# System Utilities

## **BIOS Setup Utility**

The BIOS Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/ Output System).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 4 Troubleshooting when problem arises.

To activate the BIOS Utility, press **F2** during POST (when "Press <F2> to enter Setup" message is prompted on the bottom of screen).

Press **F2** to enter setup. The default parameter of F12 Boot Menu is set to "disabled". If you want to change boot device without entering BIOS Setup Utility, please set the parameter to "enabled".

Press <F12> during POST to enter multi-boot menu. In this menu, user can change boot device without entering BIOS SETUP Utility.

### Navigating the BIOS Utility

There are six menu options: Information, Main, Advanced, Security, Boot, and Exit.

Follow these instructions:

- To choose a menu, use the left and right arrow keys.
- To choose an item, use the up and down arrow keys.
- To change the value of a parameter, press F5 or F6.
- A plus sign (+) indicates the item has sub-items. Press Enter to expand this item.
- Press Esc while you are in any of the menu options to go to the Exit menu.
- In any menu, you can load default settings by pressing F9. You can also press F10 to save any changes made and exit the BIOS Setup Utility.
- **NOTE:** You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen. Help for parameters are found in the Item Specific Help part of the screen. Read this carefully when making changes to parameter values. **Please note that system information is subject to different models**.

## Information

The Information screen displays a summary of your computer hardware information.

	InsydeH20 Setup Utility Rev. 3.5						
Information	Main	Advanced	Security	Power	Boot	Exit	
CPU Type: CPU Speed:			Intel (R) Co 2.40GHz	re (TM)2	Duo CP	U @ 2.40GHz	
HDD Model N HDD Serial Nu ATAPI Model	HDD Model Name:Hitachi HTS543516K9SA00HDD Serial Number:071129BB0C02WGHDKKGCATAPI Model Name:Slimtype DVD A DS8A2S						
System BIOS VGA BIOS Ve Serial Numbe Asset Tag Nu	System BIOS Version: V0.15T2 VGA BIOS Version: Intel V1588 Serial Number: Asset Tag Number:						
Product Name: Aspire 4930 Manufacturer Name: Acer UUID: 864BD4BE-6B22-5843-38D2-001B38D6				-001B38D637FC			
F1 Help ESC Exit	$  \begin{array}{c} \uparrow \downarrow \text{ Sele} \\ \leftarrow \rightarrow \text{ Se} \end{array} $	ect Item lect Menu	F5/F6 Chan Enter Selec	ge Item t <b>⊳</b> Subme	F9 enu F1	Setup Default 0 Save and Exit	

NOTE: The system information is subject to different models.

Parameter	Description			
СРИ Туре	This field shows the CPU type and speed of the system.			
CPU Speed	This field shows the speed of the CPU.			
HDD Model Name	This field shows the model name of HDD installed on primary IDE master.			
HDD Serial Number	This field displays the serial number of HDD installed on primary IDE master.			
ATAPI Model Name	This field shows the model name of the Optical device installed in the system.			
System BIOS Version	Displays system BIOS version.			
VGA BIOS Version	This field displays the VGA firmware version of the system.			
Serial Number	This field displays the serial number of this unit.			
Asset Tag Number	This field displays the asset tag number of the system.			
Product Name	This field shows product name of the system.			
Manufacturer Name	This field displays the manufacturer of this system.			
UUID Number	Universally Unique Identifier (UUID) is an identifier standard used in software construction, standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE).			

## Main

The Main screen allows the user to set the system time and date as well as enable and disable boot option and recovery.

	Insyd	eH20 Setup	Utility		Rev. 3.5
Information Ma	ain Advanced	Security	Power	Boot	Exit
					Item Specific Help
System Time		[13:04:04]			This is the help for the
System Date		[04/21/2008	]		hour field. Valid range
					is from 0 to 23.
Total Memory		3017 MB			INCREASE/REDUCE : F5/F6
Video Memory		[32MB]			
Quick Boot		[Enabled]			
Network Boot		[Enabled]			
F12 Boot Menu		[Disabled]			
D2D Recovery		[Enabled]			
SATA Mode		[ACHI]			
F1 Help 1↓	Select Item	F5/F6 Chan	ge Item	<b>F</b> 9	Setup Default
ESC Exit	→ Select Menu	Enter Selec	t <b>&gt;</b> Subme	nu F1	0 Save and Exit

NOTE: The screen above is for your reference only. Actual values may differ.

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Format/Option
System Time	Sets the system time. The hours are displayed with 24-hour format.	Format: HH:MM:SS (hour:minute:second)
System Date	Sets the system date.	Format MM/DD/YYYY (month/day/year)
System Memory	This field reports the memory size of the system. Memory size is fixed to 3071 MB.	N/A
Video Memory	Shows the video memory size. VGA Memory size=32 MB	N/A
Quick Boot	Allows startup to skip certain tests while booting, decreasing the time needed to boot the system.	Option: <b>Enabled</b> or Disabled
Network Boot	Enables, disables the system boot from LAN (remote server).	Option: <b>Enabled</b> or Disabled
F12 Boot Menu	Enables, disables Boot Menu during POST.	Option: <b>Disabled</b> or Enabled
D2D Recovery	Enables, disables D2D Recovery function. The function allows the user to create a hidden partition on hard disc drive to store operation system and restore the system to factory defaults.	Option: <b>Enabled</b> or Disabled
SATA Mode	Control the mode in which the SATA controller should operate.	Option: <b>AHCI Mode</b> or IDE Mode

**NOTE:** The sub-items under each device will not be shown if the device control is set to disable or auto. This is because the user is not allowed to control the settings in these cases.

## Advanced

The Advanced screen allows the user to configure the various advanced BIOS options.

**IMPORTANT:** Making incorrect settings to items on these pages may cause the system to malfunction. Unless you have experience adjusting these items, we recommend that you leave these settings at the default values. If making settings to items on these pages causes your system to malfunction or prevents the system from booting, open BIOS and choose Load Optimal Defaults in the Exit menu to boot up normally.

InsydeH20 Setup Utility						. 3.5
Information M	ain Advanced	Security	Power	Boot	Exit	
					Item Specific Help	
▶Boot Configura	ation				Configures Boot	
Peripheral Cor	nfiguration				Settings.	
►IDE Configura	tion					
►Video Configu	ration					
►USB Configura	ation					
Chipset Config	juration					
►ACPI Table/Fe	eatures Control					
Express Card		[Disabled]				
►PCI Express R	Root Port 1					
►PCI Express R	Root Port 2					
► PCI Express F	Root Port 3					
► PCI Express F	Root Port 4					
► PCI Express F	Root Port 5					
►PCI Express F	Root Port 6					
►ASF Configuration						
F1 Help 1	Select Item	F5/F6 Char	nge Item	F9	Setup Default	
ESC Exit ←	$\rightarrow$ Select Menu	Enter Selec	ct <b>▶</b> Submei	nu F1	0 Save and Exit	

The table below describes the items, menus, and submenus in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Submenu Items
Boot Configuration	Enter the Boot Configuration menu.	Numlock     Zip Emulation Type
Peripheral Configuration	Enter the Peripheral Configuration menu.	<ul> <li>Serial Port A</li> <li>Infrared Port</li> <li>Azalia</li> <li>LAN</li> </ul>
IDE Configuration	Enter the IDE Configuration menu.	<ul> <li>IDE Controller</li> <li>HDC Configure as</li> <li>ACHI Option ROM Support</li> <li>SATA Port 0, 1, 4, and 5 Hotplug</li> <li>Channel 1 to 4 Master and Slave</li> </ul>
Video Configuration	Enter the Video Configuration menu.	<ul> <li>IGD Device2, Function1</li> <li>IGD Pre-allocate Memory</li> <li>IGD DVMT Size</li> <li>Clock Chip Intialize</li> <li>Enabled CK SSC</li> <li>IGD Boot Type</li> <li>IGD LCD Panel Type</li> <li>IGD TV</li> </ul>

Parameter	Description	Submenu Items
USB Configuration	Enter the USB Configuration menu.	<ul> <li>USB Driver Select</li> <li>EHCI 1 and 2</li> <li>UHCI 1 to 5</li> <li>Per-Port Control</li> </ul>
Chipset Configuration	Enter the Chipset Configuration menu.	<ul> <li>Port 80h Cycles</li> <li>DMI Link ASPM Control</li> <li>PCI Latency Timer</li> <li>VT-d</li> </ul>
ACPI Table/ Features Control	Enter the ACPI Table/Features Control menu.	<ul> <li>FACP C2 Latency Value</li> <li>FACP C3 Latency Value</li> <li>FACP RTC S4 Wakeup</li> <li>APIC IO APIC Mode</li> <li>HPET Support</li> <li>Base Address Select</li> </ul>
Express Card	<b>Disable</b> or Enable the Express Card solution for windows Standby and Hibernation.	N/A
PCI Express Root Port 1 to 6	Enter the PCI Port 1 to 6 configuration menus.	<ul> <li>VC1 Enable</li> <li>ASPM</li> <li>URR</li> <li>FER</li> <li>NFER</li> <li>CER</li> <li>CTO</li> <li>SEFE</li> <li>SENFE</li> <li>SECE</li> <li>PME Interrupt</li> <li>PME SCI</li> <li>Hot Plug SCI</li> </ul>
ASF Configuration	Enter the ASF Configuration menu.	<ul> <li>Mini Watchdog Timeout</li> <li>BIOS Boot Timeout</li> <li>OS Boot Timeout</li> <li>Power-on wait time</li> </ul>

## Security

The Security screen contains parameters that help safeguard and protect your computer from unauthorized use.

Ir	nsydeH20 Setu	p Utility		Rev. 3.5
Information Main Advanced	Security	Power	Boot	Exit
				Item Specific Help
Supervisor Password Is:	Clear			Install or Change the
User Password Is:	Clear			password and the length
HDD Password Is:	Clear			of password must be less
				than eight words.
Set Supervisor Password	[32MB]			
Set User Password				
Set Hdd Password				
Power on password	[Enabled]			
F1 Help	F5/F6 Cha	nge Item	<b>F</b> 9	Setup Default
ESC Exit $\longleftrightarrow$ Select Menu	Enter Sele	ct Submer	nu F1	0 Save and Exit

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
Supervisor Password Is	Shows the setting of the Supervisor password	Clear or Set
User Password Is	Shows the setting of the user password.	Clear or Set
HDD Password Is	Shows the setting of the hard disk password.	Clear or Set
Set Supervisor Password	Press Enter to set the supervisor password. When set, this password protects the BIOS Setup Utility from unauthorized access. The user can not either enter the Setup menu nor change the value of parameters.	
Set User Password	Press Enter to set the user password. When user password is set, this password protects the BIOS Setup Utility from unauthorized access. The user can enter Setup menu only and does not have right to change the value of parameters.	
Set HDD Password	Enter HDD Password.	
Password on Boot	Defines whether a password is required or not while the events defined in this group happened. The following sub-options are all requires the Supervisor password for changes and should be grayed out if the user password was used to enter setup.	<b>Disabled</b> or Enabled

**NOTE:** When you are prompted to enter a password, you have three tries before the system halts. Don't forget your password. If you forget your password, you may have to return your notebook computer to your dealer to reset it.

#### Setting a Password

Follow these steps as you set the user or the supervisor password:

 Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the Enter key. The Set Supervisor Password box appears:



 Type a password in the "Enter New Password" field. The password length can not exceeds 8 alphanumeric characters (A-Z, a-z, 0-9, not case sensitive). Retype the password in the "Confirm New Password" field.

IMPORTANT: Be very careful when typing your password because the characters do not appear on the screen.

- 3. Press Enter. After setting the password, the computer sets the User Password parameter to "Set".
- 4. If desired, you can opt to enable the Password on boot parameter.
- 5. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

#### Removing a Password

Follow these steps:

1. Use the w and y keys to highlight the Set Supervisor Password parameter and press the Enter key. The Set Password box appears:

2	Set Supervisor Passwo	rd	10
	Enter current password	[	]
	Enter New Password	[	]
	Confirm New Password	[	]

- 2. Type the current password in the Enter Current Password field and press Enter.
- 3. Press e twice without typing anything in the Enter New Password and Confirm New Password fields. The computer then sets the Supervisor Password parameter to "Clear".
- 4. When you have changed the settings, press u to save the changes and exit the BIOS Setup Utility.

#### Changing a Password

 Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the Enter key. The Set Password box appears.



- 2. Type the current password in the Enter Current Password field and press Enter.
- **3.** Type a password in the Enter New Password field. Retype the password in the Confirm New Password field.
- 4. Press Enter. After setting the password, the computer sets the User Password parameter to "Set".
- 5. If desired, you can enable the Password on boot parameter.
- 6. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

If the verification is OK, the screen will display as following.



The password setting is complete after the user presses Enter.

If the current password entered does not match the actual current password, the screen will show you the Setup Warning.

Setup Warning

Invalid password

Re-enter Password

[ continue]

If the new password and confirm new password strings do not match, the screen will display the following message.

Setup Warning

Password do not match

Re-enter Password

#### Power

The Power screen allows the user to configure various CPU and power management options and device wakeup behavior.

			Rev. 3.5			
Information	Main	Advanced	Security	Power	Boot	Exit
						Item Specific Help
► Advanced 0	CPU Cor	ntrol				These items control
► Platform Po	wer Ma	nagement				various CPU parameters.
ACPI S3:			[Enabled]			
Wake on PM	Ξ		[Enabled]			
Wake on Mod	lem Ring	9	[Enabled]			
Auto wake on	<b>S</b> 5		[Disabled]			
Quickly S4 Re	esume		[Disabled]			
F1 Help	↓ Sel	ect Item	F5/F6 Chai	nge Item	F9	Setup Default
ESC Exit	$\leftrightarrow$ Se	elect Menu	Enter Sele	ct <mark>▶</mark> Subm	enu F1	0 Save and Exit

The table below describes the items, menus, and submenus in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description		Submenu Items
Advanced CPU	Enter the Advanced CPU Control menu.	•	P-States (IST)
Control		٠	Boot performance mode
		•	Thermal Mode
		•	CMP Support
		•	Use XD capability
		•	VT Support
		•	C-States
		•	Enhanced C-States
		•	C-State Pop Up Mode
		•	C-State Pop Down Mode
		•	C4 Exit Timing Mode
		•	DeepC4
		•	Hard C4E
		•	Enable C6
		•	EMTTM
		•	Bi-directional PROCHOT#
		•	Dynamic FSB Switching
		•	Turbo Mode
		•	ACPI 3.0 T-States
		٠	DTS
		٠	DTS Calibration
		•	Thermal Trip Points Setting (Fan
			On Temp., Throttle On Temp.)

Parameter	Description	Submenu Items
Platform Power management	Enter the Platform Power Management menu.	<ul> <li>PCI Clock Run</li> <li>_CST - C4 Latency Value</li> <li>C4 on C3 - Deeper Sleep</li> </ul>
ACPI S3	Enable or Disable ACPI S1/S3 Sleep State	N/A
Wake on PME	<b>Enable</b> or Disable wake up when the system power is off and a PCI Power Management Enable wake up event occurs.	N/A
Wake on Modem Ring	<b>Enable</b> or Disable wake up when the system power is off and a modem attached to the serial port is ringing.	N/A
Auto wake on S5	<b>Disable</b> or Enable auto wake up by date and time or at a fixed time everyday.	N/A
Quickly S4 Resume	Disable or Enable optional quick boot from S4 Resume.	N/A

## Boot

This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices includes the USB diskette drives, the onboard hard disk drive and the DVD drive in the module bay.

InsydeH20 Setup Utility						Rev. 3.5		
Information	Main	Advanced	Security	Power	Boot	Exit		
						Item Specific Help		
Boot priority order:						Use < $\uparrow$ > or < $\downarrow$ > to select		
						a device, then press		
1. IDE0 : Hitachi HTS542516K9SA00						<f5> to move it down the</f5>		
2. IDE1 : Slimtype DVD A DS8A2S						list, or <f6> to move</f6>		
3. USB FDD :						it up the list. Press		
4. Network Boot : Realtek Boot Agent					<esc> to escape the menu</esc>			
5. USB HDD :								
6. USB CDRO	M :							
F1 Help	1↓ Sele	ect Item	F5/F6 Char	nge Item	F9	Setup Default		
ESC Exit	$\leftrightarrow \rightarrow Se$	elect Menu	Enter Seleo	ct <b>⊳</b> Subme	enu F1	0 Save and Exit		

## Exit

The Exit screen allows you to save or discard any changes you made and quit the BIOS Utility.

InsydeH20 Setup Utility						Rev. 3.5	
Information	Main	Advanced	Security	Power	Boot	Exit	
						Item Specific Help	
Exit Saving C	Changes					Exit System Setup a	ind
Exit Discarding Changes save your changes					0		
Load Setup E	Defaults					CMOS.	
<b>Discard Char</b>	nges						
Save Change	es						
F1 Help	T↓ Sele	ect Item	F5/F6 Char	nge Item	F9	Setup Default	
ESC Exit	$\leftarrow \rightarrow Se$	elect Menu	Enter Selec	ct►Subme	enu F1	0 Save and Exit	

The table below describes the parameters in this screen.

Parameter	Description
Exit Saving Changes	Exit System Setup and save your changes to CMOS.
Exit Discarding Changes	Exit utility without saving setup data to CMOS.
Load Setup Default	Load default values for all SETUP item.
Discard Changes	Load previous values from CMOS for all SETUP items.
Save Changes	Save Setup Data to CMOS.