M900EK/EKT Series

8” Rugged Windows Tablet

Intel Celeron N6211 Elkhart Lake Processor

Windows® 10 IoT Enterprise

User Guide

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https://dc.winmate.com

Please read these instructions carefully before using this product, and save this manual for future use.

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Chapter 1: Read Me First

This chapter provides safety information, handling and maintenance precautions and other important information about using the M900EK/EKT Series rugged tablet.

1.1 Advisory Conventions

Four types of advisories are used throughout the user manual to provide helpful information or to alert you to the potential for hardware damage or personal injury. These are Notes, Important, Cautions, and Warnings. The following is an example of each type of advisory.

Note:
A note is used to emphasize helpful information

Important:
An important note indicates information that is important for you to know.

Caution A Caution alert indicates potential damage to hardware and explains how to avoid the potential problem.
Attention Une alerted'attention indique un dommage possible à l'équipement et explique comment éviter le problèm e potentiel.

Warning! An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.
Avertissement! Un Avertissement de Choc Électrique indique le potentiel de chocs sur des emplacements électriques et comment éviter ces problèmes.

1.2 Safety Information

General Product Safety
Sécurité générale des produits

- Do not block any ventilation openings. Do not place the product against a wall or in an enclosed space, as doing so might impede cooling airflow.
- *[FR] Ne pas bloquer les ouvertures de ventilation. Ne pas placer le produit contre un mur ou dans un espace clos de façon à entraver la circulation de l'air de refroidissement.*

- Do not place the product near any heat sources such as radiators, warm air intakes, stoves, or other heat-generating devices (including amplifiers or other heat-producing equipment).
- *[FR] Ne pas placer le produit près d'une source de chaleur comme des radiateurs, les arrivées d'air chaud, poêles ou autres produits générant de la chaleur (y compris les amplificateurs ou autre équipement produisant de la chaleur.)*

- Protect the power cord from being crushed or pinched, particularly in the area of the plugs, any receptacles used, and the point of exit from the apparatus. Do not break off the ground pin of the power cord.
- *[FR] Empêcher le cordon d'alimentation d'être écrasé ou pincé, en particulier dans les zones de prises, des containers utilisés, et du point de sortie de l'appareil. Ne pas casser la broche de terre du cordon d'alimentation.*

- Do not disregard the safety that a polarized or grounded connection can provide. A polarized connection consists of two plugs, one of which is larger than the other. A grounded connection has two blades and a third one that is grounded. If the main plug provided cannot be inserted into your outlet, consult an electrician to replace your obsolete outlet.
- *[FR] Ne pas ignorer la sécurité qu'une prise polarisée ou une prise de terre peut prévoir. Une prise polarisée se compose de deux fiches, dont l'une est plus large que l'autre. Une prise de terre possède deux lames et une troisième qui est la terre. Si la fiche principale fournie ne peut être insérée dans votre prise, consultez un électricien pour remplacer votre prise obsolète.*

- Use only accessories specified by the manufacturer.
  [FR] Utiliser uniquement les accessoires spécifiés par le fabricant.

- This product should not be used near water such as bathtubs, sinks, swimming pools, wet basement, etc.
  [FR] Ce produit ne dois pas être utilisé près de l'eau comme les baignoires, les éviers, les piscines, les sous-sols humides, etc.

- Use only with its transport carriage, stand, tripod, console, or table specified by the manufacturer or sold with the product. When using a carriage, move the carriage assembly with the product carefully to avoid damage from falling over.
- *[FR] Utiliser uniquement avec son chariot de transport, support, trépied, console ou table spécifiés par le fabricant ou vendu avec le produit. Lors de l'utilisation d'un charriot, déplacez l'ensemble chariot avec le produit avec soin pour éviter tout dommage de chute.*

- Unplug this apparatus during lightning storms or when it is not being used for long periods.
- *[FR] Débrancher cet appareil durant les orages ou lorsqu'il n'est pas utilisé pendant de longues périodes.*

- Refer all servicing to qualified service personnel. A technical intervention is required when the apparatus has been damaged in any way, for example, if the power cord or plug is damaged, liquid has been spilled, or objects have fallen inside the unit if the product has been exposed to rain or moisture, if it does not operate normally or if it has been dropped.
- *[FR] Confier toute réparation à du personnel qualifié. Une intervention technique est nécessaire lorsque l'appareil a été endommagé de quelque façon, par exemple si le cordon d'alimentation ou la fiche est endommagé, du liquide a été renversé ou des objets sont tombés à l'intérieur de l'unité, si le produit a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas normalement ou s'il a été jeté.*

General Guideline
Directive générale

It is recommended to reboot the device when some functions are defective or inactive. If it still can't solve the problems, please contact your dealer or agent.

- *[FR] Il est recommandé de redémarrer l'appareil lorsque certaines fonctions sont défectueuses ou inactives. Si le problème persiste, veuillez contacter votre revendeur ou votre agent.*

1.3 Handling and Maintenance

General Guideline
Guide Général

Keep the product at least 13 cm (5 inches) away from electrical appliances that can generate a strong magnetic field such as TV, refrigerator, motor, or a large audio speaker.
[FR] Garder le produit au moins à 13 cm (5 pouces) de distance des appareils électriques qui peuvent générer un fort champ magnétique comme une télévision, un réfrigérateur, un moteur, ou un important haut-parleur.

Do not place heavy objects on top of the tablet computer as this may damage the display.
[FR] Ne pas placer d'objets lourds sur le dessus de l'ordinateur tablette cela peut endommager l'écran.

The screen surface can be easily scratched. Use with care. Do not use paper towels to clean the display but use the included cleaning cloth. Avoid touching it with a pen or pencil.
[FR] La surface de l'écran peut être facilement rayée. Utiliser avec précaution. Ne pas utiliser de serviette en papier pour nettoyer l'écran mais utiliser le chiffon de nettoyage inclus. Éviter de toucher avec un stylo ou un crayon.

To maximize the life of the backlight in the display, allow backlight to automatically turn off as a result of power management. Avoid using a screen saver or other software that prevents the power management from working.
[FR] Pour maximiser la durée de vie du rétroéclairage de l'écran, autoriser le rétroéclairage résultant de la gestion de l'alimentation. Éviter d'utiliser un économiseur d'écran ou un autre logiciel empêchant la gestion de l'alimentation de fonctionner.

Cleaning Guideline
Guide de nettoyage

Use a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the product.
[FR] Utiliser un chiffon doux humidifié avec de l'eau ou un détergeant non alcalin pour essuyer l'extérieur du produit.

Gently wipe the display with a soft, lint-free cloth. Do not use alcohol or detergent on the product.
[FR] Essuyer délicatement l'écran avec un chiffon doux non pelucheux. Ne pas utiliser d'alcool ou un détergent sur le produit.

Touchscreen Guideline
Guide de l'écran tactile

Use your finger or the stylus on display. Using sharp or metallic object may cause scratches and damage the display, thereby causing errors.
[FR]Utiliser votre doigt ou le stylet sur l'écran. L'utilisation d'un objet pointu ou métallique peut provoquer des rayures.

Use a soft cloth to remove dirt on display. The touchscreen surface has a special protective coating that prevents dirt from sticking to it. Not using a soft cloth may cause damage to the special protective coating on the touchscreen surface. To clean off hard to remove dirt, blow some steam on the particular area and gently wipe away using a soft cloth.
[FR]Utiliser un chiffon doux pour enlever la poussière sur l'écran. La surface de l'écran tactile a un revêtement protecteur spécial empêchant la saleté de se coller à lui. Ne pas utiliser un chiffon doux peut endommager le revêtement spécial sur la surface de l'écran tactile. Pour nettoyer les saletés plus difficiles à enlever, souffler de la buée sur la zone particulière et essuyer doucement avec un chiffon doux.

Do not use excessive force on display. Avoid placing objects on top of the display as this may cause the glass to break.
[FR]Ne pas utiliser une force excessive sur l'écran. Éviter de placer des objets au dessus de l'écran cela pourrait provoquer une cassure du verre.

When there is a noticeable discrepancy in the operation of the touchscreen function (your touch does not correlate to the proper location on the screen), recalibrate the touchscreen display.
[FR]Lorsqu'il y a un écart sensible dans le fonctionnement de l'écran tactile (votre contact ne correspond pas à la bonne position sur l'écran), recalibrer l'écran tactile.

1.4 Declaration of Conformity (DoC)

FCC Statement

This device complies with part 15 FCC rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation

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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at him own expense.

CE Notice (European Union)

Electromagnetic Compatibility Directive (2014/30/EU)

- EN55024: 2010/ A1: 2015
  - IEC61000-4-2: 2009
  - IEC61000-4-3: 2006+A1: 2007+A2: 2010
  - IEC61000-4-4: 2012
  - IEC61000-4-5: 2014
  - IEC61000-4-6: 2014
  - IEC61000-4-8: 2010
  - IEC61000-4-11: 2004
- EN55032: 2012/AC:2013
- EN61000-3-2:2014
- EN61000-3-3:2013

Low Voltage Directive (2014/35/EU)

- EN 60950-1:2006/A11:2009/A1:2010/A12:2011/ A2:2013

This equipment is in conformity with the requirement of the following EU legislations and harmonized standards. Product also complies with the Council directions.

Chapter 2: Getting Started

This chapter tells you step by step how to get the Rugged Tablet up and running.

2.1 Introduction

Thank you for purchasing 8-inch Rugged Windows Tablet Computer M900EK/EKT Series.

The M900EK/EKT Series is a compact rugged tablet PC with robust set of features designed to withstand industrial use while providing high tech solutions that increase productivity, improve safety, and reduce operational costs. The processing power comes from Intel's Elkhart Lake processor paired with genuine Intel graphics for high performance. The tablet features a brilliant projective capacitive touch screen, which is outdoor viewable and offers 1280 x 800 pixel resolution. Weighing at just 2.2 pounds (approx. 900 grams) the M900EK/EKT Series delivers lightweight mobility in a rugged tablet.

Highlights

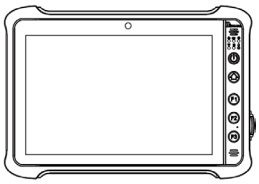
- Intel Celeron N6211 Elkhart Lake Processor
- 8" daylight readable panel with direct optical bonding
- Optional Smart Card Reader
- IP65 waterproof and dustproof

2.2 Unpacking

Check and identify the standard supplied accessories.

Standard factory shipment list:

- 8-inch Rugged Tablet M900EK/ M900EKT



- Standard Battery

- Power Adapter

- Power Cord and Plugs

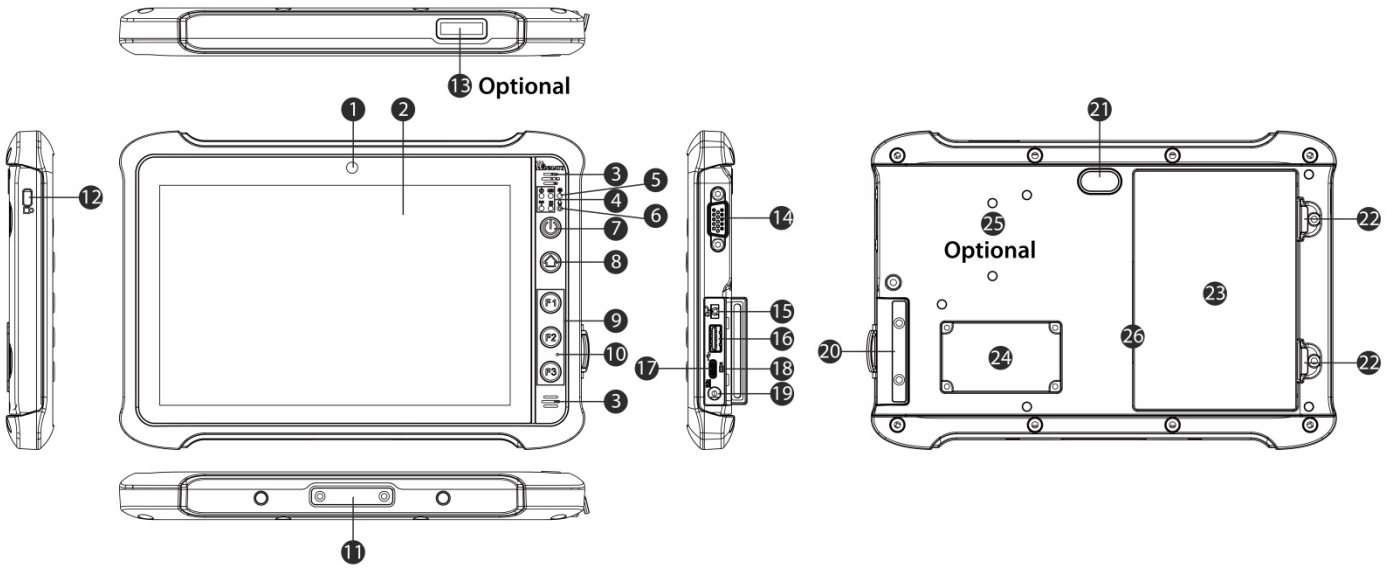
- Quick Start Guide

Your package may include other optional accessories based on your order.

- Desk Dock
- Vehicle Cradle
- Battery Charger
- Hand-Strap
- LAN Adapter Cable
- USB-A Adapter Cable

2.3 Description of Parts

M900EK Series

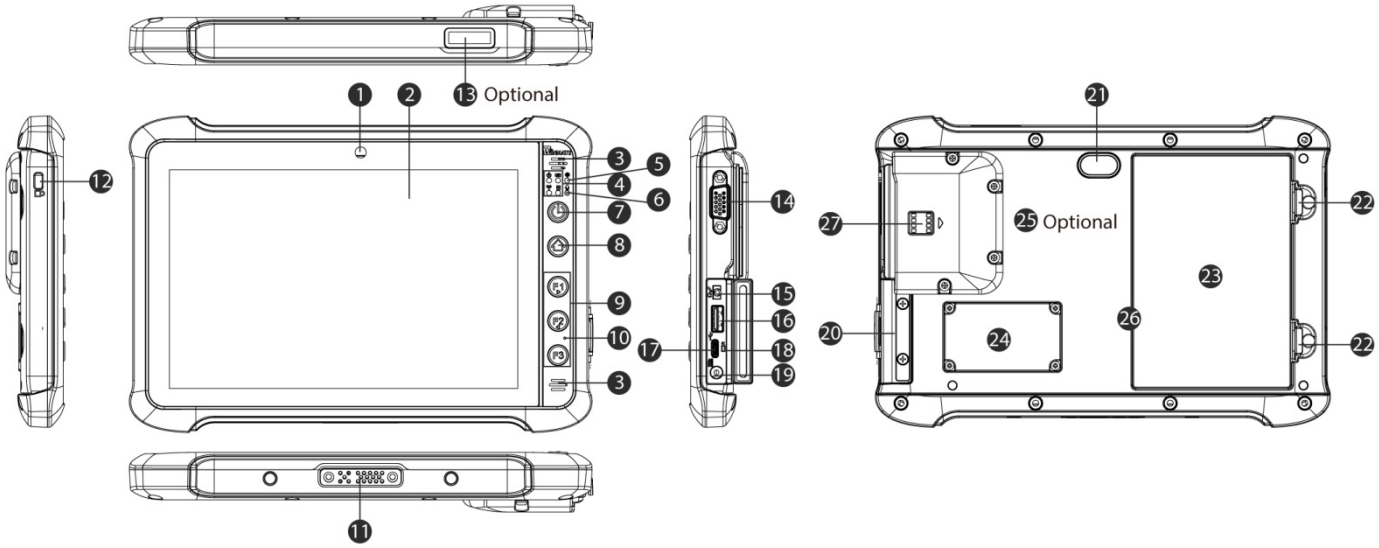


No	Item	Description
1	**Camera**	2 MP Webcam.
2	**8” Touch Screen**	Display and act as one of the inputs for the rugged tablet.
3	**Speaker**	Two 1 Watt speakers for audio output.
4	**LED Indicators**	Show the current status of the Tablet: power, battery, wireless communications, and storage.
5	**Light Sensor**	Light sensor helps to adjust display backlight.
6	**Mic**	Use during video recordings and communications.
7	**Power Button**	Power on/off tablet.
8	**Menu Button**	Hottab quick access.
9	**Function Buttons**	Three programmable function key configured by Hottab Utility.
10	**Mic**	Use during video recordings and communications.
11	**Docking Connector**	Port to docking solutions such as desk docking to provide power and external I/O.
12	**Kensington Security Slot**	Insert the lock into the Kensington slot on the tablet and secure the lock with its key or its combination.
13	**Optional Barcode Reader**	Allows you to scan 1D/2D barcodes.

Front LED Indicator Details:

No	Item	Description
14	**Expansion Port**	To connect cables to devices or components, allowing for the transmission of data
15	**Mic In/Line Out**	Connect headset or headphone (Mic is only supported with 3.5mm 4-pin headset).
16	**USB 3.0 Type-A**	USB 3.0 port connects to USB devices, such as USB flash drive, mouse, keyboard, printer, etc. 5V/0.9A.
17	**Reset Button**	Hardware reset button.
18	**USB 3.0 Type-C**	High speed USB port connects to USB devices, such as mouse, keyboard, printer, etc. **Note:** The USB Type-C connector follows USB 3.0 standard, which does not support Alternate Mode (ALT) or USB Power Delivery (USB-PD).
19	**Power Jack**	Power input 19V DC
20	**I/O Cover**	Protect I/O ports
21	**Rear Camera**	8MP camera with autofocus and LED light.
22	**Battery Lock Latch**	Latch to lock the battery in place once battery is inserted.
23	**Battery**	7.6V, typ. 4200 mAh Li-ion Battery (2S2P).
24	**WWAN Module**	Service window provides access to WWAN Module.
25	**Optional HF RFID Reader**	Allows you to read HF RFID tags.
26	**Micro-SIM card & Micro SD card slot.**	Slot for Micro SIM card & Micro SD insert. (Behind the Battery)

M900EKT Series



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6	**Mic**	Use during video recordings and communications.
7	**Power Button**	Power on/off tablet.
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9	**Function Buttons**	Three programmable function key configured by Hottab Utility.
10	**Mic**	Use during video recordings and communications.
11	**Docking Connector**	Port to docking solutions such as desk docking to provide power and external I/O.
12	**Kensington Security Slot**	Insert the lock into the Kensington slot on the tablet and secure the lock with its key or its combination.
13	**Optional Barcode**	Allows you to scan 1D/2D barcodes.

Front LED Indicator Details:

No	Item	Description
14	**Expansion Port**	To connect cables to devices or components, allowing for the transmission of signals and data
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23	**Battery**	7.6V, typ. 4200 mAh Li-ion Battery (2S2P).
24	**WWAN Module**	Service window provides access to WWAN Module.
25	**Micro-SIM card & Micro SD card slot**	Slot for Micro SIM card & Micro SD insert. (Behind the Battery)
26	**Add-on Smart Card Reader**	Add-on Smart Card Reader, Support ISO 7816 Part 1, 2, 3, T=1 and T=0 protocol IC card, EMV Level 1 Compliant

2.4 Hotkey for Specific Functions

For the physical buttons on the tablet computer, in addition to its dedicated functions detailed in the previous section, it can also be used to emulate commonly used keyboard key strokes. Under different scenario, a single physical button or a combination of physical buttons provide different keyboard key strokes, which are specified below:

In POST (Before Windows boots up):

Button	Keystroke
Fn1	F6 to enter Recovery Menu
Fn2	F7 to enter BIOS setup screen
Fn3	Keyboard F3
Menu + Fn1	Enter

In Windows:

Button	Keystroke
Menu	Hottab Quick Access
Fn1	Default: Web Browser/ Increase (Note 1).
Fn2	Default: Camera/ Decrease (Note 1)
Fn3	Default: Notepad, or Barcode trigger (Note 2).
Power	Power ON/ OFF

Note 1: Fn1/ Fn2 can be use to increase/ decrease level when Brightness or Volume bar appears.
Note 2: Fn3 is trigger button when connected with barcode scanner.

LED Indicators Description:

Indicator	Icon	Description
Power Indicator		**Blue**– Tablet is on. **No light**– Tablet is off.
Battery Status		**Orange**–AC adapter is plugged in and charging. **Green**–AC adapter is plugged in and battery is full charged. **Solid Red** - Low battery (<10%). **Blinking Red** – Battery is being hot swapped. **No light** – Battery is in use and more than 10%.
Disk Activity Indicator		**Green** - Disk is active. **No light** - Disk is idle.
RF Communications		**Green** – Wi-Fi/BT/WWAN/GPS is on. **No light** – Wi-Fi/BT/WWAN/GPS are all Off.

2.5 First-Time Operation

To get started:

1. Install a SIM card (If your device is equipped with 4G/LTE).
2. Install a storage card.
3. Install the battery.
4. Charge your tablet.
5. Start the tablet.

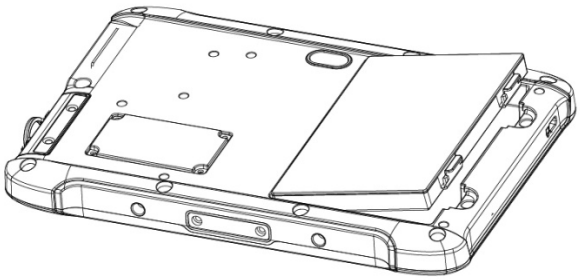
2.5.1 Installing SIM Card (For 4G/LTE Equipped Devices)

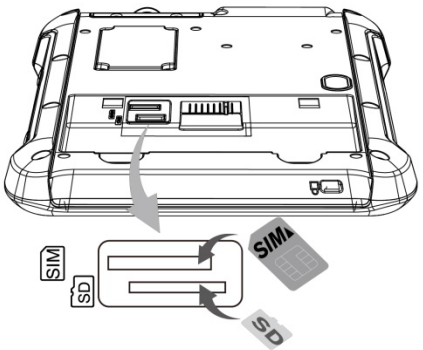
The Tablet Computer supports 4G/LTE data connection and fits a Micro-SIM card.

Caution Power off the tablet before installing the 4G/LTE module and Micro SIM card, or the tablet computer might be damaged by the incorrect installation behaviors.
Attention Éteignez la tablette avant d'installer le module 4G / LTE et la carte Micro SIM, sinon la tablette peut être endommagée par des comportements d'installation incorrects.

To install the SIM card:

1. Remove the battery.
2. The SIM card slot is located right next the battery connector.
3. Install SIM card into slot with IC facing down the contact patch.

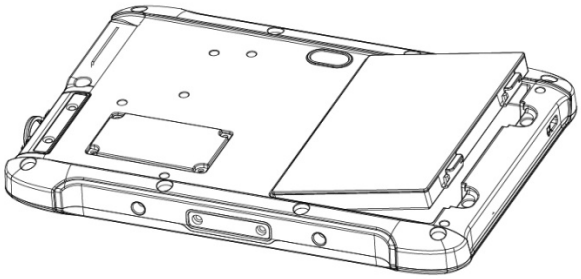


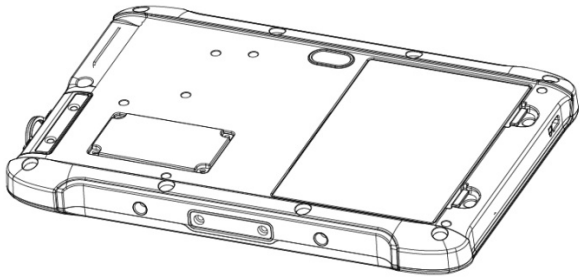


2.5.2 Installing Battery

To install the battery pack:

1. Disconnect any cords connected to the tablet computer.
2. Turn the tablet over, back facing up.
3. Insert the battery on the connector-pins side first, and then lower the battery into the battery compartment. Continue to hold the latches before battery is fully inserted.
4. Make sure the battery is completely lowered into the compartment before letting go the latches. Battery will be flat against the housing once fully inserted.





To remove the battery pack:

1. Shut down the tablet. Disconnect any cords connected to the computer.
2. Turn the tablet computer over, back facing up.
3. Hold the latches and lift the battery up to remove the battery.

2.5.3 Charging Your Tablet

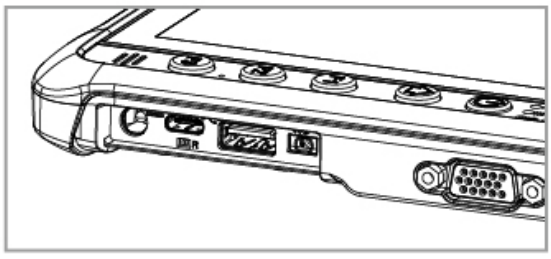
The tablet operates either on external AC power or internal battery power. It is recommended to use AC power when you start up the Tablet for the first time.

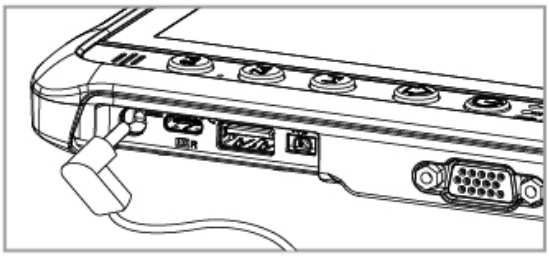
Caution Use only the AC adapter included with your Tablet Computer. Using other AC adapters may damage the Tablet Computer and the Battery.

Attention Utilisez uniquement l'adaptateur secteur fourni avec votre tablette. L'utilisation d'autres adaptateurs secteur peut endommager la tablette et la batterie.

To connect a tablet to AC power:

1. Open I/O protective cover by pulling out the latch.
2. Plug the DC cord of the AC adapter into the power jack of the tablet computer.
3. Plug the AC power cord into the AC adapter.
4. Plug the AC power cord into the electrical outlet.





The battery LED indicator shows different battery states:

Orange - AC adapter is plugged in and battery is charging.
Green - AC adapter is plugged in and battery is fully charged.
Solid Red - Low battery level (<10%).
Blinking Red – Battery is being hot swapped.
No light – Battery is in use and charged (>10%).

Item	Battery Operation Time	Battery Charging Time
Standard Battery	6~7 Hours	2.5 Hours

2.5.4 Starting the Tablet

Important: When powering on the device for the first time, please make sure there's no interruption during the Windows setting up process, for example, accidentally powering off. If it happened, please access the recovery menu by pressing **Fn1** button on the front bezel to initiate recovery process.

Press and hold the power button for **3 seconds** until the blue LED power indicator light up.

Note: Do not press the power button repeatedly.
Do not perform the following operations until the Disk Activity Indicator off

- Connecting or disconnecting the AC adapter
- Pressing the power button
- Touching the tablet buttons, screen, or external keyboard/mouse

To power off the Tablet Computer:

1. Make sure you have closed any programs that are open on the Desktop. Start Screen apps don't need to be closed.
2. Tap on the **Settings** charm.
3. Tap on **Power**.
4. Tap on **Shut Down**.
5. Wait for Tablet Computer to power off.

Note: The computer will forcibly be powered off if the power button is pressed and held for **6 seconds or longer**.

Chapter 3: Setting Up Windows

This chapter details how to setup the Windows that may be installed on the tablet for the first time.

3.1 Operating System Introduction

The M900EK/EKT Series Tablet Computer operates on Windows 10 IoT Enterprise operating system.

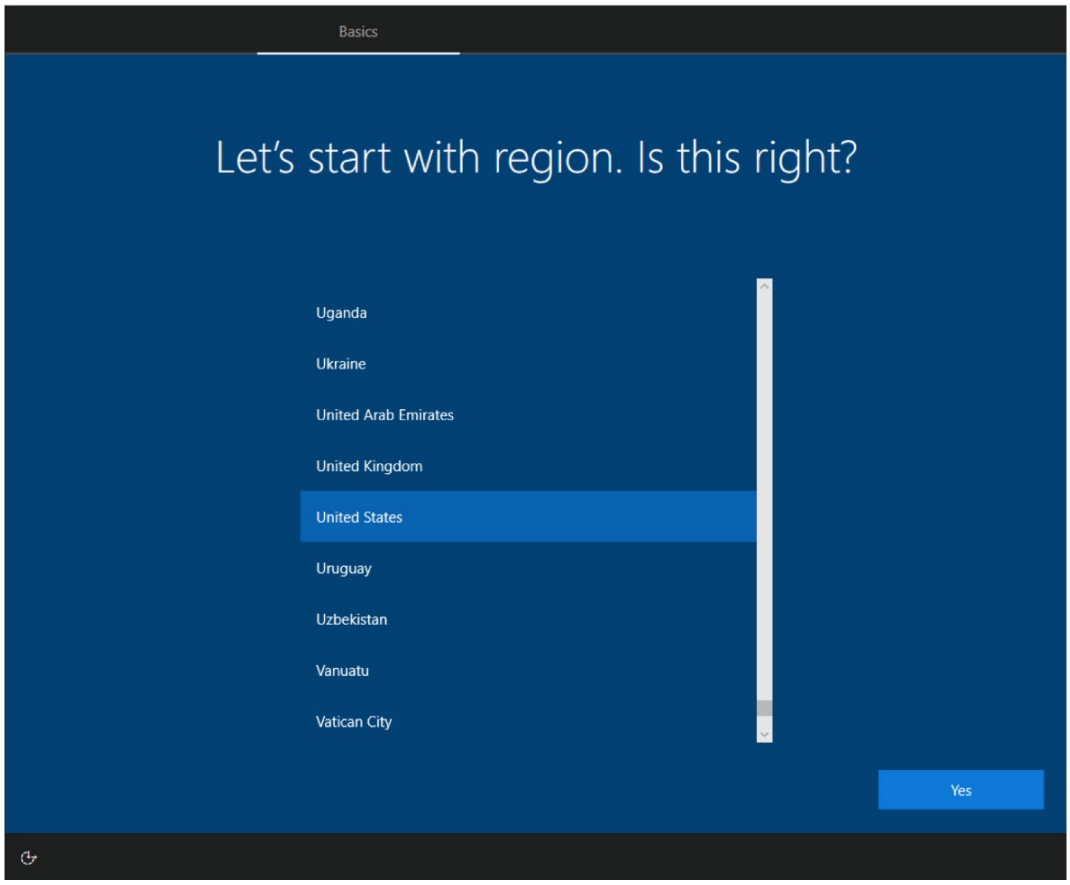
Caution Make sure the battery is full charged before starting the Tablet Computer for the first time with internal battery power.
Attention Assurez-vous que la batterie est complètement chargée avant de démarrer la tablette PC pour la première fois avec l'alimentation de la batterie interne.

- **Public network:** Select this location if you do not recognize all the computers on the network. (For example, you are in a coffee shop or airport, or you have mobile broadband.) This is a public network and is *not* trusted. Select the location where you will most often use the computer.

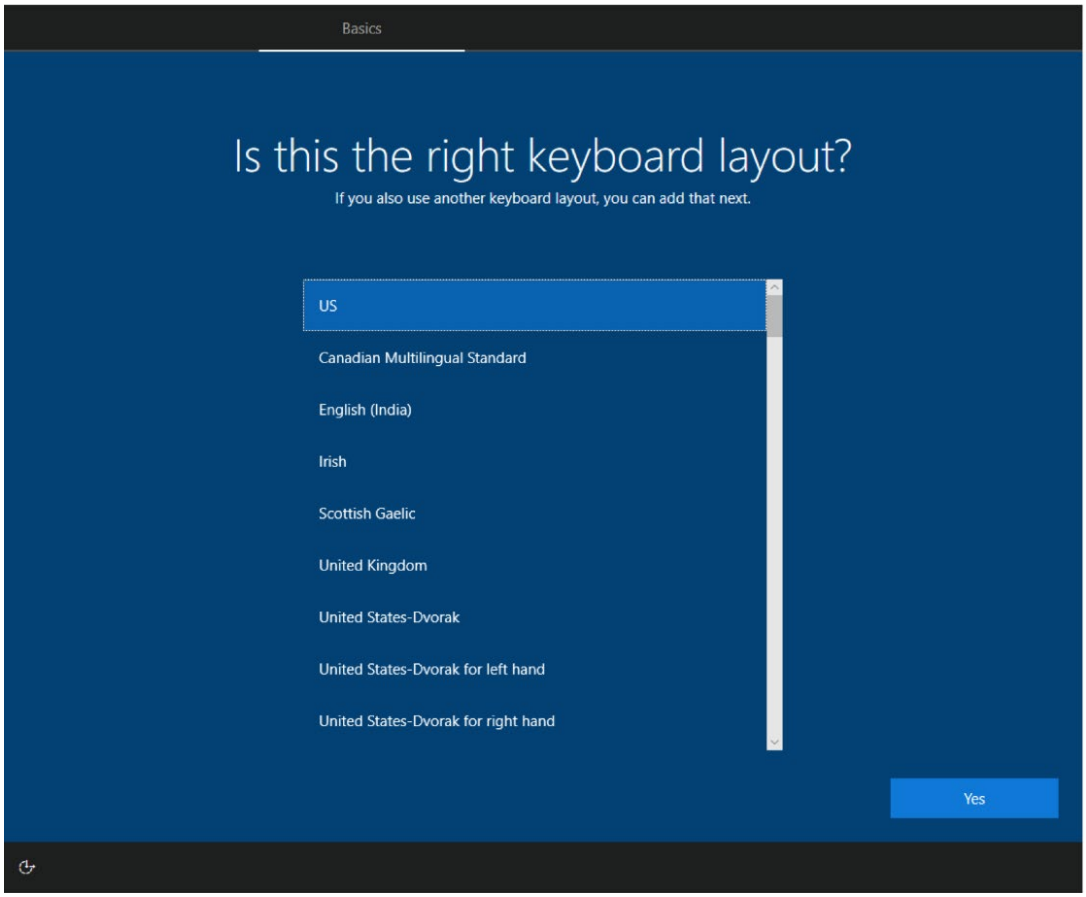
3.2 Setting Up Windows 10 IoT Enterprise

Follow the steps below to complete the Windows 10 IoT Enterprise setup process.

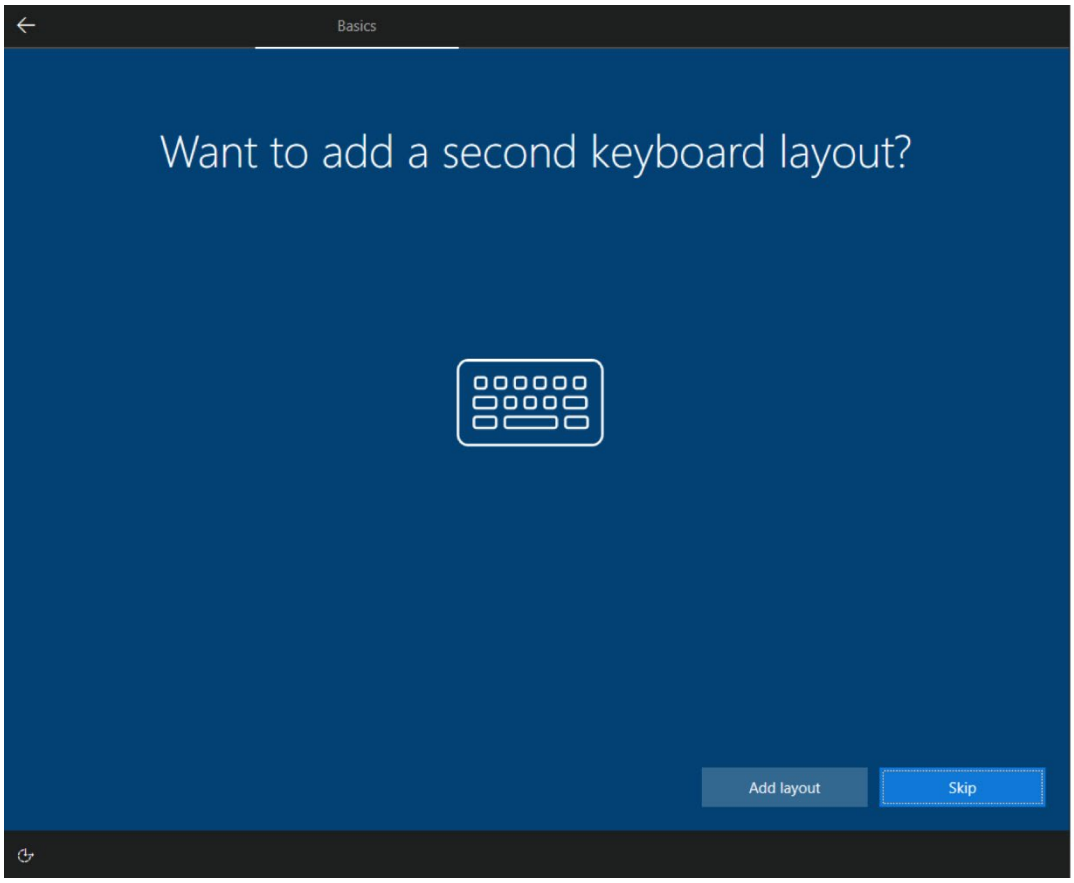
1. Press the power button to turn on the computer.
2. Select your region, then tap **Yes.**



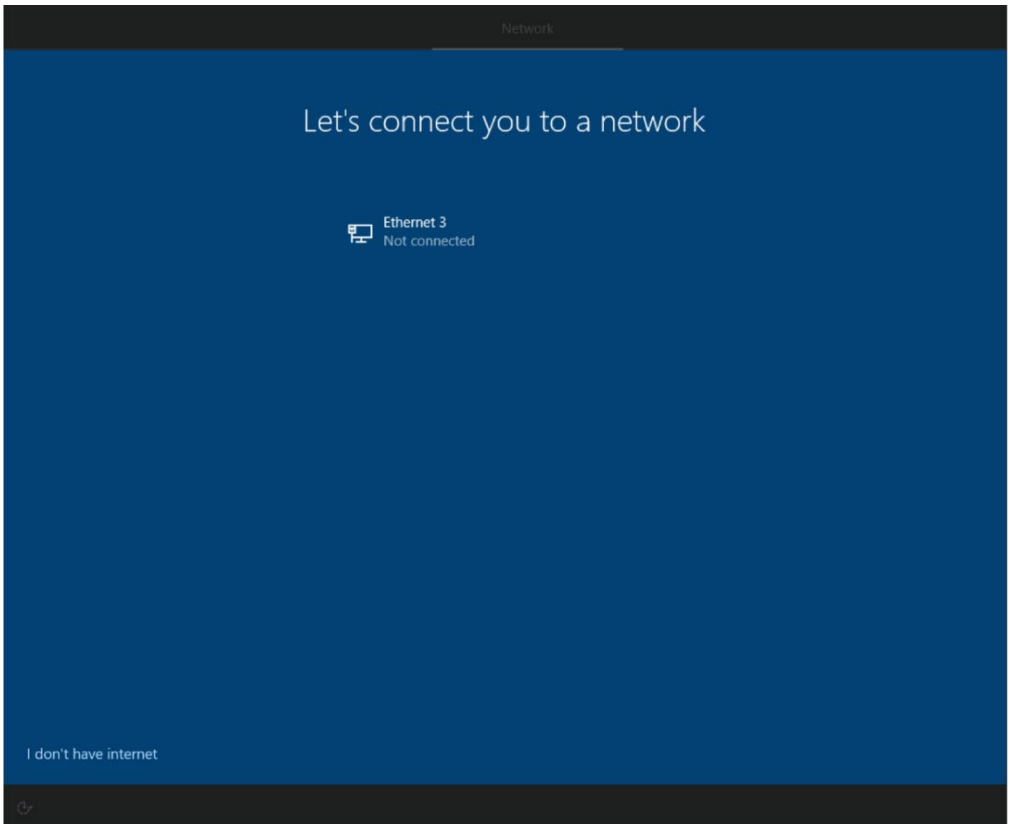
3. Select your preferred keyboard layout, then tap **Yes**.



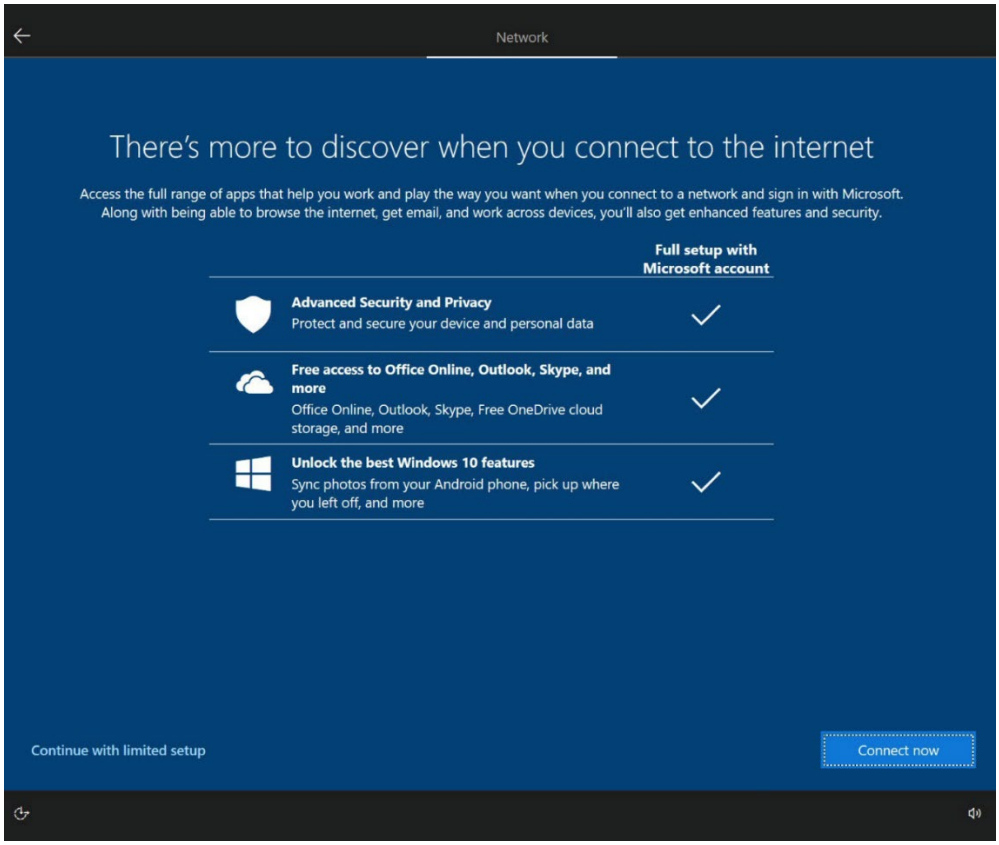
4. Tap **Add layout** if you want to add a second keyboard layout, or tap **Skip** for the next step.



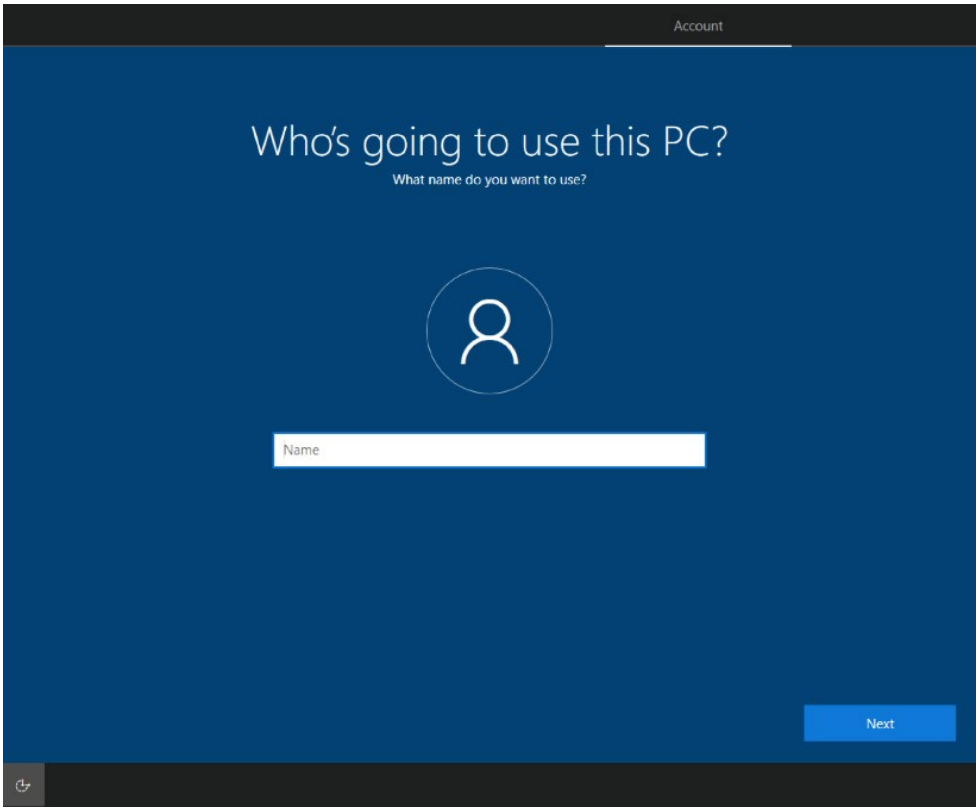
5. Windows will then try to connect you to a network. Select your network or tap **I don't have internet** to continue without a wireless connection, as you can set up the network later. You'll then jump to 7. if you don't connect to a network.



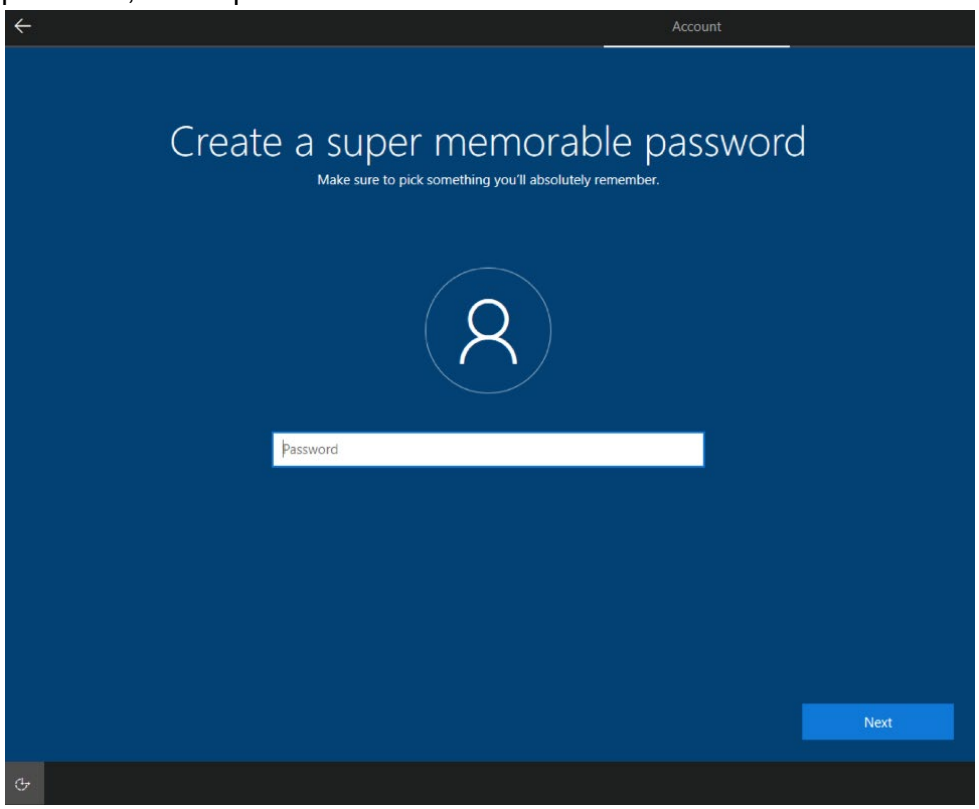
6. Tap **Connect now** to connect to your Microsoft account so that you could get the features and security, or tap **Continue with limited setup** to continue without connecting to the account, as you can connect to your account later.



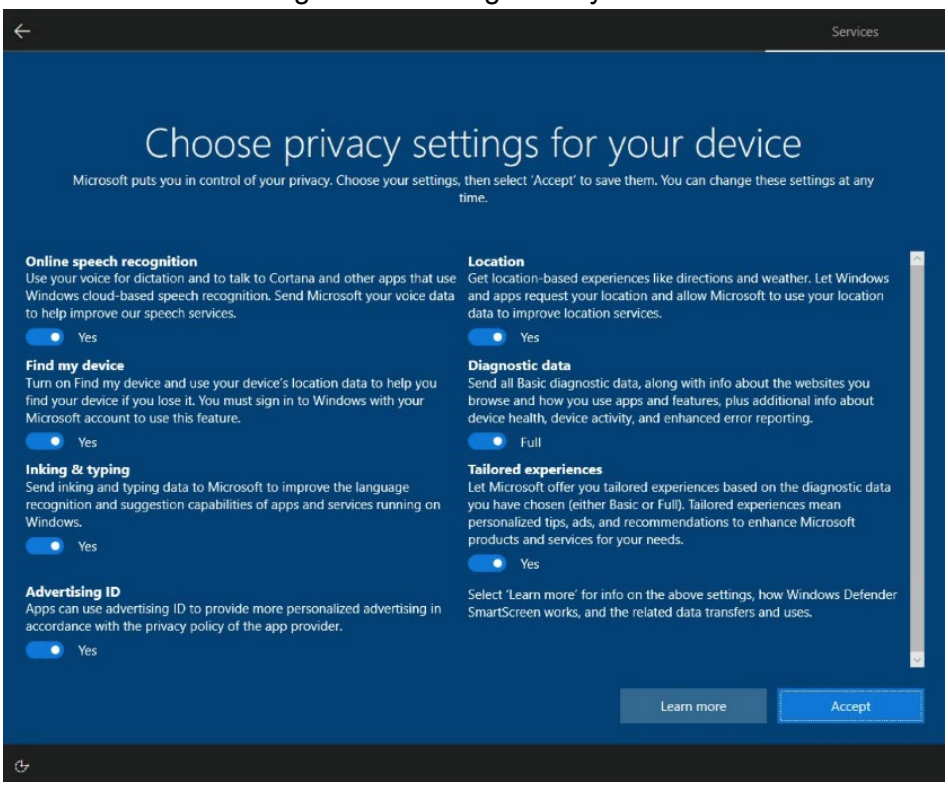
7. Type your name, then tap **Next**.



8. Create your password, then tap **Next**.



9. Read each privacy settings and choose it, you can tap **Learn more** for more information, or tap **Accept** to save them. You can change these settings at any time.



10. Read any introductory screens describing features of your computer, and tap **Next** upon completing each. You are now done with the initial setup process.

Chapter 4: Operating the Device

This chapter describes how to operate the M900EK/EKT Series Rugged Tablet, including camera, Hottab, wireless communications, barcode, RFID and smart card readers.

4.1 Hottab Introduction

Hottab provides quick access to the tablet's functions and features, such as setting up shortcuts, using camera, powering on/off built-in devices, programming function key, and changing power management.

Note: Please download the SDK from Winmate Download Center (QR code on the cover page) >> M900EK/EKT >> Development Kit.
Please notice that HF RFID reader, Barcode reader, Smart Card Reader are optional module, please make sure user have ordered the module before using the SDK.

As Windows starts up, Hottab starts and runs in the background. To display the Hottab control utility, press the (Menu) Button located on the front panel, OR launching the Hottab Utility application.

(Menu) Button on the Front Panel:

Hottab Utility Icon:

The main user interface is located on the right side of the screen. There are 4 main menu options: Shortcuts, Camera, Device ON/OFF, and Settings. Operations and functions on each menu options is explained in detail in the coming section.

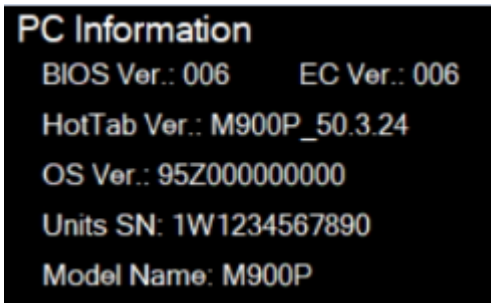
Icon	Description
Shortcuts	Allows users to configure short cut to quickly access programs with a few tabs.
Device ON/OFF	Enables/disables tablet computer's hardware functions. The configurable functions are Wi-Fi, WWAN (3G/4G/LTE), GPS, Bluetooth, Camera, LED indicators, Barcode Reader, RFID Reader, Touch set and GPS Antenna routing options.
Settings	Provides users information such as PC Information, Battery status, and also device settings such as power management setting, function key mappings, and Brightness & Volume adjustment.
Auto Rotation	Offer users the capability to adjust the screen orientation from various angles or enable/disable the auto-rotation function.

4.2 Settings

This Hottab menu option provides users information such as PC Information, Battery status, and also device settings such as power management setting, and function key mappings. Perform the following procedure to access the Hottab Setting menu:

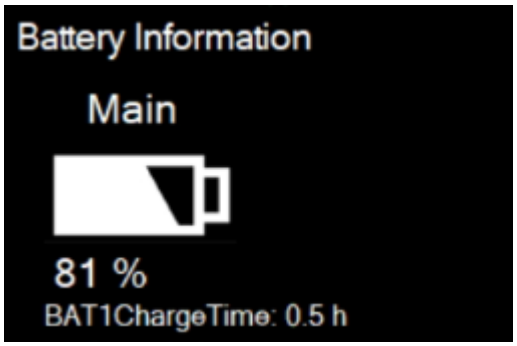
1. Open the Hottab utility by press the (Menu) Button located on the front panel, or launch the Hottab Utility application.
2. Tap on the **Settings** button.
3. Below show the items listed in Settings Menu.

4.2.1 PC Information



This section provides user device information in regards to BIOS Version, EC Versions, Hottab Versions, OS Versions, as well as Unit Serial Number, shown in the picture sample.

4.2.2 Battery Information



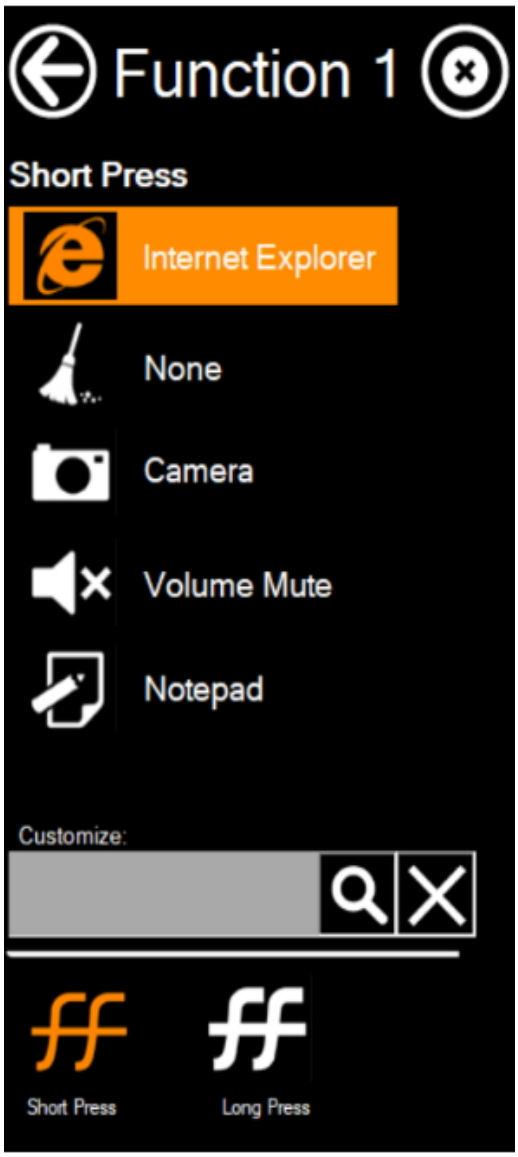
This section provides user battery Information.

Main Battery:
The main battery icon displays the battery level in percentages (0 to 100%).

Battery Charge Time:
The Battery Information also displays estimated time needed to fully charge the main battery when AC adapter is plugged in. Meanwhile, the backup battery is charged by the main battery.

4.2.3 Using the Physical Function Keys (Hotkeys)

The function key mapping menu option allows user to change the physical function buttons, Fn1, Fn2 and Fn3. Users can change what application will be launched with short press or long press of keys.



To configure function key mapping, perform the following:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, OR launching the Hottab Utility application.
2. Tap on the **Setting** button.
3. Tap on function key icon for the corresponding key that you want to change.
4. At top of utility, it will say “Short Press” or “Long Press” to indicate what type of press is being configured
5. You can switch what type of press you want to configure by tapping on the “Short Press” or “Long Press” icon at the bottom of the utility window.
6. Pick from list of preset applications by tapping on the application icons OR customize which application to execute using the picker.

Using the Custom picker:

1. Tap the icon to reveal browser window
2. Navigate to the desired executable to map to function key
3. Tap on “Done” to save selection.

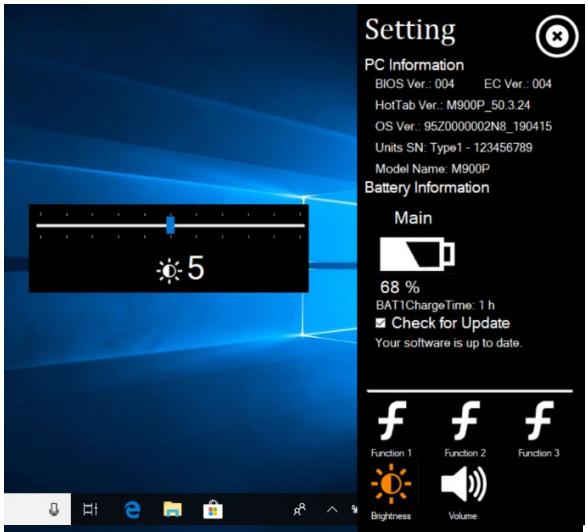
To map the function key to another application:

1. Tap on the icon to remove connection to the original application, and pick again tapping on icon.

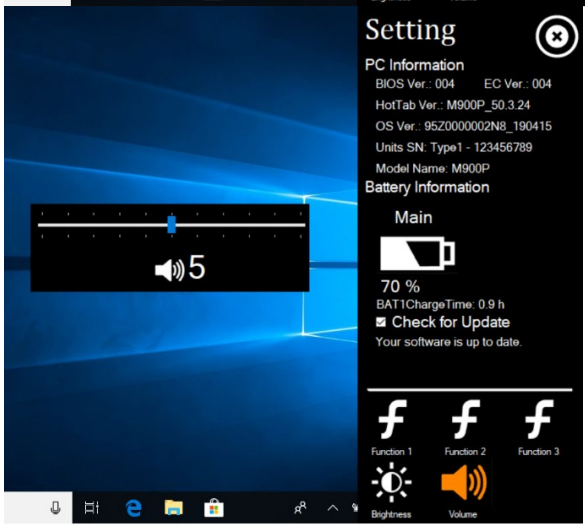
Using the physical function keys:

1. While operating the tablet, click on the physical function keys to activate functions mapped via the setup in this section.

4.2.4 Adjusting Brightness and Volume



Brightness adjustment bar appear by clicking Brightness icon.
When the Brightness adjustment bar appeared, you can change the brightness level (0 ~ 10) by touch the bar on the screen or push F1 button to increase/ F2 to decrease brightness level.

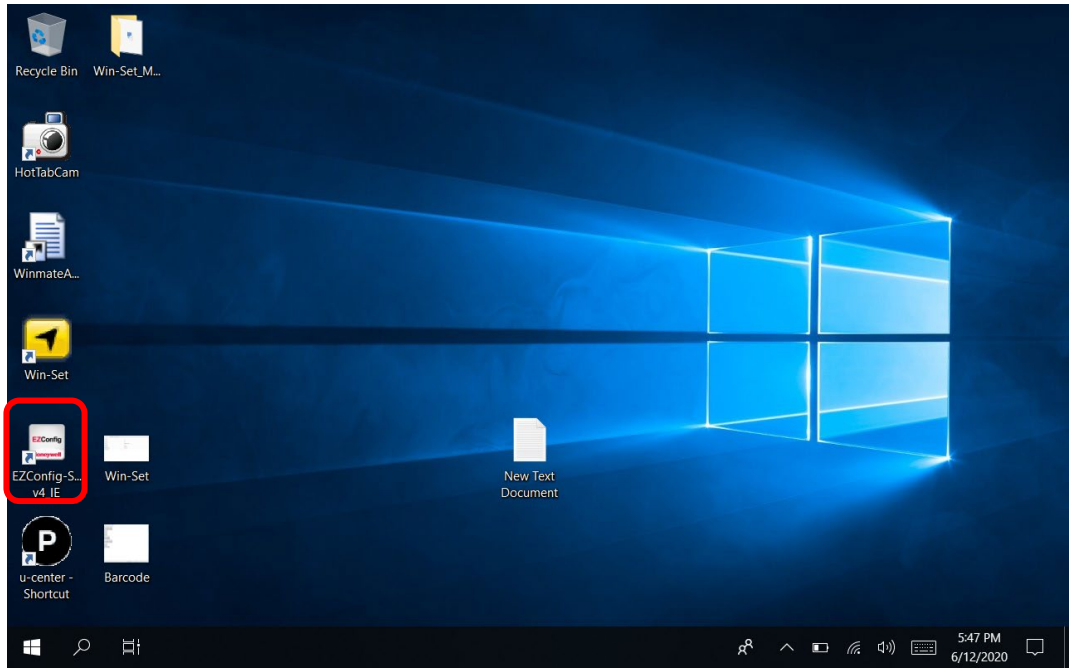


Volume adjustment bar appear by clicking Volume icon.

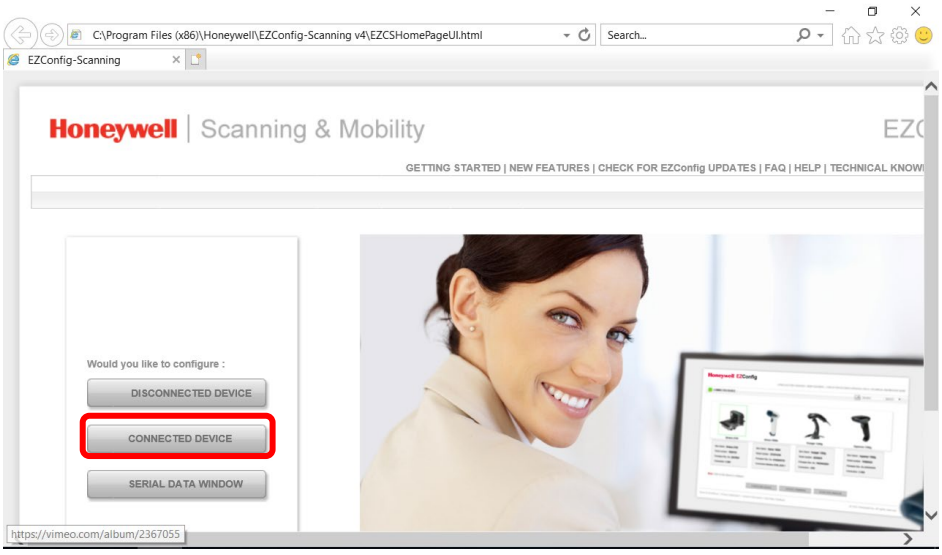
When the Volume adjustment bar appeared, you can change the Volume level (0 ~ 10) by touch the bar on the screen or push F1 button to increase/ F2 to decrease Volume level.

4.2.5 Adjusting LED Brightness

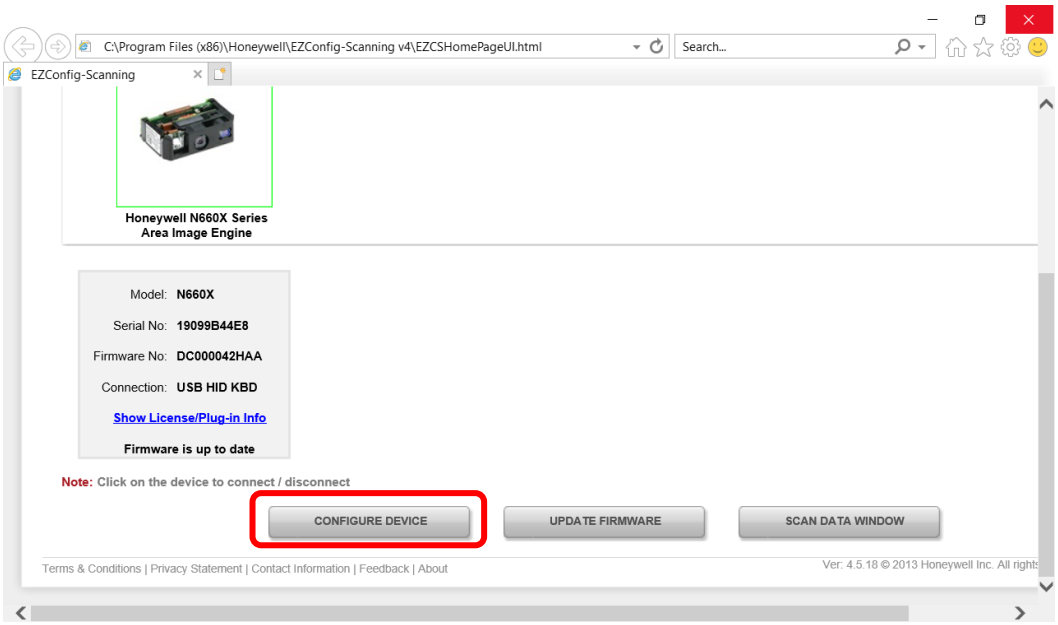
1. Open EZConfig-Scanning V4_IE Icon



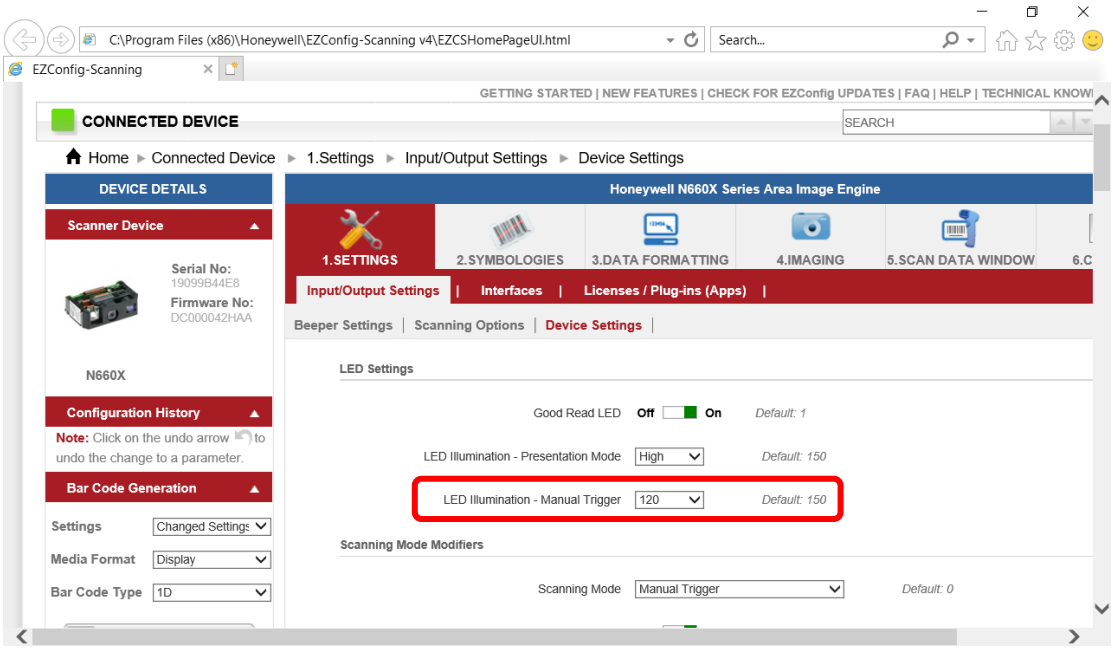
2. Open Connected Device



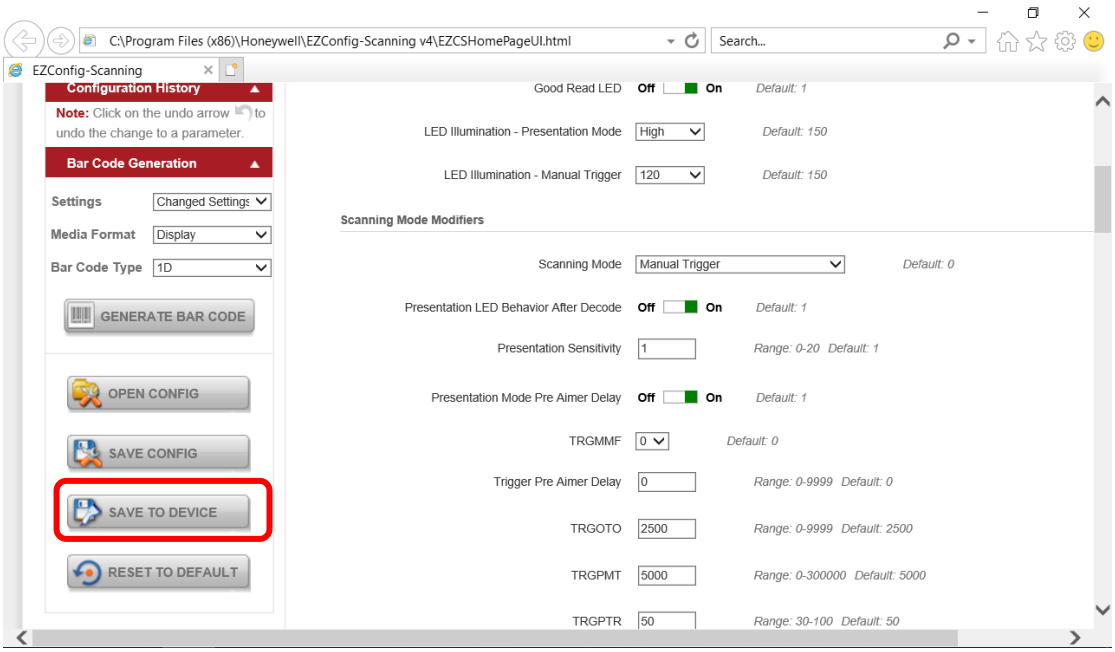
3. Open Connected Device



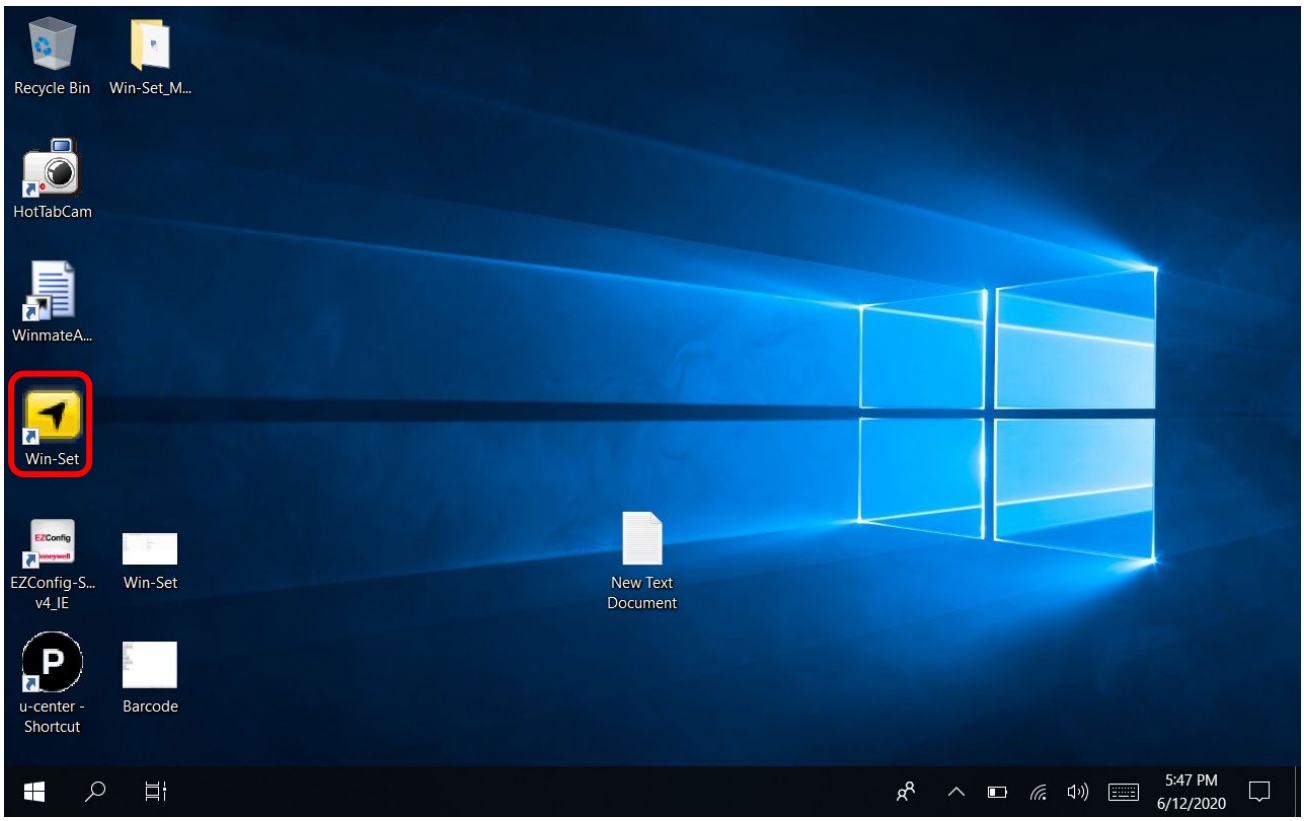
4. Open Settings → Device Settings → LED illumination - Manual Trigger Setting change 120.



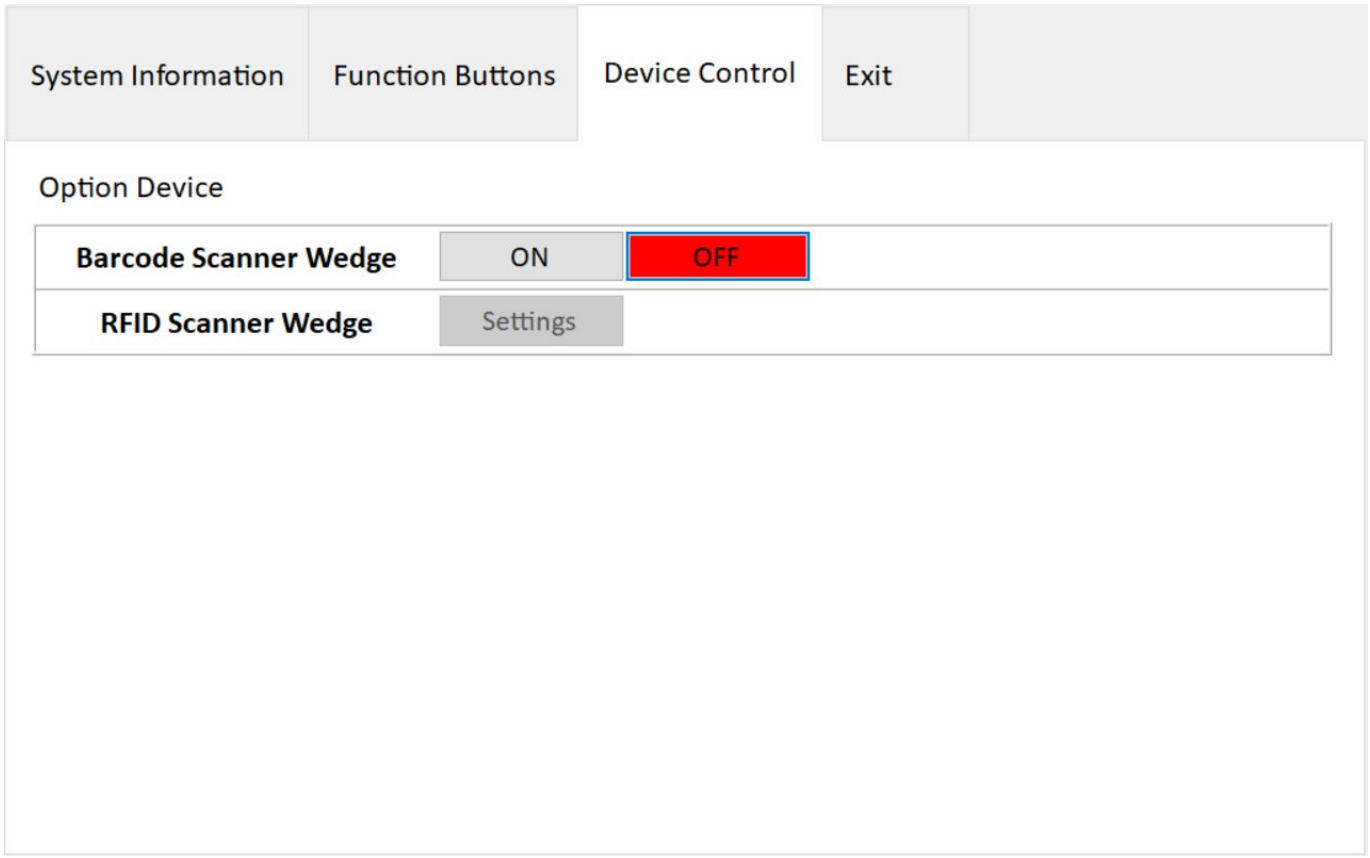
5. Save To Device



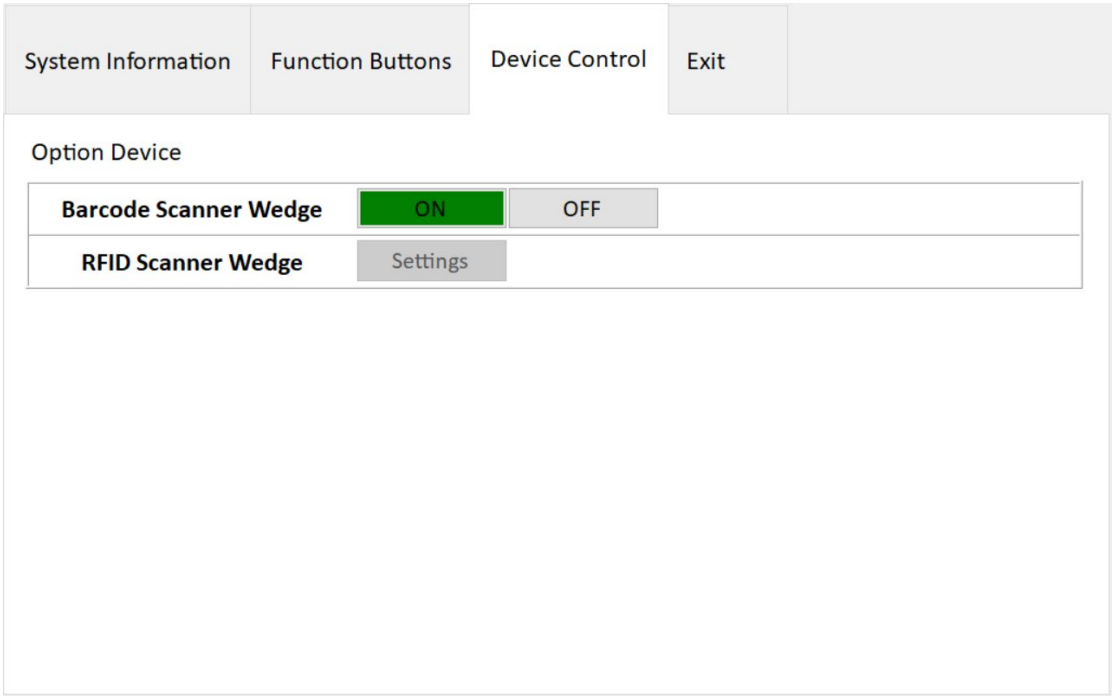
6. Open Win-Set Icon



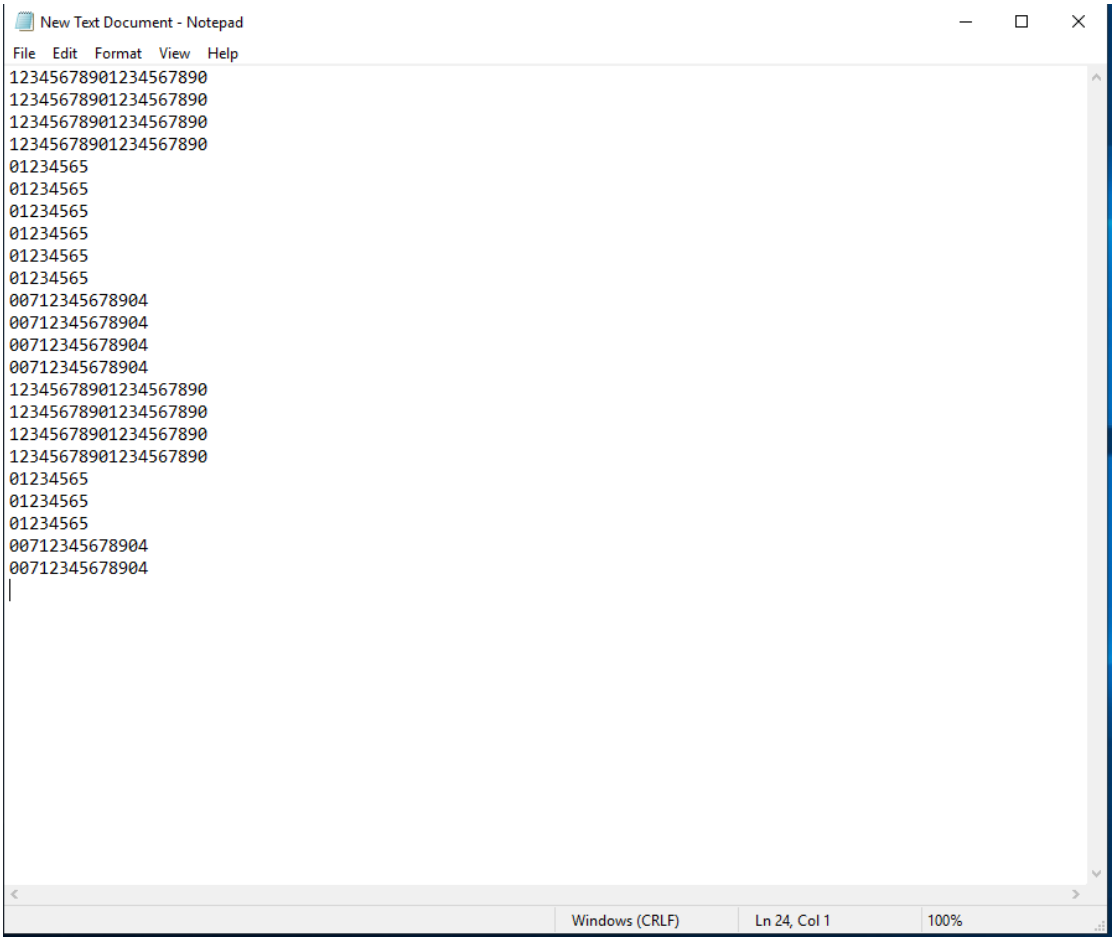
7. Barcode Scanner Wedge turns OFF



8. Barcode Scanner Wedge turns On



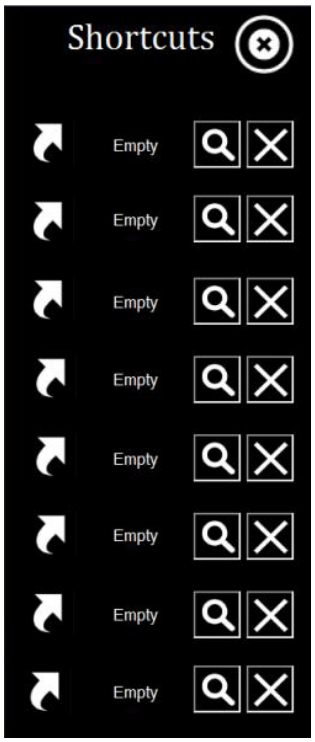
9. Scanner Barcode



4.3 Shortcuts

Hottab Shortcuts Menu provides an user-friendly interface to configure on-screen software short cuts and allow users to quickly access programs with a few tabs. The Shortcuts menu offers 8 empty slots to store user's desired quick access. Shortcuts can be mapped to any of the executable files (.exe) installed on the tablet.

Short Cut Menu:



To store a new shortcut:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, OR launching the Hottab Utility application.
2. Tap on the **Shortcuts** button.
3. Tap on button of any empty slot.
4. An on screen file browser will appear.
5. Browse to find the desired application to have shortcut.
6. Click "Open" to save the shortcut.

To remove an saved shortcut:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, OR launching the Hottab Utility application.
2. Tap on the **Shortcuts** button.
3. Tap on the button of any saved slot to remove
4. Shortcut will be removed, and once again show "Empty" to indicate slot is empty.

Tap on the button will hide the Hottab Utility Menu.

Using the Hottab shortcuts:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, OR launching the Hottab.
2. Tap on the **Shortcuts** button.
3. Tap on the saved shortcut items to access saved programs.

4.4 Changing Touchscreen Modes

The tablet computer supports three built-in operating modes for different usage scenarios:

Mode	Usage Scenario
Hand/Rain (Default)	In *Hand/Rain* mode the touchscreen rejects false inputs from liquid drops. When the liquid is removed, the touchscreen accepts touch inputs from bare fingertips. *Supports input by:* • *Rubber tip passive stylus* • *Bare fingertips*
Stylus	In *Stylus* mode, the touchscreen supports inputs from the fine-tip passive capacitive stylus (shipped with tablet). *Support input by:* • *Fine-tip passive stylus with palm rejection* • *Rubber tip passive stylus* • *Bare fingertips*
Glove	In *Glove* mode, the touchscreen supports inputs while the user is operating the touchscreen with gloves on. *Supports input by:* • *Glove* • *Rubber tip passive stylus* • *Bare fingertips*

To change touch mode:

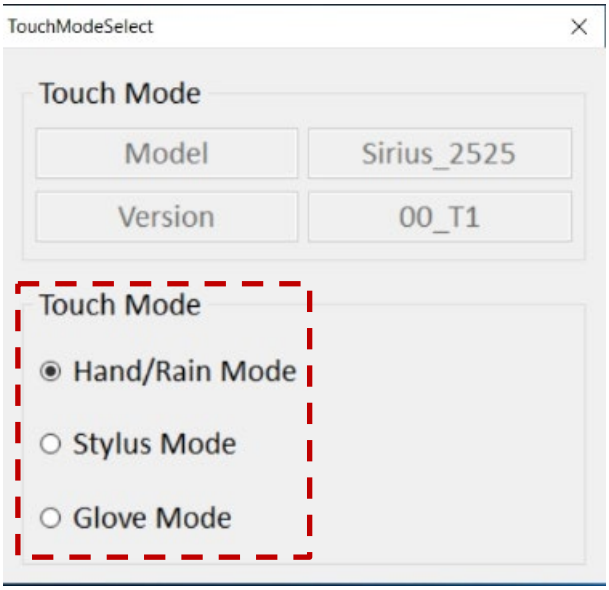
(1) Shortly press Function Key 1 (To define the function key refer to User Manual, Chapter 4).

(2) Press (Menu) button on the front to open HotTab, or launch HotTab Utility application. Choose "**Device ON/OFF,** and then click "**Touch Set"** icon. ➔ ➔

4.4.1 Switch via Built-in HotTab Utility

To switch touchscreen mode via the HotTab:

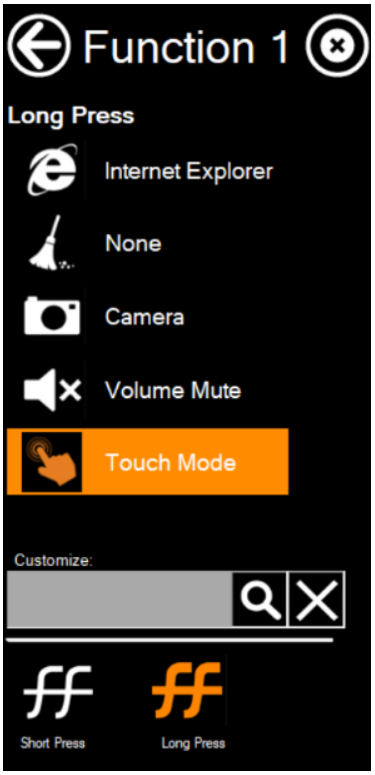
1. Open HotTab utility by pressing (Menu) Button located on the front panel, OR launching HotTab Utility application.
2. Choose "**Device ON/OFF"** and then click on "**Touch Set"** icon
3. The Touch Mode Select utility will be shown as below
4. Under the **"Touch Mode"**, select the desired touch modes by tapping on the radio button.
5. Here's also additional Touch related setting to switch the touchscreen input between mouse mode with cursor, or with multi-touch mode:
   Mouse Mode: Single touch point supported, with mouse cursor shown.
   Multi-touch Mode: The default setting of the touch screen supports multi-touch mode (up to 10 points)



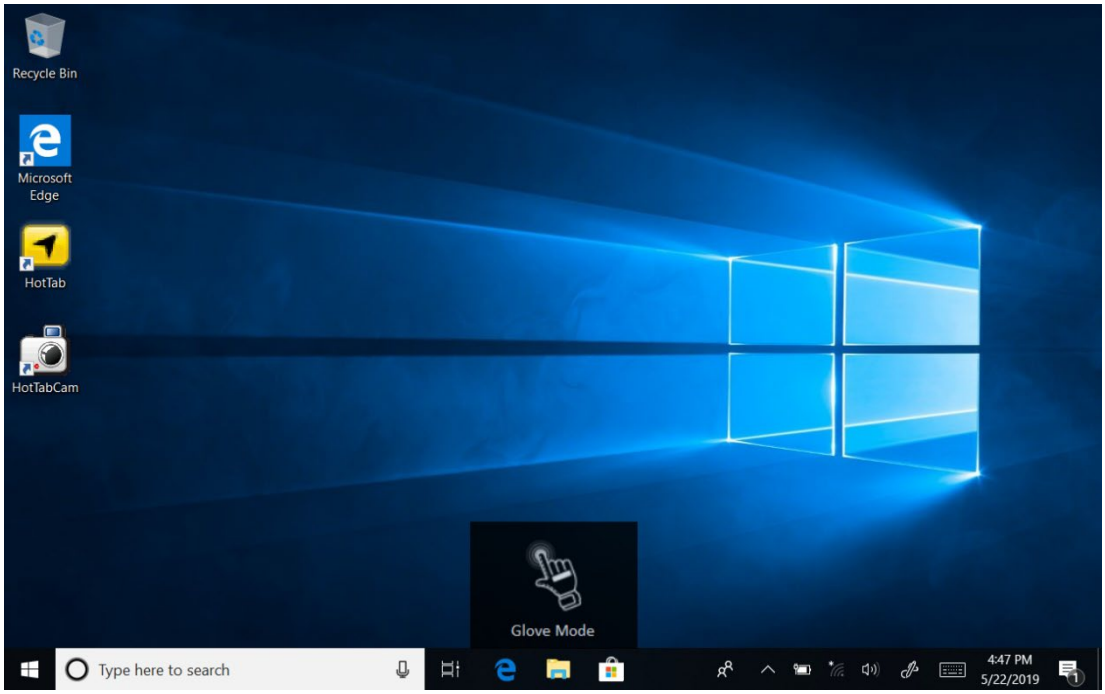
4.4.2 Switch via Programmable Function Buttons

To switch between the different touchscreen modes via the programmable function buttons, make sure the touchscreen mode switching is set to the programmable function buttons first.

1. Open HotTab utility by pressing (Menu) Button located on the front panel, OR launching HotTab Utility application.
2. Tap on the **Setting** button.
3. Tap on **F1** icon.
4. Tap on the **Long Press** icon.
5. Change the Long Press function to **"Touch Mode"** as shown below:



Once the touchscreen mode switching is set to the programmable function button, **Long Press** on **"F1"** function button to cycle through the different touchscreen modes. When touchscreen mode is switched, an icon will temporarily overlay on the lower center of the screen to indicate current touchscreen mode:



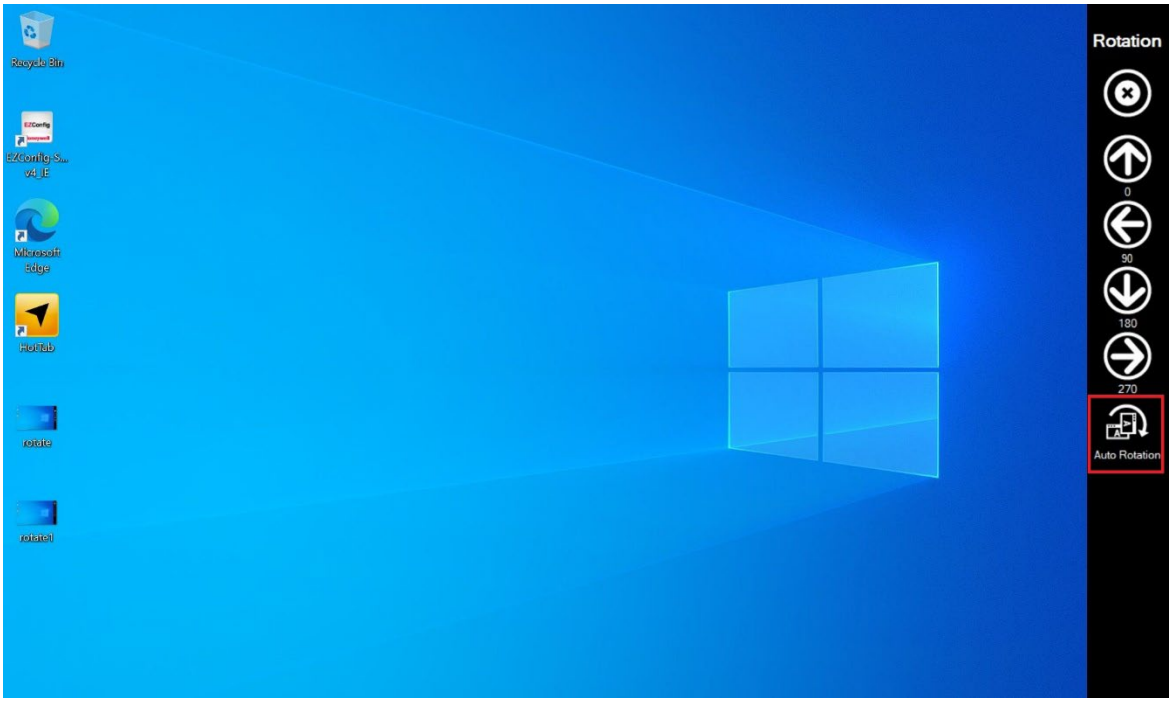
4.5 Using the Auto Rotation

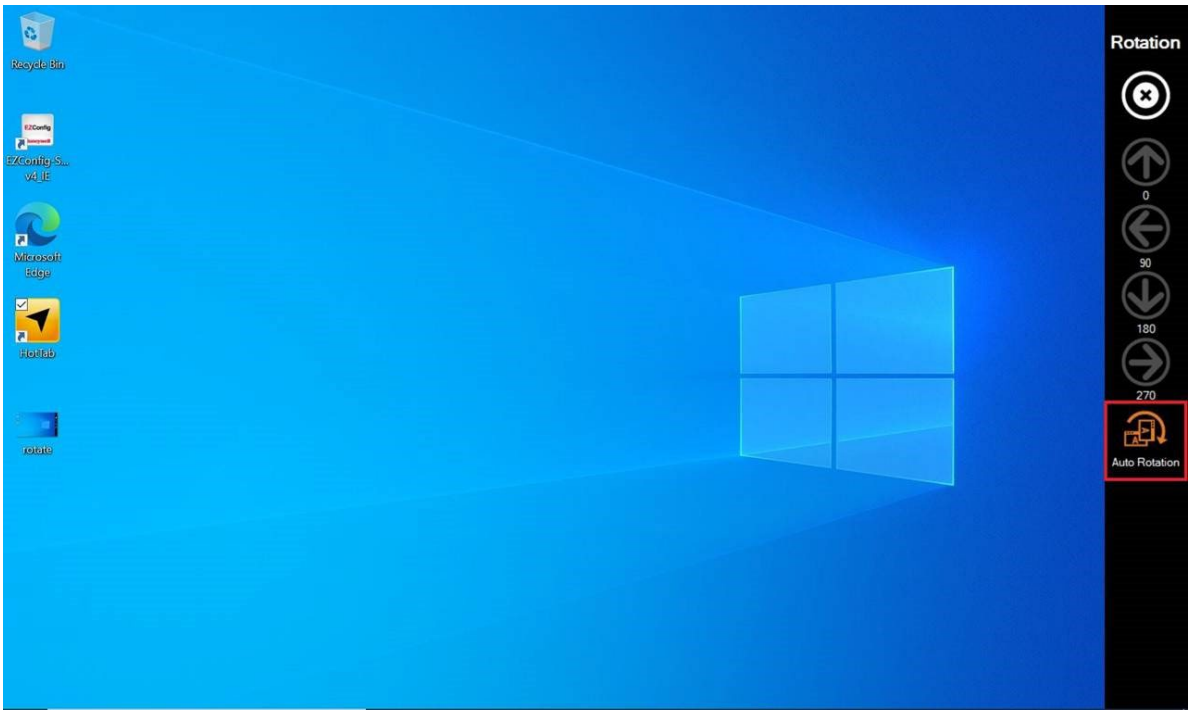
To use the Auto Rotation feature, perform the following procedure:

1. Open the HotTab by press the (Menu) button located on the front panel or launch the HotTab application.
2. Tap on the **Auto Rotation** button.
3. Check the status color of the **Auto Rotation** icon:

Item	Status Color	Description
Auto Rotation	Orange	Auto Rotation is enabled.
	White	Auto Rotation is disabled.

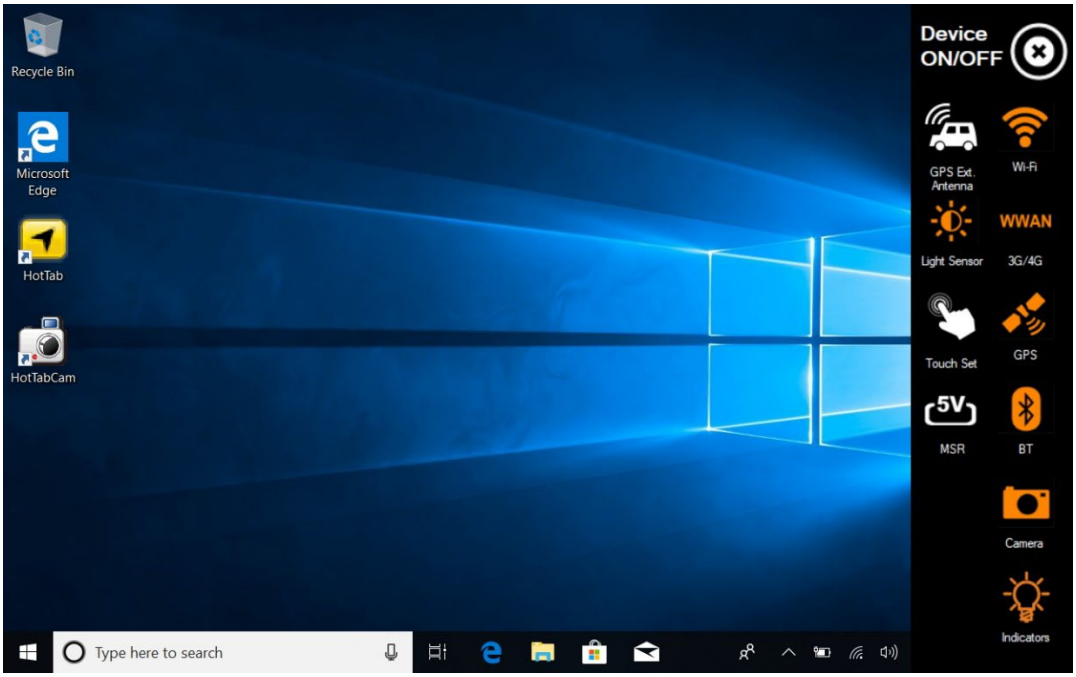
4. If the Auto Rotation feature is disabled (white), tap on the Auto Rotation icon to enable it (orange).


Recycle Bin
EZConfig S... v4_IE
Microsoft Edge
HotTab
rotate
rotate1
Rotation
0
90
180
270
Auto Rotation


Recycle Bin
EZConfig S... v4_IE
Microsoft Edge
HotTab
rotate
Rotation
0
90
180
270
Auto Rotation

4.6 Using Wireless Communications

This section describes how to get a quick access to set-up built-in devices, including turning on/off RF modules, setting up barcode reader, RFID reader, and expansion modules.



4.6.1 Using the Wireless LAN (Wi-Fi)

To use the wireless LAN (Wi-Fi) feature to connect to the network, perform the following procedure:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, or launch the Hottab Utility application.
2. Tap on the **Device ON/OFF** button.
3. Check the status color of the **Wi-Fi** icon:

Item	Status Color	Description
Wi-Fi	Orange	Wi-Fi is enabled.
	White	Wi-Fi is disabled.

4. If the Wi-Fi feature is disabled (white), tap on the Wi-Fi icon to enable it (orange).
5. Click the wireless network connection status icon in the Windows notification area. A list of available wireless networks is displayed.
6. Double-click a network to connect to it. Provide required authentication information if needed.
7. To check the connection status, observe wireless network connection status icon in the Windows notification area. The more bars the icon shows, the better the wireless LAN connection strength is.
8. Now wireless LAN connection is setup, try connection to the network with a internet browser such as Internet Explorer.

4.6.2 Using the Wireless WAN (4G/LTE)

The Tablet Computer supports data connection with 4G/LTE modules and fits Micro-SIM card. (**Note:** 4G/LTE feature is optional).

Make sure you install the SIM cart before using WWAN feature.

To connect to the network using wireless WAN:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, OR launching the Hottab Utility application.
2. Tap on the **Device ON/OFF** button.
3. Check the status color of the **WWAN** icon:

Item	Status Color	Description
WWAN **4G/LTE**	Orange	WWAN (3G/4G) is enabled.
	White	WWAN (3G/4G) is disabled.

4. If the WWAN feature is disabled (white), tap on the WWAN icon to enable it (orange).
5. You can check the wireless WAN connection status through the wireless network connection status icon in the Windows notification area. The more bars encompassed, the better the signal is.

4.6.3 Using the GPS

To enable the GPS:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, or launch the Hottab Utility application.
2. Tap on the **Device ON/OFF** button.
3. Check the status color of the **GPS** icon:

Item	Status Color	Description
GPS	Orange	GPS is enabled.
	White	GPS is disabled.

4. If the GPS feature is disabled (white), tap on the GPS icon to enable it (orange).
5. Now the GPS feature is ready to be used with an application utilizing the GPS.

4.6.4 Using the Bluetooth

To enable the Bluetooth:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, or launch the Hottab Utility application.
2. Tap on the **Device ON/OFF** button.
3. Check the status color of the **Bluetooth** icon:

Item	Status Color	Description
BT	Orange	Bluetooth is enabled.
	White	Bluetooth is disabled.

4. If the Bluetooth feature is disabled (white), tap on the Bluetooth icon to enable it (orange).
5. Click the Bluetooth icon in the Windows notification area. A contextual menu for Bluetooth is displayed.
6. To add a device, tap on *Add a Bluetooth Device*. Windows will search any Bluetooth device automatically
7. Choose the Bluetooth device to connect and follow onscreen prompt to continue the pair procedure and use the Bluetooth device.

4.7 Turning On/Off LED Indicators

The LED Indicators for Power Status, Battery Status, and RF Communication can be turned on/off from Hottab menu.

To enable/disable the LED indicators:

1. Open the Hottab utility by pressing the (Menu) button or launching the Hottab.
2. Tap on the **Device ON/OFF** button.
3. Check the status color of the **Indicator** icon:

Item	Status Color	Description
Indicator	Orange	LED indicator is enabled.
	White	LED indicator is disabled.

4. If the indicator is disabled (white), tap on the Indicator icon to enable it (orange).

4.8 Turning On/ Off the Light Sensor

The Light Sensor can be turned on/off from Hottab menu.

To enable/disable the Light Sensor:

1. Open the Hottab by press the (Menu) button located on the front or launching the Hottab.
2. Tap on the **Device ON/OFF** button.
3. Check the status color of the **Light Sensor** icon:

Item	Status Color	Description
Light Sensor	Orange	Light Sensor is enabled.
	White	Light Sensor is disabled.

4.9 Using Barcode Reader

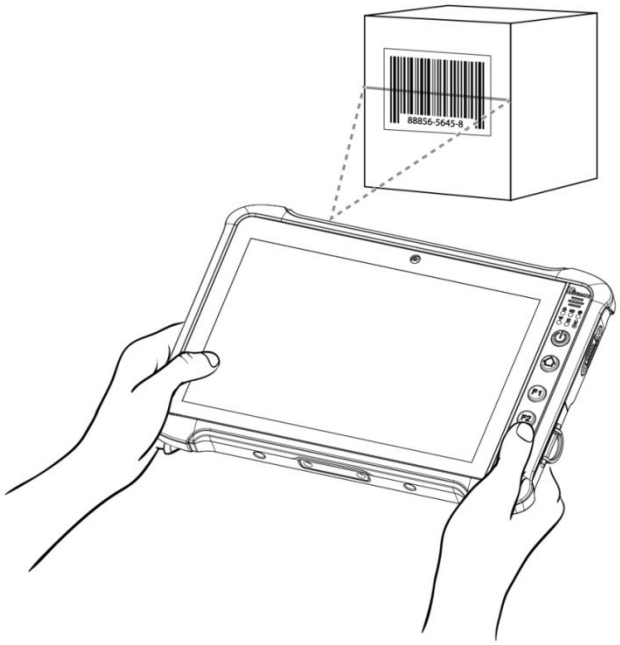
The Barcode Reader is an optional feature of M900EK/EKT Tablet PC and is not re-workable by the end user.

To enable the Barcode Reader:

1. Open Hottab utility by pressing (Menu) button located on the front panel or launching Hottab.
2. Tap on the **Device ON/OFF** button.
3. Check the status color of the **Barcode** icon.

Item	Status Color	Description
Barcode	Orange	Barcode Reader is enabled. Use Fn3 button to trigger.
	White	Barcode Reader is disabled.

4. Open the application where barcode reader will be displaying the scanned barcode.
5. Trigger the barcode reader by pressing Fn3 function key.

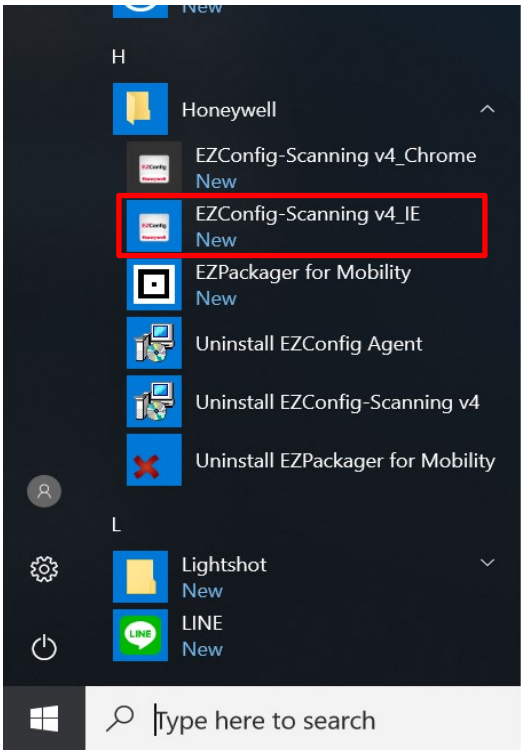


Tap **Disconnect** button to stop the connection with Barcode Reader.

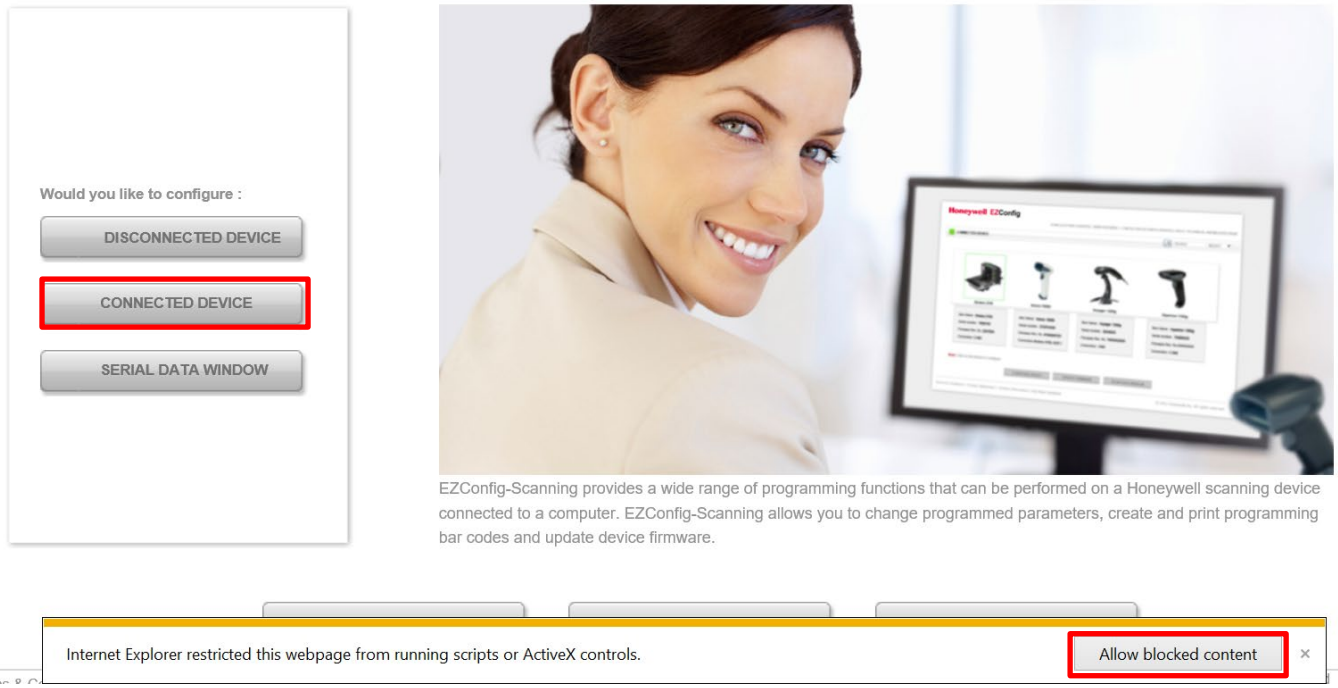
**To recover the connection, please tap on the button again to re-connect with Barcode Reader.*

4.9.1 Device Configuring and Setting

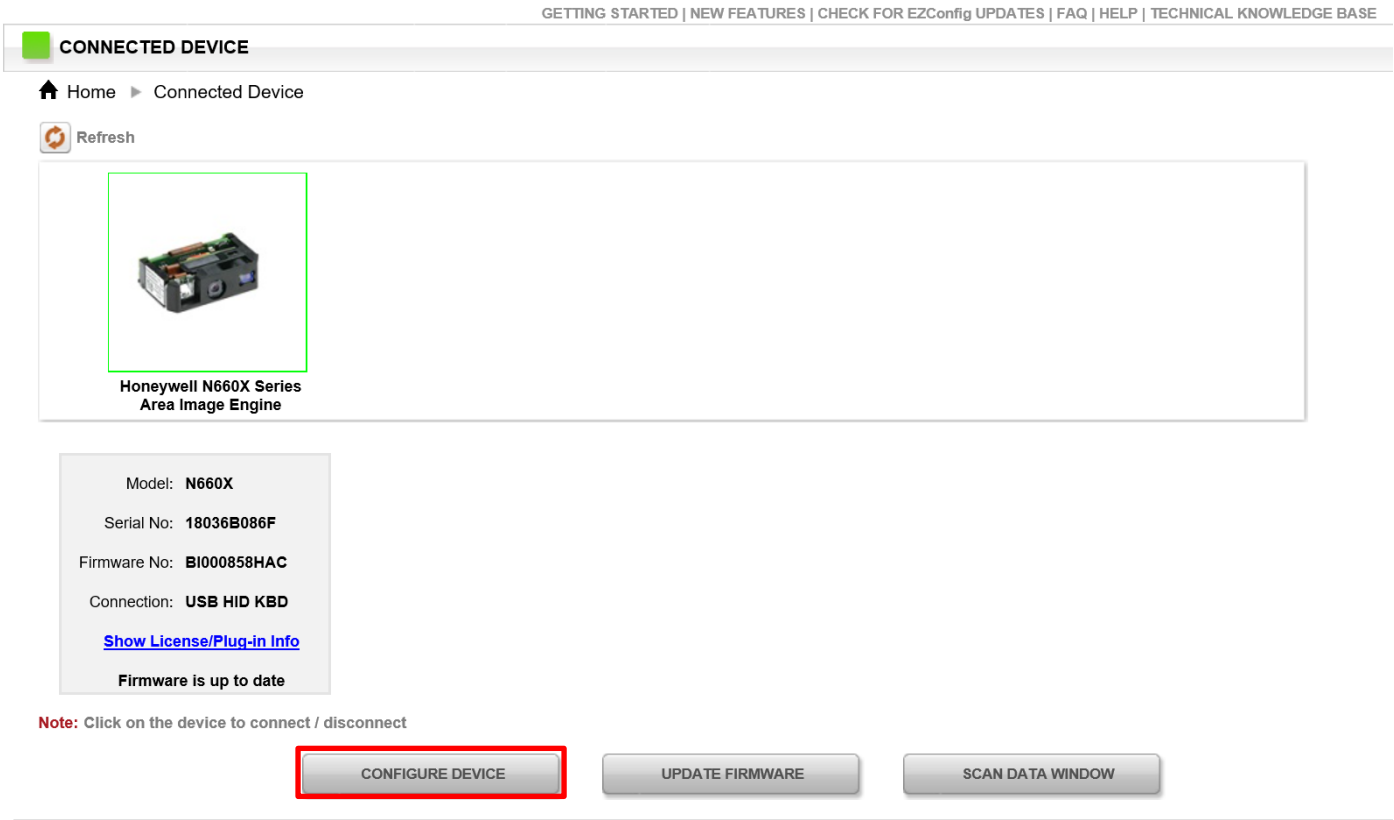
1. Click on Windows and search for **EZConfig-Scanning** from the Start menu.



2. Click on **EZConfig-Scanning v4_IE** and allow the blocked content if browser is blocking the content.
3. Click on “Connected Device” icon and wait for system to discover the device (Honeywell N660X).

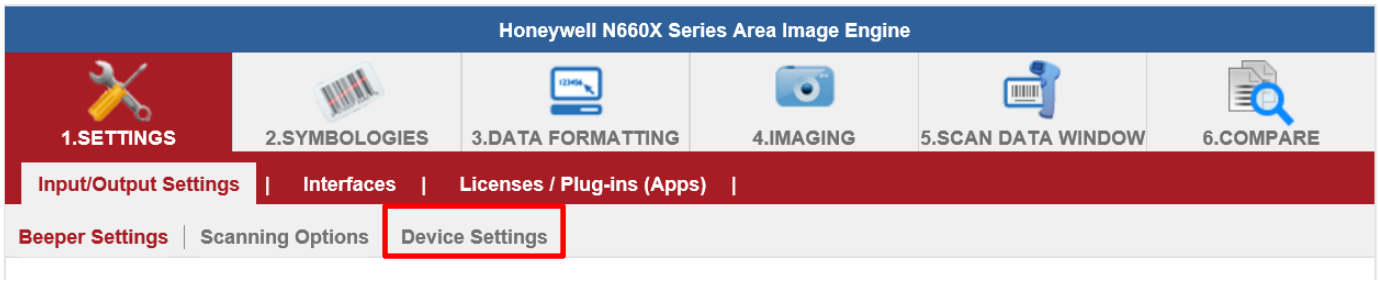


4. Once Honeywell N660X is discovered please click "**Configure Device**" button as shown.

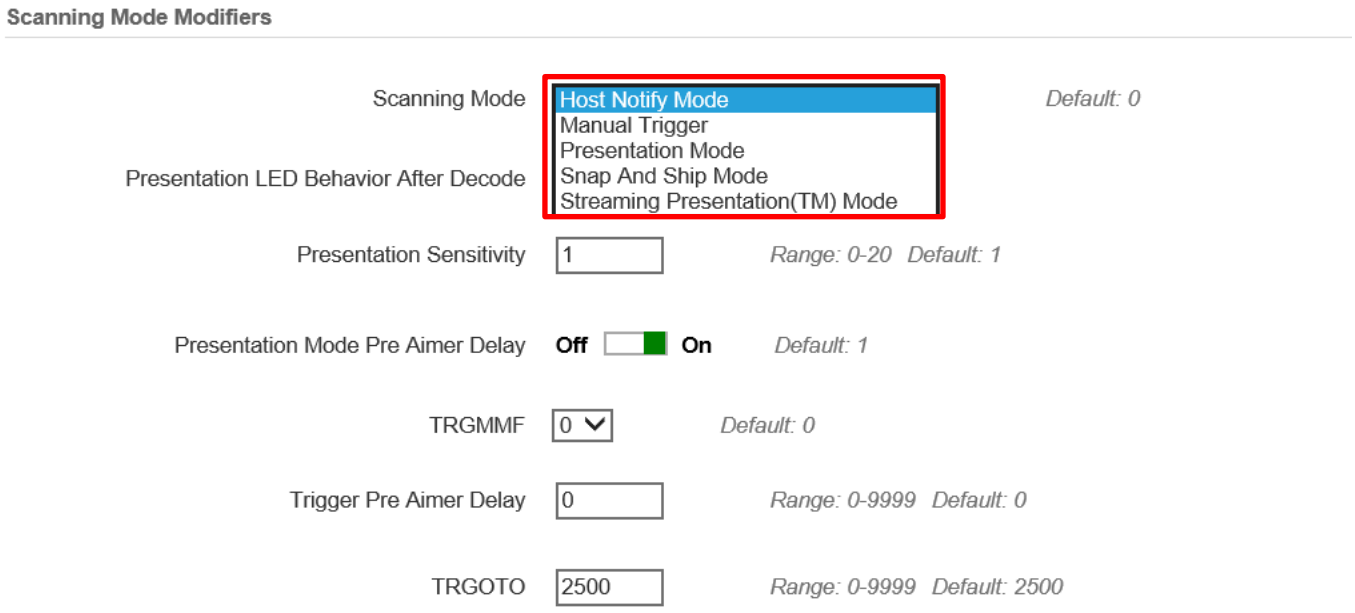


4.4.6.2 Scanning mode Settings

1. Click on Device Settings under the Input/Output settings section.



2. Select the desire scanning mode from the drop-down menu shown as below.



3. After selecting a desire scanning mode, click on the "**Save to Device**" on the side bar.

Scanning mode	Description
Manual Trigger	When in manual trigger mode, the scanner scans until a bar code is read, or until the trigger is released. Two modes are available, **Normal** and **Enhanced**. Normal mode offers good scan speed and the longest working ranges (depth of field). Enhanced mode will give you the highest possible scan speed but slightly less range than Normal mode. Enhanced mode is best used when you require a very fast speed and don't require a long working range. Default = Manual Triger-Normal.
Presentation Mode	Presentation Mode uses ambient light and scan engine illumination to detect bar codes. When in Presentation Mode, the LEDs remain dim until a bar code is presented to the scan engine, then the aimer turns on and the LEDs turn up to read the code. If the light level in the room is not high enough, Presentation Mode may not work properly.
Streaming Presentation Mode	When in Streaming Presentation mode, the scan engine's aimer goes out after a short time, but the scan illumination remains on all the time to continuously search for bar codes. Two modes are available, **Normal** and **Enhanced**. Normal mode offers good scan speed and the longest working ranges (depth of field). Enhanced mode will give you the highest possible scan speed but slightly less range than Normal mode. Enhanced mode is best used when you require a very fast scan speed and don't require a long working range.
Host Notify Mode	Host Notify Mode bypasses the decoder and notifies the host that there has been a hardware trigger pull. When in Host Notify Mode, it is up to the host to initiate an Image Snap and/or an Image Ship command. It is also up to the host to switch to another trigger mode.
Snap and Ship Mode	Snap and Ship mode, allows you to bypass the decoder and ship an image directly to the host. In this mode, an image is taken and shipped upon each trigger pull, instead of being sent to the decoder. Snap and Ship is useful when you are using your own decoder.

4.9.2 Setting the 1D/2D Barcode Scanner Symbologies

The barcode scanner is shipped with default settings shown below. If the default setting suits the usage requirement, setting symbologies is not necessary.

Symbologies Default Settings:

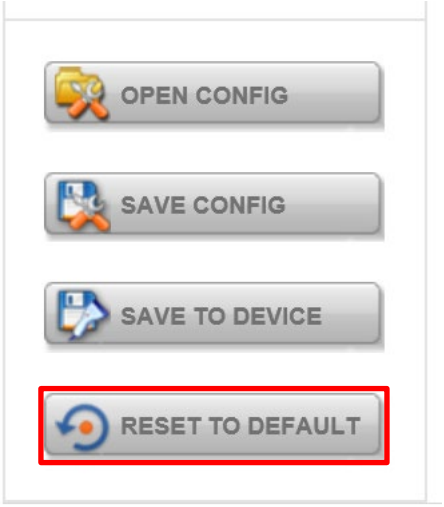
	Symbologies	Default setting
Linear	UPC-A	Enable
	UPC-E	Enable
	EAN/JAN-8	Enable
	EAN/JAN-13	Enable
	UPC-E1	Disable
	UPC-A/EAN-13 Extended Coupon Code	Disable
	GS1 DataBar Omni-Directinal	Enable
	GS1 DataBar Limited	Enable
	GS1 DataBar Expanded	Enable
	Code 39	Enable
	Code 128	Enable
	ISBT 128	Disable
	GS1-128	Enable
	Interleaved 2 of 5	Enable
	Matrix 2 of 5	Disable
	NEC 2/5	Enable
	IATA 2/5	Disable
	Code 2/5	Disable
	Codabar	Enable
	Code 93	Enable
	Code 11	Disable
	MSI	Disable
	Telepen	Disable
	Trioptic Code	Disable
	Postal Code	Disable
	Planet Code	Disable
	Korea Psot	Disable
	China Post	Disable
	Australian Post	Disable
2D	Data Matrix	Enable
	PDF 417	Enable
	Micro PDF 417	Enable
	Codablock A	Disable
	Codablock F	Disable
	Maxicode	Disable
	QR Code	Enable
	Aztec	Enable
	Composite Code	Disable
	Han Xin	Disable

Changing default setting of symbologies or the advanced setting
There are two methods to change the default setting of symbologies or other advanced setting:

Method (1). Click on the Symbologies

on the top, then you can change the symbology to the default setting or make advanced setting by its category. After setting, click on the "**Save to Device**" on the side bar.

Method (2). Click on the reset to default button on the side as shown blow:



Important

1. The reset to default button will change all setting to default.
2. N660X could disconnect with system after clicking the reset to default button.

If the Disconnection happened please scan barcodes below in the following steps.

Step 1. Frist please scan the USB HID barcode:

USB HID

Scan the following code to program the scan engine for USB HID.

TERMID131.

USB HID

Step 2. Then please scan the USB Keyboard barcode:

USB PC or Macintosh Keyboard

Scan one of the following codes to program the scan engine for USB PC Keyboard or USB Macintosh Keyboard. Scanning these codes also adds a CR suffix.

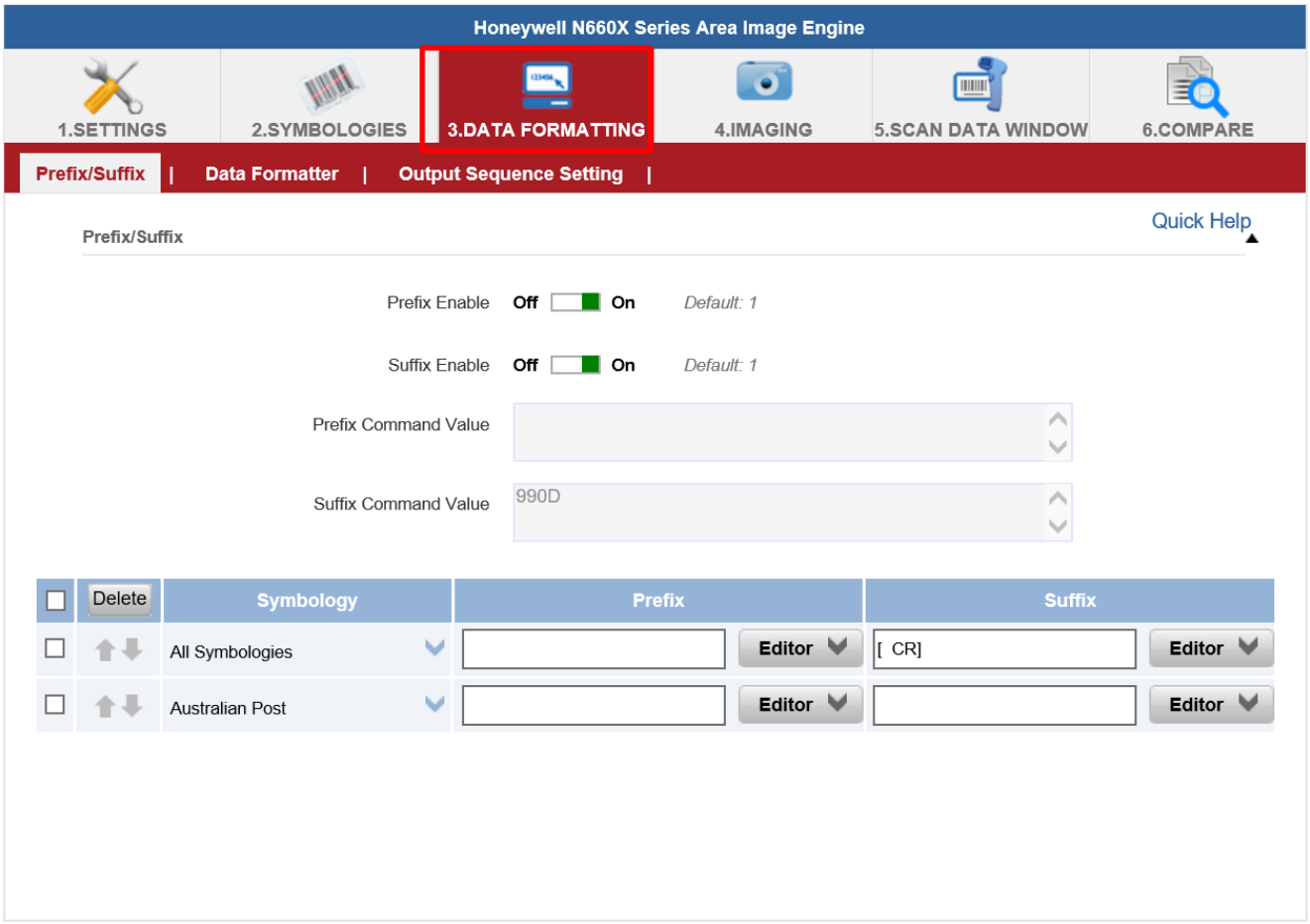
PAP124.

USB Keyboard (PC)

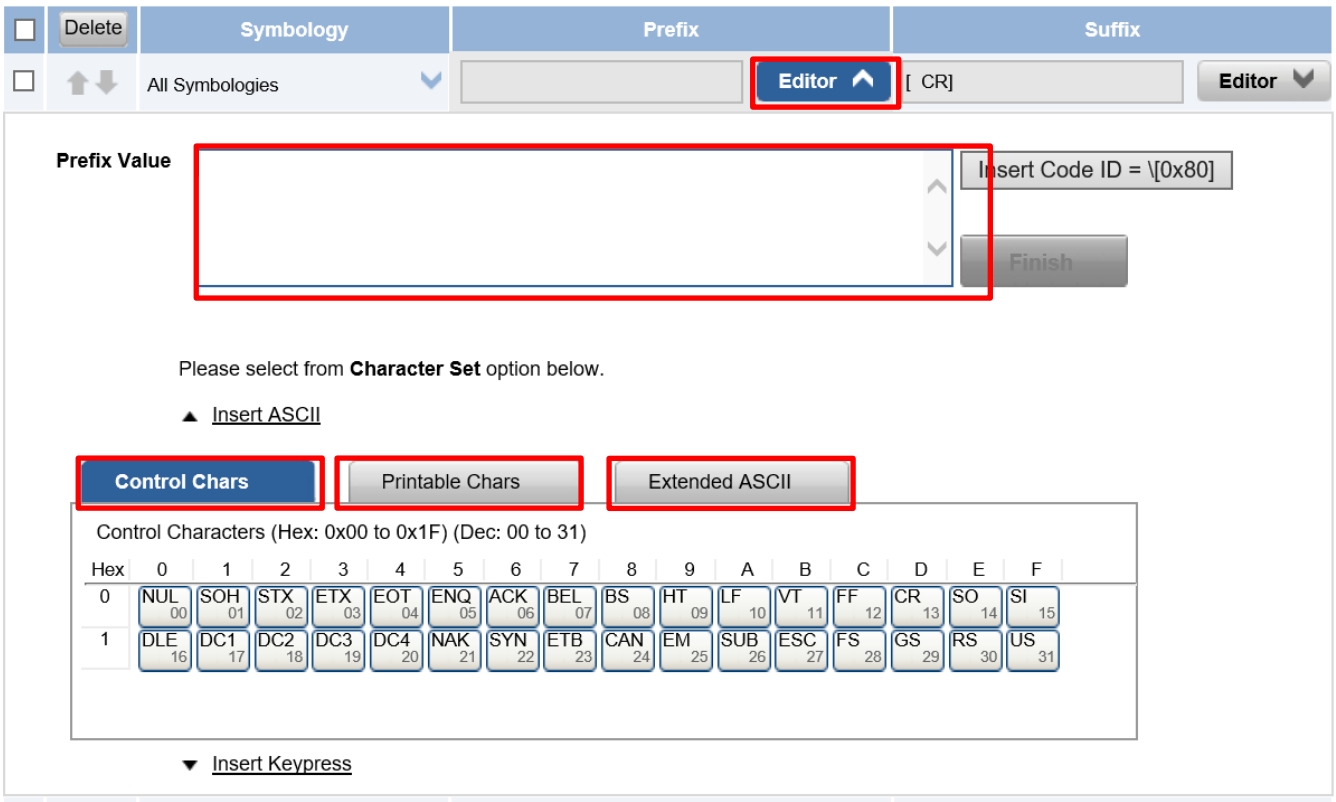
Step 3. Please run **EZConfig-Scanning** again by following ***Device Configuring and Setting***

4.9.3 Adding a Prefix or Suffix

1. To add a Prefix or Suffix please click on **Data Formatting** icon.

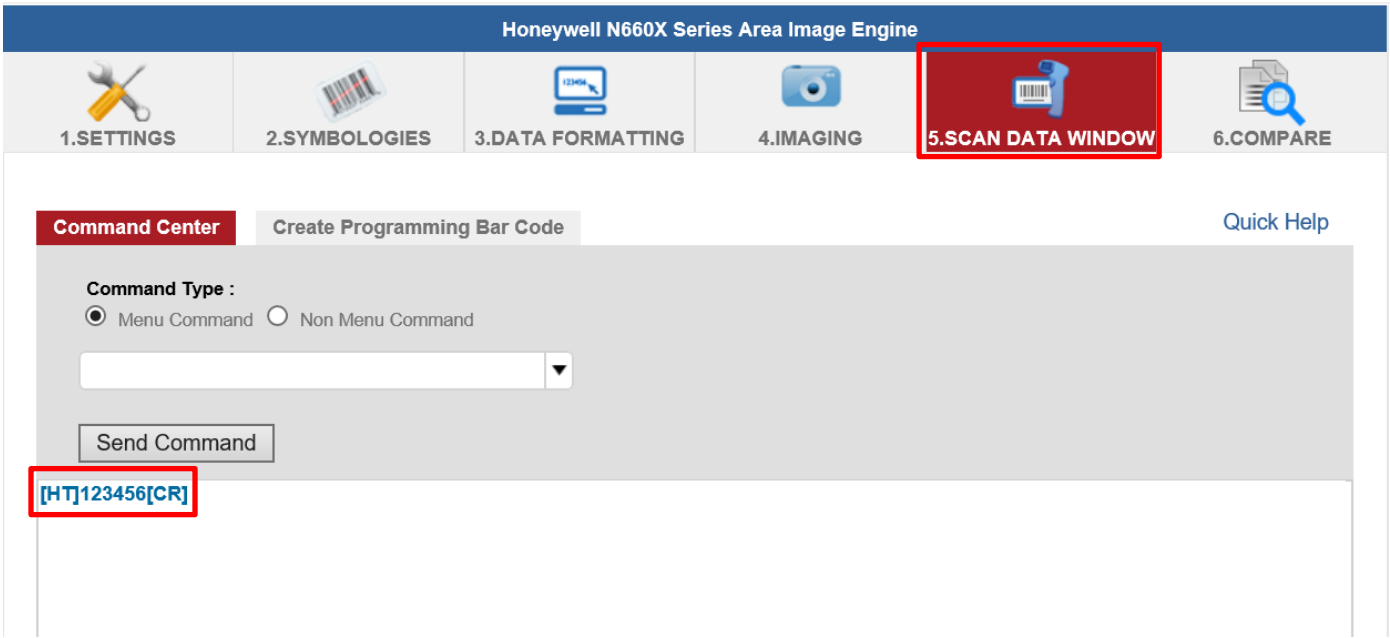


2. Click on **Editor** button under the Prefix or Suffix section and create Prefix/Suffix value by typing in the block or select desire characters in the Control chars, Printable chars, and Extended ASCII. as shown below:



3. When you finish creating Prefix/Suffix, please click on **Save to Device** on the side bar.

4. For checking the functionality of Prefix/Suffix, please chick on **Scan Data Window** icon on the top. Then scan a barcode to verify if the Prefix/Suffix appear correctly.



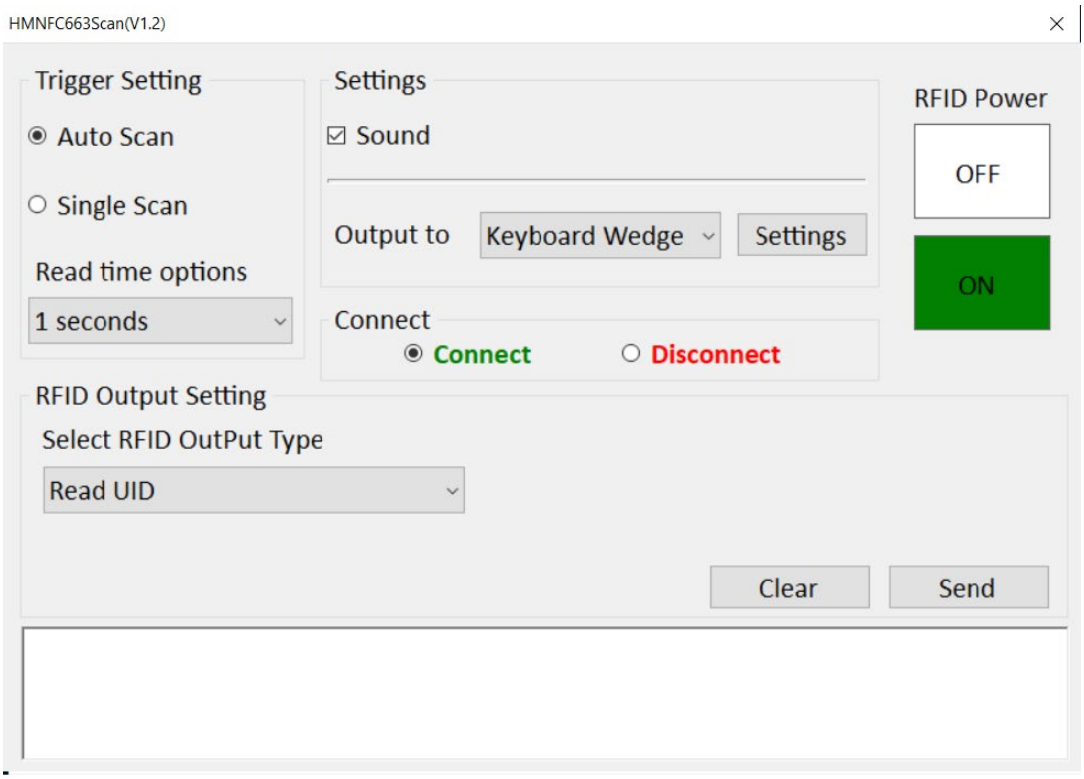
4.10 Using HF RFID Reader

The HF RFID Reader is an optional feature of M900EK/EKT Series tablet and is not re-workable by the end user. To use this feature, please make sure the tablet PC is built-in HF RFID reader before use, or contact our sales contact window for more details.

To enable the HF RFID Reader feature:

1. Open the Hottab utility by press the (Menu) Button located on the front panel, or launch the Hottab Utility application.
2. Tap on the **Device ON/OFF** button.

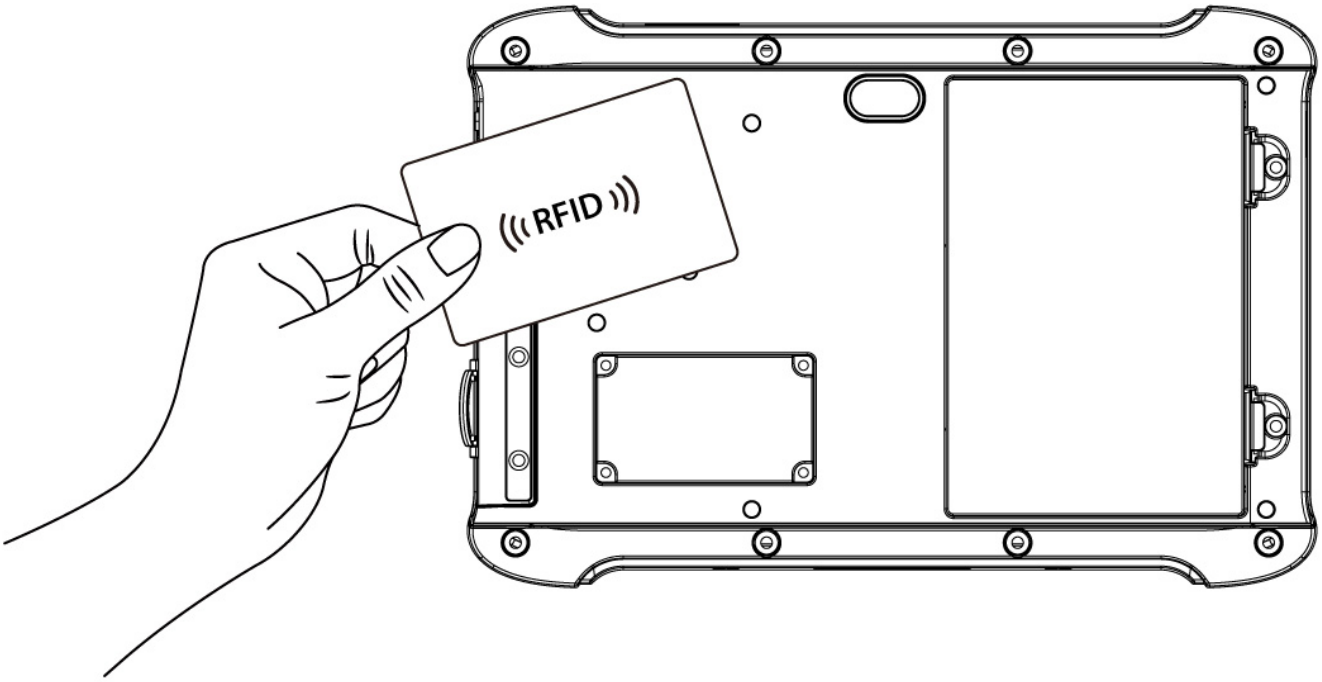
3. Tap on **RFID**, and the setting utility will show up as below:



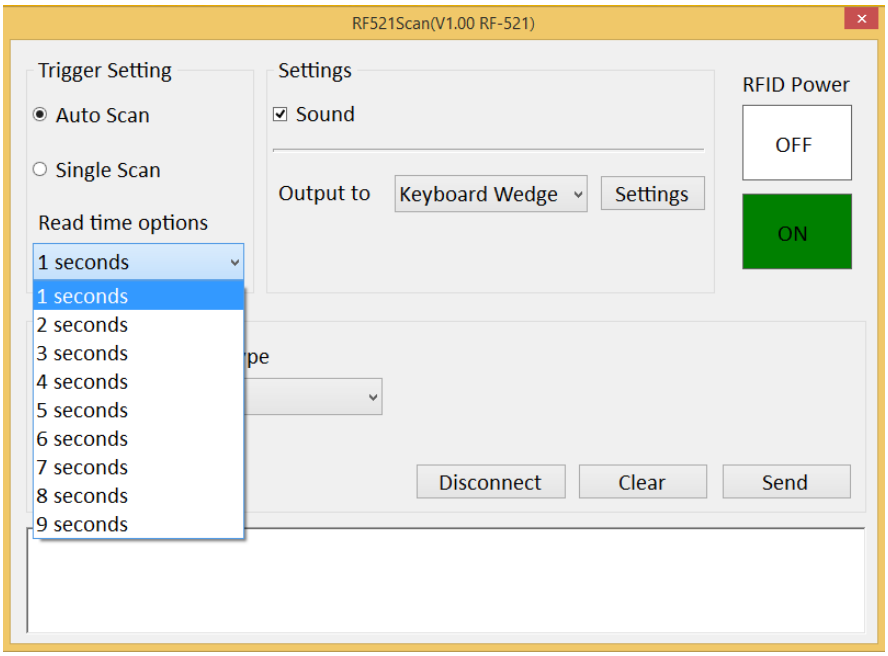
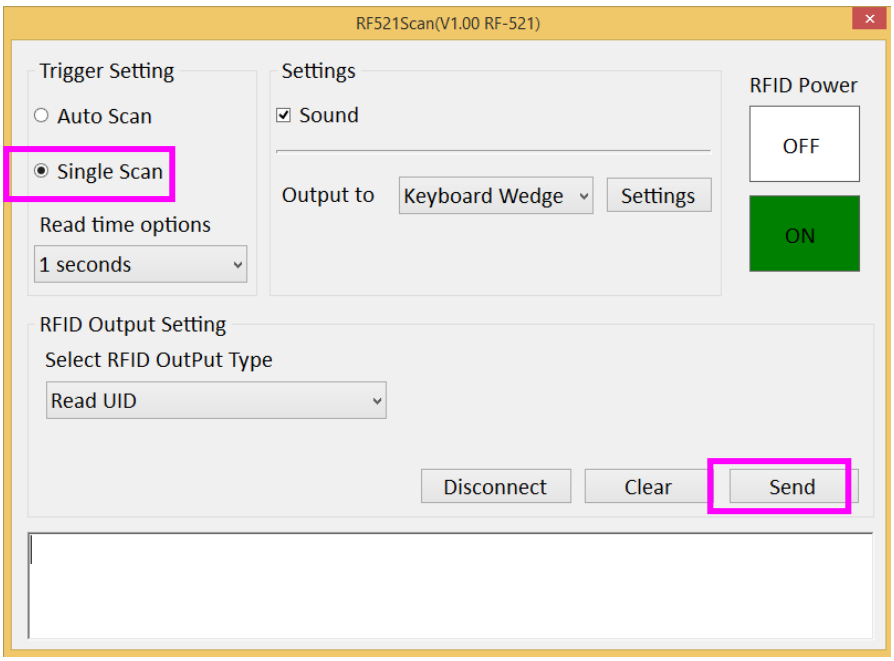
4. Tap on the **ON** button.
5. Check the status color of the ON icon is green, and the status color of the RFID icon on the Hottab menu is orange at the same time.

Item	Status Color	Description
RFID	Orange	HF RFID Reader is enabled.
	White	HF RFID Reader is disabled.

6. To scan an RFID card hold a card next to RFID reader located on the bottom of the tablet.

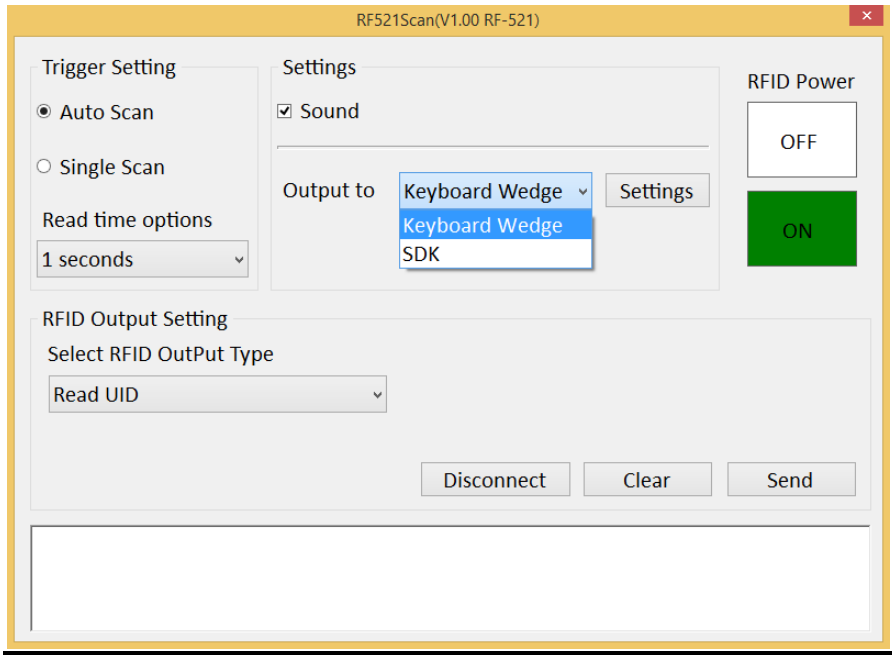


4.10.1 RFID Trigger Setting

Item	Description
Auto Scan	The default setting for RFID trigger is Auto Scan. Under this setting, the RFID Reader will always be ready to scan tags. 1. When the RFID tag is detected from RFID antenna, the data will be read automatically. 2. User can define the RFID scanning frequency from the drop-down menu shown as below. The frequency can be from 1 second to 9 seconds. 
Single Scan	User can also define the RFID Reader scanning as **Single Scan**. Under this setting, the RFID Reader will be triggered only when user click on “Send”. 

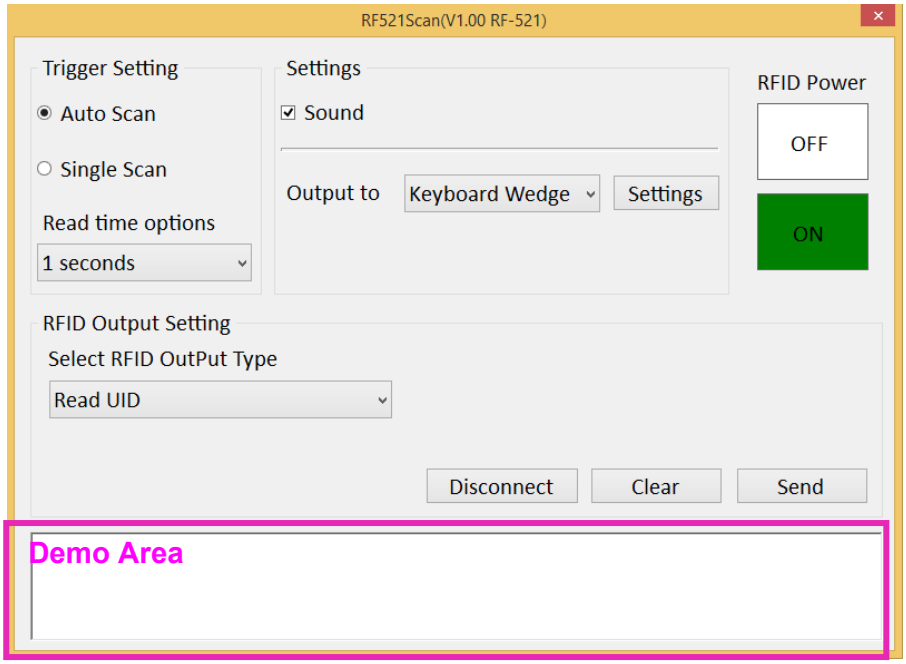
4.10.2 Settings

Item	Description
Sound	The **Sound** check box defines whether a beep sound will come with the data scanning.
Output to	This setting defines the output type of the scanned data. Two options are available:

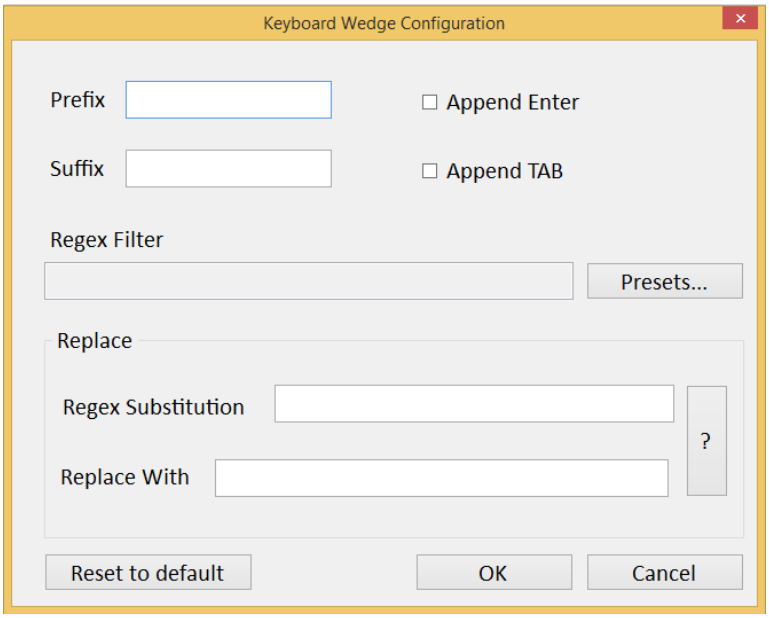


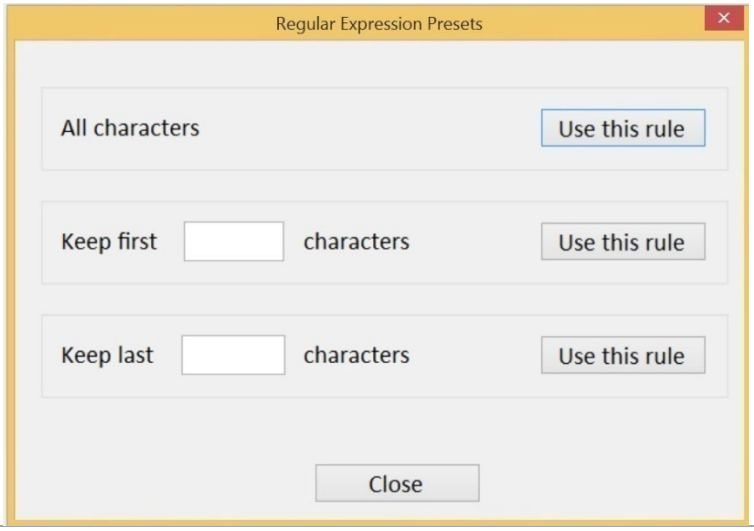
Keyboard Wedge

Under this setting, the data scanned is sent like keyboard data. The scanned data can be output directly to the demo area below this window, or user can also open other utility, such as Office Word or Notepad files, for data input.



Note: notice that the input method should support the scanned character.
User can also tap on the **Settings** button for further details settings.

Item	Description
Output to	

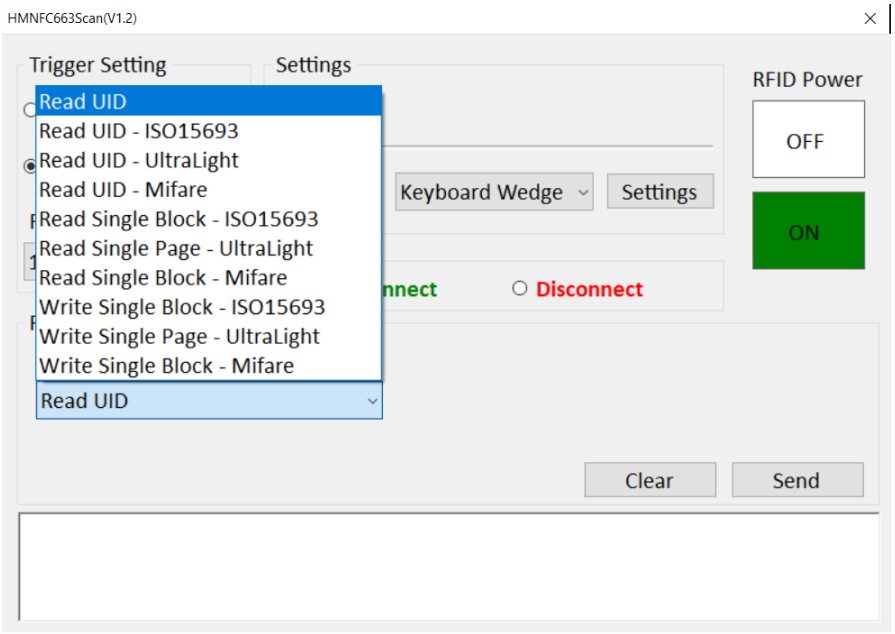
Item	Description
Prefix	User can type in this field to define the characters BEFORE the data scanned.
Suffix	User can type in this field to define the characters AFTER the data scanned.
Append Enter	The check box user can defines to append an “Enter” which is followed by the characters.
Append TAB	The check box user can defines to append an “TAB” which is followed by the characters.
Regex Filter	Press on “Presets…” button, user can define how many characters to show after the data scanned. 
Replace	User can define specific characters to be replaced with preferred characters automatically. When the characters defined in **Regex Substitution** is scanned, the data will be replaced with the one filled in **Replace with.**
Reset to default	User can remove all the set up and back to default mode.

SDK

For users following SDK for software porting, the scanned data can also be output with te format needed.

Note:
User can download the SDK from Winmate Download center website (QR code on the cover page) >> M900EK/EKT >> Development Kit.

4.10.3 RFID Output Setting

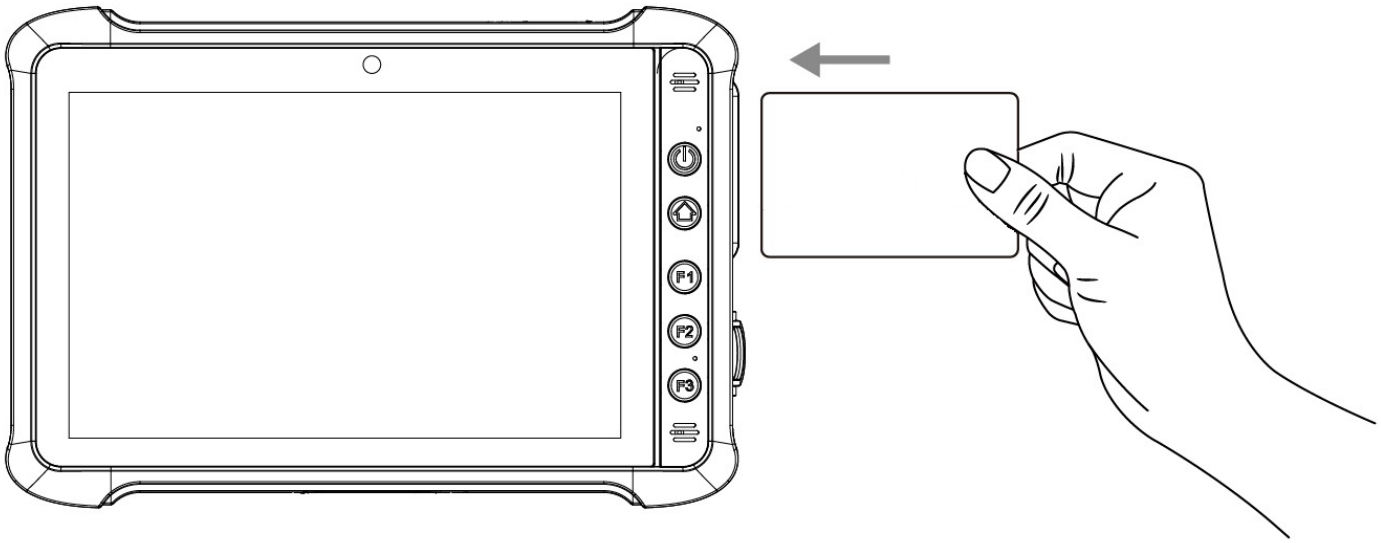
Item	Description
Select RFID Output Type	The default setting for built-in HF RFID Reader is to **Read UID**. For some applications, user might need to read or write further block data; the drop-down menu under this section can do this change. 
Disconnect	User can tap on the **Disconnect** button to stop the connection with built-in HF RFID reader. To recover the connection, please turn off the module from setting UI and then turn on the module again.

4.11 Using Smart Card Reader

The Smart Card Reader is a default feature of M900 EKT Series tablet and is designed to allow ICC (Chip) card transactions from your tablet computer. Support ISO 7816 Part 1, 2, 3, T=1 and T=0 protocol IC card, EMV Level 1 Compliant.

To use this feature, please make sure your tablet has built-in smart card reader before use, or contact our sales department for more details.

To read ICC card insert the card into the smart card reader located on the right side.



Chapter 5: Frequently Used Settings

This chapter frequently used settings such as changing resolution and scaling, using recovery wizard, docking connector and D-Sub port description, also contain basic troubleshooting guide.

5.1 Screen Resolution Scaling and Setting

The M900EK/EKT Series features a 1280 x 800 high resolution display that is perfect for viewing image, video, or other applications, however, Windows user interface (icons, buttons, and other user interface elements) may be too small to read and operate at the default Windows settings. By changing the display scaling or the display resolution setting of the device, you can adjust the size of the text and other items on the desktop for optimal viewing. Display scaling is the recommended method because it has the effect 1280 x 800. This section will explain how you can adjust the built-in windows display scaling setting and resolution setting.

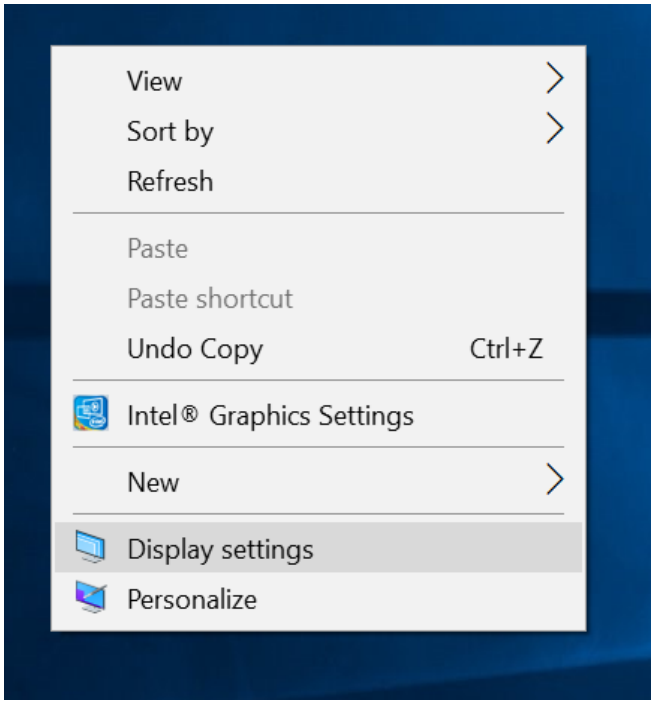
Note:

- The Tablet computer is shipped with display scaling set at **Larger - 125%**. We recommend the users set the scaling to this setting for optimal text and image viewing.
- Before proceeding to change the scaling option, make sure any opened document is saved and close, and all running applications are closed before proceeding to change the display scaling, because this procedure requires users to log out of their account to apply display scaling change.

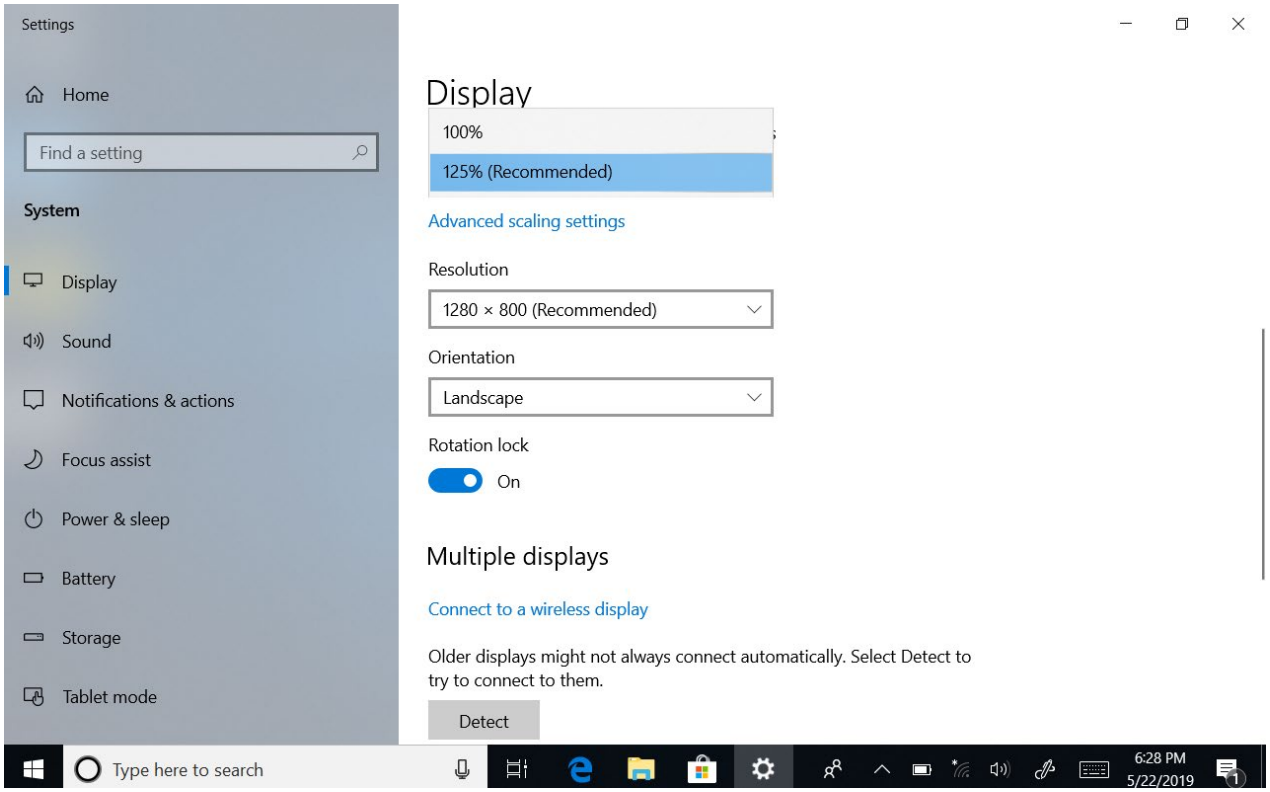
5.1.1 Changing Display Scaling (Recommended)

Perform the following to change display scaling setting:

1. Tap and hold anywhere on the desktop for 3 seconds and release to bring up the context menu, and select **Display settings** option as shown below:



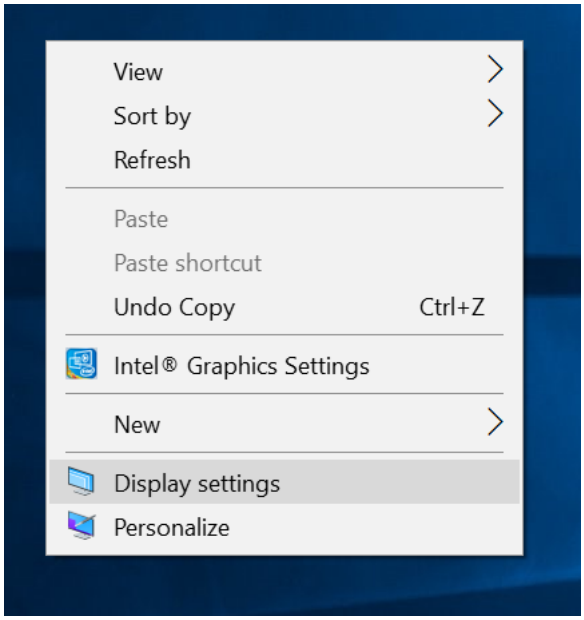
2. A “Display” Window will show up. Click on the dropdown option under the “**Scale and layout”** section and change the scaling option to “**125% (Recommended)**” or any other desired display scaling.



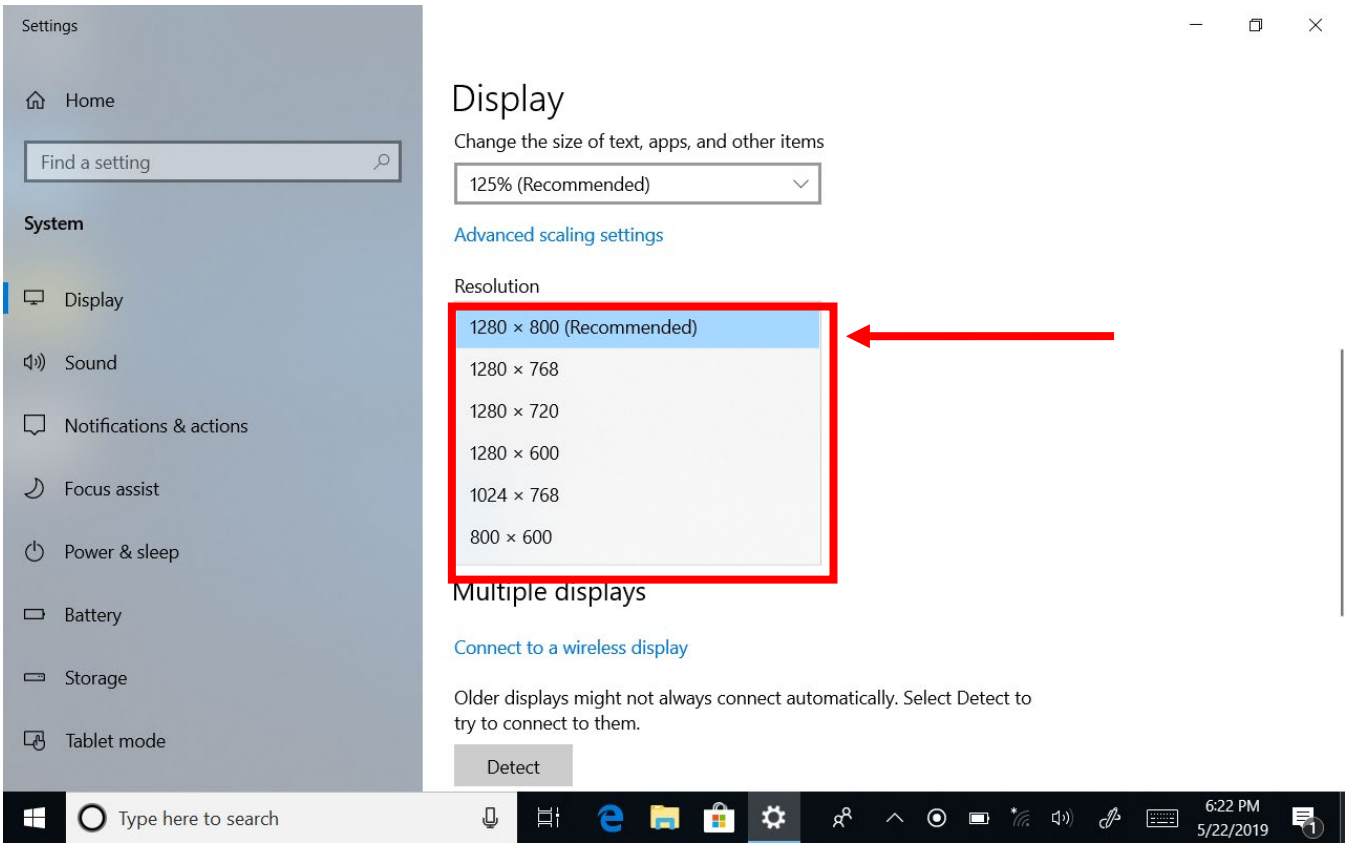
5.1.2 Changing Screen Resolution

Alternatively, instead of changing the display scaling setting, user may choose to change the overall resolution setting to make screen elements bigger.

1. Tap and hold anywhere on the desktop for 3 seconds and release to bring up the context menu, and select “**Display settings**” option as shown below:



2. Click on the dropdown option next to “**Resolution**” and select the desire resolution by tapping on the scale:



3. Hit “**Apply**”. A prompt “**Display Settings**” prompt will show up to ask the user if the applied resolution is usable.

4. If the new resolution is the desired display setting hit “**Keep changes**” and continue to next step. If the new resolution is not desirable, hit “**Revert**” and select a different resolution to change to, and start again from step 2.

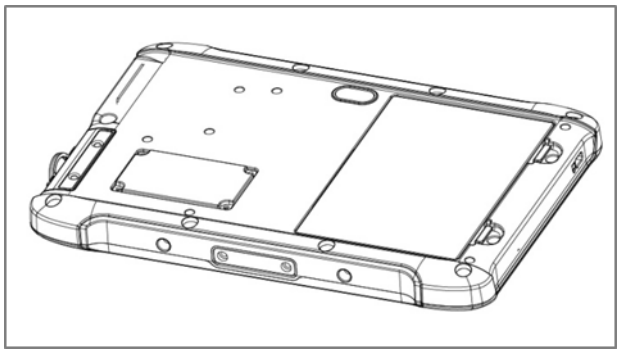
5. The user may now use the device with the new resolution setting.

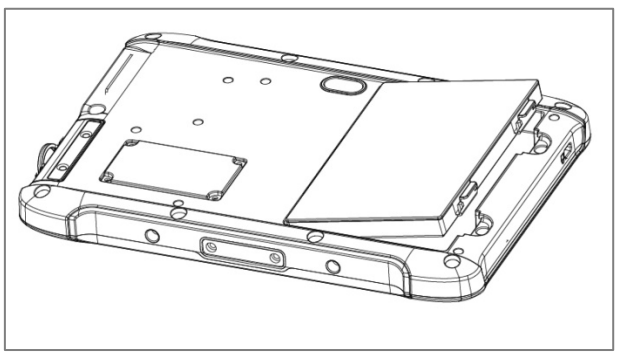
5.2 Replacing Battery

The M900EK/EKT Series Tablet Computer does not support hot-swap, meaning the tablet need to be powered off to replace the main battery.

Perform the following to replace the batteries:

1. Turn off the tablet.





5.3 Using Recovery Wizard to Restore Computer

The M900EK/EKT Series Tablet Computer has a dedicate recovery partition stored on the hard drive of the tablet to enable quick one-key recovery process. This partition occupies about 11GB of the storage space, and comes built-in to each M900EK/EKT Series Tablet Computer.

Warning! Before starting the recovery process, be sure to backup all user data, as all data will be lost after the recovery process.

Avertissement! Avant de démarrer le processus de récupération, assurez-vous de sauvegarder toutes les données utilisateur, car toutes les données seront perdues après le processus de récupération.

To enable quick one-key recovery procedure:

1. Plug-in the AC adapter to the tablet computer. Make sure the tablet computer stays plugged in to power source during the recovery process.

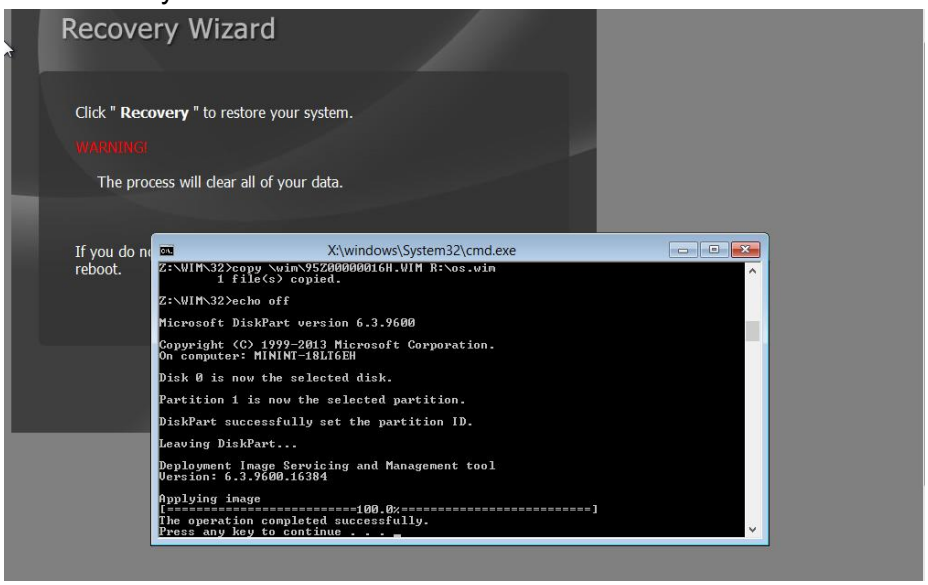
2. Power on the tablet computer, and when the boot screen shows up, press the **Fn1** button (Recovery Key) on the front bezel OR press **F6** when using an external USB keyboard to initiate the Recovery Wizard.

3. The following screen shows the Recovery Wizard. Click on “Recovery” button to continue.

4. A warning message about data loss will show up. Make sure data is backed up before recovery, and click on “Yes” to continue.

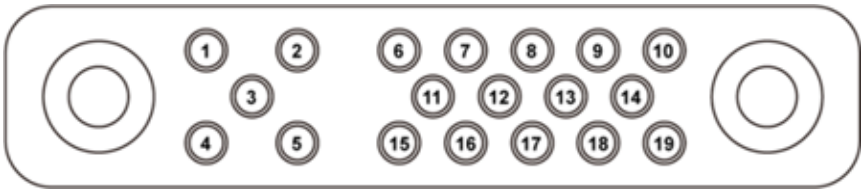
5. Wait till the recovery process to complete. During the recovery process, a command prompt will show up to indicate the percent of recovery process.

6. After recovery is completed, please press any key to continue, and the tablet computer will Shut down automatically.



5.4 Docking Connector Pin Definition

The M900EK/EKT Series Tablet Computer supports one 19-pin docking connector at the bottom side. The pin definition is listed as the following table.

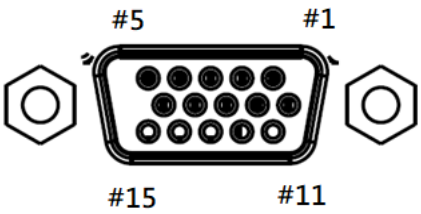


19 Pin Docking Connector			
Pin No.	**Description**	**Pin No.**	**Description**
1	RF_GND	**11**	NC
2	DOCK_DET#	**12**	NC
3	GPS ANT	**13**	GND
4	RF_GND	**14**	Power
5	RF_GND	**15**	USB+
6	NC	**16**	USB-
7	NC	**17**	GND
8	DETECT+	**18**	GND
9	Power	**19**	DETECT-
10	Power		

Caution Do not open when the expansion port is not used.

Attention Ne pas ouvrir lorsque le port d'extension n'est pas utilize.

5.5 D-sub Pin Definition



15 Pin D-sub Connector			
Pin No.	**Description**	**Pin No.**	**Description**
1	VD_USB_D-	**11**	VD_+5V
2	GND	**12**	VD_RXD
3	MDIO3-	**13**	GND
4	MDIO0-	**14**	MDIO2-
5	MDIO0+	**15**	MDIO2+
6	VD_USB_D+		
7	VD_TXD		
8	MDIO3+		
9	MDIO1-		
10	MDIO1+		

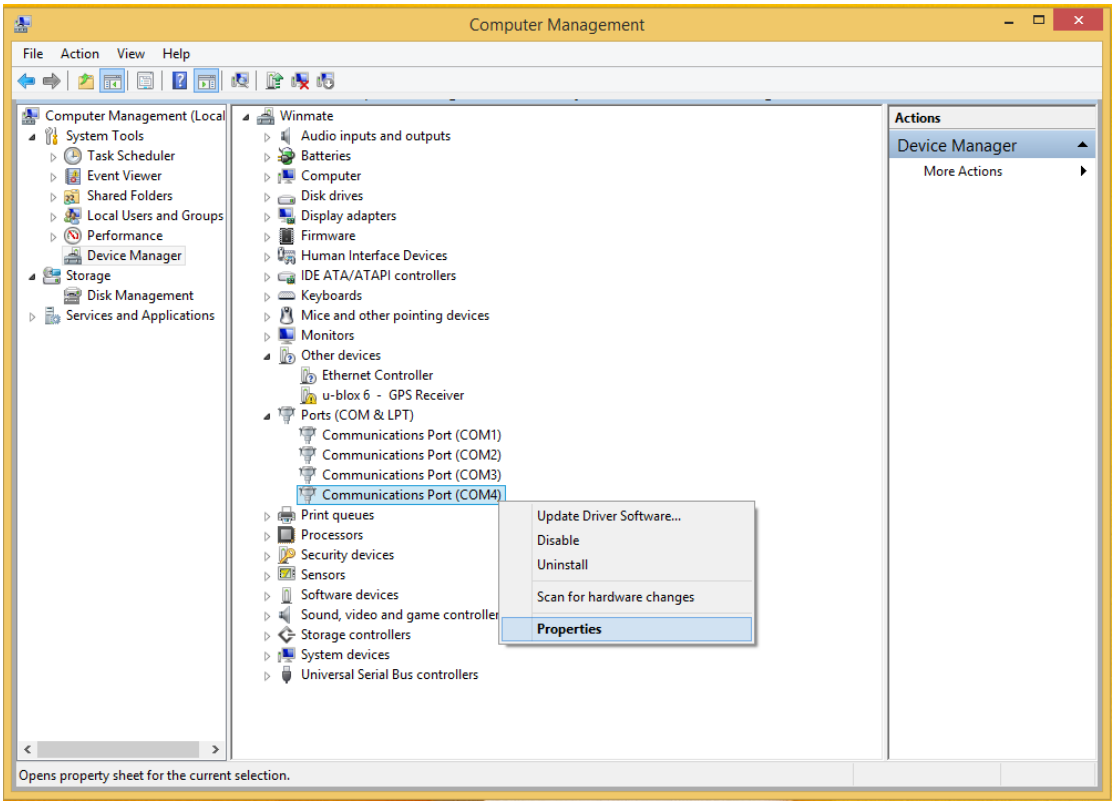
5.6 COM Port Definition

The M900EK/EKT Series Tablet Computer uses Hottab utility for built-in peripherals control. All the COM port numbers have been defined in the OS image coming with the package.

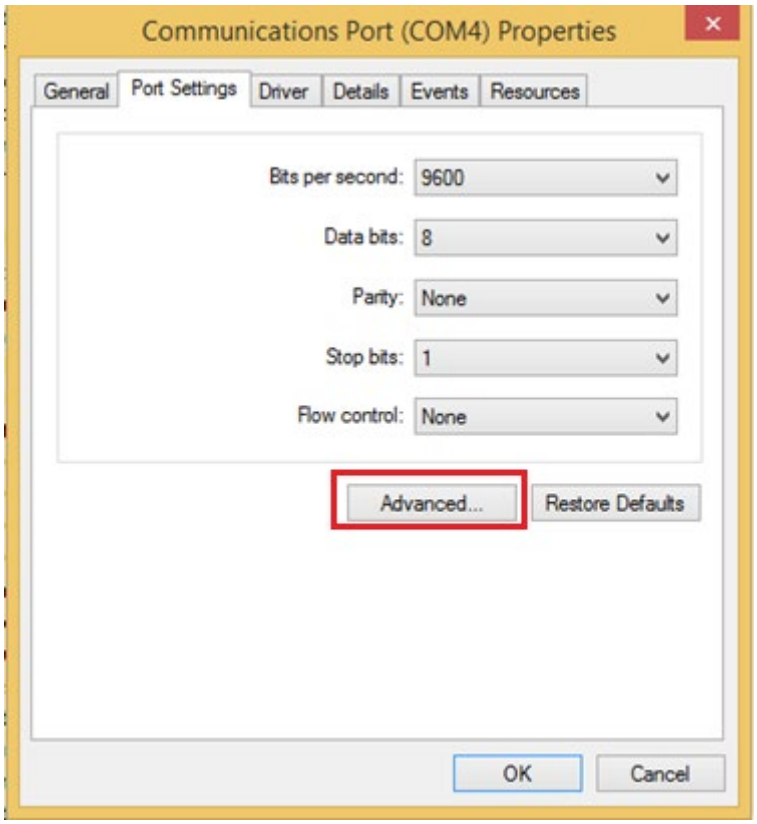
COM Port	Device
COM 1	RS232 at D-Sub15
COM 3	HF RFID (RFID Reserve)
COM 4	Bluetooth Auto Pairing
COM 9	GPS
COM 11	RS232 at Docking (optional)

For some special applications, user might re-install OS and lose the COM port settings. To make sure the features works properly with Hottab utility, please follow the procedure below to re-define the COM port numbers:

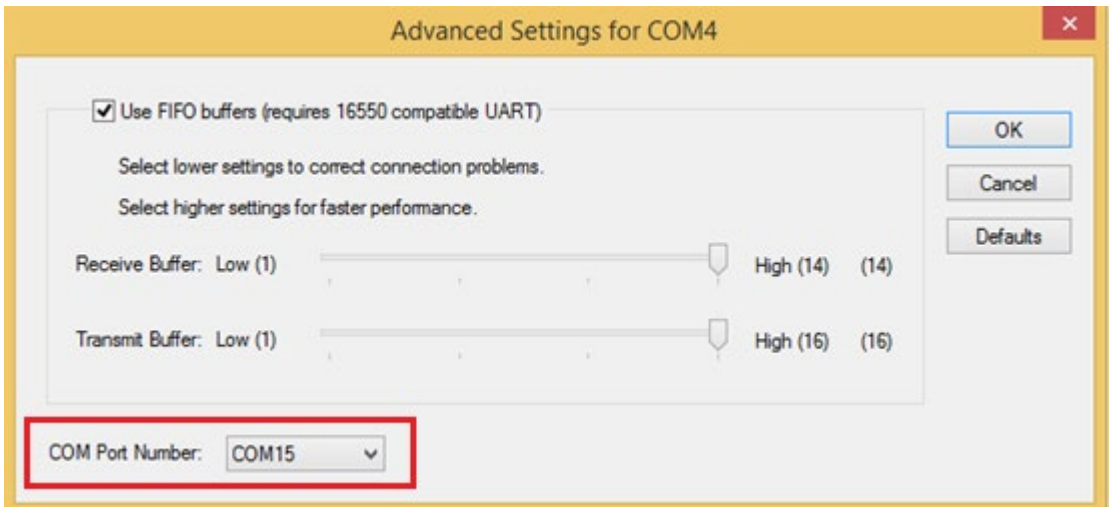
1. Open **"Device Manager"**, right click on the COM number need to be changed, and tap on "**Properties**" to open the setting page.



2. Tap on "**Port Setting**" tab and click on "**Advanced**" button.



3. Tap on the dropdown list and choose the correct COM Port Number (refer to the COM Port Definition Table), and click "**OK**".



4. Double check "Device Manager" to make sure the COM Port number has been re-defined successfully, and then restart the system.

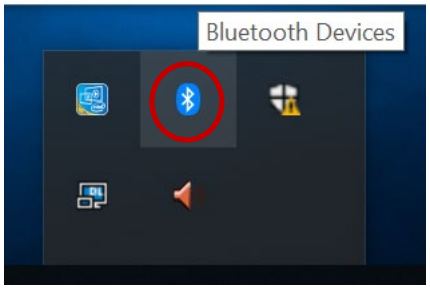
5.7 Pairing with a Wireless Bluetooth Barcode Scanner

The computer is affixed with a Bluetooth MAC (Media Access Control) address barcode label that enables wireless Bluetooth Barcode Scanner to quickly establish Bluetooth connection with the computer. It is encoded with leading characters to instruct the wireless Bluetooth barcode scanner to initial Bluetooth Serial Port Profile pairing request.

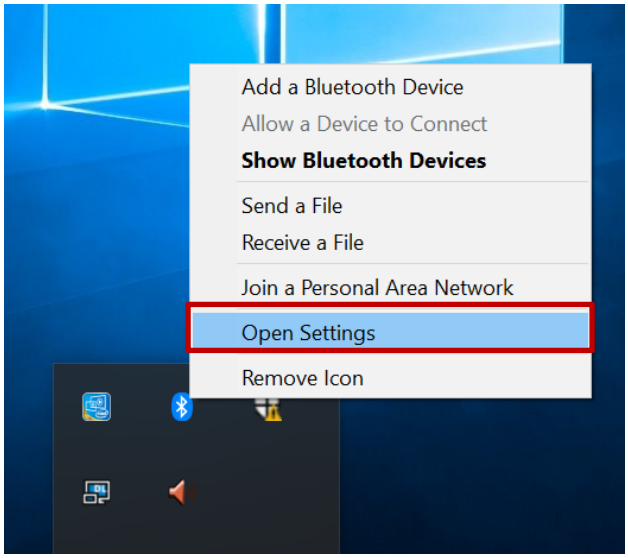
5.7.1 Setup Computer for Bluetooth Pairing

To start the pairing process, first perform the following steps to ensure the computer is properly setup for pairing:

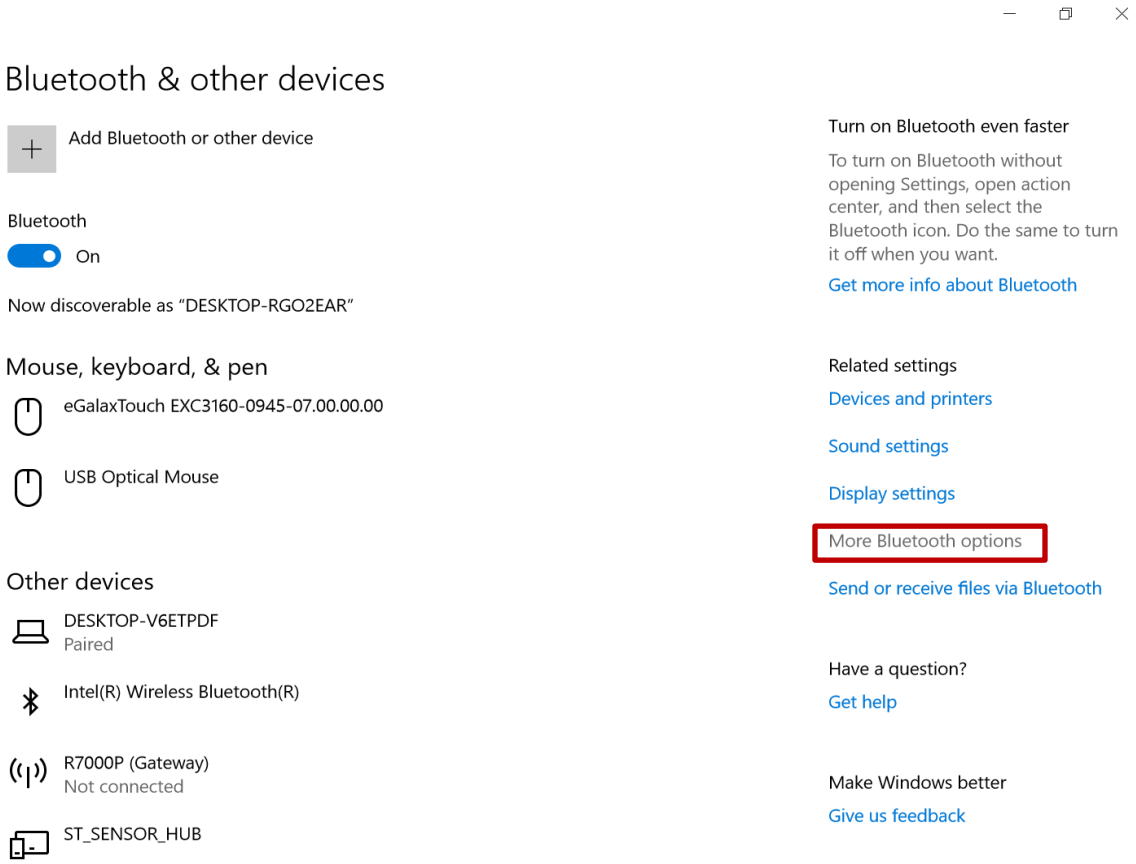
1. Locate the **Bluetooth** icon in the Notification Area



2. Bring up the Contextual Menu by performing long press on the icon with touchscreen or right-click on the icon with a mouse, and select **Open Settings**.

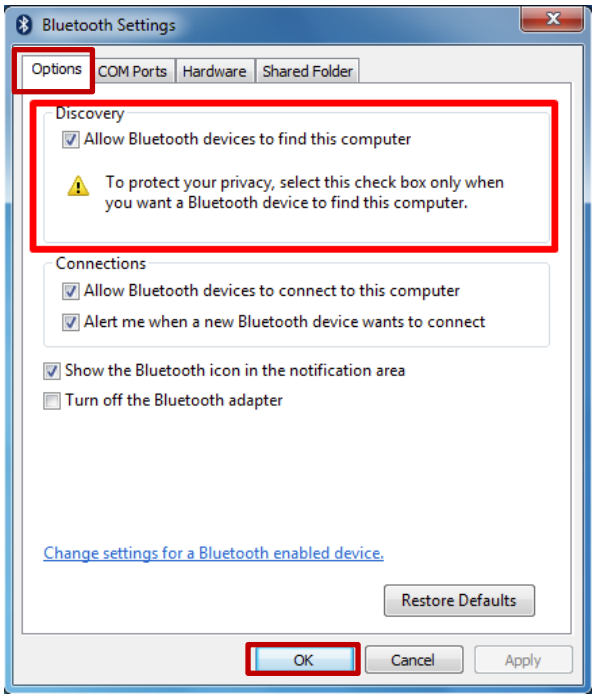


3. Once the **Bluetooth & other devices** Menu appears, click "**More Bluetooth options**" under Related settings section as shown below.



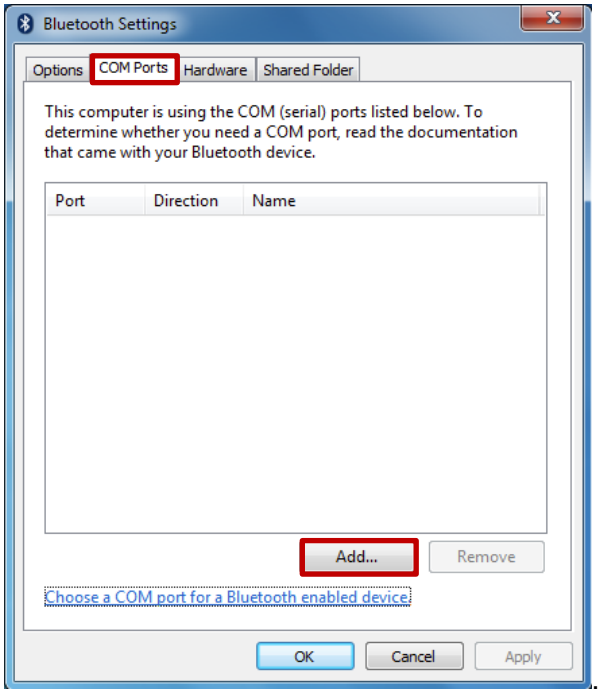
Click **OK** to continue.

4. go to **"Options"** tab, and make sure that in the Discovery section, the computer is set to **"Allow Bluetooth devices to find this computer"**, as shown below:

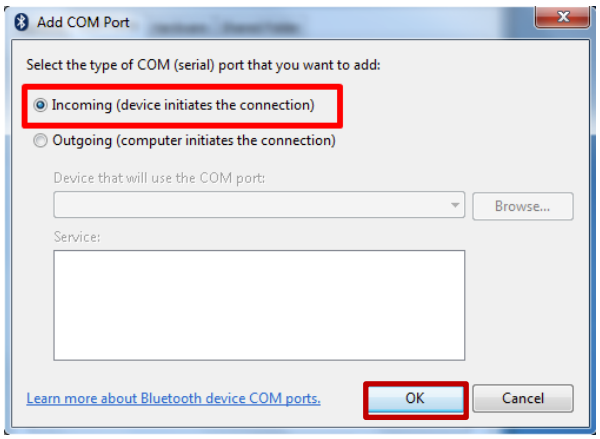


5. Click **OK** to continue.

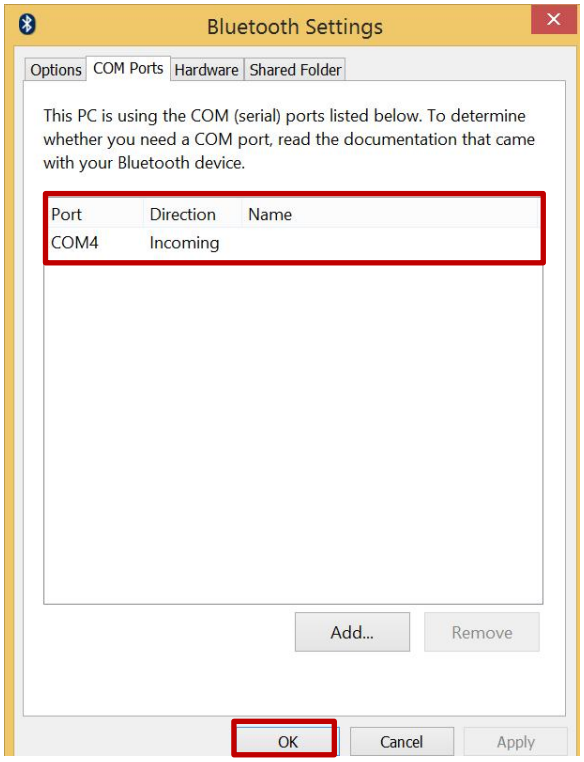
6. In the **Bluetooth Settings** menu, go to **"COM Ports"** tab. COM port has to be setup for the wireless Bluetooth Barcode Scanner to communicate via the Bluetooth Serial Port Profile. Click on the **"Add…"** button.



7. You are in **"Add COM Port"** window. Choose **"Incoming (device initiates the connection)"**, and click **"OK".**



8. The computer will automatically assign COM Port to the Bluetooth connection. In the screenshot below, **COM4** is allocated.



Click **OK** to continue.

9. Next, the user has to configure the application that is used to accept the scanned data from the wireless Bluetooth Barcode Scanner. The application has to be configured to accept the same COM Port that has been assigned for the Bluetooth Serial Port Profile in the previous step.

Important Make sure the application stays open while pairing.

10. Now the computer is ready for pairing process to start.

5.7.2 Set up the Barcode Scanner for Bluetooth Pairing

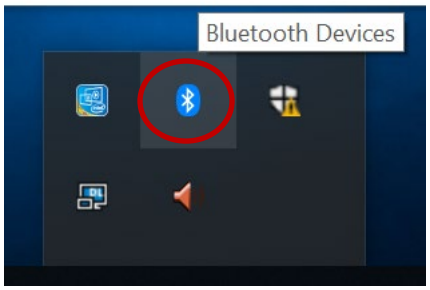
Important The wireless Bluetooth Barcode Scanner has to be configured as Bluetooth Serial Port Profile Master device to establish connection via Bluetooth MAC address barcode label. For a more detailed instruction, please refer to the User Guide for the wireless Bluetooth Barcode Scanner you are using for paring.

Now the Barcode Scanner is ready for pairing process to start.

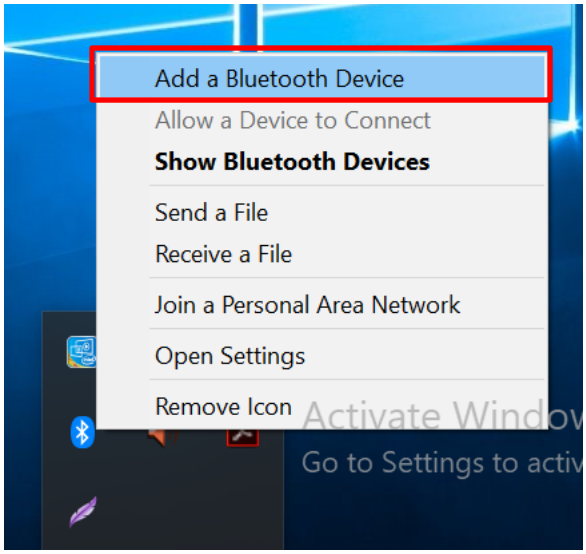
5.7.3 Perform Bluetooth Pairing

After you finish setting up both the Computer and Barcode Scanner you are ready to start pairing.

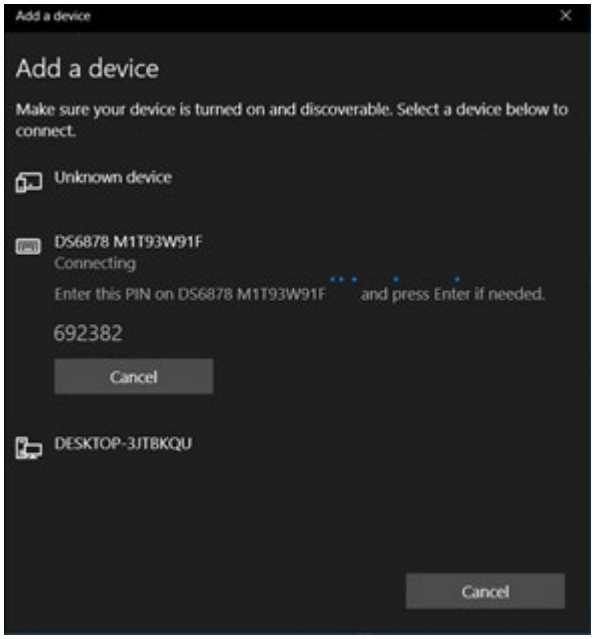
1. Open a program that is used for paring.
2. Perform scanning procedures. A Bluetooth notification window pop-up on the right hand side of the desktop. **Left click** on the mouse to enter Add a device menu.
3. Locate the **Bluetooth** icon in the Notification Area.



4. Click **Add Bluetooth Device**.

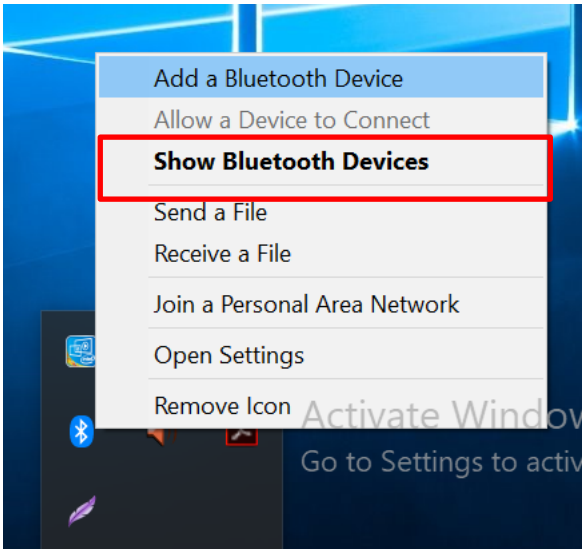


5. In **Add a Bluetooth Device** window, click **Next** to connect the Barcode Scanner to the Computer.



In order to ensure that Bluetooth Device is successfully pared to the Computer, follow the steps below:

1. Locate the **Bluetooth** icon in the Notification Area. Select **Show Bluetooth Devices**.



   You can access this menu in the Control Panel:

   Windows ➔Control Panel ➔ Devices and Printers➔ Bluetooth Devices

2. Make sure your device is connected to the computer.

5.8 Basic Troubleshooting

Problem	Solution
The removable battery is not charging.	• Make sure the AC adapter is properly connected, and that the removable battery is properly inserted.
Nothing appears on the screen.	• The tablet computer may be in sleep mode. Press the power button to wake up the display. • The brightness level may be too low. Increase brightness.
The screen suddenly turns blank and the power indicator goes off.	• Make sure that LED indicator is not powered off in Hottab. • Make sure the AC adapter is properly connected. • If running on battery power, the battery may be depleted, charge the battery.
Wireless LAN signal quality is poor.	• The tablet computer may be out of range. Move the tablet computer closer to the access point or another wireless LAN device associated with it. • Check if your surroundings have interferences, such as microwave ovens, cordless phones. Move the tablet computer away from objects causing interference.
I cannot connect to another wireless LAN device.	• Make sure that wireless LAN feature is powered on. • Make sure that the SSID setting is the same for every wireless LAN device in the network. • Restart the tablet computer • Make sure the IP address or subnet mask setting is correct.
I cannot connect to another device with Bluetooth.	• Make sure that both devices have Bluetooth powered on (For the Tablet Computer, check Hottab to see if Bluetooth is powered on). • Make sure that the distance between the two devices is within 10 meters and there are no walls or large obstructions between the devices. • Make sure the both devices are powered on and configured to be discoverable. • Make sure that both devices are compatible.
The GPS application cannot find my location.	• Make sure that GPS is powered on in Hottab. • Make sure that GPS receiver and the location sensor are enabled in Control Panel. • The tablet computer may be out of coverage area. Move your tablet computer outdoors or closer to a window. • Check if your surroundings have interferences, such as microwave ovens, cordless phones. Move the tablet computer away from objects causing interference.
No sound is produced.	• Adjust volume of the tablet computer by pressing on the volume rocker. • If using an external audio device, make sure that the cable is properly connected.
I cannot project the tablet computer display to another monitor.	• Make sure the VGA driver is installed. • Make sure the output setting selected is correct.

Problem	Solution
Barcode scanner does not emit laser beam and does not seem to work.	• Make sure the Barcode scanner device is enabled in Hottab utility. • Make sure under Windows, the Barcode Reader is set to COM 15 port, so that Hottab can trigger the Barcode Reader hardware.
Barcode scanner emits laser beam but does not read barcode presented to it.	• Adjust the distance between barcode scanner of the device and the barcode being scanned. • Make sure the barcode code type is enabled in the tablet. To enable/disable a specific barcode code type, go through the “Barcode Scanner Configuration” section.
I am having GPS accuracy issue	• When utilizing the GPS function, we recommend disabling the Barcode Reader in Hottab to reduce interference.
RFID scanner does not seem to work.	• Make sure under Windows, the RFID hardware is set to COM 3 port.
Battery leaking or swollen	• The lithium battery used in this tablet may swell after being charged/ discharged many times, but there is no problem regarding safety. • Continued use in such a state may result in the battery getting jammed, so please stop using the battery, and purchase a new one.

Chapter 6: Accessories

This chapter lists available accessories and describes how to install accessories to M900EK/EKT Series Tablet Computer.

6.1 Accessories Introduction

The accessories of M900EK/EKT Series Tablet Computer provide a variety of product support capabilities. Table below lists the accessories available.

Accessory	Part Number	Description
Standard		
Adapter and Power Cord	922D065W19V6	Provides power 100-240VAC to 19VDC@3.42A
Standard Battery Pack	98KA00000002	7.6V, typ. 4200 mAh Li Polymer Battery (2S2P)
Capacitive Stylus	9B0000000415	Better precision and data input with fine-tip point
Hand strap	98KA00000003	Use to make holding and using a tablet more secure.
Optional		
Desk Dock	98DA00000001	Use to mount tablet on the desk.
Vehicle Dock	98DT00A00026	Use to mount a tablet on the vehicle.
Vehicle Cradle VC900	98DA00000002	Use to mount a tablet on the vehicle.
Battery Charger	98JA00000001	Charges the battery.
D-Sub15 to LAN Cable	94E1150080Q0	Use to connect LAN port connector
D-SUB15 to USB-A	94E1158040Q0	Use to connect USB-A connector

6.2 Installing Vehicle Cradle

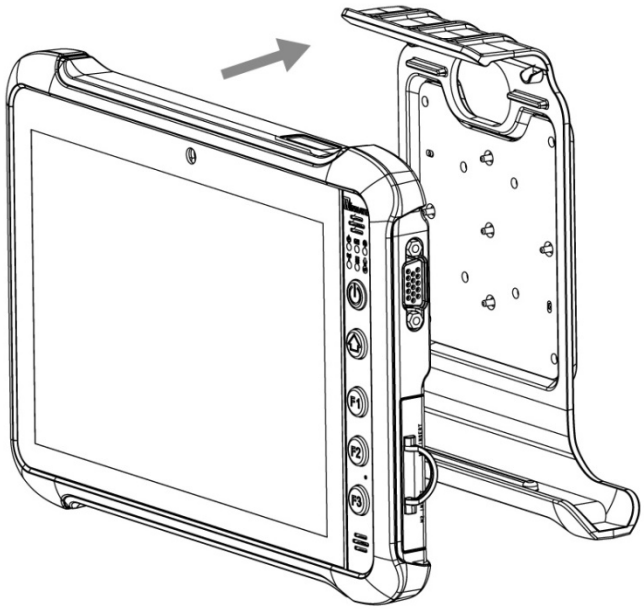
Use a vehicle cradle VC900 to mount a tablet on the vehicle. Follow the instructions below to install M900EK/EKT Series Tablet Computer on the vehicle cradle.

Highlights:

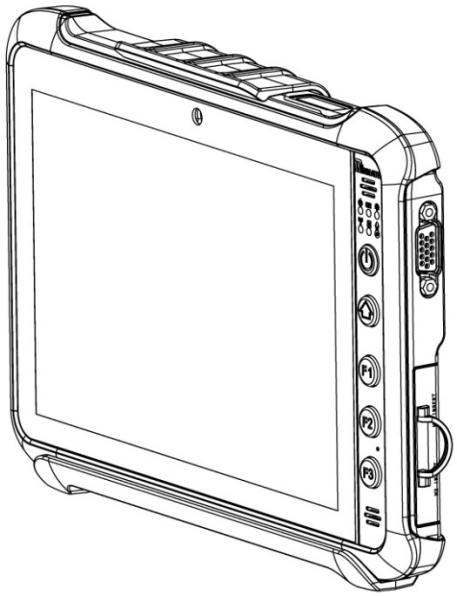
•Keeps the tablet securely fastened on a moving vehicle
• Anti-theft design with key lockable cradle
• Wide power voltage input (9~36V DC)
• VESA standard for various mounting fixtures

Installation Instruction:

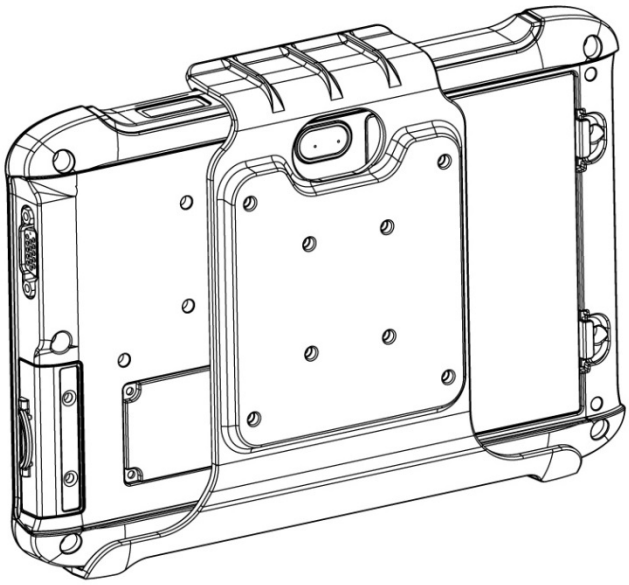
❶ Place a tablet on the vehicle cradle.



❷ Make sure the tablet is firmly inserted into the cradle.



❸ Use RAM mount to install the vehicle mount on the windshield or other flat car surface. Notice that RAM mount kit is not supplied by Winmate.



Reverse the procedure to detach a tablet from the vehicle cradle.

Appendix

This chapter provides additional information about the M900EK/EKT Series Tablet Computer.

Appendix A: Product Specifications

		Model Name M900EK/ M900EKT
Display Specification	Size	8-inch
	Resolution	1280 x 800
	Brightness	800 nits
	Contrast Ratio	1200:1
	Viewing Angle	80/80/80/80
	Touch	Projected capacitive multi-touch
	Bonding	Optical bonding for sunlight viewability
System Specification	CPU	Intel Celeron N6211 @1.20GHz (turbo up to 3.0GHz) Intel Pentium N6415 @1.20GHz (turbo up to 3.0GHz, Optional)
	System Memory	4 GB LPDDR4 (Up to 8 GB)
	Storage	128GB M.2 SATA SSD (up to 512GB)
	OS	Windows 10 IoT Enterprise LTSC Windows 11 IoT Enterprise SAC (Optional)
Wireless Communications	WLAN	802.11 a/b/g/n/ac/ax
	WWAN	LTE/5G (Optional)
	Bluetooth	Support
	GNSS	GPS, GLONASS
IO Ports	Docking Connector	1 x 19-pin docking connector
	USB	1 x USB3.0 (Type-A), 1 x USB3.0 (Type-C) **Note:** The USB Type-C connector follows USB 3.0 standard, which does not support Alternate Mode (ALT) or USB Power Delivery (USB-PD).
	Audio	1 x Audio combo 3.5mm audio combo jack Dual Digital Mic with Noise Cancellation Dual Speaker
	Expansion Port	1 x 15-pin D-Sub connector for USB 2.0, LAN, and COM(Tx/Rx)
	MicroSD Slot	1 x 1 x Micro SDXC Slot
	Indicator	4 x LED indicator for Power, Battery, HDD, RF status
Camera	Front Camera	2MP Webcam
	Rear Camera	8MP Rear Camera with Autofocus and LED Light
Data Capture	Barcode	1D/2D Barcode Scanner (Optional for M900EK and M900EKT)
	HF RFID	HF RFID Reader 13.56 MHz (Optional for M900EK)
	LF RFID	LF RFID Reader 125 KHz (Optional for M900EK)
	Smart Card Reader	Smart Card Reader, comply with ISO 7816 Part 1.2.3, T=1 and T=Ø protocol (Optional for M900EK, Built-in for M900EKT)
Security Function	Security	TPM v2.0
	MDM	SOTI Mobicontrol compatible
Control	Buttons	1 x Power, 1 x Menu, 3 x Programmable function keys
Power Management	Power Input	19V DC, 3.42A
	Battery	7.6V, typ. 4200 mAh Li-ion Battery (2S2P)
	Battery Operating Time	6 hours
	AC Adapter	100-240V, 50~60Hz / 19 V DC
Mechanical Specification	Dimensions	225 x 148 x 20.5 mm
	Weight	0.9 kg with battery
	Cooling System	Fanless design

		Model Name M900EK/ M900EKT
Environment	Operating Temp.	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
	Storage Temp.	-30°C to 70°C (-22°F to 158°F)
	Humidity	10% to 90% RH, non-condensing
	Shock	MIL-STD-810H Method 516.8 Procedure I
	Vibration	MIL-STD-810H Method 514.8 Procedure I
	Drop	MIL-STD-810H Method 516.8, 5 ft
	IP Rating	IP65 certified, dustproof and waterproof
Certificates	Certification	CE, FCC

NOTE:

1. Measured at dimming LCD brightness. Varies depending on the usage conditions, or when an external device is attached.
2. Total usable memory will be less dependent upon actual system configuration.
3. Barcode Reader and RFID Scanner are mutually exclusive options.
4. Length measurements do not include protrusions. Weight varies with options.
5. Measured at dimming LCD brightness. Varies depending on the usage conditions, or when an external device is attached.
6. Accessories and Integrated Options may vary depending on your configuration. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
7. All specifications are subject to change without prior notice.

Appendix B: Order Information

M900EK/EKT Series Rugged Tablet available for order in the following configurations:

Order Information					
	4G/ LTE	**1D/2D Barcode Reader**	**HF RFID Reader**	**LF RFID Reader**	**Smart Card Reader**
M900EK	Optional	N/A	N/A	N/A	N/A
M900EK-HF	Optional	N/A	Default	N/A	N/A
M900EK-BF	Optional	Default	N/A	N/A	N/A
M900EK-LF	Optional	N/A	N/A	Default	N/A
M900EKT	Optional	N/A	N/A	N/A	Default
M900EKT-BH	Optional	Default	N/A	N/A	Default

Notes

Notes

Notes

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