

Mobile PC

User's Guide



Preface

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Federal Communications Commission Radio Frequency Interference Statement



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 instruction manual may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Notice:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Shielded interface cables and a non-shielded AC power cord must be used in order to comply with emission limits.

This equipment is to be used with power supply:

I/P: 100-240 Vac, 50-60Hz, 1.6A max

O/P: 19Vdc, 3.16A

There is no internal power supply.

Canadian DOC Notice For Class B Computing Devices

This Class B digital apparatus meets all requirements of the Canadian Interference - Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Safety Precautions

This section is designed to assist you in identifying potentially unsafe conditions while working with this product. Required safety features have been installed in the computer to protect you from injury. However, you should use good judgment to identify potential safety hazards:

1. Please read these safety instructions carefully.
2. Please keep this User's Manual for later reference.
3. Please disconnect this equipment from AC outlet before cleaning. Don't use liquid or sprayed detergent for cleaning. Use moisture sheet or cloth for cleaning.

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4. For pluggable equipment, that the socket-outlet shall be installed near the equipment and shall be easily accessible.
 5. Please keep this equipment from humidity.
 6. Lay this equipment on a reliable surface when isntall. A drop or fall could cause injury.
 7. Make sure to use the right voltage for the power source when connecting the equipment to the power outlet.
 8. Place the power cord in such a way that people can not setp on it. Do not place anything on top of the power cord.
 9. All cautions and warnings on the equipment should be noted.
 10. If the equipment is not use for a long time, disconnect the equipment from the main power outlet to avoid being damaged by transient overvoltage.
 11. Never pour any liquid into the opening, this could cause fire or electrical shock.
 12. Never open the equipment. For safety reason, the equipment should only be opened by a qualified service personnel.
 13. If on the following situations arises, get the equipment checked by a service personnel:
 - a. The Power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment has not work well or you cannot get it work according to the user's manual.
 - e. The equipment has dropped and damaged.

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- f.* If the equipment has obvious sign of breakage.
- 14.** Do not leave this equipment in an environment unconditioned, storage temperature above 60°C (140°F), it may damage the equipment.
- 15.** The unit can be operated at an ambient temperature of max. 35°C.
- 16.** The sound pressure level at the operators position according to IEC 704-1: 1982 is equal or less than 70 dB(A).
- 17. Power Cord Requirements**
The power cord set used with the AC adaptor must meet the requirements of the country where you use the AC adaptor, whether it is 100-120 or 200-240 Vac. The following information explains the requirements for power cord set selection.
- The cord set must be approved for the country in which it is used.
 - The appliance coupler must have a configuration for mating with a CEE22/EN6032/IEC 320 appliance inlet.
- A.** For U.S. and Canada:
- The cord set must be UL Listed and CSA Certified.
 - The minimum specifications for the flexible cord are No. 18 AWG.
- B.** For Japan:
- All components of the cord set must bear a “ T ” mark and registration number in accordance with the Japanese Dentori Law.
 - The minimum specifications for the flexible cord are .75m m² conductors.
- C.** For Other Countries:
- The cord set fittings must bear the certification mark of the agency responsible for evaluation in a specific country.

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- The flexible cord must be of a HAR (harmonized) type H05VV-F.
 - The cord set must have a current capacity of a least 2.5 Amperes and voltage rating of 125 or 250 Vac.

- 18.** When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons. These precautions includes the following:
1. Do not use this product near water, for example, near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
 2. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
 3. Do not use the telephone to report a gas leak in the vicinity of the leak.
 4. Use only the power cord indicated in this manual.
- 19.** Do not use the AC adapter near open water or other liquids. Never spill liquid into the AC adapter.
- 20.** Laser Warning: Laser Class I Product Caution - Invisible laser radiation when open avoid exposure to beam.
- 21.** 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. Never remove the battery pack while the power is on as this may result in data loss when the system loses power.

Wichtige Sicherheitshinweise

1. Bitte lesen Sie diese Hinweis sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Versenden Sie keine Flüssig- oder Aerosolreiniger. Am besten eignet sich ein angefeuchtetes Tuch zur Reinigung.
4. Die Netzanschlußsteckdose soll nahe dem Gerät angebracht und leicht zugänglich sein.
5. Das Gerät ist vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Beschädigungen hervorrufen.
7. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwerte.
8. Verlegen Sie die Netzanschlußleitung so, daß niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
9. Alle Hinweise und Warnungen, die sich am Gerät befinden, sind zu beachten.
10. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
11. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. Elektrischen Schlag auslösen.
12. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen

Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.

- 13.** Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu Überprüfung.:
- a.* Netzlabel oder Netzstecker sind beschädigt.
 - b.* Flüssigkeit ist in das Gerät eingedrungen.
 - c.* Das Gerät war Feuchtigkeit ausgesetzt.
 - d.* Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
 - e.* Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
 - f.* Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.
- 14. VORSICHT:** Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.
- 15.** Dieses Schaltnetzteil kann bis zu einer Außentemperatur von maximal 35°C.
- 16.** Die Ausgangswerte dürfen nicht die auf dem Label angegebenen Werte überschreiten.
- 17. Anforderungen an das Stromkabel**
Das Kabel-Set, das an das Netzteil angeschlossen wird, muss den Anforderungen des Landes, in dem Sie das Netzteil einsetzen, genügen, je nachdem, ob die Netzspannung 100-120 oder 200-240V Wechselspannung beträgt.
- Das Kabel-Set muss für das Land, in dem es eingesetzt wird, zugelassen sein.
 - Der Gerätestecker des Kabels muss in eine CEE22/ EN603/ IEC 320 Buchse passen.

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- A.** Für die USA und Kanada:
 - Das Kabel-Set muss UL-gelistet und CSA zertifiziert sein.
 - Die Minimalanforderungen für das Kabel entsprechen No. 18 AWG.
 - B.** Für Japan:
 - Alle Teile des Kabel-Sets müssen entsprechend dem japanischen Dentori Law mit einem "T"-Symbol markiert sein
 - Die Minimalanforderungen für das Kabel sind .75m m^2 Leiter.
 - C.** Für andere Länder:
 - Die Zubehörteile des Kabel-Sets müssen das Prüfsiegel derjenigen Stelle, die in dem jeweiligen Land für die Sicherheitsprüfung zuständig ist, tragen.
 - Das Kabel muss vom HAR (harmonisierten) Typ H05VV-F sein.
 - Das Kabel-Set muss eine Stromkapazität von mindestens 2,5 Ampere haben und Spannungen von 125 oder 250 V Wechselstrom gestatten.

18. Bei der Benutzung Ihres Telefongerätes sollten Sie immer die grundlegenden Sicherheitsmaßnahmen beachten, um das Risiko von Feuer, Stromschlägen und Verletzungen zu minimieren. Zu beachten sind u.a. folgende Punkte:

1. Benutzen Sie das Gerät nicht in der Nähe von Wasser, wie zum Beispiel Badewanne, Waschbecken, Spülbecken, Waschbottich, in feuchten Kellerräumen oder in der Nähe von Schwimmbecken.
2. Benutzen Sie kein Telefon (ausgenommen schnurlose Modelle) während eines Gewitters. Es besteht das geringe Restrisiko eines Blitzschlages.
3. Benutzen Sie das Telefon nicht um ein Gasleck zu melden, falls es sich in der Nähe des Lecks befindet.
4. Benutzen Sie nur solch ein Stromkabel, wie in dieser Anleitung beschrieben.

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- 19.** Benutzen Sie das Netzteil nicht in unmittelbarer Nähe zu Wasser oder anderen Flüssigkeiten. Gießen Sie nie Flüssigkeiten über das Netzteil.
 - 20.** Achtung Laser: Laser Produkt der Klasse I. Achtung - Unsichtbarer Laserstrahl, vermeiden Sie Kontakt mit dem Strahl bei offenem Gehäuse.
 - 21.** Es besteht Explosionsgefahr, wenn der Akku nicht ordnungsgemäß ersetzt wird. Ersetzen Sie den Akku nur durch einen Akku gleichen oder äquivalenten Typs, der vom Hersteller empfohlen wird. Entsorgen Sie Akkus entsprechend den Anweisungen des Herstellers. Entfernen Sie den Akku auf keinen Fall bei eingeschaltetem Mobile PC, da hierdurch Daten verloren gehen könnten.

Personal Inventory

This Mobile PC system is designed for years of productive and pleasurable computing. Use this section to keep notes about details of your purchase. Update this section when you add new options.

Date of Purchase:

Dealer's Name:

Phone:

Address:

E-Mail Address:

WWW Site:

Serial Number:

CPU Type:

Hard Disk Capacity:

Memory Capacity:

Optional Equipment:

Chapter 1

Introduction



Things you must remember before working on your computer

Let your computer acclimate itself

Your Mobile PC can easily stand temperature extremes but it doesn't like rapid changes in temperature, like going from the cold outdoors to a warm office. Rapid changes in temperature can cause water droplets to condense inside your case, threatening to damage the electronic parts inside.

After receiving your Mobile PC when it's hot or cold outside, try not to power up the computer immediately, let the computer adjust to the room temperature gradually at least for three to four hours



If your system arrives in cold weather, do not apply power to the computer or monitor until they have been allowed to come to room temperature

Heat, Cold, Humidity, and Glare

Find a suitable place for your computer that's not too hot, too cold, too dark, or too bright. Glare can make it hard to read the screen.

- Try to avoid the computer components from being destroyed if it is over heated, so try to allow plenty of room for air to circulate around the case.
- Do not block the ventilation opening.
- Do not place your computer in direct sunlight.

A few tips to help you work effectively without a lot of physical discomfort:

- Purchase a chair with armrests and good back support. Don't slouch when sitting; keep your back straight.
- Try to place the LCD panel or external monitor so that there is little glare from the sun on the monitor.
- Walk around the room every hour.
- Every half hour look away from the computer screen for a few minutes.
- Place everything that you need to work within easy reach.

Welcome to the Mobile PC

Congratulations on your purchase of the Mobile PC. Your Mobile PC features the latest advances in portable computing technology. The Mobile PC's modular design provides maximum expandability without compromising portability. The high-performance CPU and enhanced IDE hard drive provides you with extra processing power for handling complex graphics and running large programs.

Getting to Know Your Computer

Opening the LCD Panel

At the front of the Mobile PC you will find a retaining latch on the display panel that locks the display in closed position when the Mobile PC is not in use.

1. Slide the display panel latch to the right until the display panel releases, and then raise the LCD screen.

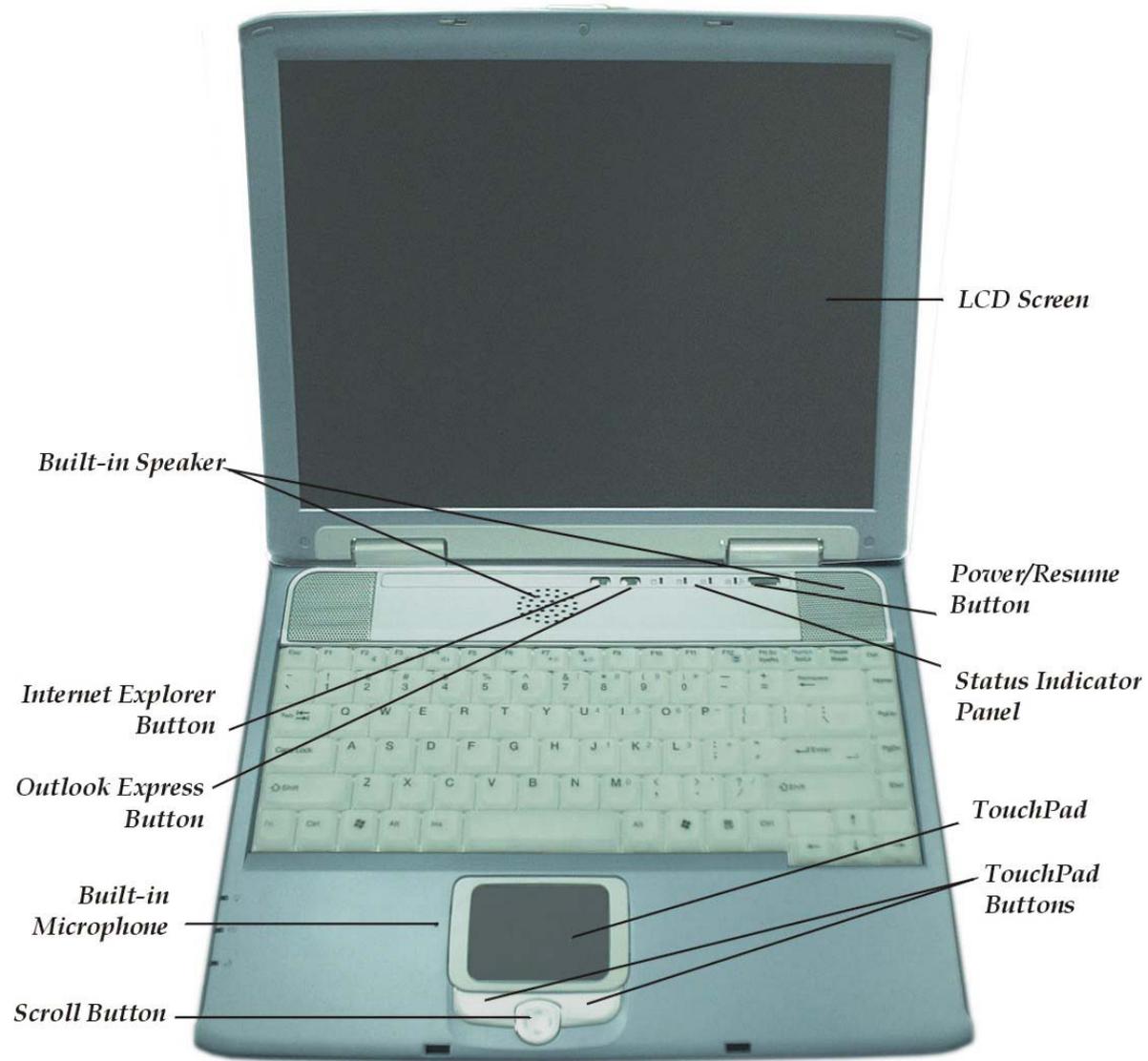
-
2. At any time you can tilt the display toward or away from you to a comfortable viewing position.



To avoid damage to the display panel:

- 1. Try not to slam the display upon closing it.**
- 2. Try not to place any object on top when it is closed or open.**
- 3. Be sure the system is turned off or in suspend mode before you close the display panel.**

With the LCD screen open, you will see several features important for operating your Mobile PC.



Each of these features is briefly described below.

LCD Screen

Your Mobile PC is equipped with a replaceable color Liquid Crystal Display (LCD) screen that supports up to 1024 x 768 x 32 bit LCD resolution utilizing a PCI BUS.

A built-in backlight allows you to comfortably view the screen even when ambient lighting is low.

Power/Resume Button

Pressing this button for 1-2 seconds will turn on the system or pressing this button when the computer is in Suspend mode will resume normal operation. Pressing this button for 4-6 seconds will also turn off the system.

System Status Indicator Panel

The system status indicator panel keeps you informed of the computer's operating status.

	Indicates that the computer is accessing the hard disk drive.
	Indicates that the keyboard is in Num Lock mode.
	Indicates when the keyboard is in Caps Lock mode. In this mode, the keyboard produces uppercase text when you press a key. When you press the Caps Lock key again, the indicator goes off and the keyboard produces lowercase text.
	Indicates when the keyboard is in Scroll Lock mode. Some applications will move information across the screen differently when Scroll Lock is on.



Indicates when the system LAN is functioning.

TouchPad

The TouchPad is hardware-compatible with the IBM PS/2 mouse and software-compatible with the Microsoft mouse.

TouchPad Buttons

The buttons below the TouchPad correspond to the left and right buttons on a standard mouse. The PS/2 compatible mouse will work with the Mobile PC's TouchPad simultaneously.

Internet Explorer Button

Use this key to open the Internet Explorer.

Outlook Express Button

Use this key to open Microsoft's Outlook to send/receive your mail.

The Built-in Microphone

The built-in microphone is located to the left of the TouchPad.

Scroll Button

Use this button to scroll up and down or left and right the scrolling bar.

Front Side

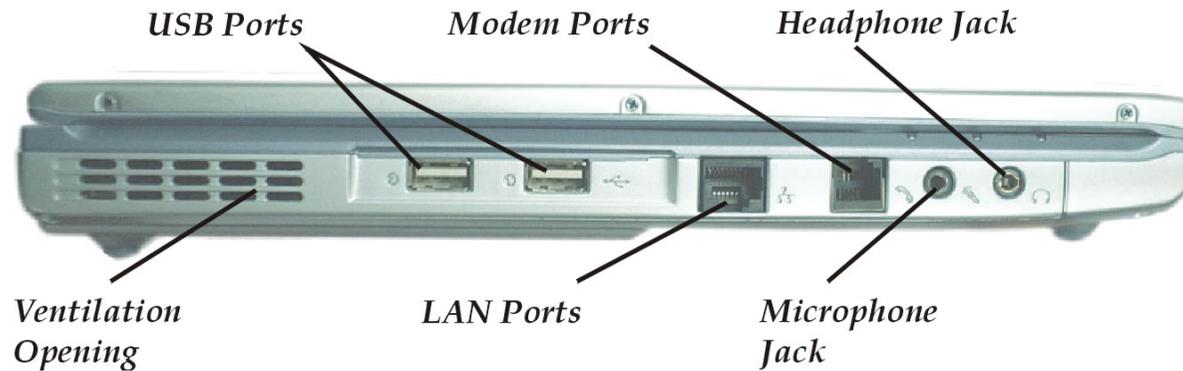
LCD Cover Release Latch

Slide this latch to the right to open the LCD cover.

LCD Cover Release Latch



The Left Side



Ventilation Opening

Please don't block this opening during operation of the system.

The LAN Port

This jack provides a standard RJ-45 connection for integration with an existing network or a high-speed (DSL or cable) connection via a network cable.



When using a LAN, please use an EMI Shielding Cable to minimize an interference when transmitting.

The Modem Port

This jack is an internal 56K voice/fax/data modem. You will connect your computer to your phone line through this port.



Always disconnect all telephone lines from the wall outlet before servicing or disassembling this equipment. To reduce the risk of fire use only No. 26 AWG or larger telecommunication line cord.

Microphone Jack

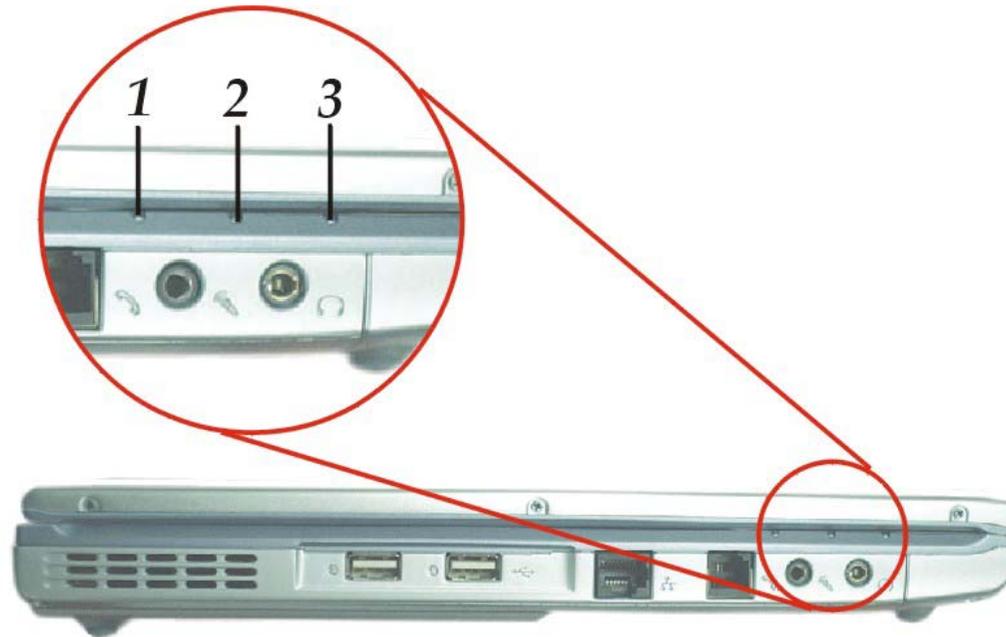
Allows you to receive monophonic input from an external microphone. Use of an external microphone will disable the built-in microphone.

Headphone Jack

You can plug an external speaker, headphone or connect the line out jack to an audio device such as a cassette recorder to record the Mobile PC's audio output.

LED Indicators

These three LED indicators are separately program for the following functions: Power On, Suspend Mode and Battery Charge.



1. Power On

This indicator will lit when the Mobile PC is powered On.

2. Battery Charge

This indicator will lit orange when the battery is in charging status. The indicator will shut down when the battery is fully charged.

3. Suspend Mode

This indicator will lit when the Mobile PC enter the suspend mode.

The Right Side



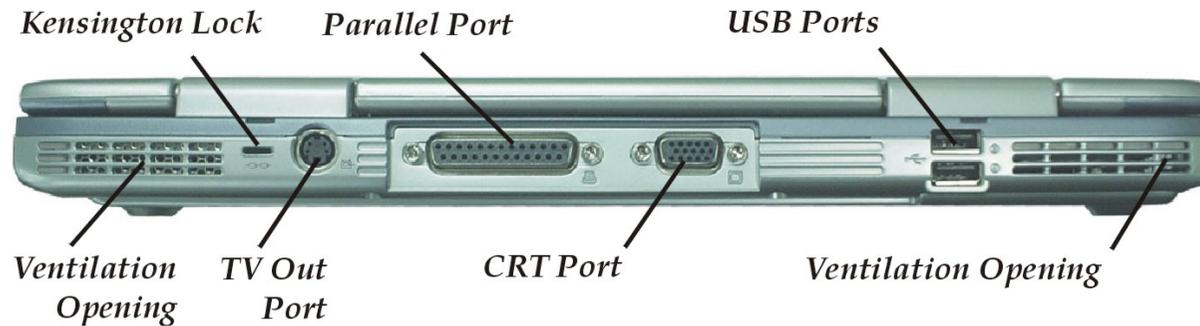
The CD-ROM/DVD-ROM or DVD CD-RW Combo/ DVD -RW(TM5800) (Option)

Your Mobile PC comes with a swappable 24X (or higher) 5.25" IDE CD-ROM or 8X DVD-ROM.

DC IN Connector

Plug the AC adapter into this connector.

The Rear



Ventilation Opening

Please don't block this opening during operation of the system.

Kensington Lock

Allows you to connect a special computer lock to secure your system. You can purchase a lock at most computer retailers.

TV Out Port

This 4-pin S-Video port allows you to view the Notebook's Video output on a television monitor.

Parallel Port

This port allows you to easily connect a parallel printer or plotter using this 25-pin bi-directional female port.

External CRT Port

This port allows you to easily connect an external VGA/SVGA display monitor into your Mobile PC using the 15-pin female connector.

USB Ports

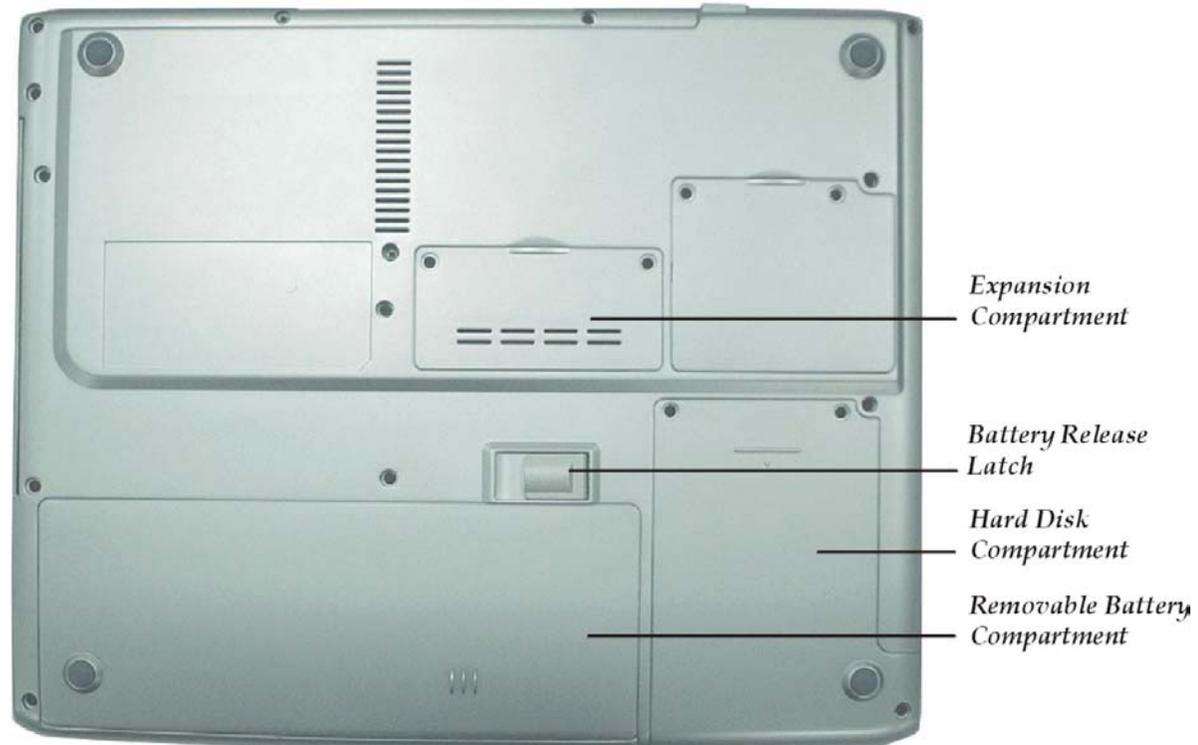
Your computer includes two Universal Serial Bus (USB) port. USB is the latest development in Plug and Play technology.

It will eventually replace the need for separate connectors for external keyboards, serial ports, and parallel (printer) port.

Ventilation Opening

Please don't block this opening during operation of the system.

The Bottom Panel



Expansion Compartment

This compartment will serve as an expansion to upgrade your RAM module.

Battery Release Latch

Lift up this latch to release the battery from its bay.

Hard Disk Drive

Your computer includes a 2.5-inch IDE hard disk drive (9.5mm in height). The Mobile PC's BIOS automatically detects IDE drive types.

Battery Compartment

Your Mobile PC comes equipped with a factory-installed battery pack module. After the battery runs down, the module can be removed and replaced with a charged battery.

Chapter 2

Getting Started



Connecting to a Power Source

Connecting the AC Adapter

A universal AC adapter is provided to supply your computer with power and also charge the computer's battery pack.

The adapter's AC input voltage can range anywhere from 100 to 240 volts, covering the standard voltages available in almost every country.

The power cord for the AC adapter requires a three-hole grounded AC outlet. To connect the computer to an external power source:



1. Plug the AC adapter's connector into the DC-IN connector on the rear of the computer.
2. Connect the power cord to the AC adapter and then to a wall outlet.



The best kind of AC power source to connect your Mobile PC to is a UPS (Uninterruptible Power Supply). Lacking this, use a power strip with a built-in surge protector. Do not use inferior extension cords as this may result in damage to your Mobile PC. The Mobile PC comes with its own AC adapter. Do not use a different adapter to power the computer and other electrical devices.

Whenever possible, keep the AC adapter plugged into the Mobile PC and an electrical outlet to recharge the battery.



Never turn off or reset your Mobile PC while the hard disk is in use and the HDD status icon is lit; doing so can result in loss or destruction of your data. Always wait at least 5 seconds after turning off your Mobile PC before turning it back on; turning the power on and off in rapid succession can damage the Mobile PC's electrical circuitry.

Turning On Your Mobile PC

Turn on your Mobile PC by pressing the power button. Hold the button down for a second or two and release. The Power-On Self Test (POST) runs automatically.

After the POST is completed, the computer reads the operating system from the hard disk drive into computer memory (this is commonly referred to as "booting" a computer). If your OS (Operating System such as Windows ME, Windows 2000... etc) is installed, it should start automatically.

To turn the Mobile PC off, save your work and close all open applications, click on **Start**, then **Shut Down** and select **Shut down the computer** and click "**Yes**" or press the power button for 4-6 seconds.

Operating on Removable Battery Power



The system provides you with a removable battery pack that does not provides the computer with information about its power status.

Your computer comes with a rechargeable removable battery pack that lets you operate the computer without an external power source. When the removable battery pack is fully charged, you can operate the computer for approximately 2 hours under the following conditions:

- The removable battery pack initially has a full charge.
- No peripheral devices are installed.
- The disk/CD-ROM drives run no more than 10% of the time.



Only use batteries that are approved by an authorized dealer. All batteries are not the same and therefore should not be treated as such. Using the wrong battery could cause serious damage to your computer and yourself through toxic emissions.

Inserting and Removing the Removable Battery Pack

The removable battery pack should already be inserted in your Mobile PC when you unpack it. If not inserted, follow these directions:

1. Turn over the Mobile PC with the front of the unit facing you and place it on a solid, flat surface.
2. Angle the battery into the bay. The front edge of the battery should slide into the grooves in the system case.



3. Gently lower the battery into the bay and push it until it clicks securely in the bay.

To remove the removable battery pack:

1. Turn off the Mobile PC, and disconnect the AC adapter.
2. Close the LCD panel and turn it over and place it on a solid, flat surface.



3. Lift the release latch to release the battery from the bay. At this time the battery will now be angled slightly out of the bay.
4. Hold the removable battery at the finger grip and lift it out of the compartment.



Charging the Removable Battery Pack

The installed removable battery pack charges automatically any time the computer is connected to the AC adapter and an external power source.

It is a good idea to occasionally discharge the battery pack fully to preserve its operating performance.

Chapter 3

Using the Mobile PC



Adjusting the LCD Screen Display

The LCD screen display can be adjusted by the following key combinations.

KEYS	FUNCTIONS
[Fn] + [F7]	Decreases the brightness level.
[Fn] + [F8]	Increases the brightness level.
[Fn] + [F12]	This key combination toggles the display between the LCD, CRT, simultaneous LCD/CRT.

LCD Care

LCD screens are delicate devices that need careful handling. Please pay attention to the following precautions:

- When you are not using the computer, keep the LCD screen closed to protect it from dust.
- If you need to clean your LCD screen, use a soft tissue to gently wipe the LCD surface.
- Do not put your fingers or sharp objects directly on the surface and never spray cleaner directly onto the display.
- Do not press on, or store any objects on the cover when it is closed. Doing so may cause the LCD to break.

External CRT Display

You can hook up an external monitor through the 15-pin CRT connector. Three configurations are available:

For TM5600

- LCD only
- CRT only

-
- TV only

For TM5800

- LCD only
- CRT only
- LCD & CRT mirror mode
- LCD & TV mirror
- TV only

You can switch between these display configurations by pressing the key combination **[Fn] + [F12]**.

- TV only



To shift the display screen from your computer to the TV screen, you will have to utilize the VGA utility function by executing the VGA Display function. Please refer to Chapter Six on the topic of “VGA Utilities” section.

For information on connecting an external display, please refer to Chapter Four.

A Tour of the Mobile PC's Keyboard

The Mobile PC's keyboard uses a standard QWERTY layout with the addition of special function keys and an embedded numeric keypad for number intensive data entry. Your keyboard supports Windows by incorporating the two Windows specific keys. With the two Windows keys you will be able to access and take advantage of many of the timesaving features of Windows software.

The function keys (F1-F12) on the top row of the keyboard, serve different

purposes and carry out different tasks depending on the application you are running.

The cursor (arrow) keys (which are all located in the lower right corner of your keyboard) and the [PgUp], [PgDn], [Home] and [End] keys (which are located along the right edge of the keyboard) allow you to move the active cursor of the computer to various locations on the screen or within the document.

The embedded numeric keypad consists of 15 keys that make number intensive input more convenient. Like the [Num Lock] key, these keys are labeled in blue on the keycaps. Numeric assignments are located at the upper right of each key.

When the numeric keypad is engaged, the NumLock icon will appear in the System Window. The keypad is activated by pressing the [Fn] + [NumLk] key. If an external keyboard is connected, pressing the NumLock key on either the Mobile PC or external keyboard will enable/disable NumLock of both keyboards in unison.

To disable the Mobile PC numeric keypad while keeping the keypad on an external keyboard activated, use the [Fn] + [NumLk] hot key on the Mobile PC keyboard.

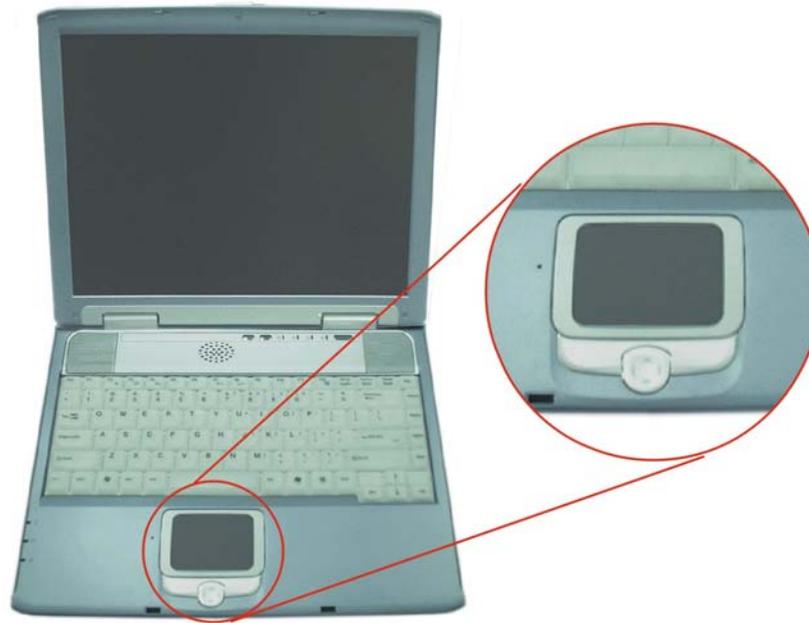


The Mobile PC's Hot Key Controls

KEYS	FUNCTION(S)
Power Button	Press this button once to power on or enter the suspend/resume mode. Press this button for more than 4 seconds to power off the system.
Internet Button	Open Internet WWW Home short-cut key
Email Button	Open Email Reader short-cut key
[Fn] + [F2]	This key combination turns on/off the volume.
[Fn] + [F3]	Decreases the speaker volume.
[Fn] + [F4]	Increases the speaker volume.
[Fn] + [F7]	Decreases the brightness level.
[Fn] + [F8]	Increases the brightness level.
[Fn] + [F12]	This key combination toggles the display between the LCD, CRT, simultaneous LCD/CRT.

The TouchPad

The touchpad is a rectangular electronic panel located just below your keyboard. You can use the static-sensitive panel of the touchpad and slit it to move the cursor. You can use the buttons below the touchpad as left and right mouse buttons.



TouchPad Precautions

The TouchPad is a pressure sensitive device. Please take note of the following precautions.

- Make sure the TouchPad does not come into contact with dirt, liquids or grease.
- Do not touch the TouchPad if your fingers are dirty.
- Do not rest heavy objects on the TouchPad or the TouchPad buttons.

You can use the TouchPad with Microsoft Windows as well as non-Windows applications.

Connecting an External Tracking Devices

The system will only enables you to use one tracking device whether it is an internal or external tracking device.

Data Storage and Retrieval

Data storage and retrieval are two of the most fundamental tasks you will perform when working with your computer. The Mobile PC is equipped with a hard disk drive (HDD). The HDD is removable allowing for easy upgrades.

The CD-ROM/DVD-ROM/Combo

Features of the CD-ROM/DVD-ROM/Combo Module

The features of the CD-ROM/DVD-ROM/Combo drive are listed below.

- The Audio Play feature allows you to play music CDs
- Front panel load/unload button
- Supports CD-DA, CD-ROM mode 1 and mode 2, Multi-Session Photo CD™, CD-I/Video CD (pcs.)
- Low power consumption
- 12.7mm height

Precautions for Handling CD-ROM/DVD-ROM/Combo Discs

- Always hold the disc by the edges, avoid touching the surface.
- Use a clean, dry, cloth to remove dust, smudges, or fingerprints. Wipe from the center outward.

-
- Do not write or place objects on the surface of the disc.
 - Store discs in a cool dry place not to damage the disc.
 - Do not use benzene, thinners, or cleaners with detergent. Only use CD-ROM/DVD-ROM cleaning kits.
 - Do not bend or drop the discs.

Loading a Disc

To play a CD disc, follow the instructions listed below.

1. Push the CD-ROM/DVD-ROM/Combo eject button on the CD drive door. Gently pull the tray all the way out.
2. Carefully lift the CD-ROM/DVD-ROM/Combo by the edges and make sure the shiny surface is face down (the side with no writing on it). Carefully insert the CD-ROM onto the tray. Push the CD-ROM/DVD-ROM down gently so that it snaps onto the center ring.
3. Push the tray back into the drive.

To remove a disk, do the following:

1. Check the LED display and make sure that the computer is not accessing the CD-ROM/DVD-ROM drive.
2. Push the eject button and pull the tray all the way out.
3. Carefully pick up the CD disk by the edges and – while pressing down on the center ring – remove the CD-ROM/DVD-ROM/Combo from the tray.



Do not insert any foreign objects into the disc tray. If you

experience difficulty when ejecting the CD disk tray, stretch a paper clip (or use a pin or a thin metal rod) and insert it into the emergency eject hole located on the right side of the front panel. The CD disk tray should eject immediately. This procedure can also be used to remove a CD from the drive when the Mobile PC is powered off.

Removing the DVD-ROM/Combo Drive

1. Remove the screws and push the drive into the direction of the arrow as described in the illustration.



-
2. Pull out the DVD-ROM drive from the bay.

Power Saving Modes

This section contains information on the Mobile PC's power system, including the AC Adapter, the battery system, recharging the battery, and tips for conserving battery power.

The power system is comprised of two parts, the AC Adapter and the battery system. The AC Adapter converts AC power from a wall outlet to the DC power required by the computer.

The Battery Power System

A fully charged pack will provide approximately 2 hours of battery life depending on your system configuration application it runs.

Charging the battery takes about 3 hours to charge when the system is in off state. If possible, always charge the battery completely.

Removing the Removable Battery Pack

To remove the battery pack from its compartment, please refer to Chapter Two, ***Inserting and Removing the Removable Battery Pack***.

To calibrate the battery pack follows the instructions below:

1. Insert the removable battery into the battery compartment and turn on the Mobile PC. If the removable battery is completely without power go to the next step.

Otherwise, let the removable battery run down until the battery low-low warning beeps are heard.

-
2. Turn the Mobile PC off. Connect the AC adapter and let the removable battery fully recharge. When the removable battery charge indicator turns off, the battery is fully charged.
 3. Turn On the Mobile PC, let the removable battery run down until the battery is in low-low state and you hear a warning beeps. You can now connect the AC adapter.
 4. The removable battery pack is now calibrated properly.

In general, using the removable battery until the low-low battery-warning indicator appears and fully recharges the battery each time (full discharge/charge cycle) will ensure the accurate reporting of the battery gauge status.

Automatic Removable Battery Pack Charging Function

You can automatically charge the removable battery pack by using the AC Adapter. The charge time is about three hours when the Mobile PC power is turned off. The following table summarizes the charging modes:

Charge Mode	Charge Time
Fast	Approximately 3 hours with the system off or in Suspend mode. The temperature must be 25°C or below room temperature.

Battery Low Warning

When the removable battery pack initially reaches the “Battery Low” state approximately 5 ~ 6 minutes of the usable battery life is left.

You will hear an audible beep signal every 1.5 seconds alerting you to the “Battery Low” status. When the battery power reaches the “Battery Low Low” status the beeping sound will accelerate.

Your battery now has 1 ~ 2 minutes of battery charge remaining. You must save your data or connect AC power immediately; otherwise, you may lose your data.

Sound	Meaning
Continuous beeping every 1 seconds	Battery Low: Indicates that there is 5 to 6 minutes charge remaining.
Beeping accelerates	Battery Low Low: Indicates that there is 1 to 2 minutes of battery charge remaining. Save your work and turn off the Mobile PC, or connect the AC adapter.

When there is only one minute of battery charge remaining, the Mobile PC will suspend to the HDD and power off. You should connect AC power and resume to save your work.

Small Battery for the Real Time Clock

There is a small built-in battery pack that supplies power to the system in order to maintain certain system information while the power is off. If the Mobile PC is left without a power source for long period of time, this battery will be exhausted and system information will be lost.



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. Never remove the battery pack while the power is on as this may result in data loss when the system loses power.

Resetting the System

After installing a software application package, you may be prompted to reset the system to load the changed operating environment. To reset the system, or “reboot,” press the **[Ctrl] + [Alt] + [Delete]** keys simultaneously. This is known as “warm boot.” This key combination acts as “software” reset switch when you encounter hardware or software problems, which lock up the Mobile PC.

If this key combination does not shut down the Mobile PC, you can reset the Mobile PC by using the Mobile PC’s power button. Should the Mobile PC lock up for some reason, pressing this button powers the Mobile PC off.

Adjusting the Brightness

To adjust the brightness on the LCD screen, press and hold down the **[Fn]** key in the lower left hand corner of the keyboard and press the **[F7]** key to reduce the brightness or **[F8]** to increase the brightness.

Chapter 4

Mobile PC Operation



Your Mobile PC is capable of providing you with efficient and productive mobile computing, it also has the speed and capacity to service as a desktop system.

This chapter discusses those functions of your Mobile PC that are typical of desktop systems.

Audio

The Multimedia Sound System

The Mobile PC's built-in audio capabilities allow you to take advantage of a wide range of education and entertainment multimedia software. The Mobile PC is equipped with two internal stereo speakers, a microphone, and input audio ports for external audio units.

An external microphone can be connected to the microphone jack. External speakers or headphones can be connected to the Mobile PC's audio-out jack.

External audio devices can be connected to the Line in jack. All audio features are software controlled. The Mobile PC's multimedia sound system includes the following features:

- Supports Windows Sound System compatibility
- Full Duplex operation
- Dynamic filtering reduces noise and distortion rate
- 16-bit digitized audio playback
- A built-in microphone for convenient recording
- Two built-in stereo speakers
- Digitized audio recording through the Mobile PC's built-in microphone or any external source

Audio Volume Control

The Mobile PC is equipped with hot-key volume controls: Pressing the **[Fn] + [F3]** hot-key combination decreases the audio output volume, press the **[Fn] + [F4]** hot-key combination increases the audio output volume.

Audio Software

Your Mobile PC comes equipped with an integrated sound system capable of providing you with quality audio sound through the built-in speakers or through external speakers connected via the system ports.

Sound Recording

Your system allows you to record sounds and store them as files using the microphone via the microphone jack on the rear of the Mobile PC. Check the Windows Help and Support Center in Windows for information on using the various elements in sound recording.



For a high-quality sound, click on the "Volume Control" at the lower right end of your screen. From the Volume Control windows, click on the "Advanced" tab, click and select the "Microphone Boost" item.

Playing Sound Files

Your Mobile PC can play audio files stored in MIDI, WAVE or MP3 file format. Check the Help and Support Center in Windows for information on the functions of the Media Player.

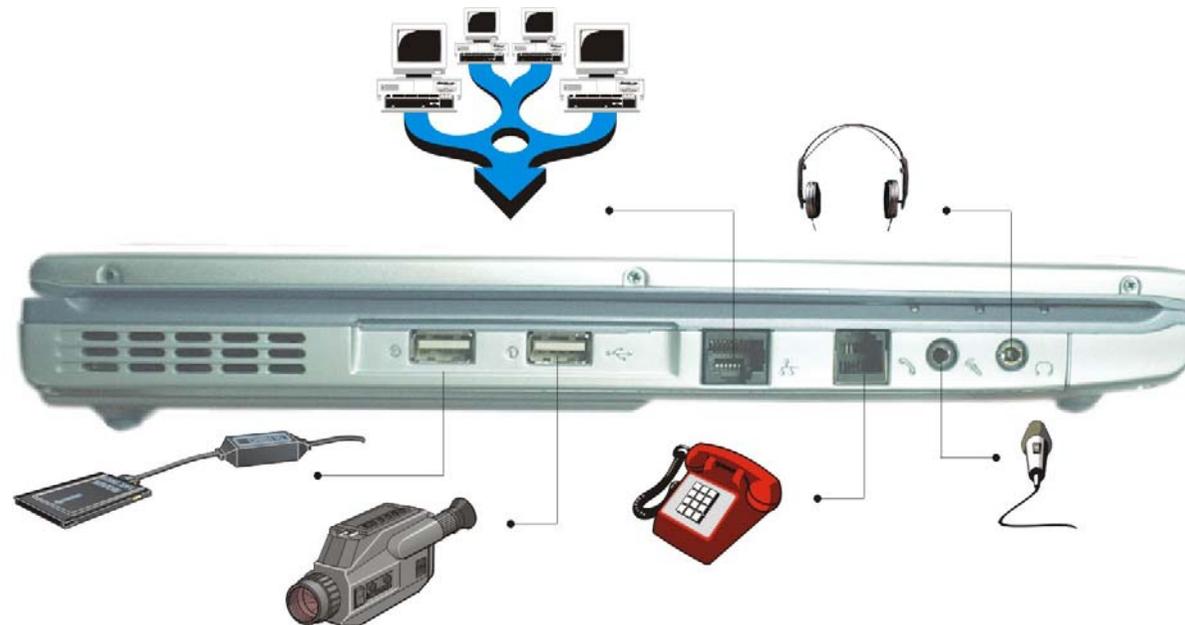
External Speakers and Microphone

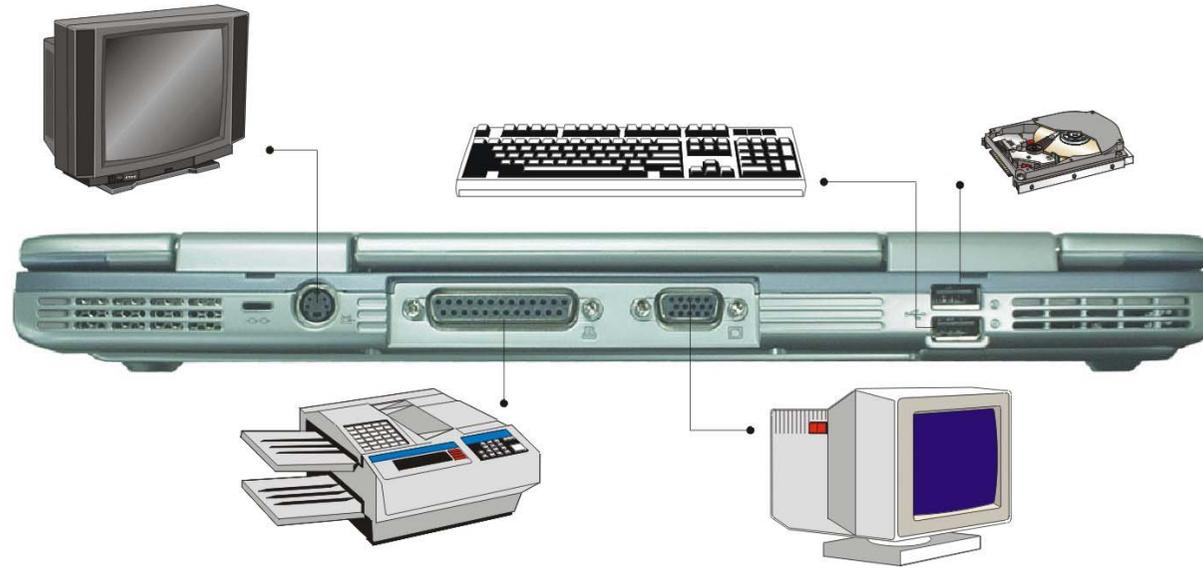
The sound system is capable in providing high-quality sound to external speakers and receiving and processing sounds from an external microphone or external sound source.

Connecting Peripheral Devices

To expand your computing capabilities, you can add a variety of external devices to your computer. You may, for example, want to add a mouse, modem, or a printer.

Connect peripheral devices to the computer's interface ports as shown below:





Chapter 5

Running BIOS Setup



Introduction

The BIOS (Basic Input and Output System) Setup program is a menu driven utility that enables you to make changes to the system configuration and tailor your system to reflect installed hardware or alter system performance. When the Mobile PC is turned back on, the system is configured with the values stored in CMOS.

Navigating through BIOS Setup

The Setup program has been designed to make it as easy to use as possible. If you accidentally make a setting and don't know which one to switch back to, the Setup program has a hot key that allows you to return to the previous value.

Accessing the BIOS Setup Program

To access the BIOS Setup program, press the DEL key after the Mobile PC has run through its POST.

Item Specific Help

On the right side of the Setup screen is an area labeled Item Specific Help. This area will list navigation key shortcuts and information that is specific for the item that you are currently editing.

The Menu Bar

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

Standard CMOS Setup

Set the time and date. Configure disk drives.

Advanced CMOS Setup

Configure basic system performance parameters.

Peripheral Setup

Configure I/O support for the Mobile PC.

To access the menu bar items, press the **↑** up or **↓** down arrow key on the keyboard until the desired item is highlighted.

The Legend Bar

At the bottom of the Setup screen you will notice a legend bar. The keys in the legend bar allow you to navigate through the various setup menus.

The following table lists the keys found in the legend bar with their corresponding alternates and functions.

Legend Key	Function
Esc	Jumps to the Exit menu or returns to the Main menu from a submenu.
↑ or ↓	Moves the cursor up and down between fields.
PgUp/PgDn	Set to modify the field selected.
F2/F3	Set the color (8 colors) of the BIOS Setup screen.
F10	Save and Exit.
Enter	Will select a sub menu or show a range of options for a field.

Launching Submenus

Note that a right pointer symbol ▶ appears to the left of certain fields. This pointer indicates that a submenu can be launched from this field. A submenu contains additional options for a field parameter. To call up a submenu, simply move the cursor to highlight the field and press the **[Enter]** key. Use the **[Esc]** key to return to the Main menu.

General Help

In addition to the Item Specific Help window, the BIOS Setup program also provides a General Help screen can be called up from any menu by simply pressing **[F1]** key.

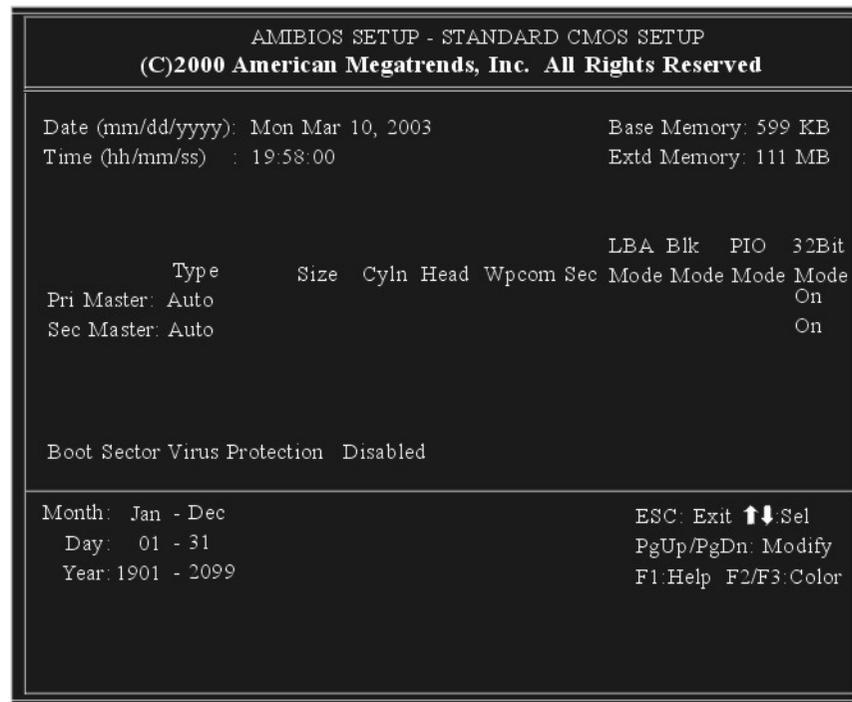
Use the up and down arrow keys (↑↓) to scroll through the entire help document. Press the Home key to display the first page, press End to go to the last page. To exit the help window, press the **[Esc]** key.

Save Changes and Exit the Setup Program

Refer to the Exit menu section of this chapter for detailed information on saving changes and exiting the setup program.

The Standard CMOS Setup

When the Setup program is accessed, the following screen appears:



Date/Time

The current values for each category are displayed. Enter new values through the keyboard "PgUp/PgDn" keys.

Pri Master, Sec Master

Select one of these hard disk drive icons to configure the hard disk drive named in the option.

The Advanced CMOS Setup

When the Setup program is accessed, the following screen appears:



Quick Boot

Set this option to Enabled to instruct AMI BIOS to boot quickly when the computer is powered on.

-
- **The settings are Disabled or Enabled (default value)**

1st Boot Device

This option sets the type of device for the first boot drives that the AMIBIOS attempts to boot from after AMIBIOS POST completes.

- **The settings are Disabled (default value), HDD, CD-ROM and USB FDD.**

2nd Boot Device

This option sets the type of device for the second boot drives that AMIBIOS attempts to boot from after AMIBIOS POST completes.

- **The settings are Disabled, HDD, CD/DVD (default value) and USB FDD.**

3rd Boot Device

This option sets the type of device for the third boot drives that the AMIBIOS attempts to boot from after AMIBIOS POST completes.

- **The settings are Disabled, IDE-0(default value), CD/DVD.**

S.M.A.R.T. for Hard Disks

Set this option to Enabled to permit AMIBIOS to use the SMART (System Management System and Reporting Technologies) protocol for reporting server system information over a network.

- **The settings are Enabled or Disabled (default value).**

Password Check

This option enables password checking every time the system boots or when you run AMIBIOS Setup. If Always is chosen, a user password prompt appears every time the computer is turned on. If Setup is chosen,

the password prompt appears if AMIBIOS is executed.

- **The settings are Setup (default value), Always.**

USB Function

Set this option to enabled or disabled the USB device of your system.

- **The settings are Enabled (default value) or Disabled.**

USB Device Legacy Support

Set this option to enable support for all USB devices if the USB Function option is set to Enabled.

- **The settings are Disabled (default value), No Mice or All Device.**



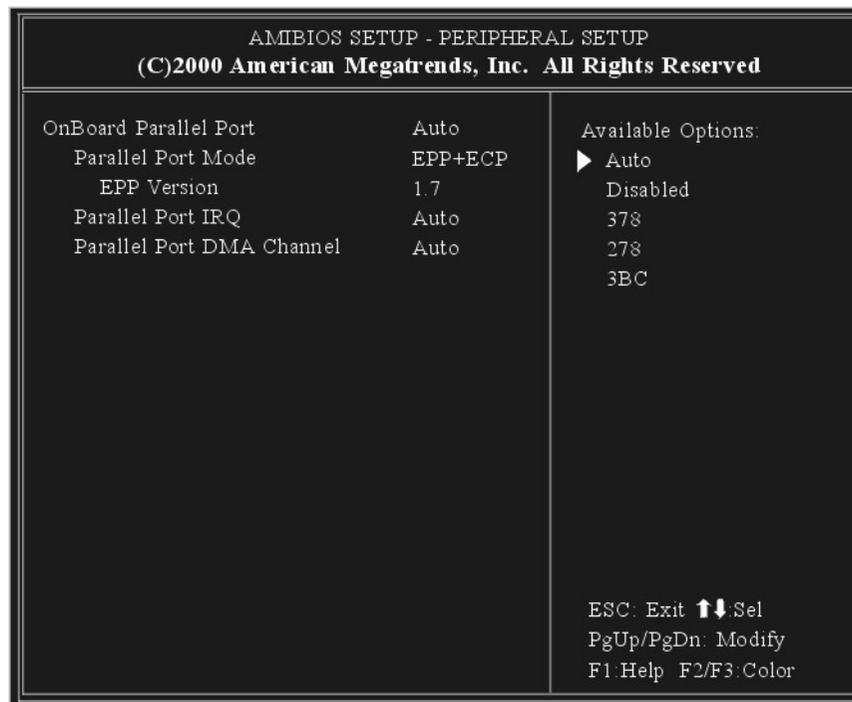
Please take note that before you installing the Windows 98SE/ME, be sure to disable the “USB Device Legacy Support” item in the Advanced CMOS Setup category of your system BIOS Setup.

Beep On Boot

Set this option to enable or disable the beeping sound when the system start to boot.

- **The settings are Disabled (default value), Enabled**

The Peripheral Setup



OnBoard Parallel Port

This option specifies the base I/O port address of the parallel port on the motherboard.

- **The settings are Auto (default value), Disabled, 378h, 278h, or 3BCh.**

Parallel Port Mode

This option specifies the parallel port mode.

- **The settings are Normal, Bi-dir, EPP or EPP+ECP (default value).**

EPP Version

This option specifies the parallel port mode value.

- **The settings are 1.7 (default value) or 1.9.**

Parallel Port IRQ

This is only a display-only item and cannot be altered.

Parallel Port DMA Channel

This is only a display-only item and cannot be altered.

Change Supervisor Password

This field allows you to set the Supervisor password. To set the Supervisor password, highlight this field and press the [Enter] key. The following dialog box appears:

Enter new supervisor password:

Auto Configuration with Optimal Settings

The optimal default settings are best-case values that should optimize system performance. To set the configuration, highlight this field and press the [Enter] key. The following dialog box appears:

Load high performance settings [Y/N] ?

Save Settings and Exit

This option saves your selections and exit the Setup program.

Save current settings and exit [Y/N] ?

Exit Without Saving

This option should only be used if you do not want to save the changes you have made to the Setup program.

Quit without saving [Y/N] ?

Chapter 6

The Software Utilities Disks



***USER'S INFO:* There are two separate procedures on how to install the driver: AutoRun installation and Manual installation.**

AutoRun Installation

- Follow the step-by-step procedures on the CD-ROM/DVD-ROM to execute the “AutoRun” application by selecting the topic of “Driver Installation”.
- To re-run the “AutoRun” installation, please refer to the procedures on the “Manual Installation” for a more detailed explanation.

Installing VGA Display Drivers for Win98/2K/ME/XP

This section describes the operation and installation of VGA display software drivers supplied on the Driver Utility CD-ROM that is shipped with your computer.

1. Insert the CD-ROM Driver into your CD-ROM/DVD-ROM drive.
2. Click “Start” and Select “Run”.
3. Type the following:
D:\VGA\TM5800\Xinst.exe

D:\VGA\TM5600\Xinst.exe

(If D is not your CD-ROM/DVD-ROM drive, substitute D with the correct drive letter).
4. Click on “Utility and Driver Setup” to begin the Installation Wizard.
5. Follow the Wizard’s on-screen instructions to complete the installation.
6. Restart the system.

Intalling the Audio Driver for Win98/2K/Me/XP

To install the audio driver you must first remove the currently installed driver.

1. Insert the CD-ROM Driver into your CD-ROM/DVD-ROM drive.
2. Click “Start” and Select “Run”.
3. Type the following: D:\Audio\Setup.exe (If D is not your CD-ROM/DVD-ROM drive, substitute D with the correct drive letter).
4. Click on “Setup” to begin the Installation Wizard.
5. Follow the Wizard’s on-screen instructions to complete the installation.
6. Restart the system.

Intalling the LAN Driver for Win98/2K/Me/XP

To install the LAN driver you must first remove the currently installed driver.

1. Insert the CD-ROM Driver into your CD-ROM/DVD-ROM drive.
2. Click “Start” and Select “Run”.
3. Type the following: D:\LAN\Setup.exe (If D is not your CD-ROM/DVD-ROM drive, substitute D with the correct drive letter).
4. Click on “Setup” to begin the Installation Wizard.
5. Follow the Wizard’s on-screen instructions to complete the installation.
6. Restart the system.

Installing the TouchPad Driver for Win98/2K/Me/XP

To install the touchpad driver you must first remove the currently installed driver.

1. Insert the CD-ROM Driver into your CD-ROM/DVD-ROM drive. Click “Start” and Select “Run”.
2. Type the following:
D:\Utility\Touchpad\Win2K&XP\Setup.exe or
D:\Utility\Touchpad\Win98&ME\Setup.exe (If D is not your CD-ROM/DVD-ROM drive, substitute D with the correct drive letter).
3. Click on “Setup” to begin the Installation Wizard. Follow the Wizard’s on-screen instructions to complete the installation.
4. Restart the system.

Installing the USB20 Driver for Win2K/XP

To install the USB20 driver you must first remove the currently installed driver.

1. Insert the CD-ROM Driver into your CD-ROM/DVD-ROM drive. Click “Start” and Select “Run”.
2. Type the following:
D:\USB\TM5800\Setup.exe
D:\USB\TM5600\Setup.exe
(If D is not your CD-ROM/DVD-ROM drive, substitute D with the correct drive letter).
3. Click on “USB20” to begin the Installation Wizard. Follow the Wizard’s on-screen instructions to complete the installation.
4. Restart the system.

Installing the Hotkey Driver for Win98 only

To install the Hotkey driver you must first remove the currently installed driver.

1. Insert the CD-ROM Driver into your CD-ROM/DVD-ROM drive. Click “Start” and Select “Run”.
2. Type the following:
D:\Hotkey\Win98\Setup.exe (If D is not your CD-ROM/DVD-ROM drive, substitute D with the correct drive letter).
3. Click on “Setup” to begin the Installation Wizard. Follow the Wizard’s on-screen instructions to complete the installation.
4. Restart the system.

Installing the Wireless LAN Driver for Win98/2K/ME/XP

To install the Hotkey driver you must first remove the currently installed driver.

1. Insert the CD-ROM Driver into your CD-ROM/DVD-ROM drive. Click “Start” and Select “Run”.
2. Type the following:
D:\Utility\Wireless LAN\Setup.exe (If D is not your CD-ROM/DVD-ROM drive, substitute D with the correct drive letter).
3. Click on “Setup” to begin the Installation Wizard. Follow the Wizard’s on-screen instructions to complete the installation.
4. Restart the system.

Manual Installation

To install the driver manually, follow the step-by-step procedures described on each individual section for a more clear installation.

Installing the Modem Driver for WinXP

Please follow these instructions to install the Modem driver:

1. From your screen, click on the "My Computer" icon and use your mouse or touchpad right button to select the "Properties" item.
2. Click on the "Hardware" tab from the "System Properties" dialog window.
3. Click on the "Other Device" (denoted by a yellow mark symbol), select the "PCI Modem" .
4. Click the "Re-install Driver" tab and select the "Install from a list or specific location (Advanced)" item.
5. Select the "Include this location in the search" item.
6. Select the "Browse" button from the "Include this location in the search" and specify for the designate location of your CD driver.

Installing the Modem Driver for Win2K

Please follow these instructions to install the Modem driver:

1. From your screen, click on the "My Computer" icon and use your mouse or touchpad right button to select the "Properties" item.

-
2. Click on the "Hardware" tab from the "System Properties" dialog window.
 3. Select the "PCI Device" in the "Other Devices" group (denoted by a yellow mark symbol).
 4. Click the "Reinstall Driver" tab and select the "Search for a suitable driver for my device(recommand)" item.
 5. Select the "Hardware types (Modems)".
 6. Click on the "Specify a location" and click the "Browse" button and specify for the designate location of your CD driver.

Installing the Modem Driver for Win98SE/ME

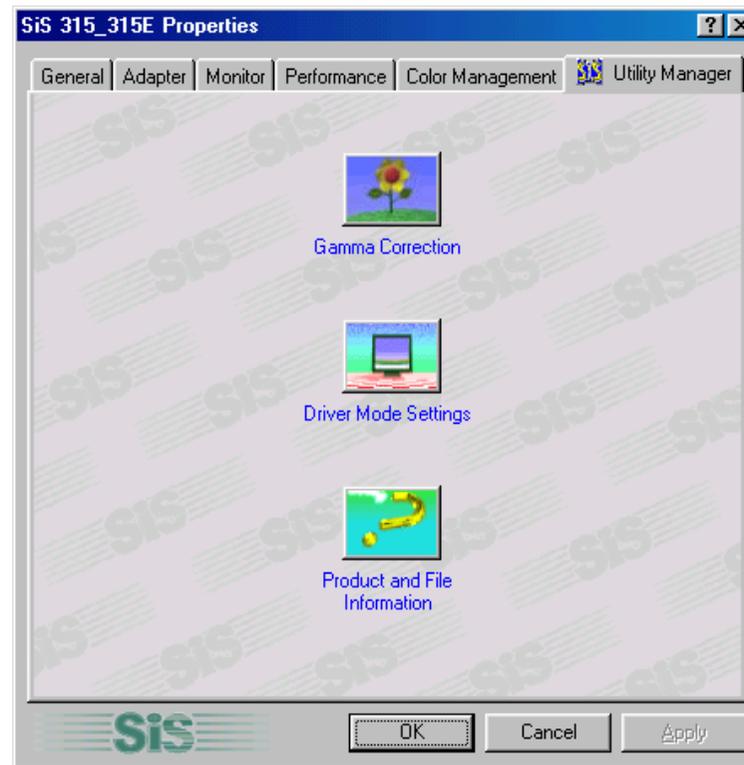
Please follow these instructions to install the Modem driver:

1. From your screen, click on the "My Computer" icon and use your mouse or touchpad right button to select the "Properties" item.
2. Click on the "Device Manager" and select the "PCI Card" item.
3. Use your mouse cursor to double click the "Reinstall Driver" item.
4. Select the "Search for a better driver than the one your device is using now.(recommand)" item and click on the "Specify a location" item.
5. Select the "Browse" button from the "Include this location in the search" item and specify for the designate location of your CD driver.

VGA Utilities for Win98

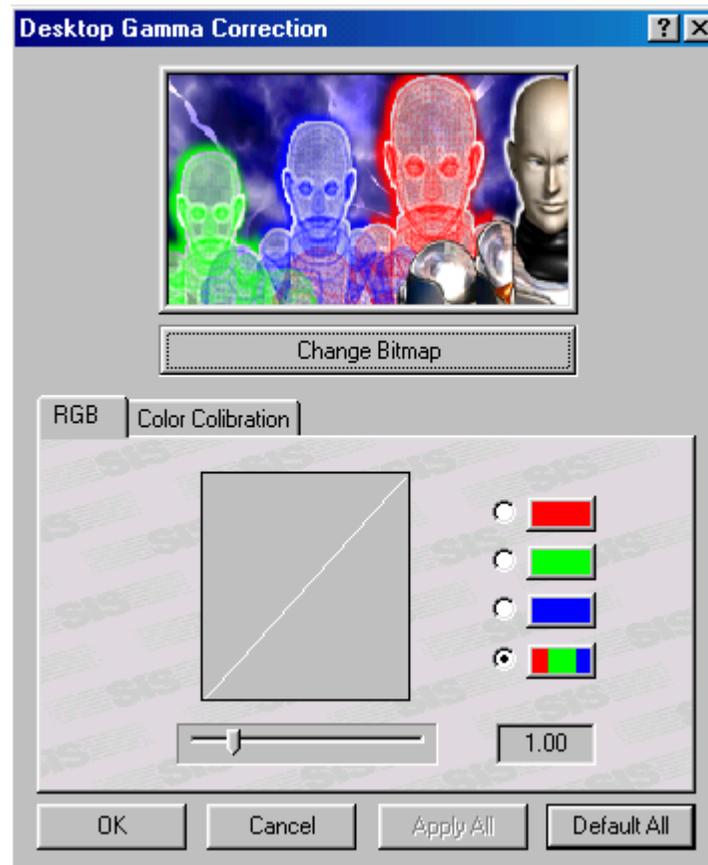
After you have restarted Windows, open the "Control Panel" and double click on the "Display" icon. From the "Display Properties" window, select the "Settings" tab and click on the "Advanced" tab to enter the "SiS 315_315E Properties" window.

You will notice three new entries have been made in the Display Properties window: Gamma Correction, Driver Mode Settings, and Product and File Information.



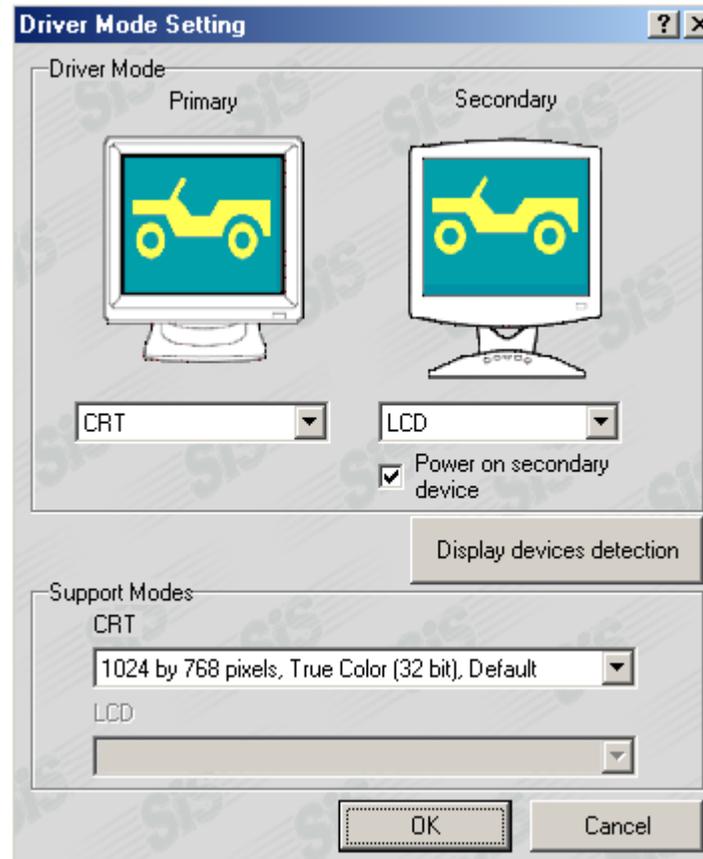
Gamma Correction

You can adjust the right color for your window screen by moving the “Brightness” adjustment window to increase or decrease the right resolution for your screen display.



Driver Mode Setting

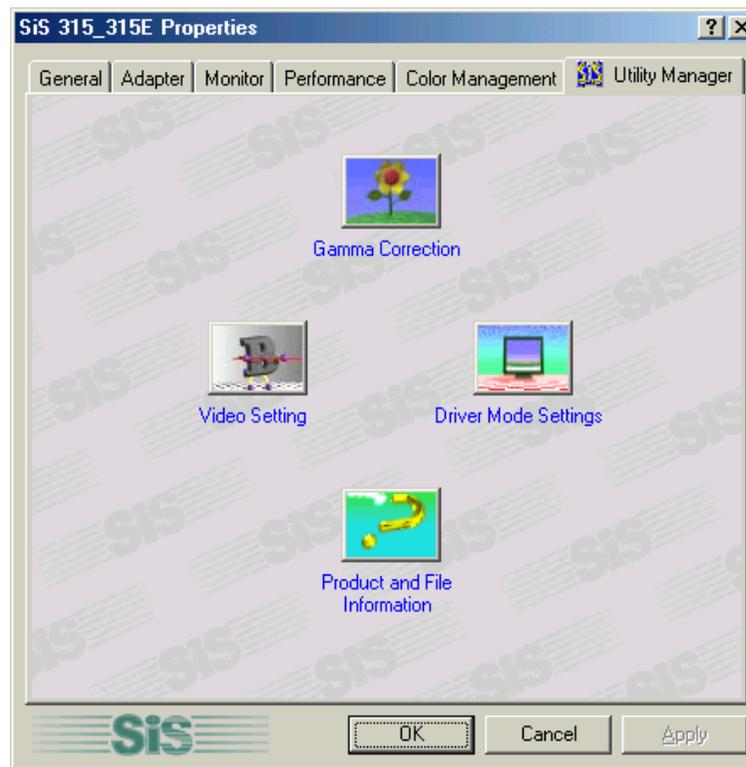
The SiS's driver allows three simultaneous outputs to LCD, TV and CRT for TM5600. And allows five simultaneous outputs to LCD, TV, CRT, LCD & CRT mirror mode, LCD & TV mirror mode for TM5800. Before proceeding, be sure the monitor is connected to the computer.



VGA Utilities for WinME/Win2K

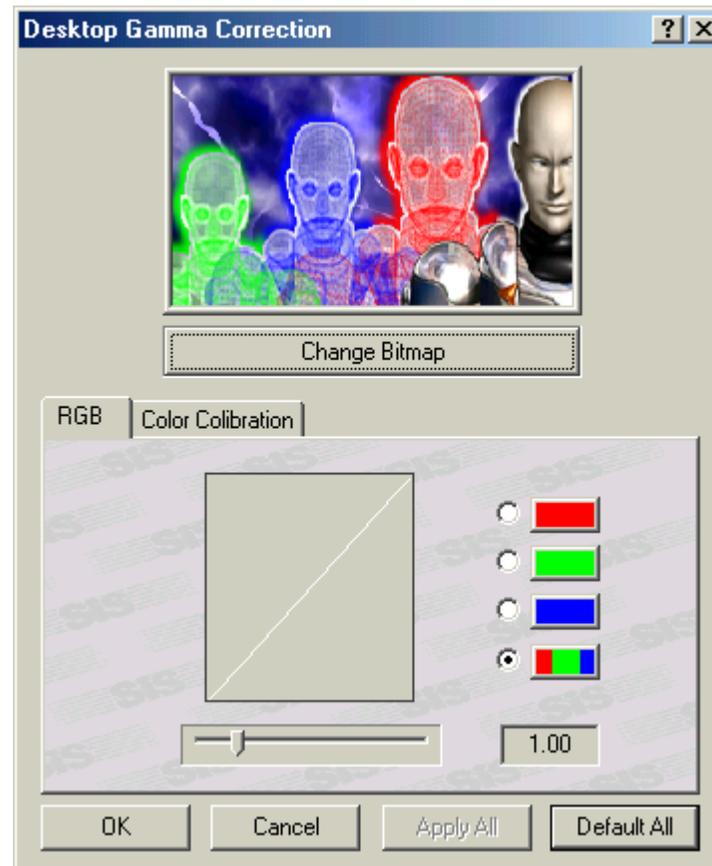
After you have restarted Windows, open the "Control Panel" and double click on the "Display" icon. From the "Display Properties" window, select the "Settings" tab and click on the "Advanced" tab to enter the "SiS 315_315E Properties" window.

You will notice three new entries have been made in the Display Properties window: Gamma Correction, Driver Mode Settings, Video Setting, and Product and File Information.



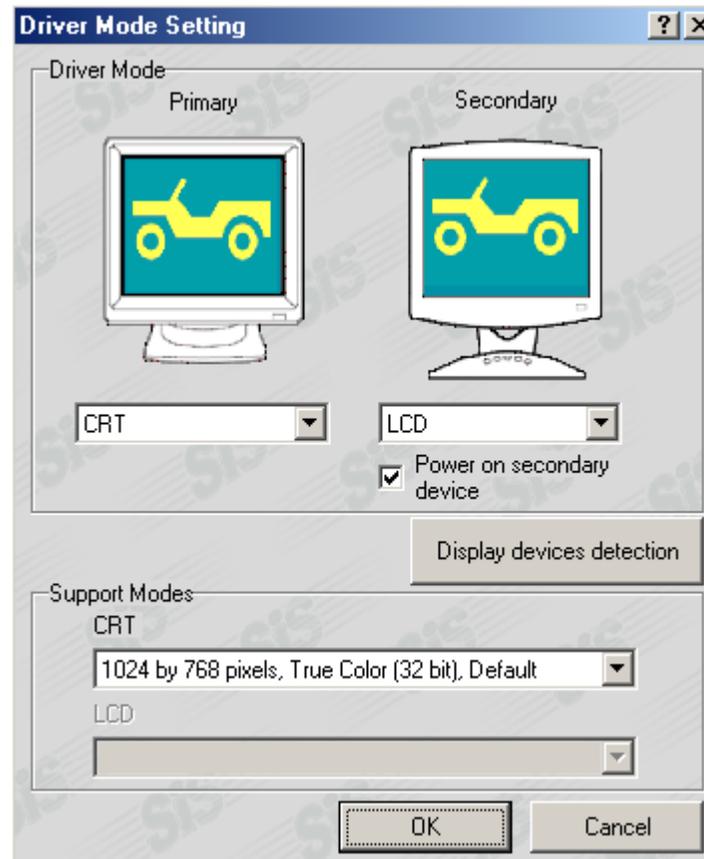
Gamma Correction

You can adjust the right color for your window screen by moving the “Brightness” adjustment window to increase or decrease the right resolution for your screen display.



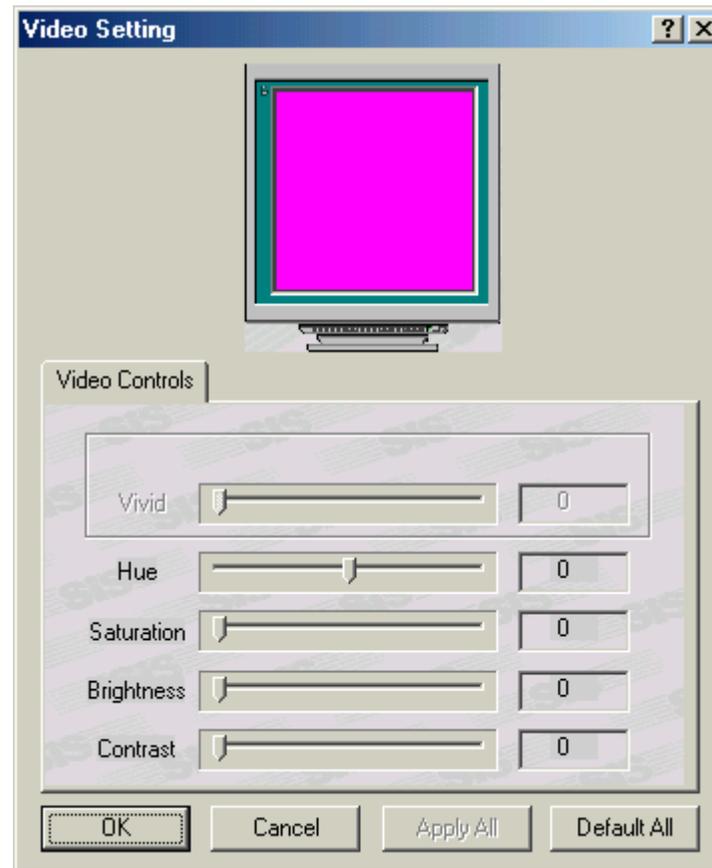
Driver Mode Setting

The SiS's driver allows three simultaneous outputs to LCD, TV and CRT for TM5600. And allows five simultaneous outputs to LCD, TV, CRT, LCD & CRT mirror mode, LCD & TV mirror mode for TM5800. Before proceeding, be sure the monitor is connected to the computer.



Video Setting

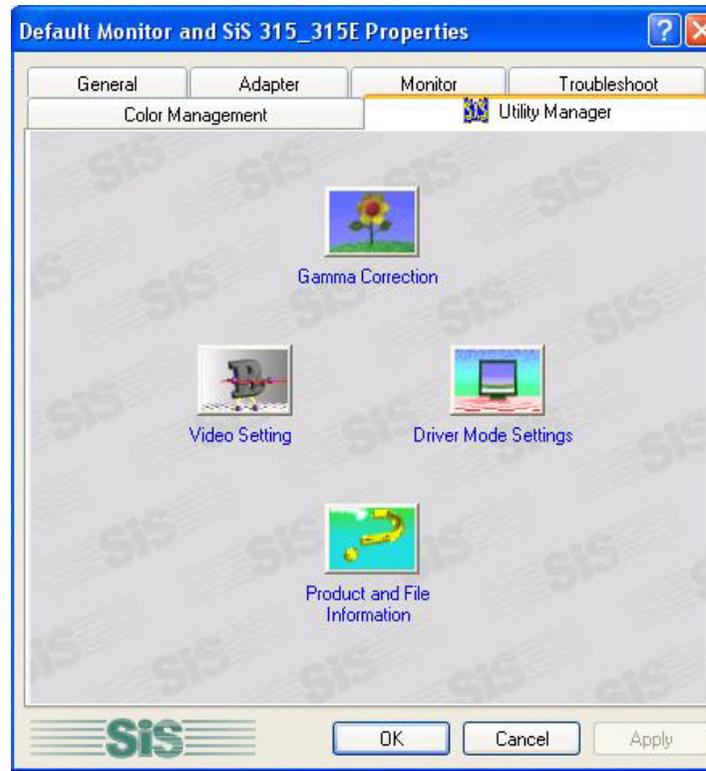
From the "Setting", you can also adjust the video of your display to overlay, contrast or brightness.



VGA Utilities for WinXP

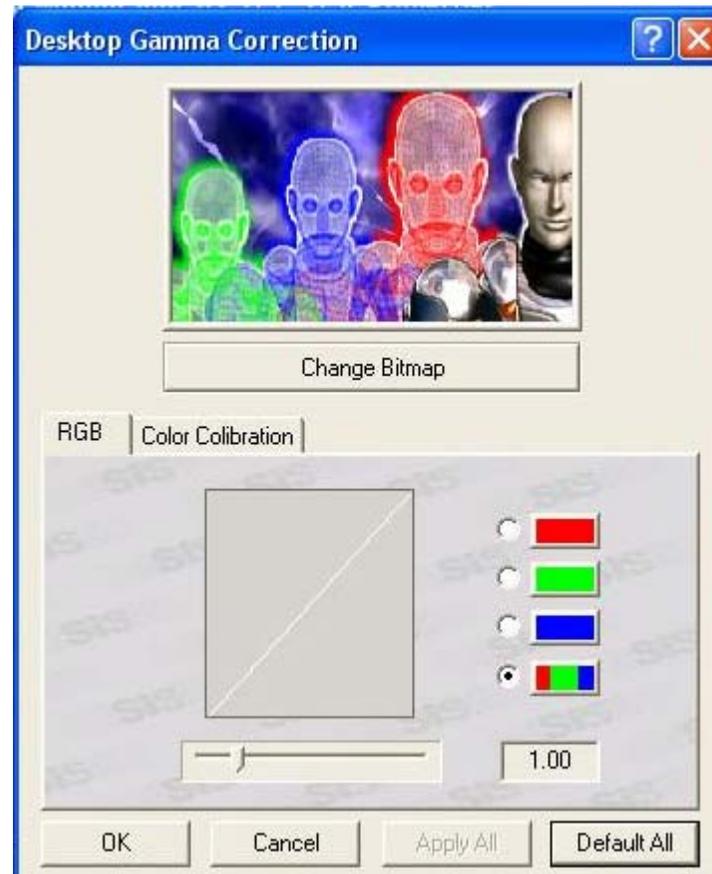
After you have restarted Windows, open the "Control Panel" and double click on the "Display" icon. From the "Display Properties" window, select the "Settings" tab and click on the "Advanced" tab to enter the "SiS 315_315E Properties" window.

You will notice three new entries have been made in the Display Properties window: Gamma Correction, Driver Mode Settings, Video Setting and Product and File Information.



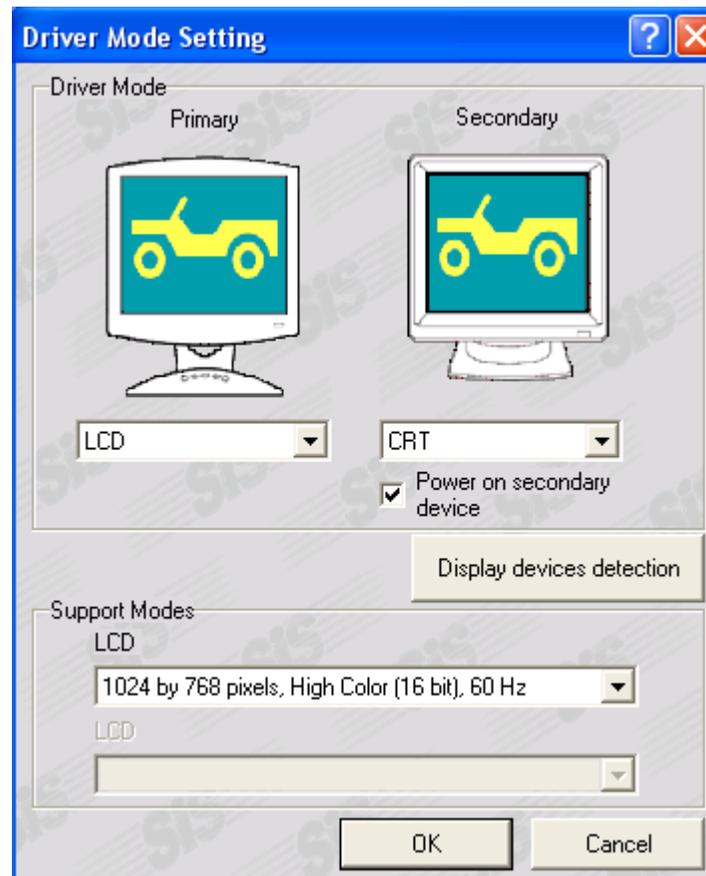
Gamma Correction

You can adjust the right color for your window screen by moving the “Brightness” adjustment window to increase or decrease the right resolution for your screen display.



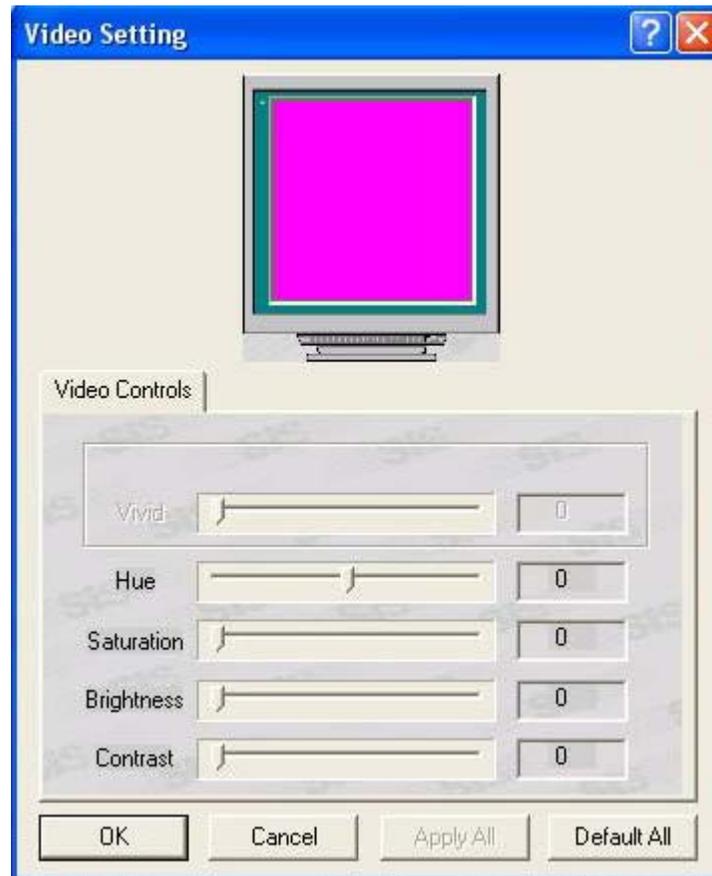
Driver Mode Setting

The SiS's driver allows three simultaneous outputs to LCD, TV and CRT for TM5600. And allows five simultaneous outputs to LCD, TV, CRT, LCD & CRT mirror mode, LCD & TV mirror mode for TM5800. Before proceeding, be sure the monitor is connected to the computer.



Video Setting

From the "Setting", you can also adjust the video of your display to overlay, contrast or brightness.



Chapter 7

Troubleshooting



This chapter describes locating and solving problems that you may encounter while using your computer.

Locating a Problem

Problems with your computer can be caused by something as minor as an unplugged power cord – or as major as a damaged hard disk. The information in this chapter is designed to help you find and solve minor problems. If you try all the suggested solutions and you still have a problem, make a list of what steps you have taken to correct the problem and contact your dealer.

Successful troubleshooting is the result of careful observation, deductive reasoning, and an organized approach to solving the problem.

The problems that you will encounter can be divided into two basic categories: hardware problems and software problems. Hardware problems can be further divided into electrical and mechanical problems. You will know you have a hardware problem if the screen is dark, the computer cannot read the disk drives, or you get an error message during the Power-On Self Test (POST).

Software errors can occur at several levels. The ROM BIOS and the operating system can give you a large number of error messages. On top of this, each application software package has its own set of error messages. It is important to determine whether the software error message you are getting is from the application or the operating system. Once you know this, you can look in the respective manual for a solution to the problem.

Checking Cables and Connections

Start by performing a careful visual inspection of the exterior of the computer. If no LEDs are illuminated, make sure that your computer and its peripherals are getting power and communicating with each other properly.

To check the power cables, and connections:

-
1. If you have been using battery power, connect the Mobile PC to an external power source and make sure that the battery has a charge.
 2. If you are using the Mobile PC with the AC adapter, check the power outlet, the power cord, and any power switches that may affect your computer.
 - Check the wall outlet or power strip with an item that you know is functioning properly. A lamp or radio is a convenient item for checking the power. You may also need to check the fuses and breakers in your electric box.
 - If the outlet is controlled by a wall switch, make sure that the switch is on.
 - If the outlet is controlled by a dimmer switch, use a different outlet.
 - If your computer is plugged into a power strip with an On/Off switch, make sure the switch is on.
 3. With the computer's power switched off, check all cable connections. If the computer is connected to any peripheral devices, look for loose or disconnected cables.

If the computer is too close to a wall, a cable connection may be loose or the cables may be crimped.



Do not substitute cables for different devices (other than the manufacturer recommended cables) even if they look exactly alike. The wiring inside the cable may be different.

4. When you are certain that you have power available and all connections are good, turn the computer on again. If the computer still does not start, you may have a hardware problem.

The Power-On Self Test

The Power-On Self Test (POST) runs every time you turn on or reset the Mobile PC. The POST checks memory, the main system board, the display, the keyboard, the disk drives, and other installed options.

A few seconds after you turn on your computer, a copyright message appears on your display screen. A memory test message appears next; as the test continues, memory size increases until all installed memory is tested. Normally, the only test routine visible on the screen will be the memory test.

Two classifications of malfunctions can be detected during the POST:

- Error messages that indicate a failure with either the hardware, the software, or the *Basic Input/Output System* (BIOS). These *critical malfunctions* prevent the computer from operating at all or could cause incorrect and apparent results. An example of a critical error is microprocessor malfunction.
- Messages that furnish important information on the power-on and boot processes (such as memory status). These *non-critical malfunctions* are those that cause incorrect results that may not be readily apparent. An example of a non-critical error would be a memory chip failure.

In general, if the POST detects a system board failure (a critical error), the computer halts and generates a series of beeps. If failure is detected in an area other than the system board (such as the display, keyboard, or an adapter card) an error message is displayed on the screen and testing is stopped. It is important to remember that the POST does not test all areas of the computer, only those that allow it to be operational enough to run diagnostic programs.

If your system does not successfully complete the POST, but displays a blank screen, emits a series of beeps, or displays an error code, consult your dealer.

General Hardware Problems

A few common hardware problems and suggested solutions are presented in the table below:

Problem: **Failure in the installation of the Audio driver.**

Solution: Be sure to first remove the current audio device from your system. Please follow the instruction on the installation of audio driver.

Problem: **The display screen is dark**

Solution: Make sure that the computer is not in Suspend mode. Check the Brightness controls for the screen. If the controls are turned too far down, the screen will be dark.

Problem: **An incorrect date and time are displayed.**

Solution: Correct the date and time using the DOS DATE and TIME commands or the options in the Setup Utility. If the date and time become incorrect after a short time, your CMOS battery may be depleted. Contact your dealer to change the battery.

Problem: **The message: "Invalid system disk, Replace the disk, and then press any key" appears during boot.**

Solution: Check and make sure that you do not have a non-bootable floppy diskette inserted in your floppy drive. If your USB FDD is empty, you may not have an operating system installed on your drive. Contact technical support for assistance.

Problem: **You hear irregular beeps during operation of the Mobile PC and the system halts.**

Solution: The problem is beyond the scope of this manual. Contact technical support.

Problem: An unidentified message is displayed.

Solution: Reboot the computer and run the BIOS system setup. Confirm the Setup parameters. If the same message is displayed after booting up again, contact technical support for assistance.

Problem: The system cannot access the CD-ROM/DVD-ROM drive.

Solution: Check that a CD is properly inserted in the drive. Make sure that you are using the correct program for that kind of CD. For example, the system cannot read a data CD using an audio program.

Problem: You cannot operate the printer.

Solution: Check the printer cable connection. Ensure that the printer power switch is turned on. Confirm that the printer is on-line.

Problem: You can't save data to disk.

Solution: Ensure that the disk has been formatted. Consult your operating system manual for information on formatting floppy diskettes.

Problem: The diskette is write-protected.

Solution: Eject the diskette, remove the write protection, and try again.

Problem: The diskette is full.

Solution: Try using another diskette or free up some space on the diskette. The disk drive is not operating. Contact your dealer for support.

Problem: You cannot use the mouse.

- Check the cable connection.

-
- Check the mouse with another application to see if there is a software incompatibility problem.
 - If possible, check the mouse with another computer to see if it works. If it doesn't operate on a different system, the mouse might be broken.

Contacting Your Dealer

If you still have a problem after reading the preceding sections, the next step is to contact your dealer. Your dealer can determine if the problem is something that requires the computer to be taken to the shop. Before you call your dealer, however, prepare the following information:

- How is your computer configured? Your dealer needs to know what peripheral devices you are using.
- What messages, if any, are on the screen?
- What software were you running at the time?
- What have you done already to try to solve the problem? If you have overlooked a step, your dealer may be able to solve the problem over the phone.

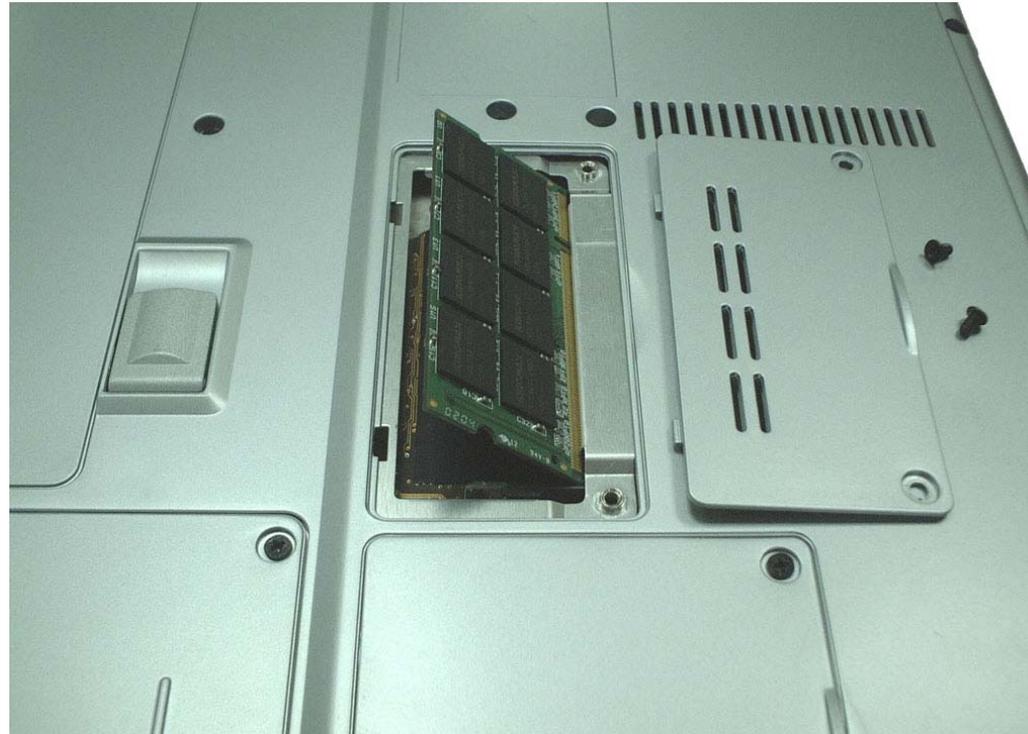
Chapter 8

Upgrading your System



Upgrading your Memory

Refer to the following instructions and illustration for information on upgrading your Mobile PC's memory.



1. Turn off the computer and disconnect the AC adapter and all peripherals.
2. Turn the Mobile PC over so that the rear ports are facing you and locate the memory module compartment.
3. Remove the screws that secure the RAM module compartment cover and set

it aside in a safe place.

4. Remove the compartment cover and then angling it up and out.
5. If you need to install a higher capacity module, gently push the edge clips on both sides to release the module. Angle the card slightly upward and gently slide it from its edge connector slot. Store the card in the anti-static bag that contains your new module(s).
6. To install the new memory card, hold the card with its gold edge connector toward the edge connector slot of the compartment. To help you orient the cards, the edge connector has been made with two unequal-length sections. You will only be able to insert the card in one direction.
7. Insert the edge connector into the slot. The gold edge connector of the card should not be visible when the card is fully inserted.
8. Press the card downward where you should hear an audible click as the latches of the connector secure the card in place.
9. Once the module is properly seated, you can replace the cover on this compartment.
10. Replace and tighten the screw.

The Easy to Upgrade HDD Module

The hard drive in your Mobile PC is made to be easily swapped out for upgrading. You should back up your hard drive before attempting to change the hard drive.



Make sure that before you install a new drive, all the files in your system should be backed up.

To upgrade your Hard Drive

1. Power down the system completely. Turn the system over with the front of the unit facing you.
2. Remove the three screws that secure the compartment cover and set them in a safe place.
3. Slide the HDD cover away from the compartment.



4. The drive is attached to a special bracket that secures it to the Mobile PC computer. There are 4 screws hold the bracket. Remove the screws and set them in a safe place.
5. Push the HDD slightly in the direction of the arrow as shown in the illustration to release it from the pins of the drive.
6. Gently hold the grip of the HDD, lift it up to release from its compartment.



7. To install the new HDD, you will need to align the tabs on the drive bracket with the slots on the bay. Press down gently on the drive bracket until it engages with the system. Do not force the drive into place this can bend the pins on the hard drive.
8. Slide the compartment cover into place and be sure the screw holes on the cover align completely with the screw holes in the case.
9. Secure the cover with the three screws.

Installing the WLAN

The Wireless Local Area Network (WLAN) Interface card enables high-speed access without wires to network assets.

1. Open the LCD panel to at least 135 degree.

- 1-1. Turn the system clockwise with 90 degree to let the system stand on your desk to better disassemble the hinge cover.
- 1-2. Pull up the two hinge cover ears.



2. Turn the system back to sit on your desk and lift up the hinge cover on top of the keyboard.
 - 2-1. Hinge cover is therefore disassembled from the system safely without any scratch on the surface.



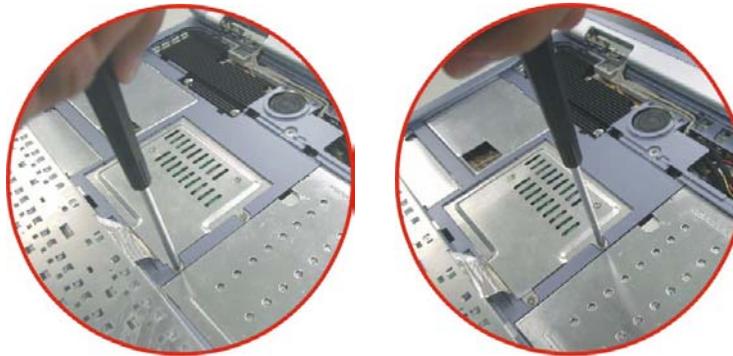
3. Unscrew the screw attached on the keyboard.



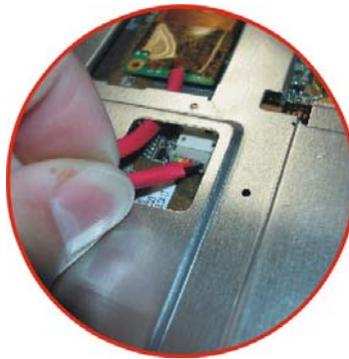
4. Lift up the keyboard.



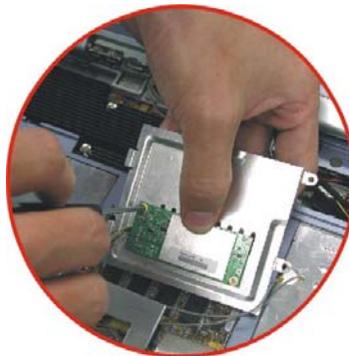
5. Remove the two screws attached to the WLAN door.

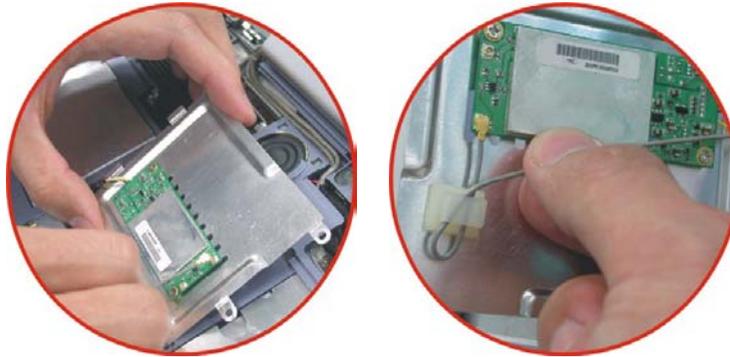


6. Open the WLAN door and connect the connector of the card and PCBA.



7. Tighten up the two screws on the WLAN. Connect the antenna connector back to WLAN card.





8. Connect the antenna connector back to WLAN card. Lock the door of the WLAN with the two screws you remove earlier.



9. Attach back the hinge cover of the computer.



Appendix A

Specification



Detailed Mobile PC Specifications

CPU

- Transmeta TM5600/5800 CPU, 512KB L2 cache on die.
- 474 pin ceramic BGA package.

Core Logic

- North Bridge embedded in CPU (not support AGP bus interface), South bridge ALi 1535+
- Supports host bus at 66 MHz
- 3.3V PCI version 2.1 compliance
- ACPI V1.0b
- USB 2.0 compatible

Memory

Main Memory for TM 5600

- 128 MB SDRAM memory on board.
- 128/ 256 MB memory module options
- One 144 pin SO-DIMM type memory slots
- 3.3V TSOPS DRAM.
- Supports PC133 SDRAM

Main Memory for TM 5800

- 128/ 256/512 MB memory module options
- One 200 pin SO-DIMM type memory slots
- 2.5V DDR- RAM.
- Supports DDR266 D-RAM

ROM

- 4Mb Flash ROM

Mass Storage

HDD

- HDSupport Enhanced IDE (PIO mode 4) and ATA5 (Ultra DMA 33/66/100 mode)
- Easily up-gradable 2.5" 9.5mm HDD

Module Bay

- Supports CD-ROM/ DVD-ROM/ Combo Drive; 5.25" 12.7mm height
- Fast IDE and ATAPI interface CD-ROM/ DVD-ROM/ Combo DVD+RW (TM5800) Drive

Pointing Devices

- Synaptics TouchPad
- Support four way scrolling feature

Keyboard

- US/Europe, DOS/V keyboard for Japan, full size keyboard alike pitch

-
- 300 mm keyboard with key stroke 3.0mm
 - Twelve function keys and Windows Function key
 - Internal keyboard works a standard 101/102 desktop keyboard
 - 2 short-cut keys: WWW & eMail

Audio

- Dual full-duplex Direct Sound Channels
- 18-bit ADC & DAC resolution
- Support SPDIF out /4 channel output
- AC'97 2.2 & PC2001 compliant

I/O Ports

- One parallel port supported EPP/ECP (25-pin female D-connector)
- One S-video TV out port for TV
- One DC input port for External AC adapter (2-pin DC jack)
- One video port for external analog VGA monitor (15-pin female D-connector)
- USB 2.0 port x 4
- MIC-in, headphone jack w/ adaptor for 5.1 channel SP/DIP support
- RJ-11 jack for Fax/Modem
- RJ-45 jack for LAN

Video System

Controller

- SiS 315E PCI bus interface.
- 529-pin PBGA package.

Display

- 14.1" XGA+ TFT --- QDI QD141X1LH03 and Hyundai HT14X13-102

Electrical

AC Adapter

- External universal type AC adapter, output maximum 60W

Battery

- 4-cell Li-Ion battery pack
- 8-cell Li-Ion battery pack option.
- User interchangeable
- Removable and rechargeable
- Charging time for 4 cell battery pack: approximately 2 hours to full charge when system off or in suspend
- More than 1 hour battery life time under Business Winstone 2002 Battery Mark.

Dimension

- 326.0 mm (W) x 258.0 mm (D) x 32mm(H)
- 12.83" (W) x 10.17" (D) x 0.99"(H)

Weight

- 2.7kg (5.9 lbs) with 14.1" panel, Battery and DVD-ROM Drive installed

Operating Environment

Temperature

- Operating: 5°C ~ 35°C
- Storage: -20°C ~ 60°C

Humidity

- Operating: 30% ~ 90% (non-condensing)
- Non-operating: 10% ~ 90% (non-condensing)

Altitude

- Operating: -200 to 10,000 feet above sea level
- Non-operating: -200 to 30,000 feet above sea level.

Options

- Wireless LAN module
- 8 cells Li-Ion battery pack and dummy battery pack
- Module bay: CD-ROM/DVD-ROM/Combo (DVD-ROM+CD-RW) Drive and Dummy ODD

Accessories

- Quick Guide
- Driver CD
- AC adapter
- Power cord
- Phone cord
- Battery pack

Software Specifications

System Software

- System BIOS: AMI BIOS
- Supported Operating Systems
 - Optional Windows 98SE
 - Optional Windows XP with SP1 or above version
 - Optional Windows ME or above version
 - Optional Windows 2000 with SP3 or above version
- Standard Software Drivers
 - VGA driver
 - Audio driver
 - TouchPad driver
 - Modem driver
 - LAN driver
 - Wireless LAN driver
 - USB20 driver