

M80J

USER MANUAL

Rugged Mobile Computing Solutions



March 27, 2023

NOTE

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



Table of Contents

Chapter 1	Ready to Start	1
	Getting the Device Running	2
	Open Box to Check	2
	Connect the Power Supply	3
	Turning On and Off the Device	4
	Device Appearance Introduction	6
	Front Components	6
	Rear Components	8
	Right-Side Components	9
	Top Components	9
	Bottom Components	10
	Left-Side Components	10
	Installation of TF card and SIM card	11
Chapter 2	Operating Your Device	12
	Using the Touchscreen	13
	Using Multi-touch Gestures	14
	Using Wireless Connections	16
	Using the WLAN	16
	Using the Bluetooth Feature	17
Chapter 3	Managing Power	18
	AC Adapter	19
	Battery Pack	20
	Charging the Battery Pack	20
	Checking the Battery Level	21
	Low Battery	21
	Replacing the Battery Pack	22
	Power-Saving Tips	23

Chapter 4	Expand Your Device	24
	Connecting Peripheral Devices	25
	Connecting a USB Device	25
	Connecting a USB Type-C Device	25
	Connecting a Monitor	25
	Connecting an Audio Device	25
Chapter 5	Using BIOS Setup	26
	When and How to Use	27
	Menu Descriptions	28
	Main Menu	28
	Security Menu	30
	Advanced Menu & Chipset Menu	31
	Boot Menu	31
	Save & Exit Menu	32
Chapter 6	Care and Maintenance	33
	Protecting the Device	34
	Using an Anti-Virus Strategy	34
	Taking Care of the Device	35
	Location Guidelines	35
	General Guidelines	36
	Cleaning Guidelines	36
	Battery Pack Guidelines	37
	Touchscreen Guidelines	38
	When Traveling	39
Chapter 7	Troubleshooting	40
	Preliminary Checklist	41
	Solving Common Problems	42
	Battery Problems	42

Bluetooth Problems	43
Display Problems	43
Hardware Device Problems	44
Power Management Problems	44
Software Problems	45
Sound Problems	45
Startup Problems	45
WLAN Problems	46
Restart the Device	47

Chapter 1

READY TO START

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.

GETTING THE DEVICE RUNNING

OPEN BOX TO CHECK

After unpacking, you should see the following standard items:

- M80J Rugged Mobile PC

- Power Cord



- Power Adapter



- Hand-Strap



CONNECT THE POWER SUPPLY

Note: Use only the power adapter provided with this product. Using other power adapters may damage your device.

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

1. Open the waterproof plug of DC port. (On right side when the device is right side up)




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.

TURNNING ON AND OFF THE DEVICE


TURNNING ON

1. Press the power button . The operating system Microsoft Windows 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] → [Shutdown]
Sleep	Use any of the following methods: <ul style="list-style-type: none">● Press the power button.● Click → [⏻ Power] → [Sleep]
Hibernation	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.

DEVICE APPEARANCE


INTRODUCTION


Note: Depending on the special model you purchased, the look and colour 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.

FRONT COMPONENTS



SYMBOL	COMPINENTS	DESCRIPTION
F	F key	2D scan key (customized)
	Home key	Used to open a Windows shortcut
+	Volume+ key	Used to increase the device volume

-	Volume- key	Used to decrease the device volume
	Power button	Used to sleep, wake up, power on and off the device
❶	Camera	Used to shoot the front pictures
❷	Indicator light *2	Blue when is turned on; Blue blinks when is standby; Red when is charging
❸	Microphone	Used to receive external sounds
❹❺	Stereo speakers	Play the device sounds

REAR COMPONENTS



SYMBOL	COMPONENTS	DESCRIPTION
①	Flashlight	Used for lighting
②	Camera	Used for photo and video recording
③⑤	Cover lock	Lock the battery cover
④	Battery cover lock	Prevent the internal battery falling out
⑥	Battery lock	Fix internal battery

RIGHT-SIDE COMPONENTS



SYMBOL	COMPONENTS	DESCRIPTION
1	USB3.0 Port	Connects a USB device.
2	3.5mm Earphone Jack	Connect an audio device.
3	HDMI Connector	Connects a HDMI display or
4	Type-C Port	Connects a USB-C device.

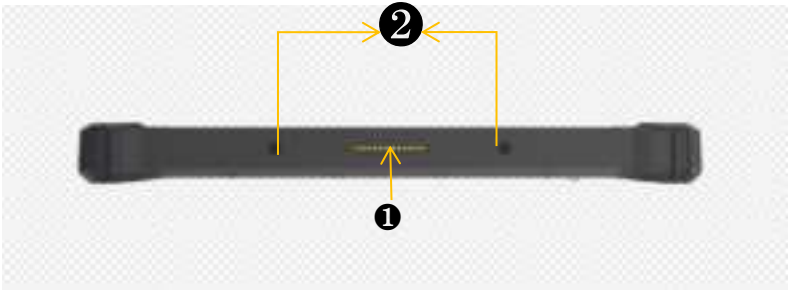
Top Components



1

SYMBOL	COMPONENTS	DESCRIPTION
1	Module port	Optional code-scanning module.

Bottom Components



SYMBOL	COMPONENTS	DESCRIPTION
1	Pogo Pin	Work with the location hole, connect the vehicle mount and docking charger to expand the USB, RJ45 and RS232
2	Location Hole	Used to fix the vehicle mount and docking charger when connecting them.

LEFT-SIDE COMPONENTS



Left side: DC charging port:It can be connected to 19V 3.42A adapter for power supply.

INSTALLATION OF TF AND SIM CARD

Remove the battery and the card holder, then insert a TF card and Nano Sim card. The NC card slot does not provide any function temporarily.



Put the TF card and Nano SIM card back to their right positions as shown in the figure below, then to use.



Chapter 2

OPERATING YOUR DEVICE

This chapter provides information about the use of the device.

If you are new to device, 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.

Note :

- Do not expose your skin to the Tablet when operating it in a very hot or cold environment.
- The Tablet 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.

Using the Touchscreen

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

Select models have a capacitive touchscreen. This type of touchscreen responds to objects that have conductive properties, such as fingertips and a capacitive-tipped stylus. You can navigate on the screen without using a keyboard, or mouse.



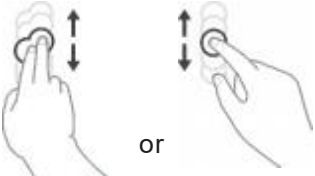

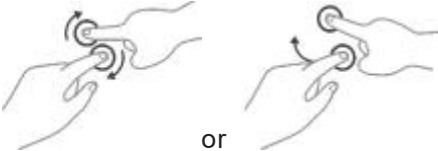
The following table shows how you use the touchscreen to obtain equivalent mouse functions.

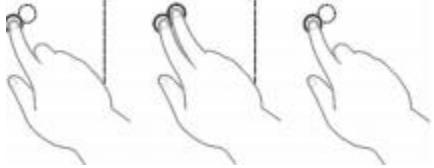
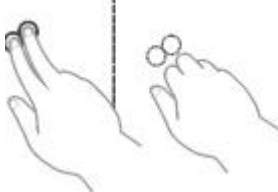
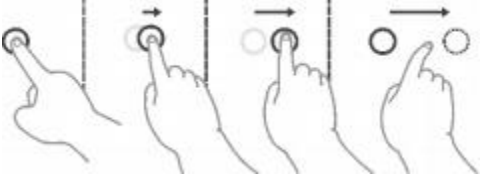
Term / Action	Equivalent Mouse Function
Tap : Touch the screen once.	Click / Point
Double-tap : Touch the screen twice rapidly.	Double-click
Tap and hold : Tap and hold until a popup menu appears.	Right-click
Drag : Hold the finger on the screen and drag across the screen until reaching your destination.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

Using Multi-touch Gestures

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

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

Gestures	Actions ( =finger down ;  =finger up)	Descriptions
Pan (Scroll)	 or Drag 1 or 2 fingers up or down.	Use panning to see another part of a page that has scroll bars.
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.
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.

Gestures	Actions (=finger down ; =finger up)	Descriptions
Press and Tap	 <p>Press on target and tap using a second finger.</p>	<p>Use press and tap to access the shortcut menu.</p>
Two-finger Tap	 <p>Tap two fingers at the same time (where the target is in the midpoint between the fingers).</p>	<p>The function is defined by applications that support the specific gesture.</p>
Flicks	 <p>Make quick drag gestures in the desired direction.</p>	<p>Flick left or right to navigate back and forward in a browser and other applications. The gesture works in most applications that support back and forward.</p>

Using Wireless Connections

Using the WLAN

The WLAN (Wireless Local Area Network) module supports WIFI 802.11(a/b/g/n/ac).

Turning On / Off the WLAN Radio


To turn on the WLAN radio:

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


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.

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

Connecting to a WLAN 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. In the list of available wireless networks, click a network, and then click 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.

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.

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.

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' online Help.

Chapter 3

MANAGING POWER

Your device operates either on external Type-C power, DC 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 device only. Connecting the AC adapter to another device can damage the adapter.
- The AC power cord supplied with your Tablet is for use in the country where you purchased your device. If you plan to go overseas with the Tablet, consult your dealer for the appropriate power cord.
- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the device. 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 AC adapter serves as a converter from AC (Alternating Current) to DC (Direct Current) power because your Tablet 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 100~240V AC, and outputs 19V.

Battery Pack


The battery pack is the internal power source for the device. 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 6.

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.

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.

Battery Low Signals and Actions


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

Replacing the Battery Pack

CAUTION :

- There is danger of explosion if the battery is incorrectly replaced. Replace the battery only with the manufacturer's optional battery packs. Discard used batteries according to the dealer's instructions.
- Do not attempt to disassemble the battery pack.
- The battery pack will become hot under long-term operation. Do not touch the hot battery pack with bare hands. After removing the battery pack, place it in a ventilated place.

NOTE : When replacing the battery, be sure to turn off the device so that the device can save the work in progress.

1. Carefully place the Tablet upside down.
2. Open the two battery cover switches and remove the battery cover.
3. Push the battery door latch to the unlocked position ().
4. Remove the battery pack.

Power-Saving Tips

Aside from enabling your device'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 or Bluetooth).
- Turn off the device when you are not using it.

Chapter 4

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.

Connecting Peripheral Devices

Connecting a USB Device

Your device has one USB 3.0 port for connecting USB devices, such as a digital camera, scanner, printer, modem, and mouse.

Connecting a USB Type-C Device

Your Tablet has a USB Type-C port. This port supports:

- USB Type-C (or just USB-C) port
- Display Port
- USB Power Delivery (power transmission)

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

Connecting a Monitor

Your device supports Micro HDMI port. Please connect the monitor to the corresponding interface according to the specifications.

Connecting an Audio Device

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



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

Chapter 5

USING BIOS SETUP

BIOS Setup Utility is a program for configuring the BIOS (Basic Input / Output System) settings of the device. 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 device 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. Click  → **[Settings]** → **[Update & security]** → **[Recovery]**. Under Advanced startup, click Restart now. In the boot options menu, click **[Troubleshoot]** → **[Advanced options]** → **[UEFI Firmware Settings]**. Click Restart.
2. In general, you can use the external keyboard, use the arrow keys to move around and + / – keys to change the setup values. Keyboard information can be found at the bottom of the screen.

NOTE :

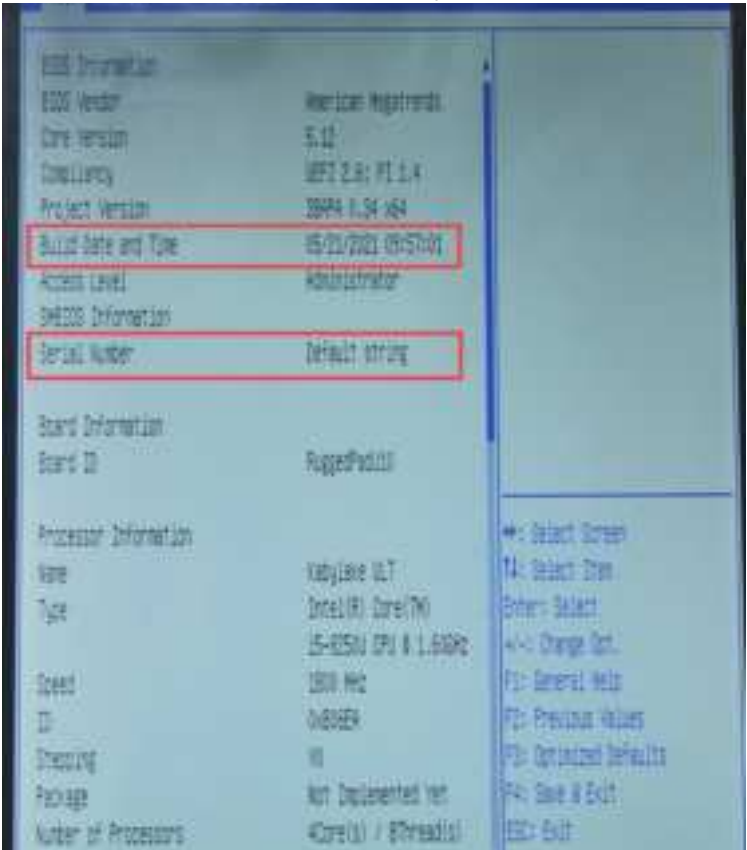
- The actual setting items on your model may differ from those described in this chapter.
- The availability of some setting items depends on the Windows version your Tablet is running.

Menu Descriptions

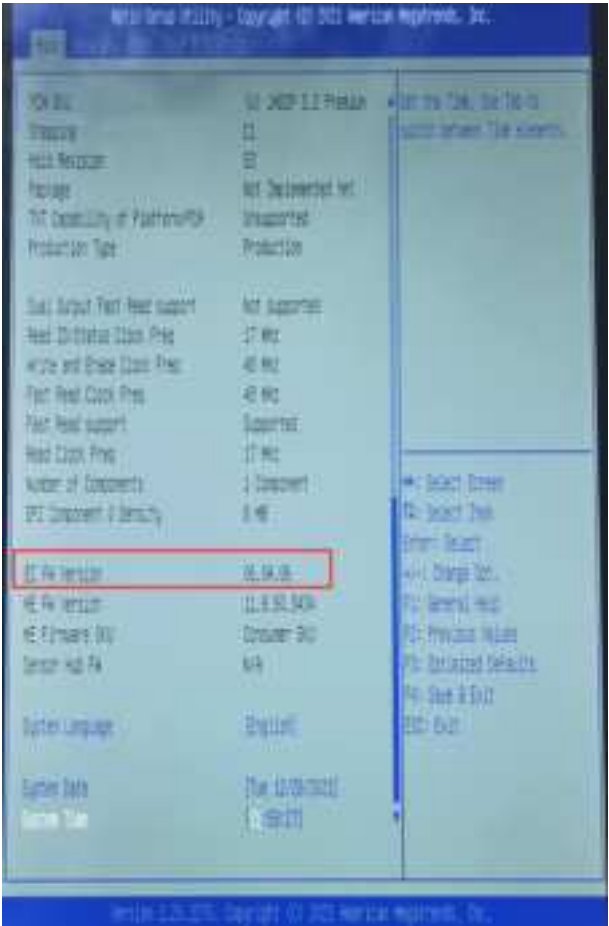
Main Menu

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** : Record ECfirmware information.
- **System Language** : Setsystem language.
- **System Date** : Sets the system date.
- **System Time** : Sets the system time.



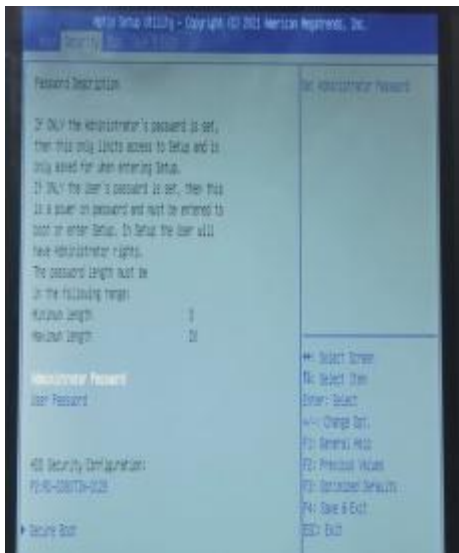
Security Menu

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 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 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.

- **Set Administrator / User Password** : Set 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.)

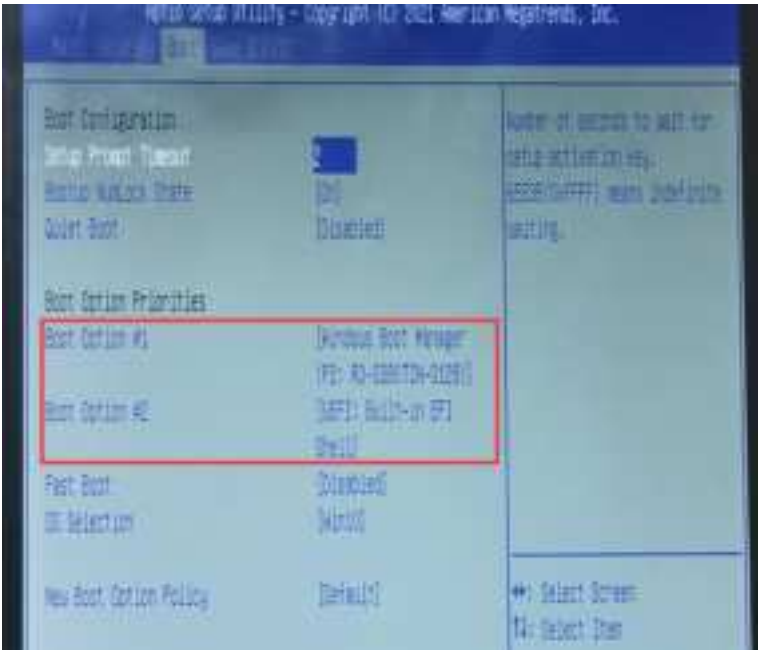


Advanced Menu & Chipset Menu

The setting options contained in the Advanced menu and the Chipset chip setting menu are for debugging by developers. Please do not change them at will.

Boot Menu

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



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 factory default values for all items.
- **Saves Changes** : Save the changes you have made.
- **Discard Changes** : All items are restored to their original values.

Chapter 6

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.

Protecting the Device

To safeguard the integrity of your data as well as the device itself, you can protect them 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.

Taking Care of the Device

Location Guidelines

- For optimal performance, use the device where the recommended temperature is between 0 °C and 40 °C . (Actual operating temperature depends on product specifications.)
- Avoid placing the device in a location subject to high humidity, extreme temperatures, mechanical vibration, direct sunlight, or heavy dust. Using the device 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 device on a flat and steady surface. Do not stand the device on its side or store it in an upside-down position. A strong impact by dropping or hitting may damage the device.
- Do not cover or block any ventilation openings on the device. For example, do not place the device on a bed, sofa, rug, or other similar surface. Otherwise, overheating may occur that results in damage to the Tablet.
- As the device can become very hot during operation, keep it away from objects that are vulnerable to heat.
- Keep the device 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 device 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 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 device with its power on.
- Use a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the device.
- Gently wipe the display with a soft, lint-free cloth.
- If water or liquid is split onto the device, wipe it dry and clean when possible. Though your device is water-proof, do not leave the device wet when you can dry it.
- If the device gets wet where the temperature is 0°C (32°F) or below, freeze damage may occur. Make sure to dry the wet device.

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 device'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 device is in Sleep mode.

Abruptly removing the battery pack may cause loss of data or the device may become unstable.

- avoid touching the battery pack terminals or damage may occur, thereby causing improper operation to it or the device.

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 device 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 to the display, thereby causing errors.

- Use a soft cloth to remove dirt on the display. The touch screen 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 device 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 touch screen 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.

Chapter 7

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

Bluetooth Problems

I 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.

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.

Hardware Device Problems

The device 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.

Power Management Problems

The device does not enter Sleep or Hibernation mode automatically.

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

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

The device does not resume from Sleep or Hibernation mode.

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

Software Problems

An application program does not work correctly.

- Make sure that the software is correctly installed.
- If an error message appears on the screen, consult the software program's documentation for further information.
- If you are sure the operation has stop, reset the device.

Sound Problems

No sound is produced.

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

WLAN Problems

I cannot use the WLAN feature.

- Make sure that the WLAN feature is turned on.

Transmission quality is poor.

- Your device may be in an out-of-range situation. Move your device 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 device away from the device causing the radio interference such as microwave oven and large metal objects.
- Plug your device 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 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 device is not recognizing changes. Restart the device.
- Make sure that the IP address or subnet mask setting is correct.

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.

Restart the Device

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

If you are sure that the device 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 device to shut down. Then turn it on again.

FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement.

The UNII Band 5150-5350MHz indoor use only.

1. Use careful with the earphone maybe possible excessive sound pressure from earphones

and headphones can cause hearing loss.

2. CAUTION : RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF

USED BATTERIES ACCORDING TO THE INSTRUCTIONS

3. This product can be connected to the USB interface of USB 3.0

4. Adapter shall be installed near the equipment and shall be easily accessible.

5. The plug considered as disconnect device of adapter

6. The device complies with RF specifications when the device used at 0mm from your body

7. Operations in the 5.15 - 5.25GHz band are restricted to indoor usage only.

Restrictions in the 5 GHz band:

According to Article 10 (10) of Directive 2014/53/EU, the packaging shows that this radio equipment will be subject to some restrictions when placed on the market in Belgium (BE), Bulgaria(BG), the Czech Republic (CZ),Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain(ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania(LT) , Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria(AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK),Finland (FI), Sweden(SE),Turkey (TR),

Norway(NO), Switzerland (CH), Iceland (IS), and Liechtenstein (LI).The WLAN function for this device is restricted to indoor use only when operating in the 5180 to 5240 MHz frequency range. Importer:Teguar Europe AG

Address:Dörflistrasse 10, CH-8057 Zürich, Switzerland.

company website: <https://www.emdoorrugged.com/>

Frequency Range: BT: 2402MHz-2480MHz; 2.4G WIFI: 2412~2472MHz; 5.2G WIFI: 5150~5250MHz; 5.8G WIFI: 5725~5850MHz; GPS: 1575.42MHz;13.56MHz

Glonass G1: 1602.5625MHz

Max. Transmit Power: BDR+EDR: 6.10dBm Max; BLE: 7.33dBm Max; 2.4G WIFI: 18.03dBm Max; 5.2G WIFI: 18.96dBm Max; 5.8G WIFI: 11.46dBm Max;

NB SAR:

This radio is designed for and classified as “General population/uncontrolled Use”, the guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The exposure standard for wireless radio employs a unit of measurement known as the Specific Absorption Rate, or SAR, the SAR limit set 2W/kg.

Body-worn operation; this device was tested for typical body-worn operations with the Front of the Rugged Table kept 0mm for body worn. To maintain compliance with RF exposure requirements, use accessories that maintain a 0mm for body worn. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with RF exposure requirements, and should be avoided.

The highest reported SAR value for worn on the body is 0.608 W/kg

FCC SAR:

This radio is designed for and classified as “General population/uncontrolled Use”, the guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The exposure standard for wireless radio employs a unit of measurement known as the Specific Absorption Rate, or SAR, the SAR limit set 1.6W/kg.

Body-worn operation; this device was tested for typical body-worn operations with the Front of the Rugged Table kept 0mm for body worn. To maintain compliance with RF exposure requirements, use accessories that maintain a 0mm for body worn. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with RF exposure requirements, and should be avoided.

The highest reported SAR value for worn on the body is 1.146 W/kg.