# Ultra Mobile PC User's Guide

Model: M704

First Edition: November 2007

#### **NOTICE**

Specifications and information found in this guide are subject to change **without** notice. Any changes therefore will be incorporated in future editions. The manufacturer assumes **no** responsibility for errors or omissions in this document.

#### **TRADEMARKS**

- Windows™ is the trademark of *Microsoft Corporation*.
- Bluetooth® is the trademark owned by its proprietor.
- Other trademarks are properties of their respective owners.

#### **Standards**

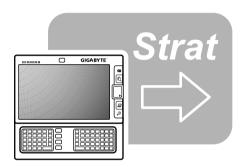
The following standards are adopted throughout this guide:

- UMPC in **boldface** (with or without capitalization) refers to the UMPC computer that you have purchased.
- Boldface type is also used to highlight important information in this document.
- Whenever extra caution is called for, the information will be boxed in a dark frame preceded by "Note:" or "Warning:

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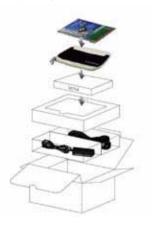


# **Chapter 1** Before You Begin

Please read this section before you start using your  ${\bf Ultra\ Mobile\ PC}.$ 

# 1.1 Checking What You Received

Your **Ultra Mobile PC** package should contain the following items:



- The Ultra Mobile PC.
- · AC Adapter.
- AC Power Cord.
- CD Disc (Including Drivers and User's Guide).
- Battery Pack.
- Utility CD.
- Protection Bag.
- · Warranty Card.
- Extra stylus pen.
- Docking Station (Option).
- TV Module with Antenna (Option).
- GPS Module with Antenna (Option).

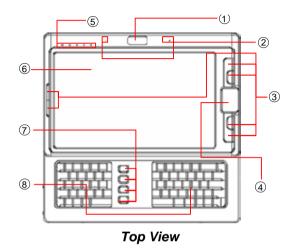
**Note:** You should keep the original factory carton and packing materials in case you need to ship the unit back for servicing.

# 1.2 Examining Your Computer

Before you start using your computer, you need to get acquainted with its main features and interfaces:



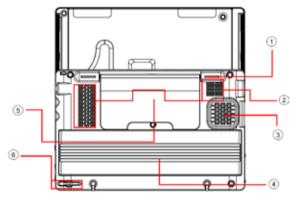
#### Panoramic View





- 2. Two Internal Microphones
- 3. Six System Buttons
- 4. Touch Pad
- 5. Five System LEDs
- 6. Touch-Screen LCD
- 7. Four Communication Buttons
- 8. Keyboard

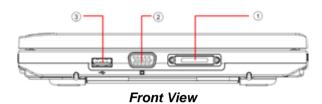
**Note:** The touch-screen LCD is available for two operation modes: "stylus pen-touch sensitive" and "finger-touch sensitive". In order for the touch-screen LCD to function properly, you are advised to press on the touch-screen with lightweight strength.



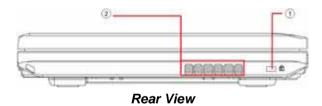
**Bottom View** 

- Support Foot (also serves to lock and to disassemble the Flip Stand)
- 2. Ventilation Holes
- 3. Speaker
- 4. Battery Pack
- 5. Flip Stand
- 6. Stylus Slot

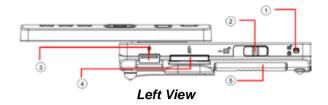
**Note:** The stylus pen together with the system touch-screen LCD display provides you a touch-screen operation by emulating the industry standard mouse right click. You are advised to keep the stylus pen in the stylus slot when not in use.



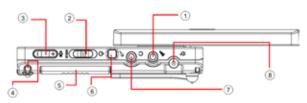
- 1. Connector for Docking Station
- 2. VGA Connector
- 3. USB Connector



- 1. Kensington Lock
- 2. Ventilation Holes

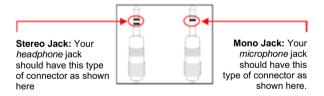


- 1. Battery Lock
- 2. Battery Latch
- 3. USB Connector
- 4. Media Card Slot (SD/SD-IO/MMC)
- 5. Battery Pack



# Right View

- 1 Microphone Jack
- 2 Power/Hold Switch
- 3 Volume (Increase/Decrease) Switch
- 4 Stylus Slot
- 5 Battery Pack
- 6 The SAS (Alt+Ctrl+Del) Switch
- 7 Headphone Jack
- 8 DC-In Jack



Two Types of Audio Jack

# 1.3 The Five System LEDs



#### The Bluetooth® LED

This LED would be lit when the **Bluetooth**® is powered on. For details on how to power on and power off the **Bluetooth**, please refer to *Chapter 1.6*.



#### The Wireless LAN LED

This LED would be lit when the **Wireless LAN** is powered on. For details on how to power on and power off the **Wireless LAN**, please refer to *Chapter 1.6*.



#### The HDD Access LED

This LED would be lit when system is accessing the HDD drive.



# The Battery Pack LED

Below is how the LED would behave in different situations:

On	Battery pack is being recharged: fast-charge or
	pre-charge.
Off	Battery pack is not under recharge.
Blinking	Battery pack is consuming down to 10% level.



#### The Power On LED

Below is how the LED would behave in different situations:

Off	System is powered off, or in <b>Hibernate</b> mode.
On	System is in full operation.
Blinking	System is in <b>Standby</b> mode.

**Note:** The Five System LEDs are located near the upper left corner of display panel. For exact location, please refer to the **Top View** diagram in *Chapter 1.2*.

For more details on **Standby** and **Hibernate**, please refer to **Power Options** in the **Control Panel** of your Microsoft Windows™ operating system.

≻Fn Keys≺

By pressing the Fn keys with other keys, it can simulate following keyboard functions.

[Fn]+[A]: Increase screen brightness.

[Fn]+[Z]: Decrease screen brightness.

[Fn]+[S]: Switch between LCD or external display device.

#### 1.4 The Three Control Switches



#### The SAS (Alt+Ctrl+Del) Switch

Press this switch to emulate Windows' "Alt", "Ctrl" and "Del" buttons pressed simultaneously.



#### The Power/Hold Switch

Slide this switch to the right (♠) to emulate standard power button of a personal computer. The power button is programmable by user. For details on how to program the power button, please refer to the **Power Options** of **Control Panel** in **Windows™** System.

Slide this switch to the left (HOLD) to temporarily suspend inputs from the keyboard, touch pad, six system buttons on the left side of the LCD screen, and the four communication buttons in between the left/right keyboard. Manually slide this switch back to the middle to resume functions of the above input devices. The purpose of this switch is to prevent mis-triggering of these input devices while the system unit is idle when it is powered up. For exact locations of these input devices, please refer to Top View diagram in Chapter 1.2.



#### The Volume Switch

Click this switch to the right (+) to increase audio volume. Click this switch to the left (-) to decrease audio volume.

**Note:** The **Three Control Switches** is located on the right side of system unit. For exact location, please refer to the **Right View** diagram in *Chapter 1.2*.

# 1.5 The Six System Buttons



#### **Left Mouse Button**

Press this button to emulate the left mouse function.



#### **Right Mouse Button**

Press this button to emulate the right mouse function.



#### **Snapshot Button**

Press this button to emulate the snapshot function.



#### Touch Pad On/Off Button

Press this button to turn on and turn off the touch pad function.



#### **Mobility Center Button**

Press this button to enter into the menu of optimized mobility setting.



#### Zoom-In Button

Press this button to activate the zoom-in and zoom out functions whereby portion of the display screen near the mouse cursor would be enlarged or minified and displayed near the topside of the display screen.

**Note:** The **Six System Buttons** are located on the left / right side of the LCD display. For exact location, please refer to the **Top View** diagram in *Chapter 1.2*.

# 1.6 The Four Communication Buttons



#### **Bluetooth Button**

Press this button to power on and power off the **Bluetooth**® module. Powering on the **Bluetooth**® by pressing this button does not automatically activate the **Bluetooth**® function. After powering on, you need to activate the **Bluetooth**® function through Windows™. The main purpose of this button is to provide you a quick way to turn off the power of **Bluetooth**® when entering venues like airplanes, airports, and hospitals where the usage of **Bluetooth**® is prohibited or not advisable.



#### Wireless LAN Button

Press this button to power on and power off the **Wireless LAN** module. Powering on the **Wireless LAN** by pressing this button does not automatically activate the **Wireless LAN** function. After powering on, you need to activate the **Wireless LAN** function through Windows<sup>™</sup>. The main purpose of this button is to provide you a quick way to turn off the power of **Wireless LAN** when entering venues like airplanes, airports, and hospitals where the usage of **Wireless LAN** is prohibited or not advisable.



#### Web Cam Button

Press this button to power on and power off the **Web Cam** module. After powering on the **Web Cam**, you need to activate its function through Windows™.



#### **GPS / TV Tuner Module Power Button**

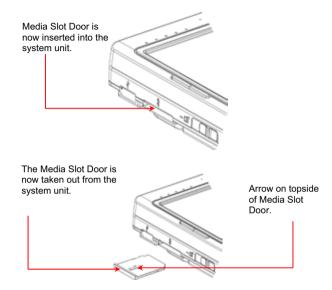
Press this button to power on and power off the GPS Module or TV Tuner Module. Powering on the GPS Module or TV Tuner Module by pressing this button does not automatically activate the respective functions. After powering on, you need to activate the function through Windows™. This button would work only when the system is powered on, and either one of the GPS or TV Tuner Module is connected into the system unit. Note: GPS and TV Tuner Modules are optional and need to be purchased separately. For details on how to connect these modules to the system unit, please refer to Chapter 4.

**Note:** The proper way to activate the above devices and modules is as below:

- 1) Press the above buttons to power on the devices, and modules.
- 2) Activate the respective application programs in Windows™. The effective range of the system **Bluetooth**® is 10 meters.

**Note:** The **Four Communication Buttons** are located between the left/right keyboards. For exact location, please refer to the **Top View** diagram in *Chapter 1.2*.

#### 1.7 Attention On Media Card Slot



Please observe below safety measures:

• When no card (SD/SD-IO/MMC cards) is inserted into the media slot, make sure this slot is covered by the "media slot door" as supplied together with this Ultra Mobile PC. The purpose of this "media slot door" is to prevent foreign matters from entering into the system unit through this slot, when no card is inserted. When inserting this "media slot door", please make sure the arrow is on the topside as shown above. Inserting this door upside down may cause damage to your Ultra Mobile PC.

#### 1.8 Touch Screen Calibration

The stylus pen together with the system touch-screen LCD display provides you a touch-screen operation by emulating the industry standard mouse right click. Below are the two conditions that you need to calibrate your touch-screen.

- The first time Windows is installed and boot up. The active cursor is shifted; not exactly the same position where the stylus pen tip is tapped.
- Periodically when you find the active cursor is shifted away from the screen position where the stylus pen tip is tapped.

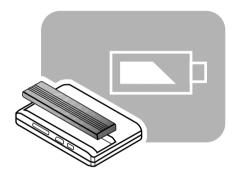
To calibrate the touch-screen, go into **Tablet PC Setting** of **Control Panel** of **Windows™ VISTA®**. In the **Tablet PC Setting** screen, select **General** and then **Calibrate**. Then follow instruction to complete calibration.



**Note:** You need to set screen display resolution to 1024x600 before proceeding with the calibration.

# 1.9 Operating Temperature

Operating Temperature: 10°C to 35°C.



# Chapter 2 Battery

# 2.1 Battery Pack

Your **Ultra Mobile PC** is equipped with a high-energy rechargeable **Lithium Ion (Li-Ion)** battery pack. Battery life will vary depending on the product configuration, product model, applications loaded on the product, power management settings of the product, and the product features used by the customer. As with all batteries, the maximum capacity of this battery will decrease with time and usage.

# 2.2 Recharging The Battery Pack

Your **Ultra Mobile PC** supports both on-line and off-line recharge. Follow the procedure below to recharge battery:

- Make sure the battery pack is installed in the Ultra Mobile PC.
- Connect the AC adapter to the **Ultra Mobile PC** and to an electrical outlet.

When a battery pack is being recharged, its battery LED (located at the upper left corner of LCD display) would be lit. For details on the LEDs, please refer to *Chapter 1.3*. When the **Ultra Mobile PC** is OFF, a depleted Li-lon battery will take three hours to recharge.

#### 2.3 Questions And Answers

Q: I can feel a mild heat next to the battery pack. Is it normal?

A: The battery will generate heat during recharging and discharging. There is a protection circuit inside the Ultra

Mobile PC to prevent overheating. User needs not to worry.

Q: My battery operation time is not as long as it should be. Why?

A: The battery is heat sensitive and can only be charged to its maximum if the battery and its environmental temperature remain within 15-25°C (59-77°F). The more the temperature deviates from this range during recharging, the less chance there is for the battery to be fully charged. In order to recharge the pack to its full capacity, users are requested to cool down the unit by unplugging the AC Adapter. Wait until it is cooled down. Then plug in the AC Adapter to start recharging again.

I did not use my spare battery for a few days. Even though it was fully recharged, there wasn't as much power left as a newly charged one. Why?

The batteries will self-discharge (1% per day for Li-lon) when they are not being recharged. To make sure a battery pack is fully charged, recharge before use. Always keep the battery inside the **Ultra Mobile PC** and have the AC adapter connected whenever possible.

- Q: I did not use my spare battery for months. I have problem in recharging it.
- A: If you happen to leave your battery pack to go through an extended period of self-discharge, say more than three months, the battery voltage level will become too low and needs to be **Pre-Charged** (to bring the battery voltage level high enough) before it automatically (for Li-lon only) resumes its normal **Fast Charge**. **Pre-Charge** may take 30 minutes. **Fast Charge** usually takes 2~3 hours.

# 2.4 Battery Maintenance

To maintain the battery pack's maximum capacity, you should occasionally let the **Ultra Mobile PC** deplete its battery power completely before recharging.

To carry out a complete depletion of the battery, disconnect the AC adapter and let your **Ultra Mobile PC** consume the remaining battery power. To speed up the depletion, use the HDD as much as possible. When the battery is empty, wait for the **Ultra Mobile PC** to cool down (especially the battery). The temperature should be within 15-25°C (59-77°F). Then insert the AC adapter to recharge the battery.

# 2.5 Power Consumption

The Windows™ operating system has incorporated the latest state-of-the-art ACPI (Advanced Configuration Power Interface) power management methodology. In order to fully utilize the power of your battery packs, it would be a good idea for you to spend sometime to acquire a basic understanding of the power management concept from your operating system.

In Windows<sup>™</sup> Operating Systems, you can go through Power Options of the Control Panel according to the version of Windows<sup>™</sup> Operating System the Ultra Mobile PC applies. We shall not describe them in details.

# 2.6 Reducing Power Consumption

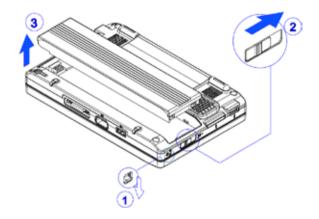
Although your **Ultra Mobile PC** (together with the operating system) is capable of power conservation, there are measures you can take to reduce the power consumption:

- Use the AC power whenever possible.
- Try to use the HDD drive to read and write files, instead of using the external USB FDD.
- Disable unused devices, such as Web Cam, WLAN, Bluetooth®, and etc.
- Decrease LCD panel brightness through Windows.

**Note:** Whenever system is powered on or powered off, make sure the battery pack is installed in the battery pack compartment.

# 2.7 Removing The Battery Pack

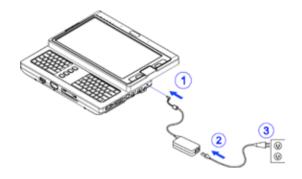
This battery pack can easily be removed and replaced. Make sure that the computer is properly shutdown before changing the battery pack. If you would like to change the battery pack while power is on, make sure this battery pack is not the only electrical source to the system unit. Follow the steps below to remove the battery pack.



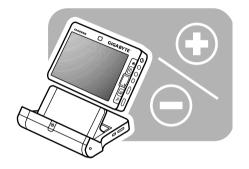
- Make sure the system is properly shutdown.
- Flip the system upside down as shown.
- Push the battery lock to the unlock position as shown by #1.
- Push the battery latch to the unlock position as shown by #2.
- Remove the battery pack as shown by #3.

To insert the battery pack, reverse the steps above.

# 2.8 Connecting System To AC Adapter



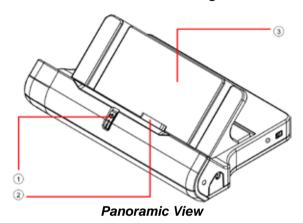
- Connect AC adapter to system unit as shown by #1.
- Connect AC power cord to AC adapter as shown by #2.
- Connect other end of **power cord** to an electrical outlet as shown by **#3**.



# Chapter 3 The Docking Station (Optional)

Depending on model, your **Ultra Mobile Personal Computer** is equipped with an optional **Docking Station**. This **Docking Station** supports hot plug-and-play with the system unit.

# 3.1 Different Views Of The Docking Station

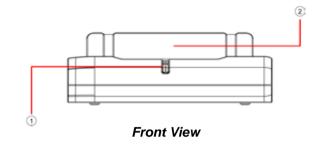


- 1. Power Button
- 2. Connector to System Unit
- 3. Detachable Stand

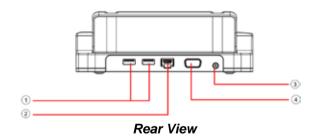
**Note:** This **Power Button** has the same function as the **Power Switch** as described in *Chapter 1.4.* For details, please refer to *Chapter 1.4.* 

The **Detachable Stand** is shipped not mounted to the main body of the **Docking Station** as shown above. For details on how to mount this **Detachable Stand**, please refer to *Chapter 3.2*.

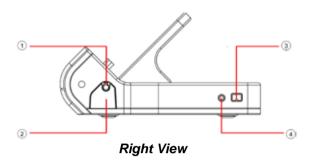
This **Detachable Station** must be connected to AC adapter to access the full function.



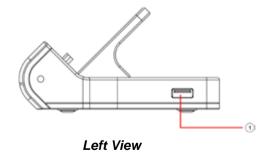
- 1. Power Button
- 2. Detachable Stand



- 1. USB Connectors
- 2. RJ45 LAN Connector
- 3. DC-In Jack
- 4. VGA Connector



- 1 Stylus Pen
- 2 Stylus Pen Tray (push to eject)
- 3 IEEE 1394 Connector
- 4 Headphone Jack

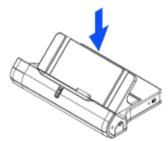


1 USB Connector

# 3.2 Mounting The Detachable Stand



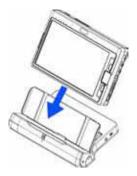
- Align and lock the tenon from detachable stand to the mortise from the docking station as shown by #1.
- Slide the right side of the **detachable stand** in the direction as shown by #2.



 Gently press the detachable stand to the docking station as shown.

Reverse the above steps to un-mount the **detachable stand**.

# 3.3 Mounting The System Unit



- Make sure connectors from both sides are well aligned.
- Slide the system unit down as shown.

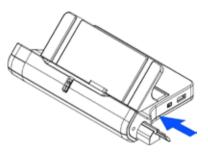


• System unit is mounted when the two connectors are full engaged as shown.

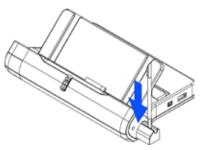
Reverse the above steps to un-mount the system unit.

# 3.4 The Stylus Pen

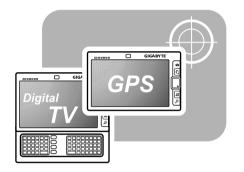
The stylus pen can be taken out and erected as shown below:



- Press on the Stylus Pen Tray in the direction as shown.
- The Tray would slide out as shown.

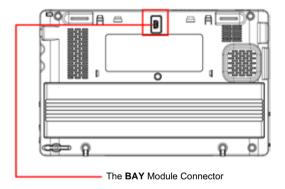


 The Tray has an insertion hole where you can erect the Stylus Pan as shown.



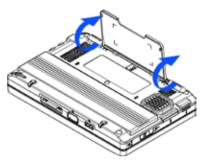
Chapter 4 The BAY Module Connector

This **Ultra Mobile PC** has a **BAY Module Connector** whereby by you can either choose to connect it to a **GPS** (Global Positioning System) **Module**, or a **TV Tuner Module**. Both the **GPS Module** and **TV Tuner Module** are optional and need to be purchased separately. The **BAY Module Connector** is underneath the **flip stand**. Diagram below shows the bottom view of the system unit with the **flip stand** removed.

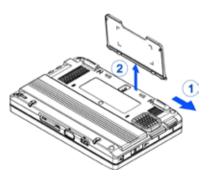


The rest of this chapter describes how the **flip stand** is removed and how the **GPS Module** and **TV Tuner Module** are installed to the system unit.

# 4.1 Removing The Flip Stand



• Gently flip the flip stand to an almost erect angle as shown.

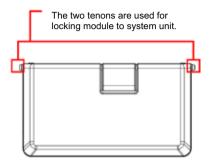


- Press and slide the **support foot** in the direction as shown by #1.
- Remove the flip stand as shown by #2.

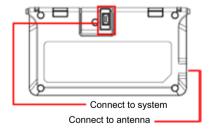
Reverse the steps above to put back the flip stand.

#### 4.2 The BAY Modules

Externally, the **GPS Module** and **TV Tuner Module** looked very much the same as shown below.

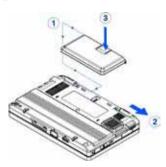


 The external side of the BAY Module when it is installed to the system unit.



 The internal side of the BAY Module when it is installed to the system unit.

# 4.3 Installing The BAY Module



- Align and lock the tenon from the module to the mortise from the system unit as shown by #1.
- Slide support foot in the direction as shown by #2.
- Gently press on the back of the connector to connect module as shown by #3.

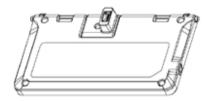


• The **support foot** would slide back by itself in the direction as shown. The module is locked to the system unit.

Reverse the above steps to remove the **BAY Module**.

#### 4.4 The GPS Module Antenna

The GPS Module has a built-in internal antenna.



Note: Before you using GPS module:

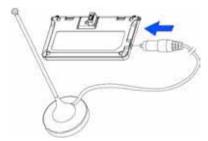
- 1.Please install the GPS driver (Driver is on your M704 Utility CD)
- Please set the GPS Module device communication port to COM4 and baud rate to 115200.

#### Caution:

In case, you want to try out other external antenna, you need to purchase an industry standard active type external antenna with MMCX connector.

#### 4-5 The TV Tuner Module Antenna

**TV Tuner Module** is without a built-in internal antenna. Therefore, it is necessary to use its proprietary external antenna as shown below.



#### Note:

- 1.Please install the TV driver (Driver is on your M704 Utility CD)
- 2.Please install the TV application software (Application CD is on your accessory package)
- 3. Connect external antenna to the TV Tuner Module.

#### Caution:

In case, you want to try out other external antenna. You need to purchase a connector adapter. One end of this connector adapter connects to the TV Tuner Module. The other end of this connector adapter has an industry IEC connector and is used to connect to your own external antenna.



Chapter 5 Using the BIOS Setup Utility

# 5.1 Using the BIOS Setup Utility

Your UMPC has a BIOS setup utility which allows you to configure important system settings, including settings for various optional functions of the computer. This chapter explains how to use the BIOS setup utility.

# **BIOS Setup Menu**

The BIOS setup Utility allows you to configure your computer's basic settings. When you turn your computer on, the system reads this information to initialize the hardware so that it can operate correctly. Use the BIOS setup utility to change your computer's start-up configuration. For example, you can change the security and power management routines of your system.

# Starting the BIOS Setup Utility

You can only enter the BIOS setup utility as the computer is booting, that is between the time you turn on the computer and before the Windows interface appears. If your computer is already on, shut down your computer completely (power off) and restart it and then press the **Fn+F2** key to enter the setup utility.

# **Navigating and Entering Information in BIOS**

Use the following keys to move between fields and to enter information:

← →	Select Screen
<b>*</b>	Push the up and down arrow keys to move among selections, then press <b>Enter</b> to make a selection.
+-	Change Option
Tab	Select Field
F1	General Help
F10	Save and Exit
ESC	Press <b>Esc</b> to exit any section. If you wish to exit the BIOS utility <i>without</i> saving changes, go to the main menu, then press <b>Esc</b> .

Users are allowed to enter new values to replace the default settings in certain fields, and the rest fields are specified by system default parameters and cannot be modified by users. Reverse the attribute of the main options and press the Enter key to enter into the submenu. Press the Esc key to return to the previous configuration page.

# The Main Menu

#### BIOS SETUP UTILITY

Main	Advanced	Security	Boot	Exit
System Overview Language System Time System Date > IDE HDD  System Memory: System Memory: Processor CPU Type: VI CPU Speed: 10 BIOS Version: 7 KBC Version: 7	[English [19:14: [Thu 01 [Hard D] 704MB	h] 50] /01/2004] Disk]	Select t language Use [+] Configu	thee display o for the BIOS.  or [-] to re system Time  slect Screen slect item eral Members of the person of the
V02.59 ©C	Copyright 1985-	2005, American	Megatren	ds , Inc.

Figure 5-1

# **Advanced Menu**

#### BIOS SETUP UTILITY



Figure 5-2

# Security menu

#### BIOS SETUP UTILITY

Main Advanced Security	Boot Exit
Security Settings Supervisor Password : Not Installed User Password : Not Installed	Install or Change the password.
Change User Password  Change User Password  IDE Hard Disk User Password  > Trusted Computing	→ Select Screen  ↑↓ Select Item Enter Change F1 General Help F10 Save and Exit ESC Exit
V02.59 @Copyright 1985-2005, Americ	can Megatrends , Inc.

Figure 5-3

#### Boot menu

#### BIOS SETUP UTILITY



Figure 5-4

#### Exit menu

#### BIOS SETUP UTILITY



Figure 5-5

# **Change User Password**

With a User password, you can enter the Setup Utility and change or remove the User password, but you cannot enter the Setup Utility and change or remove the Supervisor password, nor enable diskette access if it has been disabled

# **Change Supervisor Password**

A supervisor password must be set before a lower-level user password can be set. After selecting **Change Supervisor Password**, press **Enter**. You will be prompted for the new password, and then again to verify it. Type in 6 or fewer keystrokes. If you make an error, press **Esc** to start over.

# **Resetting the CMOS to Default Settings**

The main page provides the system parameters for you to reset the CMOS to default settings. After you enter this page, select the Load Optimal Defaults:



Select [OK] to reset the CMOS to default settings.

# **Exiting and Saving**

Save Settings and Exit	Select this option to save changes to the field values, and restart the computer using the new values. (Pressing F10 from any of the menu screens also allows you to save settings and exit.)
Exit Without Saving	Select this option to discard any changes you have made to the field values, and restart the computer using the old values.

# 5.2 How to Upgrade the BIOS

Your Ultra Mobile PC M704 uses EPROM Flash BIOS chip that allows you to easily upgrade the BIOS program.

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

To upgrade the BIOS on DOS:

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

A:\> afudos XXXX.rom /p /b /n /c /X /R1 /R2 /SHUTDOWN or (XXXX BIOS file name)

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 M704) to download
- •BIOS upgrade tool (AMI WinPhlash) and the latest BIOS upgrade utility.

- 2.Unzip the file you have downloaded.
- 3.Run the AFUWIN.exe in your unzipped folder. Click OK to start running BIOS Flash



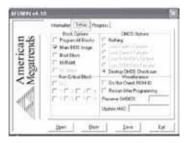
4.Click on the Information icon. Specify the location of your backup file and your new BIOS file. Click Open when you are ready to reset your BIOS with new settings.



Choose the BIOS ROM file you download form GBT websit.and press Open.



6.Click on Setup icon (please use the default settting) and click Flash to start BIOS Flash. The status of the execution will be shown in the pop-up progressive window. Please do not interrupt the process of the execution for the program to be properly executed.



7.The system now will be shut down for the program to be successfully completed. Please restart your system to complete the BIOS update.





# **Chapter 6** Troubleshooting

In this chapter, we will list some frequently encountered technical problems and tell you how to resolve them.

# 6.1 Frequently Asked Question

- Q: My computer switches to hibernation mode much too quickly, and I have to constantly hit a key or move the mouse to bring back the screen. What can I do?
- A: This is part of Windows Power Management. Access Power Management by clicking on Start / Control Panel / Performance and Maintenance / Power Options, and change the time next to the "Turn off monitor" option to the time you want. You have the choice of either adjusting time for the power supply or for the battery.
- Q: I've heard that cleaning and rearranging files on the hard drive will improve program's launch speed, how do I do this?
- A: Good disk maintenances can improve program launch speed. This normally includes deleting unnecessary files, and defragmenting hard disk so that files can be more efficiently grouped. Windows contains maintenance utilities for these tasks; run Disk Cleanup to remove unnecessary files, and Disk Defragmenter to defragment fragmented file blocks. For more information about these utilities, please refer to your Windows documentation.
- Q: The dial tone volume of the internal fax/modem is too low. How can I increase its volume?
- A: Go to Start/Control Panel/Sounds, Speech, and Audio Devices, under Device volume, adjust your speaker volume by controlling the volume bar.

- Q: What kind of external microphone can I use with my UMPC computer?
- You will need to use a self-amplifying microphone.
- Q: There are echoes coming from my speakers. What can I do?
- **A:** Double click on the Speaker icon on the task bar. Then, under Microphone Balance, check the Mute box.
- Q: Because of a software problem, I was unable to shut the computer down from Windows, I pressed the power button to power off the computer, but it didn't work. How can I force a power off?
- **A:** Make sure you press the power button for at least 4 seconds. Normally, this will force the computer to shut off.
- **Q:** Why can't I charge the battery of my portable computer after it was out of use for some time?
- A: After your portable computer has not been used for a long time (say: more than one month), the battery will enter into low voltage protection mode. Under this circumstance, restoring to normal voltage will require the battery to be slowly charged for several hours. Once the battery has been fully charged, your will resume to normal operation.
- Q: My computer says: "CMOS Battery Low", what should I do?

A: If your computer is without power (i.e. unplug the computer power source from the power outlet and remove the battery pack from it) for over 45 days, you would lose the information stored in CMOS.

Please follow the steps below to reconfigure your CMOS settings:

- 1. Press F2 to enter into the BIOS setup utility.
- Select "Load Optional Defaults?". When you see the following prompt, choose <OK> and then press <Enter>.
- Select "Save Changes and Exit", select <OK> and press <Enter> to restart your computer.

# Q: How to unplug or eject devices?

# A:

- In the notification area next to your task bar, double-click the Safe Removal icon. Safe Removal displays a list of Plug and Play devices that support safe removal and that are currently attached to the system.
  - If you do not see the Safe Removal icon, your device does not supports safe removal, and you cannot unplug or eject your device using Safe Removal.
- In Safely Remove Hardware, in the list of devices, select the device that you want to unplug or eject, and then click Stop. This tells the system that you will be unplugging or ejecting the device.
- In Stop a Hardware device, click OK.
   A notification appears stating that it is now safe to unplug or eject the device.



#### Caution

 Unplugging or ejecting a device that supports safe removal without first using the Safe Removal application to warn the system can cause data to be lost or your system to become unstable. For example, if a device is unplugged during a data transfer, data loss is likely. If you use Safe Removal, however, you can warn the system before you unplug or eject a device, preventing possible loss of data.



#### Note

 For removable storage devices that can safely be removed while the system is on, the system disables write caching by default. It does this so the devices can be removed without loss of data. When write caching is disabled, however, the system will likely experience slower performance, so be sure to enable write caching when you have finished removing the device.



# **Appendix A Agency Regulatory Notices**

# A.1 Safety Instructions



**CAUTION:** Please read these safety instructions carefully.



**CAUTION:** Please keep this User's Manual for future reference.



**CAUTION:** Please disconnect this equipment from AC outlet before cleaning. DO NOT use liquid or sprayed detergent for cleaning. Use a clean moistened cloth.



**CAUTION:** The wall socket used should be positioned near the equipment and should be easily accessible.



**CAUTION:** Please keep this equipment free from humidity.



**CAUTION:** Place the equipment on a reliable surface at all times. A drop or fall can cause severe damage.



**WARNING:** The openings of the enclosure are for air ventilation and are meant to protect the equipment from overheating. DO NOT COVER THE VENTILATION OPENINGS.



**CAUTION:** Verify the voltage of the power source before connecting the unit to any power outlet.



**WARNING:** DO NOT step on or place anything over the power cord.



**CAUTION:** All cautions and warnings on the equipment should be noted.



**WARNING:** If the equipment is not used for a long period of time, disconnect the equipment from the power source to avoid damage from power spikes.



**WARNING:** NEVER pour any liquid into any openings; a fire or electrical shock is possible.



**WARNING:** For safety reasons, other than predesignated ports, doors, and the equipment should be opened only through qualified service personnel.



**CAUTION:** If one of the following situations should arise, the equipment should be checked by an authorized technician:

- a. The power cord or plug is damaged.
- b. Liquid has penetrated into the equipment.
- The equipment has been exposed to excessive moisture.
- d. The equipment does not work well, or you fail to get it to work according to user's manual.
- $\ensuremath{\mathrm{e}}.$  The equipment has been dropped or damaged.
- f. The equipment has obvious signs of breakage.



**CAUTION:** DO NOT LEAVE THE EQUIPMENT IN TEMPERATURES BELOW -20°C°(-4°F) OR ABOVE 60°C (140°F). IT MAY CAUSE DAMAGE TO THE EQUIPMENT.



**WARNING:** Never install modem/telephone wiring during a lightning storm.



**WARNING:** Never install modem/telephone jacks in wet locations unless the jack is specially designed for wet locations.



**WARNING:** Never touch un-insulated modem/telephone wires or terminals unless the modem/telephone line has been disconnected at the network interface.



**CAUTION:** Use caution when installing or modifying modem/telephone lines.



**WARNING:** Avoid using a modem/telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.



**WARNING:** This computer contains an internal lithium battery-powered real-time circuit. There is a risk of explosion and injury if the battery is incorrectly replaced or handled. Do not attempt to recharge, disassembled, immerse in water, or dispose of it in fire. Replacement should be done through your UMPC dealer.



WARNING: 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. Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.



**WARNING:** Your **UMPC** contains a Ni-MH or Lilon battery pack. There is a risk of fire and chemical burn if the battery pack is handled improperly. Do not disassemble, crush, puncture, short external contact, dispose of in water or fire, or expose it to temperature higher than 60°C.



**WARNING:** Handle the battery pack very carefully. Avoid touching the metal leads on the connector of the battery case.



**CAUTION:** Use only approved AC Adapter with your UMPC. Using the wrong type of AC Adapter may cause serious damage to your UMPC.



**CAUTION:** The AC Adapter can accept a line voltage ranging from 100V to 240V and is compatible with most international power sources. If you are unsure whether your power source is compatible, please contact the local dealer for assistance.



**CAUTION:** For Continued Protection Against Risk of Fire, Replace Only with same Type and Rating of Fuse.



**WARNING:** Don't expose your **UMPC** to excessive heat or coldness (frost). Don't drop, spill fluids or open the exterior of the case. This can damage the **UMPC** and void the warranty.



**WARNING:** This device is equipped with the precisely designed storage device. Do not have the operation under the condition with vibration.



**WARNING:** Please pay attention for below matters at mounting design of touch panel of LCD module.

- 1.Do not put a heavy force along the edge of active area
- 2.Do not put a heavy shock or stress on the touch panel and film surface.
- 3. Do not put heavy goods on the touch panel.

# **A.2 Agency Notice**

### **Federal Communications Commission Notice**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular 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 or television technician for help.

### Modifications

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

### Cables

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

### **FCC RF Radiation Exposure Statement**

• This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **USA and Canada Safety Requirements And Notices**

The FCC with its action in ET Docket 93-62 has adopted a safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC certified equipment. The Intel PRO/Wireless LAN MiniPCI Adapter products meet the Human Exposure limits found in OET Bulletin 65, 2001, and ANSI/IEEE C95.1, 1992. Proper operation of this radio according to the instructions found in this manual will result in exposure substantially below the FCC's recommended limits

The following safety precautions should be observed:

- Do not touch or move antenna while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; if not, the radio may be damaged.
   Use in specific environments:
- The use of wireless devices in hazardous locations is limited by the constraints posed by the safety directors of such

environments.

- The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).
- The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.

### **Explosive Device Proximity Warning**

**Warning**: Do not operate a portable transmitter (such as a wireless network device) near unshielded blasting caps or in an explosive environment unless the device has been modified to be qualified for such use

#### **Use On Aircraft Caution**

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

### Canadian Notice

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

### **Avis Canadien**

Cet appareil numerque de la classe B respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

### **Canada Radio Frequency Interference Requirements**

This Class B digital apparatus complies with Canadian ICES-003, Issue 2, and RSS-210, Issue 4 (Dec. 2000).

"To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide

maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing."

Cet appareil numérique de la classe B est conforme à la norme NMB-003, No. 2, et CNR-210, No. 4 (Dec. 2000).

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

# European Union CE Notice

Product with the CE Marking comply with the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community and if this product has telecommunication functionality, the R&TTE Directive (1999/5/EC).

Compliance with these directives implies conformity to the following European Norms (in parentheses are the equivalent international standards and regulations):

- EN55022 (CISPR 22) Electromagnetic Interference
- EN55024 (IEC61000-4-2,3,4,5,6,8,11) Electromagnetic Immunity
- EN61000-3-2 (IEC61000-3-2)-Power Line Harmonics
- EN61000-3-3 (IEC61000-3-3)-Power Line Flicker
- EN60950 (IEC60950) Product Safety

For devices with built-in wireless equipment, the following additional standards apply:

- ETSI301489-17: General Emissions for Radio Equipment
- EN60950: Safety
- ETSI300328-2: Technical Requirements for Radio Equipment

**CE Caution:** Due to the fact that the frequencies used by 802.11b/802.11g wireless LAN devices may not yet be harmonized in all countries, 802.11b/802.11g products are designed for use only in specific countries or regions, and are not allowed to be operated in countries or regions other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries or regions for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country or region of use. And deviation from permissible settings and restrictions in the country or region of use could be an infringement of local law and may be punished as such.

The wireless LAN device can currently be used indoors only in the following departments of mainland France.

01	Ain	36	Indre	69	Rhône
02	Aisne	37	Indre et Loire	70	Haute Saône
03	Allier	39	Jura	71	Saône et Loire
05	Hautes Alpes	41	Loir et Cher	72	Sarthe
08	Ardennes	42	Loire	75	Paris
09	Ariège	45	Loiret	77	Seine et Marne
10	Aube	50	Manche	78	Yvelines
11	Aude	54	Meurthe et Moselle	79	Deux Sèvres
12	Aveyron	55	Meuse	82	Tarn et Garonne
16	Charente	57	Moselle	84	Vaucluse
19	Corrèze	58	Nièvre	86	Vienne
2A	Corse Sud	59	Nord	88	Vosges
2B	Haute Corse	60	Oise	89	Yonne
21	Côte d'Or	61	Orne	90	Territoire de Belfort

24	Dordogne	63	Puy du Dôme	91	Essonne
25	Doubs	64	Pyrénées Atlantique	92	Hauts de Seine
26	Drôme	65	Haute Pyrénées	93	Seine St Denis
27	Eure	66	Pyrénées	94	Val de Marne
			Orientales		
32	Gers	67	Bas Rhin		
35	Ille et Vilaine	68	Haut Rhin		

The wireless LAN device cannot currently be used in any departments of mainland France other than those listed above.

Maximum allowable EIRP 802.11b wireless LAN cards in the mainland departments of France not shown in the table above are as follows: (See the ART website at www.art-telecom.fr for information on the French overseas territories.)

Frequency Ranges (MHz)	Indoors	Outdoors	
2400 – 2446.5	10 mW	Not permitted	
2446.5 – 2483.5	100 mW	100 mW on private property	
		with Ministry of Defense	
		approval	

## **Japanese Notice**

本装置は、第二種情報装置 (住宅地域またはその隣接した地域において使用される べき情報装置) で住宅地域での電波障害防止を目的とした情報処理装置等電波障害 自主規制協議会(VCCI)基準に適合しております。

しかし、本装置をラジオ、テレビジョン受信機に、近接してご使用になると、受信 障害の原因となることがあります。本書の説明にしたがって正しい取り扱いをして ください。

### **DGT Statement**

根據 交通部低功率管理辦法 規定:

- 第十四條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
- 第十七條 低功率射頻電機之使用不得影響飛航安全及干擾合法 通信,經發現有干擾現象時,應立即停用,並改善至 無干擾時方得繼續使用。
- 第二十條 輸入、製造低功率射頻電機之公司、商號或使用者違 反本辦法規定,擅自使用或變更無線電頻率、電功率 者,除依電信法規定處罰外,電信總局並得撤銷其型 式認證或型式認證標籤。



# **Appendix B Recovery Update Notices**

How to restore your UMPC to factory defaults

Time to restore: When your computer is infected by virus or there is any other reason that you want to restore your operation system to the factory defaults.

Execute Xpress Recovery3 Lite (XR3 Lite) Professional Recovery Utility.Please take the following procedures:

- Start up your computer first. Restart your computer if it has already booted into system.
- Right after you see the startup screen (such as trademark, logo or text), the DOS screen will appear. Press F9.
  - \* F9 is a typical hotkey to restore professional settings. Please consult with your computer manufacture if your hotkey doesn't function.

 There are four options on the menu: "RESTORE" (to restore data), "ABOUT" (to display XR3 software related information) and "REBOOT" (to cancel the recovery and restart the computer). We recommend you to select "RESTORE" to restore factory defaults



4. Then the prompt "Restore Image?" will appear on the menu. We recommend you to select "YES" to restore an image file.\* "Image file" is a compressed file that compresses all the Windows operation system data. Recovery an image file allows you to restore your operation system to factory defaults.



5. After all the selections have been made, the screen shows "RESTORE NOW...", indicating your computer is now recovering the operation system data. When the recovery is complete, the computer will automatically restart and restore to factory defaults.





# **Appendix C Service Center**

This appendix will list our global service centers for your M704 Ultra Mobile PC.

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

Address: No.6, Bau Chiang Road, Hsin-Tien, Taipei 231, Taiwan

TEL: +886 (2) 8912-4000 FAX: +886 (2) 8912-4004

WEB Address (English): http://www.gigabyte.com.tw/ WEB Address (Chinese): http://www.gigabyte.tw/

### U.S.A. G.B.T. INC.

TEL: +1 (626) 854-9338 FAX: +1 (626) 854-9339

WEB Address: http://www.gigabyte.us

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

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

Shanghai

TEL: +86-21-63410999 FAX: +86-21-63410100

Guangzhou

TEL: +86-20-87540700 FAX: +86-20-87544306

Beijing

TEL: +86-10-62102838 FAX: +86-10-62102848 Chengdu

TEL: +86-28-85236930 FAX: +86-28-85256822

Wuhan

TEL: +86-27-87851312 FAX: +86-27-87851330

Xian

TEL: +86-29-85531943 FAX: +86-29-85519336

Shenyang

TEL: +86-24-83992901 FAX: +86-24-83992909

### Russia

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

TEL: +7-495-9136685

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

### Germany

HAMBURG Representative Office of Giga-Byte Technology Co.,

Ltd.

TEL: +49 40 25330433

Address: BULLENKOPPEL 16 22047 HAMBURG