YUMA User's Manual

(This version is for Safety Approval only)

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NOTE

The information in this manual is subject to change without notice.

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Preface

This manual contains information that will help you operate the tablet PC. It is divided into 7 chapters and 2 appendices.

- Chapter 1, **Getting Started**, takes you through the process of setting up the tablet PC and identifying its external components.
- Chapter 2, **Operating Your Tablet PC**, tells you how to use the tablet PC's components and features.
- Chapter 3, **Managing Power**, provides information on power.
- Chapter 4, Expanding Your Tablet PC, provides information on installing and using peripheral devices.
- Chapter 5, **Using BIOS Setup**, describes the BIOS Setup program that configures the tablet PC's BIOS settings.
- Chapter 6, Caring for the Tablet PC, gives you tips in care and maintenance.
- Chapter 7, **Troubleshooting**, gives solutions to common problems you may encounter when using the tablet PC.
- Appendix A, Specifications, gives a brief specification of the tablet PC.
- Appendix B, **Regulatory Information**, provides regulatory statements and safety notices on your tablet PC.

Notational Conventions

Throughout this manual, the following conventions are used to distinguish elements of text.

NOTE: identifies additional information that requires special attention.

CAUTION: identifies important information that, if not followed, may result in loss of data or damage to the tablet PC.

Keypad keys are shown in a bold typeset. For example:

Press the **Ent** key to complete.

A title, command, setup item, or button that you can see on the screen is shown in boldface. A value or an option that you can select for a setup item is shown in italic. For example:

Select When I press the power button, set it to *Shut down*, and then click the **Save changes** button.

Getting Started

Congratulations on purchasing this rugged tablet PC. The rugged design allows you to use it in harsh outdoor environments. You can use it under the blazing heat, subzero cold, driving rain or dusty surroundings – places you could not take a consumer-grade tablet PC.

This chapter first tells you step by step how to get the tablet PC up and running. You will find instructions for these procedures:

- Unpacking
- Connecting to AC power
- Turning on the tablet PC
- Turning off the tablet PC

Then, you will find a section briefly introducing the external components of the tablet PC. And the last section navigates you to the information you may need after the tablet PC is ready for use.

Getting the Tablet PC Running

This section guides you through the procedures for getting the tablet PC ready for operation.

Unpacking

After unpacking the shipping carton, you should find these standard items:

- Tablet PC
- Accessories:
 - AC adapter
 - AC power cord
 - Stylus

Inspect all the items. If any item is damaged or missing, notify your dealer immediately.

Keep the shipping carton and packing materials in case you need to ship or store the tablet PC in the future.

Connecting to AC Power

The tablet PC operates either on the external AC power or internal battery power. It is suggested that you use AC power when you start up the tablet PC for the very first time.

CAUTION: Use only the AC adapter included with your tablet PC. Using other AC adapters may damage the tablet PC.

- Make sure that the tablet PC is turned off.
- 2. Place the tablet PC upside down.

1-2 Getting Started

3. Fit the two battery packs into place on both sides.



4. Use the included stylus to secure the four screws by removing the rubber cap at its end to expose the screwdriver.



- 5. Plug the DC cord of the AC adapter to the power connector () of the tablet PC ().
- 6. Plug the female end of the AC power cord to the AC adapter and the male end to an electrical outlet (2).



- 7. Power is being supplied from the electrical outlet to the AC adapter and onto your tablet PC. Now, you are ready to turn on the tablet PC.
- 8. When the AC adapter is connected, it also charges the battery pack. The Battery Status Indicator () on the tablet PC glows amber to indicate that charging is in progress. When the battery is fully charged, the Battery Status Indicator glows green.

CAUTION:

- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the tablet PC. A reverse procedure may damage the AC adapter or the tablet PC.
- When unplugging the connector, always hold the plug head. Never pull on the cord.

1-4 Getting Started

Turning On and Off the Tablet PC

Turning On

- 1. Place your tablet PC on a flat and stable surface or, the tablet PC can be operated while holding it.
- 2. Make sure that the tablet PC is either connected to AC power or the battery has power.
- 3. Press the power button (**U**).



4. Each time the tablet PC is turned on, it performs a Power-On Self Test (POST), and the operating system Windows Vista should start.

Turning Off

To turn off the tablet PC power, use the "Shut Down" command of your operating system.

NOTE: There are other ways you can stop the tablet PC so that you will be back to where you left off when you next turn on the tablet PC.

CAUTION: If you have to turn the tablet PC on again immediately after turning it off, wait for at least five seconds. Turning the tablet PC off and on rapidly can damage it.

Taking a Look at the Tablet PC

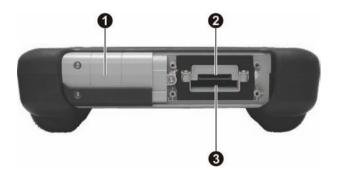
This section identifies the external components of the tablet PC and briefly describes the function of each component.

NOTE: Depending on the model you purchased, the appearance of your tablet PC may not be exactly the same as those shown in this manual.

Rear Components

NOTE: To access the rear components, use the included stylus to remove the four screws securing the compartment cover by removing the rubber cap at the end of the stylus to expose the screwdriver.

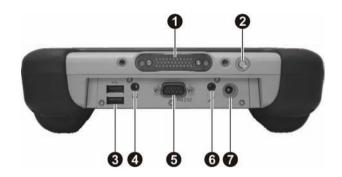




1-6 Getting Started

Ref	Component	Description
0	WiFi, GPS, and Bluetooth® Wireless Antenna	Inside is the antenna for WiFi, GPS, and <i>Bluetooth</i> * wireless transmission.
2	SDIO Slot	Accepts a Secure Digital (SD) card for removable storage media and I/O (input/output) function.
€	ExpressCard Slot	Accepts an ExpressCard for additional functions.

Front Components



Ref	Component	Description
0	Docking Connector	Connects to a docking station.
2	GPS Antenna pass-through Connector	Connects to the optional antenna for GPS receiver. NOTE: Must be connected via a docking station.
8	USB Ports	Each of the two ports connects a USB device, such as a USB flash disk, printer, digital camera, joystick, and more.
4	Audio Output Connector ()	Connects a set of headphones, external speakers with amplifier, or an audio recording device.
6	Serial Connector RS232	Connects a serial communication device.
6	Microphone Connector	Connects an external microphone.
0	Power Connector	Connects the AC adapter.

1-8 Getting Started

Bottom Components



Ref	Component	Description
0	Stylus	Provides a convenient way to use the touchscreen.
2	CMOS Camera Lens	Allows you to use your computer's camera function.
€	Speaker	Sends out sound and voice from your tablet PC.
4	Battery Packs	Supplies power to your tablet PC when external power is not connected.

Top Components



Ref	Component	Description
0	CMOS Camera Lens	Allows you to use your computer's camera function.
0	Indicators	Show the current status of the tablet PC's devices.
	Power (1)	Lights green when the computer is turned on.
		Blinks green when the computer is in Sleep mode.
Battery Charge Lights green when the battery is fully charged.		Lights green when the battery is fully charged.
	Lights amber when the battery is being charged	
	Blinks red when the battery's capacity is below 1	
Hard Disk Drive / Blinks green when hard disk drive is in use.		Blinks green when hard disk drive is in use.
	Heater 🗍	Lights red when heater is on (temperature is 0 °C and below when booting your tablet PC).
•	WiFi \(\forall\)	Lights green when WiFi antenna is on.

1-10 Getting Started

Ref	Component	Description
⑤	F1 Button	A short press serves as the Microsoft® Internet Explorer quick launch key.
		A long press (2 seconds or longer) rotates the LCD display orientation from default landscape to portrait (0° to 90° degrees and back only).
4	F2 Button	A short press serves as the camera application program quick launch key.
		Pressing this button together with the UP arrow key increases the sound volume, F2 + DOWN arrow key decreases the sound volume, F2 + LEFT arrow key decreases the LCD brightness, while F2 + RIGHT arrow key increases the LCD brightness.
		Pressing this button together with the Enter key enables/disables power saving when using battery power.
6	F3 Button	A short press serves as the Windows Mobile Center quick launch key.
		First long press (2 seconds or longer) locks the keypad to prevent accidental pressing of keypad during transport and disable the touchscreen feature. The second press unlocks the keypad and enables the touchscreen feature.
6	Power Button (Turns the computer power ON and OFF.
		Depending on your settings in Windows, you can place the computer in Sleep/Hibernation mode. For detailed information on power management, see Windows' Help.
•	Directional Button	Serves as the UP / DOWN / LEFT / RIGHT arrow keys (except pointer on screen). Pressing the F2 button together with the UP arrow key increases the sound volume, F2 + DOWN arrow key decreases the sound volume, F2 + LEFT arrow key decreases the LCD brightness, while F2 + RIGHT arrow key increases the LCD brightness.
8	Enter Button	Serves as the Enter key.
9	LCD Touchscreen	Displays and receives information for the tablet PC.

Ref	Component	Description
1	Microphone	Receives sound and voice for the computer.

1-12 Getting Started

Where to Go from Here

As your tablet PC is ready for operation, you may want to do any of the following now:

For this purpose	Do this
To know more about the tablet PC	Go on to the next chapter.
To install the operating system if your dealer has not already done so	See the operating system manual.
To know more about the operating system	Read the operating system manual.
To set a power-on password	Read the operating system manual.
To charge the battery pack for the first time	See "Charging the Battery Pack" in Chapter 3.

Operating Your Tablet PC

This chapter provides information about the use of the tablet PC.

If you are new to computers, reading this chapter will help you learn the operating basics. If you are already a computer user but are new to tablet PCs, you may choose to read only the parts containing information unique to your tablet PC.

Described in this chapter are the operating basics of these components/features:

- Starting and stopping the tablet PC
- Quick buttons
- Keypad
- Touchscreen
- Video features
- Audio features
- Communication features

Starting and Stopping the Tablet PC

There are a number of ways to start and stop the tablet PC.

Starting the Tablet PC

You always start the tablet PC using the power button (**(**)).

A computer starts up with an operating system (OS) existing on the storage device such as the hard disk. The computer will automatically load the OS after you turn it on. This process is called booting.

NOTE: An operating system is the platform for all your software application programs to run on. Your computer uses the Microsoft Windows Vista operating system.

Stopping the Tablet PC

When you finish a working session, you can stop the tablet PC by turning off the power or leaving the tablet PC in Sleep or Hibernation mode:

To stop in this mode	Do this	To start up or resume again
Off	Follow the shutdown procedure of your operating system. This can prevent loss of unsaved data or damage to your software programs.	Press the power button.
	If the system is locked up because of hardware or software problems, press the power button to turn off the tablet PC.	
Sleep	Depending on your settings in Windows, you can place the tablet PC in Sleep mode by pressing the power button.	Press the power button.
Hibernation	Depending on your settings in Windows, you can place the tablet PC in Hibernation mode by pressing the power button.	Press the power button.

If you choose to stop in Sleep or Hibernation mode, you can return to where you left off the next time you start up the tablet PC. (See "Power Management" in Chapter 3 for more information.)

Using the Quick Buttons

Located on the left of the LCD screen are three quick buttons:

F1 button –

a short press launches the Microsoft® Internet Explorer, or

a long press (2 seconds or longer) rotates the LCD display orientation from default landscape to portrait (0° to 90° degrees and back only).

F2 button –

a short press launches the camera application program, or

press this button together with the UP arrow key increases the sound volume, **F2** + DOWN arrow key decreases the sound volume, **F2** + LEFT arrow key decreases the LCD brightness, while **F2** + RIGHT arrow key increases the LCD brightness, or

press this button together with the **Enter** button toggles power saving ON and OFF when using battery power.

Power saving ON (ECO ON) changes the Windows Vista Power Plan to "Power Saver" mode and changes the brightness about 45 nits. Power saving OFF (ECO OFF) returns the Windows Vista Power Plan to the setting before ECO ON.

NOTE:

- The power saving button works only when using battery power.
- Upon connecting AC power when in ECO ON mode, your computer will return to previous state before power saving mode.

F3 button –

a short press launches the Windows Mobile Center, or

the first long press (2 seconds or longer) locks the keypad to prevent accidental pressing of keypad during transport and disable the touchscreen feature. The second press unlocks the keypad and enables the touchscreen feature.

Located on the right of the LCD screen are two quick buttons:

- Directional button
 - serves as the UP / DOWN / LEFT / RIGHT arrow keys (except pointer on screen) that lets you know exactly where on your screen anything you type will appear. It can take the form of a vertical or horizontal line, a block, or one of many other shapes.

When **F2** key is pressed together with these buttons – UP arrow key increases the sound volume DOWN arrow key decreases the sound volume LEFT arrow key decreases the LCD brightness RIGHT arrow key increases the LCD brightness.

- Enter button
 - serves as the **Enter** button.

When **F2** key is pressed together with this button – toggles power saving ON and OFF when using battery power.

Using the On-screen Keyboard

Use the on-screen keyboard to enter text and perform various keyboard functions.

- 1. Click the on-screen keyboard icon located on the Windows system tray and the software keyboard will appear onscreen.
- 2. Tap the characters on the on-screen keyboard with the stylus.

NOTE: To protect the LCD display, use the stylus on your touchscreen.

Using the Touchscreen

NOTE: The touchscreen function is not available when running the BIOS Setup program.

CAUTION: Do not use a sharp object such as a ballpoint pen or pencil on the touchscreen. Doing so may damage the touchscreen surface. Use the included stylus.

The touchscreen is a touch-sensitive device that allows you to easily communicate with the tablet PC by controlling the location of the pointer on the screen.

Here are some common terms that you should know when using the touchscreen:

Term	Action
Click/Point	Tap gently on the touchscreen.
Double-click	Tap twice on the touchscreen rapidly.
Right-click	Press lightly on the display until a pop-up menu appears, then select the desired function.
Drag and drop	Press lightly on the touchscreen and move your finger until you reach your destination (drag). Finally, release your finger (drop) when you finish dragging your selection to the destination. The object will drop into the new location.

Using the Video Features

The video subsystem of your tablet PC features:

- 7-inch wide TFT (Thin-Film Transistor) color LCD with 1024×600 higher than 650 nits transmissive display
- Toggle display between landscape view and portrait view using the
 F1 button (0° to 90° degrees and back only)
- Manually adjust the display brightness using the cursor-control LEFT arrow (brightness up) and RIGHT arrow (brightness down) buttons
- Power Management
- Sunlight-readable LCD display

Configuring the Display Modes

Your tablet PC has been set to a default resolution and number of colors before shipment. You can view and change display settings through your operating system. See your operating system documentation or online help for specific information.

Using the Audio Features

The audio subsystem of your tablet PC features:

- Manually adjust the sound volume using the cursor-control UP arrow (sound volume up) and DOWN arrow (sound volume down) buttons
- Audio-out connector (() () and
- Integrated speaker (2)

Ways of playing and recording sound vary with the operating system used. See your operating system documentation or online help for specific information.

Connecting Audio Devices

For higher audio quality, you can send sound through external audio devices such as speakers, headphones, or earphone set using the audio-out connector.

NOTE:

- After connecting an external audio device, make sure that you specify the use of the correct audio device in Windows.
- When using the external speakers/headphones, you cannot use the internal one.

Using the Communication Features

Using the Wireless LAN

The WLAN features include:

- Peer-to-Peer (Ad-Hoc) and Access Point (Infrastructure) modes support
- WEP (Wired Equivalent Privacy) 64/128-bit data encryption
- IEEE 802.11b/g standard compliance

Technology	802.11b	802.11g
Stated Maximum Throughput (Mbps)	11	54
Data Rates (Mbps)	11, 5.5, 2, 1	54, 36, 18, 9
Band (GHz)	2.412 ~ 2.462	2.4
Modulation Technology	DSSS (Direct Sequence Spread Spectrum)	OFDM (Orthogonal Frequency Division Multiplexing)

NOTE: 802.11g mode is backward compatible with 802.11b mode.

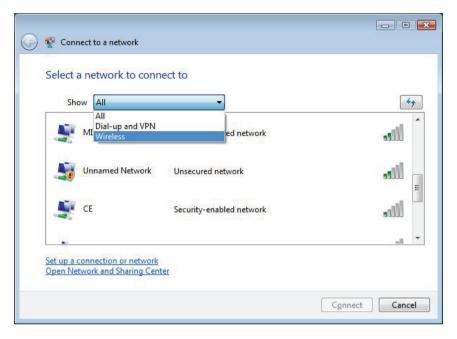
It takes approximately 30 seconds for your tablet PC to make a successful WLAN connection and approximately 10 seconds to disconnect.

Connecting to a Wireless Network

To connect to a wireless network:

- 1. Make sure that the wireless LAN radio is "on" indicated by the WiFi indicator () glowing in green.
- 2. Right-click the Wireless Network Connection icon located on the Windows system tray and select Connect to a network.

3. If any wireless network is detected, the following window appears on screen. Click the **Show** drop down menu and select **Wireless**.



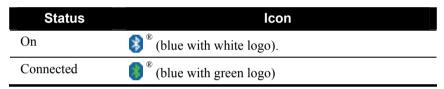
- Click to select a wireless network to connect to, and then click Connect.
- 5. Depending on the settings, you may be asked to enter a WEP key (refer to your Windows online help for more information on setting a wireless network connection).

Using the Bluetooth® Wireless Feature

Depending on your model, your tablet PC may incorporate the Bluetooth capability for short-range (about 10 meters) wireless communications between devices without requiring a cable connection.

With Bluetooth, data can be transmitted through walls, pockets and briefcases as long as two devices are within range. By default, your tablet PC's Bluetooth feature is active (always ON) upon booting your tablet PC and is in the general discoverable and pairable mode.

The status of the Bluetooth connection is indicated by the Bluetooth icon located in the system tray in the lower-right part of the screen.



You can use the Bluetooth Utility to configure Bluetooth connection settings and transfer files.

Connecting to Another Bluetooth Device

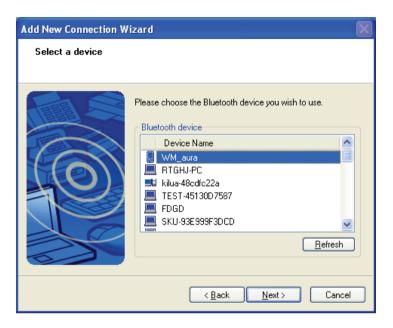
- 1. Make sure that the target *Bluetooth* device is turned on, discoverable and within close range. (See the documentation that came with the *Bluetooth* device.)
- 2. Right-click the 🔰 icon, and then click Add New Connection.



3. The Add New Connection Wizard window appears. Select Express Mode (Recommended), and then click Next.



4. Select the device to connect to and click **Next**.



5. Depending on the type of *Bluetooth* device that you want to connect to, you will need to enter the pertinent information.

For detailed information on using the Bluetooth Utility, see the Bluetooth Utility Help on your computer by clicking **Help**, then **Contents and Index**.

Using the GPS (Optional)

Depending on the model you purchased, your tablet PC may have the GPS receiver module built in.

GPS (Global Positioning System) is a constellation of 24 well-spaced satellites that orbit the Earth and make it possible for devices enabled with GPS receivers to pinpoint their location.

You need to install third-party GPS navigation software to take advantage of the GPS feature.

Managing Power

Your tablet PC operates either on external AC power or on battery power.

This chapter tells you how you can effectively manage power. To maintain optimal battery performance, it is important that you use the battery in the proper way.

The topics in this chapter include:

- What is an AC adapter
- How to charge the battery pack
- When to initialize the battery pack
- How to check the battery level
- How to replace the battery pack
- What happens when the battery is low and what actions to take
- What is Power Management
- How to save power

Managing Power 3-1

AC Adapter

CAUTION:

- The AC adapter is designed for use with your tablet PC only. Connecting the AC adapter to another device can damage the adapter.
- The AC power cord supplied with your tablet PC is for use in the country where you
 purchased your tablet PC. If you plan to go overseas with the tablet PC, consult
 your dealer for the appropriate power cord.
- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the tablet PC. A reverse procedure may damage the AC adapter or tablet PC.
- When unplugging the connector, always hold the plug head. Never pull on the cord.

The AC adapter serves as a converter from AC (Alternating Current) to DC (Direct Current) power because your tablet PC runs on DC power, but an electrical outlet usually provides AC power. It also charges the battery pack when connected to AC power.

The adapter operates on any voltage in the range of 100~240 V AC.

3-2 Managing Power

Battery Pack

The battery pack is the internal power source for the tablet PC. It is rechargeable using the AC adapter.

The operating time of a fully charged battery pack depends on how you are using the tablet PC. When your applications often access peripherals, you will experience a shorter operating time.

NOTE: Care and maintenance information for the battery is provided in the "Battery Pack Guidelines" section in Chapter 7.

Charging the Battery Pack

NOTE: During charging, do not disconnect the AC adapter before the battery has been fully charged; otherwise you will get a prematurely charged battery.

To charge the battery pack, connect the AC adapter to the tablet PC and an electrical outlet. The Battery Status Indicator () on the tablet PC glows amber to indicate that charging is in progress. You are advised to keep the tablet PC power off while the battery is being charged. When the battery is fully charged, the Battery Status Indicator glows green.

The charging times are as follows:

	Charging Time			
Battery Type	Computer is Off	Computer is On and in Idle State		
2S1P × 2	5~80 % 3.5 hours 5~100 % 5.5 hours	5~80 % 3.5 hours 5~100 % 5.5 hours		
2S2P × 2	5~80 % 5 hours 5~100 % 7 hours	5~80 % 5 hours 5~100 % 7 hours		

CAUTION: After the tablet PC has been fully recharged, do not immediately disconnect and reconnect the AC adapter to charge it again. Doing so may damage the battery.

NOTE: The battery level may automatically lessen due to the self-discharge process (0.21 % per day), even when the battery pack is fully charged (100 %). This happens no matter if the battery pack is installed in the tablet PC.

Managing Power 3-3

Initializing the Battery Pack

You need to initialize a new battery pack before using it for the first time or when the actual operating time of a battery pack is much less than expected.

Initializing is the process of fully charging, discharging, and then charging. It can take several hours.

Checking the Battery Level

NOTE: Any battery level indication is an estimated result. The actual operating time can be different from the estimated time, depending on how you are using the tablet PC.

You can check the approximate battery level using the battery meter function of the operating system. To read the battery level, click the icon on the system tray icon if the tablet PC is using AC power.

Replacing the Battery Pack

CAUTION:

- There is danger of explosion if the battery is incorrectly replaced. Replace the battery only with the tablet PC manufacturer's optional battery packs. Discard used batteries according to the dealer's instructions.

 Do not attempt to disassemble the battery pack.

If you often rely on battery power for a long period of time while traveling, you may consider the purchase of an additional battery pack from your dealer and keep it with you in a fully charged state as a backup.

To replace the battery pack, follow these steps:

- Make sure that the tablet PC is not turned on or connected to AC power.
- 2. Place the tablet PC upside down.
- 3. Use the included stylus and remove the rubber cap at its end to expose the screwdriver.

3-4 Managing Power 4. Remove the two screws securing the battery pack to the tablet PC and lift the battery pack off the tablet PC. Do the same for the other side battery pack.



Managing Power 3-5

5. Fit another battery pack into place and secure with two screws. Do the same for the other side battery pack.



Battery Low Signals and Actions

The battery icon changes appearance to display the current state of the battery so that you can see how much charge remains (Windows default setting). When the battery charge is above 25 % the battery icon is green. When the battery charge reaches 25 % a yellow triangle with an exclamation point (!) appears above the green battery icon. When the charge reaches the low battery level a red circle with a white "X" appears above the green icon. The computer's Battery Status Indicator () blinks red to alert you to take actions.

Immediately save your data upon Battery Low. The remaining operating time depends on how you are using the computer. If you are using the audio subsystem, ExpressCard, hard or USB flash disk, the battery might run out of charge very quickly.

3-6 Managing Power

Always respond to Battery Low by placing your computer on Hibernation mode, turning off the computer, or connecting the AC adapter.

CAUTION:

- If you are using an ExpressCard, do not access the card during battery low periods. This is because the access may take longer than the time it takes the battery to run out of charge, thus making your access to the card unsuccessful.

 If you fail to save your data when the battery completely runs out of charge, then
- you lose your data.

Managing Power 3-7

Power Management

Your tablet PC supports ACPI (Advanced Configuration and Power Interface) for power management. The power management feature allows you to reduce the power consumption for energy saving.

With an ACPI-compliant operating system such as Windows Vista, power supply to different tablet PC components is controlled on an as-needed basis. This allows maximum power conservation and performance at the same time.

In general, Windows' power management works in this way:

What	When	
Power to the hard disk is turned off	When the hard disk has been idle for a set period.	
Power to the display is turned off	When the display has been idle for a set period.	
The tablet PC enters the Sleep mode. The hard disk and display are turned	When the entire system has been idle for a set period.	
off and the entire system consumes less power.	When you press the power button. *	
The tablet PC enters the Hibernation mode. (See the next subsection for	When the entire system has been idle for a set period	
more information.)	When you press the power button. *	

^{*} Depends on your settings in Windows.

For detailed information on power management, see Windows' Help.

3-8 Managing Power

Hibernation

NOTE: Make sure that the hibernation feature is enabled in the "When I press the power button," "When I press the sleep button," and "When I close the lid" of the **Power Options** → **System Settings** Properties from the **Control Panel** → **Mobile PC**.

Hibernation is a very useful feature. People frequently open many applications when they use computers. It takes some time to get all these applications open and running, and normally they all have to be closed before the computer can be turned off.

When you use the hibernation feature, you do not have to close the applications. The tablet PC stores the state of your tablet PC to a file on the hard disk and then shuts down. The next time you turn on your tablet PC, you return to exactly where you left off.

Managing Power 3-9

Power-Saving Tips

Aside from enabling your tablet PC's power saving mode (see previous section), you can do your part to maximize the battery's operating time by following these suggestions.

- Do not disable Power Management. Choose a power plan that saves power. A power plan is a collection of hardware and system settings that control how your computer manages power.
- Decrease the LCD brightness to the lowest comfortable level.
- Shorten the length of time before Windows turn off the display.
- Many USB devices use power just by being connected. If you use a
 USB mouse, you can save power by disconnecting the mouse and
 using the touchpad. If you use a USB flash drive, unplug it when you
 are not using it.
- Many USB devices use power just by being connected. If you use a
 USB mouse, you can save power by disconnecting the mouse and
 using the stylus. If you use a USB flash drive, unplug it when you are
 not using it.
- If you work with an application that uses an ExpressCard, exit the application when you finish using it.
- If you have an ExpressCard installed, remove it when not in use. Some ExpressCards drain power even while they are inactive.
- Deactivate the Wireless LAN function if you are not using it.
- Deactivate the *Bluetooth* wireless feature if you are not using it.
- Turn off the tablet PC when you are not using it.

3-10 Managing Power

Expanding Your Tablet PC

You can expand the capabilities of your tablet PC by connecting other peripheral devices. When using a device, be sure to read the instructions accompanying the device together with the relevant section in this chapter.

This chapter gives guidelines on installing and using these devices:

- Serial device
- USB device
- ExpressCard
- SD card
- Docking Station

Connecting a Serial Device

Your computer has a serial port for connecting a serial device such as a serial mouse or serial communication device (modem).

Follow this procedure to connect a serial device:

- 1. Make sure the computer is not turned on.
- 2. Plug the device cable to the serial port on the lower front part of the computer.
- 3. Turn on the computer.

NOTE: Portable modems that derive power through the serial port cannot be used with the computer. Instead, use a modem that is powered by its own internal battery or external AC power.

Connecting a USB Device

Your tablet PC has two USB ports for connecting USB devices, such as a digital camera, scanner, printer, modem, and mouse.

The USB ports support transfer rates up to 12 MB/s for USB 1.1 devices and 480 MB/s for USB 2.0 devices.

To connect a USB device, simply plug the device cable to one of the USB ports ().

Using ExpressCards

NOTE: The ExpressCard interface is not compatible with the PC card interface. You need optional adapters for using PC cards on your computer.

Your computer has an ExpressCard slot.

ExpressCard supports the PCI Express and USB 2.0 serial data interfaces (supporting speeds of up to 2.5 Gbps and 480 Mbps respectively), improving speed in data transfer while conserving power usage.

ExpressCard Type

The ExpressCard slot can accommodate a 34 mm (ExpressCard/34) wide ExpressCard. Typical ExpressCards support a very extensive range of applications including memory, wired and wireless communication cards, and security devices.

Shown next is the appearance of the ExpressCard for your reference.



Inserting and Removing an ExpressCard

To insert an ExpressCard:

1. Remove the four screws securing the compartment cover.

- 2. Locate the ExpressCard slot on the computer.
- 3. Slide the ExpressCard, with its label facing up, all the way into the slot until the rear connectors click into place.
- 4. When a new card is seated, the computer will detect it and try to install the appropriate driver. Follow the on-screen instructions to complete the process.

To remove an ExpressCard:

- Double-click the Safely Remove Hardware icon found on the Windows system tray and the Safely Remove Hardware window appears on screen.
- 2. Select (highlight) the ExpressCard from the list to disable the card.
- 3. Push the ExpressCard slightly to release the card.
- 4. Pull the card out of the slot.
- 5. Replace the compartment cover and secure the four screws.

Using the SD Card Reader

NOTE: If your hard disk is divided into several drives, make sure that all drives have been formatted before using the SD Card Reader. Otherwise, you may encounter problems when using the Card Reader.

Your computer has a SD Card Reader. The Card Reader is a small drive for reading from and writing to removable storage cards (or called memory cards). The Card Reader supports a Secure Digital (SD) card.

Shown next is the appearance of the SD Card for your reference



To insert a SD card:

- 1. Remove the four screws securing the compartment cover.
- 2. Locate the SD Card Reader slot on the computer.
- 3. Align the card with its connector pointing to the slot and its label facing up. Slide the card into the slot until it reaches the end.
- 4. Windows will detect the card and assign it a drive name (typically E).

To remove a storage card:

- 1. Click Start, then Computer.
- 2. Right-click the drive with the card and select **Safely Remove**.
- 3. Pull the card out of the slot.
- 4. Replace the compartment cover and secure with four screws.

Using the Docking Station

A docking station is available as an option. This device eliminates the hassles of having you connect and disconnect the various cables when carrying your tablet PC around and allows a variety of peripherals to be connected including a headphone or USB devices, etc. The docking station connects to the docking connector at the front of your tablet PC.

- 1. Locate the docking connector.
- 2. Connect your docking station to the docking connector.

For more detailed information, refer to the Operating Instructions of the docking station.

NOTE: Hot/warm docking and hot/warm undocking are possible with the docking connector.

Using BIOS Setup

BIOS Setup Utility is a program for configuring the BIOS (Basic Input/Output System) settings of the tablet PC.

BIOS is a layer of software, called firmware, that translates instructions from other layers of software into instructions that the tablet PC hardware can understand. The BIOS settings are needed by your tablet PC to identify the types of installed devices and establish special features.

This chapter tells you when to use the BIOS Setup program.

Using BIOS Setup 5-1

When to Use BIOS Setup

When to Use

You need to run BIOS Setup utility when:

- You see an error message on the screen requesting you to run BIOS Setup utility.
- You want to restore the factory default settings.
- You want to modify some specific settings according to the hardware.
- You want to modify some specific settings to optimize the system performance.

5-2 Using BIOS Setup

Caring for the Tablet PC

Taking good care of your tablet PC will ensure a trouble-free operation and reduce the risk of damage to your tablet PC.

This chapter gives you guidelines covering these areas of maintenance:

- What to note when using and storing the tablet PC
- How to clean the tablet PC
- What to note when using the battery pack
- What to note when traveling with the tablet PC

Taking Care of the Tablet PC

Location Guidelines

- Avoid placing the tablet PC in a location subject to high humidity, extreme temperatures, mechanical vibration, direct sunlight, or heavy dust.
- Do not cover or block any ventilation openings on the tablet PC. For example, do not place the tablet PC on a bed, sofa, rug, or other similar surface. Otherwise, overheating may occur that results in damage to the tablet PC.
- Keep the tablet PC at least 13 cm (5 inches) away from electrical appliances that can generate a strong magnetic field such as a TV, refrigerator, motor, or a large audio speaker.
- Do not place the tablet PC on an unsteady surface.

General Guidelines

- Do not place heavy objects on top of the tablet PC as this may damage the display.
- The screen surface is easily scratched. Do not use paper towels to clean the display but use the included soft cloth. Avoid touching it with your fingers, pen, or pencil.
- To maximize the life of the backlight in the display, allow the backlight to automatically turn off as a result of power management. Avoid using a screen saver or other software that prevents the power management from working.

Cleaning Guidelines

• Never clean the tablet PC with its power on.

- Use a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the tablet PC.
- Gently wipe the display with a soft, lint-free cloth. Do not use alcohol
 or detergent on the display.

Battery Pack Guidelines

- Recharge the battery pack when it is nearly discharged. When recharging, make sure that the battery pack is fully charged. Doing so may avoid harm to the battery pack.
- The battery pack is a consumable product and the following conditions will shorten its life:
 - when frequently charging the battery pack
 - when using, charging, or storing the battery in high temperature condition
- To avoid hastening the deterioration of the battery pack thereby prolonging its useful life, minimize the number of times you charge it so as not to frequently increase its internal temperature.
- It is recommended not to charge the battery pack higher that 45 °C (113 °F) temperature.
 - A higher environment temperature will cause the battery pack's temperature to rise. Avoid charging the battery pack inside a closed vehicle and in hot weather condition.
- It is recommended that you do not charge the battery pack more than once a day.
- It is recommended that you charge the battery pack with the tablet PC's power off.
- To maintain the battery pack's operating efficiency, store it in a cool dark place removed from the tablet PC and with 30 % ~ 40 % charge remaining.

- When installing or removing the battery pack take note of the following:
 - avoid installing or removing the battery pack when the tablet PC is in Sleep mode. Abruptly removing the battery pack may cause loss of data or the tablet PC may become unstable.
 - avoid touching the battery pack terminals or damage may occur, thereby causing improper operation to it or the tablet PC.

Touchscreen Guidelines

- Use the finger or the included stylus on the display. Using a sharp or metallic object other than your finger or stylus may cause scratches and damage the display, thereby causing errors.
- Avoid using excessive force that may cause damage to the display.
- Use a soft cloth to remove dirt on the display. The touchscreen surface has a special protective coating that prevents dirt from sticking to it. Not using a soft cloth may cause damage to the special protective coating on the touchscreen surface.
 To remove hard to remove dirt, blow some steam on the particular area and gently wipe away using a soft cloth.
- Turn off the tablet PC power when cleaning the display. Cleaning the display with the power on may cause improper operation.
- Use the touchscreen within the intended area only. The display area and touchscreen operating area is the same.
- Do not use excessive force on the display. Avoid placing objects on top of the display as this may cause the glass to break thereby damaging the display.
- Using the touchscreen during low temperature (less than 5 °C) may cause a slower response time, this is normal. A normal response time may be restored upon returning to room temperature.
- When there is noticeable discrepancy in the operation of the touchscreen function (wrong location on intended operation or improper display resolution), refer to the Windows operating system for instructions on recalibrating the touchscreen display.

When Traveling

- Before traveling with your tablet PC, make a backup of your hard disk data into flash disks or other storage devices. As an added precaution, bring along an extra copy of your important data.
- Make sure that the battery pack is fully charged.
- Make sure that the tablet PC is turned off.
- Disconnect the AC adapter from the tablet PC and take it with you. Use the AC adapter as the power source and as a battery-charger.
- Hand-carry the tablet PC. Do not check it in as luggage.
- If you need to leave the tablet PC in the car, put it in the trunk of the car to avoid exposing the tablet PC to excessive heat.
- When going through airport security, it is recommended that you send the tablet PC and flash disks through the X-ray machine (the device you set your bags on). Avoid the magnetic detector (the device you walk through) or the magnetic wand (the handheld device used by security personnel).
- If you plan to travel abroad with your tablet PC, consult your dealer for the appropriate AC power cord for use in your country of destination.

Troubleshooting

Tablet PC problems can be caused by hardware, software, or both. When you encounter any problem, it might be a typical problem that can easily be solved.

This chapter tells you what actions to take when solving common computer problems. It is divided into three sections:

- Preliminary checklist
- Solving common problems
- Resetting the tablet PC

Troubleshooting 7-1

Preliminary Checklist

Here are helpful hints to follow before you take further actions when you encounter any problem:

- Try to isolate which part of the tablet PC is causing the problem.
- Make sure that you turn on all peripheral devices before turning on the tablet PC
- If an external device has a problem, make sure that the cable connections are correct and secure.
- Make sure that the configuration information is properly set in the BIOS Setup program.
- Make sure that all the device drivers are correctly installed.
- Make notes of your observations. Are there any messages on the screen? Do any indicators light? Detailed descriptions are useful to the service personnel when you need to consult one for assistance.

If any problem persists after you follow the instructions in this chapter, contact an authorized dealer for help.

7-2 Troubleshooting

Solving Common Problems

For easy reference, the problems are divided into these categories.

Problem Type	Go to
Battery Problems	P. 7-4
Bluetooth Wireless Transmission Problems	P. 7-4
Display Problems	P. 7-5
Hardware Device Problems	P. 7-5
Hard Disk Drive Problems	P. 7-6
Wireless LAN Problems	P. 7-6
Power Management Problems	P. 7-8
Software Problems	P. 7-8
Sound Problems	P. 7-9
Startup Problems	P. 7-9
Other Problems	P. 7-10

Troubleshooting 7-3

Battery Problems

The battery does not charge (Battery Status indicator does not light amber).

- Make sure that the AC adapter is properly connected.
- Make sure that the battery is not too hot or cold. Allow time for the battery pack to return to room temperature.
- Make sure that the battery pack is installed correctly.
- Make sure that the battery terminals are clean.

The operating time of a fully charged battery becomes shorter.

• If you often partially recharge and discharge, the battery might not be charged to its full potential. Initialize the battery to solve the problem.

The battery operating time indicated by the battery meter does not match the actual operating time.

• The actual operating time can be different from the estimated time, depending on how you are using the tablet PC. If the actual operating time is much less than the estimated time, initialize the battery.

Bluetooth Wireless Transmission Problems

I cannot connect to another device with *Bluetooth* wireless technology.

- Make sure that both devices have activated *Bluetooth* feature.
- Make sure that the distance between the two devices are not over 10
 meters or that there are no walls or other obstructions between the
 devices.
- Make sure that the other device is not in "Hidden" mode.
- Make sure that both devices are compatible.

7-4 Troubleshooting

Display Problems

Nothing appears on the screen.

- During operation, the screen may automatically turn off as a result of power management. Press any key to see if the screen comes back.
- The brightness level might be too low. Increase brightness by pressing the **F2** button for more than 2 seconds, then pressing the cursor-control button's LEFT arrow

The characters on the screen are dim.

Adjust the brightness and/or contrast.

Bad dots appear on the display at all times.

 A small number of missing, discolored, or bright dots on the screen are an intrinsic characteristic of TFT LCD technology. It is not regarded as a LCD defect.

Hardware Device Problems

The tablet PC does not recognize a newly installed device.

- The device may not be correctly configured in the BIOS Setup program. Run the BIOS Setup program to identify the new type.
- Make sure if any device driver needs to be installed. (Refer to the documentation that came with the device.)
- Make sure if the device needs any jumper or switch settings. (Refer to the documentation that came with the device.)
- Check the cables or power cords for correct connections.
- For an external device that has its own power switch, make sure that the power is turned on.

Troubleshooting 7-5

Hard Disk Drive Problems

The hard disk drive error message appears on the screen.

• The hard disk drive has defects. Ask your dealer for help.

The hard disk drive operations seem slow.

 The data files stored on the hard disk drive may be fragmented. Use a tool such as Window's **Disk Defragmenter** to defragment the files.

The hard disk drive / heater indicator () glows without blinking.

• The data files stored on the hard disk drive may be fragmented. Use a tool such as Window's **Disk Defragmenter** to defragment the files.

The hard disk drive / heater indicator glows red.

• When the tablet PC is connected to AC power and hard disk drive temperature is below 0 °C, the heater would turn on. Wait awhile.

Wireless LAN Problems

I cannot use the wireless LAN feature.

• Make sure that the wireless LAN feature is turned on.

Transmission quality is poor.

- Your tablet PC may be in an out-of-range situation. Move your tablet PC closer to the Access Point or another wireless LAN device it is associated with.
- Check if there is high interference around the environment and solve the problem as described next.

Radio interference exists.

- Move your tablet PC away from the device causing the radio interference such as microwave oven and large metal objects.
- Plug your tablet PC into an outlet on a different branch circuit from that used by the affecting device.

7-6 Troubleshooting

• Consult your dealer or an experienced radio technician for help.

I cannot connect to another wireless LAN device.

- Make sure that the wireless LAN feature is turned on.
- Make sure that the SSID setting is the same for every wireless LAN device in the network.
- Your tablet PC is not recognizing changes. Restart the tablet PC.
- Make sure that the IP address or subnet mask setting is correct.

I cannot communicate with the computer in the network when Infrastructure mode is configured.

- Make sure that the Access Point your tablet PC is associated with is powered on and all the LEDs are working properly.
- If the operating radio channel is in poor quality, change the Access Point and all the wireless station(s) within the BSSID to another radio channel
- Your tablet PC may be in an out-of-range situation. Move your tablet PC closer to the Access Point it is associated with.
- Make sure that your tablet PC is configured with the same security option (encryption) to the Access Point.
- Use the Web Manager/Telnet of the Access Point to check whether it is connected to the network.
- Reconfigure and reset the Access Point.

I cannot access the network.

- Make sure that the network configuration is appropriate.
- Make sure that the user name or password is correct.
- You have moved out of range of the network.
- Turn off power management.

Troubleshooting 7-7

Power Management Problems

The tablet PC does not enter Sleep or Hibernation mode automatically.

- If you have a connection to another computer, the tablet PC does not enter Sleep or Hibernation mode if the connection is actively in use.
- Make sure that the Sleep or Hibernation time-out is enabled.

The tablet PC does not enter Sleep or Hibernation mode immediately.

• If the tablet PC is performing an operation, it normally waits for the operation to finish.

The tablet PC does not resume from Sleep or Hibernation mode.

- The tablet PC automatically enters Sleep or Hibernation mode when the battery pack is empty. Do any one of the following:
 - Connect the AC adapter to the tablet PC.
 - Replace the empty battery pack with a fully charged one.

Software Problems

An application program does not work correctly.

- Make sure that the software is correctly installed.
- If an error message appears on the screen, consult the software program's documentation for further information.
- If you are sure the operation has stop, reset the tablet PC. (See "Resetting the Tablet PC" later in this chapter.)

7-8 Troubleshooting

Sound Problems

No sound is produced.

- Make sure that the volume control is not set too low. Increase volume by pressing the F2 button more than 2 seconds, then press the cursor-control button's UP arrow.
- Make sure that the tablet PC is not in Sleep mode.
- If using an external speaker, make sure that the speaker is properly connected.

Distorted sound is produced.

 Make sure that the volume control is not set too high or too low. In most cases, a high setting can cause the audio electronics to distort the sound.

The external audio device does not work.

- Make sure that your tablet PC is equipped with the driver needed.
- Click the speaker symbol on the taskbar and check the Windows volume control.
- Check the volume control of your tablet PC.

Startup Problems

When you turn on the tablet PC, it does not respond and the Power Indicator does not light green.

- If you are using an external AC power, make sure that the AC adapter is correctly and securely connected. If so, make sure that the electrical outlet works properly.
- If you are using the battery power, make sure that the battery is not discharged.

Troubleshooting 7-9

• When the tablet PC is connected to AC power and hard disk drive temperature is below 0 °C, the heater would turn on as indicated by the hard disk drive / heater indicator (☐) glowing in red. Wait awhile.

When you turn on the tablet PC, it stops after POST.

• Restart your tablet PC.

Other Problems

The date/time is incorrect.

- Correct the date and time via the operating system or BIOS Setup program.
- After you have performed everything as described above and still
 have the incorrect date and time every time you turn on the tablet PC,
 the RTC (Real-Time Clock) battery is at the end of its life. Call an
 authorized dealer to replace the RTC battery.

7-10 Troubleshooting

Resetting the Tablet PC

You may have to reset (reboot) your tablet PC on some occasions when an error occurs and the program you are using hangs up.

If the tablet PC operation seems to hang up, first wait. It is possible that the tablet PC is processing data. Periodically check the hard disk drive in-use indicator, if it flashes irregularly, the program may be accessing data and preventing you from using the keypad. If you are sure the operation has stopped and you cannot use the "restart" function of the operating system, reset the tablet PC.

Reset the tablet PC by turning off the tablet PC. Wait for at least five seconds and turn it on again.

CAUTION: Resetting will cause any unsaved data to be lost.

Troubleshooting 7-11

Specifications

NOTE: Specifications are subject to change without any prior notice.

	Parts	Specifications	
CPU		Intel [®] Menlow processor, 1.33 GHz or above	
System BIO	S	1 MB flash EEPROM	
Chipset		Poulsbo	
RAM (syste	m)	Up to 2 GB (standard 1 GB onboard)	
Video Controller Panel		Integrated in chipset	
		7-inch wide TFT LCD, 1024×600 transmissive display, passive touchscreen, higher than 650 Nits LCD brightness, sunlight-readable	
	Brightness	Operating System 64 levels, OSD 16 levels	
Audio	Speaker	1 watt	
Ports		Line-out, microphone	
Hard disk di	rive	1.8-inch PATA-interface, 60 GB HDD or 32 GB Solid State Drive, HDD heater	
Card slots		For SDIO device (8-bit) ExpressCard/34 mm	
I/O ports		USB ports × 2 (USB 2.0 support), DB 9 (RS232), GPS dockable coax connector with two security screws, docking connector	
Camera		1.3 megapixel for webcam 2 megapixel for camera (automatic focus)	
Wireless LA	ΛN	Intel® WiFi Link 5100 series Shirley Peak IEEE 802.11b/g	
Wireless PA	ΔN	Integrated <i>Bluetooth</i> ® wireless technology Specification 2.0 module with EDR, Class 2	
GPS		Integrated Global Positioning System (GPS) receiver module and built-in antenna or pass-through antenna connector	
WWAN		Reserved external PCI-E card 34 mm	

Specifications A-1

	Parts	Specifications	
Power	Battery	Li-ion smart battery $2s1p\times2$, $2550\sim2600$ mAH (2850 mAH optional) $2s2p\times2$ (optional) left and right battery pack needs to be able to share, chargeable in 0 °C (-32 °F) to 40 °C (104 °F) environment, hot-swappable	
	AC adapter	50 watt-type adapter, universal, input: 100~240 V AC 50/60 Hz output: 12 volt 461E-type adapter, 4.74 A, input: 100~240 V AC 50/60 Hz output: 19 volt	
Accessories		Optional office docking (via AC power) that includes RJ-45 port (10/100Base-T Ethernet), RS232 port, VGA port, USB ports \times 3 (USB 2.0 support), line-out connector (dark green), battery pack charger \times 2, stylus holder	
		Optional vehicle docking (via DC 12~24 volt power) that includes RS232 port, VGA port, USB ports × 3 (USB 2.0 support), line-out connector (dark green), GPS output connector	
		AC adapter, battery pack (2/4-cell), stylus, carrying case with hand strap, extended cap, this user manual, quick start guide, warranty card, user registration card, screen protector, magic cloth	
Dimension (W	/×D)	230×144.8×44.6~50.6 mm (9×5.7×1.75~2 inch)	
Weight		1.179~1.2 kg (2.6~2.66 lb)	
Environment Temperature		Operating: spinning hard drive can operate from $-30 ^{\circ}\text{C}$ ($-22 ^{\circ}\text{F}$) to $50 ^{\circ}\text{C}$ ($122 ^{\circ}\text{F}$), preheat time is needed for lower than $0 ^{\circ}\text{C}$ ($-32 ^{\circ}\text{F}$) to be able to boot-up within 20 minutes under AC/battery power. Allows $-20 ^{\circ}\text{C}$ ($-4 ^{\circ}\text{F}$) power-on under battery power and operate normally in a $-30 ^{\circ}\text{C}$ ($-22 ^{\circ}\text{F}$) environment. Operating: Solid State Drive can operate from $-30 ^{\circ}\text{C}$ ($-22 ^{\circ}\text{F}$) to $60 ^{\circ}\text{C}$ ($140 ^{\circ}\text{F}$), able to boot-up within 20 minutes under AC/battery power. Allows $-20 ^{\circ}\text{C}$ ($-4 ^{\circ}\text{F}$) power-on under battery power and operate normally in a $-30 ^{\circ}\text{C}$ ($-22 ^{\circ}\text{F}$) environment. Non-operating: $-40 ^{\circ}\text{C}$ ($-40 ^{\circ}\text{F}$) to $70 ^{\circ}\text{C}$ ($158 ^{\circ}\text{F}$)	
	Humidity	Relative: 95 % non-condensing	
	Altitude Operating: 15,000 ft Non-operating: 40,000 ft Change rate: 2,000 ft/min Shock Operating: 15 g, 11 ms, half sine wave Non-operating: 50 g, 11 ms, half sine wave		
Drop		26 repeated 4 ft drop onto plywood over steel board	
	Vibration	Sinusoidal Wave – Operating: 10~500 Hz, 0.075 mm / 1 g Non-operating: 10~500 Hz, 0.15 mm / 2 g Random – Operating: MIL-STD-810F, 514.5C-1 highway truck vibration exposure Non-operating: MIL-STD-810F, 514.5C-17 general minimum integrity exposure	

A-2 Specifications

Parts		Specifications		
	ESD	Air discharge – 0~8 KV (included), no error 8~15 KV, soft error level "B" allowed Contact discharge – 0~4 KV (included), no error 4~8 KV, soft error level "B" allowed Discharge to pin – 0~±2 KV criteria A ±2.1~±4 KV criteria B +4.1~±6 KV criteria C		
	Enclosure	IP67-compliance (IP6X test 2 hours)		
Compliance	EMI	CE, FCC, UL, C-Tick, MIL-STD-461E (ground army)		
	Safety	CB, TUV		
	Green Product	Supports 100 % RoHS-compliant, ENERGY STAR®, EPEAT bronze criteria		

Specifications A-3

Regulatory Information

This appendix provides regulatory statements and safety notices on your tablet PC.

NOTE: Marking labels located on the exterior of your tablet PC indicate the regulations that your model complies with. Please check the marking labels and refer to the corresponding statements in this appendix. Some notices apply to specific models only.

On the Use of the System

Class B Regulations

USA

Federal Communications Commission Radio Frequency Interference Statement

NOTE:

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/TV technician for help.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Please note:

The use of a non-shielded interface cable with this equipment is prohibited.

Canada

Canadian Department of Communications Radio Interference Regulations Class B Compliance Notice

This Class B digital apparatus meets all requirements of the Canada Interference-Causing equipment regulations.

Cet appareil numérique de Classe B respecte toutes les exigences du Règlement Canadien sur le matériel brouileur.

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

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Safety Notices

About the Battery

Caution Texts Concerning Lithium Batteries

DANISH

ADVARSEL! Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

NORWEGIAN

ADVARSEL: Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

SWEDISH

VARNING: Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

FINNISH

VAROITUS: Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan valmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

ENGLISH

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

DEUTSCH

VORSICHT: Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleich-wertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

FRENCH

ATTENTION: II y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

Attention (for USA Users)

The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

About the AC Adapter

- Use only the AC adapter supplied with your tablet PC. Use of another type of AC adapter will result in malfunction and/or danger.
- Do not use the adapter in a high moisture environment. Never touch the adapter when your hands or feet are wet.
- Allow adequate ventilation around the adapter when using it to
 operate the device or charge the battery. Do not cover the AC adapter
 with paper or other objects that will reduce cooling. Do not use the
 AC adapter while it is inside a carrying case.
- Connect the adapter to a proper power source. The voltage requirements are found on the product case and/or packaging.
- Do not use the adapter if the cord becomes damaged.
- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

On the Use of the RF Device

NOTE: The information in this section applies to models with the wireless LAN module.

USA and Canada Safety Requirements and Notices

Radio Frequency Interference Requirements and SAR

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 wireless LAN module meets 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

EMC Requirements

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

This device complies with the limits for a Class B digital device pursuant to Part 15 subpart C of the FCC Rules and Regulations. Operation is subject to the following two conditions:

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

The FCC limits are designed to provide reasonable protection against harmful interference when the equipment is installed and used in accordance with the instruction manual and operated in a commercial environment. However, there is no guarantee that interference will not occur in a particular commercial installation, or if operated in a residential area.

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

- 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.

CAUTION: The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by the manufacturer could void the user's authority to operate this device.

European Union CE Marking and Compliance Notices

Statements of Compliance

English

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

Danish

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

Dutch

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

Finnish

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

French

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

German

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

Greek

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

Icelandic

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

Italian

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

Norwegian

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

Portuguese

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

Spanish

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

Swedish

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

Local Restrictions of IEEE 802.11b/g Radio Usage

CAUTION: Due to the fact that the frequencies used by 802.11b/g wireless LAN devices may not yet be harmonized in all countries, 802.11b/g products are designed for use only in specific countries or regions, and is 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. Any 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 European variant is intended for use throughout the European Economic Area. However, authorization for use is further restricted in particular countries or regions within countries, as follows:

General

European standards dictate maximum radiated transmit power of 100 mW Effective Isotropic Radiated Power (EIRP) and the frequency range 2400 – 2483.5 MHz.

Belgium and the Netherlands

In Belgium and the Netherlands, the product may not be used outdoors. See the instructions next under the heading "Turning Off the Wireless LAN Radio"

France

Departments in Which the Wireless LAN Module Can Be Used (Indoors Only)

The wireless LAN module can currently be used indoors only in the following 38 departments of mainland France. Please turn off your wireless LAN radio when operating the device in areas/places other than the 38 departments listed:

01	Ain Orientales	36	Indre	66	Pyrénées
02	Aisne	37	Indre et Loire	67	Bas Rhin
03	Allier	41	Loir et Cher	68	Haut Rhin
05	Hautes Alpes	42	Loire	70	Haute Saône
08	Ardennes	45	Loiret	71	Saône et Loire
09	Ariège	50	Manche	75	Paris
11	Aude	55	Meuse	82	Tarn et Garonne
12	Aveyron	58	Nièvre	84	Vaucluse
16	Charente	59	Nord	88	Vosges
24	Dordogne	60	Oise	89	Yonne
25	Doubs	61	Orne	90	Territoire de Belfort
26	Drôme	63	Puy du Dôme	94	Val de Marne
32	Gers	64	Pyrénées Atlantique		

Departments in Which the Wireless LAN Module's Maximum EIRP Not Shown in the Previous Table

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

Turning Off the Wireless LAN Radio

NOTE: Turning the wireless LAN radio off is not the same as disabling the wireless LAN card. It is not necessary to disable the card to meet the regulatory requirements.

While operating the tablet PC in those French departments that do not allow use of the wireless LAN equipment, the user of the equipment must turn off the wireless LAN radio in order to comply with local regulations (see Chapter 2 for more information).