

# Fujitsu LifeBook

## A Series

### **BIOS Guide**

LifeBook A Series Model:

A1010

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**FUJITSU PC CORPORATION**

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# A Series BIOS

## SYSTEM CONFIGURATION UTILITY (SCU)

The BIOS System Configuration Utility (SCU) is a program that sets up the operating environment for your notebook. Your BIOS is set at the factory for normal operating conditions, therefore there is no need to set or change the BIOS environment to operate your notebook.

The SCU configures:

- Device control feature parameters, such as changing I/O addresses and boot devices.
- System Data Security feature parameters, such as passwords.

### Entering the System Configuration Utility

To enter the BIOS SCU, do the following:

1. Turn on or restart your notebook.
2. Press the [F2] key once the Fujitsu logo appears on the screen. Note that this occurs almost immediately when the system boots up, so have your finger on the F2 button when the boot starts. Pressing F2 opens the main menu of the SCU with the current settings displayed.
3. Press the [Enter] key to enable the dropdown menus, then press the right arrow or left arrow cursor key to scroll through the other setup menus to review or alter the current settings.

### Navigating Through the SCU

The BIOS SCU consists of five dropdown menus: Startup, Memory, Disks, Components, and Exit. This document explains each menu in turn, including all submenus and setup items.

The following procedures allow you to navigate the utility menus:

1. To select a menu, use the left and right cursor keys:  
[←], [→]
2. To select a field within a menu or a submenu, use the up and down cursor keys:

[↑], [↓].

3. This automatically selects the field upon which the prompt rests. Click **OK** to select the choice, or **Cancel** to exit the screen without making the change.
4. To activate a submenu press the [Enter] key.
5. To return to a menu from a submenu, press the [Esc] key.
6. To go to the Exit menu from any other menu, press the [Esc] key.



#### POINT

Selecting a field or submenu causes a help message about that field to be displayed on the bottom of the screen.

### Entering the SCU After a Configuration Change or System Failure

Each time the system boots, the BIOS performs diagnostic testing of the various system components. During a standard implementation, if the BIOS detects an error, one of the following events occurs:

- A message with the prefix “WARNING” is displayed informing the user where the error occurred. Following the message, the prompt “Press F1 to continue” is displayed. The system pauses until the user presses F1.
- A message with the prefix “FATAL” is displayed informing the user where the error occurred. Following the message, the system emits a series of beeps. The system then halts execution.
- The system emits a series of beeps. The system then halts execution.

Warning messages are considered “non-fatal” errors, indicating that a potential problem exists such as a system configuration error. When F1 is pressed, the system should resume execution. Non-fatal errors can be corrected by the user.

Fatal errors (those that emit a beep and may also display a “FATAL” message) indicate that the BIOS has stopped the system from continuing operation due to a severe problem such as a hardware failure. Fatal errors do not allow the system to resume execution. All fatal errors generate a series of beeps whether a message is displayed or not. See “Beep Codes” in the Troubleshooting section of your system User’s Guide for more information.

The troubleshooting section of the system User's Guide lists the messages that may appear while using the BIOS. Where applicable, possible solutions are included. Each fatal error message also includes the corresponding beep code

If there has been a change in the system configuration that does not agree with the parameter settings stored in your BIOS memory, or there is a failure in the system, the system beeps and/or displays an error message after the Power On Self Test (POST). If the failure is not too severe, it will give you the opportunity to modify the settings of the SCU.



### POINTS

- If your notebook beeps a series of beeps that sounds like a code and the display is blank, please refer to the Troubleshooting Section of the system User's Guide. The Troubleshooting Section includes a list of error messages and their meanings.
- If your data security settings require it, you may be asked for a password before the operating system will be opened.

## MAIN BIOS SCREEN – DISPLAYING CURRENT SYSTEM PARAMETERS

When the System Configuration Utility initially opens, a screen appears which displays the current system parameters. When an item is changed in one of the submenus, the change is immediately reflected in the main BIOS screen. When you are in the SCU, the main BIOS screen is always on screen, although portions of it may be obscured by dropdown menus.

Each of the items in the main BIOS screen is addressed in the applicable section of this document, depending upon the submenu to which it belongs. Note that the actual labels of some of the fields may vary, depending upon the configuration of your system.

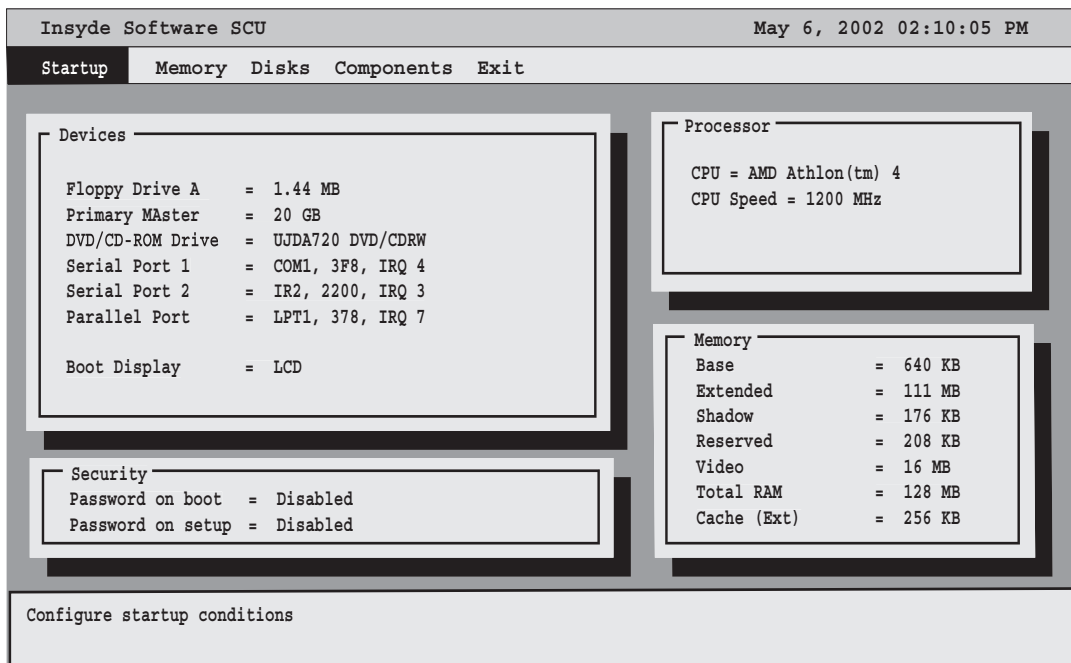


Figure 1. Main Menu

## STARTUP MENU

The Startup menu allows you to set basic information about your system, including:

- Change the system date and time
- Enable or disable the boot logo when the system boots up
- Eliminate the boot memory test in order to speed up system powering
- Select the boot device order
- Select the system display
- Set Administrator and User Passwords

### POINT

System Time and System Date can also be set from your operating system without using the setup utility. Use the calendar and time icon on your Windows Control panel or type time or date from the MS-DOS prompt.

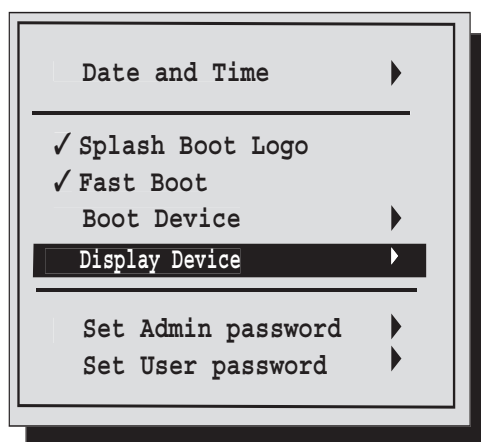


Figure 2. Startup Menu

Menu Field	Default	Description
Date and Time	---	When selected, opens the Date and Time submenu, which allows you to set the date and time for your system. (For more details, see Date and Time submenu later in this section).
Splash Boot Logo	[Checked]	The Splash Boot Logo is the large logo that appears on the screen while the system is booting. This item is enabled by default. To disable it, highlight the field, then press [Enter].
Fast Boot	{Checked]	Fast Boot allows the system to bypass the memory test when booting up. This allows the system to power up faster. This item is enabled by default; to disable it, highlight the field, then press [Enter].
Boot Device	—	When selected, opens the Boot Device submenu, which allows you to determine the order of devices your system will use when booting up. (For more details, see Boot Device submenu later in this section).
Display Device	—	When selected, opens the Display Device submenu, which allows you to determine which display your system will use when booting: LCD, external monitor, or both. (For more details, see Display Device submenu later in this section).
Set Admin password	—	When selected, opens the Set Admin password submenu, which allows you enter or change an administrator's password and to determine when it will be required. (For more details, see Set Admin Password submenu later in this section).
Set User password	—	When selected, opens the Set User password submenu, which allows you enter or change a user's password and to determine when it will be required. Note that this field is greyed out unless an Admin password has been entered. (For more details, see Set User Password submenu later in this section).

## Date and Time Submenu

The Date and Time submenu of the Startup menu allows you to adjust or set the date and time for your system.

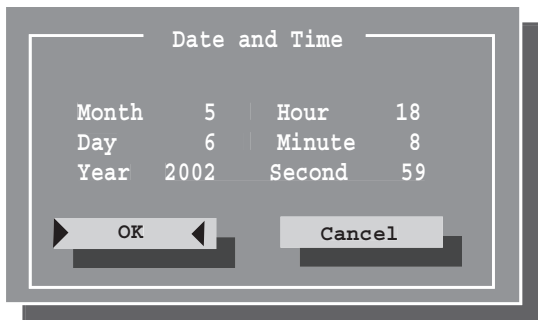


Figure 3. Date and Time submenu

To change the date or time, first select the field you want to change with the cursor or the left and right arrows, then use the up and down arrows to change the contents of the field.

Click [OK] when you have finished changing the contents, or [Cancel] to save the previous contents and exit the window.

## Boot Device Submenu

The Boot Device submenu of the Startup menu allows you to determine the order of devices in which your system will attempt to boot up.

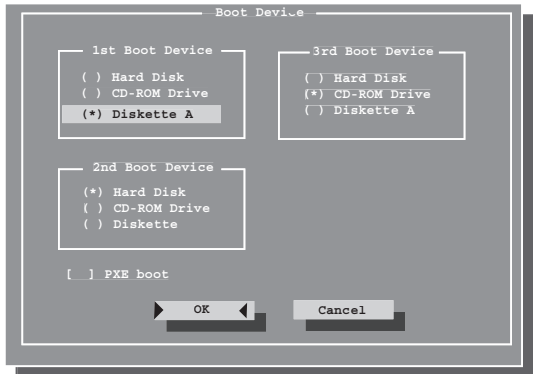


Figure 4. Boot Device submenu

The defaults for the submenu follow:

1st Boot Device: Diskette A

2nd Boot Device: Hard Disk

3rd Boot Device: CD-ROM Drive

Move between the three device windows using either the [Tab] button or the left and right arrow buttons. To change the selection within the device windows, use the up and down arrow buttons.

This submenu also allows you to enable or disable the **PXE Boot** option. PXE stands for Pre-boot Execution Environment, which allows a computer to be loaded and executed with a network program from a remote server before booting the OS on the local hard drive. This eliminates the need to physically boot the computers with floppy disks, as would normally be done.

The **PXE Boot** option is disabled by default. To enable it, click on the field or tab to it and press the spacebar.

## Display Device Submenu

The Display Device submenu of the Startup menu allows you to select the device(s) you want to use when booting up the system.

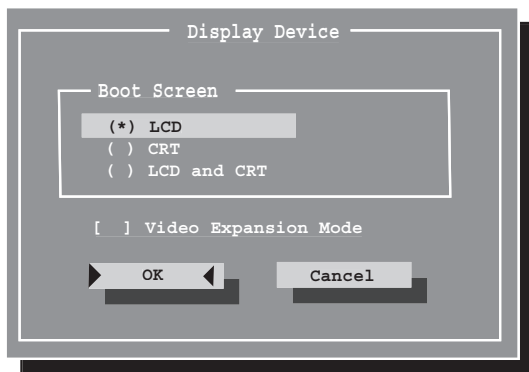


Figure 5. Display Device submenu

Select one of the following:

**LCD:** Select LCD if you want to use the system display when booting up the system.

**CRT:** Select CRT to use an external device such as a television monitor when booting up the system.

**LCD and CRT:** Select this if you would like to use the system display **and** an external device simultaneously.

**Video Expansion Mode:** Checking this box enables video expansion, which controls spacing on the display. When enabled, system displays with less than 1024 x 768 or 800 x 600 pixel resolution will cover the entire screen. Resolution below 800 x 600 will fill the screen, but due to the low resolution, may not be visually acceptable.

## Set Admin Password Submenu

The Set Admin Password submenu allows you to enter a new administrator's password, change an old one, and determine when to verify the password.

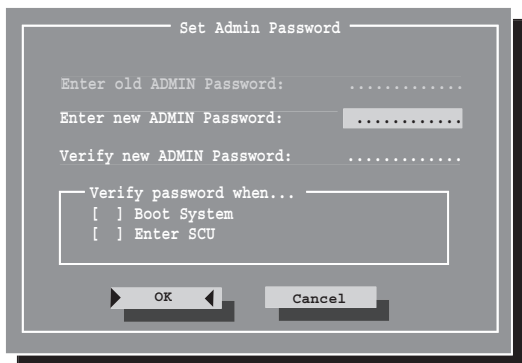


Figure 6. Set Admin Password submenu

### Entering/changing an administrator's password

If an administrator's password has not yet been set, the **Enter old ADMIN Password:** prompt is greyed out. After a password is registered, you will need to enter the password before you are allowed to proceed.

To enter an administrator's password:

- 1., Type an alphanumeric password of up to eight characters into the **Enter new ADMIN Password:** field. Be sure to use a password that you can remember easily, or write it down.
2. Press the [Enter] key.
3. Enter the number again in the **Verify new ADMIN password:** field, and press [Enter] again.
4. Check **Boot System** if you want to be prompted to enter the password when you are booting the system; check **Enter SCU** if you want to be prompted to enter the password when you are entering the BIOS System Configuration Utility.
5. Click [OK] if you are satisfied with your changes, or [Cancel] if you want to exit the window without saving any changes.

### Removing an administrator's password

To remove an administrator's password, simply type in your old password at the **Enter old ADMIN Password:** prompt, then press the [Enter] key three times, followed by the [OK] button. Note that this not only removes your Admin password, but also the User's password.

## Set User Password Submenu

The Set User Password submenu allows you to enter a new user's password or change an old one.

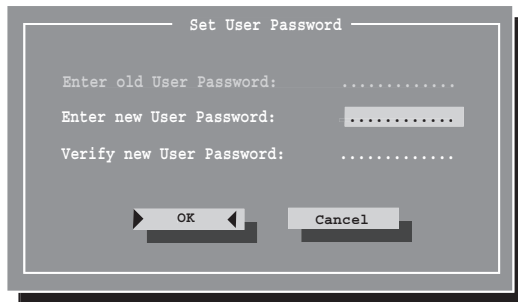


Figure 7. Set User Password submenu

### Entering/changing a user's password

If an administrator's password has not yet been set, you will not be allowed to enter a user's password; the submenu will not be accessible. If a user's password has not yet been set, the **Enter old User Password:** prompt is greyed out. After a password is registered, you will need to enter the password before you are allowed to proceed.

To enter a user's password:

1. Type an alphanumeric password of up to eight characters into the **Enter new User Password:** field. Be sure to use a password that you can remember easily, or write it down.
2. Press the [Enter] key.
3. Enter the number again in the **Verify new User password:** field, and press [Enter] again.
4. Click [OK] if you are satisfied, or [Cancel] if you want to exit the window without saving any changes.

### Removing a user's password

To remove a user's password, simply type in your old password at the **Enter old User Password:** prompt, then press the [Enter] key three times, followed by the [OK] button.

## MEMORY MENU

The Memory Menu allows you to change the amount of extended memory that the system shares as Video Memory. Increasing the amount of shared memory is helpful if you use your computer primarily for graphics-intensive applications such as gaming or computer-aided design, or if you frequently use the system with simultaneous displays. (See *Display Device Submenu* on page 6 for more information)

### Shared Memory Submenu

To access the Shared Memory submenu, select **Memory** from the top toolbar on the screen, then click **Shared Memory**. The following window appears.

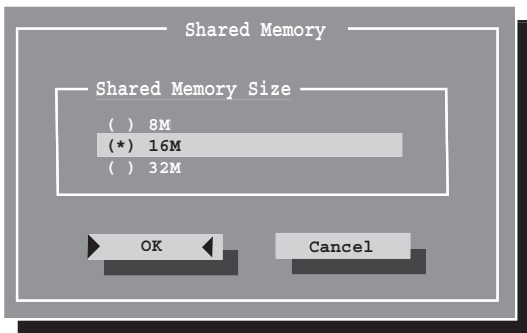


Figure 8. Shared Memory submenu

The Shared Memory submenu presents three choices: 8M, 16M, and 32M; 16M is the default selection. To increase or decrease the amount of memory to be shared, use the up and down arrows. When you have made your selection, tap [OK] to accept it or [Cancel] to exit the window without making any changes.



## DISKS MENU

The Disks menu allows you to set information about your system's hard- and floppy-disks, including:

- Enable or disable internal floppy disk drive controller
- Configure multiple diskette drives, if applicable.
- Enable or disable the internal hard disk controller
- Select the timing for hard disk drive and data transfers.
- Enable or disable hard disk drive security

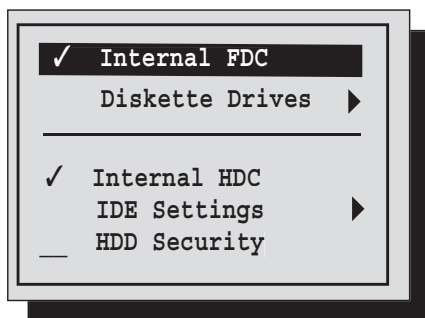


Figure 9. Disks Menu

Menu Field	Default	Description
Internal FDC	[Checked]	This item enables or disables the internal floppy disk drive controller. It is enabled by default.
Diskette Drives	---	When selected, opens the Diskette Drives submenu. This would be used only if more than one diskette drive is installed or connected.
Internal HDC	[Checked]	This item enables or disables the internal hard disk drive controller. It is enabled by default.
IDE Settings	—	When selected, opens the IDE Settings submenu, which allows you to select the timing and data transfer rates of the hard disk drive. (For more details, see IDE Settings submenu later in this section).
HDD Security	[Unchecked]	Enables or disables the hard disk drive security feature. It is disabled by default. The HDD security feature attaches the administrator's password to the hard drive so that if it is installed in a different system, the password will still be required to access its contents.

## IDE Settings Submenu

The IDE Settings submenu allows you to select the timing speed for the system hard disk drive, as well as the data transfer rates.

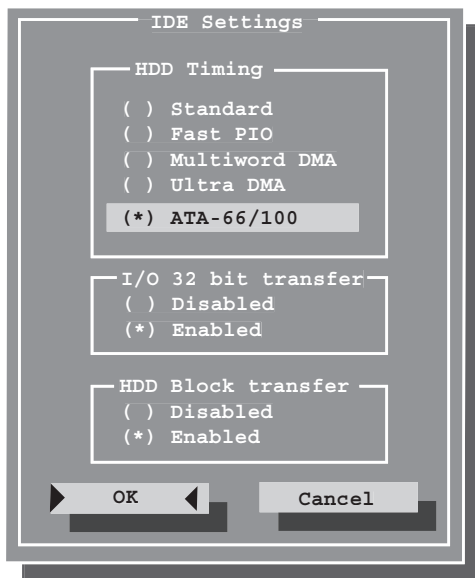


Figure 10. IDE Settings submenu

The IDE Settings submenu is divided into three sections:

### HDD Timing:

- Standard
- Fast PIO
- Multiword DMA
- Ultra DMA
- ATA-66/100

### I/O 32 bit transfer:

This field is **Enabled** by default. When it is disabled, the bit transfer is I/O 16 bit transfer.

### HDD Block transfer:

This field is **Enabled** by default. When it is disabled, system access to the hard disk drive is one sector per Read/Write.

## COMPONENTS MENU

The Components menu allows you to select several of the settings for your system, including the following:

- Serial port (COM and IR) settings
- Parallel (LPT) port settings
- PS/2 device settings
- Lid closure and Numlock settings

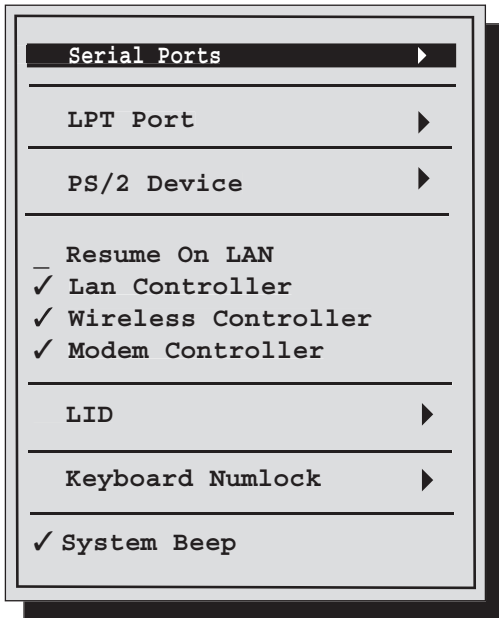


Figure 11. Components Menu

Menu Field	Default	Description
Serial Ports	---	When selected, opens the Serial Ports submenu. This allows you to select the port addresses and interrupts for the COM and IR ports. (For more details, see Serial Ports submenu later in this section).
LPT Port	---	When selected, opens the LPT Port submenu. This allows you to select the port addresses and definitions for the parallel port. (For more details, see LPT Ports submenu later in this section).

Menu Field	Default	Description
PS/2 Device	[Checked]	When selected, opens the PS/2 Device submenu. This allows you to enable or disable the internal pointing device. (For more details, see PS/2 Device submenu later in this section).
Resume On LAN	[Unchecked]	Enabling this feature allows the system to wake up when the internal LAN receives a special message ("Magic Packet") while in Suspend mode.
Lan Controller	[Checked]	Allows you to enable or disable the internal LAN controller.
Wireless Controller	[Checked]	Allows you to enable or disable the internal Wireless controller.
Modem Controller	[Checked]	Allows you to enable or disable the internal modem controller.
LID	---	When selected, opens the LID submenu. This determines what action the system should take when the lid is opened and closed. (For more details, see LID submenu later in this section).
Keyboard Numlock	---	When selected, opens the Keyboard Numlock submenu. This determines whether the numerical keypads are enabled or disabled. (For more details, see Keyboard Numlock submenu later in this section).
System Beep	[Checked]	Enables or disables the System beep.

## Serial Ports Submenu

The Serial Ports submenu allows you to select the port addresses and interrupts for the COM and IR ports.

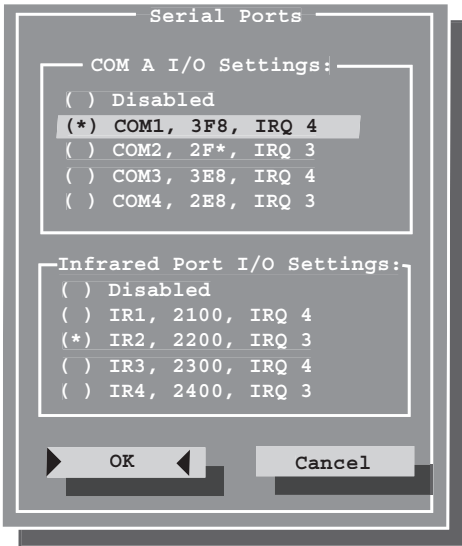


Figure 12. Serial Ports submenu

The Serial Ports submenu consists of two sections:

- COM A I/O Settings
- Infrared Port I/O Settings

The **COM A I/O Settings** section allows you to select which port address and interrupt will be used for COM port A. COM1, 3F8, IRQ4 is the default setting. To select a different address and interrupt, use the up and down arrow to choose a different one.

The **Infrared Port I/O Settings** section allows you to select which port address and interrupt will be used for COM port B (infrared port). IR2, 2200, IRQ3 is the default setting. To select a different address and interrupt, use the up and down arrow to choose a different one.

## LPT Port submenu

The LPT Port submenu allows you to select the port addresses and interrupts for the internal printer port.

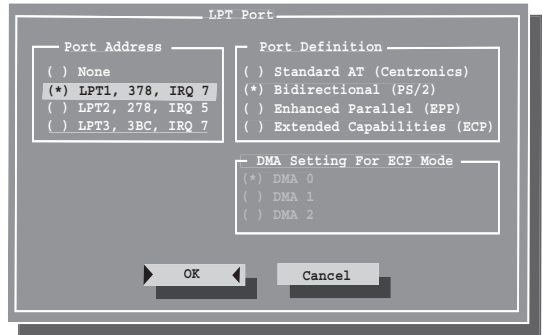


Figure 13. LPT Port submenu

The LPT Port submenu consists of three sections:

- Port Address
- Port Definition
- DMA Settings For ECP Mode

The **Port Address** section allows you to select which port address and interrupt will be used for the internal parallel (LPT) port. This is also known as the parallel port. LPT1, 378, IRQ7 is the default setting. To select a different address and interrupt, use the up and down arrow to choose a different one.

The **Port Definition** section allows you to assign advanced capabilities to an attached device that supports the capabilities. Bidirectional (PS-2) is the default setting. To select one of the other selections -- Standard AT (Centronics), Enhanced Parallel (EPP), or Extended Capabilities (ECP), use the up and down arrows to choose a different one.

Note that Extended Capabilities (ECP) must be selected in order to enable the **DMA Setting For ECP Mode** section.

The **DMA Setting For ECP Mode** section allows you to set the DMA channel for the parallel port if ECP Mode is selected in the **Port Definition** section. DMA 0 is the default setting.

## PS/2 Device submenu

The PS/2 Device submenu allows you to enable or disable the “hot-pluggability” of PS/2 devices. It also allows you to determine the conditions under which the internal PS/2 port is enabled.

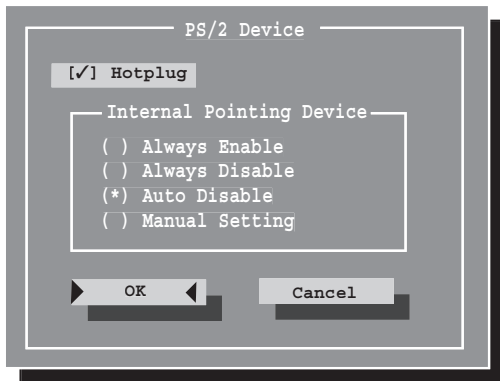


Figure 14. PS/2 Device submenu

The PS/2 Device submenu consists of a **Hotplug** checkbox (enabled by default) and an **Internal Pointing Device** section.

When **Hotplug** is checked, PS/2 devices can be plugged in -- and will be recognized -- while the system is running. When **Always Disable** or **Manual Setting** are selected in the **Internal Pointing Device** section, the **Hotplug** selection cannot be selected.

The **Internal Pointing Device** section consists of four selections:

- **Always Enable**  
When selected, the internal pointing device (touchpad) is enabled whether or not a PS/2 device is attached.
- **Always Disable**  
When selected, the internal pointing device (touchpad) is never enabled.
- **Auto Disable**  
When selected, the internal pointing device (touchpad) is disabled automatically when a PS/2 device is attached.
- **Manual Setting**  
When selected, the internal pointing device (touchpad) operation is determined by desktop selection.

## LID submenu

The LID submenu allows you to determine what action the system takes when the lid is opened and closed.

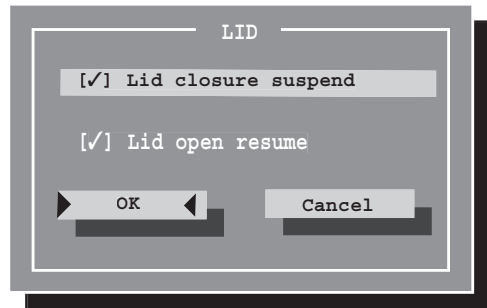


Figure 15. LID submenu

There are two selections on the LID submenu:

- **Lid Closure Suspend:**  
This is enabled by default. When it is enabled, the system will go into Suspend mode automatically when the lid is closed. When it is disabled (unchecked), the system will continue to run when the lid is closed.
- **Lid Open Resume:**  
This is enabled by default. When it is enabled, the system will automatically resume operation when the lid is opened. When it is disabled (unchecked), the system requires user intervention in order to resume (by pressing the On/Off button).

## Keyboard Numlock submenu

The Keyboard Numlock submenu allows you to determine the state of the system's numerical keypad.

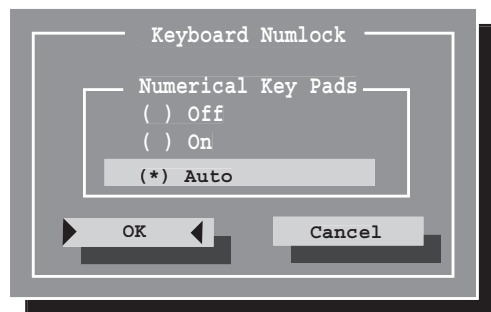


Figure 16. Keyboard Numlock submenu

The Keyboard Numlock submenu offers three choices: **Off**, **On**, and **Auto**. **Auto** is the default selection.

When **Off** or **On** are selected, the numerical keypads are disabled or enabled, respectively. When **Auto** is selected, the state of the numerical keypads is determined by the system.

## EXIT MENU

The Exit Menu provides information about the BIOS, and allows you to exit the utility, reset defaults, or restore the system to the settings it had before entering the SCU.

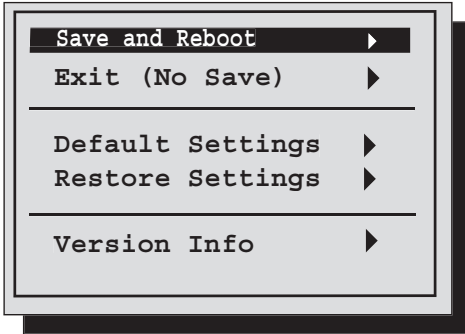


Figure 17. Exit menu

Exit Menu consists of five submenus, as detailed below:

### Save and Reboot submenu

The Save and Reboot submenu allows you to save any settings you have made to the BIOS (by clicking [OK]). When you click [OK], you will exit the utility and the system will reboot.

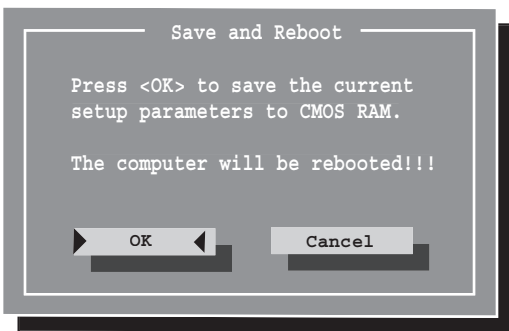


Figure 18. Save and Reboot submenu

### Exit (No Save) submenu

The Exit (No Save) submenu allows you to exit the utility without saving any changes that you made during the current session (by clicking [OK]). When you click [OK], you will exit the utility.

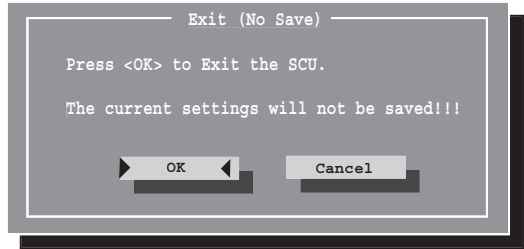


Figure 19. Exit (No Save) submenu

### Default Settings submenu

The Default Settings submenu allows you to restore the BIOS settings to the original factory default settings (by clicking [OK]). When you click [OK], you will exit the utility and the default settings will be restored.

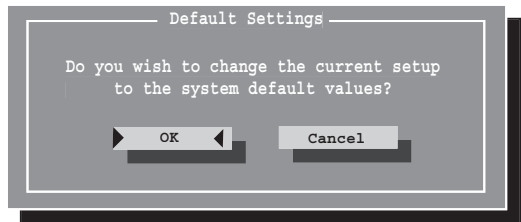


Figure 20. Default Settings submenu

### Restore Settings submenu

The Restore Settings submenu allows you to exit the utility without saving any changes (by clicking [OK]). When you click [OK], you will exit the utility and restore your custom settings.

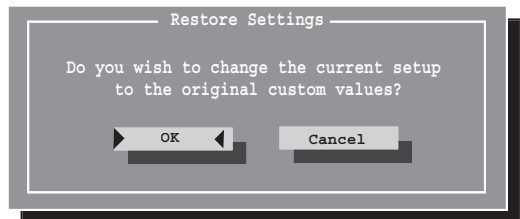


Figure 21. Restore Settings submenu

## Version Info submenu

The Version Info submenu is for display only, and indicates information about the BIOS on your system.

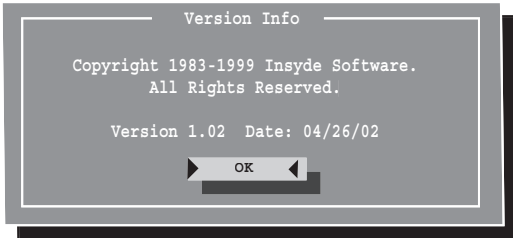


Figure 22. Version Info submenu