







# 1-1. Read this carefully before using the Notebook PC.

# Regulatory Notices

### 1-1 USA Notice

#### Federal Communications Commission

#### Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the 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 commercial installation, or if operated in a residential area.

If harmful interference with radio or television reception occurs when the device is turned on, the user must correct the situation at the user's own expense. The user is encouraged to try one or more of the following corrective measures:

- Re-orient 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 on which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

**Modifications:** The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by LG Company may void the authority to operate the equipment.

**Cables:** Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods in order to maintain compliance with FCC Rules and Regulations.

**RF Radiation Exposure Statement:** This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

**Caution:** Regulations of the FCC and FAA prohibit airborne operation of radio-frequency wireless devices because their signals could interfere with critical aircraft instruments.





#### Declaration of Conformity for products marked with the FCC logo

This device uses, generates and radiates radio frequency energy. The radio frequency energy produced by this device is well below the maximum exposure allowed by the Federal Communications Commission (FCC).

This device complies with Part of FCC Rules and Regulations. Operation is subject to the following two conditions. (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

### Responsible Party:

LG ELECTRONICS U.S.A., INC. 1000 SYLVAN AVENUE ENGLEWOOD CLIFFS, NJ Telephone: 1-800-243-0000



## 1-2. Canada Notice

This Class B digital apparatus complies with Canadian ICES-003, Issue 4, and RSS-210, No. 4 (Dec. 2000) and No. 5(Nov. 2001).

"To prevent radio interference to the licensed service, 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."

Cet appareil numérique de la classe B est conforme à la norme NMB-003, No. 4, et CNR-210, No. 4 (Dec. 2000) et No. 5(Nov. 2001).

« Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence. »

"Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."





# 1-3. European Union

This notebook PC may contain following RF modules.

for Ralink RT3090

( for Broadcom BCM92070MD\_REF

C€<sub>0560</sub> for Ericsson F3607gw

### Translated Statements of Compliance

[English]

This product follows the provisions of the European Directive 1999/5/EC.

[Danish]

Dette produkt er i overensstemmelse med det europæiske direktiv 1999/5/EC

[Dutch]

Dit product is in navolging van de bepalingen van Europees Directief 1999/5/EC.

[Finnish] Tämä tuote noudattaa EU-direktiivin 1999/5/EC määräyksiä.

[French]

Ce produit est conforme aux exigences de la Directive Européenne 1999/5/EC

. [German]

Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 1999/5/EC

[Greek]

Το προϊόν αυτό πληροί τις προβλέψεις της Ευρωπαϊκής Οδηγίας 1999/5/ΕС.

[Icelandic]

Þessi vara stenst reglugerð Evrópska Efnahags Bandalagsins númer 1999/5/EC

[Italian]

Questo prodotto è conforme alla Direttiva Europea 1999/5/EC.

[Norwegian]

Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 1999/5/EC.

[Portuguese]

Este produto cumpre com as normas da Diretiva Européia 1999/5/EC.

[Spanish]

Este producto cumple con las normas del Directivo Europeo 1999/5/EC.

[Swedish]

Denna produkt har tillverkats i enlighet med EG-direktiv 1999/5/EC.





### 1-4. Brazil Notice

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

### 1-5. France Notice

#### Pour la France métropolitaine

2.400 - 2.4835 GHz (Canaux 1à 13) autorisé en usage intérieur 2.400 - 2.454 GHz (canaux 1 à 7) autorisé en usage extérieur

# Pour la Guyane et la Réunion

2.400 - 2.4835 GHz (Canaux 1à 13) autorisé en usage intérieur 2.420 - 2.4835 GHz (canaux 5 à 13) autorisé en usage extérieur

# 1-6. Italy Notice

A general authorization is requested for outdoor use in Italy. The use of these equipments is regulated by:

- 1. D.L.gs 1.8.2003, n. 259, article 104 (activity subject to general authorization) for outdoor use and article 105 (free use) for indoor use, in both cases for private use.
- 2. D.M. 28.5.03, for supply to public of RLAN access to networks and telecom services.

L'uso degli apparati è regolamentato da:

1. D.L.gs 1.8.2003, n. 259, articoli 104 (attività soggette ad autorizzazione generale) se utilizzati al di fuori del proprio fondo e 105 (libero uso) se utilizzati

entro il proprio fondo, in entrambi i casi per uso private.

2. D.M. 28.5.03, per la fornitura al pubblico dell'accesso R-LAN alle reti e ai servizi

di telecomunicazioni.





# 1-7. Latvia Notice

A license is required for outdoor use for operation in 2.4 GHz band.

# 1-8. Russia



# 1-9. Contact Information

Country	Telephone	Email or website
Poland	801-545454	http://pl.lgservice.com
Hungary	06-40-54-5454	http://hu.lgservice.com
Spain	902-500-234	http://es.lgservice.com
Netherlands		
France		
Germany	31-24-3731375	LG@ICT-FIX,COM
Italy	31-24-3731373	
Sweden		
UK		
Portugal	808-78-54-54	http://pt.lgservice.com
Canada	888-542-2623	nbwarranty@lge.com
Australia	1300-788-184	http://au.lgservice.com
China	400-819-9999	http://cn.lge.com
India	1800-1809999	http://in.lgservice.com
Korea	82-2-219-7777 (Korean)	globalsvc@lge.com
Notea	82-31-610-9657 (English)	giobaisvo@ige.com
Singapore	65-6512-0550	lgesg@lge.com
USA	1-800-243-0000	usapcsvc@lge.com

<sup>\*</sup>The contat numbers listed above are subject to change without prior notice





### SAFETY REGULATION NOTICE

#### Battery

If the backup battery is incorrectly replaced, there is danger of explosion. The lithium battery contains lithium and can explode if it is not properly handled or disposed of replace only with a battery of the type recommended by LG

#### Australia Notice

- The appliance is not intended for use by young children or infirm persons without supervision
- Young Children should be supervised to ensure that do not play with appliance
- If the appliance is supplied from a cord extension set or an electrical portable outlet device.
- The cord extension set on electrical portable outlet device must be positioned so that it is not

subject to splashing or ingress of moisture

# European \_ WEEE



### Disposal of your old appliances

- 1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
- All electrical and electronic products should be disposed of separately from the municipal waste stream via designed collection facilities appointed by the government or local authorities.
- 3. The correct disposal of your old appliances will help prevent potential negative consequences for the environment and human health.
- For more detailed information about disposal of your old appliances, please contact your city office, waste disposal service or the shop where you purchased the product.

#### Disconnect Device

- Plug and connector of the power supply cord
- Output jack of Power supply
- Main Battery Pack





# **DECLARATION OF CONFORMITY**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Trade Name / Model: LG / LGX13

Responsible Party: LG Electronics, Inc. / Product Safety & Compliance

Address : 1000 Sylvan Avenue Englewood Cliffs, NJ 07632, U.S.A.

Contact Person : Mr. J.C.Lee, General Manager

Tel. No. 1-800-243-0000 For Technical Support Tel. No. 1-201-266-2420 For FCC Inquiry

Equipment Classification: FCC Class B Peripheral Device (JBP)

Type of Product(EUT): Notebook PC

Manufacturer: LG Electronics Inc.

Address: 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si,

Attention: Gyeonggi-do, 451-713, Korea

Mr. H.S. Lee - General Manager Digital Media Standards Group

We hereby declare that the equipment bearing the trade and model number specified above was tested conforming to the applicable FCC Rules under the most accurate measurement standards possible, and that all the necessary steps have been taken and are in force to assure that production units of the same equipment will continue to comply with the Commission's requirements.

LG Electronics Inc.

Signature

July/30/2009

Date





# 



# Suppliers Details

#### Name

LG Electronics Inc

#### Address

LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

#### Product Details

#### **Product Name**

Notebook PC

#### Model Name

LGX13

#### Trade Name

LG

# Applicable Standards Details

1. EMC Directives: 2004/108/EC

EN 55022: 2006 Class B, EN 55024: 1998+A1:2001+A2:2003 EN 61000-3-2:2006, EN 61000-3-3:1995 +A1/2001 +A2/2005

2. R&TTE Directives: 1995/5/EC

ETSI EN 301 489-1: V1.6.1(2005-09), ETSI EN 301 489-17: V1.2.1(2002-08)

ETSI EN 300 328-1 : V1.7.1(2006-10) ETSI EN 301 511:V9.0.2(2003-03), ETSI EN 301 908-1 : V3.2.1(2007-07)

EN50360: 2001, EN50361: 2001

3. Low Voltage Directives: 2006/95/EC

EN 60950-1:2001+A11:2004

# Supplementary Information

The technical files are kept available at the below. Year to begin affixing CE Marking 2009.

# Declaration

I hereby declare under our sole responsibility that the product mentioned above to which this declaration relates complies with the above mentioned standards and Directives

LG Electronics Inc. Amsterdam Office Veluwezoom 15, 1327 AE Almere, The Netherlands Tel:+31-36-547-8940, e-mail:jacob@lge.com

Issued Date

S.H.Ji / Director

July. 30, 2009

Signature of representative





# ► How to protect the human body from the hazardous RF energy exposure.

We recommend that the human body should be kept off at least 15 mm from the external antenna plug-in-radio-card or the internal antenna located in screen section during the operation or moving.

# **► ENERGY STAR**



# ENERGY STAR Compliance (Korea)

As an ENERGY STAR partner, LG has determined that standard configurations of this product meet the ENERGY STAR guidelines for energy efficiency.

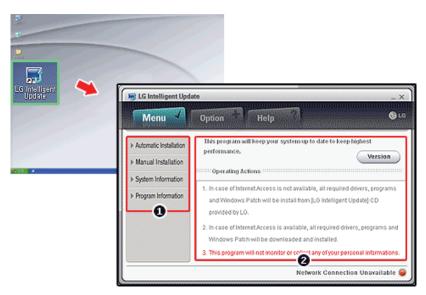
The ENERGY STAR program is a partnership with electronic equipment manufacturers to promote energy—efficient products,

Reducing energy consumption of products saves money and helps conserve valuable resources. This computer is shipped with power management enabled with the computer set to sleep after 20 minutes of user inactivity.

To wake your computer, click the mouse or touchpad button or press any key on the keyboard.

# ► LG Intelligent Update CD

To install a driver or application, use LG Intelligent Update CD provided by LG Electronics.



- 1. Guides you to configure the optimal environment for the system.
- 2. Provides you with an overview before use.



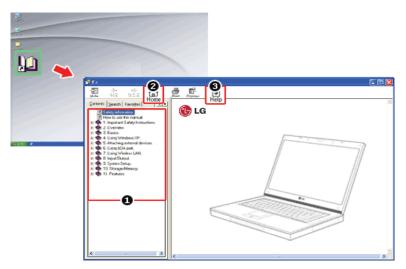


# ► Using Ez User Guide/Ez Troubleshooting

For more convenient use of the machine, we provide you with Ez User Guide/Ez Troubleshooting.

Install them by selecting LG Intelligent Update CD > Manual Installation > Application.

Click Help button and refer to Tour to learn how to use Ez User Guide/Ez Troubleshooting.



- 1. Table of Contents
- 2. Start
- 3. Help: Helps you to find the answers to your questions and solve problems.

# ► Ez User's Guide

Thank you for purchasing the LG Electronics product.

This machine is built on cutting-edge technology and has been tested reliably.

For the sake of convenient use, please read this manual in advance.

The below symbols are to inform you of dangers and safety concerns that you must be aware of. Read the symbol-indicated instructions with caution to avoid any possible mishap.





Warning	Appears in the case of noncompliance with the instruction that may cause serious physical damage or fatal injuries.	
Caution	Appears in the case of noncompliance with the instruction that may cause minor damage to the body or the machine.	

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IBM, IBM Personal Computer, PS/2, and PC AT are the registered trademarks of International Business Machine Corporation.

<b>(</b> LG	LG logo is a registered trademark of LG Corporation,
4	SONY logo and Memory Stick are the registered trademarks of SONY Corporation.
Transcend	Transcend logo is a registered trademark of Transcend Corporation,
53	SD logo is a registered trademark of Secure Digital Corporation.

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Please be understanding that this manual may contain incorrect parts despite our dedicated efforts to perfect it.

The examplified figures in this manual may not exactly the same as the real products.

LG Electronics Inc. has rights to modify any part of this manual for the better without prior notice.

Unauthorized reproduction or duplication of any part of this manual is strictly prohibited.

This product has been designed for household use and passed the Electromagnetic Interference Test. Thus, this product may be used not only in residential areas but also in any other places.

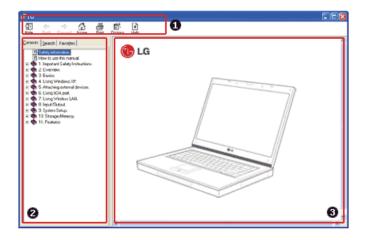
Country of Origin: China

 $Manufacturer \hbox{:}\ Tech-Front(Shanghai)Computer\ Co.,\ Ltd$ 





# ► Ez User Guide Tour



# 1. Toolbar

- Hide/Show: Hide or show the navigation window.
- Back: Displays the previous page in the navigation history.
- Forward: Displays the next page in the navigation history.
- Home: Displays the Home page.
- Print: Prints the current page.
- Option: Displays options.
- Help: Mostly used for touring this guide.
- 2. Navigation Bar
- Index: Displays a categorized list of subjects.
- Search: Allows users to type key words and search manually.
- Favorites: Registers frequently searched items for more convenient future reference,
- 3. Description Pane
- Displays the explanation of the selected item.

# ► System Protection Feature

If the system becomes too hot, the system protection feature automatically stops battery recharging and switches the power mode to Maximum Power Saving or OFF.

The system may not be reactivated until it cools down enough.





# ► Adjusting volume (headset and speakers)

Check the volume before listening to music



- Before using the headset, check if the volume is too high.
- Do not use the headset too long.





# 1-2. Important safety information

Please avoid any undesirable environmental factor that shortens the machine's life span. Use the machine in a safe and stable place.

\* The warranty does not cover any damage resulting from reckless use or use in undesirable environments.

# Installation



#### **Varnin**a



#### Do not use the machine in damp places like a laundry room or bathroom,

Moisture may cause a glitch or an electric shock. The desirable temperature and humidity ranges are from 10 to  $35^{\circ}$ C and from 80% to 20%, respectively.



# Dispose of the desiccating agent and wrapping plastic properly.

The desiccating agent and wrapping plastic may cause suffocation.



#### Use the product in a dust-free environment,

Otherwise, the system may not function properly.



# Do not leave any object nearer than 15 cm from the computer.

Otherwise, lack of ventilation could overheat the machine from inside and you could get a burn from the heat.



# Caution



# Place the machine in a safe place so that it does not fall.

If dropped, the machine could be damaged and even cause an injury.





#### Do not leave or use the computer near a magnetic object,

Otherwise, the  $\rm H/D$  and the system may be damaged and fail to operate properly. Never place the computer on a bag with magnetic objects including magnetic buttons.

Otherwise, the H/D and the system may be damaged and fail to operate properly.



### Operate the product in a place without electromagnetic interference.

Keep a proper distance between the computer and such electronic appliances as speakers that generate strong magnetic fields,

Otherwise, data may be lost from the hard disk or the LCD may show impaired coloration,



#### Do not put any heavy object on the machine.

If falling, the object could damage the machine and cause an injury.

# Using Battery



## Warning



#### Charge the battery only with the provided instrument.

Otherwise, the battery may be damaged presenting a risk of fire.



# Do not throw or disassemble the battery.

The resulting impairment may cause an injury, explosion, or fire.



## Use batteries certified and acknowledged by LG Electronic Inc.

Otherwise, an explosion or fire may occur.



# Prevent the battery from being contact with any metallic object like a car ignition key or a paper clin

Otherwise, the battery may be overheated to be damaged resulting in a fire or an injury.





### Keep the battery away from heat.

Otherwise, an explosion or fire may occur.



### Do not short-circuit the battery.

Otherwise, it may explode.



### Do not dispose of a spent (backup) battery arbitrarily.

It may explode or cause a fire.

Disposal methods may differ by country and region. Dispose of the spent battery in accordance with the laws and safety rules of the country and region.



If you find leakage or smell bad odor from the battery, remove the battery and contact the local service center.

It may explode or cause a fire.



Avoid humidity and heat above 60  $\,^\circ\,$  C as in cars or saunas.

It may explode or cause a fire.



Keep the battery out of reach of children or pets,

If damaged, it could cause an injury.



Keep the battery from being pierced by a sharp object or a chew of your pet,

It may explode or cause a fire.





### Do not sink the battery in water.

Otherwise, the battery may be damaged presenting a risk of explosion.



#### Ensure that the battery pack is locked to the machine after installation.

Otherwise, the battery pack may be damaged.



### Do not use the laptop on top of carpet, blanket or bed.

The product may malfunction, cause a fire or burn the user due to temperature rise.



### Read the directions printed on the battery pack carefully before use.

Keep the battery at room temperature. Refer to other Tips and directions in this guide to store the battery properly.

# Using AC Adapter



# Warning



# Do not use loose plugs or damaged power cords.

An electric shock or fire may occur.



## Do not touch the power cord with your hands wet,

Otherwise, an electric shock may occur.



# Pull the plug, not the cord, to disconnect the power.

Otherwise, a fire may occur or the product may get damaged.







### Operate the product at the proper voltage.

Excessive voltage may result in damage on the product, electric shock or fire.



### Use power outlets with an earth pin installed and proper supply of rated electricity.

An electric leakage may cause an electric shock or fire.



# Plug the power cord tightly into the outlet.

Loose connection of the power cord could cause a fire.



In the case that a strange noise is heard from the cord or plug, disconnect the power cord from the outlet immediately and contact the service center.

A fire or electric shock may occur.



### Never disassemble the power supply and adapter.

A damaged power cord may cause an electric shock or fire.



## Use a socket with an earth pin equipped.

If not earthed, the product may cause an electric shock and get damaged.



# Ensure that the power outlet is earthed before plugging in.

Otherwise, an electric shock from power leakage may occur.



### Always keep the power cord and the outlet clean.

A fire may occur.





Do not impair the cord by bending or pressing it too hard. Keep children and pets from damaging the power cord.

An impaired cord could damage computer parts causing a fire or electric shock.



Disconnect the machine completely from others before cleaning it,

Otherwise, an electric shock or impairment may occur.



If the power circuit and machine are soaked, disconnect the battery, AC adapter, and all others before contacting the local service center.

Otherwise, an electric shock may occur.

# ► Using Notebook PC



# Warning



Clean the computer with a proper agent and dry it completely before using it again.

If the computer is wet while used, an electric shock or fire may occur.



When lightning flashes in your area, disconnect the power, modern, LAN and other connections,

An electric shock or fire may occur.



Do not leave a cup or other containers filled with watery substance near the computer.

If the machine is soaked, a fire or electric shock may occur.







#### Do not connect the modem to a key telephone system,

A fire may occur or the product may get damaged.



If you have dropped or damaged the computer, disconnect the power and contact the local service center for a safety check,

If a damaged computer is used continuously, an electric shock or fire may occur.



Do not put a lit candle or live cigarette on the computer.

A fire may occur.



The fluorescent lamps on the LCD panel contains mercury.

If you have contacted the liquid from the LCD panel, immediately wash the substance away with water. If you feel any slightest trouble, visit your doctor immediately.



If you smell or see smoke from the computer, stop using the computer and disconnect the power before contacting the local service center.

A fire may occur.



Do not play computer games too much.

Playing a computer game for an extensive time may cause a mental disorder. It could even inflict physical impairments on feeble people including children and the elderly.



You may hear noise while on 3D mode.



Caution





# Do not leave any object such as a pen on the keypad.

You might break the LCD panel by unwittingly shutting it down with the object remaining on the pad.



# Do not press or scratch the LCD panel with a sharp object.

It may cause an impairment.



### Ensure the power is off before shutting the panel.

The machine may be deformed due to temperature rise.



The bottom of the computer gets hot when the system is working. Please avoid touching it and do not put it on your laps.



# Do not impose excessive force on the LCD panel or drop it,

You could break the LCD glass panel.



## Do not forcibly open the LCD panel with one hand.

The machine may be twisted.



To clean the LCD panel, use designated agents and soft cloth and rub the panel in one direction.

Too much force may damage the panel.



When handling computer parts, follow the instructions in the manual,

Otherwise, damage may be inflicted.







Do not put your finger or an object in the PC card slots.

An injury or electric shock may occur.



Install a vaccine program on your computer and do not download illegal programs nor access any corruptive web site such as those pushing pornographic contents.

The system may be infected and impaired.



Ask one of our engineers to run a safety check after your computer has been repaired.

Otherwise, an electric shock or fire may occur.



For minors, we recommend a program that blocks access to illegal or pornographic web sites.

Minors' exposure to adult—only contents may inflict psychological instability or even trauma on them. Take an extra precaution for your children if the whole family is using this machine.



Do not press Eject button while the CD-ROM drive is running.

The data may be lost or the disk may spin out unexpectedly to cause an injury.



Keep the machine away from heat-emitting devices such as a heater.

The product may get deformed or catch on fire.



Do not insert other devices than designated ones in the ports.

Otherwise, the product may get damaged.





Do not use a damaged CD-ROM disk or floppy disk.

It may cause product damage or physical injury.



Prevent children from thrusting their finger in the CD drive tray.

The finger may be stuck in the tray and injured.



To remove a CD, turn off the CD program and when the drive lamp is off press  $\mbox{\it Eject}$  button,

Otherwise, the fast spinning CD may spring out of the tray and hurt you.



Do not block the ventilation hole on the sides with any object,

Otherwise, an electric shock may occur.



Do not leave the machine in a car,

The battery may cause an explosion or fire.



Avoid using a wireless LAN connection within the 5m radius of a microwave or plasma lamp. If you have to use wireless LAN and a plasma bulb within the range, however, do it through a channel between 11 and 13.

The transmission rate may drop even if the connection is made.



Turn off the computer if you are not going to use it for an extended time period.

It may overheat the battery.





# ► Upgrading Notebook PC



# Warning



To upgrade the machine, turn off the system and disconnect the power cord and the battery. Disconnect the telephone line linked to the modern, if any,

An electric shock or fire may occur.



When you disassemble and upgrade the machine, prevent children from swallowing any parts including bolts.

If a child swallowed a nut, they may get suffocated. In that case, see the doctor immediately.



# Caution



Please use parts certified by LG Electronics Inc.

Otherwise, a fire or product damage may occur.



Consult our service engineer before you use a peripheral device not manufactured by LG Electronics Inc.

The product may get damaged.



Do not disassemble or moderate the machine arbitrarily.

You could get an electric shock and would not be able to receive the warranty service for that,  $\$ 



Handle devices and parts of the machine with care,

The product may get damaged.





Ensure that everything including the case is reassembled completely before connecting the machine to the power,

Any exposed part may give you an electric shock.



Do not drop any part or device of the machine while disassembling it,

If dropped, it may be damaged and cause an injury.

# ► Carrying Notebook PC



Caution



To carry the machine, turn off the power and disconnect all the cables,

Otherwise, you may trip over the wire, damaging the computer and getting an injury.



During air traveling, follow the directions of flight attendants.

Using a laptop during flight may cause an aircraft accident.



Do not carry the machine with the LCD panel open.

Otherwise, the product may get damaged.



When leaving the machine in a car, keep it in shadow.

The product may be deformed or caught on fire due to temperature rise.



Protect the machine from any shock while carrying it.

System damage or an injury may result.





## Carry the machine in a bag designed for it.



Carrying it in an other type of bag may result in product damage.



If the machine is not used for a long time, remove the battery pack and discharge electricity to store them

That way, the battery can maintain the optimal state.



Do not leave the powered—on computer in a space without enough ventilation (i.e. bags) for an extended or repeated time.

The battery may overheat and cause a fire.

# ► Safety Notes to Prevent Data Loss (HDD Management)



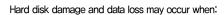
### Caution



#### Handle the computer with care to prevent a data loss.

Since the hard disk is sensitive to shocks, please make a back-up file of important data all the time

The manufacturer will not be responsible for any hard-disk data loss caused by your mistake,





External shocks are inflicted on the machine while disassembling or installing it. When the computer is abruptly reset (rebooted) due to power failure, the hard disk may get damaged.

The computer is infected with a virus, tainting the data irrecoverably.

Abrupt turning-off of the computer can damage the computer.

Moving, shaking or pounding the computer while the hard disk is running, and thus causing file damage or bad sectors.

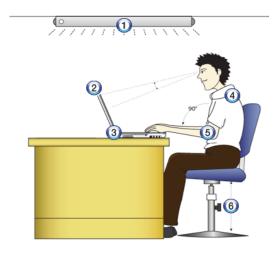


It is recommended to back up the data to minimize damage caused by hard disk damage.

The manufacturer is not responsible for any data loss.



▶ When using the computer, sit in the good posture as shown below.



- 1. Do not have light directly reflected on the monitor.
- 2. Set the upper part of the screen to be on the even level with or slightly lower level than your eyes.
- 3. Adjust the screen while avoiding illuminated reflection.
- 4. Stretch the neck and back straight.
- 5. Keep the hands, wrists, and arms horizontally.
- 6. Adjust the chair to set the hands and arms properly for the keyboard.



Warning

- Long time use of computer may cause physical fatigue.
- A 10 minutes break after 50 minute use is desirable, Avoid using the computer more than 2 hours a day.
- Take a rest regularly and stretch your body.

# ► Adjusting volume (headset and speakers)

Check the volume before listening to music



- Before using the headset, check if the volume is too high.
- Do not use the headset too long.







# 2-1. Opening/Closing Notebook PC

- 1. Raise the Notebook PC cover upward.
  - \* Adjust the angle for the best convenient position.
- 2. Be sure to close the computer after use.







# 2-2. Operation Status Lamps



- 1. Power Lamp:
- Blinking: System Standby
- On: The system is running on the AC power or battery.
- Off: The system is turned off or in Hibernates.
- 2. AC Power and Battery Status Lamp
- Orange: The battery is being charged,
- Orange/Green Blinking: Charged more than 90%
- Off: The AC adapter is not connected and the battery is being discharged,
- Green: The AC adapter is connected and the battery is not in charging stage, or the battery is fully charged.
- Green Blinking: The battery is charged less than 10%
- Red Blinking: In faulty state
- If you try to turn on the system that has entered the Hibernates mode or been turned off after a low-battery alarm, the system will not be turned on but the lamp will blink three times,
- 3. Hard Disk Drive Lamp
- The lamp is turned on when the HDD is running,
- \* Do not turn off the power forcibly while the hard disk drive lamp is on. Otherwise, the data may get impaired.
- 4. Num Lock lamp
- Num Lock lamp is turned on when you press [Fn] + Num Lock keys, indicating the embedded numeric keys are available,
   If you press [Fn] + [Num Lk] again, the Num Lock lamp is turned off and you can enter text characters.
- 5. Caps Lock lamp
- Caps Lock lamp is on when the it is active. When this lamp is on, you can type uppercase letters without holding Shift key.
- 6. Wireless LAN lamp
- Off: Wireless LAN is not in use.





- Blinking (short interval): Wireless LAN/Bluetooth is connected and data are being transmitted.
- Blinking (every 2 ? 3 seconds): Wireless LAN/Bluetooth is not connected but Wireless Radio is on.
- Blinking (every 3 ? 4 seconds): An access Point is being searched for to connect Wireless LAN/Bluetooth.
- On: An access point is being searched for or Wireless LAN is connected,
- $\mbox{\em \%}$  The Wireless LAN/Bluetooth lamp may operate differently depending on model type.
- \* OFFIGHT The Wireless LAN card and the Bluetooth device are optional, and so it may not be supported in some models.

Chapter3. Using the system



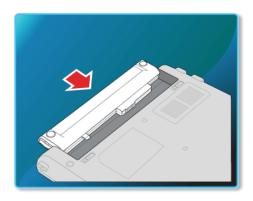




# 3-1. Running on Battery

Notebook PC runs on AC power or battery. This section describes the procedure that the user should take initially for a new system. The provided AC adapter can be used on both 100V and 240V. Charge the new battery with the AC adapter before use.

- \* Refer to [Charging Battery with AC Adapter] in User's Guide.
- 1. Turn the machine over to see the battery pack chamber and equip the pack.
- Insert the battery pack into the chamber as shown in the following figure and push it in the direction of the arrow until you hear a clicking sound.



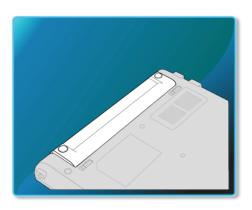
- 2. Open the machine and turn the power on.
- 3. Check the battery state.
- When the battery status lamp is blinking, charge it fully with the AC adapter before using it,







4. Remove the battery pack as shown in the diagram below.



Caution

Use batteries certified and acknowledged by LG Electronic Inc.

- Uncertified batteries may explode.
- Ensure the power is off before changing the battery pack.

# Keep the battery pack removed when the machine is not in use,

■ Otherwise, a fire and product damage may result.



# The battery may explode due to excessive heat, causing fire, For a safe and efficient use of battery, follow the below directions,

- Do not short-circuit the battery.
- Keep the battery out of reach of children.
- A visible swelling of the battery pack indicates a possible danger. When this occurs, contact your local vendor or service center immediately.
- Use only a certified and designated recharger.
- Keep the battery pack away from heat. (Never put it in a microwave.)
- Do not leave inside a car under the summar heat,
- Do not leave or use at a hot and humid place like a sauna.
- Do not use the machine placed on a heating blanket or other heat reserving materials.
- Do not leave the machine turned on inside a closed space.
- Make sure that the power ports are not touched by any metalic objects like a key, coin, necklace, and watch.
- Use only a lithium secondary battery certified and guaranteed by mobile device manufactures.
- Do not disassemble or modify the battery. Do not compress or pierce the battery.
- Do not apply shock to the battery. For example, do not drop the battery from a high place.
- Keep the room temperature between 0°C and 60°C. Do not expose the machine to the heat hotter than 60°C.
- Keep the machine dry.
- When you are not using the battery, remove it from the notebook PC. When you haven't used the battery for a long time, discharge and recharge it a few times before using it.
- Do not discard the battery arbitrarily as you are requested to follow the local procedure for discarding the battery.
- Before using this machine, read this guide carefully.

Warni







#### For more efficient use of the battery, read the following carefully.

- Natural discharge: The battery runs low naturally even if it is kept unused.
- Periodical full (dis)charge: Repeated recharge in midway shortens the running time gradually. To lengthen the span, charge and discharge the battery to the fullest once or twice. For optimal use, execute the full charge/discharge every 30 to 60 days. Still better, recharge the battery after it has run out.

### The battery capacity may change due to chemical reactions during charge and discharge,

- The system checks the charge status of LG batteries frequently, and then calculates and indicates the actual battery duration on the current system setup.
- The battery is wearable goods and thus the life span may be getting shorter as used. The battery running time may also become shorter accordingly.
- When the battery is fully charged, the machine stops recharging. It resumes recharging when the battery charge rate drops below 95%. This feature secures the safe and efficient use of the battery.
- The Battery Charging lamp may be turned off even when the battery is not fully charged, and it may blink in orange even when the battery is fully charged. This happens because of measures designed to prolong the battery life and the time gap between charge state recognition and charge state update. You don't need to worry about this because it returns to normal in a while.
- When the temperature of the battery drops below 9.6, it is charged in a low current. In this case, charging time may stretched to 32 hours or longer.



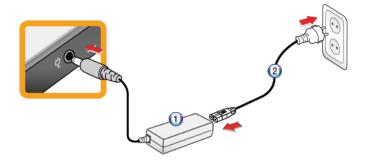


## 3-2. Charging Battery with AC Adapter

Notebook PC runs on AC power or battery.

This section describes the procedure that the user should take initially for a new system.

- \* The provided AC adapter can be used on both 100V and 240V.
- 1. Connect the AC adapter to a power outlet with the power cable.
- 2. Connect the AC adapter to the power port of the notebook PC.



- 1. AC Adapter
- 2. Power cable
- 3. Adjust the LCD panel to the most comfortable angle.
- 4. Press the power button to turn on the machine.



You need a different plug to use the AC adapter on 110V. (The extra plug for 110V is sold separately.)



### Do not leave a liquid container on the computer,

■ The system may be short-circuited and damaged.



### Please use an AC adapter certified by LG Electronics,

- Otherwise, an explosion or fire may occur.
- It may cause a problem in battery charging or system operation.





## 3-3. Registering Windows

Ensure that the AC adapter is connected or the battery is charged before turning on the machine. Refer to the below directions to turn on/off the machine.

### ► Turning On

- 1. Open the machine and adjust the panel.
- 2. Press Power button and self-diagnosis begins. After self-diagnosis, Windows XP screen appears.
- 3. User Registration for Windows XP Home Edition/Professional
- When you turn on the system for the first time, you need to go through the user registration process for Windows XP. For
  user registration process, refer to the following. (The process may differ by system model type, but that difference does
  not affect the system use.)

### ► User Registration for Windows XP Home Edition/Professional

When you turn on the system for the first time, you need to go through the user registration process for Windows XP.

For user registration process, refer to the following. (The process may differ by system model type, but that difference does not affect the system use.)

1. When the [Welcome to Microsoft Windows] screen appears, click Next.







2. When [End User License Agreement] appears, read it carefully, select Yes, I accept. (Y) and click Next.



- 3. [Please specify a computer name,] will then appear. Fill in Computer Name (C) and Computer Description (O) fields and click Skip button to continue.
  - \* To set up the Internet, click Next and continue.



4. When the [Register with Microsoft?] screen appears, select No, not at this time. (N) and click Next.







5. When the [Help protect your PC.] screen appears, select "Help protect my PC by turning on Automatic Update now" and click Next.



6. When the  $[Type \ the \ user \ name]$  screen appears, enter your  $User \ Name \ (Y)$  and click Next.



7. When the **[Thank you]** screen appears, click **Finish (F)**. Now, you have completed the installation process.







### System Termination

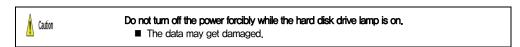
1. To turn off the computer, close all applications and, on the Windows XP screen, click Start and Turn Off Computer.



2. When the [Shutdown Computer] screen appears, click Shutdown.



- 3. The computer turns off automatically
- 4. Close the computer.









- Occasionally the system on Windows may not be shut down automatically. When this happens, press Power button for five seconds or longer to forcibly shut down. However, this is an emergency measure and it may cause system errors, it is recommended to click the Start button and select [Turn off Computer] menu to shut down the computer.
- Abnormal turning—off of the computer may damage data stored in the hard disk, When the program suddenly stops, press the **Ctrl + Alt + Delete** keys to terminate the program through **Windows Task Manager** or restart the system, If some program files or **Windows** files have been damaged due to abnormal shutdown of the computer, reinstall the damaged programs, LG Electronics is not responsible for data loss caused by your mistakes and negligence,





# 3-4. Using Windows XP

**Windows XP** is brilliant, fresh, and easy to use. The desktop and task bar images are simplified, and you can easily access applications through the Start menu.

There are more Desktop options for you to customize the environment.

### ► Windows XP Tour

Windows is an operation system of the computer. It is recommended to know basic functionality of Windows for better use of a computer.

- 1. Click the Start button and click Windows XP Tour.
- 2. Then, the window will appear. Select a feature of **Windows XP** to view detailed description.



- 1. Minimize button
- 2. Maximize button
- 3. Close button





### ► Windows XP Desktop



- 1. Start button
- Unfolds Start menu when clicked.
- 2. Start menu
- Includes programs needed to start Windows.
- Clicking All Programs displays the list of all programs installed on the system.
- 3. Taskbar
- Shows all currently running programs,
- 4. Toolbar
- Clicking the icon switches the language to another such as Korean/English.
- The user can add or delete various toolbars.
- 5. Taskbar icons and clock
- Allows you to set up resolution, **Power Management** and other basic configurations.
- 6. Recycle Bin
- Keeps dropped files and folders, Empty Recycle Bin deletes files and folders in Recycle Bin from the computer,
- \* Deleted files and folders can not be restored.





### ► Start menu

Includes all programs needed to start Windows.



- 1. Fixed Items
- 2. Recently Used Programs
- The order of the programs is subject to change.
- 3. All Programs
- 4. Start
- Allows you to easily access most commonly used programs.
- 5. My Documents
- Keeps your documents.
- 6. My computer
- Displays information on drives and networks and allows you to retrieve or execute files and folders.
- 7. Control Panel
- Allows you to customize computer settings.

### ► Help and Support

Allows you to learn about **Windows** use and get troubleshooting information and technical supports. Please read the menu before using the computer.





1. Click Start button and Help and Support on Start menu.



2. Then, the following screen will appear.



- Allows you to search for wanted items through such methods as Suggested Topics, Full-text Search Matches, and Microsoft Knowledge Base. Microsoft Knowledge Base is supported only when the Internet is connected.
- Helps you with many such troubles as learning about the features of Windows XP and getting troubleshooting information through appropriate items,
- Through the Internet connection, you can ask others for a help and receive the telephone number of the technical support center.
- 4. You can configure the optimal environment for computers.





### 3-5, Windows XP Power Management

**Windows XP** has a power management feature. With that, you can lower the power consumption of Notebook PC.

### ► Power Option Registration Information

- 1. On the home screen, click Start button and Control Panel.
- 2. Double-click Control panels | Switch to Classic View | Power Options icons.
- When Power Option Registration Information window appears, on Power Schemes tab, customize the power management settings for the user environments.





- To find appropriate power management settings for Notebook PC, just select Mobile Phone/Laptop in Power Schemes dropdown menu. Then decide detailed time frames for Turn off monitor, Turn off hard disks, System standby, and System hibernates in Power Schemes settings of Minimal Power Management.
- In the System Standby mode, the monitor and hard disks are turned off to save power,
- In System standby, currently worked—on data is not stored on the hard disk and so save it before entering into the standby mode.
- In System hibernates, the computer is turned off after all the data on the memory has been saved on the hard disk.



If you execute System standby or System hibernates while playing a computer game, a serious error may occur. Be sure to end the game before entering into System standby or System hibernates.





## 3-6. Scanning Computer Viruses

Computer viruses are programs that penetrate other programs and files. Computer viruses infect other files through replication, leaving the infected files and programs damaged and unusable. The notebook PC comes with a vaccine program called **Norton AntiVirus**. Services of **Norton AntiVirus** and **LiveUpdate** are available for free for ninety days.

- \* The figures herein are subject to change without prior notice for performance upgrade.
- \* You can use LG Intelligent Update CD to install Norton AntiVirus.

### ► Norton AntiVirus Installation and Registration

- 1. Complete Windows XP User Registration and turn on the system.
- 2. Double-click the [Install Norton AntiVirus] icon on the desktop.
  - \* You can use the LG Intelligent Update CD to install Norton AntiVirus.



When the license agreement for Norton AntiVirus appears, read the terms and conditions and click [I Agree].







- 4. When the **Norton AntiVirus** installation screen appears, select the destination folder to install the program and click **[Next]**.
  - \* When the Microsoft Windows installer update window appears, install the update. (You need to be connected to the Internet to install Microsoft Windows installer.



5. Norton Antivius will then start to install.



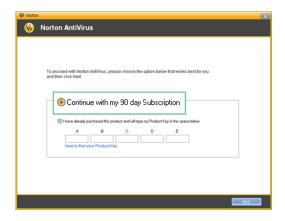




6. When the installation of Norton AntiVirus is completed as shown below, click [Next].



7. When the following screen appears, select [Continue with my 90 day Subscription] and press [Next].



- 8. When the following screen appears, click **[Finish]** to complete the installation and settings.
  - $f{x}$  The User Registration screen may appear when the Internet is connected. If you want to register then follow





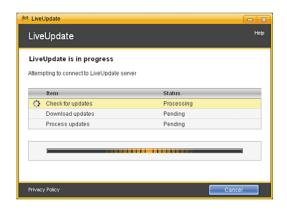
the instructions to fill in the details and press [Next] button, and if not press [Skip] button.



### ► Updating Norton AntiVirus

A modem or LAN card must be installed in the computer to update **Norton AntiVirus**. Update is available only through the Internet.

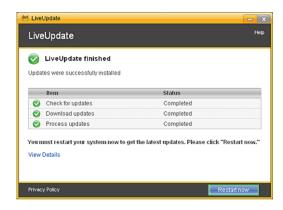
- 1. Click Start on the desktop and select Programs > Norton AntiVirus > LiveUPdate.
- 2. LiveUPdate program automatically downloads the update and begins installation.







3. When the update is complete, press the [Restart now] button to restart the system.



### ► Scanning Viruses with Norton AntiVirus

- 1. Double-click the Norton AtiVirus icon on the desktop or click [Start] > All Programs > Norton AntiVirus > Norton AntiVirus.
- 2. In the Norton AntiVirus tab, click [Tasks & Scans] > [Run a Scan], choose the scan options and start scan.

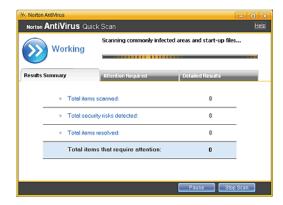


- 3. Scan is performed and the result is displayed.
  - \* The Virus Removal window appears when the system is infected with virus. Follow the instructions to remove

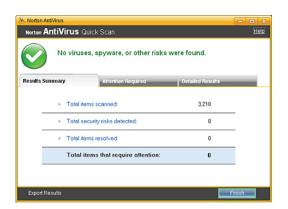




the virus.



4. When the scan was completed, click [Finish] to exit the program.







## 3-7. CyberLink YouCam

Cyberlink YouCam is the program that can take picture or moving images through the Web Camera.

- \* The figures herein are subject to change without prior notice.
- \* Optional Web Camera Optional Web Camera is optional, and so it may not be installed in some models.
- \* For more information about its operations, refer to the Help of CyberLink YouCam.

### ► Using Cyberlink YouCam

- 1. Double-click the CyberLink YouCam on the Desktop to run the program.
- 2. CyberLink YouCam Home Page appears as follows.



- 1. Viewer: Displays the Webcam screen.
- 2. Image Gallery: Use to record pictures and moving images, play back or delete those images.
- 3. Animation Effect menu Can add a frame and animation effect on the screen.
- 4. Frame / Animation Effect menu Can add a frame and animation effect on the screen.

### Major Buttons

You can switch between Snapshot/Brust and Capture/Timed REC by clicking the button on the right side of the corresponding menu icon.

- 1. Open Emotion Pictures Opens various emotion picture files.
- 2. YouCam Environment configuration: Configures the environment for YouCam.

# NOTE



- 3. Snapshot Snapshot: Takes pictures.
- 4. Burst Takes pictures continuously.
- 5. Capture Capture : Records movie clips.
- 6. Timed REC: Records a movie clip at the date and time set by the user.
- 7. Draw: Enables you to edit the pictures using a pen or stamp.
- 8. YouTube: Uploads the taken movie clips to YouTube.
- 9. E-Mail: Sends the taken pictures or movie clips through E-mail.
- 10. Print: Prints the pictures.
- 11. Recycle Bin: Deletes the taken pictures or moving images.
- 12. Rep: Displays the help window for YouCam.





### 3-8. LG Smart Care

LG Smart Care is an application that allows you to diagnose and optimize the system conveniently.

- \* The figures herein are subject to change without prior notice.
- \* You can download and install LG Smart Care using the online update feature of LG Intelligent Update.
- \* LG Smart Care may not be available depending on the model.
- \* "Diagnostics and Repair" function of LG Smart Care needs network connection or LG Intelligent Update CD/DVD.
- \* When you use LG Smart Care, make sure that the system is connected to the network or the LG Intelligent Update CD/DVD is inserted to the optical disk drive.

### ► Using LG Smart Care

- 1. Double-click the **LG Smart Care** icon on the Desktop to run the program.
- 2. LG Smart Care Home Page appears as follows.



- 1. Windows Button: Switches to Windows.
- 2. Settings Button: Allows you to change the settings of the LG Smart Care program.
- 3. Exit Button: Exits the LG Smart Care program.
- 4. Diagnostics and Repair: Diagnoses the system and solves the problems diagnosed.
- 5. Reinstall Windows: Restores the system to the restoration point set by LG Smart Recovery or Windows.
- Utilities: Provides various utilities (Internet connection, HDD defragmentor, system cleanup, etc.) that are needed for the system management.
- 7. Indicator: Displays the system preferences (display brightness, sound, power status, firewall, updates, etc.) and allows you to change the settings.
- 8. Indicator Environment configuration: Allows you to edit the indicator components displayed on the screen,
- 9. Hide/Show Indicator Button: Hides or shows the indicator window,













## 4-1. Using the Keyboard

The keyboard allows the user to input data or give commands.

### Keyboard Overview

The keyboard consists of character and numeric keys as well as function keys.



- 1. Function keys (F1 ? F12)
- The usage may differ by OS or applications types.
- 2. Fn key:
- Works as part of hot keys if used with function keys.
- 3. Character and Numeric Keys:
- Consists of keys, spacebar, numeric keys (0 ? 9), and special symbol keys.
- Spacebar: Inserts a white space per hit while you type.
- 4. Arrow keys:
- Moves the cursor and others in their respective directions,
- 5. Pg Up and Pg Dn keys:
- Moves a screened page up or down.





### Using Special Keys



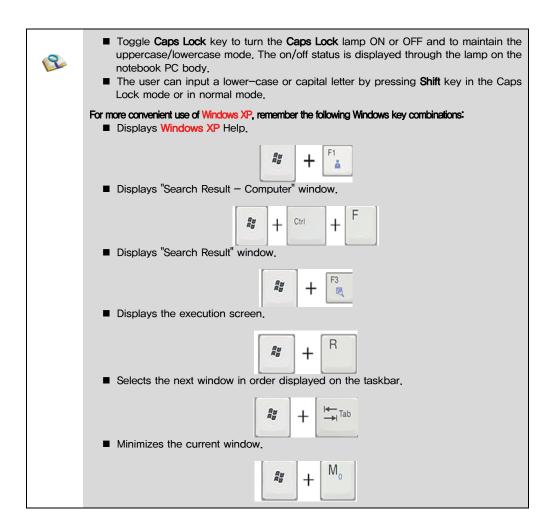
- 1. Esc key
- Terminates or stops a program.
- 2. Caps Lock key
- Used to turn on Caps Lock lamp. When this lamp is on, you can type uppercase letters without holding Shift key. To type lowercase letters, press this key again. This does not apply to Korean characters.
- 3. Shift key
- used to type uppercase letters or as part of hot keys.
- 4. Windows key
- Allows you to select the Windows Start button and open the Start menu,
- 5. Shortcut Menu Key:
- Allows you to open the Windows shortcut menus, (The shortcut menus are the same as those you can see when rightclicking a file or folder.)
- 6. Enter key
- Used to inform the computer of the completion of one command or to change the line,
- 7. Prt Sc key (Print Screen)
- Prints or temporarily saves the current screen display.



Caution

- Spilling a watery substance like coffee or juice on the keyboard may cause a fault, malfunction, or electric shock.
- The keys may not work properly when you use several keys at the same time while playing a PC game, (Please change the key combination settings according to the combinations necessary for the game play.





### ► Hot Keys:

By pressing the following key combinations at the same time, you can immediately start the designated features (such as adjusting the screen brightness).

Fn + F1	Customizable hot keys. (Configurable through OSD settings)
Fn + F2	Customizable hot keys. (Configurable through OSD settings)





Fn + F3	Magnifying hot keys
Fn + F4	Windows Executes the mode defined in the Power Save Mode. (Example: Standby, Hibernate)
Fn + F5	When the user presses <b>Fn</b> + <b>F5</b> keys, the touchpad mode toggles from <b>Touchpad Disable</b> , to <b>Touchpad Auto-Disable</b> (upon connection of external USB/PS2 mouse), to <b>Touchpad Enable</b> in order. (Initialization takes 1? 2 seconds, It is recommended to use after the initialization.)
Fn + F6	Turns the wireless devices (incl. Wireless LAN and Bluetooth) on and off (Bluetooth is optional, and so it may not be installed in some models,)
Fn + F7	Monitor toggle, If you have an external monitor connected to the computer, press Fn + F7 keys to rotate the display mode between LCD only, Monitor only, and LCD + Monitor both in order.
Fn + F8	When you press Fn + F8 keys, the sound mode toggles from SRS WOW HD,, to SRS TruSurround XT, to SRS Off in order.
Fn + F9	Mute (Sound ON / Sound OFF)
Fn + F10	System Information. System summary information will be displayed.
Fn + F11	Fan Control feature, Switches the cooling fan mode between Normal and Silent for each pressing.
Fn + F12	Hibernates (When OSD is installed)
Fn+ ▲	Increases LCD brightness within a nine-grade range.
Fn+ ▼	Decreases LCD brightness within a nine-grade range.
Fn+ ◀	Turns down the volume.
Fn+ ▶	Turns up the volume,
Fn + Num Lk	When the <b>Num Lock</b> lamp is turned on, you can enter numbers (0?9) using the embedded numeric keys. If you press <b>[Fn] + [Scr Lk]</b> again, the <b>Num Lock</b> lamp is turned off and you can enter text characters.
Fn + PgUp	You can enter [Prt Sc Sys Rq] button.
Fn + PgDn	You can enter [Pause Break] button.
Fn + Delete	You can enter [Insert] button.
-	

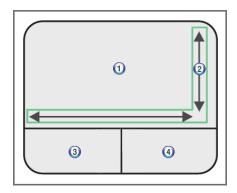




# 4-2. Using the Touchpad (and Mouse)

The touch pad is equipped with the scroll feature and can function as a wheel mouse. The touchpad is compatible with the USB-type mouse in software. The touchpad functions same as the USB-type mouse and is very useful for a program supporting mouse use like the **Windows**.

\* The touchpad and a USB-type mouse can be used together on the same system.



- 1. Touchpad
- Moves the cursor.
- 2. Scrolling area
- 3. Left button
- Used to select or execute programs.
- 4. Right button
- Functions as the right button of a mouse in most cases. However, the usage may differ depending on programs.





### ► Moving the Cursor (Pointer) on the Screen

Place a finger on the touchpad and glide the finger.



### ► Click (Select)

Press and release the left button swiftly. (Or tap the touchpad once.)

Do this, for example, to select a menu or icon and to place the cursor to type on a word processor file

### ▶ Double-click (Execute)

Press and release the left button twice swiftly in a series. (Or tap the touchpad twice swiftly in a series.)

Do this, for example, to run a program after selecting its execution file (or icon).

### Notes on Using the Touchpad



- Do not use a sharp object such as a pen on the pad nor peel the cover, It may cause an impairment
- Do not place more than one finger on the pad nor use it with your hands wet or covered with gloves, The touchpad may not function normally. Oil or dirt at the finger tip can also cause an impairment,
- The touchpad is sensitive. Do not impose an excessive pressure on it. Use the touchpad in a comfortable posture not to do any harm to your finger or wrist.





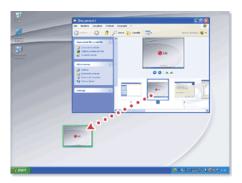
### ▶ Drag/Drop

To drag, click and hold an icon, for example, and move it to another location.

To drop, leave a dragged icon to another location.

To move a file icon, for example, to another folder or to **Recycle Bin**, place the cursor (or the pointer) on the icon, press and hold the left button, and glide another finger on the touchpad until the icon reaches the aimed location. After reaching the destination, release the left button.

- 1. Drag
- Glide one finger on the pad with another finger pressing and holding the left button.
- 2. Drop
- Release the left button to drop. (By doing this, you could drop a file into Recycle Bin, if you want to,)



### Click-free Dragging

When activated, this feature allows you to drag an icon without pressing and holding the left button.

Do the following to activate the click—free dragging feature. If it has been done, pressing the left button for an extensive time replaces pressing and constant holding so that you can drag without holding the left button.

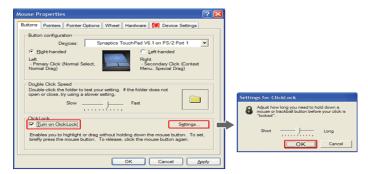
1. Click [Mouse Properties] icon in Notification Area.







2. Select Activate click-free dragging (T) and click Setup button to adjust the time span for which you should press the left button to execute the feature.



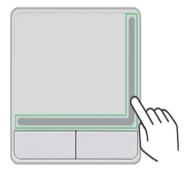
### Scrolling

The touch pad supports the scrolling feature.

To scroll vertically or horizontally, glide your finger along the right or bottom edge. Now the screen follows your finger movements if there is a scroll bar on either edge.

f X The width of scroll bar may differ by computer model type.









Chapter5.Connecting Peripherals







# 5-1. Connecting USB 2.0

Following peripherals can be connected to the Notebook PC.

\* Those peripherals need to be purchased separately.



The notebook PC can be connected with other USB supporting devices such as USB keyboard, Hub, digital camera, etc.  $\,$ 





# 5-2. Connecting Monitor



Monitor Toggle Features (Converting the Screen Using the Shortcut Key)

\* If you have an external monitor connected to the computer, press Fn + F7 keys to rotate the display mode between LCD only, Monitor only, and LCD + Monitor both in order.



■ Ensure the monitor power is off before connect external monitor to the notebook pc.





## 5-3. Using Bluetooth device

Bluetooth allows the MS Windows user to access wirelessly various devices such as camera, cell phone, headset, printer, and GPS receiver that support Bluetooth.

- \* Optional Bluetooth Optional Web Camera is optional, and so it may not be installed in some models.
- \* The images and contents of Using Bluetooth may differ depending on the Windows version.
- \* For more information, refer to the Help of the Bluetooth setup program.

### ► Searching for and Using Bluetooth Device

- 1. Double-click the "My **Bluetooth** neighborhood" icon on the desktop or the **3** icon on the right side of the task bar to run the Bluetooth Setup program.
- 2. When the following [Add New Connection wizard] appears, select [Fast Mode] and click [Next].



3. The following screen appears after searching for all **Bluetooth** devices. Select the device you want to use and click **[Next]**.







- 4. When the following [Bluetooth Manager-Bluetooth Security] window appears, enter the password for the Bluetooth device.
  - \* For a password, you can use the password provided by the **Bluetooth** device manufacturer or you can set it yourself.



5. When you added and connected the **Bluetooth** device, the corresponding icon and device name are displayed in the **Bluetooth Setup** program as follows:





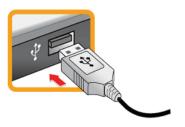


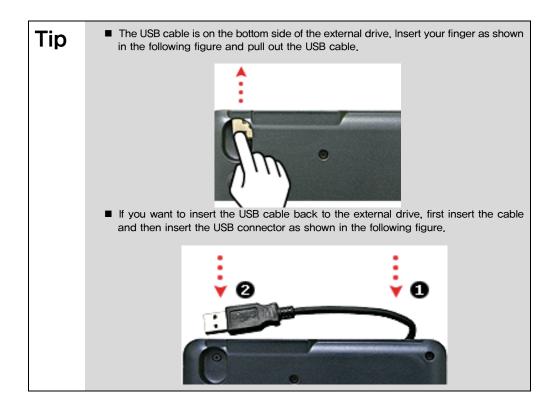
## 5-4. Using Enternal Drive (LGPC-ODD)

\* External Drive is optional, and so it may not be installed in some models.

#### ► Connecting External Drive

Connect the USB cable of the external drive to the USB port of the notebook PC.



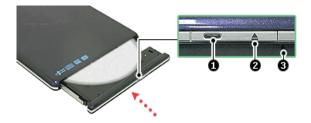






#### ► Inserting/Ejecting CD

- 1. Boot the system and press the Open Disk Tray button in front of the external drive.
- 2. When the tray is ejected, place the CD at the center of the tray.
  - \* (With brand name facing upward.)



- 1. Operation lamp
- 2. Open Disk Tray button
- 3. Emergency Ejector
- 3. Push the tray in.
- 4. If you want to take out the CD, press the Open Disk Tray button and take out the CD when the tray is ejected.



■ LGPC-ODD works only in LG X100, P100, X110, X120, X130, P300, P310, S215 Series.

## Tip

- Use the external drive on a leveled place, if possible. On a tilted place, the CD-ROM, CD-RW, or DVD-ROM may not function normally.
- The external drive installed in the notebook PC is X24 speed. When a CD is inserted, the motor will rotate at a high speed resulting in slight vibration.
- When you hold an optical disk such as CD/DVD, be careful not to smear the surface.
- Do not use benzene or thinner to clean a CD.
- Do not write anything on the readable surface of a CD.
- Do not bent a CD.
- Be sure not to drop or smash a CD.
- Do not expose a CD to the sun.
- To clean a CD or DVD, rub with smooth cloth from the center to the outer edge.
- Do not remove the CD when the CD Operation lamp is on.





# Chapter6.System Setup







## 6-1. Starting System Setup

System setup means storing the hardware configuration information of the computer in the **CMOS RAM**. Through system setup, the computer retrieves various information including current date and time, memory capacity, and hard disk capacity and type.

You setup the system when you set passwords, change the booting order, and add new peripheral devices to the machine.

- \* Items displayed on the Setup screen may differ by model type and spec.
- Refer to [Setting the Password].
- Refer to [Changing or Deleting the Password].
- Refer to [Restore the Default Settings].



- Do not change the system setup unless necessary, Incorrect system setup may cause errors during system operation. Take caution when changing the system setup.
- For performance improvement, CMOS setup menu configuration and the initial setup status may be changed and may become different from images included in the user manual.
- 1. Turn on the notebook PC.
- 2. Press F2 key while the "Press F2 for System Utilities" appears on the bottom of the LG logo screen.



80



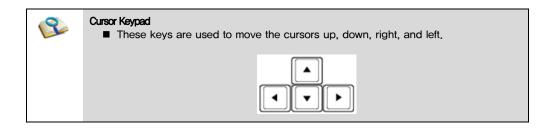


3. A while later, the system setup home screen appears.



## ► Keys Used in System Setup

Keys	Function
Enter	Selects the current item.
Esc	To deselect the current item or to move to the previous screen,
▲, ▼, ◀, ▶ (Arrow keys)	Moves the cursor up, down, left, and right,
+, -	Increases or decreases the item value.
Page Up	Moves the cursor up to the beginning.
Page Down	Moves the cursor down to the end.
F10	Stores new contents or ends the system setup.







## 6-2. Setting the Password

This process is to set a password so that other people cannot use the notebook PC or change the settings.

The user can set a password while booting the system or setting up the system.



Without the registered password, if any, access to the system will be denied. Write down and keep the password in a safe place.

#### ► Set Supervisor Password

The password prevents unauthorized people from accessing the notebook PC. By default, no password is set for the machine. If an unauthorized person changes the password in the **CMOS** Setup, you will be unable to access the system.

- 1. After opening the system setup screen, use the arrow keys to move to Security.
- 2. When the following screen appears, select **Set Supervisor Password** with the arrow keys and press **[Enter]**.



3. When the following message appears, input the password and press [Enter]. The password must not exceed 8 characters of letter (A?Z), number (0?9) or their combination.







4. When the following message appears, press [Enter].



- 5. To save the changes in system setup, press [F10].
- 6. When the following message appears, select [Yes] and press [Enter]. The notebook PC will restart.





With Supervisor Password, you are authorized to set all items in the CMOS setup menu and to set Power on Password. In case other people also use the notebook PC, it is recommended to set the Set User Password.

#### ► Set User Password

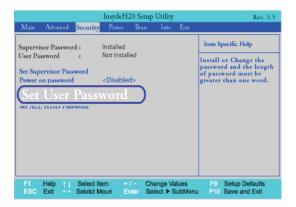
The password set by the **Set User Password** process is lower than that set by the **Set Supervisor Password** process, and so the user can use the **Set User Password** only after setting a password in the **Set Supervisor Password** menu.

1. After opening the system setup screen, use the arrow keys to move to **Security** .





2. When the following screen appears, select Set User Password with the arrow keys and press [Enter].



3. When the following message appears, input the password and press [Enter]. The password must not exceed 8 characters of letter (A-Z), number (0-9) or their combination.



4. When the following message appears, press [Enter].



5. To save the changes in system setup, press [F10].





6. When the following message appears, select [Yes] and press [Enter]. The notebook PC will restart.





■ UserPassword allows limited access to the items in CMOS setup compared to the Supervisor Password item.

#### Power on password

Power on password feature protects the system by requesting Set Supervisor Password or Set User Password during boot up.

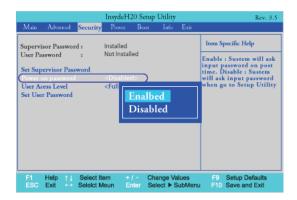
- 1. After opening the system setup screen, use the arrow keys to move to Security.
- 2. When the following screen appears, set **Set Supervisor Password** only or both **Set Supervisor Password** and **Set User Password**.







3. Select **Power on password** and press **Enter** to display a pop-up window. Select **[Enable]** and press **Enter** to set **Power on password**.



#### ► Set ALL HDD Password

HDD Password is to set a password in the HDD separately from the Supervisor Password.

- 1. After opening the system setup screen, use the arrow keys to move to Security.
- 2. When the following screen appears, select **Set All HDD Password** with the arrow keys and press **[Enter]**.







3. When the following message appears, input the password and press [Enter]. The password must not exceed 8 characters of letter (A?Z), number (0?9) or their combination.



4. When the following message appears, press [Enter].



- 5. To save the changes in system setup, press [F10].
- 6. When the following message appears, select [Yes] and press [Enter]. The notebook PC will restart.





Without the HDD Password, it is impossible to recover the HDD,

The replacement of HDD due to the forgotten HDD Password is not covered by the warranty.





## 6-3. Changing or Deleting the Password

You can delete or change the password only after inputting the current password.

#### ► Changing the Password

1. Execute the System Setup, enter the password, and press  ${\bf [Enter]}$  .



2. Change the password in the same way as setting one.

#### ▶ Deleting the Password

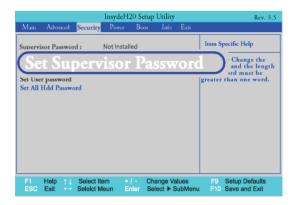
1. Execute the System Setup, enter the password, and press [Enter].

Enter CURRENT Password?





2. After opening the system setup screen, use the arrow keys to move to the **Security** menu. Then select **Set Supervisor Password** and press **Enter**.



3. When the following message appears, enter the current password in the **Please type in your** password field.



4. Press [Enter] in Please type in your new password and Please confirm your new password.







5. When the following message appears, select [Continue] and press [Enter].



- 6. To save the changes in system setup, press [F10].
- 7. When the following message appears, select [Yes] and press [Enter]. The notebook PC will restart.







## 6-4. Restore the Default Settings

If you have changed the system setup by mistake, you can restore the default settings.

- 1. After opening the system setup screen, use the arrow keys to move to <code>Exit</code>.
- 2. Use the arrow keys to select Load Optimal Defaults, and press Enter.
- 3. When the following message appears, select [Yes] and press [Enter]. The settings will be reset to their original defaults.



- 4. To save the changes in system setup, press [F10].
- 5. When the following message appears, select [Yes] and press [Enter]. The notebook PC will restart.





■ You may also press [F9] to use Load Optimal Defaults.





Chapter7.Using LG Smart Recovery







## 7-1. LG Smart Recovery System Backup

LG Smart Recovery helps you safely install and recover Windows XP.

- \* The figures herein may differ by language selection and be subject to change without prior notice.
- 1. Double-click the LG Smart Recovery icon to run LG Smart Recovery.
- 2. Click the System Backup icon.



- 3. When the following screen appears, select Backup Location and Compression Method and click Next.
  - \* The backup locations may vary depending on product specifications.







4. When the following screen appears, click OK to restart the system.



5. When the system finishes rebooting, system backup is performed as follows:



 ${\bf 6.}$  When system backup is completed, the system reboots automatically after 10 seconds or when you press  ${\bf OK.}$ 





## 7-2. LG Smart Recovery System Restoration

You can restore the system by using the LG Smart Recovery backup data.

- \* The figures and instructions herein are subject to change without prior notice.
- 1. Double-click the LG Smart Recovery icon to run LG Smart Recovery.
  - \* When Windows XP does not operate normally, the computer restarts and shows ""PRESS F11 TO RUN LG RECOVERY.."" message on the screen during the booting process. Press F11 button to start the LG Smart Recovery.
  - \* Backup important data by using Tools menu before starting the System Restoration process.
- 2. Click the System Restoration button.



- 3. When the system restoration screen appears, select **Factory Image** or the file you backed up and
  - \* Factory Image is displayed only if you performed system backup when you ran the LG Smart Recovery for the first time.
- 4. Select





\* Factory Image if you want to restore the system to the factory default state.



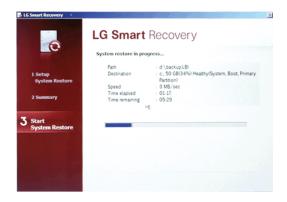
5. Check the settings and click  $O\!K$  to reboot the system.







6. When the system finishes rebooting, system restoration is performed as follows:



7. When system restoration is completed, the system reboots automatically after 10 seconds or when you press  $\mathbf{OK}$ .





## 7-3. LG Smart Recovery Tools Menu

LG Smart Recovery Tools menu provide useful tools to back up and restore the system efficiently.

\* The figures and instructions herein are subject to change without prior notice.



- 1. Disk Management: By using the Disk Management tool, you can perform disk-related tasks including creating partition and volume, formatting, and assigning drive letter.
- 2. Explorer: This tool shows drive disks and other hardware connected to the computer.
  - $\ensuremath{\mathbf{\#}}$  By using the Explorer, you can back up user data before proceeding the system restoration.











## 8-1. LG Smart Recovery Center

- **\*\* LG Smart Recovery Center DVD** may not be available depending on the model. When **LG Smart Recovery** fails to restore the system, you can reinstall **Windows XP** by using the **LG Smart Recovery Center**.
- 1. LG Smart Recovery Center Insert the DVD into the DVD-ROM and restart the system.
  - \* LG Smart Recovery Center If the DVD fails to boot the system, restart the computer and press F2 to start the BIOS SETUP and change the Booting Order option.
- 2. When the booting completes, the System Restoration screen will appear.
- 3. Click the System Restoration button.
  - \* Backup important data by using Tools menu before starting the System Restoration process.



4. Click Start button.







5. When prompted to confirm to start the System Restoration, click OK.



6. When it completes the restoration process, the system will present the Completed the Restoration message.



- 7. Click  $\mathbf{OK}$  to restart the system automatically after 10 seconds.
  - \* Remove the LG Smart Recovery Center DVD from the DVD-ROM once the System Restoration process completes.





Chapter9.Reinstalling the Driver





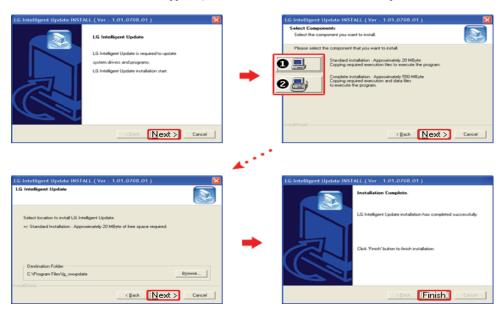


## 9-1. Reinstalling the Driver

- \* The user can download drivers at www.lgepc.co.kr.
- \* The driver installation is recommended in Windows XP SP3 or above.
- \* The screen layout may differ by model type.

#### Installation

- 1. Insert the LG Intelligent Update CD into the optical disk drive.
- 2. When the installation screen appears, click Next > Next > Next > Finish or press Enter to install.

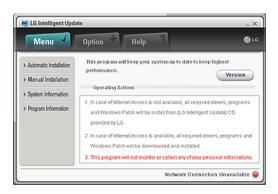


- 1. Standard Installation: Copy the files which will be needed only for execution to the hard disk,
- 2. Full Installation: Copy the entire CD to the hard disk, Drivers can be installed out of the copy without the CD,





3. LG Intelligent Update screen appears.



#### Execution

- 1. Insert the LG Intelligent Update CD in the optical disk drive. Then, the program will start automatically.
- \* If the LG Intelligent Update program is not installed, the LG Intelligent Update installation screen will come up.
- 2. Select Start > All Programs > LG Software > LG Intelligent Update to continue.



3. Double-click LG Intelligent Update icon on the desktop to run the program.





\* For more details, refer to Help.



1. Now, you can install drivers and applications needed for the system.



■ The items that the user must install are automatically displayed on the Software Installation Wizard screen. Read the screen carefully before installation.

Chapter 10. Using the Internet







## 10-1. Using the Internet

There are various methods to access the Internet. Choose the most desirable method for user environments and system specifications.

#### Using LAN

LAN refers to high speed network environments linking companies and households.

1. Connect LAN cable to the LAN port. On the taskbar, click Start | Control Panel | Switch to Classic View | Network Connection.



2. When the following screen appears, right-click Local Area Connection and click **Properties** in the list.





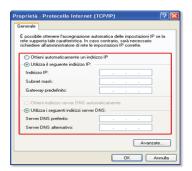


3. When the following screen appears, on the **General** tab, check if the **Realtek RTL8102E/RTL8103E**Family PCI-E Fast Ethernet NIC driver is installed in the ① [Connect using:] menu, and select ②

Internet Protocol (TCP/IP), and then click ③ Properties.



4. On Properties | General tab, click Obtain an IP address automatically.



5. Click the OK button when the Internet Protocol (TCP/IP) properties are set.



- For IP address registration, contact the network administrator or local network service engineer.
- IP Operator provides a user-friendly environment to manage wired/wireless network setup. The provided IP Operator makes networking easy and convenient.

## Using Wireless LAN

\* OPTIONAL The Wireless LAN card is optional.

Wireless LAN supports multi-terminal networking at home and office.

Wireless network offers general network features (e.g. sharing files, folders, and a printer) and allows a computer without the Internet connection in a small network to access the Internet through another terminal.





\* By default, this computer is set for wireless network on the Windows.

# ► Connecting Wireless Network By Using the Icon

1. On the taskbar, right-click the connection icon and click View Available Wireless Networks.



2. Select an Access point (AP) and click Connect.



3. To see the connection status, place the cursor over Wireless Network Connection icon on the taskbar,





- If no network key is set for the selected AP, click "Allow me to connect to the selected wireless network, even though it is not secure."
- Click Advanced button to check Connection Properties, if needed.



■ Ensure the network is secured to share the computer and be careful not to share confidential data,





# 10-2. Using IP Operator

**IP Operator** provides a user-friendly environment to manage wired/wireless network setup. The IP Operator stores the network setting in the system and analyzes the network so that the user does not need to set the **TCP/IP**. The IP Operator also supports all **IEEE 802,11a, b, g, n** wireless network specifications to set the optimal wireless network environment and to automatically switch the network environment.

- \* LG X130 Series support IEEE 802.11b/g/n 1-stream-compliant wireless network.
- \* For more information, refer to IP Operator Help.

# ► Using IP Operator

Depending on the network status of the system, the IP Operator icon is displayed as follows:

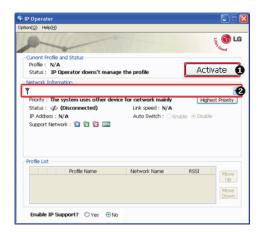
lcon	Description
6	IP Operator is starting, (Blue)
@	IP Operator is not available, (Grey)
e j	The network cable is connected.
e¥.	The network cable is not connected.
Ī <sub>k</sub>	The wireless network is not connected.
T/	The signal strength of the current wireless network.

<sup>1.</sup> Right-click the IP Operator icon on the taskbar and select Open IP Operator.

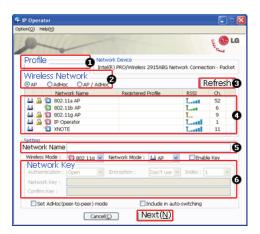




When the following screen appears, click No. ① Activate administration feature button to make the
wireless network available. When a different screen appears, select the right wireless network
device from No. ② Device Name drop-down list.



3. Click Add button and click Next when the settings have completed as shown below.



- 1. Type the profile name.
- 2. Select the wireless network type to search.
- 3. Click to search the wireless network again.
- 4. Select one of the searched wireless networks,
- 5. Type the name of the wireless network.
- 6. Type the wireless network key, if necessary.

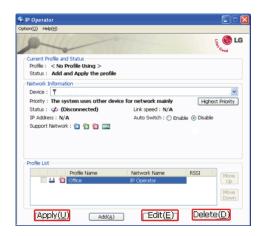




4. Set the TCP/IP address and printer for the profile and click Finish.



- 1. To refer to the existing settings for TCP/IP and printer, select the profile and click the Import button.
- 2. Set IP and DNS addresses.
- 3. Select a default printer to apply the profile.
- 5. Select a profile to use. The user can edit or delete the selected profile, or can apply the selected profile to the system by clicking Apply button.







#### New features provided by IP Operator are as follows:



- 802,3 Automatic Switching: Analyzes the network when the network cable is connected and automatically searches the optimal profile for the system. (Must be set in the Option menu.)
- Automatic Wireless Network Switching: Automatically searches for the most suitable wireless network when there are more than one wireless networks.
- IP Supporting: Helps TCP/IP setup when another program, other than IP Operator, tries to set the wireless network, or when the selected wireless network already exists in the profile.
- Device Prioritizing: Prioritizes devices for more convenient use of multiple devices in the system.







# **Memory**



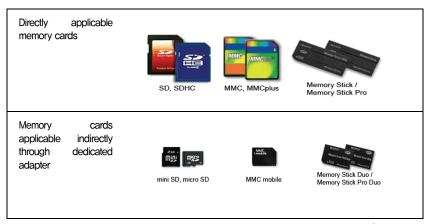


# 11-1. Using Memory Card

# ► Checking Available Memory Cards

SD, MMC, Memory Stick and Memory Stick Pro cards are mobile storage devices like a floppy disk, widely used in many digital products these days.

To use a Memory Stick Duo card, Memory Stick Pro Duo card, mini SD card, micro SD card, or an MMC mobile card, mount it on the dedicated adapter and insert the adapter into the multi-card slot.



(The available memory type and capacity may differ by the computer model type.)

\* Check availability before buying a memory card.

## Mounting and Using Memory Card

Insert the card into the multi-card slot to the fullest in the right direction.







- If you format a memory card, the data stored in the card will be erased. Check whether there are important data before formatting the memory stick.
- To format a memory stick, right-click Memory Stick drive and select Format. When Format window appears, click Start to continue.
- The format feature may not be available on those Windows whose version is lower than Windows XP/Vista. Format the card on other digital devices or format it after installing Memory Stick Formatter,
- If the writing prevention tab of Memory Stick is locked, the user cannot format the memory stick nor write or delete the data.
- SD, MMC, Memory Stick and Memory Stick Pro cards can be used only as storage devices, and don't support a copyright protection feature.



#### When using an MMC card:

■ Place the MMC card with the arrow facing upward ( ▲), and insert it into the slot, Forcing the MMC card into the slot may cause an impairment.



Some memory products manufactured by Transcend are made of metal and may cause a short circuit when contacting with the connection port in the multi-card slot, Avoid using metallic-surfaced memory products. They could offset the system performance,

#### When using a memory card through dedicated adapter:

Use the dedicated adapter. Otherwise a short-circuit may occur, causing damage to the computer and the memory card.

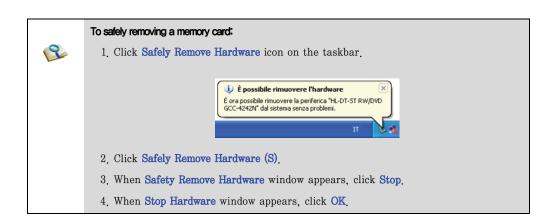
# ► Removing Memory Card

Push the card as depicted in the following picture to make the card spring out of the slot. Pull the card out in the direction of the arrow.













# 11-2. Expanding Memory Capacity

You may need to expand the notebook memory for better performance.

\* For memory expansion, we recommend that you receive a paid service from a service center certified by LG. LG disclaims any responsibility for damage resulting from uncertified service or arbitrary disassembly.

#### About Memory

This system uses a 200-pin, SO-DIMM (Small Outline Dual In-Line Memory Module)-type DDR2 SDRAM.

LG X130 Series provides 1 memory slot, and the maximum capacity of the main board is 1GB.



- When expanding the memory, add a memory with the same specification (DDR2 SDRAM for 1.8V). (Subject to change depending on model type)
- The DDR2 memory provides greatly improved transmission rate than existing memories, and is differently shaped.





Caution

#### To upgrade the machine, turn off the system and disconnect the power cord and the battery.

Disconnect the telephone line linked to the modem, if any. An electric shock or fire may occur,

#### Supported Memory

- PC2-6400S(800Mhz) DDR2 SDRAM SO-DIMM
- $\ensuremath{\mbox{\ensuremath{\mbox{\sc W}}}}$  When you expand your memory capacity, make sure to use the memory from the same company.

## Preparing Memory

Before purchasing memory, study the specifications and features of the current memory.

- 1. Rated Capacity: PC2-6400S(800Mhz) DDR2 SDRAM SO-DIMM
- 2. Speed: **800Mhz** (**400Mhz** x 2)
- 3. Type: 512MB, 1024MB





# ► Adding Memory

\* Main board configuration, memory socket and memory type may differ by model.

 $1.\ \mbox{Loosen}$  the screw on the rear side of the notebook PC to remove the cover.



2. Insert the memory into the memory socket as shown in the figure.



3. Insert the memory until you hear a "click."



4. After inserting the memory, fasten the cover with the screws.



5. If an error message related to the main memory capacity is displayed during booting after the memory is expanded, press F2 key and save the settings.



- Before remove the PC cover, turn off the AC power, and remove the battery and all peripherals. Then, disconnect the cable.
- Push till the memory is completely fixed in the lock.
- Check the memory capacity during the second booting. If the memory capacity is not correct, install the main memory again.







 $\blacksquare$  Use only the expandable main memory module manufactured by LG. Using a main memory module other than recommended products may cause malfunctioning of the notebook PC.





# Chapter12.Appendix







# 12-1. Specifications of the Notebook PC

#### ▶ Available Processors

Intel Atom Processor (L2 Cache Size: 512KB) is supported.

\* The user must not replace or expand the CPU capacity arbitrarily. The CPU capacity differs depends on model type.

#### Main Memory

Main memory supports both 512 MB and 1024 MB, and provides 1 memory slot.

\* Memory types and specifications may differ depending on the model.

## ► Secondary Storage Devices

2.5" Hard Disk Drive (SATA)

\* The hard disk capacity and the type depend on the notebook PC model.

External Optical Disk Drive

\* Optional The external Optical Disk Drive is optional, and so it may not be available in some models.

#### **▶** LCD

10.1" WSVGA+ LED (1024 x 600) TFT 컬러 LCD

- \* Some models are equipped with the Glare-type LCD featuring enhanced sharpness. This type of LCD appears to glare more than other types, but it is a normal phenomenon in the Glare type.
- \* The size and the resolution rate of the LCD depend on the notebook PC model.

#### ► Authentication for **Anticopy Technology**

 $U.S. Patent. Nos. 4, 631, 603; 4, 577, 216; 4, 819, 908; 4, 907, 093; 5, 315, 448; and 6, 516, 132. Patent. number of {\it Macrovision}. \\$ 

This product includes the technologies that are possessed by **Macrovision** and corresponding companies and protected by the US Patent Law and other related laws. Use of all technologies subject to the copyrights must be approved by **Macrovision** in advance. Otherwise, the technologies may only be used for internal display. Do not disassemble or remodel the product.

#### Bluetooth

Broadcom BCM92070MD\_REF

Ver2.1 Bluetooth Module + EDR

\* Optional Bluetooth is optional, and so it may not be installed in some models.





#### Web Camera

1.3 Mega pixels USB camera module

UVC (USB Video Class) driver supported

\* Optional Web Camera is optional, and so it may not be installed in some models.

# ► External I/O Interface

External VGA Monitor Port: 1

Microphone: 1

Microphone Input Port (Mic in): 1

Headphone Port: 1 USB 2.0 Ports: 3 Multi-card Slot: 1 RJ 45 (LAN) Port: 1 USIM Card Slot: 1

\* OPTIONAL USIM card slot may not be provided depending on the model.

#### Video

### Mobile Intel Graphic Media Accelerator 950 (Dynamic Video Memory Technology)

- \* The DVMT actively utilizes part of the system memory when processing large graphic data like 3D graphics. Therefore, the size of the graphic memory is displayed as the sum of the actual graphic memory size and the utilized amount of memory, which is decided by the size of system memory.
- \* Applications (graphics program, game, etc.) requiring strong graphic processing power may not work properly.
- \* Specifications may differ by model type.

#### Sound

Realtek High Definition Audio Codec(ALC262)

Built-in Stereo Speakers

#### Modem

Ericsson F3607gw (HSPA Modem)

\* Optional The wireless data modem is optional, and so it may not be available in some models.





## **LAN**

Realtek RTL8102E/RTL8103EL Family PCI-E Fast Ethernet NIC (10/100Mbps)

RJ 45 Jack

\* Specifications may differ by model type.

# ▶ Wireless LAN

Ralink RT3090

\* Wireless LAN specifications may differ by model type and cannot be arbitrarily changed by the user.

## Weight

Full Installation: Approx. 1.14kg (3-cell battery pack) / 1.27kg (6-cell battery pack) / 1.54kg (9-cell battery pack)

Battery: Approx. 180g (3 cells) / 310g (6 cells) / 470g (9 cells)

\* Weight descriptions may differ by model type.





# 12-2. Power Supply and Environments

# ► AC Adapter (Free Voltage)

Power Capacity: 40W

\* Input: AC 100V ? 240V, 1.7A, 50Hz ? 60Hz

\* Output: DC 20V, 2.0A

\* Caution: Use a legitimate AC adapter suitable for the model.

# ► Battery (Li-lon)

Rated Capacity: 10.8V/11.1V

Battery Make-up: 3-cell, 6-cell or 9-cell battery pack (the battery make-up may differ depending on the model.)

- \* Charging Hours: At room temperature (0°C ? 40°C) and power turned off less than 3 hours (9-cell battery pack: less than 4 hours)
- \* Not charged under 0°C.
- \* The above temperatures are internal temperatures of the battery pack, and may be different from the actual room temperature.

## Operation and Storage Environments

Operating Temperature: 10°C? 35°C

Operating Humidity: 20% RH ? 80% RH

Storage Temperature: -10°C? 60°C

Storage Humidity: 10% RH ? 80% RH

# ► Power Consumption

Operating Conditions	Approximately 20W	When running moving image media
Standby mode (Idle state)	Approximately 10W	In Display Off mode
Power Saving mode (Sleep Mode)	1,1W or lower	In S3(Suspend)
Off Mode (Standby(off) Mode)	0.8W or lower	When terminating the system

 $f{x}$  The above power consumption is calculated on the assumption that the battery is fully charged.

**Appendix** 

<sup>\*</sup> Power consumption during operation or standby may differ depending on the programs the system is running and product specifications.

<sup>\*</sup> Even when the system is turned off, it consumes a minute amount of power, if supplied. To cut off power supply completely, disconnect the power cord from the power outlet.