Notebook PC User Manual

August 2010
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Safety Precautions

The following safety precautions will increase the life of the Notebook PC. Follow all precautions and instructions. Except as described in this manual, refer all servicing to qualified personnel.

Disconnect the AC power and remove the battery pack(s) before cleaning. Wipe the Notebook PC using a clean cellulose sponge or chamois cloth dampened with a solution of nonabrasive detergent and a few drops of warm water and remove any extra moisture with a dry cloth.

- DO NOT place on uneven or unstable work surfaces. Seek servicing if the casing has been damaged.
- DO NOT expose to dirty or dusty environments. DO NOT operate during a gas leak.
- DO NOT press or touch the display panel. Do not place together with small items that may scratch or enter the Notebook PC.
- DO NOT leave the Notebook PC on your lap or any part of the body to prevent discomfort or injury from heat exposure.
- Battery safety warning: DO NOT throw the battery in fire. DO NOT short circuit the contacts. DO NOT disassemble the battery.

- DO NOT place or drop objects on top and do not shove any foreign objects into the Notebook PC.
- DO NOT expose to strong magnetic or electrical fields.
- DO NOT expose to or use near liquids, rain, or moisture. DO NOT use the modem during electrical storms.
SAFE TEMP: This Notebook PC should only be used in environments with ambient temperatures between 10°C (50°F) and 35°C (95°F).

INPUT RATING: Refer to the rating label on the bottom of the Notebook PC and be sure that your power adapter complies with the rating.

DO NOT carry or cover a Notebook PC that is powered ON with any materials that will reduce air circulation such as a carrying bag.

DO NOT use strong solvents such as thinners, benzene, or other chemicals on or near the surface.

DO NOT use damaged power cords, accessories, or other peripherals.

Incorrect installation of battery may cause explosion and damage the Notebook PC.

DO NOT throw the Notebook PC in municipal waste. This product has been designed to enable proper reuse of parts and recycling. The symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

DO NOT throw the battery in municipal waste. The symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.
**Transportation Precautions**

To prepare the Notebook PC for transport, you should turn it OFF and **disconnect all external peripherals to prevent damage to the connectors**. The hard disk drive’s head retracts when the power is turned OFF to prevent scratching of the hard disk surface during transport. Therefore, you should not transport the Notebook PC while the power is still ON. Close the display panel and check that it is latched securely in the closed position to protect the keyboard and display panel.

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**CAUTION!** The Notebook PC’s surface is easily dulled if not properly cared for. Be careful not to rub or scrape the Notebook PC surfaces.

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**Cover Your Notebook PC**

Purchase a carrying bag to protect the Notebook PC from dirt, water, shock, and scratches.

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**Charge Your Batteries**

If you intend to use battery power, be sure to fully charge your battery pack and any optional battery packs before going on long trips. Remember that the power adapter charges the battery pack as long as it is plugged into the computer and an AC power source. Be aware that it takes much longer to charge the battery pack when the Notebook PC is in use.
Airplane Precautions
Contact your airline if you want to use the Notebook PC on the airplane. Most airlines will have restrictions for using electronic devices. Most airlines will allow electronic use only between and not during takeoffs and landings.

CAUTION! There are three main types of airport security devices: X-ray machines (used on items placed on conveyor belts), magnetic detectors (used on people walking through security checks), and magnetic wands (hand-held devices used on people or individual items). You can send your Notebook PC and diskettes through airport X-ray machines. However, it is recommended that you do not send your Notebook PC or diskettes through airport magnetic detectors or expose them to magnetic wands.
Preparing your Notebook PC
These are quick instructions for using your Notebook PC.

Installing the Battery Pack

Connecting the Power Adapter
Opening the LCD display panel
1. Carefully lift up the display panel with your thumb.
2. Slowly tilt the display panel forward or backward to a comfortable viewing angle.

Turning on the Power
1. Push and release the power button located beneath the LCD display panel.
2. Use [Fn]+[F5] or [Fn]+[F6] to adjust the LCD brightness.
Using the Touchpad

A

B

C

D
A. Slide your finger across the touchpad to move the pointer. You can also hold the left button and slide your finger to drag the selected item.

B. Use the left and right buttons like a standard mouse.

C. Slide your finger up or down on the right side to scroll up or down a window. Slide your finger left or right on the bottom side to scroll left or right a window.

D. Moving two fingertips apart or together on the touchpad to zoom in or zoom out. This is convenient when viewing photos or reading documents.
Knowing the Parts
Right Side

1 Headphone Output Jack
The stereo headphone jack (1/8 inch) is used to connect the Notebook PC’s audio out signal to amplified speakers or headphones. Using this jack automatically disables the built-in speakers.

2 Microphone Input Jack
The mono microphone jack (1/8 inch) can be used to connect an external microphone or output signals from audio devices. Using this jack automatically disables the built-in microphone. Use this feature for video conferencing, voice narrations, or simple audio recordings.

3 USB Port (2.0)
The USB (Universal Serial Bus) port is compatible with USB 2.0 or USB 1.1 devices such as keyboards, pointing devices, cameras, hard disk drives, printers, and scanners connected in a series up to 12Mbits/sec (USB 1.1) and 480Mbits/sec (USB 2.0). USB allows many devices to run simultaneously on a single computer, with some peripherals acting as additional plug-in sites or hubs. USB supports hot-swapping of devices so that most peripherals can be connected or disconnected without restarting the computer.
**USB Port (3.0) (on selected models)**

The USB (Universal Serial Bus) port is compatible with USB 3.0, 2.0, or USB 1.1 devices such as keyboards, pointing devices, cameras, hard disk drives, printers, and scanners connected in a series up to 4.8Gbits/sec (USB 3.0), 480Mbits/sec (USB 2.0), and 12Mbits/sec (USB 1.1). USB allows many devices to run simultaneously on a single computer, with some peripherals acting as additional plug-in sites or hubs. USB supports hot-swapping of devices so that most peripherals can be connected or disconnected without restarting the computer.

**HDMI Port**

HDMI (High-Definition Multimedia Interface) is an uncompressed all-digital audio/video interface between any audio/video source, such as a set-top box, DVD player, and A/V receiver and an audio and/or video monitor, such as a digital television (DTV). Supports standard, enhanced, or high-definition video, plus multi-channel digital audio on a single cable. It transmits all ATSC HDTV standards and supports 8-channel digital audio, with bandwidth to spare to accommodate future enhancements or requirements.

**Display (Monitor) Output**

The 15-pin D-sub monitor port supports a standard VGA-compatible device such as a monitor or projector to allow viewing on a larger external display.

**LAN Port**

The RJ-45 LAN port with eight pins is larger than the RJ-11 modem port and supports a standard Ethernet cable for connection to a local network. The built-in connector allows convenient use without additional adapters.


**Power (DC) Input**

The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the Notebook PC and charges the internal battery pack. To prevent damage to the Notebook PC and battery pack, always use the supplied power adapter.

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⚠️ The adapter may become warm to hot when in use. Ensure not to cover the adapter and keep it away from your body.
Left Side

1. **Optical Drive**
   The Notebook PC comes in various models with different optical drives. The Notebook PC’s optical drive may support compact discs (CD) and/or digital video discs (DVD) and may have recordable (R) or re-writable (RW) capabilities. See the marketing specifications for details on each model.

2. **Optical Drive Activity Indicator**  
   (location varies by model)
   The optical drive activity indicator shows when data is being transferred by the optical disk drive. This indicator will light in proportion to the data size transferred.

3. **Optical Drive Electronic Eject**
   The optical drive eject has an electronic eject button for opening the tray. You can also eject the optical drive tray through any software player or by right clicking the optical drive in Windows **Computer** and selecting **Eject**.

4. **Optical Drive Emergency Eject**  
   (location varies by model)
   The emergency eject is used to eject the optical drive tray in case the electronic eject does not work. Do not use the emergency eject in place of the electronic eject.
USB Port (2.0)

The USB (Universal Serial Bus) port is compatible with USB 2.0 or USB 1.1 devices such as keyboards, pointing devices, cameras, hard disk drives, printers, and scanners connected in a series up to 12Mbits/sec (USB 1.1) and 480Mbits/sec (USB 2.0). USB allows many devices to run simultaneously on a single computer, with some peripherals acting as additional plug-in sites or hubs. USB supports hot-swapping of devices so that most peripherals can be connected or disconnected without restarting the computer.
Rear Side

1 Battery Pack

The battery pack is automatically charged when the Notebook PC is connected to an AC power source and maintains power to the Notebook PC when AC power is not connected. This allows use when moving temporarily between locations. Battery time varies by usage and by the specifications for this Notebook PC. The battery pack cannot be disassembled and must be purchased as a single unit.

2 Kensington® Lock Port

The Kensington® lock port allows the Notebook PC to be secured using Kensington® compatible Notebook PC security products. These security products usually include a metal cable and lock that prevent the Notebook PC to be removed from a fixed object. Some may also include a motion detector to sound an alarm when moved.
Front Side

1  🎒 ExpressCard Slot
   One 26pin Express card slot is available to support one ExpressCard/34mm or one ExpressCard/54mm expansion card. This new interface is faster by using a serial bus supporting USB 2.0 and PCI Express instead of the slower parallel bus used in the PC card slot. (Not compatible with previous PCMCIA cards.)

2  🔄 Status Indicators (front)
   Status indicators represent various hardware/software conditions.
Recovering Your Notebook PC

Using Recovery Partition

The Recovery Partition quickly restores your Notebook PC’s software to its original working state. Before using the Recovery Partition, copy your data files (such as Outlook PST files) to USB storage devices or to a network drive and make note of any customized configuration settings (such as network settings).

About the Recovery Partition

The Recovery Partition is a reserved space on your hard disk drive used to restore the operating system, drivers, and utilities installed on your Notebook PC at the factory.

IMPORTANT! DO NOT delete the partition named **RECOVERY**. The Recovery Partition is created at the factory and cannot be restored if deleted. Take your Notebook PC to an authorized ASUS service center if you have problems with the recovery process.

Using the Recovery Partition:

2. Press [Enter] to select Windows Setup [EMS Enabled].
3. Select the language you want to recover and click **Next**.
4. Read the ASUS Preload Wizard messages and click **Next**.
5. Select a partition option and click **Next**. Partition options:

   **Recover Windows to first partition only.**
   This option deletes only the first partition and allows you to keep other partitions, and to create a new system partition as drive “C”.

   **Recover Windows to entire HD.**
   This option deletes all partitions from your hard disk drive and creates a new system partition as drive “C”.

Recover Windows to entire HD with two partitions.
This option deletes all partitions from your hard drive and creates two new partitions “C” (25%) and “D” (75%).
6. Follow the onscreen instructions to complete the recovery process.

Visit the ASUS website at www.asus.com for updated drivers and utilities.

Using Recovery DVD (on selected models)

Creating the Recovery DVD:
1. Double-click the **AI Recovery Burner** icon on the Window desktop.

2. Insert a blank writable DVD into the optical drive and click **Start** to start creating the Recovery DVD.

3. Follow the onscreen instructions to complete creating the recovery DVD.

Prepare enough blank writable DVDs as instructed to create the Recovery DVD.

IMPORTANT! Remove the external hard disk drive before performing system recovery on your Notebook PC. According to Microsoft, you may lose important data because of setting up Windows on the wrong disk drive or formatting the incorrect drive partition.
Using the Recovery DVD:

1. Insert the Recovery DVD into the optical drive. Your Notebook PC needs to be powered ON.

2. Restart the Notebook PC and press [Esc] on bootup and select the optical drive (may be labeled as “CD/DVD”) and press [Enter] to boot from the Recovery DVD.

3. Select OK to start to restore the image.

4. Select OK to confirm the system recovery.

   Restoring will overwrite your hard drive. Ensure to back up all your important data before the system recovery.

5. Follow the onscreen instructions to complete the recovery process.

   WARNING: DO NOT remove the Recovery disc, unless instructed to do so, during the recovery process or else your partitions will be unusable.

   Ensure to connect the power adapter to your Notebook PC when performing system recovery. Unstable power supply may cause recovery failure.

   Visit the ASUS website at www.asus.com for updated drivers and utilities.
Declarations and Safety Statements

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The use of a shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate this equipment. “The manufacture declares that this device is limited to Channels 1 through 11 in the 2.4GHz frequency by specified firmware controlled in the USA.”

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. End users must follow the specific operating instructions for satisfying RF exposure compliance.

**Declaration of Conformity (R&TTE directive 1999/5/EC)**

The following items were completed and are considered relevant and sufficient:

- Essential requirements as in [Article 3]
- Protection requirements for health and safety as in [Article 3.1a]
- Testing for electric safety according to [EN 60950]
- Protection requirements for electromagnetic compatibility in [Article 3.1b]
- Testing for electromagnetic compatibility in [EN 301 489-1] & [EN 301 489-17]
- Effective use of the radio spectrum as in [Article 3.2]
- Radio test suites according to [EN 300 328-2]
CE Marking

CE marking for devices without wireless LAN/Bluetooth
The shipped version of this device complies with the requirements of the EEC directives 2004/108/EC “Electromagnetic compatibility” and 2006/95/EC “Low voltage directive”.

CE marking for devices with wireless LAN/Bluetooth

IC Radiation Exposure Statement for Canada
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with IC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Operation is subject to the following two conditions:

• This device may not cause interference and
• This device must accept any interference, including interference that may cause undesired operation of the device.

To prevent radio interference to the licensed service (i.e. co-channel Mobile Satellite systems) this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.
Wireless Operation Channel for Different Domains

N. America 2.412-2.462 GHz Ch01 through CH11
Japan 2.412-2.484 GHz Ch01 through Ch14
Europe ETSI 2.412-2.472 GHz Ch01 through Ch13

France Restricted Wireless Frequency Bands

Some areas of France have a restricted frequency band. The worst case maximum authorized power indoors are:

• 10mW for the entire 2.4 GHz band (2400 MHz–2483.5 MHz)
• 100mW for frequencies between 2446.5 MHz and 2483.5 MHz

Channels 10 through 13 inclusive operate in the band 2446.6 MHz to 2483.5 MHz.

There are few possibilities for outdoor use: On private property or on the private property of public persons, use is subject to a preliminary authorization procedure by the Ministry of Defense, with maximum authorized power of 100mW in the 2446.5–2483.5 MHz band. Use outdoors on public property is not permitted.

In the departments listed below, for the entire 2.4 GHz band:

• Maximum authorized power indoors is 100mW
• Maximum authorized power outdoors is 10mW

Departments in which the use of the 2400–2483.5 MHz band is permitted with an EIRP of less than 100mW indoors and less than 10mW outdoors:

01 Ain 02 Aisne 03 Allier
05 Hautes Alpes 08 Ardennes 09 Ariège
11 Aude 12 Aveyron 16 Charente
24 Dordogne 25 Doubs 26 Drôme
32 Gers 36 Indre 37 Indre et Loire
41 Loir et Cher 45 Loiret 50 Manche
55 Meuse 58 Nièvre 59 Nord
This requirement is likely to change over time, allowing you to use your wireless LAN card in more areas within France. Please check with ART for the latest information (www.art-telecom.fr)

Your WLAN Card transmits less than 100mW, but more than 10mW.
UL Safety Notices

Required for UL 1459 covering telecommunications (telephone) equipment intended to be electrically connected to a telecommunication network that has an operating voltage to ground that does not exceed 200V peak, 300V peak-to-peak, and 105V rms, and installed or used in accordance with the National Electrical Code (NFPA 70).

When using the Notebook PC modem, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

• DO NOT use the Notebook PC near water, for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
• DO NOT use the Notebook PC during an electrical storm. There may be a remote risk of electric shock from lightning.
• DO NOT use the Notebook PC in the vicinity of a gas leak.

Required for UL 1642 covering primary (nonrechargeable) and secondary (rechargeable) lithium batteries for use as power sources in products. These batteries contain metallic lithium, or a lithium alloy, or a lithium ion, and may consist of a single electrochemical cell or two or more cells connected in series, parallel, or both, that convert chemical energy into electrical energy by an irreversible or reversible chemical reaction.

• Do not dispose the Notebook PC battery pack in a fire, as they may explode. Check with local codes for possible special disposal instructions to reduce the risk of injury to persons due to fire or explosion.
• Do not use power adapters or batteries from other devices to reduce the risk of injury to persons due to fire or explosion. Use only UL certified power adapters or batteries supplied by the manufacturer or authorized retailers.
Power Safety Requirement

Products with electrical current ratings up to 6A and weighing more than 3Kg must use approved power cords greater than or equal to: H05VV-F, 3G, 0.75mm² or H05VV-F, 2G, 0.75mm².

REACH

Complying with the REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) regulatory framework, we publish the chemical substances in our products at ASUS REACH website at http://csr.asus.com/english/REACH.htm.

ENERGY STAR complied product

ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.

All ASUS products with the ENERGY STAR logo comply with the ENERGY STAR standard, and the power management feature is enabled by default. Please visit http://www.energy.gov/powermanagement for detail information on power management and its benefits to the environment. In addition, please visit http://www.energystar.gov for detail information on the ENERGY STAR joint program.
Nordic Lithium Cautions (for lithium-ion batteries)

CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer’s instructions. (English)

ATTENZIONE! Rischio di esplosione della batteria se sostituita in modo errato. Sostituire la batteria con un un di tipo uguale o equivalente consigliata dalla fabbrica. Non disperdere le batterie nell’ambiente. (Italian)

VORSICHT! Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers. (German)

ADVARESLE! Lithiumbatteri - Eksplodionfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren. (Danish)

WARNING! Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassa använt batteri enligt fabrikantens instruktion. (Swedish)

VAROITUS! Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan sousittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti. (Finnish)

ATTENTION! Il y a danger d’explosion s’il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d’un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant. (French)

ADVARESLE! Eksplodjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfarkanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner. (Norwegian)

(Japanese)

ВНИМАНИЕ! При замене аккумулятора на аккумулятор иного типа возможно его возгорание. Утилизируйте аккумулятор в соответствии с инструкциями производителя. (Russian)
## EC Declaration of Conformity

We, the undersigned,

Manufacturer: ASUSTeK COMPUTER INC.
Address, City: No. 150, LI-TE RD., PEITOU, TAIPEI 112, TAIWAN R.O.C.
Country: TAIWAN
Authorized representative in Europe: ASUS COMPUTER GmbH
Address, City: HARKORT STR. 21-23, 40880 RATINGEN
Country: GERMANY

declare the following apparatus:

Product name: Notebook P.C.
Model name: G53J

conform with the essential requirements of the following directives:

<table>
<thead>
<tr>
<th>Directive</th>
<th>Standards</th>
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|                    | EN 61000-3-2:2006  
|                    | EN 300 440-1 V1.4.1(2008-05)  
|                    | EN 300 440-2 V1.2.1(2008-03)  
|                    | EN 301 511 V9.0.2(2003-03)  
|                    | EN 301 908-1 V3.2.1(2007-05)  
|                    | EN 301 908-2 V3.2.1(2007-05)  
|                    | EN 301 893 V1.4.1(2005-03)  
|                    | EN 62209-2 (2010-06)  
|                    | EN 60331:2008  
|                    | EN 50385:2002  
|                    | EN 69095-1:2006  
|                    | Regulation (EC) No. 642/2009  
|                    | Regulation (EC) No. 278/2009  

CE marking

(CE conformity marking)

Position: CEO
Name: Jerry Shen

Declaration Date: Aug. 2, 2010
Year to begin affixing CE marking: 2010

Signature: ___