CipherLab
Reference Manual

RK25 Mobile Computer

Android 7.0, Nougat

Version 1.00

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CIPHERLAB CO., LTD.
Website: http://www.CipherLab.com

IMPORTANT NOTICES

FOR USA

This equipment has been tested and found to comply with the limits for a **Class B** digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. 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.

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

FCC Caution:
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Find the certificate information from:

Setup → About Phone → Regulatory information

Tested to Comply with FCC Standards

FOR HOME OR OFFICE USE

FOR PRODUCT WITH LASER

- This laser component emits FDA / IEC Class 2 laser light at the exit port. Do NOT STARE INTO BEAM DIRECTLY.
- Do not aim the beam at the eyes.
- Any adjustments or performance excluding those specified herein may result in hazardous laser light exposure.

ENVIRONMENT

- Operate the mobile computer at ambient temperatures from -20°C to 50°C and with humidity range from 10% to 90%.
- Store the device at ambient temperatures from -30°C to 70°C and with humidity range from 5% to 95%.
- Charge the device at ambient temperatures from 0°C to 40°C.
- This device is built with a dust-proof and splash-proof structure that conforms to protection class IP65.

SPECIFIC ABSORPTION RATE (SAR) INFORMATION

The product complies with the FCC / Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the products can be kept as far as possible from the user body or set the device to lower output power if such function is available.

For body-worn operating conditions please use belt-clips, holsters, and/or accessories that have no metallic component in the assembly and must provide at least 10mm separation between the device and the user's body.
FCC SAR Value (Standard limit is 1.6 W/Kg)

- USA (1g): Max. 0.52 W/Kg

A minimum separation distance of 0.5 cm must be maintained between the user's body and the device, including the antenna during body-worn operation to comply with the RF exposure requirements in Europe.
To compliance with RF Exposure requirements in Europe, third-party belt-clips, holsters or similar accessories used by this device should not contain any metallic components. The use of accessories that do not satisfy these requirements may not comply with RF exposure requirements, and should be avoided.

- CE SAR Value (Standard limit is 2 W/Kg)
- EU (10g): Max. 1.03 W/Kg
- 台灣 NCC 注意事項

  第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者不得擅自變更頻率、加大功率或變更原設計之特性及功能。
  第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
  前項合法通信，指依電信法規定作業之無線電通信。
  低功率射頻電機需忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
  註：若要減少電磁波影響，請妥適使用。SAR 標準值 2.0W/Kg；送測產品實測值為：0.882W/Kg。

SAFETY PRECAUTIONS

Warning statement:
A pleine puissance, l'écoute prolongée du baladeur peut endommager l'oreille de l'utilisateur.
To prevent possible hearing damage, do not listen at high volume levels for long periods.

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RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

For people's safety

- Do not listen at high volume levels for long periods to prevent possible hearing damage.
- Do not operate this device while walking, cycling or car driving.

For the equipment

- Do not use any batteries or charging devices which are not originally sold or manufactured by CIPHERLAB CO., LTD.
- Do not replace the battery with an incorrect type, to avoid the risk of heat generation, fire, or explosion.
- Do not disassemble, incinerate or short circuit the battery.
- Do not touch the contact pins of the battery pack.
- Do not expose the mobile computer or battery to any flammable sources.
- Do not expose the mobile computer to extreme temperatures or soak it in water.
- Do not use any pointed or sharp objects against the screen surface.
- Do not use the styluses which are not supplied or approved by CIPHERLAB CO., LTD., to prevent possible scratches to the touch screen.
- Water residue on the touch screen may cause abnormal behaviors or the fall of its sensitivity levels.
- On the surface of the terminal and the barcode reading window, the fog or water drops caused by low temperatures may influence barcode reading.
- Do not use bleaches or cleaners to clean the device. Use a clean, wet cloth instead.

BATTERY

- The main battery may not be charged to full for shipment. Charge the main battery to full before using the mobile computer for the first time.
- **Main battery:** The main battery powers the mobile computer to work. It takes approximately 4 hours to charge an empty main battery to full. For the first time charging the main battery, please charge it for at least 8 to 12 hours. The charging LED above the screen will light up in red while charging and will turn green when charging is complete.
- When the main battery is removed, RTC retention will be maintained for at least 30 minutes.
- **Backup battery:** The backup battery is mounted on the main board. Its role is to temporarily keep the mobile computer in suspension when the main battery is drained out so data in DRAM will be retained. The backup battery takes approximately 3.5 hours to charge to full by the main battery or power adapter.

- The allowed battery charging ambient temperature is between 0°C to 40°C. It is recommended to charge the battery at room temperature (18°C to 25°C) for optimal performance.
- Please note that battery charging stops when ambient temperature drops below 0°C or exceeds 40°C.
- In order to prevent system from shutting down after the battery is drained out, keep a fresh battery for replacement at all times, or connect the mobile computer to an external power.
- If there are drippings or dust on the device or battery pack, wipe them away with a soft clean cloth before battery replacement.
- Turn off the power before battery replacement.
- If you want to put away the mobile computer for a period of time, remove the battery pack from the mobile computer's battery compartment. Store the mobile computer and battery pack separately.
- Recycle batteries in a proper way for the green-environment issue.

SCANNER

- Scan a 1D barcode

1) Open **ReaderConfig** and tap **Scan Test** on the menu bar.
2) Aim the scanning window at the barcode to read. Move the device, having the barcode located in the center of the scanning area.
3) Press any of the two side triggers. The scanning light beams to read the printed barcodes. The buzzer beeps after scanning. The scanning light goes off once the data is decoded, or when the decode timeout period has passed.

- Scan a 2D barcode

1) Open **ReaderConfig** and tap **Scan Test** on the menu bar.
2) Aim the scanning window at the barcode to read. Move the device, having the barcode located in the center of the scanning area.
3) Press any of the two side triggers. The scanning light beams to read the printed barcodes. The buzzer beeps after scanning. The scanning light goes off once the data is decoded, or when the decode timeout period has passed.

CONNECTION

Via Bluetooth or WLAN

- Connection may fail when the mobile computer is around other wireless machines or power cables as the radio frequencies of those may cause interferences.
- If communication fails, move the devices much closer to each other, and try to communicate again
- After turning on, Bluetooth power is sustained even when the mobile computer is suspended. However, if the power mode is switched to Airplane Mode, Bluetooth power will be turned off regardless of the settings.

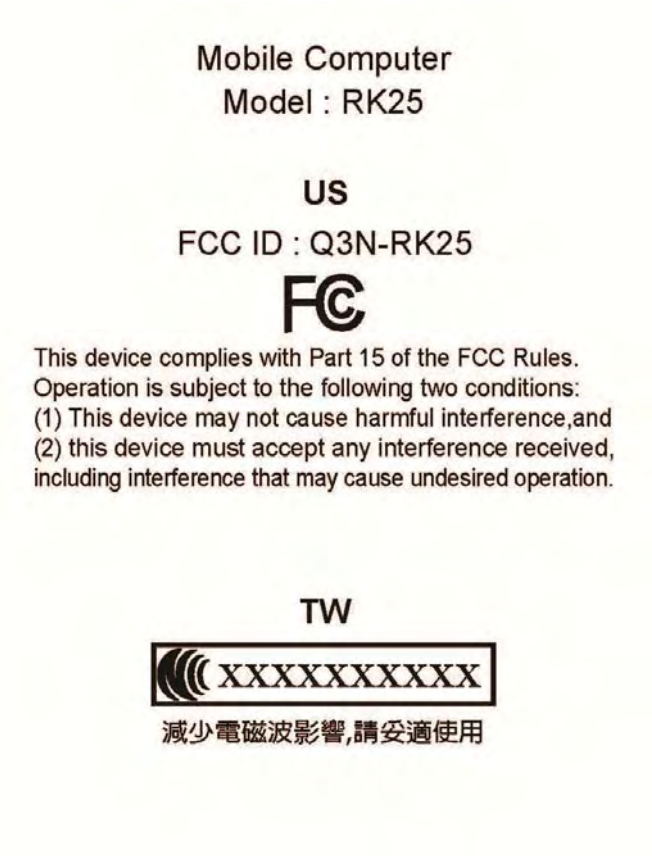
To a Charging & Communication Cradle

- Do not insert the mobile computer to a Charging & Communication Cradle if water or drippings are staying on the device.
- The LED indicator on a Charging & Communication Cradle shows the status of battery charging only; the status of terminal charging is shown on the device itself.
- Not Charging could be the result of battery damage, battery's failure to touch the connector or AC plug coming off.
- Charging error could be due to high battery temperature.

CARE & MAINTENANCE

- This mobile computer is intended for industrial use. The mobile computer is rated IP67, however, damage may be done to the mobile computer if it is exposed to extreme temperatures or soaked in water.
- When the body of the mobile computer gets dirty, use a clean, wet cloth to wipe off dust and debris. DO NOT use bleaches or cleaners.
- Use a clean, non-abrasive, lint-free cloth to wipe dust off the LCD touch screen. DO NOT use any pointed or sharp objects against the surface. Always keep the LCD dry.
- If you want to put away the mobile computer for a period of time, download the collected data to a host computer, and then remove the battery pack from the mobile computer's battery compartment. Store the mobile computer and battery pack separately.
- If you encounter malfunction on the mobile computer, write down the specific scenario and consult your local sales representative.

E-LABEL


Mobile Computer
Model : RK25
US
FCC ID : Q3N-RK25
This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference,and
(2) this device must accept any interference received,
including interference that may cause undesired operation.
TW
XXXXXXXXXX
減少電磁波影響,請妥適使用

CE DECLARATION

CIPHER LAB

CE Declaration of Conformity

Manufacturer

CIPHERLAB Co., Ltd.
12F., 333, Dunhua S. Rd., Sec. 2
Taipei, Taiwan 106, R.O.C.
Tel: +886 2 8647 1166
http://www.cipherlab.com

CipherLab Europe
Flight Forum 40,
5657 DB Eindhoven, The Netherlands
Tel: +31 (0) 40 295 1510
http://www.cipherlab.eu

Type of Equipment

Mobile Computer

Model(s) Declared

RK25

Initial Year of Manufacture **2018**
CE issued date **2018.04.10**

Reference to the specification under which conformity is declared in accordance with Council Directive- 2014/30/EU(EMC), 2014/35/EU(LVD), 2011/65/EU (RoHS), 1999/519/EC (EMF), 2014/53/EU(RED).

EN 300 328 V2.1.1
EN 303 413 V1.1.0
EN 301 511 V12.1.1
EN 301 908-2 V11.1.1
EN 50360 :2001 A1:2012
EN 300 330 V2.1.1
EN 55024 : 2010 + A1:2015
EN 55032: 2015+AC:2016
EN 60950-1 : 2006+A2:2013
EN 301 893 V2.1.1
EN 301 908-13 V11.1.1
EN 301 489-3 V2.1.1
EN 50566:2013 AC:2014
EN 301 489-52 V1.1.0
EN 301 489-1 V2.1.1
EN 301 489-17 V3.1.1
EN 301 489-19 V2.1.0
EN 301 908-1 V11.1.1
EN 62479:2010
EN 61000-3-2 :2014
EN 61000-3-3 :2013

I the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).
The Notified Body Telefication B.V., with Notified Body number 0560 performed:
choose applicable Modules: B+C
Where applicable:
The issued EU-type examination certificate: note certificate number

Manufacture Signature

Full Name :Herbie Jiang
Title : Manager
Date: 2018.04.10

RELEASE NOTES

Version	Date	Notes
1.00	March 8, 2018	Initial release

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INTRODUCTION

The **RK25** mobile computer, powered by Android 7.0 Nougat, is light-weight, easy to use, providing powerful and handy tools for the purpose of delivering flexibility in customization.

Specifically designed to work as an industrial PDA, it provides rich options of data collection, voice and data communication, long-lasting working hours, and so on. Its large color transmissive display guarantees ease in reading in all lighting conditions. Integrated with Bluetooth 2.1EDR/4.0 BLE/V4.1, 802.11 b/g/n, 802.11a/n technologies, the mobile computer also includes a GSM/GPRS/EDGE/WCDMA/UMTS/HSDPA/HSUPA/HSPA+/LTE module to gain greater speeds and optimal mobility. In particular, an integrated GPS receiver is made available for use with third-party location-based applications.

This manual serves to guide you through how to install, configure, and operate the mobile computer. The Care & Maintenance section is specifically crucial for those who are in charge of taking care of the mobile computer.

We recommend you to keep one copy of the manual at hand for quick reference or maintenance purposes. To avoid any improper disposal or operation, please read the manual thoroughly before use.

FEATURES

- Built tough to survive drop test and sealed against moisture/dust to industrial standard IP65.
- Android 7.0 Nougat operating system with a powerful Cortex 1.45 GHz Quad-Core processor
- 16GB eMMC flash memory to store OS and software programs
- 2GB LPDDR3 SDRAM to store and run programs, as well as store program data
- One expansion slot for microSDHC card up to 32GB and microSDXC card up to 64GB.
- Built-in 8.0 Megapixel rear camera with white LED for flash and auto focus.
- Left and right side triggers for ambidextrous scanning
- Total wireless solution — connectivity includes Bluetooth 2.1EDR/4.0BLE/V4.1 and, 802.11 b/g/n, 802.11a/n, GSM/GPRS/EDGE/WCDMA/UMTS/HSDPA/HSUPA/HSPA+/LTE, and near field communication (NFC).
- A 4" color transmissive display with 480x800 pixels to deliver excellent visibility in all lighting conditions
- Configurable feedback indicators including speaker and vibrator
- Built-in scan engine setting tool Reader Configuration which serves out-of-the-box keyboard wedge functionality

INSIDE THE PACKAGE

The following items are included in the kit package. Save the box and packaging material for future use in case you need to store or ship the mobile computer.

- RK25 Mobile Computer
- USB Cable
- Snap-on Cable
- AC Power Adaptor
- Quick Start Guide

ACCESSORIES

- Hand Strap
- 1-slot Charging + Communication Cradle
- Pistol Grip

RELATED DOCUMENTATION

Log in to **GoBetween** to access related documentation about the RK25 mobile computer from the CipherLab Central Service (CCS) platform. Download the **GoBetween desktop** or mobile device application, or launch the GoBetween Lite web application from the following site: http://ccs.cipherlab.com/.

Chapter 1

QUICK START

This chapter helps you get ready for starting using the mobile computer.

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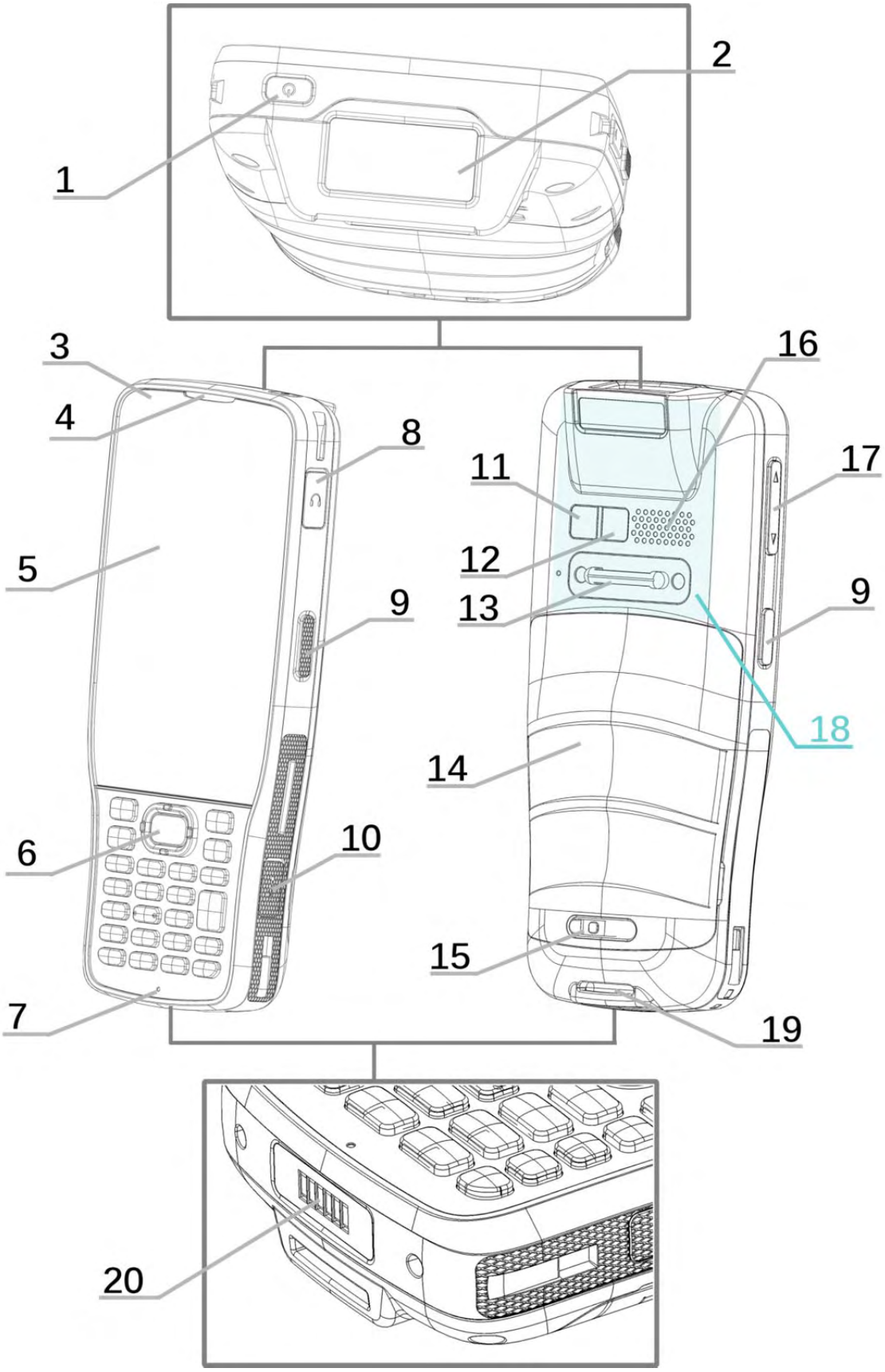
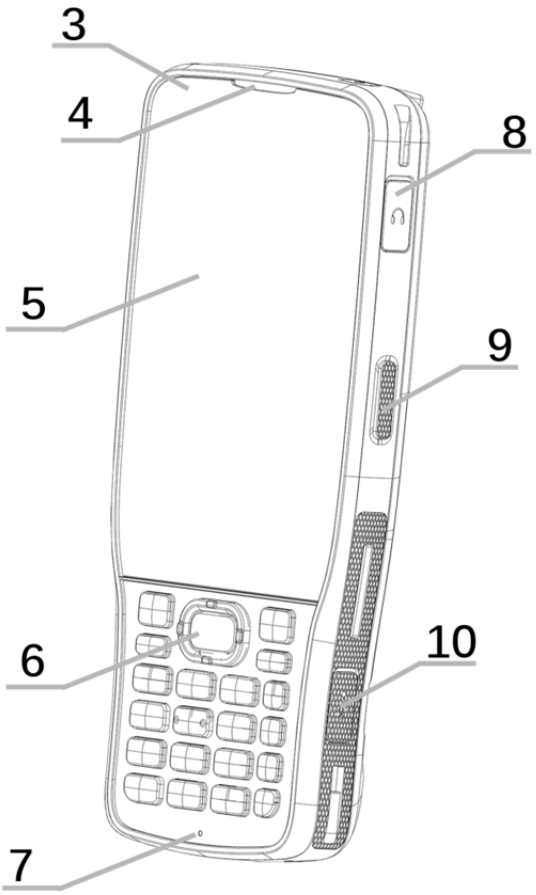
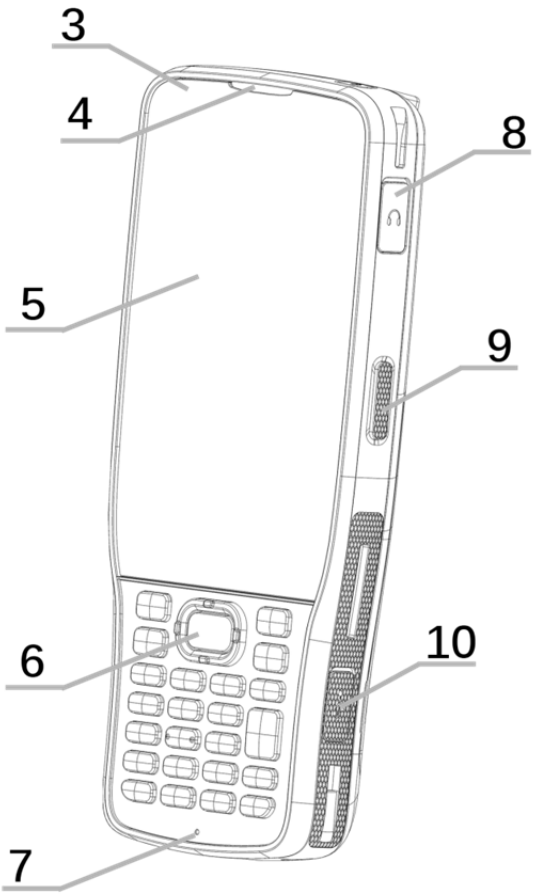
1.1. OVERVIEW





25-key Model



28-key Model

No.	Description	No.	Description
1	Power Button	2	Scan Window
3	Status LED	4	Receiver
5	Touchscreen	6	Scan Key
7	Microphone	8	Headset Jack
9	Side-Trigger	10	Micro USB Port
11	Camera	12	Camera Flash
13	Wrist Band Hole	14	Battery
15	Battery Cover Latch and Lock	16	Speaker
17	Volume Buttons	18	NFC Detection Area
19	Wrist Band Hole	20	Charging & Communication Pins

Note:
Please refer to "Physical Keypad" for the difference between **28-key Model** and **25-key Model**.

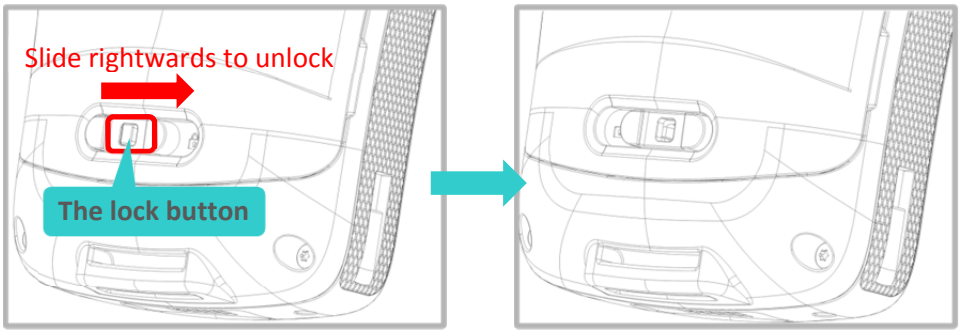
1.1.1. INSTALL/ REMOVE BATTERY

For shipping and storage purposes, the mobile computer and the main battery are saved in separate packages.

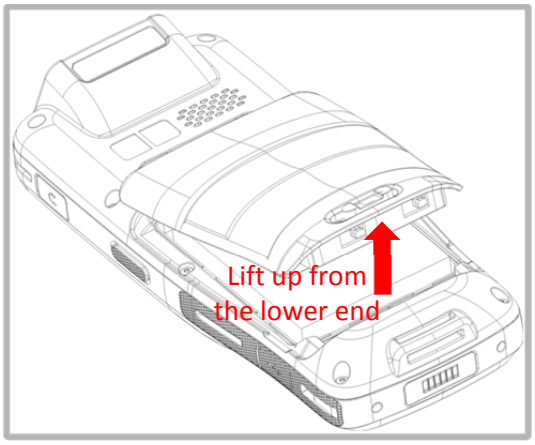
Note:
Any improper handling may reduce the battery life.

To install the main battery:

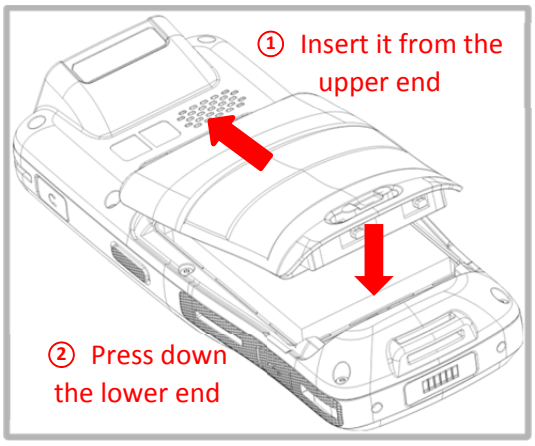
1) Press down the lock button and slide the battery latch rightward to the "**Unlock**" position.



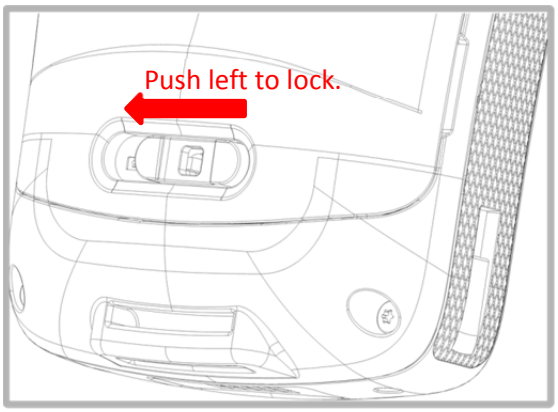
2) Lift up the main battery (which is with the battery cover) from its lower end to remove it.



3) Insert a fully-charged main battery from its upper end, and then press down the lower edge of the battery.



4) Slide the battery latch leftward to "**Lock**" position.



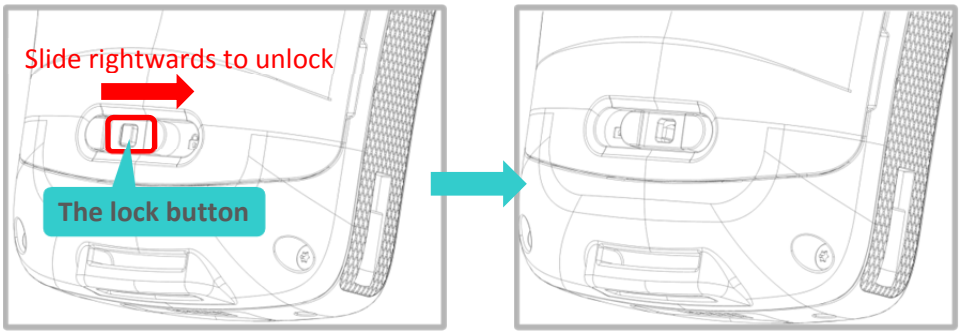
Warning:

(1) Make sure the battery latch is at the "**Lock**" position before powering on the device.

(2) For initial use, insert a charged battery, lock the battery cover in place, and then press the Power key to power on the mobile computer.

REMOVE BATTERY

1) Press down the lock button and slide the battery latch rightward to the "**Unlock**" position.



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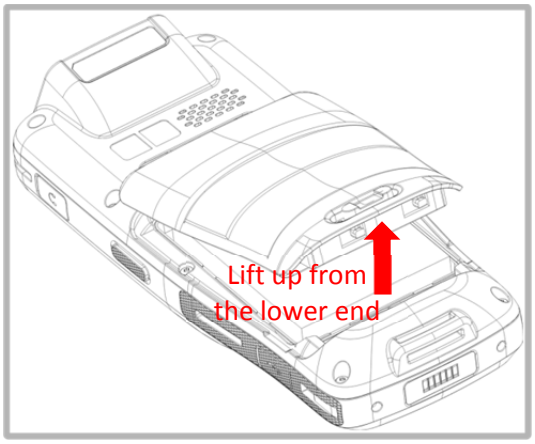
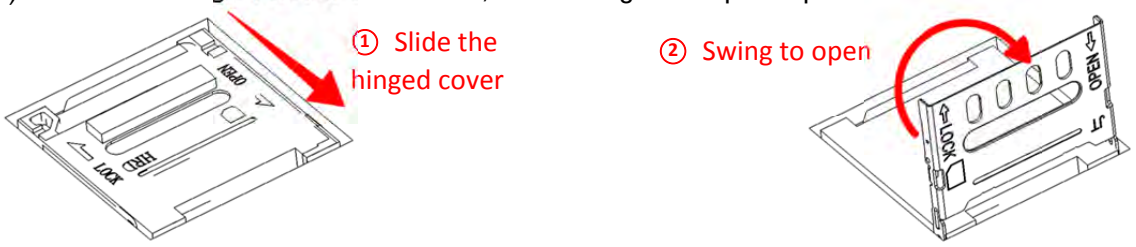


1.1.2. INSTALLING SIM CARD, SAM CARD AND MEMORY CARD

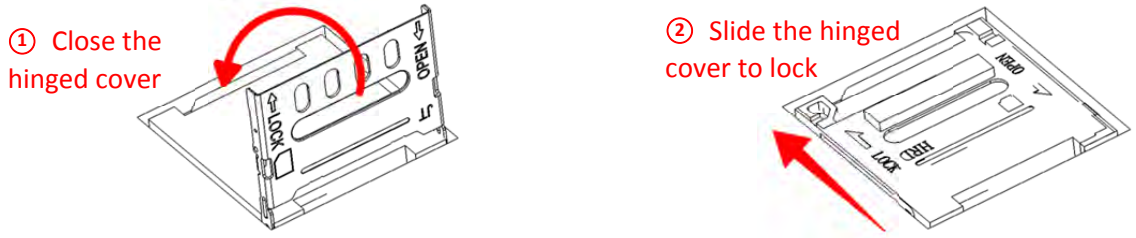
The RK25 mobile computer is equipped with two SIM card slots (SIM 2 slot is compatible with SAM card) and one memory card slot.

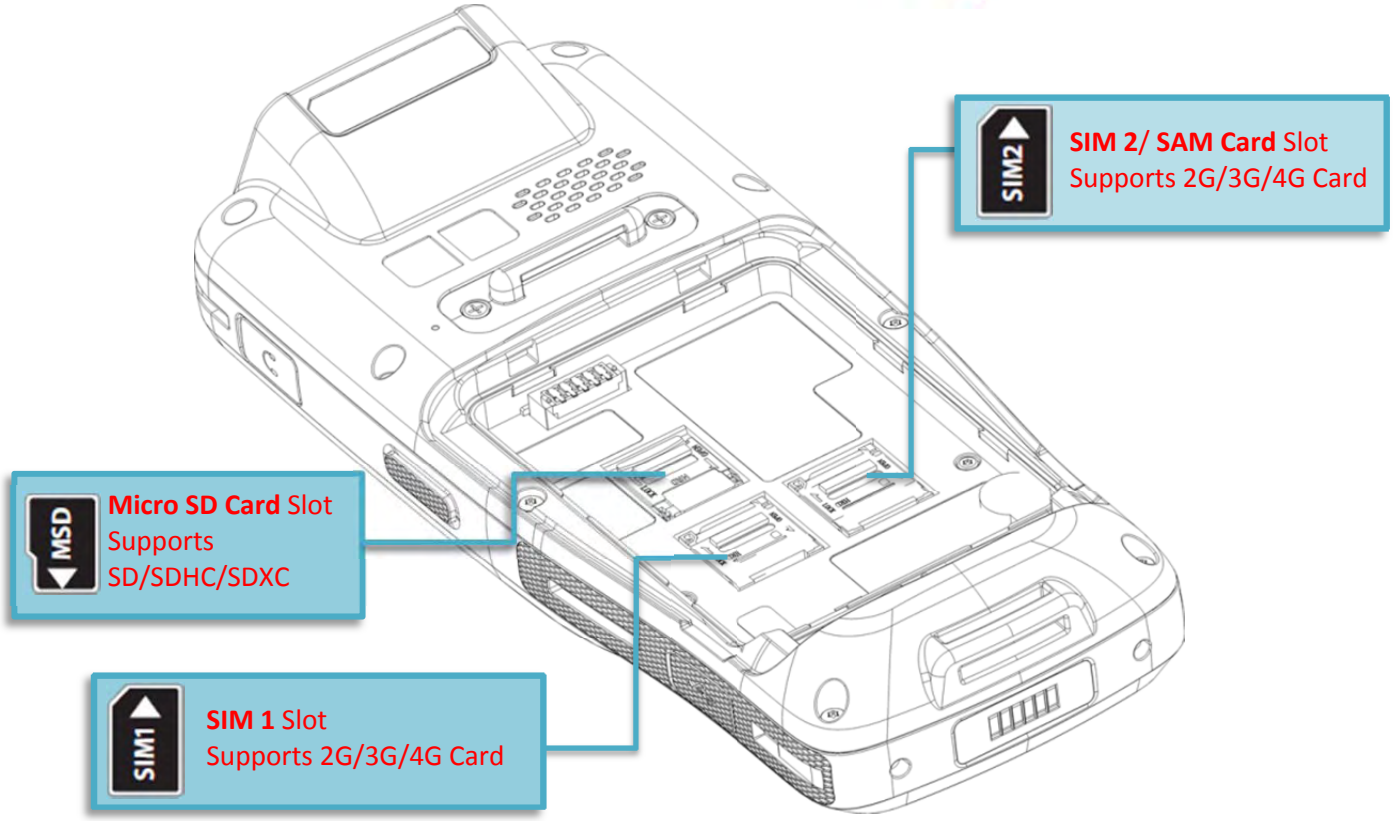
To insert the cards:

1) Remove the battery as described in Remove Battery.
2) Slide the hinged cover backward, and swing the top to open.



3) Place the card into the slot with its metal contacts downward.
4) Close the hinged cover, and then push it toward to lock.





5) Replace the battery cover and push the battery latch back to the "**Lock**" position.

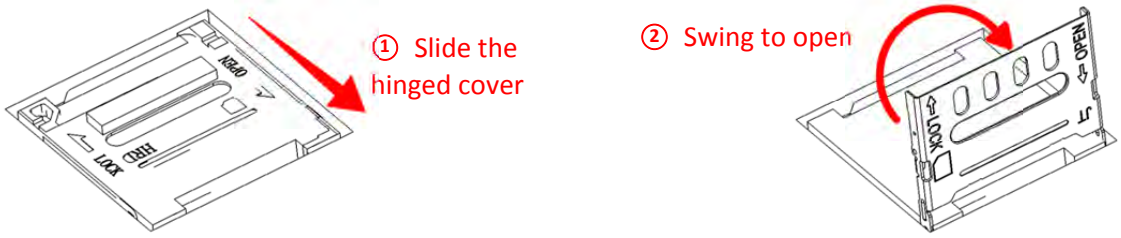
Note:

Both SIM1 and SIM2 card slots support 2G/3G/4G cards. However, you can have 3G/4G data transmission on either SIM but not on both at the same time. Refer to SIM Card Management for details on managing dual SIM cards.

REMOVE CARDS

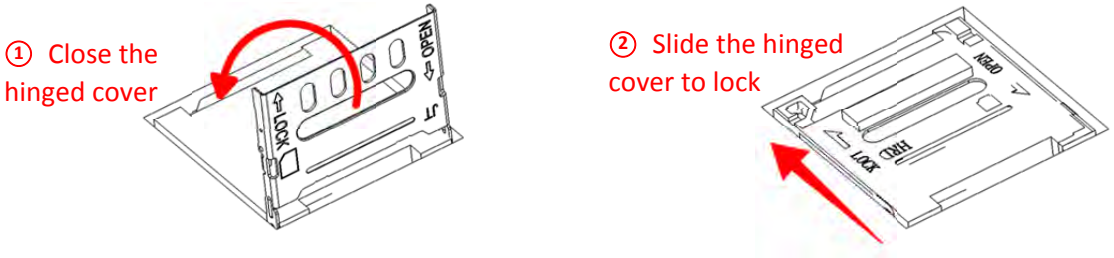
1) Remove the battery cover as described in Remove Battery.

2) Slide the hinged cover backward, and swing the top to open.



3) Take out the cards directly from their slots.

4) Close the hinged cover, and then push it toward to lock.

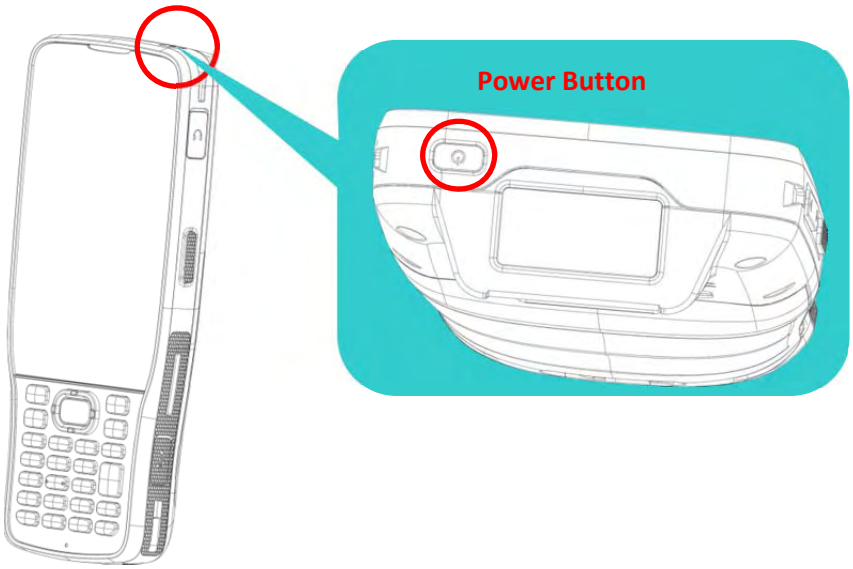


5) Replace the battery cover and push the battery latch back to the "**Lock**" position.

1.1.3. POWER ON/OFF MOBILE COMPUTER

POWER ON

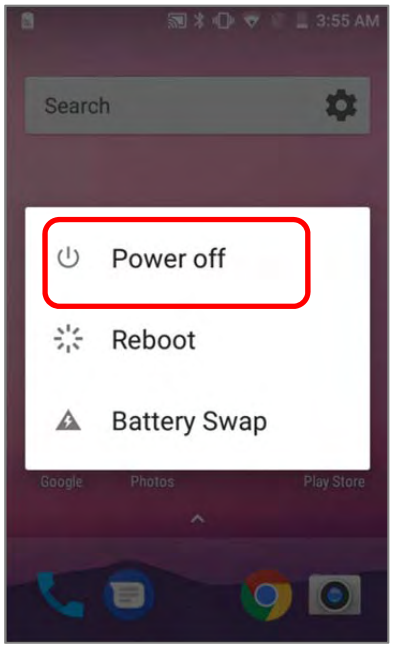
To power on the mobile computer, press and hold the power button located on the top end of the device. The mobile computer will turn on and show the Home Screen after splash screen.



Note:
For the mobile computer to power on, the battery cover must be secured in place.

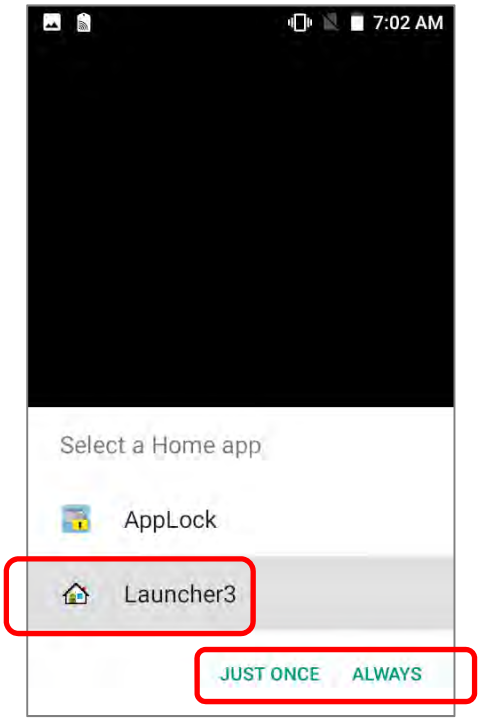
POWER OFF

To power off the mobile computer, press and hold the power button for more than three seconds. A menu will appear on-screen which allows you to power off the device. Make sure all user data and tasks have been stored before tapping on **Power off**.



1.1.4. HOMESCREEN SELECTION

Upon the first time you launch the system, a **Select Home app** window will pop up to request your immediate choice of home screen. By selecting "**AppLock**", you will directly enter AppLock application (please refer to *AppLock User Guide* for detailed instructions on AppLock settings) to start configuring the interface provided to normal users of this device; by selecting "**Launcher**", you will enter the default Android 7.0 home screen.



1.1.5. USING HARDWARE BUTTONS

Beneath the LCD display are three hardware buttons that deliver the following functions:

Button	Function	Description
	Back button	Returns to the previous screen or closes the active window or keyboard.
	Home button	Displays the Home screen.
	Recent apps button	Opens a list of recently used applications.

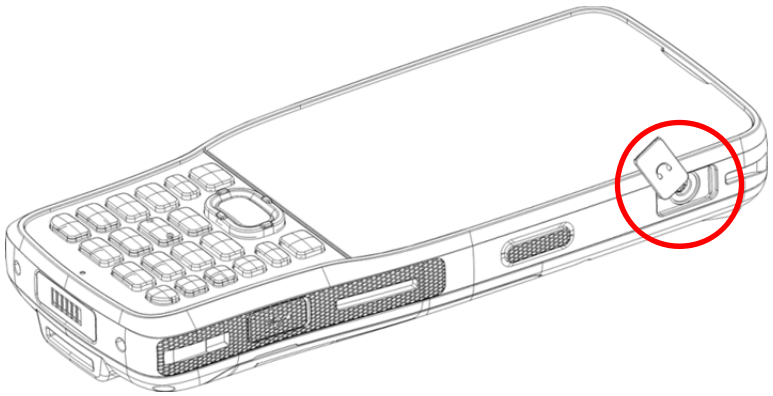
1.1.6. CONNECTING HEADSET

The headset jack is located on the upper right side of the mobile computer. You can use the headset for audio playback or communication via the phone application, audio instant messaging, etc.

1) Flip up the rubber cover.

2) Connect the headset to the headset jack.

3) Once the headset is removed, please replace the rubber cover.



1.2. CHARGING & COMMUNICATION

1.2.1. CHARGE MOBILE COMPUTER

The main battery may not be charged to full for shipment. When you first receive the kit package, you will need to charge the main battery to full before using the mobile computer. You may use the Snap-on Charging Cable or Charging & Communication Cradle along with a power adapter to charge the mobile computer.

Your device can also be charged by connecting to a host computer using the USB cable. It's slower than charging using the supplied snap-on cable or Charging & Communication Cradle.

CHARGING TIME

- **Main battery:** The main battery powers the mobile computer to work. It takes approximately 4 hours to charge an empty main battery to full. For the first time charging the main battery, please charge it for at least 8 to 12 hours. The charging LED above the screen (located on the right) will light up in red while charging and will turn green when charging is complete.

  When the main battery is removed, RTC retention will be maintained for at least 30 minutes.

- **Backup battery:** The backup battery is mounted on the main board. Its role is to temporarily keep the mobile computer in suspension when the main battery is drained out so data in DRAM will be retained. The backup battery takes approximately 3.5 hours to charge to full by the main battery or power adapter.

CHARGING TEMPERATURE

The allowed battery charging ambient temperature is between 0°C to 40°C. It is recommended to charge the battery at room temperature (18°C to 25°C) for optimal performance.

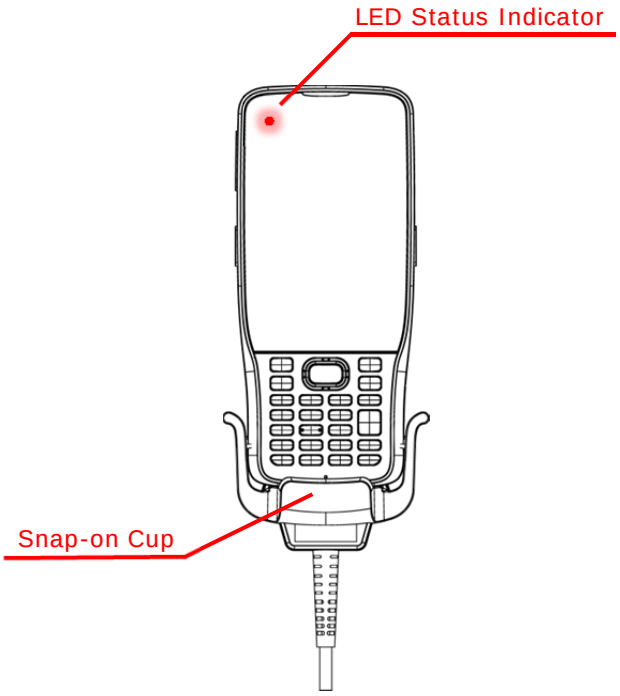
Please note that battery charging stops when ambient temperature drops below 0°C or exceeds 40°C.

OPERATION ON BATTERY POWER

When Bluetooth 2.1EDR/4.0 BLE/V4.1, 802.11 b/g/n, 802.11a/n, GSM/GPRS/EDGE/WCDMA/UMTS/HSDPA/HSUPA/HSPA+/LTE, and GPS are all enabled on battery power, the main battery level will drop down substantially. Prolonged use of the display and continued scanning of barcodes will also affect battery level.

In order to prevent system from shutting down after the battery is drained out, we suggest that you keep a fresh battery for replacement at all times, or connect the mobile computer to an external power.

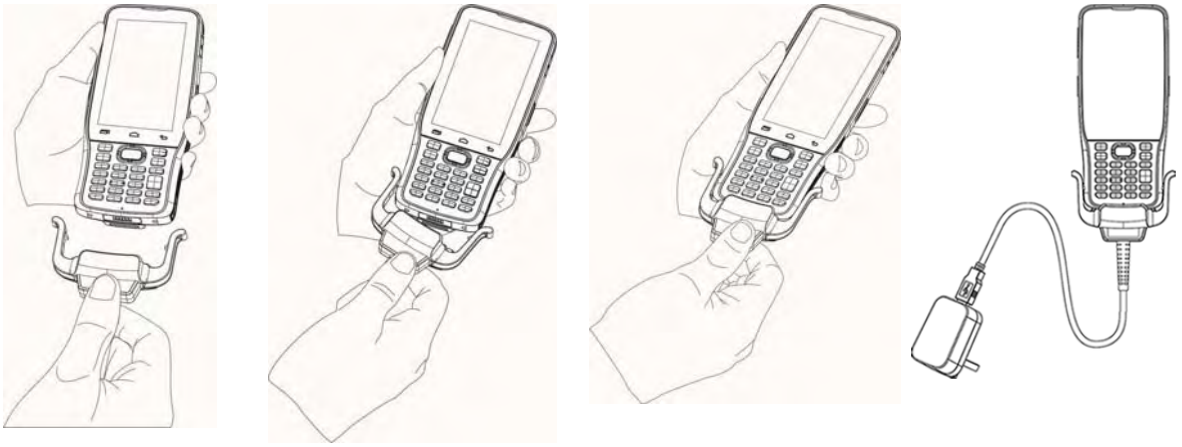
USE SNAP-ON CABLE



The Snap-on Cable provides a convenient way to charge your mobile computer as well as data communication.

To install:

1) Hold the snap-on cup toward the bottom of the RK25 mobile computer, and place one of the snap-on cup side to the side of the RK25 mobile computer.
2) Push the Snap-on cup upwards to make its another side to be attached to the RK25 Mobile computer.
3) A “click” sound is made once the Snap-on cable is connected with the bottom of the RK25 mobile computer in place.
4) Connect the USB plug to the approved adapter for external power connection, or plug it to the USB port of PC/laptop for data transmission/ charging.



While the device battery is being charged, the LED on mobile computer will indicate charging status.

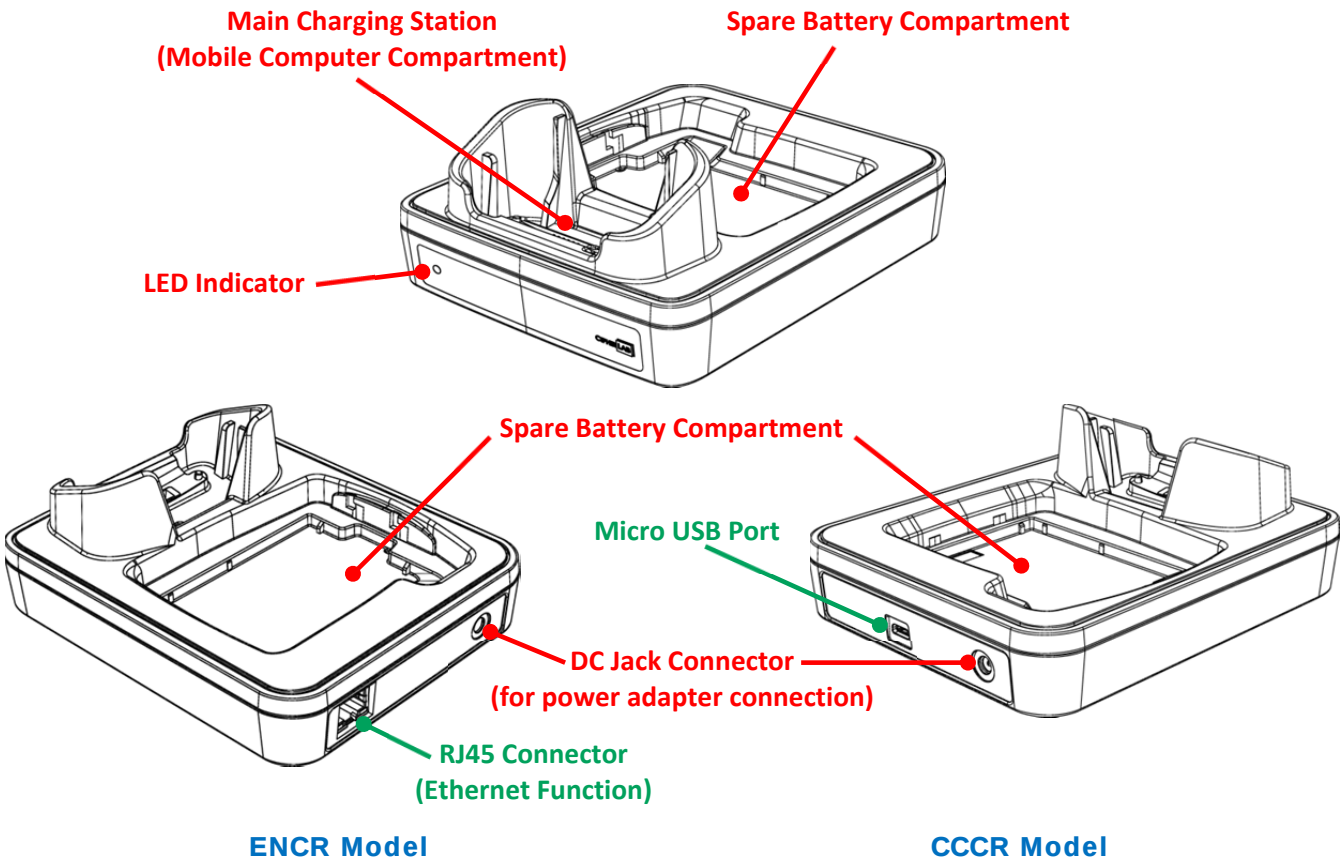
LED Indicator	Status	Description
Charging	Red, solid	Charging the mobile computer
	Red, blink	Charging error
	Green, solid	Charging complete
	No light	The cable is not correctly connected

Note:

For data communication, you could also use the micro USB cable to connect the mobile computer to your PC or laptop.

USE CHARGING & COMMUNICATION CRADLE

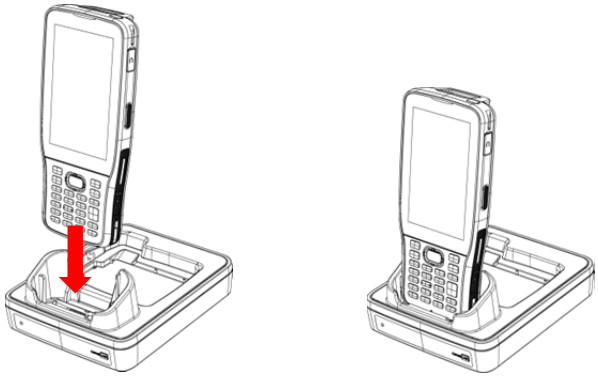
The Charging & Communication Cradle charges your mobile computer and a spare battery at the same time, and it could also be used for data communication.



Note: The Charging & Communication Cradle is equipped with either one Micro USB Port (CCCR Model) or one RJ45 Connector (ENCR Model).

To charge your mobile computer on the Charging & Communication Cradle:

I) Insert the RK25 mobile computer onto the Cradle. The installed hard shell or hand strap is not necessary to be removed in advance before inserting the mobile computer. To remove, please take out the RK25 mobile computer directly.

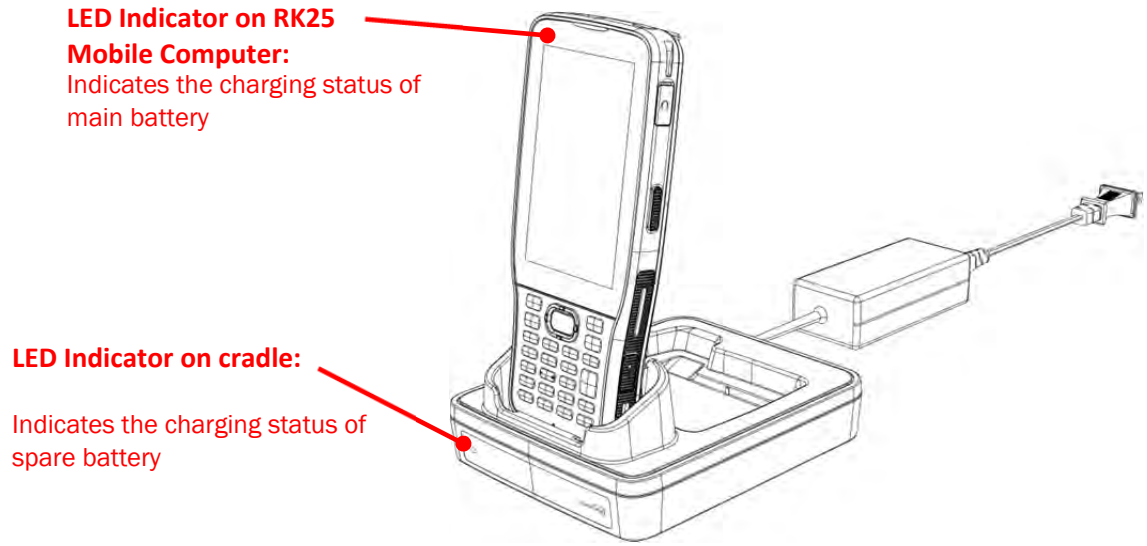


2) For the spare battery, please make sure the battery latch is at "**Unlock**" position, and then insert the battery from its top side (where the contact pins are located) into the spare battery compartment of the cradle with their contact pins connected. Press down the bottom side of the battery (where the battery latch is located), and slide the battery latch leftward to "**Lock**" position to fasten it.

   To remove, please slide the battery latch to "**Unlock**" position, and directly take the battery out.

3) Connect the adapter to the Cradle, and plug the other end into an electrical outlet.

The status of the mobile computer charging is shown on the device itself, while the LED indicator on RK25 Charging & Communication Cradle shows the status of battery charging as below:



Cradle LED Indicator	Status	Description
Charging	Red, solid	Charging the battery
	Red, blink	Charging error
	Red, flash once	No battery
	Green, solid	Charging complete
	No light	Not charging

Note:

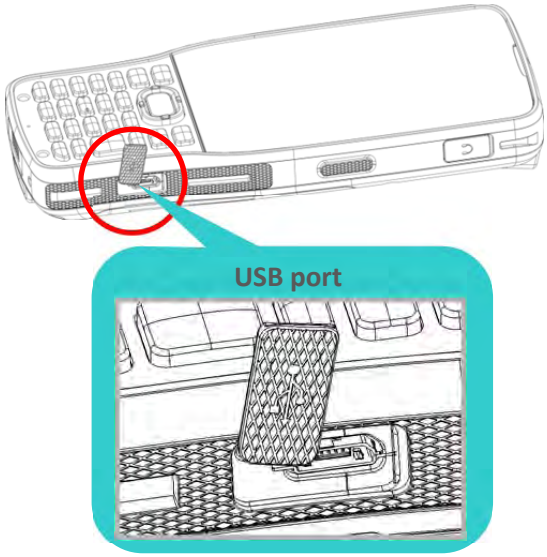
(1) ***Not Charging*** could be the result of battery damage, battery's failure to touch the connector, or AC plug coming off.

(2) Charging error could be due to high battery temperature.

1.2.2. WIRED DATA TRANSMISSION

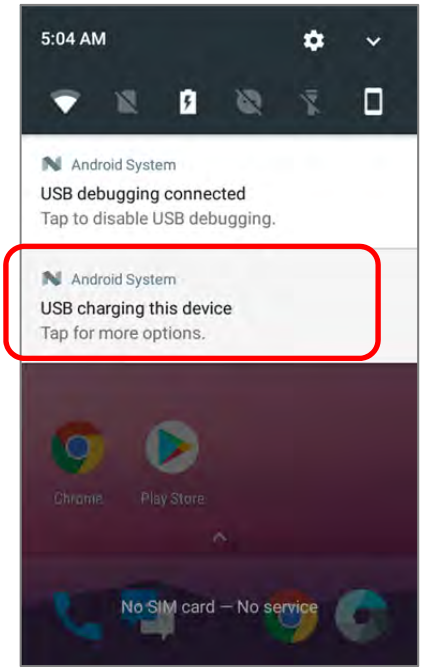
Use the micro USB cable/ the Snap-on Cable to connect the mobile computer to your PC for data transmission.

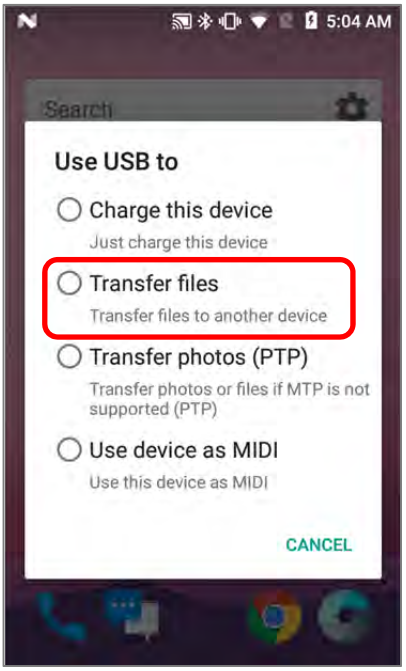
1) Connect your device to the computer with supplied USB cable/ Snap-on Cable / Cradle.



2) Swipe down from the status bar to reveal Notifications Drawer.

3) Tap "**USB charging this device**" to enter USB options. By default, the device will be in charging mode, in which you are unable to access the files on this device from the PC client. To transfer all types of files between your device and PC, choose "**Transfer files**". To transfer videos and photos, you can select "**Transfer photos (PTP)"**, in which your device will share only videos and photos in *DCIM* and *Pictures* folders.





1.2.3. USING WIRELESS NETWORKS

The mobile computer supports widely applied wireless technologies including Bluetooth 2.1EDR/4.0 BLE/V4.1, 802.11 b/g/n, 802.11a/n, and is able to send/receive data in real time in an efficient way.
Select GSM/GPRS/EDGE/WCDMA/UMTS/HSDPA/HSUPA/HSPA+/LTE modules embedded for a total wireless solution for data and voice communication.

Chapter 2

USING RK25 MOBILE COMPUTER

This chapter walks you through the fundamental usage and features of this device.

IN THIS CHAPTER

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2.2 Memory 50
2.3 Touch Screen 60
2.4 Notifications 68
2.5 Date and Time 72
2.6 Language & Keyboard Input 73
2.7 Physical Keypad 82
2.8 Sound and Volume 93
2.9 Data Capture 94

2.1. BATTERY

- **Main Battery**

  The mobile computer is powered by a rechargeable 3.85V / 2960 mAh Li-Polymer battery pack, and it takes approximately 4 hours to charge it to full from the power adaptor (for the first time charging the main battery, please charge it for at least 8 to 12 hours). However, the charging time may vary by your working condition.

- **Spare Battery**

  A spare battery pack is provided as an accessory. We recommend keeping a fully charged spare battery at hand in order to replace the main battery when it is nearly drained out.

- **Backup Battery**

  Settled on the main board is a backup battery that keeps the mobile computer in suspension when the main battery is depleted. The backup battery is a 60 mAh rechargeable Li-Polymer battery, and can retain data in the DRAM for 30 minutes when it is fully charged (as long as wireless modules on the mobile computer are inactive). The backup battery can be charged by the main battery or the power adapter, and takes approximately 3.5 hours to charge to full.

Warning:

(1) The battery cover must be secured in position with its latch locked.

(2) For a new battery, make sure it is fully charged before using.

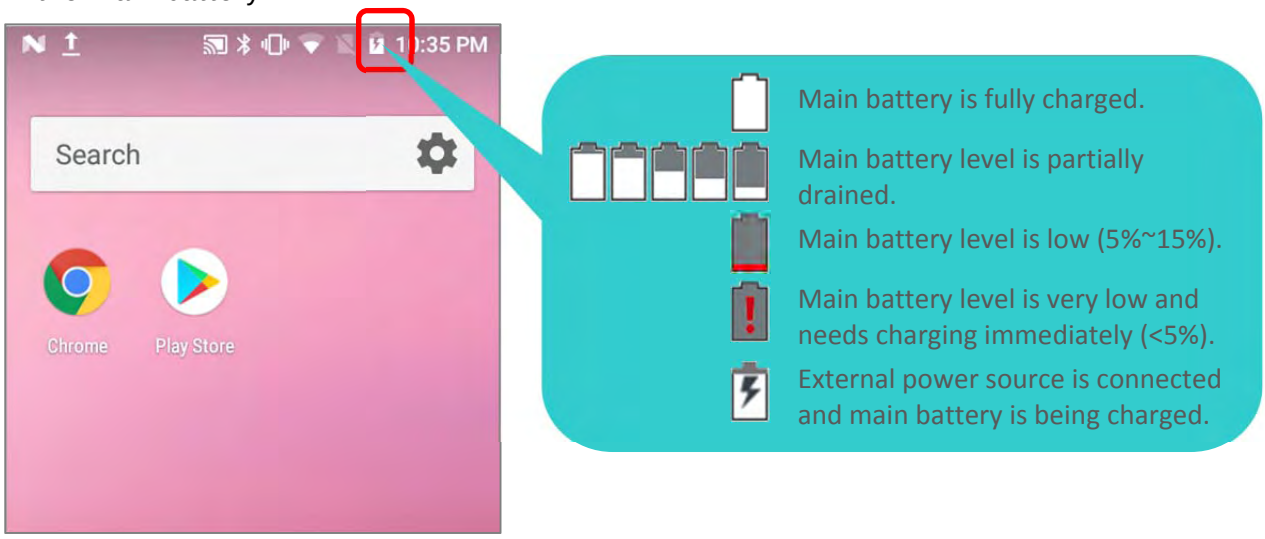
(3) To avoid data loss, when replacing the main battery, make sure you replace it with a well-charged spare battery pack. Always prepare a spare battery at hand, especially when you are on the road.

(4) When the mobile computer has been on backup battery for 30 minutes, the system will shut down. Be sure to replace the main battery as soon as possible in order to avoid data loss.

2.1.1. BATTERY STATUS INDICATORS

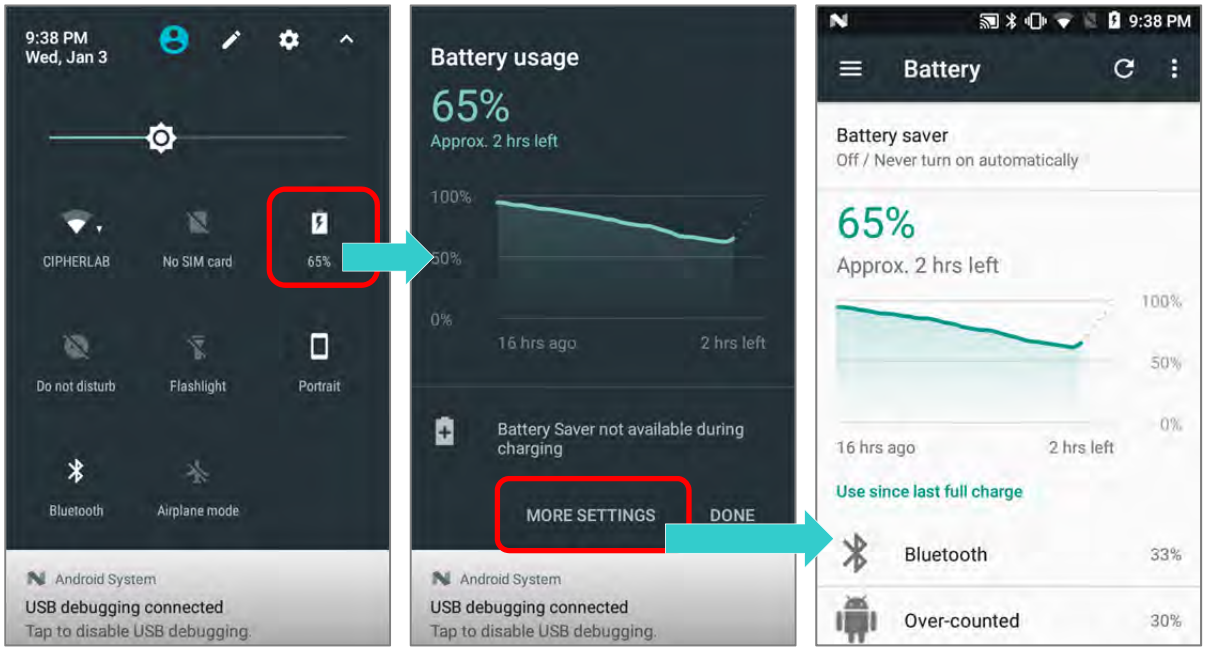
The main battery pack is the only power source for the mobile computer to work. Therefore, when the main battery level goes low, you need to replace the battery pack with a charged one or charge it as soon as possible. Most of all, you should backup important data on a regular basis.

By checking the battery status icon on **Status Bar**, you can tell the battery level remaining in the main battery.

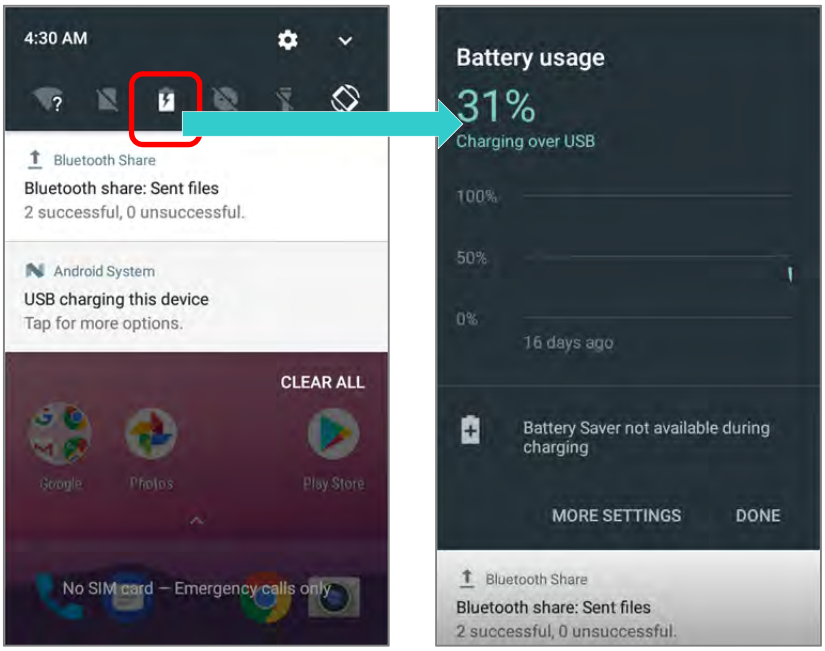


To check the exact remaining percentage of power and battery life:

1) Use two fingers to swipe down from the top of the screen to open **Quick Settings**.
2) The percentage of remaining battery power is shown below the battery icon; you can tap on it to enter **Battery usage** for quick setting. Tap "**DONE**" to exit **Battery usage** page or "**MORE SETTINGS**" for more details and configurations.



Also, you can simply swipe down from the status bar to open Notifications Drawer, and tap the battery icon to enter **Battery usage** page.



Note:

When the mobile computer is fully charged and battery level reaches 100%, the battery icon will change from to to indicate charging is completed.

Warning:

(1) Once the battery level drops below 15%, the low battery notification will be displayed on the screen.

(2) Data loss with RAM may occur when battery level is low. Always save data before the battery runs out of power or keep a fresh battery for replacement.

(3) Constant usage of the mobile computer at low battery level can affect battery life. For maximum performance, recharge the battery periodically to avoid battery drain out and maintain good battery health.

2.1.2. MONITOR BATTERY LEVEL

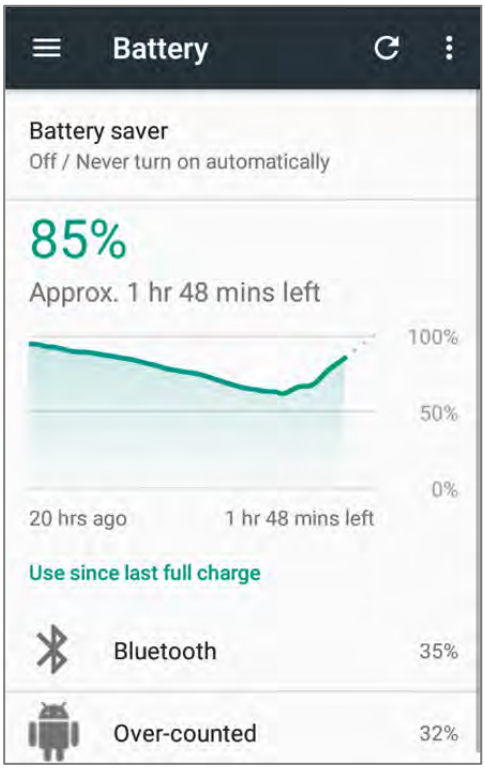
MAIN BATTERY LEVEL

The main battery is the only source that feeds the mobile computer to work. It also supplies the backup battery on the main board in order to retain the data stored in DRAM. When main battery level gets low, recharge it or replace it as soon as possible. Most critically, back up the important data from time to time to protect your work.

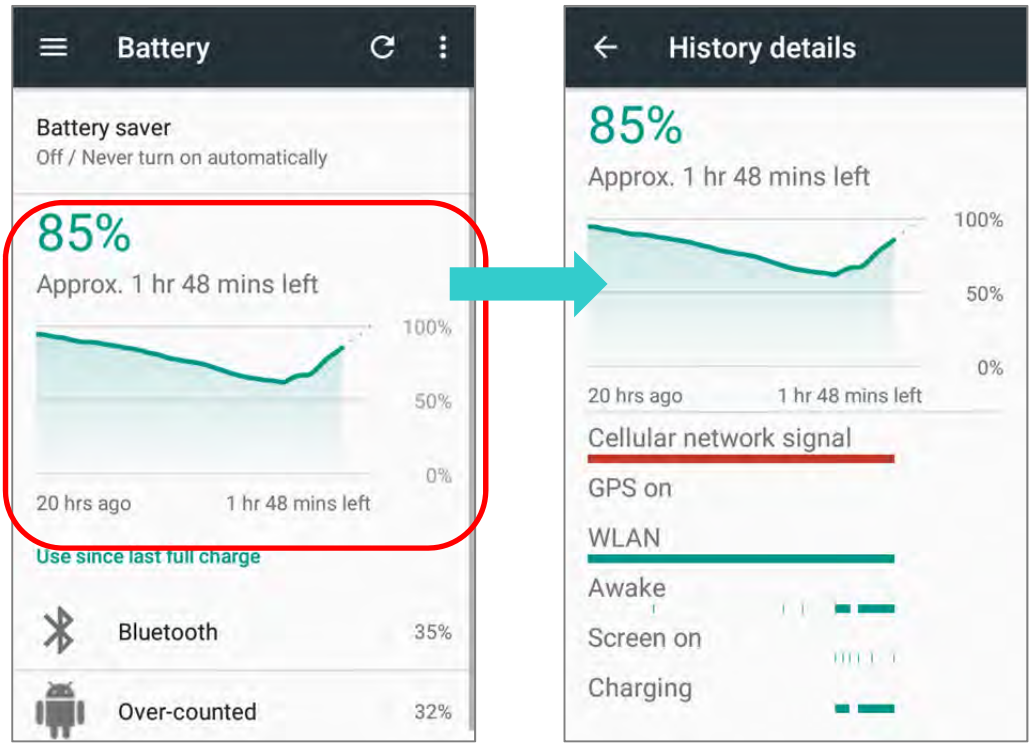
To check main battery level:

Go to **App Drawer** | **Settings** | **Battery**

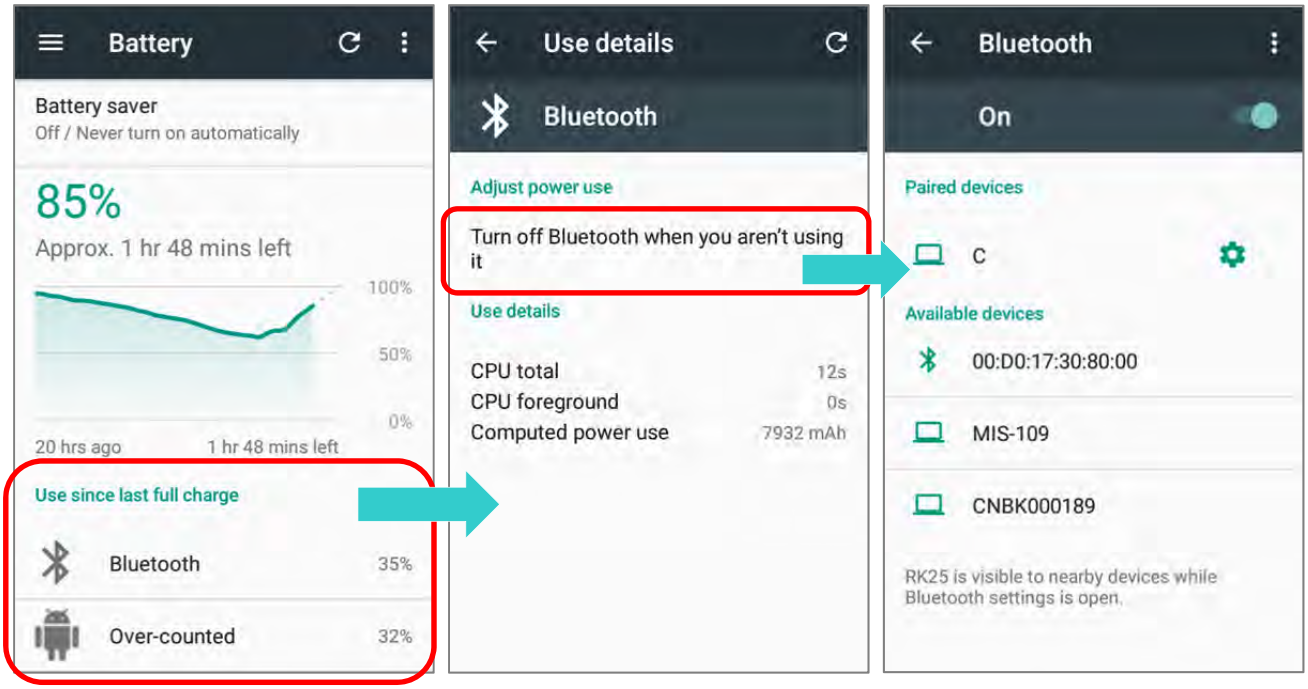
Battery level percentage is shown to provide a clear grasp of the remaining battery power. The screen also shows the rate of battery discharge since the last battery charging session, how long the device has been running on battery power, and which applications are consuming the most battery power.



- To look at the timeline of each application that drained or has been draining the battery power, tap on the chart; with this, you can diagnose any serious power drains.



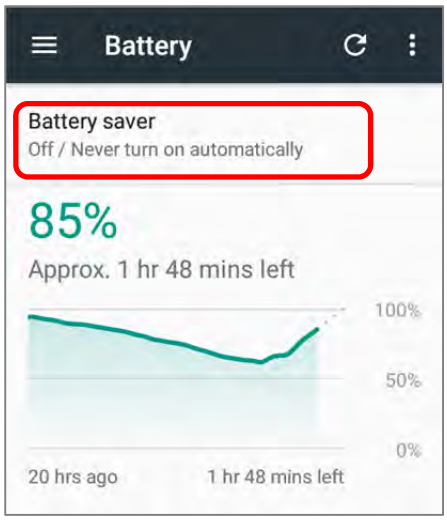
- To prevent certain applications from being draining the battery power, tap the application listed in "**Use since last full charge**" to get into its **Use details** page for "**Adjust power use**" suggestion. Tap the suggestion part to get into the related page and change the configurations for saving battery power.



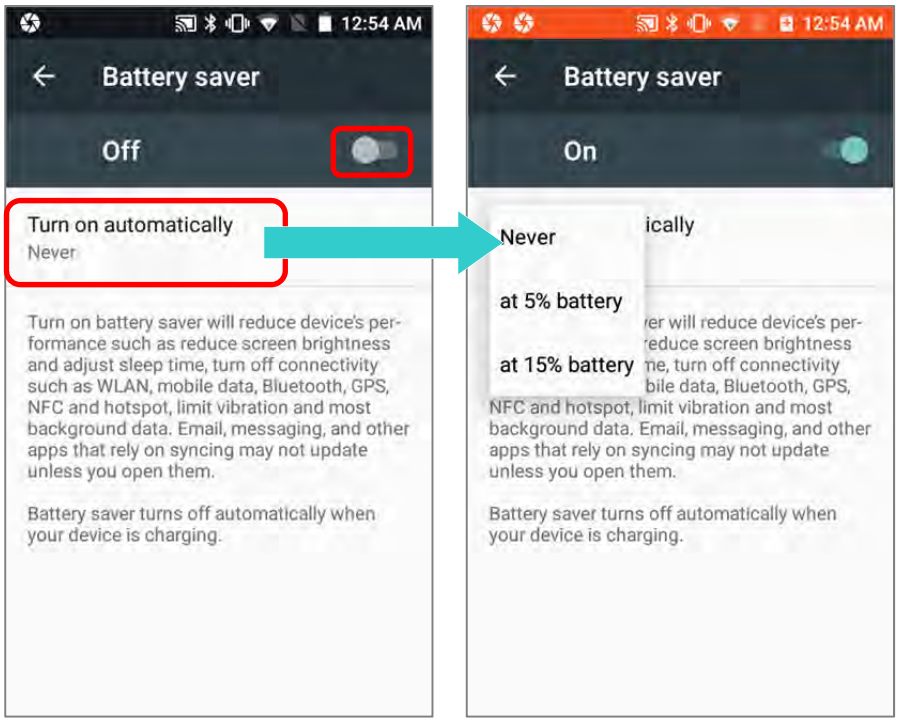
BATTERY SAVER MODE

You can have the **Battery saver** mode automatically turned on when the main battery gets low. This mode will limit the use of location services, vibration and most background processing data.

1) On Battery screen, tap "**Battery saver**".



2) Switch on the function to directly enable battery saver function, or choose when to have this mode automatically activated. After this function is enabled, the title bar of your screen will turn orange.



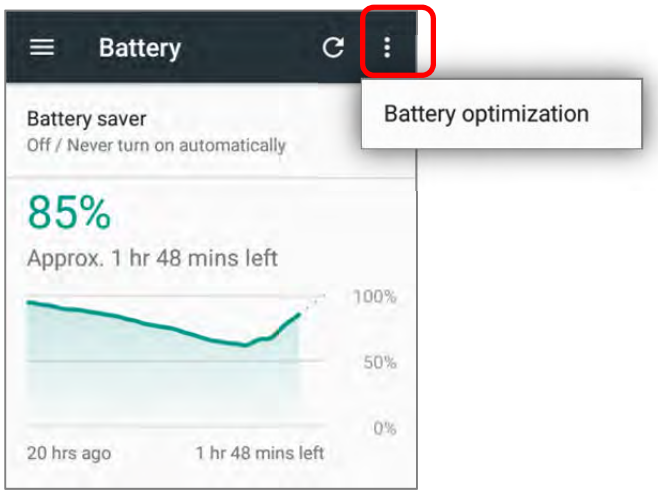
Note:

This mode will automatically become **inactive** when your device is being charged.

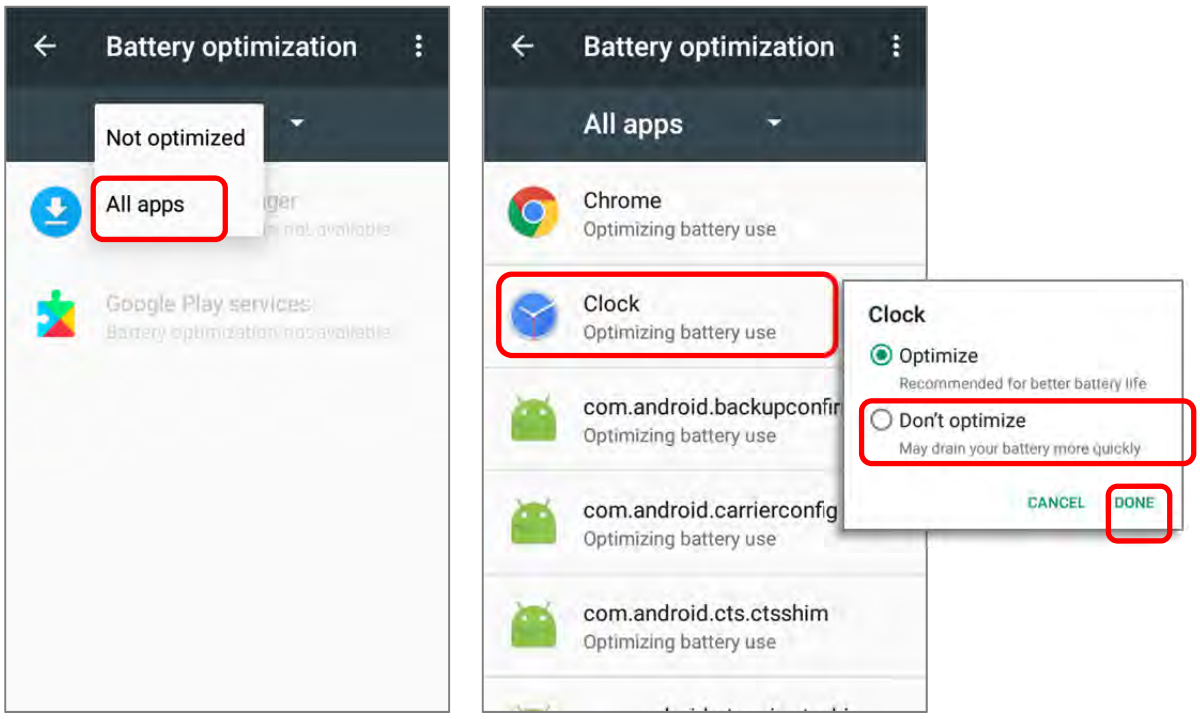
BATTERY OPTIMIZATION

With **Battery optimization enabled** for the applications, you can make sure they stay inactive when your device is idle or when they have not been used for days.

1) On **Battery** screen, tap **More** ⋮ and then select "**Battery optimization**".



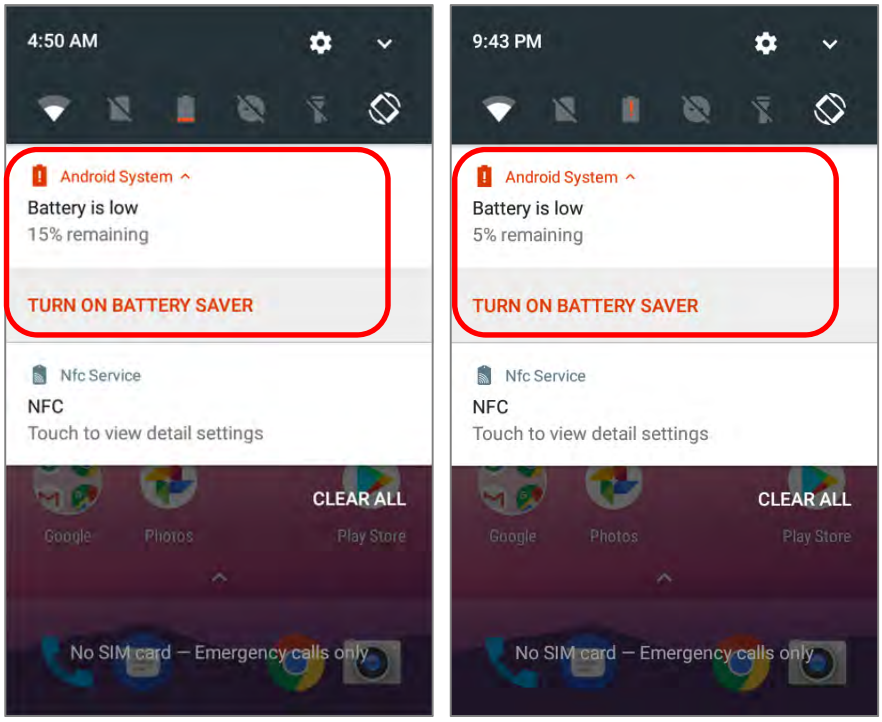
2) On dropdown list, select "**All apps**"; all the applications will be optimized by this function by default. You can individually turn off the optimization mode of a certain app if you would like it always activated by tapping on the app name and select "**Don't optimize**" and then "**DONE**".



LOW BATTERY ALERT

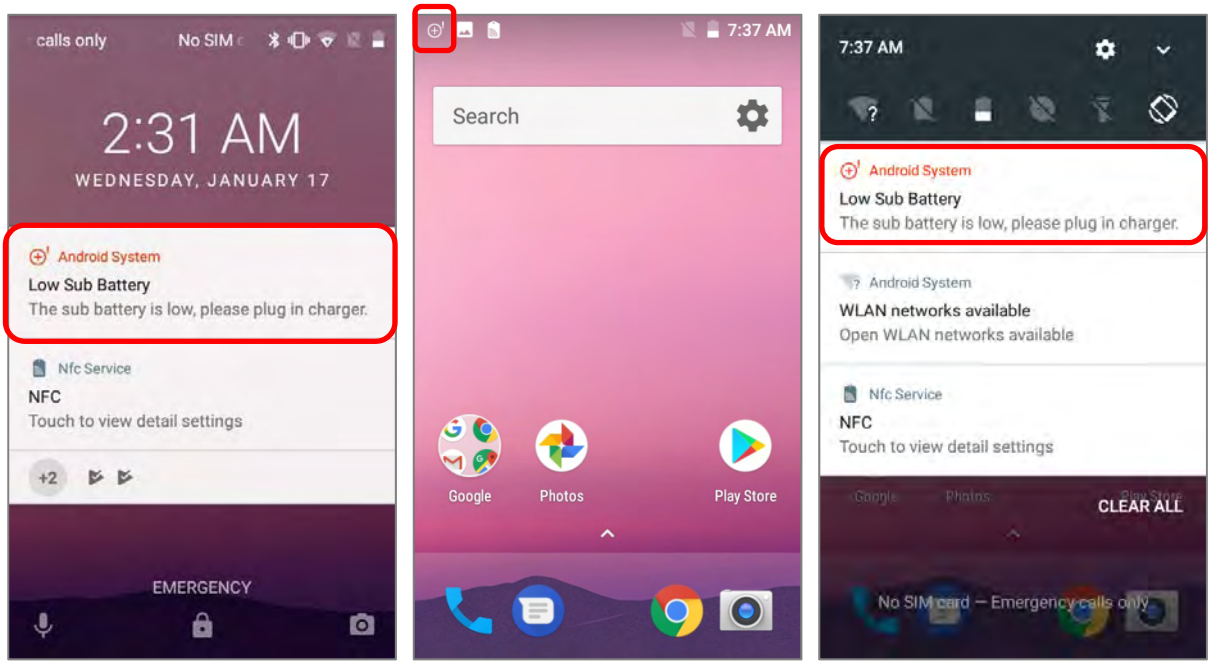
The mobile computer prompts a warning notification reminding you to charge the main battery when the main battery level drops to **15%** and **5%**.

Opening Notifications Drawer, you will also see this warning appearing on the notifications list; you may turn on Battery Saver Mode, connect the mobile computer to an external power source, or replace the main battery pack as soon as possible. To replace the main battery pack, see Replace Main Battery.



LOW SUB BATTERY ALERT

When the main battery's power is drained out, RK25 mobile computer will automatically suspend by backup battery's power for 30 minutes. When backup battery's power is low, the "**Low Sub Battery**" notification will remind you to connect the device with an external power source to charge it immediately. Please note that do not replace the main battery at this moment, otherwise data loss may occur.



2.1.3. REPLACE MAIN BATTERY

When main battery level is low, follow the steps below to replace the main battery.

SHUT DOWN TO REPLACE THE MAIN BATTERY

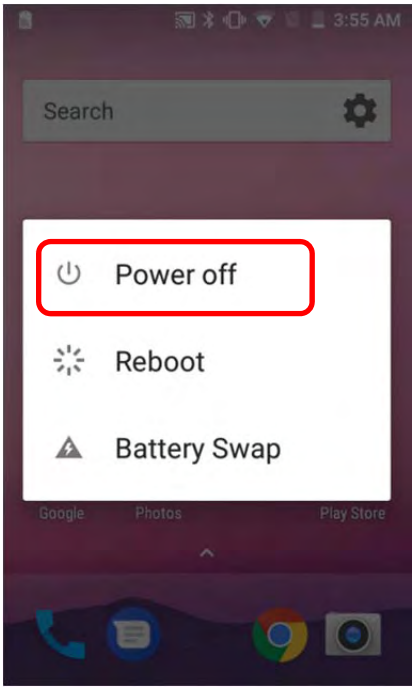
Shut the device down to replace the main battery, please:

1) Make sure the sub battery (backup battery) and the new main battery are fully-charged.

2) Press and hold the power button on the top end of the mobile computer.

3) Tap "**Power off**" in the pop-up menu. The mobile computer will power off.

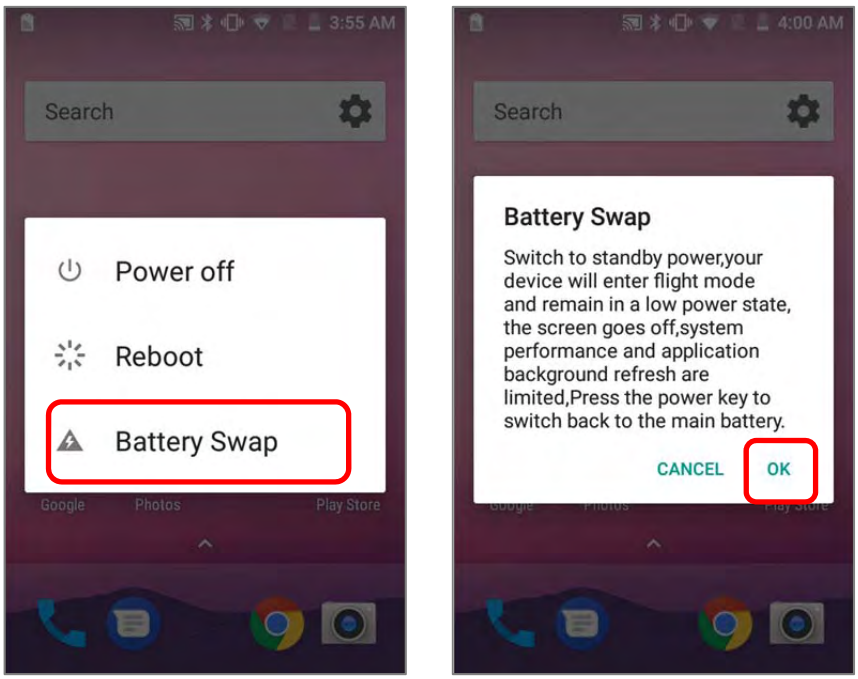
4) Follow the steps as Install/ Remove Battery describes to remove the main battery and replace it with the new one.



BATTERY SWAP

RK25 backup battery supplies system power during battery swap. When battery cover is removed, the system will enter suspend mode and not wake up until battery cover is put back and the power button is pressed. Please refer to "Low Sub Battery Alert" section to make sure the sub battery is fully charged before battery swap process.

1) Press and hold the power button on the top end of the mobile computer, and select "**Battery Swap**" and then "**OK**" in the pop-up menus. The system will prepare to enter suspend mode with the red Status LED on the front panel lit.
2) Observe the red light on the front panel; as it goes off, the device is in complete suspend mode and Main battery is ready to be replaced. Fellow the steps described in Install/ Remove Battery to remove the battery and replace it with the new one.
3) When the main battery is removed, system can stay in suspend mode at least 5 minutes. Please replace with a fully-charged main battery as soon as possible.
4) Make sure the battery latch is properly locked before pressing the power button to wake up the mobile computer from suspend mode.



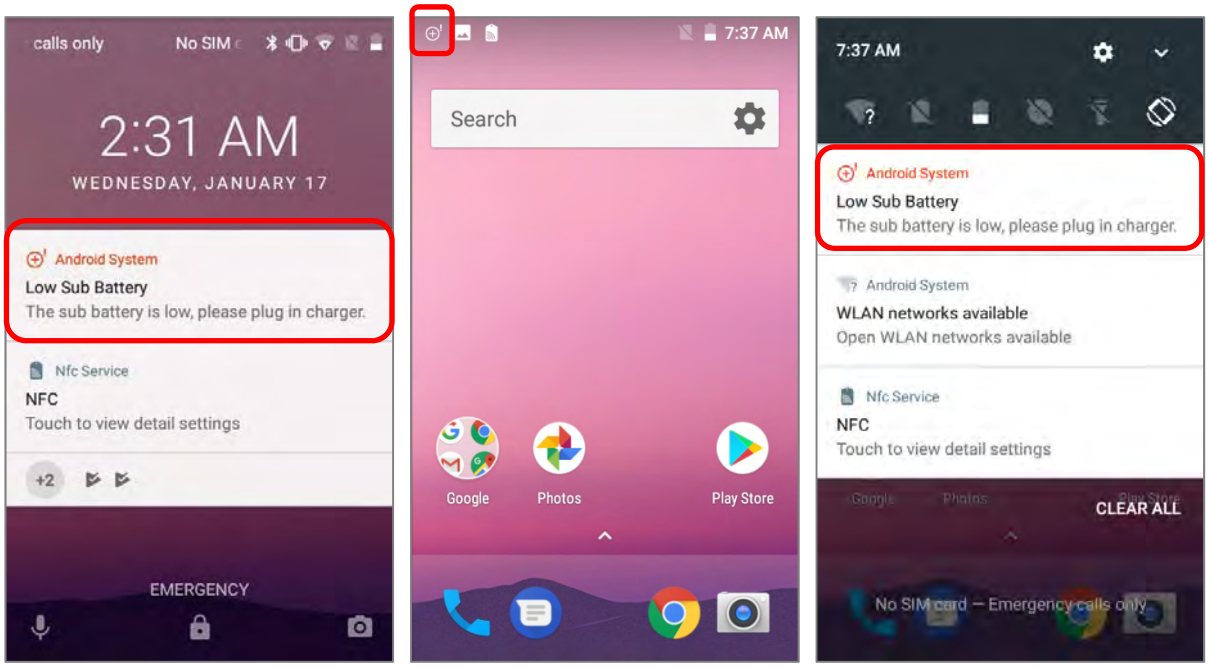
Warning:

Please do not perform a battery swapping before the mobile computer's OS is ready. Removing the battery cover during powering up your mobile computer may cause system failure.

Note:

(1) When main battery is removed, the system will stay in suspend mode for at least 5 minutes. To prevent the system from being shut down without advance warning, please DO replace the main battery within the 5 minutes.

(2) Backup battery keeps the mobile computer in suspension when the main battery is depleted. Thus, to prevent data loss, DO NOT replace the main battery when backup battery's power is low. Please connect RK25 mobile computer with the external power source to charge it till the "**Low Sub Battery**" notification icon disappears from the status bar. Once the "**Low Sub Battery**" notification disappears, the main battery replacement could be proceeded.



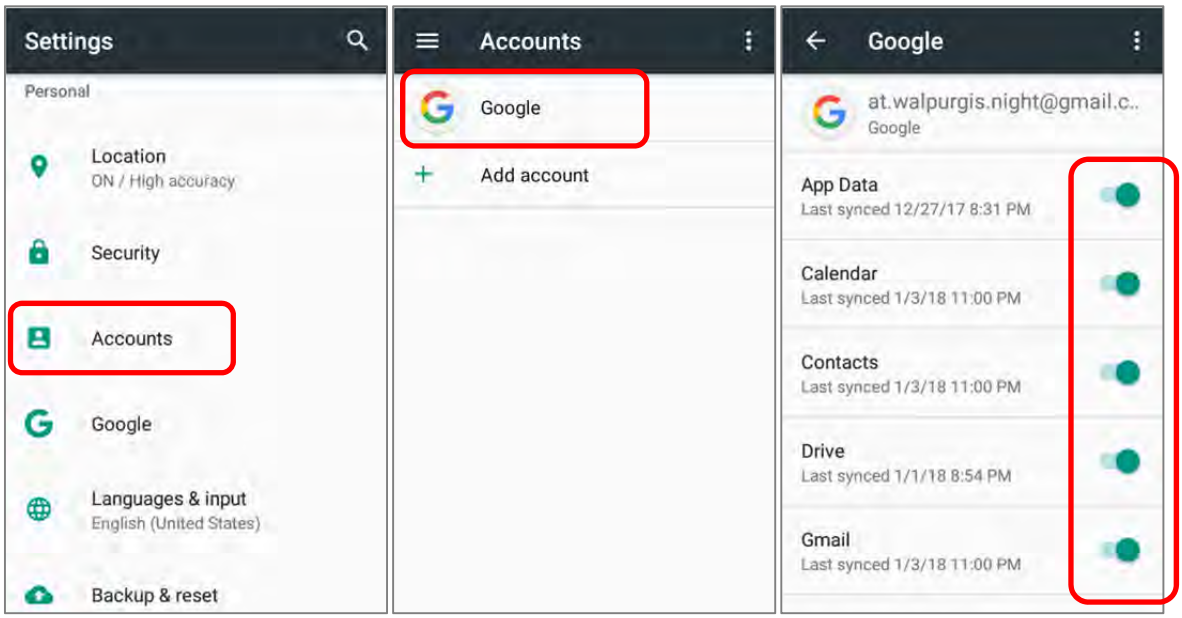
2.1.4. POWER MANAGEMENT

For any portable device, power management is a critical issue especially when you are on the road. Below are some tips to help you save battery power.

Warning:

Using backlight, wireless connectivity, and peripheral devices while on battery power will substantially reduce battery power.

- Bring an additional main battery pack with you on the road.
- End wireless connections (such as Bluetooth transmission, wireless connection, NFC and GPS) which are not in use.
- Shorten the screen off time. See Screen Timeout Settings.
- Reduce the screen brightness level, see Screen Brightness.
- If you have had your Google account signed in on this device, you could turn off certain automatic data syncing of applications (such as Email, Calendar, and Contacts). Go to **App Drawer** | **Settings** | **Accounts** | **Google** and disable the data syncing services of your desired items.



- Enable **Battery saver** mode and **Battery optimization** mode. See Battery Saver Mode and Battery Optimization.

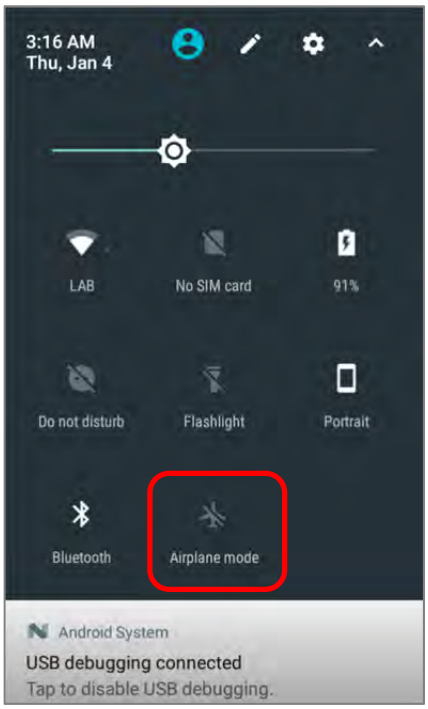
ENTER AIRPLANE MODE

You can enable **Airplane** mode to have all the wireless radios (including call functions, data connections such as Bluetooth, Wi-Fi and 3G/4G) on your mobile computer turned off, which will considerably reduce the power consumption of your battery.

To enter **Airplane** mode, please:

1) Use two fingers to swipe down from the top of the screen to open **Quick Settings** menu.

2) Tap on the **Airplane** mode icon to enable/disable the mode.



2.1.5. BATTERY PRECAUTIONS

For safety purpose, please do notice the following instructions about battery.

PRECAUTIONS WHEN CHARGING THE MAIN BATTERY FOR A LONG TIME

Please avoid using RK25 mobile computer with heavy system loading when it is being charged for a long time, for the battery is continuously charged and discharged in this period of time, and it might result in battery bulge.

Due to safety precautions, it is a normal phenomenon that the battery status shows it is not fully recharged when RK25 mobile computer is connected to an external power supply for a long time. Please pull out the charging cable and then plug it again to recharge the battery.

BATTERY TEMPERATURE ANOMALY

High ambient temperature or keeping using RK25 mobile computer while charging might results in battery temperature rises. RK25 mobile computer will automatically suspend charging battery or shut down for safety purpose. Once the battery temperature cools down to normal temperature, battery charging could be proceeded again.

2.2. MEMORY

- Flash Memory (ROM)

  16GB flash memory for storing the OS (Android 7.0 Nougat and custom application programs).
- Random-access Memory (RAM)

  2GB RAM for storing and running programs, as well as storing program data.
- Expansion Slot

  The mobile computer is equipped with one SD card slot which can accommodate a micro SD card, a **microSDHC** (up to **32GB**) or a **microSDXC** (up to **64GB**). When choosing an SD card for best compatibility and performance with RK25, please make sure of the capacity you need. For the use of SDXC card, please use a new card and make sure it has not been used in other host devices (computers, cameras, or readers).

CAUTION OF DATA LOSS

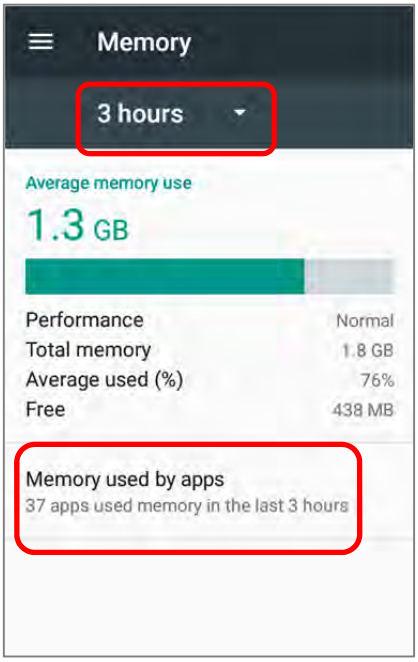
When the main battery is removed or drained, the backup battery on the main board takes over to supply the mobile computer and keep it in suspension. A fully charged backup battery will retain the data in the RAM for **30 minutes**. When the backup battery is drained out as well, the mobile computer will shut down, and only the contents of RTC will be retained. All other unsaved data will be lost.

If you want to put away the mobile computer for a couple of days, you should be aware that data loss occurs when the main battery and backup battery discharges completely. Therefore, it is necessary to backup data and files before putting away the mobile computer.

2.2.1. CHECK MEMORY USAGE

The memory manager can offer a glance of how the device is using its RAM.

Go to **App Drawer** | **Settings** | **Memory** to enter memory manager screen.



On the main screen, it tells you not only the used and free memory space of the RAM, but how your pattern of usage has impacted the device's overall performance. To figure out how the system and apps have been taking up the memory over a longer period, tap the dropdown list to choose a different time span.

To look at how individual apps are consuming the memory space, tap "**Memory used by apps**" to get a breakdown of memory usage by apps.

Tap an application name to check its memory usage. This allows you to make sense of how much memory a newly-installed application can potentially consume your RAM.

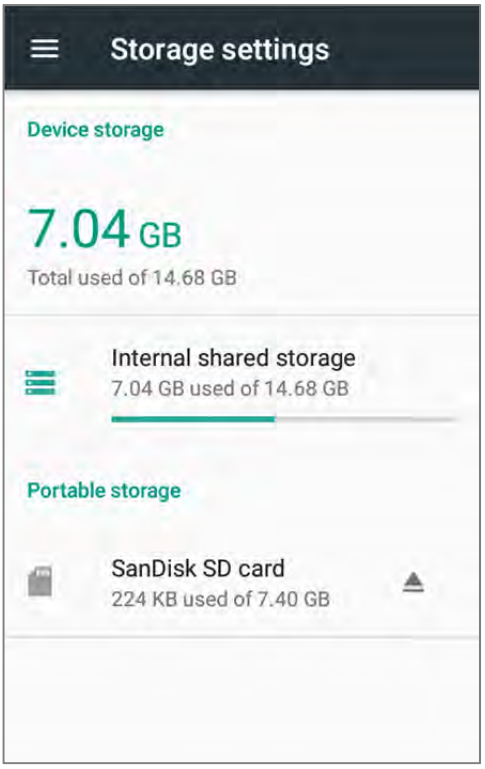
2.2.2. MANAGE STORAGE SPACE

To your Android device, the SD card can serve as an extension of your device's internal storage (which comes as 16 GB of flash memory to store the OS, applications and files) other than a portable storage place.

Go to **App Drawer** | **Settings** | **Storage** to check usage of the internal and external storage spaces.

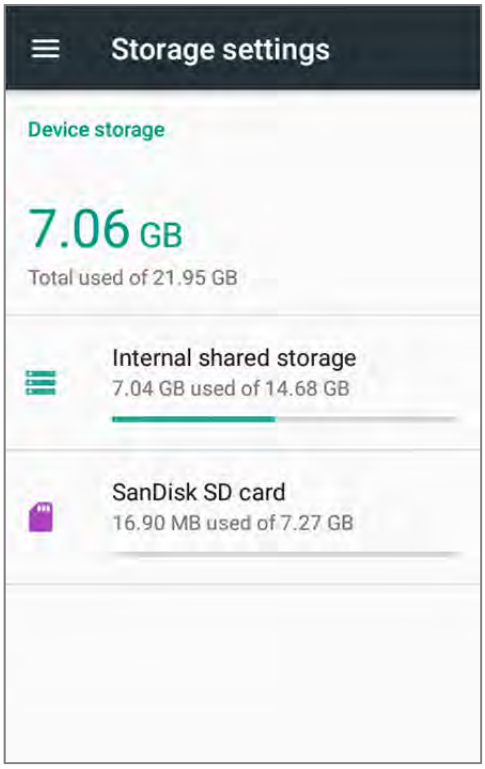
By default, all the videos, photos and downloaded files are directly saved to the device's internal storage. If you have previously inserted and mounted an SD card as portable storage, you could transfer/save photos & other media in this SD card; if the SD card is set as internal storage, photos, files, and some apps could be moved to the SD card.

SD card as portable storage in Storage Settings page



. The SD card is used for moving photos and other media between devices.

SD card as internal storage in Storage Settings page

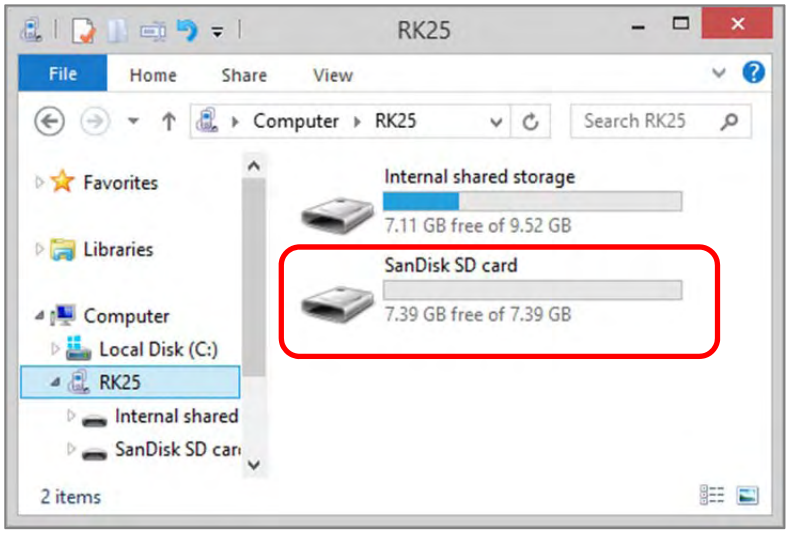


The SD card is used for storing anything on this device only, including apps and photos. Requires formatting that prevents it from working with other devices.

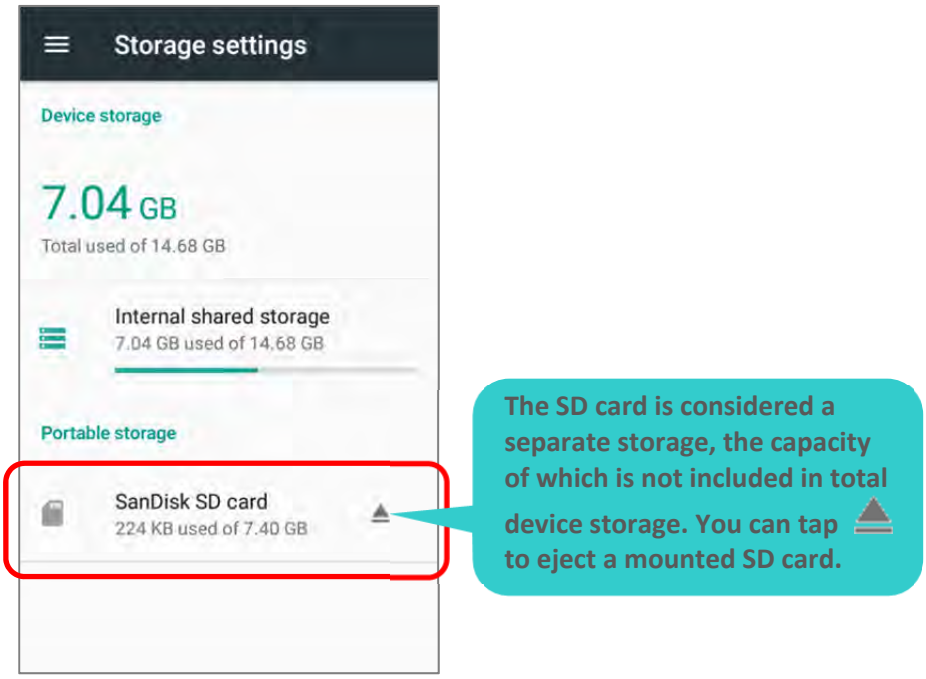
SET UP SD CARD AS PORTABLE STORAGE

Using SD card as a portable device allows you to treat it as a USB disk, by swapping it between your Android device and the computer to easily transfer files. This is quite handy when there is a need to offload files that are taking up too much storage space.

When this device is connected with PC, the disk content is readable from PC client:

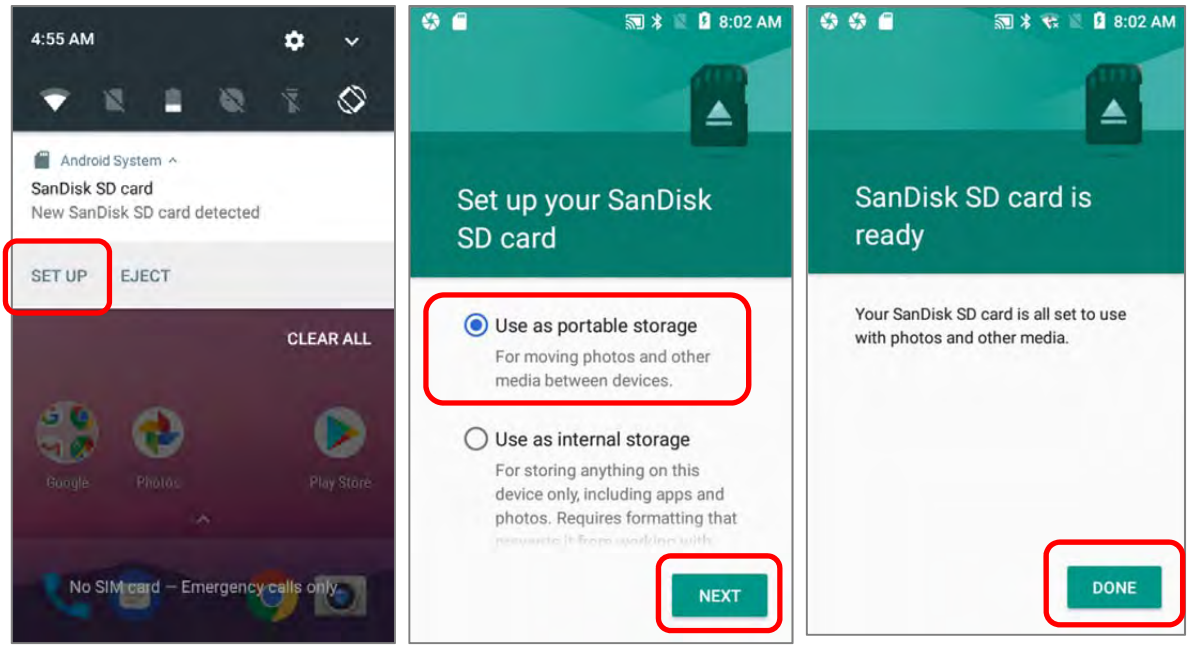


On **Storage** screen, this disk can be managed separately.

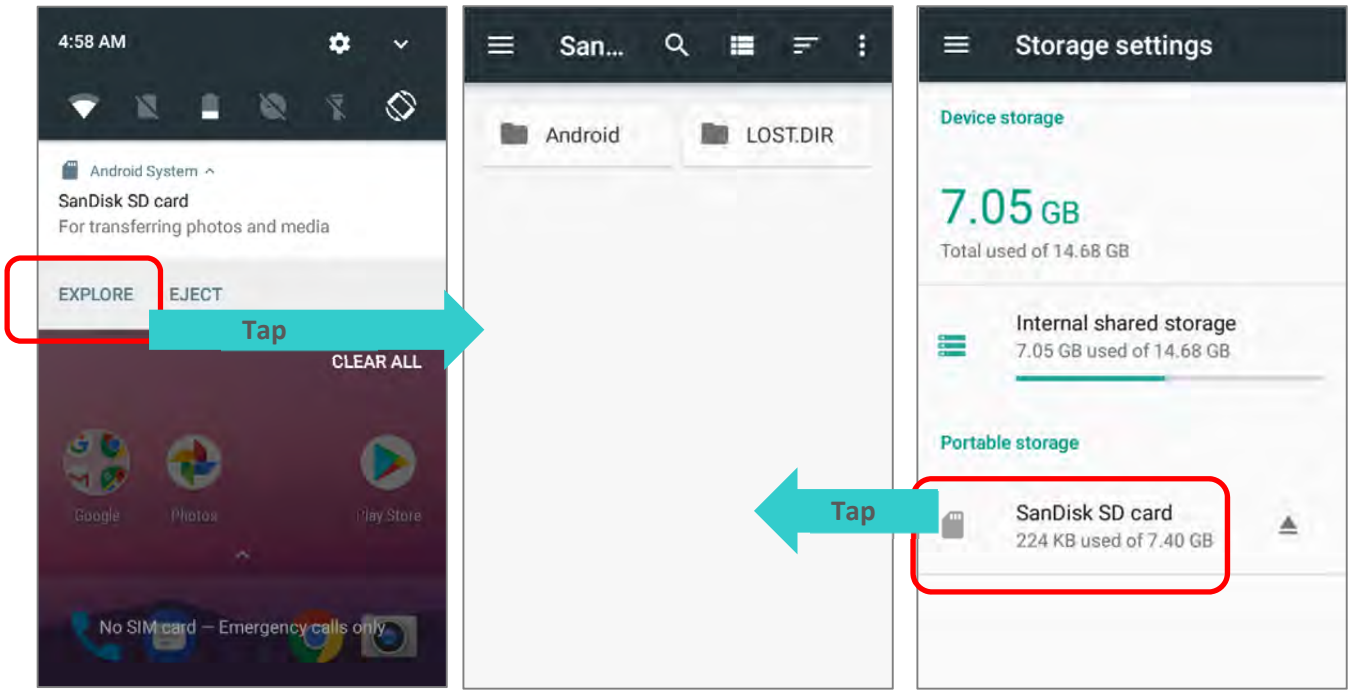


To start:

1) Insert the SD card. A notification icon indicating that an SD card is detected will be shown in the status bar; swipe down from the status bar and tap "**SET UP**".
2) Tap "**Use as portable storage**" and then "**NEXT**".
3) When the setting is completed, tap "**DONE**".



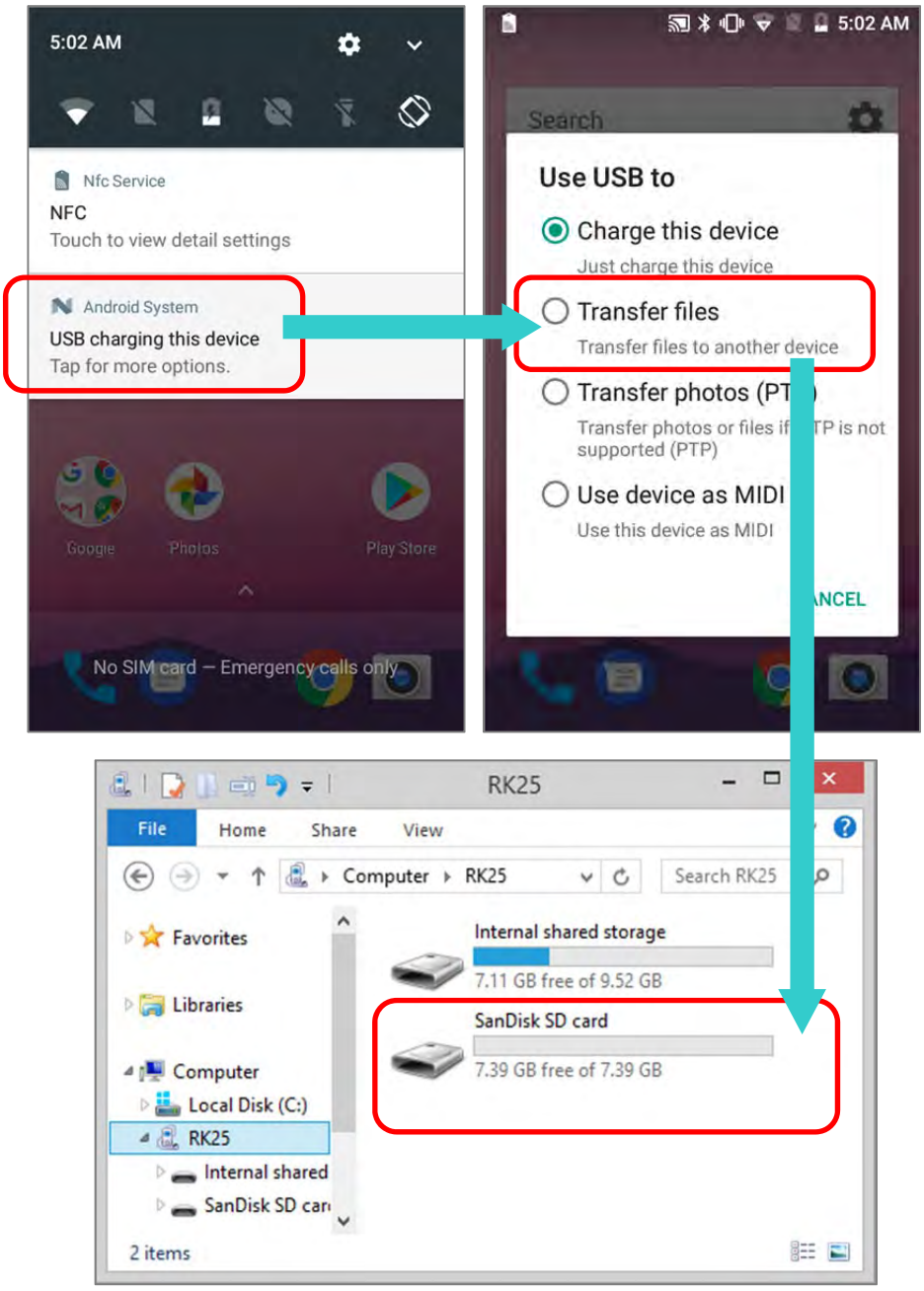
4) Swipe down from the status bar to reveal Notifications Drawer, and you will find a notification indicating that the SD card is for transferring photos and media; tap "**EXPLORE**" to check its content.
   OR tap the SD card in **Storage Settings** page to check it.



TRANSFER PHOTOS & MEDIA BETWEEN THE DEVICE & PC

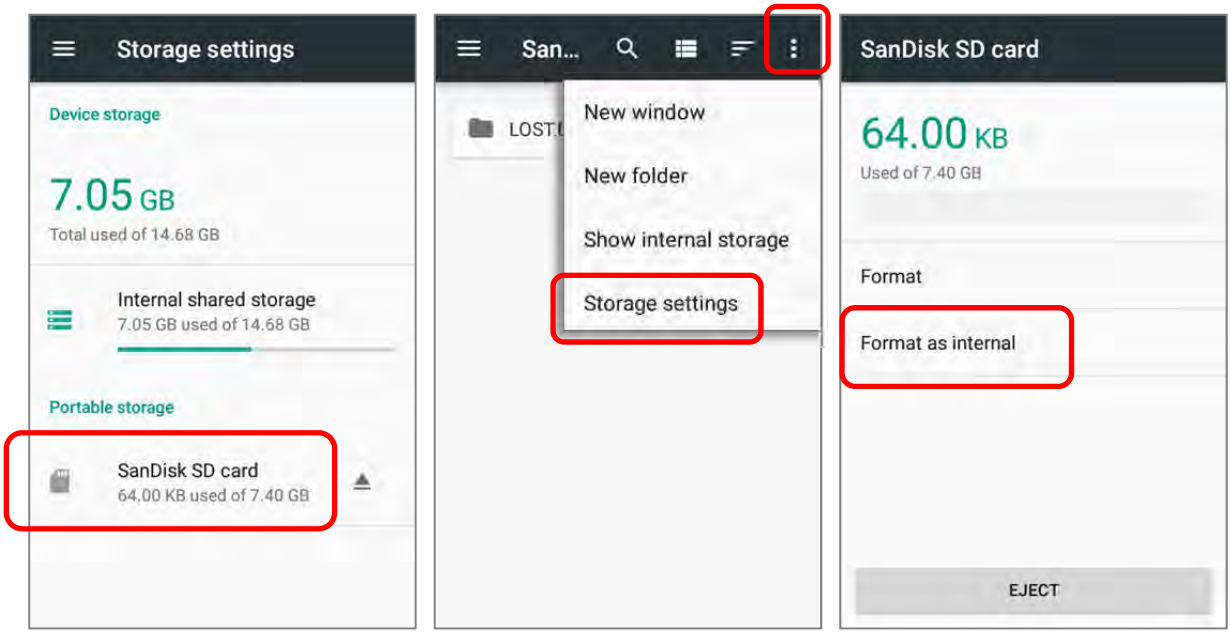
To transfer photos and media between this device and PC when the mounted SD card is set as portable storage, please:

1) Connect your mobile computer with PC with supplied USB cable.
2) Swipe down from the status bar to reveal Notifications Drawer, and tap "**USB charging this device**" to enter USB options menu.
3) Choose "**Transfer files**", and now you will find the disk content is readable from PC client. Please make sure the USB cable is properly connected while transferring files over USB connection.

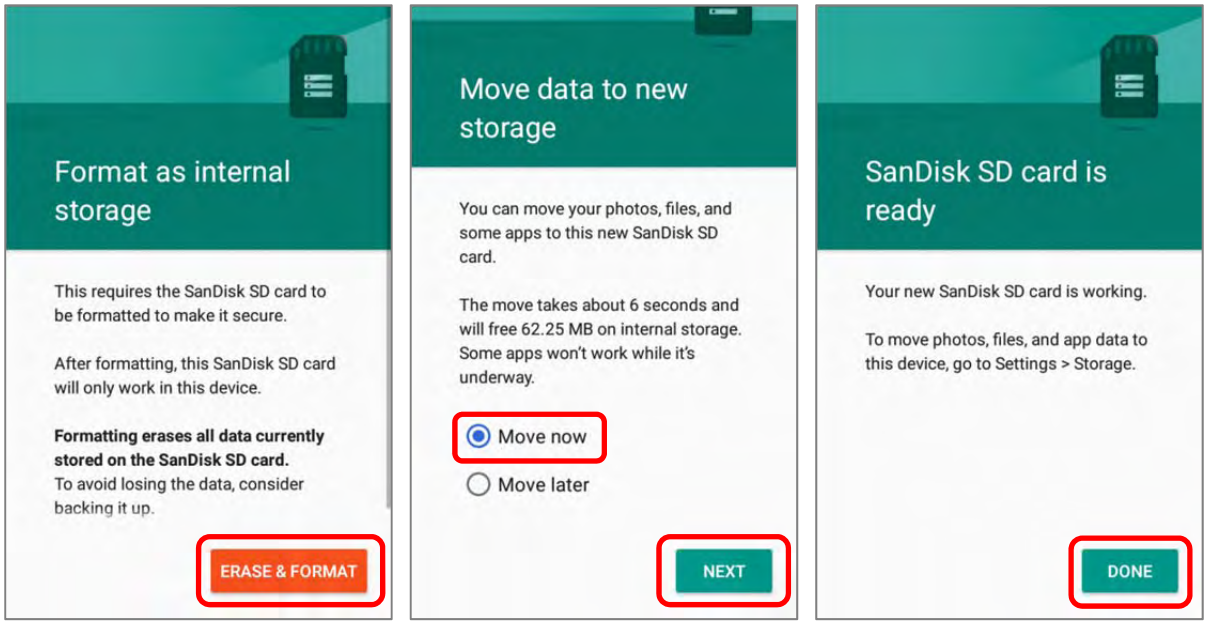


CONVERT THE SD CARD TO INTERNAL STORAGE

1) You can always convert the SD Card from portable storage to internal storage. On **Storage** screen, tap the SD card. Before you start, make a backup of the files on this disk if you would like to keep them.
2) On SD card content screen, tap **More** and then tap "**Storage settings**".
3) By selecting "**Format as internal**", the device will eventually format this SD card into a specific file format only readable by this device.



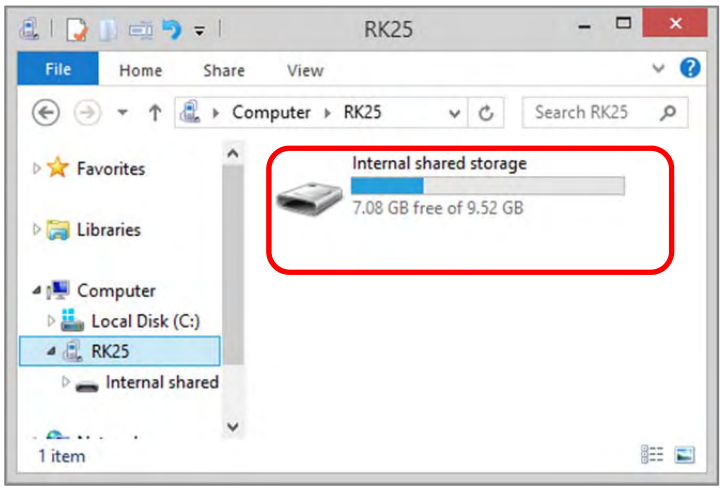
4) On Format as internal storage screen, tap "**ERASE & FORMAT**" to format the card.
5) You will then be asked whether to move multimedia files to this new SD card right away or later; make your choice and then tap "**Next**".
6) When the formatting is completed, tap "**DONE**".



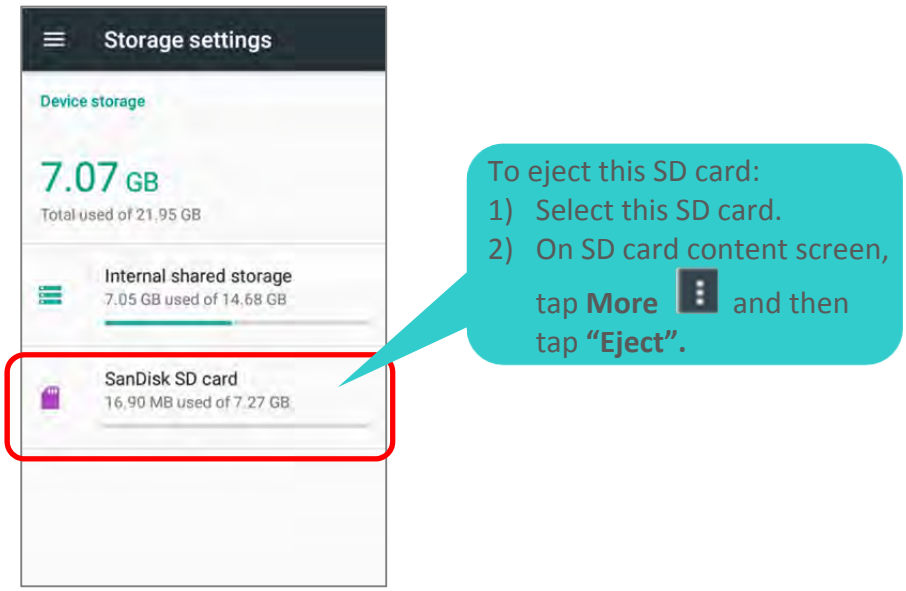
SET UP SD CARD AS INTERNAL STORAGE

Using SD card as internal storage allows you to extend your existing device storage and to store huge applications. This SD card will be reformatted and encrypted with a file format that is not readable by another device. Therefore, it is essential that you back up important files on this SD card in advance. Please note that if you eject this SD card, the applications and media files stored on it will not be available until you reinsert the card.

When this device is connected with PC, the disk content is not readable from PC client:



On **Storage** screen, the capacity of this SD card is merged into the total device storage. Please note that. In this setting, you will have no control of which files to be stored on SD card.

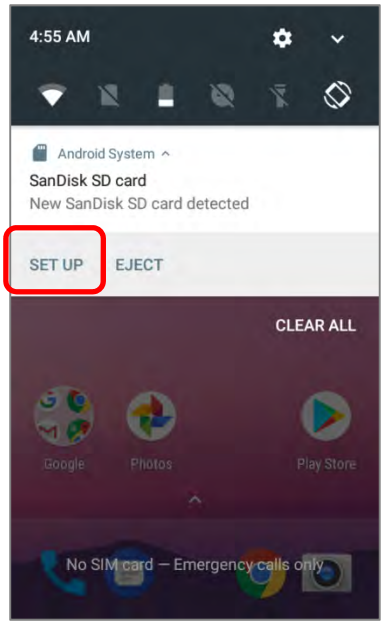


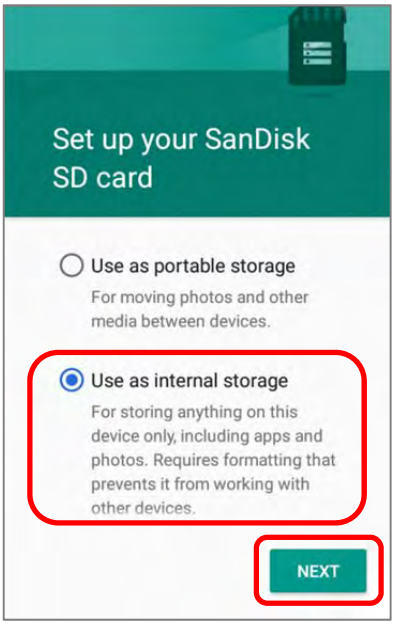
Warning:

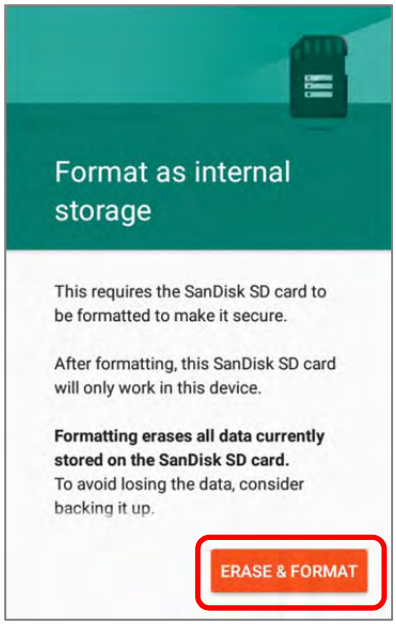
Do not physically remove the SD card from the device without ejecting this card in advance.

To start:

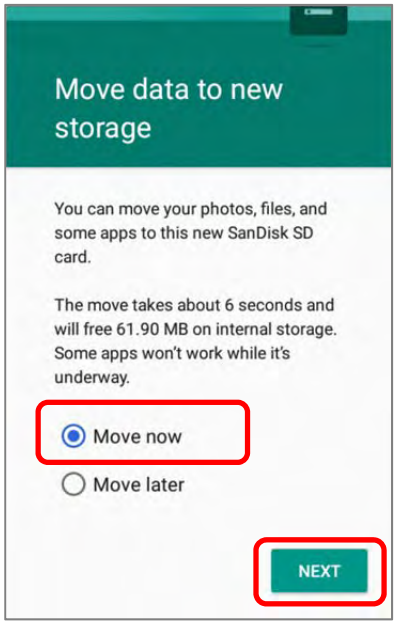
1) Insert the SD card. A notification will pop up indicating that an SD card is detected tap "**SET UP**".
2) Tap "**Use as internal storage**" and then "**NEXT**".
3) Tap "**ERASE & FORMAT**" to format this card.







4) You will then be asked to whether to move media files to this new SD card, make your choice and then tap "**Next**".
5) When the setting is completed, tap "**DONE**".

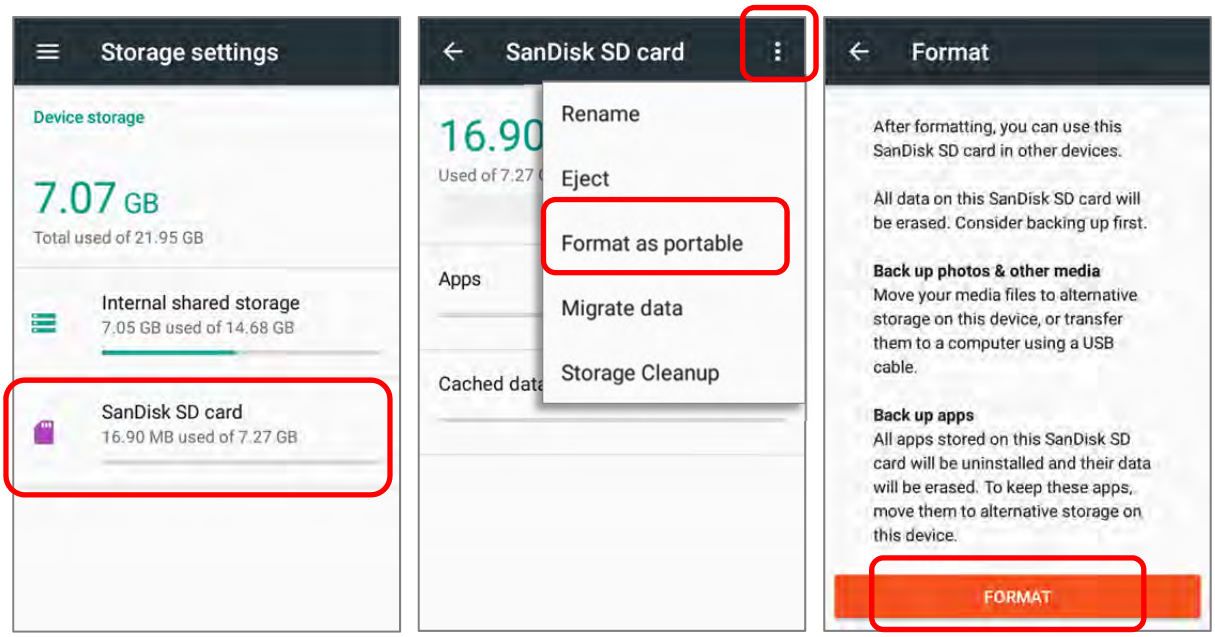


Note:

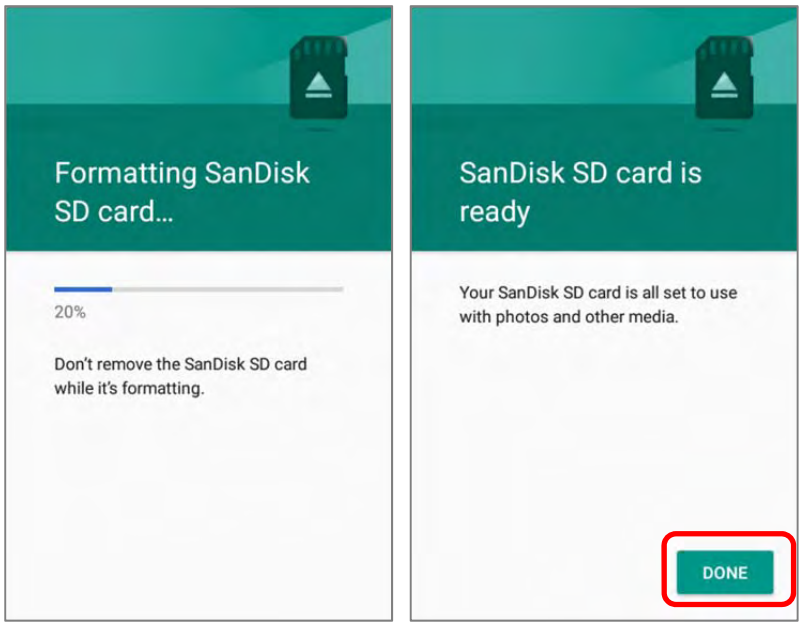
It is recommended that you select "**Move now**" at **Step 4** to have the device immediately start making use of SD card space. If you select "**Move later**", the device will continue to consider device's original storage the primary location to save files.

CONVERT THE SD CARD TO PORTABLE STORAGE

1) You can always convert the SD Card from internal storage to portable storage. On **Storage** screen, tap the SD card. Before you start, make a backup of the files on this disk if you would like to keep them.
2) On SD card content screen, tap **More** ⋮ and then tap "**Format as portable**".
3) Tap "**Format**" to have this SD card re-formatted into a file type accessible by other devices.



4) When the formatting is completed, tap "**DONE**".



Note:

Please do back up important files on this SD card before proceeding formatting.

2.3. TOUCH SCREEN

The mobile computer comes with a 4.0" transmissive LCD with 480RGBx800 resolution. The LED backlight of the screen, which helps ease reading under dim environments, can be controlled manually and automatically.

Warning:

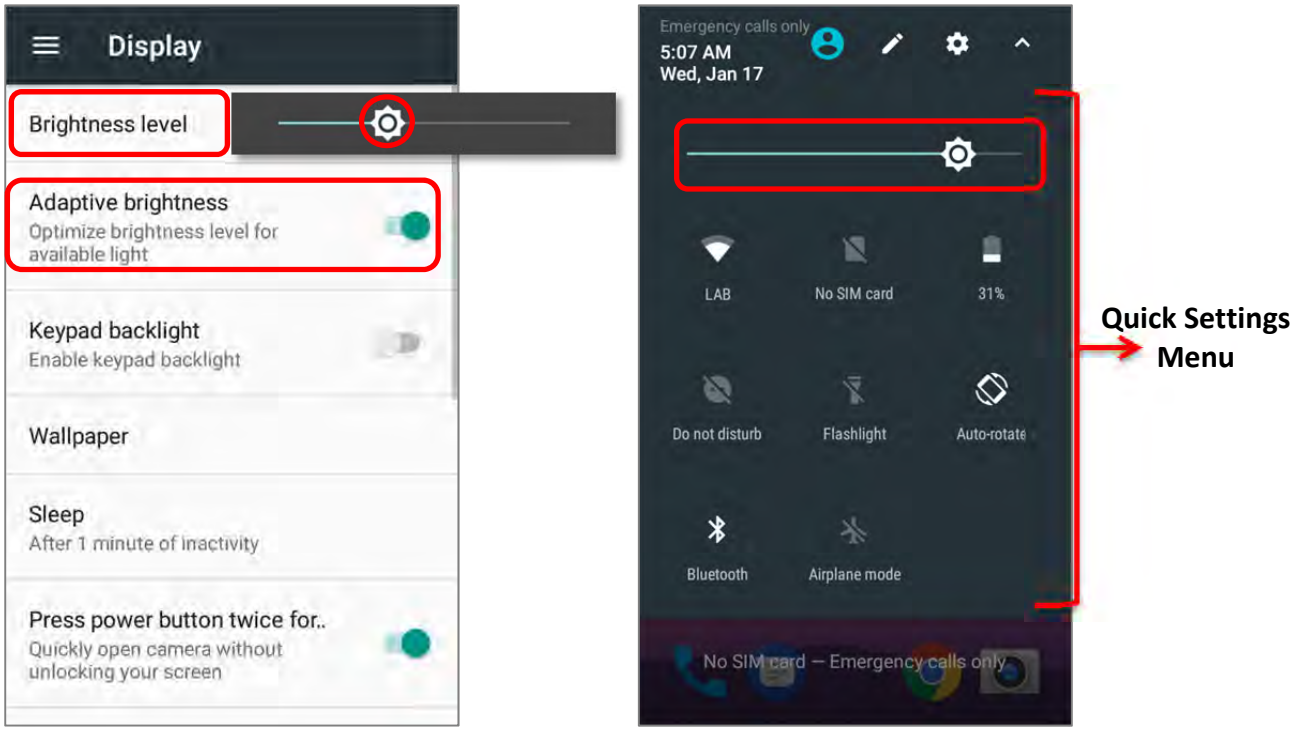
DO NOT use any pointed or sharp objects to move against the surface of the screen.

2.3.1. SCREEN BRIGHTNESS

Go to **App Drawer** | **Settings** | **Display** | **Brightness level**.

Adjust screen brightness by dragging the slider to the right (to increase brightness) or left (to reduce brightness). Switch on the **Adaptive brightness** to enable automatic backlight adjustment with the mobile computer's built-in sensor.

You can also use the shortcut button on **Quick Settings** menu to adjust the brightness level.



Note:

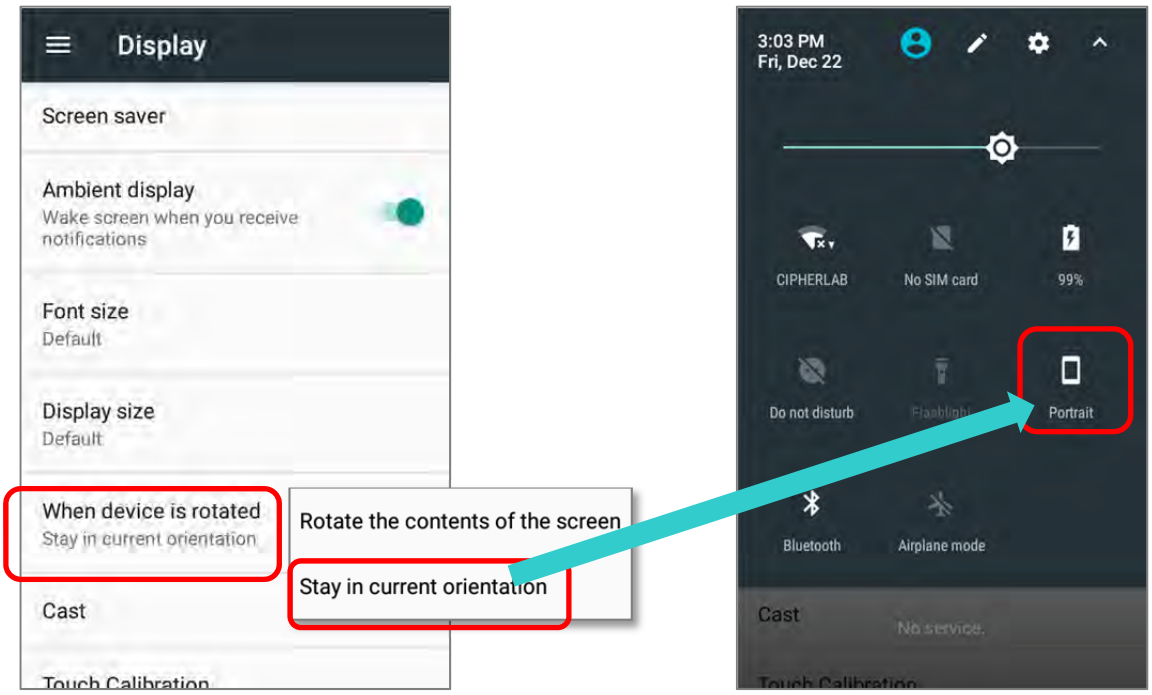
To save battery power, dim the screen brightness while working in a well-lit area, or set a shorter sleeping plan for the screen backlight to go off.

2.3.2. SCREEN ROTATION

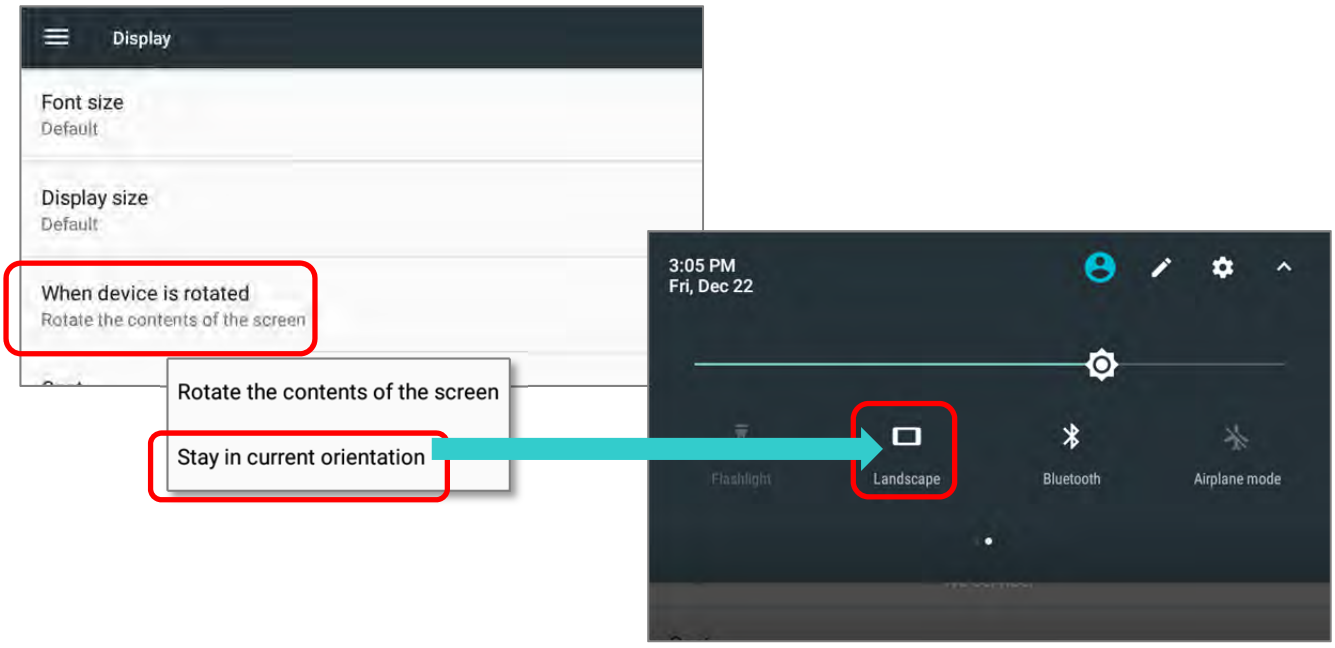
By default, the device automatically rotates the screen to when you turn the device sideways. To switch this function on or off:

1) Go to **App Drawer** | **Settings** | **Display**

2) Tap **When device is rotated** and then select **Stay in current orientation** to turn the rotation function off or tap **Rotate the contents of the screen** to enable it.

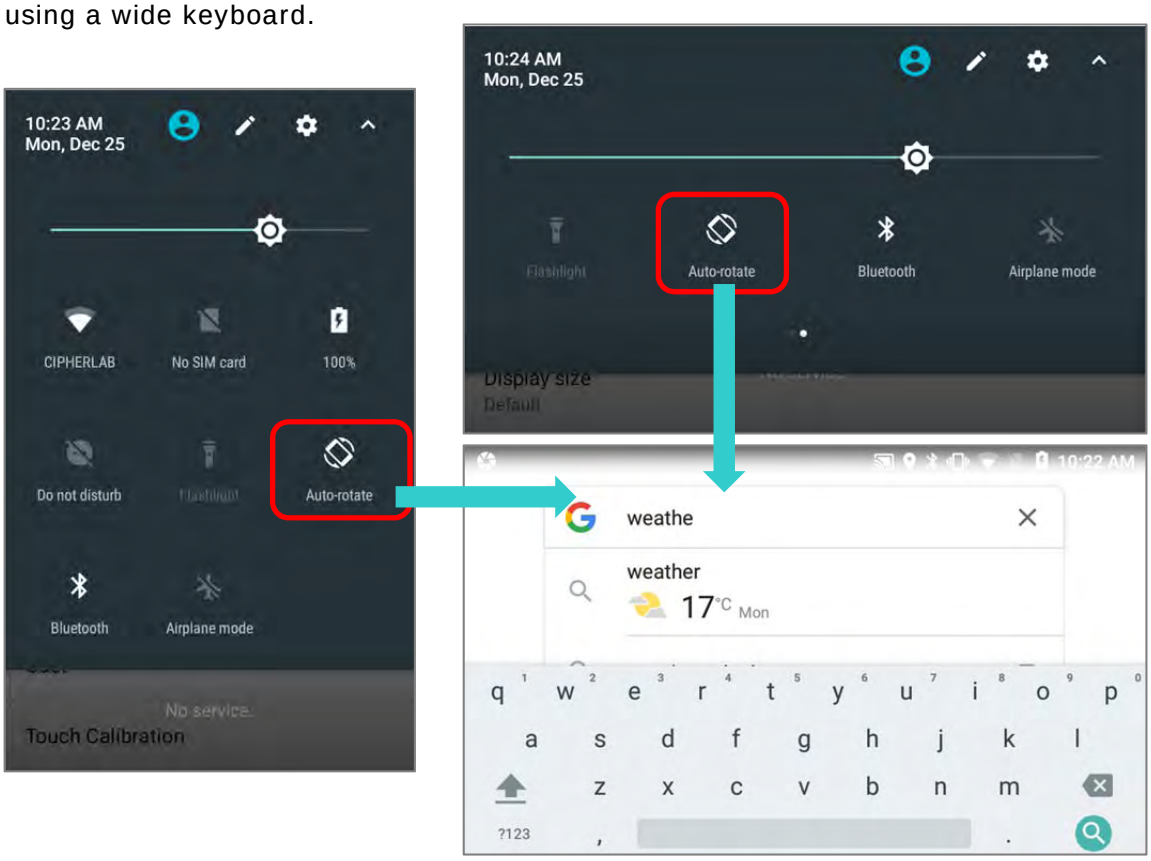


Please note that "**Stay in current orientation**" might be portrait or landscape depending on the screen display orientation when you select it.

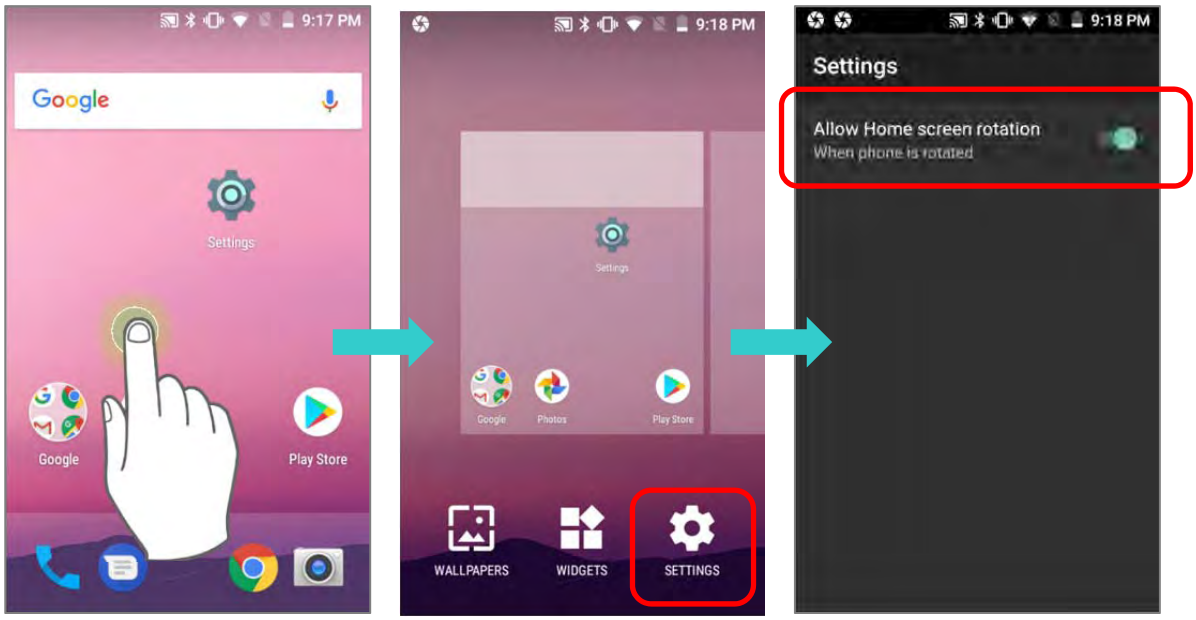


OR

3) Use two fingers to swipe down from the top of the screen to open **Quick Settings** and tap the **Auto rotate** status icon to enable screen rotation. This quick setting method allows you to temporarily enter landscape mode to enhance your typing experience by using a wide keyboard.



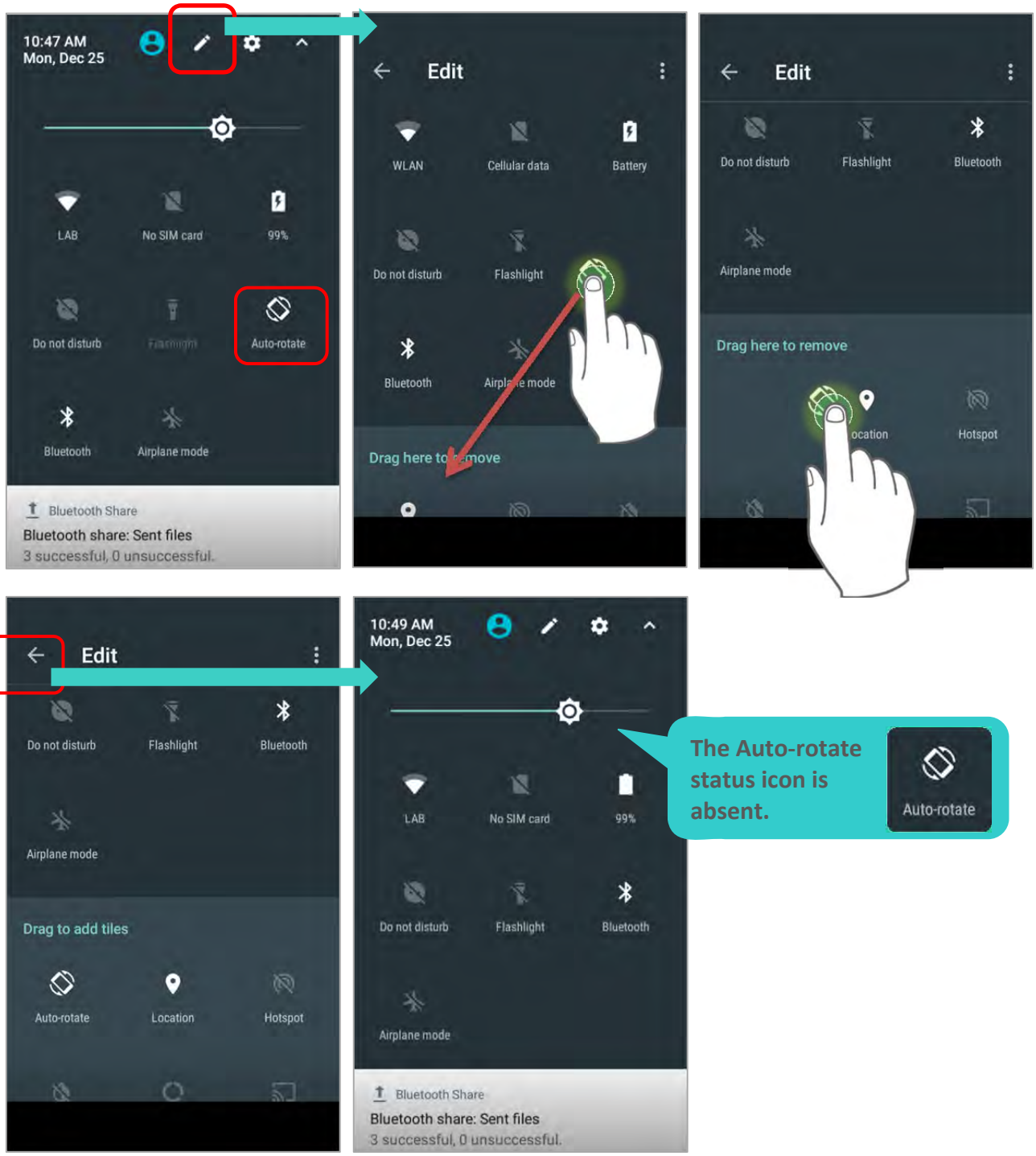
To enable Home screen rotation, please make sure Auto Rotation is enable, and press any empty spot on Home screen, tap "**Setting**" and enable "**Allow Home screen rotation**":



REMOVE AUTO ROTATION FROM QUICK SETTING MENU & DISPLAY SETTINGS

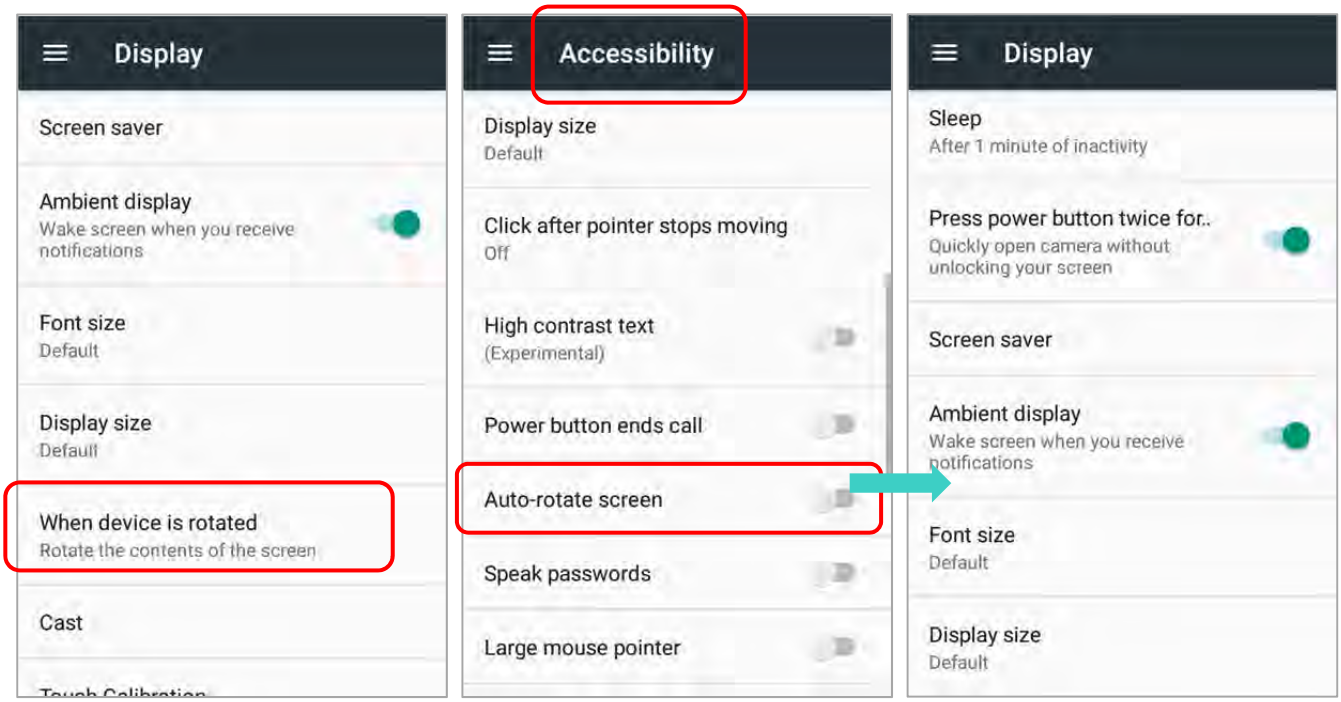
You can remove the **Auto rotate** switch icon on **Quick Settings** menu to minimize the possibility of accidentally turning on the auto-rotation function:

1) Use two fingers to swipe down from the top of the screen to open **Quick Settings** menu.
2) Click button to get into **Edit** page; tap on and hold the **Auto rotate** switch icon, and drag it to the light gray area and then release it.
3) Return to the **Quick Settings** menu, the **Auto rotate** switch icon is now hidden.



Go to **App Drawer** | **Settings** | **Accessibility** and switch off **Auto-rotate screen**.

By doing so, the auto-rotation option will be hidden in **Settings** | **Display**.



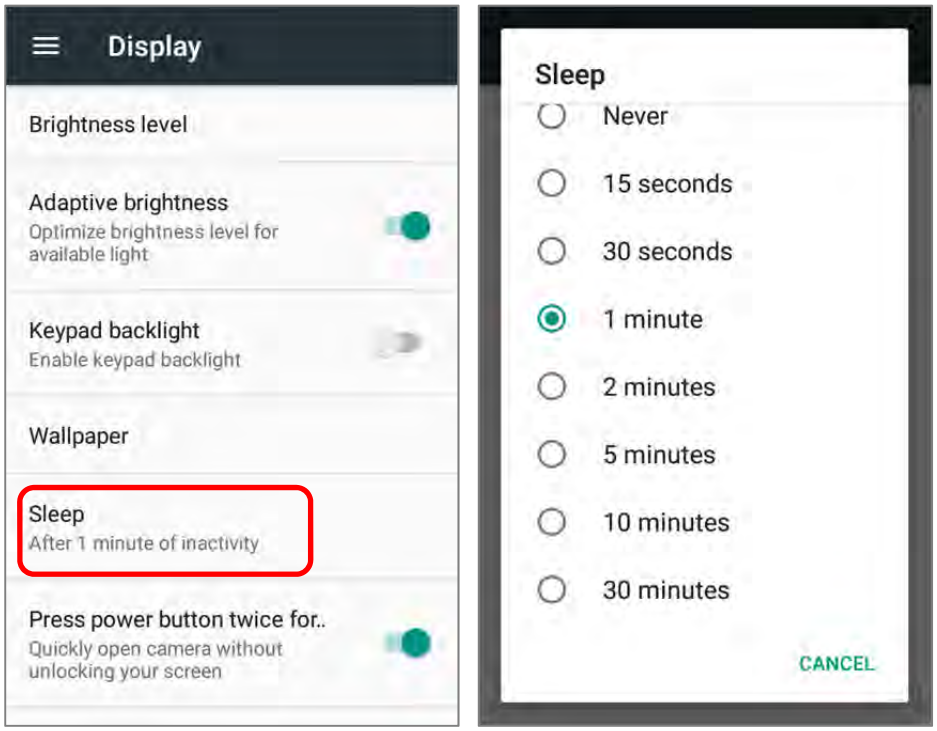
Note:

Auto-rotation is not supported for certain applications. Without enabling "**Allow Home Screen Rotation**", auto-rotation is inapplicable in **Home** Screen and **App Drawer** screen.

2.3.3. SCREEN TIMEOUT SETTINGS

Go to **App Drawer** | **Settings** | **Display** | **Sleep**.

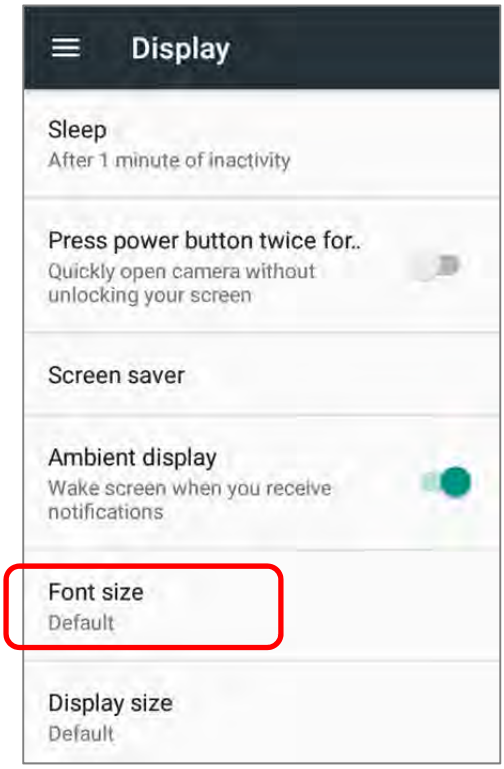
Select the time lapse for screen timeout.



2.3.4. TEXT SIZE

Go to **App Drawer** | **Settings** | **Display** | **Font size**.

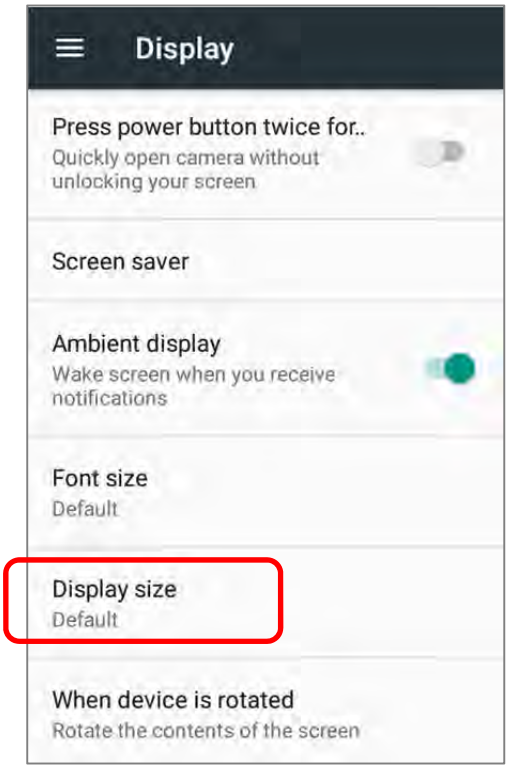
Tap the small A icon A or the large A icon A to select the font size between **Small**, **Default**, **Large** and **Largest**.

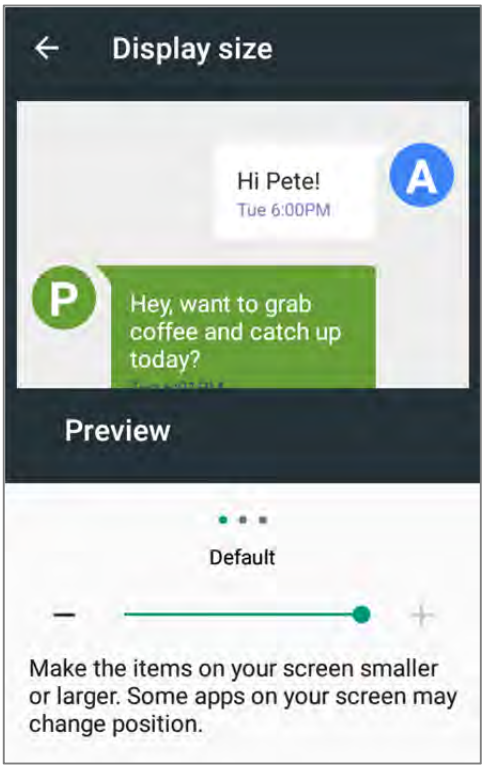


2.3.5. DISPLAY SIZE

Go to **App Drawer** | **Settings** | **Display** | **Display size**.

Tap the plus icon + or the minus icon − to select the display size as **Small** or **Default**.





2.4. NOTIFICATIONS

2.4.1. STATUS LED

Two LED indicators located above the touch screen provide information about charging status, scanner light beam, and scanner "**Good Read**" during data collection.

LED 1 for Power Indication

Indicator	Status	Description
Charging	Green, solid	Charging complete
	Red, solid	Charging the mobile computer
	Red, blinking	Charging temperature error (lower than 0°C or exceed 40°C)
Battery Swap	Red, flash once	Pressing power button and select “Battery Swap” in the pop-up menu, and the red status LED lights up. As the red light goes off, the device is in complete suspend mode and Main battery is ready to be replaced

LED 2 for Reader & System Notification

Indicator	Status	Description
Barcode decode	Green, flash once	Good read
WLAN & Bluetooth	Blue	WLAN & Bluetooth on/off indication
System Notification	Blue, blinking	System notifications such as missed calls or new messages.

Note:
For Scanner decode and Scanner beam LED to function, LED notification must be enabled in Reader Configuration.

2.4.2. AUDIO

The speaker is used to play sounds for events in windows and programs, or play audio files. In addition, it can be programmed for status feedback. In noisy environments, you may consider connecting a headset instead. A headset jack is provided on the upper right size of the mobile computer, which is a 3.5 mm DIA stereo earphone jack. The mobile computer also supports using Bluetooth headsets.

Supported audio file formats include: MP3, AAC, He-AAC v1 and v2, WMA9/Pro, Dolby AC-3, DTS-HD M6 and DTS-HD M8.

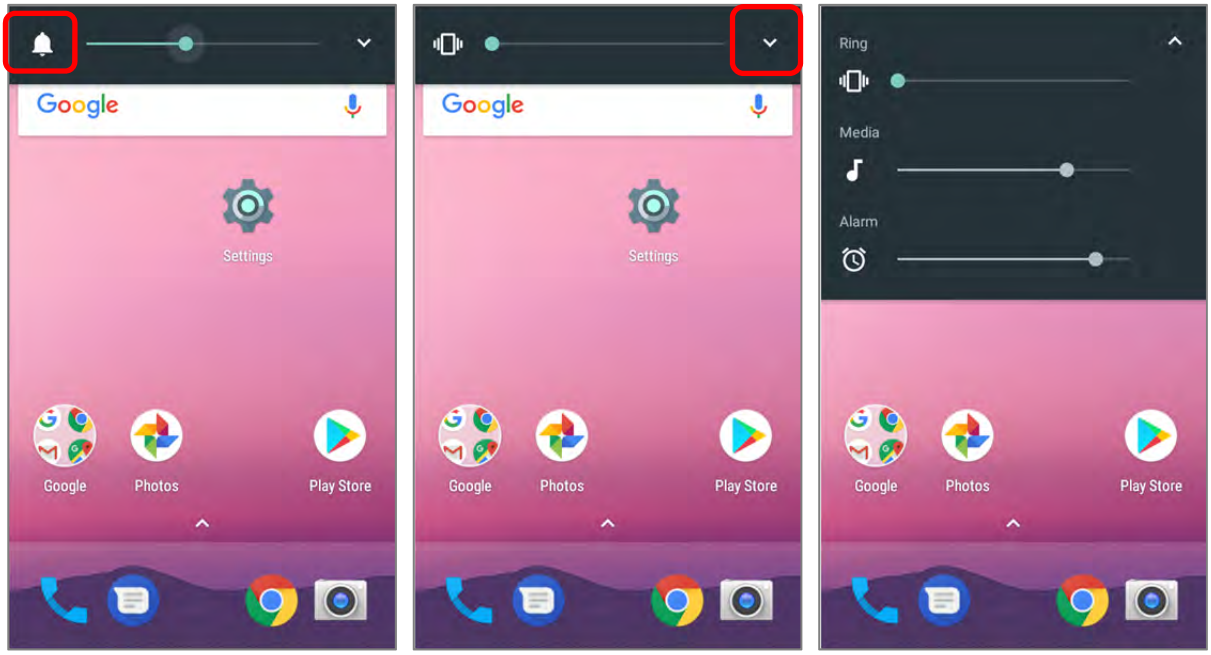
Use the volume buttons on the side of the mobile computer to adjust the system volume.

2.4.3. SOUNDS AND VIBRATION

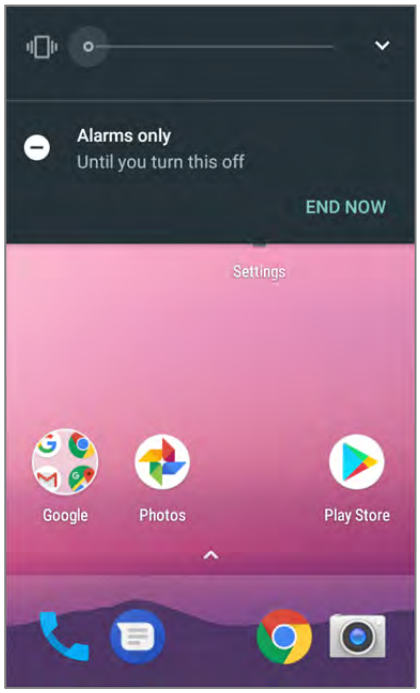
The mobile computer is integrated with a vibrator, which is software programmable for tactile feedback. This can be helpful when working in noisy environments.

You may also set the mobile computer to vibrate only, in which all system sounds will be muted and replaced by the vibrator.

On any screen, press down **Volume Up** or **Volume Down** key to open quick sound menu. Tap to switch this device to **Vibration mode**. To modify specific sound settings, tap to access more settings.

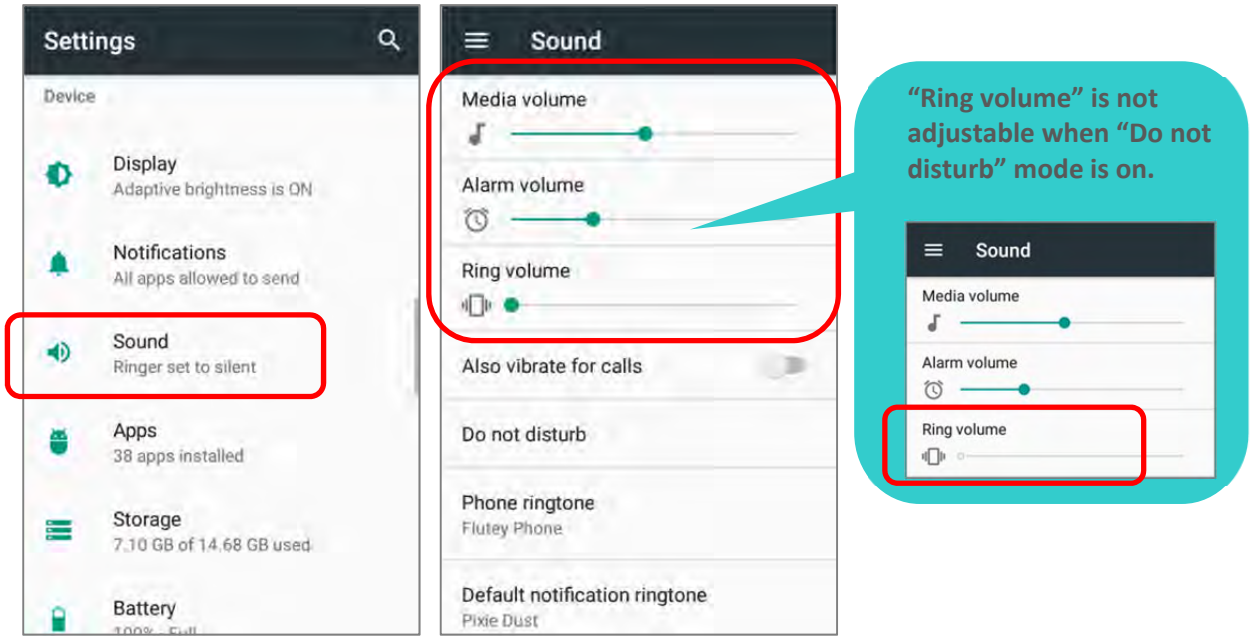


Keep pressing **Volume Down** key to turn the device into **Do not disturb** mode directly.



SOUND SETTINGS

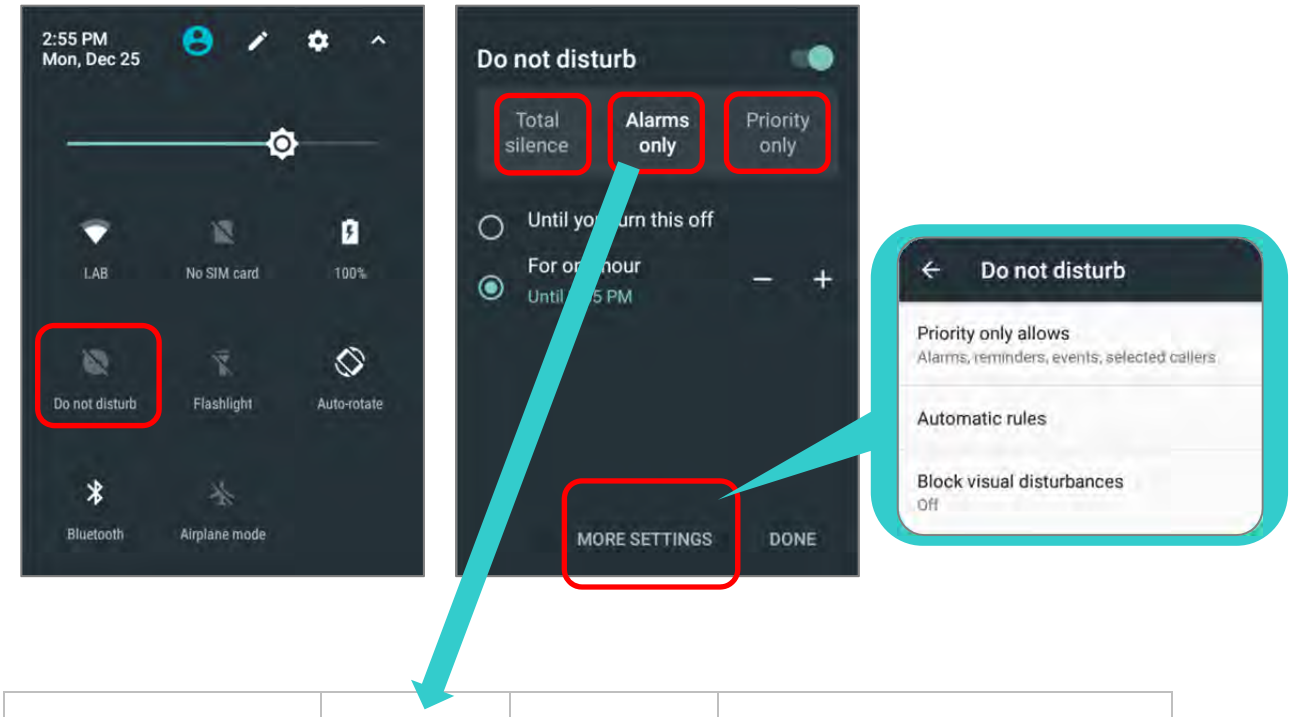
Go to **App Drawer** | **Settings** | **Sound** for more sound settings.



DISABLE UNWANTED NOTIFICATIONS WITH "DO NOT DISTURB"

You can temporarily disable specific notifications (vibration or sound) using "**Do Not Disturb**" in Quick Settings menu. What's more, you can schedule the duration of the disabled status so that the notifications will switch to enabled state automatically based on your arrangement.

Use your two fingers to swipe down from the status bar to open Quick Settings, tap on "**Do not disturb**" to enable this feature and make further adjustment.



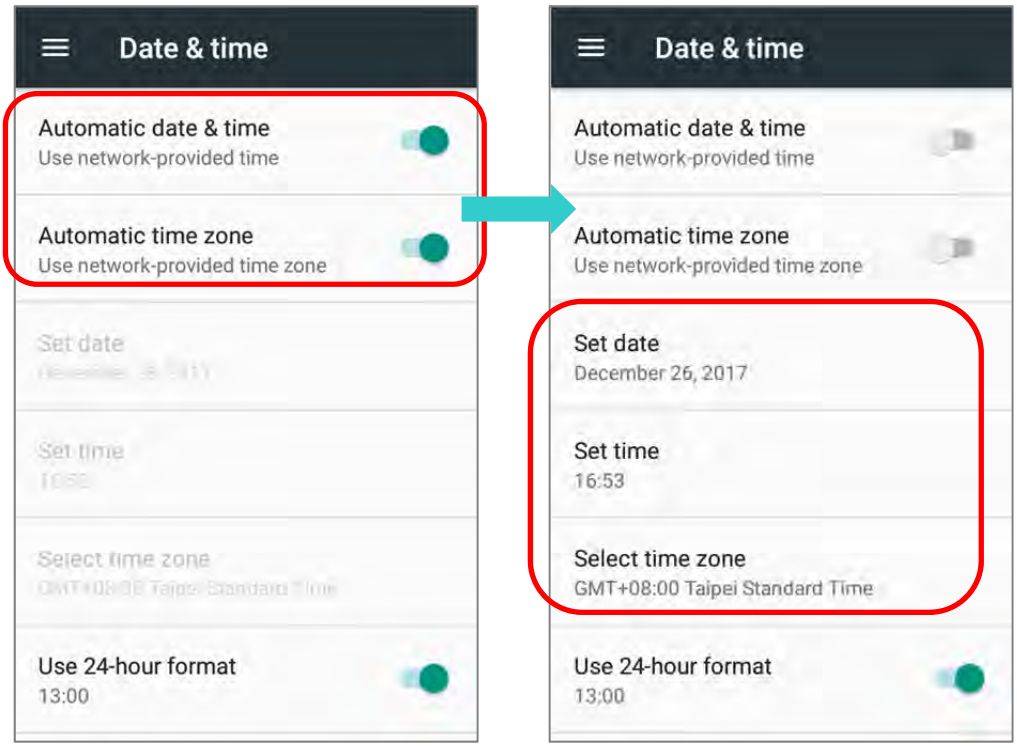
Item	Total Silence	Alarm Only	Priority Only
Alarm	OFF	ON	ON
Reminders	OFF	OFF	Adjustable(Default:ON)
Events	OFF	OFF	Adjustable(Default:ON)
Incoming Calls	OFF	OFF	Adjustable (Default:From Contacts Only)
Messages	OFF	OFF	Adjustable(Default:OFF)
Music, Video, Game or Media	OFF	ON	ON
In-Call	ON	ON	ON

2.5. DATE AND TIME

By default, the mobile computer automatically synchronizes the date and time to the WWAN network (if connected).

To set the date and time manually:

1) Go to **App Drawer** | **Settings** | **Date & time**
2) Tap **Automatic date & time** and select **Off** to disable using network-provided time.
3) Deselect **Automatic time zone**.
4) Tap **Set date**. Use the sliders to select the correct month, date and year. Tap **OK** to save.
5) Tap **Set time**. Use the sliders to select the correct time. Tap **OK** to save.
6) Tap **Select time zone**. Select the correct time zone from the list.



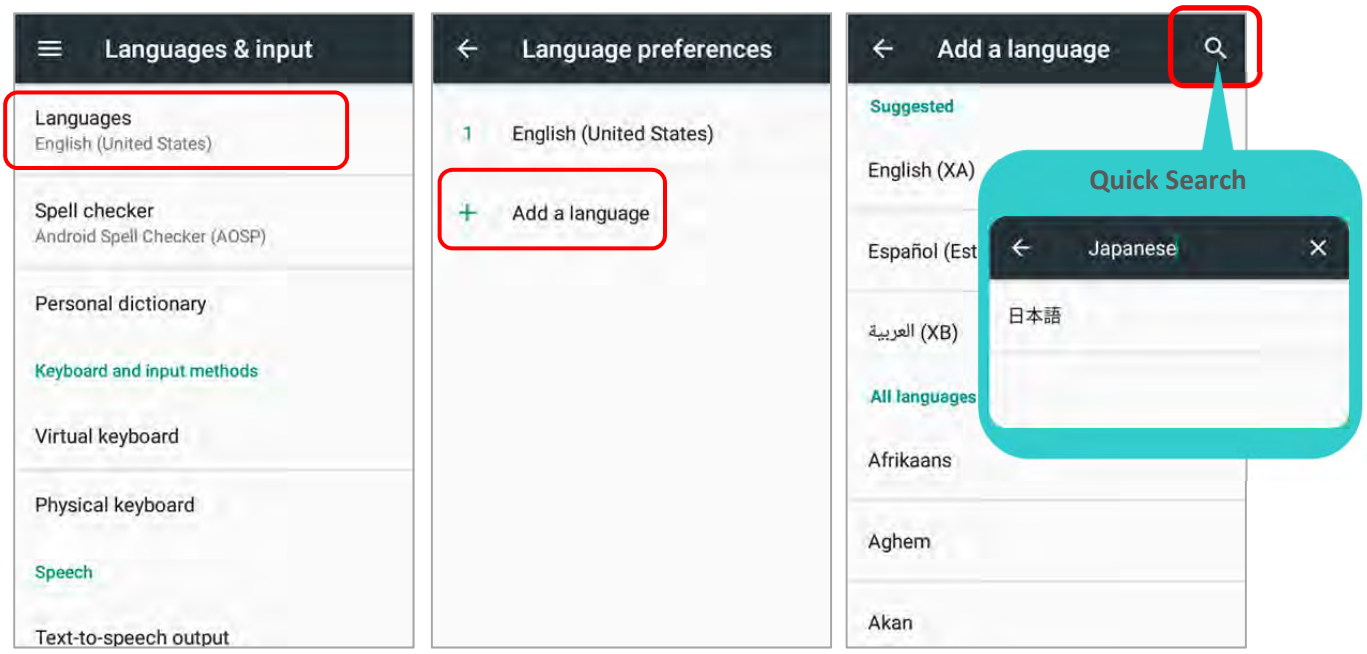
2.6. LANGUAGE & KEYBOARD INPUT

Go to **App Drawer** | **Settings** | **Language & input** to change the system language, default keyboard type, and configure keyboard input and speech settings.

2.6.1. CHANGE DISPLAY LANGUAGE

To change display language:

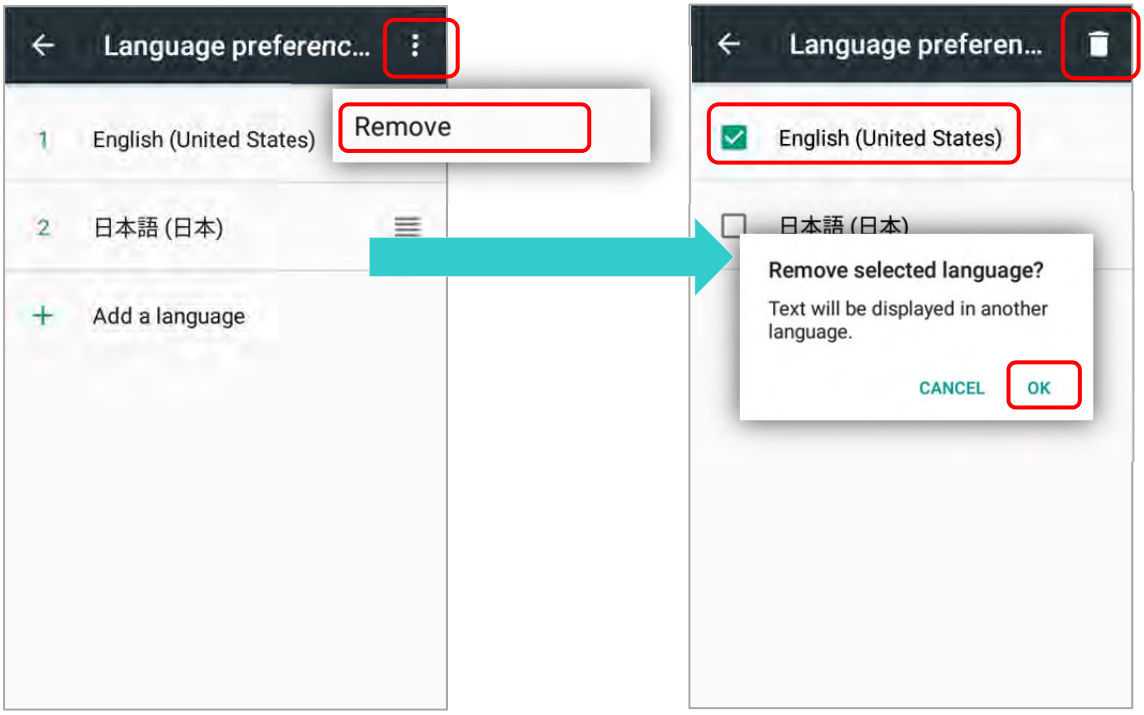
1) On **Language & input** screen, tap **Language** to get into "**Language preference**" page, and then click "**Add a language**" to select your desired system language.



2) Press and hold your desired system language to change its sorting order to the 1st by dragging. Once it is released, the new language setting will immediately be applied.

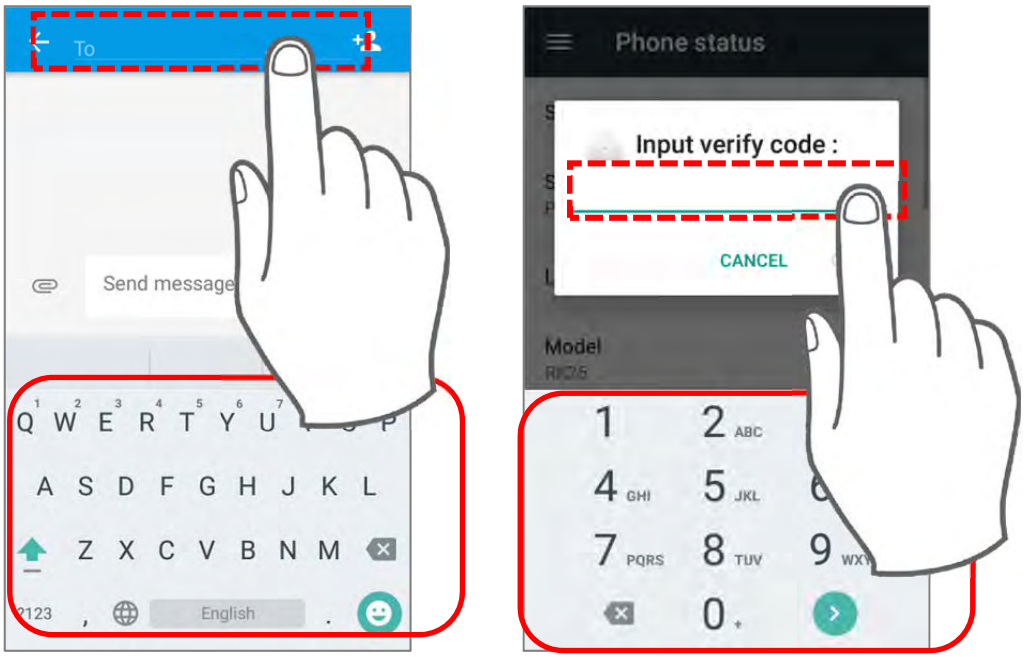
DELETE LANGUAGE

Tap ⋮ in the upper right corner and tap "**Remove**" option; select the language to delete. Please note that the display language will be changed if it is selected to be deleted.



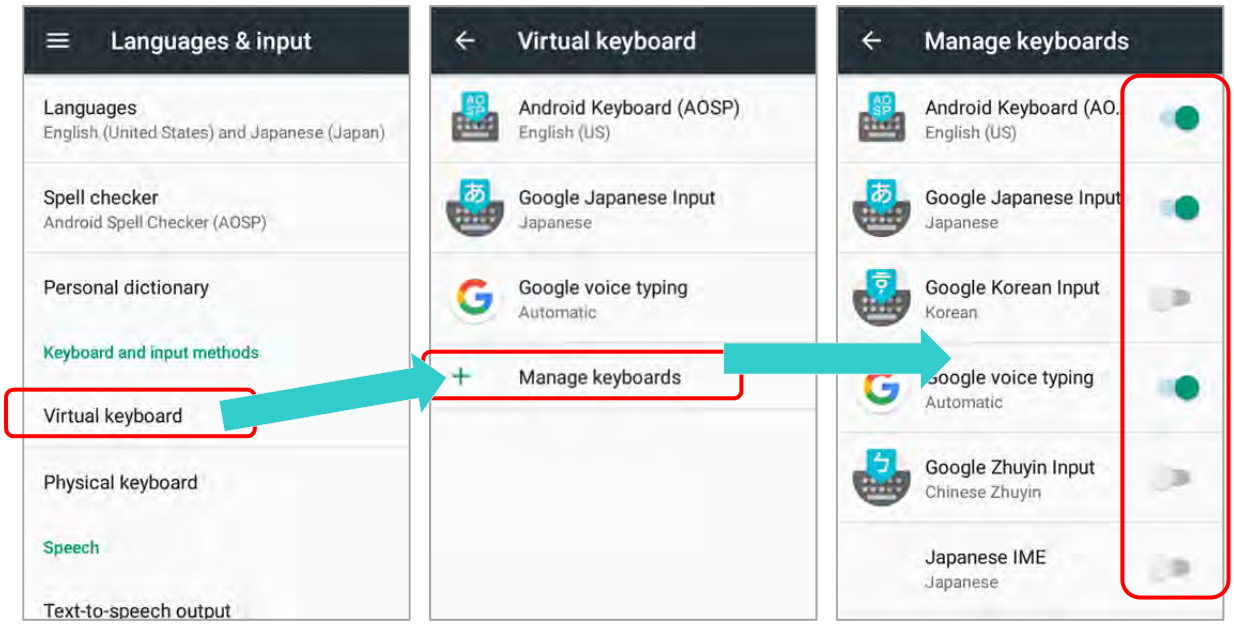
2.6.2. ON-SCREEN KEYBOARD

Tap a text input field to automatically open an on-screen keyboard. The virtual keyboard will vary depending on the data type (text or numbers) this field requires.



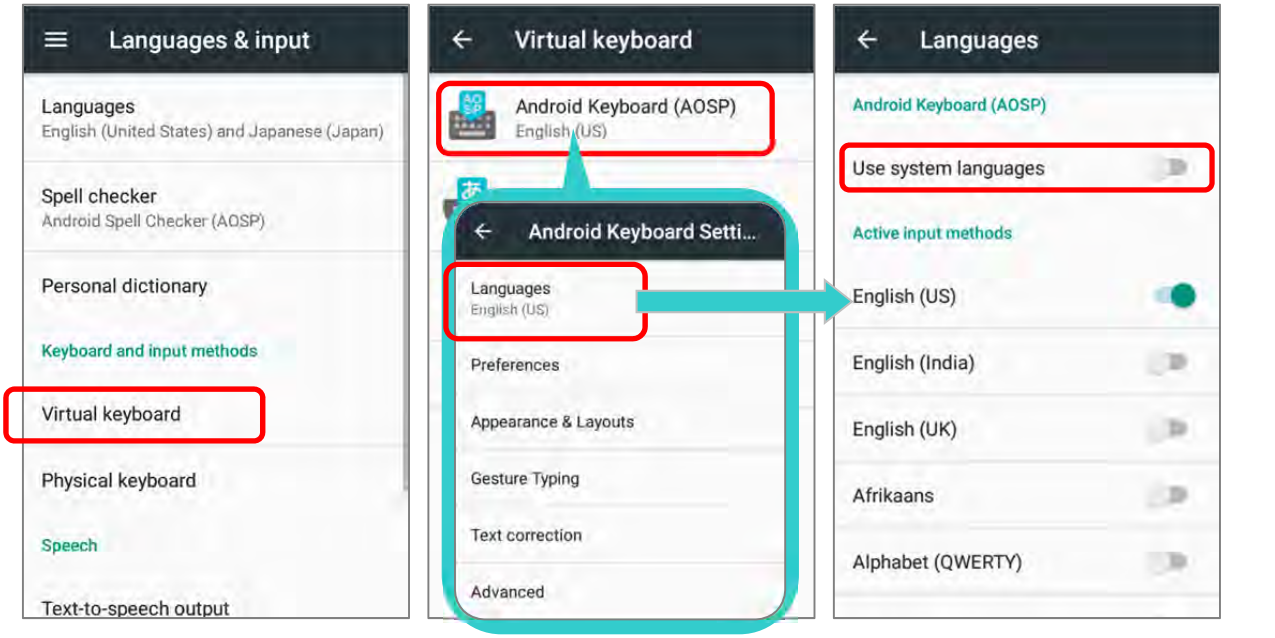
SELECT KEYBOARD (INPUT METHOD)

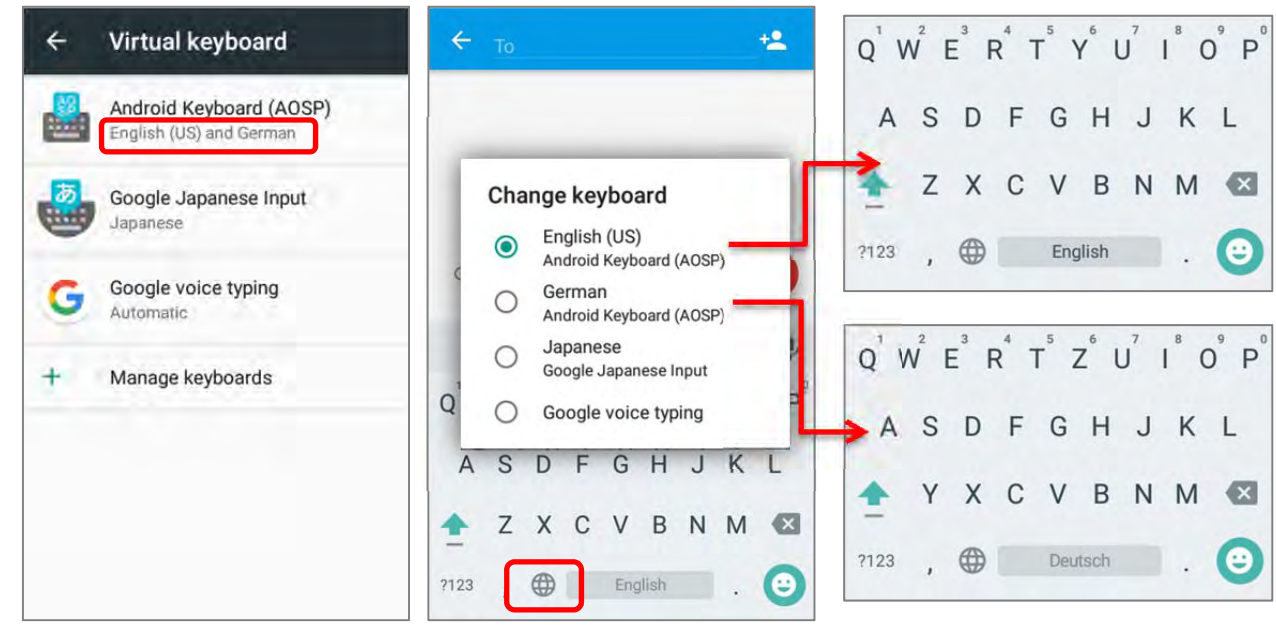
On **Language & input** screen, select **Virtual Keyboard** to manage the installed keyboards by taping "**Manage keyboard**" and switch on/off the input methods you need.



Android provides a variety of keyboard layouts of different languages. To have more options of key layouts, for example, German, you can:

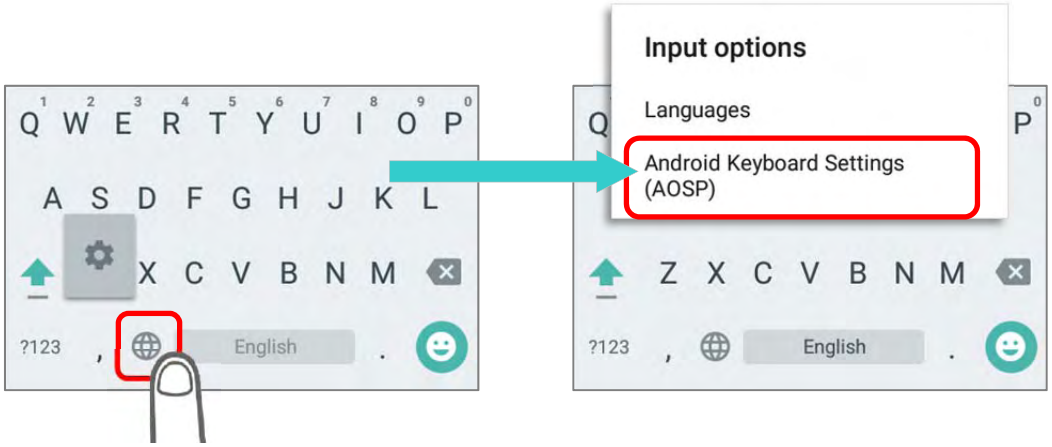
1) On **Language & input** screen, tap **Virtual Keyboard**, select **Android Keyboard (AOSP)**, and then **Languages**.
2) On the list, disable "**Use system language**".
3) Select your desired language keypad layouts.
4) Return to **Virtual Keyboard** screen, and your **Android Keyboard (AOSP)** now lists more languages below.
5) Expand your **Android Keyboard (AOSP)** and press to open "**Change Keyboard**" menu and select your desired input language. Or simply tap to cycle through the options.



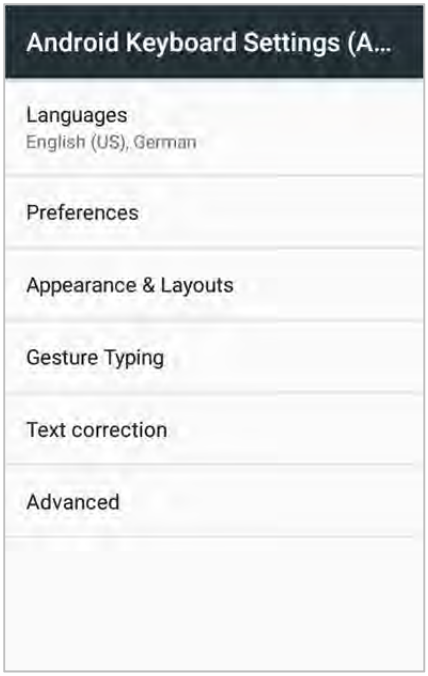


ADJUST KEYBOARD SETTINGS

To configure keyboard settings, tap and hold the comma button , until a settings button appears. A menu will open, allowing you to adjust input language (if you would like to use an input language different from the system language) or keyboard settings.



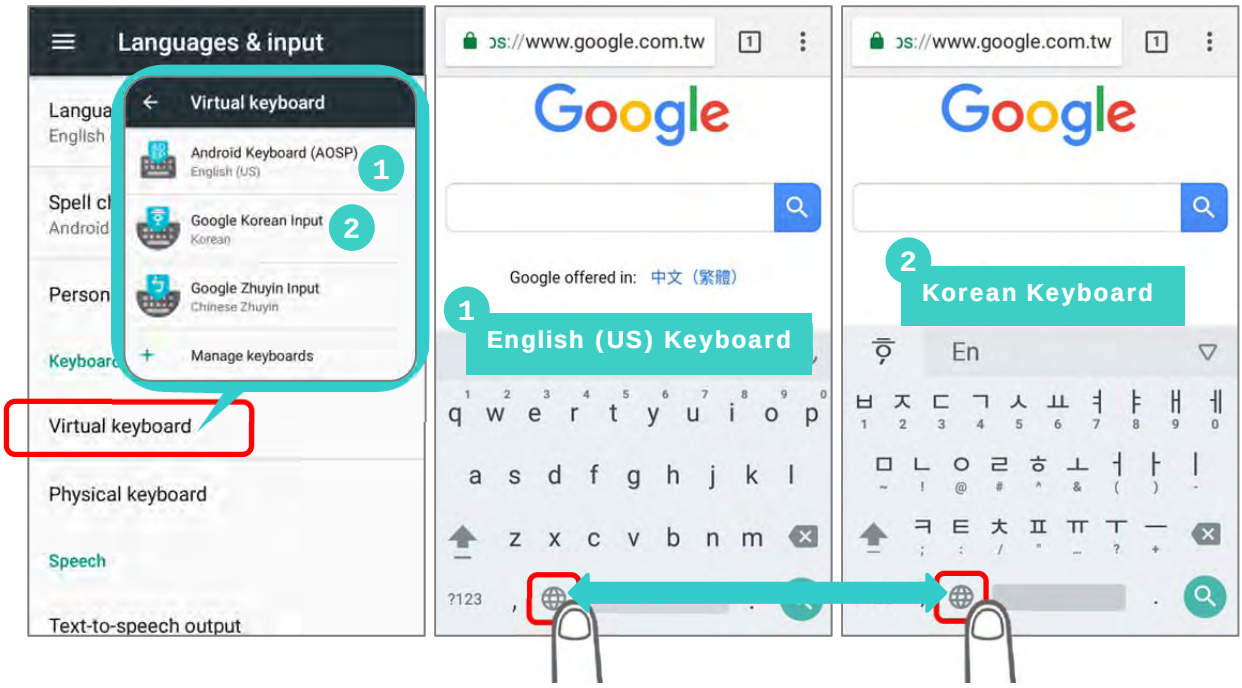
By tapping **Android Keyboard Settings (AOSP)**, you can further adjust the settings to suit your needs.



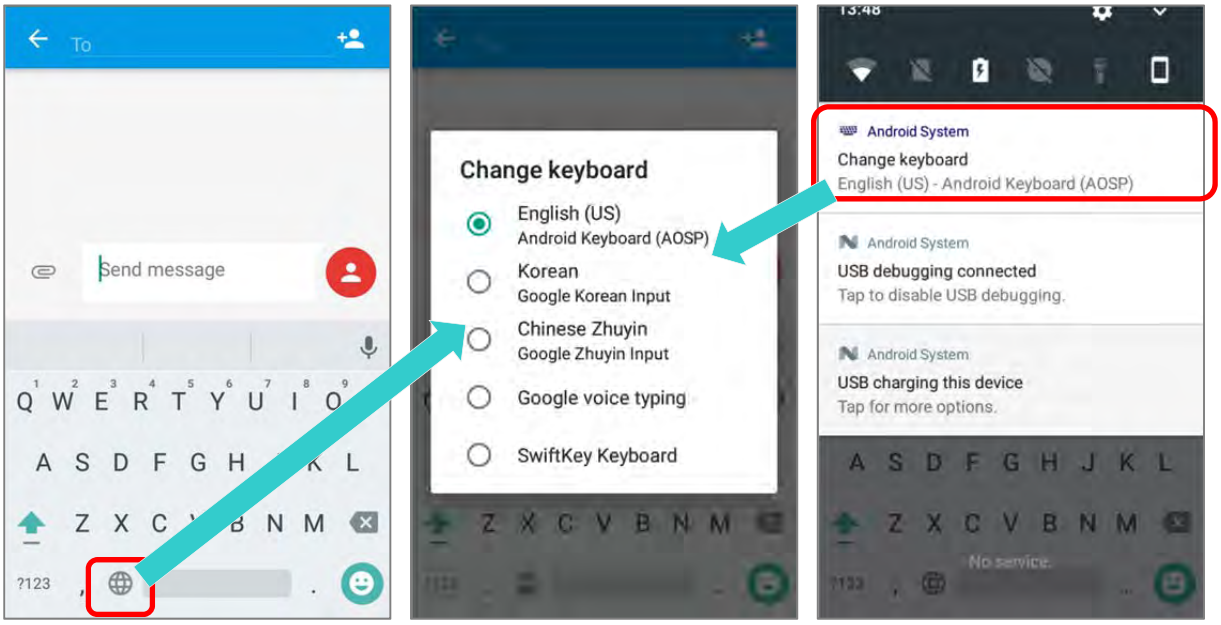
CHANGE KEYBOARD (INPUT METHOD)

The input methods you enabled in **Virtual Keyboard** under **Language & input** are available by tapping ⊕ on the on-screen keyboard.

1) For the default keyboard "**Android Keyboard Settings (AOSP)**" & other Google input keyboards, to use other input methods, simply tap ⊕ to cycle through the options.

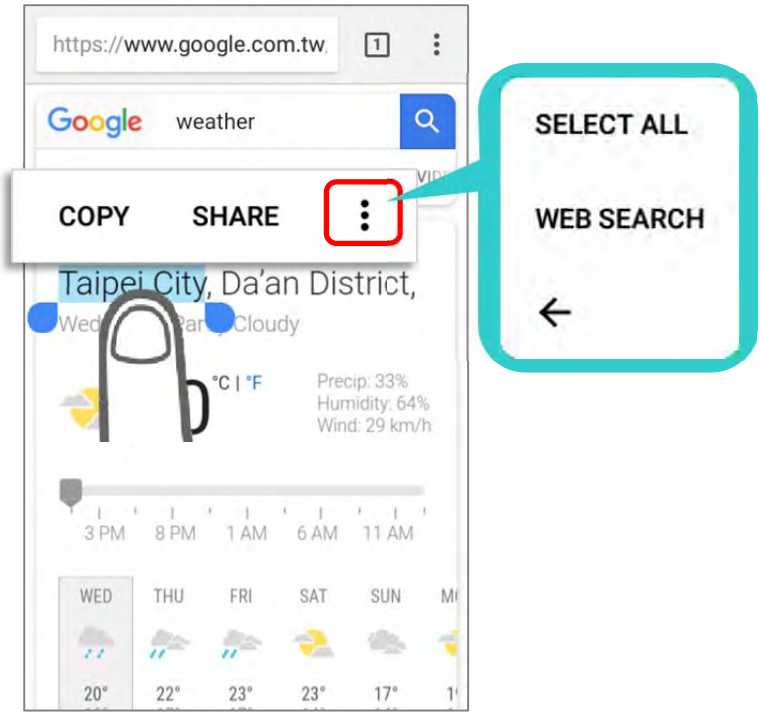


2) If there's any other keyboards installed by you, please press ⊕ on "**Android Keyboard Settings (AOSP)**" till "**Changle Keyboard**" appears and select the keyboard you need. Or swipe down from the status bar to open **Notifications Drawer** and tap "**Change Keyboard**" notification to change it.



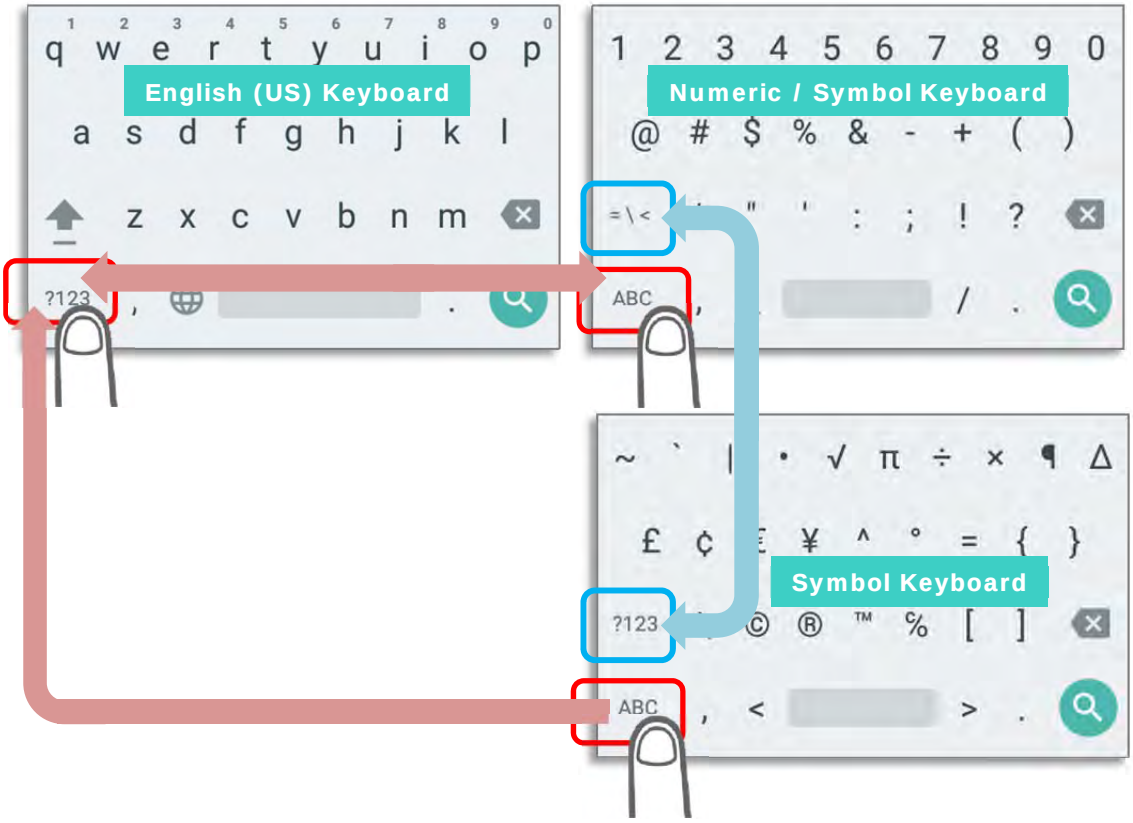
EDIT TEXT

Tap and hold text on the screen to enable a text editing menu for selecting all text, or copying and pasting text within or across applications. Some applications may use different ways to select or edit text.



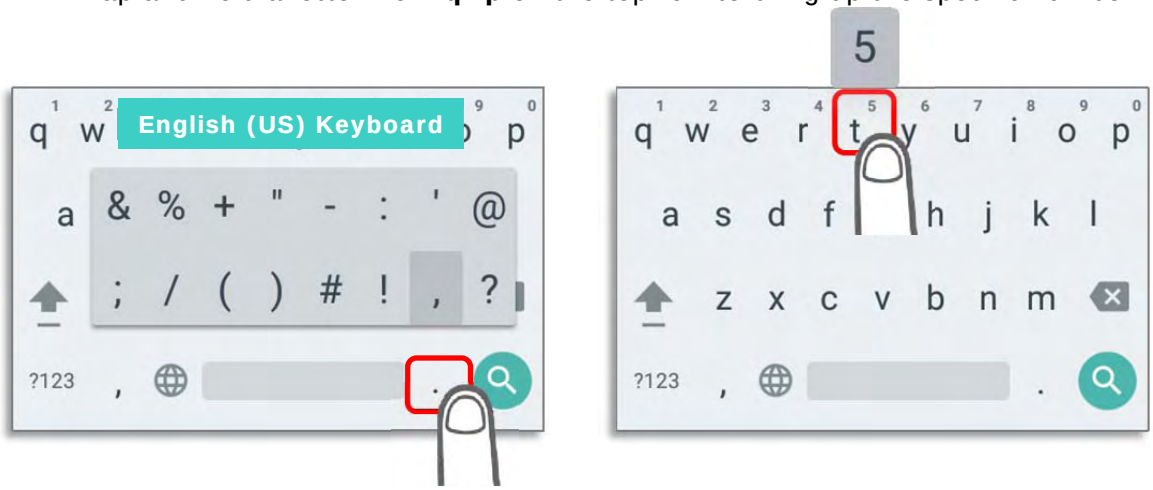
ENTER NUMBERS AND SYMBOLS

The appearance of the switch button to numeric or symbol keyboard may vary; the example below demonstrates how to use the switch key to access your desired numeric or symbol keyboards from the default **Android English (US)** keyboard. To enter **Numeric / Symbol** keyboard, tap ?123 .On **Numeric / Symbol** keyboard, tap =\< to access more symbols or tap ABC to return to **Android English (US)** keyboard.



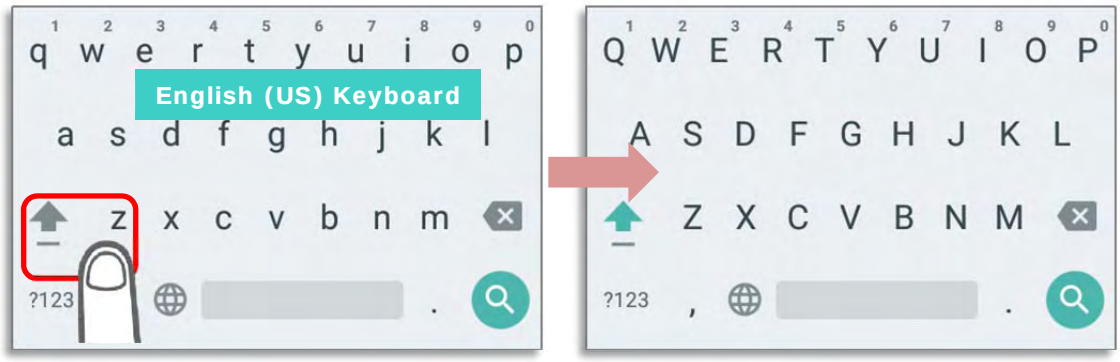
On **Android English (US)** keyboard, you can input number or symbols without switching to **Numeric / Symbol** keyboard.

- Tap and hold the period button . to open quick symbol keyboard.
- Tap and hold a letter from **q**~**p** on the top row to bring up the specific number key.



ENTER UPPERCASE LETTERS

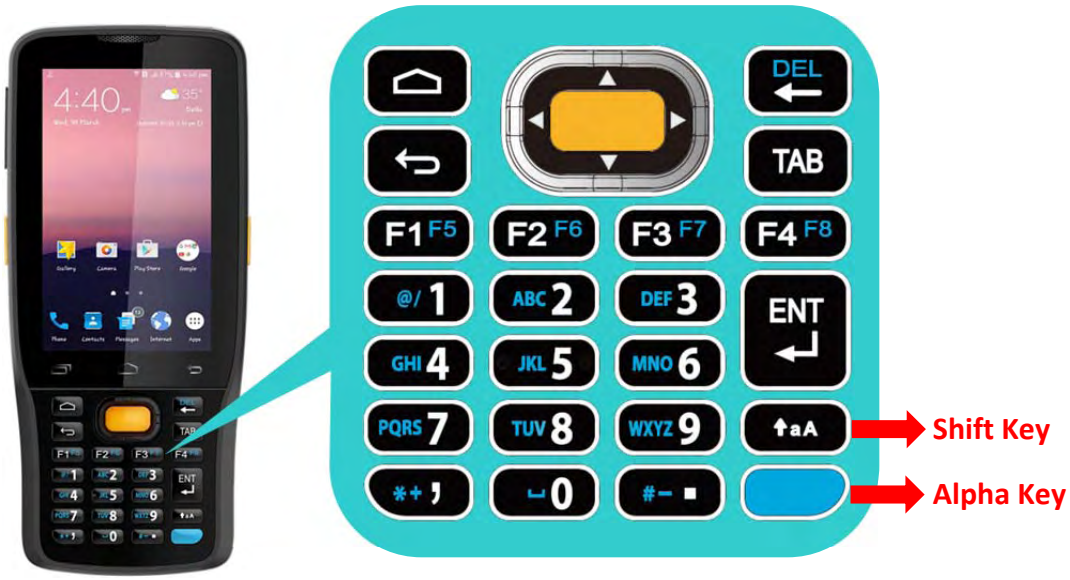
Tap and hold the Shift key , and tap a character key to enter an uppercase letter. The letters will return to lower case once an uppercase letter is entered.



2.7. PHYSICAL KEYPAD

The physical keypad receives supplementary backlight along with the screen, and supports multi-key operation, which normally requires two keys hit simultaneously. The keypad is capable of entering numbers, letters, symbols and punctuation marks.

Keypad of 28-key Model:



Keypads of 25-key Model:

2.7.1. BASIC KEY

Basic Keys deliver the folloing functions:

BASIC KEY OF 28-KEY MODEL

Key		Description
Scan		Press the scan key to read a barcode in place.
Arrows		The arrow keys are circled around the center scan key. These can be used to move the cursor up, down, left or right during text input, or move between items in certain applications.
Home		Displays the Home screen.
Back		Returns to the previous screen or closes the active window or keyboard.
Backspace		Remove the last input letter.
Tab		To advance the cursor to the next tab stop.
Enter		Enter key works as tap or double-tap.

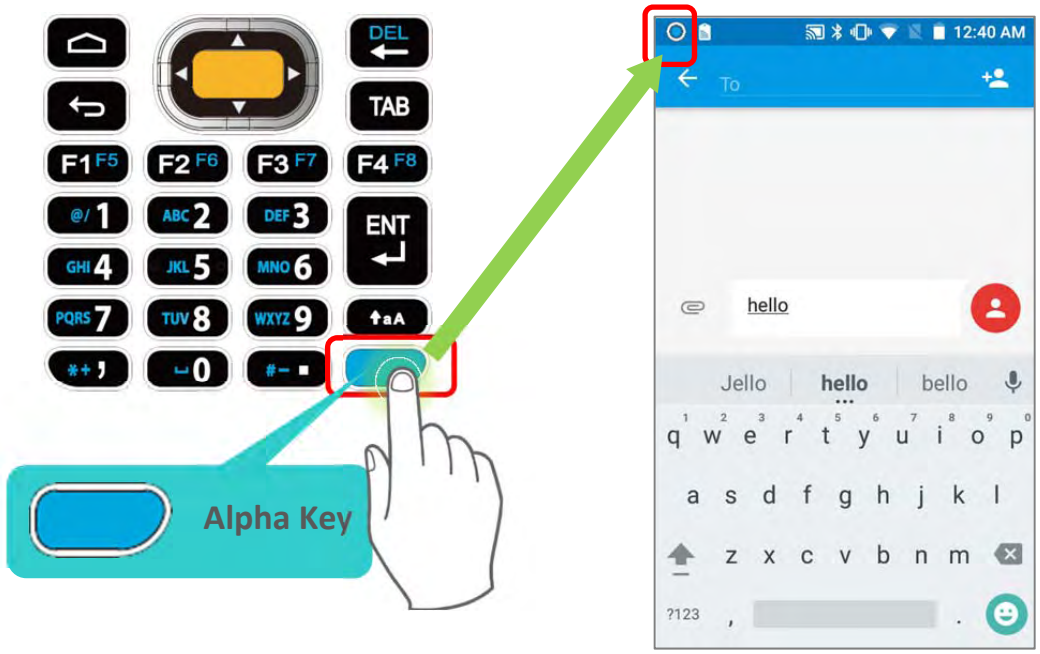
BASIC KEY OF 25-KEY MODEL

Key		Description
Scan		Press the scan key to read a barcode in place.
Arrows		The arrow keys are circled around the center scan key. These can be used to move the cursor up, down, left or right during text input, or move between items in certain applications.
Back		Returns to the previous screen or closes the active window or keyboard.
Delete		Remove the last input letter.
Enter		Enter key works as tap or double-tap.

2.7.2. ALPHA KEY

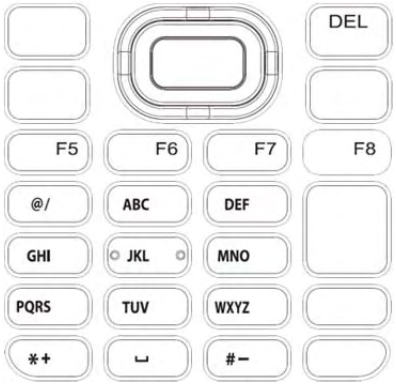
ALPHA KEY OF 28-KEY MODEL

The Alpha key is the blue button located in the bottom right corner of the keypad. When the Alpha key is pressed, a blue icon shows up in the status bar to indicate that **Alpha Mode** is on:



When Alpha Mode is on, the keypad enter Alpha lock mode, and the keys deliver the function as the text in blue on the keys (please refer to Key Functions in Different Modes for details). To turn off Alpha Mode, press Alpha key again to return to the default input mode.

Default Input Mode



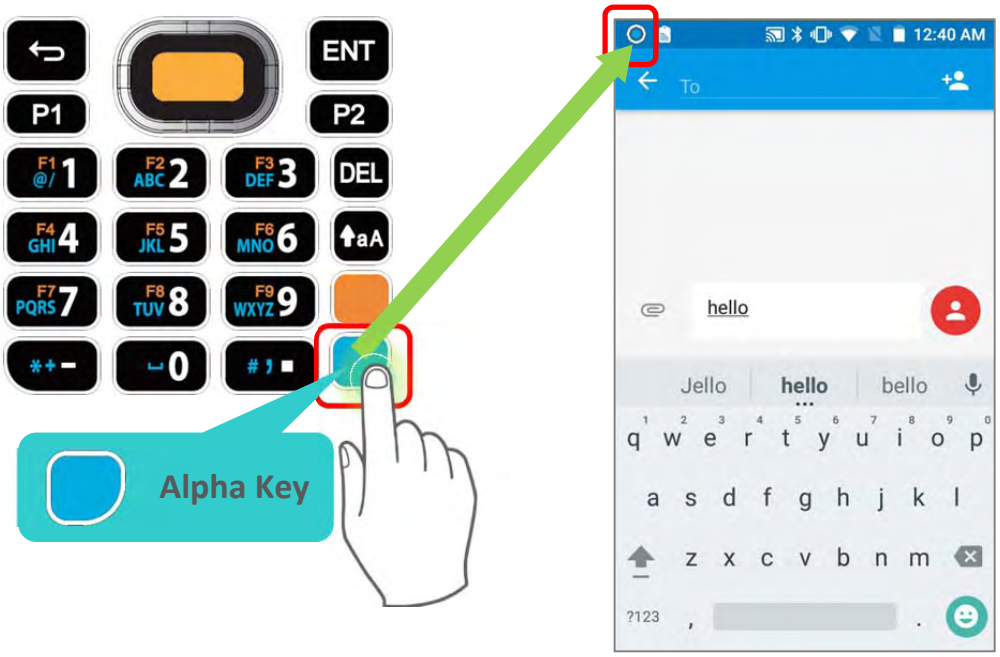
Alpha Mode

Note:

Alpha mode can coexist with Shift mode. When both modes are active, the input letters will be uppercase. Please refer to Key Functions in Different Modes.

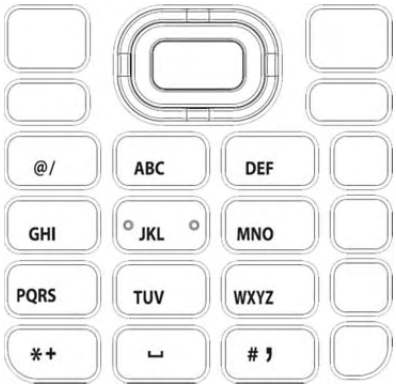
ALPHA KEY OF 25-KEY MODEL

The Alpha key is the blue button located in the bottom right corner of the keypad. When the Alpha key is pressed, a blue icon shows up in the status bar to indicate that **Alpha Mode** is on:



When Alpha Mode is on, the keypad enter Alpha lock mode, and the keys deliver the function as the text in blue on the keys (please refer to Key Functions in Different Modes for details). To turn off Alpha Mode, press Alpha key again to return to the default input mode.

Default Input Mode



Alpha Mode

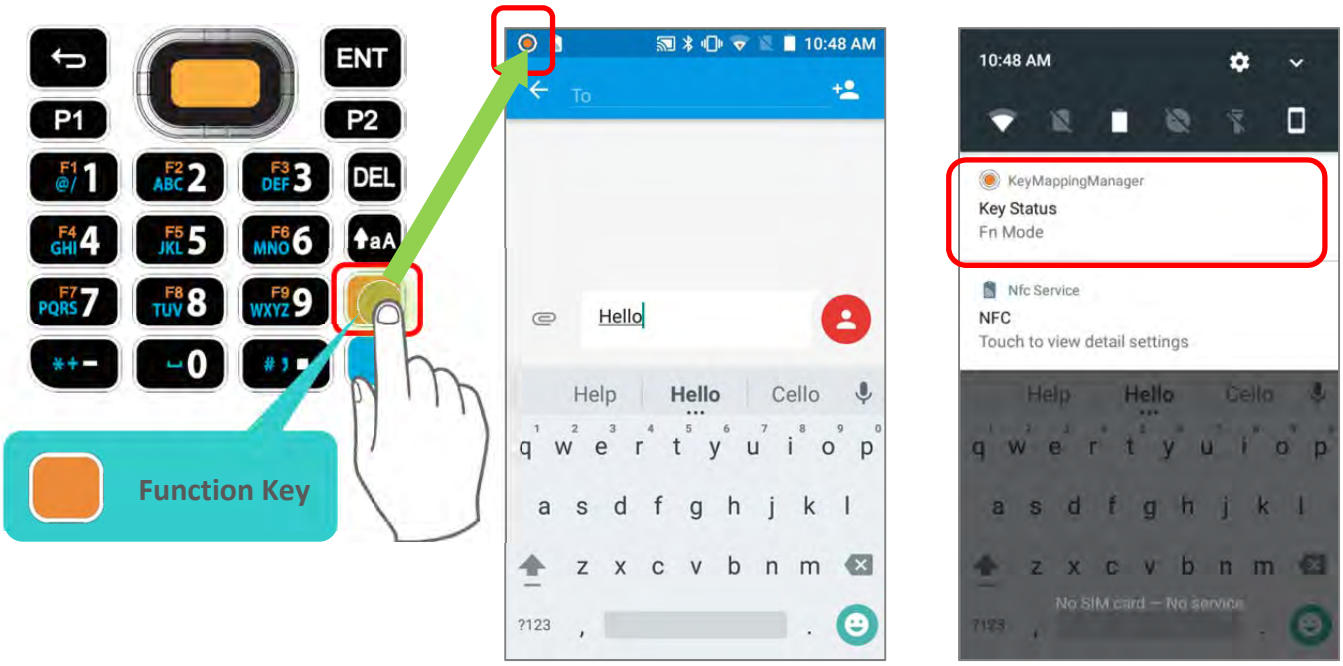
Note:

Alpha mode can coexist with Shift mode & Function Mode. When both Shift mode and Alpha Mode are active, the input letters will be uppercase. Please refer to Key Functions in Different Modes for details.

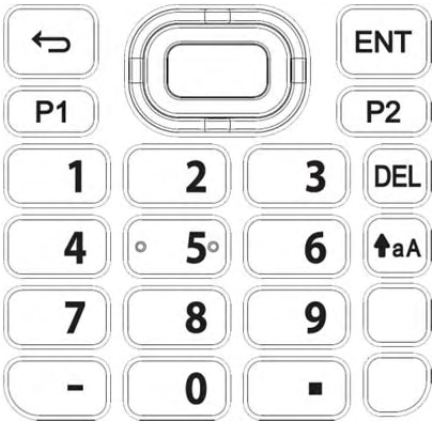
2.7.3. FUNCTION KEY (ONLY FOR 25-KEY MODEL)

The Function key is the orange button located right above in the Alpha Key (the blue button).

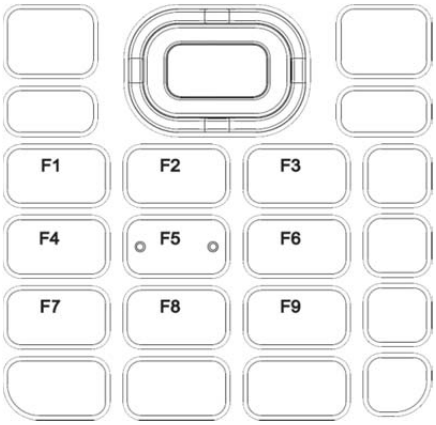
When the Function key is pressed, a orange icon shows up in the status bar to indicate that Function Mode is on:



Keypad returns from Function Mode to Default Input Mode upon pressing any button engraved in orange. If Alpha key/Shift Key is pressed, keypad will return to Alpha mode/Shidt Lock Mode until Alpha key/Shift Key is pressed again.



Default Input Mode



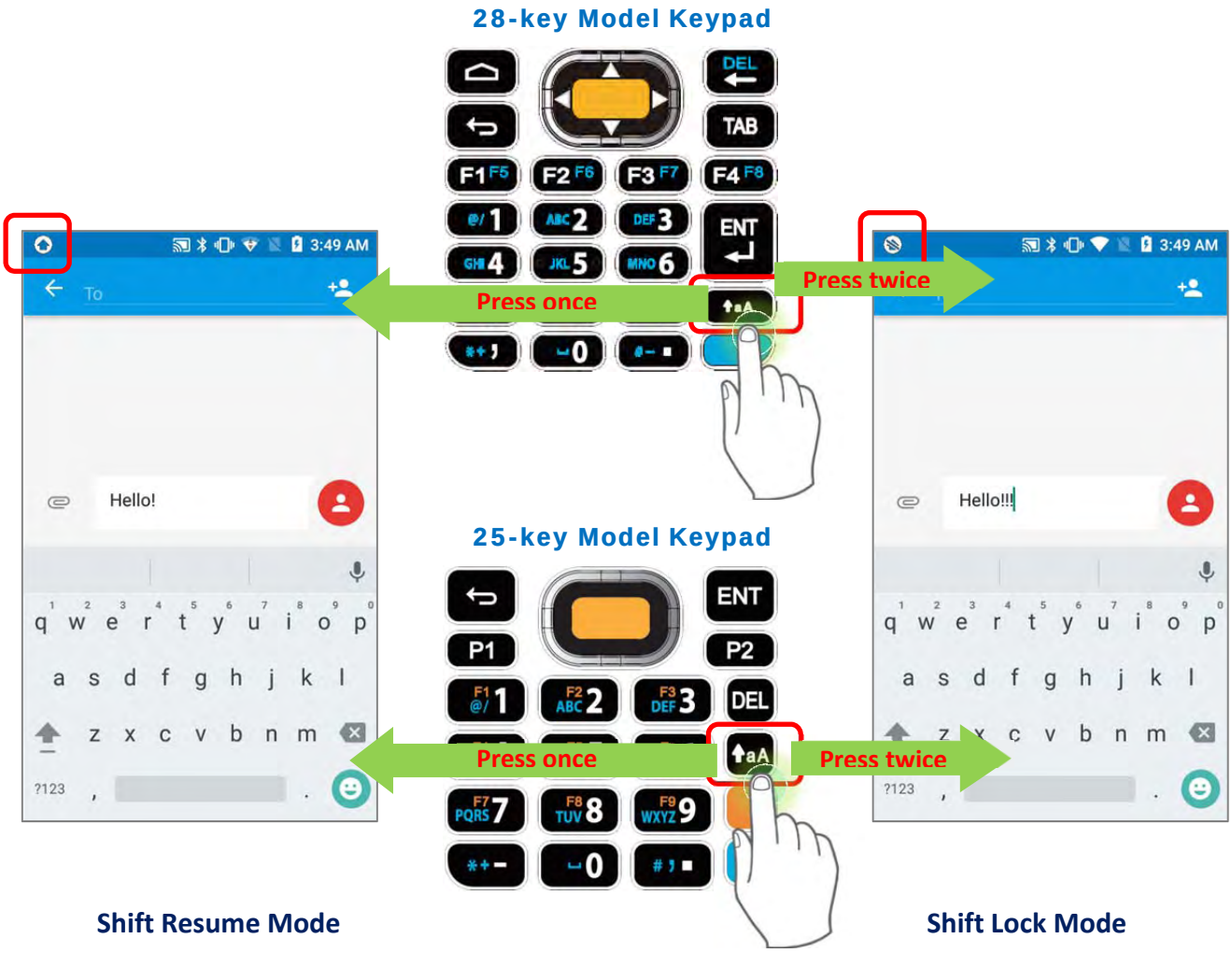
Function Mode

Note:

Function mode can coexist with Shift mode & Alpha Mode. Please refer to Key Functions in Different Modes for details.

2.7.4. SHIFT KEYS

The **Shift key** is located right above the **Alpha key** for 28-key Model, while it is located right above the **Function Key** for 25-key Model. When the Shift key is pressed once, an icon shows up in the status bar to indicate the Key Status is in **Shift Resume Mode**. The keypad will return to the **Default Input mode** right after pressing any key (except of **Backspace** key for **28-key Model** and **Delete key** for **25-key Model**).



When the Shift key is pressed twice, the keypad will enter **Shift Lock Mode** with an icon appears in the status bar, and the keypad stays in Shift Lock Mode till the Shift key is pressed again.

In both **Shift Resume Mode** and **Shift Lock Mode**, the keys deliver the functions as Key Functions in Different Modes describes:

2.7.5. KEY FUNCTIONS IN DIFFERENT MODES

FOR 28-KEY MODEL KEYPAD

Default Input Mode	Shift Mode	Alpha Mode	Shift Mode+ Alpha Mode
←	←	DEL	DEL
F1	F1	F5	F5
F2	F2	F6	F6
F3	F3	F7	F7
F4	F4	F8	F8
1	!	@/	@/
2	@	ABC	A, B, or C in uppercase
3	#	DEF	D, E, or F in uppercase
4	$	GHI	G, H, or I in uppercase
5	%	JKL	J, K, or L in uppercase
6	^	MNO	M, N, or O in uppercase
7	&	PQRS	P, Q, R, or S in uppercase
8	*	TUV	T, U, or V in uppercase
9	(	WXYZ	W, X, Y, or Z in uppercase
0	)	␣	␣
,	<	*+	*+
.	>	#–	#–
ENT	Return to the next line or start a new paragraph in text input field.	ENT	ENT

FOR 25-KEY MODEL KEYPAD

Default Input Mode	Shift Mode	Alpha Mode	Function Mode
P1 P2	N/A	N/A	N/A
1	!	@/	F1
2	@	ABC	F2
3	#	DEF	F3
4	$	GHI	F4
5	%	JKL	F5
6	^	MNO	F6
7	&	PQRS	F7
8	*	TUV	F8
9	(	WXYZ	F9
0	)	␣	0
-	<	*+	-
.	>	# '	.
ENT	Return to the next line or start a new paragraph in text input field.	N/A	N/A

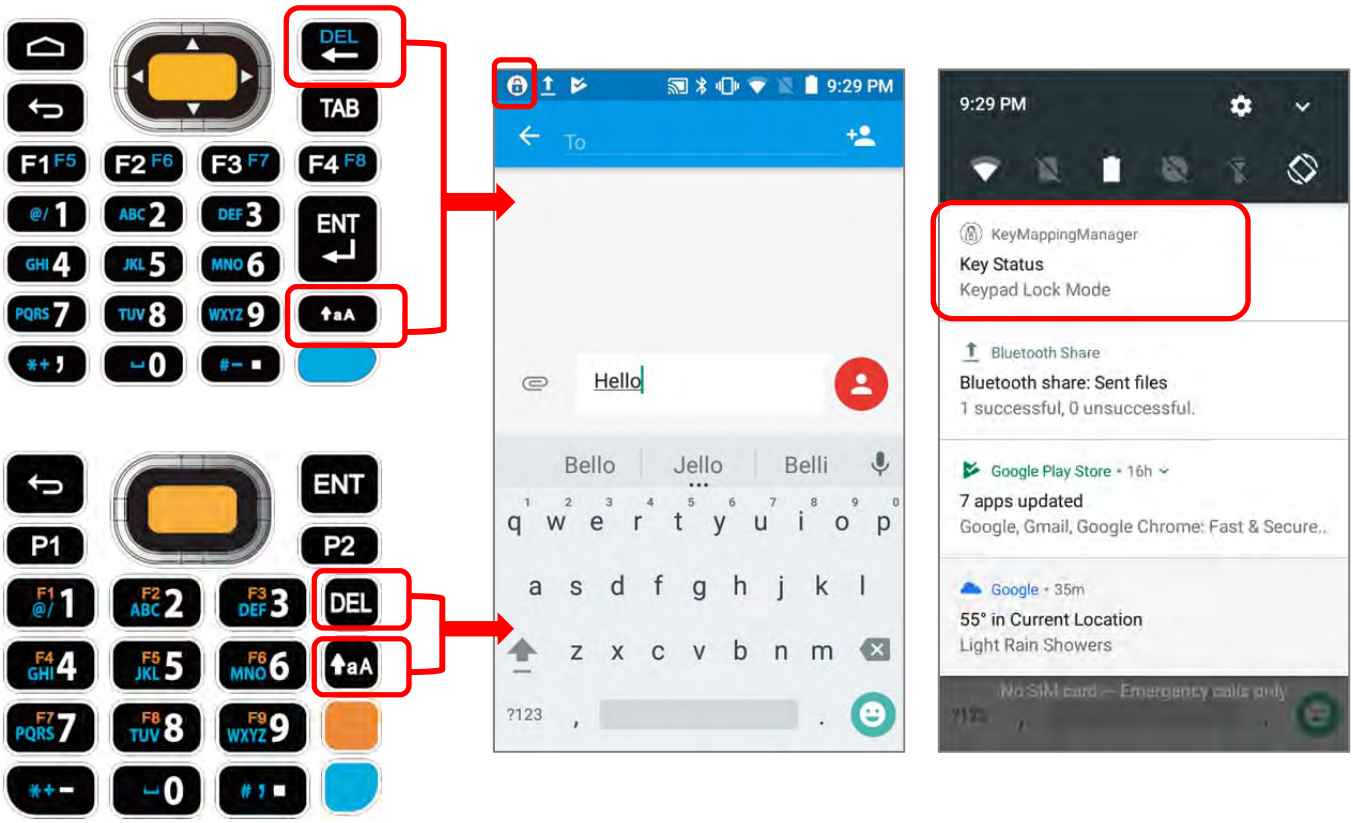
Default Input Mode	Shift Mode + Alpha Mode	Shift Mode + Alpha Mode + Function Mode Alpha Mode + Function Mode Shift Mode+ Function Mode
P1	N/A	N/A
P2	N/A	
1	@/	
2	A, B, or C in uppercase	
3	D, E, or F in uppercase	
4	G, H, or I in uppercase	
5	J, K, or L in uppercase	
6	M, N, or O in uppercase	
7	P, Q, R, or S in uppercase	
8	T, U, or V in uppercase	
9	W, X, Y, or Z in uppercase	
0	␣	)
-	*+	_
.	#,	>
ENT	N/A	Return to the next line or start a new paragraph in text input field.

2.7.6. KEYPAD LOCK

The keypad lock mode can be triggered by pressing:

1) For **28-key Model**: **Shift key** ⇧aA and **Backspace key** DEL

2) For **Chiba SKU**: **Shift key** ⇧aA and **Delete key** DEL

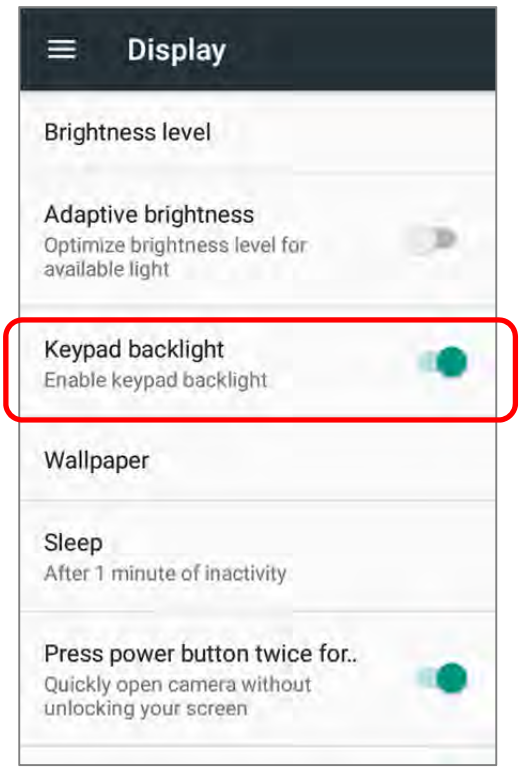


When the keypad lock mode is triggered, all keys on the keypad will become locked to prevent any accidental pressing of keys. A keypad lock icon will appear on the status bar to indicate keys are currently locked.

Note:
When Alpha Mode is on, the hot key combination (**Shift** + **Backspace**) would not work for **28-key Model**, because Backspace key becomes "**Delete**" in Alpha Mode. For **25-key Model**, the hot key combination (**Shift** + **Delete**) would not work.

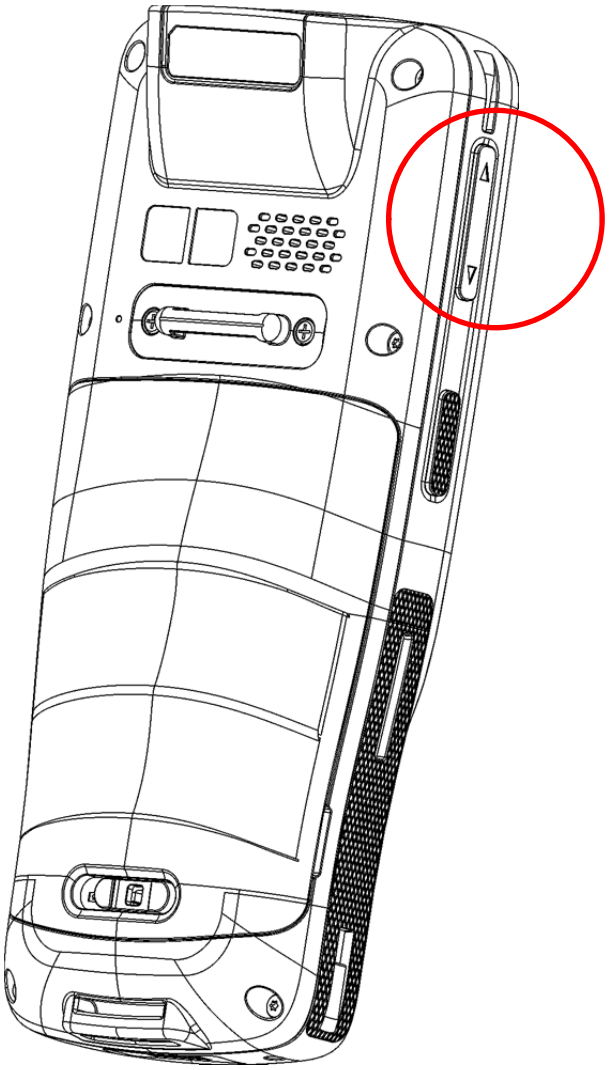
2.7.7. KEYPAD BACKLIGHT

The default setting of keypad backlight is enabled. To turn on/off the keypad backlight, please go to **App Drawer** | **Settings** | **Display**, and tap "**Keypad backlight**" to enable/disable it.



2.8. SOUND AND VOLUME

Use the volume buttons on the left side of the mobile computer to adjust system and ringer volume.



2.9. DATA CAPTURE

2.9.1. BARCODE READER

A selection of scan engines is available for delivering flexibility to meet different requirements. Depending on the scan engine integrated, the mobile computer is capable of scanning barcodes of a number of symbologies that are enabled by default while running the ReaderConfig application. You won't be able to scan a specific barcode symbology which is not enabled. Run ReaderConfig.exe to enable/disable barcode symbologies.

2.9.2. DIGITAL CAMERA

An integrated 8 megapixel rear camera in the mobile computer is specifically designed for collecting image data. You may use the image capture utility to turn on the camera and capture images. By default, the images taken by this camera application are saved as JPG files in the **DCIM** folder in the device's primary storage.

Chapter 3

BASIC OPERATION

This chapter describes the basic skills to work with the RK25 mobile computer, for instance how to operate the home screen, check system status and manage notifications. The add-on utilities for applications regarding data collection, processing, and transmission are introduced in the following chapters.

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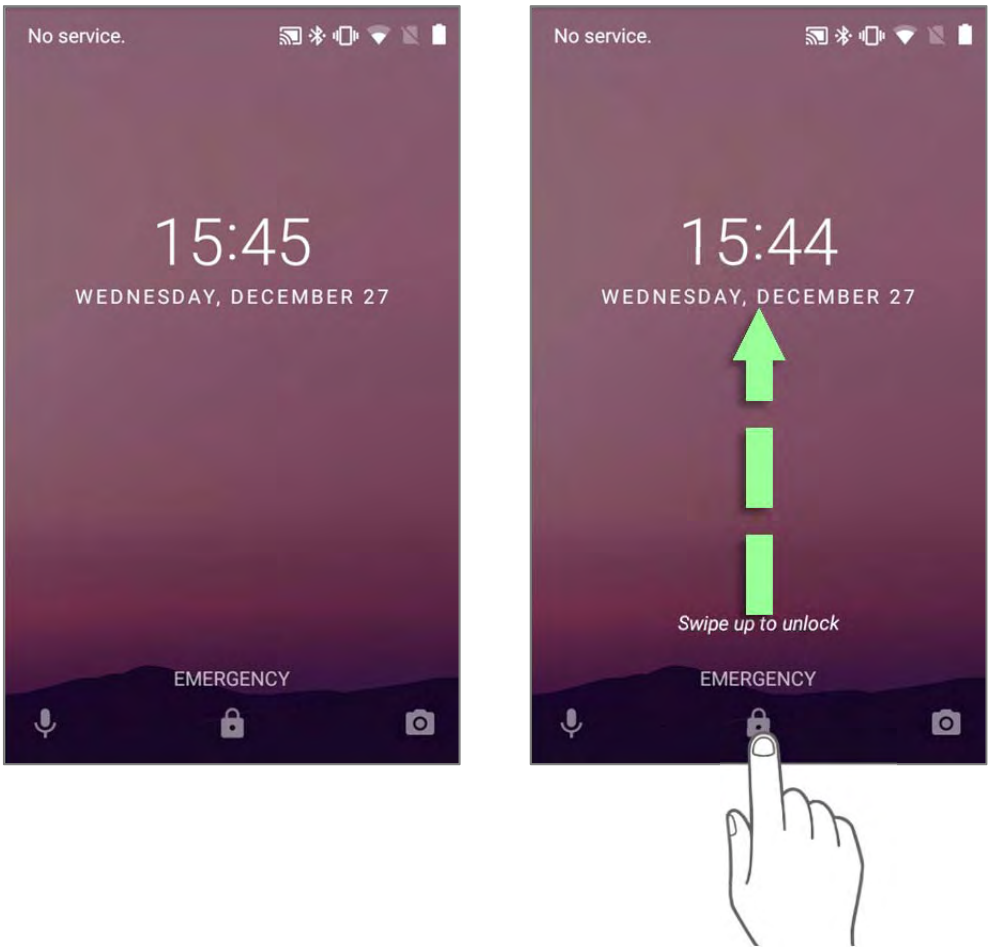
3.1. HOME SCREEN

When the mobile computer is fully charged, press the Power key for three seconds to turn on the mobile computer. A locked screen will appear. Slide the lock button upward to unlock the screen.