

Chapter 5

Software

The notebook comes pre-loaded with software and system utilities. This chapter discusses these system utilities¹, their features and functions.

¹ System utilities may differ according to system configuration.

5.1 System Software

The notebook comes preloaded with the following software:

- Windows 95¹
- System utilities and application software²
 - Sleep Manager hibernation utility
 - Notebook Manager
 - SafeOff utility
 - Touchpad driver
 - Display drivers
 - Audio drivers
 - Other third-party application drivers and software

Accessing the Applications

To access most of the software applications, click on the Start button and select the application folder. Then click on the application icon to run the selected application.

To know about the software and utility, make use of the online help provided by the software.

¹ In some areas, a different operating system may be pre-loaded instead of Windows 95.

² The system utilities and application software list may vary.

5.2 Sleep Manager

Notebooks usually feature built-in power-saving functions. In addition to the normal standby mode for power-saving, this notebook is also capable of a power management feature called hibernation mode. When a hibernation event occurs, this built-in function saves all the system's current status onto your hard disk in the form of a file. The system then shuts off the power. When the user resumes (pressing the power switch), the system will restore the data from the hard disk and resume from where you left off upon leaving hibernation mode.

Sleep Manager is a utility that reserves hard disk space needed to successfully perform the hibernation feature. The user can use this utility to create a contiguous area that resides on the hard disk. Once the reserved space is created, the notebook will be capable of the hibernation feature. User can also use this utility to remove the reserved space from the disk. In this case, the machine will not be able to enter hibernation mode.

Sleep Manager is functionally-connected with the Advanced Power Management (APM) system of Microsoft Windows. Sleep Manager uses many advanced APM functions. Sleep Manager is capable of auto-create and auto-recover features. If the system memory size was changed or the reserved space on the hard disk was corrupted, Sleep Manager will reallocate the hard disk space for you automatically.

5.2.1 Accessing the Sleep Manager

There are two ways to bring up the Sleep Manager:

- Taskbar. Double-click on the Sleep Manager status icon if enabled.
- Start menu
 1. Click on the Start button.
 2. Select Programs.
 3. Select Sleep Manager.
 4. Select the Sleep Manager program.

The Sleep Manager displays below:

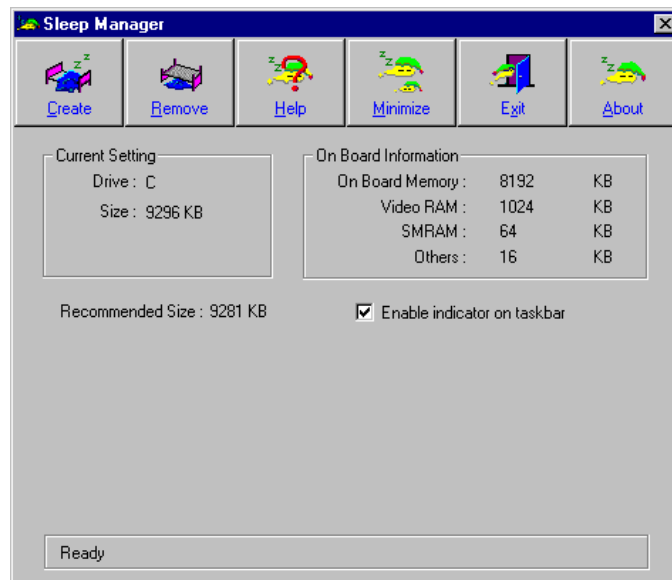


Table 5-1 Sleep Manager Window Items

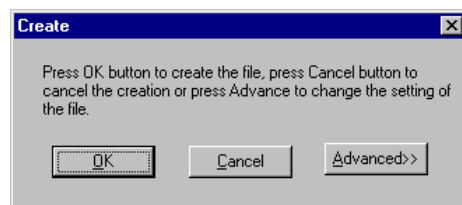
Item	Description
Buttons	Click to access the Sleep Manager functions
Current Setting	Displays the drive and size of the current reserved space created by Sleep Manager.
On Board Information	<p>Displays the different areas of system memory and their respective sizes. These system resources need to be stored before the system can enter hibernation mode, so the system can resume to the previous state successfully.</p> <p>These system resources are the contents of:</p> <ul style="list-style-type: none">• Onboard memory (DRAM or dynamic memory)• Video RAM (VRAM or video memory)• SMRAM (static memory)• Others <p>The total size of these system resources shows as the recommended size in the dialog box.</p>
Recommended Size	Displays the minimum size of the contiguous space you need for the hibernation feature. The actual size may be a little bit more due to file system alignment.
Enable Indicator on the Taskbar	<p>When this checkbox is checked, the Sleep Manager status appears on the taskbar.</p> <p>Double-click on the Sleep Manager status icon on the taskbar to bring up the main program, or simply rest your mouse pointer on the icon to display the current status.</p>

5.2.2 Sleep Manager Functions

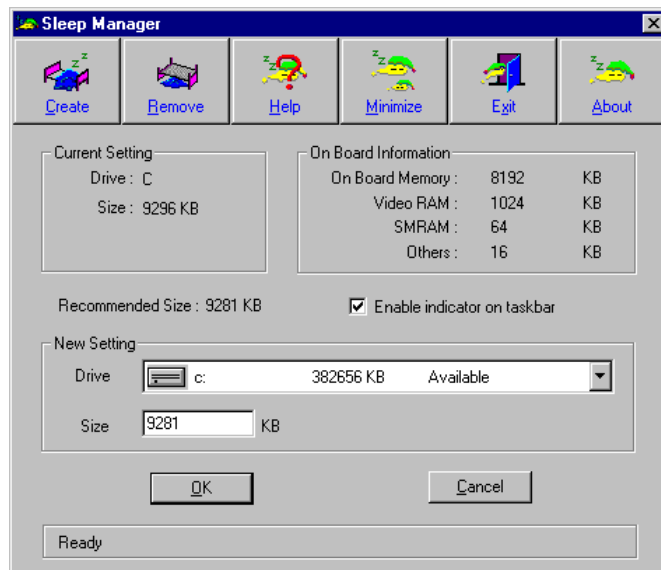
Create

The main purpose of Sleep Manager is to find and reserve a contiguous area on the hard disk. The user can allocate the space themselves by using the 'Create' function on the Sleep Manager utility. Once a hibernation event occurs, the system will enter the hibernation mode. If the user did not create the space or the system DRAM size been changed, Sleep Manager is invoked and begins the process of creating a space for the system.

When you click on the **Create** button, a dialog box pops up:



You can select **OK** to automatically create space for the hibernation feature. Sleep Manager displays the recommend size based on onboard system information. You can also choose **Advance>>>** to manually set the space settings and size. The advanced screen shows below.



Sleep Manager automatically checks the system configuration and displays the recommended size. The drive where the space will be created is defined by the system and will be the first available logical drive which has the requested contiguous free disk space on it. The recommended size is the minimum size needed to save the current system status.

If the program cannot find the required space on the hard disk during the space creation process, it shows a message box to inform the user.

Not Enough Space for Allocation

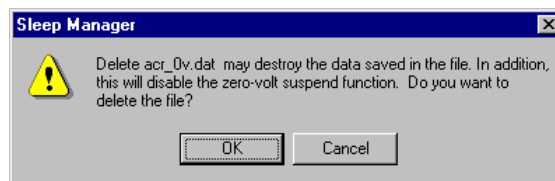
This is a common error message that appears when Sleep Manager is creating the space on the hard disk. There are several different reasons that may cause this error. One of the reasons is that the size of the free disk space on the specific drive is less than the required size. For example, if the onboard memory is 4MB and the VGA memory is 512KB, the total free disk space required will be 4608KB. If the total free disk space is less than 4608KB, the user has to delete some unnecessary files from his hard disk.

Another possible reason is that the hard disk has enough free space, but this free space exists as small fragments. The free disk space that Sleep Manager requires needs to be contiguous. To solve this problem, the user can use tools such as SpeedDisk (Norton Utilities) or Disk Defragmenter (Windows 95) to compact these free disk spaces. The user can then run Sleep Manager utility again to reserve the space.

Another factor that causes the error is when the user employs disk compression utilities. Sleep Manager can work with most compression software. However, Sleep Manager can only create the space on a host drive. A host drive stores original file information and will not be compressed. The free space on the host drive is usually very small, so the user should use the command provide by these compression software to enlarge the size of the host (uncompressed) drive for Sleep Manager.

Remove

If the user wants to use or take back the reserved space, he or she can use the delete function of Sleep Manager by clicking on the Remove button. The deletion will result in the system not being able to enter hibernation mode. Instead, the system will only be able to enter standby mode.

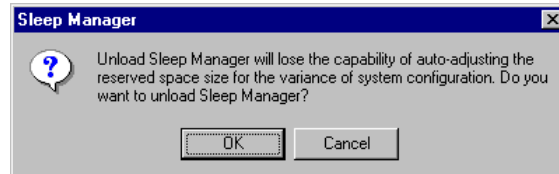


Minimize

The user can minimize Sleep Manager by selecting the Minimize button. If the Enable indicator on taskbar box is checked, Sleep Manager will then switch to background by locating itself on the taskbar. You can pop-up the main program of Sleep Manager again by double-clicking whenever needed. If the Enable indicator on taskbar icon is not checked, you have to select the Sleep Manager program from the Sleep Manager folder in the Programs menu.

Exit


The user can exit Sleep Manager by selecting the Exit button. Sleep Manager will then quit and disable the for capability of auto-adjusting the reserved space size. Disconnecting this feature is NOT recommended.



5.2.3 Running Sleep Manager

Once Sleep Manager is installed on the disk, the system automatically loads this utility every time you start Windows 95. Sleep Manager resides in the background by appearing on the taskbar.



To change the settings of Sleep Manager, simply double-click on the Sleep Manager icon () on the taskbar, or run the Sleep Manager program from the Sleep Manager folder in the Programs menu.

The Sleep Manager icon may or may not appear on the taskbar. A checkbox in the Sleep Manager main screen determines whether to enable or disable the icon on the taskbar. When Sleep Manager has not created the space to be used for hibernation or if APM is not enabled, the exclamation icon will appear. If both Sleep Manager has not created the space to be used for hibernation and APM is not enabled, the icon appears with a red crossed circle .

5.2.4 Sleep Manager Troubleshooting Tips

The following are the error messages with their corresponding solutions:

1. BIOS not compliant with Sleep Manager.

Sleep Manager can only run on notebooks with a BIOS compatible with this computer.

2. This machine does not have a power management unit. You cannot run Sleep Manager without PMU.

Sleep Manager can only work on notebooks installed with a PMU.

3. The APM driver for Windows is not installed. Use Windows Setup to install the APM driver before you run Sleep Manager.

Run Windows Setup and redefine your system as MS-DOS System with APM model. Windows will then install the APM driver for you.

4. Requested disk space is not enough./The created file is not contiguous.

If the free space is actually greater than the requested free space but not contiguous, use the Windows 95 defragment utility Disk Defragmenter to compact the hard disk drive space. Then run Sleep Manager again. If you run Sleep Manager under a DoubleSpace environment, make sure the free space on the host drive is larger than the required size for Sleep Manager.

5. The [directory name] directory cannot be created. Enter another directory or try another drive.

The directory name that the user specified is not valid. Note that the user can create only one subdirectory at a time.

6. The software has not been successfully installed. You must run Setup again.

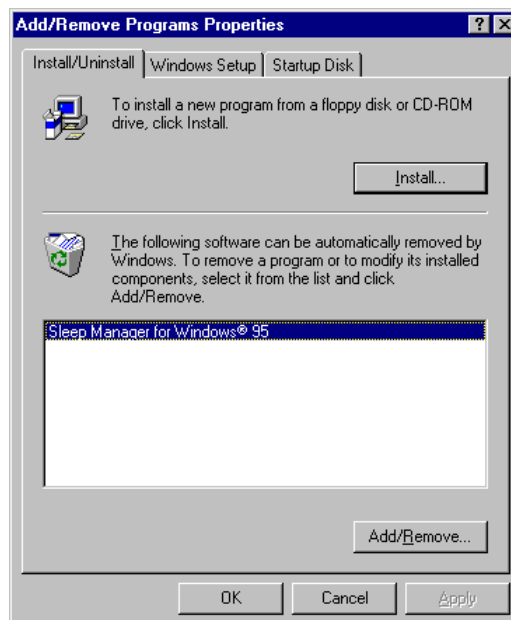
Sleep Manager is not completely installed. Try to install again.

5.2.5 Uninstalling Sleep Manager

Uninstalling Sleep Manager will delete all files and all system information for Sleep Manager, it loses the capability of auto-adjusting the reserved space size for the system configuration changes or modifications, though hibernation feature still functions

To uninstall Sleep Manager from the Windows, follow these steps:

1. Quit the Sleep Manager if it is still running.
2. Click on the Start button and select the Control Panel folder from Settings.
3. Open the Add/Remove Programs Icon.



4. Select Sleep Manager for Windows 95 and click the Add/Remove... button.

5. Follow the screen instructions to complete the uninstallation program.



Do not deactivate or uninstall Sleep Manager and do not remove or delete the hibernation file. Otherwise, the function will not work — the notebook will only enter standby mode and not hibernation mode.

5.3 Notebook Manager

The Notebook Manager is your notebook management center that allows you to effectively view and manage different aspects of your notebook computer.



The Notebook Manager gives a graphical and easy-to-use interface to the BIOS Setup utility. For more information on the BIOS Setup utility, see Chapter 6.

The intuitive user interface provides you with information about your notebook computer, and lets you make changes to BIOS settings. Topics about your computer are divided into eight (8) sections.

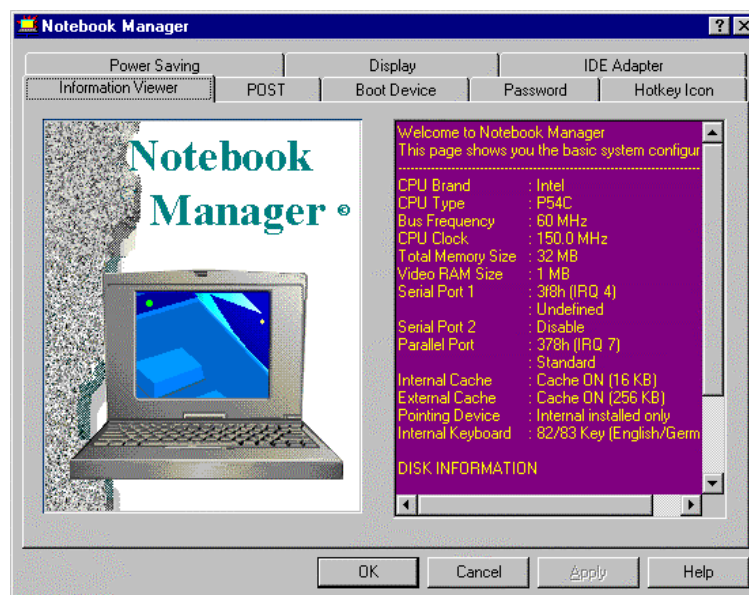
- Information Viewer
- POST
- Boot Device
- Password
- Hotkey Icon
- Power Saving
- Display
- IDE Adapter



Hot keys are disabled when you access the notebook manager.

Making changes to most settings in the Notebook Manager take effect the next time the computer restarts. If you make changes in the Hotkey Icon, Power Saving and Display screens, these changes take effect immediately.

5.3.1 Information Viewer



Information Viewer summarizes and lists information about the specifications and settings of the different components of your notebook computer.

Table 5-2 Information Viewer Items

Item	Description
CPU Brand	Brand of the CPU.
CPU Type	Type of the CPU.
Bus Frequency	Bus frequency of the CPU.
CPU Clock	Clock speed of the CPU.
Total Memory Size	Total amount of main memory.
Video RAM Size	Total amount of video memory.
Serial Ports	Settings (I/O address and IRQ channel) of the serial port(s).

Parallel Port	Settings (I/O address and IRQ channel) of the parallel port.
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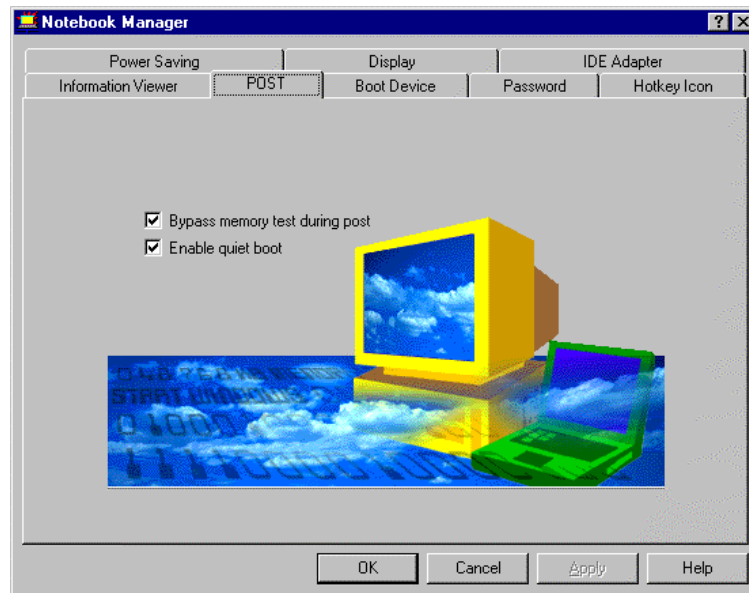
Table 5-2 Information Viewer Items (continued)

Item	Description
Internal Cache	Total amount of internal cache (CPU cache) memory and if it is enabled or not.
External Cache	Total amount of external cache (L2 cache) memory and if it is enabled or not.
Pointing Device	Type of the pointing device detected.
Internal Keyboard	Type of the internal keyboard
Disk Information	Information of drive type, free size and total size by logical drive



Items in this table may differ slightly from the ones onscreen.

5.3.2 POST



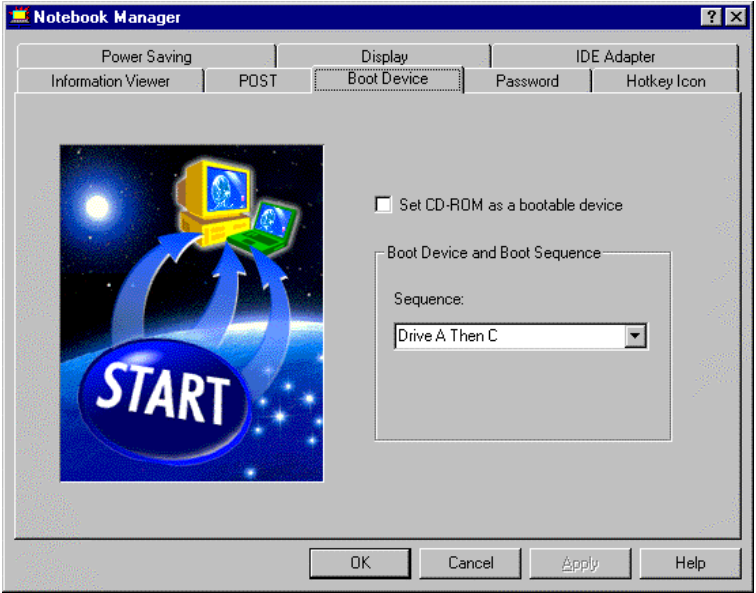
POST defines how you want your notebook computer to boot up (startup).

Table 5-3 POST Items

Item	Description
Bypass memory test during post	Bypasses the memory test to speed up booting.
Enable quiet boot	Suppresses the showing of POST messages.

To enable any of the items, click on the checkbox for the desired option, then click on **Apply** to accept.

5.3.3 Boot Device



Defines the boot sequence to follow when your notebook computer boots up.

Table 5-4 *Boot Device Items*

Item	Description
Set CD-ROM as a Bootable Device	When checked, the notebook checks from the CD-ROM drive first for a bootable CD-ROM disc. If there is no bootable CD-ROM disc or no CD-ROM is present, the notebook proceeds to follow the selected Boot Sequence setting.
Drive A then C	The notebook boots from Floppy Drive A. If no system diskette is found in Floppy Drive A, the notebook boots from Hard Drive C. If Hard Drive C is not a system disk, an error message displays.
Drive A	The notebook boots from Floppy Drive A. If no system diskette is present in Floppy Drive A, an error message displays.

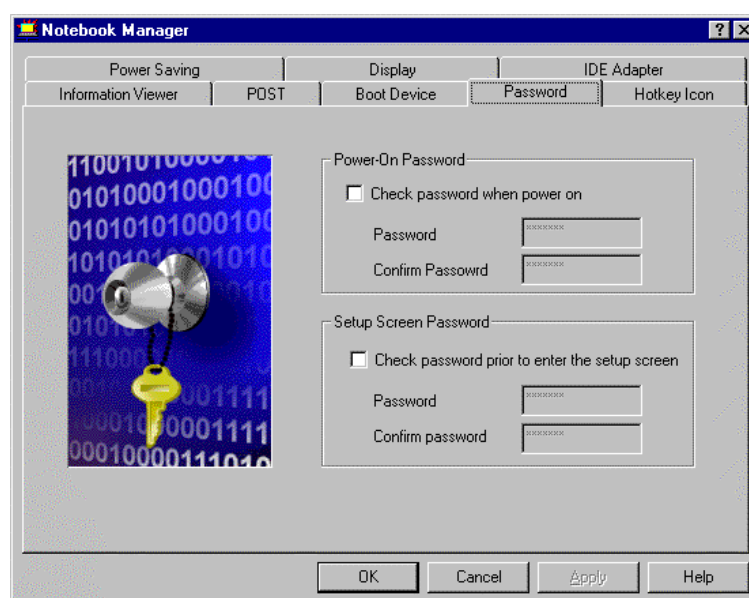
Drive C	The notebook boots from Hard Drive C. If Hard Drive C is not a system disk, an error message displays.
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Table 5-4 Boot Device Items (continued)

Item	Description
Drive C then A	The notebook boots from Hard Drive C. If Hard Drive C is not a system disk, the notebook boots from Floppy Drive A. If no system disk is present in Floppy Drive A, an error message displays.

Select the desired item by clicking on the checkbox or drop-down list box of the desired setting, then click on **Apply** to accept.

5.3.4 Password



Password lets you set, modify or delete the password(s) for your notebook computer.

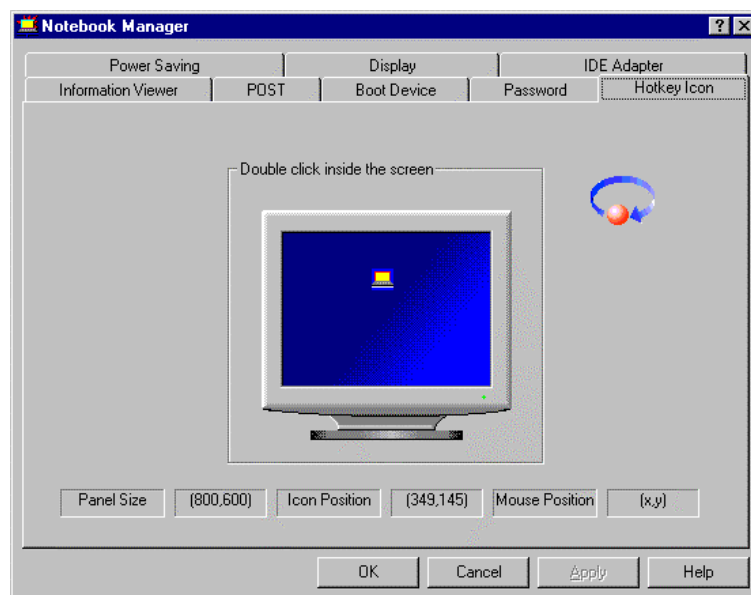
Table 5-5 Password Items

Item	Description
Power On	The Power On password prevents unauthorized access to your notebook computer at system startup and at resume from hibernation mode.
Setup Screen	The Setup Screen password prevents unauthorized access to the BIOS settings on your notebook computer.

Follow these steps:

1. Click on the checkbox before the desired password you want to modify.
2. Set/modify or delete a password:
 - To set or modify a password, type a password into the Password text box. Press tab and re-enter the password into the Confirm Password text box for verification.
 - To delete a password, do not type anything in the Password and Confirm Password text boxes (clear the Password and Confirm Password text boxes).
3. Click on **OK** to accept.

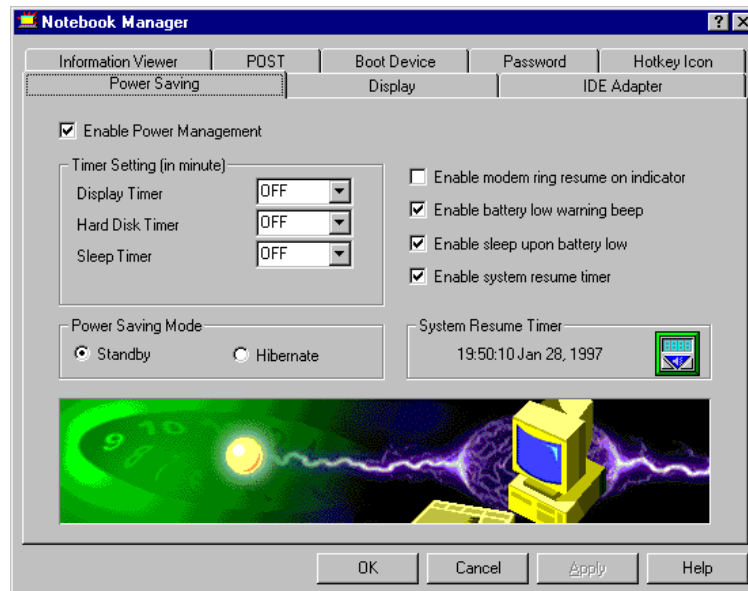
5.3.5 Hotkey Icon



Hotkey Icon allows you to set the position where hot key icons should pop-up.

Move your cursor inside the monitor to select the position where you want hot key icons to pop-up, then click to set. Click on **Apply** to accept.

5.3.6 Power Saving



Power Saving contains settings for the power saving modes. This screen allows you to set the various power saving time-outs, select the desired power saving mode to enter, and special power saving features.

Table 5-6 Power Saving Items

Item	Description
Enable power management	Click to enable power management (based on the settings in this screen)
Timer settings	Allows you to set the time-out values for three power-saving timers — display, hard disk and sleep. Before the notebook performs power saving on the particular item (i.e., The display shuts off, the hard disk spins down, the notebook enters hibernation or standby mode).

Table 5-6 Power Saving Items (continued)

Item	Description
Power saving mode	Allows you to select the desired power saving mode to enter into — standby or hibernate. Standby mode shuts power to certain components. Hibernate (works with Sleep Manager) saves all data and the current system state onto your hard disk drive and shuts off all power.
Enable modem ring resume indicator	Allows the notebook to wake-up from standby mode when an incoming modem ring is detected. Note: The notebook cannot wake-up from suspend or hibernate modes even if an incoming modem ring is detected.
Enable battery low warning beep	Allows the notebook to give off warning beeps when the notebook runs low on battery.
Enable sleep upon battery low	Allows the notebook to enter hibernation mode when the notebook runs low on battery.
Enable system resume timer	Allows the notebook to wake up from standby mode when the resume timer is set and matched. The resume date and time can be set by clicking on the alarm button. Note: The notebook cannot wake-up from hibernation mode even if the alarm date and time are met.
System resume timer	Displays the alarm time and date.

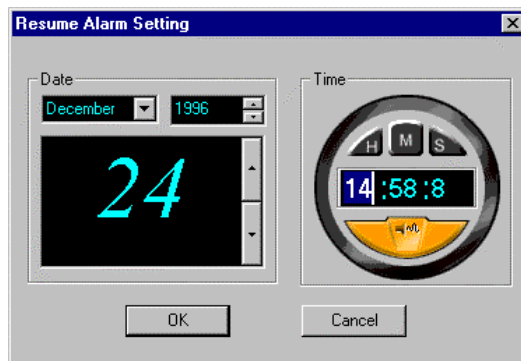
Select the desired item by clicking on the radio button or checkbox of the desired item, then click on **Apply** to accept.

Setting Power-Saving Time-outs

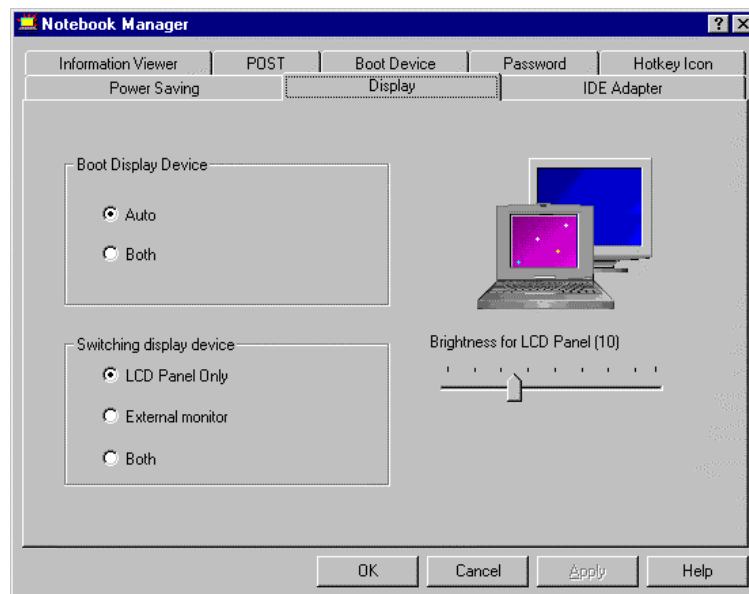
To modify time-out settings, use the spinner controls or type directly into the text box.

Setting the Resume Timer

To set the alarm time, click on the System Resume Timer button, then set the desired date and time using the pop-up calendar and clock.



5.3.7 Display



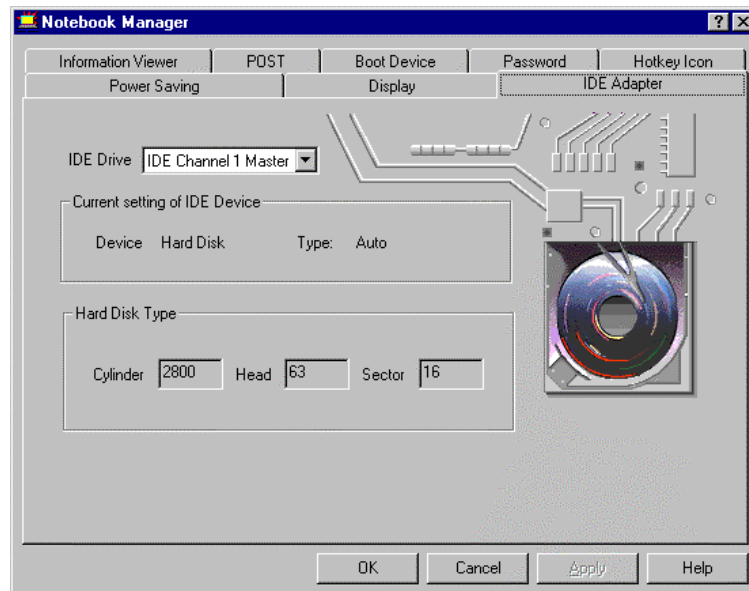
Display lets you control various settings related to display, such as the display device, and display brightness/contrast levels.

Table 5-7 Display Items

Item	Description
Boot display device	Allows you to set the default display device every time when your computer powers on — auto or both.
Switching display device	Allows you to switch the current display device — LCD, monitor or both.
Brightness / Contrast controls	Allows you to set the brightness and contrast levels of the LCD. Note: TFT (active-matrix) LCDs have fixed and optimized contrast levels.

Select the desired item by clicking on the radio button of the desired item, then click on **Apply** to accept. To modify the brightness and/or contrast levels, click and hold the slider control and move to the right to increase, move to the left to decrease the setting. You can also click on the item, and use the cursor keys to set the desired level.

5.3.8 IDE Adapter



IDE Adapter shows information on the IDE drives (hard disk drive and/or CD-ROM drive) installed on your notebook.

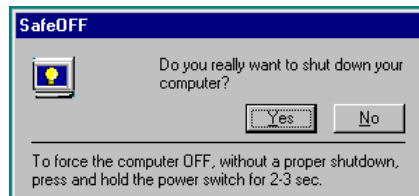
Table 5-8 IDE Adapter Items

Item	Description
IDE Drive	Allows you to select the IDE drive you want to view/modify information on.
Current Setting of IDE drive	Shows the IDE device and type of the currently-selected IDE device.
Hard Disk Type	Shows information on the hard disk drive.

Select the desired item you want to view by clicking on the drop-down list box of the desired item.

5.4 SafeOff

The SafeOFF provides protection from accidental power off. If you accidentally press the power switch, a dialog box pops up for confirmation.



- If you select **No**, the dialog closes and the system does not power off.
- If you select **Yes**, SafeOFF will request Windows 95 to shutdown the computer. Opened files can be saved and closed safely.
- If none of the alternatives is chosen, SafeOFF waits for 30 seconds and shuts down the computer.

5.4.1 Uninstalling SafeOFF

To uninstall the SafeOFF, follow these steps:

1. Press **Ctrl-Alt-Del** to end the SafeOFF task.
2. Double-click on the Add/Remove Program icon in the Control Panel.
3. Select 'SafeOFF for Windows 95' for uninstallation.

5.5 Touchpad Driver

The touchpad works with most mouse drivers, but the touchpad driver supports special functions that work uniquely with the touchpad. The touchpad driver enhances the Mouse dialog box to include these special features.

5.5.1 Configuring the Touchpad

Follow these steps to configure the touchpad:

1. Click on the Start button, then select Settings...
2. Select Control Panel to display the Control Panel Window.
3. Double-click on the Mouse icon and select TouchPad.

You can configure different aspects of the touchpad. Refer to the online help for details.