
M0830
8" Intel® Atom™ Z8350
Mobile Clinical Assistant

User's Manual

Version 1.0



2018.10

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Revision History

Version	Date	Descriptions
1.0	2018.10	Initial release

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About This Manual

This user's manual provides the general information and installation instructions for the product. The manual is meant for the experienced users and integrators with hardware knowledge of personal computers. If you are not sure about any description in this manual, consult your vendor before further handling.

We recommend that you keep one copy of this manual for the quick reference for any necessary maintenance in the future. Thank you for choosing ARBOR products.

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Declaration of Conformity

CE

The CE symbol on your product indicates that it is in compliance with the directives of the Union European (EU). A Certificate of Compliance is available by contacting Technical Support.

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This kind of cable is available from ARBOR. Please contact your local supplier for ordering information.

FCC

This device complies with Part 18 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.

Any changes or modifications not expressly approved by the guarantee of this device could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 18 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.

IEC 60601-1/EN60601-1/EN60601-1-2

- This product complies with the system standard IEC 60601-1 Medical Electrical Equipment Part 1: General Requirements for Safety. And therefore, the product is exclusively interconnected with IEC 60601-1 certified equipment in the patient environment.
- Equipment connected to the analog or digital interfaces of the unit must comply with the respective IEC standards (e.g. IEC 60601-1 for medical equipment). Furthermore all configurations shall comply with the current version of the standard for SYSTEMS IEC 60601-1-1.
- Everybody who connects additional equipment to the signal input part or signal output part configures a medical system, and is therefore responsible that the system complies with current version of the requirements of the system standard IEC 60601-1-1. If in doubt, consult the technical service department or your local representative.

RoHS

ARBOR Technology Corp. certifies that all components in its products are in compliance and conform to the European Union's Restriction of Use of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2002/95/EC.

The above mentioned directive was published on 2/13/2003. The main purpose of the directive is to prohibit the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) in electrical and electronic products. Member states of the EU are to enforce by 7/1/2006.

ARBOR Technology Corp. hereby states that the listed products do not contain unintentional additions of lead, mercury, hex chrome, PBB or PBDB that exceed a maximum concentration value of 0.1% by weight or for cadmium exceed 0.01% by weight, per homogenous material. Homogenous material is defined as a substance or mixture of substances with uniform composition (such as solders, resins, plating, etc.). Lead-free solder is used for all terminations (Sn(96-96.5%), Ag(3.0-3.5%) and Cu(0.5%)).

SVHC / REACH

To minimize the environmental impact and take more responsibility to the earth we live, ARBOR hereby confirms all products comply with the restriction of SVHC (Substances of Very High Concern) in (EC) 1907/2006 (REACH --Registration, Evaluation, Authorization, and Restriction of Chemicals) regulated by the European Union.

All substances listed in SVHC < 0.1 % by weight (1000 ppm)

Intended Use

This product is intended for use in a medical system.

Symbol Descriptions



This “CAUTION” symbol indicates that there is a danger of injury to the user or a risk of damage to the product, should warning notices be disregarded.



Battery Recycle (for models with battery)



This symbol of “Electrical Safety” indicates electrical warning of specific electrical hazards.



Refer to the user manual for more information.

Important Safety Instructions

Read these safety instructions carefully:

1. Read all cautions and warnings on the equipment.
2. Place this equipment on a reliable surface when installing. Dropping it or letting it fall may cause damage
3. Make sure the correct voltage is connected to the equipment.

4. To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
5. For pluggable equipment, the socket outlet should be near the equipment and should be easily accessible.
6. Keep this equipment away from humidity.
7. Disconnect this equipment from the A/C outlet before cleaning it. Use a moist cloth. Do not use liquid or sprayed detergent for cleaning.
8. To fully disengage the power to the unit, please disconnect the power from the AC outlet.
9. Do not scratch or rub the screen with a hard object.
10. Never use any of the solvents, such as Thinner Spray-type cleaner, Wax, Benzene, Abrasive cleaner, Acid or Alkaline solvent, on the display. Harsh chemicals may cause damage to the cabinet and the touch sensor.
11. Remove dirt with a lightly moistened cloth and a mild solvent detergent. Then wipe the cabinet with a soft dry cloth.
12. The openings on the enclosure are for air convection and protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
13. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
14. If the equipment will not be used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
15. Never pour any liquid into openings. This may cause fire or electrical shock.
16. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
17. No modification of the equipment is allowed.
18. Only personnel authorised by the manufacturer may carry out technical operations on the equipment.
19. The sound pressure level at the operator's position, according to IEC 704-1:1982, is no more than 70dB(A).
20. Keep this User's Manual for later reference.

21. DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20°C (-4°F) OR ABOVE 60°C (140°F). THIS MAY DAMAGE THE EQUIPMENT.
22. If one of the following situations arises, get the equipment checked by service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment does not work well, or you cannot get it to work according to the user's manual.
 - e. The equipment has been dropped or damaged.
 - f. The equipment has obvious signs of breakage.



Do not use the power adapter that isn't made for the equipment. Supplying the equipment with inappropriate voltage may cause harm to the battery (if any) or, even worse, burn the equipment.



Risk of explosion if RTC (Real-Time Clock) battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.



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

General Cleaning Tips

You may need the following precautions before you begin to clean the device. When you clean any single part or component for the device, please thoroughly read and understand the details below.

1. We strongly recommended that you should shut down the system before you start to clean any single components.
2. When you need to clean the device, please rub it with a piece of dry cloth.

3. Be cautious of the tiny removable components when you use a vacuum cleaner to absorb the dirt on the floor.
4. Never drop the components inside the device or get circuit board damp or wet.
5. Be cautious of all kinds of cleaning solvents or chemicals when you use it for the sake of cleaning. Some individuals may be allergic to the ingredients.
6. Try not to put any food, drink or cigarette around the device.

Cleaning Tools

Although many companies have created products to help improve the process of cleaning your devices and peripherals, users can also use household items to clean their devices and peripherals. Below is a listing of items you may need or want to use while cleaning your devices or peripherals. Keep in mind that some components in your device may only be able to be cleaned using a product designed for cleaning that component, if this is the case it will be mentioned in the cleaning.

- **Cloth:** A piece of cloth is the best tool to use when rubbing up a component. Although paper towels or tissues can be used on most hardware as well, we still recommend you to rub it with a piece of cloth.
- **Water or rubbing alcohol:** You may moisten a piece of cloth a bit with some water or rubbing alcohol and rub it on the device. Unknown solvents may be harmful to the plastics parts.
- **Vacuum cleaner:** Absorb the dust, dirt, hair, cigarette particles, and other particles out of the device can be one of the best cleaning methods. Over time, these items can restrict the airflow in a device and cause circuitry to corrode.
- **Cotton swabs:** Cotton swabs moistened with rubbing alcohol or water are excellent tools for wiping hard to reach areas in your keyboard, mouse, and other locations.
- **Foam swabs:** Whenever possible, it is better to use lint-free swabs such as foam swabs.

Recommended Cleaning Procedures

1. Close all application programs
2. Close operating software
3. Turn off the equipment
4. Remove all peripherals
5. Disconnect the power cable
6. Proceed to clean.

Disposing of the Equipment

- **Within the European Union**



EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste.

This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between yourself. The mark on electrical and electronic products only applies to the current European Union Member States.

- **Outside the European Union**

If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority so as to comply with the correct disposal method.

Additional Information & Technical Support

All ARBOR products are built to the most accurate specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new equipment is destined for the laboratory or the factory floor, you can be assured that the terminal will provide the reliability and ease of operation. Your satisfaction is our primary concern. We want you to get the maximum performance from the terminal. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in the terminal's documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult this manual first. If you still cannot find the answer, gather all the information or questions that apply to your problem, and with the product close at hand, call your dealer. Our dealers are well trained and ready to give you the support you need to get the most from the terminal. In fact, most problems reported are minor and are able to be easily solved over the phone. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products. Do not hesitate to contact us using the following contact information:

Website: <http://www.arbor-technology.com>

E-mail: info@arbor.com.tw

TEL: 886-2-8226-9396

Add: 10F., No.700, Zhongzheng Rd., Zhonghe Dist., New Taipei City 235, Taiwan

Warranty

This product is warranted to be in good working order during the warranty period. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster.

Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, or inability to use this product. Vendor will not be liable for any claim made by any other related party.

Vendors disclaim all other warranties, either expressed or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to the hardware, the accompanying product's manual(s) and written materials, and any accompanying hardware. This limited warranty gives you specific legal rights.

Return authorization must be obtained from the vendor before returned merchandise will be accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description.

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Chapter 1

Introduction

1.1 Product Highlights

- eHealthcare and clinical assistant application
- Anti-bacterial protection
- 8" TFT color LCD 1024 x 768 XGA resolution
- IPS LED display with projected capacitive multi-touch panel
- High mobility with connectivities including WLAN and Bluetooth
- Expansion for storage via microSD slot
- Identification devices (barcode scanner, RFID & NFC reader)
- IEC & EN 60601-1 (Edition 3.1) and IEC & EN 60601-1-2 (Edition 4th) compliant



1.2 Package Contents

Upon opening the package, carefully inspect the contents. If any of the items is missing or appears damaged, contact your local dealer or distributor. The package should contain the following items:

1 x M0830 Tablet PC



Medical-grade power adapter, 5V / 10W (for tablet)







Medical-grade power adapter, 12V / 30W (for cradle_



1.2.1 Order Information

M0830A	8" fanless Intel® Atom™ x5-Z8350 tablet PC with 2GB Memory, 64GB eMMC, NFC, Wi-Fi/BT, Android 5.1
M0830W	8" fanless Intel® Atom™ x5-Z8350 tablet PC with 2GB Memory, 64GB eMMC, NFC, Wi-Fi/BT, Win 10 IoT Enterprise

1.2.2 Optional Accessories

Lite Desktop Cradle for M0830	
Hand strap	
Rope Stylus Pen	
K-Lock	

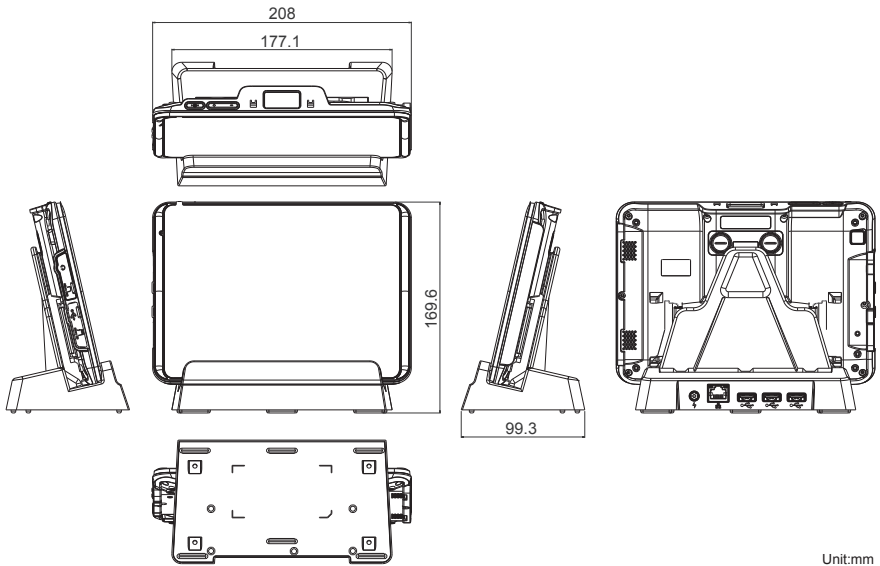
1.3 Specifications

System	
CPU	Intel® Atom™ x5-Z8350 Processor (2M Cache, up to 1.84 GHz)
Graphic	Intel® HD Graphic Chipset
OS	Android™ v5.X & Windows 10
Memory	Built-in 2GB DDR3L-1600
Storage	Built-in 64GB eMMC
Audio	1 x integrated microphone
	2 x 0.5W integrated stereo speaker
	1 x 3.5mm headphone jack
Peripherals and Devices	
Camera	Front: 2.0 MP camera with fixed focus
	Rear: 8.0 MP AF camera with auto focus
Sensor	Gyroscope, eCompass, light sensor
WLAN	Integrated IEEE 802.11 a/b/g/n/ac
Bluetooth	Bluetooth® 4.1
Barcode Scanner	1D/2D barcode scanner with physical trigger buttons on right & left sides
NFC	ISO 14443A/B, ISO 15693 (on back side)
LCD Display	
Size/Type	8" IPS LED display
Resolution	1024 x 768 (XGA)

Luminance	300 cd/m ² (typ.)
Contrast Ratio	800 : 1
View Angle (U/D/R/L)	89°/89°/89°/89°
Touch Screen	
Type	10-point Projected Capacitive Touch w/ Corning® Gorilla® Glass
Light Transparency	85% ± 5% (typ.)
Controller Interface	I2C interface
Tablet PC I/O Interface	
USB Port	1 x Micro USB 2.0 port (OTG support)
SD Slot	1 x microSD card slot
Tablet Battery Consumption	
Operating Mode	3.5 hours (continuously playing YouTube video)
Standby Mode	29~33 hours
Cradle I/O Interface	
USB Port	3 x USB 2.0 ports
LAN	1 x RJ-45 GbE LAN port
Power	1 x DC Jack
Docking	Guide pin for fixing
Power Supply	
Battery Type	Lithium-ion rechargeable battery
Battery Capacity	3.8V, 4000mAh
Power Adapter	For tablet: AC100~240V, 50~60 Hz, 5V/10W For cradle: AC100~240V, 50~60 Hz, 12V/30W
Mechanical & Environmental	
Operating Temp.	-10°C ~ 45°C (14°F ~ 113°F)
Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)
Charging Temp.	0°C ~ 40°C (32°F ~ 104°F)

Dimensions (W x H x D)	Tablet PC: 208.5 x 150.6 x 27 mm (8.21" x 5.93" x 1.63") With cradle: 208 x 169.6 x 99.3 mm (8.19" x 6.68" x 3.91")
Weight	Tablet: 520g (1.15lb) (with battery) Cradle: 900g (1.98lb)
IP Rating	IP54
Drop Resistance	1.2m (4ft.)
Regulatory	CE, FCC Part 18 Subpart C
	IEC & EN 60601-1 Safety (Edition 3.1), IEC & EN 60601-1-2 EMC (Edition 4th)

1.4 Dimensions



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Chapter 2

Getting Started

2.1 Getting to Know the Tablet PC

2.1.1 Tablet PC



2.1.1.1 Front Side

Items	Descriptions
Power Key	Press-and-hold this key to power on the device In sleep mode, press to wake the device Press to power off the device.
Volume Control	To decrease/increase volume.
Barcode Scanner	1D/2D barcode scanner
Touch screen	10-point projected capacitive touch screen
Microphone	A built-in microphone to capture sound and voice when used with a program capable of recording audio.
Power LED	Green on: Tablet PC is powered on. Red: Tablet PC is charging. Off : Tablet PC is powered off.
Front Camera	2.0 MP front facing camera
Camera flash	Camera flash
Headset jack	3.5mm combo audio/microphone jack. To connect to a set of headphones or speakers.
micro USB port	USB 2.0 micro USB port. To connect to a USB device.
microSD card slot	To insert a microSDXC/SDHC/SD card. When inserting the card, make sure to position the card as the graphic indicates, and fully insert the card into the slot until it cannot be inserted any more.
Pogo pin connector	22-pin connector for connection with cradle.

2.1.1.2 Rear Side

Items	Descriptions
Barcode trigger buttons	Press either of the buttons to scan a barcode.
Rear camera	8.0 MP auto focus camera (optional).
Speakers	Integrated dual 0.5W speakers for audio output.
RFID/NFC reader	Tap a NFC card or hold the card against the surface to read the card data.
Hand strap hooks	To attach the optional hand strap

2.2 Installing Memory Card

The tablet PC comes with a microSD card slot. To insert the microSD card:

1. On the left side of the tablet PC, open the rubber cover of the microSD card slot.
2. Position the card as the graphic indicates.
3. Fully insert the card into the slot until it clicks into place.
4. Close the rubber cover.



To verify if the memory card is successfully inserted:

- **For Windows:** Windows will detect the card and assign it a drive name in **File Explorer**.
- **For Android:** Tap the **Settings** icon on the home screen and then tap **Device > Storage > SD card**. If the SD card is successfully mounted, you should be able to find the SD card information.

2.3 Charging the Tablet PC

To charge the tablet PC with the provided power adapter:

1. Connect the USB end of the power adapter to the USB port on the device.
2. Connect the power adapter to an electrical outlet.



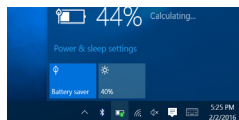
*The power plug type of the provided power adapter varies according to region.

Caution: Do not charge the tablet PC via computer's USB connection due to that the voltage output from computer USB is not enough to charge the device.

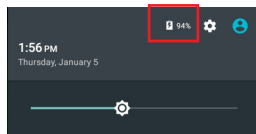
Caution: When the tablet PC is docked in the cradle, do not connect the tablet PC and the cradle to power source at the same time to prevent damage to the products.

When the charging is in process, to check the battery level:

- **For Windows:** Swipe up the battery icon in the system tray to view the charging status.



- **For Android:** Swipe down the battery indicator in the status bar and you will see the charging percentage.



2.5 Periodic Cleaning & Disinfection

This medical computer is generally employed in medical environment, for example, hospitals, as bedside infotainment. It is strongly recommended that users follow the cleaning and disinfection instructions described below to ensure proper maintenance activities.

1. Always power off your unit first when you clean or disinfect it.
2. To wipe the outer case, use lint-free cloth, lightly moistened with warm water and a mild, non-abrasive cleaning solution made of either:
 - 70% isopropyl alcohol
 - 10% bleach solution
 - Dimethyl ethylbenzyl ammonium chlorides 0.125%, dimethyl benzyl ammonium chlorides 0.125%, Isopropyl alcohol 14.850% (Sani-Cloth®)
 - Isopropanol 17.2%; Diisobutylphenoxyethyl dimethyl bezyl ammonium chlorides 0.28% (CaviCide®)
3. The touch screen can be wiped down (e.g. to remove fingerprints) during operation using standard computer screen solution.
4. Use dry cloth to clean the rear panel and bottom, especially the areas around the connectors.

Caution:

- Do not spill liquids on or around the medical computer.
- Do not use other solutions than the ones mentioned above.
- Do not touch, press or rub the display panel with abrasive cleaning compounds, instruments, brushes, or rough-surface materials.
- Never spray cleaning liquids or foam onto the medical computer or soak it for cleaning.
- Do not use solvents to clean the unit.
- Do not clean, disinfect, or sterilize any part of the system by autoclaving or with the use of ethylene oxide gas; doing so may damage the unit.
- Never spray or squirt any type of liquid onto the medical computer; if a spray, gel or foam is needed, spray the liquid onto a cloth and then use the cloth to wipe or rub down the component.

- Always avoid contamination to minimize the need for disinfectants.
- Do not spill, spray, or squirt liquids to the power block and the power cable.

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Chapter 3

Using the Tablet PC (Windows OS)

3.1 Using the Touch Screen

The computer comes with a projected capacitive touch screen. Touch control is the main way and an intuitive way to interact with the computer. Users are able to manipulate icons, graphic buttons, menus, property sheets, the on-screen keyboard or any on-screen items with touch control. This chapter will walk you through the basic operations for touch control.

3.1.1 Basic Operations

Unlike the resistive touch, the projected capacitive touch works by the change of capacitance when a conductive object, such as a finger, contact the touch screen. Hence it requires only a human finger and zero force to trigger actions from the projected capacitive touch screen. And no calibration is needed.

The table below provides instructions on how to use the multi-touch screen:

Operation	Descriptions
Tap	Tap an item and quickly release to select an item, launch an application, or open a menu.
Tap and hold	Tap and hold an item or a blank area on the screen for a few seconds until a menu opens or an option appears.
Drag	Tap and hold on an item, such as an image or an icon, then move it to the target position. While dragging, do not release until you have reached the target position.
Swipe	Move your finger horizontally or vertically across the screen to scroll through the screen, App menu, pages, lists and so on.
Zoom in / out	Move two fingers closer together on an item, such as a picture, web page, or map, to zoom out, or move two fingers apart to zoom in.
Double tap	For some applications, quickly tap twice on an item to zoom in and double-tap again to zoom out.

3.1.2 Text Input

The computer doesn't have a physical keyboard to receive user's text input. To input text on the computer, it relies on either an external USB keyboard, or the "on-screen keyboard", or the Windows-featured handwriting recognition.

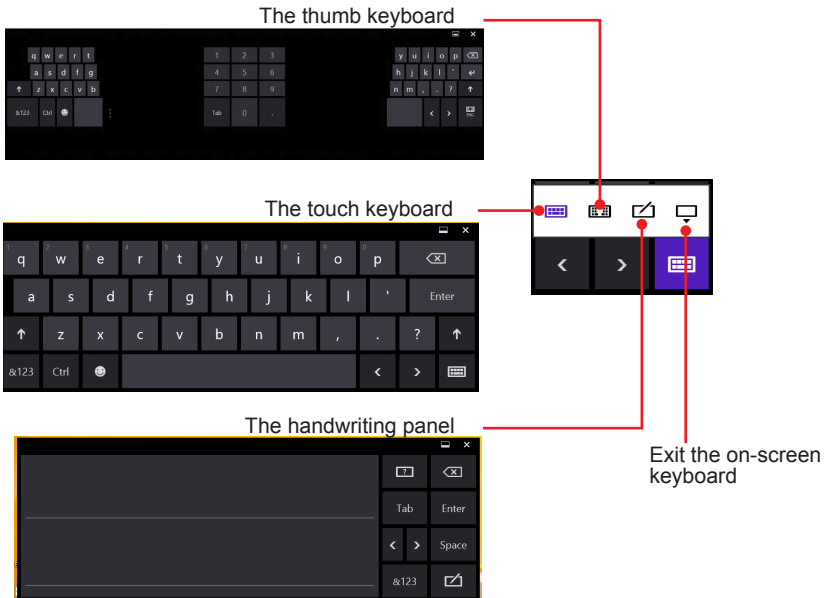
3.1.2.1 On-screen Keyboard

An "on-screen keyboard" is a virtual keyboard with all the standard keys. With Windows you can use either a touch keyboard or thumb keyboard to facilitate text input. To open the Windows on-screen keyboard:

1. Tap the keyboard icon on the Windows taskbar.



2. The **Input Panel** opens in either keyboard mode or handwriting mode, according to your previous use. Tap the icon in the lower right corner to switch between the modes.



3. To use the touch or thumb keyboard, just enter text by tapping the keys.

3.1.2.2 Handwriting Recognition

“Handwriting Recognition” is an input method that interprets and converts handwriting to text. The Windows features a “writing pad” to get the job done.

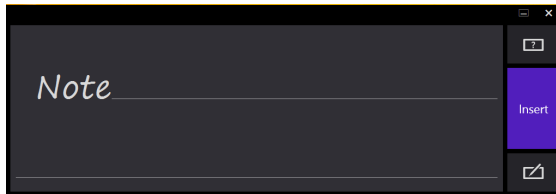
To launch the Windows handwriting panel:

1. Tap the keyboard icon on the Windows taskbar to open the **Input Panel** as described in [3.1.2.2 Handwriting Recognition](#) on page 18.

If it's in keyboard mode, tap the icon in the lower right corner and tap the handwriting icon to switch to handwriting mode.



2. Write in the writing area. Then tap the bottom-right **Enter** button to enter the text in a text field.

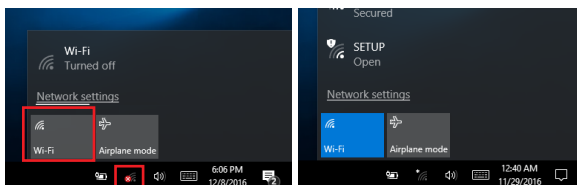


3.3 Using the Wi-Fi Feature

The computer is built-in with a Wi-Fi module for Wi-Fi networking. The Wi-Fi module supports IEEE 802.11a/b/g/n/ac.

3.3.1 Turning On/Off the Wi-Fi Feature

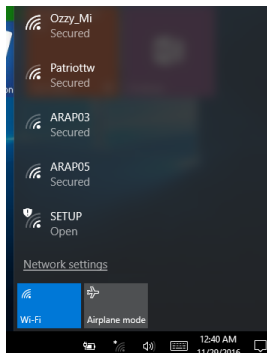
If you have previously turned off the Wi-Fi function, tap the wireless network icon in the system tray and then tap Wi-Fi to turn on the Wi-Fi radio.



To turn off the Wi-Fi function, tap the wireless network icon in the system tray and then tap Wi-Fi to turn off the Wi-Fi radio.

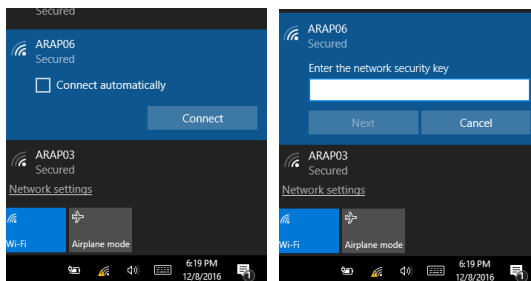
3.3.2 Connecting to a W-Fi Network

1. Make sure that the Wi-Fi function is turned on.
2. Tap the Wi-Fi signal strength icon in the notification area.
3. A list opens and shows the Wi-Fi hotspots available within the wireless coverage of the tablet PC.



4. Tap the target network and then tap **Connect**.

If the network to connect is a secured network, a dialog will open and request for the password. Enter the password to access the Wi-Fi network. If it is an open network, it will be connected directly.



- When the tablet PC is connected to a Wi-Fi network, “**Connected**” will be displayed under the Wi-Fi network’s name.



Note: To conserve power, always turn off the Wi-Fi module when it isn't used.

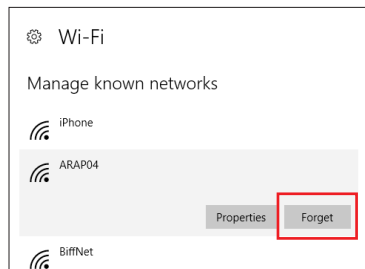
3.3.3 Forgetting/Deleting a Wi-Fi Network

Under the following situations you may need the tablet PC to forget/delete a Wi-Fi connection profile:

- You don't need to connect to a certain wireless connection anymore.
- You want to modify the security details such as the password and the encryption type it uses. In such case, after you forget the network, re-connect to the network and enter new security details when prompted.

To forget/delete a Wi-Fi network connectoin:

- Tap **START > Settings > Network & Internet > Wi-Fi > Manage Wi-Fi Settings**.
- Under **Manage known networks**, select the target network and tap **Forget**. This will delete the wireless network's profile and connection details.



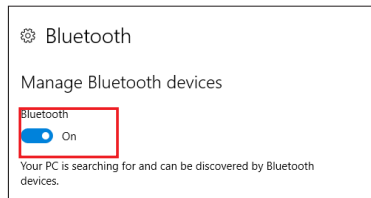
3.4 Using the Bluetooth Feature

Bluetooth enables the wireless connection over a short distance about 8 meters. It is specified as a “wireless personal area network” (WPAN). The computer is Bluetooth-enabled to synchronize data with other Bluetooth-capable devices such as PCs, laptops, hands-free, headsets, printers, PDAs and cell phones.

3.4.1 Turning On/Off the Bluetooth Feature

To be able to use Bluetooth, launch the Bluetooth module first:

Tap **START > Settings > Devices > Bluetooth**. Make sure the Bluetooth switch is in the **On** position.

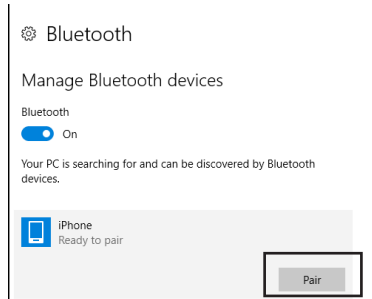


To turn off the Bluetooth module, switch the Bluetooth to the **Off** position.

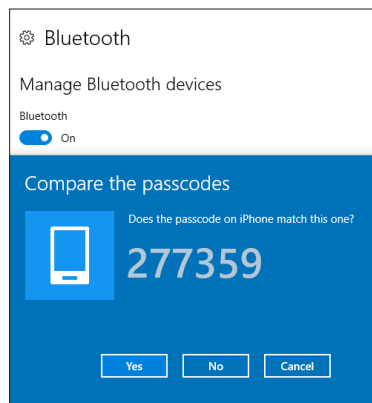
3.4.2 Pairing/Connecting with Other Bluetooth Devices

Before the computer can connect with other Bluetooth devices, it has to pair with them. To pair/connect with other Bluetooth devices:

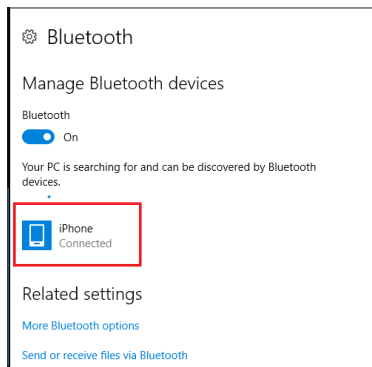
1. Before proceeding, make sure that the target Bluetooth device is turned on, discoverable and within close range.
2. Make sure that the Bluetooth function is turned on. From the Bluetooth devices list, select the device you want to pair and click **Pair**.



3. If prompted to compare the passcodes, tap **Yes** to continue.



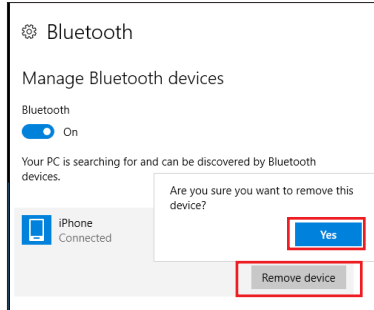
4. After pairing, the tablet PC will connect to the target device and you'll notice the **Connected** under the device name.



3.4.3 Removing a Bluetooth Device

If you want to remove a Bluetooth device paired with your tablet PC:

1. Tap **START > Settings > Devices > Bluetooth**.
2. Select the paired Bluetooth device that you want to remove and tap **Remove device**. When prompted, tap **Yes**.



If you want to connect the device to your tablet PC later, you can pair it again.

3.4.3 Bluetooth Device Name of the Tablet PC

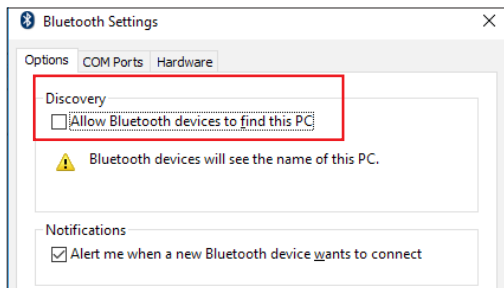
By default, the tablet PC's Bluetooth device name is the computer name, which is viewable at **START > Settings > System > About**.

You can rename the name for your Table PC by tapping **Rename PC** and then type the new name as needed.



3.4.4 Hiding/Exposing the Tablet PC

By default, the tablet PC is discoverable by other Bluetooth devices. To hide or expose the computer, tap **START > Settings > Devices > More Bluetooth options**. Then select **Allow Bluetooth devices to find this PC** to make the tablet PC discoverable, or otherwise un-select it to hide your tablet PC.



3.6 Using the Barcode Scanner

The tablet PC comes with a barcode reader module. You can read barcodes of the following types:

Type	Formats
Linear	UPC/EAN/JAN, GS1 DataBar, Code 39, Code 128, Code 32, Code 93, Codabar/NW7, Interleaved 2 of 5, Code 2 of 5, Matrix 2 of 5, MSI, Telepen, Trioptic, China Post
2D Stacked	PDF417, MicroPDF417, GS1 Composite;
2D Matrix	Aztec Code, Data Matrix, QR Code, Micro QR Code, MaxiCode, Han Xin Code;
Postal	Intelligent Mail Barcode, Postal-4i, Australian Post, British Post, Canadian Post, Japanese Post, Netherlands (KIX) Post, Postnet, Planet Code;
OCR Option	OCR-A, OCR-B, E13B (MICR)

Generally a third-party barcode application will be used to process the data read by the scanner. This user manual will not cover these applications. The following steps serve as an example only to show the basic operation of the barcode scanner.

1. Launch your barcode decoding application.
2. Point the scanner window at the barcode and press either of the barcode trigger buttons on the rear of the tablet PC. The scanner will project an aiming beam.



Press either of the barcode trigger buttons to scan

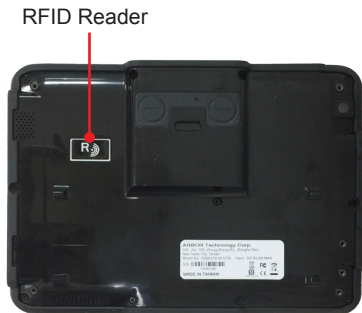


3. Upon a successful scan, the scan beam turns off. The decoded barcode data will be entered into your processing application.

3.7 Using the RFID Feature (Optional)

Radio-Frequency Identification (RFID) is a technology that uses radio frequency (RF) for a RFID reader to retrieve information from a RFID tag attached to an object. Different from a barcode technology, RFID technology does not require direct contact or line-of-sight reading; however, the read range depends on frequency, tag antenna, tag type and a number of factors.

The RFID reader area is at the back side of the tablet PC as shown below.



To read a RFID tag:

1. Launch your RFID App.
2. Place the RFID tag near the RFID reader on the back of the tablet PC.

RFID read range varies depending on your application. Contact your dealer for details.

3. After reading and decoding, the RFID tag data will be displayed.

3.8 Using the NFC Feature (Optional)

Near Field Communication (NFC) is a short-range wireless communication technology that enables NFC-capable devices to exchange data such as contacts, photos, music, or web address over a short distance less than 4 centimeters.

The NFC detection area is at the back side of the tablet PC as shown below. When you tap other NFC devices, tags, or readers, the NFC areas of both devices should be close to one another so that the connection can be established.



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Chapter 4

Using the Tablet PC (Android OS)

4.1 Using the Touch Screen

The tablet PC comes with a projected capacitive multi-touch screen. Touch control is the main way to interact with the tablet PC. Users are able to manipulate icons, graphic buttons, menus, the on-screen keyboard or any on-screen items with touch control. This chapter will walk you through the basic operations.

4.1.1 Basic Operations

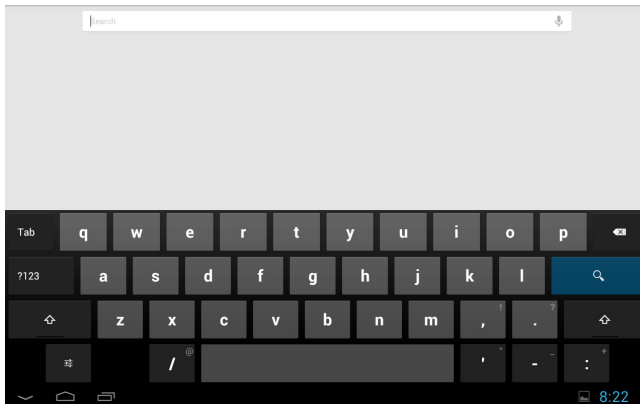
The table below provides instructions on how to use the multi-touch screen:

Operation	Descriptions
Tap	Tap an item and quickly release to select an item, launch an application, or open a menu.
Tap and hold	Tap and hold an item or a blank area on the screen for a few seconds until a menu opens or an option appears.
Drag	Tap and hold on an item, such as an image or an icon, then move it to the target position. While dragging, do not release until you have reached the target position.
Swipe	Move your finger horizontally or vertically across the screen to scroll through the screen, App menu, pages, lists and so on.
Zoom in / out	Move two fingers closer together on an item, such as a picture, web page, or map, to zoom out, or move two fingers apart to zoom in.
Double tap	For some applications, quickly tap twice on an item to zoom in and double-tap again to zoom out.

4.1.2 Text Input

The tablet PC doesn't have a physical keyboard to receive user's text input. To input text on the device, it relies on the "on-screen keyboard" featured by the operating system. An "on-screen keyboard" is a virtual keyboard with most of the standard keys.

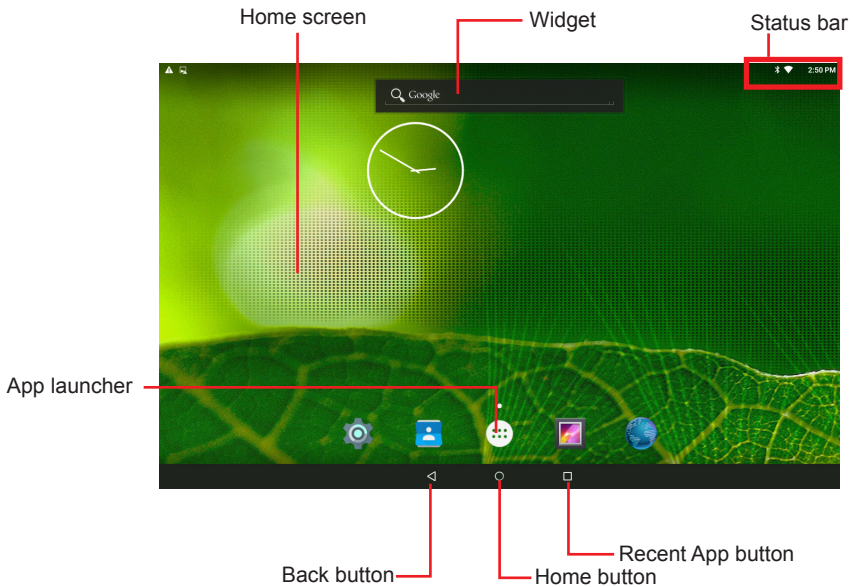
To open the on-screen keyboard, simply tap a text input field and the keyboard appears.



4.2 Home Screen

On the Android OS, the **Home** screen provides you with an instant access to device status, notifications, application shortcuts, folders and widgets. Simply tap an item and you can launch the associated application. You can also add desired items to the **Home** screen, extend the **Home** screen or personalize the wallpaper to tailor it to your personal needs.

When you power on the tablet PC for the first time, a typical **Home** screen might look like the example below:



The table below describes the elements on a typical **Home** screen:


Element	Descriptions
Status Bar	<p>The Status Bar displays these information:</p> <ul style="list-style-type: none"> • The system time • Wi-Fi signal strength • Ethernet connection status • Bluetooth connection status <p>You can access the notification panel to see more information by swiping up the status bar.</p>
Notifications Area	<p>The Notifications Area informs you of new messages, events, alarms, and activities in progress. Applications you install on your device may show their own icons or messages in the area.</p>
Home Screen	<p>Tap an item on this screen to launch that item.</p> <p>To delete an icon or widget, tap and hold that item until the remove symbol X appears on the top of the screen. Then move the icon to the X symbol.</p> <p>Tap and hold any empty spot on this screen to customize your home screen.</p>
Widget	<p>The miniature of an application that functions directly on the Home screen.</p>
App Launcher	<p>Tap it to open the App Launcher where all applications and widgets installed on the tablet PC can be viewed and launched.</p> <p>You can also touch and hold an application's icon to drag and drop it onto the Home screen.</p>
Back Button	<p>Tap to go to previous screen.</p>
Home Button	<p>Tap to return to Home screen.</p>
Recent App Button	<p>Tap to view your recent Apps and touch an App to reopen it. To remove an App from the list, swipe it left or right.</p>

4.2.1 Extending Home Screen

The **Home** screen is extended beyond the screen width to provide more space for adding application shortcuts and widgets.


To access the extended **Home** screen, swipe on the **Home** screen to the left or right.

To add application icons or widgets to the extended **Home** screen:

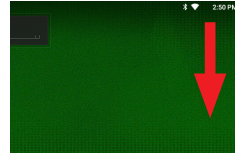
1. Tap the **App Launcher** icon  on the **Home** screen to locate the target application icon or widget.
2. Tap and hold the target icon or widget until the extended **Home** Screen appears.
3. Move the icon or widget to desired screen and then release.

4.3 Accessing the Settings Screen

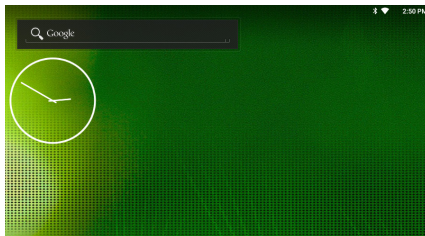
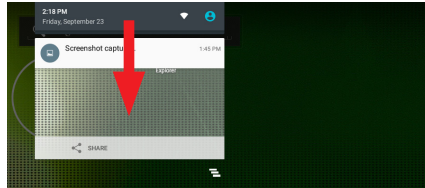
Swiping down the status bar will bring up a **Notification** panel where you can quickly access recent notifications. Swipe down the panel again to bring up the **Quick Settings** panel where you can perform these tasks:

- Tap the Settings icon  to access the **Settings** screen
- Adjust the screen brightness
- Tap the Wi-Fi icon to access the Wi-Fi settings screen
- Tap the Bluetooth icon to access the Bluetooth settings screen
- Turn on/off airplane mode
- Turn on/off auto-rotate screen function
- Tap the location icon to enable/disable the location function
- Tap the cast screen to transmit the device's screen to a Chromecast dongle

Swiping down the status bar brings up the **Notification** panel.



Swiping down the notification panel brings up the **Quick Settings** panel.




Quick Settings Panel


4.4 Using the Wi-Fi Feature


The tablet PC is capable of Wi-Fi networking. Wi-Fi is a wireless networking technology that uses an access point, also known as the “hotspot”, to connect to an Internet service provider over the wireless local area network (WLAN). Some hotspots are open to connect while others request you to present a key to authenticate your connection. The tablet PC needs to be configured including such key to connect to a hotspot.

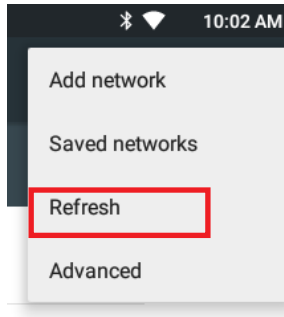
Follow the guide below to connect the tablet PC to your wireless local area network:

4.4.1 Enabling Wi-Fi and Connecting to a WLAN

1. Tap the **Settings** icon on the home screen and then tap **Wi-Fi** to access the Wi-Fi settings page.
2. Switch on Wi-Fi if it isn't enabled yet. The status bar displays the  icon when the Ethernet function is enabled.

The device then proceeds to scan for available Wi-Fi networks in range and displays the names of those found. Secured networks are displayed with waves denoting signal strength plus a lock on them  while the open networks don't.

To re-scan for available Wi-Fi networks, tap the menu icon  in the upper right corner to open the context menu and then tap **Refresh**.



Tap a network to connect to it. To connect to a secured network, you're prompted to enter a password or other credentials. (Ask your network administrator for details.)

If the tablet PC detects a network previously connected to, the tablet PC auto-connects to it.


Once a Wi-Fi network is connected, it displays as "connected" on the Wi-Fi settings screen. Tap it to see the details about the speed, security, address, and related info.

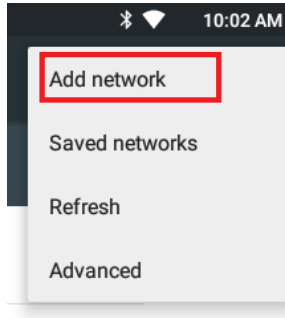
4.4.2 Adding a Wi-Fi Network

Under the following situations, you may need to manually add a Wi-Fi network:

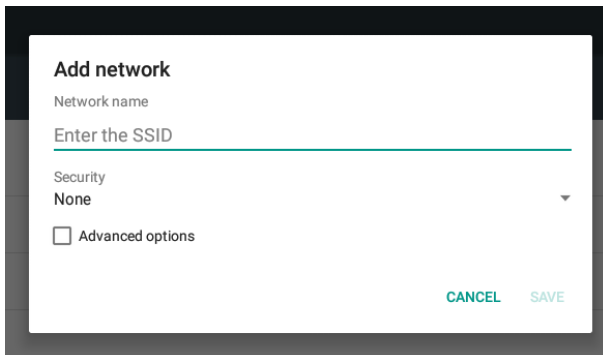
- When a Wi-Fi network doesn't broadcast its name (SSID)
- When a Wi-Fi network is out of range and you want the tablet PC to remember it and auto-connect to it as soon as it gets in range.

To add a Wi-Fi network:

1. Tap the **Settings** icon on the home screen and then tap **Wi-Fi** to access the Wi-Fi settings page.
2. Switch on Wi-Fi if it isn't enabled yet.
3. Tap the menu icon  in the upper right corner to open the context menu and then tap **Add network**.



4. Enter the SSID (name) of the network. If the network is secured, tap the triangle at the right of the **Security** field to select the type of security deployed on the network and enter any required security credentials. If you need to configure proxy and IP settings, tap **Advanced options** to proceed.




5. Tap **Save**.

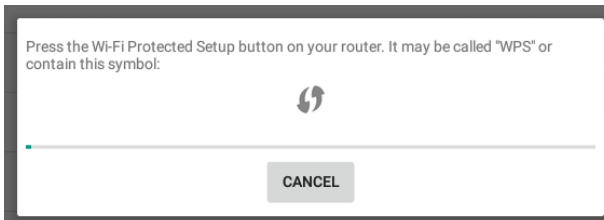
The tablet PC then proceeds to connect to the Wi-Fi network. Any credentials entered are saved so the tablet PC automatically connects it the next time the tablet PC gets it within the range.

4.4.3 Connecting to a Wi-Fi Network by WPS

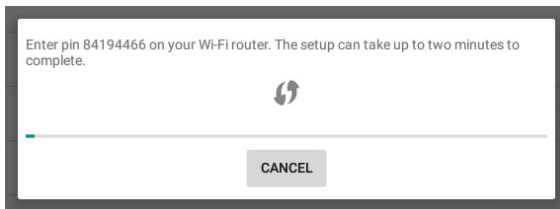
Wi-Fi Protected Setup (WPS) is a feature that allows WPS-compliant devices to connect to each other instantly in a secure way. As the WPS devices automatically configure the SSID and WPA security key, it eliminates the need for users to manually enter the SSID and password. WPS works in two methods: Push or personal identification number (PIN). To connect to a Wi-Fi network via WPS:

1. Tap the **Settings** icon on the home screen and then tap **Wi-Fi** to access the Wi-Fi settings page.
2. Switch on Wi-Fi if it isn't enabled yet.
3. Tap the menu icon  in the upper right corner to open the context menu and then tap **Advanced**.
4. Use either of the following methods to make the connection:

To use Push button, tap **WPS Push Button** and a prompt message will appear. Then press the WPS button on your WPS router within two minutes



To use PIN method, tap **WPS Pin Entry**. You will be prompted with a PIN. Enter that PIN on your Wi-Fi router within two minutes.



5. WPS authentication process will start. When the authentication is done, you will be prompted that connection is successful.

4.4.4 Forgetting/Modifying a Wi-Fi Network

When you don't want the tablet PC to "auto" connect to a Wi-Fi network or when it is a network that you no longer use, remove the Wi-Fi network by the steps below:

1. Tap the **Settings** icon on the home screen and then tap **Wi-Fi** to access the Wi-Fi settings page.
2. On the Wi-Fi settings page, tap and hold the name of the network to forget.
A context menu then opens.
3. Tap **Forget network**.



Some Wi-Fi networks may periodically change their passwords to enhance the network security. When this occurs, you need to change the saved login credentials. To change the password, follow the steps above to access the context menu of the intended network. Then tap **Modify network** to make the changes.


4.5 Using the Bluetooth Feature

Bluetooth enables the wireless connection over a short distance about 8 meters. It is specified as a “wireless personal area network” (WPAN). The tablet PC is Bluetooth-capable to synchronize data with other Bluetooth-capable devices such as PCs, laptops, hands-free, headsets, printers, PDAs and cell phones.

Before the tablet PC can connect a Bluetooth device, it needs to pair with that device. Such “pairing” involves the authentication between them to justify their accesses to each other. Once they are paired, they stay paired unless they are unpaired.


4.5.1 Enabling Bluetooth and Pairing with Bluetooth Device

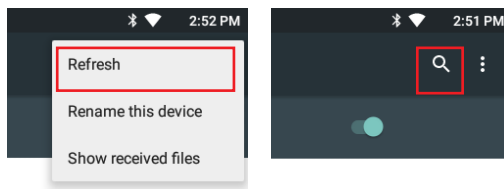
To enable or disable the Bluetooth function:

1. Tap the **Settings** icon on the home screen and then tap **Bluetooth** to access the Bluetooth settings page.
2. Switch on Bluetooth if it isn't enabled yet. The status bar displays the  icon when the Bluetooth function is enabled.

Note: While Bluetooth is enabled, the tablet PC is always visible to nearby devices. You cannot configure the visibility time but you can rename the tablet PC's name.

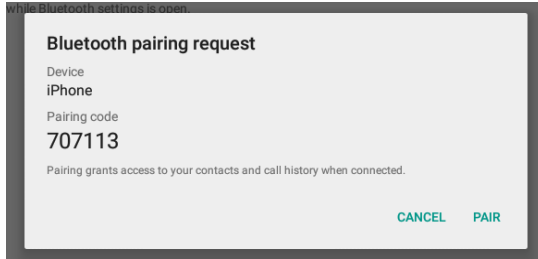
3. The tablet PC proceeds to scan for any Bluetooth device in range. Then it displays the names of the device(s) found.

If the Bluetooth device you want to pair with is not displayed in the **Available Devices** list, tap the menu icon  in the upper right corner to open the context menu and then tap **Refresh**. Or you can tap the search icon and then enter the name of the Bluetooth device you want to pair with.



Note: If the device to pair with isn't displayed after the scan, check if it is configured to be discoverable.

4. Tap the device you want to pair with. When the **Bluetooth pairing request** dialog box appears, tap **Pair**. The tablet PC will then send a connection request to the device you want to pair with.



On the device to pair with, a dialog box appears requesting to enter or verify the pairing code. The passkey entered or shown on the tablet PC and the Bluetooth device must be the same.


If you're prompted to enter a pin code, try entering 0000 or 1234 (the most common pin code), or look up in the documentation that came with the other Bluetooth device to learn its pin code.

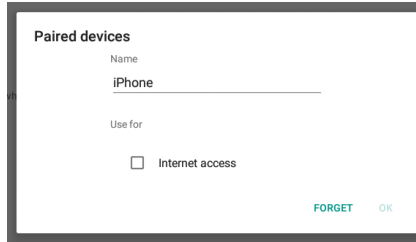
Then the devices proceed to pair with each other.

4.5.2 Configuring Bluetooth Features to Use

A "Bluetooth profile" defines the features supported by a Bluetooth device. For two Bluetooth devices to share files with each other, they need to both support the right profile. Some Bluetooth devices have multiple profiles. A profile can provide the ability to transmit phone conversations, to play music in stereo, or to transfer files or other data.


After you have paired a Bluetooth device with the tablet PC, you can select which profile you want to use with your tablet.

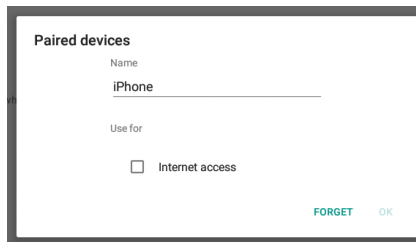
1. Tap the **Settings** icon on the home screen and then tap **Bluetooth** to access the Bluetooth settings page. Find the paired device that you want to configure the profiles and tap the  icon of the paired device.
2. A page opens for that paired device. Select or deselect a profile as needed.




4.5.3 Disconnect from a Bluetooth Device

To disconnect the tablet PC from a Bluetooth device:

1. Tap the **Settings** icon on the home screen and then tap **Bluetooth** to access the Bluetooth settings page.
2. Find the paired device that you want to disconnect and tap the  icon of the paired device.
3. A page opens for that paired device. Tap **Forget**.



4.5.4 Additional Bluetooth Settings

From the Bluetooth settings page, tap the menu icon  and a context menu opens providing the following options:

1. **Rename tablet:** Allows you to edit the Bluetooth name of the tablet PC that will be shown to others when they try to search for it.
2. **Show received files:** Open the location where downloaded and uploaded Bluetooth files are stored.

4.6 Using the RFID Feature (Optional)

Radio-Frequency Identification (RFID) is a technology that uses radio frequency (RF) for a RFID reader to retrieve information from a RFID tag attached to an object. Different from a barcode technology, RFID technology does not require direct contact or line-of-sight reading; however, the read range depends on frequency, tag antenna, tag type and a number of factors.

The RFID reader area is at the back side of the tablet PC as shown below.



To read a RFID tag:

1. Launch your RFID App.
2. Place the RFID tag near the RFID reader on the back of the tablet PC.

RFID read range varies depending on your application. Contact your dealer for details.

3. After reading and decoding, the RFID tag data will be displayed.

4.7 Using the NFC Feature (Optional)

Near Field Communication (NFC) is a short-range wireless communication technology that enables NFC-capable devices to exchange data such as contacts, photos, music, or web address over a short distance less than 4 centimeters.

The NFC detection area is at the back side of the tablet PC as shown below. When you tap other NFC devices, tags, or readers, the NFC areas of both

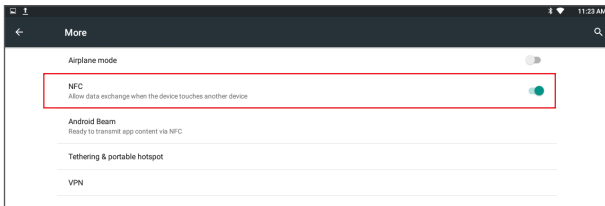
devices should be close to one another so that the connection can be established.



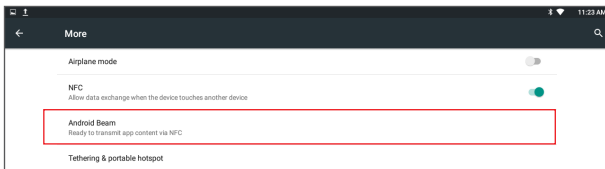
4.7.1 Using the Android Beam Feature

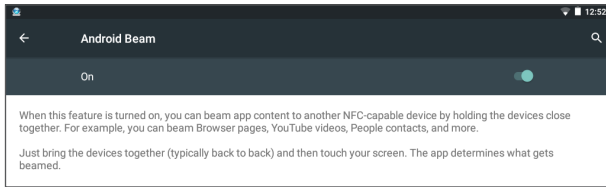
To use NFC to exchange App contents, both sending and receiving devices must be NFC-enabled and unlocked. The following is an example describing how to beam App content from the tablet PC to another NFC device:

1. Make sure both devices are NFC-enabled. To enable the tablet PC's NFC function, tap the **Settings** icon on the home screen and then tap **More** under the **Wireless & networks** section. Then enable the NFC function.



2. On the same page, tap Android Beam and then turn on the Android Beam feature.

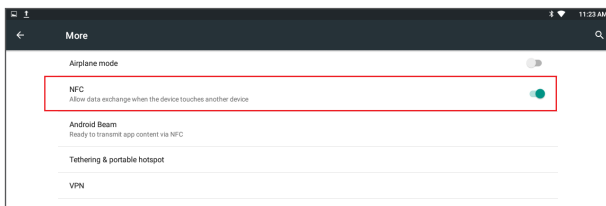




3. On the tablet PC, open the content you want to exchange.
4. Make sure the screen of both devices are unlocked, then hold your tablet PC and the receiving device back to back so that the NFC detection areas of both devices are within a range of about 4 centimeters.
5. On the tablet PC, you will hear a sound and be prompted a message “**Touch to beam**”. Touch the screen of the tablet PC to begin the beaming process.
6. The content will appear on the receiving device’s screen.

4.7.2 Using the Tap & Pay Feature

You can tap and pay with the tablet PC at the merchants that accept contactless payments. To use the tap & pay function, make sure you have enabled the tablet PC’s NFC function via **Settings > Wireless & networks > More > NFC**.

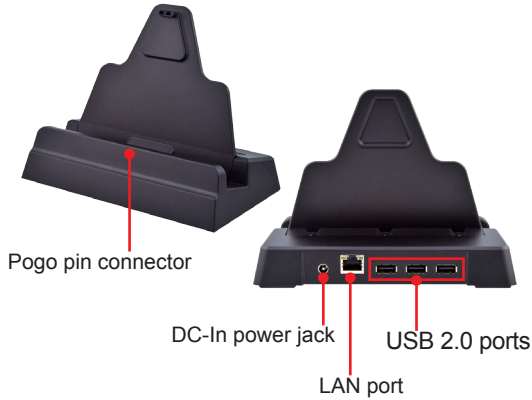


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Appendix

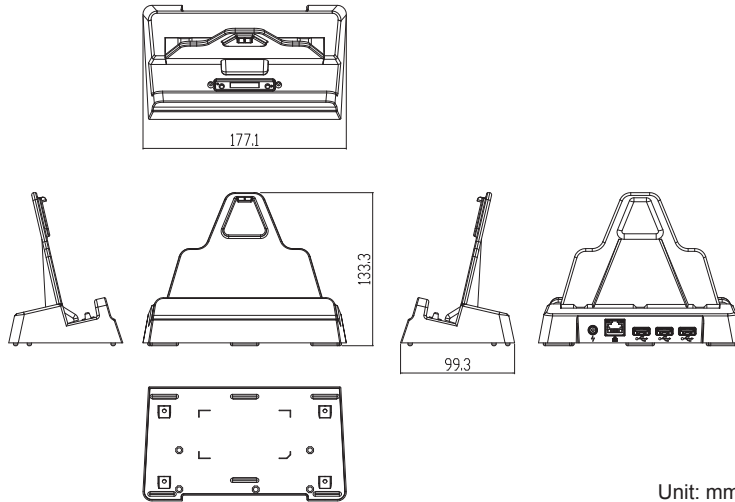
A. Using the Lite Desktop Cradle (Optional)

A.1 Overview



Items	Descriptions
Pogo pin connector	22-pin connector for connection with tablet PC.
USB ports	3 x USB 2.0 Type-A ports. To connect to USB devices.
LAN port	Gigabit Ethernet port. To connect the computer to a network through an Ethernet cable.
DC-In power jack	DC-IN Power jack. To connect the computer to a power source through provided AC power adapter.

A.2 Dimensions



Unit: mm

A.3 Docking the Tablet PC to the Lite Desktop Cradle

To dock the tablet PC:

1. With screen side facing out, insert the bottom of the tablet PC into the desktop cradle. Make sure to align with the guide posts on the cradle.



2. Connect the DC-IN jack on the cradle to a power source using the AC/DC power adapter (12V/30W AC/DC adapter kit).



When the cradle is connected to a power source, the docked tablet PC will charge through the cradle. When charging is in progress, the power LED is blinking in red.

Caution: When the tablet PC is docked in the cradle, do not connect the tablet PC and the cradle to power source at the same time to prevent damage to the products.

A.4 Connecting to a Local Area Network

The cradle comes with a LAN port allowing you to connect the tablet PC to a wired local area network. To connect the tablet PC to a wired network:

1. Using a Ethernet cable, connect one end to the LAN port on the cradle.
2. Connect the other end of the Ethernet cable to a hub, switch or router.

