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Notebook PC

Drivers and Utilities

Table of Contents

Support CD for Windows

The Notebook PC you purchased may or may not be preloaded with an operating system. 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® XP (referred to as "Windows" in this User's Manual).

The levels of hardware and software support may vary depending on the installed operating system. Operating systems not pre-installed on this Notebook PC may produce different results than the ones described in the provided user's manuals.

If your Notebook PC is not preloaded with any operating system, or you want to install another operating system other than the preloaded one, the following pages will give step-by-step installation procedures for typical system configurations under the Windows® operating system. For application usage, please see the online help provided with each of the applications after installation. The following are contents of a typical support CD. Variations may be found for each territory or language. 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.

New Windows Installation

If you install a new operating system on your Notebook PC, there will be many hardware devices without drivers. Use the provided support CD to correct this problem.

Drivers for Windows

Next page gives descriptions of each support CD item. 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.

Note: Devices varies from model to model and may differ from your system.

Required Drivers

Some drivers may already be provided in Windows. If you have any problems with these drivers, visit the Microsoft Windows Update site. A link is provided in Microsoft Windows Explorer under "Tools."

VGA (Display) "Intel(R) 82852/82855 GM/GME Graphics Controller" Driver

Installing the VGA driver first will make viewing other setup screens much easier. This installs display drivers for your operating system in order to properly use the Notebook PC's built-in graphics controller and to provide optimal display features. Once the display driver is installed, you can change your display's resolution and color through Display Properties.

This device is shown under Windows Device Manager "**Display adapters**."

ASUS_WLAN "ASUS 802.11g Network Adapter" Driver

Required on models with **ASUS** internal wireless LAN. Installs the required network driver for the Notebook PC's optional internal wireless LAN controller. If you purchased the optional internal wireless LAN, you need to install this driver. If you did not purchase the optional internal wireless LAN, you cannot install this driver.

This device is shown under Windows Device Manager "**Network Adapters**."

INTEL_Calexico "Intel(R) PRO/Wireless LAN 2100 3B Mini PCI Adapter" Driver

Required on models with **INTEL** internal wireless LAN. Installs the required network driver for the Notebook PC's optional internal wireless LAN controller. If you purchased the optional internal wireless LAN, you need to install this driver. If you did not purchase the optional internal wireless LAN, you cannot install this driver.

This device is shown under Windows Device Manager "**Network Adapters**."

ATK0100 "ATK0100 ACPI UTILITY"

This utility is required for special utilities provided in the support CD. This installs drivers for the Notebook PC's Advanced Configuration and Power Interface (ACPI) for features utilizing power management functions.

This device is shown under Windows Device Manager "**System devices**."

Audio "SoundMAX Integrated Digital Audio" Driver

This installs audio drivers for your operating system in order to properly use the Notebook PC's built-in sound controller. All audio functions are configured through Windows and help can be located within Windows documentation or Windows help files.

This device is shown under Windows Device Manager "**Sound, video and game controllers**."

CPU_HotFix

This installs Windows support files for advanced features in new processors used in Notebook PCs.

INFupdate "Intel 828XX" Drivers

This installs drivers for the Notebook PC's specific chipset.

This device is shown under Windows "**System devices**."

LAN "Realtek RTL8139 Family PCI Fast Ethernet NIC" Driver

Installs the required LAN driver for the Notebook PC's built-in PCI Fast-Ethernet controller. Fast-Ethernet supports both 10 Base-T or 100 Base-TX networks at half or full duplex.

This device is shown under Windows Device Manager "**Network Adapters**."

Modem "SoftK56 Data Fax" Driver

Installs the necessary driver in order for your operating system to have the correct files for the Notebook PC with built-in modem and drivers for integration with the internal audio. With third-party software, fax and speaker phone capabilities are possible using this Notebook PC.

This device is shown under Windows Device Manager "**Modems**."

USB2.0 "Intel(r) 82801DB/DBM USB 2.0 Enhanced Host Controller" Driver

This installs USB drivers for your operating system in order to properly use the Notebook PC's high-speed USB 2.0 ports.

This device is shown under Windows Device Manager "**Universal Serial Bus controllers**."

Recommended Utilities

LiveUpdate Utility

This utility helps you easily upgrade your Notebook PC's BIOS through an Internet connection.

PC-cillin_2002 Utility

Installs **Trend's PC-cillin 2002**, a world-class anti-virus protection software for the new Internet era, to keep your PC virus-free. This very powerful anti-virus software is bundled with each Notebook PC to protect your investment. As software become more and more a part of our daily lives, measures have to be taken to protect them. You may skip this software if you have your own anti-virus software.

Power_Gear (Power4 Gear Utility (Requires ATK0100)

Power4 Gear is a custom utility designed for this Notebook PC that allows you to use predefined or user defined values for multi-selectable power saving modes or "gears". You can "shift" between the "gears" using the taskbar icon or the "Power Gear" key above the keyboard.

Probe2 ASUS Probe Utility (Requires ATK0100)

Installs **ASUS Probe** utility to monitor the Notebook PC's CPU temperature and other resources. This is an optional software to help you better manage your Notebook PC's resources.

TouchPad "Synaptics PS/2 TouchPad" Driver

Shown under Windows "**Mice and other pointing devices**." Installs "**Synaptics® TouchPad**" utility. The Notebook PC already supports built-in or externally connected keyboard and PS/2 mouse devices. 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. To access help, right-click the TouchPad icon on the taskbar and select Help.

WinFlash Utility (Requires ATK0100)

Installs a BIOS update utility for Windows so that you can conveniently update your Notebook PC's BIOS without having to restart your Notebook PC in DOS mode.

Other Support CD items

[Read Me] Text File

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

[Technical Support Form] Text File

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.

[AFLASH2] DOS Utility

This utility allows you to upgrade your Notebook PC's BIOS in DOS mode. You enter DOS mode by booting to a DOS system on a floppy disk, CD, or USB drive instead of entering the Windows operating system. AFLASH2.EXE can be found in the Aflash folder of the support CD.

Device Manager

"Device Manager" will be used in many device driver installations, upgrades, and verification processes. Refer to the following steps on accessing the device manager.

1. Click the "start" button.
2. Click the "My Computer" icon.

4. Click the "Hardware" tab.
5. Click the "Device Manager" button.

3. Click the "View system information" link.
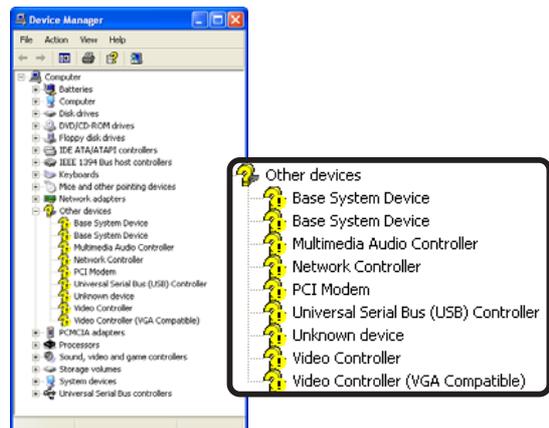
After a new Windows installation, it is normal to see several question marks under "Other devices" representing hardware devices that Windows cannot recognize. After installing the drivers from the provided support CD, those question marks will go away.

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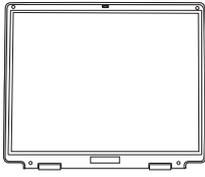
VGA Driver

(Required Driver)

Topics Covered:

VGA Driver Setup

Display Settings for Windows XP

Screens will vary depending on your operating system but the contents should be the same.

VGA Driver Setup

Running setup will give you the following wizard. See next page for VGA settings.
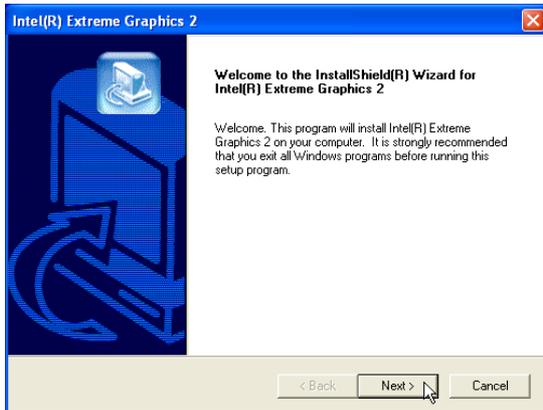
1. On the "Welcome" screen, click **Next** after reading the message.
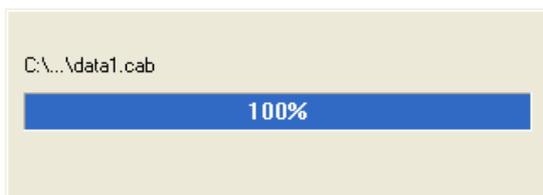
3. Wait while files are being copied to your Windows.
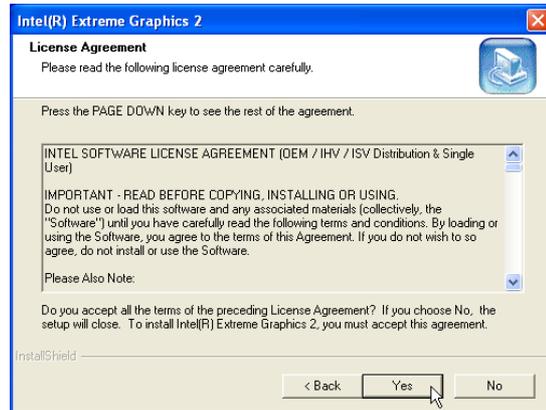
2. On the "License Agreement" screen, click **Next** after reading the message.
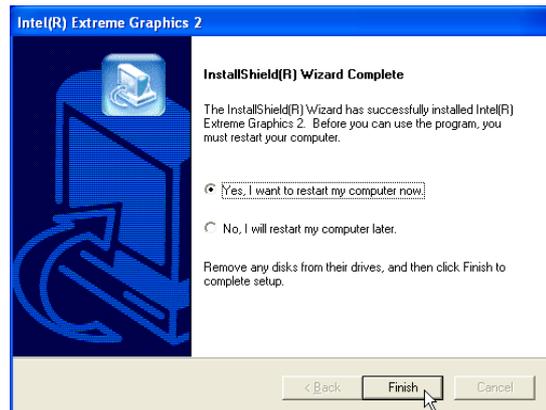
4. Setup is now complete, select "Yes..." and click **Finish** in order to restart Windows with a higher screen resolution*.

Windows may have already provided the highest screen resolution support for this graphics controller.

5. Set the screen resolution: Right-click the desktop and select **Properties.** Click on the **Settings** tab and slide the pointer to the right.

ASUS_WLAN

(Required driver for models with ASUS wireless LAN)

Topics Covered:

Wireless LAN Driver Setup

Wireless LAN Utility Setup

Wireless LAN Utility Quick Start

Screens will vary depending on your operating system but the contents should be the same.

Wireless LAN Driver Setup

This setup will install both drivers and utilities for the wireless LAN device. Running setup will give you the following wizard:
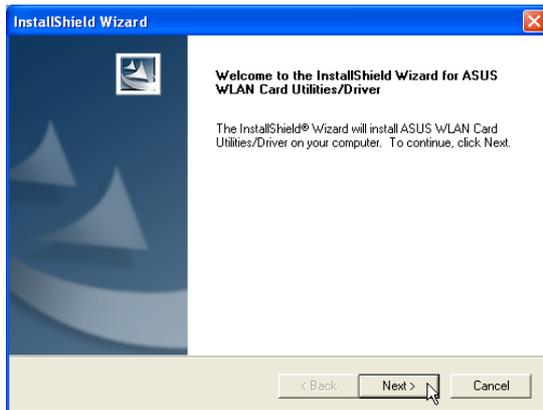
1. Click **Next** after reading the "Welcome" screen.

2. Click **Next** after reading the "Information" screen.
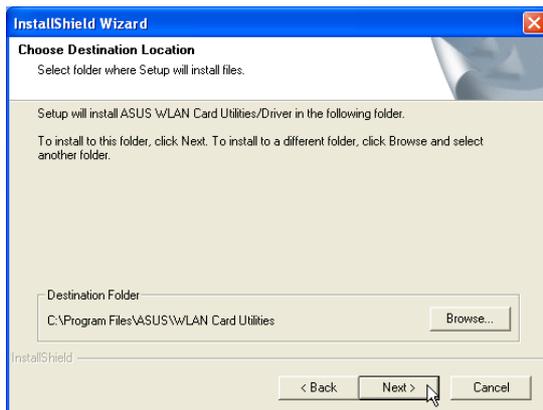
3. On the "Choose Destination Location" screen, click **Next** to continue or first change the path.
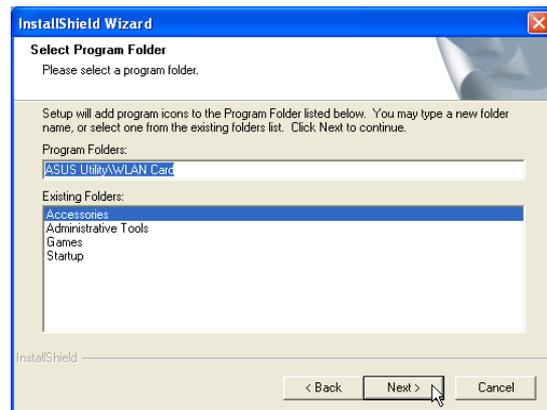
4. On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.
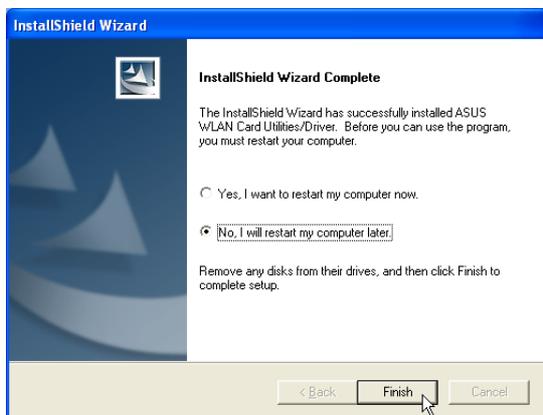
5. Click **Finish** on the "Setup Complete" screen.
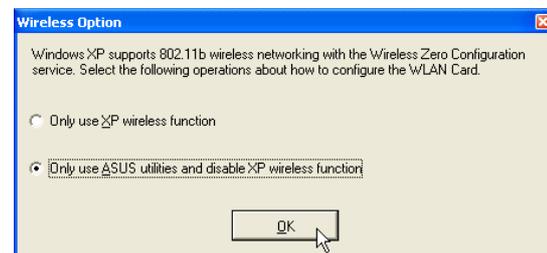
6. Select to use "...ASUS Utilities..." for added features while using the wireless LAN device.

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ASUS WLAN Utility Setup (Cont')

ASUS WLAN Utility Quick Start

After installing the ASUS WLAN driver and utility, the utility will automatically start with Windows. If you need to start it manually, you can launch the utility using the desktop icon or through Windows **start**. You will need to make some wireless LAN settings before being able to use your wireless connection.

ASUS WLAN
Control Center

If you receive this message when trying to launch the ASUS WLAN Control Center. Your Notebook PC model may use Intel Calexico wireless LAN. See the next few pages on setting up and using the Intel Calexico wireless LAN.

Information

Unable to connect to the wireless lan card. The tray icon will be loaded once the card is inserted.

OK

(Right-Click Menu)

1. Right-click the ASUS WLAN icon and select "Wireless Settings"
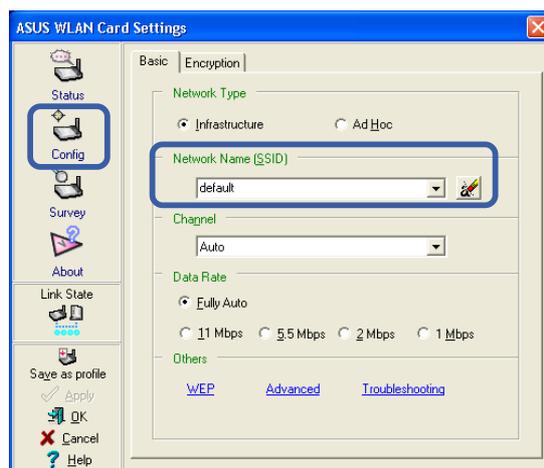
2. Set the Network Name (SSID) to the same name as the SSID set in your wireless access point.

ASUS WLAN Utility Quick Start (Cont.)
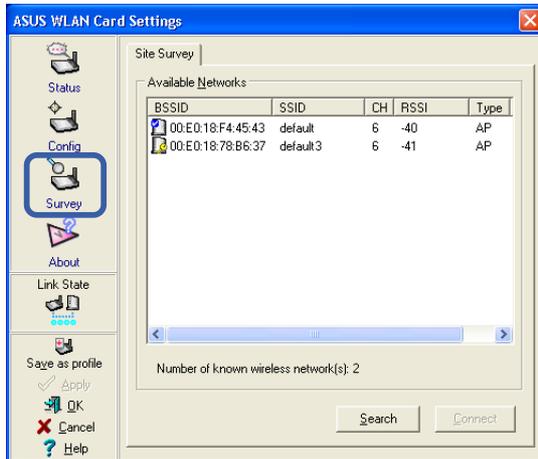
3. Use "Site Survey" if you don't know the name of your access point(s).
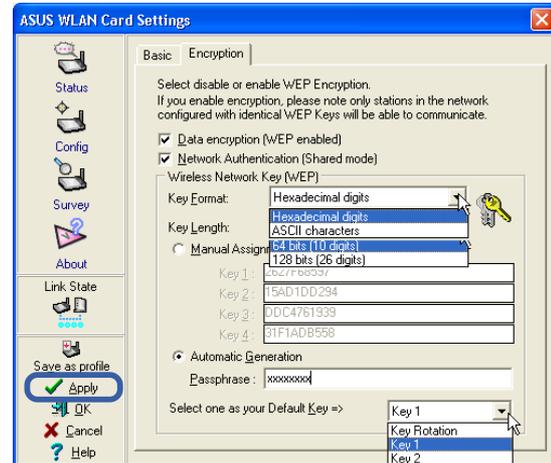
4. Encryption settings must also match those set in the access point. Talk with your network administrator if necessary. Click **Apply** to save your settings
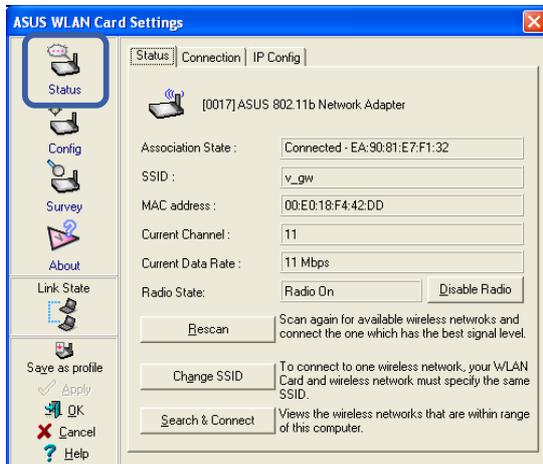
5. Check the "Status" page to see the "Association State". It should show "Connected - xx:xx:xx:xx:xx:xx".
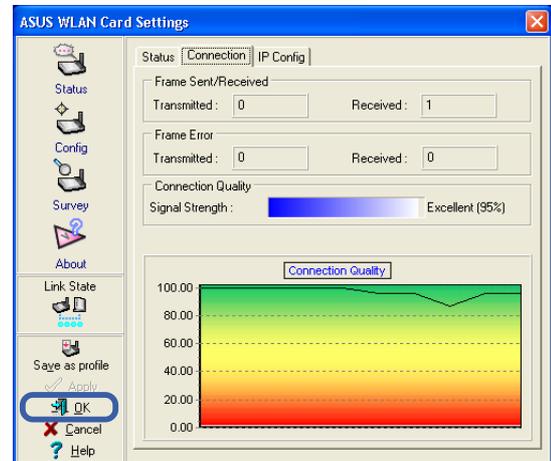
6. You can also see the connection quality on the "Connection" page. Click **OK** to exit the utility.

INTEL_Calexico

(Required driver for models with Intel wireless LAN)

Topics Covered:

**Wireless LAN Driver Setup**

Wireless LAN Utility Setup

Wireless LAN Utility Quick Start

Screens will vary depending on your operating system but the contents should be the same.

INTEL Calexico Setup

This is the wireless LAN driver. Running setup will automatically install the driver.
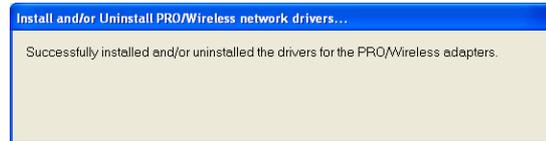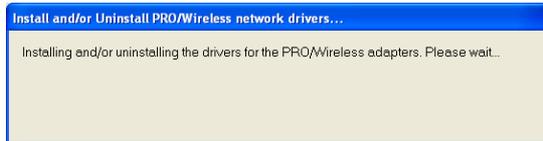
When complete, you will see "Intel(R) PRO/Wireless LAN 2100 3B Mini PCI Adapter" in device manager.

PROSet Setup

This is the wireless LAN utility. Running setup will give you the following wizard.
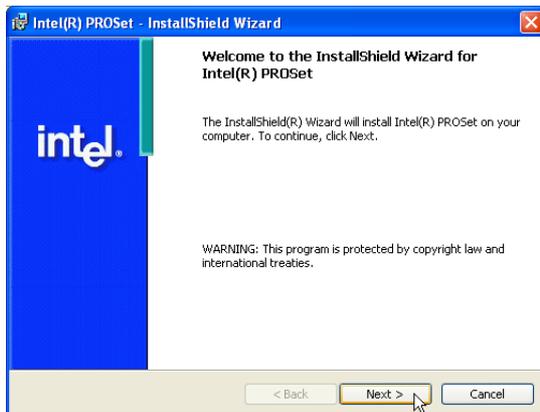
1. On the "Welcome" screen, click **Next** after reading the message.

2. On the "License Agreement" screen, click **Next** after reading the message and selecting "I accept...".

PROSet Setup (Cont.)

3. On "Setup Type" screen, select **Typical** and click **Next** to continue.
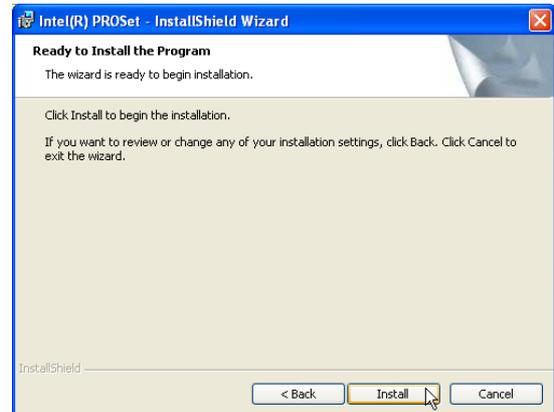
4. Click **Install** to continue.
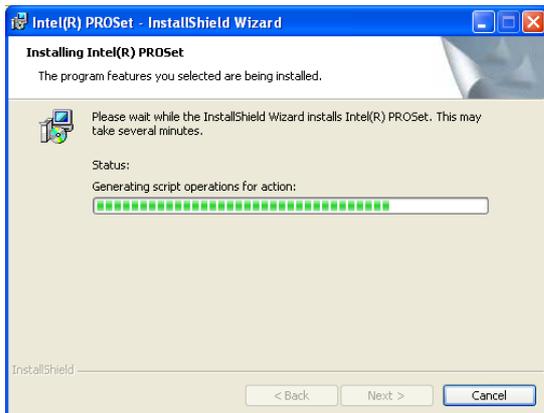
5. Wait while files are installed and configured.
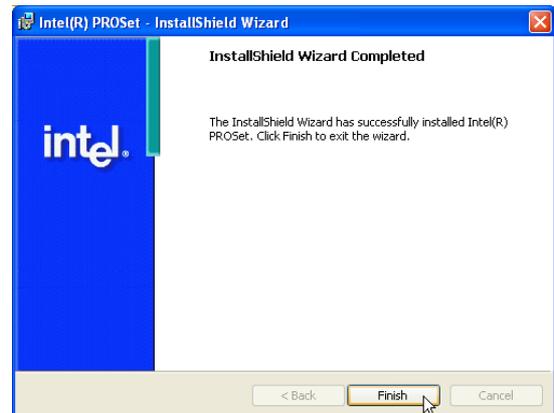
6. Setup is now complete, click **Finish** to exit the wizard.

After setup, the PROSet icon will appear on the Windows taskbar.

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PROSet Utility

This is the wireless LAN utility. You can use the **Help** button for more information.

Launch Intel PROSet utility by right-clicking the icon on the taskbar and selecting "Open Intel(R) PROSet".

If the icon is not available, launch Intel PROSet utility through Windows start button and find "Intel Network Adapters".
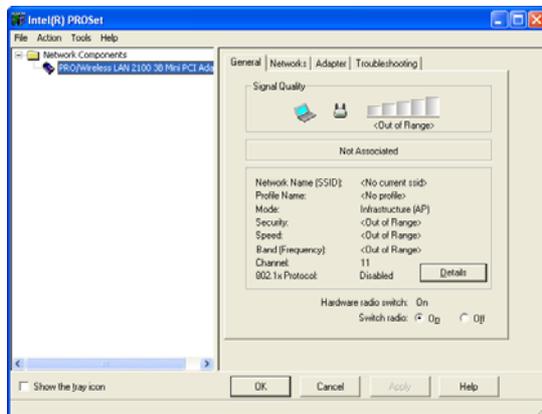
This is the main page that gives the wireless LAN status. Select "Switch radio: On or Off" to enable or disable the built-in wireless LAN.
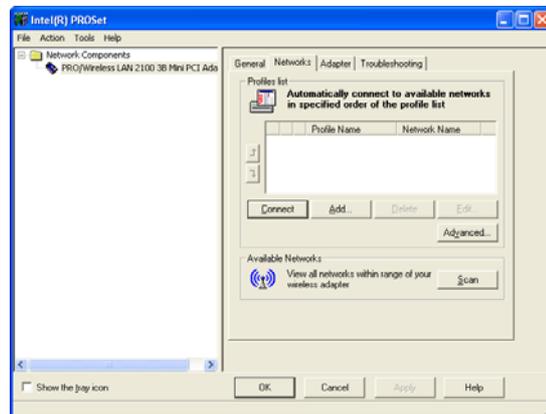
The "Networks" page is used to search and add wireless LAN networks including Ad hoc (peer to peer) connections.

This is the "Adapter" page that allows you to configure power and Ad Hoc settings.
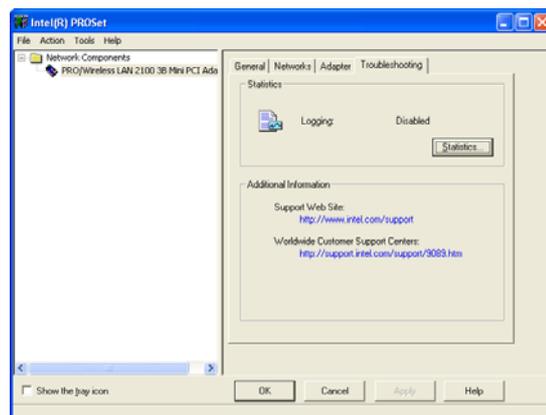
The "Troubleshooting" page is used to view wireless LAN statistics and find the manufacturer's contact information.

Connecting to a wireless LAN

Follow these steps to connect to a wireless LAN.
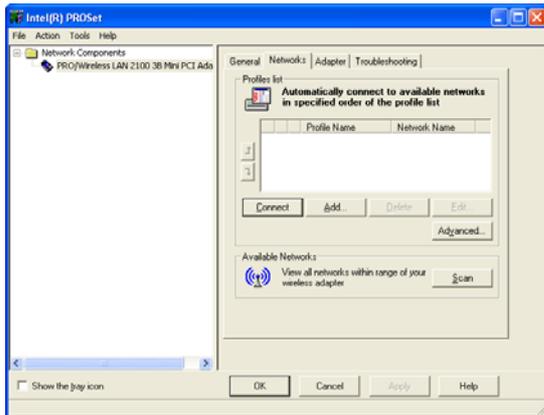
Click **Scan** on the Networks page.

Intel PROSet will scan for Access Points or peers with broadcasting enabled.
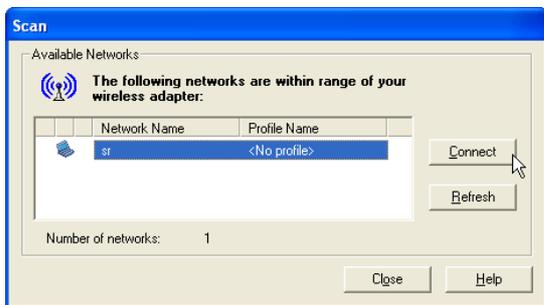
Once a wireless LAN connection is discovered, you can click the **Connect** button.

If there is no record of this connection, you will be allowed to create a profile so that you can easily roam between different wireless connections.

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Connecting to a wireless LAN (Cont.)

Type a "Profile Name". The "SSID" and "Operating Mode" will be automatically set. Ad hoc connections are usually to a nearby computer and probably uses the owner's name or initials.

Add other wireless connections if necessary. Acess Points may have their broadcasting service disabled to prevent unwanted connections. You need to obtain the SSID and enter it manually. Security settings may also be required on the next page.

When complete, the taskbar icon will show green bars indicating a good connection and the signal strength.

Make settings on this page if necessary.
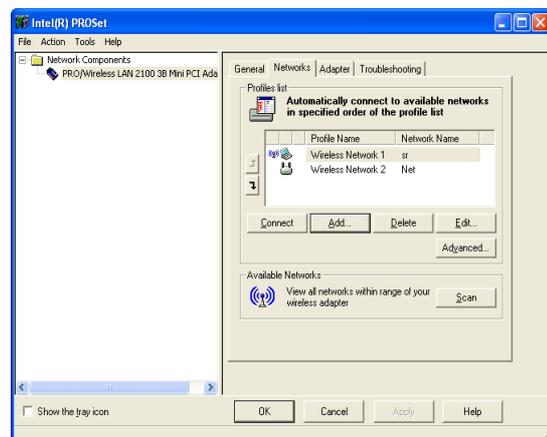
Your defined wireless connections will show on this page.

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ATK0100

(Required Utility)

Topics Covered:
ATKACPI Setup

Screens will vary depending on your operating system but the contents should be the same.

ATK0100 Setup

This utility requires that you manually install it from Device Manager. No software operation is required.

1. Double click **Unknown device**.

2. Click **Reinstall Driver**.

3. Select "Install from..." and click **Next**.
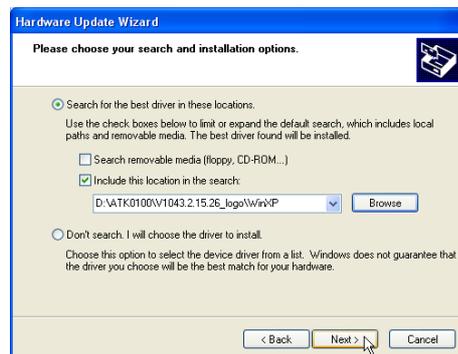
4. Browse to your operating system folder in the "ATK0100" folder and click **Next**.

5. Click **Finish** when setup is complete.
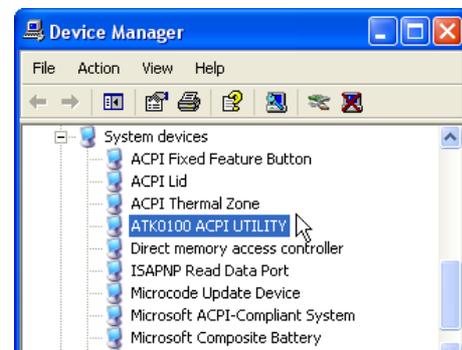
6. "ATK0100 ACPI UTILITY" should show under System devices.
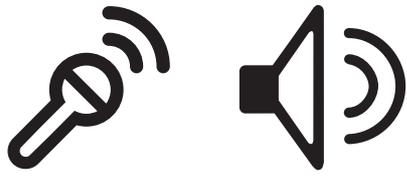
Audio

(Required Driver)

Topics Covered:

Audio Setup

Realtek Audio Utility

Screens will vary depending on your operating system but the contents should be the same.

Software Reference

Audio Setup

Running setup will give you the following wizard:

1. Normally, you will get a "Found New Hardware Wizard" as shown on the next step. If not, double click the Audio Controller with a question mark in "Device Manager".

3. On the "Welcome" screen, click **Next** to begin the setup wizard.

5. Select **No**... and click **Finish** in order to install other drivers and utilities.

2. On the "Found New Hardware Wizard" screen, click **Cancel** in order to use the audio setup program.

4. Wait while files are being copied to your hard drive.

6. When the device driver is properly setup, it will appear as the above in "Device Manager".

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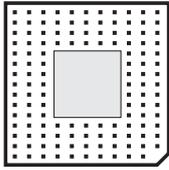
CPU Hotfix

(Required Driver)

Topics Covered:

CPU Hotfix Setup 1

CPU Hotfix Setup 2

Screens will vary depending on your operating system but the contents should be the same.

CPU Hotfix Setup 1 of 2

Two setups are required. There are several languages available in each folder. After setup, restart Windows and your Windows will be able to utilize advanced features in Intel's latest mobile processor. The first file will extract to a separate folder. Read "hotfix" for setup instructions.
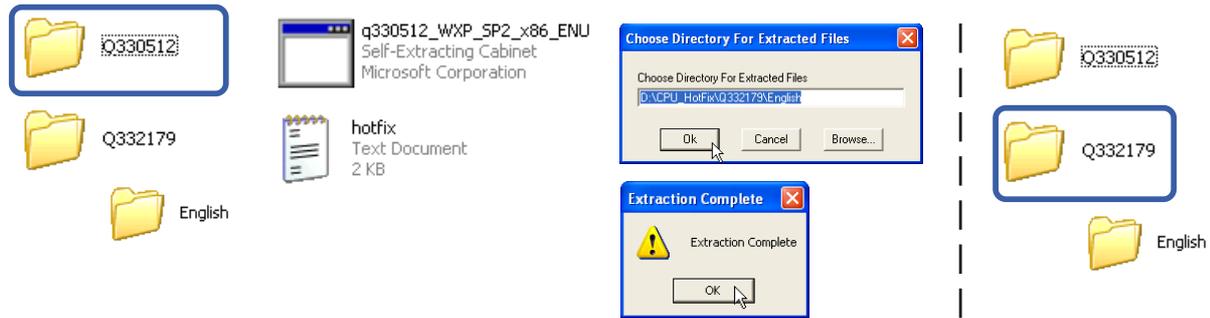
CPU Hotfix Setup 2 of 2

The second file has a setup wizard as follows.

1. Click **Next** on the welcome screen.

2. Click **Next** after selecting "I Agree" on the License Agreement.
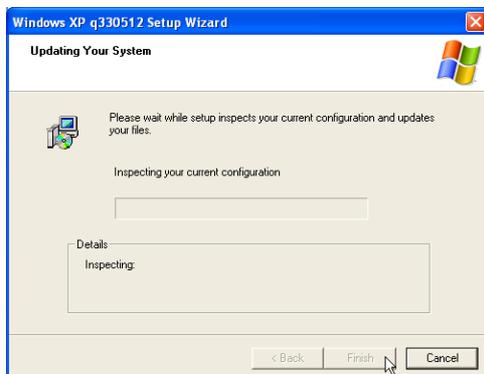
3. Wait while setup is in progress.

4. Click **Finish** after setup is complete.

INFupdate

(Required Driver)

Topics Covered:
Intel INF Update Setup

Screens will vary depending on your operating system but the contents should be the same.

INFupdate Setup

Running setup will give you the following wizard. No other configurations are necessary.
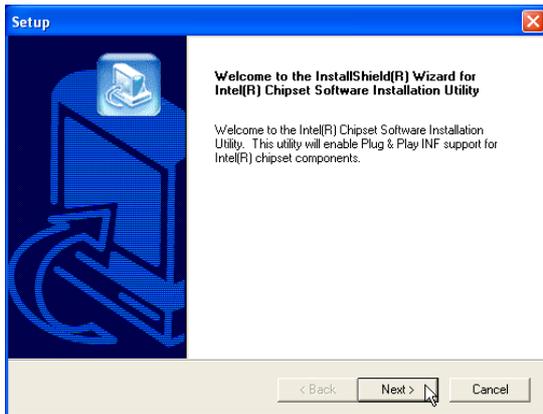
1. On the "Welcome" screen, click **Next** after reading the message.
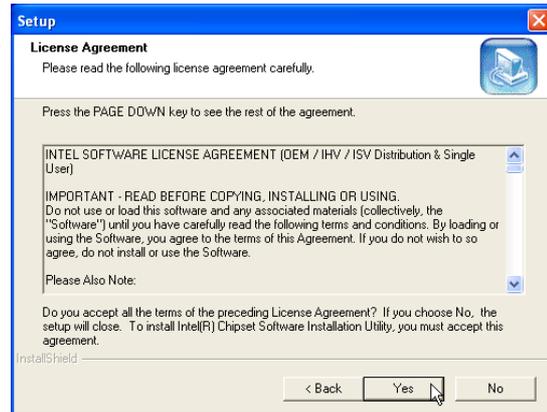
2. On the "License Agreement" screen, click **Yes** after reading the message.
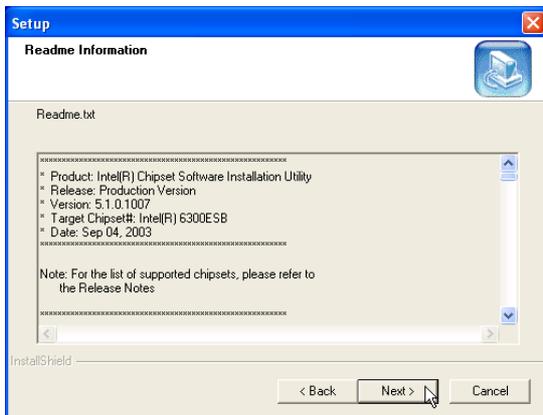
3. On the "Readme" screen, click **Next** after reading the message.

4. Setup is now complete, select "No..." and click **Finish** in order to install other items.
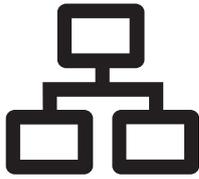
LAN

(Required Driver)

Topics Covered:
LAN Driver Setup
Configuring your LAN

Screens will vary depending on your operating system but the contents should be the same.

LAN Driver Setup

Running setup will give you the following wizard.
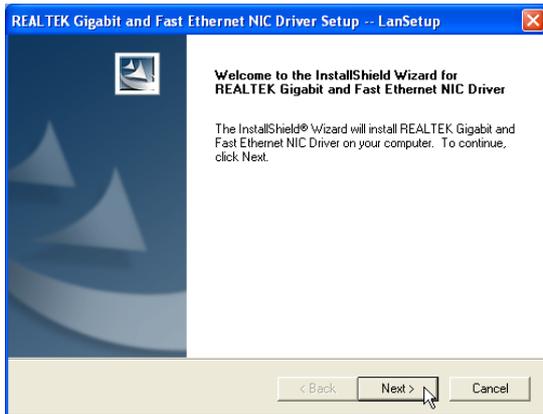
1. On the "Welcome" screen, click **Next** after reading the message.
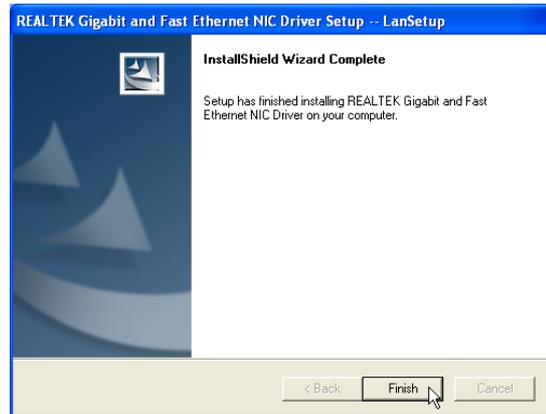
2. Setup is now complete, click **Finish** to exit the wizard.

Configuring your LAN

Joining a Domain or Workgroup (Windows XP)

(1) Click **Start** and **My Computer**.
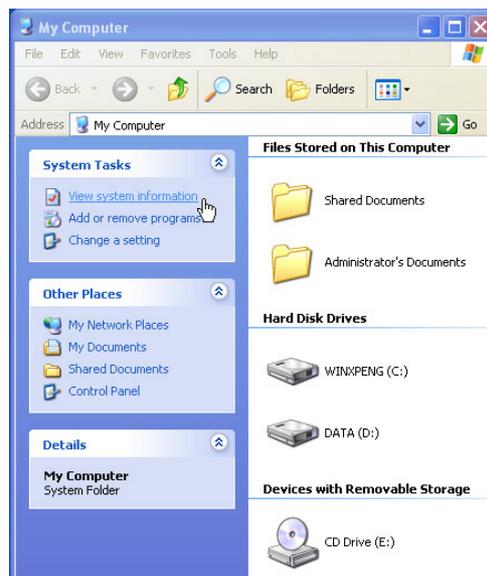
(2) Click **View system information**.
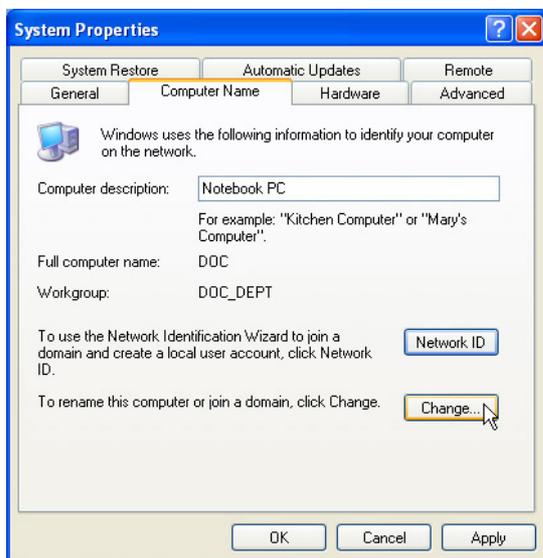
(3) Your computer name, workgroup or domain information is shown here. Click **Change** to view options.
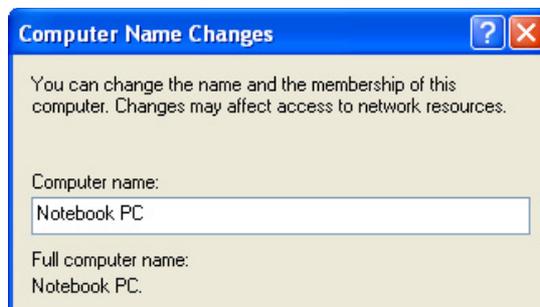
You cannot use spaces or symbols in the computer name. In the example here, a warning is given when trying to use "Notebook PC". You can use the single word "Notebook" instead.

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Joining a Domain or Workgroup (Windows XP) Cont'

(4a) Domain:
The primary server in the domain will perform routing functions and security verifications for your computer. Select **Domain** and enter an existing domain you wish to join. **NOTE:** After clicking "OK", you will be asked for the Domain Controller's Administrator password to join the domain in Windows XP.
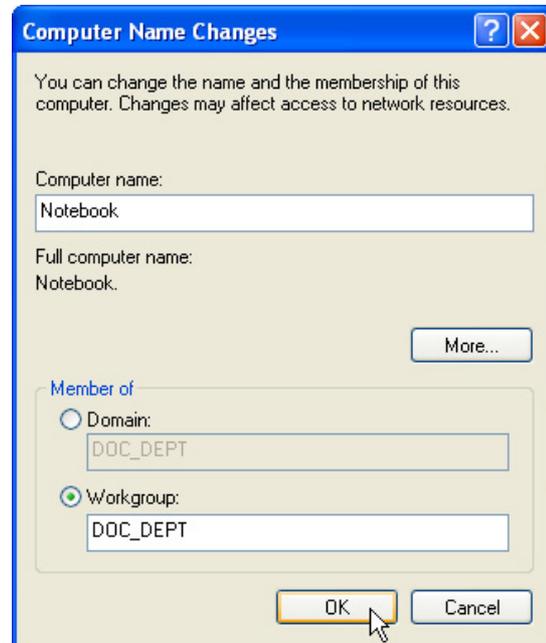
(4b) Workgroup:
If your network does not have a domain or you are not authorized to join a domain, select Workgroup and type in an existing name or create your own (by typing an unused workgroup name)
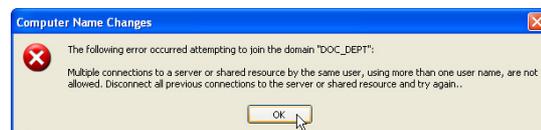
Administrator Name or Password not accepted: You cannot login with the Administrator name and use one password, then use the Administrator name with another password to add to a domain. You must login using another name. See Windows documentation to "Add New User" from User Accounts in the Control Panel.

Joining a Domain or Workgroup (Windows XP) Cont'
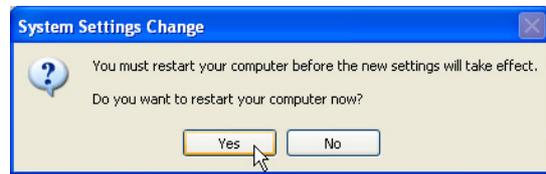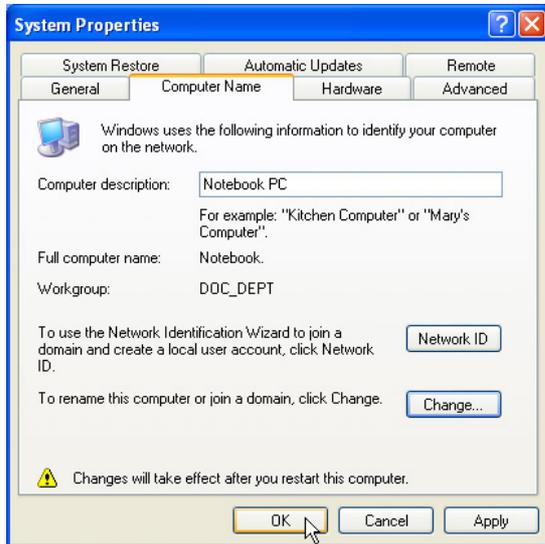
(5) After you restart your computer, you should see some contents through Entire Network.

Viewing Your Network
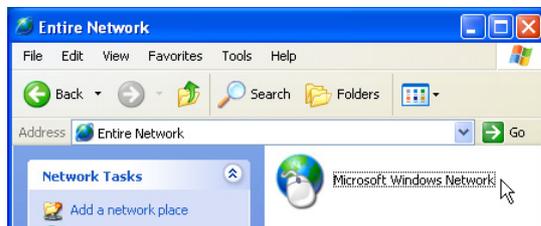
(6) Clicking on "My Network Places" will display networks which you have installed protocols for. Clicking a network protocol such as "MS Windows Network" will display all the servers available under that protocol.
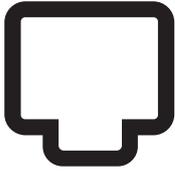
Modem

(Required Driver)

Topics Covered:

Modem Setup

Modem Configuration

Screens will vary depending on your operating system but the contents should be the same.

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Modem Setup

Running setup will give you the following wizard.
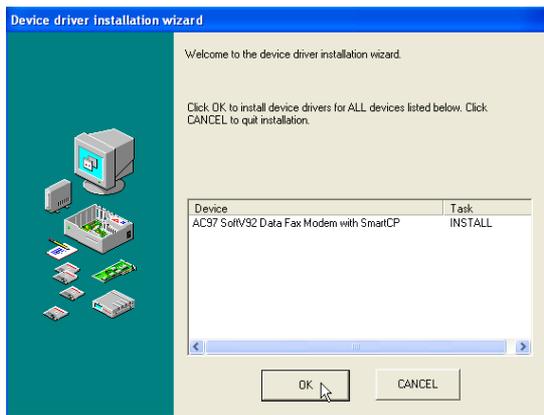
1. On the "Welcome" screen, click **Next** after reading the message.
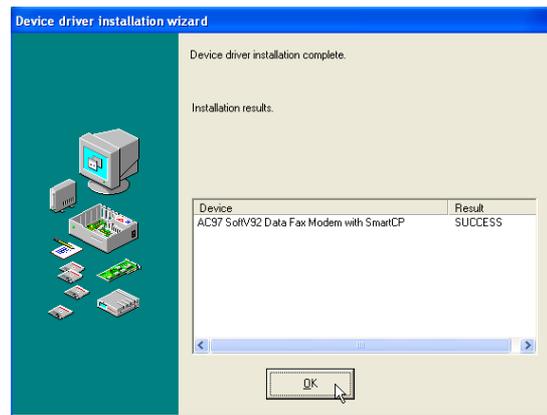
2. Setup is now complete, click **OK** to exit the wizard.

Modem Configuration

Use **New Connection Wizard** in "Network Connections" to start the configuration wizard to your modem. The New Connection Wizard also allows configuration for other communication devices (if available) such as LAN, ISDN, ADSL, or Bluetooth.
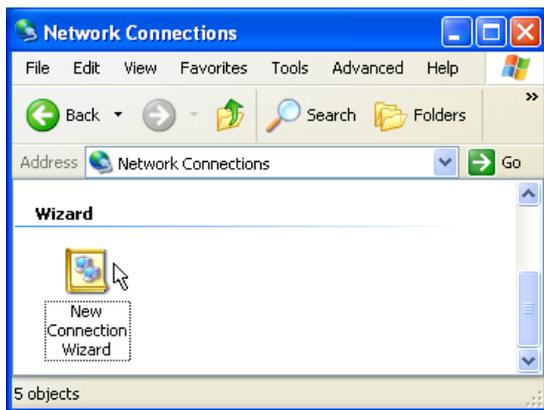
1. Double-click **New Connection Wizard** in Network Connections

2. Select "Connect to the Internet" and click **Next**.

Modem Configuration (Cont')
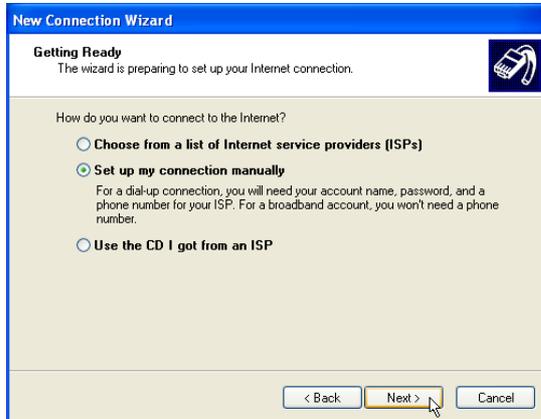
3. Select "Set up my connection manually" and click **Next**.

5. Select your modem and click **Next**.

7. Enter the dial up number for your ISP.
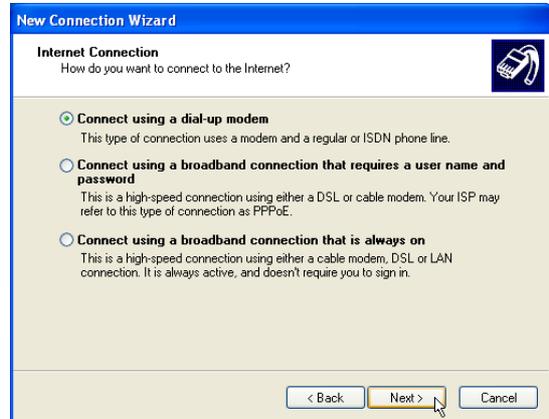
4. Select "Connect using a dial-up modem" and click **Next**.
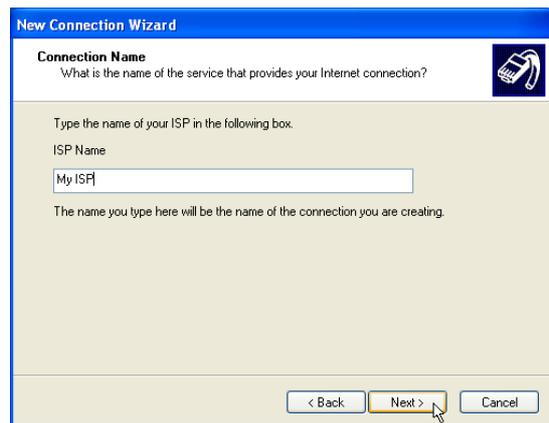
6. Enter any name to represent your ISP.

8. Select one of the security preferences and click **Next**.

Modem Configuration (Cont')

9. Enter your ISP account name and password and click **Next**.

10. Select "Add a shortcut..." and click **Finish**.
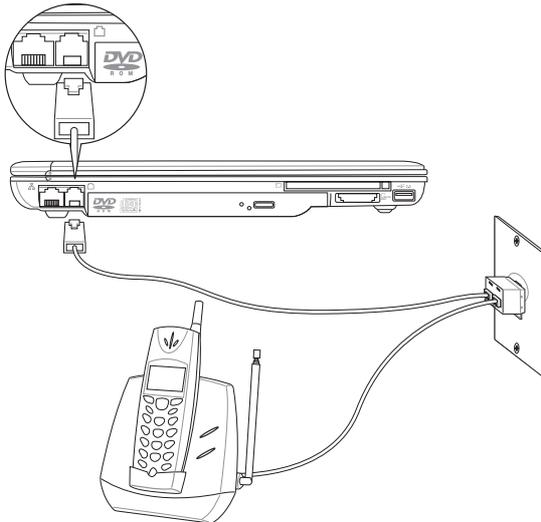
11. Connect a telephone cable from your Notebook PC to a telephone jack.

12. When you click on the link, the connection window will show. Click **Dial** to connect to your ISP.

⟵⟶2.0

USB2.0

(Required Driver)

Topics Covered:

USB Setup

Manual Setup

Screens will vary depending on your operating system but the contents should be the same.

USB2.0 Setup

Running setup (in Windows XP) will give you the following message. USB 2.0 driveres are provided in Windows XP SP1 and Windows 2000 SP4. Please visit Microsoft's web site for information on obtaining a service pack (SP) if you do not have the latest Windows version.

Intel USB 2.0 Driver Setup ✕

Intel USB 2.0 Driver support may only be installed on machines running Windows 98 SE or Windows ME.

Setup will now abort.

OK
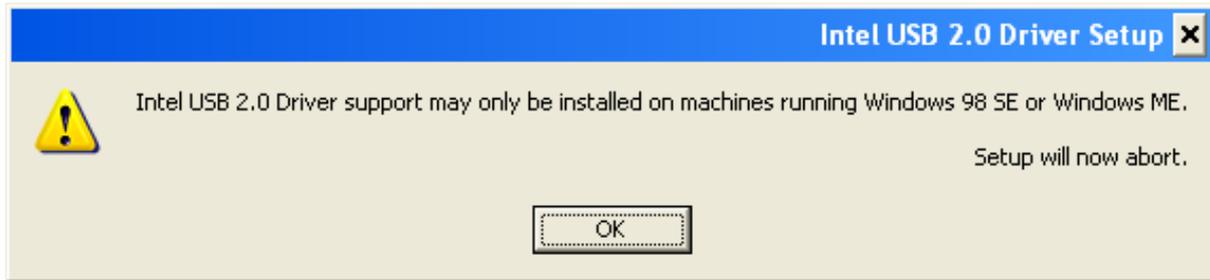
USB Usage

Simply plug in your USB device to use the USB port. For USB 2.0 speeds, the driver must be properly installed. Without the driver, your USB device can still use the port at USB 1.1 speeds.
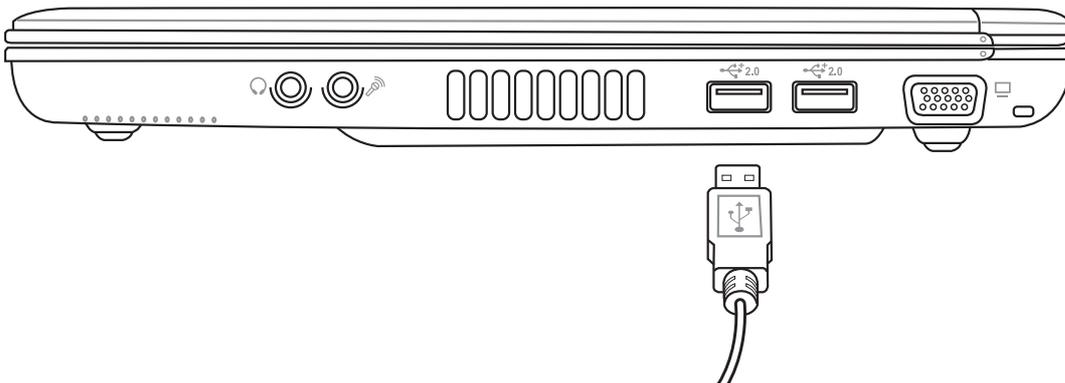
LiveUpdate

(Recommended Utility)

Topics Covered:
LiveUpdate Setup
Using LiveUpdate
Resetting Your BIOS

Screens will vary depending on your operating system but the contents should be the same.

LiveUpdate Setup

Running setup will give you the following wizard:
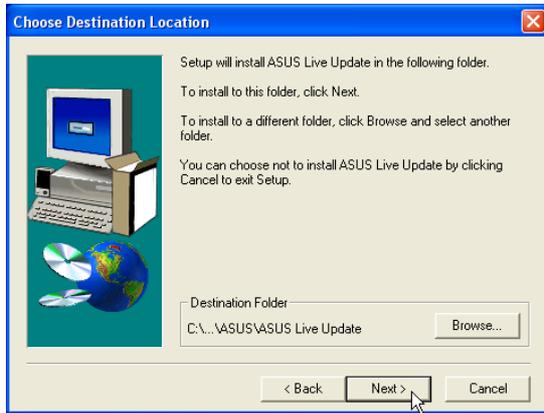
On the "Choose Destination Location" screen, click **Next** to continue or you may first change the destination folder.

On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.
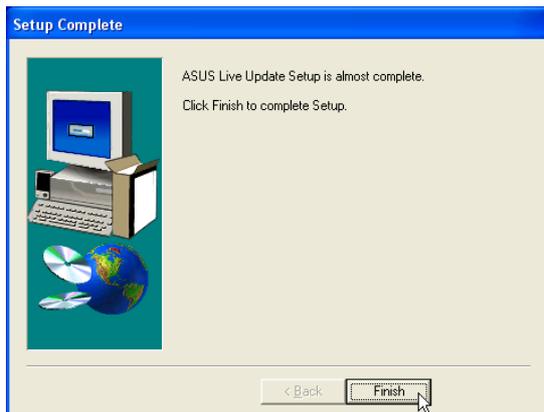
On the "Setup Complete" screen, click **Finish**.
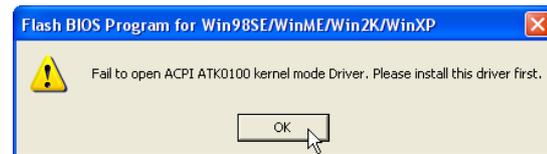
If you don't have "ATK0100" installed, you will get this message. You must "ATK0100" before using this utility.

Using LiveUpdate
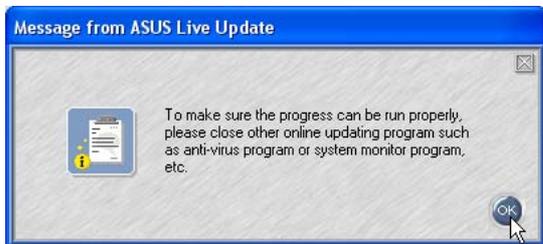
Close other software to ensure no conflicts.

Click **OK** to connect to the "Live Update" server.

Newer versions will be shown. Check the items to update or select "Check all".
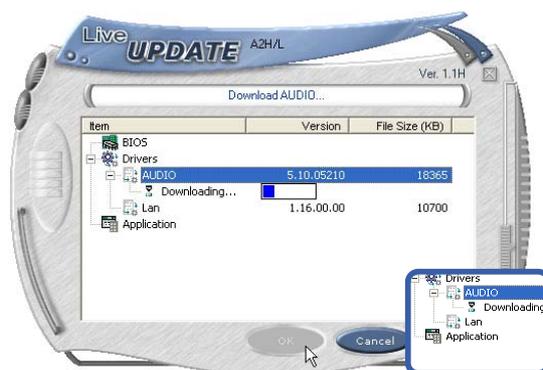
Click **OK** to download and install the update.

When update is complete, click **OK** to exit.
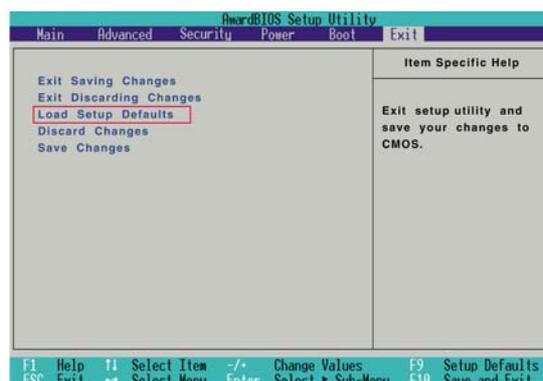
You may be instructed to "reset your BIOS". It entails pressing [**F2**] on bootup to enter BIOS setup and selecting **Load Setup Defaults**, and then **Exit Saving Changes** on the "Exit" menu.

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PC-cillin 2002

(Recommended Utility)

Topics Covered:

PC-cillin 2002 Features

About Viruses

Technical Support

PC-cillin 2002 Feature Screens

Screens will vary depending on your operating system but the contents should be the same.

Welcome to PC-cillin 2002

Trend Micro PC-cillin 2002 provides next generation secure computing for today's personal computers. More than just antivirus software, PC-cillin includes a Personal Firewall, Site filter, Internet mail scanning, and more for all your secure computing needs.

Designed for the home or small office user, the friendly interface lets you quickly become familiar with all the powerful features of the software. However, the program behind the interface uses the latest technology and provides you with protection from the nastiest viruses, sneakiest Trojans, and the meanest hackers. With firewall technology, the Trojan System Cleaner tool, and more, PC-cillin gives you peace of mind whenever you connect to the Internet. And now that Trend Micro's award winning ICSA approved scan engine also includes ScriptTrap technology, personal computing has never been more secure.

Here's what PC-cillin will do "straight out of the box":

- Checks for viruses every time you open, copy, move, or save a file
- Protects against downloading infected files from the Internet or FTP sites
- Guards against malicious Java applets and Microsoft ActiveX controls while surfing the Web
- Detects and cleans live Trojans installed on your system
- Monitors your Microsoft Word and Microsoft Excel sessions for macro viruses, using MacroTrap
- Scans and cleans all files on your hard drive
- Scans all program files for viruses
- Checks all your saved documents for macro viruses

Here's what you can do with just a click of a button:

- Scan every file on your system and clean any infected files
- Scan any file from Windows Explorer or My Computer by right-clicking the file icon
- Scan floppy disks and clean any infected files
- Check all of your Word and Excel document(s) for macro viruses
- Scan your email attachments as they are being downloaded from an Internet (POP3) mail server
- Protect your computer against attacks from the Internet using a combination of cloaking and firewall functions
- Make whatever Web sites you want "off limits" to other users of the computer
- Protect your handheld devices with updated Personal Digital Assistant (PDA) virus pattern files

Personal Firewall

PC-cillin 2002 provides secure Internet computing with its new Personal Firewall feature. Easy to operate, the Personal Firewall protects your computer from unwanted Internet connections. The Personal Firewall is ideal for computers using always-on broadband (DSL, cable modem) connections, or for those computers that are often online. Even computers that only connect to the Internet for short periods of time are still vulnerable to hacker attacks and need protection.

With adjustable security levels, a trusted site list, and a port blocking function, the Personal Firewall gives you the control to keep your computer safe from malicious code like spyware and Trojan horses. The Personal Firewall is comprised of the following components:

Cloaking: Prevents your computer from being found. Cloaking hides the entry points (ports) of your computer making it appear to be disconnected from a network. Hackers using techniques like NetBIOS browsing, port scanning, or ICMP packet special processing will be unable to locate your computer.

Firewall: Provides a barrier between your computer and the network (LAN, Internet). This barrier examines and filters network traffic coming into your computer. By filtering network traffic, the firewall prevents malicious programs or files from entering your computer. The firewall protects against attacks hackers commonly use including: Ping of Death, IP conflict, SYN flooding, and others.

Trojan Backdoor Blocking: If a hacker has already broken into your system, he or she could have installed a Trojan (small hidden program) onto your computer (unlike viruses, Trojans do not replicate themselves, but can still wreak havoc on your system). To avoid being traced, the hacker can then use your computer to attack other computers. The Trojan Backdoor Blocking function prevents hackers from using your computer by blocking Back Orifice, Back Orifice 2000, Net Bus, Deep Throat and other known back door programs.

There may be Web sites that you know are safe and will not attack your computer. Using the Trusted Sites function, the Personal Firewall lets you add these safe sites to a list. Your computer can connect to any Web site on this list because they will not be filtered.

PC-cillin for Wireless

Malicious code and other threats hidden inside files, email, or on the Web can enter your Palm, Pocket PC, or EPOC device during beaming, synchronization, or Internet access. Trend Micro PC-cillin for Wireless provides portable, easy-to-use antivirus security for wireless devices; to defend against potential threats. Best of all, PC-cillin for Wireless is bundled with PC-cillin 2002 providing you with secure computing on both your desktop and handheld.

Trojan System Cleaner

PC-cillin automatically runs the Trojan System Cleaner (TSC) during initial installation, and every time Real-time Scan runs. The TSC detects the activity of Trojan horse programs, recovers system files which are modified by Trojans, stop their processes, and deletes files dropped from Trojans.

Traditional antivirus products only scan "files", they open files and check for virus code. But they don't check and clean system files and can't clean or delete Trojan horse programs (also known as Trojans) if it is already run in the system.

The TSC uses patterns to define how to clean a Trojan. These patterns are built into Trend Micro virus pattern files and are kept up-to-date. Whenever TSC is executed, it finds the newest pattern file and tries to read Trojan clean section from the pattern file.

ScriptTrap Technology

With the addition of ScriptTrap technology, PC-cillin now more than ever provides rock-solid protection for your computer. PC-cillin not only guards against harmful known script-based viruses ("I Love You" and "Anna Kournikova"), but can also protect your PC from new, unknown script-based threats.

Using the following processes, ScriptTrap automatically scans for scripting viruses based on "what they do" rather than how they are written:

lexical analysis- divides the script's source code into components, called tokens, based on punctuation and other keys.

semantic parsing- attempts to determine the meaning of each component.

Emergency Lock

PC-cillin also includes an Internet Emergency Lock function that lets you immediately disable all Internet activity if you suspect an attack. Enabling the Emergency Lock function immediately stops all traffic to and from the Internet.

User Interface

Designed for the home or small office user, the program's friendly interface quickly familiarizes you with the powerful features of PC-cillin 2002. The interface now includes a Simple and Standard mode. Using a tab interface, you can easily switch between the two modes.

Simple mode: Perform common PC-cillin tasks such as: view a simplified version of your system status, and scan all drives. In addition, you can update and register your software.

Standard mode: Access more advanced PC-cillin 2002 functions including: viewing your system status in more detail, selectively scanning folders, synchronizing your PDA, quarantining files, and viewing logs. In the Standard mode, as in the Simple mode, you can also update and register your software.

About Intelligent Update

Intelligent Update automatically searches for and downloads the latest files for PC-cillin 2002. This includes pattern and program files for both the main program and PC-cillin for Wireless. In addition, Intelligent Update ensures you have the latest Personal Firewall rules. This powerful function keeps PC-cillin and all its components updated; offering you maximum protection with minimal user intervention.

Once your computer is running, PC-cillin checks for an Internet connection. When this feature is enabled and your computer is online, PC-cillin automatically connects to the Trend Micro server to check if the latest update is available. If newer components are on the server, a pop-up window appears asking if you want to start downloading. If you choose not to download immediately, the pop-up window reappears in 10 minutes.

New product registration method

PC-cillin 2002 offers a new way to register your software online. On our Registration Web page, simply type your name and email address in the appropriate fields, receive your License Key via email, and insert it into the correct field on the Register Now screen of the PC-cillin window.

Registration only takes a few minutes and Trend Micro provides technical support, virus pattern downloads, and program updates for one year to all registered users, after which you must purchase renewal maintenance.

About viruses

A computer virus is a program that replicates. To do so, it needs to attach itself to other program files (for example, .exe, .com, .dll) and execute whenever the host program executes. Beyond simple replication, a virus almost always seeks to fulfill another purpose: to cause damage.

Called the damage routine, or payload, the destructive portion of a virus can range from overwriting critical information kept on your hard disk's partition table to scrambling the numbers in your spreadsheets to just taunting you with sounds, pictures, or obnoxious effects.

It is worth bearing in mind, however, that even without a "damage routine," viruses allowed to run unabated will continue to propagate--consuming system memory, disk space, slowing network traffic and generally degrading performance. Besides, virus code is often buggy and can also be the source of mysterious system problems that take weeks to understand. So, whether a virus is harmful or not, its presence on your system can lead to instability and should not be tolerated.

Some viruses, in conjunction with "logic bombs," do not make their presence known for months. Instead of causing damage right away, these viruses do nothing but replicate--until the preordained trigger day or event when they unleash their damage routines on the host system or across a network.

To learn more about any particular virus, or about viruses in general, you can access Trend Micro's online Virus Encyclopedia at: www.antivirus.com/.

How viruses are created

Until a few years ago, creating a virus required knowledge of a computer programming language. Today anyone with even a little programming knowledge can create a virus. Usually, though, misguided individuals who want to cause widespread, random damage to computers create viruses.

In the typical scenario, it is an individual, working alone, who writes a virus program and then introduces it onto a single computer, network server, or the Internet. Why? Ego, revenge, sabotage, and basic disgruntlement have all been cited as motivations. Recently, do-it-yourself "virus kits" have been popping up on the Internet, and macro scripts are becoming both easier to learn and more powerful, putting the capacity to engineer viruses in the hands of nearly everyone. In other words, no single, likely profile exists by which virus writers can be described or understood.

So whatever the reason one may have for writing a virus, the important thing is to make certain your company is not victimized, that data you are responsible for is safe, and that precious time is not wasted hunting down (and cleaning up after) viruses.

Accessing the Trend Micro Virus Encyclopedia

PC-cillin includes access to the online Trend Micro virus encyclopedia, organized by name and virus type. Use it to find out about tens of thousands of individual viruses, including the typical symptoms of a given virus, its infection procedure, and the damage routine.

With the growing prevalence of Macro viruses, we have bolstered the number of Macro virus descriptions included in the encyclopedia to well over 2000.

Of course, PC-cillin, which uses Trend's award-winning, 32-bit, multi-threading scan engine, is capable of detecting all viruses that are known to be in circulation, plus the many thousands more that exist as "proof of concept" only in researcher's virus labs and on hacker's computers.

To access the Trend Micro Virus Encyclopedia, on the PC-cillin menu bar, click Security Info > Encyclopedia..

Viewing the Trend Micro Virus list

The Virus Information Center contains a list of the Real-time top ten viruses. In addition, you can view updated Security Alerts and Virus Advisories.

To access the Trend Micro Virus list, on the PC-cillin menu bar click, Security Info > Virus List.

Contacting Technical Support

Trend Micro provides technical support, virus pattern downloads, and program updates for one year to all registered users, after which you must purchase renewal maintenance.

Send an email to our highly trained technical support staff or visit our Web site to receive technical support.

Trend Micro Technical Support

Email: support@trendmicro.com

URL: www.antivirus.com

To speed up your problem resolution, when you contact our staff please provide as much of the following information as you can:

- Product serial number

- PC-cillin program, scan engine, pattern file, version number

- OS name and version

- Internet connection type

- Exact text of any error message given

- Steps to reproduce the problem

Before Contacting Technical Support

While our technical support staff is always pleased to handle your inquiries, there are a couple things you can do to quickly find the answer you are seeking.

- Check the documentation: the manual and online help provide comprehensive information about PC-cillin. Search both documents to see if they contain your solution.

- Visit our technical support Web site: our technical support Web site contains the most up-to-date information about all Trend Micro products. Other inquiries that were already answered are also posted on the support Web site.

PC-cillin 2002 Feature Screens

PC-cillin 2002 Real-time Monitor

The Real-time Monitor is the quickest way to access certain functions, for example to display the PC-cillin or Settings windows. With the Real-time Monitor, you know at a glance if real-time scanning is enabled (the lightning streak icon is red) or disabled (the lightning streak icon is grey).

The Emergency Lock is activated. All incoming and outgoing Internet traffic is halted.

PC-cillin is connecting to the Trend Micro server to download the latest updates.

Your computer is currently under attack.

The real-time scanning function is enabled.

The real-time scanning function is disabled.

Configuration Screen

Double click the PC-cillin icon on the taskbar to bring up the real-time scan information page. Or right click and select "Configuration".

The PC-cillin software has many features to protect you from Virus threats. Use the **Help** for more information.
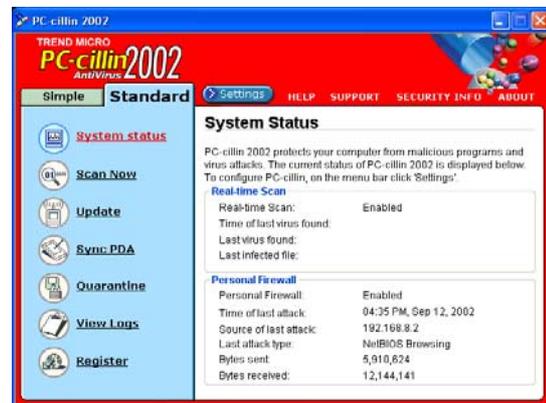
Real-time Status

Select "Real-time Status" by right clicking on the PC-cillin icon and you will bring up information on your virus pattern version, last scanned file, and network activity.

Stop Network Activity
Click the large button with a computer and broken network cable to stop all network activity if you suspect harmful activities are being made to your computer from the network.

Power4 Gear

Topics Covered:

Power4 Gear Setup

Benefits of Power4 Gear

Power4 Gear Interface

Power4 Gear Configuration

Screens will vary depending on your operating system but the contents should be the same.

Power4 Gear Setup

Running setup will give you the following wizard:

On the "Welcome" screen, click **Next** after reading the message.

On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.

If you don't have "ATK0100" installed, you will get this message. You must "ATK0100" before using this utility.

On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.

On the "Setup Complete" screen, click **Finish**.

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Benefits of Power4 Gear

Power4 Gear gives you control over power consumption items by allowing you to instantly "shift" from one power consumption scheme to another. The four preferences or "gears" are shown below. You can change or "shift" gears by using the Power4 Gear button above the keyboard or by using the task bar icon. Power4 Gear can also be automatically activated when AC power is removed.

Power4 Gear Interface

Understanding the Power4 Gear buttons

Press the Power4 Gear button above the taskbar to shift between the four gears as labeled below. The icon may vary depending on your Notebook PC model.

| Maximum Performance | | If your Notebook PC has overclocking options and is enabled, the airplane will be replaced with a rocket. |

Maximum Performance ⟷

High Performance

Medium Performance

Maximum Power Savings

Using the task bar icon

Right-click the icon on the taskbar for quick access to Power4 Gear settings.

If your Notebook PC has overclocking options and is enabled, the airplane will be replaced with a rocket.
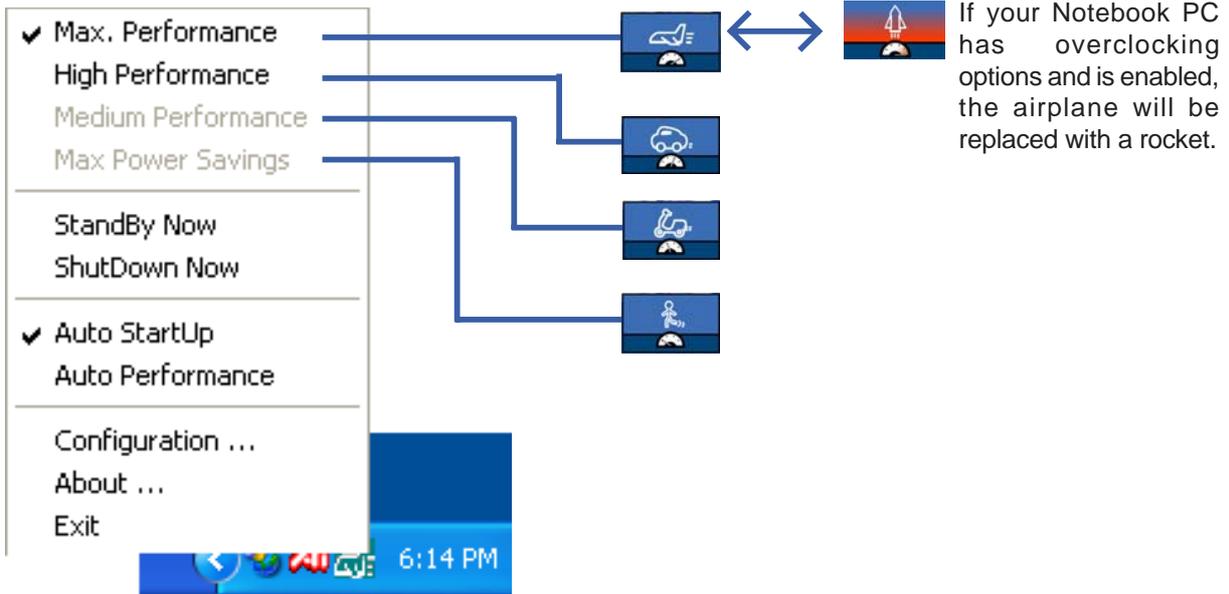
Power4 Gear Modes

When you are using an AC adapter, the Power4 Gear button will switch between two modes as shown below. When you remove the AC adapter, the Power4 Gear button will switch between three modes as shown below. When you remove or apply the AC adapter, Power4 Gear will automatically shift you up or down into the proper mode segment.

AC Mode Segment

If your Notebook PC has overclocking options and is enabled, the airplane will be replaced with a rocket.

Battery Mode Segment
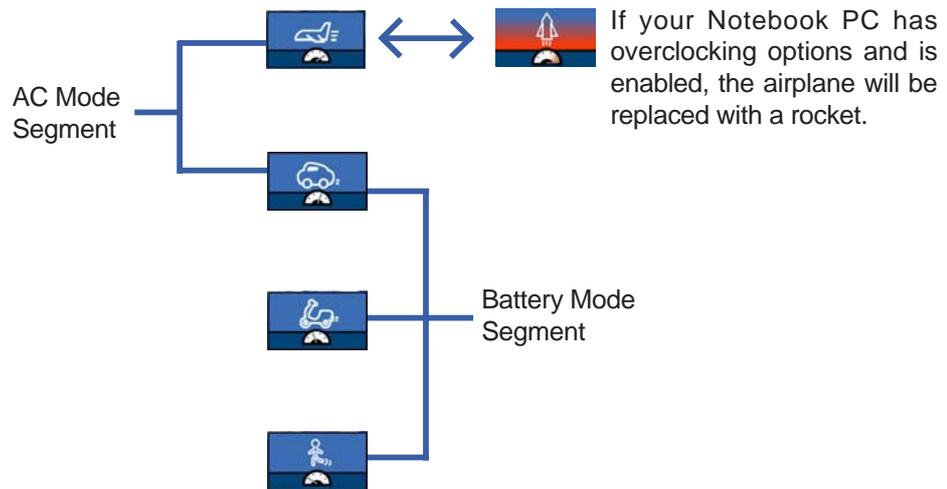
Power4 Gear Configuration

Double click an item to bring up a menu of selections and click on a value to change. To save, select "Save Configuration" form the "File" pull-down menu. If you did not save, you will be prompted to when you exit.

About Power4 Gear

Power4 Gear Utility
BatteryLife.EXE
Copyright (C) 2002

OK

Maximum Performance

Configuration Power4 Gear
File   Time out   Panel Level   CPU Preformance
Max. Performance
High Performance
Medium Performance
Max Power Savings

Max. Performance (for AC mode)
  System
    Standby time out
      Standby timer Never
  Video
    Video time out
      Video off timer 15 Minutes
  Hard Drive
    Hard Drive time out
      Hard Drive off timer Never

High Performance

Configuration Power4 Gear
File   Time out   Panel Level   CPU Preformance
Max. Performance
High Performance
Medium Performance
Max Power Savings

High Performance (for AC mode)
  System
    Standby time out
      Standby timer Never
  Video
    Video time out
      Video off timer 15 Minutes
  Hard Drive
    Hard Drive time out
      Hard Drive off timer Never

Medium Performance

Configuration Power4 Gear
File   Time out   Panel Level   CPU Preformance
Max. Performance
High Performance
Medium Performance
Max Power Savings

Medium Performance (for DC mode)
  System
    Standby time out
      Standby timer 5 Minutes
  Video
    Panel Light
      Brightness level 46%
    Video time out
      Video off timer 5 Minutes
  Hard Drive
    Hard Drive time out
      Hard Drive off timer 10 Minutes

Maximum Power Savings

Configuration Power4 Gear
File   Time out   Panel Level   CPU Preformance
Max. Performance
High Performance
Medium Performance
Max Power Savings

Max Power Savings (for DC mode)
  System
    Standby time out
      Standby timer 2 Minutes
    CPU Performance
      Performance level 37%
  Video
    Panel Light
      Brightness level 20%
    Video time out
      Video off timer 1 Minute
  Hard Drive
    Hard Drive time out
      Hard Drive off timer 3 Minutes

Renaming Settings

You can rename the four power saving levels as you like using the same method to rename files or folders in Windows.

Configuration Power4 Gear
File   Time out   Panel Level   CPU Preformance
Max. Performance
High Performance
Medium Performance
Max Power Savings

Max. Performance
High Performance
Medium Performance
For Meetings

Max Power Savings (for DC mode)
  System
    Standby time out
      Standby timer 2 Minutes
    CPU Performance
      Performance level 37%
  Video
    Panel Light
      Brightness level 20%
    Video time out
      Video off timer 1 Minute
  Hard Drive
    Hard Drive time out
      Hard Drive off timer 3 Minutes

See next page for available selections for each "gear".

Power Saving Details

System Standby Timer

☐ Standby time out
    Standby timer Never
        1 Minute
        2 Minutes
        3 Minutes
        5 Minutes
        10 Minutes
        15 Minutes
        20 Minutes
        25 Minutes
        30 Minutes
        45 Minutes
        1 Hour
        2 Hours
        3 Hours
        4 Hours
        5 Hours
        Never

CPU Performance

☐ CPU Performance
    Performance level 100%
        100%
        61%
        35%

Hard Drive Off Timer

☐ Hard Drive time out
    Hard Drive timer Never
        1 Minute
        2 Minutes
        3 Minutes
        5 Minutes
        10 Minutes
        15 Minutes
        20 Minutes
        25 Minutes
        30 Minutes
        45 Minutes
        1 Hour
        2 Hours

Display Panel Off Timer

☐ Video time out
    Video off timer 15 Minutes
        1 Minute
        2 Minutes
        3 Minutes
        5 Minutes
        10 Minutes
        15 Minutes
        20 Minutes
        25 Minutes
        30 Minutes
        45 Minutes
        1 Hour
        2 Hours
        3 Hours
        4 Hours
        5 Hours

Display Panel Brightness

(in Medium Performance or Maximum Savings)

☐ Video
    ☐ Panel Light
        Brightness level 20%
    ☐ Video   6%
        Video timer 1 Minute 13%
                    20%
                    26%
                    33%
                    40%
                    46%
                    53%
                    60%
                    66%
                    73%
                    80%
                    86%
                    93%
                    100%

60
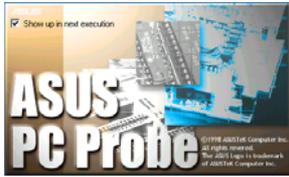
ASUS Probe

Topics Covered:

ASUS Probe Setup

ASUS Probe Reference

Starting ASUS Probe

Using ASUS Probe Monitoring

ASUS Probe Task Bar Icon

Screens will vary depending on your operating system but the contents should be the same.

Probe2 Setup

Running setup will give you the following wizard:
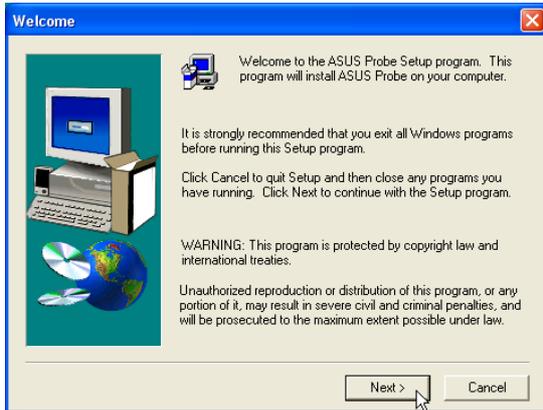
On the "Welcome" screen, click **Next** after reading the message.

On "Choose Destination Location" , click **Next** to continue or enter another destination folder.
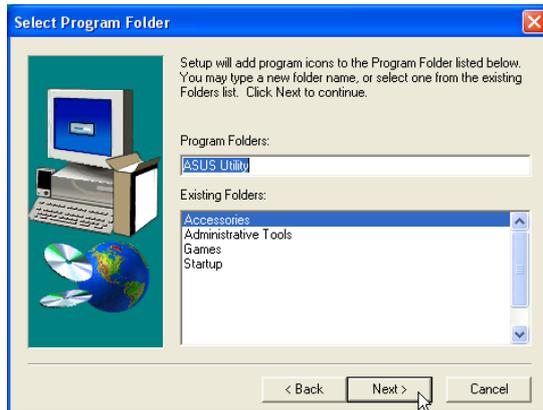
On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.
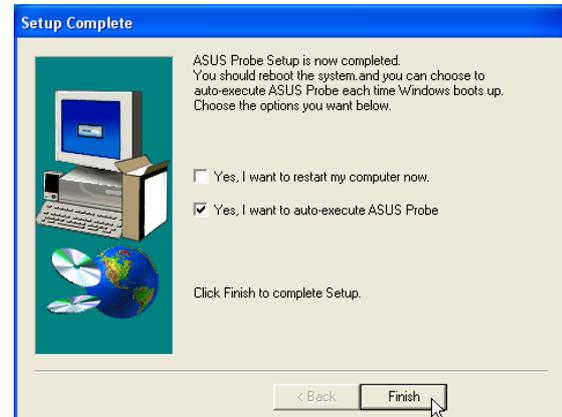
On the "Setup Complete" screen, deselect "...restart my computer now" so you can install other items and restart later. Click **Finish**.

ASUS Probe Reference

ASUS 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 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 Probe starts, a splash screen appears allowing you to select whether to show the screen again when you open ASUS Probe or not. To bypass this startup screen, clear the **Show up in next execution** check box.
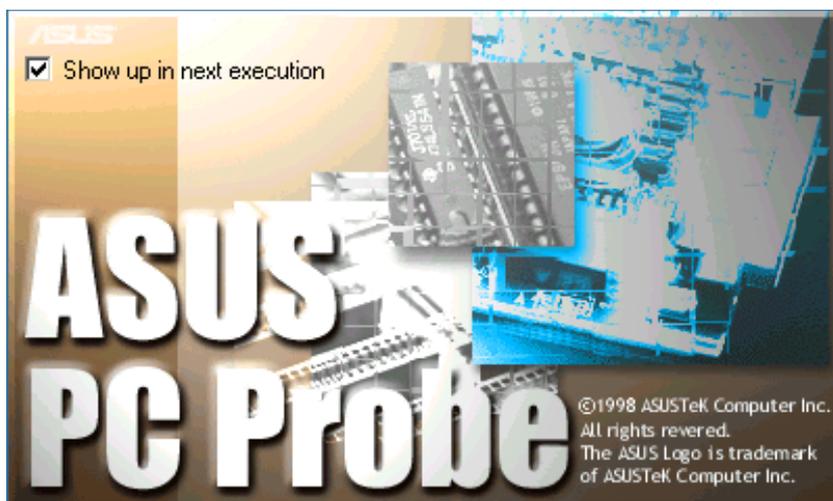
The ASUS Probe icon will appear on the taskbar's system tray indicating that ASUS Probe is running. Clicking the icon once will allow open the ASUS Probe interface.

Windows XP Taskbar

Windows XP will hide taskbar items. Click the arrow to show running services.

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Using ASUS Probe Monitoring
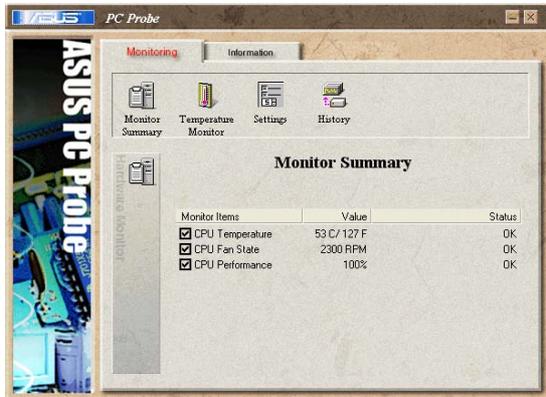
Monitor Summary

Shows a summary of the items being monitored.
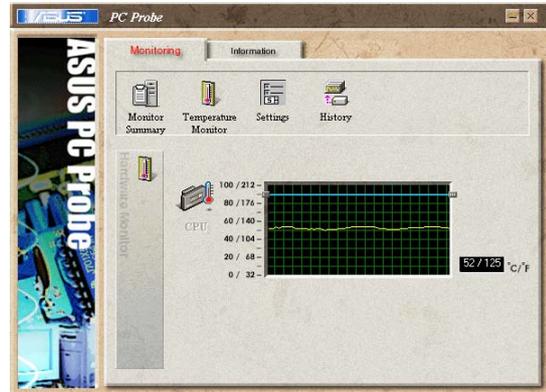
Temperature Monitor

Shows the PC's temperature.
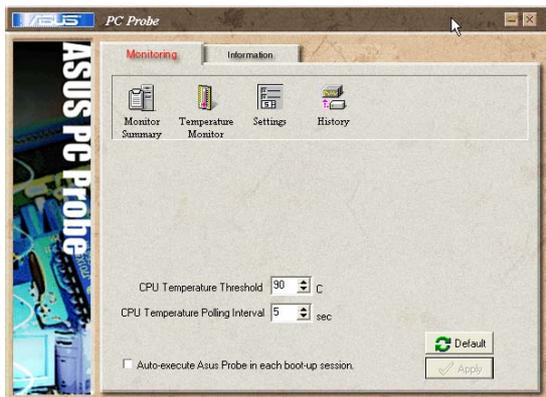
Settings

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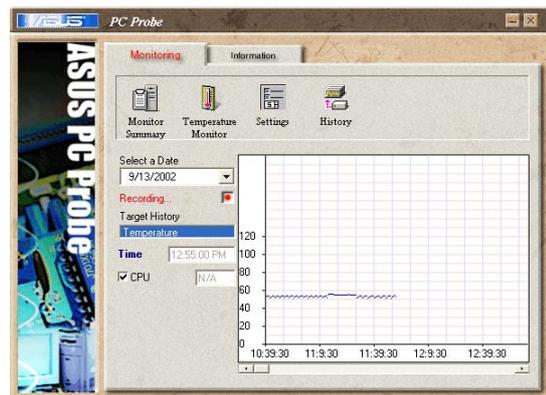
History

Lets you record the temperature monitoring activity by date, time, and target history. Click the record button and select a date. To view a previous recording, simply choose that date.

Using ASUS Probe Monitoring (Cont')

Information
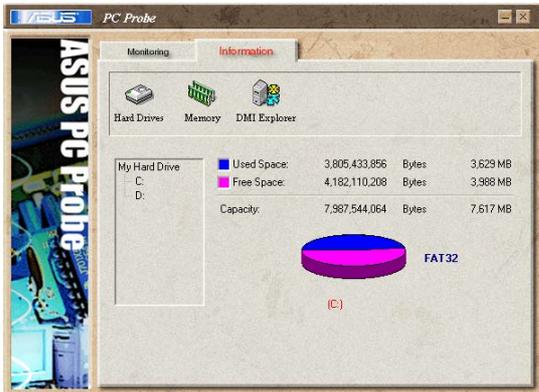
Hard Drives

Shows the used and free space of the PC's hard disk drives and the file allocation table or file system used. Information on other hard drives can be accessed by clicking on the relevant drive letter.
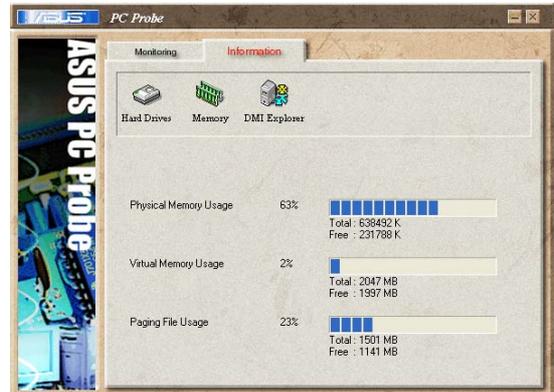
Memory

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

DMI Explorer

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

ASUS Probe Taskbar Icon

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

When the ASUS Probe senses a problem with your PC, portions of the ASUS Probe icon changes to red and audio alerts will be heard from the speaker.

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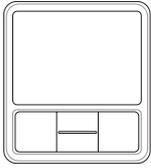
TouchPad

(Recommended Utility)

Topics Covered:

TouchPad Setup

Overview of the TouchPad

Scrolling Properties Page

Tap Zones Properties Page

More Features Properties Page

Button Actions Properties Page

Touch Properties Page

Edge Motion Properties Page

Frequently Asked Questions

Screens will vary depending on your operating system but the contents should be the same.

Touchpad Setup

Running setup will give you the following wizard:

On the "Choose Setup Language" screen, select a language and click **OK** to continue.
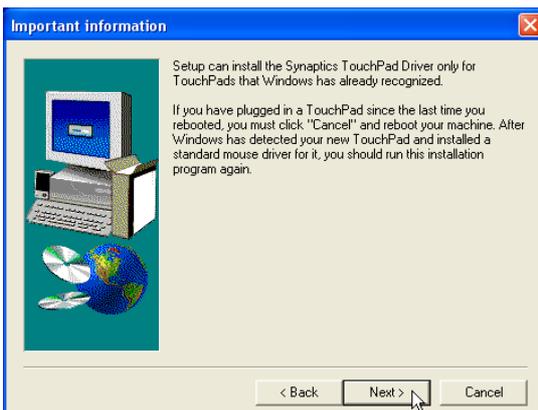
On the "Information" screen, click **Next** after reading the message.

On the "Setup Complete" screen, select "No,..."and click **Finish**.

On the "Welcome" screen, click **Next** after reading the message.

On the "Start Copying Files" screen, click **Next** after checking the current settings.

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Synaptics® TouchPad Features

Your Synaptics TouchPad is much more powerful than an old-fashioned mouse. In addition to providing all the features of an ordinary mouse, your TouchPad allows you to:

- Tap on the Pad Instead of Pressing the Buttons
- Drag Icons, Windows and Other Objects without Using Buttons
- Adjust the Overall Touch Sensitivity
- Customize Buttons and Taps
- Prevent Accidental Pointing While Typing (also known as Palm Check)
- Scroll Through a Document Without Using Scroll Bars
- Zoom In/Out and Pan on Documents
- Move the Pointer Long Distances
- Fine Tune the Pointer Movement

Tap on the Pad Instead of Pressing the Buttons

Tapping on the surface of the pad is the same as clicking the left mouse or TouchPad button (i.e. the primary TouchPad button). Tapping is usually quicker and more convenient than using the button. To double-click, just tap twice. A light, quick tap works best; very hard or very slow taps are less likely to work.

Drag Icons, Windows and Other Objects without Using Buttons

Often, you need to hold the mouse or TouchPad button down while moving the pointer (to move an icon or window around the screen, for example). This action is called dragging. Just like clicking and double clicking, you can also drag without using the button.

To move or drag an object (equivalent to pressing and holding the left TouchPad button):
1) Position the pointer over the object and tap twice, down-up-down, leaving your finger on the Touch-Pad on the second tap. This action is sometimes called tap-and-a-half.
2) Now move the selected object by sliding your finger across the TouchPad surface.
3) Lift your finger to drop the object.

Tap-and-a-Half

You might wonder what happens when you reach the edge of the pad and you are dragging an object. The Synaptics TouchPad has a feature called Locking Drags. This feature allows you to lift your finger from the pad without ending the drag. You can drag an object across the screen using several finger strokes. To end a Locking Drag action, tap again. The Synaptics TouchPad also has a feature called Edge Motion to help with long distance dragging. See Move the Pointer Long Distances for details.

The Tap and Drag and Locking Drags features are located on the Touch Properties Page in the Mouse Properties dialog.

Adjust the Overall Touch Sensitivity

You can control how much finger pressure you must apply before the TouchPad responds by adjusting the Touch Sensitivity slider. This slider is located on the Touch Properties Page in the Mouse Properties dialog.

At higher (more sensitive) Touch Sensitivity settings, the TouchPad recognizes even a very slight touch. If you see undesired or erratic pointer motion, try a lower setting. Lower (less sensitive) settings require a firmer touch to move the pointer. In general, a lighter touch works best.

Customize Buttons and Taps

Most TouchPads come with two buttons that work just like traditional mouse buttons. You can customize the behavior of these buttons.

Tapping on the TouchPad surface also performs the same action as pressing a button. Tapping in the center of the pad will always produce a left-click (the action of the primary button), but you can configure each of the four corners of the TouchPad surface to act as different buttons. These special corner regions are called tap zones . With four corner tap zones, the center of the TouchPad, and the two physical buttons you can turn your TouchPad into a seven-button mouse!

A customization example:

Suppose you want to use your TouchPad like a three-button mouse. You can configure the left TouchPad button to produce middle clicks when pressed. Remember that tapping on the TouchPad will produce left clicks, and pressing the right TouchPad button will produce right clicks. For additional convenience, you can configure the top right corner tap zone of the TouchPad to produce right clicks. Looking at the TouchPad surface in the picture below, taps in the top right corner (the red shaded area) will produce right clicks, but tapping anywhere else on the TouchPad (the solid gray area) produces left clicks.

An Example TouchPad

There are many different actions that you can assign to the buttons and tap zones. The following actions are provided as built-in features with the Synaptics TouchPad device driver. Additional actions might be available if you have installed any third-party TouchPad Plug-In software.

- Jump to the Start Button. This action causes the pointer to jump to the Start button in the Windows task bar and automatically opens the Start Menu.

- Jump to the current application's menu. This action causes the pointer to jump to the leftmost entry in the application's window menu (usually the File menu) and automatically pops up the submenu.

- Minimize the current application. This action minimizes the current application's window. If the current application's window is already minimized, this action will restore it to its normal size and location.

- Maximize the current application. This action maximizes the current application's window (expands it to cover the full screen). If the current application's window is already maximized, this action will restore it to its normal size and location.

- Run a program of your choosing. This action allows you to specify the name of any program you want to run automatically when you click the button or tap in the tap zone.

To customize taps and buttons, go to the Button Actions Properties Page in the Mouse Properties dialog.

Prevent Accidental Pointing While Typing

Unintentional pointer movement and accidental taps can be caused by accidentally brushing the surface of the TouchPad with your palm or another part of your hand. The results of this contact can be observed as a changing cursor location when typing, causing subsequent text to appear in the wrong place. Or text may "spontaneously" be highlighted and replaced. Most often, this unwanted pointing activity occurs when typing on the keyboard. The TouchPad can detect and prevent accidental and unwanted pointer movement while you are typing.

If you see unwanted pointer movement occurring while you are typing, you can adjust the Palm Check slider located on the Touch Properties Page in the Mouse Properties dialog. Move the slider thumb to the right towards Maximum. Now accidental brushes of your hand on the TouchPad while you are typing are more likely to be ignored.

On the other hand, in the midst of typing, you might purposefully use the TouchPad to point and click, and sometimes the TouchPad may not seem to respond. In this case, move the slider thumb to the left towards Minimum. Now pointing during typing is less likely to be interpreted as an accidental brush with the pad surface, and will not be ignored.

Scroll Through A Document without Using Scroll Bars

Virtual Scrolling allows you to perform a very common task – scrolling documents – without having to move the pointer away from your work. By simply sliding your finger up and down the right edge of the TouchPad, the contents of the current window will scroll vertically. Similarly, by sliding your finger left and right along the bottom edge of the TouchPad, the contents will scroll horizontally. You no longer need to laboriously maneuver the pointer to the small scroll bar elements; you can scroll no matter where the pointer happens to be.

Virtual Scrolling works with document windows (like word processors and spreadsheets), and it also works with file lists, font lists, and other scrollable items. As a rule, you can use Virtual Scrolling when you are working in any window that has a scroll bar.

And Virtual Scrolling does more than just make scrolling more convenient. It also can make scrolling smoother. When you scroll by dragging the scroll thumb with the mouse, many applications do not re-display the document window until you release the mouse button. Virtual Scrolling makes navigation through documents easier, because it forces the application to re-display the window contents as you scroll.

How do I use Virtual Scrolling?

To customize the Virtual Scrolling feature, go to the Scrolling Properties Page located in the Mouse Properties dialog.

Zoom In/Out and Pan on Documents

Note that zooming and panning only work in applications that support the Microsoft Intellimouse. With Intellimouse aware applications, you can zoom and/or pan to quickly maneuver your way through lengthy documents. To jump to a distant location within your document, zoom out, click on the desired location, then zoom in. To scroll horizontally and vertically at the same time, simply pan in a diagonal direction!

Move the Pointer Long Distances

Suppose you are dragging an object, scrolling at high speed (via Virtual Scrolling!), or merrily moving the pointer when you suddenly reach the edge of your TouchPad. Don't despair, the Synaptics TouchPad Edge Motion feature comes to the rescue! Edge Motion helps with long distance pointer motion. When you reach an edge of the TouchPad, the pointer (or scroll thumb when Virtual Scrolling) continues to move in the same direction until you lift your finger from the TouchPad or move your finger away from the edge.

Edge Motion speed can be pressure-sensitive or constant. Pressure-sensitive speed means that the harder you press, the faster the object or pointer moves.

You can configure the Edge Motion feature on the Edge Motion Properties Page in the Mouse Properties dialog.

Fine Tune the Pointer Movement

The Synaptics TouchPad has many additional features to help you control the way your pointer moves. Please take a look at the list of additional features.

Accessories

Your TouchPad is a productivity enhancing tool, designed for serious work. But we think it should also be fun. We have included two fun application programs that demonstrate some of the capabilities of the TouchPad: Pressure Graph and The Incomparable, Mysterious Synaptics MoodPad.

To run these applications, click once on the Synaptics TouchPad Icon in the Taskbar, go to the Accessories menu and select the desired application.

More About the TouchPad

The TouchPad detects your finger by capacitive sensing (it is not sensitive to heat or applied force). As your finger approaches the pad, it alters the electric field in the vicinity of the pad surface. The TouchPad sensor is just a circuit board with a matrix of conductive traces printed on the top surface. A special chip on the back side of the TouchPad continuously measures the capacitance of these traces, and thus can determine the presence and location of your finger.

To get the most out of your TouchPad, be sure that the TouchPad driver software is installed. If the Synaptics TouchPad driver is properly installed, the Mouse Properties dialog will include several TouchPad tabs along the top in addition to the standard mouse tabs.

Property Pages

The property pages allow you to customize TouchPad settings for your Notebook PC. The following pages will describe each property page with the Synaptics logo. The "Buttons", "Pointers", and "Pointer Options" pages come with Windows and should be described in Windows documentation.

Scrolling Properties Page

The Scrolling properties page allows you to customize the Virtual Scrolling capabilities of your TouchPad.

In some applications, the scroll zones which activate Virtual Scrolling can be used for zooming too.

Enabling Virtual Scrolling of the Active Window

Check the appropriate boxes on this page for the type of Virtual Scrolling that you prefer:

* Horizontal Scrolling
* Vertical Scrolling
* Coasting

Choose where you want Virtual Scrolling to occur:

* Scroll Selected Item

- OR -

* Scroll Item Under Pointer
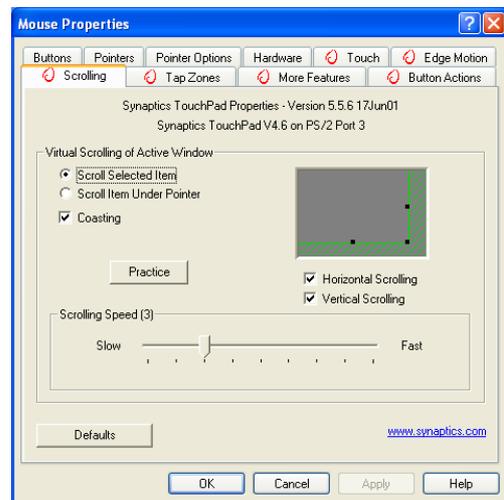
Customizing Scroll Zone Sizes

This page includes a small map of the TouchPad with the scroll zones shaded in red. See the Scroll Zone TouchPad Map for a more detailed description.

You can adjust the size of each zone by dragging one of the black resize handles on the TouchPad map.   If you are having trouble activating the Virtual Scrolling feature, you might want to try making the scroll zones wider. If you find that scrolling sometimes gets activated when you didn't mean to scroll, try narrowing the scroll zones.

Customizing Virtual Scrolling Speed

You can control the speed of Virtual Scrolling by adjusting the Scrolling Speed slider on this page. Drag the slider thumb to the right for faster scrolling.

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Tap Zones Properties Pages

The Tap Zones properties pages allow you to assign custom actions to taps in the Touchpad's corner zone regions (or tap zone regions).

The Synaptics TouchPad driver may also control other pointing devices attached to your system. If the Synaptics TouchPad driver is controlling more than one pointing device on your system, the Synaptics pages on the Mouse control panel will have a drop-down box listing all of the pointing devices that are controlled. You may set separate settings for each by selecting the appropriate device (settings which don't apply to a particular pointing device will be grayed out).
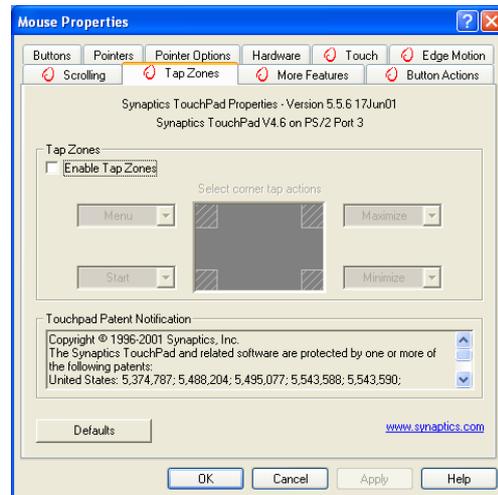
Customizing the Tap Zones

When the tap zones are enabled, each tap inside a corresponding tap zone region on your TouchPad can have a different meaning or action. For example, you can define the upper right corner tap zone to mean right clicks. Then when you tap your finger on the upper right corner of your TouchPad, it is as if you are clicking the right mouse or TouchPad button.

This page includes a small map of the TouchPad with the active tap zones shaded in red. Next to each zone is a text box specifying the action for that zone.

To Customize:
1. To activate the corner tap zones, check the box next to the text Enable Tap Zones. An unchecked box means that all taps on every part of the TouchPad surface will have left-click behavior.

2. To change an action for a particular zone, locate the text box nearest the zone. The text box displays the current action for this zone (for example, it might say No Zone which means that this particular zone is disabled and any taps here will produce the default left-click action).   Click on the down arrow button located to the right of the text to display a list of actions. Select the desired action.

3. Each tap zone can be resized to be as large or as small as you desire by dragging one of the black resize handles located on the TouchPad map.

More Features Properties Page

The More Features properties page allows you to control the following features of you Synaptics TouchPad:

Stop Pointer at Window Borders

This feature constrains the pointer to stay inside the active window. When you try to move the pointer outside the window, it stops at the edge. If you try a second time, the pointer is free to leave the window.

Stopping the pointer at the window borders makes it easy to access controls that lie around the edges of windows. For example, to close or resize a window, you can casually toss the pointer in the general direction of the close box or the edge of the window, and the pointer will stop exactly where you want it.

Snap to Default Button

This feature automatically moves the pointer to the Default Button when a dialog box appears on your screen.

Slow Motion Key

Sometimes you might need more accuracy when pointing with the TouchPad, such as in a drawing program. The speed of the pointer can make this type of accuracy difficult to obtain. To slow down the pointer movement, you can specify a slow motion key. Then, for slow pointer movement, press and hold this key as you move the pointer.

Constrained Pointer Key

At times you may want to restrict the pointer to move only horizontally or only vertically. You can specify a constrained pointer key, then press and hold this key as you move the pointer. The initial pointer direction when holding this key determines whether the pointer is constrained to move only horizontally or only vertically.

Synaptics TouchPad Tray Icon
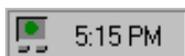
 The Synaptics TouchPad tray icon appears in the Windows Taskbar near the clock. You can choose between two icons:
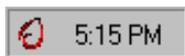
 This is the animated Touch Meter icon. The size of the dot on the touch meter indicates the amount of finger pressure. The icon turns blue while Virtual Scrolling is in progress.

This is the non-animated Synaptics logo icon.

You can access the "TouchPad Properties" dialog by double clicking on either tray icon.
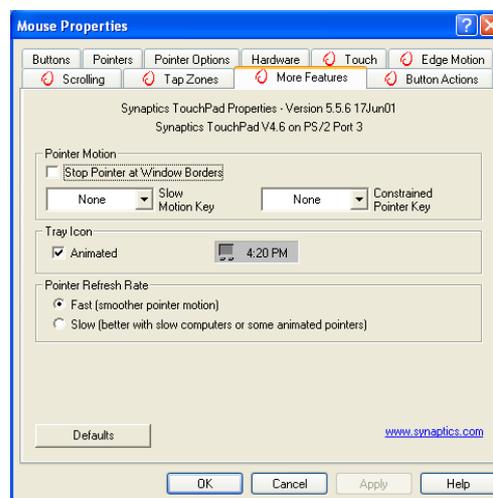
Button Actions Properties Page

The Button Actions properties page allows you to customize the physical buttons of your TouchPad.

The **Rocker Switch** settings are available on Notebook PC's with scroll buttons between the left and right buttons.

Customizing Button Assignments

You can customize the TouchPad buttons in the same way that you customize the tap zones.

To Customize:

Each button has a text box that displays the current action (for example, it might say Left, which means the left-click or primary-click action). To display a list of possible actions, click on the down arrow button located to the right of the text. Select the desired action.
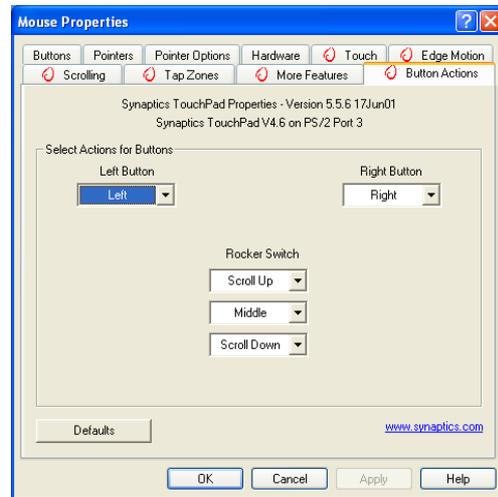
Touch Properties Page

The Touch properties page allows you to customize the tap response and sensitivity of your TouchPad.

Taps

Check the appropriate boxes in the Taps section of the Touch Properties Page for the tapping capabilities that you prefer:

- Tap to Click
- Tap and Drag
- Locking Drags

Touch Sensitivity

Use the Touch Sensitivity slider to control how much finger pressure you must apply before the TouchPad responds. See Adjust the Overall Touch Sensitivity.

Palm Check

The Palm Check slider controls the TouchPad's detection of accidental and unwanted pointing movement. In addition to detecting palm contact with the TouchPad, the TouchPad can ignore much of the accidental and unwanted pointer movement that may occur while typing (due to accidentally contacting your TouchPad). See Prevent Accidental Pointing While Typing for more details.
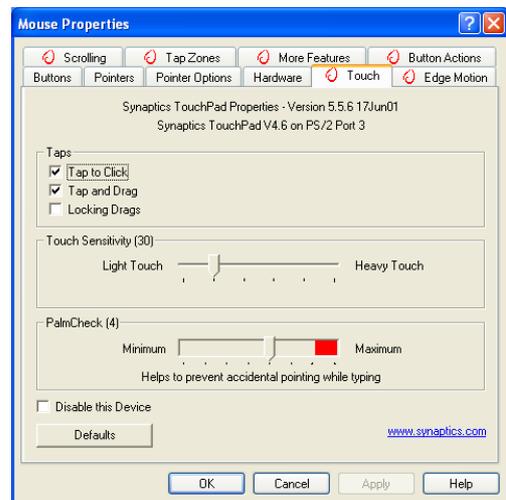
Edge Motion Properties Page

The Edge Motion properties page allows you to customize the long distance pointer motion capabilities of your TouchPad. When your finger reaches the edge of your TouchPad, the Edge Motion feature allows the pointer to continue to move until you lift your finger. See Move the Pointer Long Distances for more details about the Edge Motion feature.

Enabling Edge Motion

Check the appropriate boxes on this page for the types of Edge Motion that you desire:

- When Dragging
- Always
- When Scrolling
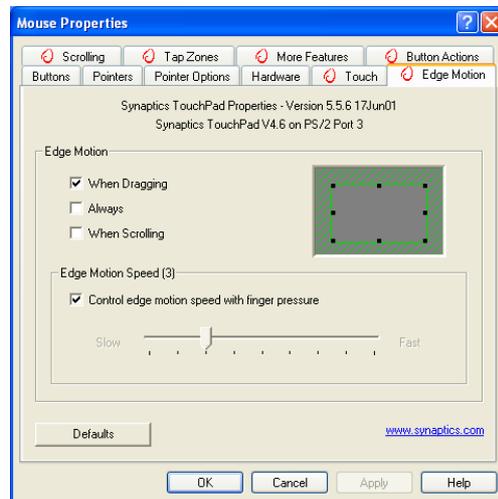
Customizing Edge Zone Sizes

This page includes a small map of the TouchPad with the edge zones shaded in red. See the Edge Zone TouchPad Map for a more detailed description. You can adjust the size of each zone by dragging one of the black resize handles on the TouchPad map. If you are having trouble activating the Edge Motion feature, you might want to try making the edge zones wider.

Customizing Edge Motion Speed

During Edge Motion, the speed at which the pointer (or dragged object or Virtual Scrolling scroll thumb) moves can be pressure-sensitive or constant. With pressure-sensitive speed, the harder you press the faster the object or pointer moves. For this type of speed, check the box labeled Control edge motion speed with finger pressure.

If you prefer a constant speed for Edge Motion, you can adjust the speed with the Edge Motion speed slider located on this page.

Frequently Asked Questions

Q: When I use Virtual Scrolling, the pointer jumps over to the scroll bar, and then jumps back where it came from when I'm done. Is this normal?

A: Yes.

Q: Why doesn't the Virtual Scrolling feature work in some windows, even though they have a scroll bar?

A: In order to scroll, Virtual Scrolling must be able to "see" the window's scroll bar. If the scroll bar is partially obscured by another window, or partially off the screen, then Virtual Scrolling will not activate in that window. In general, a window's scroll bar must be entirely on the screen, and fully visible, in order to use Virtual Scrolling in that window. There is an exception to this rule: Virtual Scrolling has "special knowledge" about many common types of windows, and can scroll them even if their scroll bars are not visible on the screen. A very small number of applications use nonstandard scroll bars that might not work reliably with Virtual Scrolling.

Q: Why do some windows scroll smoothly, while others re-display their contents only occasionally as I scroll?

A: The way a window responds to its scroll bars is entirely up to the application which owns that window. Some applications "smooth-scroll," while others wait until you release the scroll bar before updating their contents. Virtual Scrolling "knows" about many common applications and window types, and uses this knowledge to "trick" many windows into smooth-scrolling (Microsoft ® Word ™ document windows, for example, do not normally smooth-scroll, but they do when you use Virtual Scrolling). If Virtual Scrolling does not "know" about a particular type of window, it still approximates smooth-scrolling by causing the window to re-display when your finger slows down or stops. This can help you more accurately scroll to the right place in a document.

Q: Why does the scroll thumb sometimes "jump around" when I scroll, and not go exactly where the pointer is?

A: Again, the application actually has complete control over the way the scroll thumb moves. Depending upon the window contents, some applications will actually prevent you from moving the scroll thumb to certain locations. Sometimes, the scroll thumb is only "allowed" to come to rest at one or two positions along the scroll bar! In these cases, even if you were to manually drag the scroll thumb with the pointer, you would find that it would "jump" to a final location when you released it. Virtual Scrolling, unfortunately, cannot control how applications manage their scroll bars.

Frequently Asked Questions (Cont')

Q: Why doesn't Virtual Scrolling work properly with Microsoft Internet Explorer?

A: Make sure you are using Internet Explorer version 4.01 or later, and that the Use Smooth Scrolling option on the Advanced page of the Internet Explorer Properties dialog is NOT checked.

Q: When I press and hold the shift key or the control key (CTRL), the pointer movement is either very slow or restricted to move only horizontally or only vertically. What is happening?

A: The shift keys and the control keys are special and are used for various things, such as selecting multiple files in Microsoft Windows Explorer or for zooming in and out on a spread sheet in Microsoft Excel. These keys can also be used for special pointer movement, such as for slowing the pointer down or for constraining the pointer to move only horizontally or only vertically. For example, you can assign the left shift key to be the Slow Motion Key. Then when you press and hold the left shift key, the pointer motion will be slower than usual. Note that you can still use this shift key for other special behaviors! You can still press and hold the left shift key to select multiple files in Microsoft Windows Explorer, but the pointer motion will also be a bit slower. If you see slow or constrained pointer movement when pressing shift or CTRL and you want to turn off this special behavior, go to the More Features Properties Page in the Mouse Properties dialog and uncheck the appropriate boxes.

WinFlash

Topics Covered:

WinFlash Setup

Using WinFlash

Screens will vary depending on your operating system but the contents should be the same.

WINFLASH Setup

Running setup will give you the following wizard:

On the "Welcome" screen, click **Next** after reading the message.
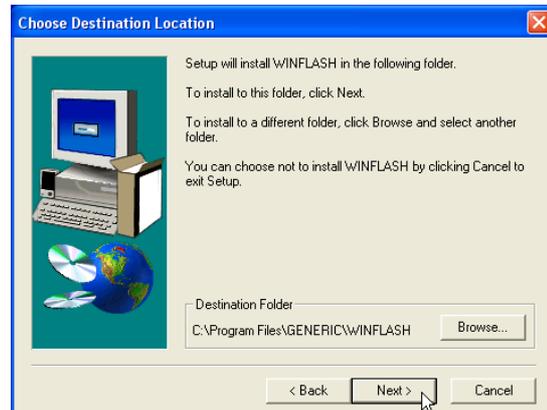
On the "Choose Destination Location" screen, click **Next** to continue or you may first change the destination folder.

On the "Select Program Folder" screen, click **Next** to continue or enter a different folder name.
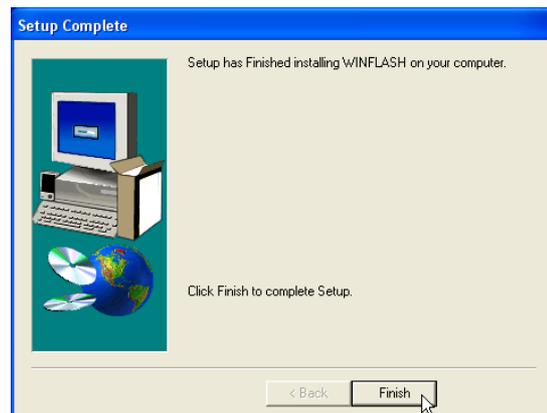
On the "Setup Complete" screen, click **Finish**.

Using WINFLASH

WINFLASH is a simple utility to update your Notebook PC's BIOS. To run **WINFLASH**, access the **All Programs** shortcut through the **Start** button.
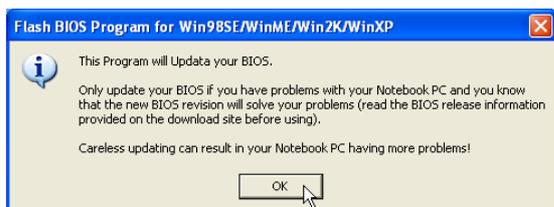
Do not update your BIOS for no reason.

You will be warned that you should only update your BIOS if you know it will solve a specific problem. If you update your BIOS using the wrong BIOS file, your Notebook PC may not boot up.

Example Only

Compare the BIOS ROM (your current BIOS) to the BIOS image (the new BIOS). If this is correct, click **Flash** to write the new BIOS to your Notebook PC. You need to restart your Notebook PC and "reset your BIOS". See instructions on the next page.
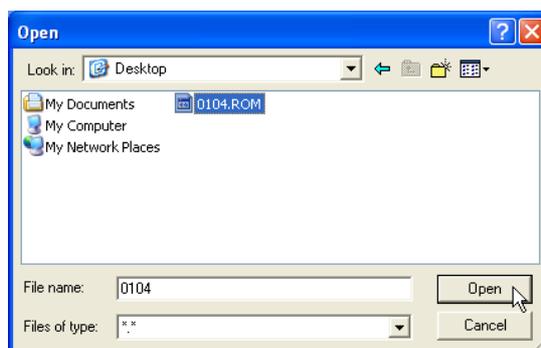
When you enter WINFLASH, you will be immediately asked for the BIOS image file. Browse to the file and click **Open**.

You may be instructed to "reset your BIOS". It entails pressing [**F2**] on bootup to enter BIOS setup and selecting **Load Setup Defaults**, and then **Exit Saving Changes** on the "Exit" menu.

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BIOS Setup

BIOS Setup Program

This Notebook PC supports a programmable EEPROM that stores the BIOS software and can be updated using the provided flash memory writer utility. This Section will guide you through the BIOS setup program by providing clear explanations for all the options. A default configuration has already been set. If you are either installing new devices or expanding main memory, you will need to enter the BIOS Setup to reconfigure your Notebook PC.

A battery backed-up CMOS RAM is used to record some basic system hardware information: clock, date, time, the error handling, and etc., even when the power is off. When the Notebook PC is turned back on, the system is configured with the values stored in the CMOS RAM.

The settings made in the BIOS Setup program intimately affect how the Notebook PC performs. It is important, therefore, to first understand all the Setup options, and second, to make settings appropriate for the way you use the Notebook PC.

The BIOS (Basic Input and Output System) Setup is a menu driven software utility that enables you to make changes to the system configuration and tailor your Notebook PC to reflect installed hardware, alter performance, and setup power saving functions. BIOS setup is used if you are setting up the Notebook PC for the first time, reconfiguring your system, or prompted to "**Run Setup**" during bootup. This section describes how to configure your system using this utility.

Even if you are not prompted to use the Setup program, at some time in the future you may want to change the configuration of your Notebook PC. For example, you may want to enable the Security Password Feature or make changes to the power management settings. It will then be necessary to reconfigure your system using the BIOS setup program so that the computer can recognize these changes and record them in the CMOS RAM of the EEPROM.

The Setup program has been designed to make it as easy to use as possible. It is a menu-driven program, which means you can scroll through the various sub-menus and make your selections among the predetermined choices.

When you start up the computer, press [F2] to call up the Setup utility.

✎ **NOTE: Because the BIOS software is constantly being updated, the following BIOS screens and descriptions are for reference purposes only and may not exactly reflect your BIOS screens.**

Updating your BIOS

This Notebook PC supports three BIOS update software as provided on the support CD: (1) "**LiveUpdate**" is a Windows utility to automatically search for a newer BIOS file on the Internet and install it for you, (2) "**WinFlash**" can be used in Windows to update your BIOS using a file that you specify, and (3) "**Aflash**" is a DOS utility to allow BIOS updating without using the Windows operating system.

BIOS Menu Bar

The top of the screen has a menu bar with the following selections. Highlighting a menu item with the ← or → (keypad arrow keys) will automatically display that page on the screen.

NOTE: Press [F2] to switch BIOS setup utility display color.

```
                        BIOS SETUP UTILITY
 Main    Advanced    Display     Security     Power     Boot     Exit
```

MAIN

Use this page to view basic system configurations such as BIOS version, CPU type, memory size, and Date/Time.

ADVANCED

Use this page to enable and make changes to the advanced features such as IDE devices and internal pointing device.

DISPLAY

Use this page to make changes to the Notebook PC's internal and external display features.

SECURITY

Use this page to set passwords and control access to the BIOS setup utility and hard disk drive.

POWER

Use this page to configure power/performance management features.

BOOT

Use this page to configure storage devices used to load the Operating System.

EXIT

Use this page to load or save settings and to exit the BIOS setup program.

BIOS Utility Help

On the right of each page will display help information to guide you through using the BIOS setup utility. The keys in the legend bar allow you to navigate through the various setup menus. The following table lists the keys found in the legend bar and those that are not with their corresponding alternates and functions.

```
Use [ENTER], [TAB]
or [SHIFT-TAB] to
select a field.

Use [+] or [-] to
configure system Time.
```

```
←→     Select Screen
↑↓     Select Item
Enter  Go to Sub Screen
F1     General Help
F9     Load Defaults
F10    Save and Exit
ESC    Exit
```

```
┌─    Options    ─┐
│ Disabled        │
│ Enabled         │
└─────────────────┘
```
Option box

```
←→     Select Screen
↑↓     Select Item
+-     Change Field
Tab    Select Field
F1     General Help
F9     Load Defaults
F10    Save and Exit
ESC    Exit
```

```
←→     Select Screen
↑↓     Select Item
Enter  Change
F1     General Help
F9     Load Defaults
F10    Save and Exit
ESC    Exit
```

Navigation Key(s)	Function Description
[Enter]	Brings up a selection menu or enter a sub-menu
[Tab] or [Shift-Tab]	Scrolls though multiple fields for those that have them
+ or − (shift =)	Increase or decrease a field value for those that have them
← or → (keypad arrow)	Selects the menu item to the left or right
↑ or ↓ (keypad arrows)	Moves the highlight up or down between fields
[F1]	Displays a general help screen from anywhere in the BIOS Setup
[F9]	Load optimal default settings (confirmation will be asked)
[F10]	Saves changes and exit (confirmation will be asked)
[Esc]	Jumps to the Exit menu or returns to the main menu from a sub-menu
[Home] or [PgUp]	Moves the cursor to the first field
[End] or [PgDn]	Moves the cursor to the last field
[F2] or [F3]	Scrolls forward or backward through display colors in the BIOS setup utility as follow: Black/Blue on Gray, Gray on Blue, White on Black
[F7]	Discard changes and exit (confirmation will be asked)
[F8]	Load safe default settings (confirmation will be asked)

F1 General Help

In addition to the Item Specific Help window, the BIOS setup program also provides a General Help screen. This screen can be called up from any menu by simply pressing [F1] or the [Alt] + [H] combination. The General Help screen lists the legend keys with their corresponding alternates and functions.

↑↓ Scroll Bar

When a scroll bar appears to the right of a help window, it indicates that there is more information to be displayed that will not fit in the window. Use [PgUp] and [PgDn] or the up and down arrow keys to scroll through the entire help document. Press [Home] to display the first page, press [End] to go to the last page. To exit the help window, press [Enter] or [Esc].

▶ Sub-Menu

Note that a right pointer symbol appears to the left of certain fields. This pointer indicates that a sub-menu can be launched from this field. A sub-menu contains additional options for a field parameter. To call up a sub-menu, simply move the highlight to the field and press [Enter]. The sub-menu will then immediately appear. Use the legend keys to enter values and move from field to field within a sub-menu just as you would within a menu. Use the [Esc] key to return to the main menu.

Take some time to familiarize yourself with each of the legend keys and their corresponding functions. Practice navigating through the various menus and sub-menus. While moving around through the Setup program, note that explanations appear in the Item Specific Help window located to the right of each menu. This window displays the help text for the currently highlighted field.

F9 Resetting Your BIOS

If you ever hear "resetting your BIOS", it entails pressing [**F2**] on bootup to enter BIOS setup and then selecting **Load Optimal Defaults** on the "Exit" page. Or you may use [F9] on any page.

```
                        BIOS SETUP UTILITY
  Main    Advanced    Display    Security    Power    Boot    Exit

  Exit Options                                    Exit system setup
  ─────────────────────────                       after saving the
  Save Changes and Exit                           changes.
  Discard Changes and Exit
  Discard Changes                                 F10 key can be used
                                                  for this operation.
  Load Optimal Defaults
  Load Failsafe Defaults




                                                  ↔     Select Screen
                                                  ↑↓    Select Item
                                                  Enter Go to Sub Screen
                                                  F1    General Help
                                                  F9    Load Defaults
                                                  F10   Save and Exit
                                                  ESC   Exit


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```

Main

When the Setup program is accessed, the main menu screen appears as shown:

```
                        BIOS SETUP UTILITY
  Main    Advanced    Display    Security    Power    Boot    Exit

  System Overview                              Use [ENTER], [TAB]
                                               or [SHIFT-TAB] to
  AMIBIOS                                      select a field.
  Version   : 0201.003
                                               Use [+] or [-] to
  Processor                                    configure system Time.
  Type    : Intel(R) Pentium(R) M processor 1700MH
  Speed   : 1700MHz

  System Memory
  Size    : 248MB

  System Time              [17:15:41]         ↔    Select Screen
  System Date              [Wed 12/17/2003]   ↑↓   Select Item
                                              +-   Change Field
                                              Tab  Select Field
                                              F1   General Help
                                              F9   Load Defaults
                                              F10  Save and Exit
                                              ESC  Exit

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```

System Overview

AMIBIOS
Version: [0202] (display field)
This displays the current BIOS version in the Notebook PC's flash EEPROM.

Processor
Type: [Intel(R) Pentium(R) 4 CPU 1000M] (display field)
This displays the current CPU model.

Speed: [1000MHz] (display field)
This displays the CPU speed specified by the above processor.

System Memory
Size: [248MB] (display field)
Shows the amount of usable memory available to your operating system.

System Time
Sets your system to the time that you specify (usually the current time). The format is hour, minute, second. Use the [Tab] or [Shift Tab] keys to move between the fields.

System Date
Sets your system to the date that you specify (usually the current date). The format is Day of the week, Month, Day, Year. Use the [Tab] or [Shift Tab] keys to move between the fields.

Advanced

Selecting this item from the previous menu displays the page as shown below.

```
                    BIOS SETUP UTILITY
   Main    Advanced   Display    Security    Power    Boot    Exit

  Advanced Settings                                  Configure the IDE
  _____     device(s).
  WARNING: Setting wrong values in below sections
           may cause system to malfunction.

  ▶ IDE Configuration
  Internal Pointing Device      [Enabled]
  Internal Numeric Pad Lock     [Enabled]



                                                  ↔     Select Screen
                                                  ↑↓    Select Item
                                                  Enter Go to Sub Screen
                                                  F1    General Help
                                                  F9    Load Defaults
                                                  F10   Save and Exit
                                                  ESC   Exit

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```

Advanced Settings

> IDE Configuration (see next page)

Internal Pointing Device [Enabled]

This allows you to turn ON or OFF the Notebook PC's built-in touchpad. Some external pointing devices have extra functions that may not function without turning OFF the Notebook PC's touchpad. The configuration options are: [Enabled] [Disabled]

Internal Numeric Pad Lock [Enabled]

This allows you to turn ON or OFF the Notebook PC's Numeric Keypad function. The configuration options are: [Enabled] [Disabled]

NOTE: Item headings in square brackets represent the default settings for those fields.

Advanced (sub-menu)

Selecting this item from the previous menu displays the page as shown below.

```
                        BIOS SETUP UTILITY
         Advanced

 IDE Configuration                              DISABLED: disables the
                                                integrated IDE
 OnBoard PCI IDE Controller    [Both]           Controller.
                                                PRIMARY: enables only
 ▶ Primary IDE Master        : [Hard Disk]      the Primary IDE
 ▶ Primary IDE Slave         : [Not Detected]   Controller.
 ▶ Secondary IDE Master      : [ATAPI CDROM]    SECONDARY: enables
 ▶ Secondary IDE Slave       : [Not Detected]   only the Secondary IDE
                                                Controller.
                                                BOTH: enables both IDE
                                                Controllers.

                                                ↔    Select Screen
                                                ↑↓   Select Item
                                                ←-   Change Option
                                                F1   General Help
                                                F9   Load Defaults
                                                F10  Save and Exit
                                                ESC  Exit

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```

IDE Configuration

> Onboard PCI IDE Controller [Both] (shows enabled item)

This item allows you to enable or disable the IDE channels. The configuration options are: [Disabled] [Primary] [Secondary] [Both]

> Primary/Secondary IDE Master/Slave (display field)
[Hard Disk] / [ATAPI CDROM]

This item automatically detects any IDE device connected here. Press [Enter] to edit device information. (Never used for normal use. Only used for troubleshooting by technical computer experts.)

[Not Detected]

If "Not Detected" is shown here, it means that there is no IDE device here, not properly connected, not compatible, or in a nonworking condition.

[Hard Disk]   **[ATAPI CDROM]**

```
              BIOS SETUP UTILITY                                          BIOS SETUP UTILITY
   Advanced                                                   Advanced

 Primary IDE Master              Select the type           Secondary IDE Master            Select the type
                                 of device connected                                       of device connected
 Device   :Hard Disk             to the system.            Device    :ATAPI CDROM          to the system.
 Vendor   :IC25N080ATMR04-0                                Vendor    :UJDA755 DVD/CDRW
 Size     :80.0GB                                          LBA Mode  :Supported
 LBA Mode :Supported                                       PIO Mode  :4
 Block Mode:16Sectors                                      Async DMA :MultiWord DMA-2
 PIO Mode :4                                               Ultra DMA :Ultra DMA-2
 Async DMA :MultiWord DMA-2
 Ultra DMA :Ultra DMA-5                                    Type                [Auto]
 S.M.A.R.T.:Supported                                      PIO Mode            [Auto]
                                                           DMA Mode            [Auto]
 Type                 [Auto]      ↔    Select Screen
 LBA/Large Mode       [Auto]      ↑↓   Select Item                                          ↔    Select Screen
 Block (Multi-Sector Transfer) [Auto]  ←−   Change Option                                   ↑↓   Select Item
 PIO Mode             [Auto]      F1   General Help                                         ←−   Change Option
 DMA Mode             [Auto]      F9   Load Defaults                                        F1   General Help
 S.M.A.R.T.           [Auto]      F10  Save and Exit                                        F9   Load Defaults
 32Bit Data Transfer  [Enabled]   ESC  Exit                                                 F10  Save and Exit
                                                                                            ESC  Exit

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```

> **NOTE: Before attempting to configure a hard disk drive, make sure you have the configuration information supplied by the manufacturer of the drive. Incorrect settings may cause your system to not recognize the installed hard disk. To allow the BIOS to detect the drive type automatically, select [AUTO].**

Type [Auto]

Select **Auto** to automatically detect an IDE type drive. This option only works with standard built-in IDE drives. If automatic detection is successful, the correct values will be filled in for the remaining fields on this sub-menu. The configuration options are: [Not Installed] [Auto] [CDROM] [ARMD]

LBA/Large Type [Auto]

When Logical Block Addressing is enabled, 28-bit addressing of the hard drive is used without regard for cylinders, heads, or sectors. Note that Logical Block Access may decrease the access speed of the hard disk. However, LBA Mode is necessary for drives with greater than 504MB in storage capacity. The configuration options are: [Disabled] [Auto]

Block [Auto]

Auto automatically sets the number of sectors per block to the highest number supported by the drive. Disabled - The data transfer from and to the device occurs one sector at a time. Auto - The data transfer from and to the device occurs multiple sectors at a time if the device supports it. The configuration options are: [Disabled] [Auto]

PIO Mode [Auto]

When enabled, this option speeds up communication between the system and the IDE controller by using enhanced I/O transfer modes (PIO Modes). Different speeds are supported by different generations of IDE devices. The configuration options are: [Auto] [0] [1] [2] [3] [4]

DMA Mode [Auto]

When enabled, this option speeds up communication between the system and the IDE controller by using DMA capability (for improved transfer speeds and data integrity) . Different speeds are supported by different generations of IDE devices. SW = Single Word, MW = Multiple Word, U = Ultra

Mode 0 = 16.7MB/s   Mode 1 = 25.0MB/s
Mode 2 = 33.3MB/s (ATA/33)   Mode 3 = 44.4MB/s
Mode 4 = 66.7MB/s (ATA/66)   Mode 5 = 100MB/s (ATA/100)

The configuration options are: [Auto] [SWDMA0...2] [MWDMA0...2] [UDMA0...4]

SMART Monitoring [Auto]

Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.) is an interface between a computer's BIOS and hard disk. It is a feature of the Enhanced Integrated Drive Electronics (EIDE) technology that controls access to the hard drive. If S.M.A.R.T is enabled, the BIOS can receive analytical information from the hard drive and determine whether to send the user a warning message about possible future failure of the hard drive. Ideally, this should allow you to take proactive actions to prevent impending disk crashes. The configuration options are: [Auto] [Disabled] [Enabled]

32Bit Data Transfer [Enabled]

Enables or disables 32-bit data transfers for supported devices. The configuration options are: [Disabled] [Enabled]

Display

Selecting this item from the previous menu displays the page as shown below.

```
                        BIOS SETUP UTILITY
   Main    Advanced    Display    Security    Power    Boot    Exit

   Configure advanced settings for display

   Boot Type:                   [CRT+LFP]




                                              ↔     Select Screen
                                              ↑↓    Select Item
                                              +-    Change Option
                                              F1    General Help
                                              F9    Load Defaults
                                              F10   Save and Exit
                                              ESC   Exit

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```
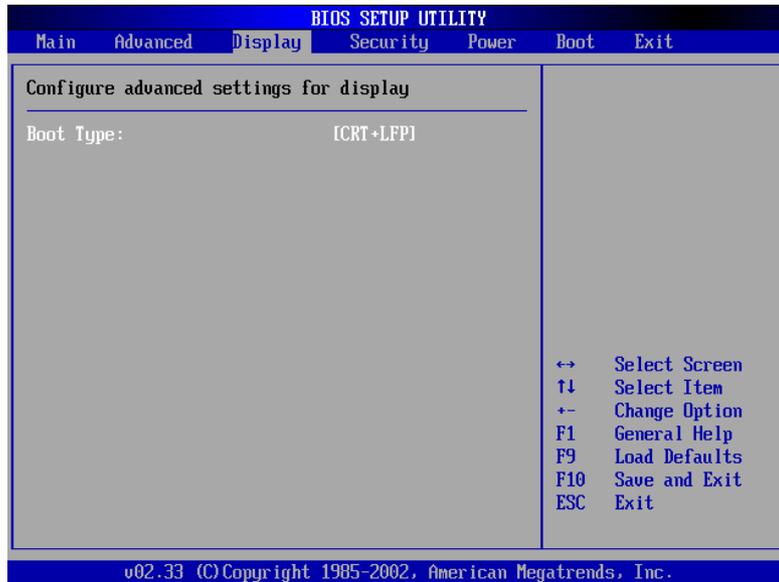
Display Settings

Boot Type [CRT+LFP]

This sets the video output mode for your display during bootup. You can control the output through software or hotkey once you are inside the Windows operating system. The configuration options are: [CRT] [LFP] [CRT+LFP]

Security

Selecting this item from the previous menu displays the page as shown below.

```
                        BIOS SETUP UTILITY
   Main    Advanced   Display   Security   Power    Boot    Exit

   Security Settings                          Install or Change the
   _____          password.

   Supervisor Password :Not Installed
   User Password       :Not Installed

   Change Supervisor Password
   Change User Password

   Boot Sector Virus Protection    [Disabled]
 ▶ I/O Interface Security

   Hard Drive Security                        ↔     Select Screen
   _____           ↑↓    Select Item
                                              Enter Change
   Primary Master HD Password                 F1    General Help
                                              F9    Load Defaults
                                              F10   Save and Exit
                                              ESC   Exit


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```

Security Settings

The BIOS Setup program allows you to specify passwords in the Security menu. The passwords control access to the BIOS and certain Security menu options during system startup. The passwords are not case sensitive. In other words, it makes no difference whether you enter a password using upper or lowercase letters.

The BIOS Setup program allows you to specify two separate passwords: a "Supervisor" password and a "User" password. When disabled, anyone may access all BIOS Setup program functions. When enabled, the Supervisor password is required for entering the BIOS Setup program and having full access to all Security menu options.

Change Supervisor Password / Change User Password

The system password protects the BIOS settings. When "Enabled", you will be prompted for a password after you press [F2] to enter BIOS setup.

To set a password: Select "Change ... Password" and press [Enter], type a password (up to 8 letters/ numbers) and press [Enter], type the same password again and press [Enter] to confirm. (You can type up to eight alphanumeric characters. Symbols and other keys are ignored.)

To remove a password: Select "Change ... Password" and press [Enter] without entering a password.

Boot Sector Virus Protection [Disabled]

This function will stop any attempt to modify hidden bootup files on your hard disk drive. This function may prevent some applications from installing properly. The configuration options are: [Disabled] [Enabled]

> I/O Interface Security (see next page)

Primary Master HD Password

A hard disk password places a protection on the hard disk drive so that a password is necessary in order to access the hard disk drive. When "Enabled", the hard disk drive will be protected as follows:

- The protected hard disk drive will prompt for a password when accessed on the Notebook PC.

- The protected hard disk drive cannot be used as a master or slave drive on another computer.

- The protected hard disk drive cannot be formatted.

To Enable: Select "Enter" and press [Enter], type a password and press [Enter], type the same password again and press [Enter] to confirm. (You can type up to eight alphanumeric characters. Symbols and other keys are ignored.)

To Disable: Select "Set" and press [Enter], enter the password and press [Enter].

Security (sub-menu)

Selecting this item from the previous menu displays the page as shown below.

```
                          BIOS SETUP UTILITY
                               Security

I/O Interface Security                              If LOCKED, the MODEM
                                                    controller will be
──────────────────────────────────                 disabled.
MODEM Interface               [UNLOCKED]
LAN Network Interface         [UNLOCKED]
Wireless Network Interface    [UNLOCKED]
Secondary IDE Interface       [UNLOCKED]
CardBus/1394 Interfaces       [UNLOCKED]
USB Interface                 [UNLOCKED]


                                                    ←→    Select Screen
                                                    ↑↓    Select Item
                                                    +-    Change Option
                                                    F1    General Help
                                                    F9    Load Defaults
                                                    F10   Save and Exit
                                                    ESC   Exit


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```

I/O Interface Security

MODEM Interface [UNLOCKED]

This allows you to enabled or disable the built-in modem. The configuration options are: [UNLOCKED] [LOCKED]

LAN Network Interface [UNLOCKED]

This allows you to enabled or disable the built-in wired network. The configuration options are: [UNLOCKED] [LOCKED]

Wireless Network Interface [UNLOCKED]

This allows you to enabled or disable the built-in wireless network. The configuration options are: [UNLOCKED] [LOCKED]

Cardbus/1394 Interfaces [UNLOCKED]

This allows you to enabled or disable the built-in PC card slot and 1394 port. The configuration options are: [UNLOCKED] [LOCKED]

USB Interface [UNLOCKED]

This allows you to enabled or disable the built-in USB ports. The configuration options are: [UNLOCKED] [LOCKED]

Power

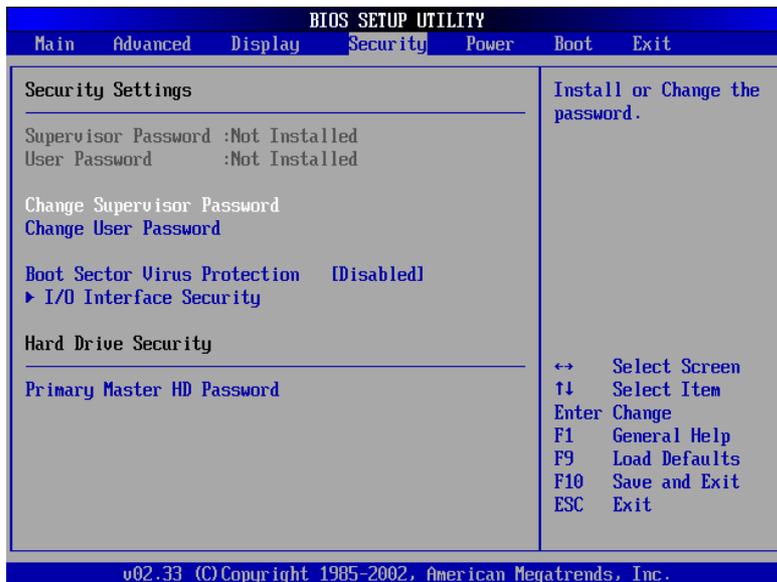Selecting this item from the previous menu displays the page as shown below.
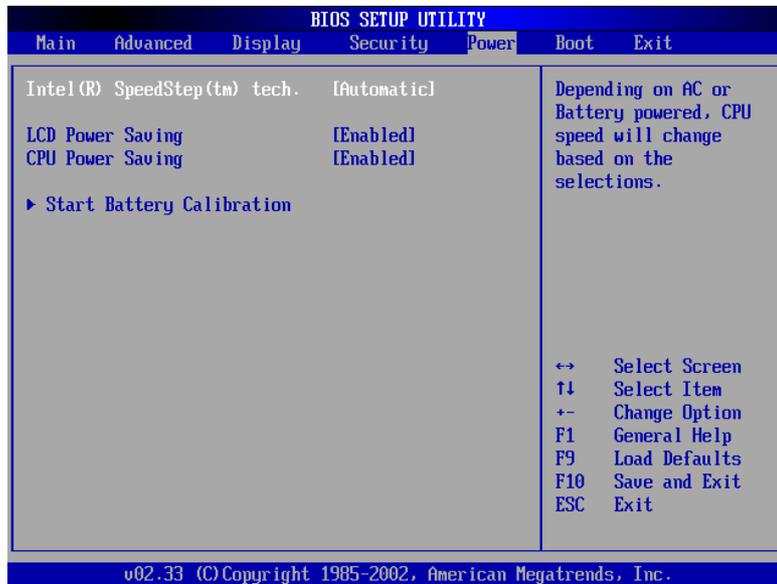
Power Settings

Intel (R) SpeedStep(tm) tech. [Automatic]

This allows you to set the performance versus battery optimization method when AC power is applied or removed. The configuration options are: [Maximum Performance] [Battery Optimized] [Reversed] [Automatic] [Disabled]

LCD Power Saving [Enabled]

This allows you to set the performance versus battery optimization method when AC power is applied or removed. Enabled will dim the LCD display when using battery power. The configuration options are: [Disabled] [Enabled]

CPU Power Saving [Enabled]

This allows you to set the performance versus battery optimization method when AC power is applied or removed. Enabled will decrease the CPU speed when using battery power. The configuration options are: [Disabled] [Enabled]

Start Battery Refreshing

This function will start a software program to remove memory effects in the battery and recalibrate the battery gauge. Even though this Notebook PC uses a Lithium-Ion battery which is not prone to memory effects, memory effects will still occur at the end of the battery's life cycle. Remember that all rechargeable batteries only have a definite number of charge and discharge cycles depending on environment and quality of the battery pack. **Follow the instructions shown on the screen.**

BIOS Setup

Boot

Selecting this item from the previous menu displays the page as shown below.

```
                           BIOS SETUP UTILITY
   Main    Advanced    Display    Security    Power    Boot    Exit
  ┌─────────────────────────────────────────────┬──────────────────────────┐
  │ Boot Settings                               │ Configure Settings       │
  │ ─────────────────────────────────────       │ during System Boot.      │
  │ ▶ Boot Settings Configuration               │                          │
  │                                             │                          │
  │ ▶ Boot Device Priority                      │                          │
  │ ▶ Hard Disk Drives                          │                          │
  │ ▶ Removable Drives                          │                          │
  │ ▶ ATAPI CDROM Drives                        │                          │
  │                                             │                          │
  │ Onboard LAN Boot ROM        [Disabled]      │                          │
  │                                             │                          │
  │                                             │ ↔    Select Screen       │
  │                                             │ ↑↓   Select Item         │
  │                                             │ Enter Go to Sub Screen   │
  │                                             │ F1    General Help       │
  │                                             │ F9    Load Defaults      │
  │                                             │ F10   Save and Exit      │
  │                                             │ ESC   Exit               │
  └─────────────────────────────────────────────┴──────────────────────────┘
         v02.33 (C)Copyright 1985-2002, American Megatrends, Inc.
```
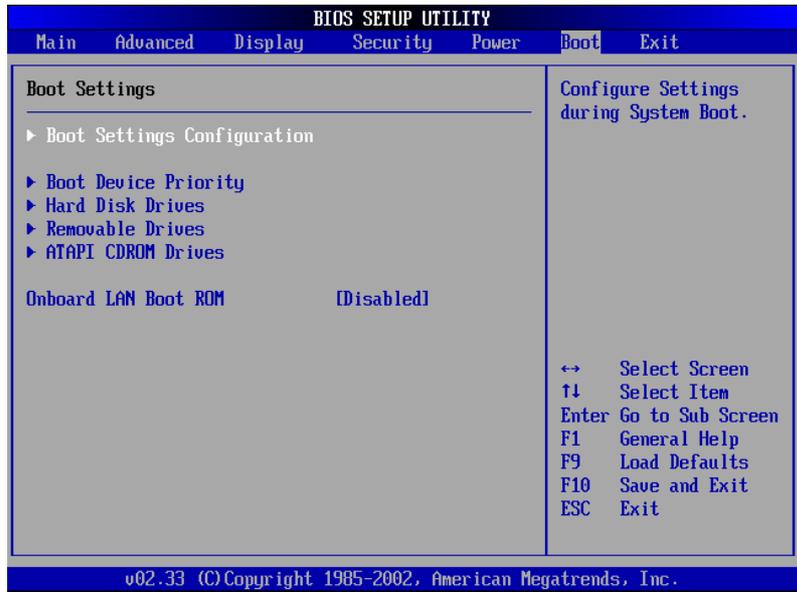
Boot Settings

> Boot Settings Configuration

> Boot Device Priority
> Hard Disk Drives
> ATAPI CDROM Drives

Onboard LAN Boot ROM [Disabled]

This item allows you to enable or disable the built-in network device's boot ROM. When enabled you can select LAN as a boot device. Configuration options are: [Disabled] or [Enabled].

Device Explanations

Removable Device refer to the floppy disk used in the internal or USB floppy disk drive.

IDE Hard Drive refers to the internal built-in hard disk drive.

ATAPI CD-ROM refers to either the built-in CD-ROM drive or DVD-ROM drive.

Other Boot Device currently refers to booting from a network drive. To boot from LAN, "Onboard LAN Boot ROM" must be enabled.

Boot (sub-menu)

Selecting this item from the previous menu displays the page as shown below.

```
                          BIOS SETUP UTILITY
                                                    Boot

  Boot Settings Configuration                   Allows BIOS to skip
                                                certain tests while
  Quick Boot              [Enabled]             booting. This will
  Quiet Boot              [Enabled]             decrease the time
                                                needed to boot the
                                                system.




                                                ↔     Select Screen
                                                ↑↓    Select Item
                                                +-    Change Option
                                                F1    General Help
                                                F9    Load Defaults
                                                F10   Save and Exit
                                                ESC   Exit

              v02.33 (C)Copyright 1985-2002, American Megatrends, Inc.
```
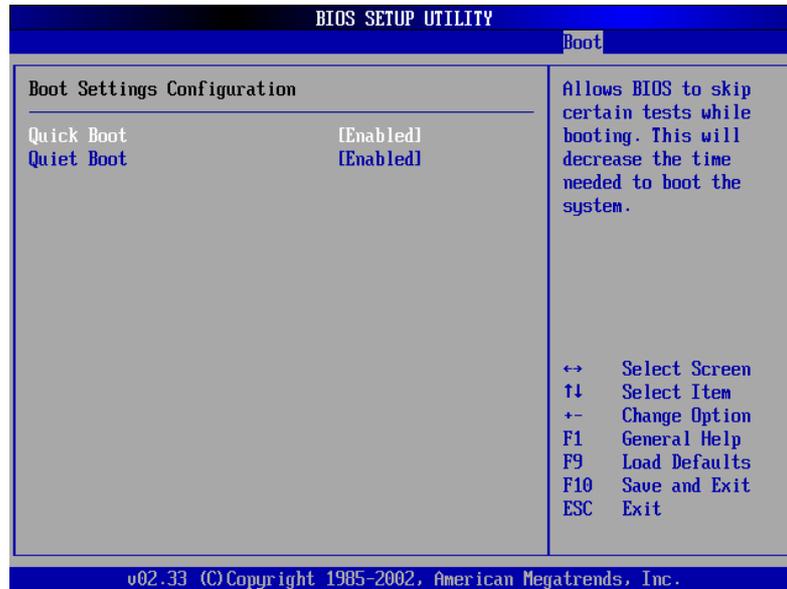
Boot Settings Configuration

Quick Boot [Enabled]

When enabled, BIOS will skip certain tests while booting. This will decrease the time needed to bootup the system. The configuration options are: [Disabled] [Enabled]

Quiet Boot [Enabled]

When disabled, BIOS will display normal POST messages. When enabled, BIOS will display a splash screen instead. The configuration options are: [Disabled] [Enabled]

Boot

Selecting this item from the previous menu displays the page as shown below.

```
                    BIOS SETUP UTILITY
                                              Boot

Boot Device Priority                          Specifies the boot
                                              sequence from the
1st Boot Device        [MITSUMI USB FDD]      available devices.
2nd Boot Device        [PM-IC25N080ATMR04-]
3rd Boot Device        [SM-UJDA755 DVD/CDR]   A device enclosed in
                                              parenthesis has been
                                              disabled in the
                                              corresponding type
                                              menu.


                                              ↔    Select Screen
                                              ↑↓   Select Item
                                              +-   Change Option
                                              F1   General Help
                                              F9   Load Defaults
                                              F10  Save and Exit
                                              ESC  Exit

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```

Boot Device Priority

1st Boot Device [USB FDD] / [Removable Dev.]

Specifies the boot sequence from the available devices. A device enclosed in parenthesis has been disabled in the corresponding type menu. The configuration options are: [Removable Dev.] [Hard Drive] [ATAPI CDROM] [Disabled] (The configuration options depend on "Hard Disk Drives" in the previous menu.)

2nd Boot Device [HARD DRIVE] (name varies by model)
3rd Boot Device [ATAPI CDROM] (name varies by model)

Exit

Once you have made all of your selections from the various menus in the Setup program, you should save your changes and exit Setup. Select **Exit** from the menu bar to display the following menu:
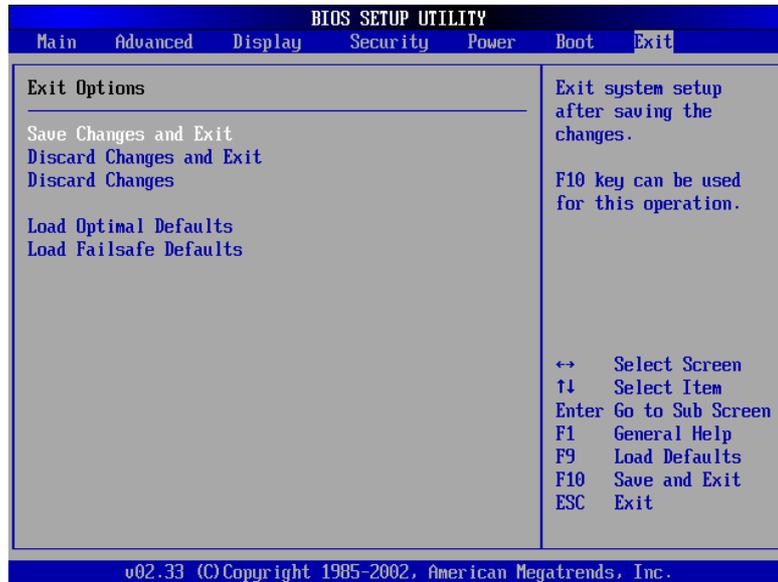
```
                          BIOS SETUP UTILITY
  Main    Advanced    Display    Security    Power    Boot    Exit

  Exit Options                                    Exit system setup
  _____                 after saving the
                                                  changes.
  Save Changes and Exit
  Discard Changes and Exit                        F10 key can be used
  Discard Changes                                 for this operation.

  Load Optimal Defaults
  Load Failsafe Defaults



                                                  ↔     Select Screen
                                                  ↑↓    Select Item
                                                  Enter Go to Sub Screen
                                                  F1    General Help
                                                  F9    Load Defaults
                                                  F10   Save and Exit
                                                  ESC   Exit

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```

Exit Options

Save Changes and Exit

Once you are finished making your selections, choose this option from the Exit menu to ensure the values you selected are saved to the CMOS RAM. The CMOS RAM is sustained by an onboard backup battery and stays on even when the Notebook PC is turned OFF. Once this option is selected, a confirmation is asked. Select **Yes** to save changes and exit.

Discard Changes and Exit

This option should only be used if you do not want to save the changes you have made to the Setup program. If you have made changes to the fields other than system date, system time, and password, the system will ask for confirmation before exiting.

Discard Changes

This option allows you to discard the selections you made and restore the values you previously saved. After selecting this option, all selections are updated and a confirmation is requested. Select **Yes** to discard any changes and load the previously saved values.

Load Optimal Defaults

This option allows you to load the "Optimal" values for each of the parameters on the Setup menus. When this option is selected or if [F9] is pressed, a confirmation is requested. Select **Yes** to load default values programmed into the BIOS file (the default values may change from one BIOS version to another). You can now select **Save Changes and Exit** or make other changes before saving the values.

Load Failsafe Defaults

This option allows you to load the "Safest" values for each of the parameters on the Setup menus. This option is for troubleshooting purposes only and will decrease performance as well as disable some of the Notebook PC's functions. When this option is selected, a confirmation is requested. Select **Yes** to load default values programmed into the BIOS file (the default values may change from one BIOS version to another). You can now select **Save Changes and Exit** or make other changes before saving the values.

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