American Megatrends, Inc.
Addendum to *Super Voyager PCI*
Motherboard User's Guide
March 4, 1994

Pages 61 - 89   New Optimal

The AMIBIOS on the American Megatrends Super Voyager PCI ISA motherboard changed since the *Super Voyager PCI Motherboard User's Guide* was printed.

The AMIBIOS has been replaced by the new American Megatrends WinBIOS. WinBIOS includes a new Optimal utility that has a graphical user interface that can be accessed via either a mouse or the keyboard.

Replace pages 61 through 102 with the following:

Chapter 6

WinBIOS

In ISA and EISA computers, the system parameters (such as amount of memory, type of disk drives and video displays, and many other elements) are stored in CMOS RAM. Unlike the DRAM (dynamic random access memory) that is used for standard system memory, CMOS RAM requires very little power. When the computer is turned off, a back-up battery provides power to CMOS RAM, which retains the system parameters. Every time the computer is powered-on, the computer is configured with the values stored in CMOS RAM by the system BIOS, which gains control when the computer is powered on.

The system parameters are configured by a system Optimal utility. Historically, Optimal utilities have been character-based, required keyboard input, and has user interfaces that were not very intuitive.

A New Type of System Optimal Utility

American Megatrends has now made available a new type of system Optimal utility. WinBIOS has a graphical user interface that permits mouse access, and is so compact that it can reside on the same ROM as the system BIOS. The system configuration parameters are set via WinBIOS. Since WinBIOS resides in the ROM BIOS, it is available each time the computer is turned on.

Starting WinBIOS

As POST executes, the following appears:

```
Hit <DEL> if you want to run SETUP
```

Press <Del> to run WinBIOS.

Using a Mouse with WinBIOS

WinBIOS has a built-in mouse driver and can be accessed by either a serial mouse or PS/2-style mouses. WinBIOS supports Microsoft-Compatible serial mouses and all PS/2-type mouses.

The mouse click functions are: single click to change or select both global and current fields and double clock to perform an operation in the selected field.

Using the Keyboard with WinBIOS

WinBIOS has a built-in keyboard driver that uses simple keystroke combinations:

<Tab>	Change or select a global field.
→, ←, ↑, ↓	Change or select the current field.
<Enter>	Performs an operation in the current field.
+	Increments a value.
-	Decrements a value.
<Esc>	Aborts any window function.
<PgUp>	Returns to the previous page.
<PgDn>	Advances to the next page.
<Home>	Returns to the beginning of the text.
<End>	Advances to the end of the text.
<Alt>	Used with certain key function, as in <Alt> <key>.
Alphabetic keys	A to Z are used in the Virtual Keyboard, and are not case-sensitive.
Numeric keys	0 to 9 are used in the Virtual Keyboard and Numeric Keypad.

WinBIOS

The WinBIOS main menu, shown below, is organized into four sections. Each of these sections corresponds to a section in this chapter.

Each section contains several icons. Clicking on each icon activates a specific AMIBIOS function. The WinBIOS icons and related functions are described in this chapter. The screen sections are:

Setup   described in Section 1 on page , this section has five icons that permit you to set system configuration options such as date, time, hard disk type, floppy type, and many others,

Utilities described in Section 2 beginning on page , has four icons that perform system functions,

Security described in Section 3 beginning on page , has two icons that control AMIBIOS security features, and

Default   described in Section4 beginning on page , this section has three icons that permit you to select a group of settings for all AMIBIOS WinBIOS options.

Section 1

WinBIOS Screens

Standard Setup

Choose the Standard Setup option the Setup section on the WinBIOS main menu (see the previous page) to run Standard Setup. The Standard Setup screen follows.

Date, Day and Time Configuration

Select the Standard option. Select the Date and Time icon. The current values for each category are displayed. Enter new values through the keyboard.

Standard Setup

Hard Disk C: Type
Hard Disk D: Type

Select one of these hard disk drive icons to configure the drive named in the option. A scrollable screen that lists all valid disk drive types is displayed. Select the correct type and press <Enter>. If the hard disk drive is an IDE drive, select Detect C: or Detect D: from the Utility section of the WinBIOS main menu to have AMIBIOS automatically detect the IDE drive parameters and report them to this screen.

Entering Drive Parameters

You can also enter the hard disk drive parameters. The drive parameters are:

Parameter	Description
Type	The number for a drive with certain identification parameters.
Cylinders	The number of cylinders in the disk drive.
Heads	The number of heads.
Write Precompensation	The size of a sector gets progressively smaller as the track diameter diminishes. Yet each sector must still hold 512 bytes. Write precompensation circuitry on the hard disk compensates for the physical difference in sector size by boosting the write current for sectors on inner tracks. This parameter is the track number where write precompensation begins.
Landing Zone	This number is the cylinder location where the heads will normally park when the system is shut down.
Sectors	The number of sectors per track. MFM drives have 17 sectors per track. RLL drives have 26 sectors per track. ESDI drives have 34 sectors per track. SCSI and IDE drive may have even more sectors per track.
Capacity	The formatted capacity of the drive is (Number of heads) x (Number of cylinders) x (Number of

	sectors per track) x (512 bytes per sector)

Standard Setup, Continued

Hard Disk Drive Types

Type	Cylinders	Heads	Write Precompensation	Landing Zone	Sectors	Capacity
1	306	4	128	305	17	10 MB
2	615	4	300	615	17	20 MB
3	615	6	300	615	17	31 MB
4	940	8	512	940	17	62 MB
5	940	6	512	940	17	47 MB
6	615	4	65535	615	17	20 MB
7	462	8	256	511	17	31 MB
8	733	5	65535	733	17	30 MB
9	900	15	65535	901	17	112 MB
10	820	3	65535	820	17	20 MB
11	855	5	65535	855	17	35 MB
12	855	7	65535	855	17	50 MB
13	306	8	128	319	17	20 MB
14	733	7	65535	733	17	43 MB
16	612	4	0	663	17	20 MB
17	977	5	300	977	17	41 MB
18	977	7	65535	977	17	57 MB
19	1024	7	512	1023	17	60 MB
20	733	5	300	732	17	30 MB
21	733	7	300	732	17	43 MB
22	733	5	300	733	17	30 MB
23	306	4	0	336	17	10 MB
24	925	7	0	925	17	54 MB
25	925	9	65535	925	17	69 MB
26	754	7	754	754	17	44 MB
27	754	11	65535	754	17	69 MB
28	699	7	256	699	17	41 MB
29	823	10	65535	823	17	68 MB
30	918	7	918	918	17	53 MB

31	1024	11	65535	1024	17	94 MB
32	1024	15	65535	1024	17	128 MB
33	1024	5	1024	1024	17	43 MB
34	612	2	128	612	17	10 MB
35	1024	9	65535	1024	17	77 MB
36	1024	8	512	1024	17	68 MB
37	615	8	128	615	17	41 MB
38	987	3	987	987	17	25 MB
39	987	7	987	987	17	57 MB
40	820	6	820	820	17	41 MB
41	977	5	977	977	17	41 MB
42	981	5	981	981	17	41 MB
43	830	7	512	830	17	48 MB
44	830	10	65535	830	17	69 MB
45	917	15	65535	918	17	114 MB
46	1224	15	65535	1223	17	152 MB
47	USER-DEFINED HARD DRIVE - Enter user-supplied parameters.					

Standard Setup, Continued

Using Auto Detect Hard Disk (Only for IDE Drives)

If you select Detect C: or Detect D: from the Utility section of the WinBIOS main menu, AMIBIOS automatically finds all IDE hard disk drive parameters. AMIBIOS places the hard disk drive parameters that it finds in the Drive C: Type or Drive D: Type fields in Standard Setup.

Floppy Drive A:
Floppy Drive B:

Move the cursor to these fields via ↑ and ↓ and select the floppy type. The settings are *360 KB 5¼ inch*, *1.2 MB 5¼ inch*, *720 KB 3½ inch*, *1.44 MB 3½ inch*, or *2.88 MB 3½ inch.*

Advanced Setup

Choose the Advanced Setup option from the Setup section on the WinBIOS main menu (see page) to run Advanced Setup. All Advanced Setup options are described on this page.

Typematic Rate (Chars/Sec)

Typematic Rate sets the rate at which characters on the screen repeat when a key is pressed and held down. The settings are *15, 20, 24,* or *30* characters per second. The Optimal default setting is *30* cps. The Fail-Safe default setting is *Disabled.*

System Keyboard

This option does not specify if a keyboard is attached to the computer. Rather, it specifies if error messages are displayed if a keyboard is not attached. This option permits you to configure workstations with no keyboards. The settings are *Absent* or *Present.* The Optimal and Fail-Safe default settings are *Present.*

Primary Display

Select this icon to configure the type of monitor attached to the computer. The settings are *Monochrome, CGA40x25, CGA80x25, VGA/EGA,* or *Disabled*. The Optimal and Fail-Safe default settings are *VGA/EGA*.

Mouse Support

When this option is enabled, AMIBIOS supports a PS/2-type mouse. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Disabled.*

Advanced Setup, Continued

Above 1 MB Memory Test

When this option is enabled, the BIOS memory test is performed on all system memory. When this option is disabled, the memory test is done only on the first 1 MB of system memory. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Disabled.*

Memory Test Tick Sound

This option enables (turns on) or disables (turns off) the ticking sound during the memory test. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Enabled.*

Parity Error Check

This option enables or disables parity error checking for system RAM. The settings are *Enabled* (all system RAM parity is checked) or *Disabled* (parity is checked only on the first 1 MB of system RAM). The Optimal default setting is *Enabled.* The Fail-Safe default setting is *Disabled.*

Hit <DEL> Message Display

Disabling this option prevents

```
        Hit <DEL> if you want to run Setup
```

from appearing when the system boots. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Enabled.*

Extended BIOS RAM Area

Specify in this option if the top 1 KB of the system programming area beginning at 639K or 0:300 in the BIOS area in low memory will be used to store hard disk information. The settings are *Top 1K* or *0:300.* The Optimal and Fail-Safe default settings are *0:300.*

Wait for <F1> If Any Error

AMIBIOS POST runs system diagnostic tests that can generate a message followed by:

```
Press <F1> to continue
```

If this option is enabled, AMIBIOS waits for the end user to press <F1> before continuing. If this option is disabled, AMIBIOS continues the boot process without waiting for <F1> to be pressed. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Enabled.*

System Boot Up Num Lock

When *On,* this option turns off *Num Lock* when the system is powered on so the end user can use the arrow keys on both the numeric keypad and the keyboard. The settings are *On* or *Off.* The Optimal and Fail-Safe defaults are *On.*

Floppy Drive Seek At Boot

When this option is enabled, AMIBIOS performs a Seek command on floppy drive A: before booting the system. The settings are *Enabled* or *Disabled.* The Optimal default setting is *Disabled.* The Fail-Safe default setting is *Enabled.*

System Boot Up Sequence

This option sets the sequence of boot drives (either floppy drive A: or hard disk drive C:) that the AMIBIOS attempts to boot from after AMIBIOS POST completes. The settings are *C:,A:* or *A:,C:.* The Optimal and Fail-Safe default settings are *C:,A:.*

Cache Memory

This option enables internal and secondary cache memory. If *Both* is selected, internal cache and external cache memory is enabled. If *Internal* is chosen, only the internal cache memory in the Pentium CPU is enabled. If *Disabled* is chosen, all cache memory is disabled. The settings are *Internal, Disabled,* or *Both.*

External Cache Mode

This option selects the caching algorithm for L2 (external) secondary cache memory. The settings are *Wr-Thru* (write-through) or *Wr-Back* (write-back).

Password Checking

This option enables the password check option every time the system boots or the end user runs Setup. If *Always* is chosen, a user password prompt appears every time the computer is turned on. If *Setup* is chosen, the password prompt appears if WinBIOS is executed. See page for instructions on changing a password. The Optimal and Fail-Safe defaults are *Setup.*

ISA Video ROM at C000,32K

The settings are:

Absent no ISA adapter ROM at this address. The address can be assigned to a PCI adaptor ROM.

Present an ISA adapter ROM is at this address but the ISA adaptor ROM is not shadowed and this address cannot be used for a PCI adaptor ROM.

Shadow an ISA adapter ROM is at this address. The ISA adaptor ROM is shadowed and this address cannot be used for a PCI adaptor ROM.

Advanced Setup, Continued

ISA Adaptor ROM at C800,16K
ISA Adaptor ROM at CC00,16K
ISA Adaptor ROM at D000,16K
ISA Adaptor ROM at D400,16K
ISA Adaptor ROM at D800,16K
ISA Adaptor ROM at DC00,16K

These options enable shadowing of the contents of the ISA Adaptor ROM area named in the option title. The settings are *Absent (allocated to PCI), Present,* or *Shadow.* See the definitions of these settings on the previous page in the **ISA Video ROM at C000,32K** option description. The ROM areas set to *Absent* are allocated to PCI adapter cards.

Performance Rich IDE

When this option is enabled, the American Megatrends onboard PRIDE (Performance Rich IDE) circuitry is enabled. PRIDE improves IDE hard disk drive throughput. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe defaults are *Disabled.* This option must be set to *Disabled* if an offboard IDE Controller is used.

Perf.Rich IDE Transfer Mode

This option sets the data transfer mode for the Performance Rich IDE circuitry. The settings are *Auto, Mode 0, Mode 1,* or *Mode 2.* If *Auto* is selected, AMIBIOS automatically determines the optimal mode. The Optimal and Fail-Safe defaults are *Mode 0.*

IDE Block Mode Transfer

This option enables multiple sector reads and writes for IDE drives. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe defaults are *Disabled.*

Chipset Setup

Choose the Chipset Setup icon from the Setup section on the WinBIOS main menu (see page) to run Chipset Setup. All Chipset Setup options are described in this section.

Base Memory Size

This option sets the size of the base system memory. The settings are *512 KB* or *640 KB.* The Optimal and Fail-Safe default settings are *640 KB.*

DRAM Performance Mode

This option sets the DRAM system memory performance mode. The settings are *Standard* or *Enhanced.* If *Standard* is selected, DRAM operates in non-paged mode. If *Enhanced* is selected, DRAM operates in paged mode. The Optimal default is *Enhanced.* The Fail-Safe default is *Standard.*

ISA/DMA Master Performance

This option enables the ISA/DMA master performance mode feature. The settings are *Standard* or *Enhanced.* If *Enhanced* is selected, the ISA and DMA line buffers are enabled. The Optimal default setting is *Enhanced.* The Fail-Safe default setting is *Standard.*

ISA Performance Mode

This option enables the ISA performance mode feature. The settings are *Standard* or *Enhanced.* If *Enhanced* is selected, the ISA to PCI posted write buffer is enabled. The Optimal default setting is *Enhanced.* The Fail-Safe default setting is *Standard.*

Chipset Setup, Continued

ISA VGA Frame Buffer Size

This option must be set to *Enabled* if the VGA card installed in the system requires a frame buffer. This option sets the size of the VGA frame buffer. The settings are *Disabled, 1 MB, 2 MB,* or *4 MB.* The Optimal and Fail-Safe default settings are *Disabled.*

ISA VGA Frame Buf. Base Addr

This option automatically sets the base address (or starting point) of the ISA VGA frame buffer according to the size of the VGA frame buffer. The Optimal and Fail-Safe default settings are *N/A.*

IRQ 9

At least one IRQ must be free for each PCI Card in the system. If the PCI Card includes a multifunction device, at least two or more IRQs must be free. This option specifies if IRQ 9 is used on the ISA bus. If it is not used on the ISA bus, it may be allocated to the PCI bus. The settings are *ISA* or *PCI.* The Optimal and Fail-Safe default settings are *PCI.*

IRQ 10

At least one IRQ must be free for each PCI Card in the system. If the PCI Card includes a multifunction device, at least two or more IRQs must be free. This option specifies if IRQ 10 is used on the ISA bus. If it is not used on the ISA bus, it may be allocated to the PCI bus. The settings are *ISA* or *PCI.* The Optimal and Fail-Safe default settings are *PCI.*

Chipset Setup, Continued

IRQ 11

At least one IRQ must be free for each PCI Card in the system. If the PCI Card includes a multifunction device, at least two or more IRQs must be free. This option specifies if IRQ 11 is used on the ISA bus. If it is not used on the ISA bus, it may be allocated to the PCI bus. The settings are *ISA* or *PCI.* The Optimal and Fail-Safe default settings are *PCI.*

ISA IRQ 15

At least one IRQ must be free for each PCI Card in the system. If the PCI Card includes a multifunction device, at least two or more IRQs must be free. This option specifies if IRQ 15 is used on the ISA bus. If it is not used on the ISA bus, it may be allocated to the PCI bus. The settings are *ISA* or *PCI.* The Optimal and Fail-Safe default settings are *PCI.*

PCI VGA Palette Snooping

This option must be set to *Enabled* if any ISA adapter card installed in the system requires VGA palette snooping. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Disabled.*

PCI SCSI BIOS For OffBoardDevice

When this option is set to *Enabled,* the PCI SCSI BIOS on the motherboard can be used by offboard PCI adapter cards with an NCR 53C810 SCSI Controller and no BIOS support on the adapter card. The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Disabled.*

Chipset Setup, Continued

PCI IDE Card Present In

This option specifies if the PCI IDE controller occupies PCI Slot 2 (P18). PCI IDE adapter cards are only supported on PCI Slot 2 (P18). *This option must be set to Disabled if a PCI IDE adapter card is not used in PCI Slot 2.* ISA IDE adapter cards and onboard IDE will not work if this option is set to *Slot 2.*

The settings are *Absent* or *Slot 2.* The Optimal and Fail-Safe default settings are *Absent.*

PCI IDE IRQ Connected to

This option specifies the PCI interrupt used by the PCI IDE adapter card in PCI Slot 2 (P18). The settings are *INTA* or *INTC.* The Optimal and Fail-Safe default settings are *INTA.*

Power Management Setup

Choose the Power Mgmt Setup icon from the Setup section on the WinBIOS main menu (see page) to run Power Management Setup. All Power Management Setup options are described in this section.

CPU Low Power Mode

This option specifies the length of time of COM1, COM2, mouse, or keyboard inactivity that must expire before the CPU is placed in Low Power Mode by WinBIOS. The settings are *Disabled* and *1 Min* through *255 Min* in one minute intervals. The Optimal and Fail-Safe settings are *Disabled.*

Monitor Low Power Mode

This option specifies the length of time of keyboard, mouse, COM1, and COM2 inactivity that must expire before the motherboard drives the SYNC ENABLE, HSYNC, and VSYNC signals Low through open collector outputs. The 10 to 26-wire cable must be connected between P2 and the VGA adapter card feature connector. The signals on the feature connector must not be output only. Monitors that support the display power management specification (DPMS) will switch the power off looking at this condition, thereby saving power. The settings are *Disabled* or *1 Min* through *255 Min* in one minute intervals. The Optimal and Fail-Safe settings are *Disabled.*

Aux Power Off Timeout

This option specifies the length of time of keyboard, mouse, COM1, and COM2 inactivity that must expire before the auxiliary power is shut off. Power supplies that support this feature can attach its two-wire cable to P15 and shut off auxiliary power. The settings are *Disabled* and *1 Min* through *255 Min* in one minute intervals. The Optimal and Fail-Safe settings are *Disabled.* On P15, Pin 2 is Ground and Pin 1 is the signal.

Peripheral Setup

Choose the Peripheral Setup icon from the Setup section on the WinBIOS main menu (see page) to run Peripheral Setup. All Peripheral Setup options are described in this section.

Programming Mode

The settings are *Auto* or *Manual.* When set to *Auto,* the BIOS automatically detects all adapter cards installed in the system and configures the onboard I/O (serial ports, parallel ports, floppy controllers, and IDE controller) automatically. All other Peripheral Setup option settings are ignored. Any serial port, parallel port, floppy controller, or IDE (Integrated Drive Electronics) controller on an adapter card in an expansion slot is configured before onboard I/O. If *Auto* is selected, the BIOS also attempts to avoid IRQ conflicts.

If the offboard serial ports are configured to specific starting I/O ports via jumper settings, the BIOS will configure the onboard serial ports to avoid conflicts. For example, if the default serial port starting I/O ports (serial port1 - 3F8h, serial port2 - 2F8h, serial port3 - 3E8h, serial port4 - 2E8h) are used, the following configurations are possible:

If there are...	the ports are configured as...	and the two onboard serial ports are configured as...
two offboard serial ports	3E8h and 2F8h	3E8h and 2E8h
two offboard serial ports	3F8h and 3E8h	3F8h and Disabled
one offboard serial port	2F8h	3F8h and Disabled
one offboard serial port	3F8h	2F8h and Disabled

If *Manual* is selected, the settings chosen by the end user in Peripheral Setup apply. AMIBIOS reports any I/O conflicts after displaying the BIOS Configuration Summary Screen, but only if *Manual* is chosen. The Optimal and Fail-Safe default settings are *Auto.*

On-Board FDC

This option enables the use of the floppy drive controller on the motherboard (if installed). The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Disabled.*

On-Board IDE

This option enables the use of the IDE controller on the motherboard (if installed). The settings are *Enabled* or *Disabled.* The Optimal and Fail-Safe default settings are *Disabled.*

Serial Port1

IRQ4 is used for the first serial port (COM1). This option enables serial port 1 on the motherboard (if installed). The settings are *Disabled, 3F8h, 2F8h, 3E8h,* or *2E8h.* The Optimal and Fail-Safe default settings are *Disabled.*

Serial Port2

IRQ3 is used for the second serial port (COM2). This option enables serial port 2 on the motherboard, if installed. The settings are *Disabled, 3F8h, 2F8h, 3E8h,* or *2E8h.* The Optimal and Fail-Safe default settings are *Disabled.*

Parallel Port

IRQ7 is used for the parallel port (LPT1). The IRQ can be changed to IRQ5. This option enables the parallel port on the motherboard, if installed. The settings are *Disabled, 3BCh, 378h,* or *278h.* The Optimal and Fail-Safe default settings are *Disabled.*

Peripheral Setup, Continued

IRQ Active State

This option specifies if the parallel and serial port IRQs are active high or active low. The settings are *Low* or *High.* The Optimal and Fail-Safe default settings are *High.*

Parallel Port Mode

This option specifies the parallel port Mode. The settings are *Normal* or *Extended.* The Optimal and Fail-Safe default settings are *Normal.*

Section 2

Utility

The following icons appear in this section:

Detect C: if drive C: is an IDE drive, the hard disk drive parameters for drive C: are automatically detected and reported to the Hard Disk Drive C: screen in Standard Setup, so you can easily configure drive C:.

Detect D: if drive D: is an IDE drive, the hard disk drive parameters for drive D: are automatically detected and reported to the Hard Disk Drive D: screen in Standard Setup, so you can easily configure drive D:.

Color Set   sets the WinBIOS screen colors.

Language   permits you to select a foreign language-specific screen character set.

Section 3

Security

AMIBIOS Password Support

WinBIOS has an optional password feature. The system can be configured so that all users must enter a password every time the system boots or when WinBIOS is executed.

Setting a Password

The password check option is enabled in Advanced Setup (see page) by choosing either *Always* (the password prompt appears every time the system is powered on) or *Setup* (the password prompt appears only when WinBIOS is run). The password is stored in CMOS RAM.

The system asks for a password.

Enter a 1 – 6 character password. The password does not appear on the screen when typed. Make sure you write it down. If you forget it, you must drain CMOS RAM and reconfigure the system.

If You Do Not Want to Use a Password

Just press <Enter> when the password prompt appears.

Changing a Password

Select the *Password* icon from the Security section of the WinBIOS main menu. Enter the password and press <Enter>. The screen does not display the characters entered. After the new password is entered, retype the new password as prompted and press <Enter>.

If the password confirmation is incorrect, an error message appears. If the new password is entered without error, press <Esc> to return to the WinBIOS Main Menu. The password is stored in CMOS RAM after WinBIOS completes. The next time the system boots, you are prompted for the password if the password function is present and is enabled.

Remember the Password

Keep a record of the new password when the password is changed. If you forget the password, remove the computer cover, set switch 1-2 (the DIAG switch) to ON, power on the computer. AMIBIOS will erase the password.

Anti-Virus

When this icon is selected from the Security section of the WinBIOS main menu, AMIBIOS issues a warning when any program (or virus) issues a Disk Format command or attempts to write to the boot sector of the hard disk drive. The settings are *Enabled* or *Disabled.* If enabled, the following appears when a write is attempted to the boot sector. You may have to type *N* several times to prevent the boot sector write.

```
            Boot Sector Write!!!
    Possible VIRUS: Continue (Y/N)? _
```

The following is displayed after any attempt to format any cylinder, head, or sector of any hard disk drive via the BIOS INT 13 Hard Disk Drive Service:

```
            Format!!!
    Possible VIRUS: Continue (Y/N)? _
```

Section 4

Default

The icons in this section permit you to select a group of settings for all WinBIOS options. Not only can you use these icons to quickly set system configuration parameters, you can choose a group of settings that have a better chance of working when the system is having configuration-related problems.

Original

Choose the Original icon to return to the system configuration values present in WinBIOS when you first began this WinBIOS session.

Optimal

You can load the optimal default settings for WinBIOS Setup options by selecting the Optimal icon. The Optimal default settings are best-case values that should optimize system performance. If CMOS RAM is corrupted, the Optimal settings are loaded automatically.

Fail-Safe

You can load the Fail-Safe WinBIOS Setup option settings by selecting the Fail-Safe icon from the Default section of the WinBIOS Setup main menu.

The Fail-Safe settings provide far from optimal system performance, but are the most stable settings. Use this option as a diagnostic aid if the system is behaving erratically.