

C H A P T E R ▼ T W O

BIOS SETUP AND SECURITY FEATURE

In this chapter, you will learn how to enter the BIOS Setup Menu and manipulate various hardware control settings. You will also learn how to use the built-in security features.

The Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/Output System). It runs and maintains a variety of hardware functions. It is a menu-driven software, which allows you to easily configure and change the settings.

The BIOS contains manufacture's default settings for the computer's standard operations. However, there are occasions when you may be required to modify the default settings in the BIOS.

The BIOS allows you to set up passwords to limit access to users. This is an important feature because a great deal of vital information is carried within the computer nowadays. Unauthorized access can be prevented. Later in this chapter, you will learn how to use this security feature.



Note: The BIOS Setup Utility you see on your notebook may appear slightly different than what is shown in this manual, because your notebook may have newer BIOS version installed.

Entering the BIOS Setup Screen

First turn on the power. When the BIOS performs the POST (Power-On Self Test), press F2 key quickly to activate the Phoenix BIOS Setup Utility.



Note: You may need to press F2 key fairly quickly. Once the system begins to load Windows, you may have to retry by cycle-power on again

Leaving the BIOS Setup Screen

When you have finished modifying the BIOS settings, exit the BIOS. It takes a few seconds to record changes in the CMOS.

BIOS Action Keys

| Function Key | Command | Description |
|--------------|------------------|--|
| ESC | Exit | Leaves a sub-menu to return to the previous menu OR exits the BIOS setup while saving changes. |
| Enter | Go to Sub Screen | Shows the Sub Menu |
| F1 | General Help | Shows the Help Screen |
| F9 | Setup Defaults | Load default values |
| F10 | Save and Exit | Saves changes and reboots the computer. |
| <Tab> | Select a field | Selects the next field. |
| ↑ | Select an item | Selects the next upper item. |
| ↓ | Select an item | Selects the next lower item. |
| - | Lower value | Selects the next value within a field. |
| + | Higher value | Selects the next value within a field. |

Modifying the BIOS Settings

The Phoenix BIOS setup main menu is subdivided into sub-menus. Each menu item is described in this section.

Main Setup

Under this menu, you may change system time/date, system memory, and HDD information.

| PhoenixBIOS Setup Utility | | | | | | |
|---------------------------|----------------|----------|-------------------|-------|------|---|
| Main | Info | Advanced | Security | Power | Boot | Exit |
| System Time: | | | [12:12:00] | | | Item Specific Help |
| System Date: | | | [02/12/2004] | | | <Tab>, <Shift-Tab>, or <Enter> selects field. |
| ➤ IDE Channel 0 Master | | | [None] | | | |
| ➤ SATA Port 1 | | | [None] | | | |
| Base Memory: | | | 640 KB | | | |
| Extended Memory: | | | 2096128 KB | | | |
| F1 Help | ↑↓ Select Item | | -/+ Change Values | | | F9 Setup Defaults |
| Esc Exit | ◀ Select Menu | | Select ▶ Sub-Menu | | | F10 Save and Exit |



Note: Due to various configurations on this model, your system may show different information.

- System Time: Type in the current time, in HH:MM:SS format.
- System Date: Type in the current date, in MM/DD/YY format.

Info Setup

Under this menu, you may view basic processor and BIOS Version information.

| PhoenixBIOS Setup Utility | | | | | | |
|---------------------------|----------------|----------------------------|----------|-------|--------------------|------|
| Main | Info | Advanced | Security | Power | Boot | Exit |
| BIOS Information: | | | | | Item Specific Help | |
| BIOS Version: | | 0.02 | | | Information | |
| KBC Version: | | 0.02 | | | | |
| Processor: | | | | | | |
| CPU Type: | | AMD Turion™ 64 | | | | |
| CPU Info: | | X2 Mobile Technology TL-60 | | | | |
| F1 Help | ↑↓ Select Item | -/+ Change Values | | | F9 Setup Defaults | |
| Esc Exit | ◀ Select Menu | Select ▶ Sub-Menu | | | F10 Save and Exit | |



Note: Due to various configurations on this model, your system may show different information.

Advanced Setup

Under this menu, you may change POST beep, LAN Remote Boot and UMA Frame Buffer Size.

| PhoenixBIOS Setup Utility | | | | | | |
|--|----------------|----------|-------------------|-------|---------------------|------|
| Main | Info | Advanced | Security | Power | Boot | Exit |
| Setup Warning | | | | | Item Specific Help | |
| Setting items on this menu to incorrect values may cause your system to malfunction. | | | | | Enable / Disable | |
| POST Beep: [Disabled] | | | | | POST Beep function. | |
| LAN Remote Boot: [Disabled] | | | | | | |
| UMA Frame Buffer Size: [Auto] | | | | | | |
| F1 Help | ↑↓ Select Item | | -/+ Change Values | | F9 Setup Defaults | |
| Esc Exit | ◀ Select Menu | | Select ▶ Sub-Menu | | F10 Save and Exit | |

- POST Beep: When enabled, the notebook will beep on POST.
- LAN Remote Boot: When enabled, the system can support remote wake-up or boot on LAN.
- UMA Frame Buffer Size: See Below.

| Item | Selections / Sub-menu | Description |
|-----------------------|--|---|
| UMA Frame Buffer Size | Auto 16MB 32MB 64MB 128MB 256MB | Select [Auto], the system will automatically set the appropriate shared memory size for the graphic engine. Otherwise, you may choose a fixed size. |

Security Setup

| PhoenixBIOS Setup Utility | | | | | | |
|---------------------------|----------------|-------------------|----------|-------------------|--------------------|------|
| Main | Info | Advanced | Security | Power | Boot | Exit |
| Supervisor Password: | | Not Installed | | | Item Specific Help | |
| User Password: | | Not Installed | | | Supervisor | |
| Set Supervisor Password: | | [Press Enter] | | | Password controls | |
| Set User Password: | | [Press Enter] | | | access to the BIOS | |
| Password on boot: | | [Enabled] | | | setup. | |
| F1 Help | ↑↓ Select Item | -/+ Change Values | | F9 Setup Defaults | | |
| Esc Exit | ◀ Select Menu | Select ▶ Sub-Menu | | F10 Save and Exit | | |

- Set Supervisor Password: Install or Change the Password.
- Set User Password: Install or Change the Password.
- Password on Boot: When enabled, the system will always ask for User Password on boot.

Using Password Protection

Two Levels of Password Protection are available. The BIOS provides both a Supervisor and a User password. If you try to activate both passwords, the Supervisor password must be set first.

The passwords activate two different levels of protection:

1. System always asks for password every time it is powered on.
2. System asks for password only when you attempt to enter BIOS utility.

The passwords are encrypted and stored in NVRAM. Make sure you write them down or memorize them. If you lost the passwords,

the computer may need to be sent back to the factory or to an authorized service dealer to reset the passwords.

Power Setup

| PhoenixBIOS Setup Utility | | | | | | |
|---------------------------|----------------|----------|-------------------|------------|--|------|
| Main | Info | Advanced | Security | Power | Boot | Exit |
| Power Button Mode: | | | | [ON/OFF] | Item Specific Help | |
| Long Battery Life Mode: | | | | [Disabled] | Select Power Button functionality. This functionality is only available in DOS mode. | |
| F1 Help | ↑↓ Select Item | | -/+ Change Values | | F9 Setup Defaults | |
| Esc Exit | ◀ Select Menu | | Select ▶ Sub-Menu | | F10 Save and Exit | |

- Long Battery Life Mode: When Enabled, maximum battery life can be achieved. The processor performance is lowered.
- Power Button Mode: See Below.

| Item | Selections / Sub-menu | Description |
|-------------------|-----------------------|---|
| Power Button Mode | ON/OFF Suspend | <p>[On/Off]: When the power button is pressed, the system is turned off.</p> <p>[Suspend]: When the power button is pressed, the system enters the suspend mode.</p> <p>This functionality is only available in DOS mode.</p> |



Note: In Windows XP, suspend mode and settings are determined by settings in the Power Options Properties (Start > Control Panel > Power Options).

Boot Setup

| PhoenixBIOS Setup Utility | | | | | | |
|---------------------------|-----------------------------|----------|-------------------|-------|--|------|
| Main | Info | Advanced | Security | Power | Boot | Exit |
| Boot Priority Order: | | | | | Item Specific Help | |
| 1. | ALL USB KEY | | | | Keys used to view or configure devices: Up and Down arrows select a device. <+> and <-> moves the device up or down. <x> exclude or include the device to boot. | |
| 2. | PCI BEV: Realtek Boot Agent | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |
| 6. | | | | | | |
| 7. | | | | | | |
| 8. | | | | | | |
| Excluded from boot order: | | | | | | |
| F1 Help | ↑↓ Select Item | | -/+ Change Values | | F9 Setup Defaults | |
| Esc Exit | ◀ Select Menu | | Select ▶ Sub-Menu | | F10 Save and Exit | |



Note: IDE CD means the system's built-in optical drive. IDE HDD means the system's built-in HDD. PCI BEV is the Realtek Boot Agent, which allows you to boot from the Network.

Note: When the BIOS performs POST, you may also press Enter Key to enable the Boot Device selection menu. You may choose CD/DVD, Hard Drive, or PCI BEV (Realtek Boot Agent) as the first storage device to boot from. If you have already connected a USB Floppy Disk Drive before powering up, it will appear as a USB FDC in the Boot Device selection menu

Exit Setup

| PhoenixBIOS Setup Utility | | | |
|---------------------------|----------------|-------------------|--|
| Main | Info | Advanced | Security Power Boot Exit |
| Save Changes & Exit | | | Item Specific Help |
| Discard Changes & Exit | | | Exit System Setup and save your changes to CMOS. |
| Get Default Values | | | |
| Load Previous Values | | | |
| F1 Help | ↑↓ Select Item | -/+ Change Values | F9 Setup Defaults |
| Esc Exit | ◀ Select Menu | Select ▶ Sub-Menu | F10 Save and Exit |

- Saves Changes and Exit: After you have completed the BIOS settings, select this item to save all settings, exit BIOS Setup utility, and reboot. New system settings will take effect on next power-up. F10 key can be used for this operation.
- Discard Changes and Exit: Discards changes done so far to any of the setup questions and exit.
- Get Default Values: Load Optimal Default value for all the setup questions. F9 key can be used for this operation.
- Load Previous Values: Load settings that you made during the previous BIOS Setup session.