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N521 Series Notebook User's Manual

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

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Safety Instructions

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

When Using Your N521 Series Notebook Computer



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.
- Replace only with the same or equivalent type battery recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.
- 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.

- 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 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.

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

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

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

TBR21

This equipment has been approved [Council Decision 98/482/EC – “TBR21”] for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the

approval does not, of itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event of problems, you should contact your equipment supplier in the first instance.

Important safety instructions

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

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

cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.

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

EMC Regulatory Information

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

Federal Communications Commission (FCC) “Declaration of Conformity Information”

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful that 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 of 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.

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

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

UL Notice (USA and Canada)




CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS

Canadian Notice (Canada Only)

This digital apparatus does not exceed the Class B for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la class B est conforme à la norme NMB-003.

CE Notice (European Union)

Marking by the symbol  indicates compliance of this N521 Series computer to the EMC Directive and the Low Voltage Directive of the European Union. Such marking indicates that this N601 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 N521 Series notebook computer 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 computer products are classified by the Bureau of Standards, Meteorology and Inspection (BSMI) as Class B information technology equipment (ITE).



This symbol that must be marked on the product indicates the product complies with BSMI standard.

Macrovision License of Notice

This product incorporates copyright protection technology that is protected by methods and claims of certain U.S. patents and other intellectual rights owned by Macrovision Corporation, and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation and is intended for home and other limited viewing uses only unless authorized by Macrovision Corporation. Reverse engineering of disassembly is prohibited.



About Your N521 Series Notebook Computer

Congratulate on your purchase of the N521 Series Notebook Computer. Your notebook computer incorporates the strongest features, which integrate the latest technologies available in the notebook industry.

N521 Series Notebook Computer has the latest multimedia applications and capable for the future exciting new software. N521 Series Computer is easy to operate, flexible, reliable, and multifunction. This is one notebook that users are demanding for a long time.



About This User Manual

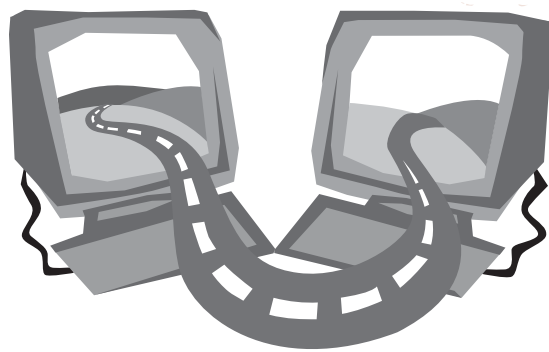
This Manual will help you to gain a complete understanding of N521 Series Professional Multimedia Notebook. This Manual is divided into eight chapters:

1. Illustrates N521 series notebook computer features.
2. Provides step-by-step instructions to help you begin using your N521 series notebook computer as quickly as possible.
3. Describes how to operate the standard features of your N521 notebook computer.
4. Explains how to use the System BIOS Setup program and upgrade your system.
5. Describes how to connect external device to N521 series notebook computer.
6. Offers instructions on how to care and maintain N521 series notebook computer.
7. Instructs you on how to deal with common system problems.



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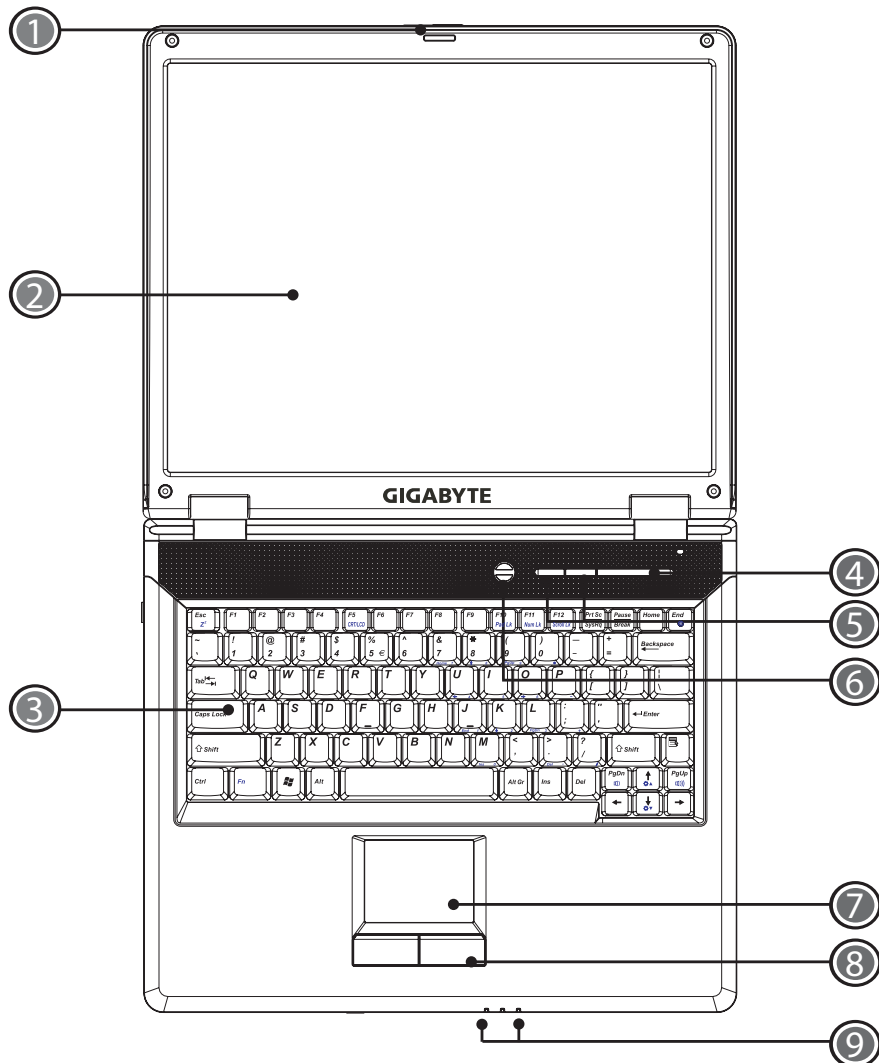


Chapter 1 Getting Started

Your N521 series notebook computer integrates the most advanced functions you can find to date in a portable personal computer. High performance, an ergonomics design and multimedia capability of N521 series notebook computer is ideal for variety of needs, from general business to personal usage. N521 series notebook computer is ideal choice for use in the office, at home, and on the road.

1.1 The Outside of N521 Series Notebook Computer

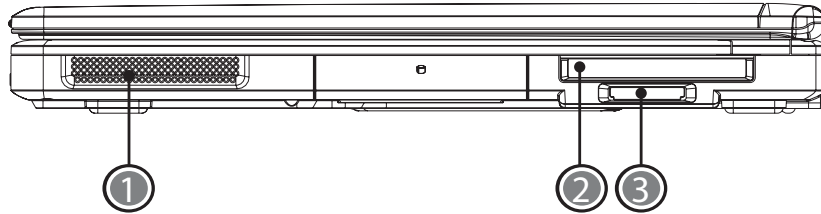
Front View



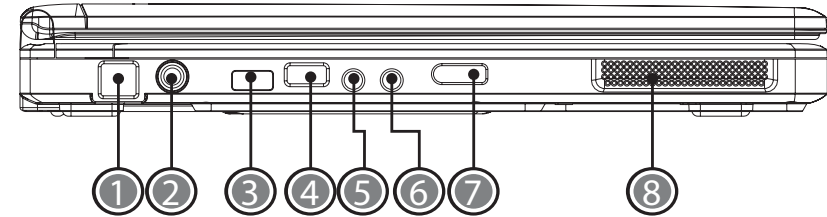
- 1 Display Latch
Locks for the lid.
- 2 LCD Display Screen
Also called Liquid-Crystal Display (LCD), displaying computer output.
- 3 Keyboard
Inputs data into your computer.
- 4 Status LED Indicator
Light-Emitting Diodes (LEDs) show the status of the computer's functions and components. These LEDs indicates the status of notebook hard disk activity, PC card activity, NUM lock, Caps lock, Scroll Lock and Touchpad Lock.
- 5 Launch Keys
Buttons for launching frequently used programs.
- 6 Power Button
Turn the computer on and off, or resumes whenever it is in Suspend mode.
- 7 TouchPad
Touch-sensitive pointing device helps to control the position of cursor and functions like a computer mouse.
- 8 Click Buttons
The left and right buttons function like the left and right mouse button. It support tapping and dragging functions.
- 9 Status LED Indicator
Light-Emitting Diodes (LEDs) show the status of the computer's functions and components. These LEDs indicates the status of notebook power source, battery life and wireless activity.

1 Getting Started

Right View



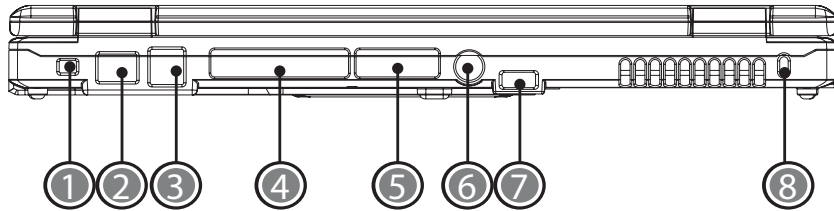
Left View



- 1 Speaker
Speaker delivers stereo audio output.
- 2 PC Card Slot
Accepts one Type II 16-bit PC card or 32-bit CardBus PC card with ZV support.
- 3 4-in-1 Cards Slot
Accepts SD/MMC/MS/MS-Pro modules.
Only one card can operate at any given time.

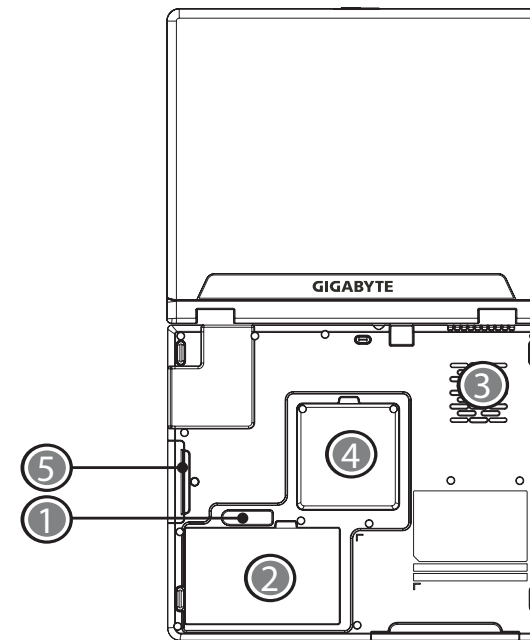
- 1 Modem Port
Connects to a phone line.
- 2 Power Port
Connects to an AC adapter.
- 3 FIR Port
Interfaces with infrared devices (e.g., infrared printer and IR-aware computer).
- 4 USB Port
Connects to USB devices (e.g., USB mouse, USB camera).
- 5 Speaker/Headphone Jack
Connects to stereo headphone, speakers, or earphone set.
- 6 Microphone Jack
Connects to an external microphone for monophonic sound recording.
- 7 Wireless Communication Switch
Turns the Wireless Communication function on or off.
- 8 Speaker
Speaker delivers stereo audio output.

Rear View



- 1 IEEE 1394 Port
Connects to IEEE1394 devices.
- 2 LAN Port
Connects to an internal 10 Base-T/ 100 Base-TX LAN module connects your computer to other computers/networks through a local area network (LAN).
- 3 USB Port
Connects to USB devices (e.g., USB mouse, USB camera).
- 4 Parallel Port
Connects parallel devices, such as a printer.
- 5 External Display Port
Connects to an external monitor.
- 6 S-Video Port
Connects to a television or display device with S-video input.
- 7 USB Port
Connects to USB devices (e.g., USB mouse, USB camera).
- 8 Security Cable Connector
Connects to a Kensington compatible security lock.

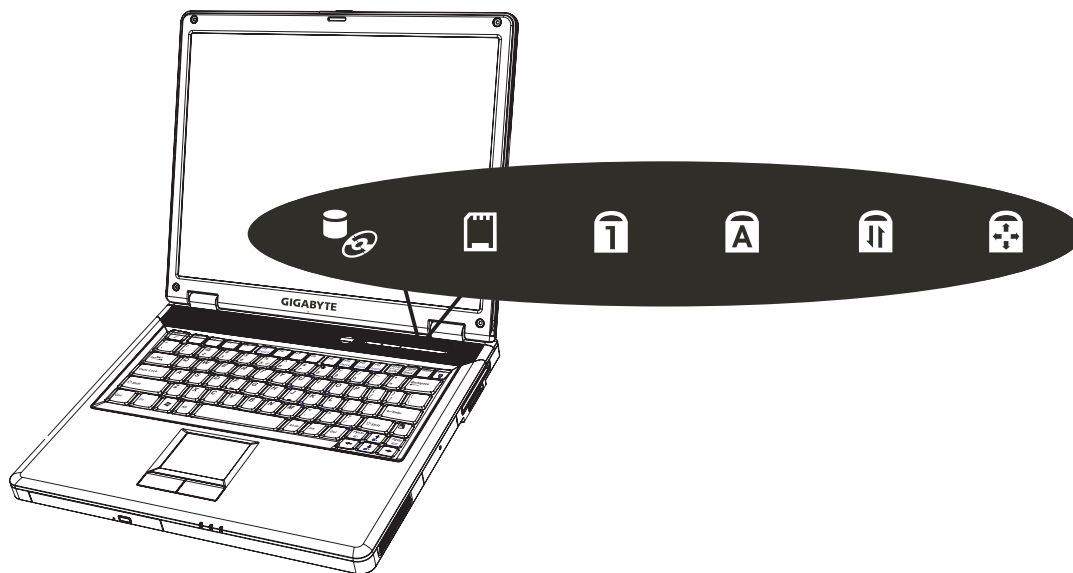
Bottom View









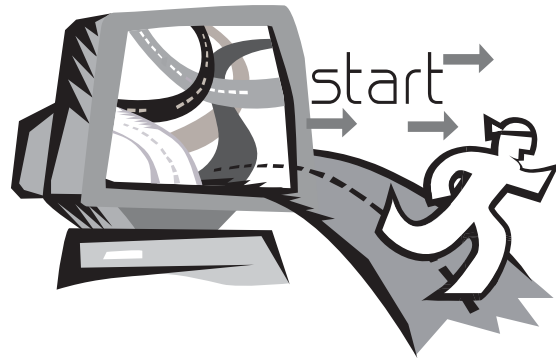
- 1 Battery Release Latch
Push latch to remove the battery pack.
- 2 Battery Bay
Equipped with a choice of Lithium-Ion (Li-Ion) battery pack.
- 3 Cooling Fan
Keeps computer cool.
- 4 Memory Compartment
Computer's main memory is located in this compartment (secured by a screw).
- 5 Hard Disk Compartment
Computer's hard disk is located in this compartment (secured by a screw).

1 Getting Started

1.2 Status LED Indicator



Icon	Function	Description
	Hard disk activity	Lights when the hard disk is activated.
	Card reader activity	Lights when the card reader is activated.
	Num Lock	Lights when Num Lock is activated.
	Caps Lock	Lights when Caps Lock is activated.
	Scroll Lock	Lights when Scroll Lock is activated
	Touchpad Lock	Lights when Touchpad Lock is activated.



Chapter 2 How to Start

Your N521 series notebook computer is designed and pre-configured for easy setup and use. This chapter helps you to learn the basic of your N521 series notebook computer and all the installation steps. Contact local dealer if all the drivers for operating N521 series has not been pre-installed or if there is an update on the driver installation of your notebook computer.

2 How to Start

2.1 Using the Battery Pack

N521 series notebook computer is designed to operate with one of the following power sources:

*AC power (using the AC adapter connected to an electrical outlet)
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. The rechargeable Li-Ion battery pack allows you to operate N521 Series notebook computer without an external power source. When you connect the AC power adapter, the battery immediately starts to recharge. Normal battery charging time is 3 hours for Lithium-Ion (Li-Ion) battery pack when your computer is turned off. Normal battery life time is 4 hours. Your battery may last less time if you are running power-intensive programs, playing CDs or DVDs, using PC Cards or have high display-brightness setting.

Once the battery is fully discharged for the first time, use your notebook on battery power until the battery discharges completely. This will extend battery life, and help ensure accurate monitoring or battery capacity. You can leave the battery in your notebook as long as you like. The battery's internal circuitry prevents the battery from overcharging.

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

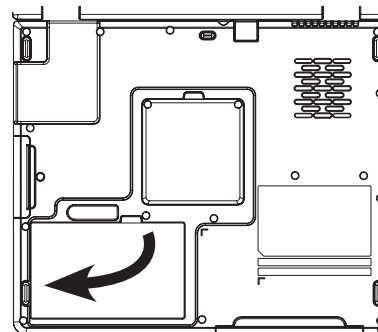
If you will not be using your notebook for a long period of time, remove the battery. Store battery packs in a cool, dry place, out of

direct sunlight. Fully charge the battery before using your notebook again.

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

Installing the Battery Pack

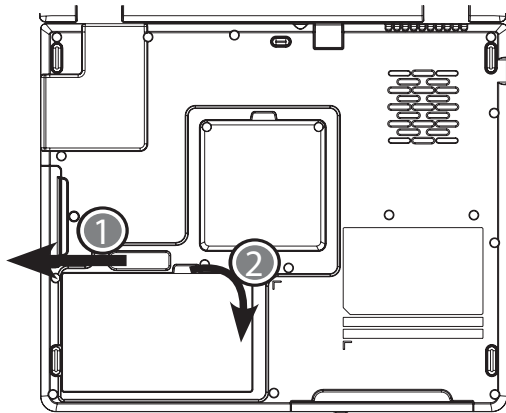
Your N521 series notebook computer provides the most convenient way to install the battery pack into your computer. To install the battery, first orient the extended nose directed toward the compartment, then slide the battery into the bay. Press it into place gently but firmly until the latch lock it into place.



Removing the Battery Pack

Before removing the battery, ensure your notebook is turned off. To remove the battery, follow the sequence as shows in the figure below.

- 1 Slide and hold the battery release latch
- 2 Gently pry the battery from the computer chassis.




Replacing the Battery Pack

When your N521 Series notebook computer 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 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, or suspending to disk. If you do not do so, the notebook computer 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 until it has 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.”

Note: 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.
Note: 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.

Battery Status	Indicator  behavior
Charging	Blinking Green
Fully Charged	Solid Green
Discharging	Off
Battery Use	Off
Critical Low	blinks amber > approximately 3 minutes left; system beeps

2.2 Connecting to the AC Power Source

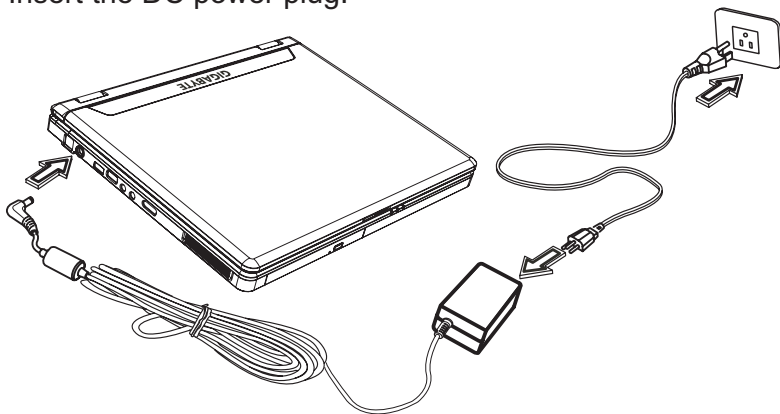
Connecting Power Adapter

The AC adapter provides external power source to your N521 series notebook computer 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.

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

To connect the power adapter:

- 1 Connect the end of the AC power cord to AC-DC converter.
- 2 Plug the other end of the AC power cord to into an electrical outlet.
- 3 Insert the DC power plug.



- Note: 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.
- Note: 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).

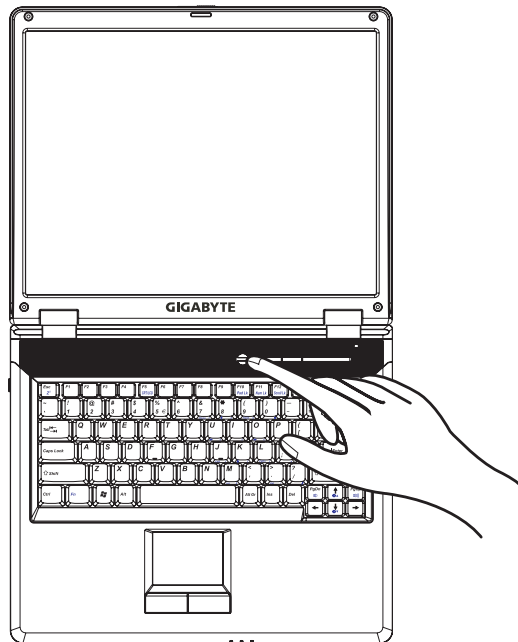
Maintenance of the AC Adapter:

- 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 rating of the equipment plugged in should not exceed the ampere rating of the cord if you are using an extension cord. The total rating of all equipment plugged into a single wall outlet should not exceed the fuse rating.
- Make sure the voltage of the power source before connecting your notebook computer to the power outlet. If you are uncertain of your power specifications, consult local dealer or Electricity Company.

2.3 Starting N521 Series Notebook Computer

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

** Do not turn off the computer until the operating system has loaded completely. Turning the computer off during its initial startup will result in an error the next time you start your computer.*



After a few seconds, the notebook's display will turn on and your notebook computer 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 optimal operation. Refer to Chapter 5 on running the SETUP program later.

After the test has completed, your notebook computer will start to search and boot up the operating system from your hard drive. The notebook computer 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.

2.4 Adjusting the Display Control

The LCD brightness adjustment is controlled by <Fn> +<↑> and <Fn> + <↓> keys respectively. You need to power on the notebook computer in order to press these hot-key controls.

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.

If you will leave a moment, you can also press <Fn> +<ESC> to turn off the LCD to save power. Press <Fn> +<ESC> again to turn on the LCD.

- * 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> + <F5> hot-key to switch the display between LCD only, CRT only, or both LCD and CRT display.

2.5 Installing N521 Series Notebook Computer Device Drivers

If N521 Notebook Computer already have an operating system installed into your notebook computer, it is best to install the needed device drivers for using the built-in devices of your notebook computer. 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 optical drive. It will get you through the Auto Run installation.

2.6 Turning Off Your Computer

If you are not going to use N521 series notebook computer for a while, it is best to turn off the power of the notebook computer for longer use. Before turning off the power, you need to close all application programs and then shutdown the operating system. Then follow the following steps:

Click Start → TURN OFF COMPUTER → TURN OFF

Your notebook will automatically turn off after the shutdown process is finished.

After turning off your N521 SERIES notebook computer, 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 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 while power-saving features are disabled.



Chapter 3 Introduction to Basic Function

This chapter describes how to operate the standard built-in features of your N521 series notebook computer that you normally would use in daily life. If you are new to computers and to the operating system, this chapter explains the basics features of your N521 series notebook computer. It is very important to be familiarized with the operating system. This chapter can guide you through the basics and try new exciting features.

3.1 Launch Keys








Launch keys are located at the upper-right corner. They are designated as the mail and Web browser under operating system.



Description	Launch Keys Default Application
F1	E-mail application
F2	Internet browser application

3.2 Keyboard Functions

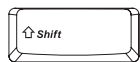
Basic Keypad

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.
	<Insert> key. Known as the Insert key. Press this key to keyboard data entry from insert to type over mode.
	<Delete> 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.

3 How to Start



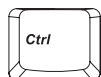
<Backspace> key. Press this key to delete the character to the left of the cursor.



<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.



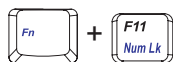
<Tab> key. Press this key to move the cursor to the next tab stop on the right. This key works much the same as in ordinary typewriter.



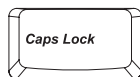
<Ctrl> key. Known as the Control key. Used in most application program in combination with other keys to execute a certain command.



<Alt> key. Known as the Alternate key. Used in most application program in combination with other keys to execute a certain command.



<Fn>+<Num Lk> key. Activates the embedded 15-key numeric keypad.



<Caps Lock> key. Used in most application program to always activate uppercase alphabet characters.



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.



<Home> key. Moves the cursor to the beginning of a screen or line.



<PgUp> key. Moves the cursor up one screen at a time.



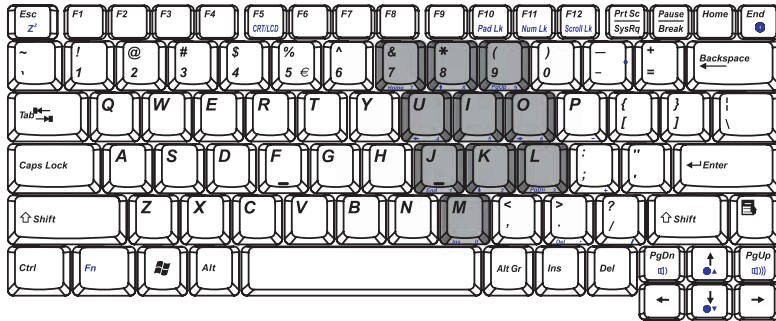
<PgDn> key. Moves the cursor down one screen at a time.



<End> key. Moves the cursor to the end of a screen or line.

Special Function Keys

■ Embedded Numeric Keypad

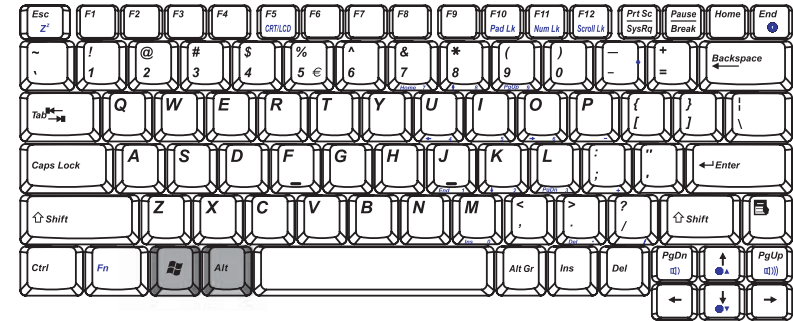


The embedded numeric keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps.

Desired Access	Num Lock On	Num Lock Off
Number keys on embedded keypad	Type numbers in a normal manner	
Cursor-control keys / Embedded keypad	Hold Shift while using cursor-control keys	Hold Fn while using cursor-control keys
Main keyboard keys	Hold Fn while typing letters on embedded keypad	Type the letters in a normal manner.

Note: If an external keyboard or keypad is connected to your notebook, the Numlock feature automatically shifts from the internal keyboard to the external keyboard or keypad.

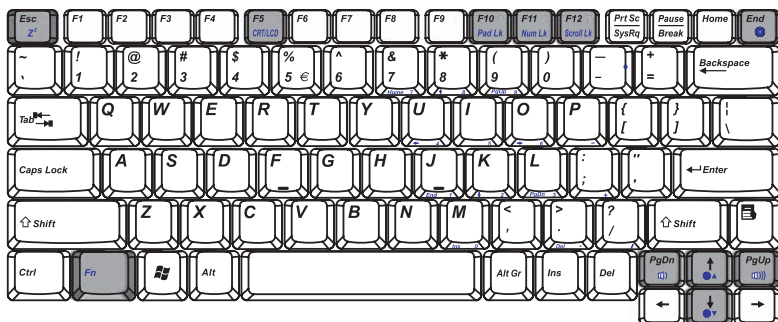
■ Window Keys



Key	Description
⊞+ E	Opens Windows Explorer.
⊞+ R	Opens the Run dialog box.
⊞+ F	Opens the Search Result dialog box.
⊞+ Ctrl+ F	Opens the Search Result-Computers dialog box (when your notebook is connected to a network).
⊞+ Pause	Opens the System properties dialog box.

3 How to Start

■ Hot Keys



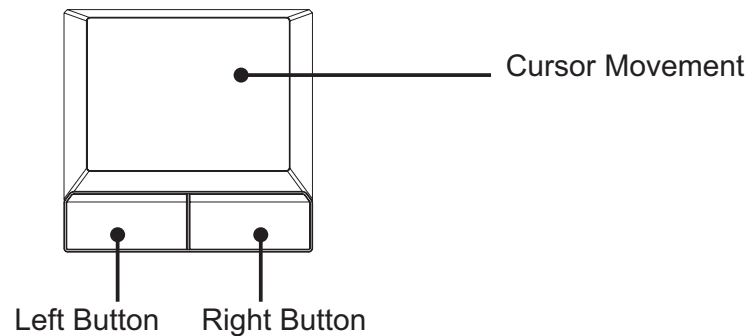
Key	Description
Fn+Esc	Suspend Key
Fn+F5	Switches Display mode. Switches the video image to the next display in the following sequence: the integrated display, an external monitor, and both displays simultaneously
Fn+F10	Pad Lock
Fn+F11	Num Lock
Fn+F12	Scroll Lock
Fn+End	Mute
Fn+▲	Brightness Up

Fn+▼	Brightness Down
Fn+PgUp	Volume Up
Fn+PgDn	Volume Down

3.3 Using the TouchPad

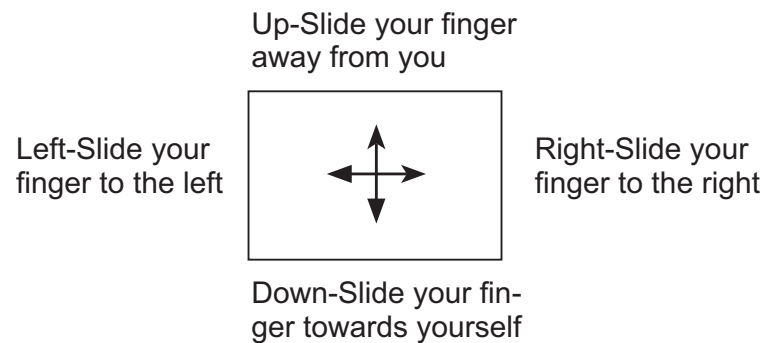
The TouchPad's primary function is to move the cursor around or select items displayed on the screen with the use of your fingertip. The following illustrations demonstrate proper use of the touchpad.

**Do not use any objects in place of your finger to operate the touchpad or else damage may occur to the touchpad's surface.*



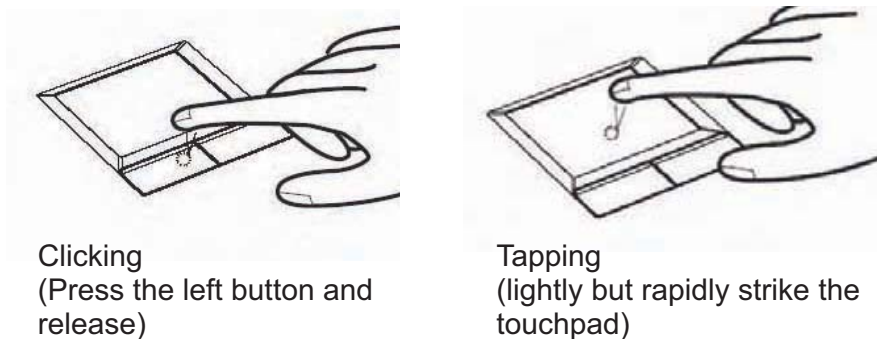
TouchPad Basic

■ Moving the Cursor



■ Clicking/Tapping Once

With the cursor over an item, press the left button or use your fingertip to do one quick tapping on the touchpad lightly (tapping too hard does not increase the responsiveness of the touchpad), keeping your finger on the touchpad until the item is selected.

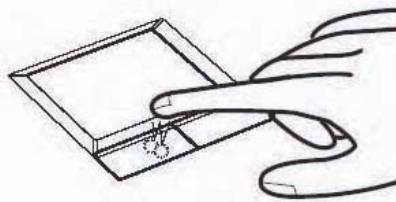


This operation can be used under the following situation:
Executing "Yes" or "Cancel" or Selecting item (from the menu bar)

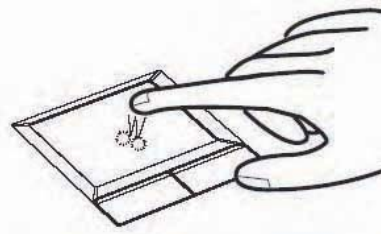
■ Double-clicking / Double-tapping

This is common for launching a program directly from the corresponding icon you select. Move the cursor over the icon you wish to execute, press the left button or tap the pad twice in rapid succession, and the system launches the corresponding program. If the interval between the clicks or taps is too long, the operation will not be executed.

3 How to Start



Double Clicking
(Press the left button twice and release)



Double-Tapping
(lightly but rapidly strike the touchpad)

This is used for dragging an icon or changing the size of window. For example, if you want to copy or move one file. Simply drag the file to another folder, window, or software icon; then release the left button.

** Make sure the touchpad does not come into contact with dirt, liquids or grease.*

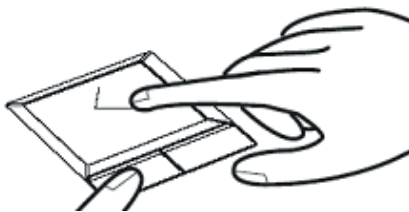
** Do not touch the touchpad if your fingers are dirty or wet.*

** Do not rest heavy objects on the touchpad or the touchpad buttons.*

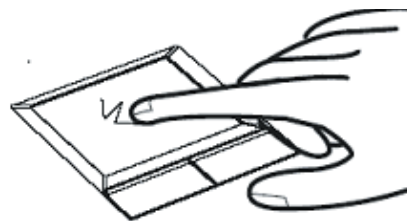
** Do not scratch the touchpad with your finger nails or any hard objects.*

■ Dragging

Dragging means to pick up an item and place it anywhere on the screen you wish. You can move the cursor over the item you select, and while keeping the left button depressed, moving the cursor to the desired location, then release the button. Or, you can simply double-tap on the item and hold while dragging the item with your fingertip.



Dragging-Clicking
(Hold left button and slide finger on touchpad)



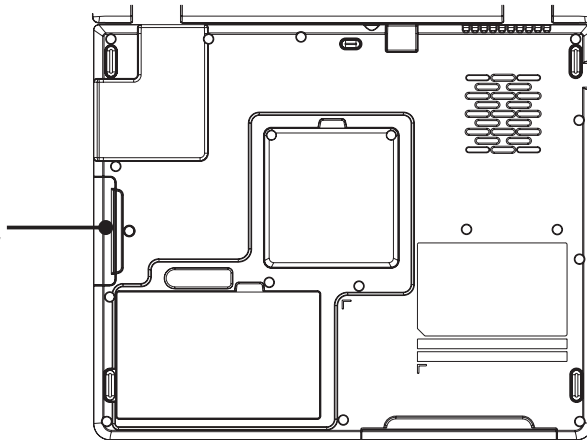
Dragging-Tapping
(lightly strike the touchpad twice, sliding finger on touchpad during second strike)

3.4 Storage

Hard Disk

N521 series notebook computer 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.

Hard disk is located here and secured by a screw.



- ➔ If you wish to replace your hard disk, contact your local dealer for more information about this dealer-installable device.
- ➔ You can increase the system's storage capacity by replacing the standard hard disk drive with a drive of greater storage capacity.
- ➔ Always turn off your notebook computer 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.

Optical Disk Drive

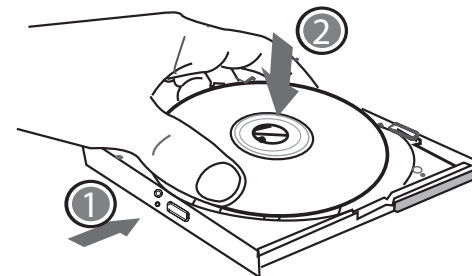
N521 series notebook computer with an optical drive which may be one of the following:

- DVD combo
- DVD Dual

You would normally use the drive for installing operating system and software application programs.

To insert and remove a disc on the drive:

1. Make sure your notebook computer 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.
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

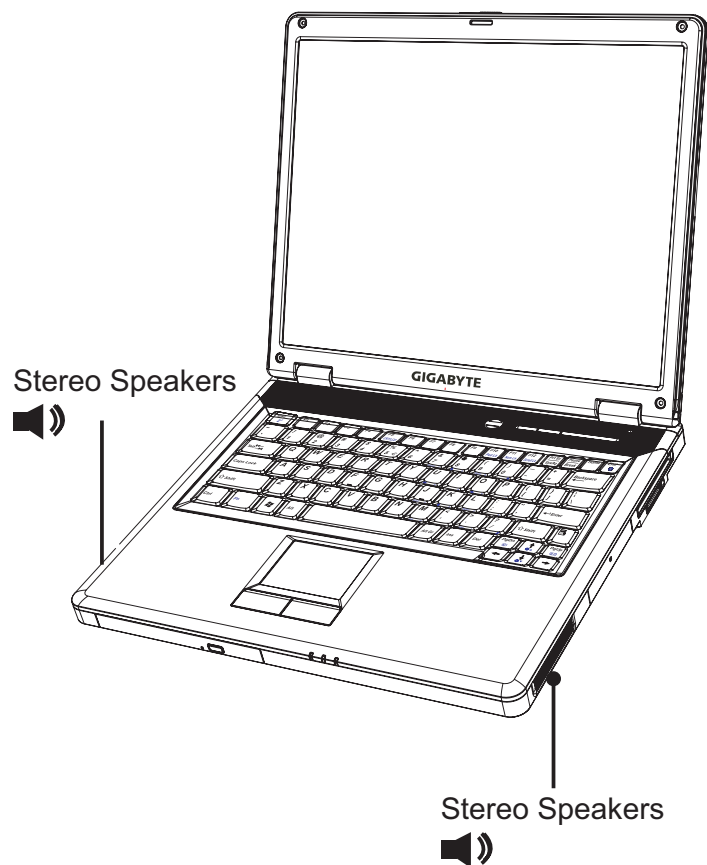


If the eject function is disabled by software or a power failure occurs, the Emergency Eject Hole allows you to manually remove a CD from the drive.

3 How to Start

3.5 Audio

The computer comes with 16-bit high-fidelity AC'97 stereo audio. The Built-in dual stereo speakers are easy to access. Pressing the hot keys to adjust the volume on the computer is quick and easy.



3.6 Disconnecting from External Accessories

■ Moving the Notebook Computer

Moving within short distances (for example, from your office to a meeting room)

- Before moving the computer, close and latch the display cover to set in Sleep Mode. Your N521 series notebook computer is now safe to move around. When you want to turn the computer back on, just open the display and press any keys. Computer may enter Hibernation mode after a period of time it is in Sleep mode. Turn the power on to wake up the computer from Hibernation mode.
- You can press Fn+ Esc, to set the computer in Sleep Mode.
- You may choose to shut down the computer:
 1. Click on START ⇒ TURN OFF COMPUTER
 2. Click on TURN OFF

■ Disconnecting From the External Accessories

Please follow the steps below

1. Save all your works in progress
2. Remove any media or compact disc from the drive(s)
3. Shut down all the operating system
4. Turn off the computer
5. Disconnect the cord from the AC adapter
6. Disconnect the keyboard, mouse, printer, and other external devices
7. Disconnect the Kensington lock if you are using one to secure the computer.

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

3.7 Introduce CyberLink DVD Solution™

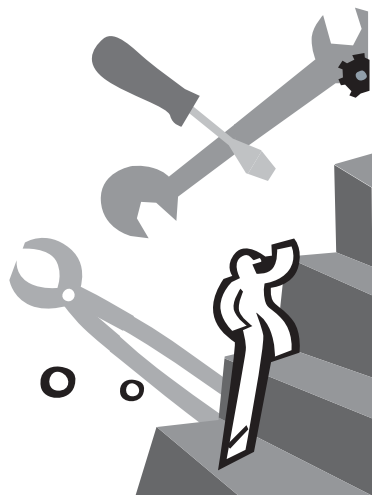
CyberLink DVD Solution™ is an integrated solution for all your DVD creativity and burning needs. CyberLink DVD Solution™ offers easy-to-use interface, full range of audio/video, disc, and data-related functions, including DVD playback, photo retouching, disc authoring and burning, slideshow creation, video editing, music ripping, and data backup.



Feature Highlights:

- Burns all media files: data, music, photos and videos
- Creates movies and slideshows onto DVDs with professional looking menus
- Rips MP3s, edit videos and fix photos
- Backs up important data and make copies of DVD movies
- Supports all media formats: DVD+R/RW, DVD-R/RW, DVD-RAM, DVD-VR

4 Personalize Your N521 Series Notebook Computer



Chapter 4 Personalize Your N521 Series Notebook Computer

N521 series notebook computer uses the Insyde BIOS Setup program that allows you to set several system configurations, to help you customize the performance of N521 Series notebook computer. Options include system time and date, disk drive configuration and password setup which are 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 to run smoothly.

In this chapter, you will also learn how to upgrade components for better performance. 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. *press Recovery will not function when your hard disc crashes. Please contact your dealer immediately.*

How 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.
2. Press <F2> during startup, select "Boot" setup menu and set boot from CD-ROM. Save and exit the BIOS setup. Place N521 Series Utility Driver CD into optical disc drive. When "CD-ROM:" appears at the bottom of the screen, press any key to enter the Xpress Utility. When you enter the Xpress

4 Personalize Your N521 Series Notebook Computer

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.

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 BIOS Setup

Your N521 series notebook computer 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'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.

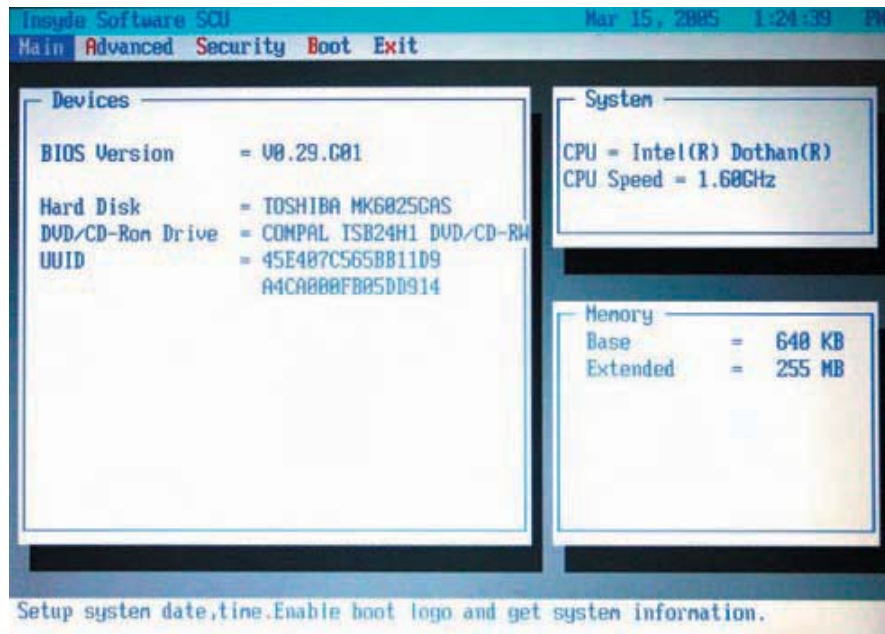
As the POST (Power-On Self Test) executes during the boot up process, the screen will display the following message:

```
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:



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

Main Use this menu to make changes to the basic system configuration.

Advanced Use this menu to enable and make changes to the advanced features available on your system.

Security Use this menu to set User and Supervisor passwords.

Boot Use this menu to specify the order in which the Notebook is to check for a device to boot the system.

Exit Use this menu to specify how to exit the Setup program.

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

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

4 Personalize Your N521 Series Notebook Computer

The Main Menu

When the Setup program is accessed, the Information screen appears. Use the down key to select the Main Menu. Enter the Main Menu of the BIOS setup program to make changes to the Notebook's basic system configuration. Each of the fields displayed in this menu is covered below in detail.

Date and Time

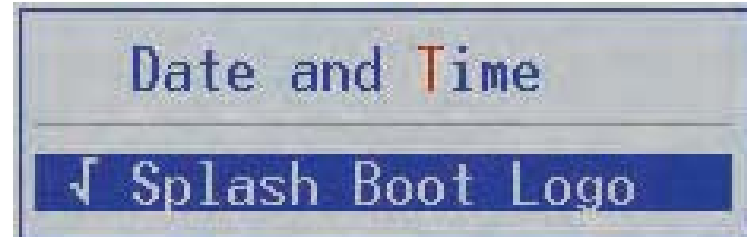
Sets your system to the time that you specify (usually the current time). The format is hour, minute, and second, using the 24-hour clock. Insert the appropriate information. Use the mouse to move between the hour, minute, and second fields.



Splash Boot Logo

Selecting this option displays the Customer logo when you start your computer. If you do not select it, the startup system check sequence is displayed.

Use the [ENTER] bar to select the Splash Boot Logo option or not.

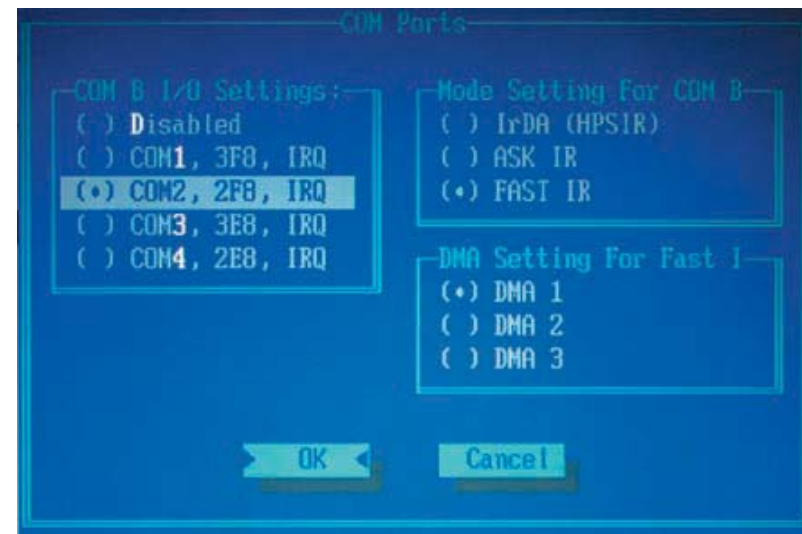


The Advanced Menu

Selecting Advanced from the menu bar displays the System Devices Menu. This menu allows you to configure the Notebook's ports options. Each field on this menu is covered below.

COM Ports

This field allows you to configure the Notebook's FIR Port. The following options are available:



FIR I/O address – Lets you Disable the FIR Port or assign an I/O port to the device. The following I/O options are available:

- Disabled
- Com1, 3F8, IRQ
- Com2, 3F8, IRQ
- Com3, 3E8, IRQ
- Com4, 2E8, IRQ

Mode Settings for IRDA – Allows you to configure the Notebook's FIR Port transmission mode. The following options are available:

- IrDA (HPSIR)
- ASK IR
- FAST IR

The default value for this field is Fast IR.

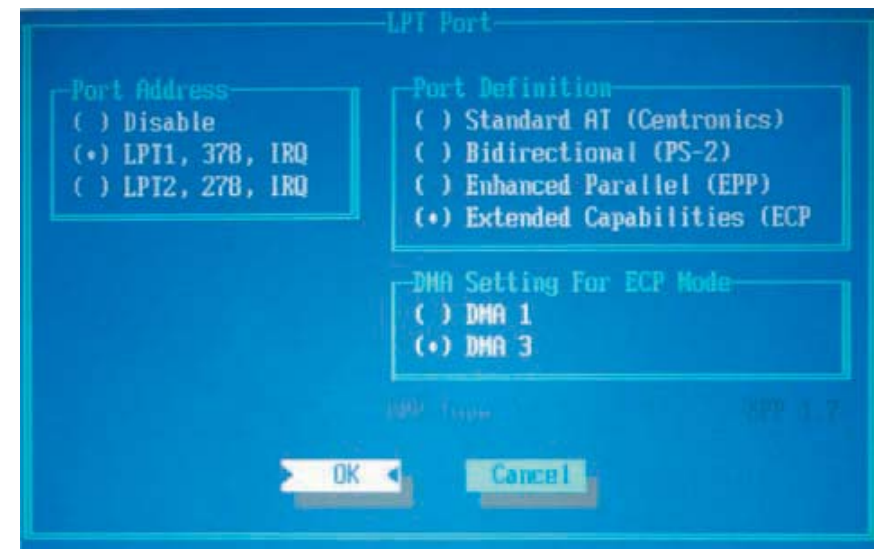
DMA Setting for Fast IR – This field is only available when the FIR Port Mode Setting for IRDA is set to FAST IR. The following options are available:

- DMA 1
- DMA 2
- DMA 3

The default value for this field is: DMA 1

LPT Port

This field allows you to configure the Notebook's LPT Port. The following options are available:



- None
- LPT1, 378, IRQ
- LPT2, 278, IRQ

The default value for this field is: LPT1, 378, IRQ 7



Changing the default address and IRQ settings for the Serial and LPT Port can cause conflicts with other installed peripherals

USB Supports by BIOS

Enables or disables legacy USB device support.

Use the [SPACE] bar to select the Legacy USB option or not.

4 Personalize Your N521 Series Notebook Computer

The Security Menu

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

Each field of the Security Menu is covered in detail below.

A Note about Passwords

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

The passwords are not case sensitive. In other words, a password can be entered using either upper or lower case letters; it makes no difference.

Passwords should be composed of characters A-Z, 0-9 and ten characters in length.

The administrator password must be set before the user password can be set.

Set User Password / Set Administrator Password



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

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

To confirm the password, type the password again and press the [Enter] key. The Administrator or user password is now set, and now you can choose when to verify the password – either when you boot the system, or when a person enters Setup.

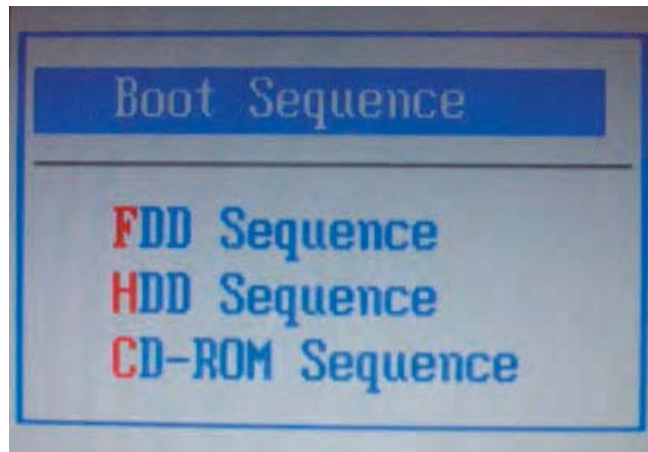
To change or clear a password, enter the submenu again. You will need to enter the Administrator password, after which you can create a new one or set the password verification options.

The Boot Menu

The Boot Menu allows the user to specify the order in which the Notebook is to check for a device to boot the system. To make changes, select Boot from the menu bar. The following screen appears:

Boot Device

The Boot Menu allows you to decide the order of boot devices to load the operating system.



The Exit Menu

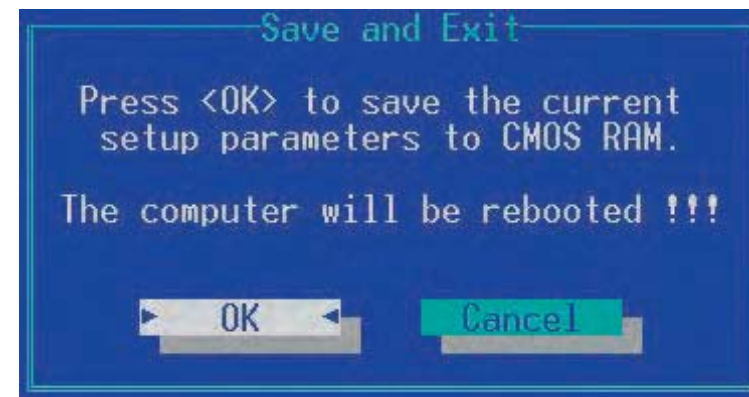
Once you have made all of your selections from the various menus in the Setup program, you should save your changes and exit Setup. Select Exit from the menu bar to display the following menu:

Pressing the [Esc] key can be used to close an open menu or submenu. Pressing it again saves the current parameters and reboots the computer.

Each of the options on this menu is described below.

Save and Exit

Once you are finished making your selections, choose this option from the Exit Menu to ensure the values you selected are saved to Non-Volatile RAM. Changes you made to the Setup program must be changed to Non-Volatile RAM in order to make them operative. Non-Volatile RAM differs from standard RAM memory in that it is sustained by an on-board battery and stays on even when the Notebook is turned off.



4 Personalize Your N521 Series Notebook Computer

Once your selections have been saved, the Setup program asks you to confirm your choice, and then reboot the computer.

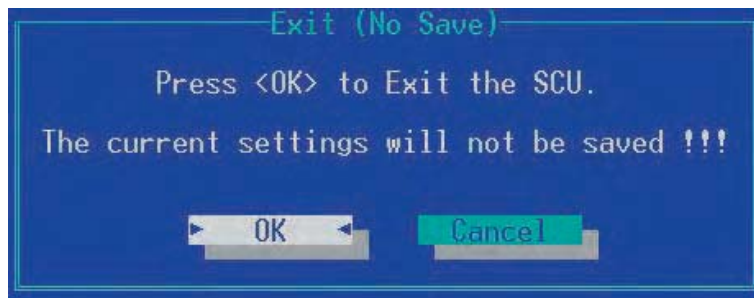
System will reboot if OK is selected and will stay in Setup if Cancel is selected.

The next time you boot up the Notebook, the BIOS will attempt to load the values you saved in Non Volatile memory. If these values cause the system boot to fail, reboot and press [F2] to enter the Setup program. Once in Setup, you can try to change the values that caused the system boot to fail. If the problem persists, load the default values (see Get Default Values below).

If you attempt to exit the Setup program without saving your changes, the program will prompt you with a message asking if you want to save your changes before exiting.

Exit (No Save)

This option can be used if you do not want to save the changes you have made to the Setup program. The default is set to No. If you have made changes to the fields other than system date, system time and password, the system will ask for confirmation when choosing Exit (No Save).

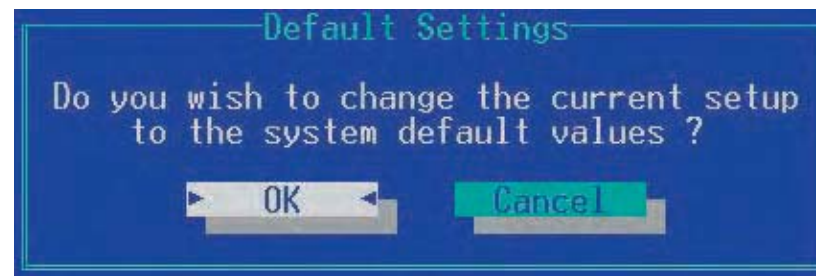


The system reboots using the original Setup values.

Default Settings

This option allows you to load the default values for each of the parameters on the Setup Menu. When this option is selected, a confirmation message appears.

The system will remain in Setup after either selection.



You can now select Save and Exit or make other changes before saving the values to Non Volatile RAM.

Restore Settings

Restores the Setup program's values to the ones it had when you entered the program during the boot sequence.



4.3 How to Upgrade the BIOS

N521 notebook computer 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://tw.giga-byte.com/> 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.

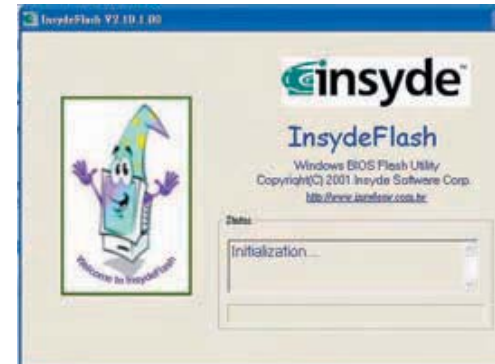
```
A:\> Phlash016 XXXXXX.ROM (BIOS filename) /allb
/c or
A:\>XXXXXX.BAT (Batch file for BIOS file)
```

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 N521) to download **1** BIOS upgrade tool (InsydeFlash) and **2** the latest BIOS upgrade utility.
2. Unzip the file you have downloaded.

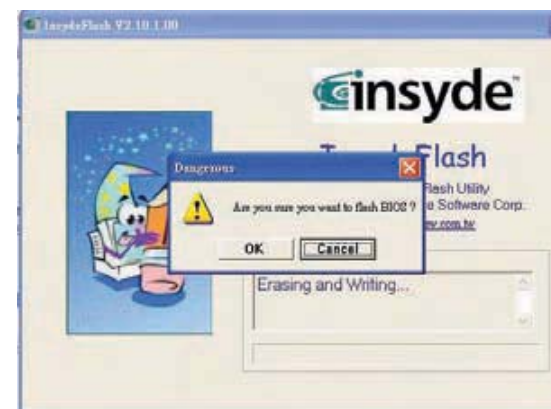
3. Run the setup10b.exe in your unzipped folder.
4. The BIOS flash tool is now initializing.



5. Please make sure that you use the AC power, otherwise the following message will appear.

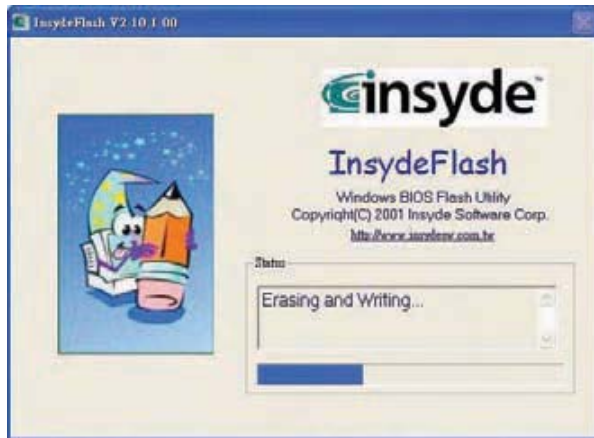


6. Click "OK" to start running the flash program.



4 Personalize Your N521 Series Notebook Computer

- The flash program is now executing. The message will be shown on the status window.



- 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.



4.4 System Upgrade

You can upgrade your memory size to your system for specific requirements. This section provides an easy step to upgrade your system.

Please contact your local dealer if you decide to perform component. To perform these procedure without consulting local dealer or certified technician may cause damage of your system. The damage of changing hard disk or installing memory module resulting from users is not under warranty.

Your notebook computer offers two memory slots using 200-pin SO-DIMM (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.

Installing Memory Module

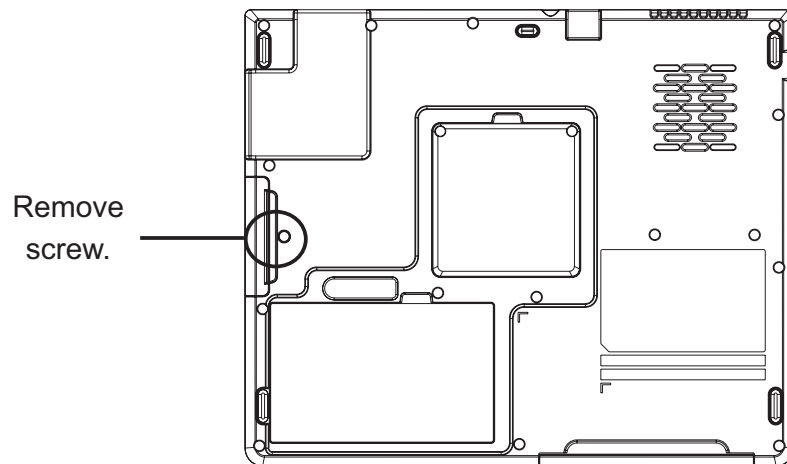
- Make sure the system is powered off, the battery also is removed and that no peripheral devices are attached.
- Turn your notebook computer upside-down and remove the screw that secures the memory module cover at the underside of your notebook computer.
- Lift off the Memory Module cover and place the new memory module in the slot.
- Hold the memory module at a 30-degree angle and matching up the notch along its connector rim with the tooth in the connection slot.
- When the module has been securely seated, press down gently

on it until it snaps into place. Put the memory module cover back and secure it with screws.

Upgrade Hard Disk

Your notebook computer offers one 2.5" format, 9.5mm height hard disk. If the volume does not fit your need or it is crashed, you can upgrade it by replacing with new hard disk. Please do the following steps to change it.

1. Turn off the computer, unplug the AC adapter (if connected) and remove battery pack. Then turn the computer over to access its base. Remove the screw.



2. Take out the hard disk case from the compartment by pulling it leftward.
3. Remove the 4 screws located at each side of the hard disk case.
4. Remove the the hard disk gently and put the new hard disk into the case. Then tighten the 4 screws back.

5. Place the hard disk back to the compartment.
6. Secure it with the screw.

Set the boot device as optical disk drive (CD, DVD...) and Primary Master as Auto on BIOS setup menu. Please refer to Chapter 4.2 about the setting of BIOS setup menu. Then, boot the system by using WinXP CD-ROM and the system will detect the hard disk automatically and prompt you how to format the new disk.

Note: Please tighten the screws located at each side of the hard disk before operating the hard disk. Any vibration may cause damage for the running hard disk. Please contact dealer or certified technician for changing the hard disk drive. The damage of changing HDD resulting from users may not be under warranty.

Note: Contact your local dealer if you decide to perform component upgrade.

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

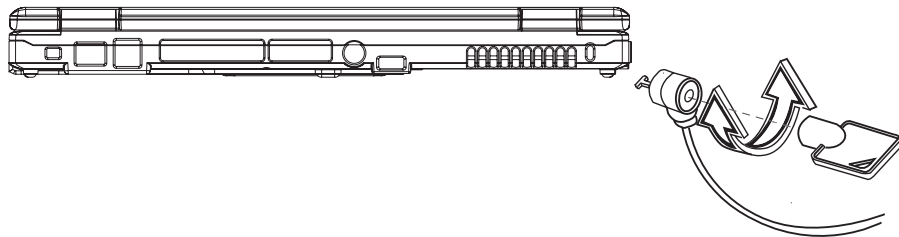
4 Personalize Your N521 Series Notebook Computer

4.5 Protecting Your N521 Series Notebook Computer

N521 Notebook Computer offers both hardware and software locks security features to protect it.

Using a computer security lock:

A security keylock notch located on the rear panel of the computer lets you connect a Kensington-compatible computer security lock.



Setting a Password:

1. Supervisor Password secures your computer against unauthorized entry to and use of the BIOS Utility.
2. Users Password secures your computer against unauthorized use.
3. Hard Disk Password protects your data by preventing unauthorized access to your hard disk.

Do not forget your setup and Hard Disk Password. If you forget your password, please contact an authorized service center.



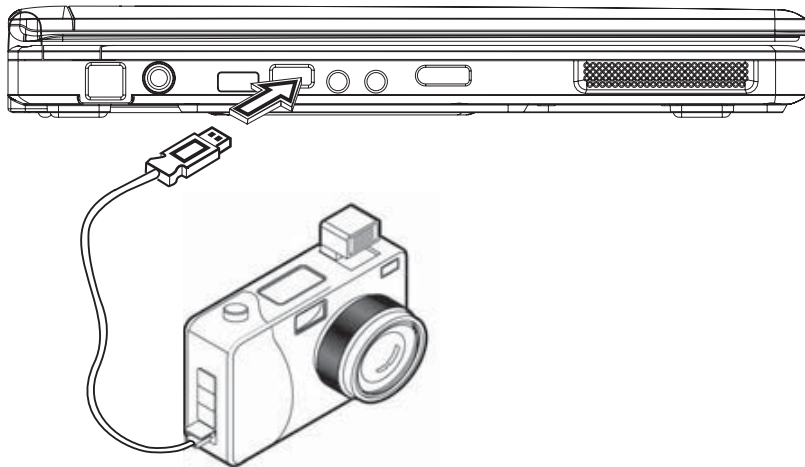
Chapter 5 Connecting to Peripherals

This chapter describes how to connect peripheral devices to your N521 series notebook computer with step-by-step instructions.

5 Connecting to Peripherals

5.1 Using USB Port

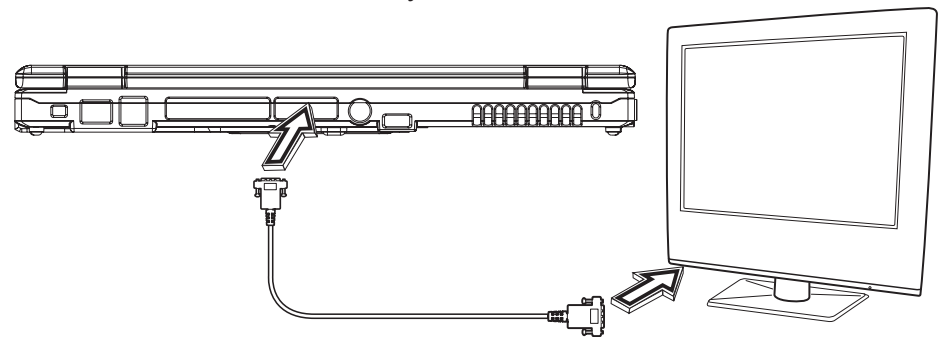
USB port allows multiple devices to run simultaneously on a computer, with peripherals such as floppy drive, mouse, digital cameras, scanners, printers, optical disk drive, keyboards, games devices and acting as additional plug-in sites, or hubs.



5.2 Connecting an External Monitor Port

Your notebook computer has one VGA port for supporting any external CRT or LCD color monitor. One end of the cable must have a 15-pin connector for the system. To connect an external monitor:

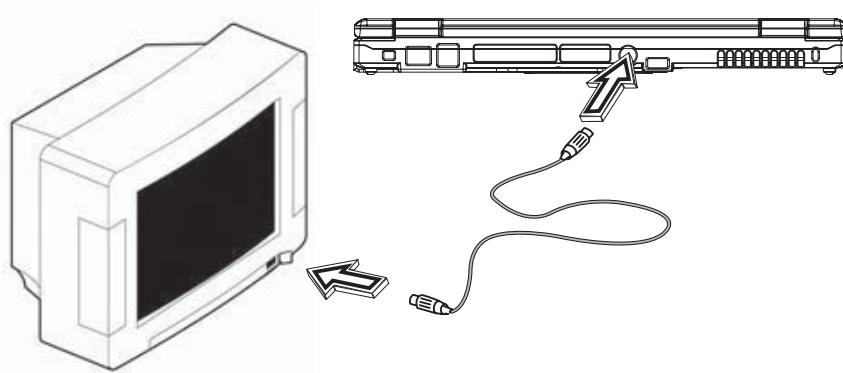
1. Turn off your notebook computer and make sure the monitor power switch is turned off.
2. Connect the connector cable of the monitor to the VGA port at the back of your notebook computer. Secure the cable connection with the screws provided.
3. Connect the monitor power cable and plug it into a properly grounded wall outlet.
4. Turn on the monitor.
5. Turn on your notebook computer. Both the LCD panel and the monitor screen will show the display. Your notebook computer 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> + <F5> 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.



Your Notebook must be power off or suspended while the monitor is being connected. It's harmful to both devices and could shorten the life of these devices.

5.3 Connecting to S-Video Port

The S-video port allows you to output to a television or display devices that support S-video input. This is important if you want to do some presentations.

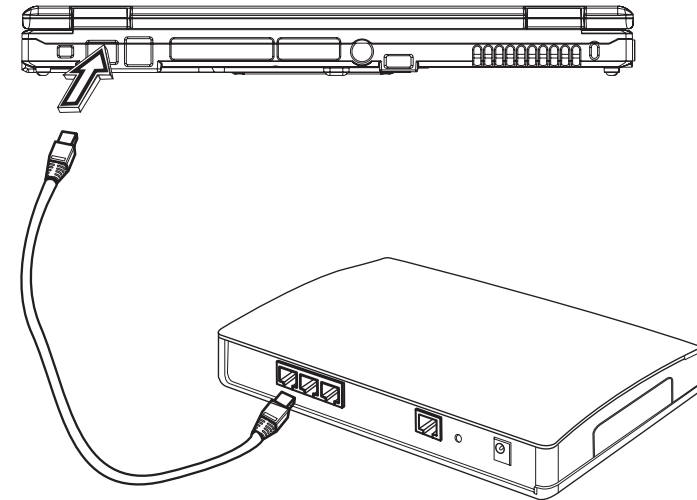


1. Turn off your N521 series notebook computer and plug one end of the RCA jack cable to the end to the input video jack of your television set.
2. Set the TV standard as you want (NTSC, PAL, SECAM, BIOS Default).
3. Turn on your notebook computer and the television set.
4. Click the Start button, then point to Settings, and click Control Panel.
5. Double-click on the Display icon and point to Setting tab.
6. Double-click Advanced button and point to Intel® Extreme Graphics tab and then click Graphics Properties.
7. In the Device tab, select the Television icon and change the related detail setting if you want. Click OK finally. Windows now automatically detect the TV out port and enable this function.

5.4 Using the LAN Port

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

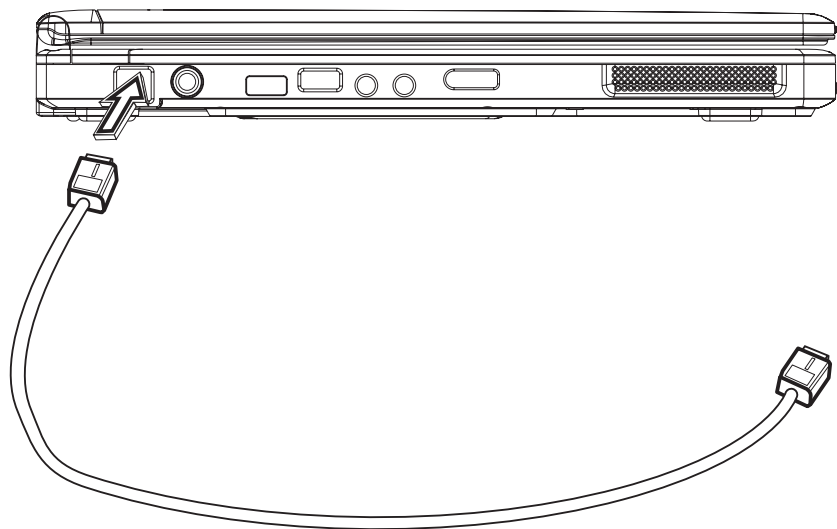
1. Locate the twisted-pair cable in the accessories box in notebook shipping carton. Each end of the cable has a RJ-45 connector.
2. Connect one end of the cable into the network wall outlet or HUB.
3. Connect the other end of the cable into the computer RJ-45 LAN port.



5 Connecting to Peripherals

5.5 Using the Modem Port

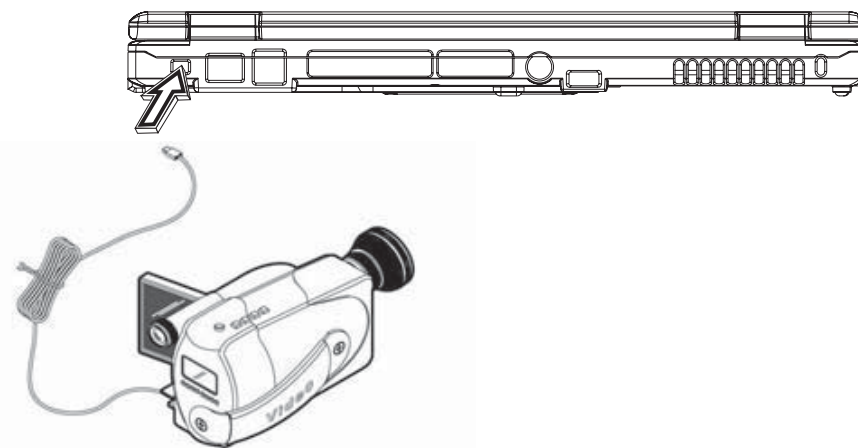
The built-in fax/data modem provides on standard phone connector.



5.6 IEEE 1394 Port

With built-in IEEE 1394 port, your notebook computer 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.



5.7 PC Card Slot

There is one PC Card slot found on the right side of the computer. These credit-card-sized Cards enhance the performance of the computer. PC Cards (formerly PCMCIA) are add-on cards for portable computers, giving you expansion possibilities long afforded by desktop PCs. Popular type II cards include flash memory, SRAM, fax/data modem, LAN and SCSI cards. CardBus improves on the 16-bit PC card technology by expanding the data path to 32 bits.

PC Cards may be 'hot-swapped', which means you can install a card while your notebook is running. The card will be detected automatically.

Usually PC Cards have a mark or symbol to show which end to insert into the slot. Cards are keyed to prevent incorrect insertion. Check the documents that came with your card if the orientation is unclear.

Inserting PC Cards

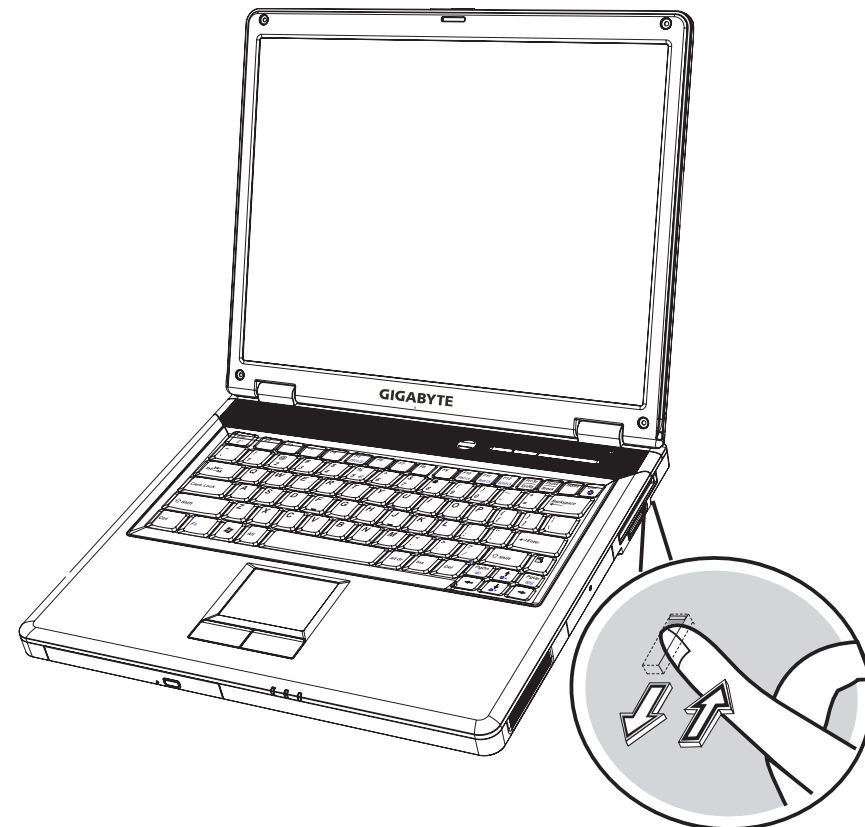
1. Hold the card with its orientation symbol pointing into the slot and the topside of the card facing up. The push-button latch may need to be in before inserting the card.
2. Slide the card into the slot until it clicks into the connector.
3. If you encounter too much resistance, do not force the card. Check the card orientation and try again.

Your notebook will recognize most PC Cards and automatically load the appropriate device driver. If the configuration program tells you to load the manufacturer's drivers, use the floppy disk or CD that came with the PC Card.

Ejecting PC Cards

Before removing a PC Card, stop it running from the configuration utility on the taskbar. Failure to do so could result in data loss. Never try to remove a PC Card by pulling on its cable, if one is attached.

1. Press the release latch.
2. Press the latch again to eject the card.
3. Remove the card.





Chapter 6 Cleaning and Maintenance

Your notebook computer is a valuable investment that you need to take care of. This chapter helps you to learn tips about how to take care of your notebook computer.

6.1 Taking Care of Your N521 Series 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.

6.2 Cleaning and Maintenance

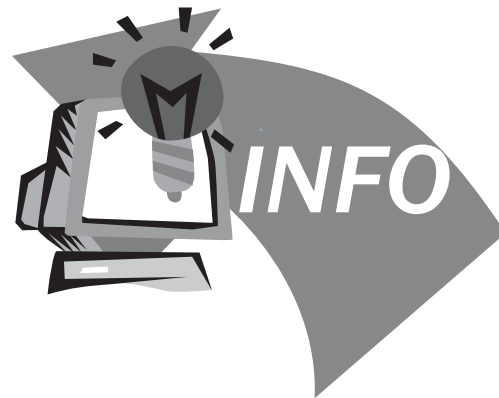
When cleaning N521 series notebook computer, follow these steps:

1. Power off your notebook computer 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.
4. Leave your notebook computer's cover open for about ten minutes while the heat disperses. Heat plays a big part on maintaining the screen. You should enable the power management of your notebook to turn off the LCD power and display when the system is not activated for some time. Adding screen savers is also another good idea to maintain your screen.
5. Users must make it a habit of doing hard disk maintenance every week or so. Here's some tips you could do:
 - Make sure you backup all data files before traveling.
 - Install the virus detecting program to prevent damaging.
 - 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.

6.3 Traveling with N521 Series Notebook Computer

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.



Chapter 7 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 N521 notebook computer.

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

7 Troubleshooting

7.1 Frequently Asked Questions

- ❖ I press the power switch, but my notebook computer 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. Check the following:

1. If you are running on battery power, it may be low and unable to power your notebook compute. Connect the AC adapter to recharge the battery pack.
2. Make sure the AC adapter is plugged in properly to your notebook computer and to the power outlet.



- ➔ If it is lit, check the following:

1. If the Standby indicator is lit, your notebook is in Standby mode. Press any key or tap on the touchpad to resume.
2. 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.

- ❖ Nothing appears on the screen.
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:

1. The brightness level might be too low. Press Fn-  and Fn-  to adjust the brightness level.
2. The display device might be set to an external monitor. Press the display toggle hot key Fn-F5 to toggle the display back to your notebook computer.

- ❖ 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 or on an external monitor.

- ❖ External microphone does not work.
Check the following:
 1. Make sure the external microphone is connected to the microphone-in jack on your notebook computer.
 2. If you cannot hear playback, the speakers may be muted.

❖ No audio from my computer.

Check the following:

1. If you are running on battery power, it may be low and unable to power your notebook compute. Connect the AC adapter to recharge the battery pack.
1. 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.
2. The speakers may be turned off. Press Fn-F6 to turn the speakers on (this hotkey also turns the speakers off).
3. 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.
4. If headphones, earphones or external speakers are connected to the line-out port on the rear panel of your notebook computer, the internal speakers automatically turn off.

❖ The keyboard does not respond.

Try attaching an external keyboard to the USB connector on the rear side of your notebook computer. If it works, contact your dealer or an authorized service center as the internal keyboard cable may be loose.

❖ I want to set up my location to use the Internet 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.

❖ Why can't I change 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 technical and hardware specifications of N521 series notebook computer. Please note that the information mentioned here may not be exactly the same with your notebook computer as specification is subject to change without notice or modifying this manual.

Designed with an advanced modular architecture, your N521 series notebook computer also allows you for several levels of customization and expansion that are previously available only on desktop PCs.

Microprocessor

- Intel® new generation Celeron-M 90NM Dothan Processor 1.73~2.13 GHz or higher with FSB 400/533 MHz

Core Logic

- Intel® Alviso 915GM/ ICH6-M for N521U
- Intel® Alviso 915PM/ ICH6-M for N521A

Memory

- 256/512 MB/1GB of DDR333 SDRAM standard, upgradeable to 2GB with dual SODIMM modules.
- 512K flash ROM BIOS

Data Storage

- 2.5", 9.5mm, UltraDMA-100 hard disk, available in 40GB/60GB/80GB
- One internal optical drive (DVD-Combo/ DVD-Dual)
- 4-in-1 SD/ MMC/ MS/ MSPRO Card Reader

Display and Video

- Thin-Film Transistor (TFT) displaying at: 15" WXGA (1024X768) resolution
- Intel® Graphic Media Accelerator 900
- ATI MOBILITY™ RADEON® X600 with 128 MB of Video memory
- Simultaneous LCD and CRT display support
- Dual independent display

Connectivity

- Intergrated 10/100/1000 Mbps Fast Ethernet connection for

N521A

- Intergrated 10/100 Mbps Fast Ethernet connection for N521U
- Build-in 56Kbps fax/data modem
- Three Universal Serial Bus (USB) 2.0 ports
- Intel® 802.11b/+g /802.11a+b+g dual-band Wireless LAN (Option)

Audio

- AC'97 stereo audio
- Dual Speakers and one internal microphone
- Separate audio ports for headphone-out, line-in and microphone-in devices

Keyboard and pointing devices

- 88/89-key Windows keyboard
- Ergonomically-centered touchpad pointing device with scroll function

I/O ports

- One Type II PC Card slot
- One RJ-11 phone jack (V.92, 56Kbps modem)
- One RJ-45 network jack
- One DC-in jack (AC adapter)
- One VGA port
- One speaker/headphone-out jack (3.5mm mini jack)
- One microphone-in jack (3.5mm mini jack)
- One Parallel Port
- One S-video port
- One IEEE 1394 Port
- 4 USB 2.0 ports

A PPENDIX A -System Information

- 4-in-1 SD/ MMC/ MS/ MC Pro card reader

Wireless

- Wireless on/off switch

Weight(with battery and optical drive)

- N521A model: about 2.86 Kg
- N521U model: about 2.81 Kg

Dimensions

- 333.6(W)x276(D)x32.1mm (max=35.8mm includes battery)

Power

- Rechargeable Li-on 2150mAh, 8-cell battery
- 65W AC adapter 19V 3.42A



Appendix B Service Center

This appendix gives information about world wide service of your N521 series notebook computer.

A PPENDIX B -Service Centers

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

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

How to submit a question?

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

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

Japan NIPPON GIGA-BYTE CORPORATION

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

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

Shanghai
TEL: +86-21-63410999
FAX: +86-21-63410100
WEB Address: <http://www.gigabyte.com.cn/>

GuangZhou
TEL: +86-20-87586074
FAX: +86-20-85517843
WEB Address: <http://www.gigabyte.com.cn/>

Beijing
TEL: +86-10-62102838
FAX: +86-10-62102848
WEB Address: <http://www.gigabyte.com.cn/>

Chengdu
TEL: +86-28-85236930
FAX: +86-28-85256822
WEB Address: <http://www.gigabyte.com.cn/>

Wuhan
TEL: +86-27-87851061
FAX: +86-27-87851330
WEB Address: <http://www.gigabyte.com.cn/>

Xian
TEL: +86-29-85531943
FAX: +86-29-85539821
WEB Address: <http://www.gigabyte.com.cn/>

Shenyang

TEL: +86-24-23960918

FAX: +86-24-23960918-809

WEB Address: <http://www.gigabyte.com.cn/>

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

TEL: +44-1908-362700

FAX: +44-1908-362709

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

Australia GIGABYTE TECHNOLOGY PTY. LTD.

TEL: +61 3 85616288

FAX: +61 3 85616222

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

Singapore GIGABYTE SINGAPORE PTE. LTD.

WEB Address: <http://www.gigabyte.com.sg/>

The Netherlands GIGA-BYTE TECHNOLOGY B.V.

TEL: +31 40 290 2088 FAX: +31 40 290 2089

NL Tech. Support: 00800-GIGABYTE

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) TEL: 00800-GIGABYTE

WEB Address: <http://www.gigabyte.fr/>

Russia

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

WEB Address: <http://www.gigabyte.ru/>

Poland

Office of GIGA-BYTE TECHNOLOGY Co., Ltd. in POLAND

WEB Address: <http://www.gigabyte.pl/>

Czech Republic Representative Office Of GIGA-BYTE Technology Co., Ltd. in CZECH REPUBLIC

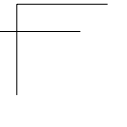
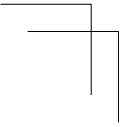
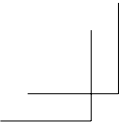
WEB Address: <http://www.gigabyte.cz/>

Romania Representative Office Of GIGA-BYTE Technology Co., Ltd. in Romania

WEB Address: <http://www.gigabyte.com.ro/>

Serbia & Montenegro Representative Office Of GIGA-BYTE Technology Co., Ltd. in SERBIA & MONTENEGRO

WEB Address: <http://www.gigabyte.co.yu/>



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N521 系列筆記型電腦使用手冊
原始發行日期：2005/04

本手冊將指導您設定和使用您的新筆記型電腦。本手冊中的資訊之正確性已經過審慎檢查確認，如有變更，恕不另行通知。未經事先書面同意，不得以任何形式或任何方式、電子、機械、影印、錄製或其他方式擅自將本手冊的任何部分重製、儲存在檢索系統內或傳送。

註冊商標

此處使用的產品名稱只供做辨識之用且可能為其各自公司的註冊商標。

Microsoft®, MS-DOS, Windows®, 和 Windows® Sound System 是 Microsoft Corporation 的註冊商標。

Intel®, Centrino™, Pentium® M, Banias, Calexico 是 Microsoft Corporation 的註冊商標。

Sound Blaster, Sound Blaster Pro 是 Creative Technology 的註冊商標。

所有在本手冊中提及的其他品牌或產品名稱皆為其各自公司之商標或註冊商標。

安全指示

請遵守以下的安全守則，此將有助於保護您自身和您的筆記型電腦的安全。

在使用您的 N521 系列筆記型電腦時



小心：行動電腦底座直接放置於身體上時請勿長期使用。長時間使用底座可能會產生熱度。電腦的支撐部分接觸到皮膚可能會不舒服，最終可能會燒傷。

- 請勿嘗試自行維修本筆記型電腦。請務必完全遵守安裝指示。
- 請勿將電池放置於口袋、皮包或其他容器內，因為金屬物品（如車鑰匙）可能會使電池端子短路，所引起的過高電流會導致極高的溫度，可能造成燃燒損害。
- 切勿將任何物品放置在 AC 變壓器的電源線上，並將電線擺放在不會絆倒人或被踩到的地方。
- 當您以 AC 變壓器使用電腦或進行充電時，請將其放置在通風良好的地方，例如桌上或地板上。請勿以紙張或其他物品覆蓋住 AC 變壓器，否則會降低散熱作用；另外當 AC 變壓器放在攜帶盒中時請勿使用。
- 請勿將任何物品推向筆記型電腦的通風口或開口處。否則會使內部元件短路，造成火災或電擊。
- 在您的筆記型電腦上請務必只使用隨附的 AC 變壓器和電池。使用其他類型的電池或 AC 變壓器可能有失火或電擊的危險。
- 如果電池的更換方式錯誤可能有爆炸危險。
- 請務必只更換相同或製造商推薦的相容電池。

- 請依造製造商的指示處理使用過的舊電池。
- 在將您的電腦連接電源時，請確定 AC 變壓器的額定電壓與您所要使用的電源額定電壓相符。

— 多數的北美洲和部分遠東國家，如南韓和台灣，為 115 V/60Hz。

— 東日本 100 V/50 Hz，西日本為 100 V/60Hz。

— 多數的歐洲、中東和遠東地區的國家為 230 V/50 Hz。

- 如果您以延長線使用 AC 變壓器，請確定插在延長線上的電器總額定電壓之安培數未超過延長線的額定電壓安培數。
- 要中斷您的筆記型電腦的電源，請先關閉電源、中斷 AC 變壓器與電源插座的連接，然後再取下電池。
- 為避免潛在的電擊危險發生，請勿於電子風暴發生期間在本產品上連接或中斷連接任何纜線，或執行任何維修或重新設定。
- 請勿將電池投入火中，可能會造成爆炸。關於處置廢電池的方式請洽詢您當地的相關單位。
- 在設定您的筆記型電腦使用時，請將之置於水平表面。
- 旅行時請勿將您的筆記型電腦登記為一般行李。您可以讓您的筆記型電腦經過 X 光安全機器檢查，但切勿讓它經過金屬偵測器。如果您以手動登記筆記型電腦，請務必準備充電電池，以在您被要求開啟筆記型電腦之電源時使用。
- 您旅行時若將硬碟機自筆記型電腦中取出，請將硬碟以不會導電的物質包裹，如布或紙張。如果您要以手動登記行李，務必將硬碟機安裝到電腦中。您可以讓硬碟機經過 X 光安全機器檢查，但切勿讓它經過金屬偵測器。
- 旅行時請勿將您的筆記型電腦放置於高過頭部的行李架，可能會滑動而造成損害。請小心不要使您的筆記型電腦掉落到地上或受到機械搖晃。
- 請保護您的筆記型電腦、電池和硬碟機遠離環境危險因子，

- 如泥土、灰塵、食品、液體、極端溫度和在陽光下曝曬等
- 當您在溫度及/或溼度範圍變化相當大的地區之間移動您的筆記型電腦時，上面或內部可能會發生冷凝現象。為避免造成損壞，使用筆記型電腦前請先預留時間讓濕氣蒸發。

附註：從低溫環境中將筆記型電腦帶到較溫暖的環境或從高溫環境中進到較涼爽的環境時，在開啟電源之前請讓您的電腦適應一下室溫。

- 當您中斷纜線連接時，請拉著其連接頭或電源線扣圈，請勿直接抓用纜線。當您拉下連接頭時，請同時拉出，以避免連接頭上的針腳彎曲。此外，在您連接纜線之前，請確定兩個連接頭的極性的位置排列均正確無誤。
- 在您清潔您的筆記型電腦之前，請先關閉電源、拔下連接電源的插頭，然後再取下電池。
- 拿取內部元件時請小心。請以抓住邊緣的方式拿取元件，如記憶體等，而不要抓住針腳。



小心：在使用您的電話設備時，您務必遵守安全注意事項，以減少火災、電擊或造成人體受傷的危險發生，這些注意事項包括：

- 請勿在靠近水源處使用本產品，例如靠近浴缸、洗臉盆、廚房水槽或洗衣槽等，還有潮濕的地下室和靠近游泳池的地方。
- 在狂風暴雨期間請儘量避免使用電話（一般有線電話除外），可能會有閃電引發電擊的危險發生。
- 發生瓦斯漏氣，請勿以電話通報。
- 請只使用本手冊中說明之電源線。

警告：可能喪失保固的狀況

- * 如果電池使用不當，可能會有爆炸的危險；請確定您使用的是相同或相容的電池。
- * 請依造製造商的指示處置使用過的舊電池。
- * 請注意，將破損、刮傷嚴重的或其他品質較差的光碟片放在本光碟機中使用會造成光碟機損壞和光碟片中的資料遺失。這類光碟片在高速運轉時可能會破裂。如果在沒有完全注意到這些可能發生的狀況，您可能會喪失本產品的保固權。

安規注意事項

聯邦通訊委員會 (FCC) 注意事項 PART 68 警告

本機符合FCC Part 68 的規定Class B。在本電腦底部的貼紙上包含了其他資訊以及本機的 FCC 註冊號碼以及數據機振鈴器負荷數。您必須因應要求將本資訊提供給您的電話公司。

如果您的電話設備會對電話網路造成損害，則電信公司有權可以中止提供服務給您。在可能的情況下，電信公司會事先通知您。但是，若無法事先通知，也會盡早通知您。同時會告知您有權向**FCC**投訴。

電信公司可能會改進其設施、設備、操作或程式。而這些可能會影響到您設備的正常使用。如果他們要進行改善工程，應

該會事先通知您，讓您可以做好預先準備以防止遺漏重要的電話。

如果本產品仍無法正常操作，請將連接設備上的電話線拔除，以確定它是否為問題的原因。如果問題是與產品有關，請停止使用本產品並與經銷商或廠商連絡。

TBR21

本產品已通過驗證 [Council Decision 98/482/EC – “TBR21”]，可經由單一終端連線至 Public Switched Telephone Network (PSTN 公用交換電話網路)。但是，因為不同國家或地區各個PSTN之間的不同，因此核准本身並不能無條件保證每個PSTN終端點都能操作正常。一旦發生問題時，您應該立刻聯絡產品的供應商。

重要安全指示

請仔細閱讀這些本安全指示說明手冊，並且加以妥善保存，以利將來參考用途。

1. 務必遵守標示在產品上所有警告與指示訊息。
2. 清潔前請將產品的插頭自牆上的插座上拔下。請勿使用液態清潔劑或含溶劑的清潔劑。請使用濕布清潔。請務必將產品從牆上插座拔除後，再進行清理工作。請勿使用液狀或噴霧清潔劑。請使用微溼的布擦拭本產品。
3. 請勿在近水處使用本產品。
4. 請勿將本產品置於不穩的平台、支架或桌面上使用。產品可能因掉落，造成嚴重損壞。
5. 機殼背面或底部的開口均作為通風之用；為確保產品的

操作可靠性，並預防過熱，絕不可阻塞或覆蓋住這些通風口。切勿將產品放置於床舖、沙發、地毯等其他類似表面上，因為這樣可能會阻礙通風。除非有適當的通風，否則決不要將本產品放在靠近電暖爐或導熱器的地方。

6. 僅使用電源線標籤所規定的電壓。如果不確定使用的電壓，請洽詢您的經銷商或當地電力公司。
7. 請勿讓任何重物品置於電源線上。請勿將電源線的走線配置在人員會被物品或腳絆到的地方。
8. 使用延長線時，請注意電流負荷量，插在延長線上的電器設備使用電量不可超過延長線的額定電流負荷量。同時，請確認同一插座的總耗電量也不可超過保險絲的額定負荷量。
9. 請勿將任何物體從通風槽塞入產品中，因為可能會觸電或者造成短路，並導致火災或產生電擊。請勿將任何液體潑灑到產品上。
10. 請勿試圖自行維修本產品，因為開啟或拆下機殼時，會使您暴露於電壓或其他的危險下。請讓合格維修人員進行維修工作。
11. 發生以下狀況時，請將本產品的電源插頭拔下，並且讓合格的維修人員維修：
 - a. 電源線或插頭損壞或磨損時。
 - b. 曾有液體潑灑至在產品內時。
 - c. 產品曾遭雨淋或浸在水中。
 - d. 在遵守操作說明下，若產品仍不能正常操作時，僅可以調整操作說明所涵蓋的控制項目，因為不當調整會造成產品損壞，並常使專業合格的維修人員花費更長的時間，才可讓產品恢復正常情形。
 - e. 如果產品摔落或機殼損壞。
 - f. 如果產品的性能出現明顯改變，則表示產品需要維修。

EMC 電磁相容性指示

本產品設計符合電磁相容性 (EMC) 的標準設計與測試。

聯邦通訊委員會 (FCC) 注意事項

本機業已經過測試並認定符合 FCC Part 15 Class B 數位裝置限制。這些限制的目的是在提供合理的保護，以防止對居家環境產生有害的干擾。

本機若未依據手冊內指示安裝，將可能會產生、使用並發射無線電波，可能會影響無線電通訊並造成有害干擾。然而我們不保證某些特定安裝方式不會發生干擾。如果本產品對收音機或電視機接收造成有害干擾，可以經由開啟或關閉本產品來加以確認，使用者可以試著以利用以下其中一種措施進行調整：

- 調整接收天線的方向或位置。
- 增加本機與接收器間的距離。
- 將設備連接至與接收器不同迴路的插座上。
- 請洽詢經銷商或有經驗專業的收音機/電視機技師協助。

這個裝置符合 FCC 條例的第 15 節限制。操作時，請尊循下列兩個條件：

- (1) 本產品不能造成傷害性干擾。
- (2) 本產品必須接受任何接收到的干擾訊號，包括可能導致非預期操作的干擾。

UL 注意事項 (美國與加拿大)



注意：如果以不正確的電池型號更換電池，可能有發生爆炸的風險。請依照說明指示方式丟棄電池。

加拿大使用者注意事項(僅適用於加拿大)

本B級數位設備裝置符合加拿大ICES-003的所有要求。

CE 注意事項 (歐盟)

具有 **CE** 這個標誌代表本N521系列筆記型電腦符合歐盟之EMC Directive 和 Low Voltage Directive 之相關規定。符合上述規定亦即表示本 N521 系統符合下列技術標準：

- EN 55022—“資訊科技設備的無線干擾特色的限制與測量方式”
- EN 55024—“資訊科技設備 - 抗擾性特色-限制與測量方式”
- EN 61000-3-2—“電磁相容性(EMC) - Part 3:限制 - Section: 諧波電流放射(每相位設備輸入電流達到並包括16 A).”
- EN 61000-3-3—“電磁相容性(EMC) - Part 3:限制 - Section 3: 電壓波動與額定電流達到並包括 16A 的設備之低電壓系統的閃爍”
- EN 60950—“資訊科技設備的安全性”



附註：EN 55022 放射需求提供給兩個類別：

- Class A 一般商業地區。
- Class B 一般住宅地區。

要判斷何種類別適用於您的筆記型電腦，請檢查電腦底部的 FCC 註冊貼紙。如果貼紙表示為 Class A，則以下警告事項適用於您的電腦：

無線電波干擾警告：此為 Class A 產品。本產品在住宅區中可能會造成無線電波 (RF) 干擾，使用者可能必須採取適切的措施。

本N521筆記型電腦裝置歸類為在一般 Class B 住宅地區使用。
技嘉電腦有限公司中已有檔案載明一項符合前述規定與標準的
「符合聲明」。

BSMI 注意事項 (僅限台灣)

多數的筆記型電腦產品「經濟部標準檢局」(BSMI)都歸類為
Class B 資訊科技設備 (ITE)。



N521系列筆記型電腦裝置歸類為在一般ClassB住宅地區使用

版權保護技術

本產品內建受到美國專利以及其他智慧財產權保護的版權保護
技術，必須經過 Macrovision 授權才可以使用本版權保護技術，
並且除非經過Macrovision 授權，否則不得在家庭以外的地點觀
賞使用。嚴禁逆向工程或分解。



關於您的N521系列筆記型電腦

感謝您選擇購買N521系列專業多媒體筆記型電腦。您的N521系列筆記型電腦結合現今最新技術，擁有高效能和多樣化的功能。

N521系列專業多媒體筆記型電腦有最新的多媒體應用程式以及卓越的性能讓您輕鬆的面對日新月異的電腦作業軟體。N521系列專業多媒體筆記型電腦人性化的設計使其操作容易和能運用於廣泛領域的特色使它成為大眾長期以來夢寐以求的筆記型電腦。



關於本使用手冊

為協助您了解及順利使用 N521系列專業多媒體筆記型電腦，我們特地設計本使用手冊來介紹N521系列筆記型電腦。本手冊共分八章：

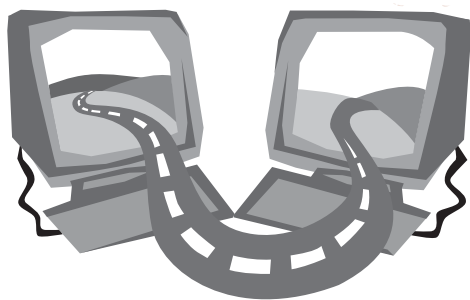
1. 簡單的瀏覽 N521系列筆記型電腦功能。
2. 逐步說明及指示如何開始使用 N521 筆記型電腦的相關細節。
3. 說明如何操作您的N521系列筆記型電腦之基本功能。
4. 說明如何個人化您的N521系列筆記型電腦，以獲得更好的效能和符合您的需求，例如：使用系統 BIOS 設定程式和升級您的筆記型電腦系統的方式。
5. 說明如何連接外部裝置到N521系列筆記型電腦。
6. 提供 N521系列筆記型電腦的保養與維護指示。
7. 教您如何處理常見的系統問題。

目錄

N521 系列筆記型電腦使用手冊

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1 開始使用

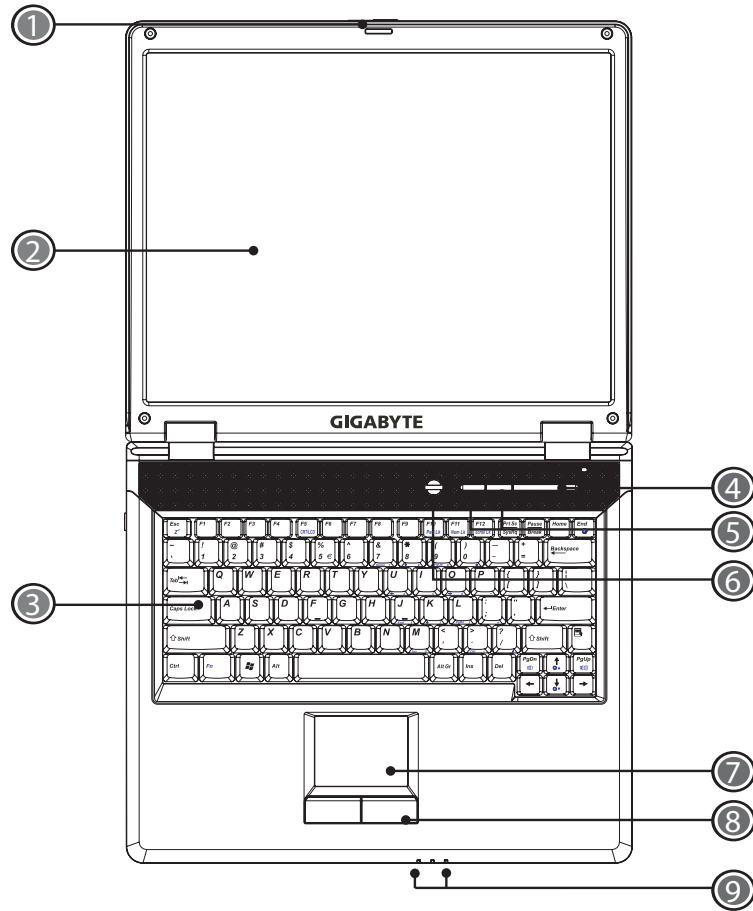


第一章 開始使用

您的 N521 系列筆記型電腦整合了今日行動個人電腦業界最先進的功能。N521 系列筆記型電腦的高效能表現、人體工學的設計與多媒體功能符合從一般商業用途到個人使用的多樣化需求。N521 系列筆記型電腦是您辦公、居家和旅行時的最佳選擇。

1.1 N521 系列筆記型電腦的外觀

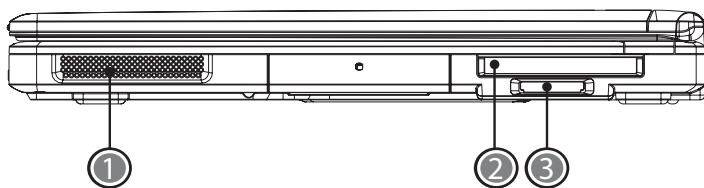
前視圖



- 1 顯示螢幕栓鎖
鎖住顯示螢幕(上蓋)。
- 2 LCD 顯示螢幕
也稱為液晶顯示器 (LCD)，顯示電腦的輸出畫面。
- 3 鍵盤
將資料輸入您的電腦。
- 4 LED 狀態指示燈
發光二極體 (LED) 顯示電腦功能和元件的狀態。這六個 LED 狀態指示燈分別代表硬碟和 PC 卡的狀態、數字鎖定、大寫鎖定、捲動畫面鎖定和觸控板鎖定。
- 5 啟動鍵
這些按鍵用來啟動最常使用的程式。
- 6 電源鍵
開啟和關閉電腦的電源，或在暫停模式中隨時回復。
- 7 觸控板
此觸摸式的指向裝置可幫助您控制游標位置，功能和電腦滑鼠相同。
- 8 滑鼠鍵
此左右鍵的功能和滑鼠左右鍵的功能相同，都支援點和拖拉功能。
- 9 LED 狀態指示燈
發光二極體 (LED) 顯示電腦功能和元件的狀態。這三個 LED 狀態指示燈分別代表電源指示、電池指示和無線通訊狀態。

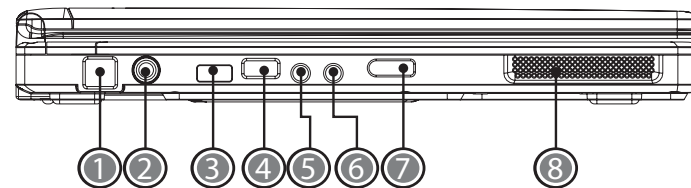
1 開始使用

右側視圖



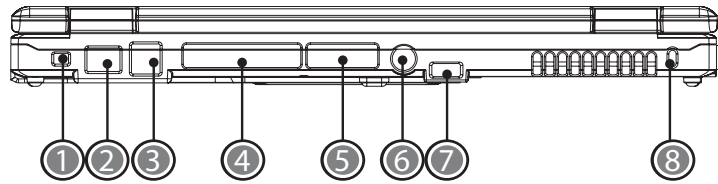
- 1 揚聲器
左右揚聲器輸出立體聲的音效。
- 2 PC卡槽
可接受一張 Type II 16位元 PC卡或支援32位元CardBus PC卡。
- 3 4合1讀卡機
可接受 SD/MMC/MS/MS Pro等記憶卡
(一次只可讀取一張記憶卡)

左側視圖



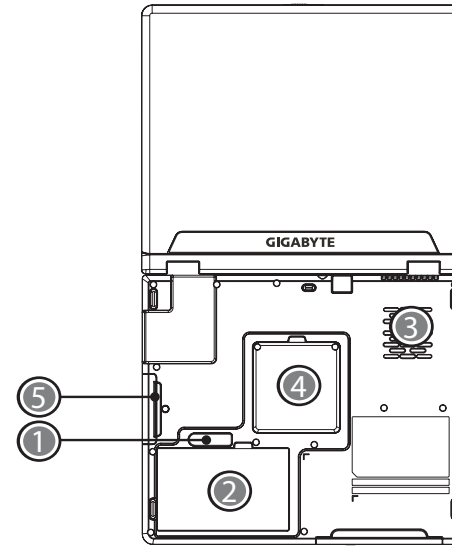
- 1 數據機埠
連接電話線。
- 2 電源輸入插孔
連接AC變壓器。
- 3 紅外線連接埠
含有紅外線裝置的介面 (例如紅外線印表機及可識別紅外線的電腦)。
- 4 USB 埠
連接USB裝置 (如 USB 滑鼠、USB 攝影機)。
- 5 揚聲器/ 耳機插孔
連接立體聲耳機、揚聲器或耳機組。
- 6 麥克風輸入插座
接受外部麥克風輸入或聲音線路輸入裝置
- 7 無線通訊
開放或關閉無線區域網路通訊。
- 8 揚聲器
左右揚聲器輸出立體聲的音效。

後視圖



- 1 IEEE 1394埠
連接 IEEE 1394 裝置。
- 2 LAN埠
連接LAN模組，透過區域網路 (LAN) 將您的電腦與其他電腦/網路連接。
- 3 USB埠
連接USB裝置 (如 USB 滑鼠、USB 攝影機)。
- 4 並列埠
連接並列埠介面裝置，如印表機。
- 5 外部顯示器埠
連接外部顯示器。
- 6 S-Video 埠
連接具有S-Video 輸入的電視或顯示裝置。
- 7 USB埠
連接USB裝置 (如 USB 滑鼠、USB 攝影機)。
- 8 防盜鏈插槽
連接與 Kensington相容的電腦安全鎖。

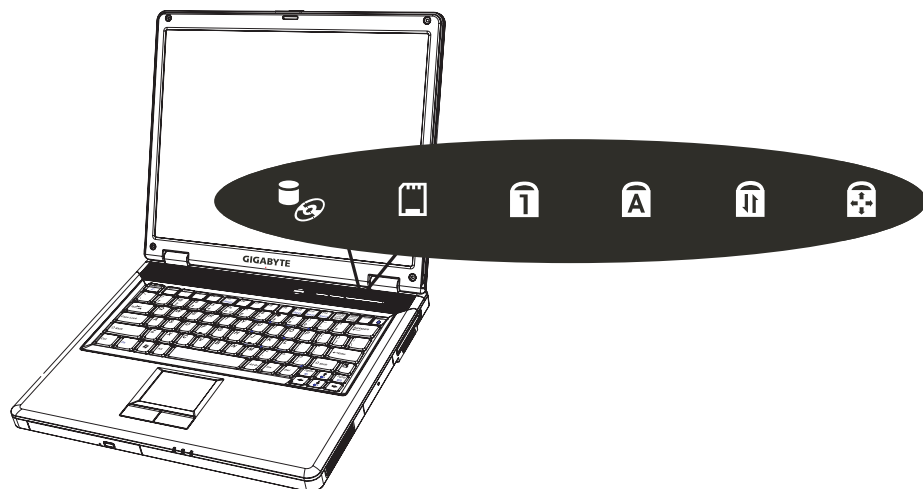
底視圖



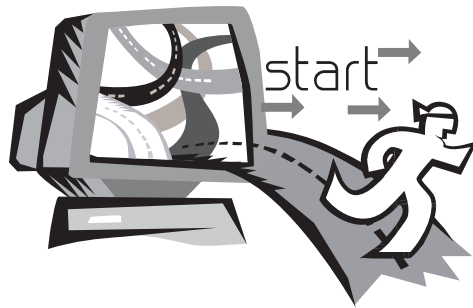
- 1 電池卡鎖栓
此卡鎖可固定電池組。
- 2 電池組槽
可配備選購的鋰 (Li-Ion) 電池組。
- 3 冷卻風扇
降低電腦溫度。
- 4 記憶體槽
電腦的主記憶體 (以螺絲鎖定)。
- 5 硬碟槽
電腦的硬碟 (以螺絲鎖定)。

1 開始使用

1.2 LED狀態指示燈



圖示	功能	說明
	硬碟的運作狀態	燈亮表示硬碟機運作中。
	讀卡槽的運作狀態	燈亮表示讀卡槽運作中。
	數字鎖定	燈亮表示已啟用數字鎖定。
	大寫鎖定	燈亮表示已啟用大寫鎖定。
	捲動畫面鎖定	燈亮表示已啟用捲動畫面鎖定。
	觸控板鎖定	燈亮表示已啟用觸控板鎖定。



第二章 使用方式

您的 N521 系列筆記型電腦，無論在設計與原廠設定上都是以容易操作與使用為前提來設定。本章將協助您學習 N521 系列筆記型電腦的基本功能和應有的安裝步驟。如果 N521 系列筆記型電腦的驅動程式並沒有預先安裝，或您的筆記型電腦的驅動程式安裝需更新時，請與當地的經銷商連絡。

2 使用方式

2.1 使用電池組

N521系列筆記型電腦設計為可搭配以下其中一種電源操作：



- AC 電源 (使用連接到電源插座的AC變壓器)
- 鋰 (Li-Ion) 電池組

您應該儘可能地使用 AC 變壓器，只在無法使用 AC 變壓器時才使用電池組。可充電的鋰電池組讓您不需連接外部電源即可操作 N521筆記型電腦。當您連接 AC 變壓器時，電池會立刻進行充電。當電腦關閉電源時，鋰 (Li-Ion) 電池組的一般充電時間約需 3 小時。正常電池的使用時間是 4 小時。如果您使用耗電量較多大的程式、播放CD或DVD、使用PC卡或提高顯示器亮度設定等，則電池的供電時間會縮短。

*為使電池發揮最大效能，第一次使用前請先將電池完全放電。*要給電池放電，請取下 AC 變壓器的插頭、關閉電源管理功能 (經由設定和 Windows)，然後再開啟系統電源。當電池完全放電時，插上 AC 變壓器的插頭後電池將開始充電。這可以延長電池壽命，並且有助於確認準確地監測電池，或者電池容量。電池可以留在筆記型電腦內而電池內部的電路系統會防止電池充電過量。

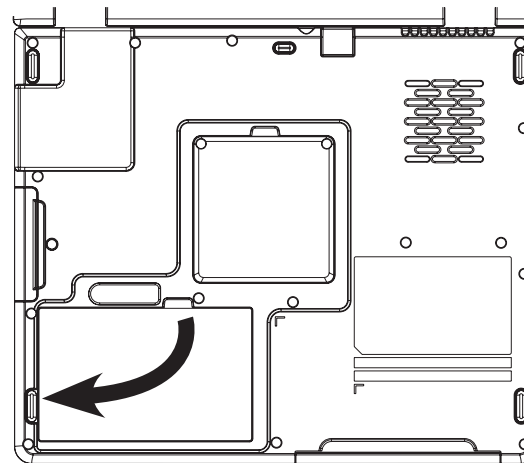
** 鋰電池相當脆弱，請勿使用其他變壓器進行充電，否則可能會造成爆炸。*

如果您將長時間不使用N521系列筆記型電腦時，請將電池拆下。並且將電池組儲存於不受陽光直射的乾燥陰涼處。當您再度使用筆記型電腦前，請將電池充飽電力。

** 如果電池或筆記型電腦因為使用或環境高溫而過熱時，電池可能無法充電。如果發生上述這種情形，電池狀態指示燈  會亮起紅燈。請立即將筆記型電腦插頭由插座拔除，並且讓筆記型電腦與電池冷卻至室溫。當電腦及電池都冷卻後，您便可以重新進行電池充電。如果當電池狀況不良或需要更換時，電池狀態指示燈  也會亮起紅燈。*

安裝電池組

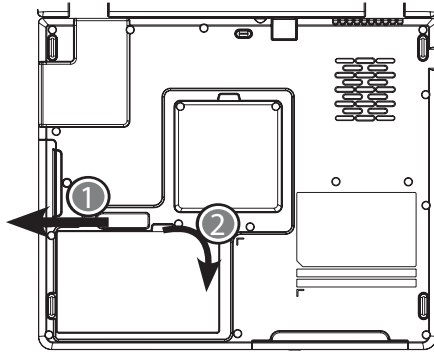
您的 N521系列筆記型電腦提供最便利的方式將電池組安裝到您的電腦上。要安裝電池，請先將延長管朝向電池組槽，然後輕輕順勢滑入電池組槽並確定電池已固定好。



取下電池組

要取下電池組前，請先確定您的筆記型電腦電源已關閉。請依照下列步驟取出電池組。

- 1 請往左滑動電池釋放栓鎖。
- 2 用您的手指從凹處將電池組向上取出。



更換電池組

您的 N521 系列筆記型電腦估計電池只能夠再繼續幾分鐘的操作時，它會以低電池量警告鳴聲提醒您。如果您使用音效系統、PC 卡槽、硬碟和光碟機而耗用了許多電力，您的筆記型電腦使用光電力的速度可能會比您想像得還快許多。您務必要以連接 AC 變壓器、關閉您的筆記型電腦或暫停磁碟來回應低電池指示。否則，筆記型電腦會自動暫停磁碟然後關閉電源，而記憶體的內容會儲存在硬碟機中。直到連接 AC 變壓器或安

裝衝過電的電池之前您將無法重新啟動您的筆記型電腦。要更換電池組，請參閱之前「安裝電池組」和「取下電池組」幾節的敘述。

附註：在更換電池組或連接 AC 變壓器之前請務必儲存您的資料。否則會造成您的資料遺失。

附註：如果電池更換方式不正確會有爆炸的危險。請只更換相同或製造商推薦的相容電池。請依造製造商的指示處置使用過的舊電池。

電池狀態	指示器燈顯示狀態
充電中	閃爍綠燈
充電完成	綠燈
電池放電中	無任何顯示(燈不會亮起)
電池使用中	無任何顯示(燈不會亮起)
電池電量過低	閃爍橘黃色燈>大約剩餘三分鐘系統發出嗶聲

2 使用方式

2.2 連接AC電源

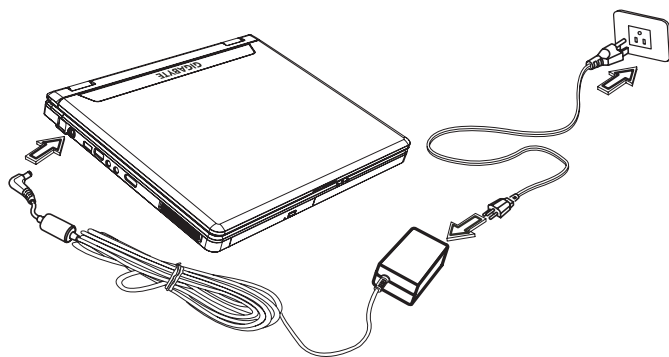
連接電源變壓器

AC 變壓器可同時提供您的 N521系列筆記型電腦外部電源並為內部電池組充電。AC 變壓器也配備自動切換設計，可連接任何 100V AC 到 240V AC 的電源插座。

※注意：縱使 AC 變壓器在世界各國的插座皆可使用，但是電源線與電源接頭會因不同而有所不同。請確認您使用相容的電線和正確地連接電源線到插座上。否則會造成火災或設備的損壞。

要連接電源變壓器：

1. 將AC 電源線插到 AC 電源變壓器的電源插孔。
2. 將AC 電源線的另一端插到有電的 AC 牆壁插座。
3. 將AC 電源變壓器的連接頭插到您的筆記型電腦後方的 DC-IN 電源插孔。



附註：我們建議您可能的話，請每次都將電池組安裝上，然後將 AC 變壓器連接到筆記型電腦。如此可確保持續的電力供應，避免突然電力失常時資料損失。

附註：關於本設備的電源供應，您應使用核可的電源線。請確定您使用的插孔和任何延長線能支援所有連接的裝置之總電壓。在清潔電腦之前，請確定已經與任何外部電源供應中斷連接(如 AC 變壓器)。

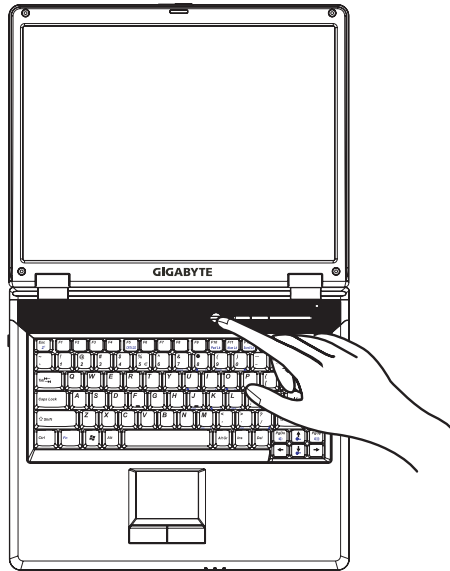
AC 變壓器的維護

- 請勿將本變壓器與其他裝置連接。
- 請勿踩踏在電源線上或在上放置重物。請小心地將電源線和任何電線擺放在遠離可能會有人走動的地方。
- 在取下電源線時，請勿拉電源線。請拉插頭處。
- 如果您使用延長線，插在上方的設備之總額定安培數不可超過電源線的額定安培數。插在單一牆壁插座上的設備之總額定安培數不可超過保險絲的額定安培數。
- 在將您的筆記型電腦連接到電源插座之前，請確定電源電壓。如果您不確定電源規格，請與您當地的經銷商或電力公司連絡。

2.3 啟動 N521系列筆記型電腦

電源/回復鍵位於電腦機座的右上部(如下圖所示)。請按下此鍵來啟動您的筆記型電腦，並檢查電源 LED 指示燈是否亮起。

** 操作系統未完全載入前，請勿關閉電腦。電腦開始啟動期間關閉電腦，可能會造成下一次開機時出現錯誤。*



幾秒鐘後，筆記型電腦的顯示器會開啟，而您的筆記型電腦會開始執行「電源開啟自我測試」(POST)，檢查是否所有的系統元件都正常運作。任何在測試間發現的錯誤都會顯示在螢幕上並也可能會出現短暫的響聲。

測試過後，螢幕會顯示一則訊息“press <F2> to enter SETUP”(按下<F2>進入設定)。此時您不需要執行此程式，因為您的經銷商已為您的筆記型電腦做了最佳化的設定。請參考後面第五章關於執行 SETUP (設定) 程式的資訊。

當測試完成後，您的筆記型電腦會開始搜尋並從您的硬碟機開啟作業系統。筆記型電腦一般在硬碟中會預先安裝 Windows 作業系統。關於如何使用 Windows，請參考 Windows 使用手冊。如果沒有安裝或您沒有手冊，請聯絡您的經銷商以獲得協助。

2 使用方式

2.4 調整顯示畫面控制鍵

LCD 亮度的調整分別是由 <Fn> + <↑> 和 <Fn> + <↓> 鍵所控制。您必須開啟筆記型電腦的電源才能按下這些快速鍵。

亮度快速控制鍵可調整 LCD 的亮度。亮度快速控制鍵無法將 LCD 設定為全黑或全亮；它可使 LCD 有足夠的照明光線以符合週遭環境的照明。室內越亮您越需要增高 LCD 的亮度。

如果您要暫時離開，您可按下 <Fn> + <ESC> 關閉 LCD 以節省電力。再按一次 <Fn> + <ESC> 可開啟 LCD。

- 65,536 或 6 萬 4 千色相當於 16 位元高彩，而 1 千 6 百萬色相當於 32 位元真實色彩。
- 您可以使用 <Fn> + <F5> 快速鍵在只用 LCD、只用 CRT 和 LCD 和 CRT 顯示器兩者都用之間切換選擇。

2.5 安裝 N521 系列筆記型電腦裝置驅動程式

如果 N521 筆記型電腦已經安裝了作業系統，您最好安裝必要的裝置驅動程式，以使用筆記型電腦的內建裝置。在安裝這些驅動程式之前，請先與您的經銷商確認這些驅動程式是否已與作業系統一起預先安裝。

如果沒有，請依照以下程序：

1. 您可以在筆記型電腦的包裝中發現一張如下圖的隨附驅動程式光碟片。



2. 將光碟片置入光碟機中。自動執行 (Auto Run) 會帶領您完成安裝。

2.6 關閉您的電腦

如果會有一陣子不使用 N521 系列筆記型電腦，您最好關閉筆記型電腦的電源。關閉電源之前，您必須先關閉所有的應用程式，然後再關閉應用程式。之後請依照下列步驟：

請按下開始 → 關機 → 關機

您的 N521 系列筆記型電腦將會在關機程式完成後自動關機。

在關閉您的 N521 筆記型電腦電源之後，請養成在長時間使用過後讓 LCD 面板維持開啟一段時間的習慣，如此可冷卻筆記型電腦內部的組件。闔上面板會使熱氣加到 LCD 螢幕上，經常如此會降低 LCD 的壽命。更重要的是，當電腦電源開啟但停用省電功能時，絕對不要長時間關閉 LCD 面板。

3 基本功能介紹



第三章 基本功能介紹

本章將說明如何使用N521系列筆記型電腦的標準內建功能。如果您對於電腦和作業系統不熟悉，本章也會說明您的N521系列筆記型電腦的常見基本功能。熟悉作業極其重要。本章將引導您超越基本功能的認識，並嘗試體驗其他令人興奮的功能。

3.1 啟動鍵








啟動鍵位於電腦機座的右上方(如下圖所示)，也就是電源鍵的左邊。這些按鍵在作業系統底下為郵件和網路瀏覽器的快速啟動鍵。



項目	啟動鍵預設應用程式
F1	電子郵件應用程式
F2	網際網路瀏覽器應用程式

3.2 鍵盤功能

基本按鍵

按鍵	功能說明
	<Enter> 鍵，執行指令。在許多文字編輯應用程式中，<Enter> 鍵可插入一個返回符號 (hard carriage return)，這點和傳統打字機一樣。
	<Esc> 鍵，按下此鍵可取消指令或離開功能。
	<PrtSc> 鍵，也就是列印螢幕鍵。按下此鍵可提取整個螢幕的畫面，與他人分享您特殊的使用方式。
	<Pause> 鍵，按下此鍵可暫時停止指令的執行。再按一次任何鍵可回復指令執行。
	<Fn>+<Break> 鍵，按下此鍵可暫時停止指令的執行。再按一次任何鍵可回復指令執行。
	<Insert> 鍵，也就是插入鍵。按下此鍵讓鍵盤資料輸入從插入模式變為覆寫模式。
	<Delete> 鍵，也就是刪除鍵。按下此鍵可從游標右邊刪除字元，或刪除標記的文字或項目。

3 基本功能介紹



<Backspace> 鍵，按下此鍵可從游標左邊刪除字元。



<Shift> 鍵，打字時以其他字母鍵與此鍵結合可產生大寫字母。此鍵與其他兩個字元的按鍵結合 (您可在鍵盤的第二排找到這些按鍵) 可產生大寫標記的按鍵。此鍵也與其他按鍵結合，用於大部分的應用程式以執行某一指令。



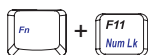
<Tab> 鍵，按下此鍵可將游標移動到右邊一個定位點位置。此按鍵的功能和傳統打字機很類似。



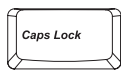
<Ctrl> 鍵，也就是控制鍵。此鍵與其他按鍵結合用於大部分的應用程式，以執行某一指令。



<Alt> 鍵，也就是交替鍵。此鍵與其他按鍵結合用於大部分的應用程式，以執行某一指令。



<Fn>+<Num Lk> 鍵，啟用內建的15鍵數字鍵盤。



<Caps Lock> 鍵，用在大部分的應用程式中可使字元一直維持大寫字母狀態。



上方向鍵，將游標一次向上移動一行。



下方向鍵，將游標一次向下移動一行。



左方向鍵，將游標一次向左移動一格。



右方向鍵，將游標一次向右移動一格。



<Home> 鍵，將游標移動到畫面或該行的開頭。



<PgUp> 鍵，將游標一次向上移動一個畫面。



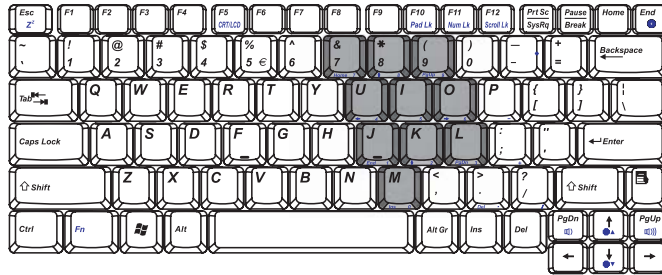
<PgDn> 鍵，將游標一次向下移動一個畫面。



<End> 鍵，將游標移動到畫面或該行的結尾。

特殊功能鍵

■ 內建數字鍵盤

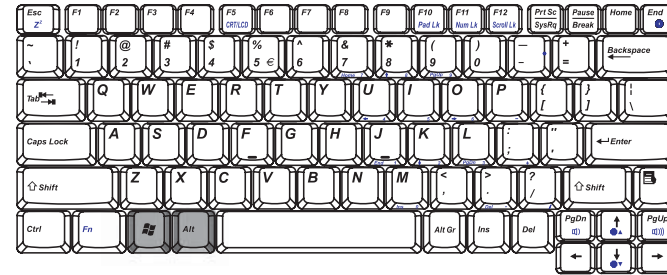


內建的數字鍵盤功能和桌上型電腦的數字鍵盤相同。您可依造按鍵右上方的小字來判斷此按鍵代表何種輸入字元。

想要的存取方式	數字鍵鎖開啟	數字鍵鎖關閉
內建鍵盤上的數字鍵	以一般方式輸入數字	
游標控制鍵/ 內建鍵盤	使用游標控制鍵按住 Shift 鍵	使用游標控制鍵 按住 Shift 鍵
主要鍵盤按鍵	在內建鍵盤上輸入文字時請按住 Fn 鍵	以一般方式輸入文字。

附註：如果您的電腦連接了外部鍵盤或按鍵組，Numlock (數字鍵鎖) 的功能會從內建的鍵盤自動切換到外部鍵盤或按鍵組。

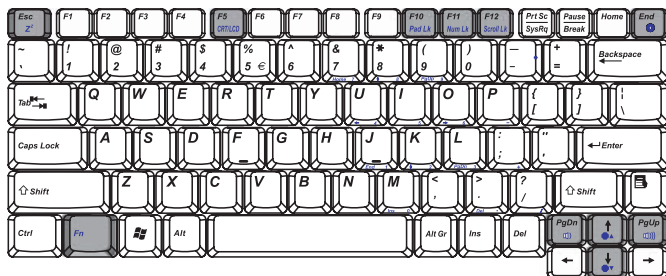
■ 視窗按鍵



按鍵	說明
⊞+ E	開啟Windows® 的檔案總管
⊞+ R	顯示執行對話框
⊞+ F	尋找檔案
⊞+ Ctrl + F	開啟搜索結果對話框(當筆記型電腦被連接到網路的時候)
⊞+ Pause	開啟系統內容是對話框

3 基本功能介紹

■ 快速鍵



按鍵

說明

Fn+Esc	啟用省電功能的待機模式
Fn+F5	切換螢幕模式 (LCD > CRT > 同時) 依下列順序切換選擇顯示器: 內建螢幕, 外接式螢幕, 同步螢幕顯示。
Fn+F10	觸控板鎖定
Fn+F11	數字鎖定
Fn+F12	捲動畫面鎖定
Fn+End	靜音
Fn+▲	逐步增加LCD顯示器的亮度

Fn+▼ 逐步降低LCD顯示器的亮度

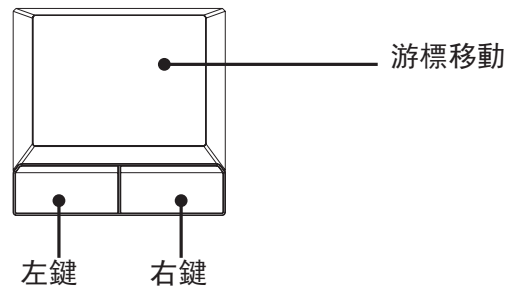
Fn+PgUp 增加音量

Fn+PgDn 降低音量

3.3 使用觸控板

觸控板的基本功能是移動游標，或者在螢幕上使用指尖選取物件。以下說明顯示觸控板的適當使用方式：

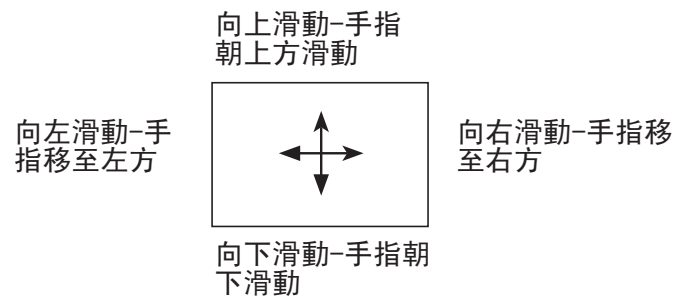
※請勿使用任何物體代替手指操作觸控板，否則可能損壞觸控板表面。



觸控板基本功能

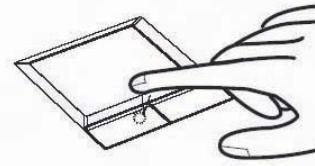
■ 移動游標

將手指置於觸控板中心，並且向一個方向滑動以移動游標。

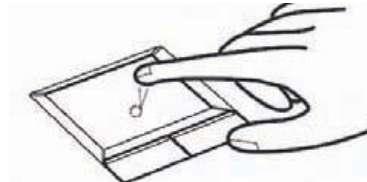


■ 點擊/輕敲一次

游標移至物件上方，按下左鍵或使用指尖快速輕敲觸控板一次 (敲擊力加重並不會增加觸控板的反應能力)，手指保持於觸控板上直到物件被選取為止。



點擊
(按下左鍵並放開)



輕敲
(快速輕敲觸控板)

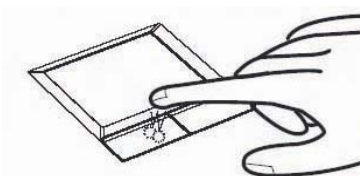
這個操作可以用於以下情形：

執行“Yes”或“Cancel”或選取物件(從選單工具列)時。

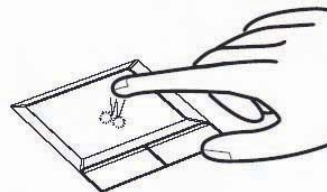
■ 點擊兩次 / 輕敲兩次

這跟一般直接從您所選擇的相對應圖示啟動程式一樣。將游標移動至您想要執行的圖示上，按下左鍵或快速輕敲觸控板兩次，系統會啟動相關的程式。如果點擊或輕敲之間的時間長，則這項操作不會執行。

3 基本功能介紹



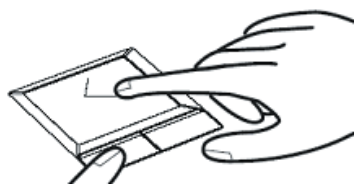
點擊兩次
(按下左鍵兩次並放開)



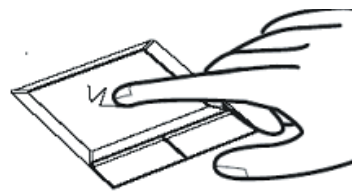
輕敲兩次
(快速輕敲觸控板兩次)

■ 拖拉

拖拉指的是選取一個物件，並且將其置於螢幕上所欲放置的任何位置。您可以移動游標至您選擇的物件上，並且持續按住左鍵，移動游標至所需的位置，然後放開按鍵。或者，您可以簡單地在物件上輕敲兩下，並且保持指尖接觸觸控板以拖拉物件。



拖拉點擊
(按住左鍵並將手指在觸控板上滑動)



拖拉敲擊
(輕敲觸控板兩次，在第二次敲擊時在觸控板上滑動手指)

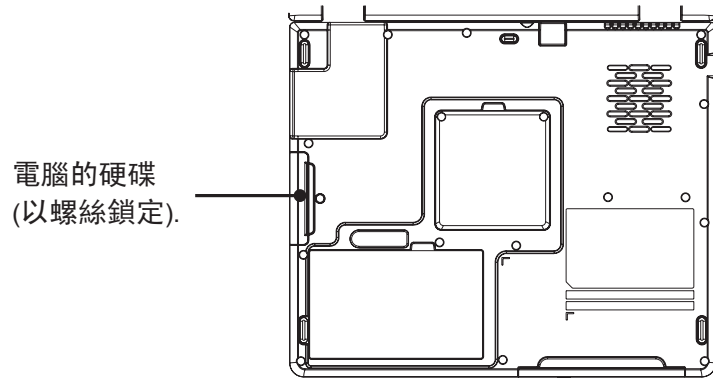
這用來拖拉圖示或改變視窗大小。例如：如果您想要複製或移動一個檔案，只要簡單地拖拉檔案至另外一個資料夾、視窗或軟體圖示，然後放開左鍵。

- * 請確保觸控板上無塵土、液體或接觸到油脂。
- * 如果您的手指上有塵土或是濕的，請勿碰觸觸控板。
- * 請勿將重物置於觸控板或觸控板按鍵上。
- * 請勿使用指甲或其他硬物刮擦觸控板。

3.4 儲存設備

硬碟

N521 系列筆記型電腦配備內建大容量 2.5 吋 IDE 硬碟機，可讓您儲存或安裝您電腦使用的作業系統和所有的應用軟體程式。



- 如果您要更換硬碟，請連絡您當地的經銷商，以獲得更多關於此經銷商可安裝之裝置的資訊。
- 您可以使用儲存容量更大的硬碟取代標準硬碟機來增加系統的儲存容量。
- 在取下硬碟機之前請先關閉筆記型電腦電源，否則會損壞電腦和硬碟。在硬碟仍在存取中時請避免搖動或移動您的電腦。

光碟機

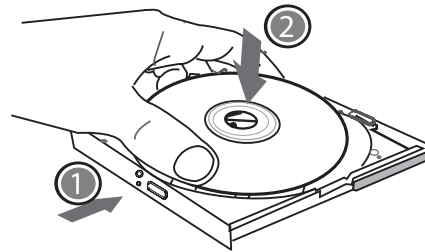
N521 列筆記型電腦配備提供以下其中一種光碟機：

- DVD combo 複合光碟機
- DVD Dual 燒錄機

一般您會使用光碟機來安裝作業系統和軟體應用程式。

要插入和取出光碟機中的光碟片：

1. 請確定筆記型電腦的電源已開啟。按下光碟機門上的退片鍵，光碟托盤會稍微跳出，請慢慢地拉出整個托盤。
2. 請以標籤面朝上的方式將光碟片放入光碟托盤中。將光碟片往中間的軸心輕壓來固定住。
3. 要取下光碟，按下中間的軸心後，將光碟片由邊緣處拉上來，直到光碟片彈開軸心的鎖定為止。
4. 要關閉光碟機，只要將光碟托盤推進去即可。光碟機 LED 會在偵測到光碟片時亮起。請等到 LED 熄滅後再開始讀取光碟片。

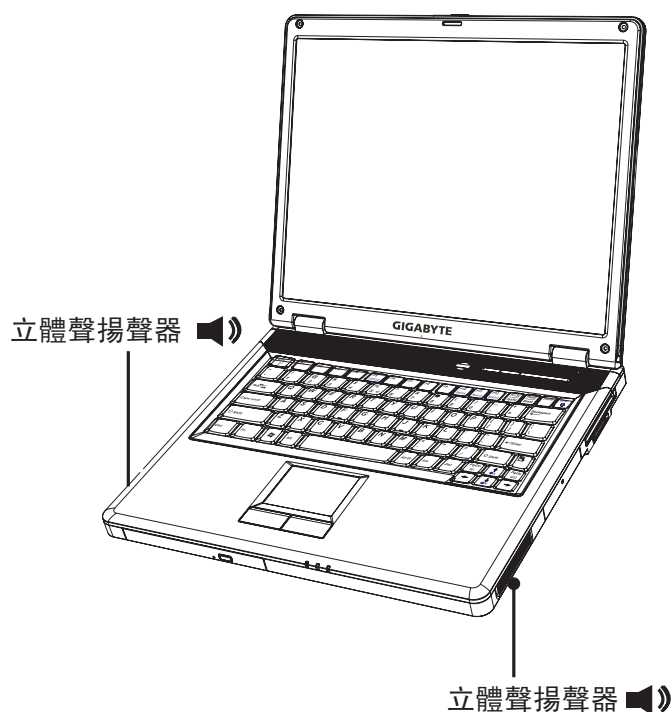


如果因為軟體或發生停電退片功能被停用，緊急退片孔可讓您手動將光碟片從光碟機中退出。

3 基本功能介紹

3.5 音效

本電腦內建 16 位元的高傳真 AC'97 立體聲音效。此內建的雙立體聲揚聲器使用非常方便。您可以使用快速鍵來調整音量的大小，詳情請參考第17頁。



3.6 移除N521系列筆記型電腦及其他外接裝置的連接

■ 移動N521系列筆記型電腦

在短距離內移動(例如：從辦公室至會議室)。

- ☉ 移動電腦前，請闔上並鎖住螢幕護蓋，以設定至睡眠模式。您的N521系列筆記型電腦現在就可以安全地四處移動了。您想要打開電腦時，只要打開螢幕按下任何一個按鍵即可。進入睡眠模式一段時間以後，電腦可能會進入休眠模式。請將打開電源以將電腦從休眠模式中喚醒。
- ☉ 您可以按下 Fn+ Esc，以設定電腦至睡眠模式。
- ☉ 您也可以選擇關閉電腦：
 1. 點選開始 ⇨ 關機
 2. 點選關機

■ 移除外部裝置的連接

請依照以下步驟進行：

1. 儲存所有作業中的資料。
2. 從磁碟機中取出任何媒體或光碟片。
3. 關閉所有操作系統。
4. 關閉電腦電源。
5. 拔掉AC電源變壓器的電源線。
6. 移除鍵盤、滑鼠、印表機及其他外部裝置的連接。
7. 如果您使用Kensington電腦鎖固定電腦，請移除它。

注意：請勿讓筆記型電腦通過金屬探測器。請讓它通過X光機，或者請檢查人員手動幫您檢查。

3.7 何謂CyberLink DVD Solution™

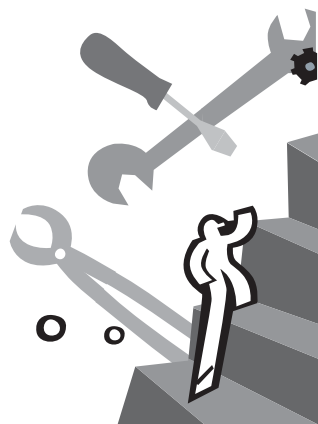
CyberLink DVD Solution™是一套內含了強大的家庭影音軟體，讓您可以輕鬆的編製DVD和複製燒錄需求。CyberLink DVD Solution™擁有簡易使用的操作介面，並提供多方面的影音功能：編輯或觀賞影片、重新潤飾圖片、製作幻燈片、燒錄和複製光碟、擷取MP3檔案和保存資料。



功能導覽：

- 輕鬆複製燒錄多媒體檔案，如：一般資料、音樂、照片和影片檔
- 輕鬆編製影片和製作相片多媒體秀並燒錄在DVD或CD光碟上，甚至是光碟選單也能一併燒錄
- 支援各種檔案規格，使您可以編輯影片、擷取MP3檔案和修改圖片
- 將您重要的資料保存和複製燒錄DVD
- 燒錄規格包括DVD+R/RW、DVD-R/RW、DVD-RAM、SVCD或VCD

4 個人化您的 N521 系列筆記型電腦



第四章 個人化您的N521系列筆記型電腦

N521 筆記型電腦使用的 Insyde BIOS 設定程式可讓您設定數種不同的系統配置，幫助您自訂N521的效能。可用的選項包括系統時間日期、磁碟配置和密碼設定，這些都儲存在CMOS RAM (CMOS 隨機存取記憶體) 中，而且除非您進行變更，否則將維持不變。

本章討論您啟動BIOS設定程式和變更系統配置的方式，以符合您想要的操作方式。您必須小心地正確設定此配置，以讓您的筆記型電腦可順暢運作。

您也可以在本章中學習升級元件的方式，以提升性能。如果對設定值有任何疑問，請與您的經銷商聯絡。

4.1 使用 Xpress回復程式

Xpress 回復程式是用於備份和回復您的作業系統分割區的程式。您的硬碟機必須與下列規格，才能正確執行程式可。

1. 它必須支援 FAT16、FAT32 和 NTFS 格式。
2. 它必須配合 IDE 硬體使用並且支援 HPA。
3. 第一個分割區必須設定為開機區。
在備份過後請勿變更開機區的大小。
4. 它必須連接到 IDE1 的 Master位置。

附註：

1. 如果您已使用其他分割管理程式或類似的程式先格式化了您的硬碟，將無法使用 Xpress 回復程式來恢復硬碟的原始狀態。
2. 硬碟的讀寫速度和資料量會影響備份的速度。
3. 當您的硬碟毀損時，Xpress 回復程式將不會發揮作用。
請立刻聯絡您的經銷商。

如何進入Xpress回復程式

1. 在開機時按下 <F9> ，您將會看以下畫面：



功能按鈕說明：

- 系統回復按鈕。此功能將使您的系統回復到原廠預設值。
- 離開按鈕。此功能將離開此視窗並重新啟動您的電腦。

2. 在開機時按下 <F2>，從主要選單中選取“Boot Setup”(開機設定選單)，並設定從光碟機 (CD-ROM) 開機。儲存並退出 BIOS 設定。將驅動程式CD放入光碟機中。當螢幕下方出現 CD-ROM開機提示時，按下任意鍵即可進入 Xpress 回復程式。當您進入 Xpress 回復程式，您將會

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看到以下畫面：



功能按鈕說明：

- 建立備份按鈕。備份系統程式會自動掃描您的系統，並將資料備份儲存至硬碟中。
- 系統回復按鈕。可將系統回復到出廠預設值或您所指定的系統備份。
- 移除檔案按鈕。此功能會移除先前的系統備份。
- 離開按鈕。按下本按鈕即可退出此視窗並重新啟動您的電腦。

為了您資料的準確性，在移除備份時，務必確定您已備份了您的資料。

我們建議您從光碟機開機方式進入 Xpress 回復程式，以便執行建立備份及移除備份等功能。

4.2 BIOS 設定

您的 N521 系列筆記型電腦在交貨前可能已經由您的經銷商正確地設定和配置過。不過有時您可能會需要使用 BIOS (基本輸入/輸出系統) 設定程式來變更系統設定資訊，例如目前的日期和時間，或者您的硬碟的型式。設定程式可以於你開啟系統時按下 <F2> 來存取。

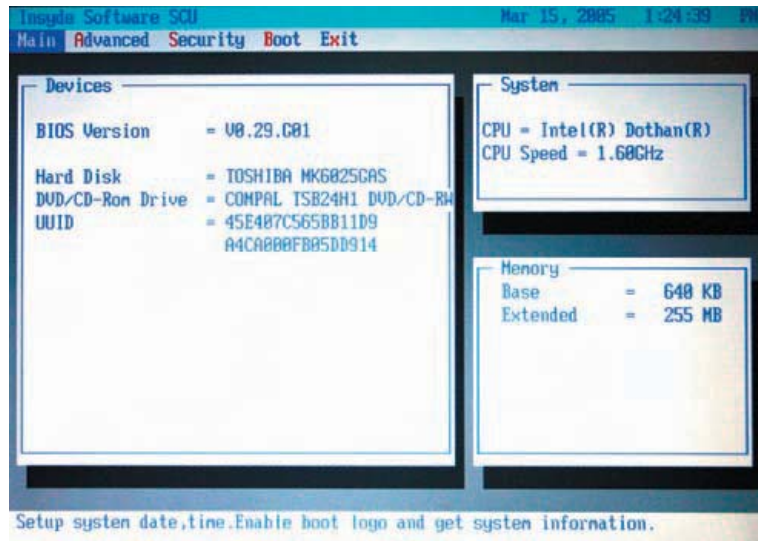
您在設定程式中所指定的設定值都會被記錄在 CMOS RAM 的特殊區域記憶體中。此記憶體有備份電池，因此您在關機或重新設定系統時都不會被刪除。每當您開啟電腦時，系統會讀取儲存在 CMOS RAM 的設定值，並將它與開機自我測試 (POST) 期間所執行的設備檢查進行比對。如果發生錯誤，畫面上則會顯示一個錯誤訊息，接著提示您執行設定程式。

當 POST (開機自我測試) 在開機過程中執行時，螢幕會顯示下列訊息：

Press <F2> to Enter SETUP

請按下 <F2> 鍵來執行 BIOS 設定程式。BIOS 設定程式有 5 個選單，您可以利用 <--> 和 <--> 鍵來選取。如果要從一個選項移動到另一個選項時，您可以在使用 <F5> 和 <F6> 或者使用上下方向鍵或 <+> 和 <-> 鍵來變更設定值。在畫面右側是一些如何變更項目的簡單輔助說明。

在您進入 BIOS 設定程式時，您會在畫面上看到一個選單。您可以用 <- 和 -> 鍵選擇其中的 5 個選單。



選單工具列 設定螢幕頂端具有一個選單工具列，附有以下選項：

- Main** 使用這個選單改變基本系統設定。
- Advanced** 使用這個選單套用並改變您的系統上可用的進階功能。
- Security** 使用這個選單設定使用者與管理者的密碼。
- Boot** 使用這個選單指定筆記型電腦檢查系統開機裝置的順序。

Exit 使用這個選單指定如何離開設定程式。

為了在選單工具列的項目之間移動，請使用[◀]與[▶]方向鍵，直到欲選取的項目反白為止。例如，如果您想要從主選單移動到進階選單，按下右方向鍵[▶]一次。

Item Specific Help 在設定螢幕的底部，您可以找到一個項目指定說明列。工具列會通知您，您在選單上選擇的每個項目之特定功能，以及該項目與/或次工具列的指定相關快捷鍵。

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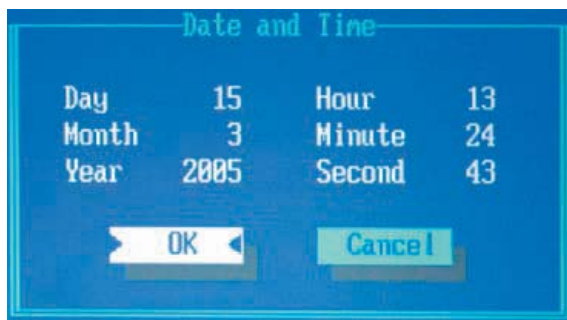
(主選單)Main設定選單

當進入BIOS設定程式時，會在畫面上看到選單。使用下方向鍵來選取主選單。

當進入BIOS設定程式的主選單，您可進行基本系統設定做更改。項目詳細說明如下：

Date and Time (日期和時間)

設定您的系統時間。（通常為目前的時間）格式是時、分和秒，使用 24 小時制的時間。填上適當的資料。 您可使用鼠標在時、分和秒間移動。



Splash Boot Logo (開機標誌)

如果您選擇這個選項，在您開機時即會顯示自訂標誌。如果您不設定它，則會顯示系統檢測順序。使用[輸入鍵]設定是否使用開機標誌。

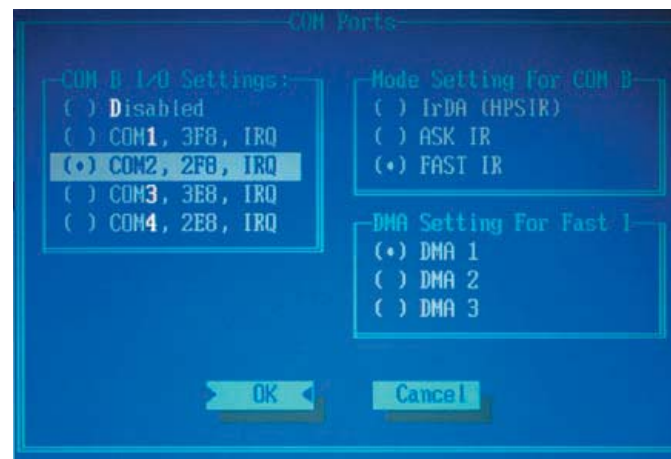


(進階)Advanced設定選單

Advanced 設定選單項目詳細說明如下：

COM 埠

COM 埠是用來改變或設定 COMS 的內容。



FIR I/O 的地址-可讓您開關 FIR 埠或分配一个 I/O 埠給裝置。
您可以有下列的 I/O 選項：

- Disabled (不使用)
- Com1, 3F8, IRQ
- Com2, 3F8, IRQ
- Com3, 3E8, IRQ
- Com4, 2E8, IRQ

IRDA 的模式設定-允許您將FIR 埠設定成傳輸模式。您有下列的選項：

- IrDA (HPSIR)
- ASK IR
- FAST IR

Fast IR 的 DMA設定- 只有當IRDA 的 FIR 埠模式設定被設定成 Fast IR 時才可使用。您有下列的選項：

- DMA 1
- DMA 2
- DMA 3

The default value for this field is (預設值是) : DMA 1

LPT 埠

允許您設定 LPT 埠。您有下列的選項：



- None (無)
- LPT1, 378, IRQ
- LPT2, 278, IRQ

The default value for this field is (預設值是) : LPT1, 378, IRQ 7



改變平行埠和 LPT 埠的預設值地址和 IRQ 設定，可能會和其它已安裝之周邊裝置相互衝突。

USB Supports by BIOS (USB 埠裝置支援)

啟用或關閉USB 埠裝置支援。

使用[空白鍵]決定是否選擇USB 埠裝置支援選項。

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(安全性)Security設定選單

筆記型電腦的安全性設定允許您設定密碼，避免系統資源、資料和BIOS 設定程式。這部份涵蓋了安全性防護

安全性設定選單說明如下：

密碼摘要說明：

BIOS設定可讓您在安全性設定選單中設定密碼。密碼會在系統使用期間，控制對BIOS和特定安全性防護選單之選項的存取。密碼和大小寫無關。即：密碼可以使用大寫或小寫字母來輸入並沒有差別。密碼應該由字母 A-Z、0-9 和10個符號以內長度組成。在設定使用者密碼前，必須先設定系統管理者的密碼。

設定使用者密碼 / 設定管理員密碼



這些選項允許您設定系統密碼。系統密碼允許您對BIOS設定選單的完全存取。如果要設定管理員密碼，選擇好項目後再按[輸入]鍵。

輸入密碼後按[輸入]鍵。您可以輸入十個以內的字母和數字。符號則會被忽略。

要確認設定密碼，再輸入一次密碼然後按[輸入]鍵。此時管理員或使用者密碼已經被設定完成。您現在則可以選擇開機時或進入設定時輸入此密碼。

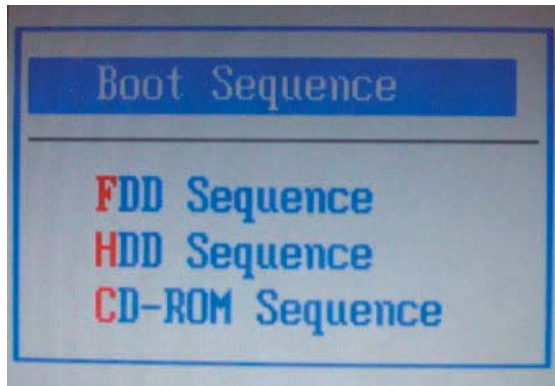
當您需要變更或清除密碼時，需再次進入這個選單來設定新的密碼或更改選項。

(開機)Boot設定選單

The Boot Menu allows the user to specify the order in which the Notebook is to check for a device to boot the system. To make changes, select Boot from the menu bar. The following screen appears: 使用者可以使用此設定來指定開機時磁碟搜尋的順序。如果要選取開機裝置可以進入Boot設定選單後，選取開機裝置。您也會隨即看到下列的畫面：

Boot Device (開機裝置)

開機選單讓您決定開機裝置的順序，以載入作業系統。



離開設定程式的方式

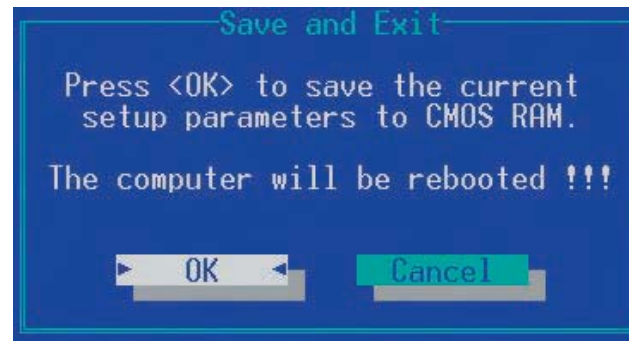
一旦您完成選項的全部設定，你應該儲存所有變更並離開系統設定。選擇離開時，會顯示以下的選項：

按下 [Esc] 鍵可以關閉選單或子選單。再按一次可以儲存所有執行BIOS設定程式所進行的變更並離開系統設定程式，重新開機。

以下是選項的說明：

Save and Exit (儲存變更並離開)

一旦您完成所有的設定，從選單中選擇此項來確定您所有的設定值，會被儲存到 RAM。您一定要儲存變更至RAM，才可使它們有效的運作。此處所指的RAM為非揮發性記憶體，與一般的RAM不同，即使當電腦是關機狀態時，它也會使用主機板上的電源來儲存資料。



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一旦您的設定已經被儲存，系統設定會要求您再度確認您的選擇，然後再重新開機。

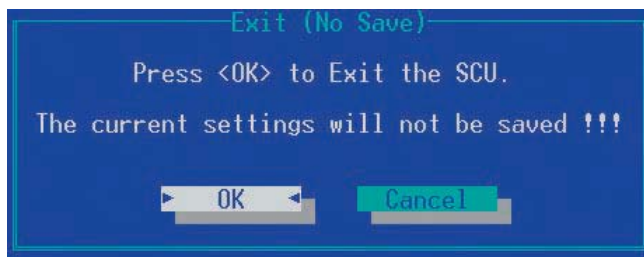
系統將會在您選取OK後重新開機，而如果您選擇取消，則會繼續停留在系統設定中。

下次您開機時，BIOS 就會載入您存在所存在非揮發性記憶體中的設定值。如果這些設定值導致開機失敗，請重新開機然後按[F2]鍵進入系統設定。進入系統設定後，您可以試著改變導致開機失敗的設定值。如果問題持續發生，請載入內建預設值。

如果您沒有儲存設定就要離開系統設定，系統設定將會出現提示字元詢問您是否要在離開前儲存變更值。

Exit (No Save) (放棄變更並離開)

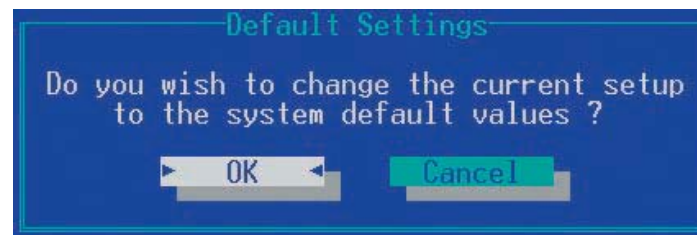
這個選項用於您不要儲存在系統設定中所做的變更。預設值會被設定成 NO。如果您已經在除了系統日期、時間和密碼以外的選項中做了變更，當您選擇放棄變更並離開時，系統設定將會要求您做再確認的動作。



系統則會用預設值重新開機。

Default Settings (載入設定預設值)

這個選項允許您載入所有設定項目的預設值。當您選擇此選項時，系統設定將會出現提示字元(如下圖)詢問您是否要載入所有設定項目的預設值。



您即可選擇確定或取消。

Restore Settings (放棄變更之設定值)

這個選項允許您放棄變更的設定值而恢復到您剛進入系統設定時的狀態。



4.3 BIOS的升級方式

N521系列筆記型電腦使用 EPROM Flash BIOS 晶片，可讓您輕鬆升級 BIOS 程式。

當你更新BIOS時，您所作的任何自訂設定都會流失，請上技嘉網站<http://tw.gigabyte.com/> 取得最新的BIOS升級工具。

在DOS中升級 BIOS:

1. 將BIOS 升級磁碟插入磁碟機中。
(USB 軟碟機、USB 隨身碟或軟碟機)
2. 在磁碟置於磁碟機中時開啟系統電源。
3. 在 DOS 提示字元下，輸入以下指令。

```
A:\> Phlash016 XXXXXX.ROM (BIOS filename) /allb /c
```

或

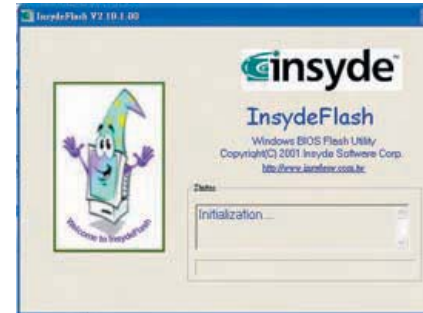
```
A:\>XXXXXX.BAT (Batch file for BIOS file)
```

4. 系統現在正自動執行 BIOS 升級。
5. 在升級完成後系統會自動關機。

在Windows中升級BIOS：

1. 請上技嘉網站：<http://www.gigabyte.com.tw> (首頁 > 技術支援 > 筆記型電腦 > BIOS > N521的BIOS) 下載 ❶ BIOS 升級工具 (InsydeFlash) 和 ❷ 最新的BIOS升級版本。
2. 解壓縮您下載的檔案。
3. 在解壓縮的檔案中執行10b.exe。

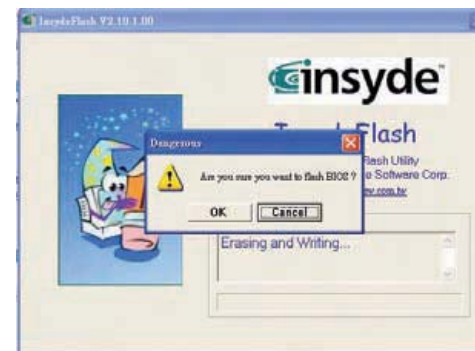
4. BIOS Flash程式正在初始狀態。



5. 請確定您正在使用AC變壓器的電源，若您不是則以下的訊息將會出現。

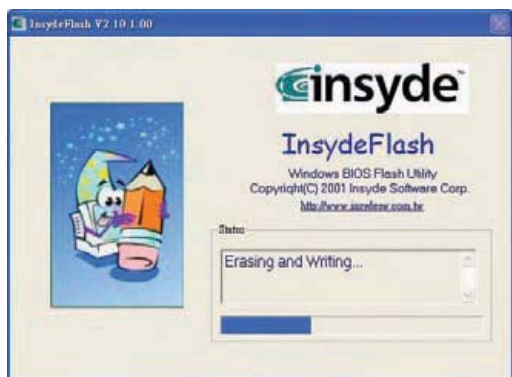


6. 按一下 [OK] BIOS Flash程式將會立即執行更新。



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7. BIOS Flash程式開始執行更新動作，其更新執行階段將顯示如下畫面。



8. 當程式執行完畢系統會自行關機，您可以按下電源鈕開啟您的筆記型電腦。



4.4 系統升級

您可以升級您的記憶體大小以符合系統規格。本節提供您一個升級系統的簡單步驟。

操作升級步驟前，請聯絡經銷商或合格技師。沒有合格技師的幫助，使用者操作很可能造成損壞。而因使用者私自升級造成的損壞並不在保固範圍。

您的筆記型電腦提供 2 種記憶體插槽，使用的是 200-pin 的 SODIMM (Small Outline Dual Inline Memory Module)，最低配備為 128MB DDR SDRAM。其中一個插槽供主機上的記憶體模組使用，您可以用另一個插槽增加另一組記憶體來升級。

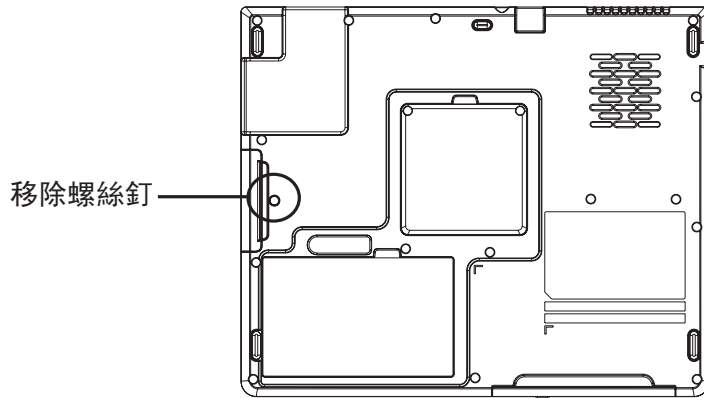
安裝記憶體模組

1. 請確定系統電源關閉、電池組也被移除，並且沒有連接任何周邊裝置。
2. 翻轉您的電腦，找出在電腦底部鎖住 DIMM 記憶體插槽蓋子的螺絲。
3. 移除螺絲釘，並用手指開啟 DIMM 記憶體插槽的蓋子。
4. 將記憶體模組已 30 度角度放入空的記憶體模組插座，請將凹口對著連結卡鎖以便和記憶體插槽吻合。
5. 記憶體模組順利就位後，慢慢將它往下壓，直到記憶體插槽的連結卡鎖卡住凹口。將鎖住 DIMM 記憶體插槽蓋子蓋上並用螺絲鎖固定。

硬碟升級

您的筆記型電腦提供一台 2.5 吋格式、高度 9.5mm 的硬碟。如如果容量不符合您的需要，或是發生損壞，您可以藉由更換新的硬碟來升級。請依下列步驟來進行更換：

1. 請確定系統電源關閉、電池組也被移除，並且沒有連接任何周邊裝置或AC電源。翻轉您的電腦，找出在電腦底部鎖住硬碟槽的螺絲。



2. 小心地抽取出硬碟槽。
3. 取下固定硬碟兩側的螺絲。
4. 輕輕地將硬碟與接頭分離。
5. 準確地把接頭接上新的硬碟。
6. 將保護用金屬護片覆蓋到新硬碟機上，然後轉緊螺絲釘。
7. 把硬碟放置回硬碟槽內。

8. 將硬碟槽推入，然後轉緊螺絲釘。

在 BIOS 設定程式中設定選單中將開機裝置設為光碟機（光碟，數位影像光碟...），並將 Primary Master 設為 Auto（自動）。關於 BIOS 設定選單的設定值，請參閱第四章第二節。然後以 WinXP 光碟開機，系統將會自動偵測到硬碟並提示您格式化新硬碟的方式。

附註：在操作硬碟之前請鎖緊位於硬碟兩側的螺絲。任何震動可能會對運作中的硬碟造成損害。要更換硬碟，請聯絡您的經銷商或經認證的技術人員。使用者自行更換硬碟所造成的損害，不在產品保證範圍內。

附註：如果您決定進行組件升級，請聯絡當地經銷商。

附註：避免接觸系統內外露的組件。這樣做可能會損壞系統。如果您決定升級元件，請聯絡您當地的經銷商。

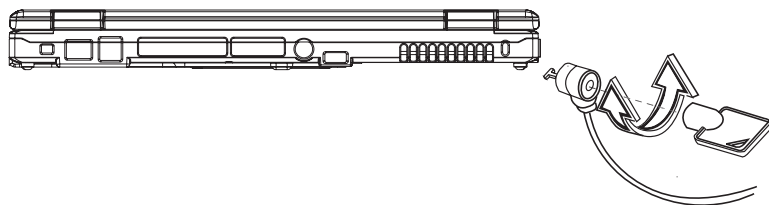
4 個人化您的 N521 系列筆記型電腦

4.5 保護您的 N521 系列筆記型電腦

我們提供了硬體與軟體安全鎖來保護 N521 系列筆記型電腦，包括電腦安全鎖和密碼設定。

電腦安全鎖的使用方式：

位於電腦後方的安全鎖孔可讓您連接與 Kensington 相容的電腦安全鎖。



設定密碼：

1. 管理員密碼可保護您的電腦，防止他人擅自使用電腦和使用 BIOS 公用程式。
2. 使用者密碼可防止他人擅自使用必電腦。
3. 硬碟機密碼可避免防止他人擅自存取電腦硬碟中的資料。

請牢記您的設定和硬碟密碼。如果您忘記了密碼，請聯絡授權的服務中心。



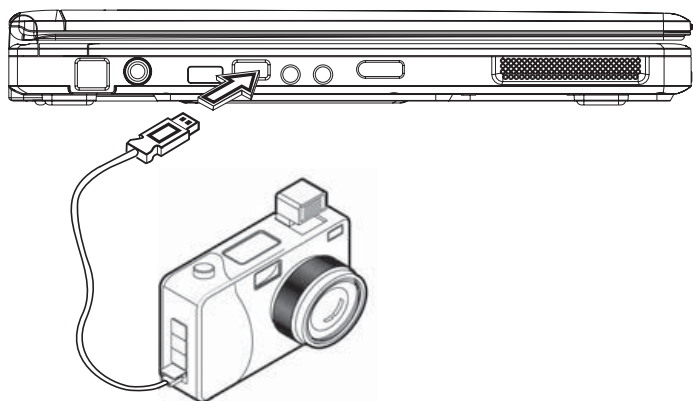
第五章 連接周邊裝置

本章描述如何把周邊裝置接到您的N521系列筆記型電腦。您將學習到如何用本章所說明的循序步驟來能連接其他周邊裝置。

5 連接周邊裝置

5.1 使用 USB埠

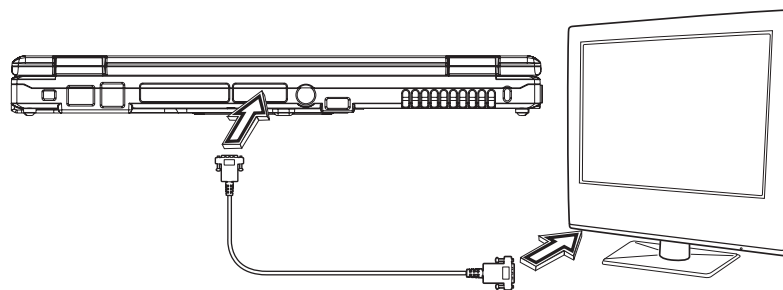
USB 埠可連接USB周邊裝置，例如軟碟機、滑鼠、數位像機、掃描器、印表機、光碟機、鍵盤和遊戲裝置，並可做為附加外掛工作站或集線器使用。



5.2 連接外部顯示器埠

N521系列筆記型電腦擁有一個VGA埠，支援任何外接顯示螢幕(CRT/LCD)。如果您要連接外部顯示器，請依照下步驟：

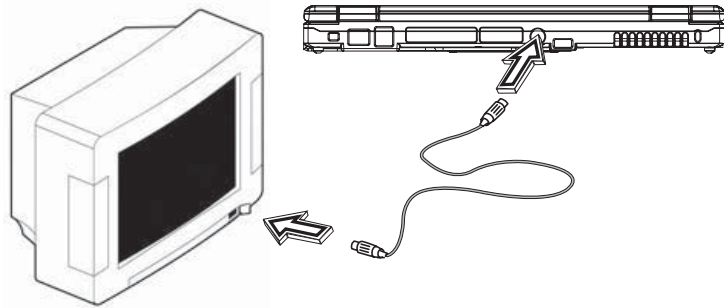
1. 關閉 N521系列筆記型電腦的電源，同時確定已關閉螢幕電源開關。
2. 將螢幕接頭纜線接到 N521背後的VGA埠。以隨附的螺絲轉緊纜線接頭。
3. 接上顯示器的電源線，將它正確地插到牆壁插座。
4. 開啟螢幕。
5. 開啟 N521 電源，液晶面板和監視器螢幕都會有畫面顯示。您的筆記型電腦的預設值為同步顯示模式。
6. 如果您只想要使用外接螢幕 (CRT/LCD) 並關閉 LCD 顯示器，您可以使用 <Fn> + <F5> 的快速鍵組合在 LCD 和 CRT 之間切換顯示畫面。持續按住快速鍵，直到只顯示外接 CRT/LCD 螢幕。



在連接顯示器時您的筆記型電腦必須先關閉電源進入暫停模式，否則可能會損壞電腦和顯示器，並縮短兩者的使用壽命。

5.3 連接 S-Video 埠

S-Video 埠可讓您輸出到支援 S-Video 輸入的電視或顯示裝置。如果您要呈現簡報，以下步驟相當重要：

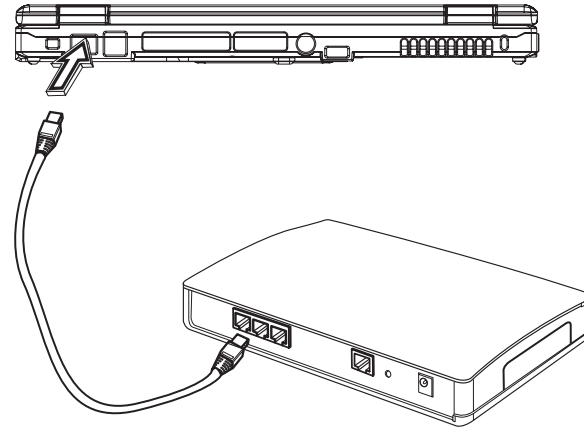


1. 關閉 N521 筆記型電腦的電源，將 RCA 插孔連接線的一端插到電視機的輸入視訊插孔。
2. 設定您所要的電視標準 (NTSC、PAL、SECAM、BIOS Default (預設 BIOS))。
3. 關啟您的筆記型電腦和電視機電源。
4. 按下<開始>，點選<設定>，進入<控制台>。
5. 按兩下「顯示」圖示，點選「設定值」標籤頁。
6. 按兩下「進階(V)」按鍵，點下 Intel® Extreme Graphics 標籤頁後按下「圖畫內容」。
7. 如果您想在「裝置」標籤頁內變更相關的詳細設定值，請選擇「電視」圖示，最後按下「確定」鍵。Windows 會自動偵測到電視輸出埠並啟用此功能。

5.4 使用 LAN 埠

如果您要使用 LAN 埠，請依照以下步驟：

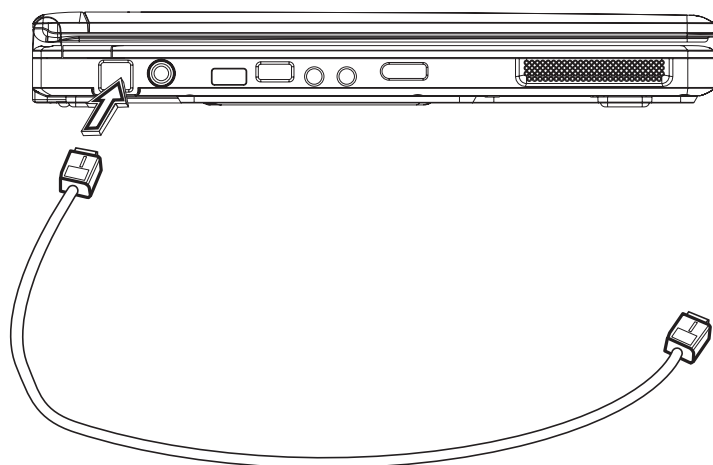
1. 在筆記型電腦包裝中的附件盒找出雙絞線，此線的每端都有一個 RJ-45 連接頭。
2. 將雙絞線的一端連接到網路插座或集線器(HUB)的一端。
3. 將雙絞線的另一端連接到電腦的 RJ-45 LAN埠。



5 連接周邊裝置

5.5 使用數據機埠

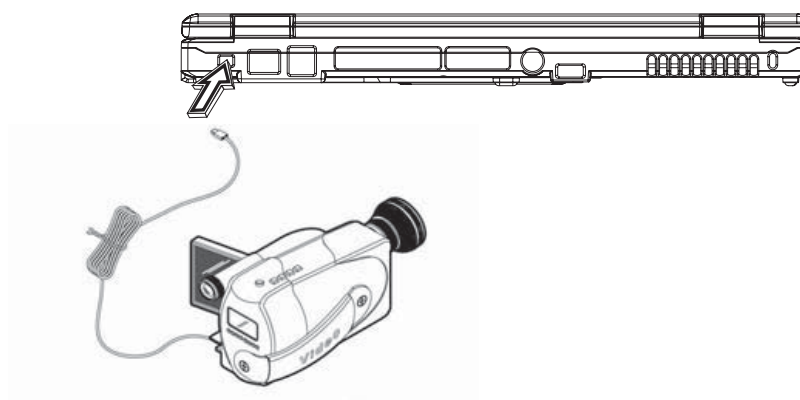
內建的傳真/數據 (fax/data) 數據機提供一個標準的電話連接頭。可讓您透過傳真及電子郵件與他人溝通，或是連線到線上服務或網際網路。



5.6 IEEE 1394 埠

透過內建的 IEEE 1394 埠，您的筆記型電腦可支援高速傳輸，並能夠以相當速率傳遞資料，讓周邊的裝置可以傳送數位影像資料或資料備份。Windows 系統能自動辨識，並為周邊裝置安裝適當的驅動程式。

此外，您應安裝週邊裝置的驅動程式以連接 IEEE 1394 埠，詳細資訊請參閱周邊裝置隨附的使用手冊。



5.7 PC 卡插槽

您可以在右側看到一個 PC 卡插槽。

這些信用卡一般大小的卡片可增強電腦的效能。PC 卡 (以前稱為 PCMCIA) 是用於行動電腦的附加卡，長久以來乃提供桌上型電腦擴充功能。最受歡迎的 Type II 卡包括快閃記憶體 (flash memory)、SRAM、傳真/數據 (fax/data) 數據機、LAN 和 SCSI 卡。CardBus 將資料路徑擴充到 32 位元改善 16 位元的 PC 卡技術。

PC 卡可以抽換，也就是說它在電腦開機狀態時也能隨時插入。電腦會自動偵測到您插入的 PC 卡。通常 PC 卡會有圖型標示插入卡插槽的方向。若有其他疑問，請參考該卡的使用手冊。

插入 PC 卡

1. 依卡上的標示，正面朝上將卡插入 PC 卡插槽內。插入卡前，卡槽退卡鍵可能需要先就定位。
2. 將卡將卡插入 PC 卡插槽內，直到它卡進連接頭。
3. 如果您遇到阻力，不要強制將卡壓進去。先檢查卡片的插入方向，再試一次。

您的筆記型電腦可辨別大多數的 PC 卡，會自動上載適當的驅動程式。如果驅動程式告知您要下載製造廠的驅動程式，請使用 PC 卡所附上的光碟片或磁碟片。

退出 PC 卡

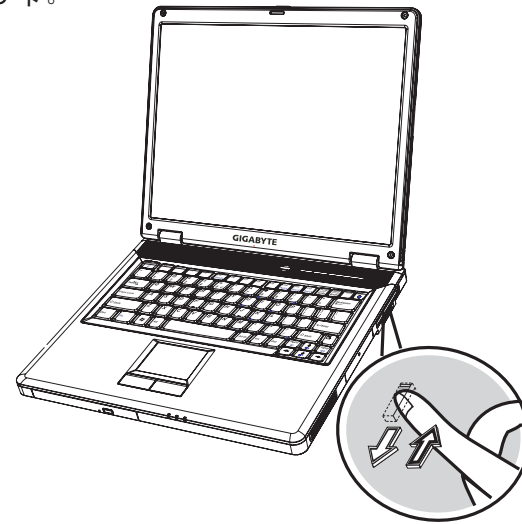
在退出 PC 卡之前：

- 結束使用 PC 卡的應用程式。
- 在系統列的 PC 卡圖示上按下滑鼠左鍵後停止作業。

若是沒有做到上述兩點，可能會導致資料遺失。如果 PC 卡有連接線，切勿借助拉連接線來取出 PC 卡。

按下卡槽退卡鍵一次讓卡片跳出來，然後再按一次退出 PC 卡。可接受一張 Type II 16 位元 PC 卡或支援 32 位元 CardBus PC 卡。

1. 按下卡槽退卡鍵一次讓卡片跳出來。
2. 然後再按一次退出 PC 卡。
3. 取出 PC 卡。



6 清潔與維護



第六章 清潔與維護

我們了解您的筆記型電腦是您貴重的投資和最佳夥伴，只要用心維護它必定會一直達成您的需求。本章將提供您清潔及維護筆記型電腦的方式和注意事項。

6.1 照顧您的 N521 系列筆記型電腦

- 機殼上的開口用來通風，讓您的筆記型電腦免於過熱。
「請勿遮蓋住通風口」。
- 請勿讓您的筆記型電腦曝露在直接日照下。請勿將電腦至於靠近熱源如電暖器的地方。
- 請勿讓您的筆記型電腦曝露在低於攝氏 5 度 (華氏 41 度) 或超過攝氏 40 度 (華氏 104 度) 的地方。
- 請勿讓您的筆記型電腦接觸磁場。
- 請勿讓您的筆記型電腦曝露在雨水或溼氣底下。
- 請勿將水或液體潑灑在您的筆記型電腦上。
- 請勿讓您的筆記型電腦受到劇烈搖晃或震動。
- 請勿讓您的筆記型電腦曝露到灰塵或泥土。
- 絕對不要將重物放在您的筆記型電腦上，以免損壞您的電腦。
- 絕對不要將您的筆記型電腦放在不平的表面。
- 請務必只以隨附的電源變壓器搭配您的筆記型電腦使用。
- 如果您長時間不使用筆記型電腦，請將變壓器自主機上取下，以避免一時電壓過高可能造成的損壞。
- 絕對不要開啟您的筆記型電腦內部。基於安全性的理由，您的筆記型電腦只能由合格的服務人員開啟。

6.2 清潔與維護

在清潔 N521 系列筆記型電腦時，請依造以下步驟：

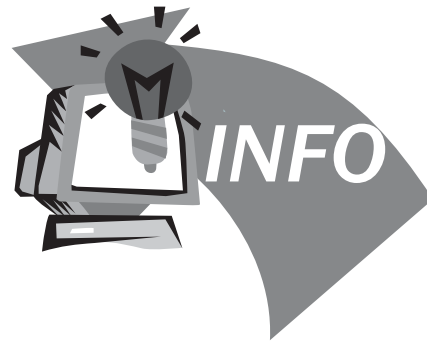
1. 關閉 N521 的電源並取下電池組。
2. 取下 AC 變壓器。
3. 使用以水沾溼的軟布，不要使用液態或含酒精的清潔劑。
4. 讓 N521 的上蓋維持開啟約 10 分鐘散熱。熱能在維護螢幕上扮演一個重要的角色。一段時間不開啟系統時，您應該啟用 N521 的電源管理功能來關閉 LCD 電源和顯示器。安裝螢幕保護程式也是維護螢幕的好方法之一。
5. 使用者必須養成大約每個禮拜維護硬碟的習慣。提供您一些提示：
 - 在出發旅行前請確定您已備份了所有資料。
 - 安裝病毒偵測程式以避免電腦受損。
 - 每隔一段時間使用一次 SCANDISK (掃描磁碟) 功能和「檔案配置表」(File Allocation Table) 以更正在目錄中發現的錯誤。如此可以釋放未使用的磁碟區段上的空間。
 - 存取電腦內的資料時，絕對不要移動或抬起電腦，更不要搖動硬碟，如此會造成硬碟毀損。
 - 使用硬碟維護程式，如 Windows 的「磁碟重組工具」。這些工具可消除檔案分離、重組您的硬碟並改善存取硬碟的時間。
 - 為您的電腦設定一個系統密碼。如此一來，其他人就不能使用硬碟。

6 清潔與維護

6.3 帶著 N521系列筆記型電腦去旅行

關於旅行時的安全性和便利性，請依造以下步驟：

- 在出發旅行前先備份硬碟上的資料。
- 將電池充電一個晚上，確保在您出發前電池已有完整的電力。
- 別忘了將 AC 變壓器和備用電池組一起攜帶。
- 也試著同時攜帶備份軟體。
- 確認您的目的地之額定電壓和插座類型。如果變壓器的電線不同，則您必須購買合適的裝備。詳請請與您的經銷商聯絡。
- 請將您的筆記型電腦裝在攜帶盒或公事包中。請不要將電腦登記為一般行李。
- 記得使用省電功能和技術以節省電池電力。



第七章 疑難排解

本章將指導您如何處理常見的系統問題。如果問題發生時，在請先參考再決定是否打電話給技術人員。解決較嚴重的問題可能需要拆開您的筆記型電腦。

請勿嘗試自行開啟您的筆記型電腦。請聯絡您的經銷商或授權的服務中心尋求協助。

7 疑難排解

7.1 常見問答集



❖ 我按下電源開關，但是我的電腦沒有啟動或開機。
檢視電源 (Power) 指示燈：

- 如果指示燈沒亮，表示您的筆記型電腦沒有接電。請檢查下列項目：
 1. 如果您使用的電源是電池，可能是電池電力過低，無法開啟電腦。請連接 AC 變壓器對電池組重新充電。
 2. 請確定 AC 變壓器已正確地連接到您的電腦和電源插座。
- 如果指示燈亮著，請檢查下列項目：
 1. 如果待機 (Standby) 指示燈亮，表示您的電腦處於待機模式。按下任何鍵或敲一下觸控板以回復為正常模式。
 2. 軟碟中是否有非開機 (非系統) 磁碟在軟碟機中？請取出此磁碟或更換系統磁碟，並按下 Ctrl-Alt-Del 重新啟動系統。

作業系統可能損壞或遺失。將您在 Windows 設定中建立的開機磁碟插入軟碟機中，按下 Ctrl-Alt-Del 重新啟動系統。此動作可診斷您的系統並進行必要的修正。

❖ 螢幕上沒有畫面。
電源管理系統會自動讓螢幕變成空白，以節省電力。按任何按鍵可重新開啟顯示器。

如果按下按鍵沒有重新開啟顯示器，原因可能有兩個：

1. 亮度可能過低。按下 Fn+  和 Fn+  的按鍵組合來調整亮度。
2. 顯示裝置可能設為外部顯示器。按下顯示器切換快速鍵組合 Fn-F5，將顯示器切換回您的筆記型電腦。

❖ 顯示在螢幕上的影像不完全。
請確定解析度已設為您的系統支援的解析度。在 Windows 桌面上按一下滑鼠右鍵，選擇「內容」後會出現「顯示內容」對話框。然後點下「設定值」標籤頁，確定解析度的設定正確。低於指定的解析度時影像不會完全顯示在筆記型電腦或外部顯示器上。

❖ 外部麥克風無法運作。
請檢查以下各項：

1. 請確定外部麥克風，以連接到筆記型電腦上的麥克風輸入插孔。
2. 如果您聽不見播放的聲音，可能是揚聲器設為靜音。

❖ 電腦沒有聲音。

請檢查下列項目：

1. 如果您使用的電源是電池，可能是電池電力過低，無法開啟電腦。請連接 AC 變壓器對電池組重新充電。
2. 音量可能調成靜音。在視窗模式中，查看系統列上的音量控制圖示。如果上面被打叉，請按下圖示，解除靜音的選擇。
3. 揚聲器的音量可能被關閉。按下 Fn-F6 的按鍵組合，開啟揚聲器（此快速鍵組合亦可關閉揚聲器）。
4. 音量可能太低。在視窗模式中，查看系統列上的音量控制圖示。按下音量圖示後調整音量。
5. 如果是連接到電腦後面板 Line-Out 埠的耳機或外部揚聲器沒有聲音，可能是內部揚聲器被關閉。

❖ 鍵盤沒有回應。

嘗試連接外部鍵盤到電腦後面板上的 USB 連接埠。如果此鍵盤作用，請聯絡您的經銷商或授權的服務中心因為內部鍵盤線可能鬆脫。

❖ 我想要設定我的撥號內容以使用網路數據機。

要正確地使用您的通訊軟體 (如HyperTerminal)，您必須如此設定您的撥號內容：

1. 開啟 Windows 「控制台」，在「數據機」圖示上

按兩下滑鼠左鍵。 the Modems icon.

2. 按下並開啟「撥號內容」，開始設定您的撥號內容。請參考您的 Windows 手冊。

- ❖ 為何麼電池充電 99-95% 時我無法將它變更為 100%？
為保存電池的使用壽命，系統只會讓您在電池電量低於 95% 時才進行充電。但我們建議您多帶一顆額外的電池，並在充電前讓系統用光其電力。



附錄A 系統資訊

本附錄提供您 N521系列筆記型電腦的技術和硬體規格的資訊。請注意此處提及的資訊可能與您的筆記型電腦不同，因為規格可能會變更而不事先通知，本手冊內容可能也會有所修改。

您的 N521系列筆記型電腦是最先進的模組架構所設計，可提供您先前只有在桌上型個人電腦上才做得到數種自訂和擴充功能。

微處理器

- 具備400/533MHz FSB 的Intel® 新世代 90 奈米 Celeron® Dothan 處理器 1.70~2.13 GHz

核心邏輯

- N521U為Intel® Alviso 915GM/ ICH6-M
- N521A為Intel® Alviso 915PM/ ICH6-M

記憶體

- 256/512 MB /1GB的標準 DDR333 SDRAM ，可升級到2GB 的雙 SODIMM 模組。
- 512K flash ROM BIOS

資料儲存

- 2.5吋、9.5mm、UltraDMA-100 硬碟，有40GB/60GB/80GB 三種
- 一台內建光碟機 (DVD-Combo/ DVD-Dual)
- 4 合 1 SD/ MMC/ MS/ MSPRO 讀卡機

顯示器和影像卡

- 薄膜電晶體 (TFT) 顯示器，15 吋 WXGA (1024X768) 的解析度
- Intel® Graphic Media Accelerator 900
- ATI MOBILITY™ RADEON® X600 ，配備 128 MB的視訊記憶體
- 支援同步顯示的 LCD 和 CRT
- 雙獨立顯示器

連結性

- N521A為整合性的 10/100/1000 Mbps 快速 Ethernet 連線
- N521U為整合性的 10/100 Mbps 快速 Ethernet 連線
- 內建 56Kbps 傳真/數據 (fax/data) 數據機
- 三個萬用序列匯流排 (USB) 2.0 埠
- Intel® 802.11b/+g /802.11a+b+g 雙頻無線區域網路 (選配)

音訊

- AC"97 立體聲音訊
- 雙揚聲器
- 獨立的音訊埠，可用於耳機輸出和麥克風輸入裝置

鍵盤和指向裝置

- 88/89 鍵的 Windows 鍵盤
- 具捲動功能的人體工學中置觸控板指向裝置

I/O 埠

- 一個 Type II PC卡插槽
- 一個 RJ-11 電話插孔 (V.92, 56Kbps 數據機)
- 一個 RJ-45 網路插孔
- 一個 DC 電源輸入插孔 (AC 變壓器)
- 一個 VGA 埠
- 一個揚聲器/耳機輸出插孔 (3.5mm 迷你插孔)
- 一個麥克風輸入插孔 (3.5mm 迷你插孔)
- 一個平行埠
- 一個 S-video TV-Out 埠
- 一個 IEEE 1394 埠
- 四個 USB 2.0 埠

附錄A -系統資訊

- 4合1 SD/ MMC/ MS/ MSPRO 讀卡機

無線網路

- 無線網路開關

重量 (包估電池和光碟機)

- N521A 機型: 約 2.86 公斤
- N521U 機型: 約 2.81 公斤

尺寸

- 333.6 (寬) x 276(深) x 32.1mm (高) (最高包括電池為 35.8mm)

Power

- 可充電鋰 (Li-Ion) 電池組 2150mAh, 8-cell battery
- 65W AC 變壓器 19V 3.42A



附錄 B 服務中心

本附錄提供您關於您的 N521 筆記型電腦的全球筆記型電腦的全球服務資訊。

附錄B - 服務中心

台灣 (總公司) 技嘉科技股份有限公司

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如何提出我的問題?

技術方面

關於使用技嘉產品的問題

非技術方面

銷售和行效議題

網址(英文): <http://tw.giga-byte.com/>

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羅馬尼亞

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塞爾維亞&蒙特尼哥羅

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