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W468N Notebook User's Manual

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This manual guides you in setting up and using your new Notebook PC. Information in the manual has been carefully checked for accuracy and is subject to change without notice.

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## Safety Instructions

Use the following safety guidelines to help protect yourself and your computer.

### General Warnings

- Do not operate your portable computer for an extended period of time with the base resting directly on your body. With extended operation, heat can potentially build up in the base. Allowing sustained contact with the skin could cause discomfort or, eventually, a burn.
- Do not attempt to service the computer yourself. Always follow installation instructions closely.
- To avoid personal injury from electric shock or fire:
  - Completely power down the computer when replacing memory modules, cleaning the computer, its components, or chassis, or performing operations requiring similar steps. To do this, first turn the power off at the power switch, remove the battery, and then disconnect the AC adapter from the electrical outlet or from any other type of external power source, such as an external battery.
  - Do not operate the computer near water, for example, near a bathtub, kitchen sink or laundry tub, in a wet basement, by a swimming pool, or in the rain.
  - Do not connect or disconnect any cables or perform maintenance or reconfiguration of this product during an electrical storm.
  - Avoid using the wired modem or LAN during an electrical storm, as a remote risk of electric shock from lightning exists.
  - Do not push objects into the air vents or openings of your

computer or accessories. Doing so can short out interior components and may cause fire or electric shock.

- When installing memory modules, ground yourself by touching a grounded conductive surface, such as a device with a grounded plug. Avoid touching the pins and leads on the memory module or internal circuitry of the computer.
- When setting up the computer for work, place it on a level surface.
- Handle components with care. Hold a component such as a memory module by its edges, not its pins.
- If the battery pack leaks and the fluid get in your eyes, do not rub them. Instead, rinse your eyes with clean running water and immediately seek medical attention. Otherwise, eye injury may result.
- If acid leaking from the battery pack contacts your skin or clothing, immediately wash it away with running water. Otherwise, skin inflammation can occur.
- Operate the computer at the recommended temperature range of +5°C to +35°C (+41°F to +95°F). Store it at a temperature of -20°C to +60°C (+4°F to +140°F).
- Your computer shipped with plastic dummies installed in the PCMCIA or Express slot. Dummies protect unused slots from dust, metal object, or other particles. Save the dummy for use when no PCMCIA or Express Card is installed in the slot.

### Power Cord & Adapter Warnings

- See the installation instructions before connecting to the power supply.
- Power cord sets for use in other countries must meet the requirements of that country. Use the appropriate AC adapter and power cord for your locale.

- If you use an extension cord with your AC adapter, ensure that the total ampere rating of the products plugged into the extension cord does not exceed the ampere rating of the extension cable.
- When using your power cord, make sure to position it around objects so it will not be cut or punctured.
- When you disconnect a cable, pull on its connector on its strain relief loop, not on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pins. Also, before you connect a cable make sure both connectors are correctly oriented and aligned.
- Be sure that nothing rests on your AC adapter's power cable and that the cable is not located where it can be tripped over or stepped on.
- Use only the AC adapters that are approved for use with this computer. Use of another type of adapter may risk fire or explosion.
- Before you connect the computer to a power source, ensure that the voltage rating of the AC adapter matches that of the available power source.
  - 115 V/60 Hz in most of North and South America and some Far Eastern countries such as South Korea and Taiwan.
  - 100 V/50 Hz in eastern Japan and 100 V/60Hz in western Japan.
  - 230 V/50 Hz in most of Europe, the Middle East, and the Far East.
  - If you use an extension cable with your AC adapter, ensure that the total ampere rating of the products plugged in to the extension cable does not exceed the ampere rating of the extension cable.
- Place the AC adapter in a ventilated area, such as a desktop or

on the floor, when you use it to run the computer or to charge the battery. Do not cover the AC adapter with papers or other items that will reduce cooling; also, do not use the AC adapter while it is inside a carrying case.

- Disconnect power cords and cables by grasping the connector, not by pulling on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pins. Before you connect a cable, make sure both connectors are correctly aligned.
- To remove power from the computer, turn it off, remove the battery, and disconnect the AC adapter from the electrical outlet.

### ***Battery Pack Warnings***

- Do not carry a battery in your pocket, purse, or other container where metal objects (such as car keys) could short-circuit the battery terminals. The resulting excessive current flow can cause extremely high temperatures and may result in damage from burns.
- Danger of explosion may occur if battery is incorrectly replaced. Replace only with the same or equivalent type battery recommended by the manufacturer.
- Do not dispose of batteries in a fire. They may explode. Check with local authorities for disposal instructions.
- Do not use or leave the battery pack near a heat source. Heat can melt the insulation and damage other safety features, possibly leading it to leak acid, overheat, emit smoke, burst and/or ignite.
- Do not immerse the battery pack in water or allow it to get wet. Its protective features can be damaged. Abnormal chemical reactions may occur, possibly leading it to leak acid, overheat, emit smoke, burst and/or ignite.

- Do not crush, disassemble, puncture, or incinerate the short external contacts of battery pack.
- Do not connect the positive (+) and negative (-) terminals with a metal object such as wire. Short-circuiting may occur leading the battery pack to leak acid, overheat, emit smoke, burst and/or ignite.
- Do not use an apparently deformed or damaged battery pack, which may leak acid, overheat, emit smoke, burst and/or ignite.
- If the battery pack leaks, gives off a bad odor, generates heat, becomes discolored or deformed, or in any way appears abnormal during use, recharging or storage, immediately remove it from the computer or charger and stop using it.

### ***Battery Pack Disposal***

- Dispose of the lithium ion battery packs only at approved disposal sites. To locate an appropriate site, contact the solid waste disposal officials where you live or look for a rechargeable battery recycling website that lists disposal locations near you.
- Do not dispose of battery packs in a fire, throw them in a trash receptacle, put them in a recycling bin not intended for their disposal, or otherwise discard them in a manner that may result in their being hazardous to the environment.

### ***Internal Modem Warnings***

**CAUTION:** When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- The modem cable you connect to your computer should have a minimum wire size of 26 AWG (American wire gauge) and an UL-compliant RJ-11 modular plug.

- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone to report a gas leak in the vicinity of the leak.
- Do not plug a modem connector (RJ-11) into a network connection (RJ-45). This may damage the connector.

## Modem Regulatory Notice

### Federal Communication Commission PART 68 Warning

This equipment complies with Part 68 of the FCC rules. Located on the bottom side of the modem is a label that contains, among other information, the FCC Registration Number and Ringer Equipment Number (REN) for this equipment. Upon request, you must provide this information to your telephone company.

If your telephone equipment damages to the telephone network, the local telephone company may temporarily discontinue your service. If possible they will notify you in advance. But, if advance notice is not practical, you will be notified as soon as possible. You will also be informed of your right to file a complaint with the FCC.

Your telephone company may make changes to this facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If this equipment should fail to operate properly, disconnect the equipment from the phone line to determine if it is causing the problem. If the problem is with the equipment, discontinue use and contact your dealer or vendor.

### **TBR21**

This equipment has been approved [Council Decision 98/482/EC – “TBR21”] for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, in itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event

of problems, you should contact your equipment supplier in the first instance.

## Important Safety Instructions

Read these instructions carefully. Save these instructions for future reference.

1. Follow all warnings and instructions marked on the product.
2. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
3. Do not use this product near water.
4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
5. Slots and openings in the cabinet and the back or bottom are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, do not block or cover these openings. Avoid placing the product on a bed, sofa, rug, or similar surface to prevent blocking these openings. This product should never be placed near or over a radiator or a heat register, or in an enclosure unless proper ventilation is provided.
6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
7. Do not allow anything to rest on the power cord. Do not locate this product where people will step on the cord.
8. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere

- rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
  10. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltages or other risks. Refer all servicing to qualified service personnel.
  11. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    - a. When the power cord or plug is damaged or frayed.
    - b. If liquid is spilled into the product.
    - c. If the product was exposed to rain or water.
    - d. If the product does not operate normally when the operating instructions are followed, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
    - e. If the product has been dropped or the cabinet has been damaged.
    - f. If the product exhibits a distinct change in performance, indicating a need for service.

## **EMC Regulatory Information**

This product is designed and tested to comply with the following related EMC (Electromagnetic compatibility) standards.

## **CE Notice (European Union)**

### **EU Declaration of Conformity**

The product conforms to the following standards:

Supplementary Information: "The product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and/or the R&TTE Directive 1999/05/EEC."



This product is carrying the CE-Mark in accordance with the related European Directives.

## **BSMI Notice (Taiwan Only)**


Most Compal computer products are classified by the Bureau of Standards, Meteorology and Inspection (BSMI) as Class B information technology equipment (ITE).



R 31199

The symbol that marked on the product indicates it complies with the BSMI standard.

## BSMI 通告 (僅限於台灣地區)

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此設備經測試證明符合BSMI(經濟部標準檢驗局)之乙類數位裝置的限定規定。這些限制的目的是為了在住宅區安裝時，能防止有害的干擾，提供合理的保護。此設備會產生，使用並散發射頻能量；如果未遵照製造廠商的指導手冊來安裝和使用，可能會干擾無線電通訊。但是，這並不保證在個別的安装中不會產生干擾。您可以透過關閉和開啓此設備來判斷它是否會對廣播和電視收訊造成干擾；如果確實如此，我們建議您嘗試以下列一種或多種方法來排除干擾：

- 重新調整天線的接收方向或重新放置接收天線。
- 增加設備與接收器的距離。
- 將設備連接至不同的插座，使設備與接收器連接在不同的電路上。
- 請向經銷商或有經驗的無線電/電視技術人員查詢，以獲得幫助。

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## About this User's Manual

This user's manual is designed to let you easily find the information you need to get the most from your notebook.

- Introduces you to the features of your notebook.
- Gives you useful details on using your notebook.
- Tells you how to look after your notebook, whether at home or traveling.
- Talks about PCI Express Card peripherals and how to use them.
- Goes into more detail about power management and explains how to conserve power while on the move.
- Introduces you to BIOS, the nervous system of your computer, and how to change its fundamental settings.

There is no need to read the manual from the beginning to end. Simply find your way to the section that interests you using the table of contents, or browse through the manual.

You will come across the following icons in the manual:

ENGLISH

VIII



*Helpful pointers and tricks to get more from your notebook*



*To help you note and avoid possible damage to your notebook's hardware or software, or loss of your work*



*Points out possible damage to property, personal injury or death*

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# CONTENTS

## Chapter 1 Introducing Your Notebook

- 1.1 Front Side ..... 2**
  - 1.1.1 LCD Module Latch ..... 2
  - 1.1.2 Built-in Camera ..... 2
  - 1.1.3 Built-in Microphone ..... 2
  - 1.1.4 Display ..... 2
  - 1.1.5 Top Panel Buttons and LEDs ..... 2
  - 1.1.6 Keyboard ..... 3
  - 1.1.7 Finger Printer ..... 3
  - 1.1.8 Touch Pad ..... 4
  - 1.1.9 Touch Pad Buttons ..... 4
  - 1.1.10 Wireless Communication Switch ..... 4
  - 1.1.11 Device Status Indicators / Power Status ..... 4
- 1.2 Right Side ..... 5**
  - 1.2.1 Optical Media Drive ..... 5
  - 1.2.2 USB Ports ..... 5
  - 1.2.3 AC Adapter Connector ..... 5
- 1.3 Left Side ..... 6**
  - 1.3.1 VGA Port ..... 6
  - 1.3.2 LAN Jack ..... 6
  - 1.3.3 Modem Jack ..... 6
  - 1.3.4 S-Video out Port ..... 6
  - 1.3.5 High Power USB Port ..... 6
  - 1.3.6 IEEE 1394 Port ..... 7
  - 1.3.7 New Card Slot (For PCI Express Card) ..... 7

- 1.3.8 Multiple Digital Media Card Slot ..... 7
- 1.3.9 Audio Ports ..... 7
- 1.4 Rear Side ..... 7**
- 1.5 Bottom Side ..... 8**
  - 1.5.1 Battery Pack ..... 8
  - 1.5.2 Battery Release Latch ..... 8

## Chapter 2 Operating Your Notebook

- 2.1 Keyboard and Touch Pad ..... 10**
  - 2.1.1 Numeric Keypad ..... 10
  - 2.1.2 Keyboard Shortcuts ..... 10
  - 2.1.3 Windows Logo Key Functions ..... 11
  - 2.1.4 Touch Pad ..... 12
  - 2.1.5 Customizing the Touch Pad ..... 12
  - 2.1.6 Finger Printer ..... 12

## Chapter 3 Caring for Your Notebook

- 3.1 Caring for Your Notebook ..... 15**
  - 3.1.1 Cleaning Your Notebook and Keyboard ..... 15
  - 3.1.2 Cleaning the Display ..... 15
  - 3.1.3 Cleaning the Touch Pad ..... 15
  - 3.1.4 Cleaning the CD/DVD Drive ..... 15
  - 3.1.5 Precautions ..... 16
- 3.2 Traveling ..... 16**
  - 3.2.1 Identifying Your Notebook ..... 16
  - 3.2.2 Packing Your Notebook ..... 16
  - 3.2.3 Setting a Password ..... 17

3.2.4	Travel Tips .....	17
3.2.5	If Your Notebook Is Lost or Stolen .....	17

## Chapter 4 Peripherals

<b>4.1</b>	<b>PCI Express Cards .....</b>	<b>19</b>
4.1.1	PCI Express Card Types .....	19
4.1.2	Installing a PCI Express Card .....	19
4.1.3	Removing a PCI Express Card .....	20

## 4.2 Adding and Removing SD/MMC/MS Cards..... 20

## Chapter 5 The Battery

<b>5.1</b>	<b>Battery .....</b>	<b>22</b>
5.1.1	Battery Performance .....	22
5.1.2	Checking the Battery Charge .....	22
5.1.3	Power Meter .....	22
5.1.4	Low-Battery Warning .....	23
5.1.5	Charging the Battery .....	23
5.1.6	Removing the Battery .....	23
5.1.7	Installing a Battery .....	23
5.1.8	Storing a Battery .....	24
5.1.9	Working With Extra Battery Packs .....	24
5.1.10	Maximizing Battery Life .....	24

## Chapter 6 The BIOS Setup Program

<b>6.1</b>	<b>Introduction .....</b>	<b>26</b>
<b>6.2</b>	<b>Navigating through the BIOS Setup Program .....</b>	<b>26</b>
6.2.1	Accessing the BIOS Setup Program .....	27
6.2.2	Launching Submenus .....	28

6.2.3	Saving Changes and Exiting the Setup Program.....	28
-------	---	----

<b>6.3</b>	<b>The Main Menu .....</b>	<b>28</b>
<b>6.4</b>	<b>The Advanced Menu .....</b>	<b>29</b>
<b>6.5</b>	<b>The Security Menu .....</b>	<b>30</b>
<b>6.6</b>	<b>The TPM State menu (*).....</b>	<b>33</b>
<b>6.7</b>	<b>The Boot Menu .....</b>	<b>33</b>
<b>6.8</b>	<b>The Exit Menu .....</b>	<b>34</b>

## Chapter 7 Software Description & Button Definition

<b>7.1</b>	<b>Q-Charging Button with Smart Battery Software.....</b>	<b>36</b>
7.1.1	Installing the Software.....	36
7.1.2	Using the Software.....	36
7.1.3	Using the Q-Charging Button.....	36
<b>7.2</b>	<b>Using the Power USB Button.....</b>	<b>37</b>

## Appendix A Specifications

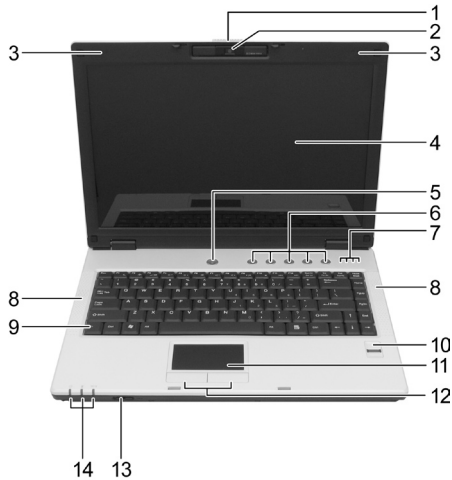
## Appendix B Recovery Update Notices

## Appendix C Service Center

# Chapter 1 Introducing Your Notebook

## 1.1 Front Side

The following picture shows the front side of the W468N notebook.



1	LCD Module Latch	8	Speakers
2	Built-in Camera	9	Keyboard
3	Built-in Microphone	10	Finger Printer
4	Display	11	Touch Pad
5	Power Button	12	Touch Pad Buttons
6	Easy Buttons	13	Wireless Communication Switch
7	Keyboard Status Lights	14	Device Status Indicators / Power Status

### 1.1.1 LCD Module Latch

The LCD Module Latch secures the display case to your notebook. To open the display, slide the latch to the right and lift the display. When you close the display, the latch secures it automatically.

### 1.1.2 Built-in Camera

The built-in camera features a 2.0 mega pixel CMOS web camera.

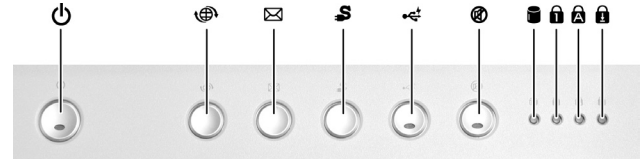
### 1.1.3 Built-in Microphone

The built-in microphone allows you to communicate without connecting an external microphone.

### 1.1.4 Display

Your display is either a 14.1" COLOR TFT/WXGA LCD.

### 1.1.5 Top Panel Buttons and LEDs



#### - Power Button:



Press to turn your notebook on.



Windows XP or Vista, which comes preinstalled, goes into the shutdown sequence automatically if you press the power button while on.

In Windows XP, you can configure this in **Control Panel > Power Options > Advanced**.

In Windows Vista, you can configure this in Control Panel > System and Maintenance or Hardware and Sound > Power Options > Change plan settings > Change advanced power settings.

**- Easy Buttons:**

The notebook offers these buttons for quick launch programs and functions.

	Internet access button
	Email button
	Q-Charging button
	Power USB button
	Mute button

**- Keyboard Indicators:**

	HDD access indicator
	Num Lock On/Off indicator
	Caps Lock On/Off indicator
	Scroll Lock On/Off indicator

**1.1.6 Keyboard**

The keyboard includes a numeric keypad and the Microsoft® Windows® logo key.

See **2.1 Keyboard and Touch Pad** for details on using keyboard shortcuts.

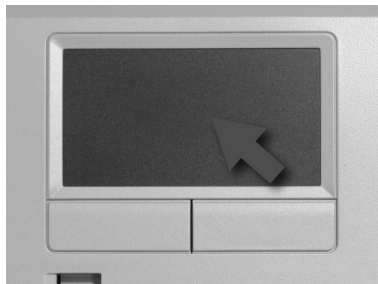
**1.1.7 Finger Printer**

The finger printer allows you to enroll the computer with registered fingerprint. This recognition device helps prevent unauthorized access by others. For more information, see **2.1.6 Finger Printer**.



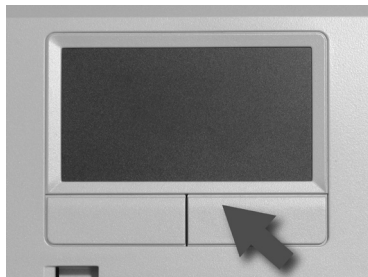
### 1.1.8 Touch Pad

The touch pad works as a desktop mouse. For more information, see [2.1 Keyboard and Touch Pad](#).



### 1.1.9 Touch Pad Buttons

The left and right touch pad buttons work as the left/right buttons on a standard mouse.

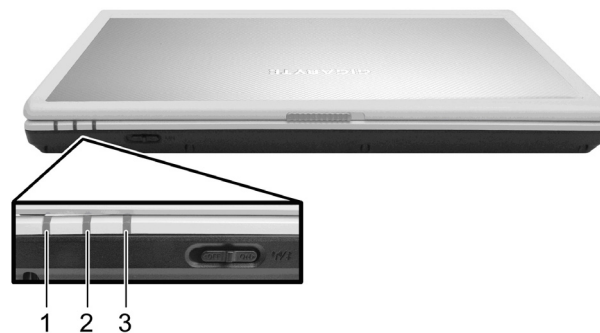


### 1.1.10 Wireless Communication Switch

Turns the wireless communication function on or off. The wireless communication LED on the front side of notebook lights when the function is activated.

### 1.1.11 Device Status Indicators / Power Status

The LEDs on the front side of notebook indicate the device and power status.



1	Power On (Blue)
2	Battery Charge (Blue/Amber)
3	Wireless (Blue) / Bluetooth (Amber)

The flashing Power On LED indicates the notebook is in standby mode.

For detailed battery status, see [5.1 Battery](#).

## 1.2 Right Side

The following picture shows the right side of the W468N notebook.



1	Optical Media Drive
2	USB Ports
3	AC Adapter Connector

### 1.2.1 Optical Media Drive

The optical media drive provides a means for you to import/export data and small files into/from your computer. Depending on the configuration of your computer, you may either be able to record CDs or play DVDs.

### 1.2.2 USB Ports



Use this port to connect a USB device, such as a mouse, full-size external keyboard, or printer, to the computer.

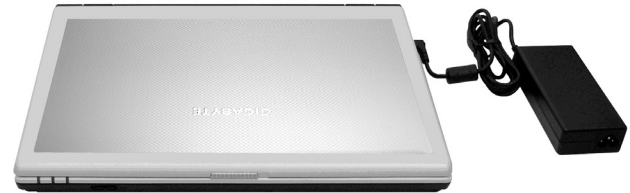


USB is a peripheral expansion standard that supports a data-transfer rate up to 480 Mbps. USB peripherals have a single standard for cables and connectors. You can install and remove USB devices while the computer is on. This is known as "hot swapping".

### 1.2.3 AC Adapter Connector



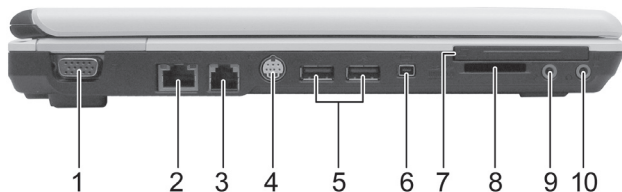
The AC adapter connector allows you to connect an AC adapter when your notebook is switched on or off.



While the AC adapter works with electrical outlets worldwide, power connectors and power strips vary from country to country. Ensure you use compatible cable and correctly connect the cable to the power strip or electrical outlet. Failure to do so may cause fire or damage to equipment.

## 1.3 Left Side

The following picture shows the left side of the W468N notebook.



1	VGA Port
2	LAN Jack
3	Modem Jack
4	S-Video out Port
5	High Power USB Ports
6	IEEE 1394 Port
7	New Card Slot
8	Multiple Digital Media Slot
9	Microphone Jack
10	Headphone Jack

### 1.3.1 VGA Port



Use this port to connect an external monitor to your computer. See **1.1.4 Display**.

### 1.3.2 LAN Jack



The RJ-45 network jack allows you to connect your notebook to a local area network (LAN).



*Be careful not to plug the telephone line into the slightly larger network connector.*

### 1.3.3 Modem Jack



The modem jack allows you to connect the notebook to a telephone line with a standard RJ-11 connector.

### 1.3.4 S-Video out Port



The S-Video out port allows you to connect an external display device, like TV set or device which has S-video port, to the notebook.

### 1.3.5 High Power USB Port



High-power USB ports can provide power for devices that draw more than 100mA from the bus line, such as cameras and external hard disks.



### 1.3.6 IEEE 1394 Port



The IEEE 1394 port allows you to connect devices that utilize IEEE 1394 technology to your computer. This technology is widely used in consumer products such as digital cameras.




### 1.3.7 New Card Slot (For PCI Express Card)

Supports 54mm type PCI Express Card. For more information, see **4.1 PCI Express Cards**.

### 1.3.8 Multiple Digital Media Card Slot

Supports one SD/MMC/MS card, which is used in digital still camera and various forms of portable information equipment.

### 1.3.9 Audio Ports

You can connect a headphone or an external speaker to the  port and a microphone to the  port. The built-in speakers are disabled when a device is connected to the  port.



## 1.4 Rear Side

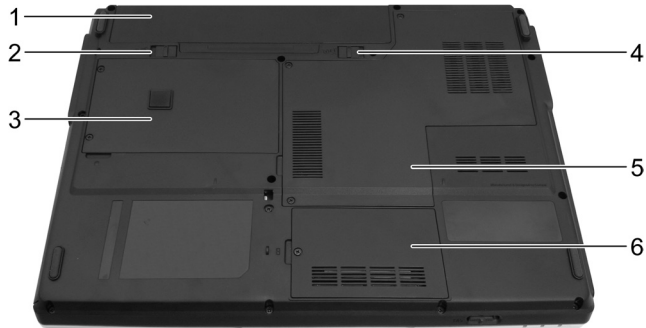
The following picture shows the rear side of the W468N notebook.



Kensington Lock

## 1.5 Bottom Side

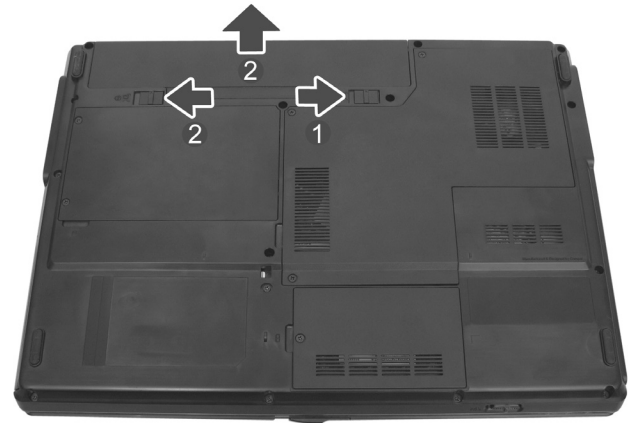
The following picture shows the bottom side of the W468N notebook.



1	Battery Pack
2	Battery Release Latch
3	HDD Cover
4	Battery Lock Switch
5	Thermal Cover
6	Memory Module Cover

### 1.5.1 Battery Pack

With a charged battery pack installed, you can use your notebook without connecting it to an electrical outlet. For more details, see **5.1 Battery**.



#### To remove the Battery Pack:

1. Move the Battery Lock Switch to the right (Unlock position).
2. Slide the Battery Release Latch to the left and gently pry the Battery Pack from the computer chassis.

### 1.5.2 Battery Release Latch

The Battery Release Latch secures the battery pack. To release, slide the latch and then remove the battery pack from the bay.


## Chapter 2 Operating Your Notebook


## 2.1 Keyboard and Touch Pad


- Numeric Keypad
- Keyboard Shortcuts
- Windows Logo Key Functions
- Touch Pad
- Customizing the Touch Pad
- Finger Printer


### 2.1.1 Numeric Keypad

Keypad numbers and symbols are marked in blue on the lower right edge of the keypad keys.













To enable the numeric keypad, press .


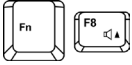





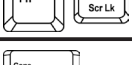

The  indicator will light when the numeric lock is on.

To disable the numeric keypad, press  again.




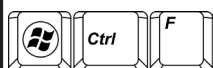

To use the primary function of a dual-function key when the numeric keypad is enabled, press  and the desired key.

### 2.1.2 Keyboard Shortcuts

 	Sleep
 	Wireless/Bluetooth On/Off (To enable this function, you need to install Wireless Select Switch.)
 	Switches Display Mode (LCD > CRT > TV > LCD + CRT Simultaneous > LCD+TV Simultaneous). Switches the video image to the next display or both displays simultaneously.
 	Brightness Down
 	Brightness Up
 	Mute

	Audio Volume Down
	Audio Volume Up
	Play/Pause
	Stop
	Fast Rewind
	Fast Forward
	Number Lock
	Scroll Lock
	Caps Lock

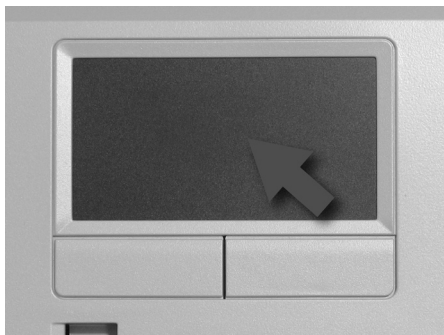
### 2.1.3 Windows Logo Key Functions

	Opens Windows Explorer
	Opens the Run dialog box
	Opens the Search Results dialog box
	Opens the Search Results - Computers dialog box (when your notebook is connected to a network)
	Opens the System Properties dialog box

To adjust keyboard operation, including character repeat rate, in the **Control Panel** click **Hardware and Sound > Keyboard**.

## 2.1.4 Touch Pad

The Touch Pad responds to the movements and pressure of your finger, allowing you to move the cursor around the screen, in the same way you would with a mouse.



Place your fingers on the keyboard in the normal typing position.

You can use the Touch Pad by moving either your right or left thumb off the space bar and on to the Touch Pad.

Gently move your thumb across the Touch Pad in the direction you want the cursor to move.

The Touch Pad buttons have the same function as mouse buttons. Clicking these buttons makes selections, drags objects, or performs a variety of other functions depending on the software. To select an object, first move the pointer over the object you want to select, and then press the left button one time and release it. The functionality

of these buttons depends on your software.

Double-clicking is a common technique for selecting objects or launching programs.

You may also select object or execute applications from icons by double tapping. This is similar to double-clicking; instead of pressing the Touch Pad buttons, you tap the Touch Pad itself.

### 2.1.5 Customizing the Touch Pad

To adjust Touch Pad settings, use the Mouse Properties window, which you can open by clicking **Control Panel > Printers and Other Hardware > Mouse**.

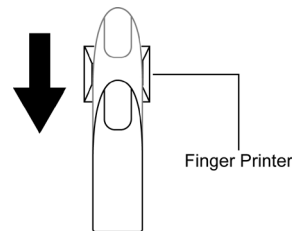
Select the desired settings and click **Apply**.

Click **OK** to save the settings and close the window.

### 2.1.6 Finger Printer

The finger printer lets you log on to your computer instead of inputting passwords from the keyboard.

To raise the recognition success rate, the following illustrations show the correct way to swipe your finger over the finger printer.



Align your fingertip with the finger printer as shown in the drawing and swipe.

To reduce the damage to the finger printer and fingerprint recognition problems, follow these guidelines when using the finger printer.

- Do not scratch or poke the finger printer with your nails or any hard or sharp objects.
- Do not press the finger printer strongly.
- Do not touch the finger printer with a wet finger or any wet objects. Keep finger printer surface dry and free of water vapor.
- Do not touch the finger printer with a soiled finger. Minute foreign particles on a soiled or dirty finger may scratch the finger printer.
- Do not paste stickers or write on the finger printer.
- Do not touch the sensor with a finger or any object with built-up static electricity.

### 2.1.6.1 Delete the Finger Printer Data

Saved fingerprint data is stored in the non-volatile memory inside the finger printer. Fingerprint data are recommended to delete before you hand over the computer the others, or dispose of it.

To delete the fingerprint data, do the following:

1. Click Start > All Programs > Protector Suite QL > Control.
2. The **Protector Suite Software** screen is displayed.
3. Click **Fingerprints > Delete**.
4. Click **Settings > Fingerprint Storage Inspector**.
5. The **Fingerprint Storage Inspector** screen is displayed. If other fingerprint data is still displayed on the list. Select all fingerprint data and click **remove**.
6. Check whether all fingerprint data was deleted on the **Fingerprint Storage Inspector** screen.

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## Chapter 3 Caring for Your Notebook



## 3.1 Caring for Your Notebook

- Cleaning Your Notebook and Keyboard
- Cleaning the Display
- Cleaning the Touch Pad
- Cleaning the CD/DVD Drive
- Precautions



*Never spray cleaning products directly onto your notebook's case or display. Only use products designed for cleaning computer displays.*

### 3.1.1 Cleaning Your Notebook and Keyboard

1. Shut your notebook down, turn it off and disconnect it from the electrical outlet and any external devices, such as a printer.
2. Remove the battery pack.
3. Use the brush attachment of your vacuum cleaner to gently remove dust from your notebook's openings and keyboard.
4. Use a slightly moistened soft, lint-free cloth to wipe your notebook and keyboard. Use only water or a recommended computer cleaner.

### 3.1.2 Cleaning the Display

1. Shut your notebook down, turn it off and disconnect it from the electrical outlet and any external devices, such as a printer.
2. Remove the battery pack.
3. Use a slightly moistened soft, lint-free cloth to wipe your notebook's display. Use only water or a recommended computer cleaner.

### 3.1.3 Cleaning the Touch Pad

1. Shut your notebook down, turn it off and disconnect from the electrical outlet and any external devices, such as a printer.
2. Remove the battery pack.
3. Use a slightly moistened soft, lint-free cloth to carefully wipe the Touch Pad, being careful not to allow any moisture into the gaps. Use only water or a recommended computer cleaner.

### 3.1.4 Cleaning the CD/DVD Drive



*Never touch the lens. Use only compressed air to clean the lens.*

If you experience problems playing CDs or DVDs, including skipping, clean the unlabelled side of the disc with a soft, lint-free cloth or using a commercial product.



### 3.1.5 Precautions

- Do not spill liquids on the keyboard. If liquid is spilled on the keyboard, turn your notebook off immediately. Leave off overnight to let it completely dry out before using it again.
- Do not turn off your notebook if a drive light indicates a drive is active. Turning off your notebook while it is reading from or writing to a disk may damage the disk, the drive, or both.
- Keep your notebook and disks away from objects that generate strong magnetic fields, such as stereo speakers. Information on disks is stored magnetically. Placing a magnet too close to a disk can erase important files.
- Scan all new files for viruses. This precaution is especially important for files you receive via email, disk or download from the Internet. You will need a special program to scan for viruses. For further information, talk to your computer dealer.
- To ensure HDD function and the integrity of the saved data, please follow the instructions below:
  - Protect the notebook from any impact when it is during operation.
  - Do not use your notebook during transportation such as in a car.
  - Do not put your notebook in a car that is directly exposed to the sun.
  - Do not place any heavy objects on the LCD monitor.
  - Use the AC adapter coming with the package instead of other adapters.

## 3.2 Traveling

- Identifying Your Notebook
- Packing Your Notebook
- Setting a Password
- Travel Tips
- If Your Notebook Is Lost or Stolen

### 3.2.1 Identifying Your Notebook

Attach a nametag or business card to your notebook, or use a permanent marker or stencil to write a unique identifying mark (such as your driver's license number) on the case.

Create a file on the Desktop called **if found**. Place information such as your name, address, and telephone number in this file.

Contact your credit card company, and ask if it offers coded identification tags.

### 3.2.2 Packing Your Notebook

Remove any external devices attached to the computer and store them in a safe place. Remove any cables attached to installed PC Cards, and remove any extended PC Cards.

Fully charge the main battery and any spare batteries you plan to carry with you.

Turn off the computer or put the computer into hibernate mode.

Disconnect the AC adapter.

Remove any extraneous items, such as paper clips, pens, and paper, from the keyboard and then close the display.

Pack your notebook and accessories in their carry case.

Avoid packing the computer with items such as shaving cream, colognes, perfumes, or food.

Protect the computer, the batteries, and the hard drive from hazards such as extreme temperatures, dirt, dust, liquids, or overexposure to sunlight.

Pack the computer so that it does not slide around in the trunk of your car or in an overhead storage compartment.



*When traveling by air, never check in your notebook as baggage.*

### 3.2.3 Setting a Password

To provide extra protection for your data and documents, it is advisable to set a password.

As your notebook is booting (starting up), press **F2** to view the **BIOS Setup Utility**. Use the right arrow key to highlight **Security**.

Use the down arrow key to select: **Set Supervisor Password**. Press **Enter**.

Type your password, press **Enter** and re-type to confirm. Press **Enter**. Your changes will be saved. Press **Enter** to continue.

Use the right arrow key to select **Exit**, use the down key to select **Exit Saving Changes**. Press **Enter** and **Yes**. Your notebook will now boot as normal.



*To enable password protection on Boot, use the down key to select **Password on boot**. Press **Enter** and select **Enabled**.*

### 3.2.4 Travel Tips

- If you are traveling abroad, carry proof of ownership—or of your right to use the computer if it is company-owned—to speed your passage through customs. Investigate the customs regulations of the countries you plan to visit and consider acquiring an international carnet (also known as a merchandise passport) from your government.
- Ensure that you know which electrical outlets are used in the countries you will visit, and prepare the appropriate power adapters.
- Check with your credit card company for information about the kinds of emergency travel assistance it offers to users of portable computers.
- When traveling by air, ensure that you have a charged battery available in case you are asked to turn on the computer.
- Before you use the computer on an airplane, verify that such usage is permitted. Some airlines forbid the use of electronic devices during the flight. All airlines forbid the use of electronic devices during takeoff and landing.



*Never walk your notebook through a metal detector. Send it through an X-ray machine, or have it manually inspected.*

### 3.2.5 If Your Notebook Is Lost or Stolen

Call a law enforcement agency to report your notebook lost or stolen. Ask that a case number be assigned and write down the number, along with the name, address, and telephone number of the law enforcement agency. If possible, obtain the name of the investigating officer.

If the notebook belongs to a company, notify the security office of the firm.

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## Chapter 4 Peripherals

## 4.1 PCI Express Cards

- PCI Express Card Types
- Installing a PCI Express Card
- Removing a PCI Express Card

### 4.1.1 PCI Express Card Types

The New Card slot supports one 54mm type PCI Express Card. It supports both USB 2.0 and PCI Express technology, which improves bus speed in data transfer and requires less power than PC Cards.



*A PCI Express Card is not a bootable device.*

### 4.1.2 Installing a PCI Express Card

PCI Express Cards, with hot-plug feature, allow you to install and remove cards when your notebook is running. The card will be detected automatically when installed.

Usually Express Cards have a mark or symbol to show which end to insert into the slot. Insert the card according to the orientation symbol, and slide the card into the slot. Check the documents that came with your card if the orientation is unclear.



1. Press to release the dummy card from the New Card slot.
2. Hold the PCI Express card with its orientation symbol pointing into the slot and the topside of the card facing up.
3. Slide the card into the slot until it clicks into the connector.
4. If you encounter too much resistance, do not force the card. Check the card orientation and try again.

#### 4.1.3 Removing a PCI Express Card



1. Push the card all the way to in to release it.
2. Pull the card out of the slot.

## 4.2 Adding and Removing SD/MMC/MS Cards



*Before removing an SD/MMC/MS card, stop it running from the configuration utility on the taskbar. Failure to do so could result in data loss.*

Insert the SD/MMC/MS card into the card reader slot.

To remove the SD/MMC/MS card, push it in gently, it ejects automatically.

## Chapter 5 The Battery

## 5.1 Battery

- Battery Performance
- Checking the Battery Charge
- Power Meter
- Low-Battery Warning
- Charging the Battery
- Removing a Battery
- Installing a Battery
- Storing a Battery
- Working With Extra Battery Packs
- Maximizing Battery Life

### 5.1.1 Battery Performance

The performance of the battery can vary, depending on operating conditions. Your battery may last less time if you are running power-intensive programs, playing CDs or DVDs, using PC Cards or have high display-brightness settings.

The Power Management Options can be set to alert you when the battery charge is low.



*Ensure any battery you use is compatible. Failure to do so may risk fire or explosion. For more details on purchasing compatible batteries, contact your notebook retailer.*



Batteries should never be disposed of with household waste. Contact your local waste disposal or environmental agency for advice on disposing of used lithium-ion batteries.





Only use the SQU-528/ID6/CBPIL48 battery pack with this computer.

### 5.1.2 Checking the Battery Charge

Battery Status	Indicator behavior
Charging	Flashing blue
Fully Charged	Solid blue
Critical Low	Blinks amber > approximately 3 minutes left; system beeps

### 5.1.3 Power Meter

The power meter  indicates the remaining battery charge. When your notebook is running on battery power, you can check the remaining battery charge, double click the  icon on the taskbar.



#### 5.1.4 Low-Battery Warning



*After a low-battery warning, save your work immediately, then connect your notebook to an electrical outlet. Hibernate mode will begin automatically if the battery runs completely out of power.*

You will hear the low-battery warning when the battery charge is approximately 90 percent depleted. Your notebook will beep once, indicating approximately 10 to 15 minutes of battery operating time remain. If you do not connect your notebook to alternative power source during that time, there will be a periodic beep. Your notebook will automatically enter **Hibernate** mode if battery charge reaches a critical low level.

#### 5.1.5 Charging the Battery



*When connected to an electrical outlet, a completely discharged 6 cell battery needs to be charged in 3.5 to 12 hours, and a 9 cell battery in 4.5 to 12 hours (depending on whether your notebook is on or off and what programs, if any, are running). You can leave the battery in your notebook as long as you like. The battery's internal circuitry prevents the battery from overcharging.*

Before using the battery for the first time it must be charged. Connect the computer to an electrical outlet and allow the battery to fully charge, indicated by the battery indicator light on the front panel of the notebook.



*Once a battery pack is fully charged for the first time, use your notebook on battery power until the battery discharges completely. This will extend battery life, and helps ensure accurate monitoring of battery capacity.*

If necessary, the battery will be charged whenever your notebook is connected to an electrical outlet.

The battery will not be charged if it or your notebook is too hot, either from use or being in a hot environment. If this occurs, the battery indicator will light amber. Disconnect your notebook from any electrical outlet, and allow it and the battery to cool to room temperature. You can then reconnect your notebook to the electrical outlet and charge the battery. The battery indicator will also light amber if the battery is bad and needs replacing.

#### 5.1.6 Removing the Battery

Before removing the battery, ensure your notebook is turned off.

1. Move the battery lock switch to the right (Unlock position).
2. Slide and hold the battery release latch.
3. Remove the battery.

#### 5.1.7 Installing a Battery

1. Slide the battery into the bay.
2. Press it into place gently but firmly until the latch locks it into place.
3. Slide the battery lock switch back to the locked position.

### 5.1.8 Storing a Battery

If storing your notebook for an extended period of time, remove the battery. Fully charge the battery before using your notebook again.

### 5.1.9 Working With Extra Battery Packs

If you spend a lot of time traveling, working without connecting your notebook to an electrical outlet, it may be a good idea to carry additional battery packs so you can quickly replace a discharged battery and continue working.

### 5.1.10 Maximizing Battery Life

A battery can be recharged many times, but over time it will lose its ability to hold a charge. To maximize battery life:

- If you are not using your notebook for a long period, remove the battery.
- If you have a spare battery pack, alternate the batteries.
- Ensure your notebook is off when replacing the battery.
- Store spare battery packs in a cool, dry place, out of direct sunlight.

## Chapter 6 The BIOS Setup Program



## 6.1 Introduction

The BIOS (Basic Input and Output System) Setup program is a menu driven utility that enables you to make changes to the system configuration and tailor the operation of your notebook to your individual work needs. A ROM-based configuration utility displays the system's configuration status and provides you with a tool to set system parameters. These parameters are stored in nonvolatile battery backed-up CMOS RAM, which saves this information even when the power is turned off. When the computer is turned back on, the system is configured with the values found in CMOS. Via easy-to-use menus, you can configure such items as:

- Hard drives, diskette drives and peripherals
- Video display options
- Password protection from unauthorized use
- Boot devices

The settings made in the Setup program intimately affect how the notebook performs. It is important, therefore, to first understand all the available options, and second, to make settings appropriate for the way you use the notebook. This chapter guides you through the Setup program by providing clear explanations for all Setup options.

A standard configuration has already been set in the Setup program by the factory technicians. However, eventually you may want to customize your system to suit your own performance needs. It is recommended that you read this chapter and become familiar with the configurations that can be made in the BIOS. The next section explains how to move around in the Setup program, as well as how to specify and save your new settings. A brief discussion of the optional settings among the different submenus follows.

## 6.2 Navigating through the BIOS Setup Program

- Accessing the BIOS Setup Program
- Launching Submenus
- Saving Changes and Exiting the Setup Program

The Setup program has been designed to make it as easy to use as possible. It is a menu driven program, which means you can scroll through the various directories and make your selections among the various predetermined choices. If you accidentally configure a setting and do not know which one to switch back to, use the BIOS hot keys to return to the previous value. The hot keys are discussed in more detail later in this chapter.

When turning on the notebook for the first time you may get a message prompting you to run the BIOS Setup program. A warning message may appear on the screen if the hardware configuration is changed or the POST fails. This message will inform you of any errors or invalid settings and prompt you to run the Setup program to correct the problem.

Even if you are not prompted by a message instructing you to use the Setup program, at some time in the future you may want to change the configuration of your computer. For example, you may want to make changes to the display option settings or enable the notebook's password function for security purposes. It will then be necessary to reconfigure your system using the Setup program so that the computer can recognize these changes.

The list below gives a few examples of reasons why you may want or need to run the BIOS Setup program.

- You have set up the computer for the first time and you got a message stating that you should run the BIOS Setup program.
- You want to redefine the communication ports to prevent any conflicts.
- You want to change the password or make other changes to the security setup.



*The few examples listed above are by no means a complete list.*

### 6.2.1 Accessing the BIOS Setup Program

To access the BIOS Setup program, press the [F2] key as soon as the computer starts up and you see the Phoenix BIOS screen.

PhoenixBIOS Setup Utility		Boot	Exit
Main	Advanced	Security	TPM State(*)
		Item Specific Help <Tab>, <Shift-Tab>, or <Enter> selects field.	
System Time:	[19:34:35]		
System Date:	[01/01/2005]		
Hard Disk:	Hard Disk Model Name		
Quiet Boot:	[Enabled]		
System Memory:	640 KB		
Extended Memory:	1022 MB		
BIOS Version:	XXXXXX		
Language:	[English (US)]		
F1 Help	↑↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	←→ Select Menu	Enter Select	↵ Sub-Menu
		F10 Save and Exit	

### The Menu Bar

The top of the Setup screen has a menu bar with the following selections:

- Main** Allows the user to configure standard IBM PC AT system parameters.
- Advanced** Allows the user to configure advanced system settings.
- Security** Allows the user to configure security system settings.
- TPM State** Allows the user to configure TPM settings.
- Boot** Allows the user to specify the order in which the notebook is to check for a device to boot the system.

**Exit** Allows the user to save CMOS setting and exit the Setup program.

To move between menu bar items, use the [◀] and [▶] arrow keys until the desired item is highlighted. For example, if you want to move from the *Main* menu to the *Advanced* menu, press the right arrow key [▶] once.

### Item Specific Help

At the right of the Setup screen, you will notice an item specific help bar. For each item that you select on the menu, the bar informs of its specific function as well as the hot keys related specifically to that item and/or submenu.

### 6.2.2 Launching Submenus

A submenu contains additional options for a field parameter. To call up a submenu, simply move the highlight to the desired field and press the [Enter] key. The submenu opens.

If you are a first time user or are not familiar with BIOS Setup program, it is highly recommended that you take a few minutes to familiarize yourself with each of the submenus and their corresponding functions. If you accidentally make unwanted changes to the current configuration, go to the *Exit* menu and select **Discard Changes**.

### 6.2.3 Saving Changes and Exiting the Setup Program

Refer to **The Exit Menu** section of this chapter for detailed information on saving changes and exiting the Setup program.

## 6.3 The Main Menu

When the Setup program is accessed, the Information screen appears. It displays the following pieces of information regarding your current system:

PhoenixBIOS Setup Utility		Boot	Exit
Main	Advanced	Security	TPM State(*)
			Item Specific Help
System Time:	[19:34:35]	<Tab>, <Shift-Tab>, or <Enter> selects field.	
System Date:	[01/01/2005]		
Hard Disk:	<i>Hard Disk Model Name</i>		
Quiet Boot:	[Enabled]		
System Memory:	640 KB		
Extended Memory:	1022 MB		
BIOS Version:	XXXXX		
Language:	[English (US)]		
F1 Help	↑↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	←→ Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit

### System Time and System Date

The hour is displayed in 24-hour format. The values set in these two fields take effect immediately.

**Hard Disk**

The hard disk information is displayed with the manufacturer and model name.

**Quiet Boot**

**Enabled:** Customer logo is displayed; Summary screen is disabled.  
Disabled: Customer logo is not displayed; Summary screen is enabled.

**System Memory**

This field reports the memory size of system base memory. The size is fixed at 640KB.

**Extended Memory**

This field reports the memory size of the extended memory with an integer in the system, but 32Bit SMI will occupy 1 MB and UMA frame buffer (Integrated VGA uses only).  
Extended Memory size = Total memory size – 1 MB – 1 MB – UMA frame buffer

**BIOS Version**

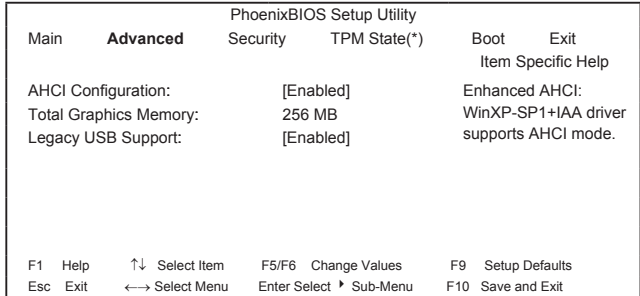
This field displays current version of the BIOS.

**Language**

This field allows the user to change the languages between English and Japanese in the BIOS Setup Program.

**6.4 The Advanced Menu**

Selecting *Advanced* on the menu bar displays the Advanced Menu. Each field on this menu is covered below.



**AHCI Configuration**

Disabled: Disables the AHCI mode.  
**Enabled:** Enables the AHCI mode.

**Total Graphics Memory**

This field displays the total onboard graphics memory.

**Legacy USB Support**

Disabled: Disables the legacy USB support.  
**Enabled:** Enables the legacy USB support.

## 6.5 The Security Menu

The notebook's advanced security system allows you to set a password to prevent unauthorized access to system resources, data, and the BIOS Setup program. This section covers each Security parameter. Selecting Security from the menu bar displays the Security menu.

### A Note about Passwords

The BIOS Setup program allows you to specify passwords in the Security menu. The passwords control access to the BIOS and certain Security menu options during system startup.

Passwords are not case sensitive. A password can be entered using either upper or lower case letters. When you choose your password, it should be composed of characters A-Z, 0-9 and be eight characters in length.

*NOTE:* The supervisor password must be set before the user password can be set.

### Set User Password... / Set Supervisor Password...

		PhoenixBIOS Setup Utility		
Main	Advanced	Security	TPM State(*)	Boot Exit Item Specific Help
Supervisor Password Is:		Clear		Supervisor password controls access to the setup utility.
User Password Is:		Clear		
Set Supervisor Password:		[Enter]		
Set User Password:		[Enter]		
Password on boot:		[Enabled]		
Built-in HDD1 Status		Clear		
Built-in HDD1 Password Select		[User Only]		
Set HDD User Password		[Enter]		
Trusted Platform Support		[Disabled]		
Password onboot:		[Enabled]		
F1 Help	↑↓ select item	F5/F6 change values	F9 Setup defaults	
Esc Exit	←→ select menu	Enter Select ▶ Sub-Menu	F10 Save and Exit	

These fields allow you to set the System Password. The System Password allows full access to the BIOS Setup menus. To set the Supervisor password, highlight this field and press [Enter].

Type the password and press the [Enter] key. You can type up to ten alphanumeric characters. Symbols are ignored.

To confirm the password, type the password again and press the [Enter] key.



**Supervisor Password Is / User Password Is**

These two fields show that User /Supervisor Passwords are set or not.

Set            System Password is set.  
**Clear**       System Password is not set.

**Set Supervisor Password / Set User Password**

Enter this field always shows the message.

While this field is highlighted, press [Enter]. The following message is shown:

Set Supervisor Password:	
Enter New Password	[            ]
Confirm New Password	[            ]

If there is an old password then setup will prompt with the following window instead and a current password will be required to be entered at first:

Set Supervisor Password:	
Enter Current Password	[            ]
Enter New Password	[            ]
Confirm New Password	[            ]

User can type password in field of **Enter New Password**, and re-enter password in field of **Confirm New Password** for verification.

If verification OK:

Setup Notice
Changes have been saved.
[Continue]

The supervisor password is set complete after user press [Enter].

If verification fails:

Setup Warning
Passwords do not match.
Re-enter <b>password</b> .
[Continue]

The formats of the password are as follows:

Length:        No more than 8 characters.

Characters: Alphanumeric keys only. The shift status, Ctrl, Shift, Alt, and Capital, are ignored.

**Password on boot**

If password on boot is required, the password must be set otherwise it cannot be enabled. Enabled this field to have setup prompt for the password when the computer boots.

**Built-in HDD1 Status**

Set        HDD Password is set.  
**Clear**    HDD Password is not set.

**Built-in HDD1 Password Select**

**User Only**    For normal user entering HDD password.  
**User+Master**    Master password must be set first before user password can be configured.

### Set HDD User Password / Set HDD Master Password

Enter this field always shows the message.

While this field is highlighted, press [Enter]. The following message is shown:

Set HDD Master Password	
Enter New Password [	]
Confirm New Password [	]

If there is an old password then setup will prompt with the following window instead and a current password will be required to be entered at first:

Set HDD Master Password	
Enter Current Password [	]
Enter New Password [	]
Confirm New Password [	]

User can type password in field of **Enter New Password**, and re-enter password in field of **Confirm New Password** for verification.

If verification OK:

Setup Notice
Changes have been saved.
[Continue]

The HDD supervisor password is set complete after user press [Enter].

If verification fails:

Setup Warning
Passwords do not match.
Re-enter <b>password</b> .
[Continue]

If password on boot is required, the password must be set otherwise it cannot be enabled.

The formats of the password are as follows:

Length: No more than 8 characters.

Characters: Alphanumeric keys only. The shift status, Ctrl, Shift, Alt, and Capital, are ignored.

### Trusted Platform Support (\*)

This item will show up if Trusted Platform Module (TPM) exists in the system.

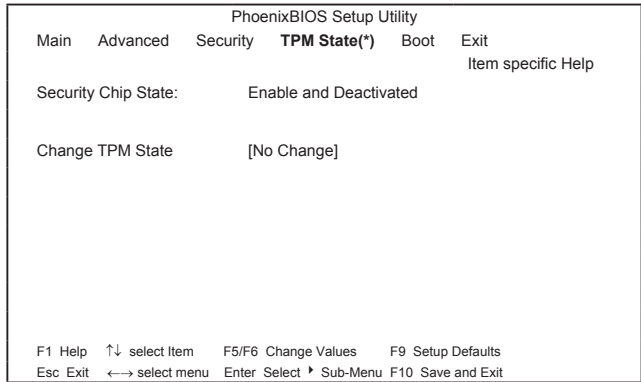
**Disabled:** Disables TPM support.

**Enabled:** Enables TPM support.

### 6.6 The TPM State menu (\*)

This menu allows the user to understand current TPM state and change the TPM state if they want to do it.

The TPM state menu will show-up if TPM existed within platform and TPM Support item is enabled in "Security Menu".



#### Security Chip State

Display current TPM state.

#### Change TPM State

No Change

No TPM setting change.

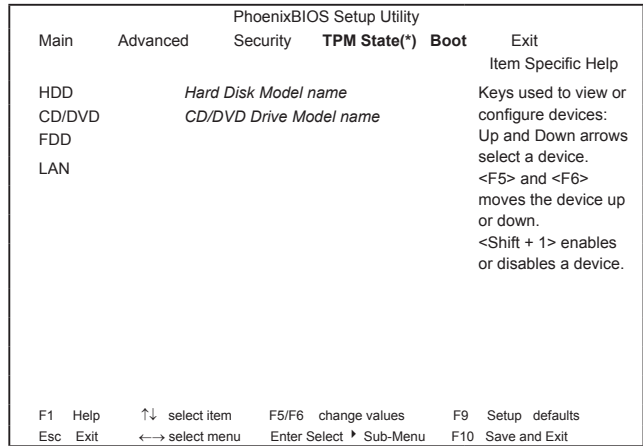
Enable & Activate

Enable chip encrypted data and user from taking ownership

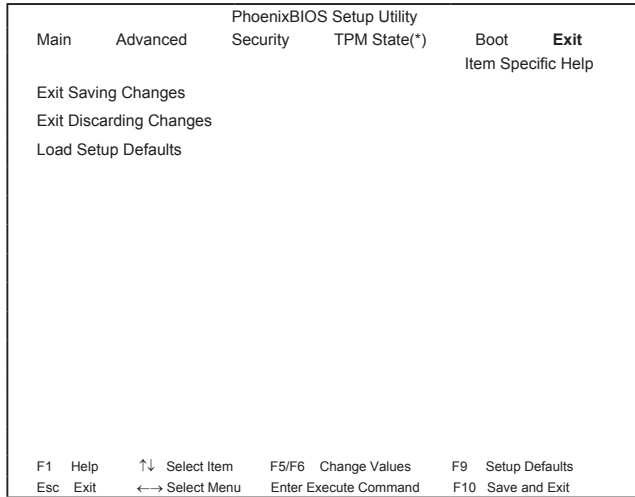
Disable & Deactivate   Disable security chip prevents encrypted data from being used and Deactivated security chip prevents a user from taking ownership.

### 6.7 The Boot Menu

This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices include the diskette drive in module bay, the onboard hard disk drive and the CD-ROM in module bay.

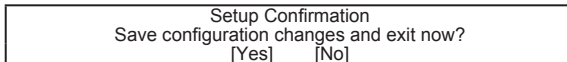


## 6.8 The Exit Menu



### Exit Saving Changes

Allows the user to save changes to CMOS and reboot system. The following message is prompted when user press [Enter] on the item.

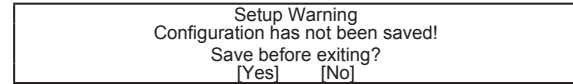


Yes: Exit SETUP and reboot

No: Go back to previous screen

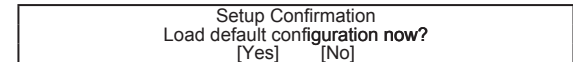
### Exit Discarding Changes

Allows the user to exit Setup without saving changes to CMOS. The following message is prompted when user press [Enter] on the item.



### Load Setup Defaults

Allows the user loads default value in CMOS Setup. The following message is prompted when user press [Enter] on this item:



Select **Yes** to confirm or **No** to abort. You will then return to the setup screen.

## Chapter 7    **Software Description & Button Definition**



## 7.1 Q-Charging Button with Smart Battery Software

- The Q-Charging button and Smart Battery software let the user determine how much the battery is charged when connected to AC power.

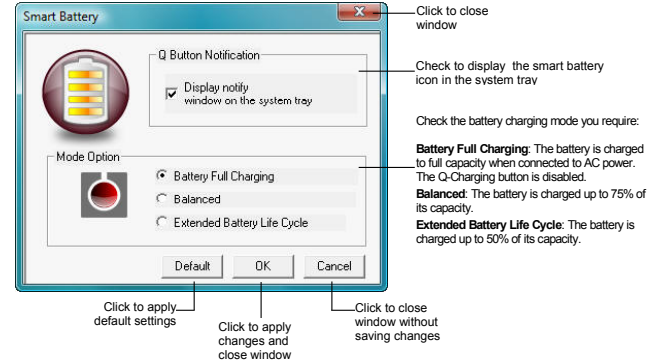
### 7.1.1 Installing the Software

You must have Administrator's rights to install the software. Double click setup.exe in the root directory on the CD-ROM to begin installation. Once installation is complete, the system will restart automatically. The software will be loaded automatically upon reboot.

### 7.1.2 Using the Software

Before you can use the Q-Charging button, you must first configure the Smart Battery software. You can access the software via the Control Panel:

1. Click Start > Settings > Control Panel.
2. Double click the Smart Battery icon. The main screen appears:



### 7.1.3 Using the Q-Charging Button

Press the Q-Charging button to begin charging the battery to its maximum capacity. By pressing the Q-Charging button, you override any settings made in the Smart Battery software.

When you press the Q-Charging button, a pop-up message will appear 'Charging in progress. Avoid disconnecting AC adaptor'. DO NOT disconnect the AC adaptor, as this may cause irreversible damage to your battery and laptop.

## 7.2 Using the Power USB Button

The laptop is equipped with a power USB function, which allows you to increase the power output when charging an external USB device, such as a mobile phone or PDA.

Press the Power USB button to increase the power output to 1 ampere. When not pressed, power output is 0.5 ampere. You can also charge external USB devices when the laptop is powered off, but this button must be pressed in order to do so.



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## Appendix A Specifications



## Specifications

### CPU

- Intel® Mobile Merom® & Merom ICPM, Socket P, FSB800/667 MHz
- Micro FC-PGA package CPU

### Chipset

- Intel® PM965
- 667/800 MHz FSB supported
- ICH8-M

### Memory

- Supports DDR-II 533/667MHz
- No on-board memory
- Two SO-DIMM with 512MB/1GB/2GB modules
- Upgradable to 4GB memory by two SO-DIMM
- Easy install from bottom side

### Display

- Supports 14.1" WXGA (1280 x 800) TFT color LCD

### Keyboard

- 86-US/87-UK/88-JA Key; 12 function keys; 4 cursor keys
- Windows key; Application keys, 19.05mm pitch, 2.5mm stroke, H=5.1mm

### Hard Disk Drive (HDD)

- 9.5mm height, 2.5" HDD
- Up to 160GB capacity
- 5400 RPM
- Easily removable
- Supports SATA 1.5Gb/s (150MB/s)

### Optical Disc Drive (ODD)

- 5.25" 12.7mm height DVD-Super Multi Drive

### Options

- 256MB/512MB/1GB/2GB SO-DIMM DDR-II modules
- Mini card WLAN module
- MDC V1.5 Modem
- Bluetooth module
- Dual-Band builds in antenna for WLAN communication

### Pointing Device

- Touch Pad with two buttons
  - Left button
  - Right button
- Finger printer

### I/O Ports

- USB 2.0 ports x 2
- Power USB ports x2
- IEEE 1394 x 1
- Microphone-in x 1
- Headphone-out jack x 1
- VGA port, 15 pins x 1
- S-Video out port, 7 pins x 1
- DC-in jack x 1 (90W, for AC adapter)
- RJ-45 jack x 1
- RJ-11 jack for 56Kbps V.92 Modem (US/Canada/UK/Germany/French)
- 3-in-1 card reader for SD/MMC/MS
- Single-Wide New Card slot (54mm type) x 1

**WLAN**

- PCI Express base specification compliant
- 802.11 a/g/n, 802.11 a/b/g (INTEL chip)

**Modem**

- Internal Modem with MDC solution (MDC1.5)

**Bluetooth**

- Foxconn Bluetooth V2.0+EDR (Broadcom chipset)

**Mini Card Organization**

- One Mini card slot for WLAN
- One 3G module
- One Mini card for Robson

**NEWCARD**

- One Single-Wide New Card socket
- Supports both PCI-Express Card and USB2.0 Card

**Excellent Power Management Function**

- Suspend to RAM or Suspend to Disk mode, by time out or by hot key
- HDD Local Stand-By mode by time out
- LCD Local Stand-By mode by time out
- Low battery alarm by beep
- Auto-backlight off when LCD cover closed
- Full ACPI 1.0B support
- LCD Auto-DIM mode by time out

**Easy Buttons**

- Power button
- Internet button
- E-mail button

- Power USB button
- Q-Charging button
- Mute button

**AC Adapter**

- Universal AC adapter. 100-240V AC, 50-60Hz
- 90W with 19V DC output
- 3 pin type for AC-in

**Memory Card**

- 3-in-1 Card Reader (MS, SD, MMC)
- Push-push type, with dummy card
- Ricoh R5C833 Card reader controller

## Appendix B Recovery Update Notices

## How to restore your W468N to factory defaults

**Time to restore:** When your computer is infected by virus or there is any other reason that you want to restore your operation system to the factory defaults.

Execute Xpress Recovery2 Lite (XR2 Lite) Professional Recovery Utility. Please take the following procedures:

1. Start up your computer first. Restart your computer if it has already booted into system.

**Note:** If your system OS is Microsoft Vista, you have to insert the driver DVD and boot from the ODD device to run the Express 2 Recovery function.

2. Right after you see the startup screen (such as trademark, logo or text), the DOS screen will appear. Press F9.

\* F9 is a typical hotkey to restore professional settings. Please consult with your computer manufacture if your hotkey doesn't function.

3. There are three options on the menu: "RESTORE" (to restore data), "ABOUT" (to display XR2 Lite related information) and "REBOOT" (to cancel the recovery and restart the computer). We recommend you to select "RESTORE" to restore factory defaults.



4. Then the prompt "Restore Image?" will appear on the menu. We recommend you to select "YES" to restore an image file.\* "Image file" is a compressed file that compresses all the Windows operation system data. Recovery an image file allows you to restore your operation system to factory defaults.



5. After all the selections have been made, the screen shows "RESTORE NOW...", indicating your computer is now recovering the operation system data. When the recovery is complete, the computer will automatically restart and restore to factory defaults.



## Appendix C Service Center

This appendix will list our global service centers for your W468N Notebook.

Taiwan ( Headquarters ) GIGA-BYTE TECHNOLOGY CO., LTD.

Address: No.6, Bau Chiang Road, Hsin-Tien, Taipei 231, Taiwan  
TEL: +886 (2) 8912-4888  
FAX: +886 (2) 8912-4004

How to submit a question?

Technical            Issues about using GIGABYTE products.  
Non-technical      Sales and marketing issues

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U.S.A.    G.B.T. INC.

TEL: +1 (626) 854-9338  
FAX: +1 (626) 854-9339  
WEB Address: <http://www.gigabyte.us>

Japan      NIPPON GIGA-BYTE CORPORATION

TEL: +81-3-5791-5438  
FAX: +81-3-5791-5439  
WEB Address: <http://www.gigabyte.co.jp/>

China      G.B.T. TECH. TRADING CO., LTD.

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FAX: +86-20-85517843

Beijing  
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FAX: +86-10-62102848

Chengdu  
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FAX: +86-28-85256822

Wuhan  
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FAX: +86-27-87851330

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Moscow Representative Office Of Giga-Byte Technology Co., Ltd.

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HAMBURG Representative Office of Giga-Byte Technoloty Co., Ltd.

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