# 6

# Customizing Your Notebook



Your computer uses the Phoenix BIOS Setup program that allows you to set several system configuration in changing the way your computer performs. This includes your system time and date, disk drive configuration, password setup, and power management settings. These information are then stored in the CMOS RAM and will remain permanent unless you change it again. This chapter discusses on how you will activate the BIOS Setup program and change the system configuration to suit your desired operation. You must be careful to set the configuration properly in order for your computer to run smoothly. If you are not sure of any settings, contact your dealer.

## 6.1 Running the BIOS Setup Program

Your computer is likely to have been properly setup and configured by your dealer prior to delivery. However, you may find it necessary to use the computer's BIOS (Basic Input-Output System) Setup program to change system configuration information, such as the current date and time, or your hard disk drive type. The Setup program can be accessed when you power on the system and pressing the  $<\mathbf{F2}>$  function key.

The settings that you specify within the Setup program are recorded in a special area memory called the **CMOS RAM**. This memory is backed up by a battery so that is will not be erased when you turn off or reset the system. Whenever you turn on the computer, the system will read the settings stored in the CMOS RAM and compare them to the equipment check conducted during the Power On Self Test (POST). If an error occurs, an error message will be displayed on the screen, and you will then be prompted to run the Setup Program.

As the POST (Power-On Self Test) executes during the boot up process, the screen will display the following message:

Press <F2> to Enter SETUP

Press the  $\langle F2 \rangle$  key to run the BIOS Setup program. The BIOS Setup program is organized into six menus which you can select using the  $\leftarrow$  and  $\rightarrow$  keys. To move from one option to another, you use the up and down arrow keys while using the  $\langle + \rangle$  and  $\langle - \rangle$  keys to change the settings. On the right hand side of the screen are some brief help descriptions of each item you want to change.

On the BIOS Setup program, you will find the following parts on the screen:

- Item Specific Help The right side of the screen. This area describes each parameter and its available settings.
- Menu Bar The top line of the screen. Each of the six selections displays its own screen.
- Parameters The left side of the screen. This area lists the parameters and their current settings.
- Key Status Bar

The bottom part of the screen. These lines display the keys available to move the cursor, select a particular function and so forth.

To exit the BIOS Setup program, simply press the <Esc> key and select from the Exit menu whether you want to Save changes and exit; Discard Changes and exit; or Set default values.

# 6.2 Using the Main Menu Setup

		Phoe	nixBIOS S	Setup Utility	у	
	Main	Advanced	Security	Power	Boo	ot Exit
					Iten	n Specific Help
	System T	ime:	[12:00:0	0]	<tal< th=""><th>o&gt;, <shift-tab>,</shift-tab></th></tal<>	o>, <shift-tab>,</shift-tab>
	System D	Date:	[07/01/199	9]	or <	Enter> selects
	Language	:	[English (U	JS)]	field	
	Diskette A	A:	[1.44/1.25]	MB, 3½]		
►	Internal H	łDD	[12073MB	]		
	Internal C	CD-ROM	Installed			
	Boot Disp	Boot Display Device:				
	System M	lemory:	640 KB			
	Extended	Memory:	130048 KE	3		
	CPU Type:		Pentium (R	.) III		
	CPU Speed:		500 MHz			
	BIOS Ver	rsion:	B.1A-0215	-6211		
F1	Help	↑ ↓ Select Ite	m - /+	Change Values	F9	Setup Defaults
Esc	Exit	$\leftarrow \rightarrow$ Select Me	nu Enter	Select → Sub-Me	nu F10	Save and Exit

• System Time

Allows you to change the system time using the hour:minute:second format of the computer.

Enter the current time for reach field and use the <Tab>,

<Shift>+<Tab>, or <Enter> key to move from one field or back to another.

You can also change the system time from your operating system.

• System Date

Allows you to set the system date using the month/date/year format. Your notebook is year 2000-compliant.

Enter the current time for reach field and use the <Tab>,

<Shift>+<Tab>, or <Enter> key to move from one field or back to another.

You can also change the system time from your operating system.

• Language

Allows you to set the display language in English or Japanese version for the BIOS Setup program.

• Diskette A

This item enables or disables the floppy disk drive by pressing the **<Enter>** key. When you select 1.44MB/1.25MB 3 ½, you should know that the 1.25MB 3 ½ diskette requires a 3-mode floppy-disk drive and refers to a 1024byte/sector Japanese media format.

Internal HDD

This field displays various parameters for the hard disk drive. If type [Auto] is selected, the system automatically sets these parameters. If type [User] is selected, Cylinders, Heads and Sectors can be edited.

• Internal CD-ROM This field is for information only as the BIOS automatically detects the CD-ROM.

- Boot Display Device Lets you select the display device.
- System Memory This field reports the amount of base (or conventional) memory found by the BIOS during Power-On Self-Test (POST).
- Extended Memory This field reports the amount of extended memory found by the BIOS during Power-On Self-Test (POST).
- CPU Type This field reports the CPU type information detected by the BIOS during Power-On Self-Test (POST).
- CPU Speed

This field reports the CPU speed information detected by the BIOS during Power-On Self-Test (POST).

BIOS Version

This field are for information only as the BIOS display the BIOS version during the Power-On Self-Test (POST).

#### 6.2.1 INTERNAL HDD SUB-MENU

Phoenix	<b>BIOS Setup Utility</b>		
Main			
Internal HDD: [1	2073MB]	Item Specific Help	
Type:	[Auto]	User = you enter	
Cylinders:	[16383]	parameters of hard-	
Heads:	[16]	disk drive installed	
Sectors:	[63]	at the Connection.	
Maximum Capacity:	12073MB	Auto = autotypes	
		Hard-disk drive	
Multi-Sector Transfers:	[16 Sectors]	installed here.	
LBA Mode Control:	[Enabled]	None = no device is	
32 Bit I/O:	[Disabled]	installed here.	
Transfer Mode:	[Fast PIO 4]	CD-ROM = a CD-	
SMART Monitoring:	Disabled	ROM drive is	
Ultra DMA Mode:	[Mode 2]	installed here.	
F1 Help ↑ ↓ Select Item	- /+ Change Values	F9 Setup Defaults	
<b>Esc Exit</b> $\leftarrow \rightarrow$ Select Menu	Enter Select → Sub-Men	u F10 Save and Exit	

Use the Type field to select the drive type installed. You can select different drive types as CD-ROM, User, or None by pressing **<Space**> bar. Set this option to Auto so your computer will automatically detect the drive type during power on. Set this option to None when your computer is not installed any devices. Press **<Esc**> to return to the Main Menu.

# 6.3 Using the Advanced CMOS Setup

	PhoenixBIOS Setup Utility									
	Main	A	dvanced	Security		Power	Boo	ot	Exit	
							Item S	Specific	Help	
•	PS/2 Mous Silent Boot Local Bus I/O Device	e: :: IDE ac Confi	dapter: guration	[Enabl [Disab [Both]	led] bled]		<sup>6</sup> Disabled installed 1 from funct frees up I <sup>6</sup> Enabled operating determine to enable	l' preve PS/2 m tioning, RQ12. ' allow system e wheth or disa	ents any ouse but s the n to er ble	
							the mouse	e		
<b>F1</b>	Help		Select Iter	m - /+	Chang	ge Values	F9	Setup	Defaults	
Esc	Exit		Select Me	nu Enter	Select	→ Sub-M	enu F10	Save	and Exit	

PS/2 Mouse

[Enabled] allows the OS to determine whether to enable or disable the PS/2 mouse. [Disabled] prevents any installed PS/2 mouse from functioning.

Silent Boot

Lets you specify the boot screen as Logo screen, POST screen, or Black screen by choosing Enabled, Disabled, or Black option, respectively.

- Local Bus IDE adapter Allows you to enable/disable the IDE hardware such as HDD and CD-ROM.
- I/O Device Configuration Lets you configure input/output device such as Serial Port, Infrared Port, Parallel Port, and Floppy disk controller.

#### 6.3.1 PERIPHERAL SUB-MENU

PhoenixBIOS Setup Utility								
Advan	ced							
I/O	Device Configuration	on	Item Specific Help					
Serial port: Infrared port: Parallel port:	[A [D [A	uto] isabled] uto]	Configure serial port A using options: [Disabled]					
Mode:	[B	[Bi-directional] No configuration,						
Floppy disk controlle	er: [E	nable]	[Enabled] User configuration, [Auto] BIOS or OS chooses configuration,					
<b>F1</b> Help $\uparrow \downarrow$ Sel	ect Item - /+	Change Values	F9 Setup Defaults					
Esc Exit $\leftarrow \rightarrow$ Sel	ect Menu Enter	Select → Sub-Me	nu F10 Save and Exit					

• Serial port

You can press **< Enter>** to select the Enabled, Disabled, or Auto option for enabled or disabled the port, or automatically sensed the address assignment by BIOS or OS.

• Infrared port

Lets you press **< Enter>** to select the Enabled, Disabled, or Auto option for enabled or disabled the port, or automatically sensed the address assignment by BIOS or OS.

• Parallel port

Allows you to press **< Enter>** to select the Enabled, Disabled, or Auto option for enabled or disabled this port, or automatically sensed the address assignment by BIOS or OS.

• Mode

Allows you to press **< Enter>** to select a parallel mode as Output only, Bi-directional, or ECP when the parallel port is configured. When you set the configured parallel port to Enabled rather than Auto, you should also set the parameter of Base I/O address and DMA channel for this port.

• Floppy disk controller Allows you to press <**Enter**> to select the Enabled or Disabled option for configured or not configured the floppy disk controller.

### 6.4 Security Menu Setup

	PhoenixBIOS Setup Utility										
	Main	Ad	vanced	Security	Power	Boo	t Exit				
						Item S	Specific Help				
	Set Supervisor Password:				[Enter] Supervisor Pass						
	Set User Password:				[Enter]	controls access to the					
						setup uti	ility.				
	Password on boot:				[Disabled]						
	Password on Resume:										
	Fixed disk boot sector:			[Normal]							
	Diskette access:				[Supervisor]						
F1	Help		Select Item		Change Values	F9	Setup Defaults				
Esc	Exit	$\leftrightarrow$	Select Menu	Enter	Select → Sub-Me	nu F10	Save and Exit				

• Set Supervisor Password

Supervisor password gives you the authority in accessing the setup utility. You can also enter the supervisor password in booting the system and resuming from suspend mode. When you press **<Enter>** in this field, the Set Supervisor Password dialog box appears. Enter a new password with up to 8 alpha-numeric characters, and then enter this same new password again for confirmation.

Set User Password

This field is only available when you have set Supervisor Password previously. You can enter the user password when boot the system or resume from suspend mode. But if you set Write Protect in the Fixed disk boot sector field, you should enter a supervisor password to access the fixed disk when boot the system or resume from suspend mode.

- Password on Boot If you set this field to Enabled, your computer will always ask for the password every time you boot your computer.
- Password on Resume If you set this field to Enabled, your computer will always ask for the password every time when you resume from your computer.
- Fixed Disk Boot Sector If you set this field to Write Protect, the write protect boot sector on hard disk will protect against viruses. In this situation, only the supervisor can access this fixed disk.
- Diskette Access

If you set this field to Supervisor, only the supervisor can access to the diskette drives. If you set to User, both the supervisor and user can access to the diskette drives.

### 6.5 Using Power Saving Setup

]	Phoenix	BIOS	Setu	p Utility		
Main Adva	inced S	lecurity		Power	Boot	Exit
					Item Spec	ific Help
Power Button Mod	le:	[On/C	Off]		Behavior of	the
SpeedStep Mode		[Auto	matic]			
					Power swite	ch.
Power Management	nt Function	[Batte	ery only]		'Suspend/R	esume'
Power Savings Lev	vel	[Disa	bled]		causes the H	PC to
					Suspend/Re	esume,
Standby Timeout:		[Off]				
Suspend Timeout:		[Off]			'On/Off' ca	uses the
Suspend Mode:		[Susp	end]		PC to Powe	r
Auto Save To Dis	k:	[Off]			On/Off.	
Hard Disk Timeou	ıt:	[Disa	bled]			
Video Timeout:		[Disa	bled]		Please be no	oticed
					that all the l	Power
Resume On Mode	m Ring:	[Off]			menu settin	gs will
Resume On Time:		[Off]			be ineffective	ve in
Resume Time:		[00:0	0:00]		the ACPI m	ode.
F1 Help ↑↓ Se	lect Item		Change	Values	F9 Setup D	<b>Defaults</b>
Esc Exit $\leftarrow \rightarrow$ Se	lect Menu	Enter	Select	Sub-Menu	F10 Save an	d Exit

• Power Button Mode The power button operates as both an On/Off and Suspend/Resume button.

- → On/Off functions as a normal power switch to power the system on or off.
- → Suspend/Resume functions as a suspend button to put the system into Suspend mode and return to normal operation from Suspend.
- SpeedStep Mode

Automatically increase or decrease the CPU frequency to high or low speed by selecting various mode as Automatic, Maximum Performance, Battery Optimized, or Disabled. For example, if the high speed and low speed of CPU are 650MHz and 500 MHz, respectively, then you can get the followings as:

- For Automatic, system will automatically detect whether the AC adapter is connected or not, if it is connected, CPU speed will be set to 650MHz (high speed), otherwise it will be 500MHz (low speed).
- → For Maximum Performance, CPU speed will always be set to 650MHz (high speed).
- → For Battery Optimized, CPU speed will always be set to 500MHz (low speed).
- → For Disabled, system will ignore the SpeedStep technology for whatever CPU type is installed (always is low speed).
- Power Management Function Lets you set up power management by the system power source. You can select Always On or Battery Only. If you choose Always On, various power saving modes will function to save the power source both from AC power and battery power. If you choose Battery Only, power saving function will only execute for battery pack.
- Power Savings Level Lets you choose one of four levels of power management.

- Diabled turns off the power management function.
- → Customized alter these settings.
- → Maximum Power Savings conserves the greatest amount of system power.
- → Maximum Performance conserves power but allows the greatest system performance.
- Standby Timeout

Lets you specify the amount of time before the system entering the Standby Mode. Standby Mode powers off various devices in the system, until you start using the computer again. You can choose Off, 1, 2, 4, 6, 8, 12, or 16 minutes in this field.

• Suspend Timeout

Lets you specify the amount of time before the system entering the Suspend Mode. Suspend Mode powers off various devices in the system, except the memory component, until you start using the computer again. You can choose Off, 5, 10, 15, 20, 30, 40, or 60 minutes in this field.

• Suspend Mode

Lets you select the suspend mode. You can press <Enter> to choose the Suspend or Save To Disk option. If you choose Save To Disk, the system will save its state to disk and then power off. If you choose Suspend, the system will save its state but remaining in a low power mode.

Auto Save To Disk

Lets you turn on or off the Auto Save To Disk feature. If you turn on it, the system will save its state to disk and then power off after being in Suspend mode for 1 hour.

Hard Disk Timeout

Allows you to select the amount of time that your hard disk is not active before it shuts down. You can specify the amount of time as 1, 2, 4, 6, 8, 10, 15, 30, 45 minutes, or choose Disabled to inactive this feature.

• Video Timeout

Allows you to select the amount of time that your input devices are not active before your video shuts down. You can specify the amount of time as 1, 2, 4, 6, 8, 10, 15, 30, 45 minutes, or choose Disabled to inactive this feature.

Resume On Modem Ring

Lets you specify On or Off to wake up the system or not, when an incoming call is detected on your modem. If the Suspend Mode field is set to Save To Disk, the Resume On Modem Ring field will not work.

Resume On Time

Lets you specify On or Off to wake the system up at a specific time or not. If the Suspend Mode field is set to Save To Disk, the Resume On Time field is disabled.

Resume Time

Lets you specify the time, with hour/minute/second, 24 hour format, to wake up the system. To move the cursor within field to field, press <Tab>, <Shift-Tab>, or <Enter> key. To change the number in each field, press <Space> bar.

All above the Power Menu Settings will be ineffective in the ACPI mode.

### 6.6 Using the Boot Setup

This item allows you to set the search drive sequence where the system will try to boot up first.

	PhoenixBIOS Setup Utility											
	Main		Advanced	Securit	у	Power	Boot	Exit				
							Item S	pecific Help				
	+Remo	ovable	Devices				Use <	$\rightarrow$ or $<\psi>$ to				
	+Hard Drive							select a device, then				
ATAPI CD-ROM Drive							press <+> to move it					
							up to the	list, or <-> to				
							move it c	lown to the				
							list. Pres	s <esc> to</esc>				
							exit from	this menu.				
<b>F1</b>	Help	$\wedge \psi$	Select Item	- /+	Chang	e Values	F9 S	etup Defaults				
Esc	Exit		Select Menu	Enter	Select	→ Sub-Men	u F10 S	ave and Exit				

To select the boot device, you can use the up or down arrow key, then press <+> to move up the device in the list or press <-> to move down the device in the list. To exit from this menu, press <**Esc**>.

### 6.7 How to Exit the Setup Program

There are three choices to escape from the Setup program.

	PhoenixBIOS Setup Utility										
	Main	Advanced	Security	Power	Boot	Exit					
	Exit Savii	Item Specific Help Exit System Setup									
	Exit Disc:	and sav	e your								
	Load Setu	changes to CMOS.									
	Discard C	Thanges									
	Save Cha	nges									
	Battery R										
<b>F1</b>	Help 🔨	↓ Select Item		Change Values	F9 S	Setup Defaults					
Esc	Exit <	→ Select Menu	Enter	Execute Command	F10 S	Save and Exit					

• Exit Saving Changes

This option saves all changes to CMOS while running the BIOS setup program and exit from the system setup program.

- Exit Discarding Changes This options allows you to discard all changes made while running the BIOS setup program and exit from the system setup program.
- Load Setup Defaults This option lets you load the default values for all setup items.
- Discard Changes Reverts to previously selected settings.

- Save Changes Saves Setup data to CMOS.
- Battery Refresh Conditions the battery so that the battery can be fully charged. The function applies to NiMH battery only.

### 6.8 How to Upgrade the BIOS

Your computer uses EPROM Flash BIOS chip that allows you to easily upgrade the BIOS program. When you update the BIOS, any customized settings you made are lost.

To upgrade the BIOS:

- 1. Insert the BIOS Update diskette into the diskette drive.
- 2. Power on the system with the diskette in the diskette drive.
- 3. On the DOS prompt, type the following command.

A:\>Phlash XXXXXX.ROM (BIOS filename)

 Press <Enter> to run this BIOS utility. After the system has been successfully run this program, a message similar to the following appears:

Flash memory has been successfully programmed, press any key to restart the system. If the system does not restart, turn it off, then turn on again.

5. Press any key to restart this system.

Contact your dealer for the latest BIOS update file.

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