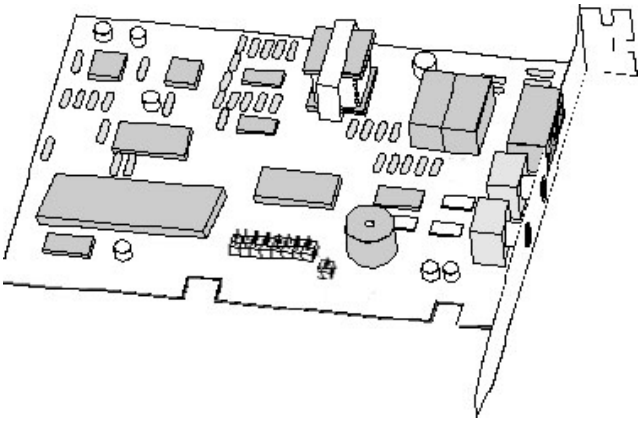
Quick Installation Reference Card

Smart LITE 56K

8FM-56KSHSF-V2

PCI Dual Mode

ITU-T V.90 & K56Flex Modem



- ☑ **Software Upgradeable**
- ☑ **56,000* bps Data Modem (DUAL MODE) Supporting both V.90 and K56Flex**
- ☑ **14,400 bps Send & Receive Fax**
- ☑ **Supports speeds up to 115,200 bps**
- ☑ **V.42 Error Correction and V.42bis 4-to-1 Data Compression**

- *Capable of receiving at up to 56kbps, and send at up to 31.2kbps. Due to FCC regulations on power output, receiving speeds limited to 53kbps. Actual speeds vary. Requires compatible phone line and server equipment. Complies with both the V.90 56k standard and K56Flex technology protocols.*

Zoltrix

Features:

- Dual Mode: Automatically detects all ITU V.90, K56Flex or 33.6 kbps connections
- PCI Bus mastering interface
- PnP for easy installation
- SmartDAA technology
  - Caller ID (U.S. version only)
  - Line-in-use detection
  - Remote hang-up
  - Extension off-hook detection
  - Call waiting
  - Digital PBX line protection
- Wake-on ring filtered in hardware
  - No false detects from picking up extension phone lines
- Enhanced voice features
  - Extension pick-up detection
  - Line-in-use; stops recording TAM message, etc.
  - Detection by monitoring Tip/Ring Voltage
- Data/Fax/Voice call identification
- Software upgradeable to full-duplex speakerphone (requires full duplex sound card)

If you have never installed an add-in board in your computer before, please follow the instructions in this section carefully. You may also want to refer to the Installation Chapter in your manual.

Technical Specifications:

- Data: ITU-T V.90/K56Flex, V.34, V.32bis, V.32, V.22bis, V.22, V.21, V.23, Bell 212A/103
- Fax: ITU-T V.17, V.27ter, V.29, V.21 Channel 2, Group 3, EIA Class 1
- Data Compression: ITU-T V.42 LAPM, MNP 5
- Error Correction: ITU-T V.42 LAPM, MNP class 2-4
- AT and extended AT command set compatible
- H.324, V.80 for video conferencing over Internet and point to point connection

Fax/Voice Mail Features:

- Automatically detects and routes incoming voice, fax, and data call to the proper module
- Fax speed ups to 14,400bps·Sends and receives faxes to or from any group 3 fax machine, Printer-quality faxing, forwarding
- Schedules fax transmission and multiple recipients
- Convenient voice storage and playback
- Easy voice message retrieval through sound card, or from remote locations
- Password protection for up to 999 mail boxes

Safety Precautions

1. **Turn OFF the computer before you begin. Also, turn OFF any external devices that are connected to your computer, such as printers.**
2. Handle the board gently by the edges. Some of the component leads under the board have very sharp edges and may cause serious injury.
3. To prevent electrostatic discharge damage to the components on your modem, do not remove the modem from the static-shielded bag until you have discharged any static electricity from your body by touching any unpainted surface on the case of your computer.

Necessary Equipment

Make sure that you have all necessary equipment at hand before you begin.
You should have:

- The ***Zoltrix Smart Lite Board***
- A Pentium-200 MMX or faster compatible computer with an available PCI expansion slot
- A modular telephone outlet and cable
- A small, flat-blade screwdriver and a small pair of pliers or tweezers
- A telephone set (Optional)

Installation Steps

The steps to install your modem are shown in order in this section. For some steps, you may need to refer to your computer's User's Manual.

Selecting the COM Port

The ***Zoltrix Smart Lite*** is PnP and can use COM ports 1 to 8 and IRQ's 2, 3, 4, 5, 10, 11, 12 & 15. This is selected automatically. There are no hardware jumpers or dip switches to set.

Inserting the Fax/Modem

1. Turn off the power to the computer. Also, turn off any external devices that are attached, such as a printer and monitor.
2. Take out the mounting screws on the back of you computer. Refer to your computer manual if you cannot locate them.
3. Remove the computer cover. Refer to your computer manual if you cannot determine how to remove the cover.
4. Select an empty PCI slot. You may need to remove the metal slot cover first, using a small screwdriver.
5. Discharge any static electricity in your body by touching any bare metal surface on the chassis of the computer and remove the modem from the static-shielded bag.
6. Press the board firmly into the slot ensuring that the gold tabs on the fax/modem are aligned with the connectors in the slot.
7. Insert the screw and tighten slightly. Check to ensure that the telephone jacks in the back of the modem are unobstructed. If so, then tighten the screw securely.
8. Replace the computer cover.

Installing Telephone Lines

The Fax/Modem has two modular telephone jacks on the back of the modem. You will need to connect your Fax/Modem to the wall outlet via a modular telephone cord.
If your wall outlet is not a modular type, you can purchase an inexpensive converter at most electronics or phone stores. It is suggested that you connect your modem to a "*dedicated line*". A dedicated line is a regular phone line that does not go through a switchboard, PBX, etc.

You can also connect a telephone set to your modem, enabling you to use the phone when the modem is not in use. The modem can also be used as an autodialer with your telephone set. It is recommended that you use a single line phone outlet (RJ11). However, you can use a two-line (RJ14) phone line, but the modem will only work on the first line using the center pair of wires.

To connect the telephone lines to the modem follow these steps:

1. Insert one end of the phone line into the jack on the modem labeled **Line**.
2. Insert the other end of the phone line into the phone jack, (usually located on your wall).

If you wish to use a phone set in conjunction with your modem, Please follow these steps:

1. Insert the line from the phone into the jack labeled **Phone**.
2. Make sure that the other end of the phone line is connected to the telephone.

Testing

The actual installation of the modem is now complete. Before attempting to use your modem, you should complete the following steps:

1. Before turning the power back on to the computer, check the telephone connection by lifting the telephone handset. You should hear a dial tone. If you don't, check that all phone cords are firmly connected.

2. Turn the computer power back on. Lift the handset of the telephone again to check for a dial tone. Once again, you should hear a dial tone.

3. You've now completed the hardware installation of your modem. From here, you are ready to install the communications software.

4. Once you've installed your communications software, test the modem according to the instructions in either the hardware or software manual.

Windows 95(OSR2) Driver Installation

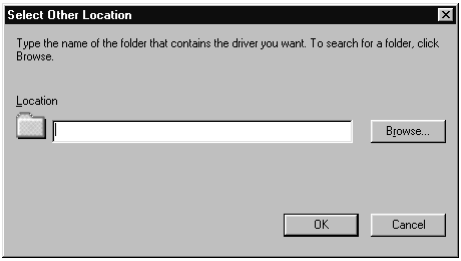
1. Start Windows 95. As soon as Windows 95 starts you will see a screen similar to the right diagrams:

2. Click on the “NEXT” button.

3. You will see a screen similar to the diagram to the right:

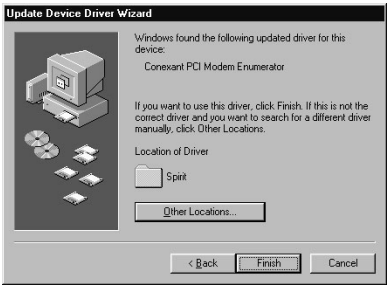
4. Click on the Other Locations button to bring up a screen similar to the diagram to the right:

5. Click on the Browse button and then select the correct drive and directory containing the Win95 driver and then click on the OK button. If you have the Zoltrix COMMUNICATIONS CD-ROM in your CD-ROM drive, select D:\SmartLite\Win95_98



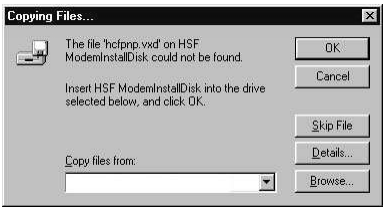
Note: Replace D: with the drive letter of your CD-ROM drive if necessary.
The button will be grayed out until you find a directory that actually contains a modem driver.

After Clicking on OK if you do not see a screen similar to the diagram to the right, the location you specified may not contain the correct driver:



6. Click on the “FINISH” button to complete the modem driver installation.

If the screen to the right is displayed, Click on Browse and once again select the correct drive and directory that contains the modem driver to complete the driver installation.

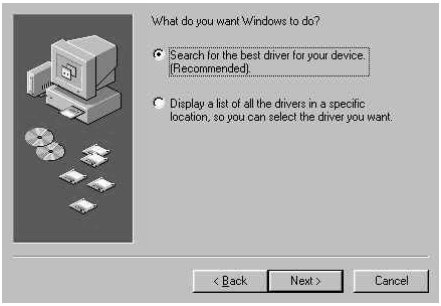


7. You should then see the Modem driver and Wave device for the voice modem detected and installed.

Windows 98 Driver Installation

1. Start Windows 98. As soon as Windows 98 starts you will see a screen similar to the diagram to the right:

2. Click on the “NEXT” button. You will see a screen similar to the diagram to the right:



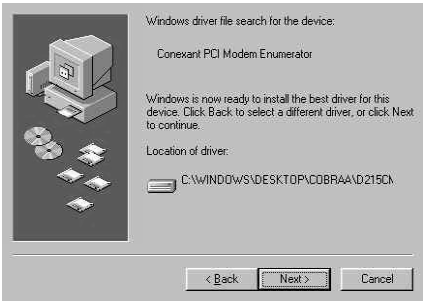
3. Make sure that the box has a check mark like the diagram to the right and click on the button.

4. Make sure that the box has a check mark like the diagram to the right and then either type in the correct path to the driver disk **or** Click on the Browse button and then select the correct drive and directory containing the Win98 driver. Then click on the NEXT button.

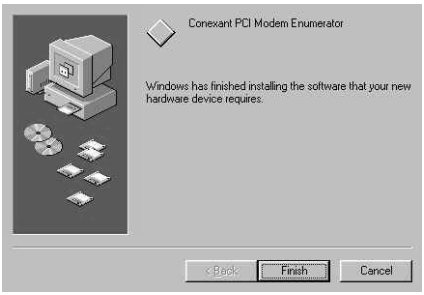
If you have the Zoltrix COMMUNICATIONS CD-ROM, insert the CD-ROM into your CD-ROM drive and select D:\SmartLite\WIN95_98
Note: Replace D: with the drive letter of your CD-ROM drive if necessary.

The “OK” button will be grayed out until you find a directory that actually contains a modem driver

5. Click on the “NEXT” button. If the directory contained the driver you will see a screen similar to the diagram to the right:



6. Click on the “NEXT” button.
You will see a screen similar to the diagram to the right:



7. Click on the “FINISH” button to complete the modem driver installation.

8. You should then see the Modem driver and Wave device for the voice modem detected and installed.

Un-Installation of the Windows 95/98 Driver

If you ever want to remove the modem or update the modem drivers with newer versions obtained on the web, you must first remove the HSF modem drivers. We provided a utility program that not only removes the modem driver, but completely removes all the modem entries in the Windows registry. Use the following procedure to remove the modem drivers.

1. Start the Control Panel and double click on “Add / Remove Programs” icon.
2. Scroll down the list and select the “Conexant SoftK56 modem”
3. Click on the “Add/Remove” button
4. Click on the “ Yes “ button to confirm the driver removal

Common Problems and Their Solutions

Problem: Modem answers incoming calls and then returns to the on-hook condition, disconnecting the caller.
This occurs most often when connecting to a UNIX system. In most case, the host does not prefer to see any result or command echo codes. If this is the case, the codes can be disabled by adding E0 Q1 to the modem configuration string.

Problem: No echo from modem
This is normally caused by an I/O address or IRQ conflict. Verify that the COMPort is not in use by any other serial device and if necessary use another COMPort or I/O address setting.

Problem: The modem dials and appears to complete the connection, but the communications software does not enter the correct mode. (The screen remains blank.)
There may be an I/O conflict (See the solution for the previous problem, "No echo from modem").

The Result Codes may have been disabled by the software configuration set up. Check if Q1 is in the configuration or initialization string. If so, change it to Q0.

Your software may require numeric result codes rather than verbal result codes. Use either V0 for numeric result codes or V1 for verbal result codes in your initialization or configuration string.

Some software require full extended result codes (ie. CONNECT 33600 instead of CONNECT). This can be controlled by the Xn command. X0 sends a summarized code (CONNECT) and X4 sends a full extended code (CONNECT 33600).

Problem: The modem does not auto answer.
The auto answer mode is determined by the S0 register. If S0 has been set to 0, the modem will not answer. Assign another value to S0 by entering the following command S0=n, where n=the number of rings to occur before the call is answered (ATS0=2, the modem answers after two rings).

Problem: The modem always answers the phone
Set the S0 register to 0. ATS0=0

Problem: The communications software displays,"No Dialtone".
Make sure that your phone cable is working properly and that it is firmly seated to the phone socket at your phone jack and in the rear panel of the modem.

On-line Technical Support

If you have access to the World Wide Web be sure to visit the Zoltrix home page at:

http://www.zoltrix.com