

### Setup

The notebook has a BIOS setup utility that allows you to configure the notebook and its hardware settings. This chapter tells how to use the Setup utility and describes each parameter item in the setup screens.



*The notebook is also bundled with a Windows 95-based notebook management utility similar in function with the BIOS Setup utility called the Notebook Manager. See section 5.3 for details.*

## 6.1 When to Use Setup

The notebook is already correctly configured for you and you do not need to run Setup. If you make any changes to the notebook or you receive an Equipment Configuration Error message after you turn on the notebook, you need to run Setup. Run Setup also if you want to do any of the following:

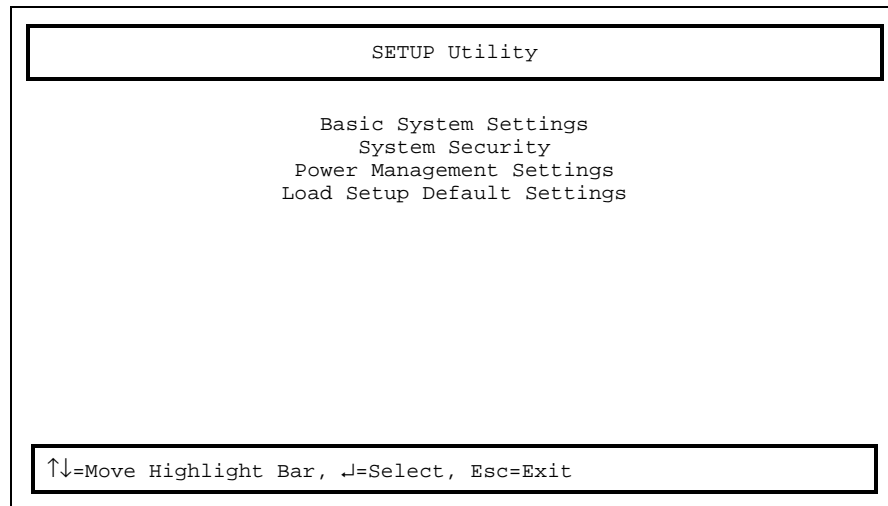
- Change the system date or time
- Set the power-saving modes and timers
- Set, change, or remove a system password
- Change the system boot drive or display device
- Add or remove serial and parallel devices
- Set the video display features



*The system configuration values reside in the battery-powered CMOS RAM.*

## 6.2 Entering Setup

Press **F2** during POST to enter Setup. The BIOS Utility main screen displays.



There are four main menu items:

- Basic System Settings
- System Security
- Power Management Settings
- Load Setup Default Settings

Read through the Setup Screen Notes before navigating the Setup screens.

### Setup Screen Notes

- From the main menu, press  $\uparrow$ ,  $\downarrow$ ,  $\leftarrow$  or  $\rightarrow$  to move from one menu item to another and press **Enter** to enter the selected menu.
- When accessing multi-page sections, press **PgDn** and **PgUp** to go through the pages.
- Parameters displayed in low brightness (grayed-out) are not user-configurable. The notebook detects and sets the values for these parameters.
- Press  $\uparrow$  or  $\downarrow$  to move from one parameter to another. Press  $\leftarrow$  or  $\rightarrow$  to change parameter settings. You have to change some settings when you add a component to the notebook.
- Most of the Setup parameters are self-explanatory. Press **F1** for help on individual parameters.
- When you press **Esc** to exit the Setup utility, the following prompt appears:

Do you want to save CMOS data?

[Yes]                      [No]

Select [Yes] to save the changes you made to the configuration values or [No] to abandon the changes and retain the current values.

## 6.3 Basic System Settings

Basic System Settings			
Date -----	[Dec 06,1996]		
Time -----	[10:00:00]		
Floppy Disk A -----	[1.44 MB 3.5-inch]		
Floppy Disk B -----	[None]		
	Cylinder	Head	Sector
Hard Disk (1160 MB) -----	[Auto]	787	32 63
Large Hard Disk Capacity ---	[Enabled]		
Memory Test -----	[Disabled]		
Boot Display -----	[Auto]		
Quiet Boot -----	[Enabled]		

↑↓=Move Highlight Bar, →←=Change Setting, F1=Help, Esc=Exit

### 6.3.1 Date and Time

The notebook displays the current date in Mmm DD, YYYY format and the current time in HH:MM:SS format. It uses a 24-hour clock; for example, 6:25 PM displays as 18:25:00.

### 6.3.2 Floppy Disk Drives

The default setting for Diskette Drive A is [1.44 MB 3.5-inch] and this setting applies to both an internal and external floppy drive configuration. Diskette Drive B, by default, is set to [None]. Enable this parameter if two floppy drives are connected to the notebook.

### 6.3.3 Hard Disk Drive

The default setting for Hard Disk is [Auto]. With this setting, the BIOS automatically detects your drive parameters. You can also opt to key in your drive parameters by setting this parameter to [User]. To determine your drive parameters, look at the data on the label pasted on your hard disk drive (or supplied in vendor documentation) and type in the parameters. Be sure to set the correct drive parameters; otherwise an error message appears when you boot up the notebook. We suggest you set this parameter to [Auto].

### 6.3.4 Large Hard Disk Capacity

The default setting for Large Hard Disk Capacity is [Enabled]. Set this parameter to [Disabled] if you use a non-DOS or non-Windows-based operating system on this computer.

### 6.3.5 Memory Test

The notebook can test main memory for errors when you turn it on. The default setting, [Disabled], allows the notebook to bypass the memory test and speed up the self-test procedure.

### 6.3.6 Boot Display

If you connect an external monitor, you can switch display between the LCD and the external display. This parameter determines which display device the notebook uses on boot-up. Table 6-1 describes the different settings.



*If notebook resolution is set at 640x480, the image on the notebook and external monitor will not be full-screen. For full-screen image, set-up notebook at 800x600 resolution.*

*Table 6-1     Display Device Settings*

Setting	Description
Auto (default)	If an external display is present, the notebook uses the external display; otherwise, the LCD is the display device.
Both	The notebook uses the external display and LCD simultaneously.

### **6.3.7    Quiet Boot**

In Quiet Boot mode, the notebook does not display POST messages on your display. The default setting is [Enabled].

# 6.4 System Security

System Security

Disk Drive Control

Floppy Disk Drive ----- [Normal]

Hard Disk Drive ----- [Normal]

System Boot Drive ----- [Drive A Then C]

CD-ROM Bootable ----- [Disabled]

On Board Communication Ports

Serial Port 1 Base Address ---- [3F8h(IRQ 4)]

Parallel Port Base Address ---- [378h(IRQ 7)]

Parallel Port Operation Mode -- [Standard and Bidirectional]

ECP DMA Channel ----- [0]

Setup Password ----- [None]

Power On Password ----- [None]

Plug and Play O/S ----- [Yes]

OS Legacy Mode Support ----- [Disabled]

↑↓=Move Highlight Bar, →←=Change Setting, F1=Help, Esc=Exit

## 6.4.1 Floppy Disk Drive Control

This parameter allows you to enable or disable the read/write functions of the floppy drive. The following table summarizes the available options.

Table 6-2 Floppy Disk Drive Control Settings

Setting	Description
Normal (default)	Floppy drive functions normally
Write Protect Boot Sector	Disables the floppy drive write function on a diskette's boot sector. This option is for operating systems that access the floppy drive 100 percent via BIOS only.
Disabled	Disables the floppy drive



## 6.4.2 Hard Disk Drive Control

This parameter allows you to enable or disable the read/write functions of the hard disk drive. The following table summarizes the available options.

*Table 6-3 Hard Disk Drive Control Settings*

Setting	Description
Normal (default)	Hard disk drive functions normally
Write Protect Boot Sector	Disables the hard disk drive write function on the hard disk's boot sector. This option is for operating systems that access the hard disk 100 percent via BIOS only.
Disabled	Disables the hard disk drive

## 6.4.3 System Boot Drive Control

This parameter determines which drive the notebook boots from when you turn it on. The following table lists the three possible settings.

*Table 6-4 System Boot Drive Control Settings*

Setting	Description
Drive A Then C (default)	Notebook boots from floppy drive A. If there is no system disk in drive A, the notebook boots from hard disk C. If the hard disk is a non-system disk, an error message appears.
Drive C Then A	Notebook boots from hard disk C. If hard disk C is not a system disk, the notebook boots from floppy drive A. If no diskette is present or if the diskette in floppy drive A is a non-system disk, an error message appears.
Drive C	Notebook boots from hard disk C. If hard disk C is not a system disk, an error message appears.
Drive A	Notebook boots from floppy drive A. If no diskette is present or if the diskette in floppy drive A is a non-system disk, an error message appears.



*An installed PCMCIA bootable card overrides the System Boot Drive setting. The notebook supports SRAM card boot.*

#### **6.4.4 CD-ROM Bootable**

When enabled the notebook checks the CD-ROM drive first and boots from there, if possible, before checking the System Boot Drive control setting.

There are two image types/formats for CD-ROMs - floppy drive and hard disk. See Table 6-5 for a description.

*Table 6-5 CD-ROM Image Descriptions*

<b>Image Type</b>	<b>Upon Boot-up...</b>
Floppy Drive	CD-ROM drive becomes drive A and the floppy drive becomes drive B. The hard disk drive remains drive C.
Hard Disk	CD-ROM drive becomes drive C and the hard disk drive becomes drive D. The floppy drive remains drive A.

### 6.4.5 Serial Port 1 Base Address

The serial port can accommodate a modem, serial mouse, serial printer, or other serial devices. The default setting for the serial port base address is 3F8h(IRQ 4)<sup>1</sup>.

Other options include:

- 2F8h(IRQ 3)
- 3E8h(IRQ 4)
- 2E8h(IRQ 3)
- Disabled

Make sure the serial port base address does not conflict with the address used by a PCMCIA card, if one is installed.

### 6.4.6 Parallel Port Base Address

The parallel port can accommodate a parallel printer or other parallel devices. The default setting for the parallel port base address is [378h(IRQ 7)]<sup>1</sup>. The other options for this parameter are:

- 278h(IRQ 5)
- 3BCh(IRQ 7)
- Disabled

---

<sup>1</sup> The parameter value is the base address expressed in hexadecimal.

## 6.4.7 Parallel Port Operation Mode

The parallel port supports four operation modes:

- Standard and Bidirectional
- Extended Capabilities Port(ECP)
- Standard and Unidirectional
- Enhanced Parallel Port(EPP)

ECP or Extended Capabilities Port supports a 16-byte FIFO (first in, first out) which can be accessed by host DMA cycles and PIO cycles. ECP boosts I/O bandwidth to meet the demands of high-performance peripherals. EPP or Enhanced Parallel Port is a parallel port interface that greatly improves performance for bi-directional block-mode data transfers. EPP provides greater throughput by supporting faster transfer times and a mechanism that allows the host to address peripheral device registers directly.

The default setting is [Standard and Bidirectional].



*If you set EPP as the parallel port operation mode, do not use 3BCh as the parallel port base address; otherwise, I/O conflicts may occur.*

### ECP DMA Channel

Set the ECP DMA Channel parameter if you set the Parallel Port Operation Mode to [Enhanced Capabilities Port(ECP)]. The default value, with ECP selected, is [0].

### 6.4.8 Passwords

Two passwords are implemented in this notebook. The Setup Password prevents unauthorized access to the Setup utility, while the Power On Password prevents unauthorized access to the notebook during boot-up and resume from hibernation.

#### Setting a Password

To set a password, select the desired password (Setup and Power On) to set or edit, and press ← or →. The password prompt (a key) appears:



A message below the menu prompts you to enter a password. The password may consist of up to seven characters which do not appear on the screen when you type them. After typing your password, press Enter. Another prompt appears asking you to retype your password to verify your first entry.

After setting a password, the notebook sets this parameter to [Enabled]. The next time you boot the notebook, resume from hibernation mode or run the Setup utility, the password prompt appears. Key in the appropriate password (Power On or Setup). If the password you entered is incorrect, an "X" appears. You have three chances to type in the correct password. After three tries, the following message appears:

Incorrect password specified. System disabled.

The notebook freezes up and disables all devices. You must turn off the notebook and turn it on again to retry. If you forget your password, you must reset the configuration values stored in CMOS to defaults. Resetting CMOS requires opening up the notebook, so contact your dealer for assistance.

## Removing a Password

To remove a password, select the desired password (Setup and Power On) to remove and press ← or → to set it to [None].

### 6.4.9 Plug and Play O/S

By default, Plug and Play O/S is set to [Enabled] because the notebook comes pre-installed with a Plug and Play operating system. If in case a non-Plug and Play operating system is installed, set this to [Disabled].

### 6.4.10 OS Legacy Mode Support

The notebook comes pre-installed with a Windows 95 version which has built-in support for CardBus. In this case, OS Legacy Mode Support is not needed and set to [Disabled]. If in case you install an older version of Windows 95 which does not have built-in Cardbus driver support, you need to enable this parameter. The default setting is [Disabled].



*To verify your Windows 95 version, access the System icon in the Control Panel. In the System section of the General tab, verify that the Windows 95 version is 4.00.950 B.*

## 6.5 Power Management Settings

Besides accessing this screen from POST (**F2**), you can also press **Fn-F6** during runtime to access this section of Setup.

Power Management Settings	
Power Management Mode -----	[Enabled]
Display Standby Timer -----	[ 1] Minute(s)
Hard Disk Standby Timer -----	[ 1] Minute(s)
System Sleep Timer -----	[ 3] Minute(s)
System Sleep Mode -----	[Hibernation]
System Resume Timer Mode -----	[Disabled]
System Resume Date -----	[--/--/----
System Resume Time -----	[--:--:--]
Modem Ring Resume On Indicator ----	[Enabled]
Battery-low Warning Beep -----	[Enabled]
Sleep Upon Battery-low -----	[Enabled]
↑↓=Move Highlight Bar, →←=Change Setting, F1=Help, Esc=Exit	

### 6.5.1 Power Management Mode

With enabled, all the timers in Setup take effect unless specifically disabled by the user. Select [Disabled] to turn off all the timers. The default setting is [Enabled].



*You cannot disable this parameter in Setup if APM is installed under DOS, Windows or Windows 95. To disable APM, type Power Off under DOS, or disable the Power icon in the Windows Control Panel.*

### **6.5.2 Display Standby Timer**

The notebook shuts off the LCD backlight and turns off the CRT video as well, if there is no activity from the keyboard or external PS/2 mouse within the period specified by this timer. To turn the display back on, press a key or move the mouse.

The valid values for this timer range from 1 to 15 minutes with default set at [1]. Select [Off] to disable the timer.

### **6.5.3 Hard Disk Standby Timer**

The hard disk drive enters standby mode if there are no disk read/write operations within the period specified by this timer. The hard disk returns to normal mode once the notebook accesses it.

The valid values for this timer range from 1 to 15 minutes with default set at [1]. Select [Off] to disable the timer.

### **6.5.4 System Sleep Timer**

This parameter enables you to set a timeout period for the notebook to enter either standby or hibernation mode. The System Sleep Mode parameter determines which sleep mode the notebook will enter into.

The valid values for this timer range from 1 to 15 minutes with default set at [3]. Select [Off] to disable the timer.

### **6.5.5 System Sleep Mode**

This parameter tells the notebook which sleep mode (Standby or Hibernation) to enter into when the System Sleep Timer times out. The default setting is [Hibernation].



### 6.5.6 System Resume Timer Mode

When enabled, the notebook resumes from standby mode at the specified Resume Date and Resume Time parameter settings.



*When the notebook is in hibernation mode, it cannot resume when this parameter is enabled.*

### 6.5.7 System Resume Date and Time

The Resume Date and Resume Time parameters let you set the date and time for the resume operation. The date and time fields take the same format as the System Date and Time parameters in the Basic System Settings screen.



*Setting a resume date and time that is not valid automatically disables these fields. A successful resume occurring from a date and time match automatically disables these fields.*

### 6.5.8 Modem Ring Resume On Indicator

When enabled, the notebook wakes up from standby mode and returns to normal mode when a PCMCIA modem detects a ringing tone. The default setting is [Enabled].



*When the notebook is in hibernation mode, it cannot resume from a modem ring.*

## **6.5.9 Battery-low Warning Beep**

This parameter allows you to enable or disable the warning beep generated by the notebook when a battery-low condition occurs. The default setting is [Enabled].

## **6.5.10 Sleep Upon Battery-low**

This parameter enables the notebook to enter standby or hibernation mode when a battery-low condition takes place. The default setting is [Enabled].

## 6.6 System Information Reference

If you access Setup during runtime (**Fn-F6**), pressing **PgDn** after the Power Management Settings screen displays a summary of your notebook's components and settings.

System Information Reference	
CPU ID : Pentium	Internal Cache : 16KB, Enabled
CPU Clock : 133 MHz	External Cache : 256KB, Enabled
System DRAM : 16 MB	Pointing Device : Detected
Video DRAM : 1 MB	Internal KB : 85 key
Floppy Disk A : 1.44 MB	
Security : Normal	
Floppy Disk B : None	
Security : Normal	
Hard Disk : 1160 MB	
Security : Normal	
CD ROM : None	
System Boot Drive : Drive A Then Drive C	
CD ROM Bootable : Disabled	
Serial Port 1 : 3F8h, IRQ4	
Parallel Port : 378h, IRQ7	
Operation Mode : Standard and Bidirectional	

F1=Help, Esc=Exit
-------------------

The items in this screen are not user-configurable. See table below.

**Table 6-6**      *System Status Descriptions*

<b>Item</b>	<b>Description</b>
CPU ID	Shows the processor type
CPU Clock	Shows the processor speed
System memory	Shows the total system memory
Video memory	Shows the total video memory
Floppy Disk A	Shows the floppy drive A type
Security	Shows floppy drive A security setting
Floppy Disk B	Shows the floppy drive B type
Security	Shows floppy drive B security setting
Hard Disk	Shows the IDE drive type and size and its security setting
Security	Shows hard disk drive security setting
CD ROM	Shows the presence of a CD-ROM drive
System Boot Drive	Shows the boot sequence setting
CD ROM Bootable	Shows if the CD ROM Bootable feature is enabled or not
Serial Port 1	Shows the serial port base address and IRQ
Parallel Port	Shows the parallel port base address and IRQ
Operation Mode	Shows the parallel port operation mode
Internal Cache	Shows the internal cache size and setting
External Cache	Shows the external cache size
Pointing Device	Shows the presence of a pointing device
Internal KB	Shows the internal keyboard type



*This screen may show other items which are not in this list if certain parameters settings are changed and enabled.*

## 6.7 Load Setup Default Settings

Selecting this option allows you to load all the default settings. The default settings are the values initially stored in CMOS RAM intended to provide high performance. If in the future, you change these settings, you can load the default settings again by selecting this option.

When you select this option, the following prompt appears:

Load Setup Default Settings  
Are you sure?

[Yes]                      [No]

Select [Yes] to load the default settings or [No] to abort the operation.