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Notebook Computer **G-MAX™** N411 User's Manual

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This manual guides you in setting up and using your new notebook computer G-MAX N411. Information in the manual has been carefully checked for accuracy and is subject to change without notice.

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Safety Instructions

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

When Using Your notebook computer G-MAX N411



CAUTION: Do not operate your portable computer for an extended period of time with the base resting directly on your body. With extended operation, heat can potentially build up in the base.

Allowing sustained contact with the skin could cause discomfort or, eventually, a burn.

- ✧ Do not attempt to service the notebook yourself. Always follow installation instructions closely.
- ✧ Do not carry a battery in your pocket, purse, or other container where metal objects (such as car keys) could short-circuit the battery terminals. The resulting excessive current flow can cause extremely high temperatures and may result in damage from burns.
- ✧ Be sure that nothing rests on your AC adapter's power cable and that the cable is not located where it can be tripped over or stepped on.
- ✧ Place the AC adapter in a ventilated area, such as a desktop or on the floor, when you use it to run the computer or to charge the battery. Do not cover the AC adapter with papers or other items that will reduce cooling; also, do not use the AC adapter while it is inside a carrying case.
- ✧ Do not push objects into air vents or openings of your notebook computer. Doing so can cause fire or electric shock by shorting out interior components.
- ✧ Use only the AC adapter and batteries that are approved for use with your notebook. Use of another type of battery or AC adapter may risk fire or explosion.
- ✧ Danger of explosion if battery is incorrectly replaced.
- ✧ Before you connect your notebook to a power source, ensure that the voltage rating of the AC adapter matches that of the available power source.
 - 115 V/60 Hz in most of North and South America and some Far Eastern countries such as South Korea and Taiwan.
 - 100 V/50 Hz in eastern Japan and 100 V/60Hz in western Japan.
 - 230 V/50 Hz in most of Europe, the Middle East, and the Far East.
- ✧ If you use an extension cable with your AC adapter, ensure that the total ampere rating of the products plugged in to the extension cable does not exceed the ampere rating of the extension cable.
- ✧ To remove power from your notebook, turn it off, disconnect the AC adapter from the electrical outlet, and remove the battery.
- ✧ To help avoid the potential hazard of electric shock, do not connect or disconnect any cables or perform maintenance or reconfiguration of this product during an electrical storm.
- ✧ Do not dispose of batteries in a fire. They may explode. Check with local authorities for disposal instructions.
- ✧ When setting up your notebook for work, place it on a level surface.
- ✧ When traveling, do not check your notebook as baggage. You can put your notebook through an X-ray security machine, but never put your notebook through a metal detector. If you have your notebook checked by hand, be sure to have a charged battery available in case you are asked to turn on your notebook.

Safety Instructions

- ✧ When traveling with the hard drive removed from your notebook, wrap the drive in a non-conducting material, such as cloth or paper. If you have the drive checked by hand, be ready to install the drive in your notebook. You can put the hard drive through an X-ray security machine, but never put the drive through a metal detector.
- ✧ When traveling, do not place your notebook in overhead storage compartments where it could slide around. Do not drop your notebook or subject it to other mechanical shocks.
- ✧ Protect your notebook, battery, and hard drive from environmental hazards such as dirt, dust, food, liquids, temperature extremes, and overexposure to sunlight.
- ✧ When you move your notebook between environments with very different temperature and/or humidity ranges, condensation may form on or within your notebook. To avoid damaging your notebook, allow sufficient time for the moisture to evaporate before using your notebook.



NOTICE: When taking your notebook from low-temperature conditions into a warmer environment or from high-temperature conditions into a cooler environment, allow your notebook to acclimate to room temperature before turning on power.

- ✧ When you disconnect a cable, pull on its connector or on its strain relief loop, not on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pins. Also, before you connect a cable make sure both connectors are correctly oriented and aligned.
- ✧ Before you clean your notebook, turn it off, unplug it from its power source, and remove the battery.
- ✧ Handle components with care. Hold a component such as a memory module by its edges, not its pins.



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

- ✧ Do not use this product near water, for example, near a bathtub, washing bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
- ✧ Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- ✧ Do not use the telephone to report a gas leak in the vicinity of the leak.
- ✧ Use only the power cord indicated in this manual.

WARNING: Possible voiding of Warranty

- * If the battery is not properly handled, there may be a risk of explosion; make sure you are using the same or equivalent battery.
- * Please dispose the used battery according to the instructions given by the manufacturer.
- * Please be aware that cracked, deeply scratched or other poor quality disk used in this drive may cause damage to the drive and data in the disk. Such discs may break at high-speed rotation. If full care is not exercised in relation to this matter you may void the warranty to this product.

Regulatory Notices

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.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ✧ Reorient or relocate the receiving antenna.
- ✧ Increase the separation between the equipment and receiver.
- ✧ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ✧ Consult the dealer or an experienced radio/TV technician for help.
- ✧ All external cables connecting to this basic unit must be shielded. For cables connecting to PC cards, see the option manual or installation instructions.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by the manufacturer responsible for compliance may void the user's authority to operate the equipment.

Cables

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

Federal Communications Commission (FCC) PART 68 Warning

This equipment complies with Part 68 of the FCC Rules. On the bottom of the computer is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company.

FCC Part 68 Registration Number: 6CTTAI - 25876 - FB – E


REN: 0.8B

The REN is useful to determine the quantity of devices you may connect to your telephone and still have those devices ring when your number is called. In most, but not all areas, the sum of the REN's of all devices should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should call your local telephone company to determine the maximum REN for your calling area.

If your MODEM causes harm to the telephone network, the local Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. However, if advanced notice isn't practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

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

CE Notice (European Union)

Marking by the symbol  indicates compliance of notebook computer G-MAX N411 to the EMC Directive and the Low Voltage Directive of the European Union. Such marking indicates that this notebook computer G-MAX N411 system meets the following technical standards:

- ✧ EN 55022 — "Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment."
- ✧ EN 55024 — "Information technology equipment - Immunity characteristics - Limits and methods of measurement."
- ✧ EN 61000-3-2 — "Electromagnetic compatibility (EMC) - Part 3: Limits - Section 2: Limits for harmonic current emissions (Equipment input current up to and including 16 A per phase)."
- ✧ EN 61000-3-3 — "Electromagnetic compatibility (EMC) - Part 3: Limits - Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to and including 16 A."
- ✧ EN 60950 — "Safety of Information Technology Equipment."



NOTE: EN 55022 emissions requirements provide for two classifications:

- ✧ Class A is for typical commercial areas.
- ✧ Class B is for typical domestic areas.

To determine which classification applies to your notebook, examine the FCC registration label located on the back panel of your notebook. If the label indicates a Class A rating, the following warning applies to your notebook:

RF INTERFERENCE WARNING: This is a Class A product. In a domestic environment this product may cause radio frequency (RF) interference, in which case the user may be required to take adequate measures.

This notebook computer G-MAX N411 device is classified for use in a typical Class B domestic environment.

A "Declaration of Conformity" in accordance with the preceding directives and standards has been made and is on file at Gigabyte Computer Corporation.

BSMI Notice (Taiwan Only)

Most notebook computer G-MAX N411 computer products are classified by the Bureau of Standards, Meteorology and Inspection (BSMI) as Class B information technology equipment (ITE).

This notebook computer G-MAX N411 device is classified for use in a typical Class B domestic environment.

U.K. Modem Compliance Information

This modem is approved by the secretary of state at the **D**epartment of **T**rade and **I**ndustry for connection to a single exchange line of the public switched telephone network run by certain licensed public telecommunication operators or system connected there to (Direct exchange lines only, not shared service or 1-1 carrier systems).

This modem is also suitable for connection to **P**rivate **A**utomatic **B**ranch **E**xchange (**PABX**), which return secondary proceeding indication.

If this modem is to be used with a PBX which has extension wiring owned by BT, connection of the modem the PBX can only be carried out by BT; or by the authorized maintainer of the PBX unless the authorized maintainer has been given 14 days written notice that the connection is to be made by another person; and that period of notification has expired.

This modem is suitable for use only on telephone lines proved with Loop Disconnect or Multi-Frequency Dialing Facilities. Users of this modem are advised that the approval is for connection to the **PSTN** via the telephone line interface supplied with it. Connection of a modem to the **PSTN** by any other means will invalidate the approval.

There is no guarantee of correct working in all circumstances. Any difficulties should be referred to your supplier. Some network operators require that intended users of their network request permission to connect and for the installation of an appropriate socket.

The **R**inger **E**quivalence **N**umber (**REN**) of this modem is 1. **REN** is guide to the maximum number of apparatus that can simultaneously be connected to one telephone line. The **REN** value of each apparatus is added together, and should not exceed 4. Unless otherwise marked, a telephone is assumed to have a **REN** of 1.

This modem is only approved for use of the following facilities:

- ✧ Storage of telephone numbers for retrieval by a predator mined code.
- ✧ Initial proceed indication detection.
- ✧ Automatic calling / automatic answering.
- ✧ Tone detection.
- ✧ Loud-speaking facility.

This modem is not approved for connection to U.K./private speech-band services. This modem does not support an automatic re-dial function. Any other usage will invalidate the approval of your modem, if as a result, it then ceases to conform to the standards against which approval was granted. The approval of this modem is invalidated if the apparatus is subject to modification in any material way not authorized by the **BABT** or if it is used with, or connected to external software that have not been formally accepted by **BABT**.

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About Notebook Computer G-MAX N411



Congratulation for having purchased your new Professional Multimedia Notebook Computer G-MAX N411. Your notebook computer G-MAX N411 incorporates the strongest features, which integrate the latest technologies available in the notebook industry.

Your new notebook computer G-MAX N411 not only drives today multimedia applications but also be ready for tomorrow exciting new software. This Professional Multimedia Notebook Computer G-MAX N411 is a freedom, flexibility, and functionality notebook that users are demanding for a long time.

G-MAX™ N411 User's Manual

About This User's Manual



Welcome to your Professional Multimedia Notebook Computer G-MAX N411 User's Manual. This manual covers everything you need to know in learning how to use your notebook computer G-MAX N411. This also assumes that you know the basic concepts of Windows and the PC. You will start doing a lot of great and fun things with your notebook computer G-MAX N411.

This manual is divided into eight chapters:

- | | |
|-----------|--|
| Chapter 1 | Gives introduction on your notebook computer G-MAX N411 features. |
| Chapter 2 | Provides step-by-step instructions to help you begin using your notebook computer G-MAX N411 as quickly as possible. |
| Chapter 3 | Describes how to operate the standard features of your notebook computer G-MAX N411. |
| Chapter 4 | Explains how to use the System BIOS Setup program. |
| Chapter 5 | Illustrates how to connect external device to your notebook computer G-MAX N411. |
| Chapter 6 | Explains how to use the internal module options of your notebook computer G-MAX N411. |
| Chapter 7 | Offers instructions on how to care and maintain your notebook computer G-MAX N411. |
| Chapter 8 | Instructs you on how to deal with common system problems. |

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1 Unpacking & Packing List



Your notebook computer G-MAX N411 is a fully Windows compatible portable personal computer. With the these latest features in mobile computing and multimedia technology, your notebook computer G-MAX N411 makes a natural entertainment companion. With leap of technology and compact, your notebook computer G-MAX N411 runs on a whole wide range of general business, personal productivity, entertainment, and professional applications. It is ideal for use in the office, at home, and on the road.

Your notebook computer G-MAX N411 makes an ideal choice for use in the office, the schoolroom, at home, on the road and all other occasions.

1.1 Feature Highlight

Before we go to identify each part of your notebook computer G-MAX N411, we will first introduce you to other notable features of your notebook computer G-MAX N411.

Notebook computer G-MAX N411 uses the platform with certified Intel® Centrino™ Mobile Technology. It supports the new Intel® Pentium® M processor, the core-logic architecture that absolutely fits the processor and the built-in excellent Intel® IEEE 802.11 b + g standard technology.

The Centrino™ Mobile Technology is a new concept of NB that is capable of power-saving long operation time and easy accessing wireless connection. The CPU is specialized design for power saving feature with adequate speed. You can get the same powerful performance as high speed Intel Pentium® 4, yet without consuming so much energy.

Processing Unit

- Your notebook computer G-MAX N411 runs on Intel® Centrino™, Intel® Banias or Intel® Dothan microprocessor. The Intel Pentium® M is integrated with 2048 KB L2 Cache. Check with your dealer on the CPU type and speed.
- Fully compatible with an entire library of PC software based on operating systems such as Windows 2000 and Windows XP.

Wireless LAN

Intel® IEEE 802.11 b + g standard technology network solution.

Memory

Your notebook computer G-MAX N411 provides one on board memory module and one memory slot for installing DDR SDRAM 200-pins SODIMM modules up to 1024MB using 256MB, or 512MB DDR 333 SDRAM modules. User can add, upgrade the DDR SDRAM modules inside the memory slot.

IEEE 1394

Provides one IEEE 1394 ports for fast data transmission by external hard disk or digital video (DV).

USB 2.0

Provides two USB 2.0 ports for fastest I/O data transmission.

AGP Local Bus Architecture

AGP 4X video local bus and 3D Graphic Engine with shared 8/16/32MB VRAM.

Audio System

Full-duplex 16-bit stereo audio system output. Sound Blaster and Sound Blaster Pro compatible.

Flash BIOS

Flash BIOS allows you to easily upgrade the System BIOS using the Phoenix Flash utility program.

Power and System Management

- Integrated SMM (System Management Mode) on system chipset that shuts down components not in use to reduce power consumption. To execute power management, you can set up the parameter in Power Options properties by pointing your mouse to Control Panel of Windows.
- Suspend hot-key allows you to suspend the system operation instantly and resume at the press of the power button.
- System Password for User and Supervisor included on the BIOS SETUP Program to protect unauthorized use of your notebook computer G-MAX N411.

1.2 Unpacking Notebook Computer G-MAX N411

Your notebook computer G-MAX N411 comes securely packaged in a sturdy cardboard shipping carton. Upon receiving your notebook computer G-MAX N411, open the carton and carefully remove the contents. In addition to this User's Manual, the shipping carton should also contain the following items:

- The Notebook Computer G-MAX N411
- An AC Adapter and AC Power Cord
- Li-Ion Battery Pack
- Windows XP /Utility /Power DVD/ Easy CD Creator CD
- OS Manual /User's Manual
- Quick Start Guide
- Guarantee Card
- Mouse
- Phone Cord

Depending on the configuration of your notebook computer G-MAX N411, you may also need the following items:

- DVD / CD-RW Combo Application CD

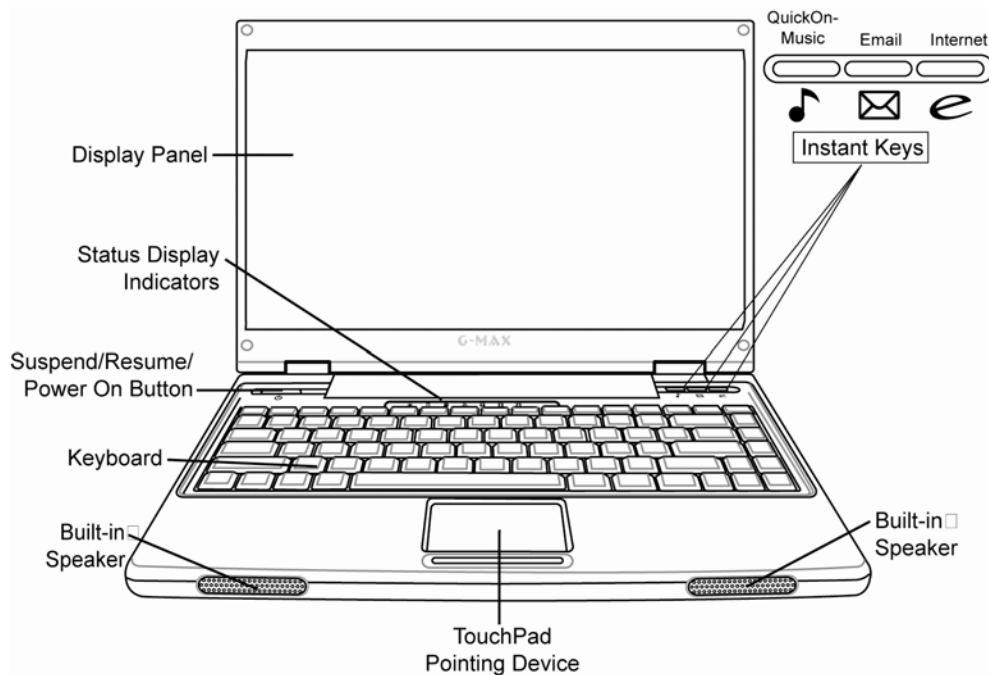


Specifications are subjected to change according to Gigabyte local operation.

Carefully inspect each component to make sure that nothing is missing and/or damaged. If any of these items is missing or damaged, notify your dealer immediately. Be sure to save the shipping materials and the carton in case you need to ship the computer or if you plan to store the computer away sometime in the future.

1.3 The Inside of Your Notebook Computer G-MAX N411

The notebook computer G-MAX N411 is compact with features on every side. First, look at the inside of the system. The following sections describe inside features.



❶ Display Panel

Your notebook computer G-MAX N411 comes with a color LCD that you can adjust for a comfortable viewing position. The LCD is a 14" TFT color LCD with 1280x768 WXGA (Extended Graphics Array) resolution panels. The features of the Color LCD Display are summarized as follows:

- ❖ TFT color LCD with 14" 1280x768 WXGA resolution panels.
- ❖ LCD display control hot-keys allows you to adjust the brightness of the LCD.
- ❖ Simultaneous display capability for LCD and external desktop computer monitor.

② Power/Status LED Indicators

Keeps you informed of your notebook computer G-MAX N411's current power and operating status. Description of the status icons appears in the latter part of this section.

③ Suspend/ Resume/ Power On Button

This button turns your notebook computer G-MAX N411 on and off as well as put it to sleep. (See *Suspend/Resume/Power On Button in Chapter 3.5 Knowing the Power Saving Features for more information.*)

④ Keyboard

- ✧ Standard QWERTY-key layout and full-sized 86 keys keyboard with Windows system hot-keys, embedded numeric keypad, and 12 function keys.

⑤ Built-in Stereo Speakers

Integrated left and right mini stereo speakers for sound and audio output for your multimedia presentations or listening pleasure.

⑥ Touchpad Pointing Device

Microsoft PS/2 mouse compatible with two select buttons, including two Touchpad click buttons. These two buttons array below the Touchpad. The two click buttons located at each side support tapping selection and dragging functions. These buttons work like a standard computer mouse. Simply move your fingertip over the Touchpad to control the position of the cursor. Use the selection buttons below the Touchpad to select menu items.

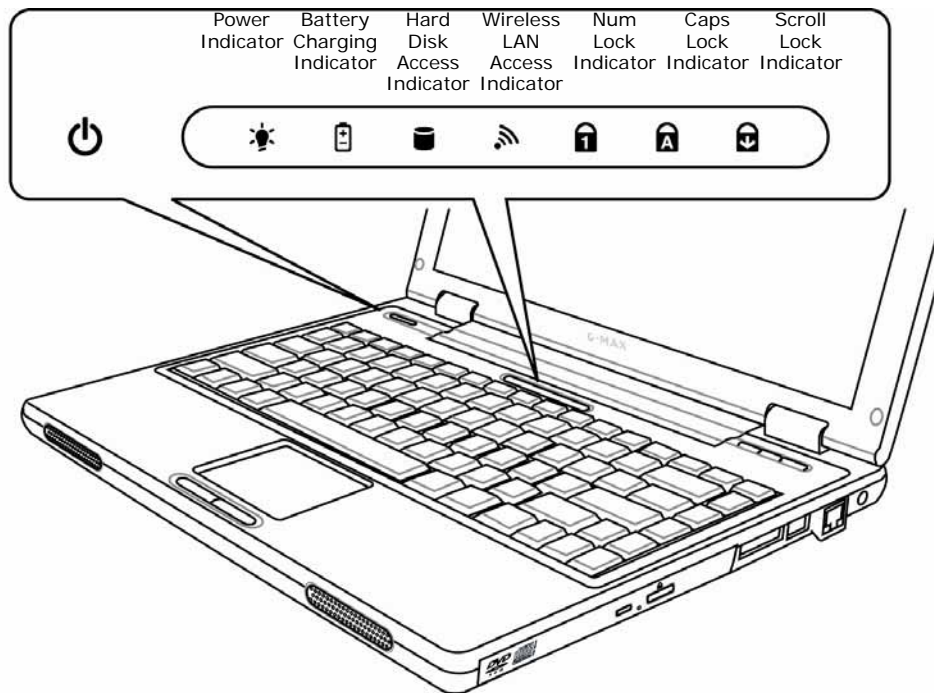
⑦ Instant Keys

The three instant keys allow you to launch QuickOn-Music and the default email and internet applications with the touch of a button.

The QuickOn-Music feature allows you to listen to CDs and MP3s on an optical drive, hard drive, or USB drive without powering up your notebook computer G-MAX N411. (See **QuickOn-Music Control Keys** in Chapter 3.2 **Control Keys** for information on how to control the media player).

Power/Status LED Icons

The Power/Status LED Panel keeps you informed of the notebook computer G-MAX N411's current power and operating status. Each LED is marked with an icon to designate the system status.



❶ Power Indicator

Lets you know that power to the system is turned on. This LED is positioned so that you can see the power state whether the LCD panel is opened or closed.

- ❖ Lights green: This means that there is power to your notebook computer G-MAX N411 and that it is ready for use.
- ❖ Lights orange: This means that your notebook computer G-MAX N411 is in Suspend mode.
- ❖ Steady Off (not visible): This means that your system is either in Save-to-Disk mode, or that your notebook computer G-MAX N411 has been turned off with the power switch.

If you are charging your battery, the Power indicator symbol will remain on even if your notebook computer G-MAX N411 is shut off. The Power indicator symbol will also remain on if you have

either adapter connected and are shut down from Windows, but have not turned off the power switch.

② Battery Charging Indicator

Lights to indicate battery in charging status.

- ✧ Lights orange to indicate that the battery is in charging.
- ✧ Lights green to indicate that the battery is fully charged or no battery installed.



If there is no battery activity, the power adapters are not connected, or the power switch is Off, Battery Charging Indicator will also be off.



Batteries subjected to shocks, vibration or extreme temperatures can be permanently damaged.

③ Hard Disk Access Indicator

When LED blinking green indicates that the system is accessing the Hard Disk drive.

④ Wireless LAN Access Indicator

When lights blinking orange indicate that the system is accessing or retrieving data by wireless device.

⑤ Num Lock Indicator

When LED in green light indicates that the Num Lock key on the keyboard is activated. When activated, the embedded numeric keypad will be enabled.



If you are using the optional external numerical keypad, pressing the [Num Lock] key will activate the external keypad. The indicator will come on, however, it will not change any of the functionality of your keyboard keys.

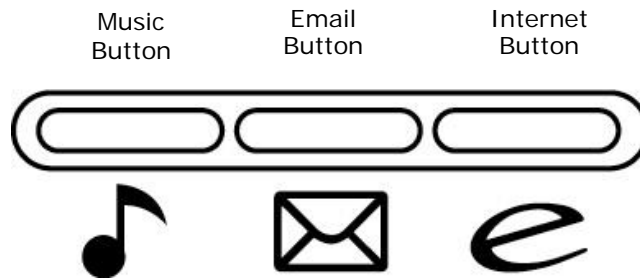
⑥ Caps Lock Indicator

When LED in green light indicates that the Caps Lock key on the keyboard is activated. When activated, all alphabet keys typed in will be in uppercase or capital letters.

⑦ Scroll Lock Indicator

When LED in green indicates that the Scroll Lock key on the keyboard is activated.

The Function of Instant Keys



❶ Music Button

Press the button to play music. This feature allows you to listen to CDs and MP3s on an optical drive, hard drive, or USB drive without powering up your notebook computer G-MAX N411. (See **QuickOn-Music Control Keys** in Chapter 3.2 **Control Keys** for information on how to control the media player).

❷ Email Button

Press the button to receive/send Email.

❸ Internet Button

Press the button to access Internet.

1.4 The Outside of Your Notebook Computer G-MAX N411

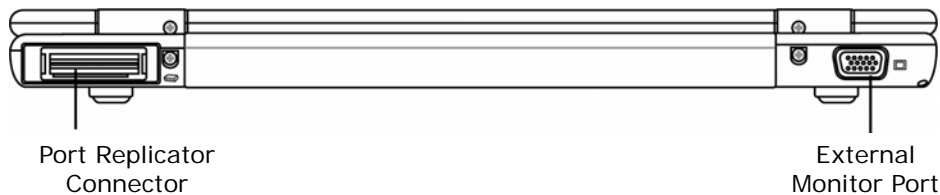
The Front Side



❶ Built-in Stereo Speakers

The built-in dual speakers allow for stereo sound.

The Rear Side



❶ External Monitor Port

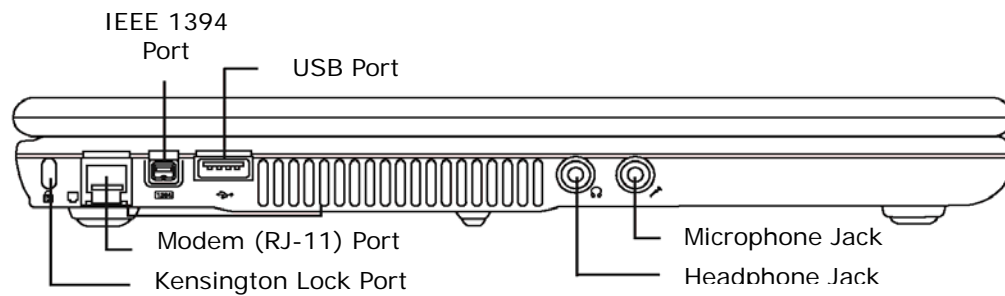
The external monitor port allows you to connect an external monitor.

❷ Port Replicator Connector

The Port Replicator connector extends the functionality of your notebook computer G-MAX N411 by providing ports to connect PS/2 devices, an external monitor, a serial device, a parallel device, USB devices, a LAN (RJ-45) cable, an external audio source, and an AC adapter. See Chapter 5.9 **Using Port Replicator (Option)** for more information.

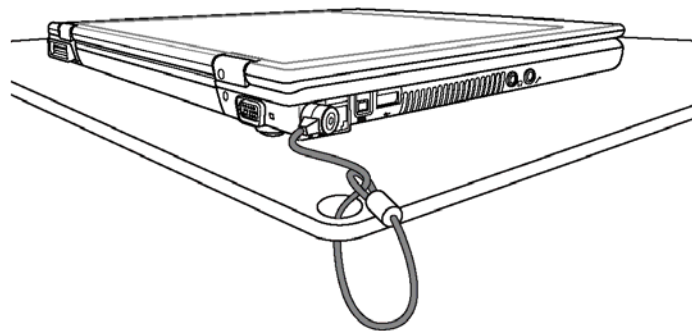
The Left Side

The left side of your notebook computer G-MAX N411 has the features shown in the following figure.



❶ Kensington Lock Port

The Kensington lock slot allows you to secure your notebook computer G-MAX N411 to an immovable object through an optional security cable (as below).



❷ Modem (RJ-11) Port

A 56K internal fax/data modem is installed. It keeps you connected to the outside world through networks.

❸ IEEE 1394 Port

IEEE 1394 port is a high speed I/O port that can transfer high levels of data in real-time, such as external hard disk, Digital Video Camera.

4 USB Port (V2.0)

The Universal Serial Bus (USB) port allows you to connect up to 127 USB-equipped peripheral devices (for example, printers, scanners and so on) to your notebook computer G-MAX N411.

5 Headphone Jack

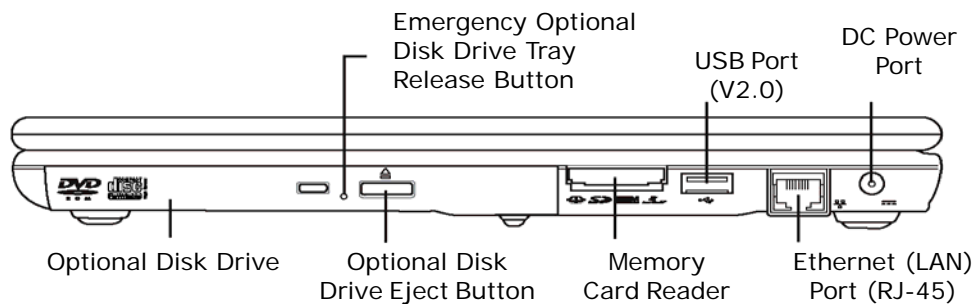
Lets you plug in a stereo headphone, powered speakers, or earphone set with 1/8 inch phone plug for personal listening.

6 Microphone Jack

Allows you to connect an external microphone for monophonic sound recording directly into your notebook computer G-MAX N411.

The Right Side

The right side of your notebook computer G-MAX N411 offers the features shown in the following figure.



1 Optional Disk Drive

Allows you to load and start programs from a compact disc (CD) or a digital video disc (DVD) and play conventional audio CDs. It also can write data to CD-R or CD-RW and DVD-R media.

2 Emergency Optional Disk Drive Tray Release Button

The Emergency Optional Disk Drive Tray Release Button allows you to open the Optional Disk Drive tray without powering on your notebook computer G-MAX N411.

3 Optional Disk Drive Eject Button

The Optional Disk Drive Eject Button allows you to open the Optional Disk Drive tray to remove or install a DVD, CD-R or CD-ROM.

4 Memory Card Reader

The Memory Card Reader offers the fastest and most convenient way to transfer pictures, music and data between your notebook computer G-MAX N411 and flash-compatible devices such as digital cameras, MP3 Player, mobile phones, and PDAs.

5 USB Port (V2.0)

The Universal Serial Bus (USB) port allows you to connect up to 127 USB-equipped peripheral devices (for example, printers, scanners and so on) to your notebook computer G-MAX N411.

6 Ethernet (LAN) Port (RJ-45)

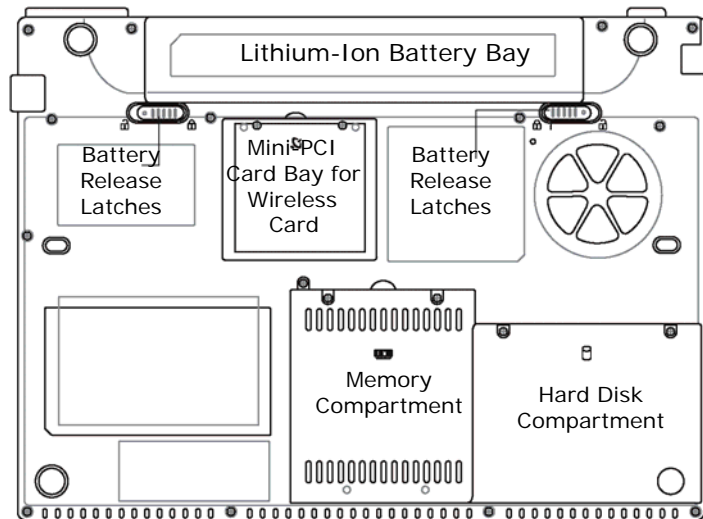
The Ethernet (LAN) Port is designed to support a 10/100 Base-T standard RJ-45 plug.

7 DC Power Port

Lets you connect the AC power adapter in supplying continuous power to your notebook computer G-MAX N411 and recharging the battery.

The Under Side

The bottom of the notebook computer G-MAX N411 offers the following features.



❶ Lithium-Ion Battery Bay

The battery bay contains the internal Lithium ion battery. It can be opened for the removal of the battery when stored over a long period of time or for swapping a discharged battery with a charged Lithium ion battery.

❷ Memory Compartment

Remove the screw to find one DIMM slot. One slot is empty for upgrade usage.

❸ Hard Disk Compartment

Open this cover of this compartment to replace with other Hard Disk Drive. We recommend you to replace it in your local Gigabyte Service Center.

❹ Battery Release Latches

These 2 spring-loaded latches automatically lock the battery pack in place when inserted. See Chapter 2.1 **Using the Battery Pack** for more information.

❺ Mini-PCI Card Bay for Wireless Card

The Mini-PCI Card Bay for Wireless Card locates here.

1.5 Your Notebook Computer G-MAX N411 Accessories

AC Adapter

The AC Adapter supplies external power to your notebook computer G-MAX N411 and charges the internal battery pack simultaneously. The AC adapter has an auto-switching design that can connect to any 100V AC ~ 240V AC power outlets. You just change the power cord if you are going to use your notebook computer G-MAX N411 in other countries with different connector outlets.

When you connect the AC adapter, it charges the battery whether or not your notebook computer G-MAX N411 is powered on.

Battery Pack

Aside from the AC adapter, your notebook computer G-MAX N411 can also be powered through the internal battery pack. The battery pack uses rechargeable Lithium-Ion (Li-Ion) battery cells that provide long computing hours when fully charged and power management enabled. You should always leave the battery inside your computer even when using the AC adapter as it also acts as a back-up power supply in case power from the AC adapter is cut off. It is also very important to have the battery pack always charged to prevent battery cell degradation.

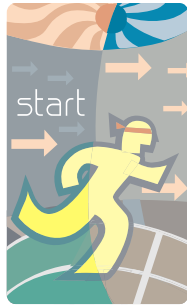
1.6 Notebook Computer G-MAX N411 Options

DVD Combo (Optional)

This device pack can write data to CD-R / CD-RW CD or DVD-R / DVD-RW CD for you to backup the data and also can read DVD/CD title.

Bluetooth Module (Optional)

2 How to Start



Your notebook computer G-MAX N411 is designed and pre-configured for easy setup and use. This chapter describes the installation steps you should follow to get your notebook computer G-MAX N411 up and running as quickly as possible. Contact your dealer if they have pre-installed all the needed drivers to fully operate your notebook computer G-MAX N411 or if there is an update on the driver installation of your notebook computer G-MAX N411.

2.1 Using the Battery Pack

Your notebook computer G-MAX N411 is designed to operate with one of the following power sources:

- With AC power using the AC adapter connected to an electrical outlet.
- With a Lithium-Ion (Li-Ion) battery pack.

You should use the AC adapter whenever it is possible, relying on the battery pack only when AC power is unavailable.

Before you use your notebook computer G-MAX N411, install and recharge the battery pack first. The rechargeable Li-Ion battery pack allows you to operate your notebook computer G-MAX N411 without an external power source. When you connect the AC power adapter, the battery immediately starts to recharge. Quick battery charging time is 2.5 hours for Lithium-Ion (Li-Ion) battery pack when your computer is turned off. Normal battery life time is 3.5 hours.

For maximum battery performance, fully discharge the battery first before recharging it when you start to use it first time. To do so, unplug the AC adapter, turn off power management features (through Setup and Windows), and turn on the system. Once the battery is fully discharged, plug in the AC adapter and recharge the battery.

If you do not discharge the battery completely, it fails to accept a full recharge.



Li-Ion battery is vulnerable, do not charge it with other power adapter, or it may cause fire or explosion.

Replacing the Battery Pack

When your notebook computer G-MAX N411 estimates that the battery only has enough charge to continue for a few minutes, it will alert you with a battery low warning beep. If you are consuming a lot of power by using the audio system, the PC Card slots, the hard drives, and optical disk drive, your notebook computer G-MAX N411 might run out of charge much sooner than you expect. You should always respond to the battery low indication by connecting to AC power or turning off your notebook computer G-MAX N411, or suspending to disk. If you do not do so, the notebook computer G-MAX N411 will automatically suspend to disk and turn off. The contents of the memory will store in the hard disk drive. You will be unable to restart your notebook computer G-MAX N411 until you have connected to the AC adapter or installed a charged battery. To replace the battery pack, refer to the previous sections on "Installing the Battery Pack" and "Removing the Battery Pack."



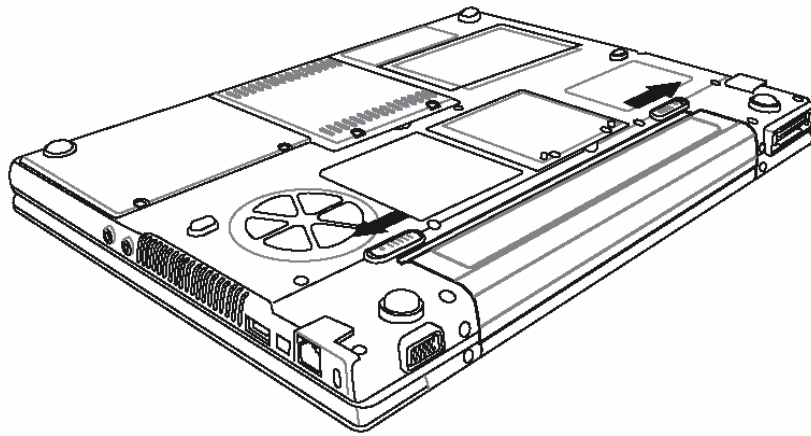
Be sure to save your data before replacing the battery pack or connecting the AC adapter. Failure to do so can result in data loss.



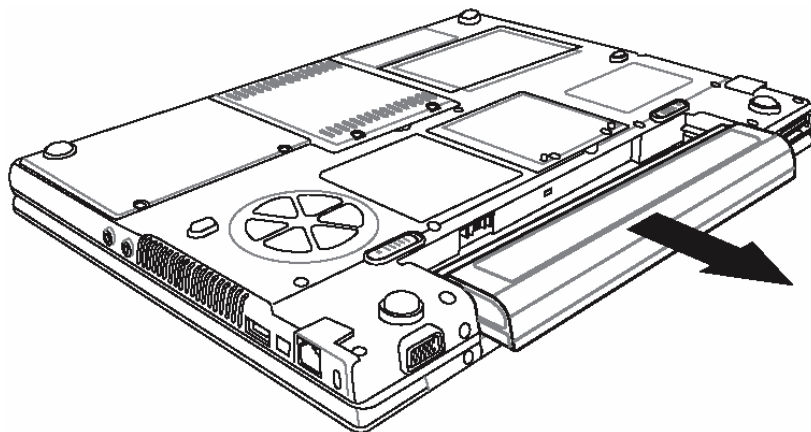
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Your notebook computer G-MAX N411 provides the most convenient way to install the battery pack into your computer. To install the battery, first orient the extended nose directed toward the compartment, then following the sequence as shown in the figure below.

1. Have a charged battery ready to install.
2. Shutdown your notebook computer G-MAX N411 and disconnect the AC adapter.
3. Slide the battery release latches while pulling the battery from the bay.



4. Remove the battery from the bay.



5. Slide the new battery into the bay. The pins will automatically align with the connector.
6. Press the battery in until the battery release latches snap into place.
7. Plug in the AC adapter and press the resume/suspend/power on button.



If the Lithium-Ion battery connector is not fully seated, you may not be able to use your notebook computer G-MAX N411 or charge your battery.

Extending Battery Life

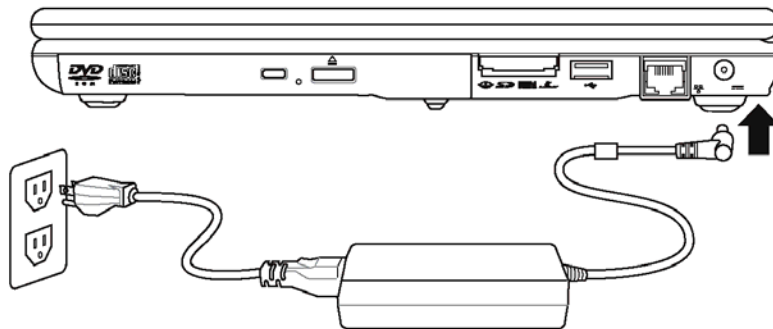
It is important to be aware of the simple things for extending the life of the system main battery while you are on the road. You should find a working place where the external lighting is not too bright and turn down the screen brightness. Also, you can choose the available mode on the Power Management item of the Control Panel in Windows.

2.2 Connecting the AC Power Source

The AC adapter provides external power source to your notebook computer G-MAX N411 and charges the internal battery pack at the same time. The AC adapter also has an auto-switching design that can connect to any 100V AC ~ 240V AC power outlets.

To connect the power adapter:

1. Plug the AC power cord into the power socket of the AC power adapter.
2. Plug the other end of the AC power cord to a live AC wall outlet.



3. Plug the connector of the AC adapter to the DC-IN port found at the right of your notebook computer G-MAX N411.



Whenever possible, it is advisable to always have the AC adapter connected to the notebook and the battery pack installed. This ensures continuous power supply and prevents any data loss incurring from sudden power breakdown.



- For the power supply of this equipment, an approved power cord has to be used.*
- Make sure the socket and any extension cord(s) you use can support the total current load of all the connected devices.*
- Before cleaning the computer, make sure it is disconnected from any external power supplies (i.e. AC adapter).*

2.3 Starting Notebook Computer G-MAX N411

The Power/Resume button is found on the top of the base unit. Press the Power/Resume button to start your notebook computer G-MAX N411 and check that if the Power LED turns on.



After a few seconds, the notebook's display will turn on and your notebook computer G-MAX N411 will begin to execute the Power On Self Test or POST to check if all system components are running properly. Any error found during the test will be displayed on the screen and may generate short beep sound as well.

After the test, the screen will also display a message "**press <F2> to enter SETUP**". You don't need to run this program at the moment as your dealer already made the necessary settings for your notebook computer G-MAX N411 optimal operation. Refer to Chapter 4 on running the SETUP program later.

After the test has completed, your notebook computer G-MAX N411 will start to search and boot up the operating system from your hard drive. The notebook computer G-MAX N411 normally comes with a Windows operating system pre-installed in your hard drive. Consult the Windows manual on how to use the program. If not, contact your dealer for assistance.



Do not carry your notebook computer G-MAX N411 around with the power on or subject to shocks or vibration, as you risk damaging your notebook computer G-MAX N411.



Never turn off your notebook computer G-MAX N411 during the Power On Self Test (POST) or an unrecoverable error may occur.

2.4 Adjusting the Display Controls

The LCD brightness adjustment is controlled by <Fn> + <F4> and <Fn> + <F5> keys respectively. You need to press these hot-key controls after powering on your N411 to suit your viewing pleasure.

The Brightness hot-key control adjusts the brightness on the LCD. The brightness hot-key control will not set the LCD completely dark or bright; it provides sufficient lighting to the LCD to match the external lighting of the surrounding. The brighter the room, the more you need to increase the brightness of the LCD.



The higher the brightness level, the more power the notebook computer G-MAX N411 will consume and the faster your batteries will discharge. For maximum battery life, set the brightness to as low a level as possible.



If using AC power, your brightness setting is set to its highest level by default. If using battery power, your brightness setting is set to approximately mid-level by default.

2.5 Installing Your Notebook Computer G-MAX N411 Device Drivers

If you already have an operating system installed into your notebook computer G-MAX N411, it is best to install the needed device drivers for using the built-in devices of your notebook computer G-MAX N411. Before installing the drivers, check with your dealer first if they have already installed all the drivers along with the operating system. If not, follow the procedures below:

1. You can find one bundled Driver CD shown as follow.



2. Put the CD into the DVD or DVD-Combo (optional) Drive. It will get you through the Auto Run installation.

2.6 Turning off Notebook Computer G-MAX N411

If you are not going to use your notebook computer G-MAX N411 for a while, it is best to turn off the power of your notebook computer G-MAX N411 for longer use. Before turning off the power, you need to close first all application programs and shutdown the operating system.

After turning off your notebook computer G-MAX N411, make it a habit to leave the LCD panel open for a while whenever used for an extended period of time. This allows the inside parts of your notebook computer G-MAX N411 to cool off. Closing the panel will force the heat up against the LCD screen, which may degrade the LCD when done regularly. More importantly, never close the LCD panel for a long period of time when computer is on and power saving features are disabled.

3 Introduction to Function



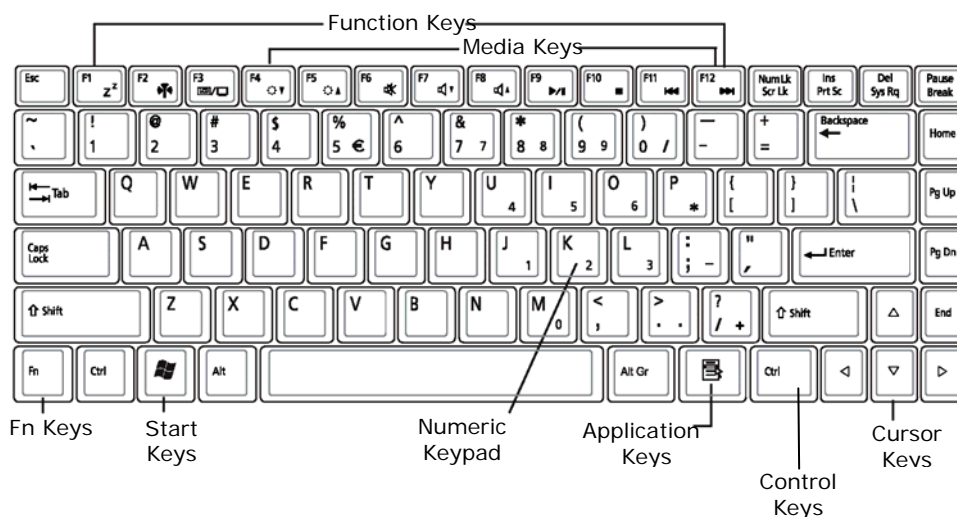
This chapter describes how to operate the standard built-in features of your notebook computer G-MAX N411 that you normally would use in your day-to-day computer work. If you are new to computers and to your operating system, you also need to read the manual for the operating system on how to work with your notebook computer G-MAX N411. It is very important to familiarize yourself well with the operating system. The succeeding chapters not only guide you to go beyond the basics, but also try other exciting features.

3.1 Starting Your Operating System

The operating system is a must ingredient in using your notebook computer G-MAX N411. Without an operating system, it is like playing chess without the chessboard. It is the platform for all your software application programs to run on. The most popular operating system today is Microsoft Windows. You should have installed one operating system by your dealer unless you are an expert computer user and would need a more powerful operating system. If you have an operating system already installed in your notebook computer G-MAX N411, then you would be up and running after you power on your notebook computer G-MAX N411 and boot up the system. Check your operating system manual on how to run it.

3.2 Understanding the Keyboard Functions

Your notebook computer G-MAX N411 is equipped with an 86 keys keyboard that provides all the functionality of a full-sized 101 or 102-key IBM keyboard. Aside from the standard typewriter-layout keyboard of your notebook computer G-MAX N411, there are a number of extra features and function controls on the built-in keyboard including Windows system hot keys.



Key features and operations are described below:

① Function Keys

Function keys are application-driven, like **F1** through **F12** can be found on the keyboard. These keys work together with the **Fn** key to activate special functions. Some keys (printed in blue on keypad) are preprogrammed with dual functions.

② Control keys — **Ctrl**, **Alt**, **Fn**, and **Shift**

They are controls used in conjunction with other keys to change their functions. To use control keys, press and hold the control key while pressing another key. For example, "Press **Ctrl-C**" means to hold down the **Ctrl** key and type the letter **C**. Key combinations work especially to the application you are running.

③ Windows keys

Use the following two keys to facilitate your work:

Start Menu key Displays the Start menu.

Shortcut/Application key Provides quick access to shortcut menus. This key acts like a right mouse button.

④ Cursor Control keys

Cursor control keys let you position the cursor on the screen where you want. In the screen, the cursor is a blinking underline, block, or vertical bar depending on the application. The cursor indicates where the next text typed is inserted.



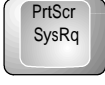

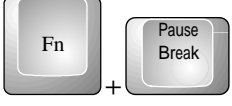



⑤ Numeric keys

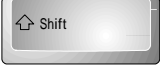
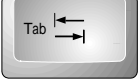


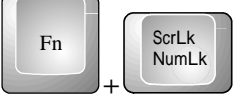
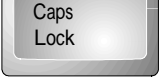

Numeric keys (also called Typewriter keys) are used to enter text and characters. Keys with blue print on them behave differently when combined with control keys.







If you are using the optional external numerical keypad, pressing the <Num Lock> key will activate the external keypad. The indicator will come on, however it will not change any of the functionality of your keyboard keys.

Basic Keyboard Functions









Keypad	Function Description
	<Enter> key. Execute a command. Within many text editing application programs, the <Enter> key inserts a hard carriage return, just like what ordinary typewriter does.
	<Esc> key. Press this key to cancel or escape from a command or function.
	<PrtSc> key. Known as the Print Screen key. Press this key to map the whole screen to share memory for your specific usage.
	<Pause> key. Press this key to temporarily halt execution of a command. Pressing any other key to resume execution of a command.
	<Fn> + <Break> key. Press this key to temporarily halt execution of a command. Pressing any other key to resume execution of a command.
	<Ins> key. Known as the Insert key. Press this key to toggle the keyboard data entry from insert to type over mode.
	 key. Known as the Delete key. Press this key to delete the character to the right of the cursor, or delete marked texts or items.
	<Backspace> key. Press this key to delete the character to the left of the cursor.

Keypad	Function Description
	<p><Shift> key. Press this key in combination with alphabet letters to produce uppercase letters in typing. Use this key in combination with those two-character keys (found on the second row of the keyboard) to produce the upper marked keys. Also used in most application program in combination with other keys to execute a certain command.</p>
	<p><Tab> key. Press this key to move the cursor to the next tab stop on the right. This key works much the same as in ordinary typewriter.</p>
	<p><Ctrl> key. Known as the Control key. Used in most application program in combination with other keys to execute a certain command.</p>
	<p><Alt> key. Known as the Alternate key. Used in most application program in combination with other keys to execute a certain command.</p>
	<p><Fn> + <Num Lock> key. Activates the embedded 15-key numeric keypad. The keys are color coded blue.</p>
	<p><Caps Lock> key. Used in most application program to always activate uppercase alphabet characters.</p>
	<p><Scroll Lock> key. Used in most application program to scroll the screen without having to move the cursor.</p>



Cursor Control Keys

Keypad	Function Description
	Up arrow key. Moves the cursor up one line at a time.
	Down arrow key. Moves the cursor down one line at a time.
	Left arrow key. Moves the cursor to the left one space at a time.
	Right arrow key. Moves the cursor to the right one space at a time.

Screen Control Keys

Keypad	Function Description
 + 	<Fn> + <Home> key. Moves the cursor to the beginning of a screen or line.
 + 	<Fn> + <PgUp> key. Moves the cursor up one screen at a time.
 + 	<Fn> + <PgDn> key. Moves the cursor down one screen at a time.
 + 	<Fn> + <End> key. Moves the cursor to the end of a screen or line.

Windows Hot Keys

Keypad	Function Description
	<Start> key. Pulls up the Windows Start menu.
	<Right Click> key. Performs a mouse right-click function for Windows system.


Special Function Keys





Keypad	With <FN> Held Down	With QuickOn-Music Running
<F1>	Toggles between suspend mode and active mode.	
<F2>	Enables/disables wireless network connections. Each time you press this combination of keys, you will step to the next choice. The choices are wireless enable, Bluetooth enable, wireless and Bluetooth enable, and wireless and Bluetooth disable.	
<F3>	Changes your selection of where to send your display video. Each time you press the combination of keys you will step to the next choice. The choices, in order, are: built-in display panel only, both built-in display panel and external monitor, or external monitor only.	
<F4>	Lowers the brightness of your display when pressed repeatedly.	Scans to the next playable medium and starts playing.

Keypad	With <FN> Held Down	With QuickOn-Music Running
<F5>	Increases the brightness of your display when pressed repeatedly.	Steps to the next playback mode.
<F6>	Toggles the Audio Mute on and off.	Turns ON/OFF the volume.
<F7>	Decreases the volume of your notebook computer G-MAX N411 when pressed repeatedly.	Decreases volume.
<F8>	Increases the volume of your notebook computer G-MAX N411 when pressed repeatedly.	Increases volume.
<F9>	Toggles between playing and pausing the optical drive.	Toggles between playing and pausing audio playback.
<F10>	Stops your optical drive.	Stops audio playback.
<F11>	Jumps back to the previous file.	Skips to the beginning of the previous track.
<F12>	Skips ahead to the next file.	Skips ahead to the next track.

Control Keys

QuickOn-Music Control Keys

Even when your notebook computer G-MAX MAX wasn't turned on, you can still enter the QuickOn-Music mode by pressing the music button of Instant Keys. While in QuickOn-Music mode, you can use the media keys  directly to control the media. For media selection, press <F4>. Each time you press <F4>, you will step to the next choice. The choices are MP3 files on the hard disk drive, audio CD, and USB storage. To change playback mode, press <F5>. Each time you press <F5>, you will step to the next playback mode. The choices are sequence, cycle, shuttle, and repeat.

Keypad	Function Description
<Home>	Changes the current song to the first one.
<End>	Changes the current song to the last one.
<PgUp>	Moves the current song to the first song of the previous folder in the playlist.
<PgDn>	Moves the current song to the first song of the next folder in the playlist.
<P>	Toggles between playing and pausing audio playback. Same as <F9>.
<Space>	Toggles between playing and pausing audio playback. Same as <F9>.
<S>	Stops audio playback. Same as <F10>.
	Increases volume.
	Decrease volume.
	Skips ahead to the next track.
	Skips to the beginning of the previous track.
<U>	Turns ON/OFF the volume.
<M>	Steps to the next playback mode.
<Tab>	Scans to the next playable medium and starts playing.

QuickOn-Music Limitations

1. Disk C must be the first partition.

All system files for QuickOn-Music reside in disk C. If disk C is not the first partition, the QuickOn-Music system files and BIOS need to be modified.

2. Disk C can be formatted as FAT32 or NTFS.

3. Support for English display only.

MP3 file names with other language codes will be displayed in unreadable codes. However, this will not affect playback.

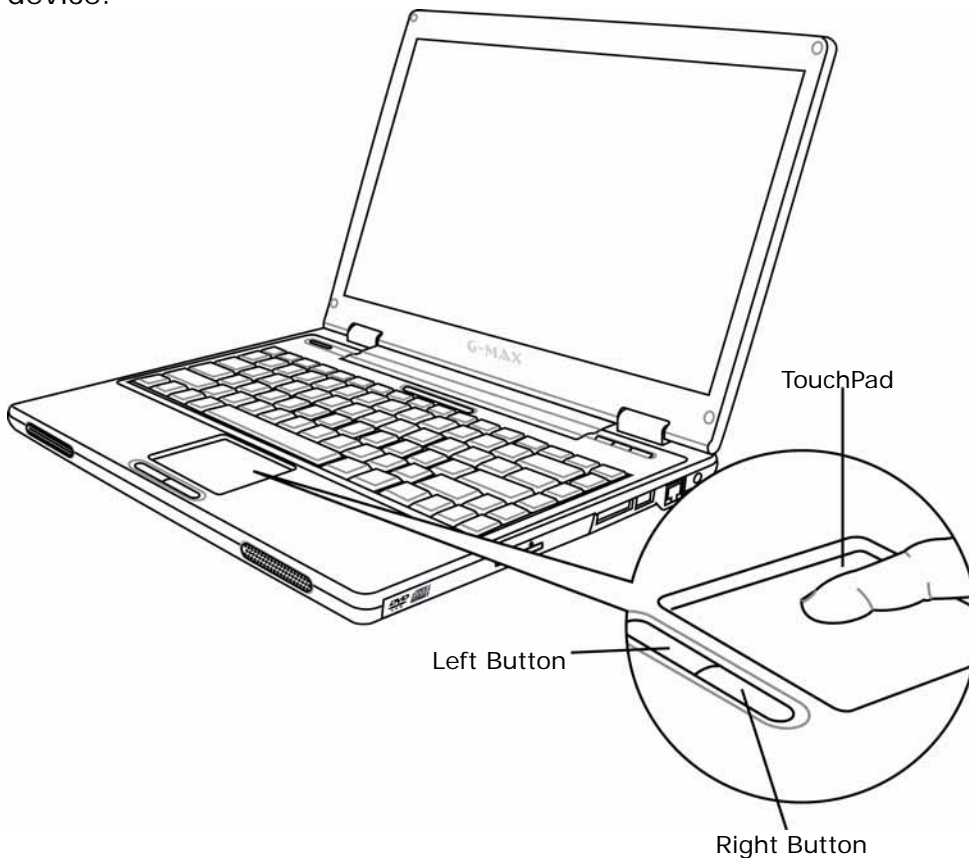
4. QuickOn-Music can only access on the hard disk drive MP3 audio files located in C:\QuickOn-Music\.

3.3 Using the TouchPad Pointing Device

Your notebook computer G-MAX N411 comes with a built-in TouchPad pointing device that is found on the center of the palm-rest surface.

The TouchPad offers a number of options that let you customize how it functions. To access these options, locate the Control Panel and double click on the Mouse icon. The options let you control the size and color of the cursor, cursor speed, the accepted double-click speed, and selection button orientation.

The TouchPad works a mouse pointing device replacement that is used under Windows-based operating system. You can use the standard Microsoft driver that is compatible with the TouchPad device and is normally used under Windows-based operating system. However, if you want to utilize the added features of the TouchPad, you may want to try installing its own device driver that comes with added utilities for enhancing the function of the device.



Here how to use the TouchPad pointing device:

1. The rectangular surface acts like a miniature duplicate of your display screen. To move the mouse cursor, place the finger lightly on the sensor pad and move in the desired direction. If you reach the end of the pad, lift your finger and place it back down on the other side of the pad.
2. To select an item, click on the item by pressing the left button control or by simply tapping on the surface once. A light, quick tap always works best. To execute an item, click the left button twice or do a quick double tap on the surface.
3. To simulate holding the mouse button down (dragging an icon or selection), use the tap-and-drag gesture. This feels much like a double-click, except that the finger remains on the pad after the second tap: Tap, lift, tap, hold and move. The simulated button remains held as long as the finger remains on the pad.
4. To scroll up or down the screen, just slide up or down the scroll button to move the screen up or down.



Avoid spilling any liquid on the TouchPad surface and always keep the TouchPad surface and pointing finger dry from sweat built-up. Also do not expose TouchPad d to any magnetic source object.

3.4 Configuring Your Screen Display

The VGA display function of your notebook computer G-MAX N411 is based on a high performance AGP local bus controller and is fully IBM VGA compatible. This controller offers a large set of extended functions and higher resolutions especially useful when you are connecting an external high-resolution and high-frequency CRT or LCD.

Please refer to Section 5 "Installing Your Notebook Computer G-MAX N411 Device Drivers" of Chapter 2 in this manual for the procedures on how to install the VGA device driver under Windows. After installing the VGA driver, you would then configure the display resolution or screen size to match your LCD display panel. Your notebook computer G-MAX N411 provides a 1280x768 WXGA panels. You would also probably want to set the amount of color output to display sharper images and photos.

Possible Display Configurations

The table below shows you the possible display resolution you can set when using either the LCD display or the external monitor (CRT):

Display	Possible Resolution	Maximum Colors
1280x768 WXGA LCD	640x480 800x600 1024x768	16 million colors 16 million colors 16 million colors
CRT Only	640x480 800x600 1024x768 1152x768	16 million colors 16 million colors 16 million colors 16 million colors



65,536 or 64K colors is also equivalent to 16-bit high color while 16 million or 16M colors is equivalent to 32-bit true color.



You can use the <Fn> + <F10> hot-key to switch the display between LCD only, CRT only, or both LCD and CRT display.

Changing the Display Properties under Windows

To change the display properties of your screen under Windows system, just right-click on the desktop area and select Properties or go to the Control Panel and click on the Display icon. The Display Properties dialog box will appear on your screen. Click on the Settings tab to set your desired configuration. Make sure to follow the configuration table above.



*If you cannot configure the display properties, change the display driver first as mentioned on Chapter 2.5 **Installing Your Notebook Computer G-MAX N411 Device Drivers**. Consult your dealer for the latest Windows AGP VGA driver.*

3.5 Knowing the Power Saving Features

One of the great features in your notebook computer G-MAX N411 aside from its superior performance is the ability to save energy power. Your notebook computer G-MAX N411 is designed to incorporate intelligent and advanced power management functions that turn off power of most components when system is idle or not in use. This does not affect the performance of your system as it monitors the activity of your notebook computer G-MAX N411 and resumes power and operating speed when activity is detected. This feature not only gives you longer battery hours but cooler systems and components as well. For more information on how to control the power management features of your notebook computer G-MAX N411, refer to Power Management function in Control Panel of Windows.

The definitions of power management mode are depicted as follows:

- **Full-On Mode**

No device in the system is executed in power management, the system can respond to all applications at maximum performance.

- **Suspend to RAM mode (Suspend Mode)**

All devices are powered off except the other supporting components and system memory where your working files are stored. You can activate this either pressing the power button or setting the Suspend timer on the Power Management function of the Control Panel in Windows. To resume full-on state, press the power button.

- **Suspend to Disk mode (Hibernation Mode)**

When this mode is activated, the context of the entire system is saved to disk and all components and devices are powered off, while all clocks are also stopped (except Real Time Clock or RTC). You can activate this by setting the Hibernate (Windows XP) mode on the Power Management function of the Control Panel in Windows. To resume full-on state, you can press the power button.

When your notebook computer G-MAX N411 is active, the Suspend/ Resume/ Power On button can also be used to manually put your notebook into Suspend mode. Push the Suspend/ Resume/ Power On button when your notebook is active, but not actively accessing anything, and immediately release the button. You will hear two short beeps and your system will enter Suspend mode. If your notebook computer G-MAX N411 is suspended, pushing the Suspend/ Resume/ Power On button will return your notebook to active operation. You can tell whether or not your system is in Suspend mode by looking at the Power icon on the Status LCD Panel. (See *Chapter 1.3 Power/ Status LED icons for more information.*) If the indicator is visible and not flashing, your notebook computer G-MAX N411 is fully operational. If the indicator is both visible and flashing, your notebook computer G-MAX N411 is in Suspend mode. If the indicator is not visible at all, the power is off or your notebook computer G-MAX N411 is in Hibernation (Save-to-Disk) mode.



The Suspend or Hibernation (Save-to-Disk) mode should not be used with certain PC Cards. Check your PC Card documentation for more information.

Besides, there are three power management parameters:

- **STANDBY MODE**

Standby mode is one of the power management parameters. When Standby mode is activated, your notebook computer G-MAX N411 shuts off the display and turns off the hard drive when there is no activity (keystroke, pointer action, sound generation, video display change, modem transmission or reception, etc.) on your notebook for the user-selected Standby timeout period. Any activity will cause your notebook computer G-MAX N411 to return to normal operation automatically. This feature is independent of the Suspend/ Resume/ Power On button.

- **DISPLAY TIMEOUT**

The Video Timeout is one of the power management parameters. This feature saves power by turning off the display if there is no keyboard or pointer activity for the user selected timeout period. Any keyboard or pointer activity will cause the display to restart automatically.

- **POWER OFF**

Before turning off the power by choosing Shut Down from Windows, check that the Hard Drive, Optical Disk Drive, PC Card and Floppy Disk Drive Access indicators are all OFF. If you turn off the power while accessing a disk or PC Card, there is a risk of data loss. To ensure that your notebook computer G-MAX N411 shuts down without error, use the Windows shut down procedure.



Turning off your notebook computer G-MAX N411 without exiting Windows or turning on your notebook computer G-MAX N411 within 10 seconds of the notebook being shut down may cause an error when you start the next time.

3.6 Working with the Built-in HDD

Your notebook computer G-MAX N411 is equipped with a built-in large capacity 2.5 inch IDE hard disk drive where you store or install your computer operating system and all application software programs. The internal hard disk is normally assigned as Drive C after formatting. Sometimes divided into two partitions, adding a Drive D. Since your notebook computer G-MAX 411 supports different hard disk capacities (to 40 GB or above), you also need to setup the disk type first on your notebook computer G-MAX N411's BIOS SETUP program before formatting the disk drive. Your notebook computer G-MAX N411 supports Auto-detect hard disk type, so you do not need to set it manually. Your dealer should already have done all of this for you. You can refer to **Chapter 4** on how to run the BIOS SETUP program.

You can increase the system's storage capacity by replacing the standard hard disk drive with a drive of greater storage capacity.



If you wish to replace your hard disk, contact your local dealer for more information about this dealer-installable device.



Always turn off your notebook computer G-MAX N411 first before removing the hard disk drive. Failure to do so will damage the computer and the hard disk. Avoid jarring or moving your computer while the hard disk is still being accessed.

3.7 How to Access the Optical Disk Drive

Your system ships with a DVD combo installed on the right side of your notebook computer G-MAX N411. You would normally use the drive for installing operating system and software application programs.

Depending upon the configuration of your notebook computer G-MAX N411, you may have the following drive:

- DVD / CD-RW combo

A DVD/CD-RW combo drive gives you access to movie, software, data, and audio DVD/CDs, and to write data onto recordable CDs.



Do not operate your optical drive unless your notebook computer G-MAX N411 is sitting on a flat surface. Using a drive when the system is not level may damage the drive or prevent proper operation. Prolonged use of the optical drive, such as watching a DVD movie, will substantially reduce the battery life if no other power source is attached..



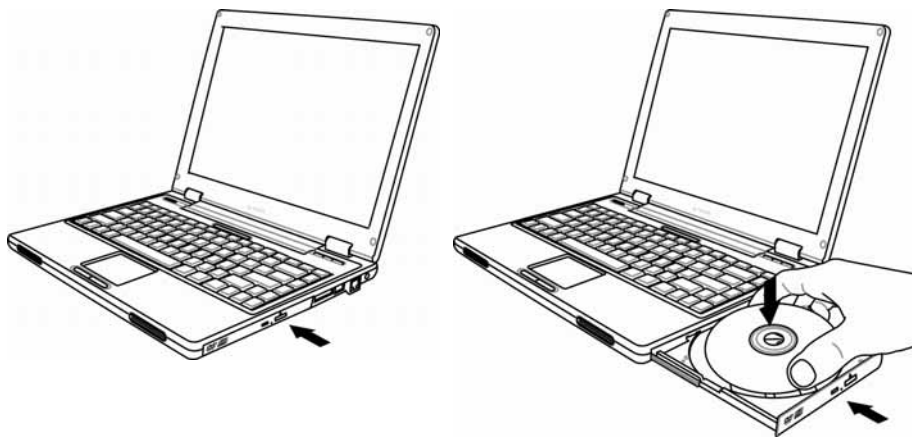
You should periodically check updated drivers. The DVD player is set to play DVD titles with region code number 1 which is specified for the North American market. The region number is a regional restriction code defined by the DVD Forum acting on the requirements of Hollywood. Different region codes are recorded on video DVD titles for publication in different areas of the world. If the regional code of the DVD player does not match the regional codes on the titles, then playback is impossible.



*Many movies run-times are longer than your notebook computer G-MAX N411 can support on a single charged battery. If you are watching a DVD movie on battery power you may need to swap in an additional, charged battery or attach AC power during the movie to view it in its entirety.
An additional fully-charged battery is highly recommended if you will be watching DVD movies on battery power.*

To insert and remove a disc on the drive:

1. Make sure your notebook computer G-MAX N411 is turned on. Press the eject button found on the door cover of the optical disk drive. The CD tray mechanism will pop-out slightly and slowly pull out the whole length of the tray.
2. Place the disc on top of the CD tray with the label side facing up. Gently press the compact disc onto the center spindle to secure the disc.



3. To remove the disc, press on the center spindle and pull up the disc from the side until the disc snaps out of the spindle lock.



If the eject function is disabled by software or a power failure occurs, the Emergency Optical Drive Tray Release button allows you to manually remove a CD from the drive.

4. To close the optical disk drive, simply push the CD tray inside. The optical disk drive LED will activate when the disc is detected. Wait until the LED has turned off and then start to read the disc.



There may be a protective sheet in the tray from when it was shipped; please make sure it is removed before operating the drive.

Using DOLBY™ Headphone

The Dolby Headphone utility lets you enjoy multi-channel sound sources, such as DVD movies, with realistic surround sound using your *conventional* stereo headphones. The Dolby Headphone is a utility that is available in the DVD player software.



Media discs which do not have the Dolby Surround 5:1 symbol will not support Dolby Headphone.

After making changes to the Dolby Headphone feature and clicking OK, wait at least ten seconds before making another change in order to allow the system to stabilize.

To use the Dolby Headphone feature, perform the following steps:

1. Double click the DVD player application icon on your desktop.
2. On the toolbar that appears, click the **Properties** button (the fourth button from the left, with the image of a wrench).
3. On the Properties window, select the **Dolby Headphone** tab.
4. To enable Dolby Headphone, check the **Enable Dolby Headphone** box. To change the type of surround sound, select one of the radio buttons listed under Room Filter Setting.
5. Click **OK**. The Dolby Headphone feature will now be enabled until you disable it by canceling Enable Dolby Headphone.

How to care the CD

When you handle CDs, pay attention to the following guidelines:

- Always pick up the CD by its edges.
- Avoid scratching or soiling either side of the CD.
- Do not write with the hard ball-point pen or apply labels on either side of the CD.
- Keep the CD away from direct sunlight or high temperatures.
- Clean fingerprints or dust from the CD by wiping it with a soft cloth.



The optical disk drive is a Class 1 Laser Product.

4 Setting / BIOS



Your notebook computer G-MAX N411 uses the Phoenix BIOS Setup program that allows you to set several system configuration in changing the way your notebook computer G-MAX N411 performs. This includes your system time and date, disk drive configuration and password setup. This information is then stored in the CMOS RAM and will remain permanent unless you change it again. This chapter discusses on how you will activate the BIOS Setup program and change the system configuration to suit your desired operation. You must be careful to set the configuration properly in order for your notebook computer G-MAX N411 to run smoothly. If you are not sure of any settings, contact your dealer.

4.1 Using the Xpress Recovery Utility

Xpress Recovery utility is an utility for backing up and restoring your operating system partition. Your hard drive must conform to the following specifications for this utility to run properly.

1. It must support FAT16, FAT32, and NTFS format.
2. It must be used with IDE hard disc supporting HPA.
3. The first partition must be set as the boot partition. Please do not change the size of the boot partition once it has been backed up.
4. It must connect to IDE1 master.

Note:

1. If you have previously formatted your hard disc with other partition manager or any similar utilities, your hard disc will not be recovered to its original state by using Xpress Recovery.
2. System data and the reading/writing speed of your hard disk will affect the back up speed.
3. Xpress Recovery will not function when your hard disc crashes. Please contact your dealer immediately.

How to enter the Xpress Recovery:

There are two ways to enter the Xpress Recovery utility:

1. Press <F9> during startup, and you'll be greeted by this screen below:



The function buttons description :

- ✧ Recover button. This function will recover your system to factory default.
- ✧ Exit button. This function will exit and restart your notebook computer G-MAX N411.

2. Press <F2> during startup, select "Boot" setup menu and set boot from CD-ROM. Save and exit the BIOS setup. When "CD-ROM:" appears at the bottom of the screen, press any key to enter the Xpress Utility. When you enter the Xpress Utility, you'll be greeted by this screen below:

The function buttons description :



- ✧ Backup button. The backup utility will scan your system automatically and back up data as a backup image in your hard driver.
- ✧ Recover button. This function will recover your system to factory default or the backup image as you desired.
- ✧ Remove button. Remove the backup image.
- ✧ Exit button. Press Exit button to exit and restart your notebook computer G-MAX N411.



For your data accuracy, always make sure you've backed up your data before removing the backup image.



We recommend that you should enter Xpress Recovery by booting from the CD-ROM, for using functions such as data remove or backup.

4.2 Running the BIOS Setup Program

Your notebook computer G-MAX N411 is likely to have been properly setup and configured by your dealer prior to delivery. However, you may find it necessary to use your notebook computer G-MAX N411's BIOS (Basic Input-Output System) Setup program to change system configuration information, such as the current date and time, or your hard disk drive type. The Setup program can be accessed when you power on the system and pressing the <F2> function key.

The settings that you specify within the Setup program are recorded in a special area memory called the **CMOS RAM**. This memory is backed up by a battery so that it will not be erased when you turn off or reset the system. Whenever you turn on the computer, the system will read the settings stored in the CMOS RAM and compare them to the equipment check conducted during the Power On Self Test (POST). If an error occurs, an error message will be displayed on the screen, and you will then be prompted to run the Setup Program.

As the POST (Power-On Self Test) executes during the boot up process, the screen will display the following message:

```
Press <F2> to Enter SETUP
```

Press the <F2> key to run the BIOS Setup program. The BIOS Setup program is organized into five menus which you can select using the <--> and <--> keys.

To move from one option to another, you use the up and down arrow keys while using the <F5> and <F6>, or <+> and <-> keys to change the settings. On the right hand side of the screen are some brief help descriptions of each item you want to change.

On the BIOS Setup program, you will find the following parts on the screen:

- Item Specific Help

The right side of the screen. This area describes each parameter and its available settings.

- Menu Bar

The top line of the screen. Each of the five selections displays its own screen.

- Parameters

The left side of the screen. This area lists the parameters and their current settings.

- Key Status Bar

The bottom part of the screen. These lines display the keys available to move the cursor, select a particular function and so forth.

To exit the BIOS Setup program, simply press the <Esc> key and select from the Exit menu whether you want to Exit Saving Changes; or Exit Discarding Changes.

4.3 Using the Main Menu Setup

Phoenix BIOS Setup Utility		Main	Security	Boot	Exit
					Item Specific Help
BIOS Version:	3A10				<Tab>, or <Enter> selects field.
Product Name:	N411				
Manufacturer Name:	Gigabyte				
System Time:	[1 :00 :00]				
System Date:	[09/15/2004]				
▶ IDE Adapter 0 Master:	[40008MB]				
Video Memory:	[16MB]				
Quiet Boot Mode:	[Enabled]				
Legacy USB Support:	[Enabled]				
Power On Display:	[Both]				
▶ I/O Configuration:					
ATAPI Device:	UJDA755 DVD/CDRW				
CPU Type:	Intel ® Dothan				
	Processor 1800 MHz				
System Memory:	640KB				
Extended Memory:	238KB				
Serial Num:	04320011				
UUID:	806FB27B43640010 ABC600C09F3B6582				
F1 Help ↑↓ Select Item -/+ Change Values F9 Setup Defaults Esc Exit ←--> Select Menu Enter Select F10 Save and Exit ▶ Sub-Menu					

- BIOS Version

This field is for information only as the BIOS displays the BIOS version during the Power-On Self-Test (POST).

- System Time

Allows you to change the system time using the hour:minute:second format of your notebook computer G-MAX N411.

Enter the current time for reach field and use the <Tab>, <Shift>+<Tab>, or <Enter> key to move from one field or back to another.

You can also change the system time from your operating system.

- System Date

Allows you to set the system date using the month/date/year format.

Enter the current time for each field and use the <Tab>, <Shift>+<Tab>, or <Enter> key to move from one field or back to another.

You can also change the system time from your operating system.

- IDE Adapter 0 Master

This field displays various parameters for the hard disk drive. If type [Auto] is selected, the system automatically sets these parameters. If type [User] is selected, Cylinders, Heads and Sectors can be edited.

- Video Memory

Lets you specify the shared memory pre-allocated for frame buffer as 8MB, 16MB or 32MB. The default value is 8MB.

- Quiet Boot Mode

Lets you specify your boot screen is quiet (Logo screen) or not (POST screen) by specifying the value to [Enable] or [Disable].

- Legacy USB Support

Enable or disable the support of USB 2.0.

- Power On Display

Lets you select the display device.

- I/O Configuration

This field display various I/O support. Refer to Chapter 4.3.1 for more information.

- ATAPI Device

This field displays the interface device communicating your notebook and option disk drive / disk drive.

- CPU Type

This field reports the CPU type information detected by the BIOS during Power-On Self-Test (POST).

- System Memory

This field reports the amount of base (or conventional) memory found by the BIOS during Power-On Self-Test (POST).

- Extended Memory

This field reports the amount of extended memory found by the BIOS during Power-On Self-Test (POST).

- Serial Num

This field displays the serial number of your notebook computer G-MAX N411.

- UUID

This field displays the Universal Unique Identifier (UUID) of your computer.

4.3.1 I/O Configuration Sub-Menu

Phoenix BIOS Setup Utility		
Main		
I/O Configuration		
Serial Port:	[Auto]	Item Specific Help Allow user to enable/disable the Network boot function.
Parallel Port:	[Auto]	
Mode:	[ECP]	
PXE Lan boot:	[Enable]	
Wireless LAN:	[ON]	
F1 Help Esc Exit	↑ ↓ ← →	Select Item Select Menu
	-/+ Enter	Change Values Select ▶ Sub-Menu
		F9 Setup Defaults F10 Save and Exit

- Serial Port

Lets you specify the Serial Port status by specifying the value to [Auto], [Enable] or [Disable].

- Parallel Port

Lets you specify the Parallel Port status by specifying the value to [Auto], [Enable] or [Disable].

- Mode

Lets you specify the using status of Parallel Port by specifying the value to [Output only], [Bi-directional], [EPP] or [ECP].

- PXE Lan boot

Lets you activate or inactivate the PXE LAN function by specifying the value to [Disabled] or [Enabled] when system is booting.

- Wireless LAN

There are two options to this field: ON, and OFF. This field allows you to activate (ON) or deactivate (OFF) the default wireless function.

4.4 Security Menu Setup

Phoenix BIOS Setup Utility			
Main	Security	Boot	Exit
User Password Is		Clear	Item Specific Help Supervisor Password controls access to the setup utility.
Supervisor Password Is		Clear	
Set User Password		[Enter]	
Set Supervisor Password		[Enter]	
Password on boot		[Disabled]	
F1	Help	↑ ↓	Select Item -/+
Esc	Exit	←-->	Select Menu Enter
			Change Values F9
			Setup Defaults F10
			Save and Exit
			Sub-Menu

- User Password Is

Shows that your notebook computer G-MAX N411 is under controlled by User Password or not.

- Supervisor Password Is

Shows that your notebook computer G-MAX N411 is under controlled by Supervisor Password or not.

- Set User Password

This field is only available when Supervisor Password has set. Enter the user password when boot the system or resume from suspend mode. But if the Write Protect is set in the Fixed disk boot sector field, you should enter a supervisor password to access the fixed disk when boot the system or resume from suspend mode.

- Set Supervisor Password

Supervisor password gives you the authority in accessing the setup utility. You also need to enter this password in system booting and resuming from suspend mode. When you press <Enter> in this field, the Set Supervisor Password dialog box appears. Enter a new password with up to 8 alpha-numeric characters, and then re-enter it for confirmation.

- Password on Boot

If you set this field to Enabled, your notebook computer G-MAX N411 will always ask for the password every time you boot your notebook computer G-MAX N411.

4.5 Using the Boot Setup

This item allows you to set the search drive sequence where the system will try to boot up first.

Phoenix BIOS Setup Utility			
Main	Security	Boot	Exit
		Item Specific Help	
Removable Devices CD-ROM Drive +Hard Drive Boot to LAN		Use <↑> or <↓> to select a device, then press <+> to move it up to the list, or <-> to move it down to the list. Press <ESC> to exit from this menu.	
F1	Help	↑ ↓	Select Item
Esc	Exit	←-->	Select Menu
		-/+	Enter
			Select Sub-Menu
		Change Values	F9 Setup Defaults
			F10 Save and Exit

To select the boot device, you can use the up or down arrow key, then press < + > to move up the device in the list or press < - > to move down the device in the list. To exit from this menu, press < **Esc** >.

4.6 How to Exit the Setup Program

There are two choices to escape from the Setup program.

Phoenix BIOS Setup Utility			
Main	Security	Boot	Exit
Exit Saving Changes Exit Discarding Changes Load Setup Defaults Discard Changes Save Changes		Item Specific Help Exit System Setup and save your changes to CMOS.	
F1 Help	↑↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	←--> Select Menu	Enter Execute Command	F10 Save and Exit

- Exit Saving Changes

Saves all changes to CMOS while running the BIOS setup program and exit from the system setup program.

- Exit Discarding Changes

Allows you to discard all changes made while running the BIOS setup program and exit from the system setup program.

- Load Setup Defaults

Lets you load the default values for all setup items.

- Discard Changes

Discard all changes during running the BIOS setup program.

- Save Changes

Saves Setup data to CMOS.

4.7 How to Upgrade the BIOS

Your notebook computer G-MAX N411 uses EPROM Flash BIOS chip that allows you to easily upgrade the BIOS program.

When you update the BIOS, any customized settings you made are lost. Please go to Gigabyte website at <http://www.gigabyte.com.tw> for the latest BIOS upgrade utility.

To upgrade the BIOS on DOS:

1. Insert the disk with BIOS updated into the diskette drive. (USB FDD, USB Flash Disc, or Floppy Disc)
2. Power on the system with the diskette in the diskette drive.
3. On the DOS prompt, type the following command.

```
A:\> Phlash016 XXXXXX.ROM (BIOS filename) /allb /c  
or  
A:\>XXXXXX.BAT (Batch file for BIOS file)
```

4. The system is now automatically running the BIOS upgrade.
5. The system will shut down automatically when the upgrade is completed.

To upgrade the BIOS on Windows:

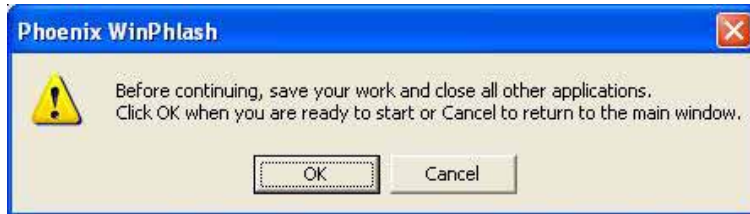
1. Please go to Gigabyte website at <http://www.gigabyte.com.tw> (Home > Support > Notebook > BIOS > BIOS of N411) to download ❶ BIOS upgrade tool (Phoenix WinPhlash) and ❷ the latest BIOS upgrade utility.
2. Unzip the file you have downloaded.
3. Run the setup.exe in your unzipped folder.
4. After you have successfully installed the WinFlash program, click Start, then point to Programs, you will find WinFlash program folder, click WinFlash.



5. Select the operation you desired. "Backup BIOS and Flash BIOS with new settings" will erase all the settings you previously made. Specify the location of your backup file and your new BIOS file. Click **Flash BIOS** when you are ready to reset your BIOS with new settings.



6. Click OK to start running the flash program.



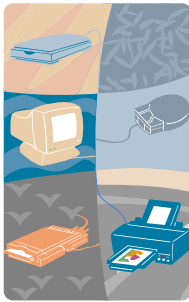
7. The status of the execution will be shown in the pop-up window. Please do not interrupt the process of the execution for the program to be properly executed.



8. The system now will be shut down for the program to be successfully completed. You may press the power button to restart your notebook computer G-MAX N411.



5 Connecting to Peripherals



This chapter describes how you attach peripheral devices to your notebook computer G-MAX N411. You can attach a printer or mouse; connect an external monitor and keyboard, or any other peripheral device. You will learn how to use these peripheral devices with the step-by-step instructions depicted in this chapter.

5.1 Using the USB Port

USB or Universal Serial Port is a peripheral bus standard developed by Compaq, DEC, IBM, Intel, Microsoft, NEC and Northern Telecom. Personal computers equipped with USB will allow computer peripherals to automatically configure as soon as they are physically attached - without the need to reboot or run setup. USB will also allow multiple devices to run simultaneously on a computer, with peripherals such as floppy drive, mouse, digital cameras, scanners, printers, optical disk drive, keyboards, games devices and acting as additional plug-in sites, or hubs.



Due to the ongoing changes in USB technology and standards, not all USB devices and/or drivers are guaranteed to work.



Depending on your operational requirements, you may need to disable other ports in order to release system resource for the USB port.

5.2 Using an External Monitor Port

Your notebook computer G-MAX N411 has a 15-pin Monitor port for supporting any external CRT or LCD color monitor. You need a display signal cable (usually provided with the monitor). One end of the cable must have a 15-pin connector for the system.

To connect an external monitor:

1. Turn off your notebook computer G-MAX N411 and make sure the monitor power switch is turned off.



Your notebook computer G-MAX N411 must be powered off or suspended while the monitor is being connected. Although you can connect the external Monitor without power off your notebook computer G-MAX N411 and the external monitor, however, it is harmful to both devices and it shortens the life of these devices.

2. Connect the connector cable of the monitor to the VGA port at the back of your notebook computer G-MAX N411. Secure the cable connection with the screws provided.

3. Connect the monitor power cable and plug it into a properly grounded wall outlet.
4. Turn on the power of the monitor.
5. Turn on your notebook computer G-MAX N411. Both the LCD panel and the monitor screen will show the display. Your notebook computer G-MAX N411 is set at default to run at simultaneous display mode.
6. If you only want to show the display on the external monitor (CRT/LCD) and shut off the LCD display, you can use the <Fn> + <F10> hot-key to switch display type between LCD and CRT. Keep pressing the hot-key until you get the display to external CRT/LCD only.

5.3 Using the IEEE 1394 Port

IEEE 1394 is a new I/O standard that is supported by Win98 (second edition) or later Windows version. With supporting high-speed transmission and delivering data at a guaranteed rate, you can record digital video clips and download them directly via a super-speed IEEE 1394 port at the left side of your notebook computer G-MAX N411. IEEE 1394 becomes an ideal for devices that need to transfer high speed data in real-time.

With built-in IEEE 1394 port, your notebook computer G-MAX N411 enables the peripheral devices in transmitting digital video data or data backup. The Windows system will automatically recognize it in installing a suitable driver for it.

Moreover, you should install the driver of peripheral device to connect with the IEEE 1394 port, for details please refer to the manual that comes with your peripheral devices.



Please make sure that the external IEEE 1394 HDD box you purchase on local electronic store should provide external power adapter. There are different types of IEEE1394 HDD box and hard disk from different manufacturers, the power consumption has varied range. If the power of the external IEEE 1394 HDD is supplied from the USB of your notebook computer G-MAX N411, it may not run properly.

5.4 Using the External Audio System

At the left side of your notebook computer G-MAX N411, you will find the built-in audio ports. You can connect Microphone jack, earphone or powered speaker.

To connect to a audio jack:

1. Locate the audio port (Microphone, Headphone) that you want to use to the target device.
2. Plug the jack into the port on the left side of the system.



If you use external speakers and experience the sound distortion or feedback, please lower the volume. Some factors is caused by too close locating the microphone and speakers from each other, moving away the external audio option from the unit may also help.

5.5 Using the LAN Port

Your notebook computer G-MAX N411 comes with a internal 10 Base-T/100 Base-TX LAN module that connects your notebook computer G-MAX N411 to other computers/networks through a local area network (LAN) and supports data transfer rates at 10 Mbps and can be up to 100 Mbps. The 10Base-T standard also called Twisted Pair Ethernet is connected with RJ-45 connectors. The 100 Base-TX is based on the older Ethernet standard. Because it is 10 times faster than Ethernet, it is often referred to as Fast Ethernet.

The built-in LAN module provides a standard RJ-45 connector.

To connect the twisted-pair cable to your LAN port:

1. Prepare one twisted-pair cable. Each end of the cable has a RJ-45 connector.
2. Connect one end of the cable into the network wall outlet or HUB.
3. Connect the other end of the cable into the computer RJ-45 LAN port.

5.6 Using the Wireless LAN

Wireless LAN is the major breakthrough in computer communication technology. It lets user connect to the LAN environment without using any wire to traditional RJ-45 jack. User can enjoy the wireless connection within the range of Access Point (AP) of LAN.

Access Point (AP) is the wireless transmission and receiving device, it generally connects to the server of a LAN environment or act as a LAN hub with wireless connection. Access point can be set in an office environment, airport, major railway station, etc. that depends on the construction of each country. In most case, you probably can use it at office, please consult with the network department of your company for more details.

Your notebook computer G-MAX N411 integrates built-in IEEE 802.11b + g wireless LAN module, with using Intel ® PRO/Wireless network solution by Intel ® Centrino™ mobile technology. IEEE 802.11b + g standard supports 11 Mbps wireless connection speed. You can connect to the wireless LAN Access Point without insert extra wireless LAN card into the PCMCIA slot.

Wireless LAN module is similar to LAN module. You need to install software driver before using it. Please refer to chapter 2.5 on how to install the driver.

Wireless LAN and Bluetooth(Option)

Pressing <F2> + <Fn> enables/disables wireless network connections. Each time you press this combination of keys, you will step to the next choice. The choices are wireless enable, Bluetooth enable, wireless and Bluetooth enable, and wireless and Bluetooth disable.

1. The first time when you press <F2> + <Fn>:

WLAN ON & Bluetooth OFF (LED Flashing)

Icons at the right bottom side of the screen are:



Note: 1. Bluetooth mark is RED highlight; means disable.
2. Pro/SET mark is NOT forbidden; means enable.



2. The second time when you press <F2> + <Fn>:

WLAN OFF & Bluetooth ON (LED OFF)

Icons at the right bottom side of the screen are:



Note: 1. Bluetooth mark is WHITE highlight; means enable.
2. Pro/SET mark is forbidden; means disable.



3. The third time when you press <F2> + <Fn>:

WLAN ON & Bluetooth ON (LED Flashing)

Icons at the right bottom side of the screen are:



- Note: 1. Bluetooth mark is WHITE highlight; means enable.
2. Pro/SET mark is NOT forbidden; means enable.



5 Connecting to Peripherals

4. The fourth time when you press <F2> + <Fn>:

Both OFF (LED OFF)

Icons at the right bottom side of the screen are:



Note: 1. Bluetooth mark is RED highlight; means disable.
2. Pro/SET mark is forbidden; means disable.



5.7 Using the Modem Port

Your notebook computer G-MAX N411 comes equipped with a 56K internal fax/data modem that allows you to communicate with others via fax, email, or to connect to an online service or Internet.

The built-in fax/data modem provides on standard phone connector.

To connect the analog phone cable to your modem:

1. Locate the analog phone cable in the accessories box in your notebook computer G-MAX N411 shipping carton. Each end of the cable has a RJ-11 connector.
2. Connect one end of the cable into a standard wall outlet.
3. Connect the other end of the cable into your notebook computer G-MAX N411 modem port.



The speed of data transmission is dependent on the quality of telephone lines. Digitally terminated lines improve the speed of data transmission. Contact your service provider for more information.



The analog phone cable is an industry standard cable. Longer cables are available at your local electronics store.

5.8 Using Memory Card Reader

Your notebook computer G-MAX N411 is equipped with a memory card reader that can read and write to three different popular digital media - Memory Stick™, Multimedia Card™, and Secure Digital Card™. With this 3-in-1 reader, you can easily transfer data to your notebook computer G-MAX N411 from digital cameras, digital camcorders, PDAs, MP3 players, digital voice recorders and more.

Inserting and Removing a Memory Card

Inserting a Memory Card

Depending on the type of memory card, you may need to insert it into the reader conducting plate/label side up or down.

Memory Type	Insert Direction
Memory Stick™ Pro	label side down
SecureDigital™ / MultiMedia™	label side up



Inserting your memory card incorrectly may cause your system to slow down or even hang up. If that happens, restart your system and insert the card correctly.

Removing a Memory Card

To remove the memory card from the reader, follow these steps:

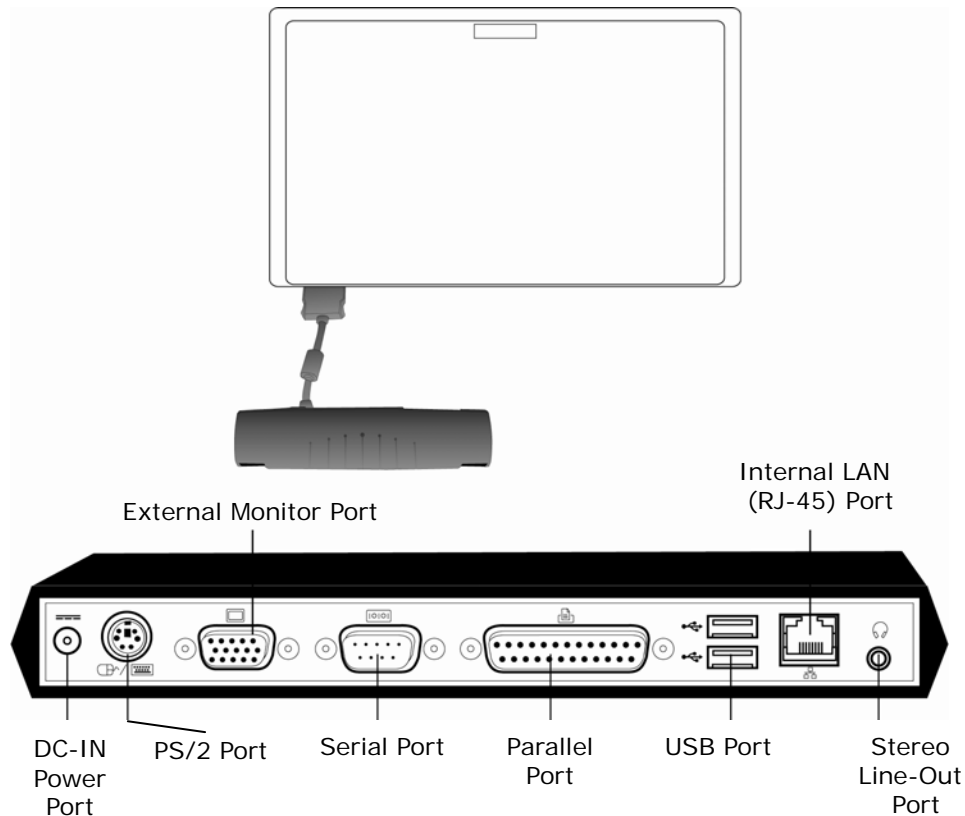
1. Locate the drive icon for your memory card reader.
2. Right-click the icon and select **Eject**.
3. Remove memory card from the reader.



Physically removing the memory card before it is ejected may result in data loss.

5.9 Using Port Replicator (Optional)

If your notebook computer G-MAX N411 has the optional Port Replicator, it comes equipped with multiple ports to which you can connect external devices including: disk drives, keyboards, USB devices, printers, etc.



Here are the I/O ports that Port Replicator has (from left to right):

❶ DC Power Port

Lets you connect the AC power adapter in supplying continuous power to your Port Replicator.

❷ PS/2 Port

The PS/2 port allows you to connect an external keyboard, and/or numeric keypad and mouse. In order to connect a PS/2 interface device follow these steps:

1. Align the connector with the port opening.
2. Push the connector into the port until it is seated.



A mouse, keyboard, or keypad may be installed and automatically recognized by your notebook without restarting or changing setups.

❸ External Monitor Port

The external monitor port allows you to connect an external monitor. Refer to Chapter 5.2 for more information.

❹ Serial Port

The serial port, or COM port, allows you to connect serial devices, such as printers or scanners. In order to connect a serial interface device follow these steps:

1. Align the connector with the port opening.
2. Push the connector into the port until it is seated.
3. Tighten the two hold-down screws, located on each end of the connector.

5 Parallel Port

The parallel port, or LPT port, allows you to connect parallel devices, such as a printer to your notebook computer G-MAX N411. In order to connect a parallel interface device, follow these steps:

1. Align the connector with the port opening.
2. Push the connector into the port until it is seated.
3. Tighten the two hold-down screws, located on each end of the connector.

6 USB Ports

The two USB ports allow you to connect USB devices such as external game pads, pointing devices, keyboards and/or speakers. Refer to Chapter 5.1 for more information.

7 Internal LAN (RJ-45) Port

Internal LAN port connects your notebook computer G-MAX N411 to other computers/networks through a local area network (LAN) and supports data transfer rates at 10 Mbps and can be up to 100 Mbps. The 10Base-T standard also called Twisted Pair Ethernet is connected with RJ-45 connectors. Refer to Chapter 5.5 for more information.

8 Stereo Line-out Port

The optional stereo line-out port allows you to connect a set of speakers or a headphone to your notebook computer G-MAX N411. To connect, follow these steps:

1. Align the connector with the port opening.
2. Push the connector into the port until it is seated.

6 System Upgrade



This chapter describes how to upgrade your system. You can upgrade your memory size to your system for specific requirements. This section provides an easy step in doing system upgrade for your notebook computer G-MAX N411. The upgrade procedures include the following.

6.1 Memory Upgrade Procedures

Your notebook computer G-MAX N411 offers two memory slots using 200-pin SODIMM (Small Outline Dual Inline Memory Module) at least 128MB DDR SDRAM. One of them is for on board memory module, you can use another to add and upgrade. The memory compartment is located just under your notebook computer G-MAX N411.

Based Memory	Installing Memory	Total
512 MB	0 MB	512 MB
512 MB	128 MB	640 MB
512 MB	256 MB	768 MB
512 MB	512 MB	1024 MB

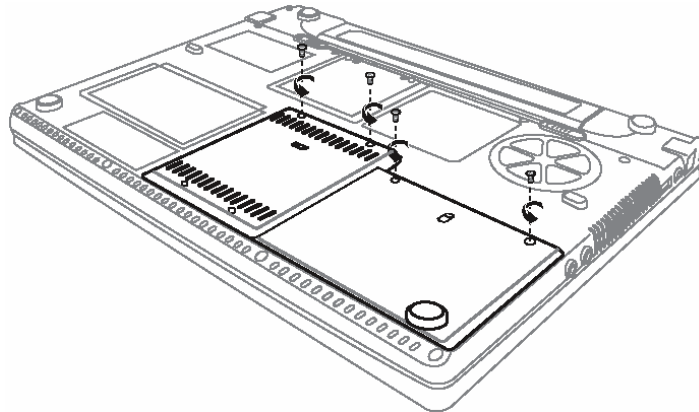
Installing Memory Module


Your notebook computer G-MAX N411 comes with standard 512MB of synchronous DDR SDRAM. You can increase system memory to a maximum of 1024 MB in the system, by installing one small outline double inline memory modules (SO-DIMMs) with installed base memory in the system.

The 128MB, 256MB and 512MB memory module are available.


To install the memory module:

1. Make sure the system is powered off, the battery also is removed and that no peripheral devices are attached.
2. Turn your notebook computer G-MAX N411 upside-down and locate the screw that secures the DIMM door at the underside of your notebook computer G-MAX N411.

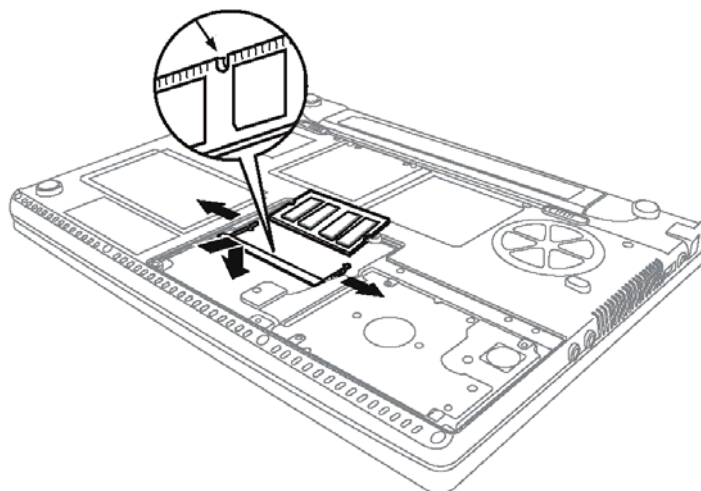


 *The memory upgrade module can be severely damaged by electrostatic discharge (ESD). Be sure you are properly grounded when handling and installing the module.*

3. Remove the screw and open the DIMM cover by your finger.
4. Locate the memory module into the empty memory module sockets. (Your system comes with one memory module already installed in the socket.)

 *Avoid touching the exposed components inside the system. Doing so may damage the system.*

5. Insert the connector of the memory module into the socket. Make sure the notch of the memory module fits the nose of the socket.



- ✧ Hold the memory module at a 45-degree angle and push its connector into the memory socket of the notebook.
 - ✧ Press down on the edge of the memory module until the locking tabs on both sides is locked.
6. Put the DIMM door back and secure the screw on the DIMM door.
 7. Turn the system over.

To remove a memory module, push the locking tabs aside from the memory module until the module pops up. Then, remove the memory module.



The memory upgrade module is not something you routinely remove from your notebook computer G-MAX N411. Once it is installed, you should leave it in place unless you want to increase system memory capacity.

7 Cleaning & Maintenance



Your notebook computer G-MAX N411 will serve you well if you take care of it.

This chapter describes some tips and notice about how to care and maintain your notebook computer G-MAX N411.

7.1 Taking Care of Your Notebook Computer

- The openings on the enclosure are for air convection hence your notebook computer can be protected from overheating. **DO NOT COVER THE OPENINGS.**
- Do not expose your notebook to direct sunlight. Do not place it near sources of heat, such as a radiator.
- Do not expose your notebook to temperatures below 5°C (41°F) or above 40°C (104°F).
- Do not subject your notebook to magnetic fields.
- Do not expose your notebook to rain or moisture.
- Do not spill water or any liquid on your notebook.
- Do not subject your notebook to heavy shock and vibration.
- Do not expose your notebook to dust and dirt.
- Never place objects on top of your notebook to avoid damaging your notebook.
- Never place your notebook on uneven surfaces.
- Use only a power adapter approved for use with your notebook computer.
- If your notebook computer is not in use for a long time, disconnect it from mains to avoid possible damage by transient over-voltage.
- Never open the body of your notebook computer. For safety reason, your notebook computer should only be opened by qualified service personnel.

Taking Care of Your AC Adapter

Here are some ways to take care of your AC adapter:

- Do not connect the adapter to any other device.
- Do not step on the power cord or place heavy objects on top of it. Carefully route the power cord and any cables away from all potential traffic.
- When unplugging the power cord, do not pull on the cord itself but pull on the plug.

- The total ampere ratings of the equipment plugged in should not exceed the ampere rating of the cord if you are using an extension cord. Also, the total current rating of all equipment plugged into a single wall outlet should not exceed the fuse rating.
- Make sure the voltage of the power source when connect your notebook computer to the power outlet. If you are unsure of your local power specifications, consult your dealer or local power company.

Taking Care of Your Battery Pack

Here are some ways to take care of your battery pack:

- Use only batteries of the same kind as replacements. Turn the power off before removing or replacing batteries.
- Do not tamper with batteries. Keep them away from children.
- Handle batteries carefully. Do not try to disassemble, crush, puncture, open, drop, mutilate, short external contacts, disposed of in water or fire, or expose it to temperatures higher than 60 C.
- Recharge batteries only as described in this manual and only in ventilated areas. Never use an external charger other than the one supplied with your notebook computer.
- Do not leave batteries in hot locations for more than a day or two.
- Do not leave your battery in your notebook computer for longer than 1 month without plugging in the power adapter.
- Do not leave battery in storage for more than 2 months without recharging it to prevent over discharge. Over discharge will hurt the battery either.
- Dispose of used batteries according to local regulations. Recycle if at all possible.

7.2 Cleaning and Servicing

When cleaning your notebook, follow these steps:

1. Power off your notebook and remove the battery pack.
2. Disconnect the AC adapter.
3. Use a soft cloth moistened with water. Do not use liquid or aerosol cleaners.

7.3 Maintaining the LCD Quality

When it comes to screen problems, heat plays a big part. After a good working session, the typical routine is to shut the machine and close the cover. But the display surface - no matter what type it is - and the components inside the computer radiates heat; when you close the cover, you trap the heat against the screen. Leave your notebook computer's cover open for about ten minutes while the heat disperses. Make this a habit.

You should also enable the power management of your notebook to turn off the LCD power and display when the system is in inactivity for some time. Adding screen savers is also acceptable.

Follow the safety guidelines mentioned earlier and how to clean your notebook computer.

7.4 Maintaining Your Hard Disk

Losing your data has the same consequences as a system break down. Users must make it a habit of doing hard disk maintenance every week or so. Here is some maintenance you could do:

- Always backup your data files from your hard disk.
- Install the virus detecting program to monitor virus that could tamper your files.
- Use SCANDISK once in a while to correct any errors found in the directory and File Allocation Table. This will also free up space from any unused sectors.

- Never move or raise the computer while the hard disk is being accessed, most especially don't jar the hard disk as this may cause a hard disk crash.
- Use hard disk maintenance programs like **Disk Defragmenter** of Windows. These reorganize your hard disk by eliminating fragmentation and improving your hard disk access time.
- Install a system password in your computer so others won't be able to use the hard disk.



About maintaining data in your hard disk, please refer to p.48 "Using the Express Recovery Utility".

7.5 When You Travel

For safety and convenience when traveling, please follow these instructions:

- Backup all needed files on your hard disk before traveling.
- Recharge your battery overnight to ensure full battery power before you leave.
- Don't forget to bring along the AC adapter and extra battery pack.
- Try to bring backup software as well.
- Check the voltage rating and the outlet type of your destination. If the power cord of the adapter is different, then you need to purchase a suitable one. Consult your dealer.
- Carry your notebook computer in its carrying case or in a briefcase. Never check-in the computer as a luggage.
- Remember to apply those power saving features and techniques to save battery power.

Contact your dealer or see your service technician if any of the following occurs:

- Your notebook has been dropped or the body has been damaged.
- Liquid has been spilled into the product.
- Your notebook does not operate normally.

8 Troubleshooting



This chapter instructs you on how to deal with common system problems. Read it before calling a technician if a problem occurs. Solutions to more serious problems require opening up your notebook computer G-MAX N411.

Do not attempt to open and service your notebook computer G-MAX N411 by yourself. Contact your dealer or an authorized service center for assistance.

Frequently Asked Questions

This is a list of possible situations that may arise during the use of your notebook computer G-MAX N411, and it gives easy answers and solutions to these questions.

Q1. I press the power switch, but my notebook computer G-MAX N411 does not start or boot-up.

Look at the Power indicator:

- If it is not lit, no power is being applied to your notebook computer G-MAX N411. Check the following:
 - ✧ If you are running on battery power, it may be low and unable to power your notebook computer G-MAX N411. Connect the AC adapter to recharge the battery pack.
 - ✧ Make sure the AC adapter is plugged in properly to your notebook computer G-MAX N411 and to the power outlet.
- If it is lit, check the following:
 - ✧ If the Standby indicator is lit, your notebook is in Standby mode. Press any key or tap on the touchpad to resume.
 - ✧ Is a non-bootable (non-system) diskette in the floppy drive? Remove or replace it with a system diskette and press Ctrl-Alt-Del to restart the system.

The operating system files may be damaged or missing. Insert the startup disk you created during Windows setup into the floppy drive and press Ctrl-Alt-Del to restart the system. This will diagnose your system and make necessary fixes.

Q2. Nothing appears on the screen.

Your notebook computer G-MAX N411's power management system automatically blanks the screen to save power. Press any key to turn the display back on.

If pressing a key does not turn the display back on, two things might be the cause:

- The brightness level might be too low. Press <Fn> + <F4> and <Fn> + <F5> to adjust the brightness level.
- The display device might be set to an external monitor. Press the display toggle hot key <Fn> + <F10> to toggle the display back to your notebook computer G-MAX N411.

Q3. Image is not full-screen.

Make sure the resolution is set to a resolution your system supports. Right-click on your Windows desktop and select Properties to bring up the Display Properties dialog box. Then click on the Settings tab to make sure the resolution is set to the appropriate resolution. Resolutions lower than the specified resolution are not full-screen on your notebook computer G-MAX N411 or on an external monitor.

Q4. No audio from my notebook computer G-MAX N411.

Check the following:

- The volume may be muted. In Windows, look at the volume control icon on the taskbar. If it is crossed-out, click on the icon and deselect the Mute option.
- The speakers may be turned off. Press <Fn> + <F6> to turn the speakers on (this hotkey also turns the speakers off).
- The volume level may be too low. In Windows, look at the volume control icon on the taskbar. Click on the icon and adjust the level. You may press <Fn> + <F7> or <Fn> + <F8> to adjust the volume.
- If headphones, earphones or external speakers are connected to the line-out port on your notebook computer G-MAX N411's left panel, the internal speakers automatically turn off.

Q5. External microphone does not work.

Check the following:

- Make sure the external microphone is connected to the microphone-in jack on your notebook computer G-MAX N411's left panel.
- If you cannot hear playback, the speakers may be muted.

Q6. The keyboard does not respond.

Try attaching an external keyboard to the USB connector on the left or right panel of your notebook computer G-MAX N411.

If it works, contact your dealer or an authorized service center as the internal keyboard cable may be loose.

Q7. The printer does not work.

Check the following:

- Make sure that the printer is connected to a power outlet and it is turned on.
- Make sure the printer cable is connected securely to your notebook computer G-MAX N411's port and the corresponding port on the printer.

Q8. I want to set up my location to use the internal modem.

To properly use your communications software (e.g., HyperTerminal), you need to set up your location:

1. Open the Windows Control Panel and double-click on the Modems icon.
2. Click on Dialing Properties and begin setting up your location.

Refer to the Windows manual.

Q9. Why can't I charge my battery to 100% charged when it is 99-95% charged?

To preserve the life of the battery, the system only lets you charge the battery when its capacity falls below 95%. However, it is recommended that you bring an extra battery and let the battery in the system use up its power before charging it.

APPENDIX A

System Information



This appendix gives information on the technical and hardware specifications of your notebook computer G-MAX N411. Please note that the information mentioned here may not be exactly the same with your notebook computer G-MAX N411 as specification is subject to change without notice or modifying this manual.

Designed with an advanced modular architecture, your notebook computer G-MAX N411 also allows you for several levels of customization and expansion that are previously available only on desktop PCs.

System Specification

Processor Unit

- (1) Intel® Centrino™ Mobile Technology
 - (2) Intel® Banias, 1.4GHz ~1.7GHz
 - (3) Intel® Dothan, 1.5GHz ~ 2.0GHz
- 2048KB integrated L2 cache for Pentium® M / 1024 KB integrated L2 cache for Celeron® M CPU

System Memory

- One on-board 200-pin memory slot (512MB module)
- One user-upgradeable slot to maximum 1024 MB using 200-pin SODIMM 128MB, 256MB and 512MB module
- DDR 333 SDRAM modules



We recommend that you should go to your local Gigabyte Service Center for memory upgrading.

LCD Display

- 14" WXGA (1280x768) Color TFT LCD
- Maximum 16M true colors on all LCD display

VGA System

- AGP Local Bus VGA Accelerator.
- Embedded graphic engine with maximum 8/16/32MB shared video memory
- Simultaneous LCD and external monitor (CRT) display
- Maximum 16 million colors on LCD display at 1280x768 resolution for 14" WXGA LCD

Disk Drives

- 32-bit PCI Enhanced IDE interface with LBA mode
- 9.5mm height Ultra DMA 100 HDD
- Enhanced IDE bootable CD-ROM drive module
- Optional CD-RW/DVD combo drive that can be replaced with CD-ROM

Audio System

- Full-duplex 16-bit stereo speaker with wave table support
- H/W Audio Sound Blaster 16 compatible
- Built-in dual speakers
- Audio input jacks for microphone (MIC)
- Audio output jack for external speaker or headphone (Line-Out)
- Thumb wheel for volume control

TouchPad

- Integrated TouchPad pointing device with left and right buttons.

Keyboard

- Full-sized 86-keys keyboard with Windows systems hot-keys, 12 function keys, and embedded numeric keypad
- Provides international language keyboard

Flash BIOS

- 512K Flash ROM BIOS for easy BIOS upgrade

I/O Ports

- 2 x Universal Serial Bus (USB 2.0)
- 1 x IEEE 1394 port (4-pin)
- 1 x VGA port / Mini D-sub 15-pin (Monitor)
- 1 x Headphone jack
- 1 x Microphone jack
- 1 x Modem (RJ11) port
- 1 x LAN (RJ45) port
- 1 x DC power port
- 1 x Memory Card Reader socket, for Multi-Media Card/Memory Stick/ SD Card

Wireless devices

- 802.11b+g Wireless LAN (Intel® PRO/Wireless network solution by Intel® Centrino™ mobile technology)

AC/DC Power Supply Adapter

- Universal auto-switching 60W (100V~240V) adapter

Battery

- Rechargeable 6 Cells Li-ion battery pack with Smart Battery function
- 3.5 hours of usage (when run ZD Battery Mark diagnostic program)
- 2.5 hours quick charge (computer turn off)

Weight and Dimension

- 325 mm x 244 mm x 23~29 mm (front)
- 2.18 kg (4.8 lbs)

APPENDIX B

Service Centers



This appendix gives information about service Centers of your notebook computer G-MAX N411.

G-MAX™ N411 User's Manual

Taiwan (Headquarters)

GIGA-BYTE TECHNOLOGY CO., LTD.

- Address: No.6, Bau Chiang Road, Hsin-Tien, Taipei Hsien, Taiwan, R.O.C.
- TEL: +886 (2) 8912-4888
- FAX: +886 (2) 8912-4004
- How to submit a question?

✦ **Technical** Issues about using GIGABYTE products.

✦ **Non-technical** Sales and marketing issues

- WEB Address (English): <http://www.gigabyte.com.tw/>
 - WEB Address (Chinese): <http://chinese.giga-byte.com/>
-

U.S.A.

G.B.T. INC.

- Tel: +1 (626) 854-9338
- Fax: +1 (626) 854-9339
- How to submit a question?

✦ **Technical** Issues about using GIGABYTE products.

✦ **Non-technical** Sales and marketing issues

- WEB Address: <http://www.giga-byte.com/>

Germany

G.B.T. TECHNOLOGY TRADING GMBH

- Tel: +49-40-2533040 (Sales)
+49-1803-428468 (Tech.)
- Fax: +49-40-25492343 (Sales)
+49-1803-428329 (Tech.)
- How to submit a question?

✦ **Technical** Issues about using GIGABYTE products.

✦ **Non-technical** Sales and marketing issues

- WEB Address: <http://www.gigabyte.de/>
-

U.K.

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

- Tel: +44-1908-362700
- Fax: +44-1908-362709
- How to submit a question?

✦ **Technical** Issues about using GIGABYTE products.

✦ **Non-technical** Sales and marketing issues

• WEB Address: <http://uk.giga-byte.com/>

-

Australia

GIGABYTE TECHNOLOGY PTY. LTD.

- Tel: +61 3 85616288
- Fax: +61 3 85616222
- How to submit a question?
 - ✦ **Technical** Issues about using GIGABYTE products.
 - ✦ **Non-technical** Sales and marketing issues
- WEB Address: <http://www.giga-byte.com.au/>

Singapore

GIGABYTE SINGAPORE PTE. LTD.

- How to submit a question?
 - ✦ **Technical** Issues about using GIGABYTE products.
 - ✦ **Non-technical** Sales and marketing issues

The Netherlands

GIGA-BYTE TECHNOLOGY B.V.

- Tel: +31 40 290 2088
- NL Tech.Support : 0900-GIGABYTE (0900-44422983)
- BE Tech.Support : 0900-84034
- Fax: +31 40 290 2089
- How to submit a question?
 - ✦ **Technical** Issues about using GIGABYTE products.
 - ✦ **Non-technical** Sales and marketing issues
- WEB Address: <http://www.giga-byte.nl/>

France

GIGABYTE TECHNOLOGY FRANCE S.A.R.L.

- Add:47 allée des impressionnistes , immeuble Gauguin- 93420 Villepinte (France)
- How to submit a question?
 - ✦ **Technical** Issues about using GIGABYTE products.
 - ✦ **Non-technical** Sales and marketing issues
- WEB Address: <http://www.gigabyte.fr/>

Russia

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

- How to submit a question?
 - ✦ **Technical** Issues about using GIGABYTE products.
 - ✦ **Non-technical** Sales and marketing issues
- WEB Address: <http://www.gigabyte.ru/>

Poland

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

- How to submit a question?
 - ▣ **Technical** Issues about using GIGABYTE products.
 - ▣ **Non-technical** Sales and marketing issues
- WEB Address: <http://www.gigabyte.pl/>