NOTEBOOK PC

SUPPORT CD

SOFTWARE SETUP & REFERENCE

(WINDOWS 98)

Contents

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Support CD for Windows 98

The support CD included with this Notebook PC provides all the necessary drivers and utilities in order for you to use your Notebook PC with Microsoft® Windows® 98 (referred to as "Windows" in this User's Manual). The following pages will give step-by-step installation procedures for typical system configurations under this operating system. For application usage, please see the online help provided with each of the applications after installation. The following is what you will see when you insert the support CD. If the autorun menu does not appear, double clicking the CD-ROM disc drive icon in "My Computer" (may be the (D:) drive or (E:) drive on hard drives with two partitions) or running SETUP.EXE (through Start menu "Run...") located in the root of the support CD, will bring up the autorun menu.

Autorun Screen for Windows 98

L7300B/L7200B Series Notebook PC CD Rev. 1.0 for Win98

/ISUS

VGA Driver
Control Panel
VPM Driver
Audio Driver
ASUS PC Probe
TouchPad
PC-cillin 98
Intel 82440MX INF update
Read Me
Browse this CD
Technical Support Form
Exit

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Drivers for Windows 98

The following are descriptions of what each autorun menu item does when selected with the mouse. Due to ongoing improvements in the support CD, there may be some differences between this User's Manual and your support CD. The names in quotations are the actual driver names displayed in the System Properties of MS Windows. Windows cannot contain all the device drivers from every manufacturer, with every update; therefore the provided support CD will contain the best driver for your built-in devices and should be used in place of any Windows default drivers.

1. VGA Driver (required)

Installs the display adapter "Silicon Motion LynxEM" in order for your Notebook PC's display panel to work properly. This is necessary in order for your operating system to have the correct video drivers for your Notebook PC's built-in graphics.

2. Control Panel (optional)

This installs the Silicon Motion Control Program which is a utility that provides DualView and DualApp support as well as special display functions for your Notebook PC.

3. VPM Driver (optional)

This installs Silicon Motion VPM driver for your Notebook PC. The VPM driver is used by video capture or TV tuner applications to communicate with the LynxEM video chipset. If you will not be using any video capture or TV tuner devices, the VPM driver is not required. There is no configuration necessary for this driver.

4. Audio Driver (recommended)

This installs the necessary "SoundMAX Integrated Digital Audio" driver in order for your operating system to have the correct files for your Notebook PC's built-in audio and "Wave Device for Voice Modem" for integration of the internal audio with the internal modem. All audio functions are configured through Windows and help can be located within Windows help files or documentation.

5. ASUS PC Probe (optional)

PC Probe is a convenient utility to monitor the computer system's vital components. This is an optional software to help you manage your Notebook PC.

6. TouchPad (recommended)

The system BIOS fully supports keyboard and PS/2 mouse devices that are built-in or connected to the Notebook PC externally. The Notebook PC's integrated TouchPad pointing device is fully compatible with the two-button PS/2 mouse. However, the provided "Alps GlidePoint" device driver will provide enhancements and features to the touchpad to increase the functionality of the touchpad.

7. PC-cillin 98 (optional)

Installs Trend's PC-cillin virus protection software. As software become more and more a part of our daily lives, measures have to be taken to protect them. When you invest in this Notebook PC, a very important anti-virus software is included on the support CD. You may skip this software if you have your own anti-virus software.

8. Intel 82440MX INF update (for release 4.10.1998 and earlier)

This utility installs INF files in Windows for versions released 4.10.1998 and earlier to support special features of the Intel® 82440MX chipset.

9. Read Me

Opens up a text file containing notes concerning this support CD or the Notebook PC.

10. Browse this CD

Allows you to see the contents of this support CD.

11. Technical Support Form

Opens up a blank Technical Support Request Form for you to fill in and print out when you run into technical difficulties and need technical assistance. Information in the technical support form is required when asking for technical support.

12. Exit

Allows you to close the support CD autorun screen.

Supplemental Support CD

Modem Driver (required for Modem model)

The supplemental "Computer Associates" CD provides the necessary "V.90 K56Flex HSP PCI Modem" driver for Windows to use the Notebook PC with a built-in modem. One support CD is provided to support the modem protocol in your territory. For modem protocol drivers for other territories, please download them from the web site.

Modem Software (optional for Modem model)

The same supplemental "Computer Associates" CD also provides a collection of software for use with the Notebook PC's modem. The software includes Cheyenne's Bitware and other utilities. Only "Bitware for Windows Voice/Fax/Data (PCtel)" is licensed for use with the Notebook PC with a built-in modem. The other software may only be trial or demo versions and may require registration and/or payment for permanent use. Please view the license agreements provided with each of the software.

1. VGA Driver

When the Notebook PC's built-in graphics device (VGA) is not installed correctly, "Device Manager Display adapters" will show "Standard PCI Graphics Adapter (VGA)". If this is the case, follow the procedure to install the VGA driver.
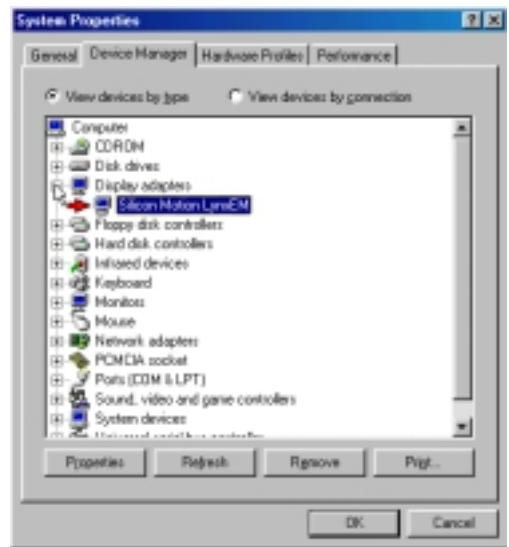
Installing the VGA Driver

1. Insert the support CD and click "**VGA Driver**."

2. After these two dialogue boxes, your VGA driver should be properly installed.
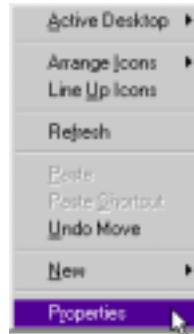
   Click **Yes** to restart your computer.

Checking the VGA Driver

When the Notebook PC's built-in graphics device (VGA) is successfully installed, "Device Manager Display adapters" will show "Silicon Motion LynxEM".

Display Property Settings

1. Right-click on the Windows desktop and click **Properties**.

2. Click **Settings** and then click **Display Type.**

3. Click **Monitor** and then click **Change**.

4. Select **(Standard monitor types)** from "Manufacturers" and **Laptop Display Panel (1024x768)** from "Models".

   NOTE: 1024x768 can be selected for both the 12.1" or the 13.3" display panels. Selecting the 1024x768 for the 12.1" display panel will allow virtual desktop to be enabled or disabled at anytime through "Screen area" in "Display Properties Settings" (see **NOTE** on next page).

   Click **OK** when finished. The selection will be updated on the relevant screens.

5. Click **Apply** to set the monitor refresh rate.

6. Click **OK** to change the refresh rate of your display.

7. Click **Yes** to keep the setting.

    Click **Close** to return to "Display Properties".

8. Drag the "Screen area" adjustment bar so that it reads 1024 by 768 pixels and select the highest "Colors" available and click **OK**.

    NOTE: On the Notebook PC with a 12.1" display panel, panning (virtual desktop) will occur to cover the 1024 by 768 area. If you do not want panning, use 800 by 600 pixels.

    Click **OK** to continue.

9. A warning will be shown, select "Apply the new color settings without restarting?" You can prevent future warning messages when changing display settings by selecting "Don't ask this question again".

    Click **OK** to continue.

10. Click **OK** to resize your desktop.

11. Click **Yes** to keep the setting. You should restart your computer after all the display settings are configured.
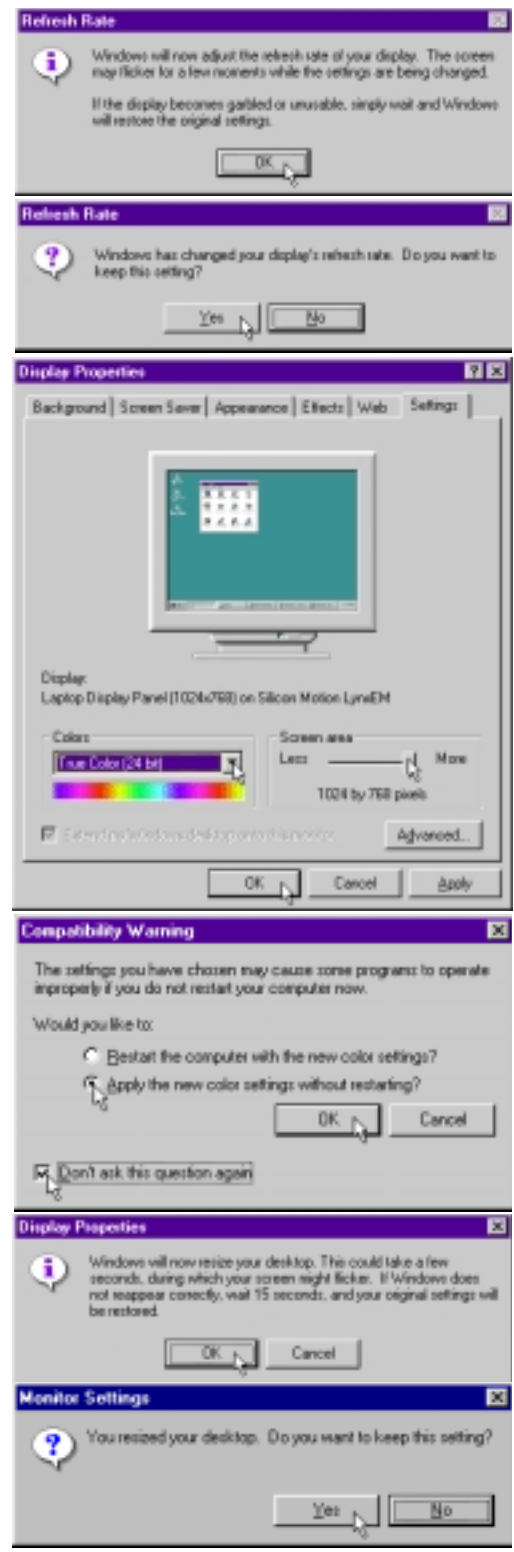
2. Control Panel

Please see Software Reference for more information on this utility.

Installing the Control Panel

1. Insert the support CD and click **Control Panel** on the autorun menu.

2. Click **Next** after reading the "Welcome" screen.

3. Click **Next** to create program icons in the default folder or select another folder or type in a new folder name for the program icons.

4. Click **Finish** when you see the "Setup Complete" notice.

5. If you restart Windows, an **SMI** icon will appear on the task bar each time Windows starts. Double-click on the "SMI" icon to view or change special display settings. You may also run the **Control Program** manually through **Start | Programs | Silicon Motion Control Programs**.

Windows Task Bar

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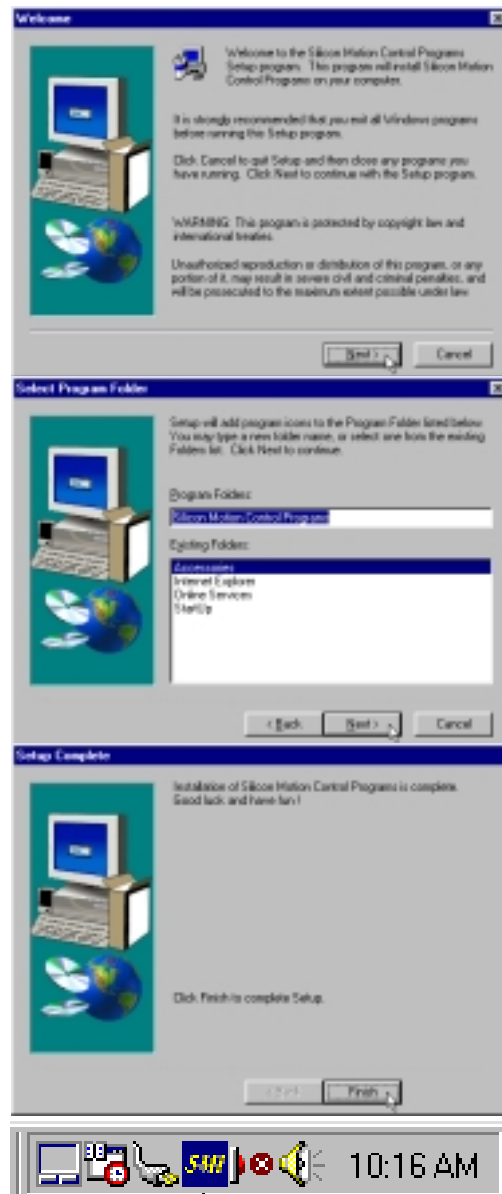
3. VPM Driver

Installing the VPM Driver

1. Insert the support CD and click **VPM Driver** on the autorun menu.

2. Click **Next** after reading the "Welcome" screen.

3. Click **Next** on the "Setup Type" screen. Make sure that the selection is on **Install VPM Drivers only**. Do not select "Install VPM Drivers with Video Capture Application" since this application is not supported on this Notebook PC.

4. Click **Finish** to restart your computer now or select "No..." then **Finish** so that you can install other items and restart your computer later.

4. Audio Driver

When the Notebook PC's built-in audio is not installed correctly, a question mark will show in "Device Manager" for "PCI Multimedia Audio Device." If this is the case, follow the procedure to install the audio drivers.

Installing the Audio Driver

1. Insert the support CD and click **Audio Driver** on the autorun menu.

2. Click **Next** after reading the "Welcome" screen.

3. Click **OK** to restart your computer now or select "No..." then **Finish** so that you can install other items and restart your computer later.
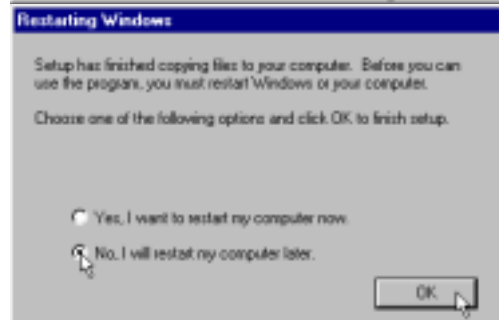
Checking the Audio Driver

When correctly installed "SoundMAX Integrated Digital Audio" will show under "Sound, video and game controllers" within "System Properties Device Manager".

Audio Controls

A Speaker icon will show on the task bar and when selected with the left mouse button. A simple master control will show. If selected with the right mouse button a menu will show allowing adjustment of audio properties or detailed volume controls.
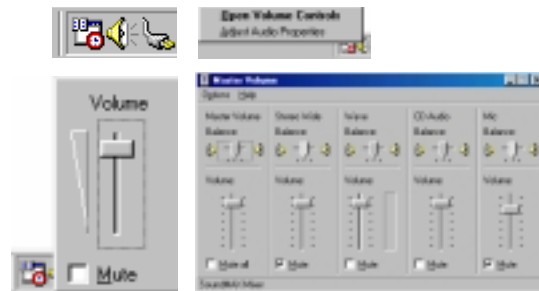
Manually Installing the Audio Driver

If you do not get the "New Hardware Found" wizard as shown on the previous "Audio Driver" installation and you cannot connect hear any audio, follow these steps for manual installation of the audio driver.

1. Right-click **My Computer** on the desktop.

2. Select **Properties**
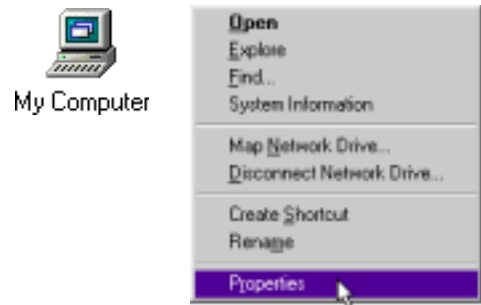
3. Click the Device Manager tab.

4. Double-click **"Other Device" or "Sound, video and game controllers"** in the list area.

5. Click the "**PCI Multimedia Audio Device**" or other audio devices with an error. If there is no such item, skip to step 8.
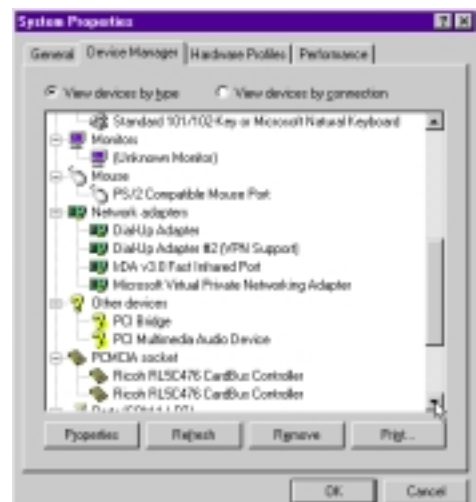
6. Click **Remove**.

7. Click **OK** to confirm device removal.
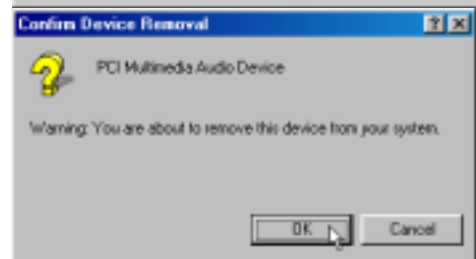
8. Click **Refresh** on the "Device Manager" page and the Plug & Play will automatically detect your audio device. Click **Next** to search for new drivers.
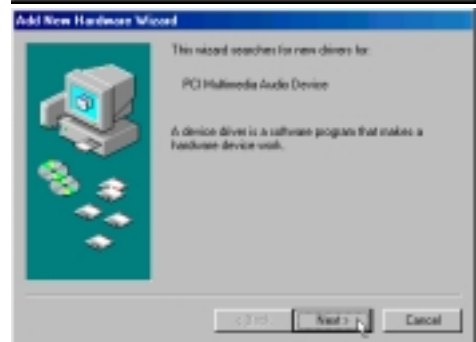
9. Click **Next** to search for the best driver for your device.

10. Enter the letter of your CD-ROM drive and the **\AUDIO\WIN98\DRIVER** path (or click Browse to see other paths for other Windows versions) on the Notebook PC support CD. Click **Next** to determine the best driver for your device.

11. Click **Next** to install the recommended driver.

12. Click **Next** again to finish installing the drivers.

13. Click **Finish** when the installation is complete.

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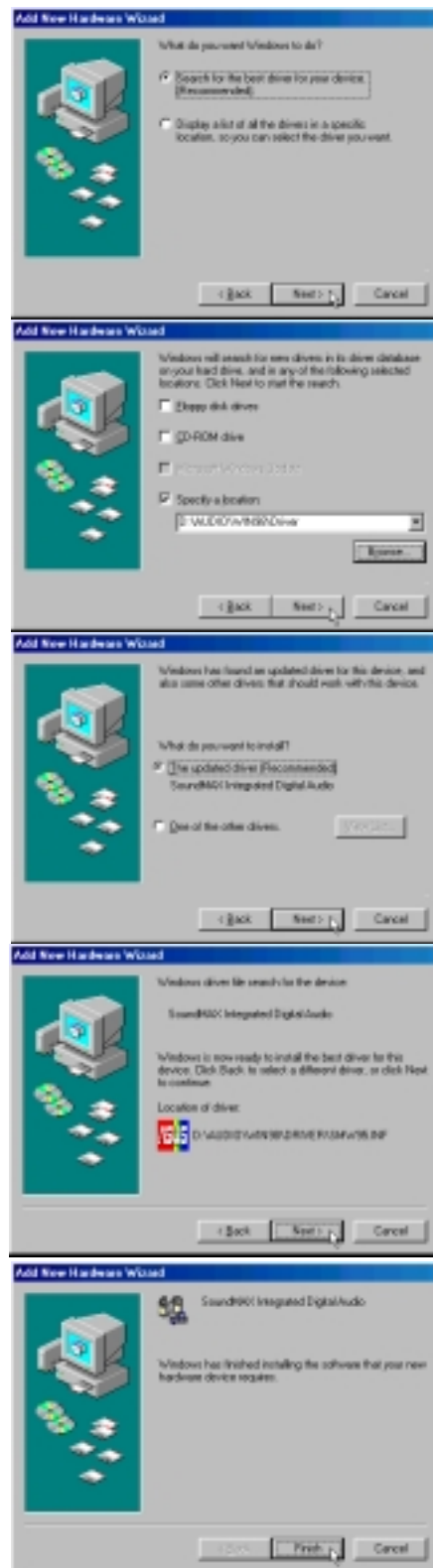
5. ASUS PC Probe

NOTE: In order for PC Probe to run, Intel's LDCM and other hardware monitoring software cannot be installed. You must first uninstall other such software before installing PC Probe.

Installing the PC Probe Utility

1. Insert the support CD and click **ASUS PC Probe** on the autorun menu.

2. Click **Next** after reading the "Welcome" screen.

3. Click **Next** to install into the default directory or click **Browse** to change the destination directory.

4. Click **Next** after reading the "Information" screen.

5. Configure the settings if you desire (you can also make settings any time after you install PC Probe). The default setting runs a check on the system every 5 seconds for the Temperature. Decreasing this value increases real-time accuracy but decreases system performance. Increasing this values produce the reverse effect. Click **Next** to continue.

6. Click **Next** after verifying the configuration settings.

7. Click **Next** to create program icons in the default folder or select another folder or type in a new folder name for the program icons.

8. Click **Finish** when the installation is completed. You may choose to run PC Probe now and/or to automatically run PC Probe each time Windows starts.

6. TouchPad

Installing the TouchPad Utility

1. Insert the support CD and click **TouchPad** on the autorun menu.

2. Click **Yes** to begin installation.

3. Click **Yes** to restart your computer now or click **No** so that you can install other items and restart your computer later.

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7. PC-cillin 98

Installing the PC-cillin Utility

1. Insert the support CD and click **PC-cillin 98** on the autorun menu.

2. Click **Next** after reading the "Welcome" screen.

3. Click **Yes** after reading the "Agreement".

4. Wait while your setup checks your system for viruses based on the included pattern file. (This is usually older than what is available on the Internet at "http://www.trend.com". You should rescan your hard drives after updating the virus pattern.) The screen will change when completed.

5. Choose another destination folder or click **Next** to use the default.

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6. Click **Next** to create program icons in the default folder or select another folder or type in a new folder name for the program icons.

7. Answer **Yes** or **No** to add PC-cillin to your active desktop and subscribe to the Internet "channel" so that you can be notified of updates.

8. Answer **Yes** or **No** to apply PC-cillin anti-virus protection to your Internet browser.

9. Click **Start** to create a Bootable Emergency Clean Disk. Otherwise, click **Skip** on the "Create Emergency Clean Disk" screen.

10. Click **Finish** to restart your computer now or select "No..." then **Finish** so that you can install other items and restart your computer later.

8. Intel 82440MX INF Update

System Requirements

1. The update included with this support CD is designed to operate with the Intel® 82440MX Chipset.

2. It is recommended that the kit update is installed on systems with at least 32MB of system memory.

3. There should be sufficient hard disk space in the <TEMP> directory (typically C:\WINDOWS\TEMP) on the hard disk drive to install this update.

Windows Version

Only Windows version "4.10.1998" and earlier require the INF update. Versions of Microsoft Windows after this release (such as "4.10.2222" as shown below) will not require the Intel 82440MX INF update. The following are public releases of Windows:

• Windows 95 4.00.950   (Windows 95 Retail Release)
• Windows 95 4.00.950b   (Windows 95 OSR2 without USB Supplement)
• Windows 95 4.00.950b   (Windows 95 OSR2.1 with USB Supplement)
• Windows 95 4.00.950c   (Windows 95 OSR2.5 with or without USB Supplement)
• Windows 98 4.10.1998   (Windows 98 Retail Release)
• Windows 98 4.10.2222   (Windows 98 Second Edition – no INF update necessary for this Notebook PC)

Checking your Windows Version

1. Right-click **My Computer** on the desktop.

2. Select **Properties**.

3. Read the information under "System:"
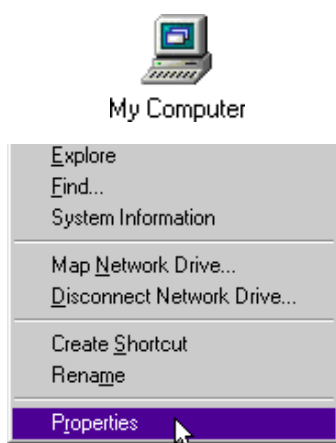
Windows 98 Second Edition
(no INF update necessary)
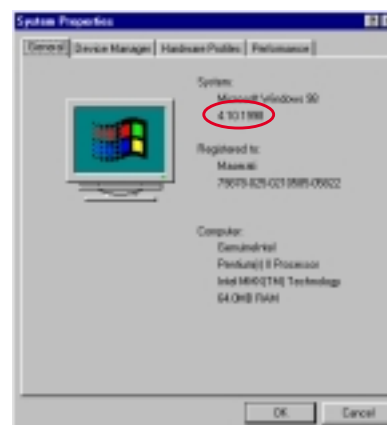
Windows 98 First Edition
(INF update is necessary)

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Outdated Device Drivers

Windows 98 First Edition will show the following outdated drivers. When updated or when Windows 98 Second Edition is installed, the device names on the right will be seen.

The following drivers should be updated: **Updated Device Driver Names**
- PCI Bridge   →   Intel(r) 82440MX Power Management Controller
- PCI standard host CPU bridge   →   Intel(r) 82440MX Processor to I/O Controller
- PCI standard ISA bridge   →   Intel(r) 82440MX PCI to ISA Bridge
- Standard Dual PCI IDE Controller   →   Intel(r) 82440MX Bus Master IDE Controller
- Standard Universal PCI to USB Host Controller →   Intel(r) 82440MX USB Universal Host Controller
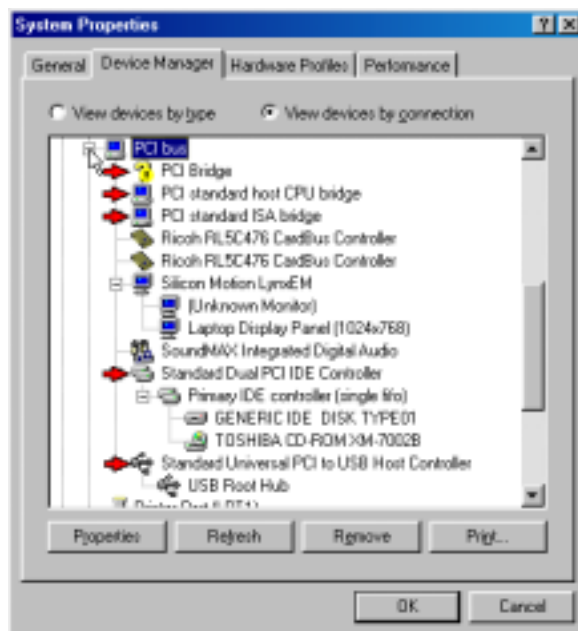
Windows 98 First Edition will show the following outdated devices when first installed.
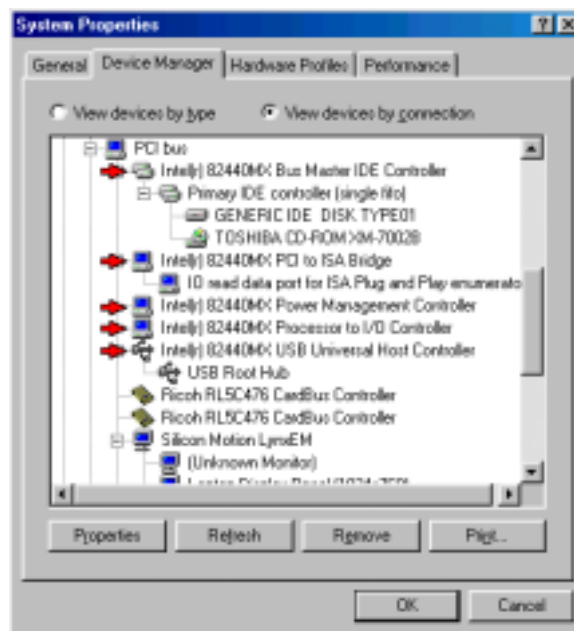
Windows 98 First Edition will show the following when the devices have been updated.

INF Update for "PCI Bridge"
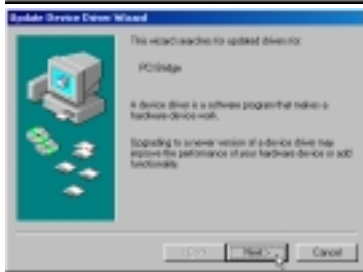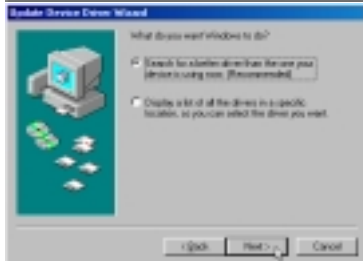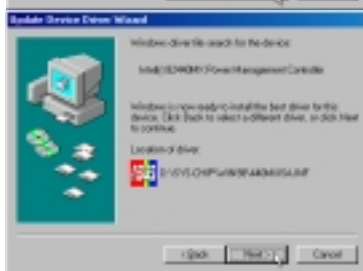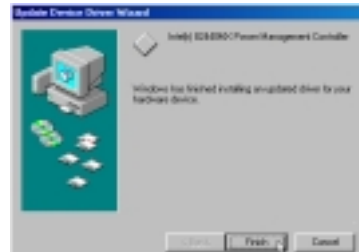
The update should look like the above item as indicated by the arrow.

INF Update for "PCI standard host CPU bridge"
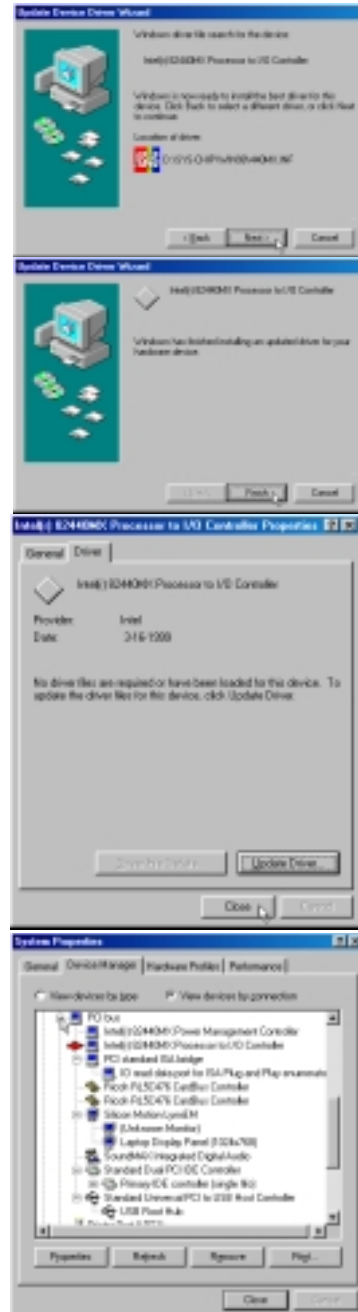
The update should look like the above item as indicated by the arrow.

11. 82440MX INF

INF Update for "PCI standard ISA bridge"

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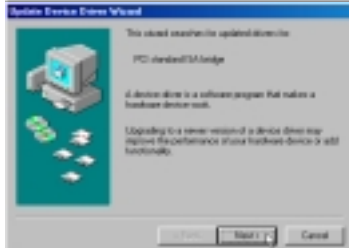
3
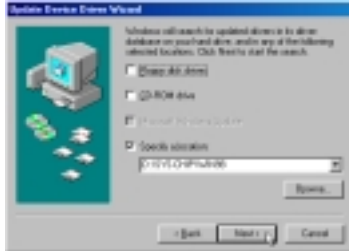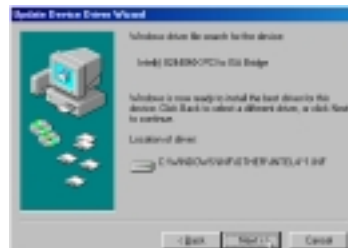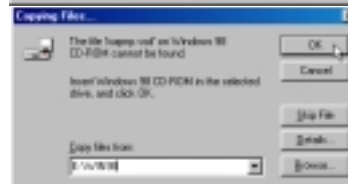

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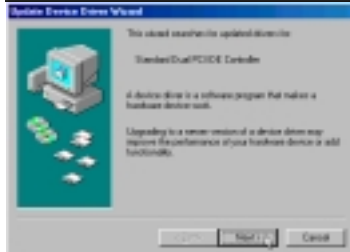6

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The update should look like the above item as indicated by the arrow.
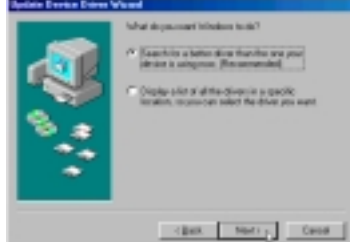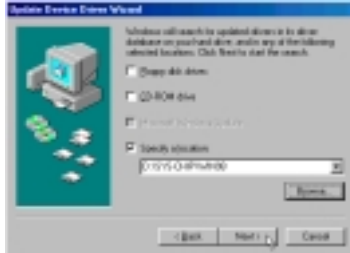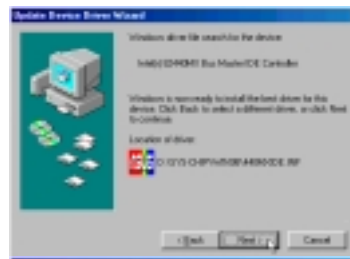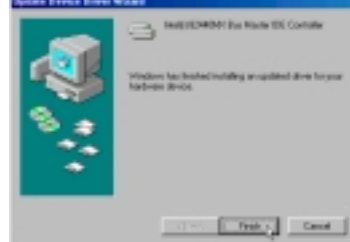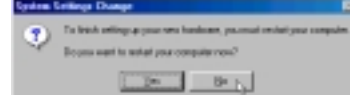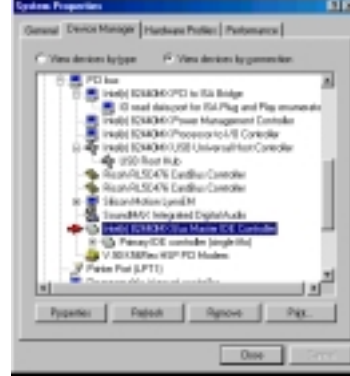
INF Update for "Standard Dual PCI IDE Controller"

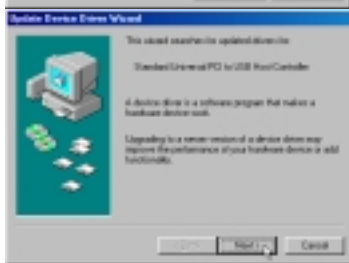The update should look like the above item as indicated by the arrow.

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INF Update for "Standard Universal PCI to USB Host Controller"

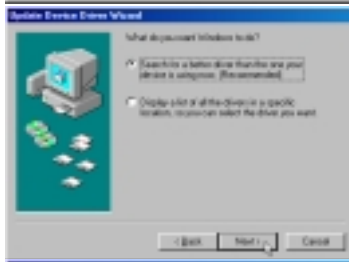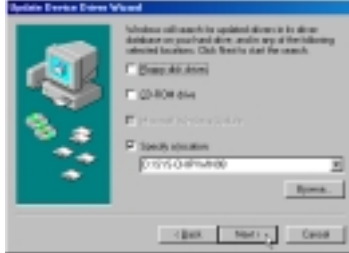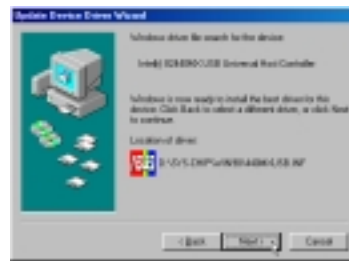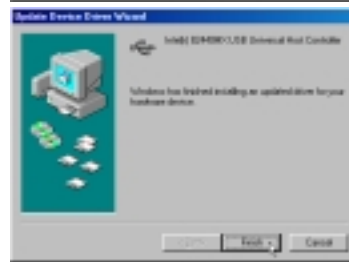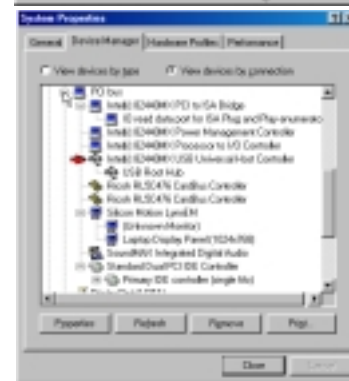The update should look like the above item as indicated by the arrow.

Installing the INF Update (Before Installing Windows 98)

The Windows 98 distribution CD contains a setup directory with all the base OS setup files (*.CAB) and installation program (SETUP.EXE). The name of the directory can vary depending on the distribution CD. (i.e. \WIN98\)

1. Copy the OS installation files from the Windows 98 setup directory to a directory on the hard disk. This procedure requires a large amount of disk storage. It is important to make sure this is enough disk space before beginning the copy process. This directory shall be referred to as the <WIN98 Setup Directory>.

2. Copy the Windows 98 INF files from the **\SYS-CHIP\WIN98** directory on the Notebook PC support CD to the setup directory identified in Step 1 above.

3. Run SETUP.EXE to install Windows 98.

Verifying Installation of the Software

NOTE: This procedure is common to both Windows 98 and Windows 95 systems.
Run Device Manager to verify correct installation and usage of the INF files.

1. Right-click on **My Computer** on the desktop.
2. Select **Properties**
3. Click on **Device Manager** tab
4. Click on **View devices by Connection** button
5. Click on **Plug and Play BIOS**
8. Click on **PCI bus**
9. Check the descriptions for the following entries:
   • Intel 82440MX PCI Bus Master IDE Controller
   • Intel 82440MX PCI to ISA Bridge
   • Intel 82440MX PCI to USB Universal Host Controller
   • Intel 82440MX Power Management Controller
   • Intel 82440MX Processor to I/O Controller
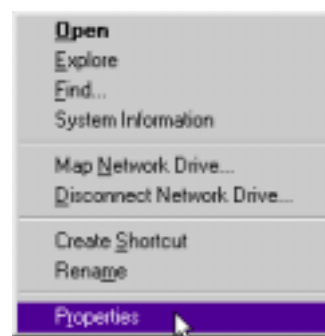
On the Device Manager page, click "View devices by connection"
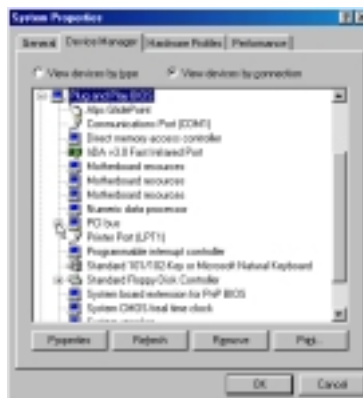
Click the + sign next to "Plug and Play BIOS" to expand it.

The five items above must have Intel 82440MX as the prefix.

Modem Driver (for Notebook PC with modem only)

NOTE: This is only for the Notebook PC model with built-in modem.

The 56K* PnP (Plug-N-Play) "Host Based" Voice/Data/Fax Modem allows your computer to connect to an ISP supporting rates up to 56K bps. A Host Based modem uses the computer systems CPU to control some of its actions. This greatly reduces the number of chips that the modem uses; reducing its complexity, cost, and increasing its reliability. Plug-N-Play refers to a set of specifications that allow the computer hardware and operating system to automatically configure settings for the modem.

Features

• Plug-N-Play installation to get you up and running in minutes
• Telephone Answering Machine with Voice Mail capabilities
• Transmits data up to 115,200 bps with compression
• Background broadcast fax send and receive
• Host based operation
• K56flex protocol

*This modem is capable of 56K downloads. However, due to FCC rules which restrict power output of your ISP's modems, current download speeds are limited to 53K bps but even this maximum will depend on the conditions of your telephone lines.

NOTE: PC is a trademark of IBM Corporation. Windows 98 and Windows NT are trademarks of Microsoft, Inc. 56Flex is a trademark of Lucent Technologies, Inc. and Rockwell International.

WARNING! The modem will be damaged if you use a digital phone line. Since some homes and most businesses have digital phone lines, before connecting your modem to a phone jack you are unsure of; a phone jack at work for example; ask if the phone system is digital.

Plug-N-Play Hardware Configuration

Windows 98 will automatically detect and start setup for your Notebook PC's built-in modem. If you cancel the installation wizard, you may install the modem manually at anytime in the future. The only configuration for your modem is for it to use the Plug-N-Play capabilities of your computer and direct the installation wizard to the location of the drivers on the provided support CD. Plug-N-Play is a set of specifications that define the ability for the computer hardware and operating system to automatically configure all Plug-N-Play compliant devices that are installed in the system. In the case of the modem, this relieves the user of the need to determine which COM Port and Interrupt Request (IRQ) settings are to be used by the modem. See next page for detailed installation procedures if necessary.

Manually Installing the Modem Driver

If you cannot use your modem after installation from the support CD, you may need to manually configure your modem. A New Hardware Found dialog box should appear the first time Windows is installed. If you did not get the dialog or you skipped the installation and you cannot get the internal modem to work, follow these steps:

1. Right-click **My Computer** on the desktop.

2. Select **Properties**

3. Click on **Device Manager** tab.

4. Double-click **Modem** or ⊟ 🎇 Other devices (if present) in the list area.

5. Click the **PCI Communication Device** with an error. If there is no such item, skip to step 8.

6. Click **Remove**.

7. Click **OK** to confirm device removal.

8. Click **Refresh** on the "Device Manager" screen and the Plug & Play will automatically detect the new device. Once your modem device is detected, setup will be automatic. Click **Next** to continue.

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9. Click **Next** to search for the best driver for your device.

10. Click **Specify a location** and enter the letter of your CD-ROM drive and the **\DRIVER\WIN95_98** path on the Notebook PC support CD. Click **Next** to determine the best driver for your device.

11. Click **Next** to install the "V.90 K56Flex HSP PCI Modem" driver.

12. **FCC B:** The CD labeled FCC B is intended for USA. Change the country if using the modem in other territories.

   CTR21: The CD labeled CTR21 is intended for Europe (shown as CTR21 here and TBR21 in control panel). Change the country if using the modem in other territories.

   JATE: The CD labeled JATE is intended for Japan. Change the country if using the modem in other territories.

   You can change this anytime from the "Control Panel".

13. Click **Finish** when Windows finishes the software installation for the device.

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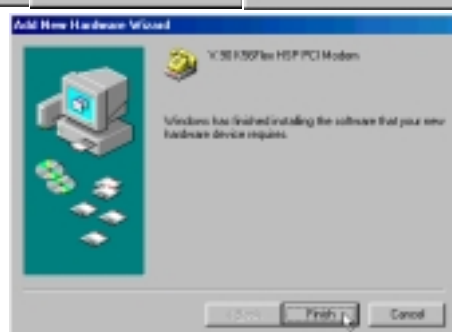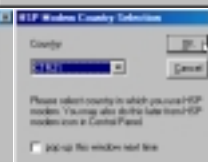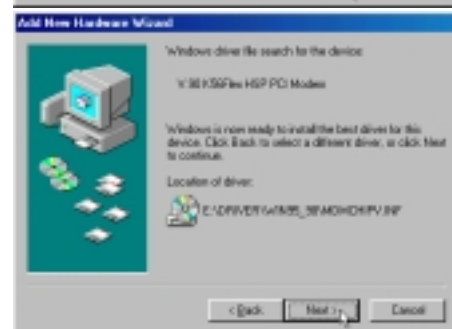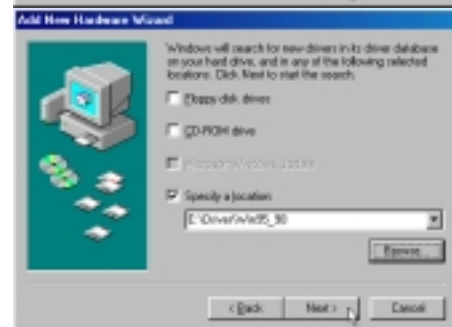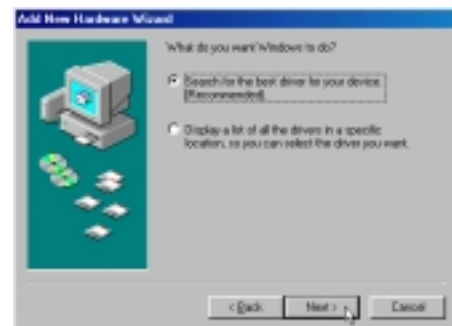
When correctly installed, the Notebook PC's internal built-in modem should show up in "Device Manager Modem" as the following item:

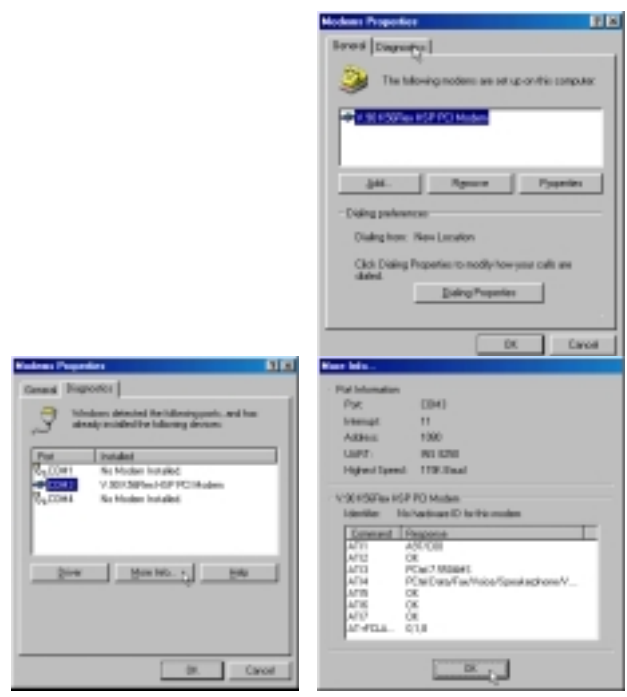- V.90 K56Flex HSP PCI Modem

Checking your Modem Setup

Click **Diagnostics** tab.

Click **COM3 V.90 K65Flex HSP PCI Modem**

Click **More Info....** If the modem is setup correctly, "Command" and "Responses" will be shown in the window. If the modem is not setup correctly. The window will display a communication error message.


Country Setting for the Modem

1. Double-Click **My Computer**, **Control Panel**, then **HSP Modem**.

2. Click the "Country" selection and choose the country you will be using the modem in. Click **Apply** to set and close the window.

   **FCC B:** The "Country" setting should be left on JAPAN unless traveling abroad.

   CTR21: The "Country" setting should be left on TBR21 unless traveling abroad. (Shown as CTR21 during setup.)

   JATE: The "Country" setting should be left on JAPAN unless traveling abroad.

My Computer   Control Panel   HSP Modem
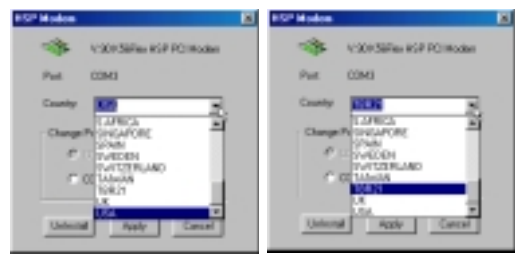
Changing the Modem Protocol

1. Select **V.90 K56Flex HSP PCI Modem.**

2. Click **Remove.**

3. Click **OK** to confirm device removal.

4. If you reinstall the driver the "Add New Hardware Wizard" will tell you that the location of the best driver is at: C:\WINDOWS\INF\OTHER\PCTEL_~1.INF. This driver must first be deleted in order for the new driver to be used.

5. Use Find Files or Folders... from the Start menu. Enter ***.inf** in "Named" and **C:\WINDOWS\INF\OTHER** in "Look in:". Click **Find Now** to start the search.

6. Right-click **PCtel, Inc. MDMCHIPV** and select **Delete**.
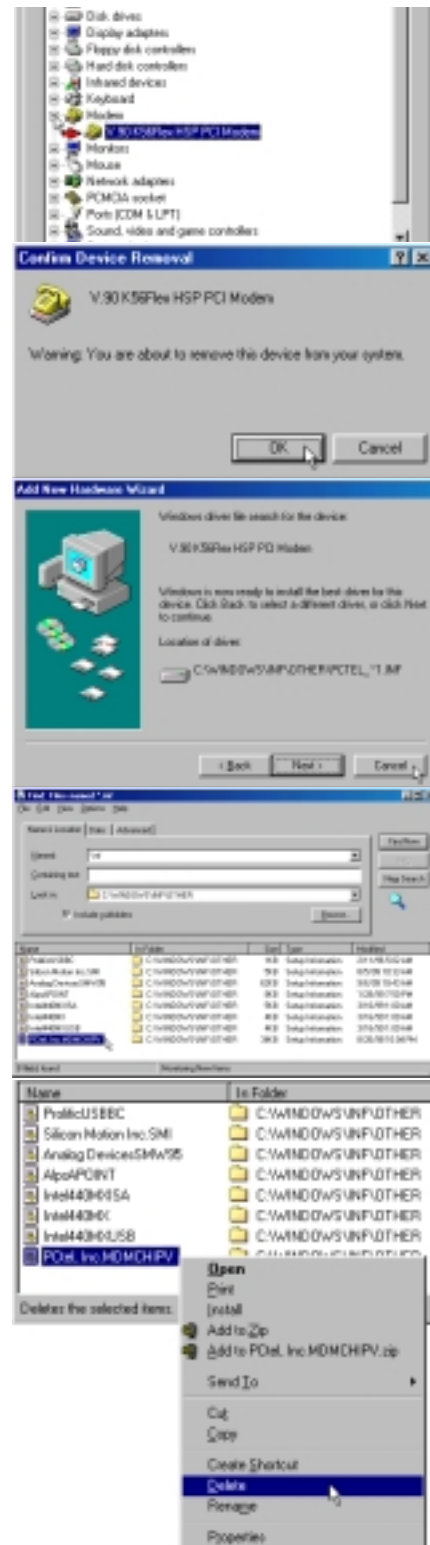
7. Click **Yes** to confirm file deletion.

8. When you reinstall the modem driver, the location of driver should be: **E:\DRIVER\WIN95_98\MDMCHIPV.INF**

9. Make sure that your support CD is inserted and click **OK** to continue.

10. Enter the letter of your CD-ROM drive and the **\DRIVER\WIN95_98** path on the Notebook PC support CD.

11. This screen will depend on the support CD that you are using.
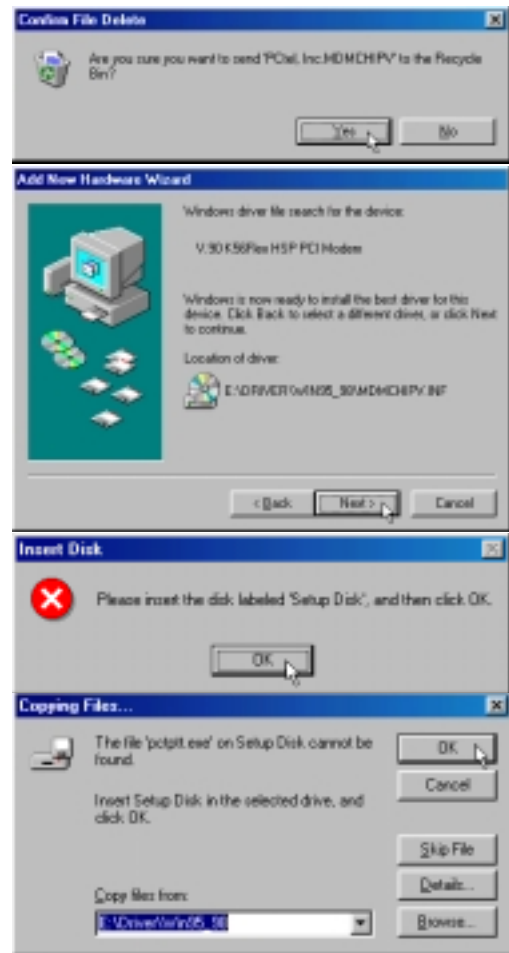
FCC B: USA

CTR21: TBR21 (EUROPE)

JATE: JAPAN

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Fax/Modem Software

1. Select **BitWare for Windows Voice/Fax/Data**.

2. Click **Install**.

3. Click **Accept** after reading the License Agreement.

4. Click **OK** to accept the default location or change the destination directory.

5. Fill in your personal information and click **OK** to continue.

6. Wait while files are being copied to your hard disk drive.

7. Click **OK** to create program icons in the default folder or select another folder or type in a new folder name for the program icons.

8. Click **OK** to create independent icons.

9. Click **OK** to create program icons in the default folder or select another folder or type in a new folder name for the program icons.

10. Wait while the modem is being detected.

11. Review the modem configuration and click **Close**.

12. Select whether the voicemail system will be used by a single or multiple users.

13. Click **OK** to restart your computer now or click **Cancel** so that you can install other items and restart your computer later.
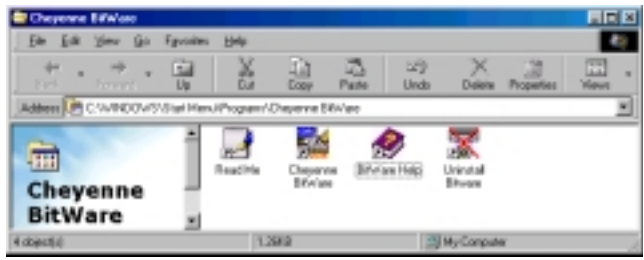
Program Groups and icons created by this installation. Run through "Start" menu "Programs".

Infrared Communication Notes

If you experience difficulties in using your infrared port for wireless communications or networking, complete the following procedure:

1. Double-click the **Network** icon in "Control Panel".

2. Scroll down to the network components until you find "Fast Infrared Protocol -> IrDA v3.0 Fast Infrared Port" and then double click on this item.

3. Click the **Advanced** tab.

4. Change the value for "Infrared Transceiver A" to **IBM 31T1100**.

5. Click **OK** to continue.

6. Insert your "Windows 98" CD and click **OK**.

7. Click **Yes** to restart your computer now.