# Getac

F110
USER MANUAL

Rugged Mobile Computing Solution

Oct. 2013

#### **TRADEMARKS**

All brand and product names are trademarks or registered trademarks of their respective companies.

#### NOTE

The information in this manual is subject to change without notice. For the latest version of the manual, please visit the Getac website at <a href="https://www.getac.com">www.getac.com</a>.

# **Table of Contents**

Chapter 1	Getting Started	1-1
	Getting the Tablet PC Running	1-2
	Unpacking	1-2
	Installing the SIM Card (Optional) and Battery Packs.	1-3
	Connecting to AC Power	1-5
	Using the Tether	1-6
	Turning On and Off the Tablet PC	1-7
	Taking a Look at the Tablet PC	
	Front Components	
	Rear Components	
	Left-Side Components	
	Top Components	
	Bottom Components	
Chapter 2	Operating Your Tablet PC	2-1
	Navigating on the Screen	
	Using the Touchscreen	
	Using the Dual Mode Display (Optional)	
	Using the Network Features	
	Using the LAN (Optional)	
	Using the Wireless LAN	
	Using the BT Feature	
	Turning On/Off the BT Radio	
	Connecting to another BT Device	
	Using the WWAN Feature (Optional)	. 2-10

	Turning On/Off the WWAN Radio	2-10
	Setting up a WWAN Connection	2-11
Chapter 3	Managing Power	3-1
	AC Adapter	3-2
	Battery Pack	3-3
	Charging the Battery Pack	3-3
	Initializing the Battery Pack	3-4
	Checking the Battery Level	3-4
	Battery Low Signals and Actions	3-5
	Replacing the Battery Pack	3-6
	Power-Saving Tips	3-8
Chapter 4	Expanding Your Tablet PC	4-1
	Connecting a USB Device	
	Connecting an Audio Device	4-3
	Connecting an HDMI Display Monitor	4-4
	Connecting a Serial Device (Optional)	4-5
	Using Smart Cards (Optional)	4-6
	Using MicroSD Cards (Optional)	4-8
Chapter 5	Using BIOS Setup	5-1
	When and How to Use	
	Menu Descriptions	5-3
	Information Menu	5-3
	Main Menu	5-3
	Advanced Menu	5-4
	Security Menu	5-5
	Boot Menu	5-6
	Exit Menu	5-6
Chapter 6	Using Getac Software	6-1
	OSD Control Panel	
	G-Manager	6-3
	Getac Camera (Optional)	6-5
	Getac Smart Tag (Optional)	6-6
	Using the Barcode Reader (Optional)	6-7

Chapter 7	Caring for the Tablet PC7-1
	Protecting the Tablet PC7-2
	Using an Anti-Virus Strategy7-2
	Using the Cable Lock7-2
	Taking Care of the Tablet PC7-3
	Location Guidelines7-3
	General Guidelines7-4
	Cleaning Guidelines7-4
	Battery Pack Guidelines7-5
	Touchscreen Guidelines7-6
	When Traveling7-8
Chapter 8	Troubleshooting8-1
	Preliminary Checklist8-2
	Solving Common Problems8-3
	Battery Problems8-3
	BT Wireless Transmission Problems8-3
	Display Problems8-4
	Hardware Device Problems8-4
	Power Management Problems8-5
	Sensor Problems (for Windows 8 Models Only)8-6
	Software Problems8-7
	Sound Problems8-7
	Startup Problems8-7
	Wireless LAN Problems8-8
	Other Problems8-9
	Resetting the Tablet PC 8-10
	System Recovery8-11
	System Restore, Refresh, or Reset (for Windows 8
	Models)8-11
	System Recovery (a Tool for Windows 7 Models) 8-12
Appendix A	SpecificationsA-1
Appendix B	Regulatory InformationB-1
. appoint D	On the Use of the System B-2

Class B Regulat	ons		B-2
ANSI Warning			B-3
Safety Notices			B-4
On the Use of the	RF Device		B-7
USA and Canad	a Safety Requiren	nents and Notice	es B-7
European Union	CE Marking and	Compliance Not	ices B-9

# **Chapter 1**

# **Getting Started**

Congratulations on purchasing this rugged Tablet PC.

This chapter first tells you step by step how to get the Tablet PC up and running. Then, you will find a section briefly introducing the external components of the Tablet PC.

# **Getting the Tablet PC Running**

## **Unpacking**

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

- Tablet PC
- Accessories:
  - AC adapter
  - AC power cord
  - Stylus or digitizer pen
  - Tether
  - AG/AR (anti-glare/anti-reflection) film, which is already attached to the screen
  - Screen cleaning cloth
  - Driver disc
  - Document(s)

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

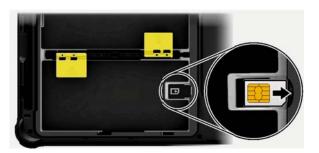
# **Installing the SIM Card (Optional) and Battery Packs**

1. Locate the battery cover. Slide the two small locks outward to the unlocked position ( $\bigcirc$ ) ( $\bigcirc$ ) and then release the latch ( $\bigcirc$ ) ( $\bigcirc$ ) to open the battery cover.



#### 2. Select models only:

With the SIM card's chip side facing up and the beveled corner pointing to the slot, insert the card all the way into the slot.



**NOTE:** To remove the SIM card, just push in the SIM card to pop-out and remove the card.

3. Note the orientation of the battery pack. Hold the battery pack at an angle and insert its small tabs to the corresponding notches in the battery compartment. Then, lift the yellow protection sheet in the battery compartment and plug the battery connector.



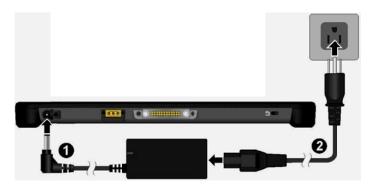
- 4. Proceed with the other battery pack.
- 5. Hold the battery cover at an angle and insert the cover's small tabs to the corresponding notches on the Tablet PC; then close the cover. Press the four small dots (1) so that the cover clicks into place. Engage the cover latch (1) (2) and slide the two small locks inward to the locked position (1) (3).



## **Connecting to AC Power**

It is suggested that you use AC power when starting up the Tablet PC for the very first time.

- 1. Plug the DC cord of the AC adapter to the power connector of the Tablet PC (lacktriangle).
- 2. Plug the female end of the AC power cord to the AC adapter and the male end to an electrical outlet (2).



3. 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.

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

**NOTE:** When the AC adapter is connected, it also charges the battery pack. For information on using battery power, see Chapter 3.

### **Using the Tether**

A tether is provided for attaching the stylus to your Tablet PC.

 Insert one of the tether's loop ends through the hole of the stylus (as indicated by **1** below). Then, insert the other end through the first loop (as indicated by **2** below) and pull it tight.



- Insert the other loop end to the tether hole on the Tablet PC (as indicated by **1** below). Then, insert the stylus end through the loop (as indicated by below) and pull it tight.
- 1-6 Getting Started



## **Turning On and Off the Tablet PC**

#### **Turning On**

Press the power button (  $( \ \ \ \ \ )$  ). The Windows operating system should start.

#### **Turning Off**

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

T.	Do this			
To	Windows 8	Windows 7		
Power off (Shutdown)	Open the Charms Bar of Windows     swiping in from the right side of the screen.	Use the Windows Start menu in the lower left and follow the shutdown procedure.		
	2. Tap <b>Settings</b> and then tap <b>(Power)</b> .			
	3. Tap <b>Shut down</b> in the Power menu			

То	Do this	
10	Windows 8	Windows 7
	that pops up.	
Sleep	Press the power button* or use the Power menu to put the Tablet PC in Sleep mode.	Press the power button* or use the Windows Start menu to put the Tablet PC in Sleep mode.
Hibernate	By default, this option is not shown in the Power menu. If you want to use the feature, set up according in Windows <b>Control Panel</b> .	Use the Windows Start menu to put the Tablet PC in Hibernation mode.

<sup>\* &</sup>quot;Sleep" is the default setting of the power button. You may change what the power button does in Windows **Control Panel**.

# Taking a Look at the Tablet PC

**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.

**CAUTION:** You need to open the protective covers to access the connectors. When not using a connector, make sure to close the cover completely for water- and dust-proof integrity. (Engage the locking mechanism if existing.)

### **Front Components**

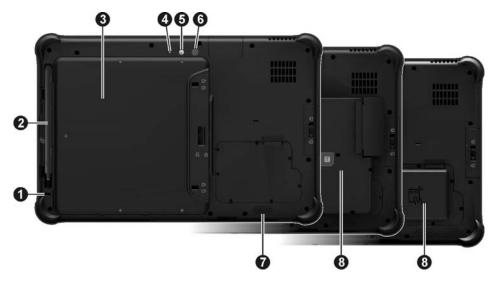


Ref	Component	Description	See Also
0	Touchscreen	Displays and receives information for the Tablet PC.	P. 2-2
2	Camera Lens (optional)	Allows you to use the camera function. When the camera lens is in use, the indicator beside it lights up.	P. 6-5
₿	Light Sensor	Senses the ambient light for automatic adjustments	

Ref	Component	Description	See Also
		of the display backlight.	
4	Indicators		<u> </u>
	(I) Power	Lights blue when the power is on.	
		Blinks blue when the system is in Sleep mode.	
	<b>= ≠</b> Battery	Lights green when the battery is fully charged.	P. 3-3
	Charge	Lights amber when the battery is being charged.	
		Blinks red (once per second) when the battery's capacity is below 10%.	P. 3-5
		Blinks red rapidly (once per 0.5 second) when there is a thermal protection problem. Ask for repair service in case this happens.	
		Blinks amber when the battery charging is in an abnormal state. Replace the battery in case this happens.	
	RF (Radio Frequency)	Lights blue when the RF radio of any RF feature (WLAN/BT/WWAN) is on.	
6	Power Button	Turns the power on or off. (The default "off" state is "Sleep mode.")	P. 1-7
6	Extra Button	Starts the Getac Camera program and serves as the shutter release button.  — or —  Serves as the trigger button for the barcode reader if your model has the barcode reader module.	P. 6-5 - or - P. 6-7
		When Function Lock is on: Enables or disables the touchscreen feature.	
		Provides a keyboard key function for specific occasions.	P. A-2

Ref	Component	Description	See Also
•	P1 Button	Switches on or off <b>Function Lock (FL)</b> , which changes the <b>Extra</b> , <b>Up</b> , and <b>Down</b> buttons to an alternative function. When <b>FL</b> is on, the appears on Windows taskbar.	
		When pressed longer: Serves as the Ctrl+Alt+Del keyboard keys.	P. 8-10
		Provides a keyboard key function for specific occasions.	P. A-2
8	Up/Down Button	时)) increases the sound volume. 时)) decreases the sound volume.	
		When Function Lock is on:  (其)) increases the LCD brightness.  (其)) decreases the LCD brightness.	
		Provides a keyboard key function for specific occasions.	P. A-2
9	Microphone	Receives sound and voice to record voice.	
0	Windows Logo Button	For Windows 8: Goes to the Start screen. Or if you're already on Start, pressing this button brings you to the last application you were in.	
		For Windows 7: Opens or closes the OSD Control Panel.	P. 6-2
		Provides a keyboard key function for specific occasions.	P. A-2

# **Rear Components**

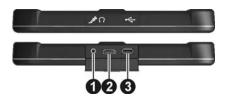


Ref	Component	Description	See Also
0	Tether Hole	Stylus can be tethered to this hole.	P. 1-6
2	Stylus/ Digitizer pen	Serves as the input device by tapping on the touchscreen to make selections and enter information.	P. 2-2
€	Battery Pack Cover	Inside are two battery packs.	P. 3-3
		Inside is the SIM card slot (optional).	P. 1-3
4	Camera Indicator ( optional )	Lights up when the camera lens beside it is in use.	
6	Flash (optional)	Provides extra light when taking pictures.	
<b>6</b>	Camera Lens ( optional )	Allows you to use the camera function.	P. 6-5
0	Speaker	Sends out sound and voice from your Tablet	

1-12 Getting Started

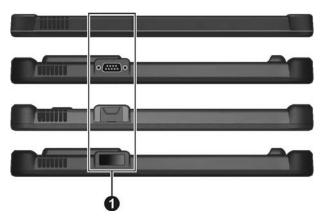
		PC.	
Ref	Component	Description	See Also
8	Select models have one of the below components.		
	Smart Card Reader	Accepts a smart card for additional security feature.	P. 4-6
	RFID Reader	Scans and reads RFID (Radio-frequency identification) tags.	P. 6-6

# **Left-Side Components**



Ref	Component	Description	See Also	
0	Connects a set of headphones or external speakers with amplifier		P. 4-3	
		Supports a headset microphone with 4-pole TRRS 3.5mm jack.		
2	HDMI Connector	Connects a HDMI (High-Definition Multi-media Interface) monitor or TV set.	P. 4-4	
8	USB 3.0 Port	Connects a USB device, such as a USB flash disk, printer, digital camera, joystick, and more.	P. 4-2	

# **Top Components**



Ref	Component	Description	See Also	
0	None			
	Or can be one of the below components depending on your mo			
	Serial Port	Connects a serial device.	P. 4-5	
(inside the cover) r  RJ-45 Connector (inside the cover)  USB 2.0 Port (inside (		Accepts a microSD card for removable storage media.	P. 4-8	
		Connects the LAN cable.	P. 2-6	
		Connects a USB device, such as a USB flash disk, printer, digital camera, joystick, and more.	P. 4-2	
	Barcode Reader Lens	Scans and reads barcodes.	P. 6-7	

# **Bottom Components**



Ref	Component	Description	See Also	
0	Power Connector	Connects the AC adapter.	P. 1-5	
2	Antenna Pass- through (optional)	Connects to the docking station for using external WWAN/GPS/WLAN antenna.		
8	<b>Docking Connector</b>	Connects to the docking station (available as an option).		
4	Kensington Lock	Locks the Tablet PC to a stationary object for security.	P. 7-2	

## **Chapter 2**

# **Operating Your Tablet PC**

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

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

#### CAUTION:

- Do not expose your skin to the Tablet PC when operating it in a very hot or cold environment.
- The Tablet PC can get uncomfortably warm when you use it in high temperatures. As a safety precaution in such a circumstance, do not place the Tablet PC on your lap or touch it with your bare hands for extended periods of time. Prolonged body contact can cause discomfort and potentially a burn.

## **Navigating on the Screen**

The screen of your Tablet PC is touch-sensitive. You can control the location of the cursor/pointer on the screen using the included stylus or your finger to communicate with the Tablet PC.

**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 or your finger.

NOTE: An AG/AR film has been attached to the screen before shipment. The film is a consumable, which will be worn out by possible scratches. You can purchase a new one when replacement is required.

### **Using the Touchscreen**

NOTE: Instead of a hard tip, your stylus has a soft tip so that it does not scratch the AG/AR film. It is normal for the soft tip to wear out after a long period of use. You can purchase a new one when needed.



The following table shows how you use the touchscreen to obtain equivalent mouse functions.

Term/Action	Equivalent Mouse Function
Tap: Touch the screen once.	Click/Point
Double-tap: Touch the screen twice rapidly.	Double-click
Tap and hold: Tap and hold until a popup menu appears.	Right-click
<b>Drag:</b> Hold the stylus (or finger) on the screen and drag across the screen until reaching your destination.	Drag

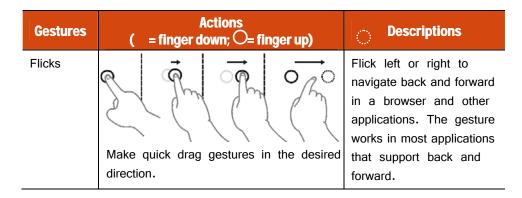
## **Using Multi-touch Gestures**

You can interact with your Tablet PC by placing two fingers on the screen. The movement of the fingers across the screen creates "gestures," which send commands to the Tablet PC.

Here are the multi-touch gestures that you can use:

Gestures	Actions ( = finger down; $\bigcirc$ = finger up)	<b>Descriptions</b>
Pan (Scroll)	or	Use panning to see another part of a page that has scroll bars.
	Drag 1 or 2 fingers up or down.	
Zoom (Pinch)	Move two fingers apart/toward each other.	Use zooming to make an item (a photo for example) on the screen larger or smaller. The gesture works in applications that support mouse wheel zooming.

Gestures	Actions ( = finger down; ○= finger up)	<b>Descriptions</b>
Rotate	or  Move two fingers in opposing directions.  -or-  Use one finger to pivot around another.	Use rotating to move a picture or other item on the screen in a circular direction (clockwise or counter–clockwise). The gesture works in applications that support the specific gesture.
Press and Tap	Press on target and tap using a second finger.	Use press and tap to access the shortcut menu.
Two- finger Tap	Tap two fingers at the same time (where the target is in the midpoint between the fingers).	The function is defined by applications that support the specific gesture.



## **Using the Dual Mode Display (Optional)**

Dual mode display (if your model has the feature) incorporates both touchscreen and digitizer functions.

The display is set to Touchscreen mode by default. Touchscreen mode provides all the functionalities that an ordinary touchscreen has. When the Tablet PC receives signals from the digitizer pen, the display automatically switches to Digitizer mode.

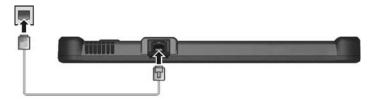


You can move the cursor by bringing the digitizer pen close to the screen, without actually touching the screen's surface.

## **Using the Network Features**

### **Using the LAN (Optional)**

To connect the network cable to the LAN module (if your model has the feature), connect one end of the LAN cable to the RJ-45 connector on the Tablet PC and the other end to the network hub.



### **Using the Wireless LAN**

The WLAN module of your Tablet PC supports IEEE 802.11a/b/g/n/ac.

#### **Turning On/Off the WLAN Radio**

#### To turn on the WLAN radio:

- 1. Make sure that the Airplane mode is switched off. You can control the Airplane mode using one of the below methods.
  - Use the Airplane Mode button in the OSD Control Panel.
  - For Windows 8: Open the Charms Bar, tap Settings → Change PC Settings
     → Wireless. Slide the Airplane mode switch to the Off position.
- 2. If you have previously turned off the WLAN radio, use one of the below methods to turn it on.
  - For Windows 8: Open the Charms Bar of Windows. Tap Settings → Change PC Settings → Wireless. Slide the Wi-Fi switch to the On position.

For Windows 7: Use either Windows Mobility Center or Getac Quick Bar. To open Getac Quick Bar, tap and hold the Getac Utility icon on Windows taskbar and select Quick Bar. Tap the WLAN button in the Quick Bar (an X over the button means the radio is currently off).



#### To turn off the WLAN radio:

You can turn off the WLAN radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode.

#### **Connecting to a WLAN Network**

- 1. Make sure that the WLAN function is enabled (as described above).
- 2. For Windows 8: Open the Charms Bar of Windows. Tap Settings and then tap

For Windows 7: Tap the Wireless Network icon on the taskbar. (An orange light in the icon indicates connections are available.)

- 3. In the list of available wireless networks, tap a network, and then tap **Connect**.
- 4. Some networks require a network security key or passphrase. To connect to one of those networks, ask your network administrator or Internet service provider (ISP) for the security key or passphrase.

For more information on setting a wireless network connection, refer to Windows online help.

**NOTE:** You can use  $Intel^{@}$  PROSet Wireless to take full advantage of the Wi-Fi capabilities of your Tablet PC. See the Help of the utility for instructions.

## **Using the BT Feature**

The BT 4.0 technology allows short-range (about 50 meters) wireless communications between devices without requiring a cable connection. Data can be transmitted through walls, pockets and briefcases as long as two devices are within range.

### Turning On/Off the BT Radio

#### To turn on the BT radio:

- Make sure that the Airplane mode is switched off. You can control the Airplane mode using one of the below methods.
  - Use the Airplane Mode button in the OSD Control Panel.
  - For Windows 8: Open the Charms Bar, tap Settings → Change PC Settings
     → Wireless. Slide the Airplane mode switch to the Off position.
- 2. If you have previously turned off the BT radio, use one of the below methods to turn it on.
  - For Windows 8: Open the Charms Bar of Windows. Tap Settings → Change
     PC Settings → Wireless. Slide the BT switch to the On position.
  - For Windows 7: Use Getac Quick Bar. To open Getac Quick Bar, tap and hold the Getac Utility icon on Windows taskbar and select Quick Bar. Tap the BT button in the Quick Bar (an X over the button means the radio is currently off).



#### To turn off the BT radio:

You can turn off the BT radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode.

### **Connecting to another BT Device**

- 1. Make sure that the BT function is enabled (as described above).
- 2. Make sure that the target BT device is turned on, discoverable and within close range. (See the documentation that came with the BT device.)
- For Windows 8: Open the Charms Bar of Windows. Tap Settings → Change PC Settings → Devices. Tap Add a device.

For Windows 7: Tap and hold the BT icon on Windows taskbar. Tap Add a Device.

- 4. Select the device you want to connect from the search results.
- 5. Depending on the type of BT device that you want to connect to, you will need to enter the pertinent information.

For detailed information on using the BT feature, see Windows' online Help.

## **Using the WWAN Feature (Optional)**

A WWAN (Wireless Wide Area Network) uses mobile telecommunication cellular network technologies to transfer data. The WWAN module of your Tablet PC supports 3G and 4G LTE.

#### NOTE:

- Your model only supports data transmission. Voice transmission is not supported.
- For instructions on installing the SIM card, see "Installing the SIM Card (Optional) and Battery Packs" in Chapter 1.

## **Turning On/Off the WWAN Radio**

#### To turn on the WWAN radio:

- Make sure that the Airplane mode is switched off. You can control the Airplane mode using one of the below methods.
  - Use the Airplane Mode button in the OSD Control Panel.
  - For Windows 8: Open the Charms Bar, tap Settings → Change PC Settings
     → Wireless. Slide the Airplane mode switch to the Off position.
- If you have previously turned off the WWAN radio, use one of the below methods to turn it on.
  - For Windows 8: Open the Charms Bar of Windows. Tap Settings → Change
    PC Settings → Wireless. Slide the Mobile Broadband switch to the On
    position.
  - For Windows 7: Use the WWAN utility software or Getac Quick Bar. To open Getac Quick Bar, tap and hold the Getac Utility icon on Windows taskbar and select Quick Bar. Tap the WWAN button in the Quick Bar (an X over the button means the radio is currently off).



#### To turn off the WWAN radio:

You can turn off the WWAN radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode.

## **Setting up a WWAN Connection**

- 1. Make sure that the SIM card is inserted and the WWAN function is enabled (as described above).
- 2. Start the WWAN utility software (**AirCard Watcher**). The screen as below appears.



3. You can use the WWAN utility software to configure and use WWAN connections. See the online help for information.

Operating Your Tablet PC 2-11

# **Chapter 3**

# **Managing Power**

Your Tablet PC operates either on external AC power or on internal 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.

## **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.

## **Battery Pack**

Your Tablet PC has two battery packs. The battery pack is the internal power source for the Tablet PC. It is rechargeable using the AC adapter.

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

### **Charging the Battery Pack**

#### NOTE:

- Charging will not start if the battery's temperature is outside the allowed range, which is between 0 °C (32 °F) and 50 °C (122 °F). Once the battery's temperature meets the requirements, charging automatically resumes.
- 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 Charge 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 Charge Indicator glows green.

The two battery packs are charged in parallel. It takes approximately 5 hours to fully charge the two battery packs when the power is off and approximately 6 hours when the power is on (may need a longer charging time at lower temperatures).

**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.

### **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.

A software tool called "Gauge Reset" is provided for the purpose. Use the G-Manager program and select the **Battery** tab to find the tool.

### **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.

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.

The two battery packs are discharged in parallel.

#### **By Operating System**

You can check the approximate battery level using the battery meter function of the operating system. To read the battery level in Windows, tap the battery icon on the taskbar.

#### **By Gas Gauge**

On the exterior side of the battery pack is a gas gauge for displaying the estimated battery charge. When the battery pack is not installed in the Tablet PC and you want to know the battery charge, you can press the switch with a pointed device to see the corresponding value of indicator segment that light green.



The value of the corresponding green segment indicates the relative percentage of the battery charge. The battery pack is fully discharged when you see no segment glowing green.

### **Battery Low Signals and Actions**

The battery icon 
changes appearance to display the current state of the battery.

Battery Icon	Battery Level	Description
	Discharging	The icon shows the charge remaining in 10-percent increments until the charge reaches the low-battery level.
	Low	The battery charge has reached the low-battery level (10% by default).
<u> </u>	Critically low	The battery charge has reached the critical battery level (5% by default). By default, Windows will display a notification and put your Tablet PC into Hibernation.

When the battery is low, the Tablet PC's Battery Charge Indicator ( ) also blinks red to alert you to take actions.

Always respond to low-battery by connecting the AC adapter, placing your Tablet PC in Hibernation mode, or turning off the Tablet PC.

### **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 battery packs. Discard used batteries according to the dealer's instructions.
- Do not attempt to disassemble the battery pack.

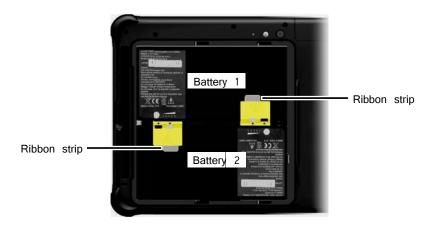
NOTE: You can hot swap one battery pack while the other one is supplying the power.

To replace the battery pack, follow these steps:

1. Locate the battery cover. Slide the two small locks outward to the unlocked position ( $\bigcirc$ ) ( $\bigcirc$ ) and then release the latch ( $\bigcirc$ ) ( $\bigcirc$ ) to open the battery cover.



2. Pull the ribbon strip to lift the battery pack off the compartment.



- 3. Fit another battery pack into place. Note the orientation of the battery pack. Hold the battery pack at an angle and insert its small tabs to the corresponding notches in the battery compartment. Then, lift the yellow protection sheet in the battery compartment and plug the battery connector.
- 4. Hold the battery cover at an angle and insert the cover's small tabs to the corresponding notches on the Tablet PC; then close the cover. Press the four small dots ( ① ) so that the cover clicks into place. Engage the cover latch ( ☐ ) ( ② ) and slide the two small locks inward to the locked position ( ☐ ) ( ③ ).



# **Power-Saving Tips**

Aside from enabling your Tablet PC's power saving mode, you can do your part to maximize the battery's operating time by following these suggestions.

- Do not disable Power Management.
- Decrease the LCD brightness to the lowest comfortable level.
- Shorten the length of time before Windows turn off the display.
- When not using a connected device, disconnect it.
- Turn off the wireless radio if you are not using the wireless module (such as WLAN, BT, or WWAN).
- Turn off the Tablet PC when you are not using it.

# **Chapter 4**

# **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.

# **Connecting a USB Device**

Your Tablet PC has a USB 3.0 port for connecting USB devices, such as a digital camera, scanner, printer, modem, and mouse. USB 3.0 supports a transfer rate up to  $5~\mathrm{Gbit/s}$ .



Select models have a second USB port, which supports USB 2.0 (transfer rate is 480 MB/s).



# **Connecting an Audio Device**

For higher audio quality, you can send sound through an external audio device.

The audio combo connector is the "4-pole TRRS 3.5mm" type (Apple iPhone Recessed) so you can connect a compatible headset microphone.



SAFETY WARNING:

To prevent possible hearing damage, do not listen at high volume levels for long periods.

# **Connecting an HDMI Display Monitor**

If you want the benefits of a larger display screen with higher resolution, you can connect an external display monitor to your Tablet PC.

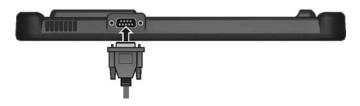
Your Tablet PC supports an HDMI connector. HDMI (High-Definition Multimedia Interface) is an audio/video interface that transmits uncompressed digital data and therefore delivers true HD quality.



To switch the display output, use Windows Control Panel or OSD Control Panel.

# **Connecting a Serial Device (Optional)**

If your model has the RS232 serial port, you can connect a serial device such as a serial mouse or serial communication device.



# **Using Smart Cards (Optional)**

If your model has the smart card reader, you can use smart cards.

With an embedded microcontroller, smart cards have the unique ability to store large amounts of data, carry out their own on-card functions (e.g., encryption and mutual authentication), and interact intelligently with a smart card reader.

To insert a smart card:

- 1. Locate the smart card reader. Open the cover.
- 2. With the embedded computer chip facing front and near the slot, slide the smart card into the slot.



Chip on the other side of the card.

3. Close the cover.

To remove a smart card:

- 1. Make sure that the software is not accessing the smart card.
- 2. Open the cover.
- 3. Pull the card out of the slot.

4-6 Expanding Your Tablet PC

4. Close the cover.

# **Using MicroSD Cards (Optional)**

If your model has the microSD card reader, you can use microSD cards for removable storage media.

To insert a microSD card:

- 1. Locate the microSD card reader. Open the cover.
- 2. Align the card with its connector pointing to the slot and the connector side facing back. Slide the card into the slot until it reaches the end.



- 3. Windows will detect the card and assign it a drive name.
- 4. Close the cover.

To remove a microSD card:

- 1. Open File Explorer and tap Computer.
- 2. Tap and hold the memory card icon and tap Eject.
- 3. Open the cover.
- 4. Slightly push the card to release and then pull it out of the slot.
- 5. Close the cover.

# **Chapter 5**

# **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 how to use the BIOS Setup Utility.

### When and How 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 BIOS settings.
- You want to modify some specific settings according to the hardware.
- You want to modify some specific settings to optimize the system performance.

To run BIOS Setup Utility:

- For Windows 8 models: Open the Charms Bar of Windows. Tap Settings → Change PC Settings → General. Under Advanced startup, tap Restart now. In the boot options menu, tap Troubleshoot → Advanced options → UEFI Firmware Settings. Tap Restart to restart the system and enter UEFI (BIOS).
- Method 1 for Windows 7 models: During start when the Getac logo screen appears, double-tap the screen. In the menu that appears, select Setup under App Menu.
- Method 2 for Windows 7 models: If a keyboard is connected, press the F2 key when
  the prompt ("Press F2 for System Utilities") appears at the bottom left corner
  of the screen during system startup.

NOTE: The actual setting items on your model may differ from those described in this chapter.

## **Menu Descriptions**

#### Information Menu

The Information menu contains the basic configuration information of the system. There are no user-definable items in this menu.

NOTE: The "Asset Tag" information appears when you have entered the asset number for this Tablet PC using the asset management program. The program is provided in the Assettag folder of the Driver disc.

#### **Main Menu**

The Main menu contains the various system settings.

- System Date sets the system date.
- **System Time** sets the system time.
- Legacy USB Support enables or disables the system's support for Legacy
- **CSM Support** enables or disables CSM (Compatibility Support Mode). You can set this item to Yes for backward compatibility with legacy BIOS services. This item appears only on Windows 8 models.
- UEFI Boot enables or disables booting using UEFI (Unified Extensible Firmware Interface). UEFI is a new type of firmware after the BIOS firmware. This item appears only on Windows 8 models.
- Legacy Boot enables or disables booting using legacy BIOS. This item is accessible only when the CSM Support item is set to Yes. This item appears only on Windows 8 models.

#### **Advanced Menu**

The Advanced menu contains the advanced settings.

#### Wake Up Capability

**USB Wake-Up From S3** allow a USB device activity to wake up the system from S3 (Sleep) state. (This feature works for Windows 7 only.)

 AC Initiation sets if connecting AC power will automatically start or resume the system.

#### AMT Configuration

Intel(R) AMT enables or disables Intel® Active Management Technology BIOS extension execution. AMT allows the system administrator to access an AMT featured computer remotely.

**Enter Intel MEBx Setup** determines whether the prompt for entering Intel MEBx Setup appears or not during POST.

#### Virtualization Technology Setup

**Intel(R) Virtualization Technology** enables or disables Intel® VT (Intel Virtualization Technology) feature which provides hardware support for processor virtualization. When enabled, a VMM (Virtual Machine Monitor) can utilize the additional hardware virtualization capabilities provided by this technology.

**Intel(R) VT for Directed I/O (VT-d)** enables or disables VT-d (Intel® Virtualization Technology for Directed I/O). When enabled, VT-d helps enhance Intel platforms for efficient virtualization of I/O devices.

#### Graphics Setup

**DVMT Pre-Allocated** sets the amount of pre-allocated (fixed) graphics memory for use by the internal graphics device.

**DVMT Total Gfx Mem** sets the amount of total graphics memory (pre-allocated + fixed + DVMT) for use by the internal graphics device.

 Device Configuration enables or disables several hardware components. The items available for setting depend on your model.

### **Security Menu**

The Security menu contains the security settings, which safeguard your system against unauthorized use.

#### NOTE:

- You can set the user password only when the supervisor password has been set.
- If both the supervisor and user passwords are set, you can enter any of them for starting up the system and/or entering BIOS Setup. However, the user password only allows you to view/change the settings of certain items.
- A password setting is applied right after it is confirmed.
   To cancel a password, leave the password empty by pressing the Enter key.

#### Account's Password Status

**Supervisor/User Password Is** shows whether you have set the supervisor/user password or not for the system.

**Set Supervisor/User Password** sets the supervisor/user password.—You can set the supervisor/user password to be required for starting up the system and/or entering BIOS Setup.

- Password on Boot allows you to enable or disable the entering of password for booting up your system. This item appears only on Windows 7 models.
- HDD Security Status

**HDD 0 Password State** shows whether you have set the hard disk password or not.

**Set HDD 0 Password** sets the password for locking the Primary Master hard disk drive. After setting a password, the hard disk drive can only be unlocked by the password no matter where it is installed.

#### TPM Setup Menu

**TPM Support** enables or disables TPM (Trusted Platform Module) support. TPM (Trusted Platform Module) is a component on your computer's mainboard that

is specifically designed to enhance platform security by providing a protected space for key operations and other security critical tasks.

Current TPM State shows the current TPM state.

**TPM Action** allows you to select between *No Change*, *Clear*, *Enable and Activate*, and *Disable and Deactivate*.

• Intel Trusted Execution Technology enables utilization of additional hardware capabilities provided by Intel® Trusted Execution Technology.

#### **Boot Menu**

The Boot menu sets the sequence of the devices to be searched for the operating system.

The bootable devices will be automatically detected during POST and shown here, allowing you to set the sequence that the BIOS uses to look for a device from which to load the OS.

#### **Exit Menu**

The Exit menu displays ways of exiting BIOS Setup Utility. After finishing with your settings, you must save and exit so that the changes can take effect.

- Exit Saving Changes saves the changes you have made and exits BIOS Setup Utility.
- **Exit Discarding Changes** exits BIOS Setup Utility without saving the changes you have made.
- Load Setup Defaults loads the factory default values for all the items.
- **Discard Changes** restores the previous values for all the items.
- Saves Changes saves the changes you have made.

# Chapter 6

# **Using Getac Software**

Getac software includes application programs for specific computer components and utility programs for overall management.

This chapter briefly describes the programs.

### **OSD Control Panel**

The OSD (On Screen Display) Control Panel provides a user-friendly interface for you to quickly activate or operate certain functions on your Tablet PC with a simple tap of the screen.

To open the OSD Control Panel, start the program named **OSDC.** If you have a Windows 7 model, you can also press the **Windows Logo** button on your computer to open it. The following screen appears.

Help





For detailed information on the program, see the program's online help.

# **G-Manager**

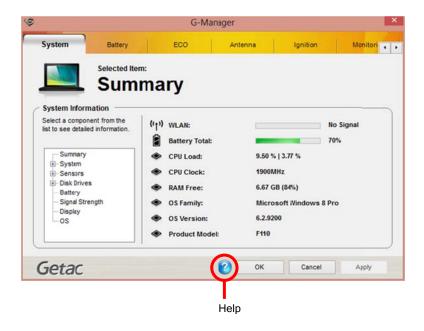
G-Manager is a unified user interface utility that allows you to view, manage, or configure your computer features.

With G-Manager, you can perform all or some of the tasks listed below.

- View system information.
- Check the battery status and configure the battery.
- Configure ECO modes (or called power profiles).
- View light sensor information (select models only).
- Set if your system will switch to the external antenna when connected to the docking station (select models only).
- Configure how your system works with the vehicle ignition (select models only).
- Monitor the system.
- View GPS information (select models only).

Tap and hold the Getac Utility icon 📓 located on Windows taskbar and select G-Manager to start the program. The G-Manager window appears, containing several tabs.

NOTE: Depending on your model, the actual items appearing on the screen may differ from those shown in this manual.



For detailed information on the program, see the program's online help.

# **Getac Camera (Optional)**

Getac Camera is a geo-tagging camera program, which allows you to stamp geographical information on photos as watermarks and embed such information into JPEG files as EXIF 2.2 metadata.

#### NOTE:

- Getac Camera works with Virtual-GPS (a separate application program).
- Before starting Getac Camera, close any other program that uses the camera; otherwise, Getac Camera can only provide limited functions.

Start Getac Camera. The Getac Camera window appears as shown below.



The GPS positioning will be automatically activated. When the GPS positioning is completed, you will see the geographical information in the watermark area on the image.

For detailed information on the program, see the program's online help. Tap About and then

# **Getac Smart Tag (Optional)**

If your model has the RFID reader/writer module, you can use Getac Smart Tag to read UID numbers from RFID tags (14443-A, 14443-B, and 15693 types).

Start **Getac Smart Tag.** The Getac Smart Tag floating button appears and is always on top of the screen. Tap the floating button to start scanning. While scanning is in progress, the button's color is orange.

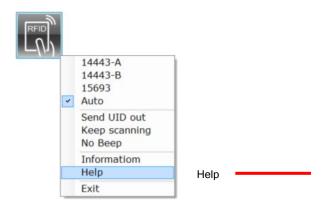




Idle

Scanning

To configure the program, open the options menu by tapping and holding the floating button.



For detailed information on the program, see the program's online help.

# **Using the Barcode Reader (Optional)**

NOTE: For enhanced applications and customization of the module, contact your authorized Getac dealer.

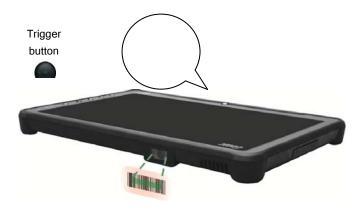
If your model has the barcode reader module, you can read barcodes of the following types:

- Code 39
- Code 128
- EAN/JAN/UPC
- GS1 Databar
- Interleaved 2 of 5
- PDF417
- QR Code
- Data Matrix
- **OCR**

#### To read barcodes:

- 1. Start your processing software and open a new or existing file. Place the insertion point (or called cursor) where you want the data to be entered.
- 2. Press and hold the Trigger button of your Tablet PC while aiming the green scan beam at the barcode.

The beam should be centered over the barcode. Adjust the lens' distance from the barcode, shorter for a smaller barcode and farther for a larger one.



**NOTE:** If the code being scanned is highly reflective (e.g., laminated), it may be necessary to tilt the code  $+5^{\circ}$  to prevent unwanted reflection.

3. Upon a successful scan, the system beeps and the scan beam turns off. The decoded barcode data will be entered into your processing software.

# **Chapter 7**

# **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 areas such as protecting, storing, cleaning, and traveling.

# **Protecting the Tablet PC**

To safeguard the integrity of your Tablet PC data as well as the Tablet PC itself, you can protect the Tablet PC in several ways as described in this section.

### **Using an Anti-Virus Strategy**

You can install a virus-detecting program to monitor potential viruses that could damage your files.

### **Using the Cable Lock**

You can use a Kensington-type cable lock to protect your Tablet PC against theft. The cable lock is available in computer stores.

To use the lock, loop the lock cable around a stationary object such as a table. Insert the lock to the Kensington lock hole and turn the key to secure the lock. Store the key in a safe place.



## Taking Care of the Tablet PC

#### **Location Guidelines**

- For optimal performance, use the Tablet PC where the recommended temperature is between 0 °C (32 °F) and 55 °C (131 °F). Actual operating temperature depends on product specifications.
- Avoid placing the Tablet PC in a location subject to high humidity, extreme temperatures, mechanical vibration, direct sunlight, or heavy dust. Using in extreme environments for long periods can result in product deterioration and a shortened product life.
- Operating in an environment with metallic dust is not allowed.
- Place the Tablet PC on a flat and steady surface. Do not stand the Tablet PC on its side or store it in an upside-down position. A strong impact by dropping or hitting may damage the Tablet PC.
- 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.
- As the Tablet PC can become very hot during operation, keep it away from objects that are vulnerable to heat.
- 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.
- Avoid moving the Tablet PC abruptly from a cold to a warm place.
   A temperature difference of more than 10 °C (18 °F) may cause condensation inside the unit, which may damage the storage media.

#### **General Guidelines**

- Do not expose your skin to the Tablet PC when operating it in a very hot or cold environment.
- Do not place heavy objects on top of the Tablet PC as this may damage the display.
- The screen surface is easily scratched. Avoid touching it with a sharp object such as a pen or pencil.
- LCD image sticking occurs when a fixed pattern is displayed on the screen for a prolonged period of time. You can avoid the problem by limiting the amount of static content on the display. It is recommended that you use a screen saver or turn off the display when it is not in use.
- To maximize the life of the backlight in the display, allow the backlight to automatically turn off as a result of power management.

### **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.
- If water or liquid is split onto the Tablet PC, wipe it dry and clean when possible.
   Though your Tablet PC is water-proof, do not leave the Tablet PC wet when you can dry it.
- If the Tablet PC gets wet where the temperature is 0°C (32°F) or below,
   freeze damage may occur. Make sure to dry the wet Tablet PC.

### **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.
- Charge the battery pack between 10 °C ~ 30 °C (50 °F ~ 86 °F) temperature range. 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. Also, charging will not start if the battery pack is not within the allowed temperature range.
- 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.
- $\bullet$  To maintain the battery pack's operating efficiency, store it in a cool dark place removed from the Tablet PC and with 30 %  $\sim$  40 % charge remaining.
- Important guidelines when using the battery pack.
  - 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.

The Tablet PC's input voltage and surrounding temperature will directly affect the battery pack's charge and discharge time:

- charging time will be prolonged when the Tablet PC is turned on.
   To shorten the charging time, it is recommended that you place the Tablet PC in Sleep or hibernation mode.
- a low temperature will prolong the charging time as well as hasten the discharge time.
- When using battery power in an extremely low temperature environment, you may experience shortened operating time and incorrect battery level reading. This phenomenon comes from the chemical characteristics of batteries. The appropriate operating temperature for the battery is -10 °C  $\sim 50$  °C (14 °F  $\sim 122$  °F).
- Do not leave the battery pack in storage for more than six months without recharging it.

#### **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.
- 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.
- Turn off the Tablet PC power when cleaning the display. Cleaning the display with the power on may cause improper operation.
- 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.

- ullet Using the touchscreen during low temperature (less than 5  $^{\circ}$ 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 online Help 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.

## **Chapter 8**

# **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 Tablet PC problems.

### **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? Do you hear any beeps? 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.

### **Solving Common Problems**

### **Battery Problems**

### The battery does not charge (Battery Charge 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.
- If the battery doesn't charge after it has been stored in very low temperatures,
   try disconnecting and reconnecting the AC adapter to solve the problem.
- 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.

### **BT Wireless Transmission Problems**

### I cannot connect to another device with BT wireless technology.

- Make sure that both devices have activated BT feature.
- Make sure that the distance between the two devices is within the limit and 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.

### **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 the brightness.

#### The characters on the screen are dim.

Adjust the brightness and/or contrast.

### The display brightness cannot be increased.

 As a protection, the display brightness will be fixed at a low level when the surrounding temperature is too high or too low. It is not a malfunction in this situation.

### 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.

## Clouding (or called "mura") happens on the screen when you exert forces on the left or right side of the LCD frame.

• This is a normal phenomenon, not a 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.

### **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.

### **Sensor Problems (for Windows 8 Models Only)**

### The built-in digital compass doesn't seem to be accurate.

- Rotating the display can affect the accuracy of the digital compass. This is normal, not a malfunction. The sensors for the compass require periodic recalibration.
   Follow this method to recalibrate the sensors:
  - 1. Make sure you are far away from any large metal objects or magnetic fields.
  - 2. Start an application that utilizes the digital compass.
  - 3. Hold the Tablet PC level with the horizon, with the LCD side facing up.
  - 4. Rotate the Tablet PC  $360^{\circ}$  at least three times around each axis (X, Y, and Z) as shown below.



### 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.)

### Sound Problems

### No sound is produced.

- Make sure that the volume control is not set too low. Increase the volume.
- Make sure that the sound is not muted.
- 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.

### **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.

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

• Reset your Tablet PC. (See "Resetting the Tablet PC" later in this chapter.)

### **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.
- 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.

### 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.

### **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 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 any one of these methods:

- Press and hold the **P1** button for more than 2 seconds. This opens the **Ctrl-Alt-Del** screen where you can select actions including **Restart**.
- If the above action does not work, press and hold the power button for more than 5 seconds to force the system to turn off. Then turn on the power again.

### **System Recovery**

### System Restore, Refresh, or Reset (for Windows 8 **Models**)

If you're having problems with your Windows 8 computer, you can try to restore, refresh, or reset it.

### To restore your computer to an earlier point in time:

- 1. Enter Recovery in the search box.
- 2. Tap Settings, and then tap Recovery.
- 3. Tap Open System Restore.

### To refresh your computer without affecting your files:

- 1. Open the Charms Bar of Windows.
- Tap Settings → Change PC Settings → General.
- 3. Under Refresh your PC without affecting your files, tap Get started.

### To remove everything and reinstall Windows:

- 1. Open the Charms Bar of Windows.
- 2. Tap Settings → Change PC Settings → General.
- 3. Under Remove everything and reinstall Windows, tap Get started.

### **System Recovery (a Tool for Windows 7 Models)**

Use System Recovery when:

- The Windows 7 operating system does not start at all.
- You want to restore the system to the factory state.

#### WARNING:

- Using this feature will reinstall Windows to your system and configure it to the system's factory default settings. All data on the hard disk drive will be lost.
- Make sure that power is not interrupted during the recovery process. An unsuccessful recovery may result in Windows startup problems.

To run System Recovery:

- 1. Connect the AC adapter.
- Turn on the Tablet PC. During system startup when the Getac logo screen appears, double-tap the screen. In the menu that appears, select HDI Recovery under App Menu.

Or, if a keyboard is connected, you can press **Ctrl + Alt + F2** keys for four seconds instead of tapping the screen.



3. In the screen that appears, select **Recovery** to start the recovery process.



- 4. The progress bar shows the percentage completed. When it reaches 100%, the system turns off.
- 5. Turn on the Tablet PC. The Windows setup wizard starts. Follow the onscreen prompts to continue.
- 6. When the system restarts, the installer screen appears. The installer will perform system hardware detection and driver installation.



7. When completed, the system restarts and displays Windows desktop.

# **Appendix A**

# **Specifications**

 $\ensuremath{\mbox{NOTE:}}$  Specifications are subject to change without any prior notice.

Parts		Specifications		
CPU		Haswell Intel® Core™ i3/i5/i7 processor		
BIOS		Phoenix, Flash EEPROM, supporting UEFI, NIST, ACPI, and TPM		
RAM		4GB/8GB DDR3L 1600MHz SO-DIMM		
Video	Controller	UMA - Intel® GT2		
	Display Panel	11.6-inch (16:9) TFT LCD, HD 1366x768 or FHD 1920x1080, sunlight readable, 800 Nits maximum brightness		
Audio Features Azalia, F		Azalia, High Definition audio		
	Speaker	1.5W x 1		
	Microphone	Integrated microphone		
Hard disk drive		64/128/256 GB SSD (Solid-State Disk)		
I/O ports	Standard	USB 3.0, combo audio (4-pole TRRS 3.5mm type HDMI, Docking		
	Optional	One of the below on the top side: RS232 / RJ-45 / USB 2.0 / microSD / barcode reader		

Parts		Specifications		
		One of the blow at the rear : Smart card reader / RFID reader		
LAN (option)		10/100/1000 Mbps Ethernet		
Wireless LAN + BT		IEEE 802.11ac, compatible with 802.11a/b/g/n, BT 4.0 + EDR		
GPS (option)		NMEA0183		
WWAN (option)		3G/4G LTE		
Camera (option)		Front: HD Rear: 5M pixel, autofocus, LED, video capture		
Security		Kensington lock TPM 1.2		
Power	AC adapter	Universal 65 W; input: 100~240 V, 50/60 Hz; output: 19V		
	Battery pack x 2	Lithium-ion Prismatic type, 3-cell		
Dimension (LxW×D)		314 x 207 x 22mm (12.4 × 8.1 × 0.9 inch)		
Weight		1.39 kg (3 lb)		

### **Button Functions on Special Occasions**

On "POST/BIOS Setup/Non-ACPI" occasions, the five hardware buttons provide keyboard key functions as described below.

Button	Function
	Enter
	Esc

Button	Function
P1	Tab
<b>E</b> ())	↑Up
国》	<b>↓</b> Down

### **Appendix B**

# **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.

### **ANSI Warning**

Equipment approved for ANSI/ISA 12.12.01, Nonincendive Electrical Equipment for use in Class 1, Division 2, Group A, B, C, and D. Maximum ambient temperature: -25°C~55°C

- WARNING: To prevent ignition of a hazardous atmosphere, batteries must only be changed or charged in an area known to be non-hazardous.
- EXPLOSION HARZARD WARNING: External connections/hubs through the connectors as mentioned (USB connector, Ethernet connector, phone connector, video port, serial port, power supply connector, microphone jack, headphones jack, and buttons/switches) and super multi DVD/combo drive are not to be used in a hazardous location.
- Power adapter shall not be used in hazardous locations.

### **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: Il 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

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

IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

### Radio Frequency Interference Requirements and SAR

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.

### **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.

### Canada Radio Frequency Interference Requirements

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.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé 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 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.

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

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

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.

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

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.

### **Restrictions**

This device is restricted to indoor use when operating in the 5150 to 5350 MHz frequency range.