

***TABLET COMPUTER***

***DE13***

***USER'S GUIDE***

## Notice

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## **Radiation Exposure Statement**

### RF Exposure Information (SAR)

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

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of [www.fcc.gov/eot/ea/fccid](http://www.fcc.gov/eot/ea/fccid) after searching on FCC ID:IR5DE13

## **Regulatory Information/Disclaimers**

Installation and use of this computer must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

## **FCC (Federal Communications Commission) regulatory compliance**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### **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.

### **Important:**

Changes or modifications to this product not authorized by MilDef could void the electromagnetic compatibility (EMC) and wireless compliance and negate your authority to operate the product.

In order to maintain compliance with FCC regulations, compliant peripheral devices and shielded cables must be used with this equipment.

## CE Declaration of Conformity



It is confirmed to comply with the requirements set out in the Council Directive on the approximation of the laws of the member states relating to Electromagnetic Compatibility (2004/108/EC), Low-voltage Directive (2006/95/EC), the Amendment Directive (93/68/EEC), and the procedures given in European Council Directive (99/5/EC and 2004/108/EC ).

The equipment was passed, and the equipment test was performed according to the following European standards:

**EN 300 328 V1.8.1 (2012)**

**EN 301 893 V1.7.1 (2012)**

**EN 301 489-1 V1.9.2 (2011)**

**EN 301 489-3 V1.4.1 (2002)**

**EN 301 489-17 V2.2.1 (2012)**

**EN62311 2008**

**EN300440-1 V1.6.1 2010**

**EN300440-2 V1.4.1 2010**

**UL, TÜV**

AC Adapter (TÜV includes **LVD EN60950**)

## Power Conservation

This tablet computer consumes less power compared to conventional consumer computers. The power consumption may be further reduced by properly configuring the Power Management Setup.

It is recommended that the power saving features be enabled even when not running on battery power. Power Management features can conserve power without degrading system performance.

## Power Safety

There are specific power requirements for your tablet computer:

- Only use an approved AC adapter designed for this tablet computer.
- There is a 3-prong grounded plug for the AC adapter. The 3<sup>rd</sup> prong is an important mechanism for ensuring product safety. Please do not neglect the importance of this mechanism. If you are unable to access a compatible outlet, please hire a qualified electrician to install a compatible outlet for you.
- When unplugging the AC power cord, please make sure to disconnect the cord by pulling from the plug head instead of pulling from the wire to prevent wire damage.
- Make sure the power outlet and any other extension cord(s) you use can support the total current load of all the connected devices.
- Before cleaning the tablet computer, please make sure it is disconnected from any external power source.



### **Warning**

*Before any upgrade procedures, make sure the power is turned off, and all the cables are disconnected (including telephone lines). Also, it is advisable to remove your battery to prevent your tablet computer from accidentally turning on.*

## Battery Precautions

- Only use batteries designed for this tablet computer. Using incompatible battery types may cause explosion, leakage or damage to the computer.
- Do not remove the battery from the computer while the computer is powered on.
- Do not continuously use a battery that has been dropped, or that appears damaged (e.g. bent or twisted) in any way. Even if the computer is able to continuously work with a damaged battery, the circuit damage may occur and possibly cause fire.
- Always use the charger designed for this computer to recharge the battery. Incorrect recharging may cause the battery to explode.
- Do not try to service a battery by yourself. For battery service or replacement, please contact your service representatives.
- Please dispose of damaged battery promptly and carefully. Explosion or leakage may occur, if the battery is exposed to fire, improperly handled or discarded.

### Notice:

For safety, charging will stop if the internal temperature of the battery is out of range (<0°C; >50°C). Please note that charging could have stopped before the ambient temperature reaching these boundaries because the internal temperature of the battery does not equal to the ambient temperature.



### **Battery Disposal & Caution**

*The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its service life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal. Danger of explosion may possibly occur, if the battery is incorrectly replaced. Replace only with the same or the equivalent battery recommended by the manufacturer. Discard the used battery according to the manufacturer's instructions.*

## Water Resistance

DE13 has a rating of IP67 under IEC standard 60529 (maximum depth of 1 meters up to 30 minutes) and was tested under controlled laboratory conditions. Although it has excellent protection, please do not use it as a diving equipment. Splash, water, and dust resistance are not permanent conditions when using the product continuously in extreme environments and resistance might decrease as a result of normal wear. Also, please do not disassemble any part of your device because it might damage the resistance of your device.

## Environmental Information, Material Safety & Recycling

All materials used in the manufacturing of this equipment are recyclable or environmentally friendly. Please recycle the packing materials in accordance with local regulations at the end of the product's service life.

### Notice:

- The equipment may contain insignificant amount of hazardous substances for health and environment below control level.
- To avoid spreading such substances into the eco system and to minimize the pressure on the natural environment, you are encouraged to reuse or recycle most of the materials in a safe way after the product's service life.
- For more information on collection, reuse and recycle of materials, please consult local or regional waste administrations for more information. You can also contact your dealer for more information on the environmental details of the equipment.
- The symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Please check local regulations for disposal of electronic products.





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# Chapter 1 - Getting Started

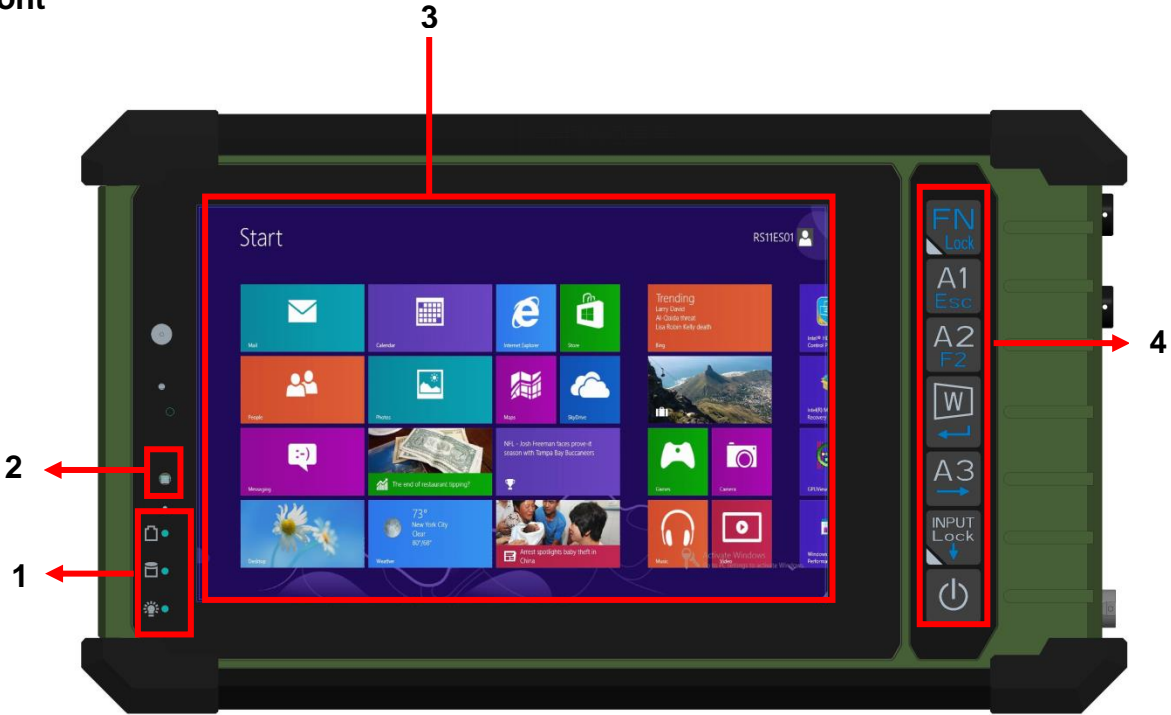
## Unpacking

The following components come with your computer. If anything is missing or damaged, please notify the dealer immediately.

- Tablet omputer unit
- AC Adapter
- Quick Guide

Appearance Overview

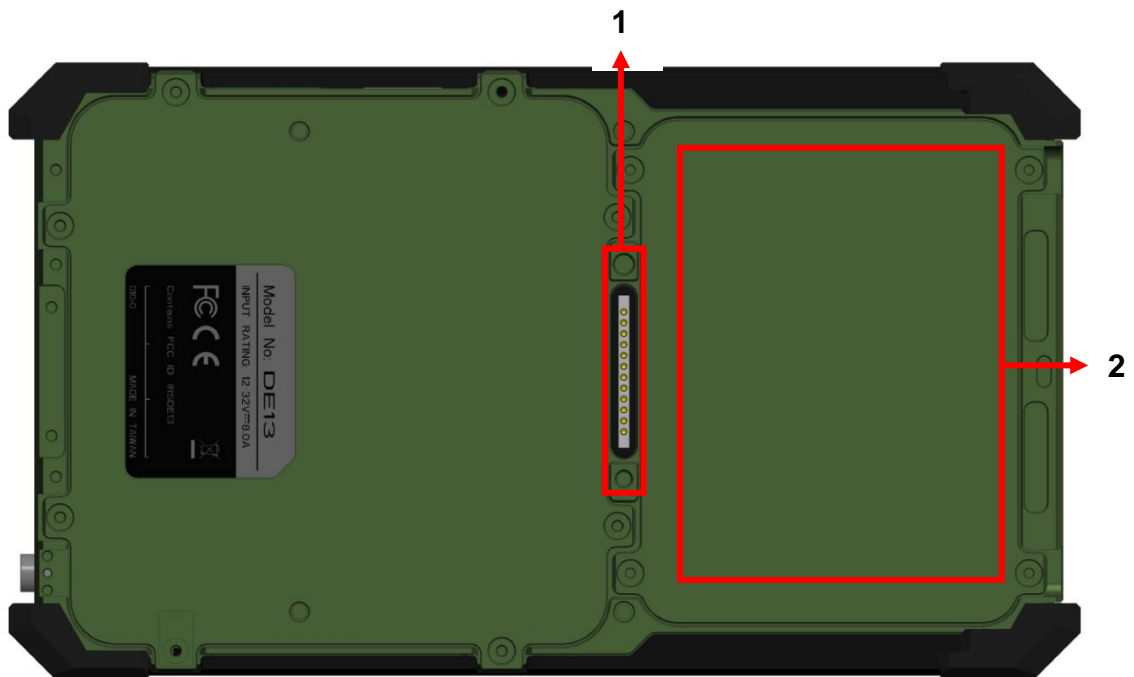
Front



- 1. LED Indicators
- 2. Light Sensor
- 3. Touch Screen
- 4. Buttons

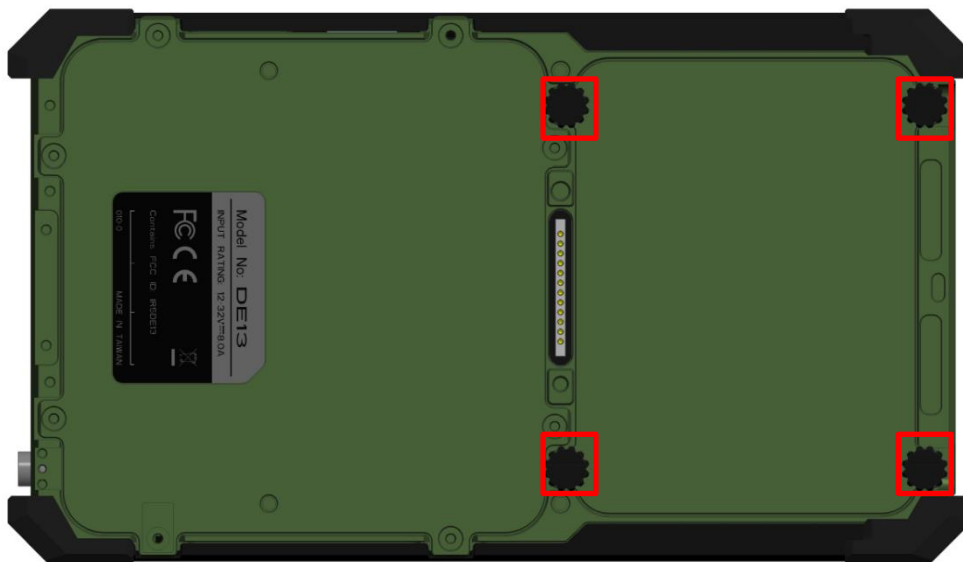
Buttons							
Default Function	FN Lock	Volume Up	Volume Down	Windows	Rotation	Input Lock	Power Button
FN Lock Mode		ESC	F2	Enter	→	↓	
User Settable		✓	✓		✓		

## Rear

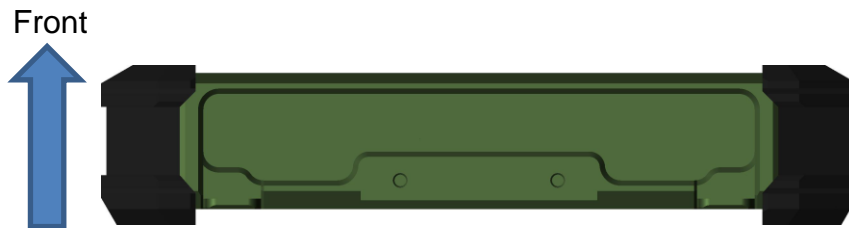


1. Expansion ports
2. Battery slot cover

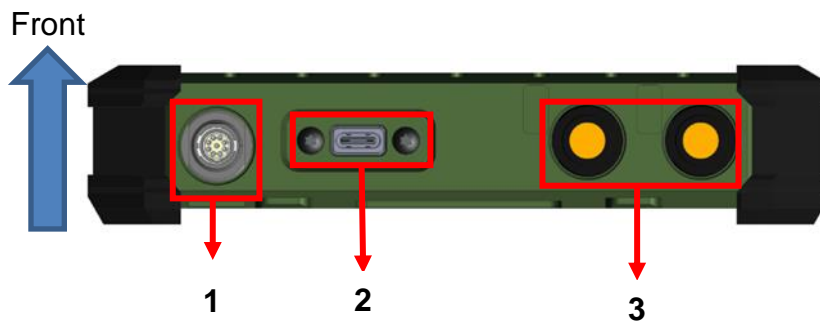
\* Optional IP65 device has thumb screws on the battery slot cover



## Left



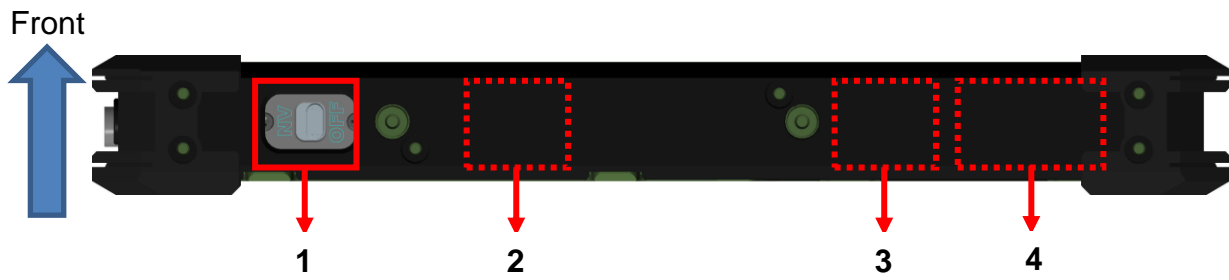
## Right



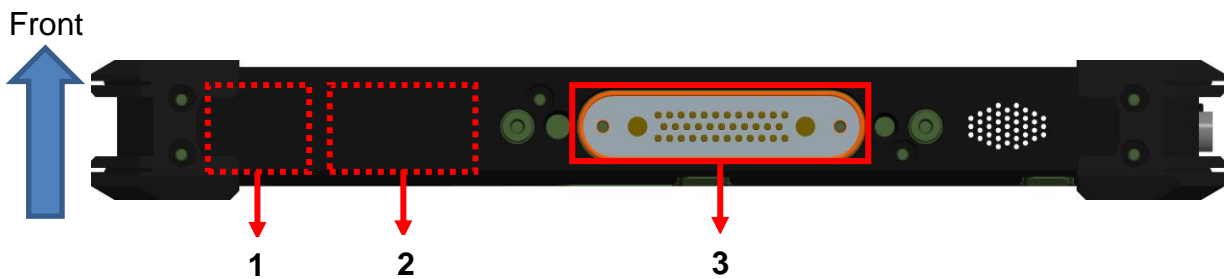
1. DC-In 12~32V
2. USB3.1 Type C
3. Optional Fischer I/O:

Choose 2 out of the 5 options listed as below:

- USB 2.0 x1
- GLAN x1
- COM x 1 (RS232 x1/RS422 x 1)
- Audio (Headphone out/Mic-in Combo) x 1
- Sealed Headset (Headphone out/Mic-in Combo) x1

**Top**

1. Optional invisible mode on/off
2. GPS Antenna
3. WLAN/BT Main Antenna
4. WWAN Main Antenna

**Bottom**

1. WLAN/BT Aux Antenna
2. WWAN Aux Antenna
3. Docklite connector (POGO connector, Ext. ANT Signals x 2)

## **Chapter2 - Operating Information**

### **Start Using Your Tablet Computer**

Always turn on your tablet computer by using the power button. Press the power button about 2 seconds and the tablet will boot up. This is the standard operating procedure to start using your tablet computer. After turning on the power of your tablet computer, it will start with the Operating System (OS) installed.

### **Boot Up**

When you turn on the power, your computer will start to load the OS into the system memory. This start-up procedure is called “boot up”.

### **Power On Self-Test (POST)**

Each time your computer is turned on, the BIOS will automatically perform a self-test of CPU, memory, hardware devices, and so on.



---

## **Stop Using Your Tablet Computer**

Each time when you finish working with your tablet computer, there are several ways to stop your tablet computer from operating.

### **Shut down**

Directly click “Shut down” from your OS to turn OFF the power of your computer. Before shutting down, please do remember to save unfinished works and close your applications to prevent your SSD from suffering possible data loss or damage. “Shut down” will turn OFF power of your computer. If you want to start your computer again, you need to turn it ON again by pressing the power button.

### **Sleep**

Under “Sleep” mode, the system will temporarily save your work into the computer’s RAM. If you want to start your computer again, please press the power button to resume.

### **Hibernate**

Under “Hibernate” mode, the system will save your work into SSD. If you want to start your computer again, you need to press and hold the power button (approx. 2 sec.) until the SSD indicator lights on.

### **Force Shut Down**

In the event that your tablet computer hangs or stops responding, you can perform a force shut down by pressing and holding the power button for 4~5 seconds. Please note that any unsaved work or data will be lost this way.

## Installing Operating System

Your computer is designed to operate with Microsoft Windows 10 / 64-bit Operating System. Please connect your computer with an external USB-interface drive to start the OS installation.




**Note:**

- *A USB hub may be required during installation to connect with an external USB-interface ODD, as the System USB port may not supply enough power. Please connect your USB hub with extra power supply to complete the installation.*

## Using Indicators and Keypad


Your tablet computer is designed with backlight buttons for easy and quick operations. Also, each LED indicator shows different meanings. The description of each LED indicator and button functions are provided for your operational reference.








### LED Indicators

LED Indicator	Description
	<b>Power/ S3 Indicator:</b> Green/ Flashing Green
	<b>SSD Indicator:</b> Green
	<b>Charger/ Battery Low Indicator:</b> Orange/ Flashing Orange

## FN Lock Key

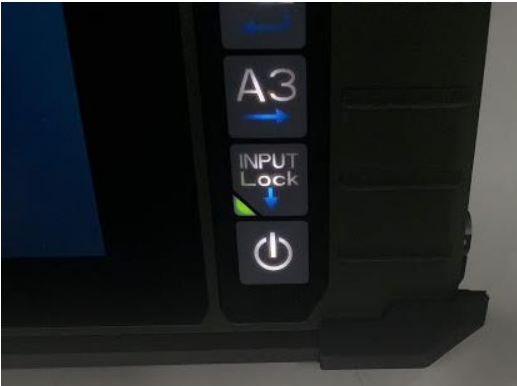
Fn lock Key is used to switch other buttons into 2<sup>nd</sup> layer function(Blue legends).

	<ol style="list-style-type: none"> <li>1. Press the Input Lock key.</li> <li>2. Fn Lock Indicator will light on (Green light).</li> <li>3. Press the Fn Lock key again to cancel the function.</li> </ol>
---	---

Buttons							
Default Function	FN Lock	Volume Up	Volume Down	Windows	Rotation	Input Lock	Power Button
FN Lock Mode		ESC	F2	Enter	→	↓	

## Input Lock key

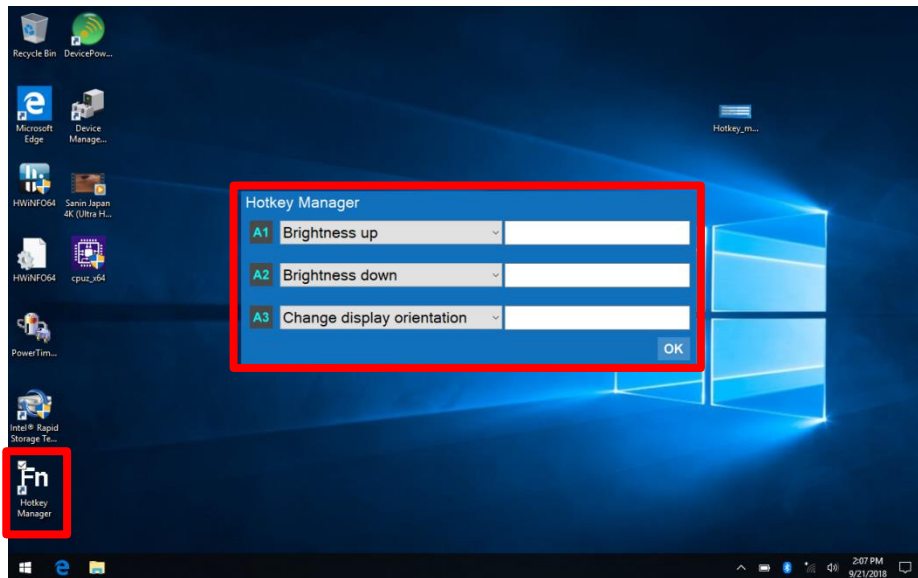
To prevent from unexpected input by buttons and touch screen, you can press Input Lock key. When Input Lock function is on, the input from devices including buttons and touch screen will be locked. To cancel the input lock function, just press the Input Lock key again and the indicator will be turned off.

	<ol style="list-style-type: none"> <li>4. Press the Input Lock key.</li> <li>5. Input Lock Indicator will light on (Green light).</li> <li>6. Press the Input Lock key again to cancel the function.</li> </ol>
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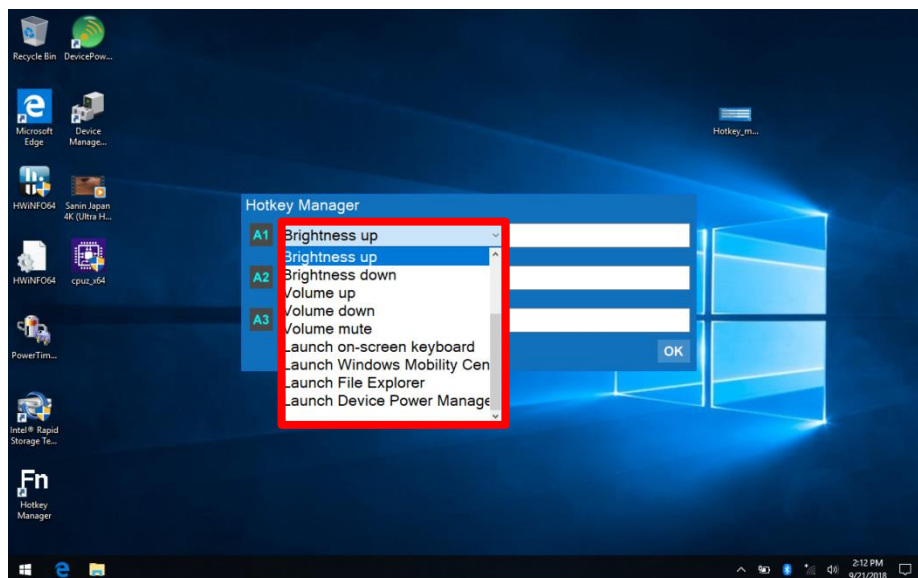
## Setting Function for Buttons A1~A3

**Hotkey Manager** is an app which could be used to quickly set up and change between multiple functions for A1, A2 and A3. Please follow these procedure to use it.

1. Operate the Hotkey Manager then a menu will show up.

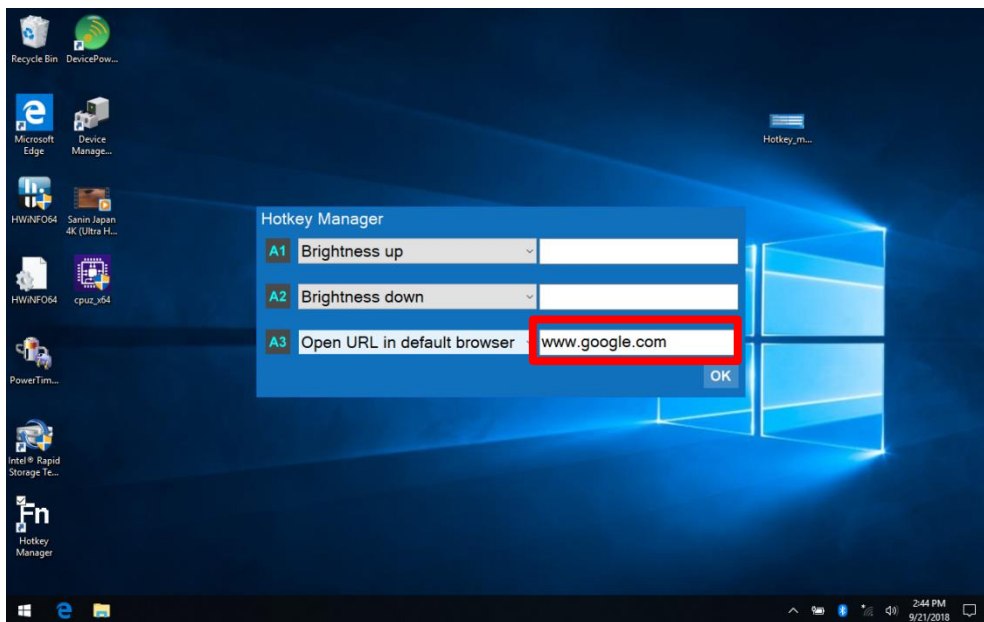


2. Scroll down to select function for each key.



3. Click  and the setting will be saved automatically.

4. The blank could be filled with related parameter according to the selected function.  
E.g. Fill in the address to use the function “Open URL in default browser”.



### Available Function Items List

None
Open/ Execute a selected file
Open URL in default browser
Change display output
Brightness up
Brightness down
Volume up
Volume down
Volume mute
Launch on-screen keyboard
Launch Windows Mobility Center
Launch File Explorer
Launcher Device Power Manager

## Operating Wireless Devices

For your ease of operations, you can turn on/off your wireless devices through the proprietary software application - “**Device Power Manager**”.

**Note:**

- *Depending on the configuration of your tablet computer, your Device Power Manager menu may appear differently from the screenshots provided in this section.*
- *When you adjust User Account Control (UAC), a security feature in Windows, the setting value of Device Power Manager will be affected. So, once there is any adjustment on UAC, please uninstall Device Power Manager and reinstall it again.*

### Bluetooth (Option)

The Bluetooth module provides your tablet computer with a short-range wireless communication protocol to connect with other compatible devices via the pre-installed embedded antenna. To activate your Bluetooth functions, please follow the instructions below.

#### 1. Driver & Application Installation

- a. Install the Bluetooth driver first. Read from the Utility DVD and find the directory listed in the readme file to finish installation.
- b. Install the Device Power Manager application. Read from the Utility DVD and find the directory listed in the readme file to finish installation.

## 2. Launch the Device Power Manager

After launching the utility, please tap “Bluetooth” to enable the Bluetooth function (tap again to disable). Once the Bluetooth function starts up, the wireless LED indicator (color blue) will turn on and the Bluetooth icon will show up in the operating system accordingly.



Tap “Bluetooth” to enable the Bluetooth function (tap again to disable).

Once the Bluetooth function starts up, the wireless device LED indicator will turn on (color blue) and the Bluetooth icon will appear in the OS accordingly.

## Wireless LAN (Option)

Wireless LAN is an optional wireless communication module for your tablet computer. An embedded antenna will be pre-installed in your tablet computer to access the internet wirelessly. To activate your Wireless LAN function, please follow the illustrations below:

### 1. Driver & Application Installation

- a. Install the Chipset Driver first. Read from the Utility DVD and find the directory listed in the readme file to finish installation.
- b. Then, install the Device Power Manager application. Read from the Utility DVD and find the directory listed in the readme file to finish installation.

### 2. Launch the Device Power Manager

After launching the utility, please tap “Wireless LAN” for enabling the Wireless LAN function (tap again to disable).



Tap “Wireless LAN” to enable the Wireless LAN function (tap again to disable).

Once the Wireless LAN function starts up, the wireless device LED indicator will turn on (color blue) and the Wireless LAN icon will appear in the OS accordingly.



## GPS (Option)

GPS is an optional module for your tablet computer. This GPS module supports both GPS and GLONASS systems. An embedded antenna is pre-installed in your tablet computer to support the functions of your GPS and GLONASS.

### 1. Driver & Application Installation

- a. Install the Device Power Manager application:  
Read from the Utility DVD and find the directory listed in the readme file to finish installation.
- b. Install the GPS driver:  
GPS (Driver): Read from the Utility DVD and find the directory listed in the readme file to finish installation.



Tap "GPS" to enable the GPS function (tap again to disable).

### 2. Navigation & Mapping Software Installation

Please install your 3rd party navigation and mapping software after installing your GPS driver. Refer to your navigation and mapping software manual for installation and procedures on application setup and access.

Once the GPS function starts up, the wireless device LED indicator will turn on (color blue).

**Note:**

- Wireless devices can be turned ON/OFF through BIOS. Once a device is turned off through BIOS, its button on the Device Power Manager will be colored in yellow and with a prohibition marker. For example, the following illustration shows that WLAN and GPS devices are disabled through BIOS. To turn on, please enter into BIOS and enable the functions. For more information on BIOS setting, please refer to [RF Device Control Configuration Sub-Menu](#) section.



---

## Chapter3- Managing Power

### AC Adapter

The AC adapter performs two functions:

- It powers the computer from an external AC source.
- It charges the computer battery.

The adapter automatically detects the AC line voltage (110V or 220V) and adjusts accordingly.

The following are recommended when using the AC adapter:

- Use a properly grounded AC outlet.
- Use one AC outlet exclusively for the computer. Having other appliances on the same line may cause interference.
- Use a power strip with built-in surge protection.

Connect the AC adapter:

- Plug the AC cord to the adapter.
- Plug the other end of the AC cord into the wall outlet. Make sure the green LED on the adapter turns on.
- Attach the DC plug into the power jack of the computer.

### AC Adapter Indicator

The green LED indicates that AC power is ready.

## Battery

The computer will automatically switch to battery when the external power source (AC adapter or optional vehicle adapter) is disconnected.

### Battery Power Saving Tips

The computer comes with an intelligent power-saving feature. You may extend the battery life by:

Setup power saving functions in Operating System Power Management options (e.g. Windows Power Options).

Lower the intensity of the display by brightness control.

Turn the computer into standby (by Sleep or Power button) when it is temporarily not in use.

Shut down the computer when it will not be in use for longer period of time.

### Battery Low

When the battery is nearly exhausted, the computer gives the following “Battery Low” warnings:

Windows battery low warning.

The power LED flashes.

Once the “Battery Low” warning occurs, please:

Save and close the files you are currently working on then shut down the computer.

Plug in AC or vehicle adapter to recharge the battery.

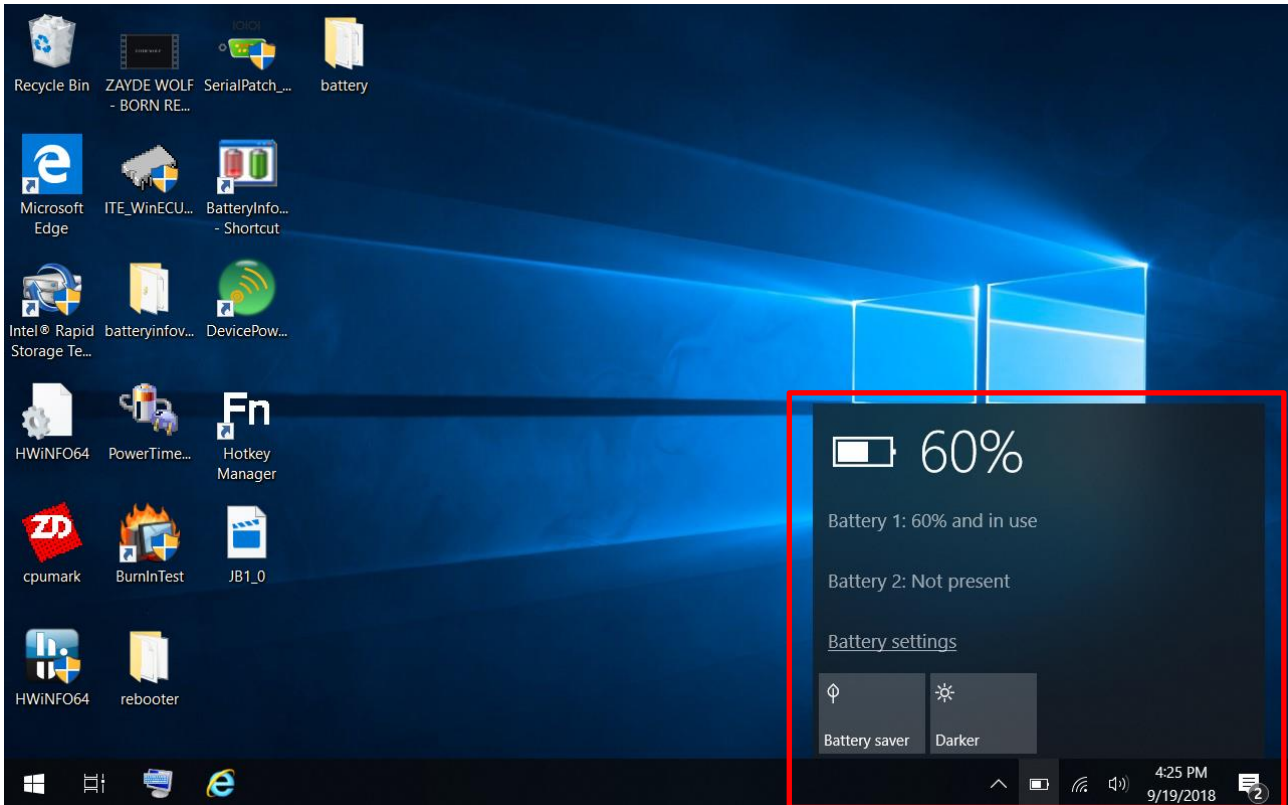
### Charging the Battery

Plug in the AC adapter to start the battery charging. If the battery is already full, the sense circuitry will stop high current charge within several minutes.

Charge indicator turns ON when the battery is charging and turns OFF when the battery charging is completed.

## Battery Level

You may check battery status from Operating System. In Windows, you can click the power/battery icon to reveal the battery gauge window. The following is the illustration of Battery Gauge in Windows OS.



### Note:

- *Battery characteristic varies depending on factors such as ambient temperature, charging method, load current, aging, etc. For example, the chemicals of the battery are more inactive at low temperature, thus decreases the output power.*
- *The battery gauge should only be used as a reference. Please do not expect it to show the exact amount of the power remaining. There is no memory effect on Lithium Ion battery cells. However, discharge the battery to nearly empty every month will help calibrating the internal gauge.*

## Battery Recalibration

Battery recalibration allows users to maintain the battery in a healthy condition. To perform battery recalibration, please follow the steps as below:

1. Update BIOS & EC to the latest version.
2. Insert the battery to the computer, and connect it to AC adapter.
3. Enter the BIOS => Choose "Advanced menu" => Choose "Battery Recalibration" => Press "Enter".
4. When the "Start Battery Recalibration" pop-up appears, press "Yes" to continue. (Before you run the battery calibration, please make sure that the battery level must be LOWER than 95% ; otherwise, the calibration cannot work.)
5. The recalibration is now processing. You can see the following recalibration status on the screen:
  - Calibration Frequency: How many times the calibration is processed
  - Battery Capacity: Current battery capacity
  - Battery Charge Mode: Charge/Discharge
  - Battery Learning Mode: Normal (charge)/Learn (discharge)
  -
6. A pop-up appears when the calibration is completed. Then click "OK".
7. Press "Yes" to reboot the computer when "Reset Without Saving" pop-up appears.

**Note:**

- *Do not turn off the LCD and do not remove AC adapter during the calibration.*
- *One cycle of recalibration process indicates "Charge to Full => Start Learn Mode => Discharge => Complete Learn Mode => Charge to Full". It will take approx. eight hours for a cycle.*
- *It requires five cycles to complete the battery recalibration. Then the recalibration will stop automatically.*
- *If you want to terminate the calibrating, simply shut down the computer by pressing Power Button or just press "CTRL+ALT+DEL" to restart.*

---

**ACPI Support**

Your computer supports ACPI (Advanced Configuration and Power Interface) for power management. With ACPI and an ACPI-compliant operating system (such as Microsoft Windows), this feature will allow you to reduce the power consumption and conserve energy. By supporting ACPI, the AC adapter LED and the Power indicator LED will show in different ways. The followings are detailed descriptions of LED indicators and their meanings:

**Sleep:**

AC adapter LED is ON (while connecting with power)

Power LED indicator is flashing Green; other LED indicators are OFF

**Hibernate:**

AC adapter LED is ON (while connecting with power)

Power LED indicator is OFF; other LED indicators are OFF

**Shut down:**

AC adapter LED is ON (while connecting with power)

Power LED indicator is OFF; other LED indicators are OFF

# Chapter 4 - BIOS Setup

Press [F2] at boot up to enter BIOS setup. Use arrow keys to select options and [+/-] to modify them. When finished, move to "Exit" and press [Enter] then confirm save by pressing [Y].

## Main Menu

Aptio Setup Utility	
Main	Advanced
<b>BIOS Information</b> BIOS Vendor Core Version Compliancy Project Version Build Date and Time Access Level EC Version  <b>Processor Information</b> Name Type  Speed Microcode Revision Total Memory ME FW Version Serial ATA Port 1  System Date System Time	Set the Date. Use Tab to switch between Date elements.  →←: Select Screen ↑↓: Select Item Enter: Select -/+ : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

**Note:**

- The contents may vary depending on computer configurations.
- Incorrect settings may cause system malfunction. To correct it, restore the Optimized Defaults with F3.



## Advanced Menu

Aptio Setup Utility	
Main	Advanced
<ul style="list-style-type: none"> <li>▶ PCH-FW Configuration</li> <li>▶ Trusted Computing</li> <li>▶ RF Device Control</li> <li>▶ EC Thermal Control</li> <li>▶ AC In boot Control</li> <li>▶ USB CHARGE Control</li> <li>▶ Battery Recalibration</li> <li>▶ IT8760 Super IO Configuration</li> <li>▶ Network Stack onfiguration</li> <li>▶ CSM Configuration</li> </ul>	<p>Configure Gigabit Ethernet device parameters</p> <hr/> <p>→←: Select Screen            ↑↓: Select Item            Enter: Select            -/+ : Change Opt.            F1: General Help            F2: Previous Values            F3: Optimized Defaults            F4: Save &amp; Exit            ESC: Exit</p>

### Advanced Menu Selections

You can make the following selections on the Advanced Menu.

Feature	Options	Description
PCH-FW Configuration	Firmware update Configuration	Configure Management Engine Technology Parameter
Trusted Computing	Disabled Enabled	TPM Support
RF Device Control	Disabled Enabled	GSM, GPS, BLUETOOTH, WLAN
AC In Boot	Disabled Enabled	AC In Boot Setting
USB CHARGE Control	Disabled Enabled	USB Charge Setting
Battery Recalibration	Yes No	Start Battery recalibration function *For Main Battery Only!
IT8760 Super IO Configuration	Serial Port configuration	Enable / Disable Serial Port (COM) Change COM port Settings
	Parallel Port configuration	Enable / Disable Parallel Port
Network Stack Configuration	Disabled Enabled	Enable / Disable UEFI Network Stack
CSM Configuration	Disabled Enabled	Enable / Disable CSM support

## PCH-FW Configuration Sub-Menu

Advanced <span style="float: right;">Aptio Setup Utility</span>	
<p>ME FW Version ME Firmware Mode ME Firmware Type ME Firmware SKU</p> <p>Firmware Update Congiguration</p>	<p>Configure Management Engine Technology Parameters</p> <hr/> <p>→←: Select Screen ↑↓: Select Item Enter: Select -/+ : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</p>

## Trusted Computing Sub-Menu

Advanced <span style="float: right;">Aptio Setup Utility</span>	
<p>TPM20 Device Found Security Device Support Pending operation</p>	<p>Enables or Disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.</p> <hr/> <p>→←: Select Screen ↑↓: Select Item Enter: Select -/+ : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save &amp; Exit ESC: Exit</p>

## RF Device Control Configuration Sub-Menu

Advanced		Aptio Setup Utility
<b>RF Device Control</b>		RF Device Control Setting
<b>GSM STATUS</b>	<b>Present</b>	→←: Select Screen ↑↓: Select Item Enter: Select -/+ : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
<b>GSM</b>	[Enabled]	
<b>GPS STATUS</b>	<b>Present</b>	
<b>GPS</b>	[Enabled]	
<b>BT STATUS</b>	<b>Present</b>	
<b>BLUETOOTH</b>	[Enabled]	
<b>WLAN STATUS</b>	<b>Present</b>	
<b>WLAN</b>	[Enabled]	

## AC In Boot Control Sub-Menu

Advanced		Aptio Setup Utility
<b>AC In Boot</b>		AC In Boot Setting
<b>AC In Boot Control</b>	[Disabled]	

## USB CHARGE Control Sub-Menu

Advanced		Aptio Setup Utility
<p><b>USB CHARGE</b></p> <p>USB CHARGE Control                      [Disabled]</p>	<p>USB CHARGE Setting</p>	<p>→←: Select Screen            ↑↓: Select Item            Enter: Select            -/+ : Change Opt.            F1: General Help            F2: Previous Values            F3: Optimized Defaults            F4: Save &amp; Exit            ESC: Exit</p>

## Battery Recalibration Sub-Menu

Advanced		Aptio Setup Utility
<p><b>Battery Recalibration Utility</b></p> <p>Calibration Frequency            Battery Capacity            Battery Charge Mode            Battery Learning Mode</p> <p>Note: For Primary battery (left hand side) only, while the Utility is executing, please remove secondary battery (right hand side) and don't close the LCD and don't disconnect the AC adapter. The battery is first fully charged, dully discharged, and then it will be fully charged again to complete the battery recalibration process. About 8hrs is needed for the battery to completely the process.</p>	<p>Start Battery recalibration function</p> <p>*For Main Battery Only!</p>	<p>→←: Select Screen            ↑↓: Select Item            Enter: Select            -/+ : Change Opt.            F1: General Help            F2: Previous Values            F3: Optimized Defaults            F4: Save &amp; Exit            ESC: Exit</p>

## IT8760 Super IO Configuration Sub-Menu

Advanced <span style="float: right;">Aptio Setup Utility</span>	
<p><b>IT8760 Super IO Configuration</b></p> <p>Super IO Chip           IT8760</p> <p>Serial Port 1 Configuration</p> <p><b>Serial Port 2 Configuration</b></p>	<p>Set Parameters of Serial Port</p> <hr/> <p>→←: Select Screen            ↑↓: Select Item            Enter: Select            -/+ : Change Opt.            F1: General Help            F2: Previous Values            F3: Optimized Defaults            F4: Save &amp; Exit            ESC: Exit</p>

## Network Stack Configuration Sub-Menu

Advanced <span style="float: right;">Aptio Setup Utility</span>	
<p>Network Stack           [Disabled]</p>	<p>Enable/Disable   UEFI            Network Stack</p> <hr/> <p>→←: Select Screen            ↑↓: Select Item            Enter: Select            -/+ : Change Opt.            F1: General Help            F2: Previous Values            F3: Optimized Defaults            F4: Save &amp; Exit            ESC: Exit</p>

### CSM Configuration Sub-Menu

Advanced		Aptio Setup Utility
<b>Compatibility Support Module Configuration</b>		Enable/Disable CSM Support.
CSM Support	[Disabled]	
		→←: Select Screen ↑↓: Select Item Enter: Select -/+ : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

## Chipset Menu

Aptio Setup Utility					
Main	Advanced	Chipset	Boot	Security	Save & Exit
▶ PCH-IO Configuration				PCH Parameters	
				→←: Select Screen ↑↓: Select Item Enter: Select -/+: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	

## PCH-IO Configuration Sub-Menu

Aptio Setup Utility		
Chipset		
Intel PCH RC Version	2.1.0.1	Enable or disable onboard NIC.
Intel PCH SKU Name	PCH-H Mobile QM170	
Intel PCH Rev ID	31/D1	→←: Select Screen ↑↓: Select Item Enter: Select -/+: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
PCH LAN Controller	[Enabled]	
Wake on LAN	[Enabled]	

## Security Menu

Aptio Setup Utility	
Main	Advanced
<p><b>Chipset</b>      <b>Boot</b>      <b>Security</b>      <b>Save &amp; Exit</b></p>	
<p><b>Password Description</b></p> <p>If <b>ONLY</b> the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup.            If <b>ONLY</b> the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights.            The password length must be in the following range;  <b>Minimum length</b>            3  <b>Maximum length</b>            20</p> <p>Administrator Password            User Password</p> <p><b>HDD Security Configuration:</b>            P1: XXXXXXXXXXXXX</p> <p>Secure Boot</p>	<p>Set Administrator Password</p> <hr/> <p>→←: Select Screen            ↑↓: Select Item            Enter: Select            -/+ : Change Opt.            F1: General Help            F2: Previous Values            F3: Optimized Defaults            F4: Save &amp; Exit            ESC: Exit</p>

## HDD Security Configuration Sub-Menu

Aptio Setup Utility	
Security	
<p><b>HDD Password Description:</b></p> <p>Allows Access to Set, Modify and Clear Hard Disk User and Master Password. User Password need to be installed for Enabling Security. Master password can be Modified only when successfully unlocked with Master Password in POST.</p> <p><b>HDD PASSWORD CONFIGRATION:</b></p> <p>Security Supported : Yes            Security Enabled : No            Security Locked : No            Security Frozen : No            HDD User Pwd Status    NOT INSTALLED            HDD Master Pwd Status    INSTALLED</p> <p>Set User Password            Set Master Password</p>	<p>Set HDD User Password.</p> <p>***Advisable to Power Cycle System after setting Hard Disk Passwords***</p> <hr/> <p>→←: Select Screen            ↑↓: Select Item            Enter: Select            -/+ : Change Opt.            F1: General Help            F2: Previous Values            F3: Optimized Defaults            F4: Save &amp; Exit            ESC: Exit</p>



## Setting Password

1. Once you set HDD passwords successfully, you must enter user password to boot in the future. The master password provides an alternative entry in case the user password is lost.
2. Clearing the master password in BIOS setup will also clear the current user password. Master password is used as a backup key, it's better not to be changed frequently.
3. You can set your master password and user password with a length between 1 and 32 characters. If you want to clear current password, type nothing when creating a new password.
4. After you set a password, "Pwd Status" will change from "NOT INSTALLED" to "INSTALLED" and the "security enabled" status will change to "YES".
5. Your setting will take effect after reboot.

**Note:**

- *If the master password is lost or it is not set earlier than the user password, losing the user password would make accessing impossible. So please set the master password at first and keep it carefully.*

## Resetting Password

1. After typing an invalid user password three times, a message will show "HDD is locked". Pressing "Enter" will leave the screen message.
2. Press "F2" immediately to enter the BIOS setup where the lost users password could be cleared with the master password.
3. Once the HDD is locked, users have no right to access. You can only enter again by the correct user password or clear it by the master password.
4. A warm boot will cause HDD Security Frozen in the selection. Only a cold boot can lift the HDD Security frozen and allow further operations in the BIOS setup. (After a cold boot, users can try to enter again with the correct user password or just reset it with the master password)

## Boot Menu

Aptio Setup Utility					
Main	Advanced	Chipset	Boot	Security	Save & Exit
<b>Boot Option Priorities</b>		[Windows Boot Manager (P1: XXXXXXXX) ]		Set the system boot order.	
Boot Option #1				→←: Select Screen ↑↓: Select Item Enter: Select -/+ : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	

The system will try to boot from device on top then the 2<sup>nd</sup> and so on. If there is more than one device in each category, only the device on top of sub-menu can boot up.

## Save & Exit Menu

Aptio Setup Utility					
Main	Advanced	Chipset	Boot	Security	Save & Exit
<b>Save Options</b>				Reset the system after saving the changes	
Save Changes and Reset					
Discard Changes and Reset					
<b>Default Options</b>				→←: Select Screen ↑↓: Select Item Enter: Select -/+ : Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	
Restore Defaults					
<b>Boot Override</b>					
Windows Boot Manager (P1: XXXXXXXX)					
Launch EFI Shell from filesystem device					

## **Chapter 5 – Drivers and Applications**

The Utility DVD includes all the drivers for the devices installed in your tablet computer. Please consult your dealer if there are any driver missing. Also, you could update the driver or check if there any driver need to be installed by "Windows device manager". Please check the "readme.txt" file on Utility DVD to get the information for driver installation

## Chapter 6 – Specifications

### Platform

Intel® Kaby Lake-Y Platform

### CPU

Intel® 7th Generation Dual Core™ i7-7Y75 Processor (4M Cache, up to 3.60 GHz)

### Memory

16GB System Memory (On board)

- Industrial grade
- LPDDR3 1066MHz

### Touch Screen

- Type: 7" WXGA (16:10)
- Resolution: 1280 x 800 pixels
- Brightness (min.~ typ.): 640~800 nits
- Resistive Multi-Touch Screen
- Optional Invisible mode on/off

**Note:**

- *Invisible Mode On/Off controls all light sources on/off, including LCD B/L, LED Indicators & Keypad B/L. Invisible Mode trades-off with Fischer conn. x 1.*

### Storage

- M.2 2280 M key SATAIII SSD
- 128GB/256GB/512GB
- Industrial Grade

## Buttons/Function Keys

- Power button (front side)
- Membrane Function Keys with LED Backlight

## Audio

- HD Audio and mono Speakers
- Embedded Digital Mic

## I/O Ports

### Right:

- Jack I/O: Amphenol USB3.1 Type C x 1
- Optional Fischer I/O: Each function can only be chosen once.

Choose 2 out of 6 options listed as below:

- USB 2.0 x1
- DP x 1
- GLAN
- COM x 1 (RS232 x1/RS422 x 1)
- Audio (Headphone out/Mic-in Combo) x 1
- Sealed Headset (Headphone out/Mic-in Combo) x1

### Note:

- *Optional Fischer Audio and Sealed Headset can't coexist.*

### Bottom:

- Docklite Connector: 35-pin POGO (Hot Swappable)
- Ext. ANT Signals x2

## Case

- CNC milled Aluminum
- Color: Black/ NATO Green

## Dimensions and Weight

- Dimensions (mm):  
250 (L) x 14 (W) x 30.5 (H)(with Bumpers)
- Weight: 1.15kg (With battery)  
0.97kg (Without battery)

**Note:**

➤ *Weight varies depending on system configurations.*

## Power

**Battery Pack:**

Type:	Prismatic Lithium Ion Cell
Capacity:	7.2V/4400mAh (2S2P)
Dimensions:	138 mm (W) x 136 mm (D) x 9.7 mm (H)
Weight:	Approx. 300 gram (0.66 lb.)

**AC Adapter**

Input Voltage:	AC 100 - 240V
Frequency:	50/60 Hz
Output Voltage:	DC 19V
Maximum Power:	90 Watts
Dimensions:	133 mm (W) x 58mm (D) x 30mm (H)
Weight:	Approx. 400 g (0.88 lb.)

**DC-In:**

12~32V = 8A

- Fischer 3 pin Connector

## Certification

CE, FCC, WEEE, REACH, RoHS, IP65, MIL-STD-810G, MIL-STD-461G, Optional GA

## Operating & Storage Temperature

Operating Temp.:

- Standard: -20 °C ~ +60 °C
- Optional: -30 °C ~ +60 °C

\*Battery Mode at least -10°C

Storage Temp.: -40 °C ~ +70 °C

## Materials and Recycling

Materials of the computer are as follows:

Magnesium case: AL6061T6

PCB: FR-4, UL 94V0

Battery: Rechargeable Lithium Ion cells

Packing: Carton: Unbleached paper

Cushion: Recyclable PE

Carrying bag: Recyclable PE Fiber

Quick Guide: Paper

Please recycle the parts according to local regulations.

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## Chapter 7 – Optional Devices

### Communication

- WiFi/Bluetooth:
  - Intel Dual Band wireless- AC 8265
  - Board Form Factor: M.2 2230 E-key Card
  - Wi-Fi Certified: 802.11 a/b/g/n/ac
  - Bluetooth: Supports BT 4.2 (Backward compatible)
  - Interface: PCIe (WiFi)/USB (BT)
- GPS:
  - U-blox M8N (USB interface)

### Security

BIOS password and Kensington cable lock slot are available to safely secure your computer. Optional TPM (Trusted Platform Module) version 2.0 is also supported, preventing unauthorized access to your computer.

### Mil. Fischer Connector

Optional Fischer connectors provide solutions for users to operate the device in harsh environments. Signals designed for usage include USB2.0, DP, VGA, RS232 or RS422, GLAN, and Audio.



# Chapter 8 – Maintenance and Service

## Cleaning

ALWAYS turn OFF the power, unplug the power cord and remove the battery before cleaning.

The exterior of the system and display may be wiped with a clean, soft, and lint-free cloth. If there is difficulty removing dirt, apply non-ammonia, non-alcohol based glass cleaner to the cloth and wipe.

An air gun is recommended for cleaning water and dust. For salty water please clean with fresh water then blow-dry with an air gun.

## Troubleshooting

Should the tablet computer fail to function properly, the troubleshooting steps below may be followed.

- Power Problems:

**When I turn on the Tablet computer, it does not respond.**

- If you are using battery power, check if the battery is charged
- If you are using AC power, ensure that the connection of AC adapter is correct.

**I cannot return from Hibernation while on battery power**

- The battery might be drained. Please plug the tablet into AC power.
- Hard reset the device by pressing the power button for 4 seconds

**Unexpected or improper shutdown causes BIOS to reset to Optimized Default**

- This could be a power problem. Please connect the AC power adapter to fix the abnormal shutdown problem.
- Minimize the configuration, i.e. remove extra peripherals and devices.
- Remove the modules one by one (SSD, Battery, etc.).
- Remove the software suspected.
- Set BIOS fail-safe default.
- Re-install operating system and application software.

## RMA Service

If troubleshooting solutions are unsuccessful, consult your dealer for RMA.

Shipping instructions:

1. Remove any personal add-on devices or other media.
2. Use the original shipping container and packing materials, if possible.
3. If the original packing materials are not available, wrap the equipment with soft material (e.g. PU/PE form) then put the wrapped equipment into a hard cardboard shipping box.
4. Include a sheet with the following information: (Note: Please keep a copy of this sheet for your records.)
  - Name
  - Address
  - Unit serial number
  - Place and date of purchase or the original invoice number
  - Date of failure
  - A DETAILED description of the problems you have encountered including: The operating system, the add-on device installed (if any), the application software, the failure phenomenon, etc.
  - A list of the hardware/software configuration, if applicable.
5. Clearly mark the outside of the shipping box with the RMA #. If an RMA # is not present on the shipping box, receiving will be unable to identify it and it might be returned.
6. Unless prior arrangements have been made, the customer is responsible for all shipping costs. Unauthorized use of the company's shipping accounts is not permitted.