters AT (or at) must precede all commands except A/ and +++. Factory-default options are underlined.

Command	Description
%C	Data Compression (DC) Mode Determines whether the modem implements methods of increasing the effective data rate by reducing the number of bits used to represent data
%C0	Disable Compression
%C1	Enable Compression
%D	Disconnect Buffer Delay Controls the delay after detection of a disconnect request before the modem disconnects from the telephone line
%D0	Disable Delay
%Dn	Delay for n Seconds (n = 1 to 255)
\K	Break Handling Method
\K1	Destructive Expedited
\K3	Non-destructive Expedited
\K5	Non-destructive Non-expedited
\N	Error-Correction (EC) Mode
\N0	Normal
\N1	Direct
\N4	LAP-M Only
\N6	Reliable
\N7.	Auto-Reliable
\Q	DTE Flow Control
\Q0	Disable
\Q1	XON/XOFF (software flow control)
\Q3	RTS/CTS (hardware flow control)
\T	Disconnect on DTE Inactivity
\T0	Disable
\Tn	Disconnect after n minutes of inactivity by the computer; n = 0 to 255
\V	Connect Message Format Determines which messages the modem generates at connection time

\V0	Display DTE Rate
\V1	DTE with EC /DC message
\V2	Display DCE Rate
\V3	DCE with EC/DC Message
\V4	DCE with Modulation & EC/DC Message

AT* (Asterisk) Commands

The modem responds to the following AT* command options.

The letters AT (or at) must precede all commands except A/ and +++. Factory-default options are underlined.

Command	Description
*DD	Dial Wait Specifies the time interval to wait when the modem encounters a W or w while processing a dial string
*DD0	2 Seconds
*DD1	3 Seconds
*DD2	4 Seconds
*DD3	6 Seconds
*DD4	12 Seconds
*DD5	15 Seconds
*DD6	20 Seconds
*DD7	30 Seconds
*DD8	40 Seconds
*LS	Low-Speed Operation Protocol Lets you select a communications protocol to communicate with very low-speed or older modems.
*LS0	Bell 103
*LS1	ITU-T V.21 (international standard)
*LS2	Bell 103 or ITU-T V.21 (Auto determination)
*MM	Modulation Mode
*MM0	V.34 Auto Modulation
*MM1	V.21
*MM2	Bell 103
*MM4	V.22/Bell 212
*MM5	V.22bis
*MM6	V.23
*MM10	V.32 Only
*MM11	V.32 bis
*MM12	V.34 Only
*MM13	K56flex(tm) Only
*MM14	K56flex(tm) Auto-modulation

*MM15	V.90 Only
*MM16	V.90 Auto

Appendix 3   S-Register Summary

The modem responds to the following ATS command options.
The letters AT (or at) must precede all commands except A/ and +++. Factory-default options are underlined.

S-Register	Description
S0	Auto-Answer on Ring Number
S0=0	Disable
S0=n	Answer on Ring n; n=0 to 255
S1	Ring Count
S1=n	Counts the number of rings in an incoming call. If the modem is configured to auto-answer (S0 set to a non-zero option), when S1=S0, the modem answers the call.
S2	Select Escape Character
S2=n	Specifies ASCII character for Escape; n=0 to 255. Default = 43 (+)
S3	Select Carriage-Return Character
S3=n	Specifies ASCII character for Carriage-Return; n=0 to 127. Default = 13 (CR)
S4	Select Line-Feed Character
S4=n	Specifies ASCII character for Line-Feed; n=0 to 127. Default = 10 (LF)
S5	Select Backspace Character
S5=n	Specifies ASCII Character for Backspace; n=0 to 127. Default = 8 (BS)
S6	Blind Dial
S6=n	Before dialing, the modem goes off-hook and waits n seconds; n=0 to 255. Note: When the ATX2 or ATX4 option is in effect, the S6 value is disregarded. Default = 2
S7	Call Time-out
S7=n	Pause for n seconds; n=0 to 255; before dialing. Default = 60
S8	Pause Delay
S8=n	Pause for n seconds; n=0 to 255; for dial modifier in a dial string. Default = 2
S10	DCD Loss Disconnect
S10=n	Disconnect after n seconds; n=0 to 255 in 0.1 second increments; after DCD signal is de-asserted. Default = 14
S11	Tone Length
S11=n	Specifies duration, in 0.001 second increments, of DTMF tone when it is generated;n=60 to 255. Default =72
S12	Escape Code Guard Time
S12=n	Specifies the interval, in 0.02-second increments, that must be present on either

side of the escape code (+++) for the modem to recognize the escape command and enter command mode. If S12=0, the speed at which you enter the escape sequence is not a factor. Default = 50

S18	Test Timer
S18=n	Specifies test execution duration; n=0 to 255. Default = 0

Appendix 4 Result Codes and Connect Messages

The Result Code Display parameter must be enabled (ATQ=1) for the modem to generate any messages.

The following numeric codes or text messages are sent, according to the Call Progress Reporting (ATX) option. The connect messages shown below can be generated when the Connect Message parameter (AT\V) is set to a Rate-Only option (AT\V0 or AT\V2).

Numeric Code	Text Message	Call Progress Reporting (ATX) Option
0	OK	0,1,2,3, or 4
1	CONNECT 75	0

Note: If Call Progress=0, the receipt of numeric code 1 indicates only that a connection has been made. If Call Progress=1, 2, 3, or 4, the receipt of numeric code 1 indicates a connection was made at 75 BPS.

2	RING	0, 1, 2, 3, or 4
3	NO CARRIER	0, 1, 2, 3, or 4
4	ERROR	0, 1, 2, 3, or 4
5	CONNECT 1200	1, 2, 3, or 4
6	NO DIALTONE	2 or 4
7	BUSY	3 or 4
8	NO ANSWER	0, 1, 2, 3, or 4
10	CONNECT 2400	1, 2, 3, or 4
11	CONNECT 4800	1, 2, 3, or 4
12	CONNECT 9600	1, 2, 3, or 4
13	CONNECT 600	1, 2, 3, or 4
20	CONNECT 300	1, 2, 3, or 4
22	CONNECT 7200	1, 2, 3, or 4
23	CONNECT 12000	1, 2, 3, or 4
24	CONNECT 14400	1, 2, 3, or 4
25	CONNECT 16800	1, 2, 3, or 4
26	CONNECT 19200	1, 2, 3, or 4
27	CONNECT 21600	1, 2, 3, or 4
28	CONNECT 24000	1, 2, 3, or 4
29	CONNECT 26400	1, 2, 3, or 4
30	CONNECT 28800	1, 2, 3, or 4
31	CONNECT 31200	1, 2, 3, or 4
32	CONNECT 33600	1, 2, 3, or 4
34	CONNECT 38400	1, 2, 3, or 4
35	CONNECT 57600	1, 2, 3, or 4
36	CONNECT 115200	1, 2, 3, or 4
37	CONNECT 32000	1, 2, 3, or 4

38	CONNECT 34000	1, 2, 3, or 4
39	CONNECT 36000	1, 2, 3, or 4
40	CONNECT 38000	1, 2, 3, or 4
41	CONNECT 40000	1, 2, 3, or 4
42	CONNECT 42000	1, 2, 3, or 4
44	CONNECT 44000	1, 2, 3, or 4
46	CONNECT 46000	1, 2, 3, or 4
48	CONNECT 48000	1, 2, 3, or 4
50	CONNECT 50000	1, 2, 3, or 4
52	CONNECT 52000	1, 2, 3, or 4
54	CONNECT 54000	1, 2, 3, or 4
56	CONNECT 56000	1, 2, 3, or 4
58	CONNECT 58000	1, 2, 3, or 4
60	CONNECT 60000	1, 2, 3, or 4
61	CONNECT 28000	1, 2, 3, or 4
62	CONNECT 29333	1, 2, 3, or 4
63	CONNECT 30666	1, 2, 3, or 4
64	CONNECT 33333	1, 2, 3, or 4
65	CONNECT 34666	1, 2, 3, or 4
66	CONNECT 37333	1, 2, 3, or 4
67	CONNECT 38666	1, 2, 3, or 4
68	CONNECT 41333	1, 2, 3, or 4
69	CONNECT 42666	1, 2, 3, or 4
70	CONNECT 45333	1, 2, 3, or 4
71	CONNECT 46666	1, 2, 3, or 4
72	CONNECT 49333	1, 2, 3, or 4
73	CONNECT 50666	1, 2, 3, or 4
74	CONNECT 53333	1, 2, 3, or 4
75	CONNECT 54666	1, 2, 3, or 4

Appendix 5 Government compliance notices

FCC compliance

This equipment complies with Part 68 of the FCC Rules. On this equipment is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

If your telephone equipment causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify in advance. But, if advance notice isn't practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect proper operation of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.
The FCC prohibits this equipment to be connected to party lines or coin-telephone service.
In the event that this equipment should fail to operate properly, disconnect the equipment from the phone line to determine if it is causing the problem. If the problem is with the equipment, discontinue use and contact your dealer or vendor.

FCC Class B statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
*   Reorient or relocate the receiving antenna.
*   Increase the separation between the equipment and the receiver.
*   Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
*   Consult the dealer or an experienced radio/TV technician for help.

Notice: 1) Shielded cables, if any, must be used in order to comply with the emission limits.
            2) Any change or modification not expressly approved by the Grantee of the equipment authorization could void the user' s authority to operate the equipment.

DOC compliance information

NOTICE: The Canadian Department of Communications label identifies certified equipment. This certification means that 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 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. The customer should be aware that compliance with the above conditions might not prevent degradation of service in some situations.

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.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.
NOTICE: The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a 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 sum of the Load Numbers of all the devices does not exceed 100.

European CTR 21 compliance

The equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point. In the event of problem, you should contact your equipment supplier in the first instance.
Note: The manufacturer should ensure that the vendor and user of the equipment is clearly informed of the above information by means of package and /or user manuals of the forms of user instructions.