

NOTEBOOK PC

SOFTWARE SETUP & REFERENCE

Windows 98 Software Setup

Support CD for Windows 98	2
Autorun Screen for Windows 98	2
Drivers for Windows 98	3
1. VGA Driver	5
Display Property Settings	6
2. Control Panel	8
3. VPM Driver	9
4. Audio Driver	10
5. DirectX 7	14
6. SpeedStep	15
7. ASUS PC Probe	16
8. TouchPad	18
9. PC-cillin 98	19

Windows 98 Software Reference21

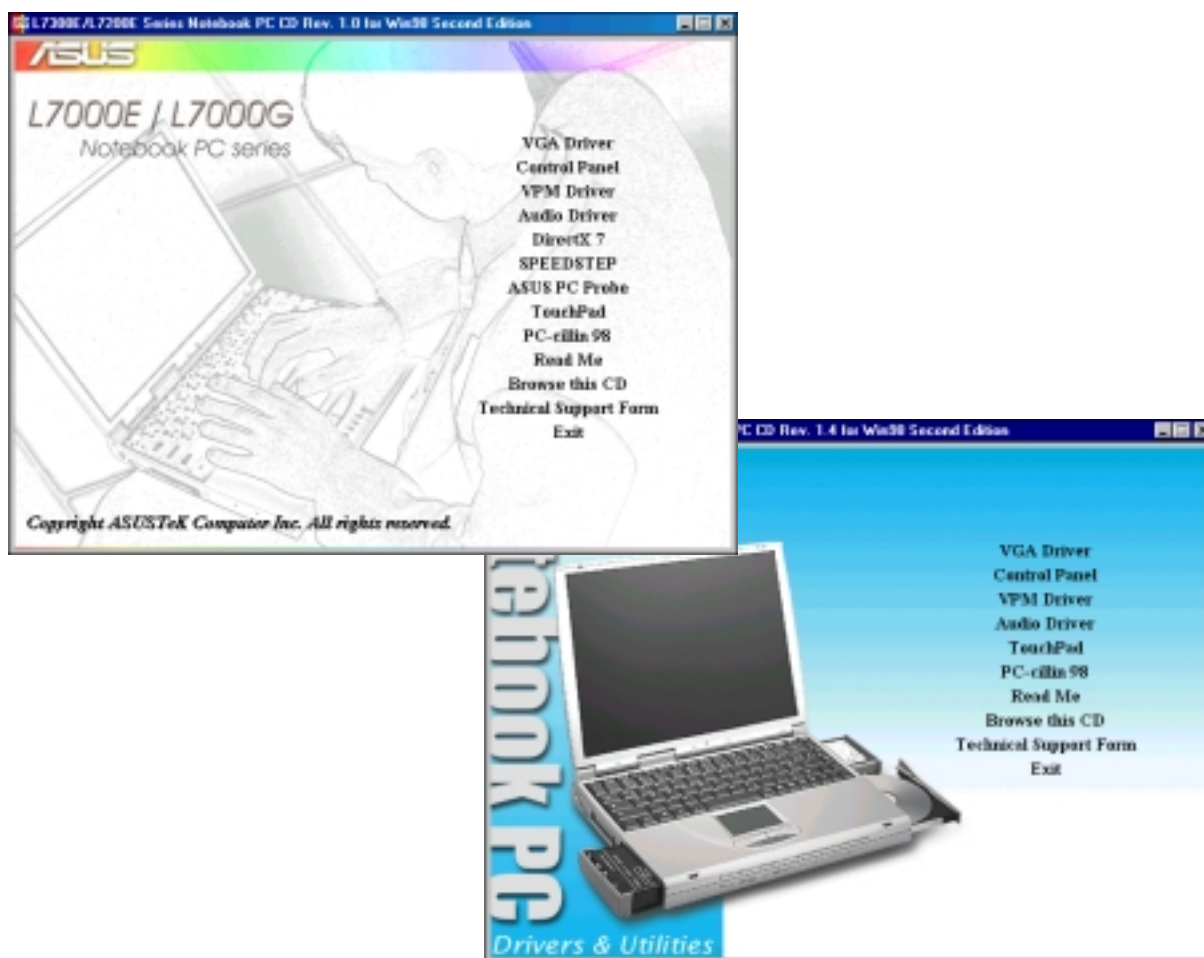
Product Name: **Notebook PC Support CD**
Manual Revision: **1.00 E513**
Release Date: **February 2000**

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. The autorun style will depend on your Notebook PC model.

NOTE: If you get driver installation wizards when starting Windows. Click Cancel on each wizard so that you can make proper driver installations using the provided support CD.

Autorun Screen for Windows 98



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 "Silicon Motion LynxEM" display drivers for your operating system in order to properly use the Notebook PC's built-in graphics and to provide optimal features. Once the display driver is installed, you can change your display's resolution and color through Display Properties. Right click the desktop and choose Properties or choose Display from the Control Panel. See this section for basic procedures on setting the display. Read the Windows documentation or Windows help files for detailed information if necessary.

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 documentation or Windows help files. Once the audio drivers are installed, you can change Volume controls by double clicking the speaker icon on the taskbar. Right click the speaker icon and choose Audio Properties for other configuration settings.

5. DirectX 7 (recommended)

Installs version 7 of the DirectX utility for modern multimedia software applications. Microsoft Windows uses DirectX to enhance multimedia capabilities on your computer. DirectX provides better playback of different types of multimedia and manages 3-D graphics better than console computers.

6. SpeedStep (recommended)

Installs Intel® SpeedStep™. Intel® SpeedStep™ technology provides near-desktop-level performance in a mobile PC by enabling the processor to operate at two different performance levels: Maximum Performance when connected to external power and Battery Optimized Performance when mobile.

7. ASUS PC Probe (optional)

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

8. TouchPad (recommended)

The Notebook PC fully supports built-in or externally connected keyboard and PS/2 mouse devices. The Notebook PC's integrated TouchPad pointing device is fully compatible with two or three-button PS/2 mice. However, the provided device driver will provide enhancements and features to the TouchPad to increase the functionality of the TouchPad. For detailed information, see the Software Reference in the next section of this User's Manual. To access help, right-click the TouchPad icon on the taskbar and select Help.

9. 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 useful anti-virus software is included on the support CD. You may skip this software if you have your own anti-virus software.

10. Read Me

Gives you notes concerning this support CD or the Notebook PC.

11. Browse this CD

Shows you the contents of this support CD using Windows Explorer.

12. Technical Support Form

Opens up a Technical Support Request Form so that you will understand what kind of information is needed if you run into problems and require technical assistance.

13. Exit

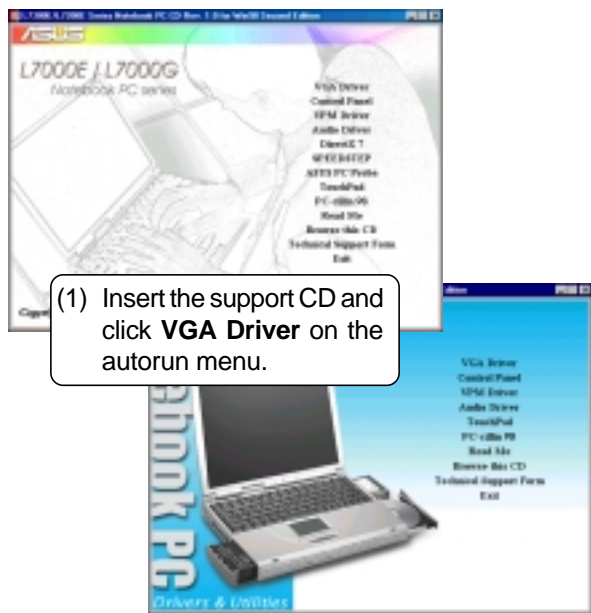
Closes the support CD autorun screen.

1. VGA Driver

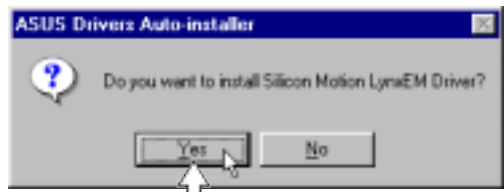
When the Notebook PC's built-in graphics device (VGA) is not installed correctly, "Device Manager Display adapters" will show "Standard PCI Graphics Adapter (VGA)". If this is the case, follow the procedure to install the VGA driver.



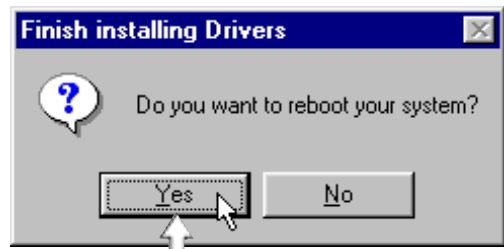
Installing the VGA Driver



(1) Insert the support CD and click **VGA Driver** on the autorun menu.



(2) Click **Yes** to begin installing drivers now.

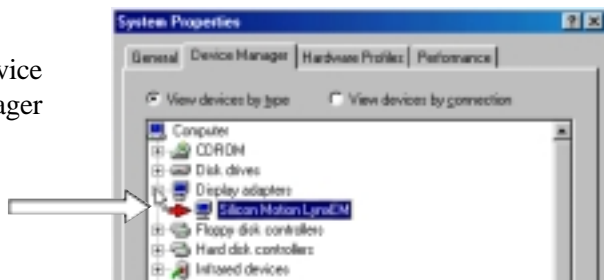


(3) Installation has finished. You should correct your display by restarting your computer before installing other items. Click **Yes** to restart your computer.

Checking the VGA Driver

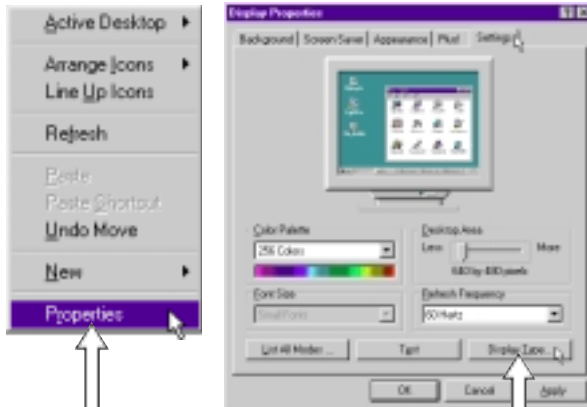
When the Notebook PC's built-in graphics device (VGA) is successfully installed, "Device Manager Display adapters" will show:

- Silicon Motion LynxEM



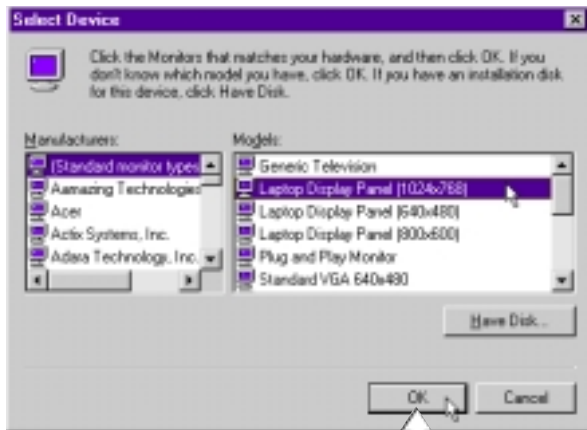
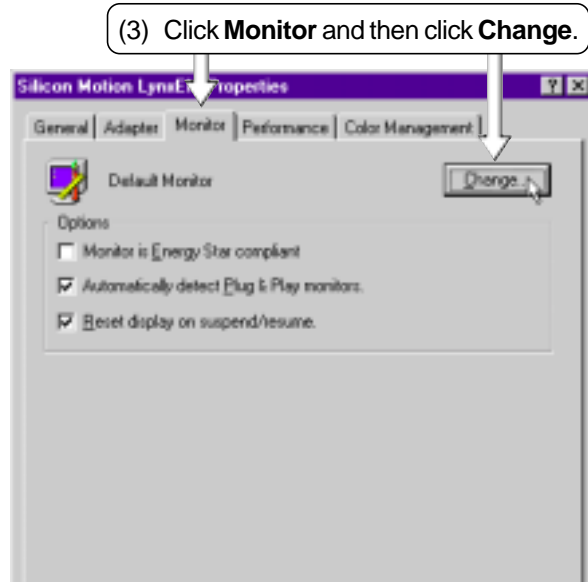
Display Property Settings

Setting the Display Properties



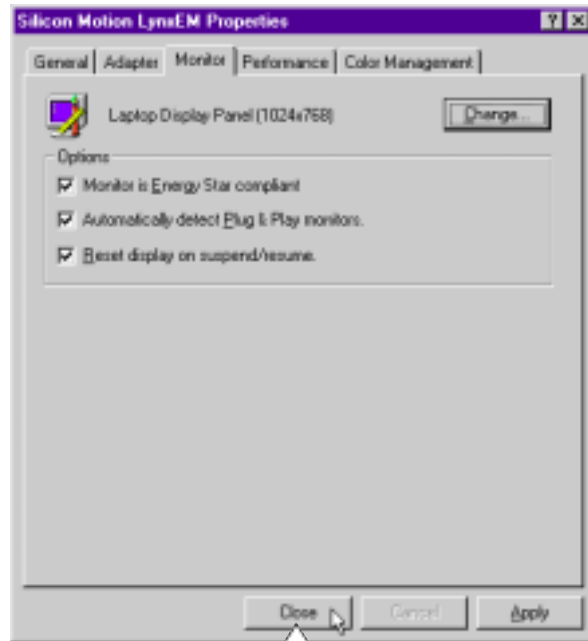
(1) Right-click on the Windows desktop and click **Properties**.

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



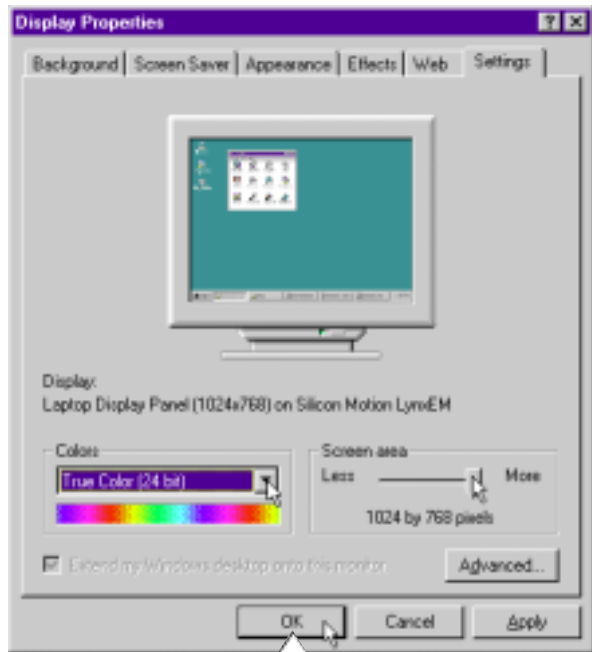
(4) Select **(Standard monitor types)** from "Manufacturers" and **Laptop Display Panel (1024x768)** from "Models".

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

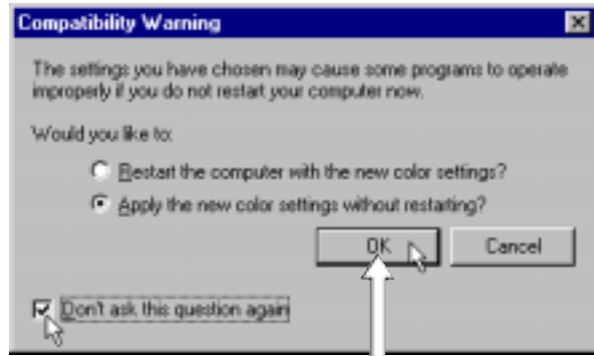


(5) Click **Close** to return to "Display Properties".

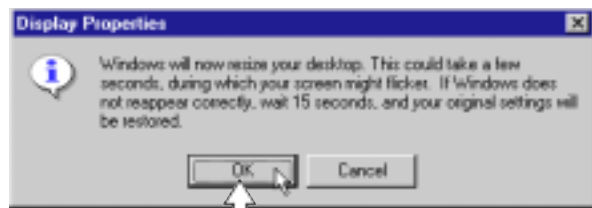
Display Property Settings (Cont')



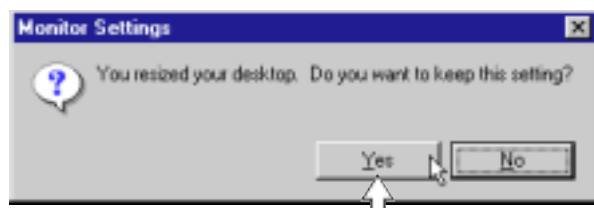
(6) Drag the "Screen area" adjustment bar so that it reads 1024 by 768 pixels and select the "High Color" and click **OK**. Selecting "True Color" will disable Dual Display.



(7) A warning will be shown, select "Apply the new color settings without restarting?" and "Don't ask this question again".
Click **OK** to continue.



(8) Click **OK** to resize your desktop.



(9) Click **Yes** to keep the setting. You should restart your computer after all the display settings are configured.

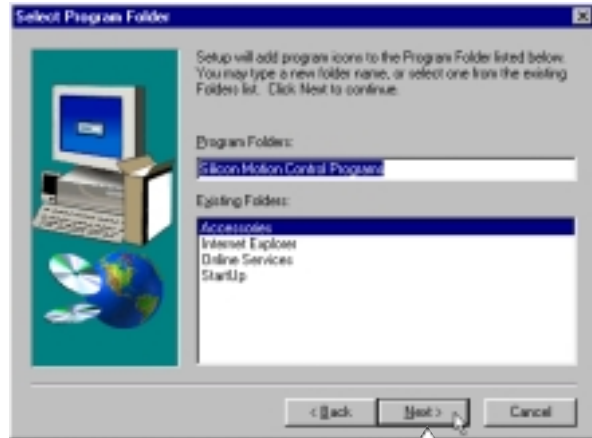
2. Control Panel

Please see Software Reference for more information on this utility.

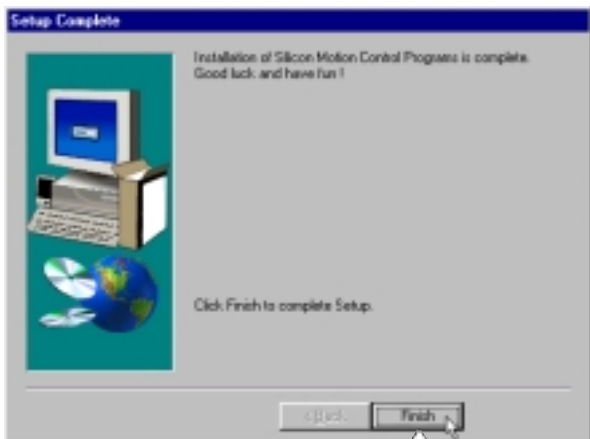
Installing the Control Panel



- (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) The installation has finished. Click **Finish** to exit the installation wizard.

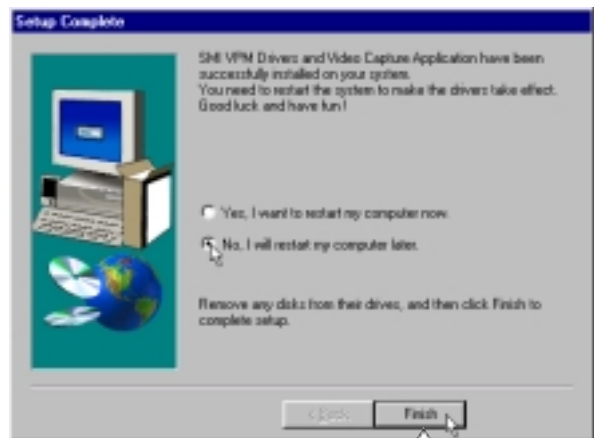
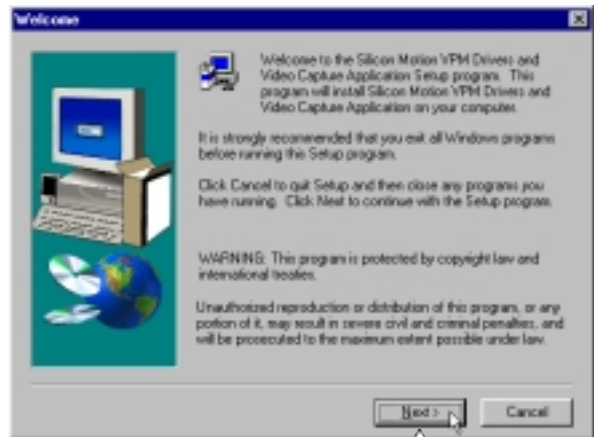
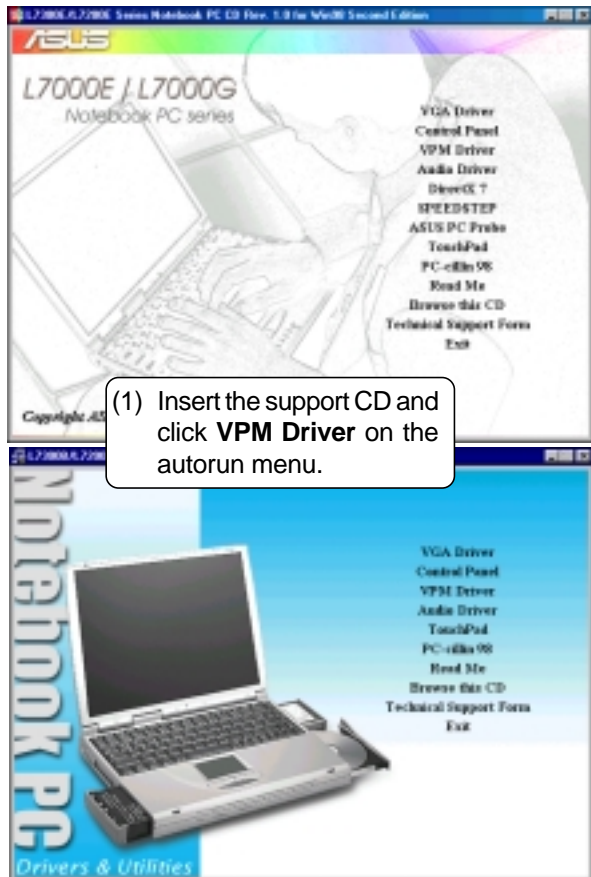


Windows Task Bar

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**.

3. VPM Driver

Installing the VPM Driver

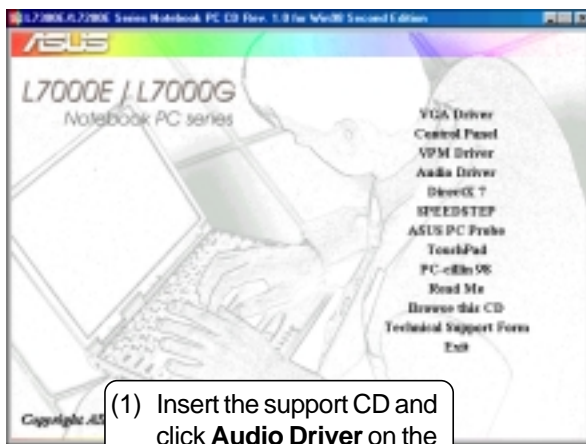


4. Audio Driver

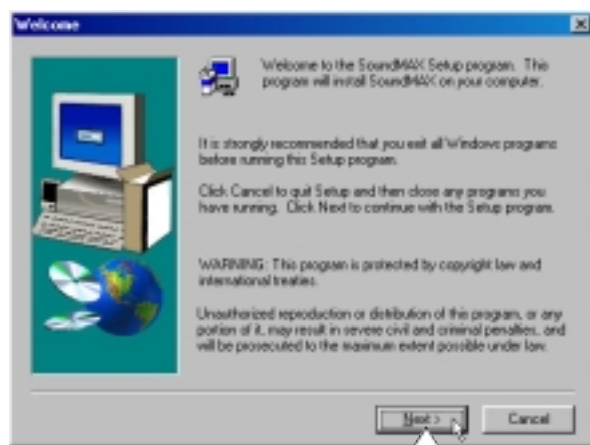
When the Notebook PC's built-in audio is not installed correctly, a question mark will show in "Device Manager" for "PCI Multimedia Audio Device." If this is the case, follow the procedure to install the audio drivers.



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) Installation has finished. 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

After the Notebook PC's built-in audio is properly installed, the following should appear under "Sound, video and game controllers" in "Device Manager":

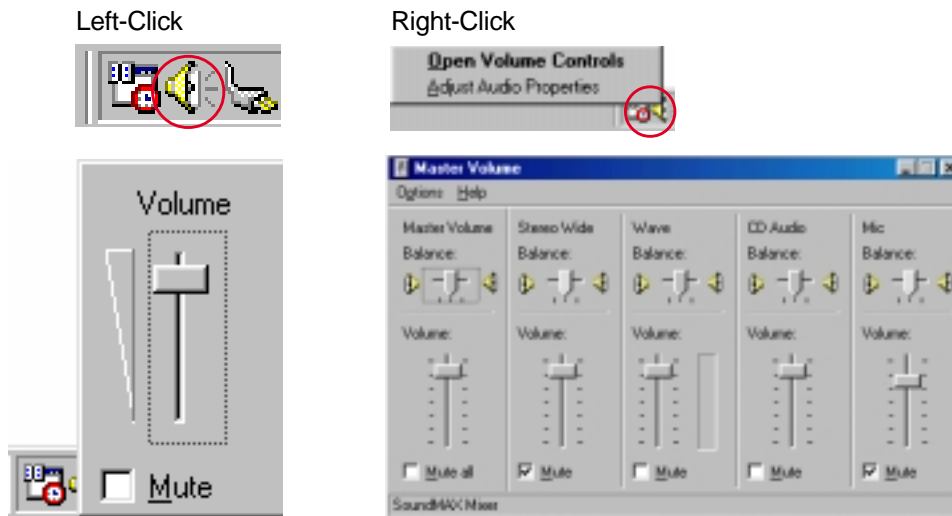
- SoundMAX Integrated Digital Audio



NOTE: The "Wave Device for Voice Modem" will only show when the modem driver is properly installed.

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.

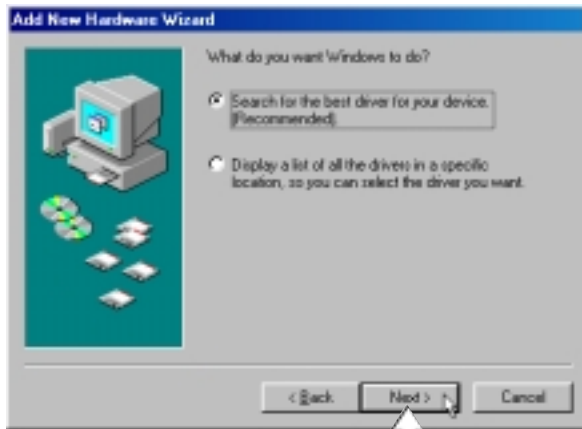
(5) Click the “**PCI Multimedia Audio Device**” or other audio devices with an error.

(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.

(9) Click **Next** to search for new drivers.



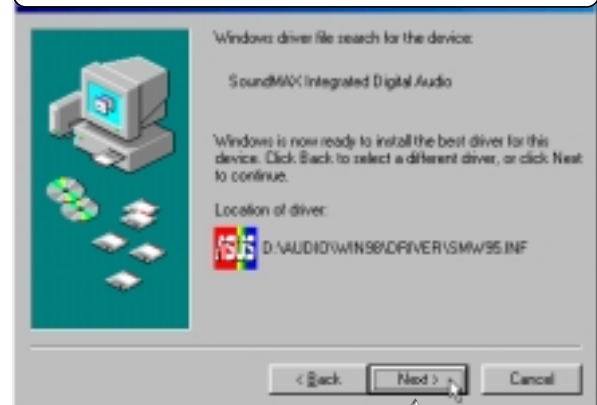
(10) Click **Next** to search for the best driver for your device.



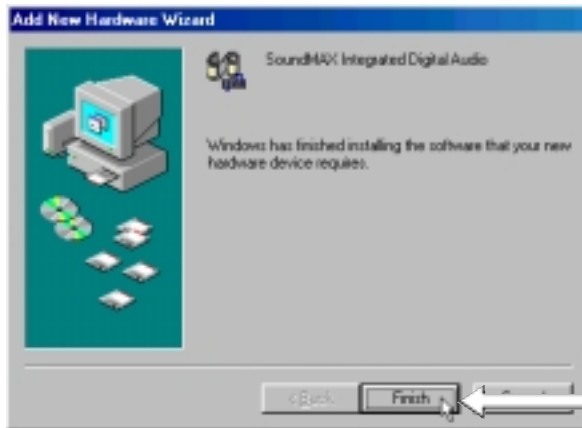
(11) Enter the letter of your CD-ROM drive and the **AUDIO\WIN9X\DRIVER** path on the Notebook PC support CD. (Browse to the folder that corresponds to your OS.) Click **Next** to determine the best driver for your device.



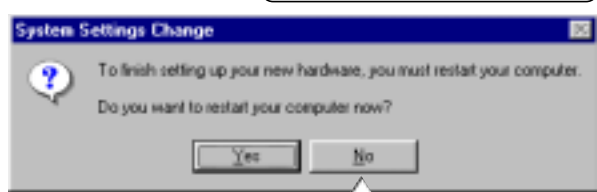
(12) Click **Next** to install the recommended driver.



(13) Click **Next** to install the recommended driver.

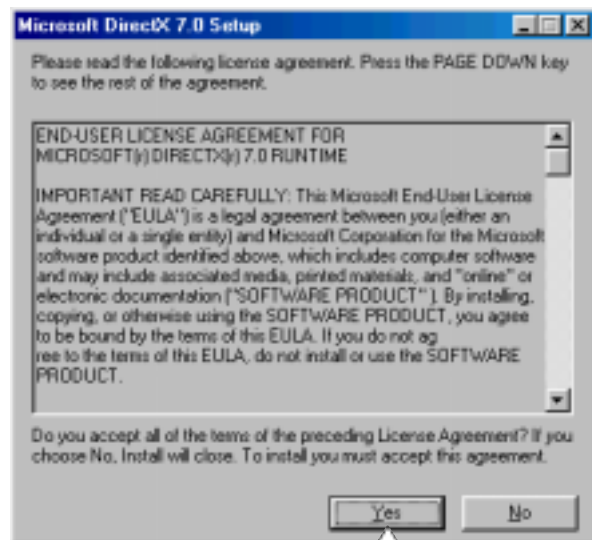
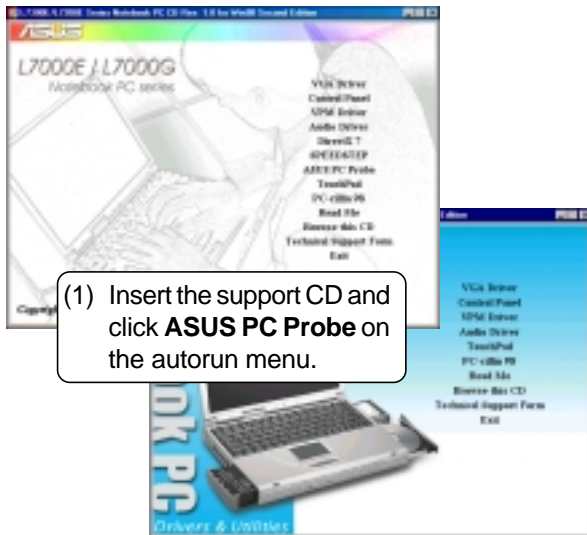


(14) The installation has finished. Click **Finish** to exit the installation wizard.



(15) Click **No** so that you can install other items.

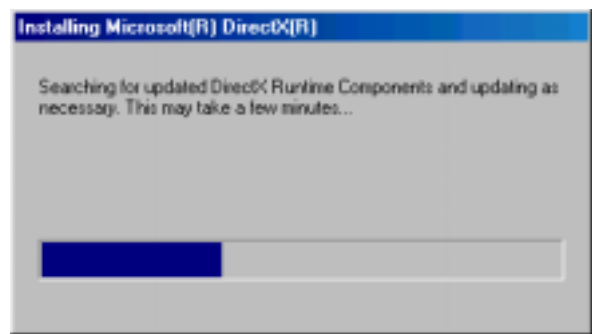
5. DirectX 7



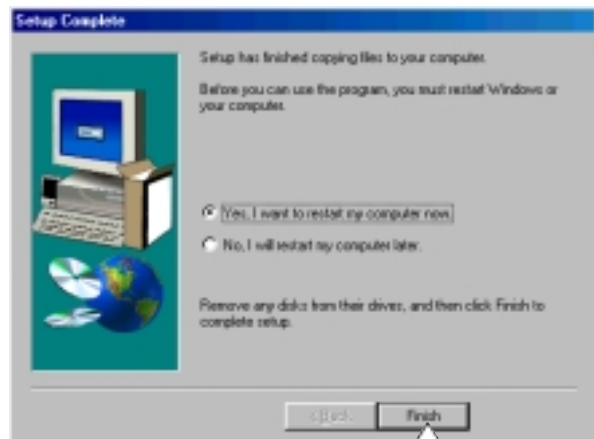
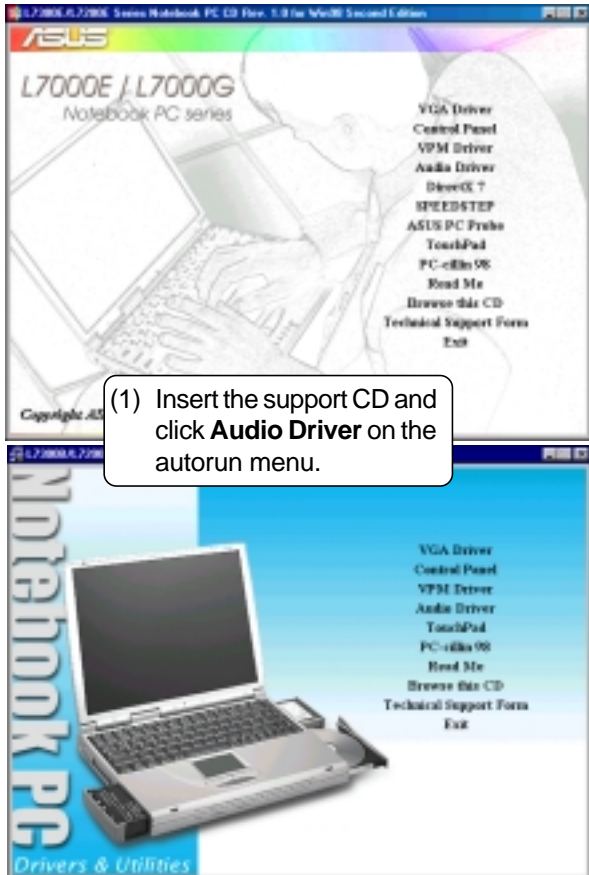
(3) Click **Reinstall DirectX** to begin installation.



(4) Installation has finished. Click **OK** to restart your computer.
NOTE: You cannot skip the restart.



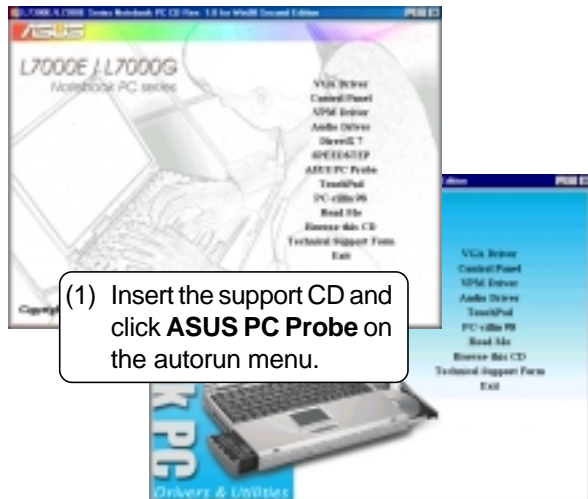
6. SpeedStep



7. 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 ASUS PC Probe



7. ASUS PC Probe (Cont')



(5) Adjust the settings if you desire and click **Next**.

NOTE: 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.



(6) Click **Yes** after reading the final current settings.



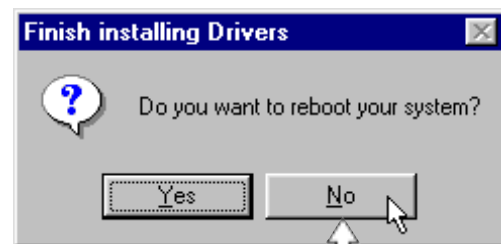
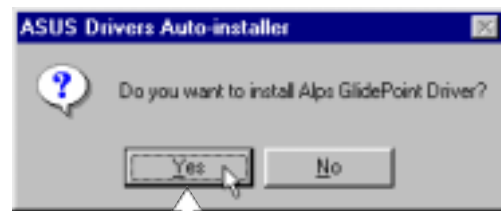
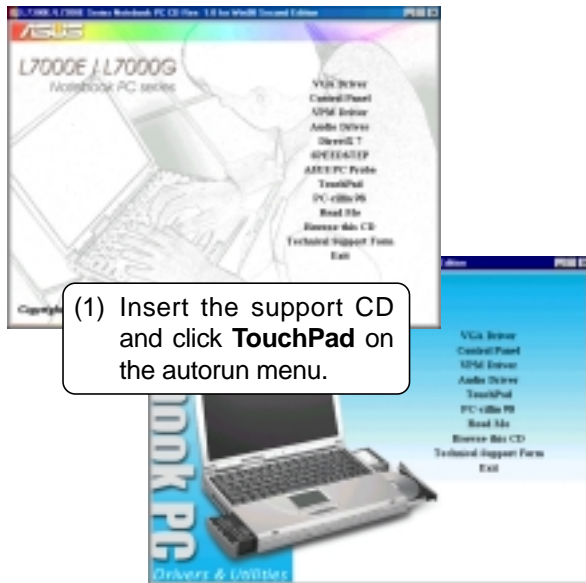
(7) Choose another folder, create a new folder, or click **Next** to use the default folder for the program icons.



(8) Installation has finished. Click **Finish** to exit and execute commands checked above.

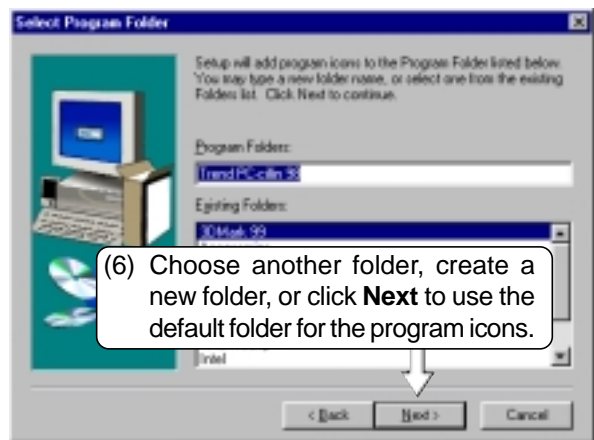
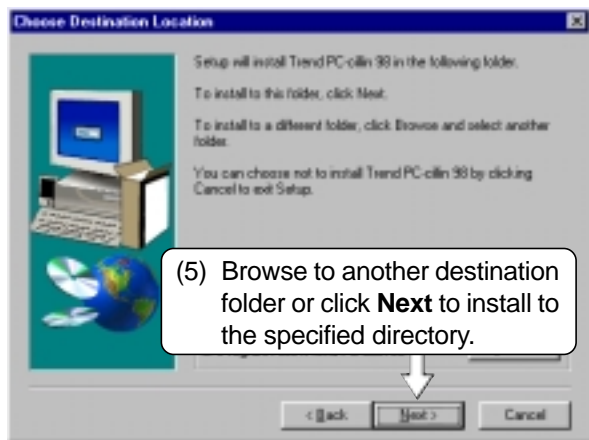
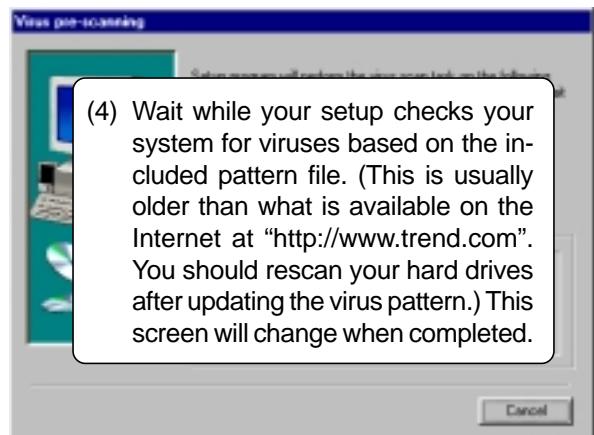
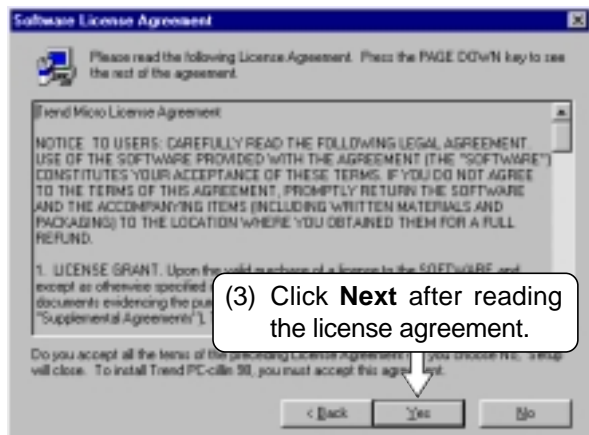
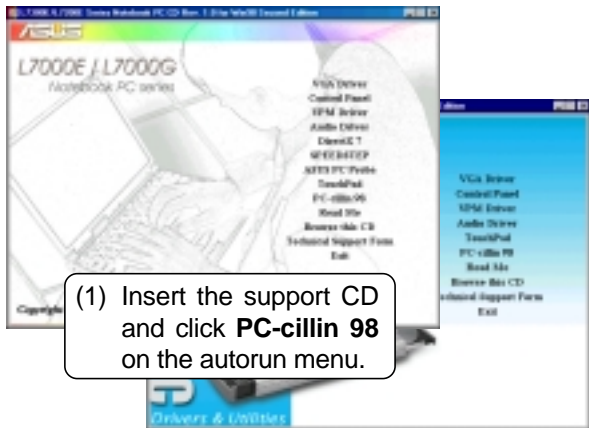
8. TouchPad

Installing the TouchPad Utility



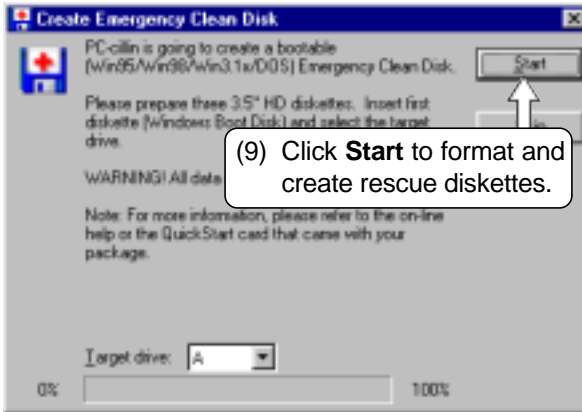
9. PC-cillin 98

Installing PC-cillin 98

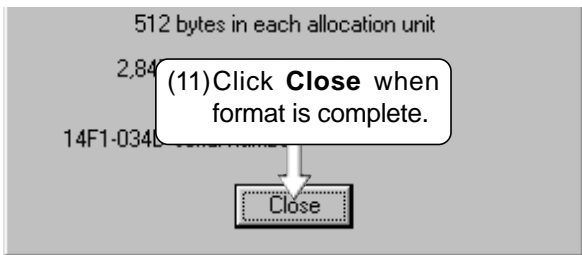


9. PC-cillin 98

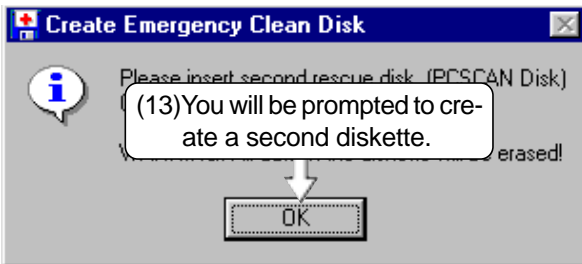
(7) Answer **Yes** or **No** to add PC-cillin to your active desktop and subscribe to the Internet "channel" so that you can be notified of updates.



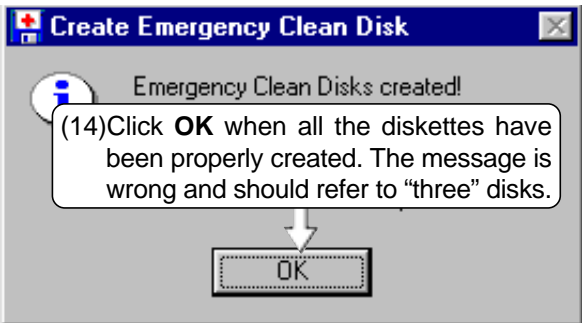
(9) Click **Start** to format and create rescue diskettes.



(11) Click **Close** when format is complete.

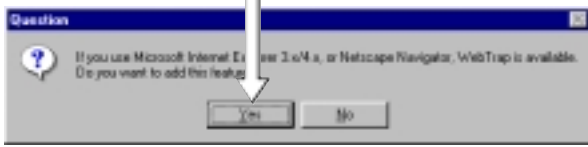


(13) You will be prompted to create a second diskette.

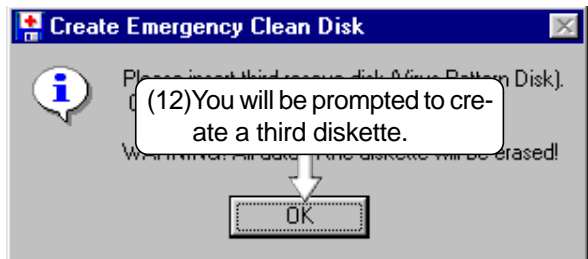


(14) Click **OK** when all the diskettes have been properly created. The message is wrong and should refer to "three" disks.

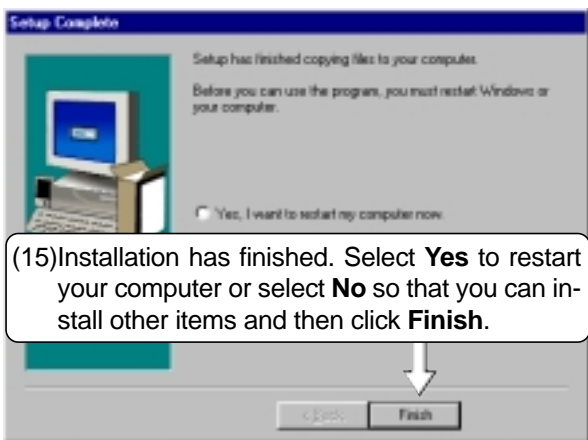
(8) Answer **Yes** or **No** to apply PC-cillin anti-virus protection to your Internet browser.



(10) Click **Start** to format a floppy diskette.



(12) You will be prompted to create a third diskette.



(15) Installation has finished. Select **Yes** to restart your computer or select **No** so that you can install other items and then click **Finish**.

NOTEBOOK PC
SOFTWARE REFERENCE

WINDOWS 98

Contents

VGA DRIVER	25
Dual Display Settings	26
Display Arrangement	26
Enabling an External Monitor	27
SPEEDSTEP	29
Intel® SpeedStep™ Overview	30
How it Works	30
IT Friendly	30
Summary	31
SpeedStep Properties and Settings	32
SpeedStep Software Notes	34
ASUS PC PROBE	35
ASUS PC Probe	36
Starting ASUS PC Probe	36
Using ASUS PC Probe Monitoring	37
ASUS PC Probe Task Bar Icon	39
TOUCHPAD	41
Section Overview	42
Changing the Settings	42
Mouse Properties	42
Buttons	42
Functions assigned to buttons	43
Double Click Speed	43
Use Wheel Function	43
Options	43
Options (Cont')	44
Scroll Speed	44
Scroll Area	44
Tray Icon	44
Mouse Compatibility Mode	44
Motion	45
Acceleration	45
Speed	45

Scrolling Properties Page	46
Orientation Settings	46
Pointer Trail	46
Orientation	46
Auto Jumps	47
Button Actions Properties Page	47
Edge Motion Properties Page	48
Tapping	48
Touch Properties Page	49
Tapping	49
Tapping Speed	49
Drag Lock Settings	49
Typing	49
Gesture	50
Corner Tap Functions	50
Use Scroll Function	50
Option	50
Sound Feedback	51
Easy Launcher	52
Application button(s)	52
Shortcut List	53
New	53
Delete	53
Change	53
Easy Launcher Properties	53
Up/Down	54
Option	54
General controls	57
OK	57
Cancel	57
Apply	57
Default	57
Version Information	57
Frequently Asked Questions (FAQ)	58

PC-CILLIN 98	59
PC-cillin 98 Features	60
What are Computer Viruses?	61
Methods of Virus Scan	61
Actions on Virus Found	62
What are Virus Pattern Files?	62
Real-time Monitor	63
WebTrap	63
Manual Scan	63
Scan Window	64
Manual Scan	64
 APPENDIX	 65
Using New Hard Disk Drives	66
Creating a Bootable Diskette	66
Using the FDISK.EXE Utility	66
Formatting the Hard Disk Drive	66
Using Save-to-Disk	67
Creating a Save-to-Disk Partition	67
Creating a Save-to-Disk File	67
CD-ROM Support Under MS-DOS	68
Microsoft Windows 98	69
Infrared Communication Notes	70
Communication Regulations (Notebook PC with modem)	71
FCC Regulations	71
Declaration Of Conformity (Notebook PC with modem)	72
Canadian Department Of Communications (CDOC):	72

VGA DRIVER

Topics Covered:

Dual Display Settings

Display Arrangement

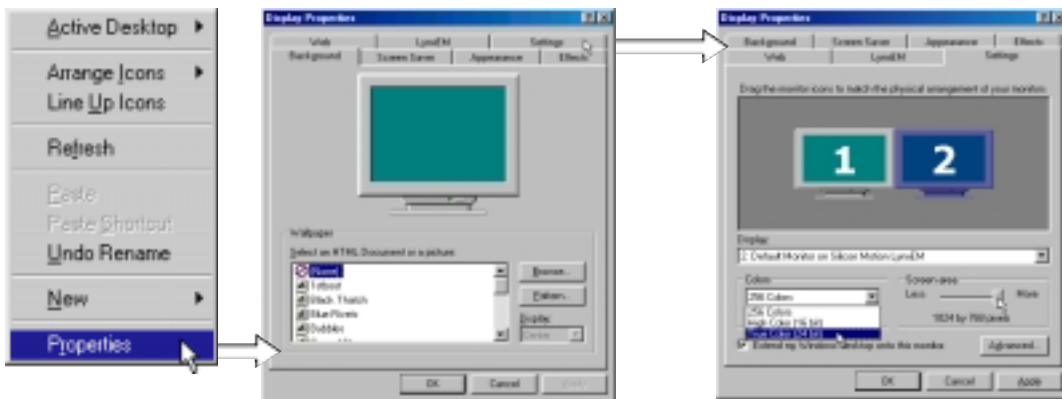
Enabling an External Monitor

Color Settings

Dual Display Settings

When you enter the Display Properties Settings, two displays will be shown (the Notebook PC's display must be set to "256 colors" or "High Color"). You can set the resolution, color, and monitor type independently from each other in order to make independent display adjustments. Dual display provides the following two features:

- **Dual Application** – Display independent applications (graphics or video) on two different displays. Such as a spreadsheet on one display and a presentation on another display.



(1) Right click the desktop and select Properties.

(2) Click the **Settings** tab.

Click on either monitor 1 (the Notebook PC's LCD display) or monitor 2 (externally connected monitor through the 15-pin VGA port).

When you choose the second display, you will be asked whether you want to activate the second display. Select Yes to enable the second display. You can uncheck the "Extend my Windows desktop onto this monitor" at any time to disable the second display on the Notebook PC.



NOTE: Making dual display settings do not require a second display to be connected, but using Dual Application requires a second display to be connected to the VGA port on the Notebook PC.

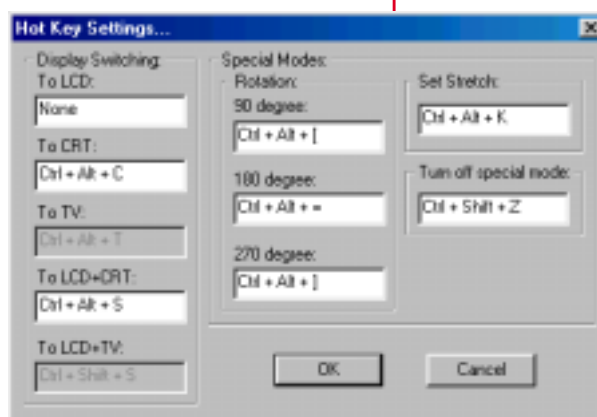
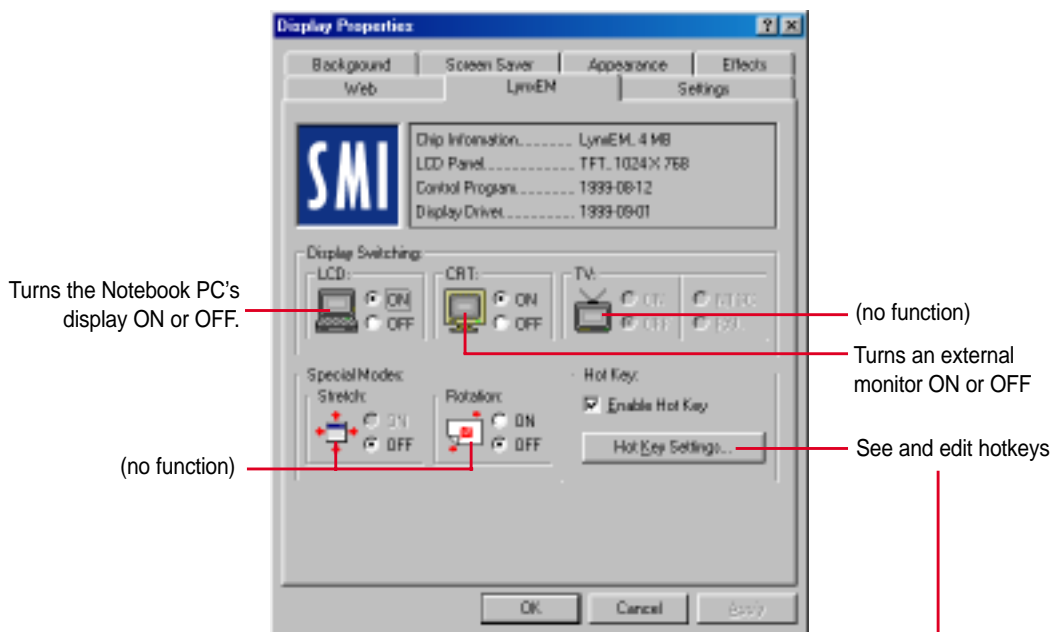
Display Arrangement

You can drag either display with your cursor in order to arrange the two displays in a configuration that is convenient for your use. In this example, the second display can be accessed by moving down from the first display.



Enabling an External Monitor

Use the LCD/Monitor Function keys <Fn><F8> to toggle between the Notebook PC's LCD display and an external monitor in this series: Notebook PC LCD -> External Monitor -> Both. You can also enable or disable displays using the display settings software.



SPEEDSTEP

Topics Covered:

Intel® SpeedStep™ Overview

How it Works

IT Friendly

Summary

SpeedStep Properties and Settings

SpeedStep Software Notes

Intel® SpeedStep™ Overview

Most important, the new processors, rated at frequencies of 600MHz and 650MHz, will be the first to incorporate an innovative performance technology called Intel® SpeedStep™ technology. Built into certain mobile Pentium III processors, this technology from Intel provides near-desktop performance with all the benefits of mobility. When connected to an AC power source, mobile Pentium III processors featuring Intel SpeedStep technology will deliver near-desktop-level performance. When working on battery, the mobile PC automatically detects the change and drops both the processor clock frequency and voltage to deliver outstanding performance without compromising battery life. This new technology will be available in the thinnest and lightest mobile PCs, so users won't have to compromise in order to enjoy the mobility they have come to expect.

How it Works

Mobile Pentium III processors featuring Intel SpeedStep technology can be switched between two performance modes—maximum performance and battery-optimized performance—either automatically or by user command. By default, mobile PCs with mobile Pentium III processors featuring Intel SpeedStep technology detect when they are plugged into or unplugged from an AC outlet. When a system is unplugged, the processor core automatically drops to 500MHz from the peak frequency of 600MHz or 650MHz. At the same time, the operating voltage of the processor drops to 1.35 volts from 1.6 volts. Plug that system back into an outlet, and the processor automatically speeds back up to peak frequency and boosts voltage to 1.6 volts.

Users can also manually adjust the Intel SpeedStep technology mode. For example, if a user needs to conduct a presentation away from an outlet, he or she can use the Intel SpeedStep technology applet to put the mobile PC into maximum performance mode. The applet is accessed via an icon in the Windows* Taskbar. When the presentation is complete, the system can be put back into battery-optimized performance mode.

When switching performance modes, Intel SpeedStep technology can reduce the active power of the processor up to 45% while maintaining up to 80% of the maximum performance. Switching voltage levels provides significant power savings, because power consumption occurs in proportion to the square of voltage. By contrast, clock frequency has a linear relationship with power consumption. The result: A slight reduction in voltage yields a significant impact on power savings. Of course, the overall impact on battery life depends on the application running and the design and components of the mobile PC.

IT Friendly

IT managers will be glad to know that Intel SpeedStep technology functionality is completely seamless. If we look under the hood, we find that Intel SpeedStep technology uses Intel® QuickStart technology to put the processor into “sleep” mode. The voltage level and processor frequency are then adjusted and the system awakened. The process is completely transparent to running applications and takes just one-half of a millisecond to complete—less time than the blink of an eye.

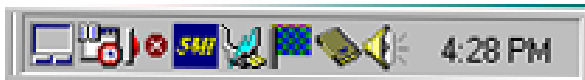
What's more, IT managers won't have to worry about implementing Intel SpeedStep technology in the enterprise. The technology works with all major operating systems, including Microsoft's Windows 95, Windows 98, Windows NT 4.0, and Windows 2000.

Summary

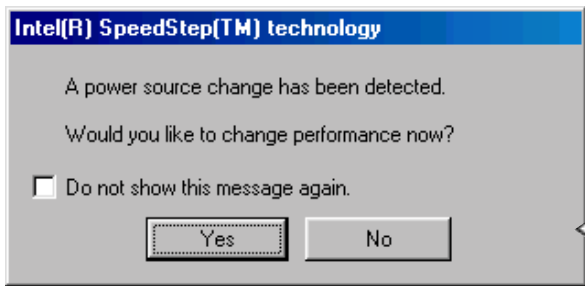
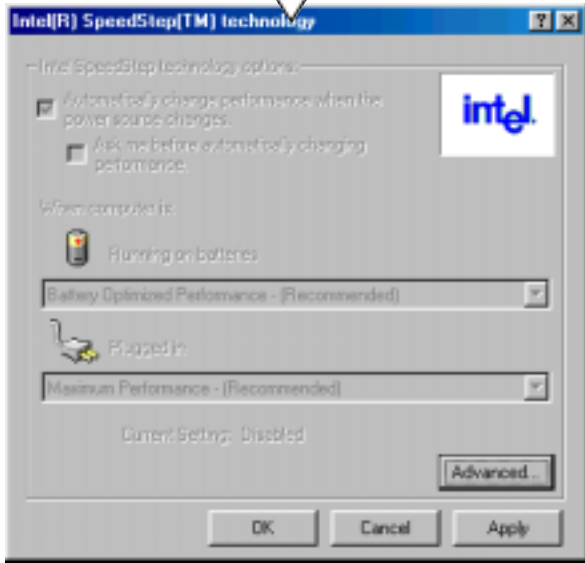
When the notebook is plugged in, mobile Pentium III processors run at peak clock frequency—600MHz and 650MHz for current models. When the system runs on battery power, clock rates drop to 500MHz.

- Operating voltages also switch, dropping to 1.35 volts when unplugged from 1.6 volts when running off an AC power source.
- The mode switch can be invoked automatically when systems are plugged into or unplugged from an outlet, or by user command using a simple utility.
- Mode switches occur in less than one-half a millisecond and are completely transparent to both the end user and running applications.
- Intel mobile Pentium III processors featuring Intel SpeedStep technology allow OEMs to build mobile PCs that closely match the performance and capabilities of advanced desktop systems.

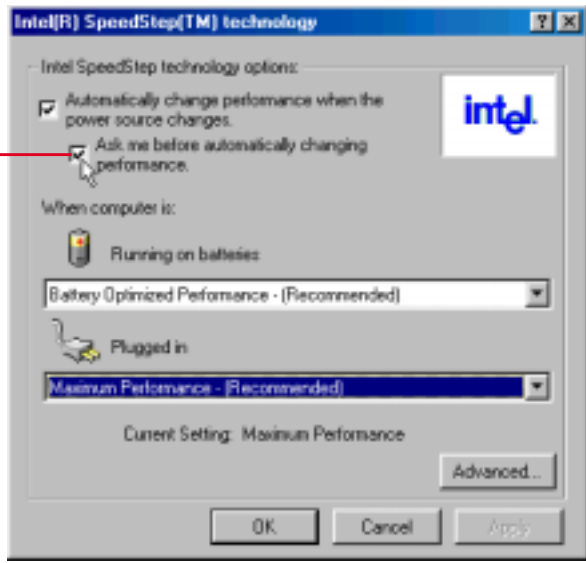
SpeedStep Properties and Settings



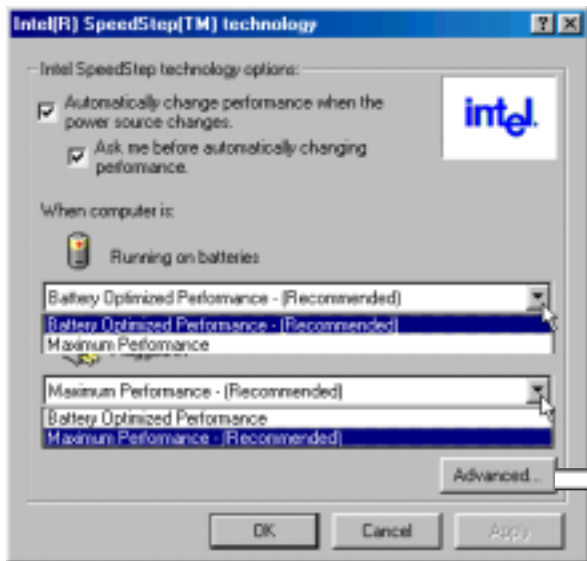
NOTE: If your processor does not support SpeedStep, the blue flag will have an "x" over it. Entering the properties page (double clicking with left button or selecting the menu called up by the right button) will show grayed out items.



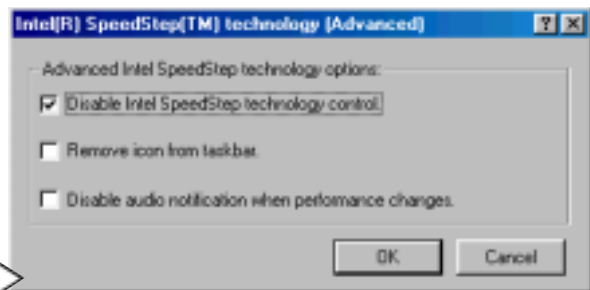
Passing the cursor over the blue flag icon will show the performance status. There are two statuses: "Maximum Performance" or "Battery Optimized Performance".



Select "Ask me before automatically changing performance" if you tend to plug and unplug the power while the Notebook PC is running applications. This will ensure that running applications do not stop due to a decrease in processor speed.



You can independently choose the performance level while “running on batteries” and when “plugged in”.



Clicking “Advanced” gives you the choice to:

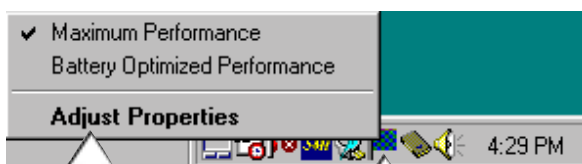
Disable SpeedStep - Your Notebook PC will always run at the maximum processor speed regardless of whether an AC power source is present.

Remove icon from taskbar - Removes the blue flag icon from the taskbar. You will then have to enter the properties settings through the Control Panel “Power Management” icon.

Disable audio notification when performance changes - By default, a “ping” sound is heard when speed changes. If the noise is a problem, you can disable it here.



You may have to restart your computer in order to activate certain settings.



Right-clicking the blue flag will give you a menu in order to manually change the processor speed and to enter the properties page.

SpeedStep Software Notes

WARNING

You are authorized and licensed to install this application and driver **ONLY** on a Licensed PC that has System Management Mode (SMM) BIOS support installed. This driver may permanently damage any system that does not meet these requirements. A Licensed PC is a computer which (1) is capable of seamlessly and automatically transitioning among multiple performance states (potentially operating at different efficiency ratings) based upon power source changes, end user preference, processor performance demand, and thermal conditions; and (2.) includes an Intel mobile Pentium II processor, Intel mobile Pentium III processor, or any other future Intel processors that incorporates the capability to transition between different performance states by altering some or any combination of the following processor attributes: core voltage, core frequency, bus frequency, number of processor cores available, or any other attribute that changes the efficiency (instructions/unit time-power) at which the processor operates.

The User Interface

The User Interface is accessed either from the system tray icon (a “flag”) or from the power management icon in the Control Panel. If the user does not have restricted privileges (on Windows 2000 or NT4.0), the User Interface allows the user to select their processor performance level preference for when the computer is running on AC or on battery. The User Interface allows for advanced options, such as disabling the Applet. Disabling the Applet only disables the user’s ability to set preferences and control transitions, it does not disable Intel SpeedStep technology in the BIOS. The Applet never issues a SetSpeedStepSetup SMI command with ECX = 0xFF to disable control. The only way to completely disable Intel SpeedStep technology is via the BIOS setup.

Restricted User limitations

With some Windows operating systems, like Windows 2000, a user account can be created that has restricted access to the operating system and its environment. While the IST Applet will run correctly, the system preferences will not be available for the user to modify. System level preferences include the ability to disable the Applet and the ability to set processor performance level preferences for AC and battery. These choices will be grayed out. User preferences will not be effected.

Over-installing

If the Intel SpeedStep technology Applet has been installed previously, we recommend that you first uninstall the Applet.

If you over-install the Intel SpeedStep technology Applet without first uninstalling, the Applet must be removed from the running task list. If the Applet is running while attempting to over-install, an error message will appear informing the user to first uninstall the Applet before proceeding. Also, the OEM configuration and user preference values stored in the Windows registry will be overwritten by the values contained in the Registry.ini file that is part of the installation package.

Uninstalling the Applet

Open **Control Panel | Add Remove Programs** and select the Intel SpeedStep technology Applet entry and press **Add/Remove**.

ASUS PC PROBE

Topics Covered:

Starting ASUS PC Probe

Using PC Probe Monitoring

ASUS PC Probe Task Bar Icon

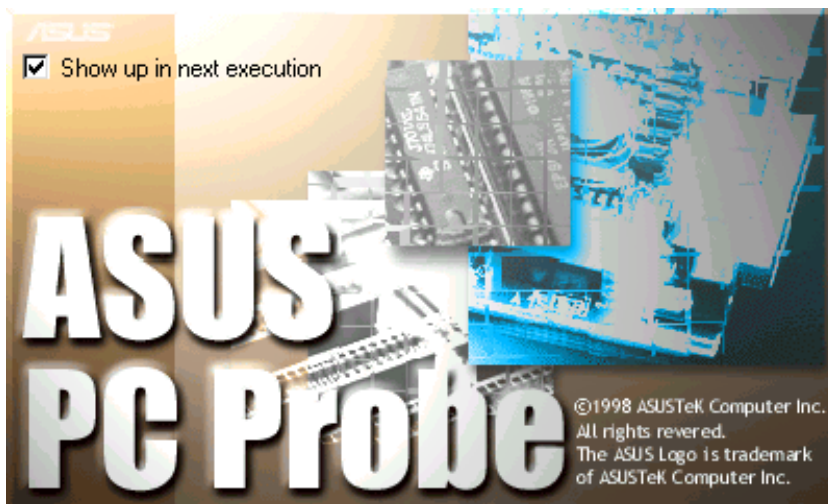
ASUS PC Probe


ASUS PC Probe is a convenient utility to continuously monitor your computer system's vital components, such as fan rotations, voltages, and temperatures. It also has a utility that lets you review useful information about your computer, such as hard disk space, memory usage, and CPU type, CPU speed, and internal/external frequencies through the DMI Explorer.

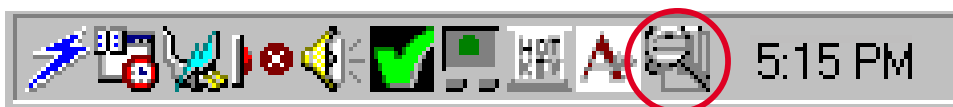
Starting ASUS PC Probe

If the ASUS Probe icon (magnifying glass) is not shown on the taskbar (see below), click the Windows **Start** button, point to **Programs**, and then **ASUS Utility**, and then click **Probe VX.XX**.

When ASUS PC Probe starts, a splash screen appears allowing you to select whether to show the screen again when you open PC Probe or not. To bypass this startup screen, clear the **Show up in next execution** check box.



The PC Probe icon  will appear on the taskbar's system tray indicating that ASUS PC Probe is running. Clicking the icon once will allow open the PC Probe interface.



NOTE: PC Probe will constantly use resources to check the system status while Windows is operating. It is suggested to exit PC Probe while using high demanding applications.

Using ASUS PC Probe Monitoring

Monitoring

Monitor Summary

Shows a summary of the items being monitored.



Temperature Monitor

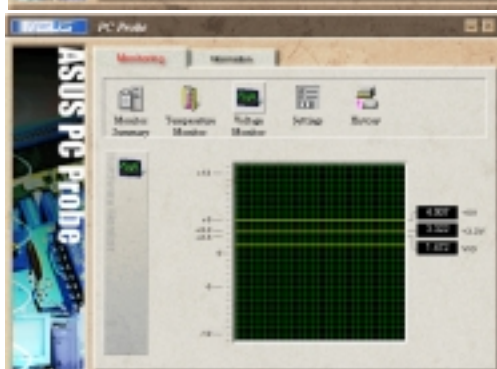
Shows the PC's temperature.

Temperature Warning threshold adjustment
(Move the slider up to increase the threshold level or down to decrease the threshold level)



Voltage Monitor

Shows the PC's voltages.



Settings

Lets you set threshold levels and polling intervals or refresh times of the PC's temperature, fan rotation, and voltages.



History

Lets you record the monitoring activity of a certain component of your PC by date, time, and target history.

Information

Hard Drives

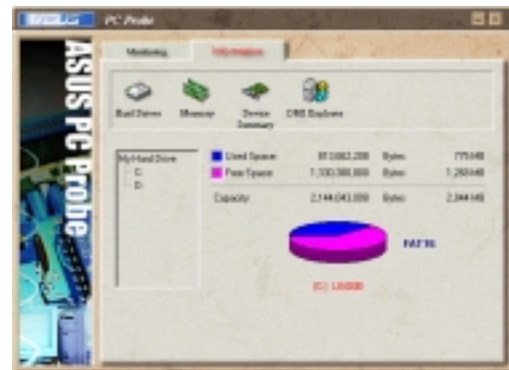
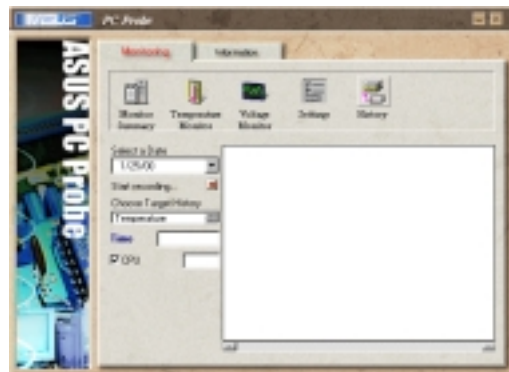
Shows the used and free space of the PC's hard disk drives and the file allocation table or file system used.

More Hard Drives

Information on other hard drives can be accessed by clicking on the relevant drive letter.

Memory

Shows the PC's memory load, memory usage, and paging file usage.



Device Summary

Shows a summary of devices in your PC.



DMI Explorer

Shows information pertinent to the PC, such as CPU type, CPU speed, and internal/external frequencies, and memory size.



PC Probe

ASUS PC Probe Task Bar Icon

Right clicking the PC Probe icon will bring up a menu to open or exit ASUS PC Probe and pause or resume all system monitoring.



When the ASUS PC Probe senses a problem with your PC, portions of the ASUS PC Probe icon changes to red, the PC speaker beeps, and the ASUS PC Probe monitor is displayed.



TOUCHPAD

Topics Covered:

Section Overview

Changing the Settings

Options

Motion

Scrolling Properties Page

Orientation

Button Actions Properties Page

Edge Motion Properties Page

Tapping

Touch Properties Page

Gesture

Sound Feedback

Easy Launcher

General controls

Frequently Asked Questions

Section Overview

The Alps Mouse Utility is installed from the autorun by clicking “TouchPad”. Alps is a pointing device driver and utility for Windows systems that can be used on the Notebook PC. The Alps Mouse Utility can be used with the built-in Touchpad pointing device as well as any externally connected PS/2 pointing devices.

Changing the Settings

Mouse Properties

Mouse Properties is an easy to use application software to change the settings for pointing devices. The original Windows property sheets for the mouse (found in the control panel) were either added to or replaced when the Touchpad driver was installed.

NOTE: The Pointers sheet is the same as the Windows standard mouse properties. If any functions cannot be used, the corresponding tab will not be displayed.

Buttons

Use this feature to adjust the button settings



A preset function can be assigned to each button. The picture of the device varies according to the device which the driver detects. The third picture is for “Both Buttons” on your Notebook PC Touchpad or a two button mouse, the “Central Button” for the middle button on a 3 button mouse, and the “Wheel Button” for a mouse with a wheel.

Changing the Settings (Cont')

NOTE: The Internal Pointing Device in the Advanced Menu of the BIOS Setup Utility must be set to [Disabled] to allow detection of a wheel mouse by the Mouse Utility. If left [Enabled] the Notebook PC will treat all externally connected pointing devices as a standard 2 or 3 button mouse.

Functions assigned to buttons

The following are functions that can be assigned to the mouse buttons.

- None
- Click
- Shortcut Menu
- Auto Scroll
- Double Click
- Easy Launcher

Double Click Speed

Double Click Speed allows the user to vary the time period between clicks in order for Windows system to register a double click. The user can test their own settings by double clicking in the test window. When a double click is registered, the dolphin jumps through the hoop.

Use Wheel Function

Check this if you want to use the wheel feature. This check box is displayed only when a wheel mouse is used on your Notebook PC in place of your Touchpad.

NOTE: The Internal Pointing Device in the Advanced Menu of the BIOS Setup Utility must be set to [Disabled] to allow detection of a wheel mouse by the Mouse Utility. If left [Enabled] the Notebook PC will treat all externally connected pointing devices as a standard 2 or 3 button mouse.

Options

You can change scrolling related values and other options on this sheet.



Options (Cont')

Scroll Speed

This allows you to change the scrolling speed of your pointing device with the scrolling function.

NOTE: The Internal Pointing Device in the Advanced Menu of the BIOS Setup Utility must be set to [Disabled] to allow detection of a wheel mouse by the Mouse Utility. If left [Enabled] the Notebook PC will treat all externally connected pointing devices as a standard 2 or 3 button mouse.

Scroll Area

Change the width of the scrolling area for the Touchpad.

NOTE: The Internal Pointing Device in the Advanced Menu of the BIOS Setup Utility must be set to [Disabled] to allow detection of a wheel mouse by the Mouse Utility. If left [Enabled] the Notebook PC will treat all externally connected pointing devices as a standard 2 or 3 button mouse.

Tray Icon

Check this to display the tray icon on the task bar. Part of this Tray icon will change color when you touch the scrolling area. Also, you can display a menu by right-clicking the icon. Double-clicking the icon brings up the Mouse Properties.



Mouse Compatibility Mode

Use this feature when the external mouse does not work. When this mode is enabled, you cannot use the extended functions of the Touchpad.

NOTE: This feature is displayed only when you are using an old-format mouse.

Motion

Use this feature to adjust the motion of the mouse pointer.



Acceleration

Acceleration allows the cursor to cover more area if the mouse is moved quickly. The check box will enable or disable acceleration. If acceleration is enabled, you can choose Low, Medium, or High acceleration using the track bar.

Speed

Sensitivity defines how Windows scales the distance moved by the mouse and the distance moved on the screen. Low Sensitivity settings can enable the user to position the cursor more precisely, setting a high sensitivity results in a broader cursor coverage on the screen with relatively small movements of the pointing device. The check box enables the user to lock or unlock the horizontal and vertical sensitivity trackbars together. The trackbars allow the user to vary the sensitivity for both horizontal and vertical directions.

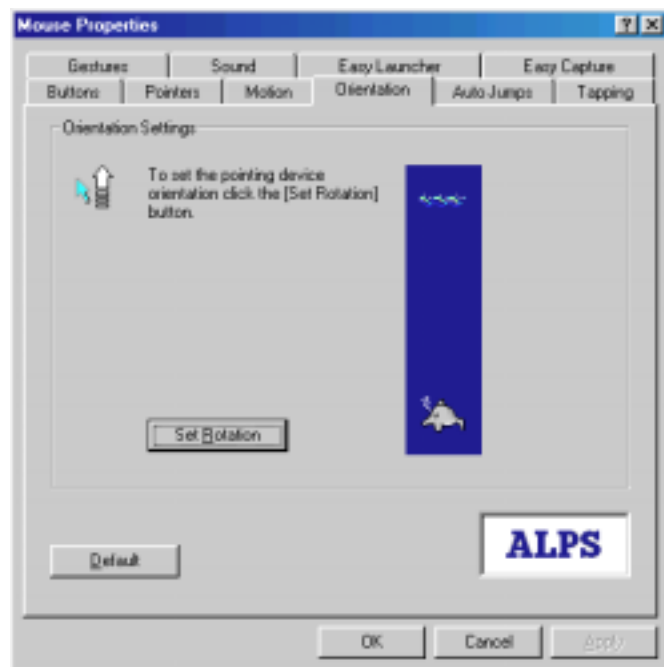
Motion (Cont')

Pointer Trail

This feature makes it easier for the user to keep track of the location of the cursor on screen. It does this by leaving ghost cursors, which slowly disappear whenever the mouse is moved. This leaves a very noticeable trail on the screen when the cursor moves. The check box will enable or disable the trails and the trackbar can vary the number of ghost cursors trailing the main cursor.

Orientation

Use this feature to adjust the rotation of the mouse pointer.



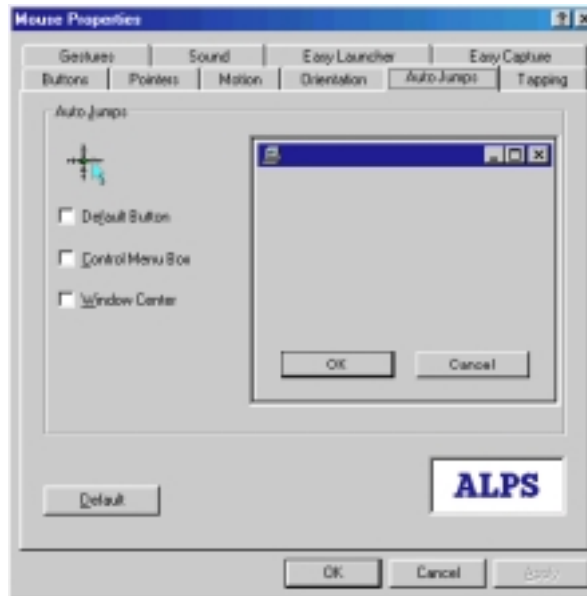
Orientation Settings

This feature is beneficial when the user finds it more efficient to hold or place the pointing device at an angle. Click the **Set Rotation** button, when the message “Move the dolphin to the surface to set the orientation” appears, move the pointing device in the direction the user wants to represent as the upward movement on the screen. Based on this new upward direction, the on-screen cursor will, from now on, move relative to this new orientation.

Motion (Cont')

Auto Jumps

Use this feature to automatically jump to a specified point.



Auto Jumps moves the cursor to a specified area of a window every time one is opened. There are currently three different positions that the cursor can jump to with this function.

1. Default Button
2. Control Menu Box (top right hand corner of the Window)
3. Center of the Window

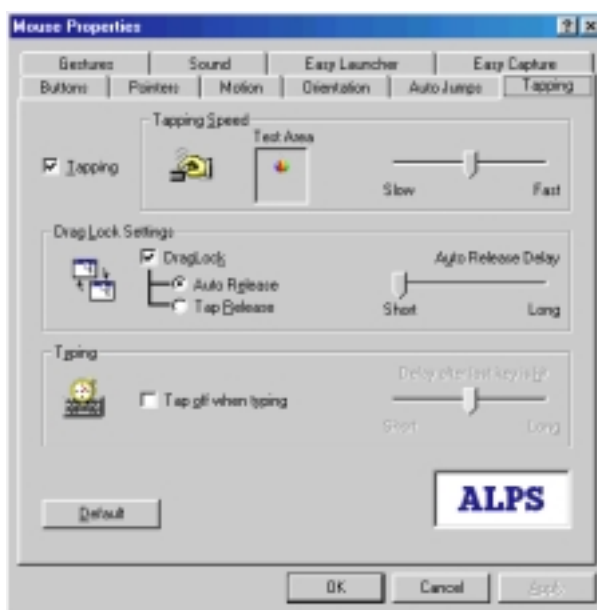
Orientation (Cont')

In the case where a specific control does not exist (e.g. no default button) The cursor remains in it's current position. The user can however select multiple locations and in this case a priority system is used. For example, if default push button and system menu box are selected and a window which contains no default push button is opened then the cursor jumps to the system menu box if it is present. If not, the cursor remains in it's current location. The dialog bitmap to the right of the check boxes show the location of the current auto Jumps and their associated priorities - one being the highest, three being the lowest.

NOTE: This feature only moves a cursor to specific position; it does not make click event. This feature may not work on some application.

Tapping

Use this feature to adjust the tap settings.



NOTE: Tapping tab appears only when a Touchpad having tapping setup functions is used. When the Tapping property sheet is not displayed, this function cannot be used with your pointing device.

Tapping (Cont')

Tapping

When Tapping is enabled, you can simulate a mouse click by simply pressing on the surface of the pointing device. It is set whether to use the Tapping function. When the Tapping function is used, the Tapping check box is turned on. When the Tapping is not used, the Tapping check box is turned off. **NOTE:** If this feature is disabled, Drag Lock Setting, Tapping Speed, and Typing will also be disabled.

Tapping Speed

Moving the Tapping Speed track bar to the left results in a simulated mouse click to slower tapping. Moving it to the right results in a simulated mouse click to faster tapping. By tapping in the test box, you can test the current tapping speed. The animation in the box begins to move when done from the value to which the Tapping is set fast. The animation does not change when it is slower than setting.

Drag Lock Settings

Drag Lock

It is a function that keeps the state of dragging even if the finger is separated from the operation side after drags by the Tapping. When the drag lock function is used, the drag lock check box is turned on. **NOTE:** When the drag lock check box is disabled, the Auto Release cannot be set.

Auto Release

The Drag Lock will release the cursor after a specified period of time, which starts when the user raises his or her finger from the surface of the Touchpad. This time period can be defined by the user via the Auto Release Delay track bar, just to the right of the auto release radio button.

Tap Release

When the Tap Release is chosen, the drag lock will be released by clicking a left mouse button mouse or tapping.

Typing

Tap off when typing

With this option selected, you can not tap while typing on the keyboard. This feature will benefit users in preventing inadvertent tapping while creating a document on a word processor. When typing is interrupted, tapping becomes acceptable. This time period can be defined by the user via the "Delay after last key is hit" track bar.

Gesture

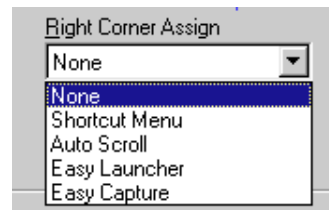
Use this feature to adjust the Gesture settings.



Corner Tap Functions

Left Corner Assign/Right Corner Assign

You can assign a function to the corner tap of the Touchpad. Click the Left Corner Assign or Right Corner Assign drop down list and a menu of available options will appear.



Use Scroll Function

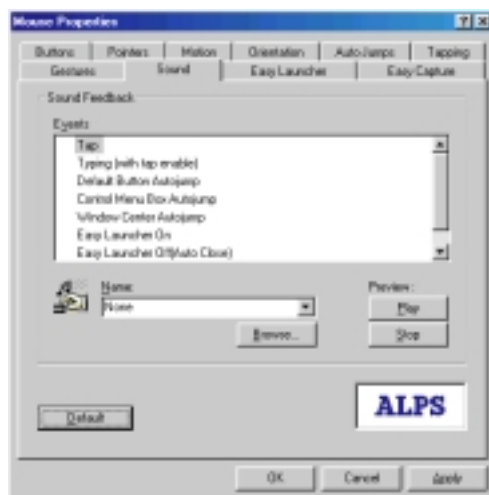
Check this if you want to use the scrolling function. When this feature is enabled, you can scroll by sliding your finger on the edge of Touchpad instead of moving the cursor onto the scroll bar. Also, you can use Zoom and Data Zoom by pressing the “Ctrl” key or “Shift” key while sliding you finger on the Touchpad.

Option

Opens “Options” dialog box. In this dialog, you can change scrolling parameter, tray icon status, and mouse compatibility mode. You can also open this dialog box from the “Gesture” tab.

Sound Feedback

Sound Feedback enhances the many features of the mouse by giving the user easily discernible feedback on the operation of the pointing device. Users can assign specific sound files (WAV format) to the various pointing device operations. When audible feedback occurs, users can recognize the execution of the specific pointing device operation. Users can customize the Sound Feedback settings by using Sound property sheet.



Events

The operation to which the sound is allocated is displayed. The speaker is displayed to show that the sound is set.

Name

The sound set in the operation is displayed. Click the down arrow on the name cell to see a list of the allocated sounds.

Browse

It is possible to refer to the sound of an arbitrary folder. It is possible to refer to other folders when the sound is not displayed in the sound name cell.

Preview: Play

Plays the sound that the sound is displayed in the name cell.

Preview: Stop

Stops the sound preview.

Easy Launcher

Easy Launcher is an utility program which allows you to easily operate the Windows system. Users can execute an arbitrary application program by clicking icon buttons which are located in the popup window. To start the Easy Launcher, set the Easy Launcher to Left or Right Corner Assign, then tap the corner.

The following windows open when the Easy Launcher is started.



After installation Easy Launcher has four default icon buttons which consist of the minimize button, the closed button, the start button and the Close Easy Launcher button.

Minimize button

When users click this button, the currently activated window is minimized.

Close button

When users click this button, the currently activated window is closed.

Start button

When users click this button, the Windows start menu is displayed on the task bar.

Close Easy Launcher button

When users click this button, the Easy Launcher is closed.

NOTE: The Easy Launcher can also be closed by clicking the close window button or pressing the Esc key on the keyboard.

Application button(s)

Application button(s) appear when the short cuts are added in the Easy Launcher. When users click the application button(s), the application associated with that icon can be started. The application is added/ deleted form Alps Pointing Device Driver property sheet.

Use this feature to adjust the Easy Launcher settings.

Easy Launcher (Cont')

Easy Launcher Properties

Use this feature to adjust the Easy Launcher settings.



Shortcut List

The application program registered in the Easy Launcher is displayed. The application icon can be added to the Easy Launcher when drag and dropping to the short cut list from desktop and the Explorer.

New

The application program is added to the Easy Launcher.

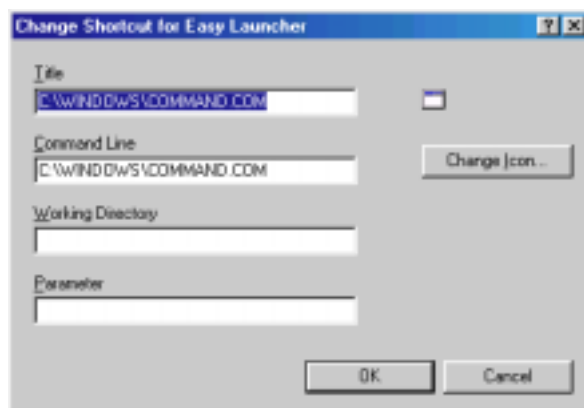
Delete

The application program is deleted from the Easy Launcher.

Change

The Change Shortcut for Easy Launcher dialog box is opened, and setting the application program can be changed.

Easy Launcher (Cont')



Up/Down

The arrangement of the application button displayed in the Easy Launcher is changed.

Option

The option dialog box opens, and the Easy Launcher can be customized.

Windows style

The window style of the Easy Launcher is selected from Standard, Vertical or Horizontal.

Windows location

The window location of the Easy Launcher is selected from Display center, Pointer position or Previous position.

Icon-button size

The icon size of the Easy Launcher is selected from Standard buttons, Small buttons or Large buttons.

Enable Auto close

The Easy Launcher window is automatically closed after a fixed time when this check box is turned on.

Show Title Bar

The display/non-display of the title bar is switched.

Use Tool Hint

The display/non-display of the tool hint is switched.

Only Application Shortcut

If this box is checked, the start menu button, the close button and the minimize buttons are hidden.

Enable Auto Grid

When the Easy Launcher opens, the mouse of each icon is moved when this box is checked.

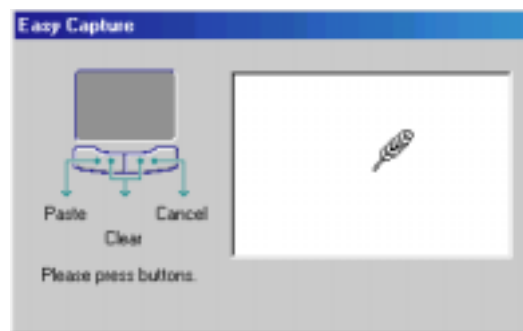
Use Close Easy Launcher button

When this check box is turned off, the button which Close Easy Launcher button becomes non-display.

Easy Capture

The Easy Capture is a utility program which enables the user to draw a picture and paste them into an active application without the need of starting the Paint Brush or similar application.

To start Easy Capture, set the Easy Launcher to Left or Right Corner Assignment, then tap the corner. If 3 button mode is set, it is also possible to start with one of the mouse buttons. Starting Easy Capture will open an Easy Capture window which is described below. With this window, you can draw a picture or character and then paste them into an application.



NOTE: Easy capture only support images and may not display other forms of data.

To paste a picture on Easy Capture window in an application

Click on the left button of Touchpad.

To clear a picture on Easy Capture window

Click on both the right and left buttons of Touchpad simultaneously.

To cancel Easy Capture window

Click on the right button of the Touchpad, or press the Esc key on the keyboard.

The Easy Capture property sheet allows changing the color, the size of the pen, and the size of the canvas.



Canvas size

Select the canvas size to be used in Easy Capture: Large, Medium and Small.

Width (Pen Style)

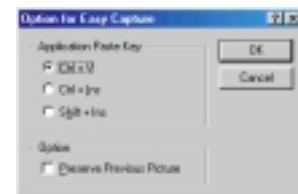
Select the width of the line to be used from the list.

Color (Pen Style)

Select the line color to be used from the list.

Option

The Option for Easy Capture dialog box opens when this button is clicked. In the option dialog box, the Application Paste Key and the Preserve Previous Picture is set. When Easy Capture cannot paste to the application program, change the Application Paste Key.



General controls

OK

Click the OK button to close the Mouse Properties and save any changes which you have made.

Cancel

Click the Cancel button to close the Mouse Properties without saving any changes which you have made.

Apply

Click the Apply button to save the changes which you have made without closing the Mouse Properties .

Default

Click the Default button to return the current settings to the initial default values.

Version Information

You can find version of Alps Pointing Device Driver files. To display the About dialog box, click “ALPS” logo on any Mouse Properties sheet to see “About Alps Pointing-device Driver”.



Frequently Asked Questions (FAQ)

Here we will list frequently ask questions about Alps Pointing Device Driver.

Q1. How do I use the Windows standard mouse driver instead of the Alps Pointing Device Driver.

A1. See “To add or change a device driver for hardware” under Windows help files.

Q2. How do I use Tapping?

A2. Open Tapping property page, and then select the Tapping check box.

Q3. I cannot see the Alps Pointing Device Driver Properties.

A3. Restart your Notebook PC. If you connected an external PS/2 mouse, disconnect it from your Notebook PC.

Q4. I cannot popup the Easy Launcher and the Easy Capture.

A4. If an external mouse is connected, disconnect it. Please confirm whether the Easy Launcher or Easy Capture is set to the corner tap by the Gesture property sheet.

PC-CILLIN 98

Topics Covered:

PC-cillin 98 Features

What are Computer Viruses?

Methods of Virus Scan

Actions on Virus Found

What are Virus Pattern Files?

Real-time Monitor

WebTrap

Manual Scan

Scan Window

Manual Scan

PC-cillin 98 Features

High speed and easy operation

The real-time virus monitoring function has been separated from the manual virus detect function is now memory resident. This enables you to recall the virus detect function for files and disks whenever necessary, and cuts down the amount of resident memory.

Also, by improving the operation of the program, a 197% speed up has been realized relative to the previous version, "PC-cillin II/PC-cillin 97" (based on benchmark tests conducted in-house).

Macro Trap — Detecting even unknown macro viruses

These days, macro viruses increasingly infect systems via E-mail attachments. Our famous MacroTrap not only detects and sterilizes macro viruses, but will even catch new strains of macro viruses that have yet to be identified.

WebTrap — Blocking malicious Java applets and ActiveX controls

PC-cillin 98 features the WebTrap function, which blocks the downloading of malicious Java applets and ActiveX controls via a web browser, such as Internet Explorer or Netscape Navigator.

Update via Internet

You can update the virus pattern file via the Internet or floppy disks.

Handling Compressed Files and E-mail Attachments

PC-cillin 98 can detect viruses in attachments and compressed files without opening them. PC-cillin 98 can handle 3 formats of E-mail attachments and 12 formats of compressed files.

Compression file format

PKZIP, ARJ, LHA, TAR, GNU-ZIP, UNIX ZIP, UNIX compress,

MS-compress, PKLITE, LZEXE, DIET, Cabinet

E-mail attachment format

Uuencode, MIME, BinHex

User interface

The user interface has been renovated. The new design is more refined and the interface is easier to use.

What are Computer Viruses?

A computer virus is a piece of executable code (program) that attaches itself to operating system files, executable files, boot sectors or partition tables, or data files of applications such as Microsoft Word and Excel. Viruses have the unique ability to replicate and, in some cases, may deliver a payload or damage routine. The damage routine is the part of the viral program that, when activated, attempts to destroy data, display messages or images, or perhaps play music. The type and extent of damage varies from virus to virus. Some viruses are programmed to simply replicate, but this too may cause system performance problems.

Detailed types of computer viruses

- Boot Sector viruses
- Multi-partite viruses
- Direct Action viruses
- Stealth viruses
- Network viruses
- Parasitic viruses
- Overwriting viruses
- TSR viruses
- Mutation, or Polymorphic viruses
- Macro viruses

Methods of Virus Scan

PC-cillin 98 provides 3 methods of virus scanning: manual scan, prescheduled scan, and real-time scan.

Manual Scan

PC-cillin 98 scans specified drivers and/or folders any time you execute the manual scan. Actions on virus found will be taken automatically unless you select the Pass on the Configure setting.

Prescheduled Scan

PC-cillin 98 automatically starts at a specified time and date, and performs scanning in the background. To use this function, the power to the computer must be turned on and the Real-time Monitor must be enabled.

Real-time Scan

Automatically scans files for viruses before the files are input or output, and eliminates detected viruses. The Real-time scan always performs virus scans, and stops viruses before they can do any harm to your system.

Actions on Virus Found

If viruses are found by PC-cillin 98, there are 4 actions that you can choose to process:

Access Denied

No action is taken. You will select a corrective action for a virus-infected file.

Clean

The virus will be cleaned from the file.

Delete

The infected file will be deleted.

Rename

The extension of the infected file will be changed so that the file is no longer executable.

Move

The infected file will be moved to a specified folder.

What are Virus Pattern Files?

The pattern matching method uses virus patterns to detect viruses. It involves a database of specific patterns that indicate the presence of a computer virus. A file that contains this database is called the virus pattern file. You need to update this file frequently to protect your computer from new viruses.

PC-cillin 98 enables you to automatically update the virus pattern file and program via the Internet, as well as via BBS, floppy disk, or CD-ROM.

Real-time Monitor

When you install PC-cillin 98, the Real-time Monitor will be automatically executed every time you start the system. It displays the title screen and is docked to the taskbar. Double click the PC-cillin 98 icon in the task bar to display the Title window. Start up PC-cillin 98 application by clicking the Main button in the Title window.

When the Real-time Monitor is ON (a blue icon), all incoming and outgoing files will be monitored. If the infected file is about to be executed or opened, the Real-time Monitor shows a message and stops the operation.

WebTrap

PC-cillin 98 features a WebTrap function that prevents Internet viruses (such as illegal Java applets and ActiveX controls) from being downloaded without viewer's awareness. You can also update your virus pattern file, scan engine programs, and obtain the latest information from Trend Micro via Internet.

To setup WebTrap, click the Internet icon on the Configure bar, or select Internet from the Configure menu. After changing the WebTrap settings, you need to close then restart all browsers.

If you are using 2 or more browsers, you need to manually change browser settings for those non-default browsers. Next is the setting procedure.

For Internet Explorer

1. Choose Start | Settings | Control Panel to open the Control Panel, and double-click the Internet icon.
2. Click Connections tab and check the Proxy Server setting. Click the Details button to display the Proxy setting window.
3. Enter the Proxy Address and Port to finish the proxy setting.
4. Click OK to close the Proxy setting window. Click OK again to close the Internet Property window.

If you cannot connect to the Internet after installing PC-cillin 98, you have to check the Proxy Setting. Some programs change Proxy Setting to the browser while installation. Please recover the Proxy Setting to the original setting for PC-cillin 98.

Please note that WebTrap works only when the Real-time Monitor is ON.

Manual Scan

You can select drivers and/or folders to scan by clicking the Scan Now button. Click the Scan Macro button will scan macro virus for files such as Microsoft Word or Excel files. You can also scan floppy disk's boot sector each time you insert a floppy disk to the driver by clicking the Scan Boot button.

Click on the item for more information.

Scan Macro scans Microsoft Word, Excel, and template files on local disks (includes floppy disk driver). You cannot select folders for this scan option.

When you click Scan Macro button, all local disks will be scanned. If there is any network disk assigned, it will be scanned too. Network disk device will be scanned after finishing all local disk scanning.

You can setup actions on virus found in the Manual Scan Configure window. If you select one of the Clean, Delete, Rename, or Move action, the action which you selected will be processed automatically, cannot be terminated. If you select Access Denied, PC-cillin 98 will not process to the infected file.

Scan Window

While scanning, PC-cillin 98 displays the Scan Window. This window shows information, such as: scan status, detected virus and file name.

If you set the Action on Virus Found option to Clean, Delete, Rename, or Move, 4 buttons in the middle become disable.

If you select Access Denied in the Action on Virus Found option, these 4 buttons become active when PC-cillin 98 detect viruses. Select the infected file, then click the button you want to process to the file.

Manual Scan

Set up the scan target files of manual scan, and actions to be taken when viruses detected on this window.

APPENDIX

Topics Covered:

Using New Hard Disk Drives

Using Save-to-Disk

CD-ROM Support Under MS-DOS

Modem AT Command Set

Modem Troubleshooting

Infrared Communication Notes

Communication Regulations

Declaration Of Conformity

Using New Hard Disk Drives

When you purchase a new hard disk drive, there will not be any partitions on it unless it was pre-configured for your Notebook PC by your dealer. Partitions are necessary for a hard disk drive to accept data. Each user accessible partition will have its own drive letter and the CD-ROM will then add its own drive letter to the end.

NOTE: Formatting will not be allowed on non-partitioned hard disk drives and formatting hard disk drives will not remove partitions.

Creating a Bootable Diskette

A bootable system diskette is necessary to enter the command prompt when there are no active system partition on your hard disk drive. To create a bootable floppy diskette, type “FORMAT A:/S” from the DOS prompt or use Window’s format (from “My Computer”) and check “Copy system files.” You must copy FDISK.EXE and other DOS utilities from the “C:\WINDOWS\COMMAND” directory of Windows 95 or 98. Do not include AUTOEXEC.BAT or CONFIG.SYS system files on the boot disk because some utilities cannot be used with memory managers usually loaded through the AUTOEXEC.BAT and CONFIG.SYS system files.

Using the FDISK.EXE Utility

The FDISK.EXE utility can add or remove partitions on a hard disk drive. This utility is only required if the hard disk drive is new and has never been formatted or used (remember the ability to format a hard disk drive means that there is at least one partition). You do not need to use this utility after formatting a hard disk drive. Be careful not to remove existing partitions that you may need, you will not be able to recover it!

1. Boot from a system diskette with the “FDISK.EXE” utility.
2. Type “FDISK” from the “A:\>” prompt, then press [Enter].
3. Create a primary partition and set it active by following the on-screen menu, and also create extended partitions if needed.

Formatting the Hard Disk Drive

Formatting a hard disk drive actually only erases all the data on one partition. In order to erase data on other partitions, you must specify those drive letters when using the format utility. The /S command will place system files on the partition to allow bootup. Type “FORMAT /?” for a list of other options.

1. Boot from a system diskette with the “FORMAT.COM” utility.
2. Type “FORMAT C: /S” from the “A:\>” prompt then press [Enter].
3. Type “Y”, then press [Enter] to confirm format.
4. Enter a Volume label, or press [Enter] to leave blank.

Using Save-to-Disk

The “Save-to-Disk” function requires that the “Suspend Mode” be set to “Save-to-Disk” in the “Power” menu of the BIOS setup and you must have a Save-to-Disk file or partition. The Save-to-Disk file or partition can be created or deleted at any time using the PHDISK utility.

The Save-to-Disk partition will occupy its own space on the hard disk drive that cannot be used for other purposes which is safer than a Save-to-Disk file. Because the Save-to-Disk partition is not user-accessible, it does not have a drive letter. The limitation with a Save-to-Disk partition is that it requires a free non-partitioned space on your hard drive which must first be setup using a partition management utility.

The Save-to-Disk file is a new feature supported by the current PHDISK which creates a hidden file called “SAVE2DSK.BIN” which is stored on your current partition and does not affect any of your current files or partitions. The limitation is that it is not a dedicated space and therefore is prone to problems that are associated with common files (e.g. accidental deletion, virus, and fragmentation). But the convenience of using a file is that it can be created, deleted, or changed at any time without concern for the current partition(s).

PHDISK can be used to create a space which is a slightly larger than the current system memory plus video memory size. But future memory upgrades will require that the Save-to-Disk file or partition be deleted and recreated to allow for the extra data that may be stored in memory.

Creating a Save-to-Disk Partition

Follow this procedure to create a Save-to-Disk partition:

1. Copy “PHDISK.EXE” from the Support CD to your hard drive or floppy disk.
2. Enter the DOS environment and type “PHDISK /CREATE /PARTITION” followed by pressing <Enter> in the same directory at “PHDISK.EXE”.

Creating a Save-to-Disk File

Follow this procedure to create a Save-to-Disk file:

1. Copy “PHDISK.EXE” from the Support CD to your hard drive or floppy disk.
2. Enter the DOS environment and type “PHDISK” followed by pressing <Enter> in the same directory at “PHDISK.EXE”.
3. Type “1” followed by pressing <Enter> to create file.
4. Type the size desired for the Save-to-Disk file that is greater than the minimum amount shown.
5. Confirm the Save-to-Disk file by reading the “Save to File Information:” and Type “4” followed by pressing <Enter> to exit the utility.

NOTE: If you have both a Save-to-Disk File and Save-to-Disk Partition, the Save-to-Disk File will be used. But you should delete one or the other to reclaim hard drive space.

CD-ROM Support Under MS-DOS

NOTE: To boot from a bootable CD, BIOS setup must define “ATAPI CD-ROM Drive” as the first item in the boot sequence.

When installing an operating system on an empty hard disk drive, a DOS real-mode CD-ROM driver needs to be loaded in the CONFIG.SYS and AUTOEXEC.BAT files in order to use the CD-ROM drive. The floppy disk drive on the other hand can be used without any device drivers.

The CD-ROM device driver should be pre-configured from the factory as shown below. Because hardware and software are constantly improved or customized for a particular market, the examples in this User’s Manual may not exactly reflect those of your Notebook PC.

CONFIG.SYS: DEVICE=C:\CDROMDRV.SYS /D:OEMCD001
AUTOEXEC.BAT: MSCDEX.EXE /D:OEMCD001 /L:D

The CD-ROM driver is located in the Support CD \CDROM\TEAC or \CDROM\TOSHIBA\. Use the driver under TEAC or TOSHIBA depending on your CD-ROM manufacturer.

Windows Startup Disk

The Windows 98 “Startup Disk” is the most convenient solution to giving you CD-ROM access under the DOS environment because it contains all the CD-ROM drivers compressed into a single floppy diskette. When booting with the “Startup Disk,” the CD-ROM will automatically be made available. Create a “Startup Disk” through **Add/Remove Programs** in the **Control Panel**.



NOTE: PCMCIA cards, especially those for external hard drives, are not recommended under the DOS environment. If necessary, consult your PCMCIA card documentation or dealer for configuration under the DOS environment.

Microsoft Windows 98

Microsoft Windows 98 may be pre-installed on your Notebook PC. If installation or configuration changes are necessary, please refer to the documentation provided with the Windows 98 operating system. Once Windows 98 is running, you should use the Windows 98 CD-ROM device driver instead of the DOS real-mode CD-ROM driver. A DOS driver has poor performance, poor memory management, and may cause conflicts with other devices.

Removing the DOS real-mode CD-ROM driver

Removing the device line or adding “REM” (upper or lower case) in front of the line will disable the DOS driver and allow Windows 98 to use its own CD-ROM device driver. Windows 98 may already add the letters “REM” in front of the DOS CD-ROM drivers in AUTOEXEC.BAT such as:

```
CONFIG.SYS:    rem - By Windows Setup - DEVICE=C:\CDROMDRV.SYS /D:0EMCD001  
AUTOEXEC.BAT: rem - By Windows Setup - MSCDEX.EXE /D:OEMCD001 /L:D
```

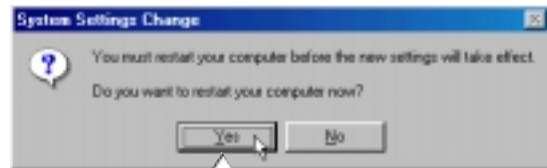
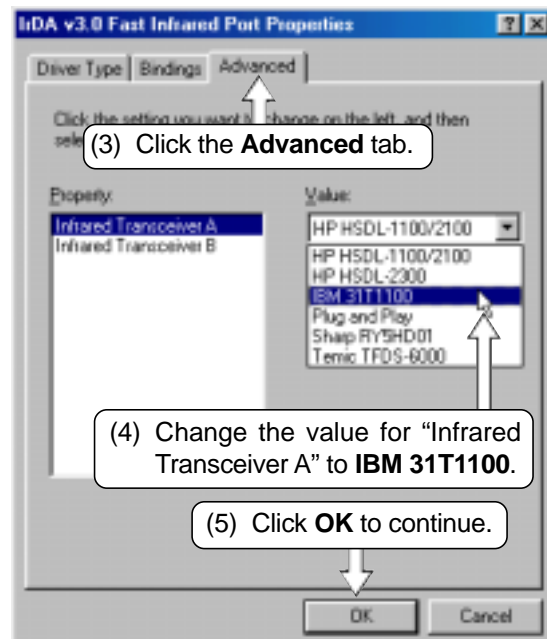
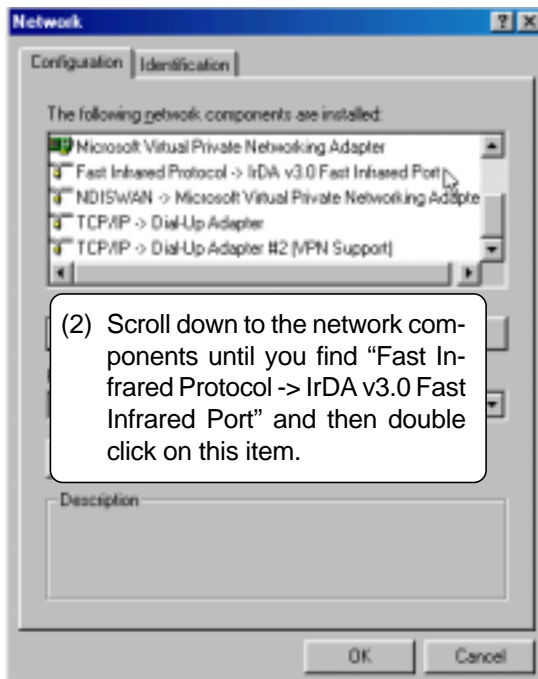
If running Windows 98 setup, it will automatically check for real-mode drivers and guide you using a wizard to remove undetected ones. If these two lines exist and do not have “REM” in front, add them yourself by opening the files with NOTEPAD.EXE provided by Windows or EDIT.COM provide by DOS or you may simply delete these two lines.

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".



Communication Regulations (Notebook PC with modem)

FCC Regulations

The following statements are provided in accordance with the Federal Communications Commission (FCC) regulations. Please read these statements carefully before installing your modem.

FCC Part 68 Requirements

This equipment complies with Part 68 of the FCC Rules. On the bottom of this equipment is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. If requested, this information must be given to the telephone company.

The REN is used to determine the maximum number of devices connected to your telephone line that will ring in response to an incoming call. In most, but not all, areas, the total REN of devices connected to a line should not exceed five (5.0). To find out the total permitted in your area, contact your local telephone company.

If your telephone equipment causes harm to the telephone network, the telephone company can discontinue your service temporarily. If possible, the company will notify you 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 can make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If so, you will be notified in advance so you can make the changes needed to maintain uninterrupted service.

If you experience trouble with this equipment, please contact the manufacturer at the address given in this manual. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on public coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

Declaration Of Conformity (Notebook PC with modem)

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 and television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient 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! CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT

Canadian Department Of Communications (CDOC):

Notice: The Canadian Department of Communications label identifies certified equipment. This certification means the equipment meets certain telecommunications network requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment users should ensure that connection to the line is allowed by the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a telephone extension cord. Compliance with the above conditions may not prevent degradation of service in certain 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.

WARNING! Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.