C H A P T E R ▼   O N E

GETTING TO KNOW THE BASICS

This chapter introduces the features and

components of the computer.

Performance Features

■ **High Performance Intel Processor with advanced Intel Integrated Chipset**
The notebook PC is equipped with the powerful Mobile Intel Merom dual-core processor, or the Mobile Intel Yonah dual-core or single-core processor. Together with the latest Intel chipset and integrated graphic technologies, the system offers very advanced PC performances.

■ **Wide-Screen LCD Display**
The computer is equipped with a wide-screen 15.4-inch TFT high-resolution display panel for the best cinematic viewing experience.

■ **Battery Performance Technology**
The system uses a unique power management technology that allows user to enjoy extended battery life without sacrificing performance.

■ **ExpressCard Technology**
ExpressCard (type II, 54mm) is the next-generation of the PC Card standard. The bus interface is based on the two standards: PCI Express for high-performance I/O and USB2.0 for variety of devices.

■ **Expandability**
The system offers upgradeable hard disk drive and 2 DDRII SDRAM sockets for expansion, allowing the user to easily increase the storage and system capacities as the need arises.

■ **Built-in Multiple Card Reader**
There is built-in 4-in-1 card reader to access many of the portable media formats (SD Card, MS Card, MMC Card, and MS-Pro Card).

■ **Ethernet Port**
The system provides built-in 10/100Mbps Ethernet network adapter for high bandwidth network connection.

■ **Firewire (IEEE1394 / 1394a) and USB2.0 ports**
In addition to a full array of built-in I/O ports, the computer offers IEEE1394 for ultra high-speed connection to high bandwidth digital video devices and USB2.0 ports to connect to any USB-based peripheral devices.

■ **Wireless LAN**
The internal Wireless LAN module allows your notebook to connect wirelessly to other 802.11-enabled systems, devices, or network.

System At A Glance

Top View
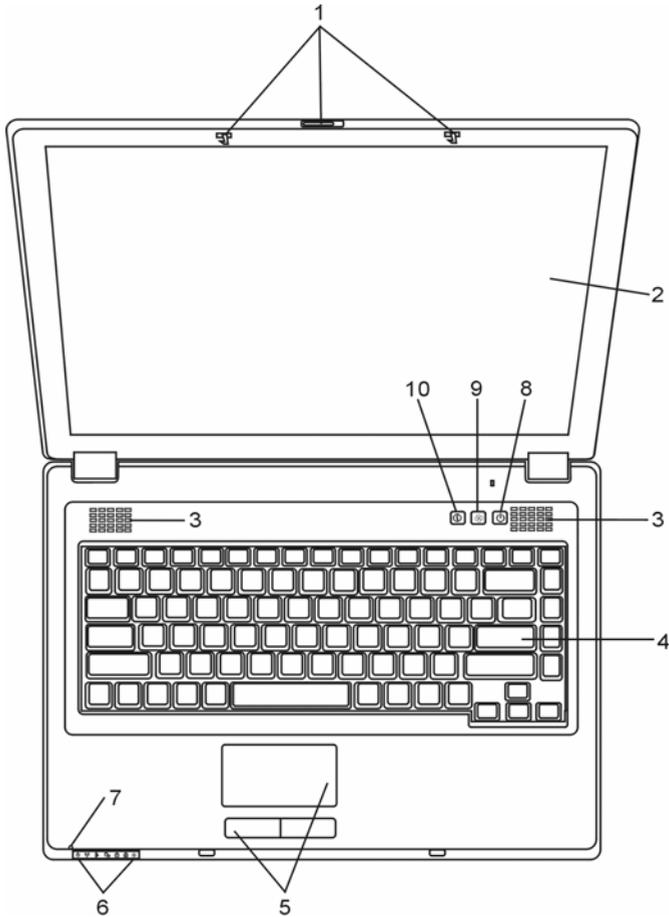
1. **LCD Latch**
    The LCD latches lock / unlock the LCD panel.

2. **LCD Display**
    The panel is where the system content is displayed.

3. Built-in Stereo Speakers

The built-in speakers output the sound in stereo.

4. Keyboard

The keyboard is used to enter data. (See Keyboard Section for details.)

5. Touch Pad

The touch pad is a built-in pointing device with functions similar to a mouse.

6. LED Status Indicator

The LED Status indicators reveal the status of these functions: Numeric keypad, cap lock, silent mode, WLAN module enabling and disabling and also the ODD, HDD activities. (See the LED Status Indicator Section for details.)
The LED Status indicators also reveal the status of the system power state and battery-charging state. See the LED Status Indicator Section for details.

7. Built-in Microphone

The built-in microphone records sound.

8. Power / Suspend Button

The power/suspend button turns the notebook on and off and it also acts as a system suspend key. Press momentarily to turn on the system. Press and hold for at least 4 seconds to turn off the system. How this key behaves can be defined in [Start > Settings > Control Panel > Power Options > Advanced] menu. Press the power / suspend button again to return from the suspend mode. (See Chapter 3 for more details on system suspend function.)

When the system is in Suspend Mode, the ⏻ LED status indicator shows blinking green light.
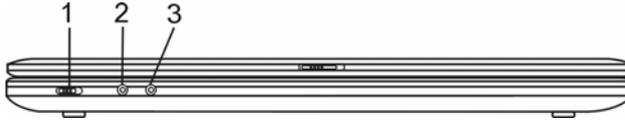
9. Silent Mode Button

Pressing the key enables the system to lower its power usage; therefore the fan speed is reduced to achieve lowest operating noise.

When Silent Mode is enabled, the ⚙ LED status indicator shows steady green light.

10. Internet Explorer Quick Key

Pressing the button launches Internet Explorer in Windows.

Front View

Warning: Do not place any heavy objects on the top of notebook. This may damage the display

1. **Wireless On/Off Switch**

   Use the Switch to disable or enable the Wireless function.

   When Wireless LAN function is enabled, the   LED status indicator shows steady green light.

2. **Microphone/Audio Line-in Jack**

   The microphone/Audio Line-in jack (3.5-mm diameter) is where you connect a microphone or an external audio input source such as a CD Player..

3. **Stereo Headphone / SPDIF-out Jack**

   The stereo headphone jack (3.5-mm diameter) is where you connect the headphones or external speakers. Alternatively, you may connect the S/PDIF output to an external DTS, AC3, or PCM sound processor / decoder in your home stereo system.

Side Views
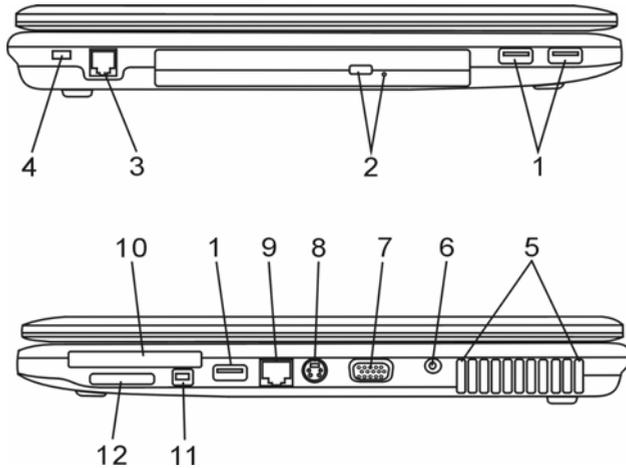
Warning: Do not place any heavy objects on the top of notebook. This may damage the display

1. **USB2.0 Port (x3)**

   The Universal Serial Bus (USB2.0-compliant) port allows you to connect a wide variety of devices to your computer at a rate of up to 480 Mbps. This port conforms to the latest USB2.0 plug-and-play standards.

2. **Optical Drive and Disk Eject Button and Manual Eject Key Hole**

   If your computer comes with the Combo drive, DVD-Dual or Super-Multi drive, you may save data onto a CD-R / CD-RW or DVD RW disc. Press the eject button to eject the disk tray. The manual eject keyhole allows you to manually eject a jammed

disk.

3. **Modem Port**

   This is where you plug the phone jack (RJ-11) for fax/modem functions.

4. **Kensington Lock Key Hole**

   A Kensington-type security lock latches to this keyhole for anti-theft purpose.

5. **Ventilation Grill**

   The fan grill is where air is exchanged to dissipate the internal heat. Do not block this airway completely.

6. **Power Jack (DC-in)**

   The DC-out jack of the AC Adapter connects here and powers the computer.

7. **External VGA Port**

   The VGA video output port is for connecting the external LCD monitor or projector.

8. **TV (S-Video) Port**

   The S-Video port permits you to redirect the screen output to a television set or any analog video playback device. This TV Port is copyright protected; when DVD movie is played, the output is scrambled to prevent analog recording.

9. **Ethernet / LAN Port**

   The port connects to a network hub via the RJ-45 cable and also conforms to 10/100Base-TX transmission protocol.

10. ExpressCard Slot

The slot is where ExpressCard (Type II, 54mm) is inserted.
ExpressCard integrates both the PCI-Express bus technology
and USB2.0 interface.
Press the card into the slot to insert. Press the card again to
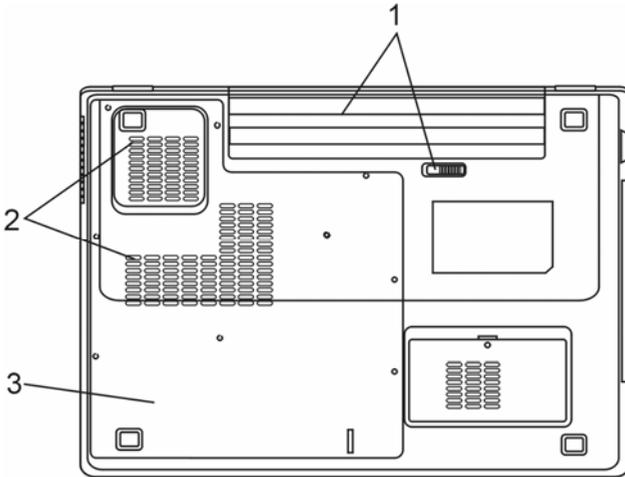eject.

11. Firewire / IEEE1394 / 1394a Port

This is a high-speed serial data port. You may connect any
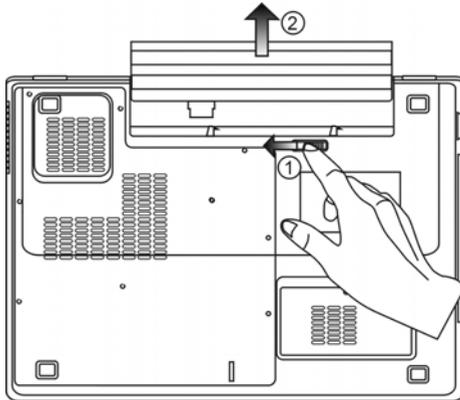Fire-wire-ready device to this port.

12. 4-in-1 Card Reader

The 4-in-1 Card Reader supports SD Card, MS Card, MMC
Card, and MS-Pro Card.

Bottom View

1. **Battery Pack and Battery Latch**
    The battery pack is a built-in power source for the notebook.
    Slide the battery latch to release the battery pack.

2. **Ventilation Grill**

The fan grill is where air is exchanged to dissipate the internal heat. Do not block this airway completely.

Warning: Do not block the Fan Grill outlet. Place the machine on hard surface only. The bottom case may get very hot.

3. System Device Cover

The system's processor with cooler assembly, Wireless LAN module, HDD, and DDR memory module are located under the case cover. The system memory can be upgraded to a larger capacity. (See Chapter 4 for instructions on the memory and HDD upgrade.)

AC Adapter
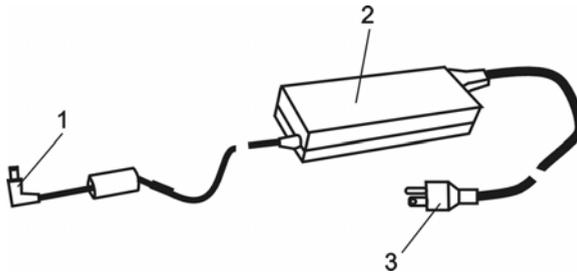
1. DC-out Connector
The DC-out connector docks to the power jack (DC-in) on the computer.

2. Adapter
The adapter converts alternating current into constant DC voltage for the computer.

3. AC Plug
The AC plug plugs to the AC wall outlet.

Warning: Make sure you are using a standard 3-prong AC wall socket with a ground pin. If not, you may feel a slight tingling sensation on any of the computer's metal parts such as the I/O ports. This is caused by leakage current when the AC adapter is not properly grounded (via the ground pin). However, the amount of leakage current is within the safety regulation and is not harmful to human body.

LED Status Indicator

The LED Status Indicator displays the operating status of your notebook. When a certain function is enabled, an LED will light up. The following section describes its indication.

System & Power Status Indicators

LED Graphic Symbol	Indication
⏻	Green light indicates the system is ON. Blinking green light indicates the notebook is in the suspend mode.
((•))	Green light indicates the WLAN module is active.
❁	Persistent green light indicates the Silent Mode is enabled.
⇥	Blinking orange light indicates the battery is being charged. Blinking red light indicates the battery power is low when the system is turned ON. Persistent green light indicates the battery is Full and the AC Adapter is plugged in.
⬜◎	Green light indicates the hard drive and/or optical drive is being accessed.
①🔒	Green light indicates the numeric keypad is activated.
Ⓐ🔒	Green light indicates the cap-lock is activated.

Keyboard Features

Function Keys (Quick Keys)

Graphic Symbol	Action	System Control
☽	Fn + F1	Enters Suspend Mode.
🔋⊘	Fn + F3	Turns the battery warning beep off or on.
◻\⌐	Fn + F4	Changes Display Mode: LCD-only, CRT-only and LCD&CRT.
🔊)))	Fn + F5	Turns Speaker Volume up.
🔊))	Fn + F6	Turns Speaker Volume down.
☼+	Fn + F7	Increases Display Brightness.
☼−	Fn + F8	Decreases Display Brightness.
	Fn+Num Lock	Enables the embedded keypad to work in numeric mode. The keys act like numeric keypads in a calculator. Use this mode when you need to do a lot of numeric data entry. An alternative would be to connect an external numeric keypad.
	Scroll Lock	Press the Scroll Lock key and then press ↑ or ↓ to move one line up or down.

For various system controls, press the Fn (Function) key and the Fx key simultaneously.

1-15

Windows Keys

Your keyboard also has two Windows keys:

 1. Start Key

This key allows you to pull up the Windows Start Menu at the bottom of the taskbar.

 2. Application Menu Key

This key brings up the popup menu for the application, similar to a click of the right mouse button.

Embedded Numeric Keypad

Press Fn+Num Lock to enable the embedded numeric keypad. The numbers are printed in upper right corner of a key, in a color different from the alphabets. This key pad is complete with arithmetic operators (+, -, * , /).

Press Fn+Num Lock to revert to normal character keys.
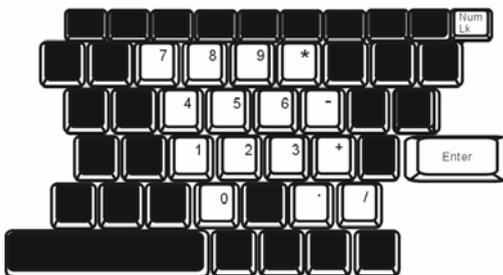
Touch Pad

The built-in touch pad, which is a PS/2-compatible pointing device, senses movement on its surface. As you move your fingertip on the surface of the pad, the cursor responds accordingly.

The following items teach you how to use the touch pad:

1. Move your finger across the touch pad to move the cursor.

2. Press buttons to select or execute functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touch pad twice produces is similar to clicking the left button of a mouse.

Function	Left Button	Right Button	Equivalent Tapping Action
Execution	Click twice quickly		Tap twice (at the same speed as double-clicking the mouse button)
Selection	Click once		Tap once
Drag	Click and hold to drag the cursor		Tap twice quickly and on the second tap hold finger to the touch pad to drag the cursor
Access Context Menu		Click once	
Move One Page Up or Down			

Tips on Using the Touch Pad:

1. The double-click speed is timed. If you double-click too slowly, your notebook responds as if you single-clicked twice.

2. Keep your fingers dry and clean when using the touch pad. Also keep the surface of touch pad clean and dry to prolong its life.

3. The touch pad is sensitive to finger movements. Hence, the lighter the touch, the better the response. Heavy touch does not produce better response.

Graphic Subsystem

Your computer uses a high performance 15.4-inch active matrix TFT panel with high resolution and multi-million colors for comfortable viewing. The Intel 945GM (940GML) integrated video graphics accelerator, which is Microsoft DirectX 9 compatible, performs graphic rendering at a lighting-fast speed.

Adjusting the Display Brightness

The notebook uses special key combinations, called hot keys, to control brightness.
Press Fn+F7 to increase the brightness.
Press Fn+F8 to decrease the brightness.

Note: To maximize your battery operating time, set the brightness to the lowest comfortable setting, so that the internal backlight uses less power.

Extending the Life of the TFT Display Device

Observe the following guidelines to maximize the life of the backlight in the display.

1.   Set the brightness to the lowest comfortable setting (Fn+F8).
2.   When working at your desk, connect your notebook to an external monitor and disable the internal display Fn+ F4.
3.   Do not disable the suspend time-outs.
4.   If you are using AC power and have no external monitor attached, change to suspend mode when not in use.

Opening and Closing the Display Panel

To open the display, push the LCD latch to the right and lift up the lid. Then tilt it to a comfortable viewing position. The LCD panel has a maximum opening of 135 degrees. Do not push it down forcibly.
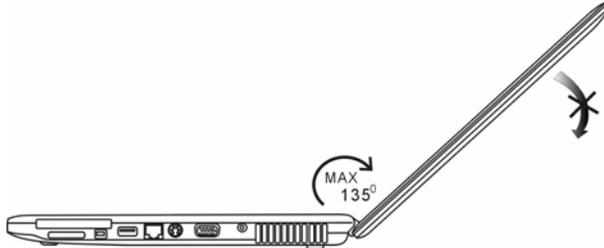
To close the display cover, fold it down gently.

Warning: To avoid damaging the display, do not slam it when closing. Do not place any object on top of the computer when the display is closed

Audio Subsystem

Your computer's audio subsystem is Sound Blaster Pro-compatible.

Adjusting the Volume Manually

To increase the volume, press Fn+F5.

To decrease the volume, press Fn+F6.

Adjusting the Audio Volume in Windows

1. Click the speaker symbol in the task tray in Windows.

2. Drag the volume control bar up or down to adjust the volume.

3. To temporarily silence the speaker without changing the volume setting, click Mute.

Voice Recording

A built-in microphone allows you to record sound. You will need to use audio processing software to enable the built-in microphone. For example, you may use Microsoft Sound Recorder.

Modem

Your computer comes with a 56K V.92 internal fax/modem and a phone jack (RJ-11), which is located on the left side of your computer.
Use a telephone cable to connect the computer to the telephone wall outlet.

Connecting the Modem

1.   Plug one end of the phone line into the modem port located on the rear side of the computer. (For EMI compliance, you need to clip the included EMI CORE to the phone line.)

2.   Plug the other end of the line into the analog phone wall outlet.

Depending on where your computer is used, you may need to change settings in the modem. Correct setting will allow you to maintain a stable connection in a country where its telecommunication system may be different to others.

To change the modem setting, do the following:

1.   Go to [Start > Settings > Control Panel > Phone and Modem Options]. Go to *Dialing Rules* and Edit *My Location*. In the Country/Region pull-down menu, select the appropriate country setting. You will see a similar dialog box.
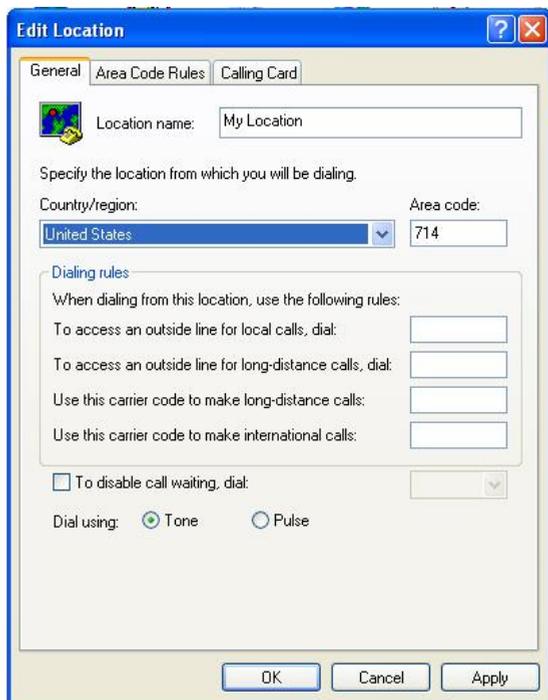
2. Click on the pull-down menu and select the country where it is applicable. Click on OK to exit.

Ethernet

Your computer is equipped with a 10/100Base-TX Fast Ethernet network adapter. Connect the active LAN cable to the RJ-45 LAN port located on the right side of the computer. This allows you to access and transmit data in the local area network.

Connecting to the Network

Use Unshielded Twisted Pair (UTP) Ethernet cable only.

1.   Insert one end of the UTP cable into the network connector until the connector snaps securely into the receptacle.

2.   Either connect the other end of the cable to an RJ-45 jack wall outlet or to an RJ-45 port on a UTP concentrator or hub in the network.

Cabling Restriction for Networks

The following restrictions should be observed for 10/100BASE-TX networks:

■   The maximum cable run length is 100 meters(m) (328 feet[ft]).

Note: Consult Windows manual and / or Novell Netware user's guide for the software installation, configuration, operation of the network.