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# **Notebook PC**

**Drivers and Utilities**

**User's Manual**

**Product Name:** Notebook PC  
**Manual Revision:** 1 E1516  
**Release Date:** January 2004

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## 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.

## 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.” The following devices varies from model to model and may differ from your system.

### **VGA (Display)** “ATI MOBILITY RADEON 9600 Series” 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 Wireless LAN** “ASUS 802.11g Network Adapter” Driver

Required on models with 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.**”

### **ATKACPI** “ATK0100 ACPI UTILITY” 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** “Realtek AC’97 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.

### **LAN** “SiS 900 PCI Fast Ethernet Adapter” 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 SmartCP” 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.

## **SmartIO**

“Winbond Memory Stick Storage (MS) Device Driver” “Winbond Secure Digital (SD/MMC) Device Driver”

Installs the necessary drivers to use memory stick and secure digital flash memory cards in the built in flash memory reader/writer. These devices are shown under Windows Device Manager “**IDE ATA/ATAPI controllers**” and “**Disk drives**”

## **Recommended Utilities**

### **AMD PowerNow** Utility

Installs AMD PowerNow utility to actively adjust CPU power and performance to maximize battery time when you are not using an AC adapter.

### **Check Mail** Utility

Installs Check Mail Utility to monitor and notify you of incoming email messages waiting in your Microsoft® Outlook or Outlook Express Inbox. (This utility may or may not be compatible with other email applications.)

### **Hotkey** Utility

Installs **Hotkey utility**. Hotkey utility is a program designed to intercept key strokes so that key assignments can be made to run a program or script. This program cannot be used to change default keys or key combinations used by other software, operating systems, or by the Notebook PC’s hardware.

### **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.

### **Power4 Gear+** Utility

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** Utility

Installs **Probe2** 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

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.

**Drivers Provided in Windows XP**

If you have any problems with these drivers, visit the Microsoft Windows Update site. A link is provided in Microsoft Windows Explorer under "Tools." The following devices varies from model to model and may differ from your system.

**1394** "OHCI Compliant IEEE 1394 Host Controller" "1394 Net Adapter" (Already supported in Windows XP)

These drivers are provided by Microsoft in its Windows XP operating system.

These devices are shown under Windows Device Manager "IEEE 1394 Bus host controllers" and "Network adapters".

**CD-ROM** "Matshita DVD-RAM" (Already supported in Windows XP) *Varies by Notebook PC model*

This driver is provided by Microsoft in its Windows XP operating system.

This device is shown under Windows Device Manager "DVD/CD-ROM drives".

**IR** "Built-in Infrared Device" (Already supported in Windows XP)

This driver is provided by Microsoft in its Windows XP operating system.

This device is shown under Windows Device Manager "Infrared devices".

**PCMCIA** "Ricoh...R5C520...Cardbus Controller" (Already supported in Windows XP)

This driver is provided by Microsoft in its Windows XP operating system.

This device is shown under Windows Device Manager "PCMCIA adapters".

## Other Support CD items

### **[Read Me]** Text File

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

### **[Browse this CD]** Link

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

### **[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]** Folder

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.



Aflash



AFLASH2

### **[Exit]** Link

Closes the support CD autorun screen.

# Device Manager

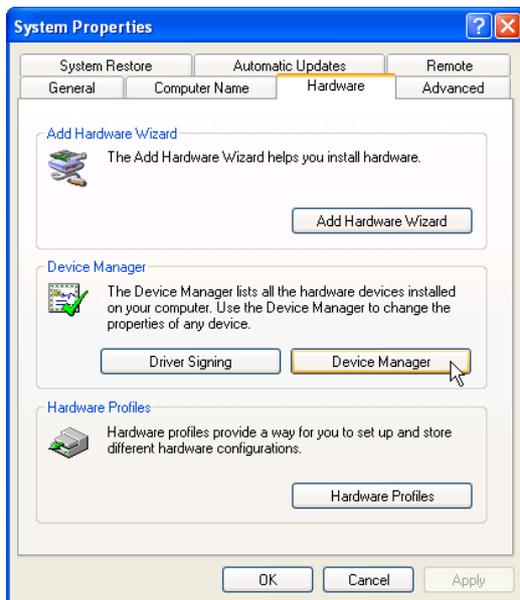
“Device Manager” will be used in many device driver installation, upgrade, and verification processes.



1. Click “start” button.
2. Click “My Computer” icon.



3. Click “View system information” link.



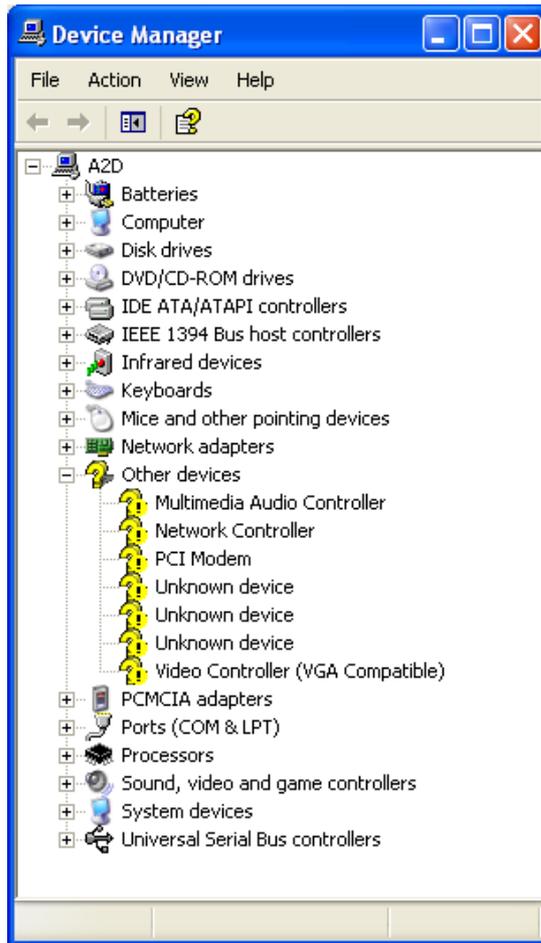
4. Click “Hardware” tab.
5. Click “Device Manager” button.

## Hardware Devices

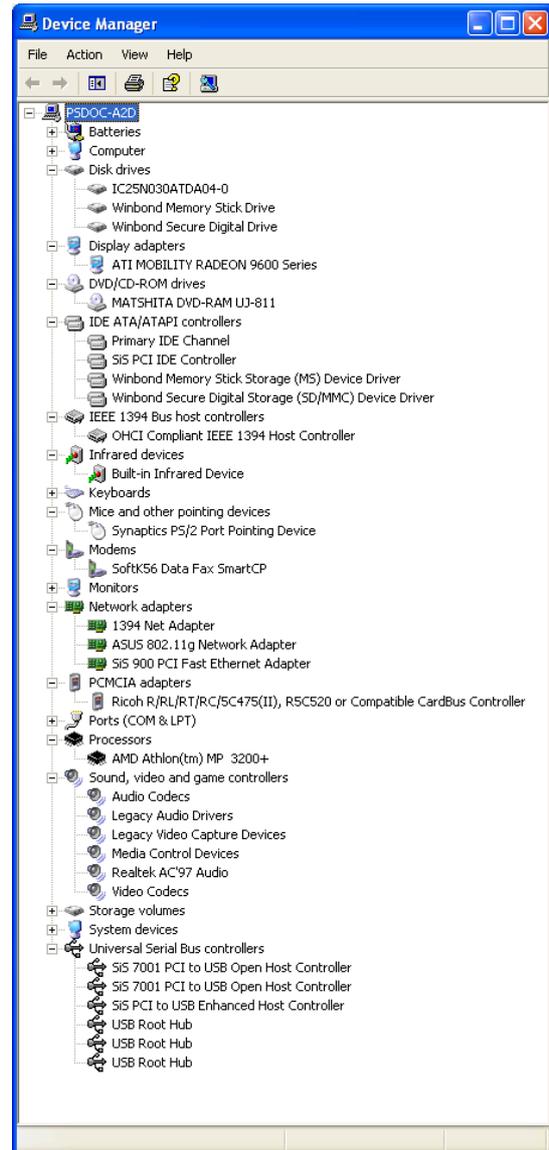
After installing your operating system, several question marks will appear under “Other devices” representing hardware devices that Windows cannot recognize. After installing the drivers from the provided support CD. Those question marks will go away.



## Device Manager (Before installing drivers)

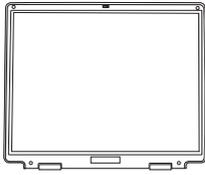


## Device Manager (After installing drivers)



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





# VGA Driver

(It is necessary to install the VGA driver first in order to see other setup screens in their proper sizes.)

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## **Topics Covered:**

**VGA Driver Setup**

**Display Settings for Windows XP**

**ATI Taskbar Icon**

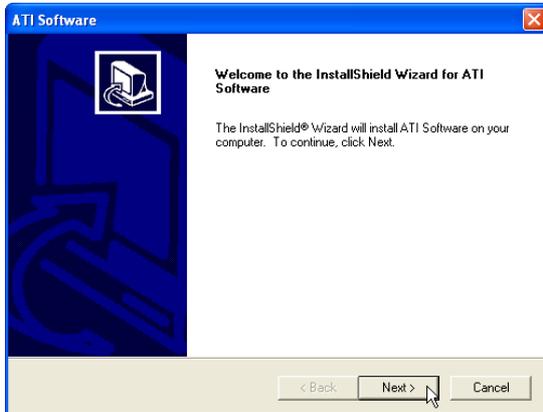
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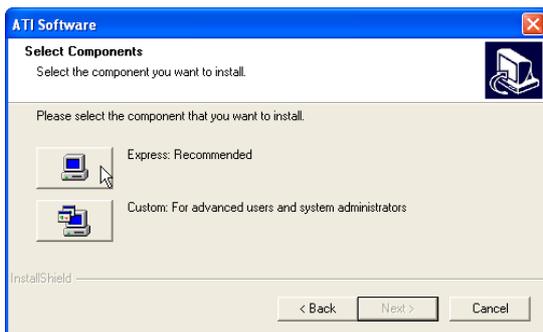
Screens will vary depending on your operating system but the contents should be the same.

## VGA Driver Setup

Running setup will give you the following wizard. See next page for VGA settings.



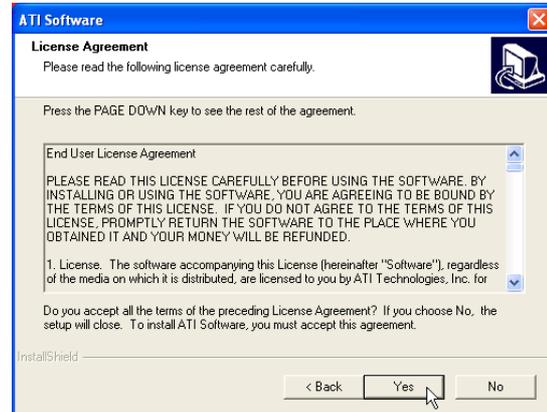
On the welcome screen, click **Next** to begin the setup wizard.



On the “Select Components” screen, click **Express...** to begin installation.



On the “Setup Complete” screen, click **Finish**. Restarting now will help enlarge the screen area to view other setup items more comfortably.



On the “License Agreement” screen, click **Yes** after reading the message.

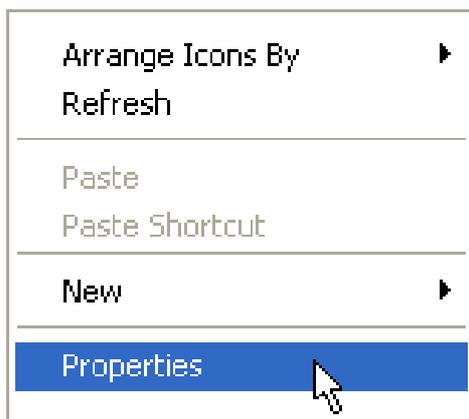


When you restart Windows, you will get a help screen. You can disable this by unchecking the startup option box.

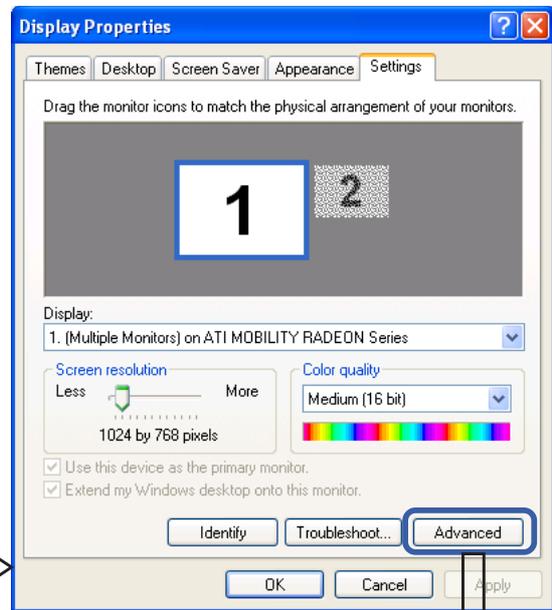
# Display Settings for Windows XP

## Display Properties

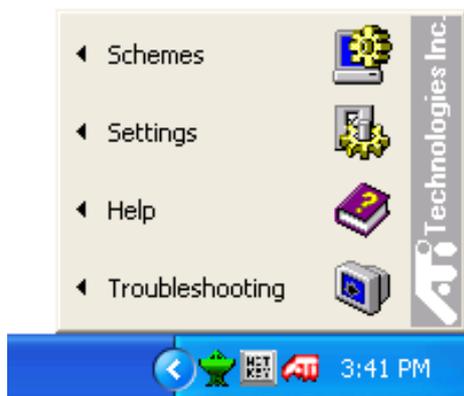
Set screen resolution and color quality to the maximum for best results. If your Notebook PC does not support the maximum resolution, panning will occur to cover the extra area. In this case, you can lower the resolution.



By right clicking your desktop and selecting **Properties**, you can view your display properties.

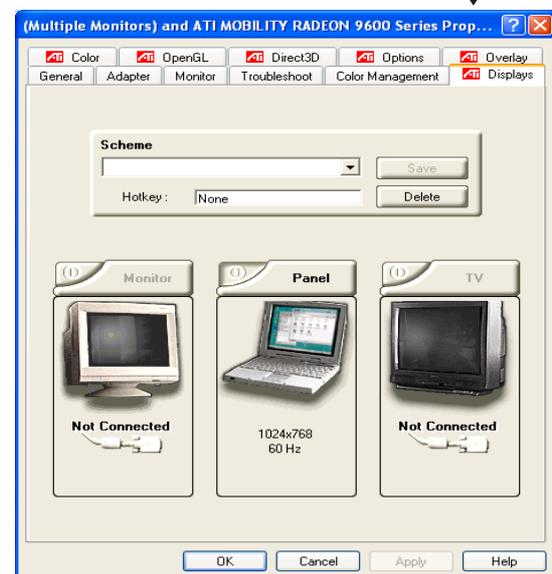


For advanced graphics controller settings, click the **Advanced** button



## ATi Display Properties

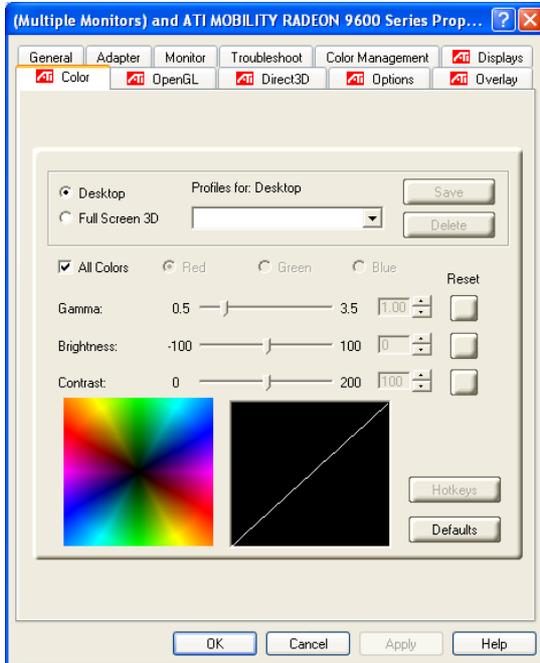
ATi display properties can be accessed through the advanced button or through the ATi icon on the taskbar.



## Displays

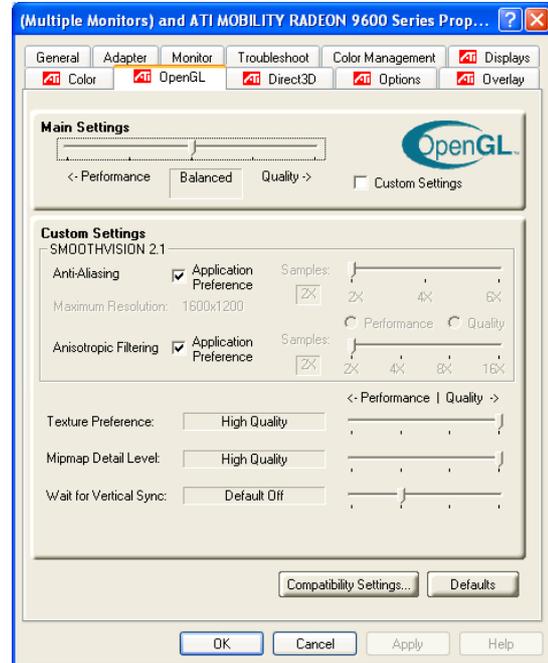
This page allows you to enable or disable display output devices and save schemes with hotkeys.

# Display Settings for Windows XP (Cont')



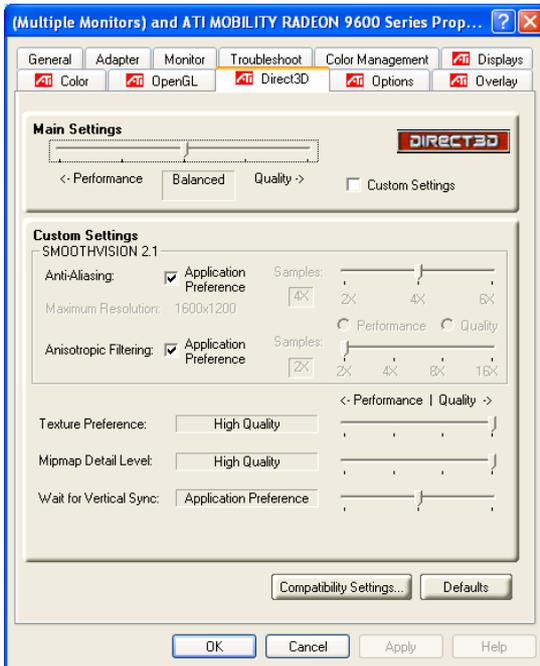
## Color

This page allows you to adjust and save profiles for colors, gamma, brightness, and contrast.



## OpenGL

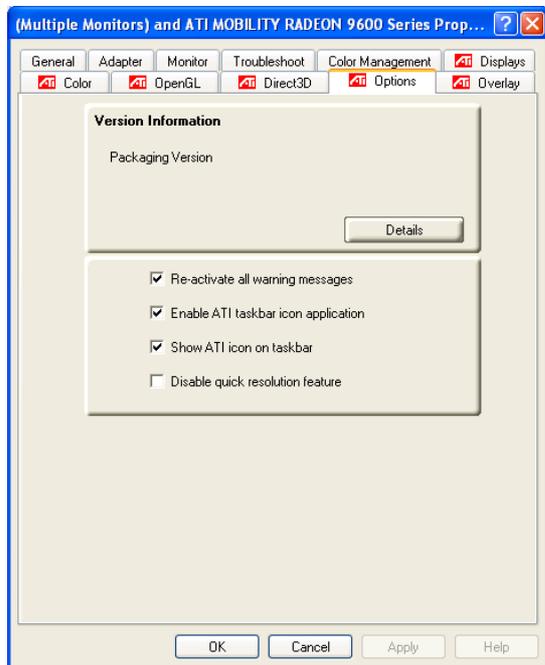
This page allows you to adjust quality and performance for applications using OpenGL.



## Direct3D

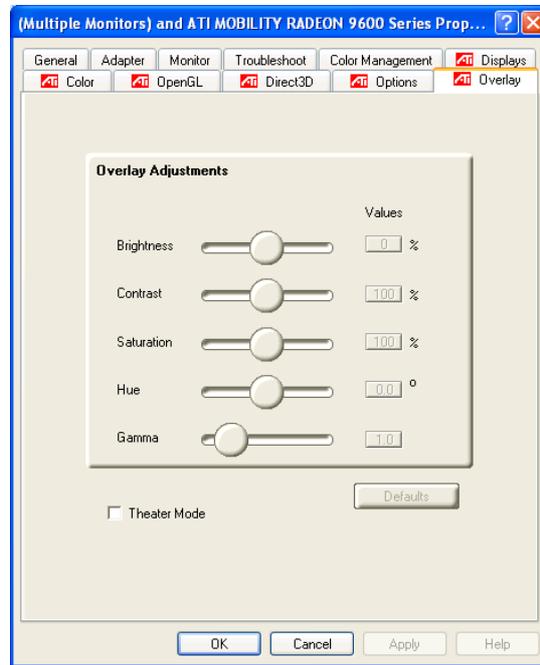
This page allows you to adjust quality and performance for applications using Direct3D.

## Display Settings for Windows XP (Cont')



### Options

This page allows you to enable or disable ATI quick access desktop and taskbar menus.



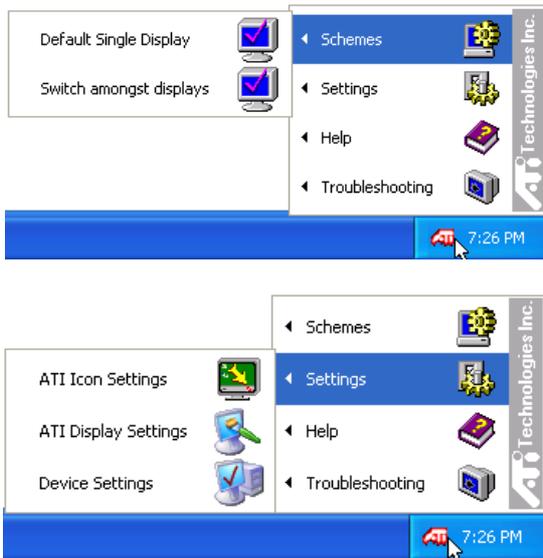
### Overlay

This page allows you to adjust brightness, contrast, saturation, hue, and gamma for videos.

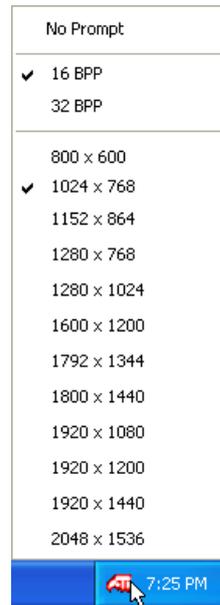
# Display Settings for Windows XP (Cont')

## ATi Taskbar Icon

Bring up ATi quick-access menus by right clicking  on the task bar. You can quickly launch display-related property windows using the ATi taskbar. If you cannot see this icon, you may have to “Show hidden icons” by clicking on .



Right-click the ATi icon for many quick access display-setting menus.



Left-click the ATi icon for quick display resolution changing.



# ASUS Wireless LAN

(Required Driver)

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**Topics Covered:**

**ASUS Wireless LAN Driver Setup**

**ASUS WLAN Utility Setup**

**ASUS WLAN Utility Quick Start**

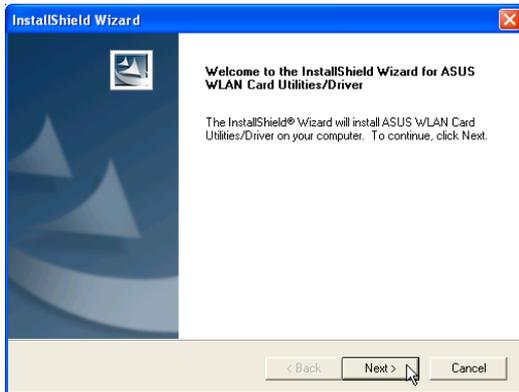
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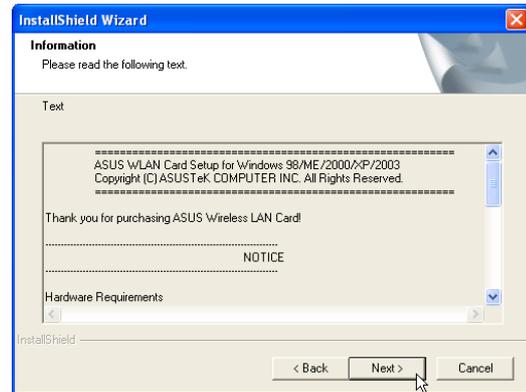
Screens will vary depending on your operating system but the contents should be the same.

# ASUS WLAN Utility Setup

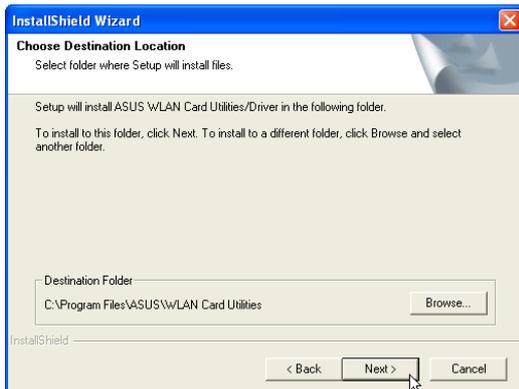
Running setup will give you the following wizard:



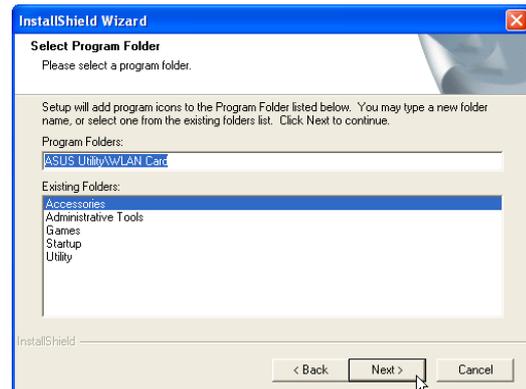
On the “Welcome” screen, click **Next**.



On the “Information” screen, click **Next** after reading the text.



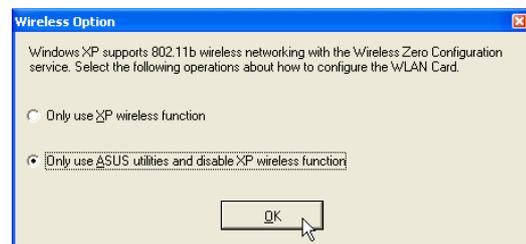
On the “Choose Destination Location” screen, click **Next** or you change the destination folder.



On the “Select Program Folder” screen, click **Next** or enter a different folder name.



When setup is complete, click **Finish**.



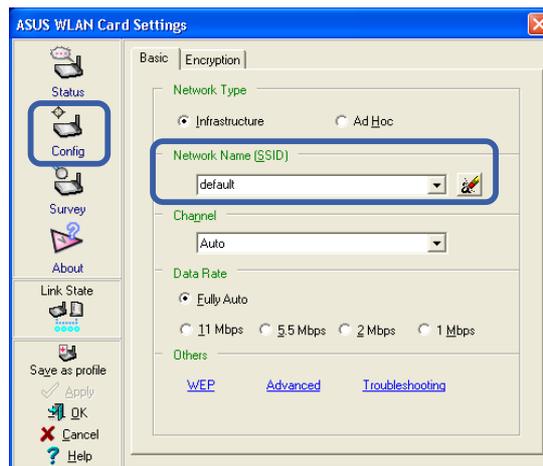
Select to use “...ASUS Utilities...” for added features while using the wireless LAN device.

# 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.

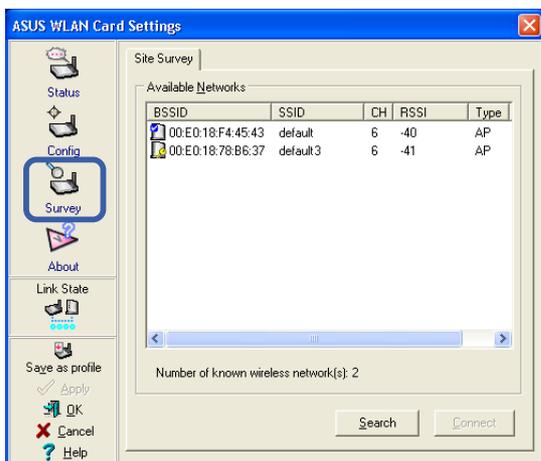


(Right-Click Menu)

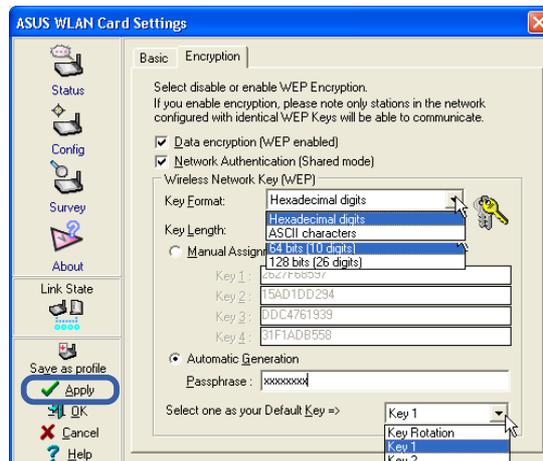


Right-click the ASUS WLAN icon and select "Wireless Settings"

Set the Network Name (SSID) to the same name as the SSID set in your wireless access point.

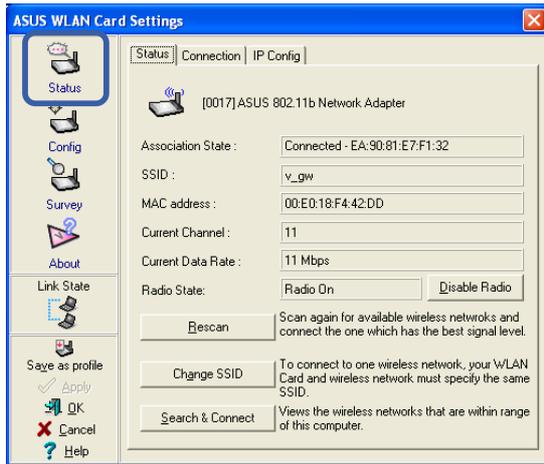


Use "Site Survey" if you don't know the name of your access point(s).

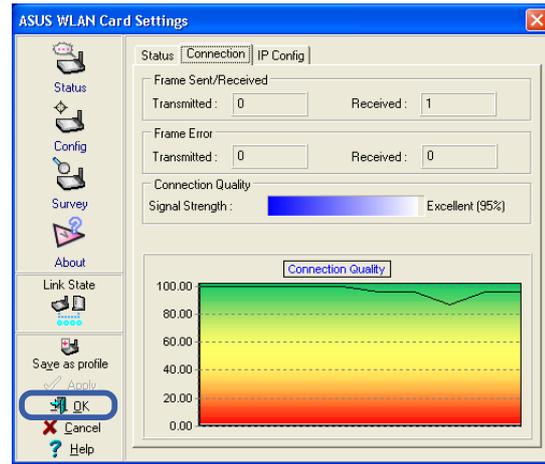


Encryption settings must also match those set in the access point. Talk with your network administrator if necessary. Click **Apply** to save your settings

## ASUS WLAN Utility Quick Start (Cont.)



Check the “Status” page to see the “Association State”. It should show “Connected - xx:xx:xx:xx:xx:xx”.



You can also see the connection quality on the “Connection” page. Click **OK** to exit the utility.

# ATKACPI

(Required Driver)

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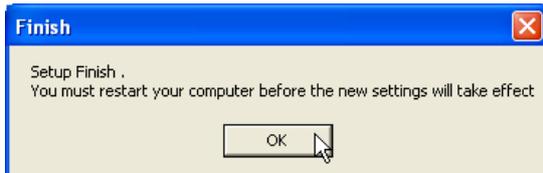
**Topics Covered:**  
**ATKACPI Driver Setup**

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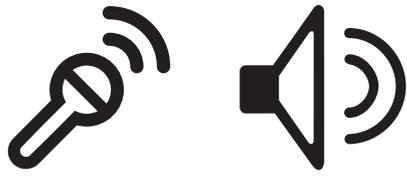
Screens will vary depending on your operating system but the contents should be the same.

## ATKACPI Driver Setup

Running setup will give you the following wizard:



When setup is complete, click **OK** to exit the wizard.



# Audio

(Required Driver)

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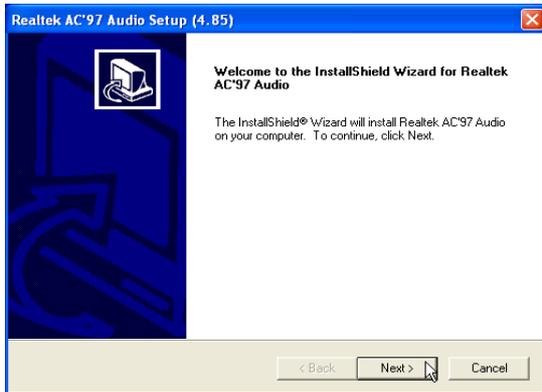
**Topics Covered:**  
**Audio Driver Setup**

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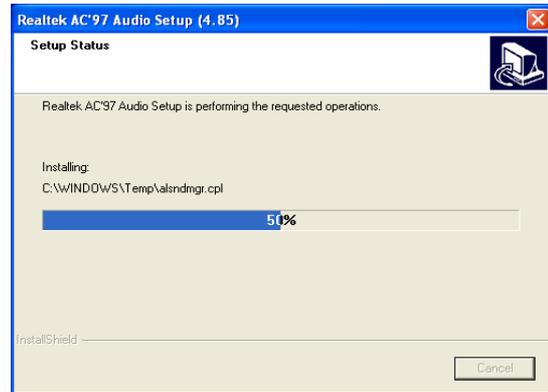
Screens will vary depending on your operating system but the contents should be the same.

# Audio Driver Setup

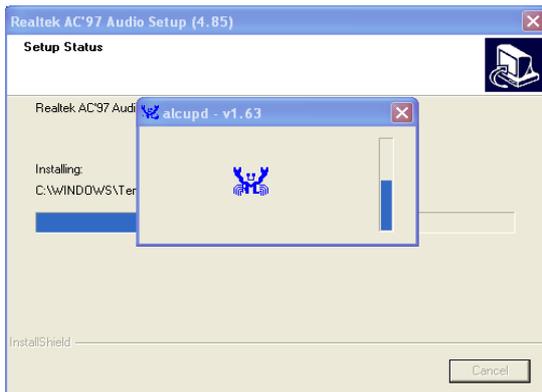
Running setup will give you the following wizard:



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



Wait while files are being copied to your hard drive.



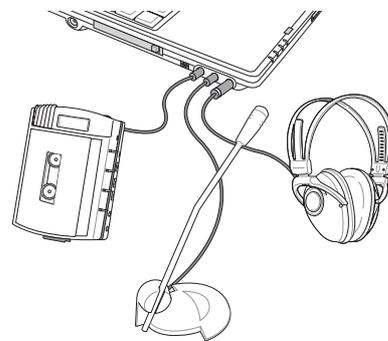
Wait while files are being copied to your hard drive.

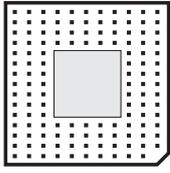


Select **No...** and click **Finish** in order to install other drivers and utilities.

## Connecting audio devices

After restarting Windows, your Notebook PC's audio controller will begin working. You can use the Notebook PC's built-in audio devices or connect external audio devices to increase functionality of your portable multimedia PC.





# CPU Hotfix

(Required Driver)

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**Topics Covered:**  
**CPU Hotfix Setup**

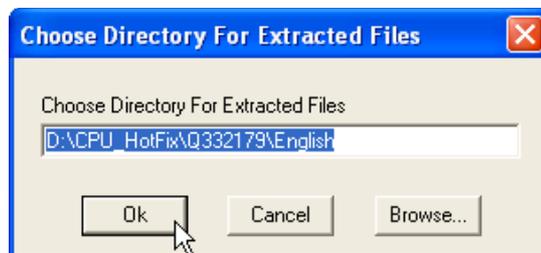
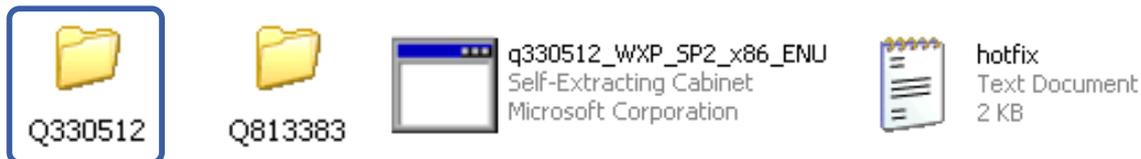
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Screens will vary depending on your operating system but the contents should be the same.

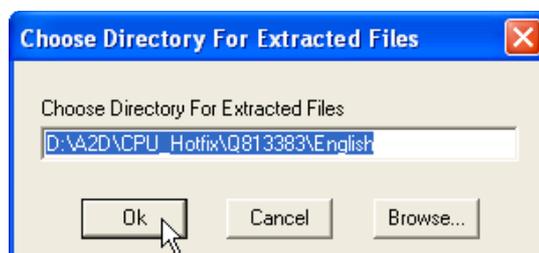
## CPU Hotfix Setup 1 of 2

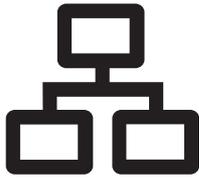
Two setups are required. There are several languages available in each folder. After setup, restart Windows and your Windows will be able to utilize advanced features in Intel's latest mobile processor. The first file will extract to a separate folder. Read "hotfix" for setup instructions.



## CPU Hotfix Setup 2 of 2

The second file will extract to a separate folder. Read "hotfix" for setup instructions.





# LAN

(Required Driver)

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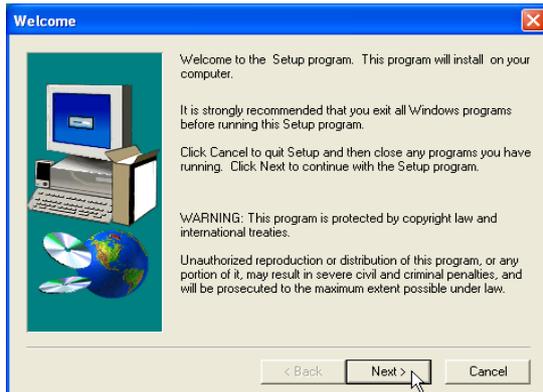
**Topics Covered:**  
**LAN Driver Setup**  
**Configuring your LAN**

---

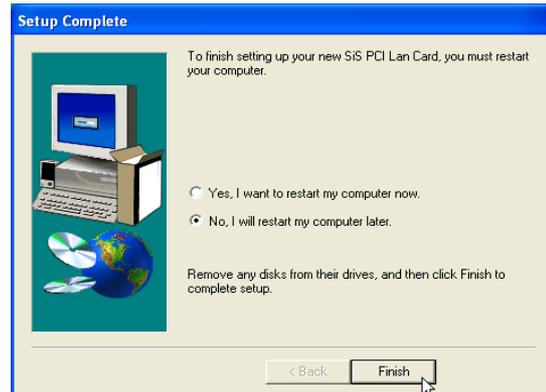
Screens will vary depending on your operating system but the contents should be the same.

## LAN Driver Setup

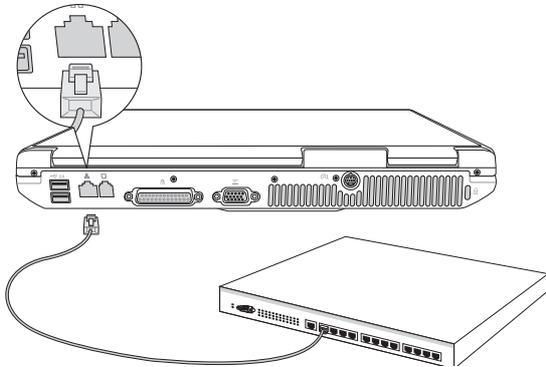
Running setup will give you the following wizard:



On the “Welcome” screen, click **Next** to begin the setup wizard.



When setup is complete, select **No...** and click **Finish** in order to install other drivers and utilities.



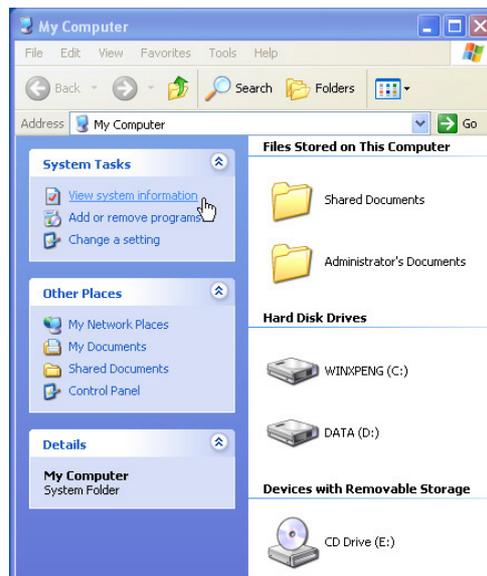
Connect a network cable from your Notebook PC to a hub or switch in a LAN.

# Configuring your LAN

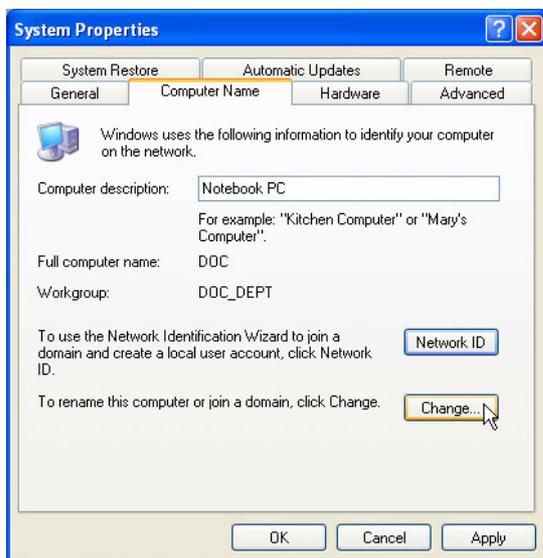
## Joining a Domain or Workgroup (Windows XP)



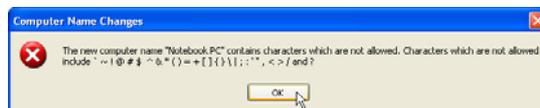
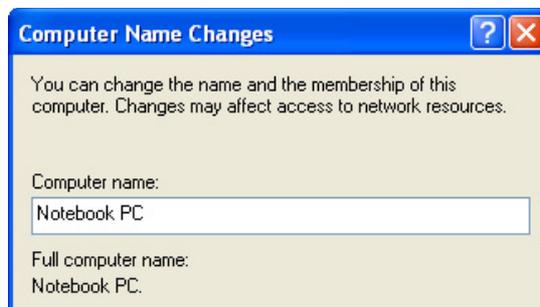
(1) Click **Start** and **My Computer**.



(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.

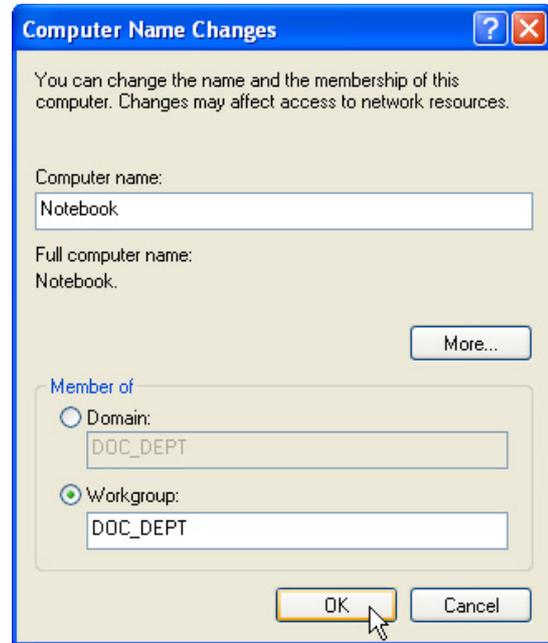


## Joining a Domain or Workgroup (Cont')



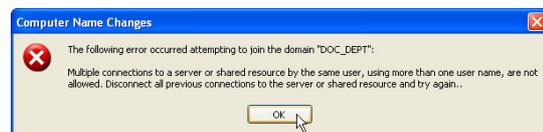
### (4a) Domain:

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:

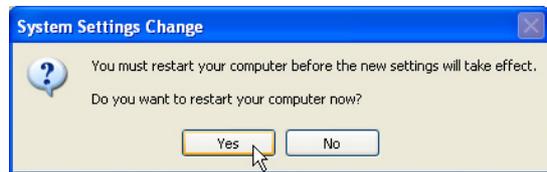
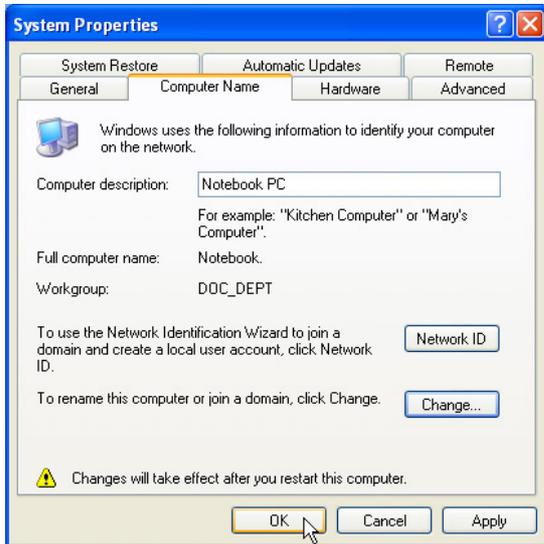
If your network does not have a domain or you are not authorized to join a domain, select **Workgroup** and type in an existing name or create your own (by typing an unused workgroup name)



### Administrator Name or Password not accepted:

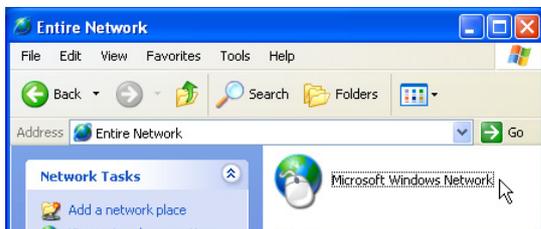
You cannot login with the Administrator name and use one password, then use the Administrator name with another password to add to a domain. You must login using another name. See Windows documentation to "Add New User" from User Accounts in the Control Panel.

## Joining a Domain or Workgroup (Cont')

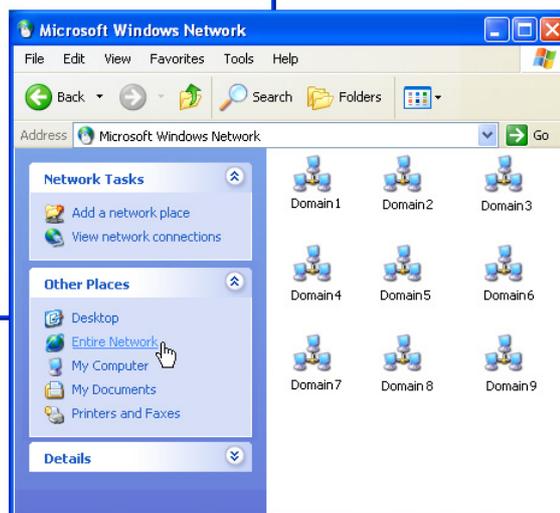


(5) After you restart your computer, you should see some contents through Entire Network.

## 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)

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**Topics Covered:**  
**Modem Driver Setup**  
**Modem Configuration**

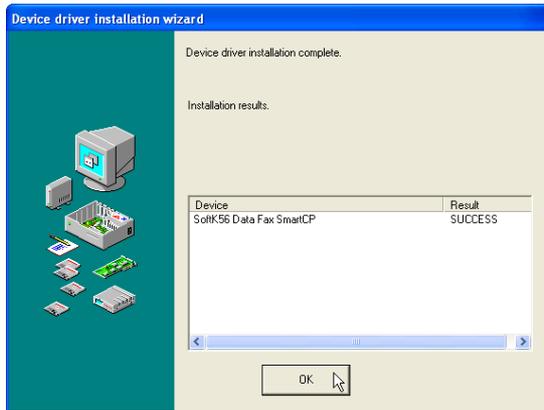
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Screens will vary depending on your operating system but the contents should be the same.

## Modem Driver Setup

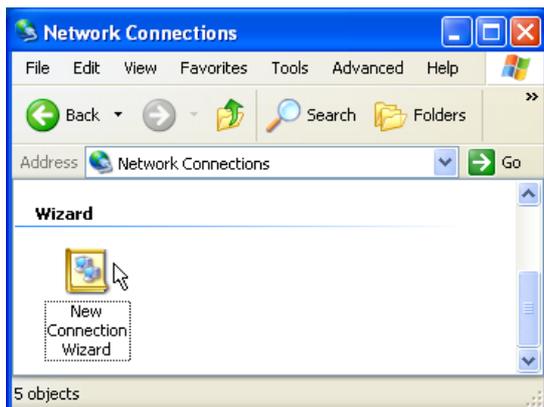
Running setup will give you the following wizard:



Click **OK** to install the modem driver.

## 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.



Double-click **New Connection Wizard** in Network Connections

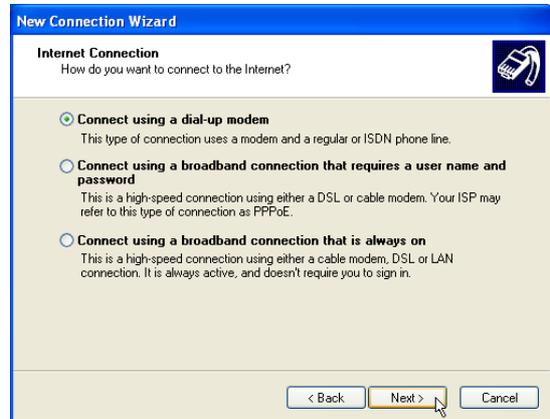


Select "Connect to the Internet" and click **Next**.

## Modem Configuration (Cont')



Select "Set up my connection manually" and click **Next**.



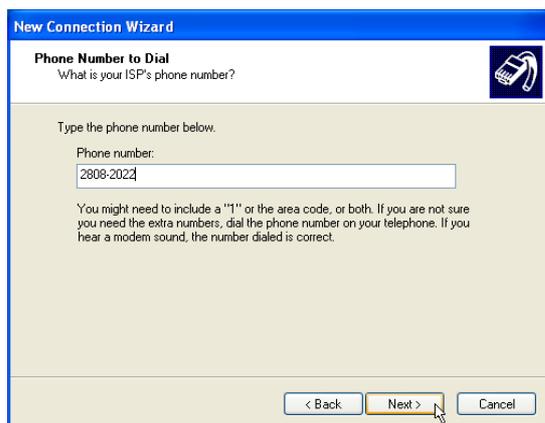
Select "Connect using a dial-up modem" and click **Next**.



Select your modem and click **Next**.



Enter any name to represent your ISP.



Enter the dial up number for your ISP.



Selection one of the security preferences and click **Next**.

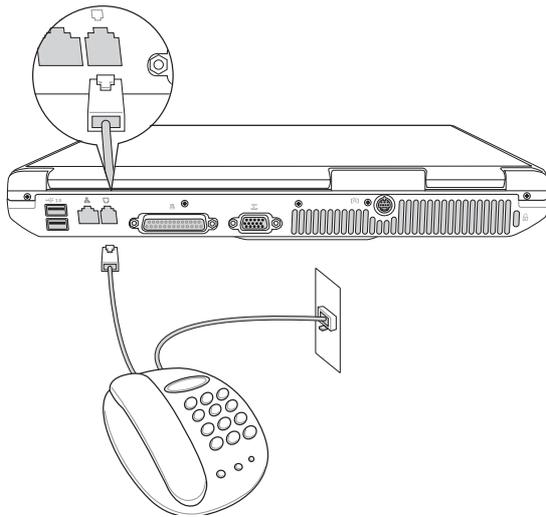
## Modem Configuration (Cont')



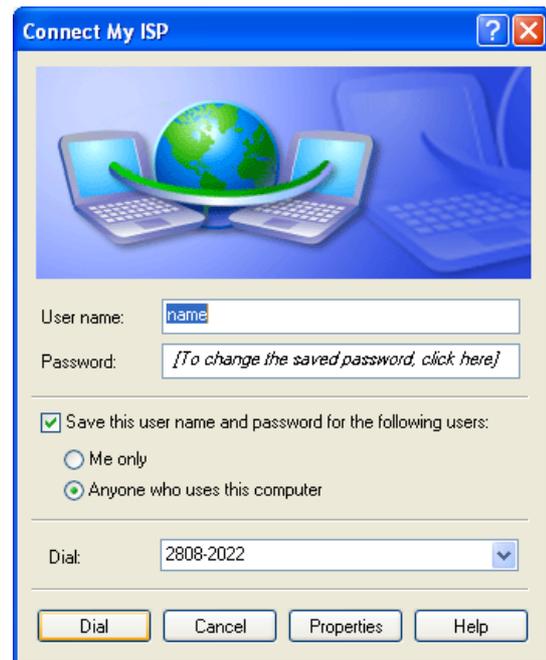
Enter your ISP account name and password and click **Next**.



Select "Add a shortcut..." and click **Finish**.



Connect a telephone cable from your Notebook PC to a telephone jack.



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

# Smart IO

(Required Driver)

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## **Topics Covered:**

**SmartIO Setup**

**Flash Memory Card Usage**

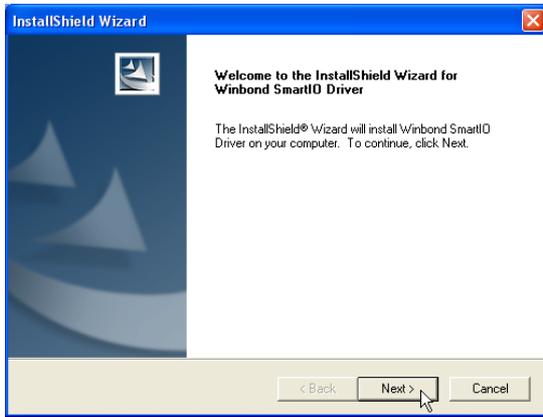
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Screens will vary depending on your operating system but the contents should be the same.

# SmartIO Setup

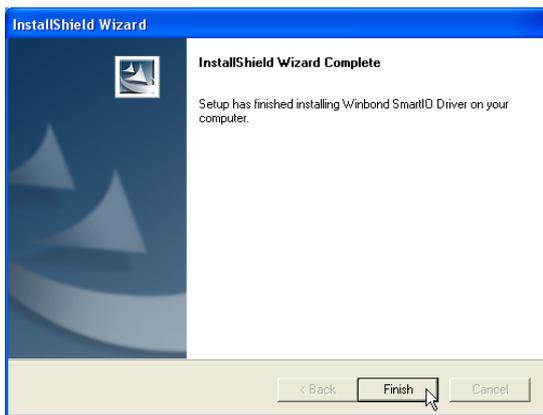
Running setup will give you the following wizard:



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



Click **Next** or deselect a memory type if you don't want to use one of the memory types.



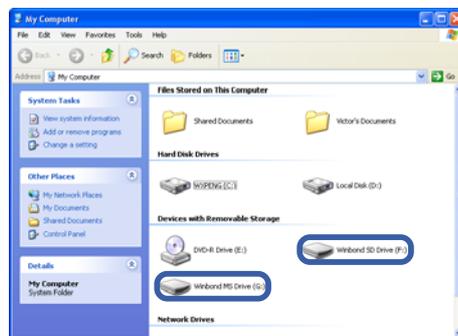
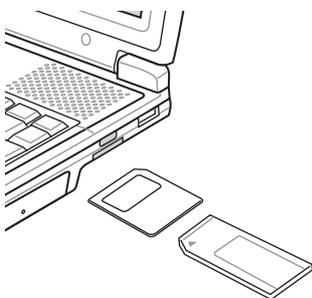
On the “Setup Complete” screen, click **Finish**.

## Flash Memory Card Usage

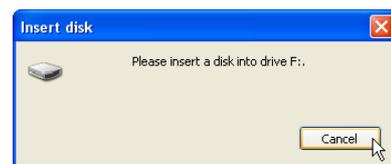
Insert a SD, MMC, or MS flash memory card into the socket and you can access it through “My Computer” (launched through Windows *start*). Winbond SD Drive (your drive letter may be different) can access SD and MMC cards. The Winbond MS Drive can access MS cards.



**Slowly push the memory card into the socket to use. When finished, push the card to eject, and then slowly pull the card out of the socket.**



If you do not have a compatible card inserted, you will get this message when you click one of the Winbond drives:





# PowerNow

(Recommended Utility)

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**Topics Covered:**  
**AMD PowerNow Utility Setup**

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

## AMD PowerNow Utility Setup

Running setup will give you the following wizard:



When setup is complete, click **Finish** to exit the setup wizard.



# ChkMail

(Recommended Utility)

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## **Topics Covered:**

**ChkMail Utility Setup**

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

# ChkMail Utility Setup

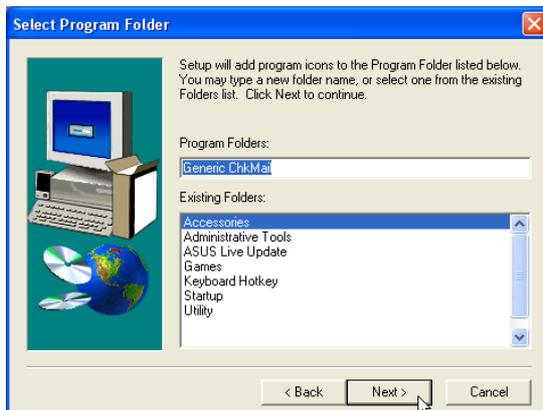
Running setup will give you the following wizard:



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



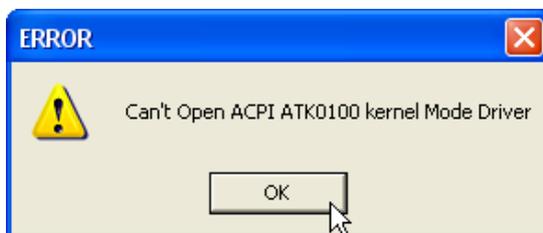
On the “Choose Destination Location” screen, click **Next** to continue or you may first change the destination folder.



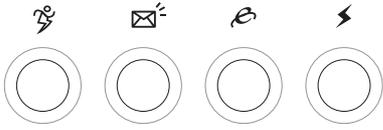
On the “Select Program Folder” screen, click **Next** to continue or enter a different folder name.



On the “Setup Complete” screen, click **Finish**.



You must install ATK0100 before running this utility.



# Hotkey

(Required Utility)

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## **Topics Covered:**

**Hotkey Utility Setup**

**Hotkey Utility Reference**

**Hotkey Utility Actions**

**Adding a Program to Run**

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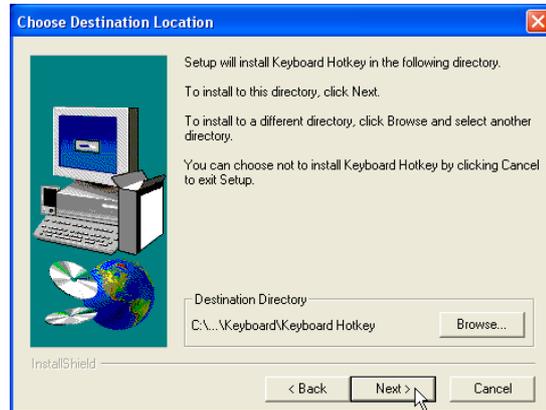
Screens will vary depending on your operating system but the contents should be the same.

# Hotkey Utility Setup

Running setup will give you the following wizard:



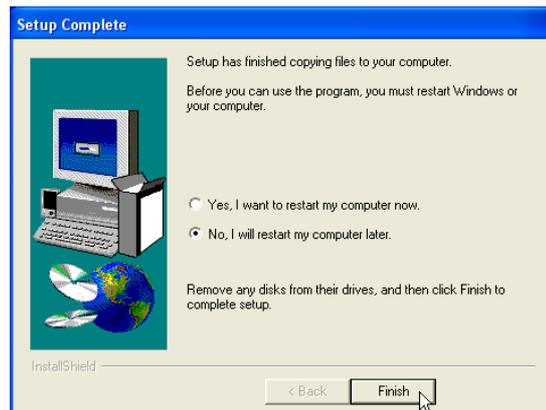
On the “Welcome” screen, click **Next** after reading the message.



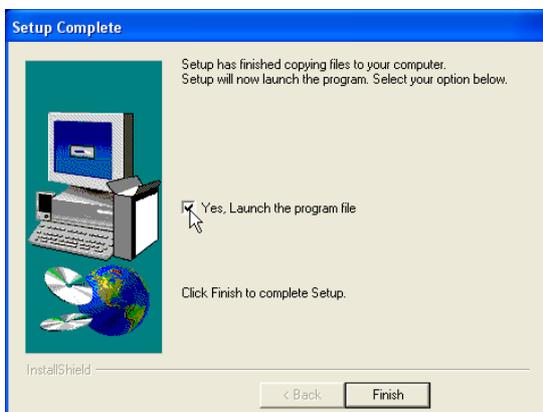
On the “Choose Destination Location” screen, click **Next** to continue or you may first change the destination folder.



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



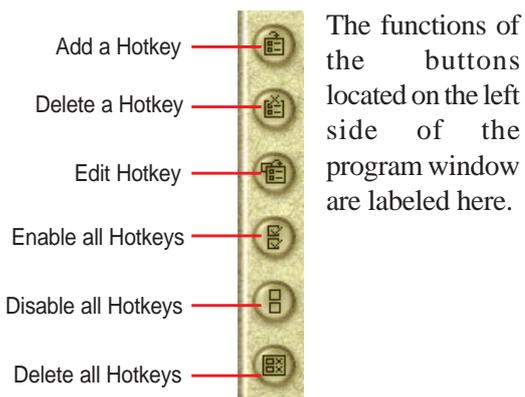
On the “Setup Complete” screen, click **Finish**.



You can select to launch the utility now.

# Hotkey Utility Reference

## Buttons



## Delete a Hotkey

Highlight a Hotkey and click this button to delete it from the current category.



If you did not select a Hotkey, a message will show:



## Delete all Hotkeys

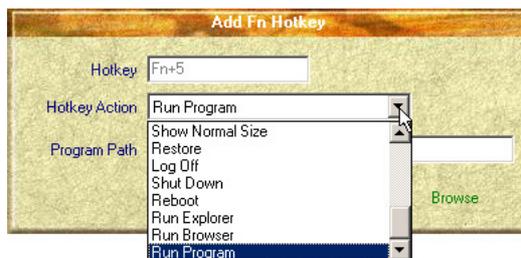
Deletes all Hotkeys in the current category. This confirmation will be shown:



## Add a Hotkey

You can assign three Hotkeys to the two preset by the utility for a maximum of five. If you don't use the two preset, you can delete them for your own applications.

When you choose to add a hotkey, you can specify a key by pressing that key or key combination in the Hotkey box (the <Fn> key cannot be entered and will be automatically added to the "Notebook Fn Hotkey" category). The available Hotkey actions for assignment are shown in the "Hotkey Action" pull down.



If you already have five hotkey settings, you will get this message.



## Edit a Hotkey

Highlight a Hotkey and click this button to change its Hotkey or action.

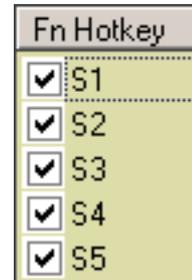
You can enter any information just like adding a Hotkey.





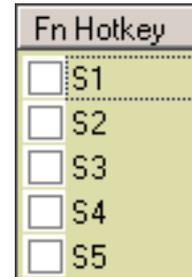
### Enable all Hotkeys

Enables all Hotkeys by placing check marks in front of the Hotkeys in the current category.

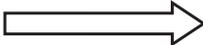
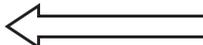


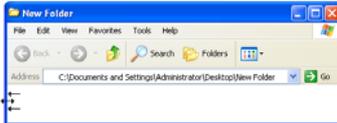
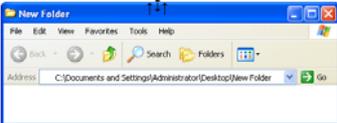
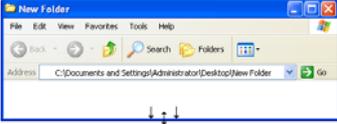
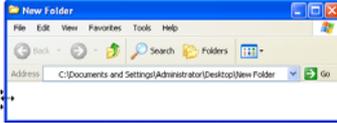
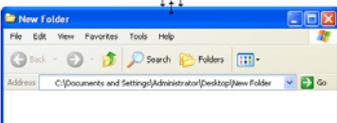
### Disable all Hotkeys

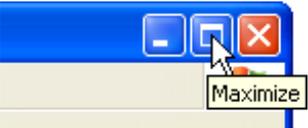
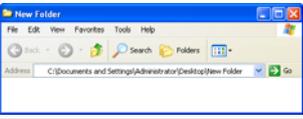
Disables all Hotkeys by removing check marks from the front of the Hotkeys in the current category.



## Hotkey Utility Actions

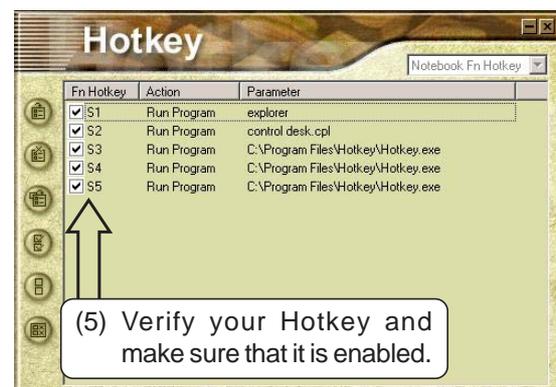
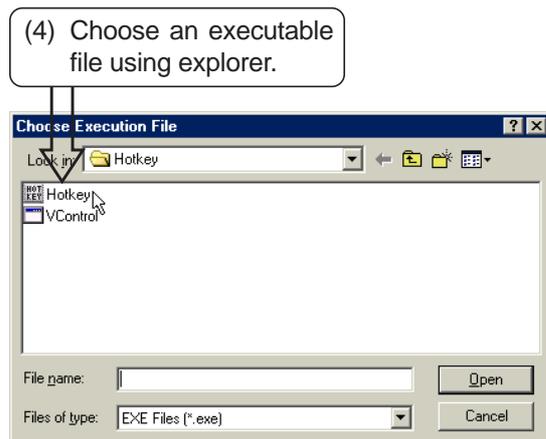
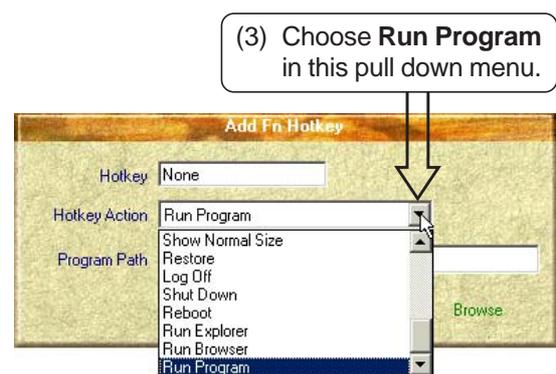
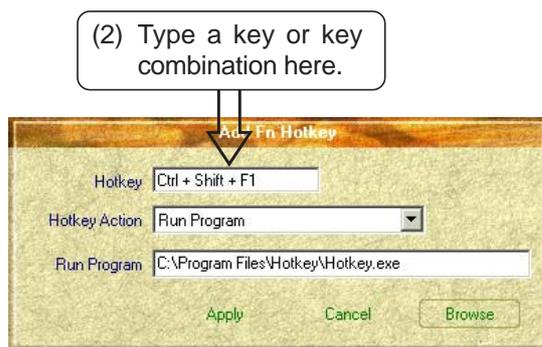
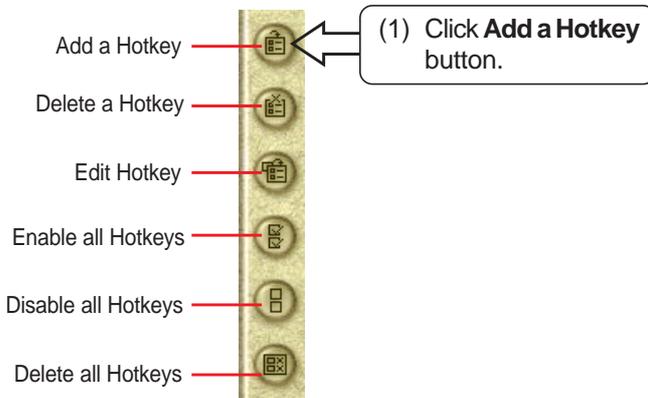
Actions	Descriptions	Examples (of action)
None:	Performs no action	--
Move Window To Left:	Moves the active window left between 1-50 steps	
Move Window To Up:	Moves the active window up between 1-50 steps	
Move Window To Right:	Moves the active window right between 1-50 steps	

Actions	Descriptions	Examples (of action)
Move Window To Below:	Moves the active window down between 1-50 steps	
Extend Window From Left:	Stretches the active window left between 1-50 steps	
Extend Window From Up:	Stretches the active window up between 1-50 steps	
Extend Window From Right:	Stretches the active window right between 1-50 steps	
Extend Window From Below:	Stretches the active window down between 1-50 steps	
Shrink Window from Left:	Shrinks the active window from the left between 1-50 steps	
Shrink Window from Up:	Shrinks the active window from the top between 1-50 steps	
Shrink Window From Right:	Shrinks the active window from the right between 1-50 steps	
Shrink Window From Below:	Shrinks the active window from the bottom between 1-50 steps	

Actions	Descriptions	Examples (of action)
Minimize Window:	Minimizes the active window	
Maximize Window:	Maximizes the active window	
Show Normal Size:	Shows the active window in normal size (user adjustable)	
Restore:	Restores a minimized window to its previous size.	
Log Off:	Logs the current user OFF from the current Windows session and any connected networks.	
Shut Down:	Exits from Windows and turns OFF the Notebook PC.	
Reboot:	Restarts the Notebook PC	
Run Explorer:	Runs Windows Explorer	
Run Browser:	Runs the Internet Browser	
Run Program:	Runs a user defined program	

## Adding a Program to Run

To add a Hotkey to run a program follow the steps below.







# LiveUpdate

(Recommended Utility)

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**Topics Covered:**  
**LiveUpdate Setup**  
**Using LiveUpdate**

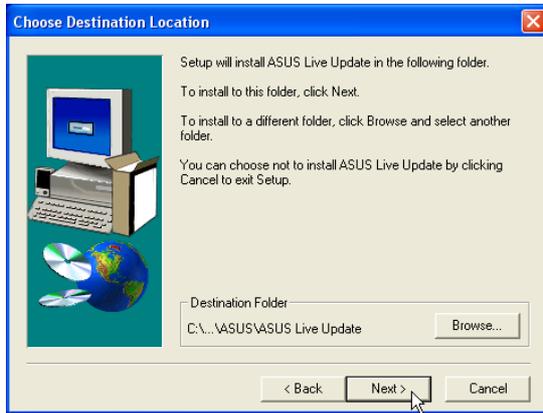
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Screens will vary depending on your operating system but the contents should be the same.

## LiveUpdate Setup

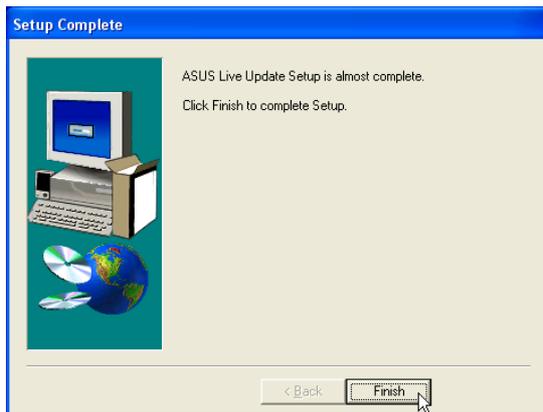
Running setup will give you the following wizard:



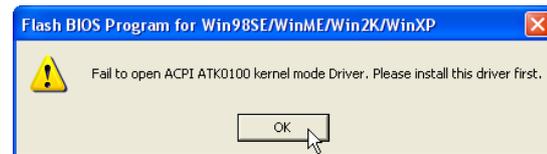
On the “Choose Destination Location” screen, click **Next** to continue or you may first change the destination folder.



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

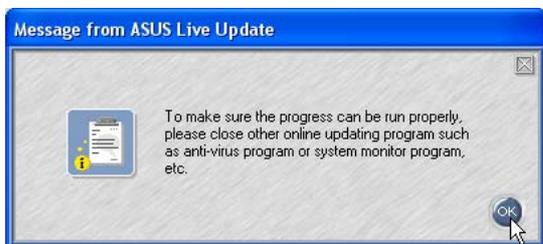


On the “Setup Complete” screen, click **Finish**.



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

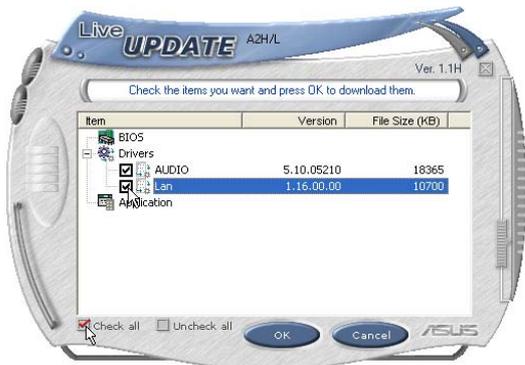
# Using LiveUpdate



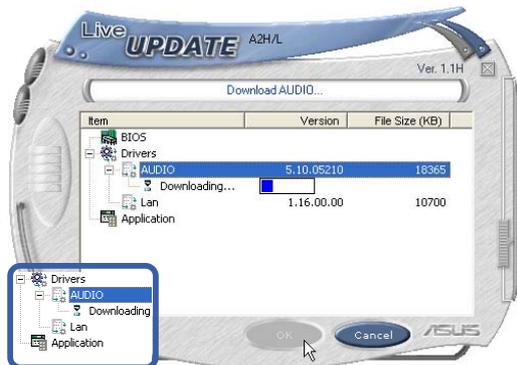
Close other software to ensure no conflicts.



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



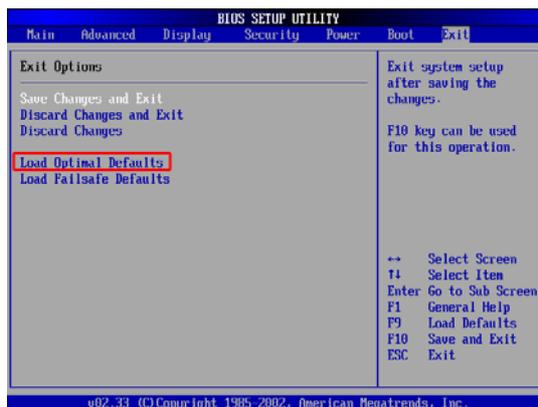
Newer versions will be shown. Check the items to update or select "Check all".



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.





# PC-cillin 2002

(Recommended Utility)

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## Topics Covered:

**PC-cillin 2002 Features**

**About Viruses**

**Technical Support**

**PC-cillin 2002 Feature Screens**

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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/](http://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](mailto:support@trendmicro.com)

URL: [www.antivirus.com](http://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

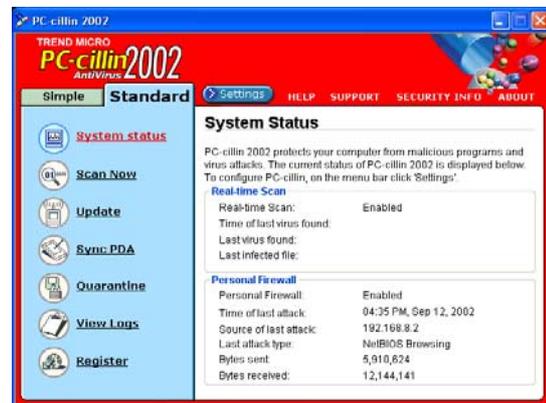
The Real-time Monitor is the quickest way to access certain functions, for example to display the PC-cillin or Settings windows. With the Real-time Monitor, you know at a glance if real-time scanning is enabled (the lightning streak icon is red) or disabled (the lightning streak icon is grey).

-  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+

(Recommended Utility)

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## Topics Covered:

**Power4 Gear+ Utility Setup**

**Benefits of Power4 Gear+**

**Power4 Gear+ Interface**

**Power4 Gear+ Configuration**

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

# Power4 Gear+ Utility Setup

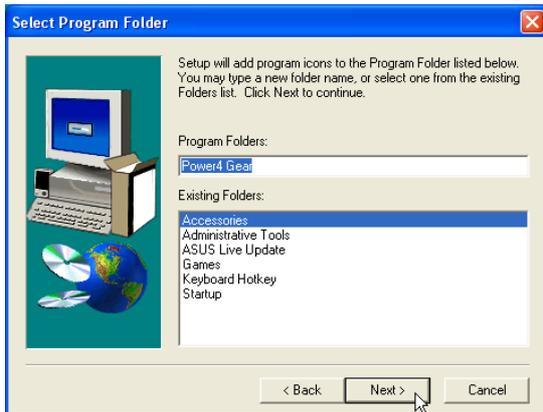
Running setup will give you the following wizard:



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.



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.

## 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 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.

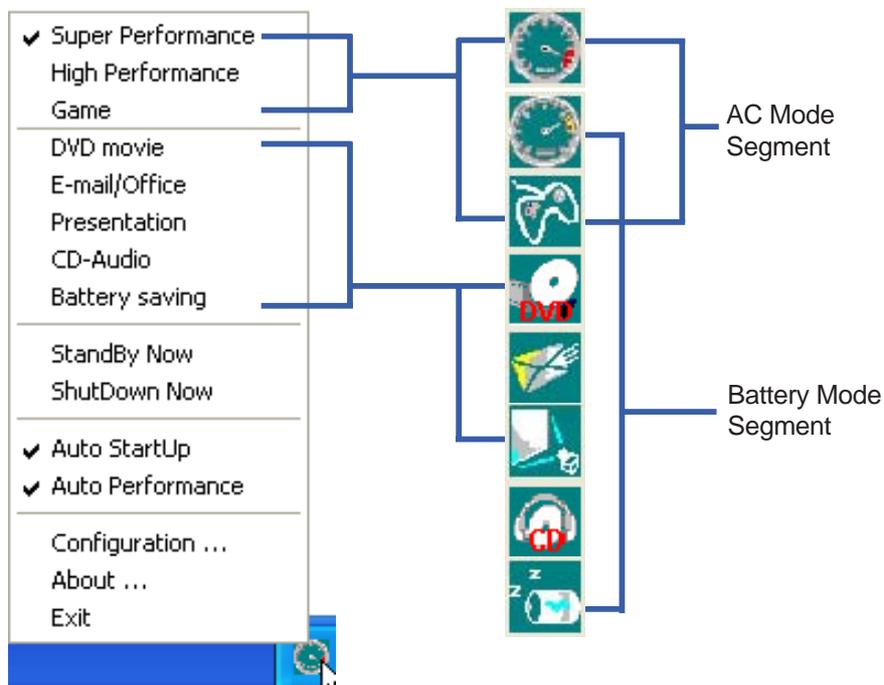
Icons	Mode Names	Power Segment
	Super Performance	AC
	High Performance	AC/DC
	Game Performance	AC/DC
	DVD Movie Performance	DC
	Email/Office Performance	DC
	Presentation Performance	DC
	Audio Listening Performance	DC
	Battery-Saving Performance	DC

## Using the task bar icon

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

## Power4 Gear+ Modes and Power Segments

When you are using an AC adapter, the Power4 Gear+ button will allow switching between three modes as shown above. When you remove the AC adapter, the Power4 Gear+ button will allow switching between seven modes as shown above. When you remove or apply the AC adapter, Power4 Gear+ will automatically shift you up or down into the proper mode segment.



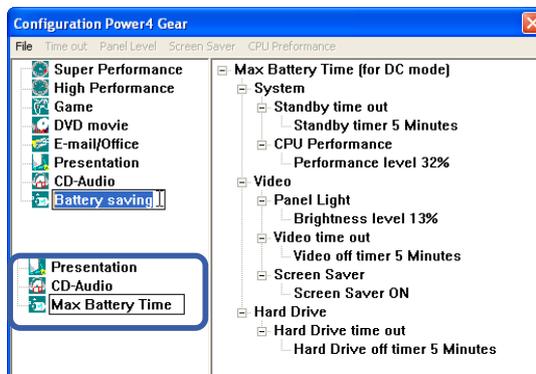
## Power4 Gear+ Configuration

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.



## Renaming Settings

You can rename the power saving levels as you like using the same method to rename files or folders in Windows. In the example on the right, the brightness level is decreased to 13% and the name is changed to “Max Battery Time”.



## Power Saving Details

Double click an item to view possible settings. Some power saving items are only available under certain modes.

### CPU Performance

- System
  - Standby time out
    - Standby timer 5 Minutes
  - CPU Performance
    - Performance level 32%
      - 100%
      - 64%
      - 32%

### System Standby Timer

- System
  - Standby time out
    - Standby timer 25 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
      - Never

### Hard Drive Off Timer

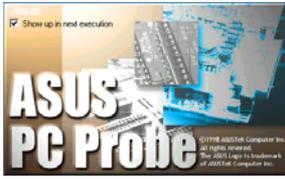
- Hard Drive
  - Hard Drive time out
    - Hard Drive off timer 30 Minutes
      - 1 Minute
      - 2 Minutes
      - 3 Minutes
      - 5 Minutes
      - 10 Minutes
      - 15 Minutes
      - 20 Minutes
      - 25 Minutes
      - 30 Minutes
      - 45 Minutes
      - 1 Hour
      - 2 Hours
      - 3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

### Display Panel Brightness

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

### Display Panel Off Timer

- Video
  - Video time out
    - Video off timer 30 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
      - Never



# Probe2

(Recommended Utility)

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## **Topics Covered:**

**Probe2 Setup**

**Probe2 Reference**

**Starting Probe2**

**Using Probe2 Monitoring**

**Probe2 Task Bar Icon**

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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:



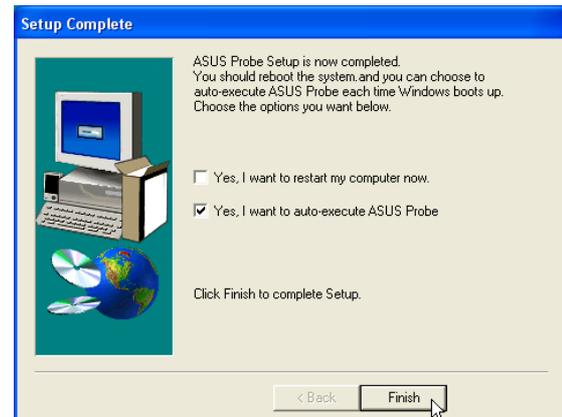
On the “Welcome” screen, click **Next** after reading the message.



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, click **Finish**.

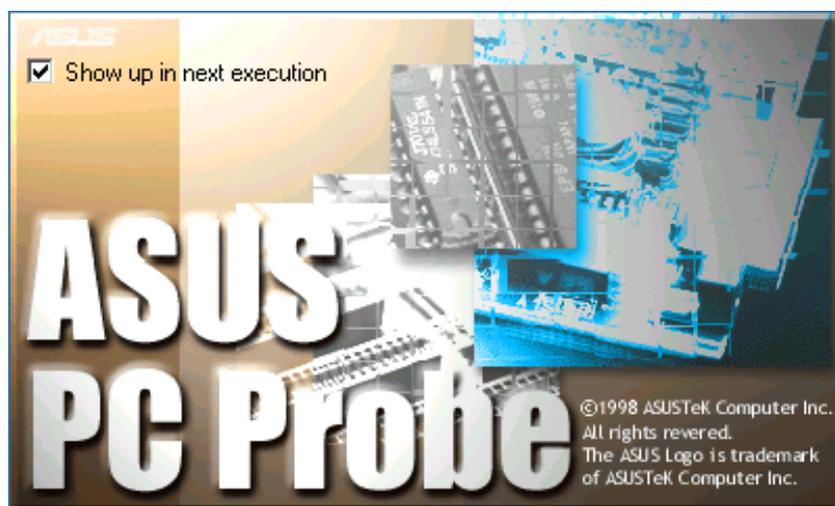
## Probe2 Reference

Probe2 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 Probe2

If the Probe2 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 Probe2 starts, a splash screen appears allowing you to select whether to show the screen again when you open Probe2 or not. To bypass this startup screen, clear the **Show up in next execution** check box.



The Probe2 icon  will appear on the taskbar's system tray indicating that Probe2 is running. Clicking the icon once will allow open the Probe2 interface.

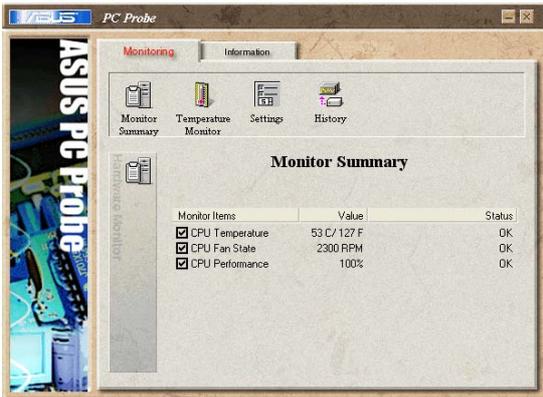
### Windows XP Taskbar

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



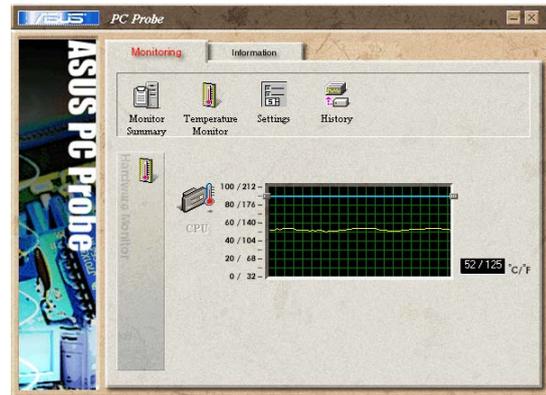
# Using Probe2

## Monitoring



### Monitor Summary

Shows a summary of the items being monitored.



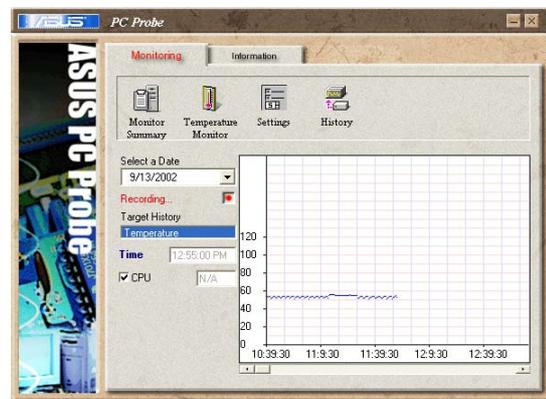
### Temperature Monitor

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.

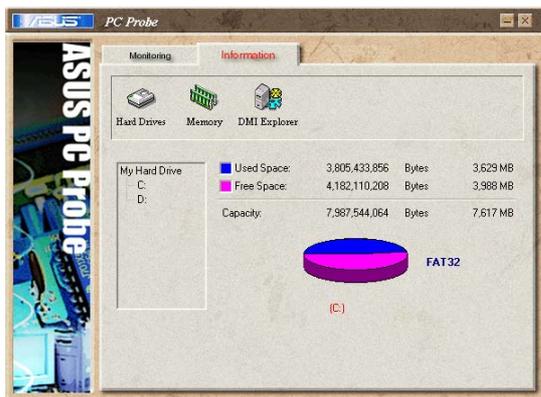


### History

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.

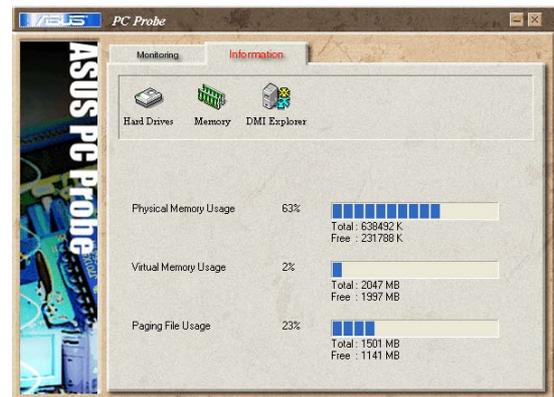
## Using Probe2 (Cont')

### 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.

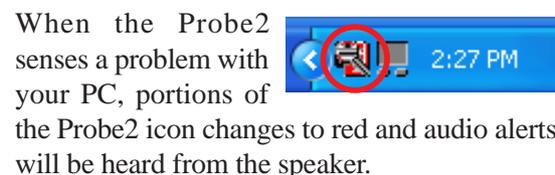


#### DMI Explorer

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

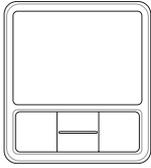
### Probe2 Taskbar Icon

Right clicking the Probe2 icon will bring up a menu to open or exit Probe2 and pause or resume all system monitoring.



When the Probe2 senses a problem with your PC, portions of the Probe2 icon changes to red and audio alerts will be heard from the speaker.





# TouchPad

(Recommended Utility)

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## **Topics Covered:**

**TouchPad Utility 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**

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

# Touchpad Utility Setup

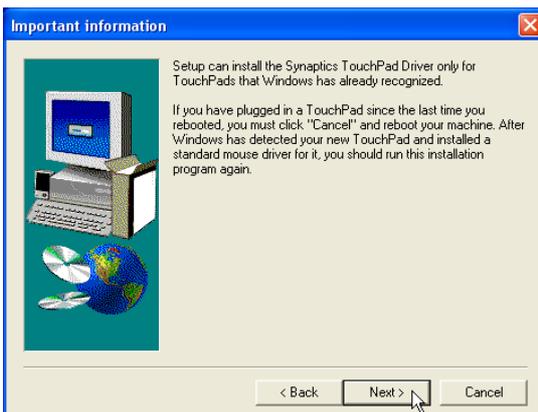
Running setup will give you the following wizard:



On the “Choose Setup Language” screen, select a language and click **OK** to continue.



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



On the “Information” screen, click **Next** after reading the message.



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



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

## 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 TouchPad 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 left-most 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.

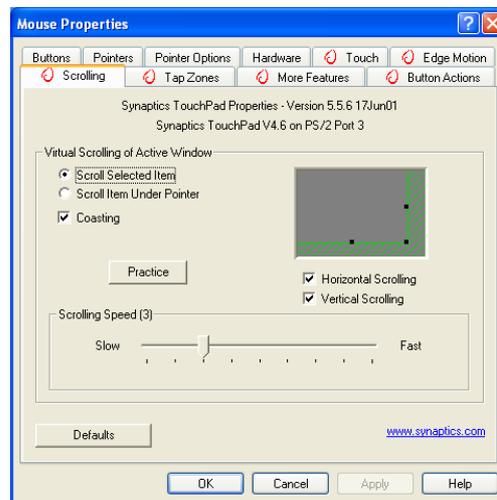
### Enabling Virtual Scrolling of the Active Window

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.

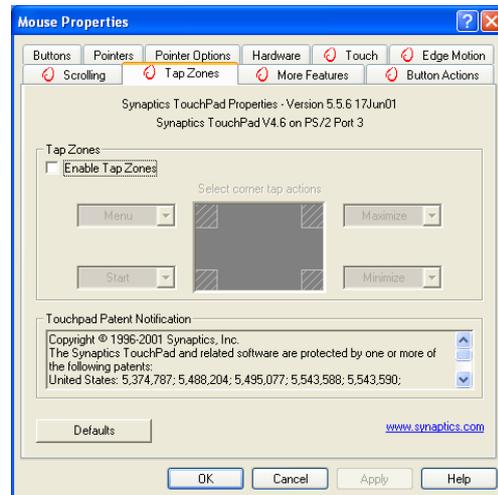
### Customizing Virtual Scrolling Speed

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.

## 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 your 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.

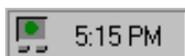
### Slow Motion Key

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.

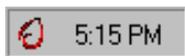
### Constrained Pointer Key

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



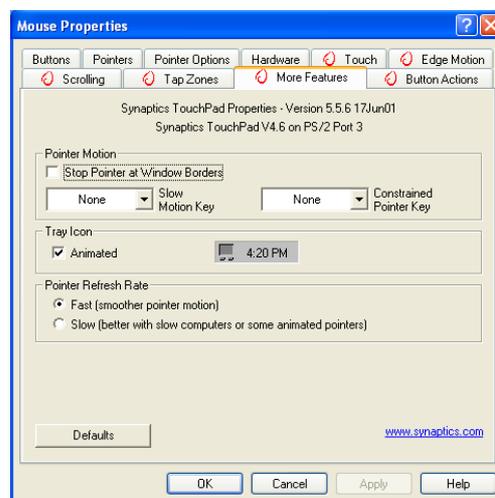
The Synaptics TouchPad tray icon appears in the Windows Taskbar near the clock. You can choose between two icons:



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.

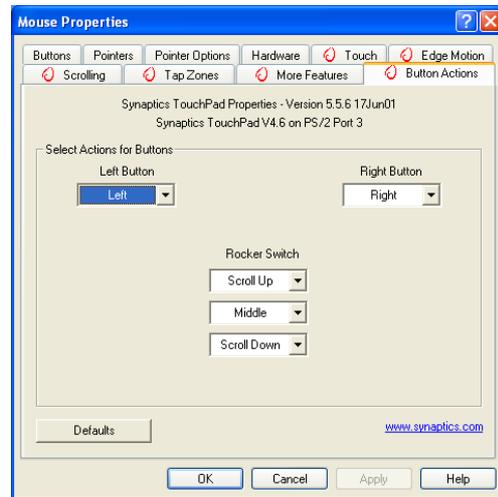
The **Rocker Switch** settings are available on Notebook PC's with scroll buttons between the left and right buttons.

### 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:

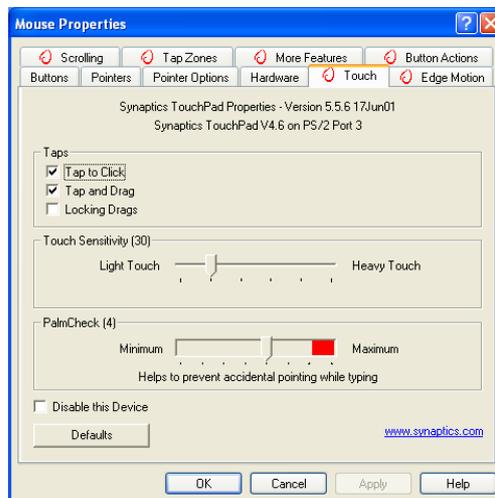
- Tap to Click
- Tap and Drag
- Locking Drags

### 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.



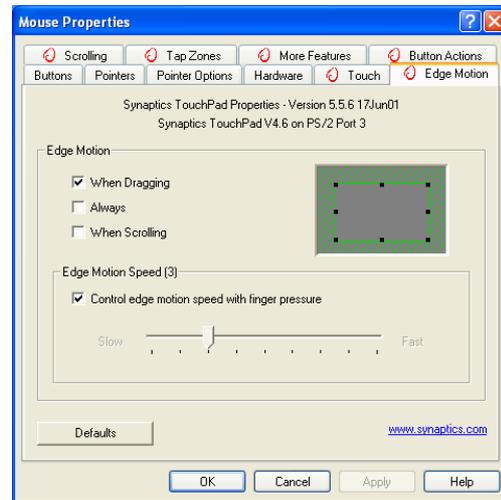
## Edge Motion Properties Page

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

(Recommended Utility)

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**Topics Covered:**  
**WinFlash Utility Setup**  
**Using WinFlash**

---

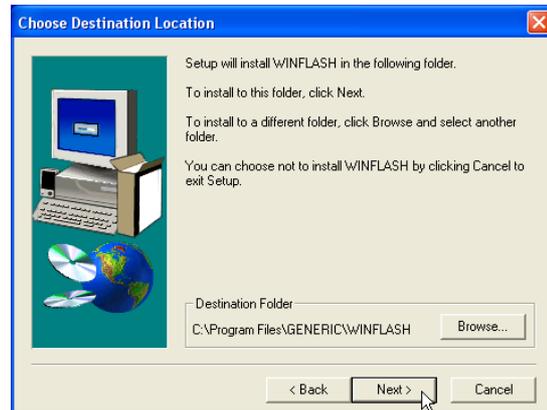
Screens will vary depending on your operating system but the contents should be the same.

## WINFLASH Utility Setup

Running setup will give you the following wizard:



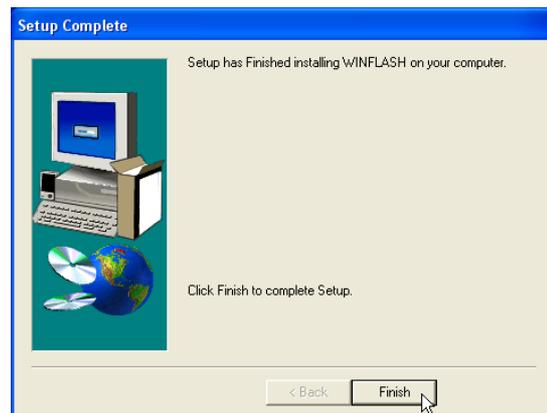
On the “Welcome” screen, click **Next** after reading the message.



On the “Choose Destination Location” screen, click **Next** to continue or you may first change the destination folder.



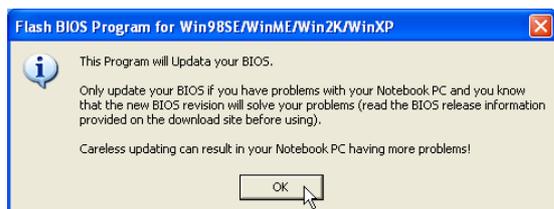
On the “Select Program Folder” screen, click **Next** to continue or enter a different folder name.



On the “Setup Complete” screen, click **Finish**.

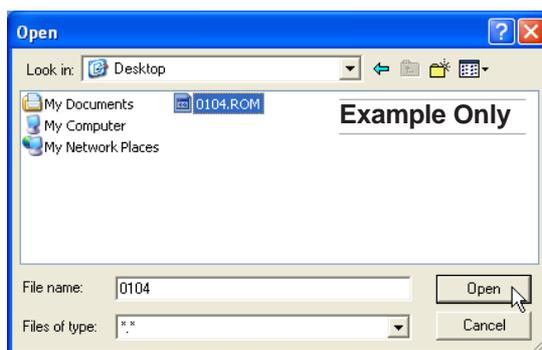
# Using WINFLASH

WINFLASH is a simple utility to update your Notebook PC's BIOS. To run **WINFLASH**, access the **All Programs** shortcut through the **Start** button.

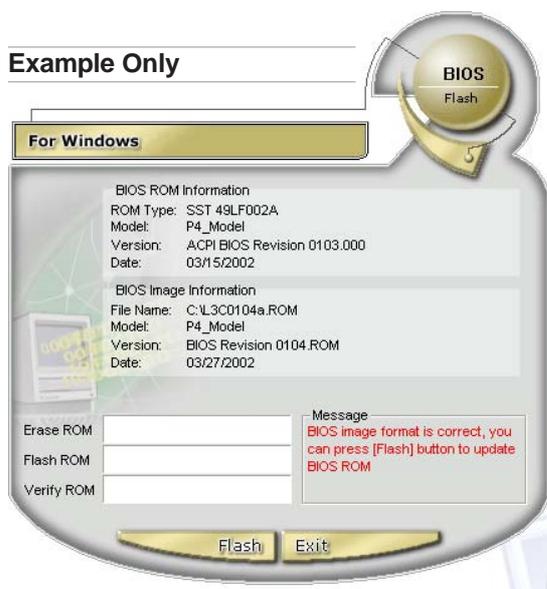


## Do not update your BIOS for no reason.

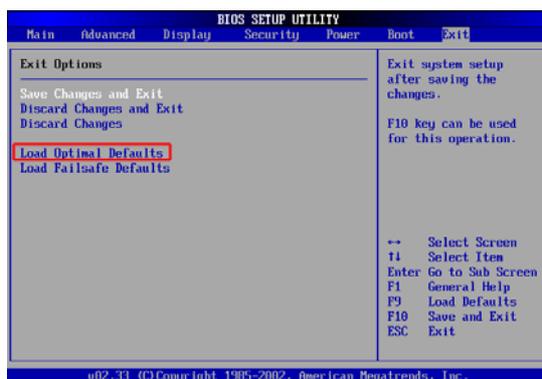
You will be warned that you should only update your BIOS if you know it will solve a specific problem. If you update your BIOS using the wrong BIOS file, your Notebook PC may not boot up.



When you enter WINFLASH, you will be immediately asked for the BIOS image file. Browse to the file and click **Open**.



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.



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.



# BIOS Setup

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## 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.**

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## 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.**

---

**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. This page also provides a battery refreshing/calibration function.

### BOOT

Use this page to configure storage and boot devices such as hard disk drives, optical drives, and removable drives.

### EXIT

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

## Menu and Sub-Menu Topology

**Main**    -- (no sub-menu)

**Advanced** -- IDE Configuration  
          -- SuperIO Configuration

**Display** -- (no sub-menu)

**Security** -- (no sub-menu)

**Power**    -- (no sub-menu)

**Boot**     -- Boot Settings Configuration  
          -- Boot Device Priority  
          -- Hard Disk Drives  
          -- ATAPI CDROM Drives

## 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



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].

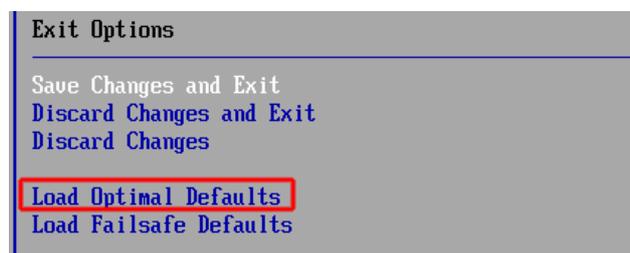
## **▶** Sub-Menu

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.



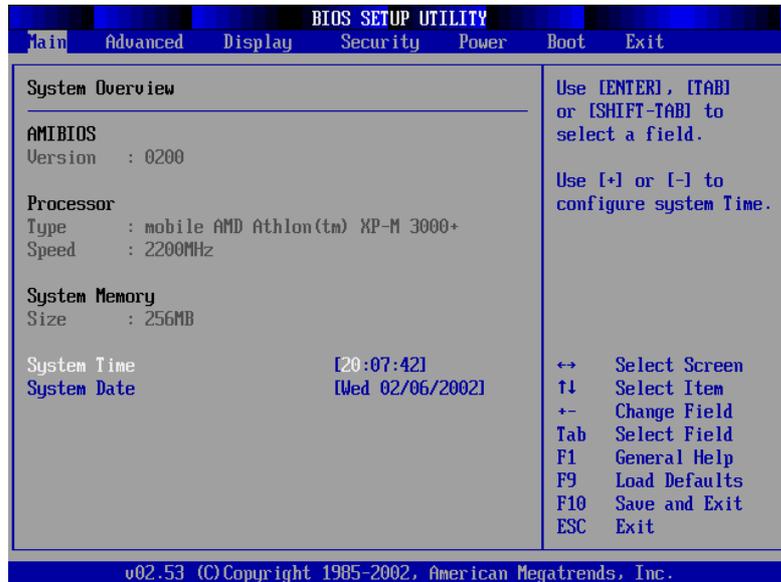
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**NOTE:** In this User's Manual, item headings in square brackets represent the default settings for those fields.

---

## Main

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



## System Overview

### AMIBIOS

**Version : [XXXX] (display field)**

This displays the current BIOS version in the Notebook PC's flash EEPROM.

### Processor

**Type : [Mobile Genuine Intel (R) processor] (display field)**

This displays the current CPU model.

**Speed : [1600MHz] (display field)**

This displays the CPU speed specified by the above processor.

### System Memory

**Size : [384MB] (display field)**

Shows the amount of usable memory available to your operating system.

**System Time [00:00:00] (display field)**

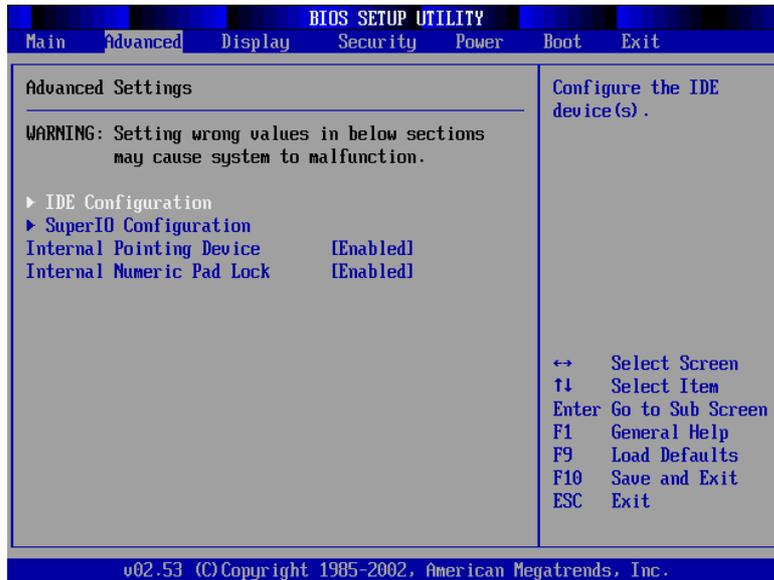
Sets your system to the time that you specify (usually the current time). The format is hour, minute, second. Use the [Tab] or [Shift Tab] keys to move between the fields.

**System Date [Tue 00/00/0000] (display field)**

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.



## Advanced Settings

### >IDE Configuration (see next page)

Enter this sub-menu to configure IDE devices.

### > SuperIO Configuration (described later)

Enter this sub-menu to configure input/output devices.

### 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]

## Advanced (sub-menu)

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



## IDE Configuration

### Onboard PCI IDE Controller [Primary]

Set to “Disabled” to disable the integrated IDE controller. Set to “Primary” to enable only the primary IDE controller. Set to “Secondary” to enable only the secondary IDE controller. Set to “Both” to enable both the primary and secondary controllers. The configuration options are: [Primary] [Secondary] [Both]

### > Primary/Secondary IDE Master/Slave (display field, see next page)

[Hard Disk] This item automatically detects any IDE device connected here. Press [Enter] to edit device information. (Editing device information is only used for troubleshooting by technical computer experts and should never be edited by users.)

[ATAPI CDROM] This item automatically detects any IDE optical drive connected here. Press [Enter] to edit device information. (Editing device information is only used for troubleshooting by technical computer experts and should never be edited by users.)

[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.

## Advanced (sub-menu)

### Primary/Secondary IDE Master/Slave

**NOTE:** The drives displayed here are examples only. The actual display will be dependent on the drives you have installed in your Notebook PC.

Primary IDE Master [Hard Disk]

Advanced		BIOS SETUP UTILITY	
<b>Primary IDE Master</b>		Select the type of device connected to the system.	
Device	:Hard Disk		
Vendor	:IC25N040ATMR04-0		
Size	:40.0GB		
LBA Mode	:Supported		
Block Mode	:16Sectors		
PIO Mode	:4		
Async DMA	:MultiWord DMA-2		
Ultra DMA	:Ultra DMA-5		
S.M.A.R.T.	:Supported		
Type	[Auto]	↔	Select Screen
LBA/Large Mode	[Auto]	↑↓	Select Item
Block (Multi-Sector Transfer)	[Auto]	←→	Change Option
PIO Mode	[Auto]	F1	General Help
DMA Mode	[Auto]	F9	Load Defaults
S.M.A.R.T.	[Auto]	F10	Save and Exit
32Bit Data Transfer	[Enabled]	ESC	Exit
v02.53 (C) Copyright 1985-2002, American Megatrends, Inc.			

Primary IDE Slave [ATAPI CDROM]

Advanced		BIOS SETUP UTILITY	
<b>Primary IDE Slave</b>		Select the type of device connected to the system.	
Device	:ATAPI CDROM		
Vendor	:QSI DVD-ROM SDR-083		
LBA Mode	:Supported		
PIO Mode	:4		
Async DMA	:MultiWord DMA-2		
Ultra DMA	:Ultra DMA-2		
Type	[Auto]	↔	Select Screen
PIO Mode	[Auto]	↑↓	Select Item
DMA Mode	[Auto]	←→	Change Option
v02.53 (C) Copyright 1985-2002, American Megatrends, Inc.			

Secondary IDE Master [Not Detected]

Advanced		BIOS SETUP UTILITY	
<b>Secondary IDE Master</b>		Select the type of device connected to the system.	
Device	:Not Detected		
Type	[Auto]	↔	Select Screen
LBA/Large Mode	[Auto]	↑↓	Select Item
Block (Multi-Sector Transfer)	[Auto]	←→	Change Option
PIO Mode	[Auto]	F1	General Help
S.M.A.R.T.	[Auto]	F9	Load Defaults
32Bit Data Transfer	[Enabled]	F10	Save and Exit
v02.53 (C) Copyright 1985-2002, American Megatrends, Inc.			

Secondary IDE Slave [Not Detected]

Advanced		BIOS SETUP UTILITY	
<b>Secondary IDE Slave</b>		Select the type of device connected to the system.	
Device	:Not Detected		
Type	[Auto]	↔	Select Screen
LBA/Large Mode	[Auto]	↑↓	Select Item
Block (Multi-Sector Transfer)	[Auto]	←→	Change Option
PIO Mode	[Auto]	F1	General Help
S.M.A.R.T.	[Auto]	F9	Load Defaults
32Bit Data Transfer	[Enabled]	F10	Save and Exit
v02.53 (C) Copyright 1985-2002, American Megatrends, Inc.			

**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].

(continued on next page)

## IDE setting details

### 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]

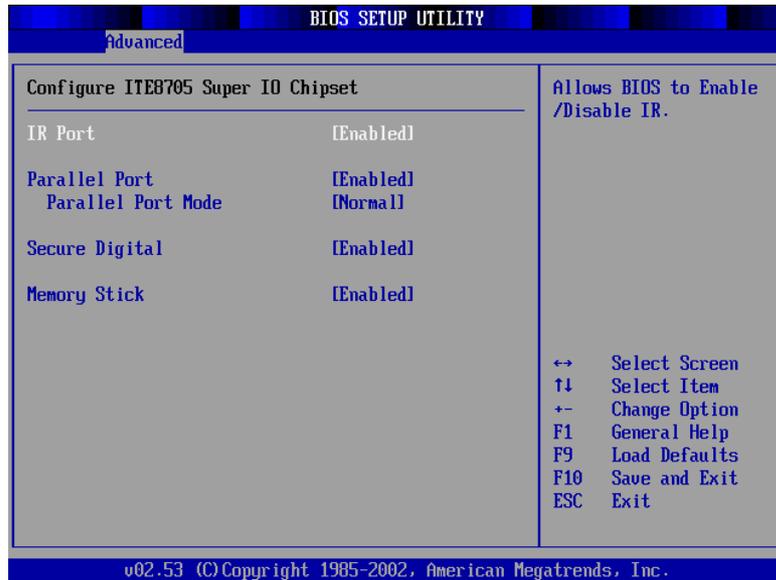
Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.) is an interface between a computer's BIOS and hard disk. It is a feature of the Enhanced Integrated Drive Electronics (EIDE) technology that controls access to the hard drive. If S.M.A.R.T is enabled, the BIOS can receive analytical information 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]

## Advanced (sub-menu)

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



## Configure Super IO Chipset

### IR Port [Enabled]

This field allows you to enable or disable the Notebook PC's infrared port. The configuration options are: [Enabled] [Disabled]

### Parallel Port [Enabled]

This field allows you to enable or disable the Notebook PC's parallel port. The configuration options are: [Disabled] [Enabled]

### Parallel Port Mode [Normal]

This field allows you to configure the Notebook PC parallel port. The configuration options are: [Normal] [Bi-Directional] [EPP] [ECP]

### Secure Digital [Enabled]

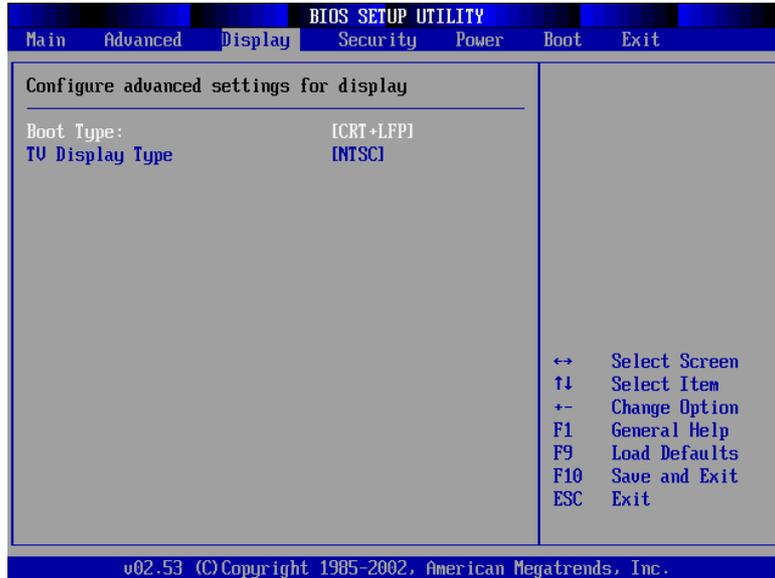
This field allows you to enable or disable the Notebook PC's secure digital controller. Disabling this will not allow the use of SD or MMC cards in the Notebook PC's built-in flash memory reader. The configuration options are: [Disabled] [Enabled]

### Memory Stick [Enabled]

This field allows you to enable or disable the Notebook PC's memory stick controller. Disabling this will not allow the use of MS cards in the Notebook PC's built-in flash memory reader. The configuration options are: [Disabled] [Enabled]

## Display

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



## Configure advanced settings for display

### Boot Type: [CRT+LFP]

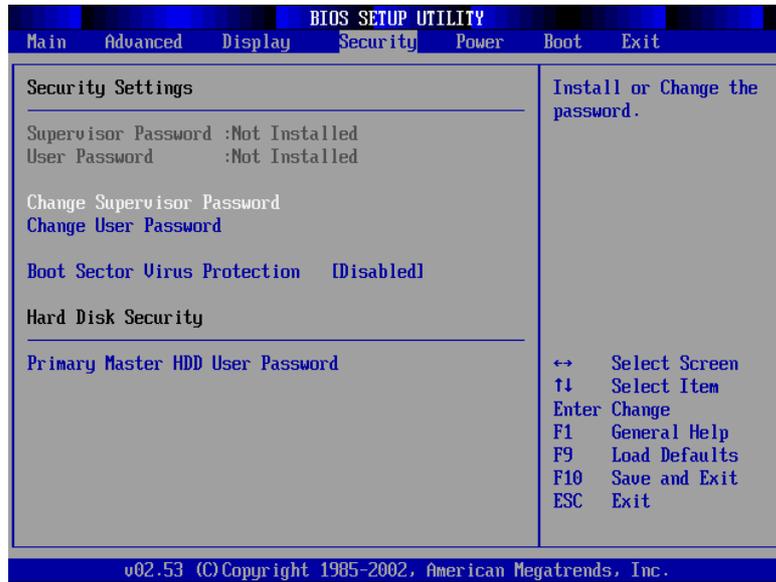
This allows you to set the output signal when booting in order to show or hide bootup information on an external monitor if used. The configuration options are: [LFP] [CRT] [CRT+LFP]

### TV Display Type [NTSC]

This allows you to set the TV output signal to match the frequency used in your region. The configuration options are: [NTSC] [PAL]

## Security

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



## 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.

(continued on next page)

## Security (Cont')

### Security Settings

#### **Supervisor Password: Not Installed/Installed**

Display fields show you the status of the security settings.

#### **User Password: Not Installed/Installed**

Display fields show you the status of the security settings.

#### **Change Supervisor 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 the password:**

1. Select “Change ... Password” and press [Enter], type up to 8 letters/numbers and press [Enter]
2. Type the same password again and press [Enter] to confirm.

##### **To clear the password:**

Select this item and press [Enter] without entering anything to clear the password.

#### **User Access Level**

You can change the access level for this user once a password is set. The configuration options are: [No Access] [View Only] [Limited] [Full Access]

#### **Change User Password**

1. Select “Change ... Password” and press [Enter], type up to 8 letters/numbers and press [Enter]
2. Type the same password again and press [Enter] to confirm.

#### **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]

(continued on next page)

## Security (Cont')

### Hard Disk Security

#### Primary Master HDD User 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:

- Hard drive password will be required on system bootup.
- Hard drive password will be required even to enter BIOS setup.
- 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:

1. Select the item and press [Enter], type a password and press [Enter]
2. Type the same password again and press [Enter] to confirm. (You can type up to eight alphanumeric characters. Symbols and other keys are ignored.)

A message will be shown in BIOS when successful “Password installed.”

Future system bootup will display: “Hard Drive Locked, enter password:”.

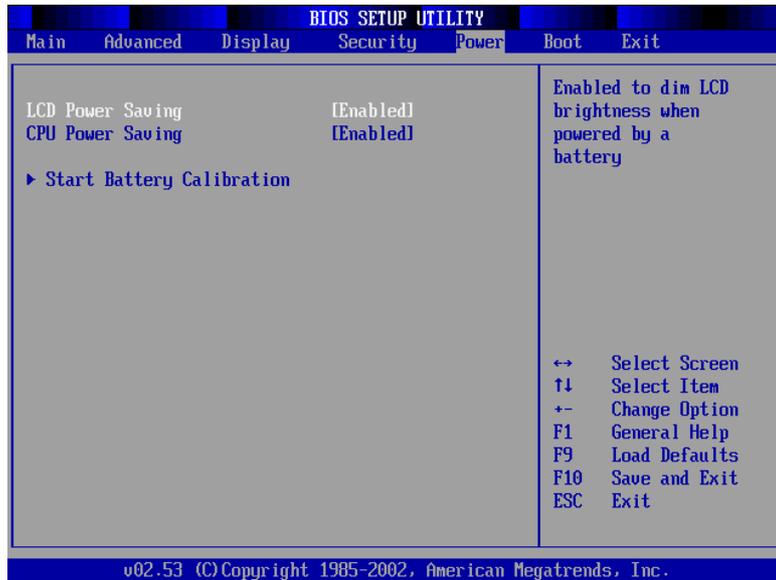
If you enter the wrong password, you will see “Primary Master Hard Disk Error” “Press F1 to Resume”. Pressing F1 will display, “Reboot and Select proper Boot device or Insert Boot Media in selected Boot device and press a key”. Make sure that you use “Save Changes and Exit”.

#### To Disable:

Select the item and press [Enter] and enter the correct password. When asked for a new password, leave it blank and press [Enter]. A message will be displayed: “Password uninstalled.” Make sure that you use “Save Changes and Exit”.

## Power

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



### 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 Calibration

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.**

## Boot

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



## Boot Settings

### > Boot Settings Configuration

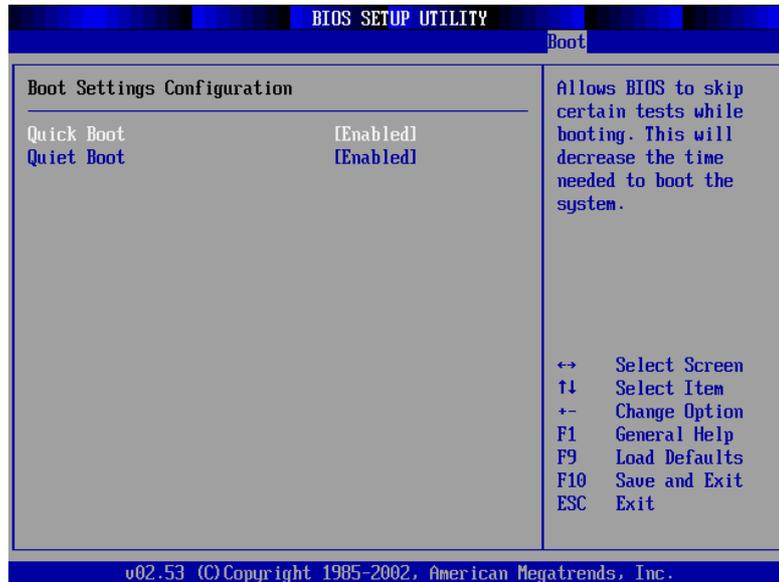
- > Boot Device Priority
- > Hard Disk Drives
- > Removable Drives
- > ATAPI CDROM Drives

### 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].

## Boot (sub-menu) Boot Settings Configuration

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



## Boot Settings Configuration

### Quick Boot [Enabled]

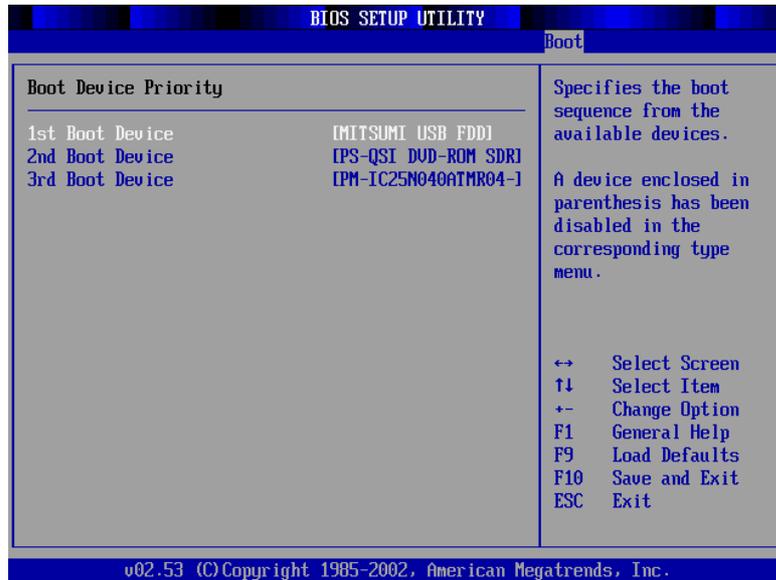
When enabled, BIOS will skip certain tests while booting. This will decrease the time needed to bootup the system. The configuration options are: [Disabled] [Enabled]

### 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 (sub-menu) Boot Device Priority

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



## Boot Device Priority

### 1st / 2nd / 3rd Boot Device [\_\_\_\_\_]

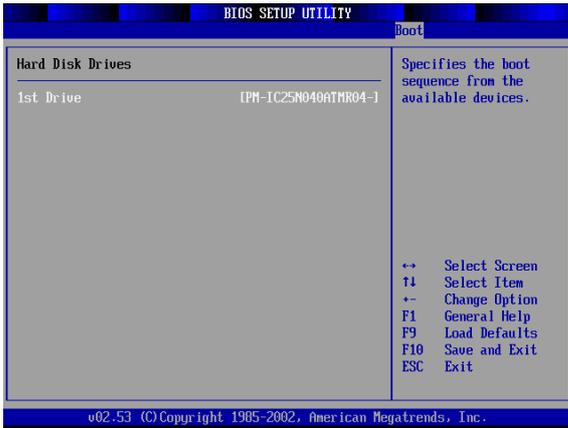
Specifies the boot sequence from the available devices. A device enclosed in parenthesis has been disabled in the corresponding type menu. The configuration examples are: [Removable Dev.] [ASUS Ai-Flash] [MITSUMI USB FDD] [TOSHIBA DVD-ROM] [PM-IC25N040ATMR04-] [ATAPI CDROM] [Disabled] (The configuration options depend on "Hard Disk Drives" in the previous menu.)

## Boot (sub-menu) Hard Disk / Removable / CDROM Drives

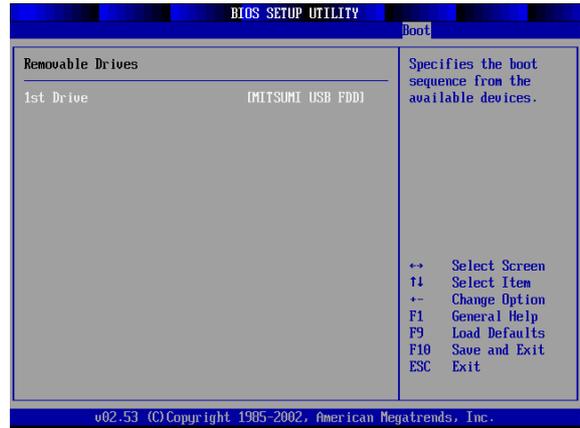
Selecting this item from the previous menu displays the page as shown below.

These pages allow you to select the drive to represent each of the boot devices.

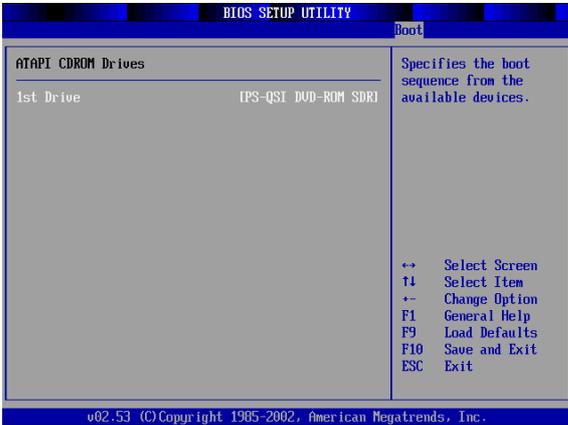
Hard Disk Drives [xxxxxxxxxx]



Removable Drives [xxxxxxxxxx]

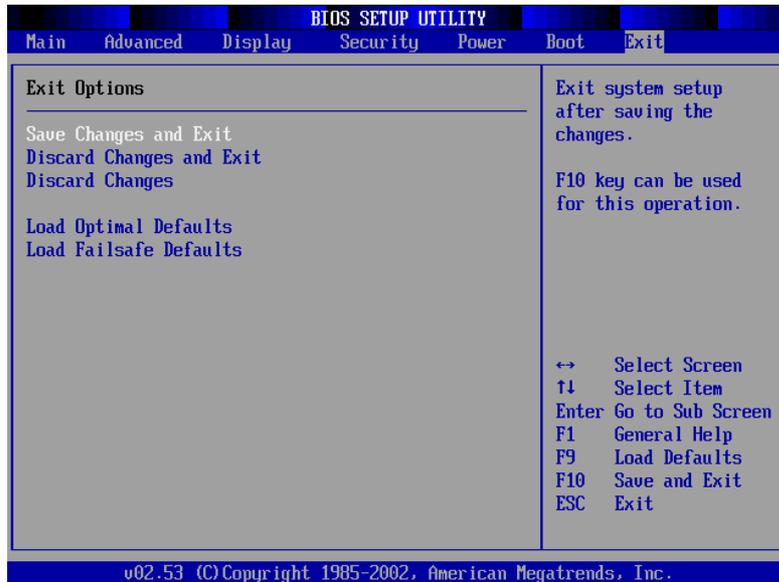


ATAPI CDROM Drives [xxxxxxxxxx]



## 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:



### 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.



## Contact Information

### ASUSTeK COMPUTER INC. (Asia-Pacific)

Company Address: 150 Li-Te Road, Peitou, Taipei, Taiwan 112

General Telephone: +886-2-2894-3447

Web Site Address: [www.asus.com.tw](http://www.asus.com.tw)

General Fax: +886-2-2894-7798

General Email: [info@asus.com.tw](mailto:info@asus.com.tw)

### Technical Support

MB/Others (Tel): +886-2-2890-7121 (English)

Notebook (Tel): +886-2-2890-7122 (English)

Desktop/Server (Tel): +886-2-2890-7123 (English)

Support Fax: +886-2-2890-7698

### ASUS COMPUTER INTERNATIONAL (America)

Company Address: 44370 Nobel Drive, Fremont, CA 94538, USA

General Email: [tsd@asus.com](mailto:tsd@asus.com)

Web Site Address: [usa.asus.com](http://usa.asus.com)

General Fax: +1-510-608-4555

### Technical Support

Support Email: [notebooktsd@asus.com](mailto:notebooktsd@asus.com)

Support Fax: +1-502-933-8713

General Support: +1-502-995-0883

Notebook (Tel): +1-510-739-3777 x5110

### ASUS COMPUTER GmbH (Germany & Austria)

Company Address: Harkort Str. 25, D-40880 Ratingen, Germany

Web Site Address: [www.asuscom.de](http://www.asuscom.de)

General Telephone: +49-2102-95990

Online Contact: [www.asuscom.de/sales](http://www.asuscom.de/sales)

General Fax: +49-2102-959911

### Technical Support

Online Support: [www.asuscom.de/support](http://www.asuscom.de/support)

Support Fax: +49-2102-959911

Component Support: +49-2102-95990

Notebook Support: +49-2102-959910

### ASUS ITALY S.r.L. (Europe)

Company Address: Via Lazzaro Palazzi 2/a, 20124 Milano (MI), Italy

Web Site Address: [www.asus.it](http://www.asus.it)

Support Telephone: +02-2023-1021

Web Site Address: <http://notebook.asus.it>

Support Fax: +02-2024-0555

Online Support: <http://notebook.asus.it/supporto/assistenza.html>

### ASUS COMPUTER (Middle East and North Africa)

Company Address: P.O. Box 64133, Dubai, U.A.E.

General Telephone: +9714-283-1774

Web Site Address: [www.ASUSarabia.com](http://www.ASUSarabia.com)

General Fax: +9714-283-1775