

## Chapter 3: Setup

### About the Setup Utility

This chapter explains how to use and modify the BIOS setup utility that is stored on the mainboard. The setup utility stores information about the mainboard components, and the configuration of other devices that are connected to it. The system uses this information to test and initialize components when it is started up, and to make sure everything runs properly when the system is operating. This mainboard lets you use the BIOS setup utility to configure the system for the kind of processor you install instead of using jumpers to make changes to the processor configuration.

The setup utility is installed with a set of default values. The default values are designed to ensure that the system will operate adequately. You will probably have to make changes to the setup utility whenever you add new components to your system such as new disk drives. You may be able to generate increased performance by changing some of the timing values in the setup, but this can be limited by the kind of hardware you are using, for example, the rating of your memory chips. In certain circumstances, the system may generate an error message which asks you to make changes to the setup utility. This happens when the system finds an error during the POST (power on self test) that it carries out at start up.

### Starting the Setup Utility

You can only start the setup utility shortly after the computer has been turned on. A prompt appears on the computer display which reads “*Press DEL to run Setup*”. When you see this prompt, press the DEL key, and the system will start the setup utility and display the main menu of the utility.

### Using the Setup Utility

When you press the DEL key to start setup, the main menu of the utility appears.

The main menu of the setup utility shows a list of the options that are available in the utility. A highlight shows which option is currently selected. You can use the cursor arrow keys to move the highlight to other options. When an option is highlighted, you can execute the option by pressing the ENTER key.

Some options lead to dialog boxes which ask you verify that that you wish to execute that option. You usually answer these dialogs by typing Y for yes and N for no.

Some options lead to dialog boxes which ask for more information. Setting the User Password or Supervisor Password have this kind of dialog box.

ROM PCI/ISA BIOS (P6BX-A+)  
CMOS SETUP UTILITY  
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	PC HEALTH MONITOR
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP/PCI CONFIGURATION	IDE HDD AUTO DETECTION
LOAD BIOS DEFAULTS	SAVE & EXIT SETUP
LOAD OPTIMUM SETTINGS	EXIT WITHOUT SAVING
Esc : Quit F10 : Save & Exit Setup	
↑ ↓ → ← : Select Item (Shift)F2 : Change Color	

Some options lead to tables of items. These items usually have a value on the right side. The value of the first item is highlighted, and you can use the cursor arrow keys to select any of the other values in the table of items. When an item is highlighted, you can change the value by pressing the PGUP or PGDN keys, or the PLUS or MINUS keys. The PGUP and PLUS keys cycle forward through the available values, the PGDN and MINUS keys cycle backwards through the values.

When you are in the main menu, you can exit the utility by pressing the ESC key. You can save the current selections and exit the utility by pressing the F10 key. You can change the color scheme of the utility by pressing the F2 key while holding down the SHIFT key.

When you are in one of the options that displays a dialog box, you can return to the main menu by pressing the ESC key.

When you are in one of the options that displays a table of items, you can return to the main menu by pressing the ESC key. For some items, you can display a help message by pressing the F1 key. You can change the color scheme of the utility by pressing the F2 key while holding down the SHIFT key. You can press F5 to discard any changes you have made and return all items to the value that they held when the setup utility was started. You can press F6 to load the displayed items with a standard list of default values. You can press F7 to load the displayed items with a high-performance list of default values.

## Standard CMOS Setup Option

This option displays a table of items which defines basic information about your system.

```
ROM PCI/ISA BIOS (P6BX-A+)  
STANDARD CMOS SETUP  
AWARD SOFTWARE, INC.  
  
Date (mm:dd:yy) : Thu, Mar 5 1998  
Time (hh:mm:ss) : 12 : 19 : 52  
  
HARD DISKS      TYPE      SIZE      CYLS HEAD PRECOMP LANDZ SECTOR  MODE  
-----  
Primary Master  : None      0          0  0  0      0  0  0  0 -----  
Primary Slave   : None      0          0  0  0      0  0  0  0 -----  
Secondary Master : None      0          0  0  0      0  0  0  0 -----  
Secondary Slave : None      0          0  0  0      0  0  0  0 -----  
  
Drive A : None  
Drive B : None  
Floppy 3 Mode Support : Disabled  
Video   : EGA/VGA  
Halt On : All Errors  
  
Base Memory:  0K  
Extended Memory: 0K  
Other Memory: 512K  
-----  
Total Memory: 512K  
  
ESC : Quit      ↑ ↓ → ← : Select Item      PU/PD/+/- : Modify  
F1  : Help      (Shift)F2 : Change Color
```

### *Date and Time*

The Date and Time items show the current date and time held by your computer. If you are running a Windows operating system, these items will be automatically updated whenever you make changes to the Windows Date and Time Properties utility.

### *Hard Disk*

### *Defaults: None*

These items show the characteristics of any hard disk drives on the four available IDE channels. (Note that SCSI hard disk drives do not appear here.) You can automatically install most modern hard disks using the *IDE HDD Auto Detect Option* from the main menu. However, if you find that a drive cannot be automatically detected, you can use these items to select USER, and then manually enter the characteristics of the drive. The documentation provided with your drive provides the data you need to fill in the values for CYLS (cylinders), HEAD (read/write heads), and so on.

The documentation provided with the drive may not tell you what value to use under the MODE heading. If the drive is smaller than 528 MB, set MODE to Normal. If the drive is larger than 528 MB and it supports Logical Block Addressing, set MODE to LBA. Very few high-capacity drives do not support Logical Block Addressing. If you have such a drive, you might be able to configure it by setting the MODE to Large. If you're not sure which MODE setting is required by your drive, set MODE to Auto and let the setup utility try to determine the mode automatically.

### *Drive A and Drive B*

### *Default: None*

These items define the characteristics of any diskette drive attached to the system. You can connect one or two diskette drives.

#### ***Floppy 3 Mode Support***

***Default: Disabled***

Floppy 3 Mode is a special mode that supports 3.5" diskettes with a capacity of 1.2 MB. Outside of Japan, very few people use this kind of diskette.

#### ***Video***

***Default: EGA/VGA***

This item defines the video mode of the system. The default value is for the VGA standard which is supported by all current display adapters. If you wish to use an older display adapter which does not support VGA, you can select one of the earlier video standards such as CGA or Hercules.

#### ***Halt On***

***Default: All Errors***

This item defines the operation of the system POST (Power On Self Test) routine. You can use this item to select which kind of errors in the POST are sufficient to halt the system.

#### ***Base, Extended and Other Memory.***

These items show how much memory is available on the system. They are automatically detected by the system so you cannot manually make changes to these items.

## **BIOS Feature Setup Option**

This option displays a table of items which defines more advanced information about your system. You can make modifications to most of these items without introducing fatal errors to your system.

ROM PCI/ISA BIOS (P6BX-A+)  
BIOS FEATURES SETUP  
AWARD SOFTWARE, INC.

CPU Internal Core Speed	: 350MHz	Security Option	: Setup
Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU L1 Cache	: Enabled	C8000-CBFFF Shadow	: Disabled
CPU L2 Cache	: Enabled	CC000-CFFFF Shadow	: Disabled
CPU ECC Function	: Disabled	D0000-D3FFF Shadow	: Disabled
Quick Power On Self Test	: Enabled	D4000-D7FFF Shadow	: Disabled
Boot From LAN First	: Enabled	D8000-DBFFF Shadow	: Disabled
Boot Sequence	: A,C,SCSI	DC000-DFFFF Shadow	: Disabled
Boot Function of Hard Disk	: Enabled		
Boot Function of Drive A	: Enabled		
Swap Floppy Drive	: Disabled		
Hard Disk Write Protected	: Disabled		
Floppy Disk Write Protected	: Disabled		
Boot Up NumLock Status	: On	ESC : Quit	F10 : Select Item
Gate A20 Option	: Fast	F1 : Help	PU/PD/+/- : Modify
PCI/UGA Palette Snoop	: Disabled	F5 : Old Values (Shift)	F2 : Color
OS Select For DRAM > 64MB	: Non-OS2	F6 : Load BIOS Defaults	
HDD S.M.A.R.T. capability	: Disabled	F7 : Load Optimum Settings	

***CPU Internal Core Speed***

***Default: 233 MHz or 350MHz***

This item should be installed with the rated internal core speed of the Pentium-II class processor that is installed in your system. The setup utility will then automatically configure the system with the correct host bus speed, and bus frequency multiplier. If you set this item to Manual, two new items will appear: *CPU Host BUS Frequency* and *CPU Core:Bus Freq. Multiple*. You can use these two items to manually configure the mainboard for the speed of the processor. The values available in these two items will vary, according to the kind of Pentium-II processor that is installed.

***Note:** Using the three items above, you can configure the mainboard so that it runs a processor faster than the rated clock speed. We strongly recommend that you do not overclock the processor. Overclocking can introduce excess heat, recurring instability, or even complete failure in your system.*

***Virus Warning***

***Default: Disabled***

When this item is enabled it provides some protection against viruses which try to write to the boot sector and partition table of your hard disk drive. This item is Disabled as a default so that you can install an operating system. We recommend that you enable Virus Warning as soon as you have installed your disk with an OS.

***Note:** You must disable this item when creating new partitions on a hard disk.*

***CPU L1 Cache***

***Default: Enabled***

***CPU L2 Cache***

***Default: Enabled***

This mainboard is designed for the Pentium-II series of processor cartridges. All these processors feature internal level-1 cache memory, and external level-2 cache memory. Therefore you should enable both these items for better performance.

***CPU ECC Function***

***Default: Disabled (only for 66MHz systems)***

This item can be used to enable ECC (error checking and correction) for the level-2 cache memory. We recommend that you leave this item at the default value disabled.

***Quick Power On Self Test***

***Default: Enabled***

You can enable this item to shorten the power on testing and have your system start up a little faster.

***Boot from LAN First***

***Default: Enabled***

This item lets you specify that the system will try to load an operating system from a network server first, before booting from any of the local drives.

***Boot Sequence***

***Default: A, C, SCSI***

This item defines where the system will look for an operating system, and the order of priority. You can boot an operating system from many locations including a SCSI device, a ZIP drive, a floppy diskette drive, or an LS-120 high-capacity diskette drive.

***Boot Function of Hard Disk***

***Default: Enabled***

**Boot Function of Drive A****Default: Enabled**

These items allow the system to boot an operating system from a hard disk drive or a floppy disk drive.

**Swap Floppy Drive****Default: Disabled**

If you have two floppy diskette drives in your system, this item allows you to swap around the assigned drive letters so that drive A becomes drive B, and drive B becomes drive A.

**Hard Disk Write Protected****Default: Disabled****Floppy Disk Write Protected****Default: Disabled**

You can use these items to write protect the hard disk drive and floppy disk drive.

**Boot Up NumLock Status****Default: On**

This item defines if the keyboard Num Lock key is active when your system is started.

**Gate A20 Option****Default: Fast**

This option provides compatibility with older software written for the 286 processor. Leave this item at the default value Fast.

**PCI/VGA Palette Snoop****Default: Disabled**

This item can help overcome problems that are caused by some non-standard VGA cards. We recommend that you leave this item at the default value Disabled.

**OS Select For DRAM > 64 MB****Default: Non-OS2**

This item is required if you have installed more than 64 MB of memory and you are running the OS/2 operating system. Otherwise, leave this item at the default Non-OS2

**HDD S.M.A.R.T Capability****Default: Disabled**

S.M.A.R.T is an industry acronym for Self-monitoring, Analysis and Reporting Technology. If the documentation of your hard disk states that S.M.A.R.T. is supported, you can enable this item.

**Security Option****Default: Setup**

If you have installed password protection, this item defines if the password is required at system start up, or if it is only required when a user tries to enter the setup utility.

**Video BIOS Shadow****Default: Enabled**

This item lets the video BIOS to be copied to system memory for faster performance.

**XXXXX-XXXXX Shadow****Default: Disabled**

These items allow the BIOS of other devices to be copied to system memory for faster performance.

## Chipset Features Option

This option displays a table of items which define timing parameters of the mainboard components including the graphics system, the memory, and the system logic. In general rule, you should leave the items on this page at the default values unless you are very familiar with the technical specifications of your hardware. If you change the values, you may introduce fatal errors or recurring instability into your system.

ROM PCI/ISA BIOS (P6BX-A+)  
CHIPSET FEATURES SETUP  
AWARD SOFTWARE, INC.

Auto Configuration : Enabled	AGP Aperture Size (MB) : 64
EDO DRAM Speed Selection : 50ns	Clock Spread Spectrum : Enabled
EDO CAS# MA Wait State : 1	
EDO RAS# Wait State : 1	
SDRAM RAS-to-CAS Delay : 3	
SDRAM RAS Precharge Time : 3	
SDRAM CAS latency Time : 3	
SDRAM Leadoff Clock : 4	
USWC Write Post : Enabled	
DRAM Data Integrity Mode : Non-ECC	
Host Bus Fast Data Ready : Enabled	
System BIOS Cacheable : Enabled	
Video BIOS Cacheable : Enabled	
Video RAM Cache Method : Uncache	
AGP Aperture Cache Method : Uncache	
8 Bit I/O Recovery Time : 1	ESC : Quit      ↑↓→← : Select Item
16 Bit I/O Recovery Time : 1	F1 : Help      PU/PD/+/- : Modify
Memory Hole At 15M-16M : Disabled	F5 : Old Values (Shift)F2 : Color
Passive Release : Enabled	F6 : Load BIOS Defaults
Delayed Transaction : Disabled	F7 : Load Optimum Settings

### ***Auto Configuration***

***Default: Enabled***

Leave this item at the default value Enabled. This will automatically install the correct values for the system memory timing in the next 7 items.

### ***USWC Write Post***

***Default: Enabled***

USWC (uncacheable, speculative write combining) is a cache memory technology. We recommend that you leave this item at the default value Enabled.

### ***Dram Data Integrity Mode***

***Default: Non-ECC***

This item enables or disables ECC (error checking and correction) for the main memory. We recommend that you leave this item at Non-ECC unless you have verified that your memory modules support ECC.

### ***Host Bus Fast Data Ready***

***Default: Enabled***

When this item is enabled, it speeds up memory access by one clock cycle. We recommend that you leave this item at the default value Enabled.

### ***System BIOS Cacheable***

***Default: Enabled***

### ***Video BIOS Cacheable***

***Default: Enabled***

These two items allow the system and video BIOS to be cached for faster performance. We recommend that you leave these items at the default value Enabled.

***Video RAM Cache Method***  
***AGP Aperture Cache Method***

***Default: Uncache***  
***Default: Uncache***

These two items can be used to cache the video RAM and AGP aperture using USCW (uncacheable, speculative write combining). We recommend that you leave both these items at the default value Uncache.

***8-bit I/O Recovery Time***  
***16-bit I/O Recovery Time***

***Default: 1***  
***Default: 1***

These two items set timing parameters for 8-bit and 16-bit ISA expansion cards. We recommend that you leave these items at the default value 1.

***Memory Hole at 15M-16M***

***Default: Disabled***

This item can be used to reserve memory space for some ISA cards that require it. We recommend that you leave this item at the default value Disabled.

***Passive Release***  
***Delayed Transaction:***

***Default: Enabled***  
***Default: Disabled***

These two items make the PCI bus compliant with the PCI Specification Ver. 2.1. It provides compatibility with older, slower ISA expansion cards. We recommend that you leave these items at their default values.

***AGP Aperture Size (MB)***

***Default: 64***

This item defines the size of the AGP aperture. We recommend that you leave this item at the default value 64.

***Clock Speed Spectrum***

***Default: Enabled***

When this item is enabled, it can significantly reduce the EMI (electrical magnetic interference) that your system generates. We recommend that you leave this item at the default value Enabled.

## **Power Management Setup Option**

---

This option displays a table of items which lets you control the power management of the system. Modern operating systems take care of much of the routine power management. This mainboard supports ACPI (advanced configuration and power interface).

This system supports three levels of power-saving modes; doze mode, standby mode, and suspend mode. Standby mode uses less power than doze mode and suspend mode uses the least power.

The power management in the setup utility lets you specify a timeout for each of the power-saving modes, and a timeout for a hard disk drive power down. A timeout, means a period of time when the system (or the hard disk drive) is inactive. If the timeout completes, the system power-saving mode will execute, or the hard disk drive will power down.



You can resume from the power-saving modes by carrying out any of the activities which are enabled in the list Reload Global Timer Events. If the hard disk has been powered down it will automatically resume to full power when an access to the hard disk is required (this takes just a few seconds).

ROM PCI/ISA BIOS (P6BX-A+)  
POWER MANAGEMENT SETUP  
AWARD SOFTWARE, INC.

ACPI Function	: Enabled	** Reload Global Timer Events **	
Power Management	: Disable	IRQ(3-7,9-15),NMI	: Enabled
Doze Mode	: Disable	Primary IDE 0	: Disabled
Standby Mode	: Disable	Primary IDE 1	: Disabled
Suspend Mode	: Disable	Secondary IDE 0	: Disabled
HDD Power Down	: Disable	Secondary IDE 1	: Disabled
HDD Down When Suspend	: Enabled	Floppy Disk	: Disabled
Throttle Duty Cycle	: 62.5%	Serial Port	: Enabled
Video Off Method	: DPMS	Parallel Port	: Disabled
Video Off After	: Standby	UGA Active Monitor	: Enabled
MODEM Use IRQ	: 3		
Soft-Off by PWR-BTTN	: Delay 4 Sec.		
CPUFAN Off In Suspend	: Enabled		
** Powered On or Resumed By **		ESC : Quit	↑↓→← : Select Item
AC Resume	: Disabled	F1 : Help	PU/PD/+/- : Modify
Modem/NetCard (R1)	: Disabled	F5 : Old Values (Shift)	F2 : Color
RTC Alarm (IRQ 8)	: Disabled	F6 : Load BIOS Defaults	
		F7 : Load Optimum Settings	

**ACPI Function**

**Default: Enabled**

This system supports ACPI (advanced configuration and power management interface) which is an industry standard specification. We recommend that you leave this item at the default value enabled.

**Power Management**

**Default: Disabled**

This item acts like a master switch for the power-saving modes and hard disk timeouts. If this item is set to Disabled, all the power-savings modes are disabled. If this item is set to Max Saving, doze, standby, and suspend mode, and the hard disk powerdown will occur after a timeout of 1 minute. If this item is set to Min Saving, doze, standby, and suspend mode will occur after a timeout of 1 hour. The hard disk powerdown will occur after fifteen minutes. If the item is set to User Define, you can insert your own timeouts for the power-saving modes and hard disk powerdown.

**Doze Mode**

**Default: Disabled**

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 1 minute to 4 hours.

**Standby Mode**

**Default: Disabled**

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 1 minute to 4 hours.

**Suspend Mode**

**Default: Disabled**

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 1 minute to 4 hours.

**HDD Power Down****Default: Disabled**

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 1 minute to 4 hours.

**HDD Down When Suspend****Default: Enabled**

When this item is enabled, hard disk drives on the primary or secondary IDE channels will power down in suspend mode.

**Throttle Duty Cycle****Default: 62.5%**

This item defines what percentage of time the system will halt the processor clock when it is in power-saving mode.

**Video Off Method****Default: DPMS**

This item defines how the video is turned off to save power. As a default, this is set to DPMS (display power management software).

**Video Off After****Default: Standby**

This item lets you define which level of power-saving mode is required in order to turn off the video display.

**Modem Use IRQ****Default: 3**

If you would like an incoming call on a modem to automatically resume the system from a power-saving mode, use this item to specify the interrupt request line (IRQ) that is used by the modem.

**Soft-Off by PWR-BTTN****Default: Delay 4 Sec.**

You can use this item to install a four second delay in powering down the system when the power switch is turned off.

**CPUFAN Off In Suspend****Default: Enabled**

You can use this item to specify if the CPU cooling fan is turned on or off when the system goes into suspend mode.

**Powered On or Resumed By**

This list of items specifies system activities which will automatically restart the system when it has been turned off or set in suspend mode.

**AC Resume****Default: Disabled**

If this is enabled, the system will restart when AC power is supplied to the system.

**Modem/NetCard (RI)****Default: Disabled**

If this item is enabled, the system will restart when an incoming transmission is received by an internal modem, or a network adapter.

**RTC Alarm (IRQ 8)****Default: Disabled**

You can use this item to set a time and date for the system to automatically restart.

When you enable this item, two other items appear that let you enter a date and time for the restart.

#### ***Reload Global Timer Events***

This is a list of system activities which can be used to restart the countdown of the power-saving timeouts. If an item in this list is enabled, and the activity of that item occurs, the timeout counter will begin counting again from the start.

#### ***IRQ [3-7, 9-15], NMI***

***Default: Enabled***

If this item is enabled, any activity on the listed IRQs (interrupt request lines) or the NMI (non-masked interrupt) will restart the timeouts.

#### ***Primary IDE 0***

***Default: Disabled***

#### ***Primary IDE 1***

***Default: Disabled***

#### ***Secondary IDE 0***

***Default: Disabled***

#### ***Secondary IDE 1***

***Default: Disabled***

#### ***Floppy Disk***

***Default: Disabled***

You can use these items to let activity on the IDE devices or floppy disk drives restart the timeouts.

#### ***Serial Port***

***Default: Enabled***

#### ***Parallel Port***

***Default: Disabled***

When enabled, these items let activity on the serial or parallel ports restart the timeouts.

#### ***VGA Active Monitor***

***Default: Enabled***

You can use this item to let activity on the active monitor restart the timeouts.

## **PNP/PCI Configuration Option**

---

This option displays a table of items that configures how PNP (Plug and Play) and PCI expansion cards operate in your system.

ROM PCI/ISA BIOS (P6BX-A+)  
PNP/PCI CONFIGURATION  
AWARD SOFTWARE, INC.

PNP ISA Initialized By : BIOS Resources Control Method : Auto Reset Configuration Data : Disabled	
	ESC : Quit            ↑↓←→ : Select Item F1 : Help            PU/PD/+/~ : Modify F5 : Old Values (Shift) F2 : Color F6 : Load BIOS Defaults F7 : Load Optimum Settings

***PNP ISA Initialized By***

***Default: BIOS***

If you have installed a Plug and Play operating system such as Windows 95, you can change this item to PNP OS. When the item is set to PNP OS, you can use the Device Manager utility in the operating system to make changes to the configuration of expansion cards.

***Resources Control Method***

***Default: Auto***

You should leave this item at the default Auto. If you find that you cannot get a particular expansion card to work properly, you might be able to solve the problem by changing this item to Manual, and defining the characteristics of the card in the new items which appear.

If you change this item to Manual, the display will list a series of items that allow you to define the assignments of the system interrupt lines (IRQs) and Direct Memory Access (DMA) channels. As a default, these items are set to PCI/ISA PnP. If you install an ISA-bus card that does not support PNP, and it requires a special IRQ and DMA, you can modify the list of assignments. Change the values of the IRQ and DMA that are required to Legacy ISA.

If you change this item to Manual, a new item, Legacy ISA ROM Base, will appear. As a default this item is set to N/A (not available). If the ISA expansion card uses a ROM (read only memory) chip, you might need to use this item to specify the ROM address in order to make the card work properly.

***Reset Configuration Data***

***Default Disabled***

If you enable this item and restart the system, any PNP configuration data stored in the BIOS setup will be cleared from memory.

## Load BIOS Defaults Option

This option displays a dialog box which allows you to install BIOS defaults for all appropriate items in the whole setup utility. Press the Y key and then the ENTER key to install the defaults. Press the N key and then ENTER to not install the defaults. The BIOS defaults do not place great demands on the system and are generally very stable. If your system is not running correctly, you might like to install the BIOS defaults as a first step in getting your system working properly again. If you only want to install BIOS defaults for a specific option, select and display the option, and press the F6 key.

## Load Optimum Settings Option

This option displays a dialog box which allows you install optimum defaults for all appropriate items in the whole setup utility. Press the Y key and then the ENTER key to install the defaults. Press the N key and then ENTER to not install the defaults. The optimum defaults can place some demands on the system that are greater than the performance level of the components, such as the processor and the memory. You could cause fatal errors or recurring instability if you install the optimum defaults when your hardware does not support it. If you only want to install optimum settings defaults for a specific option, select and display that option, and then press the F7 key.

## Integrated Peripherals Option

This option displays a list of items which defines the operation of some peripheral items on the system's input/output ports.

ROM PCI/ISA BIOS (P6BX-A+) INTEGRATED PERIPHERALS AWARD SOFTWARE, INC.			
IDE HDD Block Mode	: Enabled	UART Mode Select	: Normal
On-Chip Primary PCI IDE	: Enabled		
On-Chip Secondary PCI IDE	: Enabled	Onboard Parallel Port	: 378/IRQ7
IDE Primary Master PIO	: Auto	Parallel Port Mode	: SPP
IDE Primary Slave PIO	: Auto		
IDE Secondary Master PIO	: Auto		
IDE Secondary Slave PIO	: Auto		
IDE Primary Master UDMA	: Auto		
IDE Primary Slave UDMA	: Auto		
IDE Secondary Master UDMA	: Auto		
IDE Secondary Slave UDMA	: Auto		
USB Keyboard Support	: Disabled		
POWER ON Function	: Hot Key		
Hot Key Power ON	: Ctrl-F12	ESC : Quit	↑↓←→ : Select Item
KBC input clock	: 8 MHz	F1 : Help	PU/PD/+/- : Modify
Onboard FDC Controller	: Enabled	F5 : Old Values (Shift)	F2 : Color
Onboard Serial Port 1	: 3F8/IRQ4	F6 : Load BIOS Defaults	
Onboard Serial Port 2	: 2F8/IRQ3	F7 : Load Optimum Settings	

### *IDE HDD Block Mode*

### *Default: Enabled*

Most IDE hard disks can deliver better performance if they use block mode transfer. If your hard disk(s) supports block mode transfer (check the drive documentation) set this item to Enabled to improve performance.

***On-Chip Primary PCI IDE******Default: Enabled***

This item enables or disables the primary IDE channel that is built into this mainboard. When the channel is enabled the items Master/Slave PIO Mode/UDMA appear. As a default, the PIO mode item is set to Auto and the UDMA item is set to Auto. The system will then automatically detect if a device on the channel requires PIO mode, or Ultra-DMA.

***On-Chip Secondary PCI IDE******Default: Enabled***

This item enables or disables the secondary IDE channel that is built into this mainboard. When the channel is enabled the items Master/Slave PIO Mode/UDMA appear. As a default, the PIO mode item is set to Auto and the UDMA item is set to Auto. The system will then automatically detect if a device on the channel requires PIO mode, or Ultra-DMA.

***Note:*** You may have to install the Ultra-DMA drivers that are supplied with this mainboard in order to use a UDMA device.

***USB Keyboard Support******Default: Disabled***

You must enable this item if you are using a keyboard which uses the USB interface.

***Power On Function******Default: Hot KEY***

This item allows you to power on the system by pressing hot-keys, or typing in a password. If you set this item to Hot Key, another item appears, *Hot Key Power On*. Use this item to choose which hot keys are installed. If you choose Password, another item appears, *KB Power On Password*. Use this item to install a power on password.

***KBC Input Clock******Default: 8 MHz***

This item sets the clock for the keyboard. We recommend that you leave this item at the default value 8 MHz.

***Onboard FDC Controller******Default: Enabled***

This item enables or disables the floppy diskette drive controller built into this mainboard.

***Onboard Serial Port 1******Default: 3F8/IRQ4***

This item lets you disable the built-in serial port 1, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ).

***Onboard Serial Port 2******Default: 2F8/IRQ3***

This item lets you disable the built-in serial port 2, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ). If you have installed an optional IR port, you should disable the second serial port, and configure the IR port with the following item *UART2 Mode Select*.

### ***UART2 Mode Select***

***Default: Normal***

This item defines the operation of serial port 2. In the default Normal setting, serial port 2 is assigned to the connector on the mainboard. If you have installed an optional infrared port, you must change the setting of this item to either IrDA, or ASKIR. These settings will disable the mainboard serial port connector and assign serial port 2 to the infrared device. IRDA SIR prepares the port to receive infrared communications using the IrDA serial infrared standard. ASKIR prepares the port to receive infrared communications using the ASK serial infrared standard. The ASK standard is supported by many devices made by the Sharp Corp. If you have selected IrDA or ASKIR, two further items appear which let you set the parameters of the IR port. Use the documentation of the IR port to install the correct settings for these items.

### ***Onboard Parallel Port***

***Default: 378/IRQ7***

This item lets you disable the built-in parallel port, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ).

### ***Parallel Port Mode***

***Default: SPP***

This item defines the operation of the parallel port. As a default it is set to SPP (standard parallel port). If you are connected to a parallel device that supports the higher-performance EPP (enhanced parallel port) or the ECP (extended capabilities port) make the appropriate changes to this item, and to the extra items, EPP and ECP configuration, that will appear.

## **PC Health Monitor Option**

You can only use this option if your mainboard is has the optional W83871D sensor chip. This chip monitors voltage levels and temperatures in the system.

ROM PCI/ISA BIOS (P6BX-A+)  
PC HEALTH MONITOR  
AWARD SOFTWARE, INC.

**** Warning Messages ****		**** PC Status ****	
CPU Core Voltage	: Enabled	CPU Core Voltage	:
Vcc3 Voltage (3.3V)	: Enabled	Vcc3 Voltage (3.3V)	:
Vcc2 Voltage (2.5V)	: Enabled	Vcc2 Voltage (2.5V)	:
Vcc Voltage (5V)	: Enabled	Vcc Voltage (5V)	:
+12V Voltage	: Enabled	+12V Voltage	:
-12V Voltage	: Enabled	-12V Voltage	:
-5V Voltage	: Enabled	-5V Voltage	:
CPU Fan	: Disabled	CPU Fan	:
Power Fan	: Disabled	Power Fan	:
Chassis Fan	: Disabled	Chassis Fan	:
CPU Temperature	: Enabled	CPU Temperature	:
Mainboard Temperature	: Enabled	Mainboard Temperature	:
Chassis	: Enabled	Chassis	:
		ESC : Quit	F1+< : Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift)F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Optimum Settings	

### ***Warning Messages***

The warning messages on the left side of the screen lists the items that can be monitored. If you enable any of these items, the system will generate a warning

message at start up time, if the real temperature or voltage measurement exceeds the normal parameters.

#### ***PC Status***

The PC status list on the right side of the screen lists the actual temperature or voltage measurement of the items that are being monitored.

## **Supervisor Password and User Password**

---

These two items can be used to install a Supervisor Password and a User Password. If you log on as Supervisor, you have full access to the system, and you can restrict the permissions granted to someone who logs on as User. For example, a Supervisor can restrict a User from entering the setup utility.

To install a Supervisor or User Password, follow these steps:

1. Highlight the item Supervisor/User password on the main menu and press ENTER.
2. The password dialog box will appear.
3. If you are installing a new password, carefully type in the password. You cannot use more than 8 characters or numbers. The password will differentiate between upper case and lower characters. Press ENTER after you have typed in the password. If you are deleting a password that is already installed just press ENTER when the password dialog box appears.
4. The system will ask you to confirm the new password by asking you to type it in a second time. Carefully type the password again and press ENTER, or just press ENTER if you are deleting a password that is already installed.
5. If you typed the password correctly, the password will be installed.

## **IDE HDD Auto Detection Option**

---

This item automatically detects and installs any hard disk drives installed on the primary and secondary IDE channel. Most modern drives can be detected. If you are using a very old drive that can't be detected, you can install it manually using the Standard CMOS Setup option.

Setup will check for two devices on the primary IDE channel and then two devices on the secondary IDE channel. At each device, the system will flash an N in the dialog box. Press Enter to skip the device and proceed to the next device. Press Y, then Enter to tell the system to auto-detect the device.

## **Save And Exit Setup Option**

---

Highlight this item and press ENTER to save the changes that you have made in the setup utility and exit the setup program. When the *Save and Exit* dialog box appears, press Y to save and exit, or press N to return to the setup main menu.



## **Exit Without Saving Option**

---

Highlight this item and press ENTER to discard any changes that you have made in the setup utility and exit the setup program. When the *Exit Without Saving* dialog box appears, press Y to discard changes and exit, or press N to return to the setup main menu.