

 AutoTRON

NAS1408

User's Manual



Copyright Notice

The information in this document is subject to change without prior notice in order to improve reliability, design and function and does not represent a commitment on the part of the manufacturer.

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

Trademarks

All registered trademarks and product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective owners.

Revision History

The revision history of NAS1408 User Manual is described below:

Version No.	Revision History	Date
1.0	Initial Release	2025/03/21

Thank you for choosing MACTRON Tablet

This instruction serves to enable users to get to know our product as soon as possible. Here we have made a brief introduction to the key layout and definitions in figures and words. And a brief explains for the basic operating functions

Attention:

- 1.1 The instructions in this guide refer to the windows 10/11 system. If you are using other windows operating systems, some operations may be slightly different. If you are using another windows operating system, some operations may not suit you.
- 2.1 The instructions describe the general functions of most models. Your computer may not have some functionality, or some features on your computer are not described in the manual.
- 3.1 This instruction applies the following models: NAS1408 rugged tablet.
- 4.1 The illustrations in this instruction may be different from the product itself.

Contents

1. Getting Started.....	7
1.1 Packing List.....	7
1.2 Connecting to AC Power.....	7
1.3 Turning On and Off the Tablet.....	8
2. Product Information.....	9
2.1 Specifications	9
2.2 Product Overview	12
2.3 System Configuration	15
2.3.1. Front Components.....	15
2.3.2. Rear Components.....	16
2.3.3. Left-Side Components	17
2.3.4. Right-Side Components	17
2.3.5. Top Components	18
2.3.6. Bottom Components	20
3. Operating Your System	21
3.1 Using the Touchscreen	21
3.2 Using the Touchpad	24
3.2.1 Touchpad Gestures in Windows 10.....	25
3.2.2 Connections Changing Touchpad Settings.....	25
3.3 Using LAN (Local Area Network)	25
3.4 Using the WLAN.....	25
3.4.1 Turning On the WLAN Radio:	25
3.5 Using the Bluetooth Feature	26
3.5.1. Turning On / Off the Bluetooth Radio	26
3.6 Using the Fingerprint Sensor.....	27
4. Managing Power.....	28
4.1 AC Adapter.....	28
4.2 Battery Pack.....	29
4.2.1. Charging the Battery Pack.....	29
4.2.2. Checking the Battery Level	29

4.2.3. Battery Low Signals and Actions	30
4.2.4. Replacing the Battery Pack	30
4.3 Power-Saving Tips	31
5. Expand Your Device	31
5.1 Connecting Peripheral Devices	31
5.1.1. Connecting a USB Device	31
5.1.2. Connecting a USB Type-C Device	31
5.1.3. Connecting a Monitor.....	32
5.1.4. Connecting to RD232 Devices.....	32
5.1.5. Connecting an Audio Device.....	32
5.2 Peripheral the SSD/Memory Module	32
6. Using BIOS Setup	34
6.1 Menu Descriptions.....	35
6.1.1. Main Menu	35
6.2 Advanced Menu & Chipset Menu	36
6.2.1. Security Menu	36
6.3 Boot Menu.....	37
6.4 Save & Exit Menu	37
7. Care and Maintenance.....	38
7.1 Protecting the Tablet.....	38
7.2 Taking Care of the Tablet	38
8. Troubleshooting.....	42
8.1 Preliminary Checklist.....	42
8.2 Solving Common Problems	43
8.2.1 Battery Problems	43
8.2.2 Bluetooth Problems.....	44
8.2.3 Display Problems.....	44
8.2.4 Hardware Device Problems.....	45
8.2.5 Keyboard and Touchpad Problems	45
8.2.6 Power Management Problems	45
8.2.7 Software Problems	46

8.2.9 Startup Problems	46
8.2.10 WLAN Problems	47
8.3 Restart the Tablet	48
8.4 System Recovery Features	48

1. Getting Started

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

1.1 Packing List

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

If you discover any of the items listed below are damaged or lost, please contact your local distributor immediately.

- NAS1408 x 1
- Battery x 1
- Power Cord x 1
- Power Adapter x 1

1.2 Connecting to AC Power

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

Note:

- The battery will be shipped to you in transport mode, which protects the battery from charging or discharging. When you install the battery for the first time and connect the notebook to AC power, the battery will automatically exit this mode for you to start using.
- Connecting the power adapter will begin charging the battery. Refer to Chapter 3 for charging instructions.

It must be connected to AC power supply when it is turned on for the first time.

1. Open the waterproof plug of DC port.



2. Insert the DC head of the power adapter into the DC port of the device.
3. Plug the female end of the power cord into the power adapter and the male end into the power outlet.
4. The power outlet supplies power to the device through an adapter. Now you can power on the device.

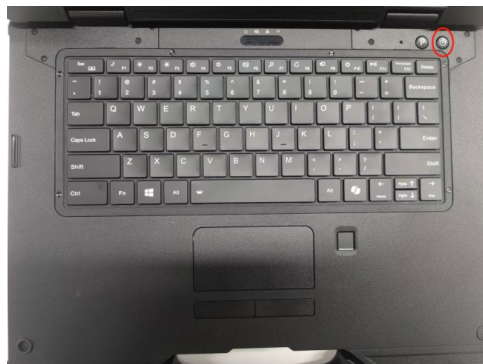
1.3 Turning On and Off the Tablet

Turning On

1. Release the latch on the top cover, then lift the screen cover. You can adjust the screen angle for optimal image clarity.

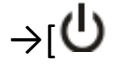


Press the power button (⏻). The Microsoft Windows operating system will start.



Turning Off

When you are work done, you can power it off or leaving it in Sleep or Hibernation mode:

To...	Do this...
Power off (Shutdown)	Click  →[ Power]→[Shut down].
Sleep	Use one of following methods: ● Press the power button. ● Click →[ Power]→[Sleep].
Hibernate	This item does not appear in the power menu by default. If you want to set up this mode, please go to Windows Settings to set it up.

- 「Sleep」 is a default function for this action. You can change the result of this action through Windows Settings.

2. Product Information

2.1 Specifications

Display	
Display Type	14-inch FHD
Resolution	1920x1080
Brightness	1000 nits
Touch Panel	10-Point Capacitive Screen, Hardness above 7H; Scratch-resistant; Supports glove touch (Optional)
System	
CPU	Intel® Core™ Ultra 7 Processor 155H 24M Cache, up to 4.80 GHz
GPU	iGfx/dGfx (Intel Xe LPG Graphics)
Memory	32GB DDR5 4800MHz
Storage	256GB M.2 SSD

SSD	1 x M.2 2280 M-Key SSD (Expansion Slot) (Optional)
Operating System	Windows 11/10 IoT
Security	TPM2.0
I/O Ports	3 x USB Type-A (1 x USB3.2, 1 x USB3.0, 1 x USB2.0)
	1 x USB Type-C (Support Thunderbolt 4)
	1 x Φ 3.5mm standard earphone jack
	1 x HDMI 2.0a Mini
	1 x SIM card
	1 x TF card
	1 x RJ45 10M/100M/1000M self-adaptive
	1 x RJ45 10M/100M/1000M self-adaptive (USB2.0), supports Gigabit Ethernet protocol
	1 x RS232
	1 x DC19V/3.78A Φ 5.5mm power interface
	1 x 12PIN Pogo Pin (USB & Charging)
	1 x Anti-theft Lock Slot
Physical	1 x Right-side Cooling Vent
	1 x M.2 E-KEY interface for custom modules.
	WiFi
	Wi-Fi 6
	4G/5G
	4G (M.2 interface) LTE-FDD: B1/3/5/7/8/20/28, LTE-TDD: B38/40/41 ; 5G (Optional)
	Bluetooth
	BT5.1 class 1; Transmission Distance: 10m
	GPS
	Supports single GPS or single glonass, default GPS
	Data Collection
	Fingerprint Module
	NFC Module
Buttons	Material
	ABS+PC
	Camera
	Front 5.0MP
	Speaker
	2 x Built in 4 Ω /3W
	Microphone
	1 x Internal MIC
	Keyboard
	US Layout Keyboard with Backlight
	Color
	Black
Buttons	Dimension (WxHxD)
	363.2 x 287.4 x 42.1mm
	Weight
	TBD
	1 x Power Button
	1 x P Key (one-click screen off/on)
	1 x F (toggle switch, enable/disable wireless functions)
	1 x Camera Constant white light when active, light off when inactive.

Indicator Light	1 x Power Constant blue light when power on, light off when off.
	1 x Battery (Dual-color red/green) Red when charging, green when fully charged, blinking red for low battery, light off during discharge.
	1 x Caps Lock Key Red light on indicates caps lock on, off indicates caps lock off.
	1 x Airplane Mode Red light on indicates airplane mode on, off indicates airplane mode off.
Battery (Built-in)	Built-in Polymer Lithium-ion Battery, Non-removable 1300mah/11.1V (14.4WH)
	1.5hrs (Default 50% volume, 200 lumens brightness, playing 1080P HD video)
Battery (Removable)	Removable Polymer Lithium-ion Battery, Hot-swappable 4850mah/11.55V (56WH)
	8hrs (Playing 1080P HD video, Conditions: System in balance mode, 30% brightness, 320 lumens, 30% volume (70 dB at 10cm), WiFi and Bluetooth turned off.)
Power Adapter	DC input 100-240VAC0.5A50/60Hz
	DC19V/3.78A 71.82W
Standard Accessory	1 x DC19V / 3.78A adapter
Box Dimension	442 x 312.5 x 72 mm
Box Weight	TBD
Environment	
IP Rating	IP65
Drop Test	1.22m drop resistance
Certification	CE, UN3803, Optional FCC, CCC, MIL-STD-810H
Operating Temperature	-20°C to 60°C
Storage Temperature	-30°C to 70°C
Relative Humidity	95% Non-Condensing
Warranty	2 Years

2.2 Product Overview

Note: Depending on the special model you purchased, the look and color of the device may be different from the graphics shown in this manual.

Note: Please open the waterproof plug before using the ports or device. When not using ports or device, please completely cover the waterproof plug to isolate water and dust.

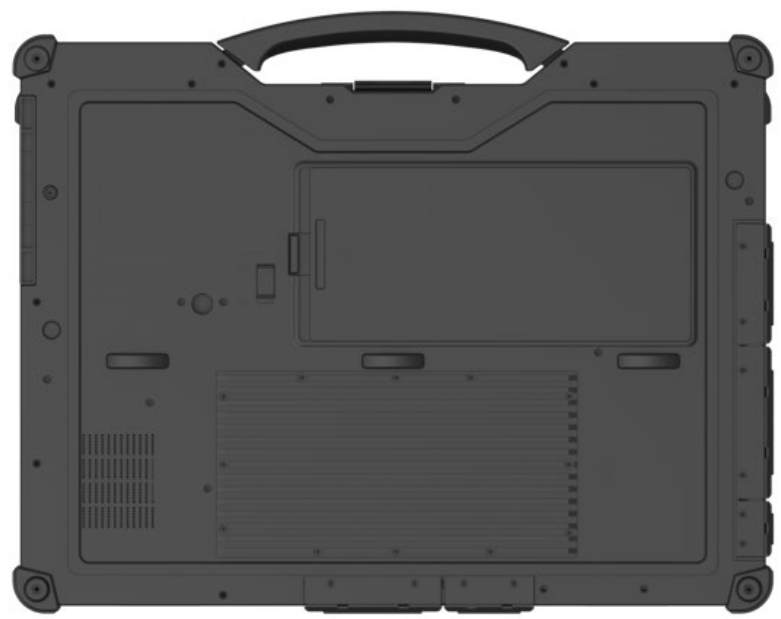
Six Views



Front View



Rear View



Top View



Bottom View



Side View



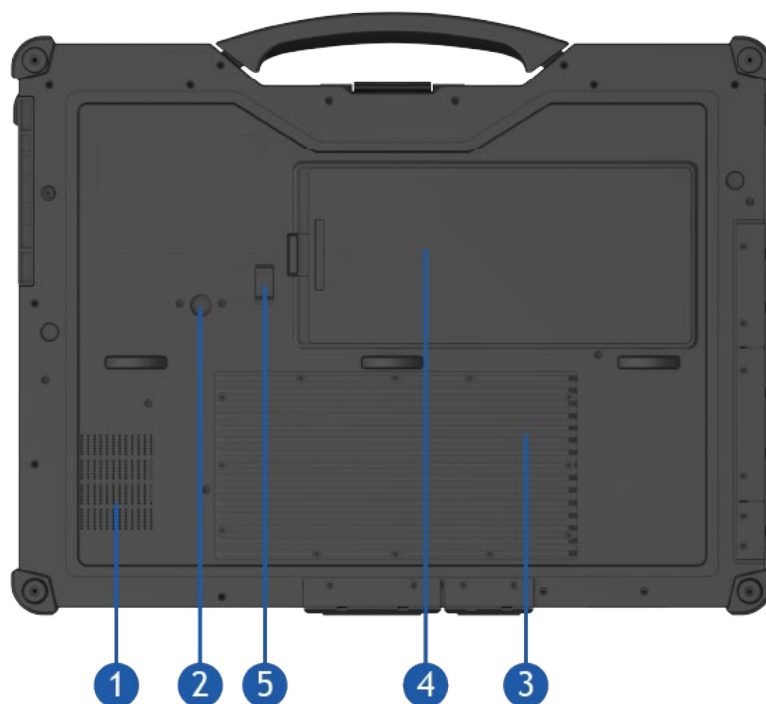
2.3 System Configuration

2.3.1. Front Components



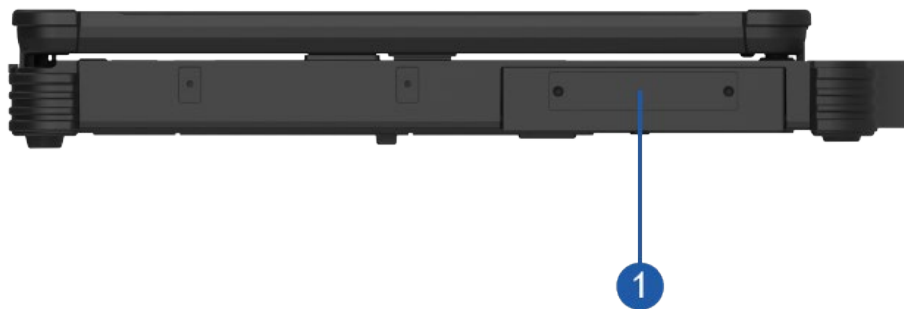
Ref. No.	Component	Description
1	Top Cover Latch	Used to secure the top cover.
2	Stereo Speakers	Play the device sounds.
3	Handle	A convenient solution for carrying the device.

2.3.2. Rear Components



Ref. No.	Component	Description
1	Air Intake Hole	Works with the ventilation holes to dissipate heat.
2	Removal Battery	A removable battery that supports hot-swappable replacement.
3	SSD/Memory Installation Location	Open the cover to replace the SSD. Memory modules can also be upgraded. Note: This is not a hot-swappable device. Please do not remove the device while the system is powered on.
4	HDD Hard Drive Lock	Locks the inserted HDD enclosure.
5	Drainage Hole	Helps expel any water that may have flowed into the keyboard.

2.3.3. Left-Side Components



Ref. No. Component

Description

Optional M.2-2280 PCIe interface ×1 for connecting an SSD, with an additional option for M.2 E-Key interface ×1 for custom modules.

①

Expansion Interface



2.3.4. Right-Side Components



Ref. No. Component

Description

①

RS232 Serial Port

Connects to Serial device.

②

RF Switch

Enables or disables the device's RF signal.

③

USB3.0 Port

Connects to USB devices.

④

USB2.0 Port

Connects to USB devices.

⑤

RJ45 Gigabit Ethernet Port

Connects to a LAN network cable.

⑥

DC Power Jack

Connects to the Power adapter.

2.3.5. Top Components



Ref. No.	Component	Description
❶	Camera	Used to enable video functionality. The privacy shutter can also forcibly shield the camera.
❷	LCD Screen	Displays the device's visual output.
❸	Microphone	Used to capture external sounds.
❹	Keyboard	The computer input device.
❺	Touchpad	The pointing device for the computer.
❻	Touchpad Indicator Lights	⏻ Power: Glows solid blue when the device is powered on.
		🔋 Battery: Glows solid red when charging, flashes red when the battery is removed.
		💿 Hard Drive Indicator: Flashes when the system performs read/write operations on

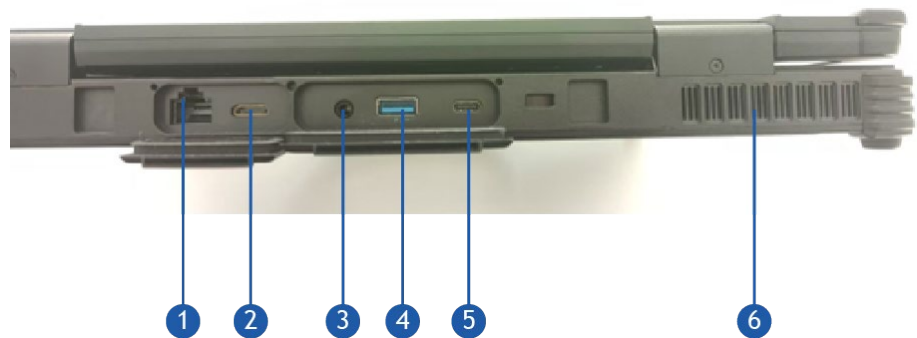
the hard drive.

Caps Lock: Glows solid red when the Caps Lock key is enabled on the keyboard.

4G Indicator: Lights up when the device's 4G module is recognized

7	Fingerprint Sensor	Used for fingerprint login, preventing unauthorized use of your computer.
8	P Button	Press and hold for more than 1 second to turn off the screen display; press again to turn the screen back on.
9	Power Button	Controls the power on/off of the device (defaults to sleep mode when turned off).

2.3.6. Bottom Components



Ref. No.	Component	Description
①	RJ45 Gigabit Ethernet Port	Connects to a LAN network cable.
②	HDMI Port	Connects to an HDMI display or projector.
③	3.5mm Audio Port	Connects to speakers using a 3.5mm audio cable for audio playback.
④	USB3.0 Port	Connects to USB devices.
⑤	Type-c Port	Compatible with devices supporting Thunderbolt or USB-C.
⑥	Ventilation Holes	Designed for heat dissipation.

3. Operating Your System

This chapter provides information about the use of the Tablet. If you are new to Tablets, reading this chapter will help you learn the operating basics. If you are already a Tablet user, you may choose to read only the parts containing information unique to your Tablet.

CAUTION :

- Do not expose your skin to the Tablet when operating it in a very hot or cold environment.
- The Notebook can get uncomfortably warm when you use it in high temperatures. As a safety precaution in such a circumstance, do not place the Tablet 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.

3.1 Using the Touchscreen

Your keyboard features the standard functions of a full-sized computer keyboard, along with the ability to use special functions via the Fn key.

The standard functions of the keyboard can be categorized into four main types:

- Typing Keys
- Cursor Control Keys
- Numeric Keys
- Function Keys
- Fn Key
- Hotkeys
- Windows key

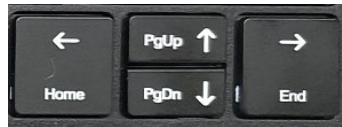
Typing Keys:

Typing keys refer to the traditional keys found on a typewriter, with additional special-purpose keys such as Ctrl, Esc, and lock keys. The Control (Ctrl) and Alternate (Alt) keys are typically used in combination with other keys to perform specific program functions. The Escape (Esc)

key is usually used to stop a process, such as exiting a program or canceling a command. Its function depends on the software you are using.

Cursor Control Keys:

Cursor control keys are primarily used for moving and editing



Note: The cursor is the pointer on the screen that indicates your current typing position. Its shape can vary depending on the software you're using; it may appear as a line, block, or any other shape.

Numeric Keys:

The typing keys include a set of 10 numeric keys as shown in the image below:

(Include the relevant image or diagram here)



Function Keys:

The top row of the keyboard contains the **F1** through **F12** function keys. These keys have multiple functions and execute specific commands defined by individual programs.

Fn Key:

The Fn key, located in the lower-left corner of the keyboard, is used in combination with other keys to perform additional functions. To activate a function, press and hold the Fn key, then press the other key.

Hotkeys:

Hotkeys refer to key combinations that, when pressed together, trigger special functions on the computer. Most hotkeys operate in a cycle, switching to a different function or option each time the hotkey combination is pressed.

Icons on the keys help you identify the corresponding hotkey functions.

The hotkey functions are explained below:

Key	Description
FN + Esc	Toggle the touchpad on or off.
FN + F1	Sleep mode button; its function depends on the Windows power settings.
FN + F2	Decrease screen brightness.
FN + F3	Increase screen brightness.
FN + F4	Mute or unmute system sound output.
FN + F5	Decrease volume.
FN + F6	Increase volume.
FN + F7	Open Windows search.
FN + F8	Open online voice recognition.
FN + F9	Open the device connection interface, including wireless displays and audio devices.
FN + F10	Open Windows Settings.
FN + F11	Play/pause media.
FN + F12	Windows screenshot.

Windows key:

The  Windows logo key opens the Start menu. When used in combination with other keys, it can perform specific functions in various software.

3.2 Using the Touchpad

Note: Do not use sharp objects (such as pens) to touch the surface of the touchpad to avoid damage.

Note:

- Press Fn + Esc to toggle the touchpad on or off.
- To ensure optimal touchpad performance, keep your fingers and the surface of the touchpad clean and dry. When touching the surface, use a gentle tap, not a heavy press.

The touchpad serves as the pointing device for interacting with your computer. It controls the position of the pointer (cursor) on the screen and allows for selection via tapping.



The touchpad consists of a rectangular surface (working area) and left/right buttons. To use the touchpad, place your fingertip on the surface. The rectangular area acts as a scaled-down version of the screen—when you move your fingertip on the touchpad, the pointer on the screen will follow. If your fingertip reaches the edge of the surface, simply lift your finger and place it on the other side to continue.

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

Term	Operations
Point	Move your fingertip to position the cursor arrow over the item you wish to select.
Click	Press and quickly release the left button, or tap anywhere on the touchpad.
Double-click	Press the left button quickly twice in succession, or double-tap quickly on the touchpad.
Drag and drop	Press and hold the left button, then move your finger to the desired location (drag). Release the button when the item is placed in the new location (drop). Alternatively, double-tap the touchpad and, on the second tap, keep your finger in contact with the surface. Then move your finger to drag the selected item to the desired position. Once your finger is lifted from the surface, the item will be placed in its new position.

Note:

If you switch the left and right mouse button functions, you will not be able to use the "tap" gesture on the touchpad as a substitute for clicking the left button.

3.2.1 Touchpad Gestures in Windows 10

For additional touchpad settings, go to **[Settings] > [Devices] > [Mouse and Touchpad]**.

3.2.2 Connections Changing Touchpad Settings

You may want to adjust the touchpad settings to suit your needs. For example, left-handed users can swap the left and right mouse button functions to make it easier to use the right button in place of the left one, and vice versa. Additionally, you can change the pointer size and its movement speed on the screen.

3.3 Using LAN (Local Area Network)

The built-in 10/100/1000M LAN (Local Area Network) module allows your computer to connect to a network. Insert one end of the network cable into the RJ45 port on your computer and the other end into a network hub.

3.4 Using the WLAN

The computer's built-in WLAN (Wireless Local Area Network) feature supports the IEEE 802.11ax standard.

3.4.1 Turning On the WLAN Radio:

Click  → **[Settings]** → **[Network & Internet]** → **[WLAN]**, and toggle the WLAN switch to **[On]**.

3.4.2 Turning OFF the WLAN Radio:

You can turn off WLAN radio by following the same steps as turning it on. To quickly disable all wireless radios at once, you can enable Airplane Mode.

Click  → [Settings] → [Network & Internet] → [Airplane Mode] , and toggle the switch to the [On] .

3.4.3 Connecting to a Wireless Network:

1. Make sure that the WLAN function is enabled (as described above).
2. Click the network icon  in the lower right of the task bar.
3. Select the network you want to connect to from the list of available wireless networks, then click **[Connect]**.
4. Depending on the network settings, you may need to enter a password.

Contact your network administrator or service provider for details.

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

3.5 Using the Bluetooth Feature

The Bluetooth technology allows short-range 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.

3.5.1. Turning On / Off the Bluetooth Radio

To turn on the Bluetooth radio:

Click  → [Settings] → [Devices] → [Bluetooth] , Slide the Bluetooth switch to the [On] position.

To turn off the Bluetooth Radio:

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

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

Click  → [Settings] → [Network & Internet] → [Airplane mode] , Slide the Airplane Mode switch to the [On] position.

Connecting to another Bluetooth Device

1. Make sure that the Bluetooth function is enabled (as described above).
2. Make sure that the target Bluetooth device is turned on, discoverable and within close range. (See the documentation that came with the Bluetooth device.)
3. Click  → **[Settings]** → **[Devices]** → **[Bluetooth]**.
4. Select the device you want to connect from the search results.
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 feature, see Windows's online Help.

3.6 Using the Fingerprint Sensor

Note:

For optimal performance, both the sensor surface and your finger should be clean and dry. If necessary, clean the fingerprint sensor. You can use tape to remove dirt and oil from the sensor surface by applying and peeling it off.

Avoid using the fingerprint sensor when the temperature is below freezing, as moisture on your finger may freeze on the metal surface, causing failure. Additionally, contact with frozen metal may cause frostbite.

The fingerprint sensor provides a powerful verification mechanism through fingerprint recognition. Once your fingerprint is registered, you can use it to log in to Windows and unlock the screen.



Note:

You must first create a user account and password in Windows before registering a fingerprint.

The fingerprint login process may take some time, as the system needs to complete hardware and security checks before activating the fingerprint sensor.

Registering a Fingerprint:

1. Click  → [Settings] → [Accounts] → [Sign-in Options].
2. Under [Fingerprint] on the right, click [Add].
3. Follow the on-screen instructions to complete the fingerprint registration.

4. Managing Power

Your device can be powered by an external AC power source or an internal battery pack.

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.

4.1 AC Adapter

CAUTION:

- The AC adapter is designed for use with your device only. Connecting the AC adapter to another device can damage the adapter.
- The power cord provided with the power adapter complies with local standards where the computer was purchased. If using the computer abroad, consult your dealer to obtain a compatible power cord.
- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the Tablet. A reverse procedure may damage the AC adapter or Tablet.
- When unplugging the connector, always hold the plug head. Never pull on the cord.

The power adapter converts AC power from the wall outlet to the DC power required by your computer. While the adapter is connected, it also automatically charges the battery.

The adapter operates on any voltage in the range of 100~240V AC. Inputting 19V.

4.2 Battery Pack

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

CAUTION: The time to unplug the battery pack is limited to when the battery is not being charged.

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

4.2.1. Charging the Battery Pack

NOTE: The rechargeable temperature of the battery is between 0°C and 50°C.

To charge the battery pack, connect the AC adapter to the Tablet and an electrical outlet. The Battery Indicator () on the Tablet glows red to indicate that charging is in progress. When the battery is fully charged, the Battery Indicator lights green.

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

4.2.2. 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.

When the battery is fully charged, its power supply time depends on how you use the Tablet. If the software you use requires frequent use of peripheral devices, the power may run out soon.

You can find the battery icon on the Windows taskbar (lower-right corner). The icon shows the approximate battery level.

If your model has more than one battery pack installed, the battery pack discharges in parallel.

4.2.3. Battery Low Signals and Actions

When the battery is low, please connect the adapter immediately, put the Tablet into hibernation, or turn off the Tablet's power.

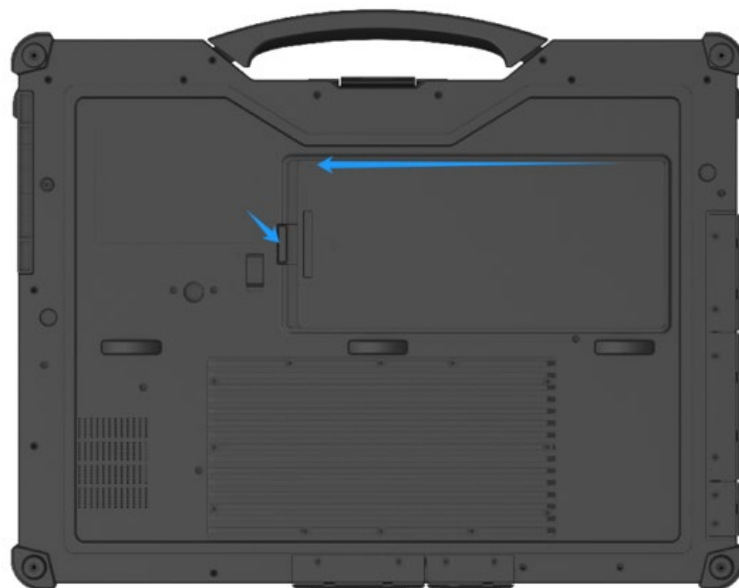
4.2.4. Replacing the Battery Pack

CAUTION:

- Incorrect battery replacement may lead to explosion. Always replace the battery with one provided by the manufacturer. Dispose of old batteries following the manufacturer's instructions.
- Do not attempt to disassemble the battery pack.
- Prolonged use of the battery may cause it to become hot. Avoid touching a hot battery with bare hands. Place the removed battery in a ventilated area to cool down.

If your computer supports multiple battery packs, you can hot-swap one while the other provides power.

1. Carefully turn the computer upside down.
2. Press the battery latch and slide the battery in the indicated direction to remove it. Replace the battery as needed.



4.3 Power-Saving Tips

To maximize battery runtime, consider the following:

- **Enable Power Management:** Do not disable power-saving features.
- **Adjust Screen Brightness:** Lower the brightness to the minimum comfortable level.
- **Set Display Timer:** Reduce the time before Windows turns off the display.
- **Disconnect Unused Devices:** Unplug external peripherals when not in use.
- **Disable Wireless Features:** Turn off WLAN and Bluetooth when not needed.
- **Power Off When Idle:** Shut down the device when not in use.

5. Expand Your Device

You can expand the capabilities of your Device 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.

5.1 Connecting Peripheral Devices

5.1.1. Connecting a USB Device

This device is equipped with 4 USB ports, allowing connection to devices such as digital cameras, scanners, printers, and mice.

5.1.2. Connecting a USB Type-C Device

Your device has a thunderbolt 4 Type-C port. This port supports:

- Data Transmission
- Power Supply

Be sure to use the correct specification USB-C power adapter with your Tablet model.

5.1.3. Connecting a Monitor

Your device supports an HDMI interface. Ensure the monitor is connected using the correct cable according to specifications.

5.1.4. Connecting to RD232 Devices

Your device supports a RS232 port. You can connect to the RS232 devices.

5.1.5. Connecting an Audio Device

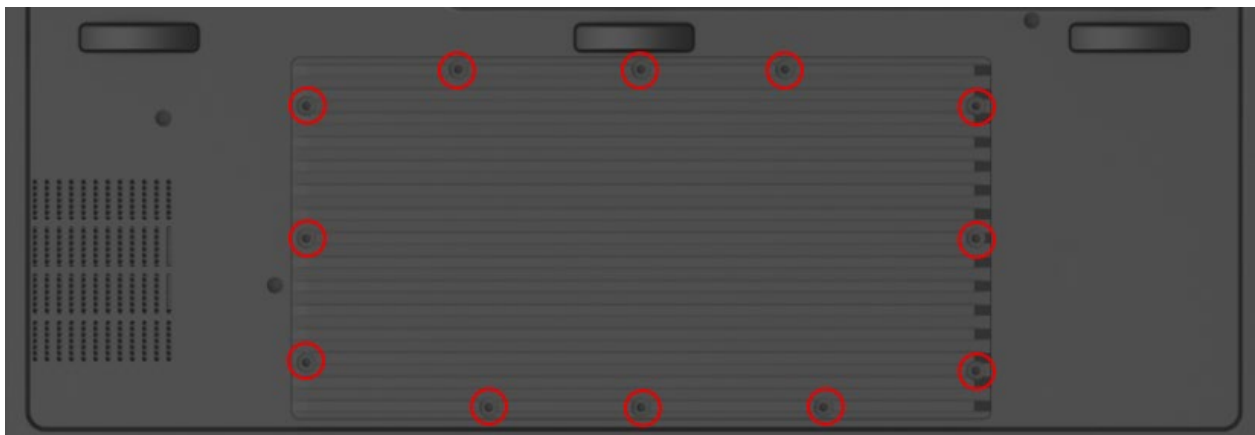
Your device is equipped with a composite audio port, which is 3.5mm in size, which can be connected to a compatible headset microphone.

AFETY WARNING :

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

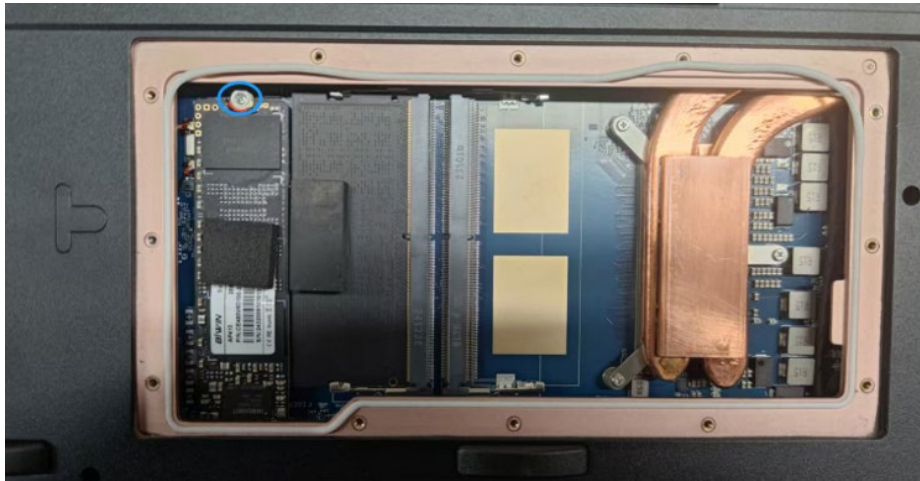
5.2 Peripheral the SSD/Memory Module

1. Power off the device and unplug the power adapter.
2. Carefully turn the device upside down.
3. Remove the battery pack.
4. Unscrew the SSD module cover.



5. Remove the SSD module cover.

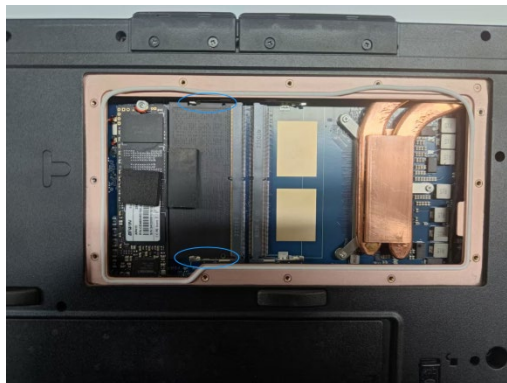
6. Unscrew and slide out the existing SSD module



7. Insert the new SSD module

8. Tighten the screws to secure the SSD module.

9. Memory module replacement follows a similar procedure. Refer to the diagram for guidance.



6. Using BIOS Setup

BIOS Setup Utility is a program for configuring the BIOS (Basic Input / Output System) settings of the Tablet. BIOS is a layer of software, called firmware, that translates instructions from other layers of software into instructions that the Tablet hardware can understand. The BIOS settings are needed by your Tablet 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:

1. Press the Esc or Delete key on an external keyboard during device startup.

to enter the BIOS setup.

2. The BIOS setup program's main screen will appear.

Typically, you can use the arrow keys to navigate and select options, and the - / + keys to adjust settings. Keyboard usage information is provided at the bottom of the screen.

NOTE:

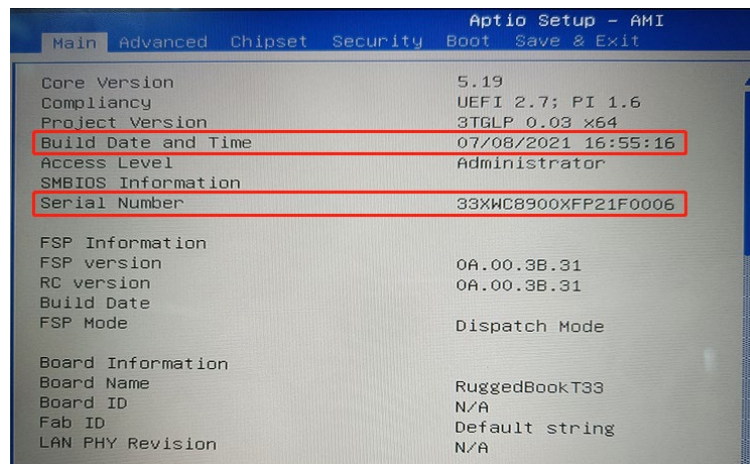
- The actual setting items on your model may differ from those described in this chapter.
- The availability of some setting items depends on the Windows version your device is running.

6.1 Menu Descriptions

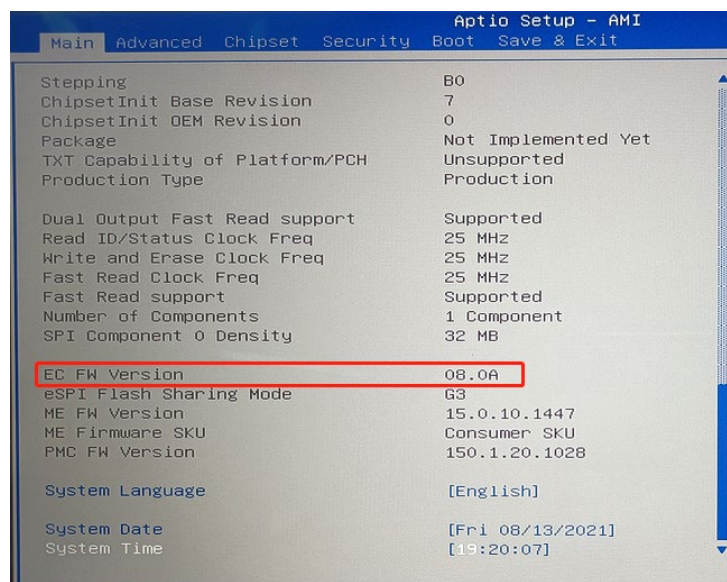
6.1.1. Main Menu

The Main menu contains the various system settings.

- **Build Date and Time (BIOS version date)** : Record the Tablet bios version.
- **Serial number (SN)** : Record Tablet factory code.



- **EC FM Version**: Records the EC firmware information.



- **System Language**: Set the system language.
- **System Date**: Sets the system date
- **System Time**: Sets the system time

6.2 Advanced Menu & Chipset Menu

The settings in the Advanced and Chipset menus are for developer debugging purposes. Please do not alter these settings without proper knowledge.

6.2.1. Security Menu

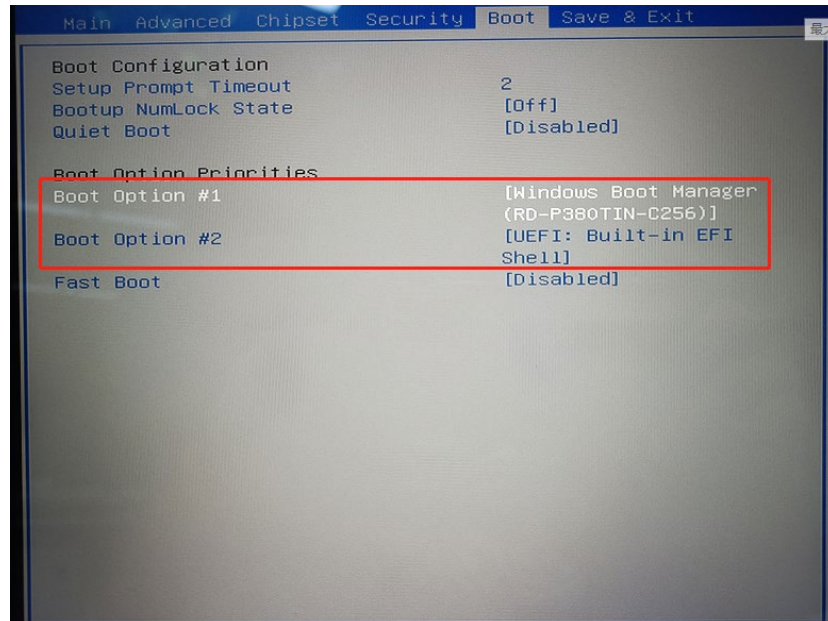
The Security menu contains the security settings, which safeguard your system against unauthorized use.

Note:

1. User passwords can only be set after the supervisor password has been configured.
 2. If both the administrator 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 is only used for viewing or changing specific settings.
 3. Password changes take effect immediately after confirmation. To remove a password, simply press Enter in the field.
- **Set Administrator / 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.
 - **Secure Boot** : Set up the safe boot function. This item can only be used after the supervisor password is set. (Secure Boot secure boot function can prevent unauthorized firmware, operating system, or UEFI driver from running during boot.)

6.3 Boot Menu

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



6.4 Save & Exit Menu

The Save & 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.

- **Save Changes and Exit** : Saves the changes you have made and exits BIOS Setup Utility.
- **Discard Changes and Exit** : Exits BIOS Setup Utility without saving the changes you have made.
- **Save Changes and Reset** : Saves the changes you have made and restart the device.
- **Discard Changes and Reset** : Restart the Tablet without saving the changes you have made.
- **Restore Default** : Load the factory default values of all items.
- **Save as User Defaults** : Save user default settings.
- **Restore User Defaults** : Load the factory default values for all items.
- **Saves Changes** : Save the changes you have made.
- **Discard Changes** : All items are restored to their original values.

7. Care and Maintenance

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

This chapter gives you guidelines covering areas such as protecting, storing, cleaning, and traveling.

7.1 Protecting the Tablet

To safeguard the integrity of your device data as well as the device itself, you can protect the device 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 a Security Lock**

You can use a Kensington standard key security lock to prevent your device from being stolen. Such devices are available at most computer accessory stores.

To use it, wrap the cable around a fixed object, such as a table, then insert the lock head into the security lock slot on your device and secure it with the key. Finally, store the key in a safe place.

7.2 Taking Care of the Tablet

Location Guidelines

For optimal performance, use the Tablet where the recommended temperature is between 0 °C and 40 °C. (Actual operating temperature depends on product specifications.)

- Avoid placing the Tablet in a location subject to high humidity, extreme temperatures, mechanical vibration, direct sunlight, or heavy dust. Using the Tablet 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 on a flat and steady surface. Do not stand the Tablet on its side or store it in an upside-down position. A strong impact by dropping or

hitting may damage the Tablet.

- Do not cover or block any ventilation openings on the Tablet. For example, do not place the Tablet on a bed, sofa, rug, or other similar surface. Otherwise, overheating may occur that results in damage to the Tablet.
- As the Tablet can become very hot during operation, keep it away from objects that are vulnerable to heat.
- Keep the Tablet 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 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 place heavy objects on top of the Tablet when it is closed as this may damage the display.
- To avoid damaging the screen, do not touch it with any sharp object.
- 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.
- Do not place heavy objects on top of the device when it is closed as this may damage the display.
- To avoid damaging the screen, do not touch it with any sharp object.
- 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, please allow the backlight to automatically turn off as a result of power management.

Cleaning Guidelines

- Never clean the Tablet with its power on.
- Use a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the Tablet.
- Gently wipe the display with a soft, lint-free cloth.
- If water or liquid is split onto the Tablet, wipe it dry and clean when possible. Though your Tablet is water-proof, do not leave the Tablet wet when you can dry it.
- If the Tablet gets wet where the temperature is 0°C (32°F) or below, freeze damage may occur. Make sure to dry the wet Tablet.

Battery Pack Guidelines

- 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 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's power off.
- To maintain the battery pack's operating efficiency, store it in a cool dark place removed from the Tablet and with 30 % ~ 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 is in Sleep mode. Abruptly removing the battery pack may cause loss of data or the Tablet may become unstable.

– avoid touching the battery pack terminals or damage may occur, thereby causing improper operation to it or the Tablet. The device'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 is turned on.

To shorten the charging time, it is recommended that you place the Tablet 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.
- Do not leave the battery pack in storage for more than six months without recharging it.

Touchscreen Guidelines

- Use the finger or 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 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.
- In low and high temperatures, the touchscreen may have a slower response time or register the touch in the wrong location. It will go back to normal after returning to room temperature.

When Traveling

- Make sure that the battery pack is fully charged.
- Make sure that the device is turned off.
- Make sure that all the connector covers are closed completely to ensure the waterproof integrity.
- Disconnect the AC adapter from the Tablet and take it with you. Use the AC adapter as the power source and as a battery-charger.
- Hand-carry the device. Do not check it in as luggage.
- If you need to leave the device in the car, put it in the trunk of the car to avoid exposing the device to excessive heat.
- When going through airport security, it is recommended that you send the device 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 device, consult your dealer for the appropriate AC power cord for use in your country of destination.

8. Troubleshooting

Device 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 problems.

8.1 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 is causing the problem.
- Make sure that you turn on all peripheral devices before turning on the Tablet.
- 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.

8.2 Solving Common Problems

8.2.1 Battery Problems

The battery does not charge (The red indicator is not on) .

- 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. (Fully charge in the shutdown state, discharge to 0%, and then fully charge the shutdown, cycle 2-3 times).

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. If the actual operating time is much less than the estimated time, initialize the battery.

8.2.2 Bluetooth Problems

If cannot connect to another Bluetooth-enabled device.

- Make sure that both devices have activated Bluetooth 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.

8.2.3 Display Problems

Nothing appears on the screen

- 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.
- The screen output may be switched to an external device. Please switch the display via Windows [**Control Panel**].

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.

8.2.4 Hardware Device Problems

The Tablet does not recognize a newly installed device.

- Make sure if any device driver needs to be installed. (Refer to the documentation that came with the device.)
- The device may not be correctly configured in the BIOS Setup program. Run the BIOS Setup program to identify the new type.
- 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.

8.2.5 Keyboard and Touchpad Problems

Keyboard Is Unresponsive:

Connect an external keyboard. If it works, the built-in keyboard's connection cable might be loose. Consult a qualified technician.

Liquid Spilled on the Keyboard:

Immediately shut down the device and unplug the power cable. Turn the keyboard upside down to let the liquid drain out. Dry all liquid from the crevices thoroughly. Although the keyboard is waterproof, failure to clean it may allow liquid to remain trapped inside.

Touchpad Is Not Working or Difficult to Use:

Ensure the touchpad surface is clean.

8.2.6 Power Management Problems

The Tablet does not enter Sleep or Hibernation mode automatically.

- If you have a connection to another Tablet, the Tablet 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 does not enter Sleep or Hibernation mode immediately.

- If the Tablet is performing an operation, it normally waits for the operation to finish.

The Tablet does not resume from Sleep or Hibernation mode.

- The Tablet 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.
 - Replace the empty battery pack with a fully charged one.

8.2.7 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.

8.2.8 Sound Problems

No sound is produced

- Make sure that the volume control is not set too low.
- Make sure that the Tablet is not in mute mode.
- Make sure that the Tablet 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.

8.2.9 Startup Problems

When you turn on the Tablet, it does not seem to respond.

- 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.

8.2.10 WLAN Problems

If cannot use the WLAN feature.

- Make sure that the WLAN feature is turned on.

Transmission quality is poor.

- Your Tablet may be in an out-of-range situation. Move your Tablet closer to the Access Point or another WLAN 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 away from the device causing the radio interference such as microwave oven and large metal objects.
- Plug your Tablet 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.

If cannot connect to another WLAN device.

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

If cannot access the network.

- Make sure that the network configuration is appropriate.
- Make sure that the user's name or password is correct.
- You have moved out of range of the network.

8.3 Restart the Tablet

When the Tablet crashes due to a problem, you may need to restart the Tablet.

If you are sure that the Tablet has crashed and you cannot use the reboot function provided by the operating system, please reboot in one of the following ways:

- Press **Ctrl + Alt + Del** on the keyboard to bring up the **Ctrl-Alt-Del** screen. This screen provides several operation options including "Restart".
- If the above method does not work, press and hold the power button for more than 5 seconds to force the Tablet to shut down. Then turn it on again.

8.4 System Recovery Features

Using Windows Recovery Environment (Windows RE)

Windows 10 includes the Windows Recovery Environment (Windows RE), which offers tools for restoring, repairing, and troubleshooting the system, collectively called **Advanced Startup Options**.

Go to  [Settings] → [Update & Security]

Options include:

System Restore:

Restore the device to a previous point using a saved restore point.

Recover from a Drive:

Reinstall Windows using a recovery drive.

Reset This PC:

Reinstall Windows with an option to retain or remove your files.

Refer to the official Microsoft website for detailed instructions.

Note:

If the computer cannot boot into Windows, access Advanced Startup Options by running the BIOS setup utility and selecting Advanced > Windows RE.

The system recovery process typically takes several hours to complete.

Using Recovery Partition

When needed, you can use the "Recovery Partition" feature to restore the Windows 10 system to its factory settings.

The "Recovery Partition" refers to a section of the hard drive set aside by the manufacturer to store the system's original image file.

Warning:

This process reinstalls Windows and resets the system to factory defaults, erasing all data on the hard drive.

Ensure the computer remains powered throughout the recovery process. Interruptions may cause the system to fail to boot.

Steps to Restore Factory Settings:

1. Connect the power adapter.
2. Enter the BIOS setup utility and select **Advanced > Recovery Partition**.
3. Follow the on-screen instructions to complete the recovery process.