CipherLab
Reference Manual

RK26 Mobile Computer

Version 1.02

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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:

Settings → Legal Information → Electronic authentication

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℃ to 50℃ and with humidity range from 10% to 90%.
- Store the device at ambient temperatures from -30℃ to 70℃ and with humidity range from 5% to 95%.
- Charge the device at ambient temperatures from 0℃ to 45℃.
- This device is built with a dust-proof and splash-proof structure that conforms to protection class IP65.

SPECIFIC ABSORPTION RATE (SAR) INFORMATION

- **USA(FCC):**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/ TV technician for help.

This device is slave equipment, the device is not radar detection and not ad-hoc operation in the DFS band.
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.

RF Exposure warning

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

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

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm after searching on FCC ID: Q3N-RK26.

- **Canada (ISED):**

This Class B digital apparatus complies with Canadian ICES-003. CAN ICES-003 (B)/NMB-003(B)

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with ISED's licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and

(iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate. High-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Les utilisateurs devraient aussi être avisés que

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725MHz doit se conformer à la limite de p.i.r.e.;

(iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

De plus, les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Innovation, Science and Economic Development Canada (ISED) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has been evaluated for and shown compliant with the ISED Specific Absorption Rate ("SAR") limits when operated in portable exposure conditions. (Antennas are greater than 5mm from a person's body).

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie rayonnée de l'appareil sans fil est inférieure aux limites d'exposition aux radiofréquences d'Innovation, Sciences et Développement économique Canada (ISDE). L'Appareil sans fil doit être utilisé de telle manière que le potentiel de contact humain pendant le fonctionnement normal soit minimisé.

Cet appareil a été évalué et démontré conforme aux limites de débit d'absorption spécifique ("SAR") ISDE lorsqu'il est utilisé dans des conditions d'exposition portables. (Les antennes sont à plus de 5 mm du corps d'une personne).

EU / UK (CE/UKCA):

EU Declaration of Conformity

Hereby, CIPHERLAB CO., LTD. declares that the radio equipment type RK26 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.cipherlab.com

UK Declaration of Conformity

Hereby, CIPHERLAB CO., LTD. declares that the radio equipment type RK26 is in compliance with the essential requirements and other relevant provisions of the Radio Equipment Regulations 2017.

The full text of the UK Declaration of Conformity may be found at h at the following internet address: www.cipherlab.com

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

RF Exposure warning

This device meets the EU requirements (2014/53/EU) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

The limits are part of extensive recommendations for the protection of the general public. These recommendations have been developed and checked by independent scientific organizations through regular and thorough evaluations of scientific studies. The unit of measurement for the European Council's recommended limit for mobile devices is the "Specific Absorption Rate" (SAR), and the SAR limit is 2.0 W/Kg averaged over 10 grams of body tissue. It meets the requirements of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).
For next-to-body operation, this device has been tested and meets the ICNRP exposure guidelines and the European Standard **EN 50566 and EN 62209-2**. SAR is measured with the device directly contacted to the body while transmitting at the highest certified output power level in all frequency bands of the mobile device.



AT	BE	BG	CH	CY	CZ	DK	DE
EE	EL	ES	FI	FR	HR	HU	IE
IS	IT	LT	LU	LV	MT	NL	PL
PT	RO	SI	SE	SK	NI		





All operational modes:

Technologies	Frequency range (MHz)	Max. Transmit Power
GSM 900	880-915 MHz	33.5 dBm
GSM 1800	1710-1785 MHz	30 dBm
WCDMA Band I	1920-1980 MHz	22 dBm
WCDMA Band VIII	880-915 MHz	24.5 dBm
LTE Band 1	1920-1980 MHz	20 dBm
LTE Band 3	1710-1785 MHz	20 dBm
LTE Band 7	2500-2570 MHz	20 dBm
LTE Band 8	880-915 MHz	23.5 dBm
LTE Band 20	832-862 MHz	24 dBm
LTE Band 28	703~748MHz	24 dBm
LTE Band 38	2570-2620 MHz	23 dBm
LTE Band 40	2300-2400 MHz	23 dBm
Bluetooth EDR	2402-2480 MHz	6.0 dBm
Bluetooth LE	2402-2480 MHz	3.5 dBm

WLAN 2.4 GHz	2412-2472 MHz	18 dBm
WLAN 5 GHz	5180-5240 MHz	18.5dBm
WLAN 5 GHz	5260-5320 MHz	18.5 dBm
WLAN 5 GHz	5500-5700 MHz	18.5 dBm
WLAN 5 GHz	5745-5825 MHz	18.5 dBm
NFC	13.56 MHz	7 dBuA/m @ 10m
GPS	1575.42 MHz	

The adapter shall be installed near the equipment and shall be easily accessible.

CAUTION

Risk of explosion if battery is replaced by an incorrect type.

Dispose of used batteries according to the instructions.

- **Japan (TBL/JRL):**



台灣(NCC):

- 取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材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。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須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。
- 應避免影響附近雷達系統之操作。
- 使用過度恐傷害視力。
- 認證標籤相關資訊，可以在產品上，依下列步驟操作取得
- “設置”→ “關於手機”→ “法律資訊”
- 使用 30 分鐘請休息 10 分鐘。
- 未滿 2 歲幼兒不看螢幕，2 歲以上每天看螢幕不要超過 1 小時
- 減少電磁波影響，請妥適使用。
- SAR 標準值：2 W/kg，送測產品實測值： 0.503 W/kg。
- 內建主記憶體硬體容量：64 GB，使用者可使用主記憶體容量至少：50 GB，可擴充記憶卡支援：256 GB 以下。

Power Adapter Information

INPUT: 100-240V~50/60Hz 0.35A

OUTPUT/: 5.0V 2.0A 10.0W

IMPORTANT SAFETY INSTRUCTIONS AND WARNINGS FOR LI-ION/POLYMER BATTERY

Lithium batteries are prone to capacity loss and swelling when exposed to high temperatures, excessive discharge, or overcharging. While CipherLab pre-charges batteries before shipment to prevent excessive discharge, it's crucial for customers to follow the guidelines below for battery usage and storage:

1. **If the batteries will not be used for long periods, store them in an environment at room temperature and charge them to 60% to 70% of capacity every 3 to 4 months.**

2. **Please avoid leaving the battery installed in the device for long periods, even when the device is powered off. Standby power consumption may occur, leading to potential excessive discharge of the battery.**

3. **Avoid prolonged charging of the batteries. It is recommended to unplug the charging cable within 48 hours after the battery is fully charged to avoid damaging the battery's lifespan.**

- It is important for users to be aware of the risks associated with lithium batteries.
- Lithium Polymer and Li-ion batteries are volatile. Failure to read and follow the instructions below may result in personal injury or damage to the device if charged or used improperly.
- Lithium Polymer/Li-ion batteries have limited life cycle for charging and discharging. When life cycle has been reached, battery may swell.
- Must keep Lithium Polymer and Li-ion battery away from children.
- Never make wrong polarity connection when charging and discharging battery. Always double check polarity of battery's connector.
- If battery has not been using or staying in device for 2 months, please do battery complete discharging and charging once before use. Always detach battery from device if you will not use device for long period of time.

CAUTION

Risk of explosion if battery is replaced wit incorrect type.

Dispose of used batteries according to the instructions.

- Disposal of a battery by throwing it into a fire or a hot oven, or by mechanically crushing or cutting it can result in an explosion.
- Leaving a battery in an extremely high-temperature environment may result in an explosion or the leakage of flammable liquid or gas.
- Exposing a battery to extremely low air pressure may also result in an explosion or the leakage of flammable liquid or gas.

GENERAL GUIDELINE AND WARNING

- Use specific Lithium Polymer/Li-ion charger from CipherLab only. Failure to do so may cause fire, which may result in personal injury and property damage.
- Never charge batteries unattended. When charging Lithium Polymer/Li-ion batteries, you should always remain in constant observation to monitor the charging process and react to potential problems that may occur.
- Some Polymer/Li-ion chargers on the market may have technical deficiencies that may cause it to charge the LiPo/Li-ion batteries incorrectly or at an improper rate. Assure the charger you purchased works properly and always monitor charging process to ensure batteries are being charged properly. Failure to do so may result in fire.
- If at any time you witness a battery starting to balloon, swell up, emit smoke, or become hot; stop using this battery at once and contact your dealer immediately.
- If you accidentally short-circuit the battery by reversing its polarity, place it in a safe area and observe it for approximately 15 minutes. Additionally, please be aware that in the event of a short circuit and contact with metal (such as rings on your hand), severe injuries may occur due to the conductivity of electric current.
- In the event of a crash caused by a bad shipment or other reasons, you must remove the damaged battery for observation and store it separately from the other good batteries.
- Never drop the batteries.
- Do NOT expose the battery to water.
- Do NOT attempt to disassemble the battery.
- It is recommended to place the battery in an enclosure to protect it from damage caused by liquid exposure or accidental drops from a height.

CHARGING PROCESS

- Please ensure to charge the battery indoors, in a well-ventilated room between 20℃ to 30℃.
- Do NOT charge battery under direct sunlight.
- When selecting the cell count or voltage for charging purposes, choose the cell count and voltage specified on the battery label. For safety reasons, please verify that the information printed on the battery is accurate.
- Lithium Polymer/Li-ion batteries have a limited charging and discharging cycle life. The battery may swell once it reaches the end of its cycle life.
- The allowed charging temperature is from 0℃ to 45℃.
- While discharging and handling batteries, ensure that the temperature does not exceed 50°C.

STORAGE & TRANSPORTATION

- CipherLab battery is charged to approximately 30% of its full capacity during manufacturing, which is an ideal level for long-term storage and transportation.
- Do not store the battery in a fully charged or fully discharged state, as it can cause permanent damage to the battery.
- Batteries undergo discharge even when not installed in a device. For any stored and unused battery, it is highly recommended to charge the battery to 40% to 60% of its full capacity every 3 months to prolong its storage life.
- Remove the battery from the device if you do not plan to use it for a long period of time.
- For the best performance, store the battery at indoor temperatures between 0°C and 30°C.
- Do not store the battery at temperatures exceeding 50°C, and avoid subjecting the battery pack to high external pressure for extended periods, as this can result in internal short circuits and overheating.
- The temperature range should be range greater than 0℃ but no more than 45℃ when transporting or temporarily storing in a vehicle.
- Storing battery at temperatures greater than 50℃ for extended periods of time (more than 2 hours) may cause damage to battery.

TO USE, HANDLE, AND DISPOSE BATTERY

- For Li-ion/Li-polymer batteries, it is normal for them to balloon, expand, or swell after one year or 500 cycles (full charge-discharge cycles). Although we guarantee that this won't cause any damage, these batteries cannot be reused and must be disposed of immediately. Therefore, we strongly recommend replacing the battery every year or after 500 cycles.
- If a battery performance decreases more than 20%, it means the battery is at the end of its life cycle. Please stop using this battery, dispose properly according to the location's safe battery disposal procedures, and replace with a new / healthy one.
- The actual number of charge cycle will vary depending on usage conditions, patterns, ambient temperature, and other variables.
- Batteries may undergo discharge even when they are not installed inside a device. To prevent permanent deterioration, batteries should not be discharged below 5%.
- Use caution to avoid puncture of the battery. Puncture of battery may damage battery cell.
- Periodically and properly dispose used battery according to local regulations.

PRODUCT WARRANTY

The product warranty is limited to original manufacturing defects in material only. The warranty will not apply to batteries with reduced capacity due to user scenarios, unless such reduction is determined to be a manufacturing flaw.

The warranty does not cover collateral damage. Misuse, abuse, incorrect charging, and other inappropriate uses of this product are not covered under the warranty.

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.

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 5 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 4 hours to charge to full by the main battery or power adapter.
- **RTC battery:** RTC battery is a 3V, 3mAh rechargeable SMT type Li-battery which takes about 12 hours to be fully charged. RTC retention will be maintained for at least 72 hours when the main battery is removed.
- The allowed battery charging ambient temperature is between 0℃ to 45℃. It is recommended to charge the battery at room temperature (18℃ to 25℃) for optimal performance.
- Please note that battery charging stops when ambient temperature drops below 0℃ or exceeds 45℃.
- 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 IP65, 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.

RELEASE NOTES

Version	Date	Notes
1.02	Sep. 26th, 2024	Updated the Table of Contents, icons and screenshots.
1.01	Apr. 29th, 2024	Added important notices for lithium polymer batteries.
1.00	Nov. 2nd, 2023	Initial release

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INTRODUCTION

The **RK26** mobile computer 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 Class I, v4.0, v4.1, V4.2 v2.1 BLE, v2.1 with Enhanced Data Rate (EDR)+EDR, 802.11 b/g/n/ax and 802.11 a/ac/n/ax networking 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.
- Operating system with a powerful Cortex 1.8GHz up to 2.0GHz Octa-Core processor.
- 64GB Flash memory to store OS and software programs
- 4GB LPDDR4X 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 1TB.
- Built-in 16 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 Class I, v4.0, v4.1, V4.2 v2.1 BLE, v2.1 with Enhanced Data Rate (EDR)+EDR, 802.11 b/g/n/ax and 802.11 a/ac/n/ax networking, GSM/GPRS/EDGE/WCDMA/UMTS/HSDPA/HSUPA/HSPA+/LTE, and near field communication (NFC)
- A 4.0 inch, LCD, Corning Gorilla Glass 3 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.

- RK26 Mobile Computer
- USB Cable (optional)
- Snap-on Cable (optional)
- AC Power Adaptor (optional)
- Hand Strap (optional)
- Quick Start Guide

ACCESSORIES

- 1-slot Charging + Communication Cradle
- Pistol Grip
- Rubber Boot
- Vehicle Cradle
- Hand Strap
- Shoulder Strap

RELATED DOCUMENTATION

Please visit CipherLab website to access related documentation about the RK26 mobile computer.

Chapter 1

CHAPTER1. QUICK START

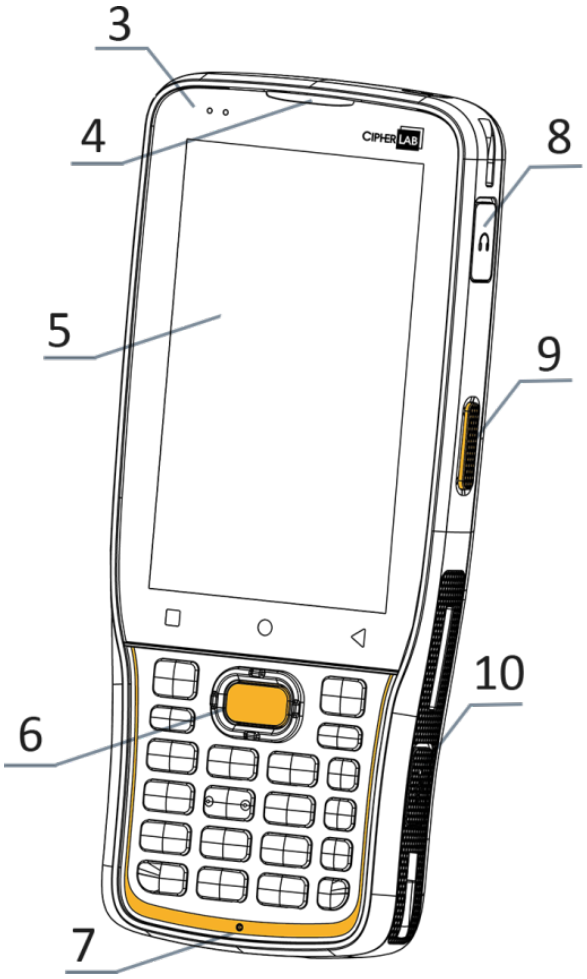
This chapter guides you in preparing to use the mobile computer for the first time.

IN THIS CHAPTER

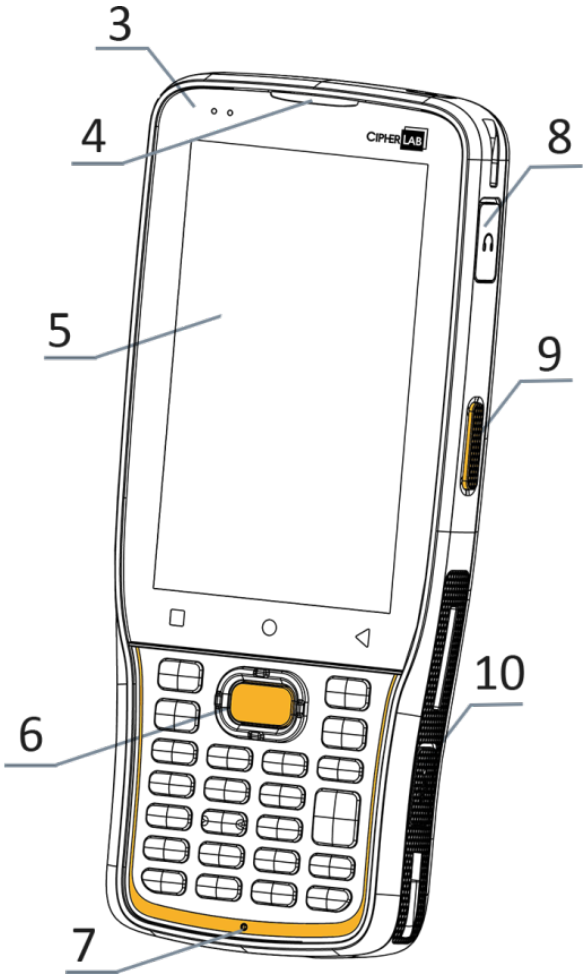
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1.1. OVERVIEW



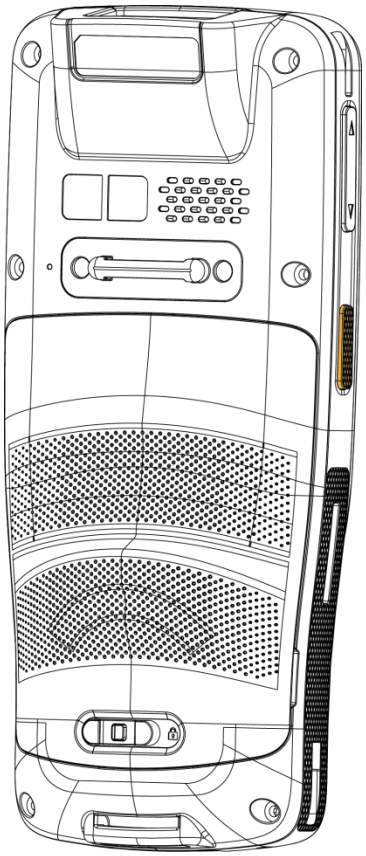


25-key Model

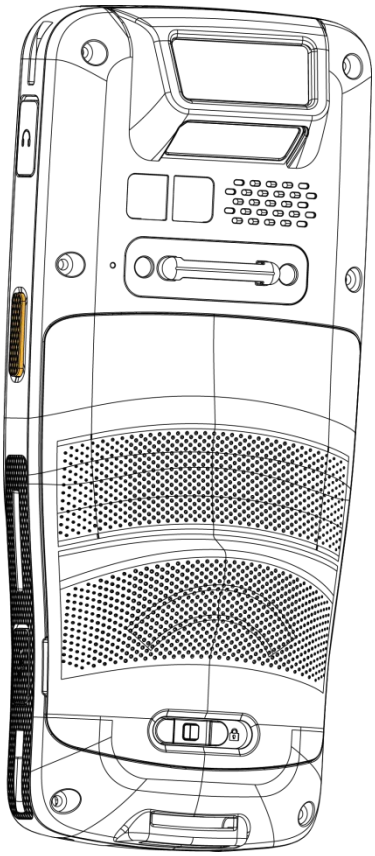


28-key Model

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	USB Type-C Port
11	Camera	12	Camera Flash
13	Handstrap Cover	14	Battery
15	Battery Cover Latch and Lock	16	Speaker
17	Volume Buttons	18	NFC Detection Area
19	Handstrap Hole	20	Charging & Communication Pins



10° Tilted Reader



70° Tilted Reader

Note:

(1) Please refer to "Physical Keypad" for the difference between 28-key Model and 25-key Model.

(2) NFC function is unavailable for 70° tilted reader model and 25-Key model.

1.1.1. INSTALL/ REMOVE BATTERY

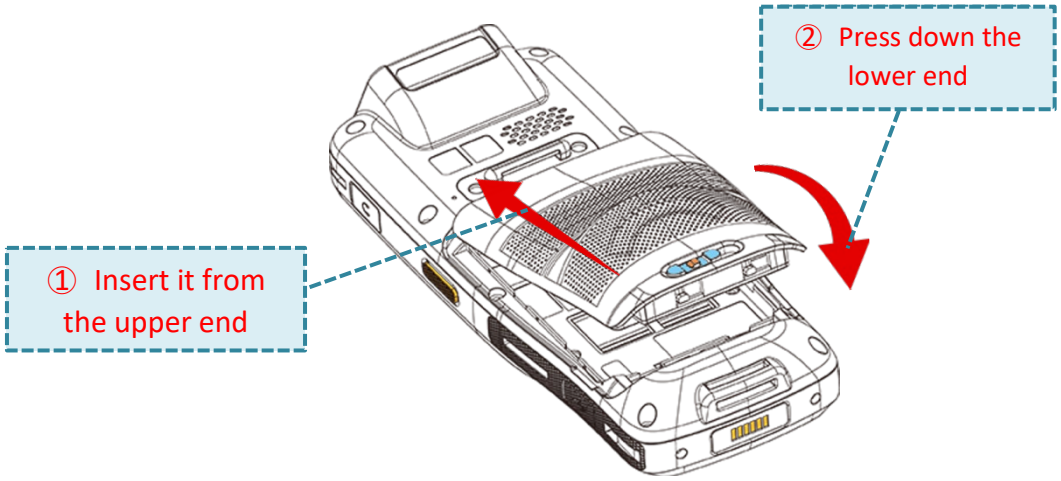
For shipping and storage purposes, the mobile computer and the main battery are packed separately.

Note: Improper handling may adversely impact battery life.

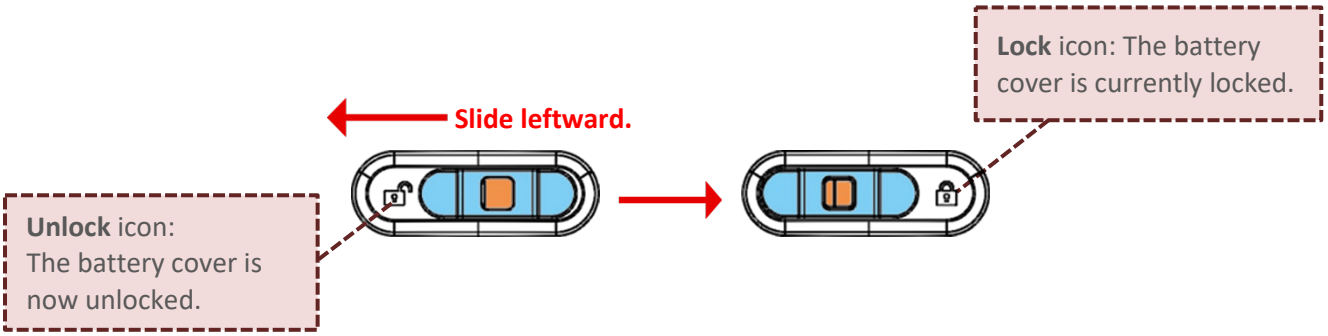
INSTALL BATTERY

To install a main battery:

1) Insert a fully-charged battery from its upper end, and press down the lower end of the battery.



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



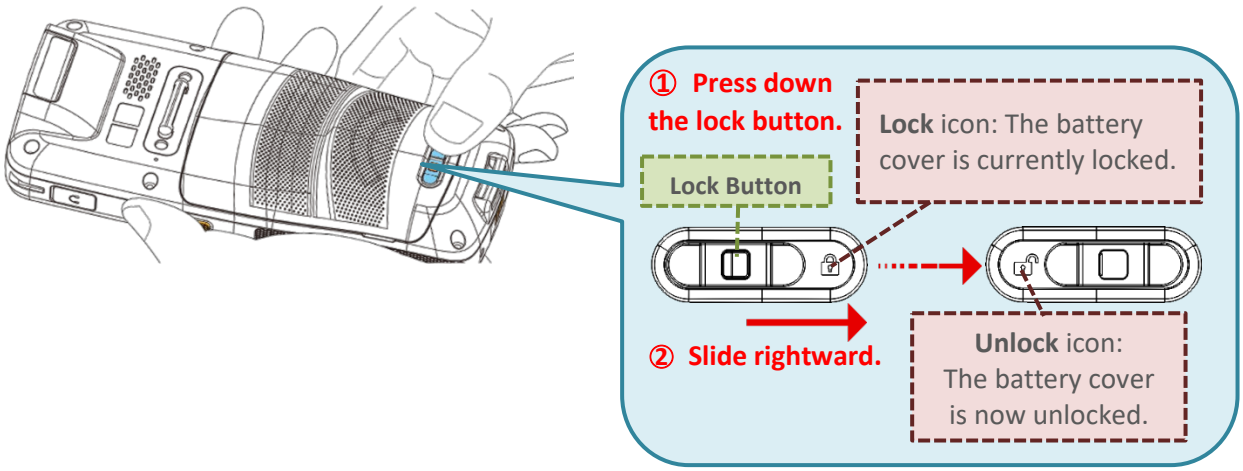
Warning:

1) **Ensure the battery latch is in the "Lock" position before powering on the device.**
2) **For the initial use, insert a charged battery, lock the battery cover in place, and then press the Power Button to power on the mobile computer.**

REMOVE BATTERY

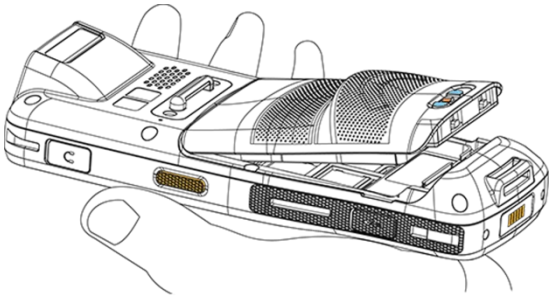
To remove the battery from the device:

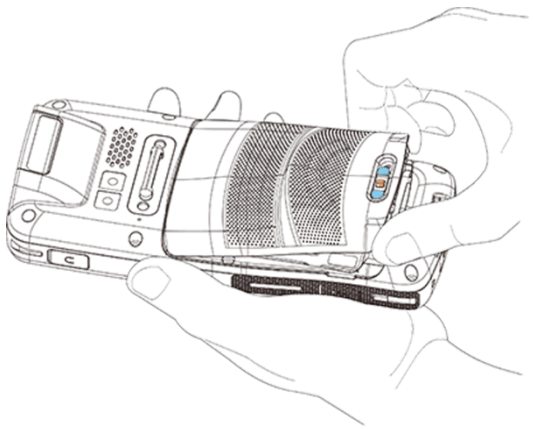
1) Press and hold the lock button while sliding the battery latch to the right to unlock it.



2) Once the battery cover is unlocked, it slightly tilts up and is ready to be removed.

   Hold the two sides of the battery cover (the main battery itself) and lift it up to remove it.

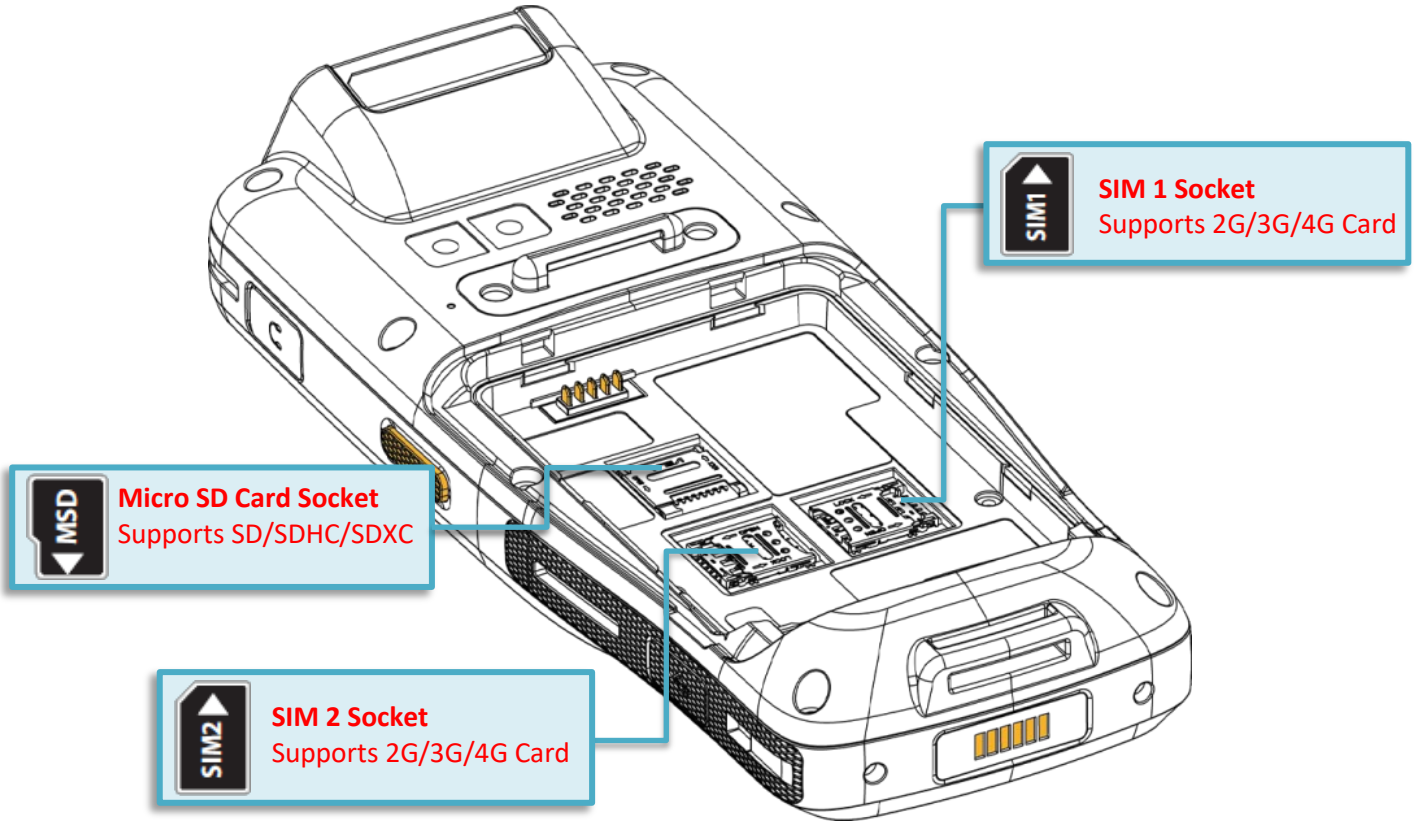


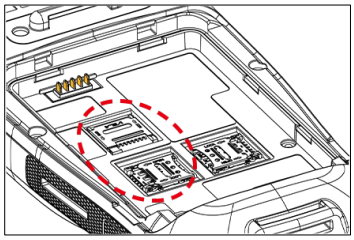


1.1.2. INSTALLING SIM CARD AND MEMORY CARD

The RK26 mobile computer is equipped with:

- 2 Nano SIM card sockets
- 1 Micro SD card socket

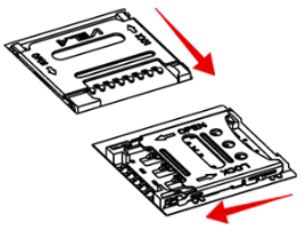




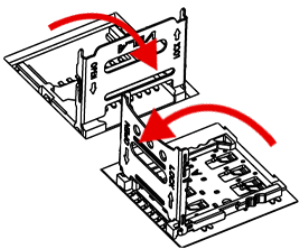
To insert the cards into the card slots:

1) Remove the battery cover.
2) Slide the hinged cover and swing to open.

① Slide the hinged cover



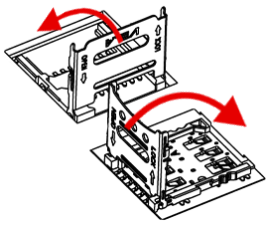
② Swing to open

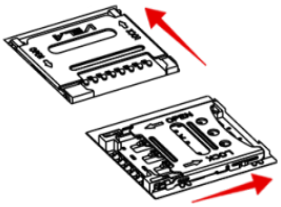


3) Place the card into the slot with its metal contacts downward.
4) Close the hinged cover and push it forward to lock it.
5) Instert the battery cover.

② Slide the hinged cover to lock

① Close the hinged cover

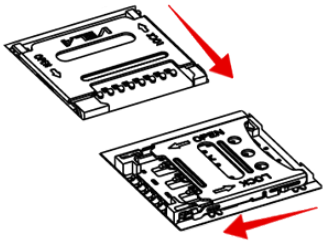




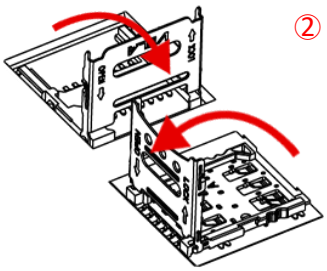
REMOVE CARDS

To remove the cards from the card slots:

1) Remove the battery cover.
2) Slide the hinged cover and swing to open.



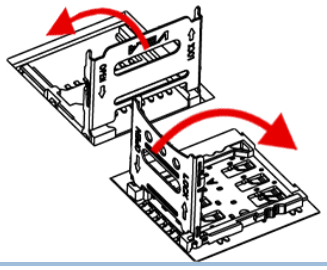
① Slide the hinged cover



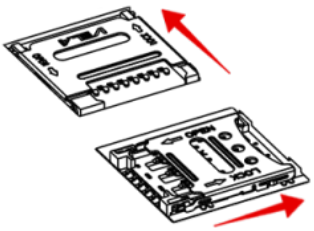
② Swing to open

3) Take out the cards directly from their slots.
4) Close the hinged cover and then slide it forward to lock it.

① Close the hinged cover



② Slide the hinged cover to lock



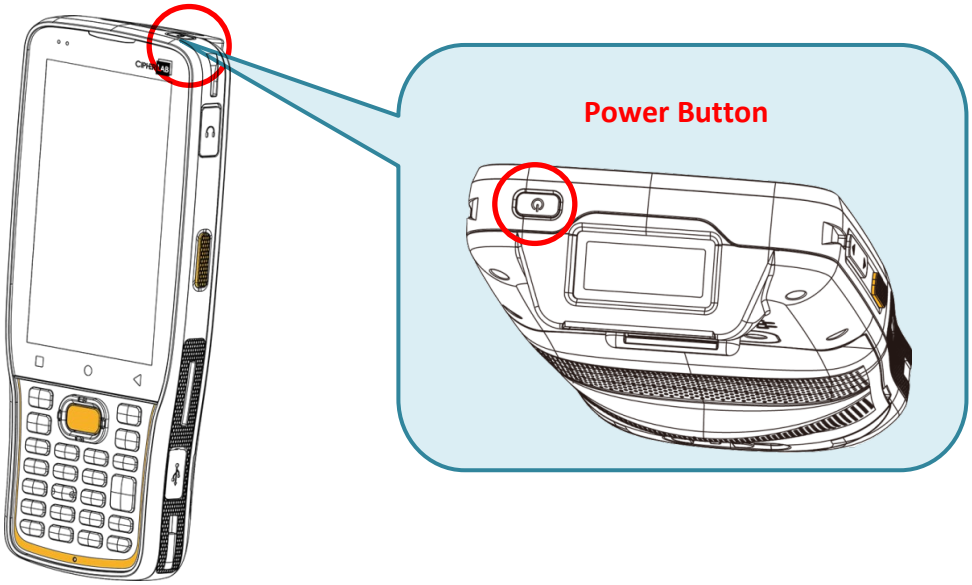
Note:

Both SIM1 and SIM 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.

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 display the **Home Screen** after the splash screen.

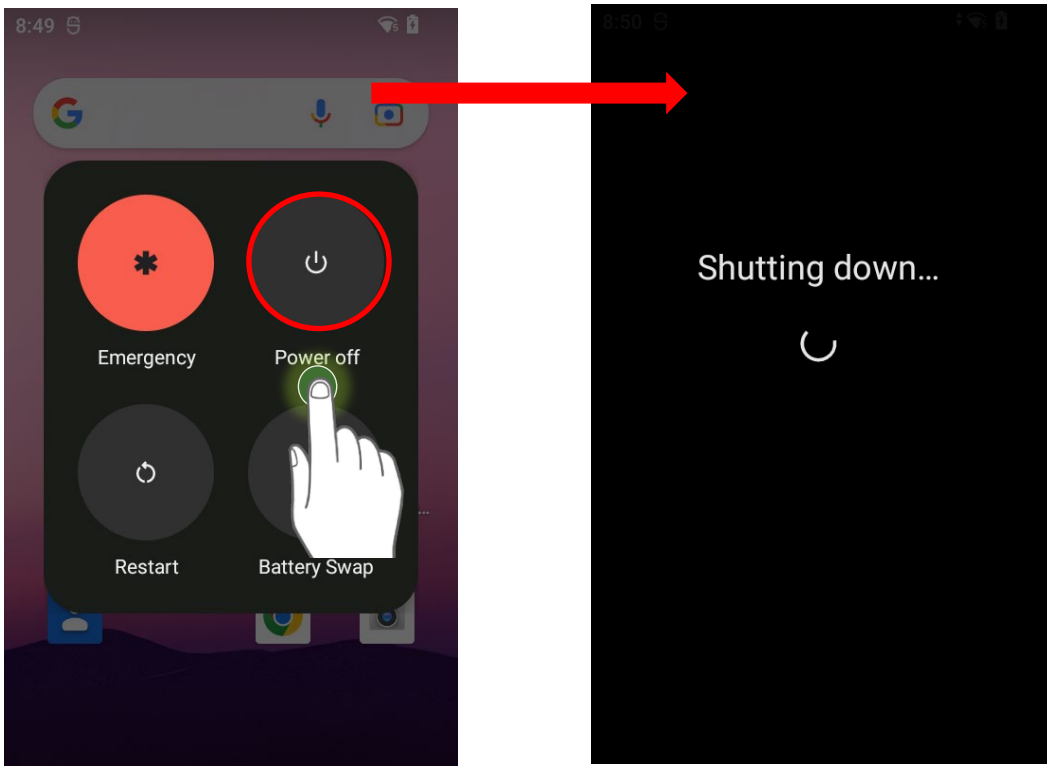


Note:

To power on the mobile computer, ensure the battery cover is securely 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, allowing you to power off the device. Ensure all user data and tasks are stored before tapping "**Power off**".



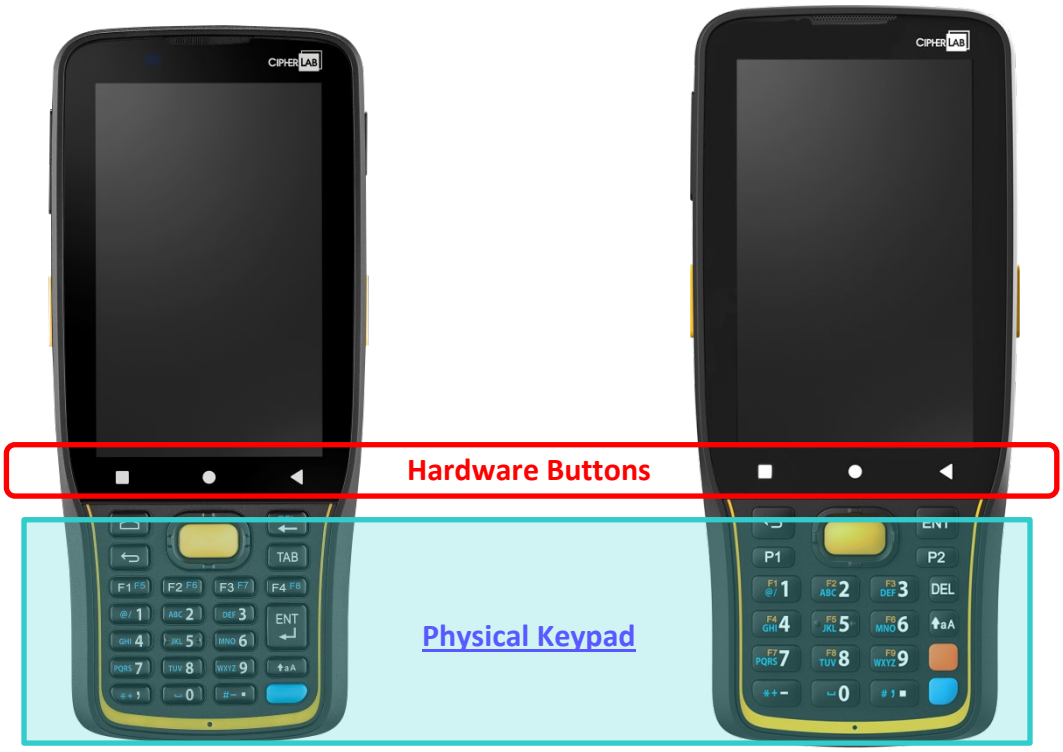
1.1.4. HOMESCREEN SELECTION

Upon launching the system for the first time, a "**Select Home**" app window will pop up, prompting you to choose your preferred home screen.

Selecting "**AppLock**" will take you directly to the AppLock application (refer to the **AppLock User Guide** for detailed instructions) to configure the interface provided for users of this device. Alternatively, choosing "**Launcher**" will take you to the default home screen.

1.1.5. USING HARDWARE BUTTONS

Beneath the LCD display, three hardware buttons are located, each delivering 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.

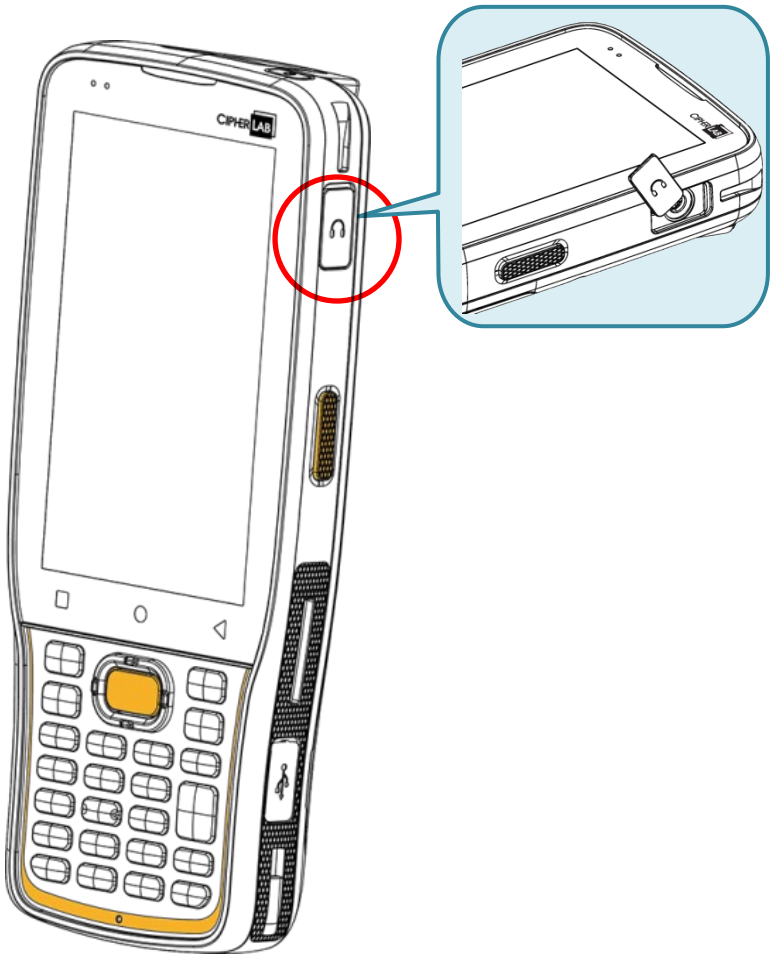
1.1.6. CONNECTING HEADSET

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 THE MOBILE COMPUTER

The main battery may not be fully charged for shipment. Upon receiving the kit package, it is necessary to charge the main battery fully before using the mobile computer. You can use either the Snap-on Charging Cable or the 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; however, please note that this method is slower than charging using the supplied snap-on cable or the 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 left) 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 5 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 4 hours to charge to full by the main battery or power adapter.

CHARGING TEMPERATURE

The allowed battery charging ambient temperature is between 0℃ to 45℃. It is recommended to charge the battery at room temperature (18℃ to 25℃) for optimal performance.

Please note that battery charging stops when ambient temperature drops below 0℃ or exceeds 45℃.

OPERATION ON BATTERY POWER

When Bluetooth Class I, v4.0, v4.1, V4.2 v2.1 BLE, v2.1 with Enhanced Data Rate (EDR)+EDR, 802.11 b/g/n/ax and 802.11 a/ac/n/ax networking, 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.

To prevent the system from shutting down due to a drained battery, it is recommended to keep a fresh battery for replacement at all times or connect the mobile computer to an external power source.

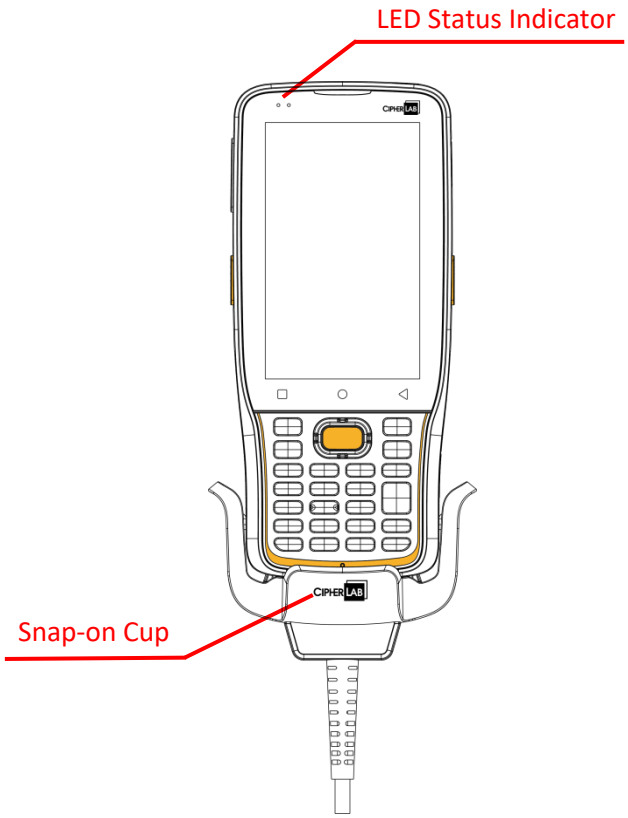
BATTERY STATUS & STATUS LED DURING CHARGEING

To prevent continuous charging and discharging of the battery, the RK26 mobile computer will automatically stop charging when it reaches 100%, even if connected to a snap-on cable, charging & communication cradle, or a USB Type-C cable for external power supply.

When RK26 mobile computer is connected to an external power source, the Status LED located above the touch screen displays as follows:

LED Status	Description
Red, solid	Charging the mobile computer (0% to 94%)
Red, blink	Charging error
Green, solid	Charging complete (95% to 100%)
No light	The cable is not correctly connected

USE SNAP-ON CABLE



The Snap-on Cable provides a convenient way for both charging your mobile computer and facilitating data communication.

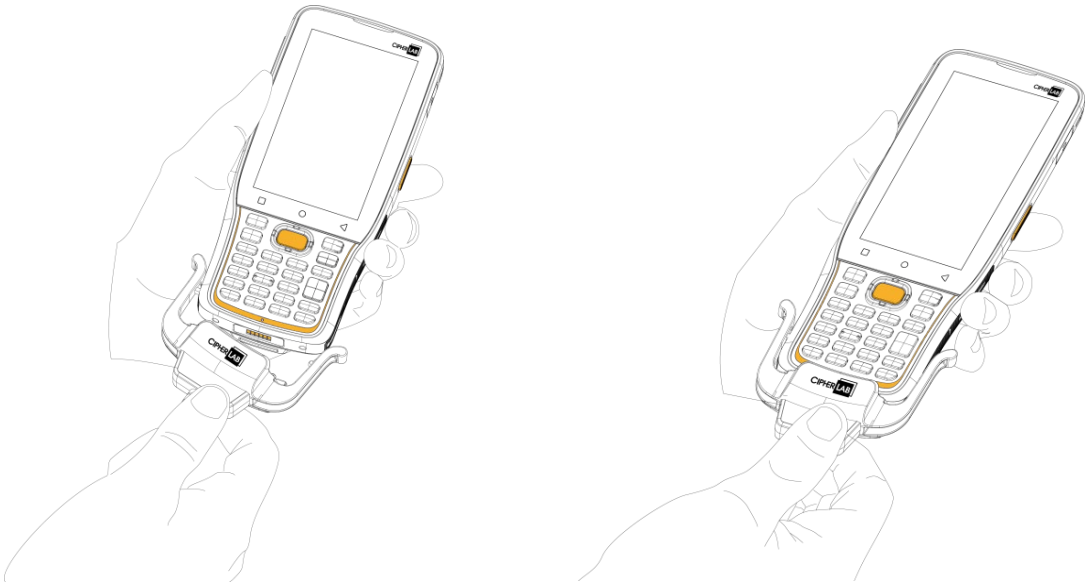
To install:

1) Remove the USB Type-C Cable if it is connected with the RK26 mobile computer.

2) Hold the snap-on cup and aim it towards the bottom of the RK26 mobile computer, placing one side of the snap-on cup in alignment with the side of the RK26 mobile computer.



3) Push the snap-on cup upwards to make the other side to be attached to the RK26 mobile computer.



4) A "**click**" sound is made once the Snap-on cable is connected with the bottom of the RK26 mobile computer in place.

5) Connect the USB-A plug to either an approved adapter for external power connection or to a PC/laptop for charging or data transmission.



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

LED Indicator	Status	Description
Charging	Red, solid	Charging the mobile computer.
	Red, blinking	Charging error.
	Green, solid	The mobile computer is fully charged.
	No light	The cable is not correctly connected.

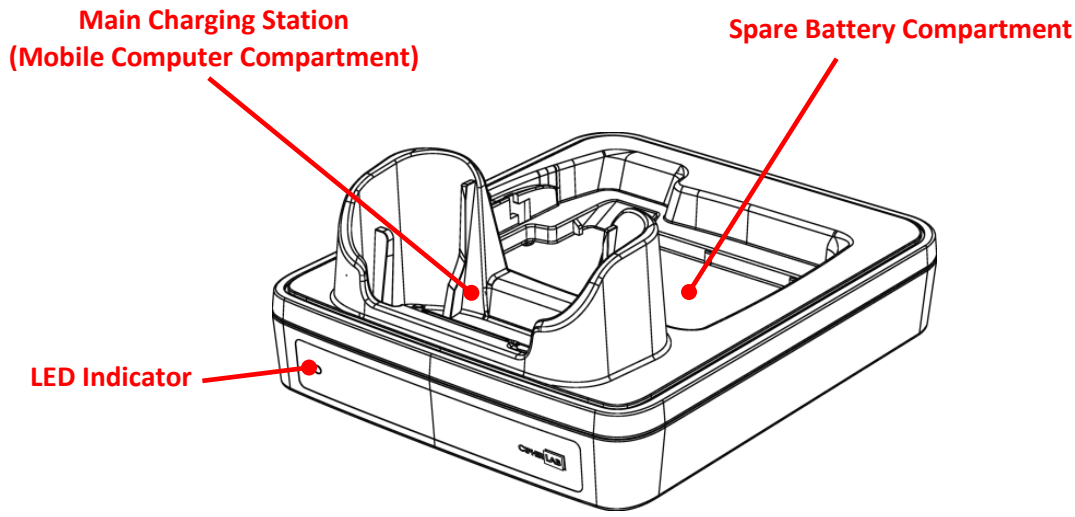
Note:

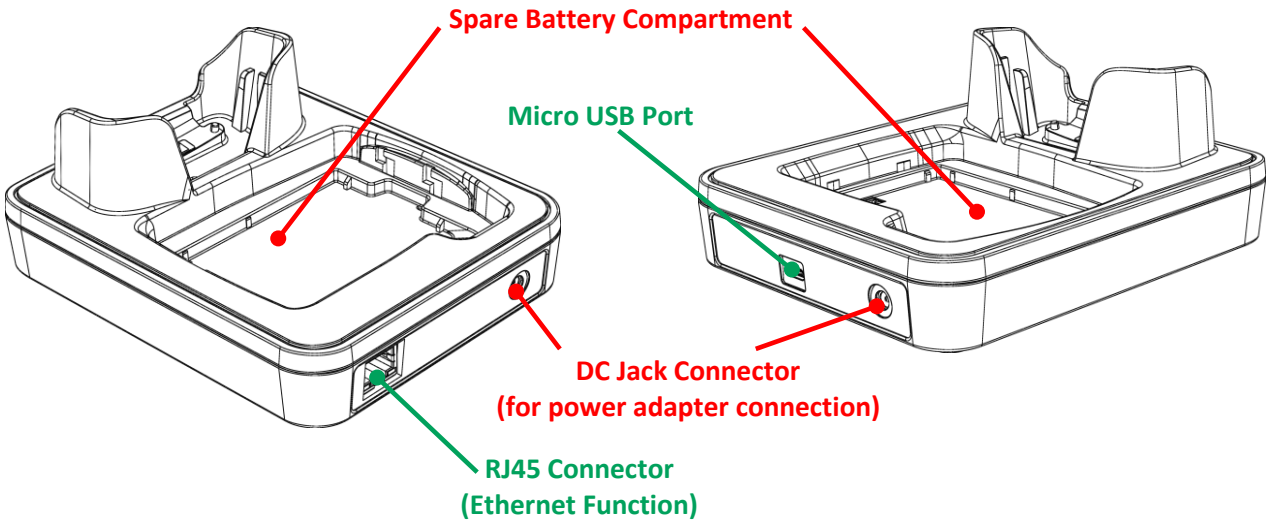
(1) Please remove the USB Type-C cable from RK26 device before installing the snap-on cable.

(2) For data communication, you can also use the USB Type-C 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 can also be used for data communication.





ENCR Model CCCR Model

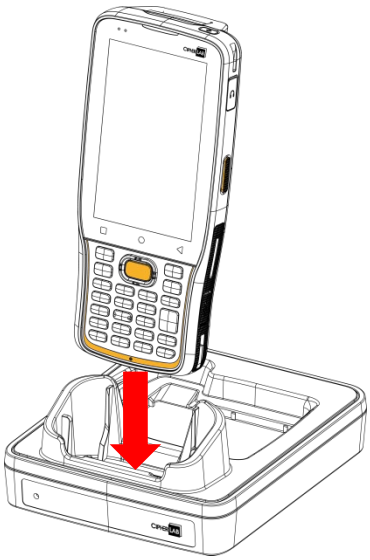
Note:

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:

1) Remove the USB Type-C cable if it is connected with the RK26 mobile computer.

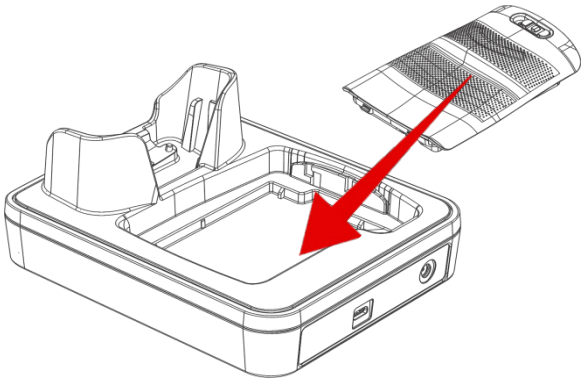
2) Insert the RK26 mobile computer onto the Cradle. It is not necessary to remove the installed hard shell or hand strap before inserting the mobile computer. To remove it, simply take out the RK26 mobile computer directly.

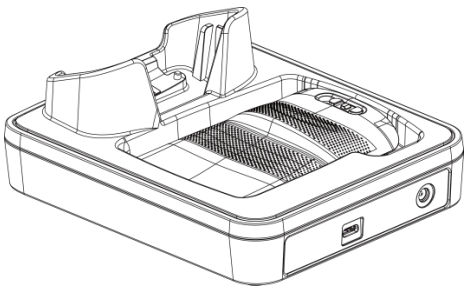




For the spare battery, ensure the battery latch is in the "**Unlock**" position. Then, insert the battery from its top side (where the contact pins are located) into the spare battery compartment, ensuring the contact pins are connected. Press down on the bottom side of the battery (where the battery latch is located) and slide the battery latch leftward to the "**Lock**" position.

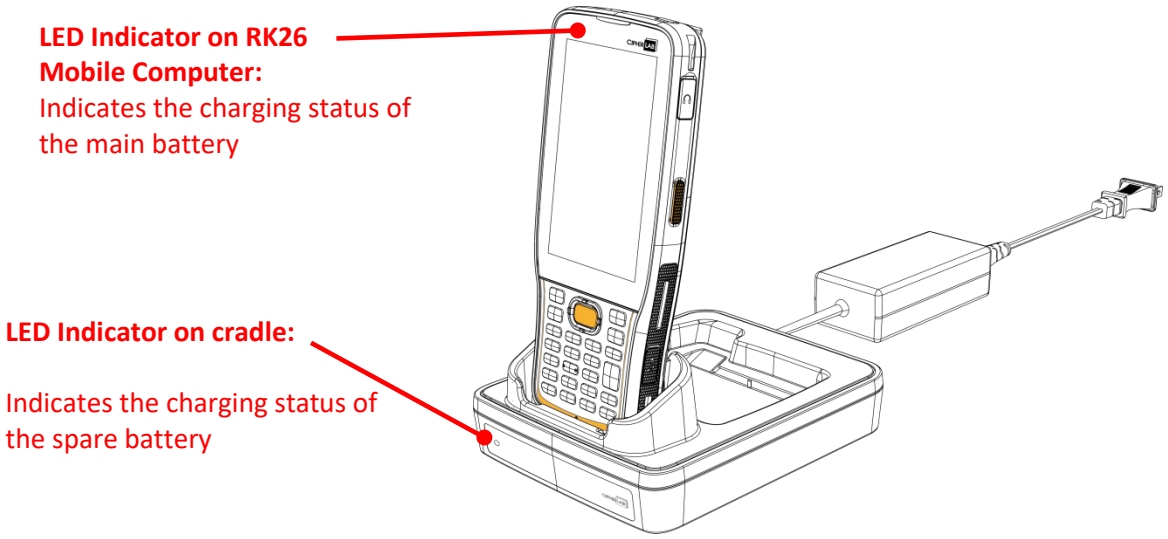
To remove, slide the battery latch to the "**Unlock**" position and take out the battery.





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 Cradle shows the charging status of the spare battery.



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

Note:

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

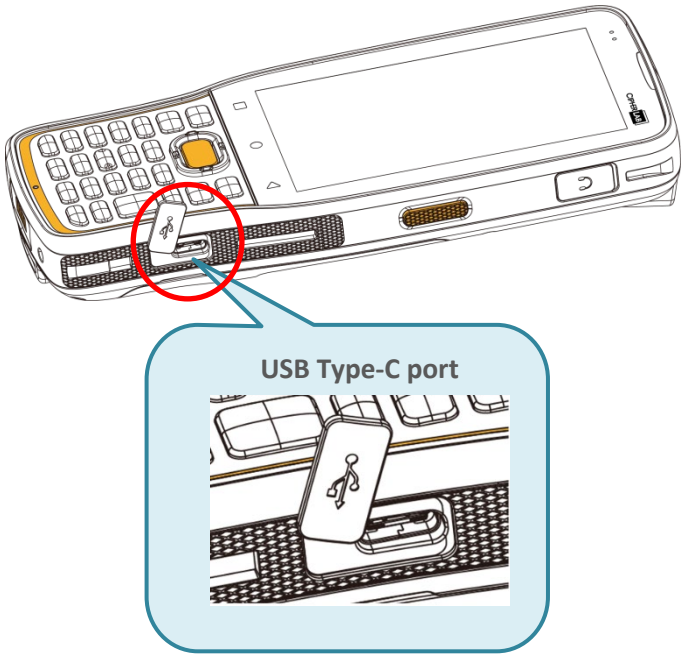
(2) Charging error could be due to high battery temperature.

(3) Before inserting the device onto the cradle, ensure that the USB Type-C cable is removed.

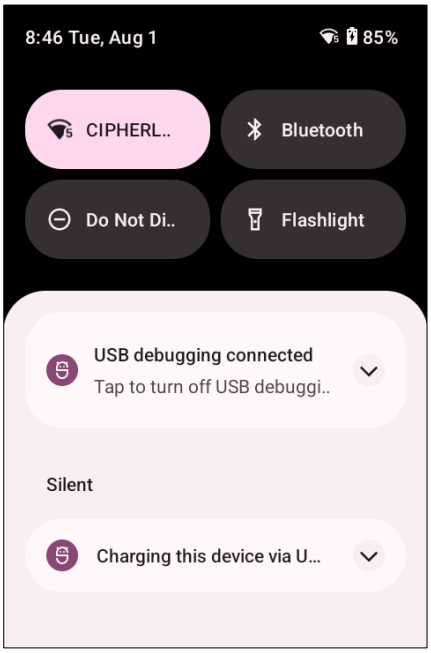
1.2.2. WIRED DATA TRANSMISSION

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

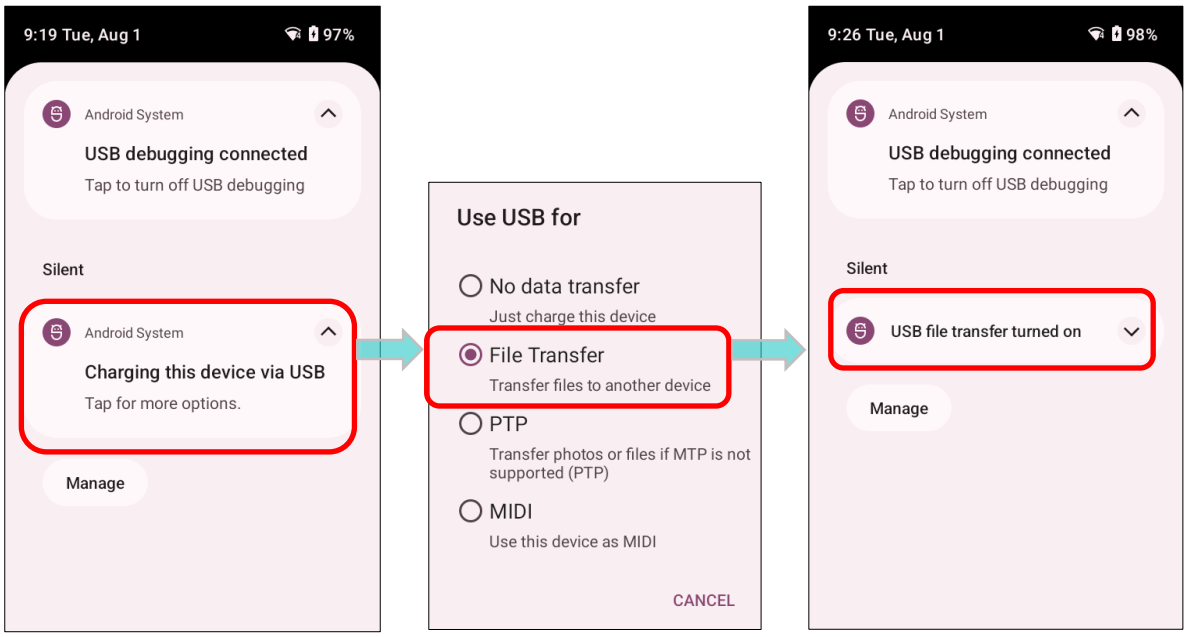
1) Connect your device to the computer with supplied USB cable/ Snap-on Cable / Cradle.



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



3) Tap on the system notification "**Charging this device via USB**" to access USB options. By default, the device will be in charging mode, restricting access to files from the PC client. To enable file transfer between your device and PC, choose "**Transfer files**".



To transfer videos and photos, select "**PTP**". In this mode, your device will share only videos and photos located in the DCIM and Pictures folders.

1.2.3. USING WIRELESS NETWORKS

The mobile computer supports widely applied wireless technologies including Bluetooth Class I, v4.0, v4.1, V4.2 v2.1 BLE, v2.1 with Enhanced Data Rate (EDR)+EDR, 802.11 a/ac/n/ax 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

CHAPTER2. USING RK26 MOBILE COMPUTER

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

IN THIS CHAPTER

2.1.Battery 46
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2.4.Notifications 87
2.5.Date and Time 95
2.6.Language & Keyboard Input 99
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2.8.Data Capture 105

2.1. BATTERY

- Main Battery

The mobile computer is powered by a rechargeable 3.8V / 4000 mAh Li-Polymer battery pack. It takes approximately 4 hours to charge it to full from the power adaptor. For the initial charge of the main battery, please charge it for at least 8 to 12 hours. However, note that the charging time may vary depending on your working conditions.

- 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

On the main board, there is a backup battery that maintains the mobile computer in suspension when the main battery is depleted. The backup battery is a 75 mAh rechargeable Li-Polymer battery and can retain data in the DRAM for 5 minutes when fully charged, provided that wireless modules on the mobile computer are inactive. Charging of the backup battery can be performed by the main battery or the power adapter, and it takes approximately 4 hours to reach a full charge.

Warning:

(1) Secure the battery cover in position with its latch locked.

(2) For a new battery, ensure it is fully charged before use.

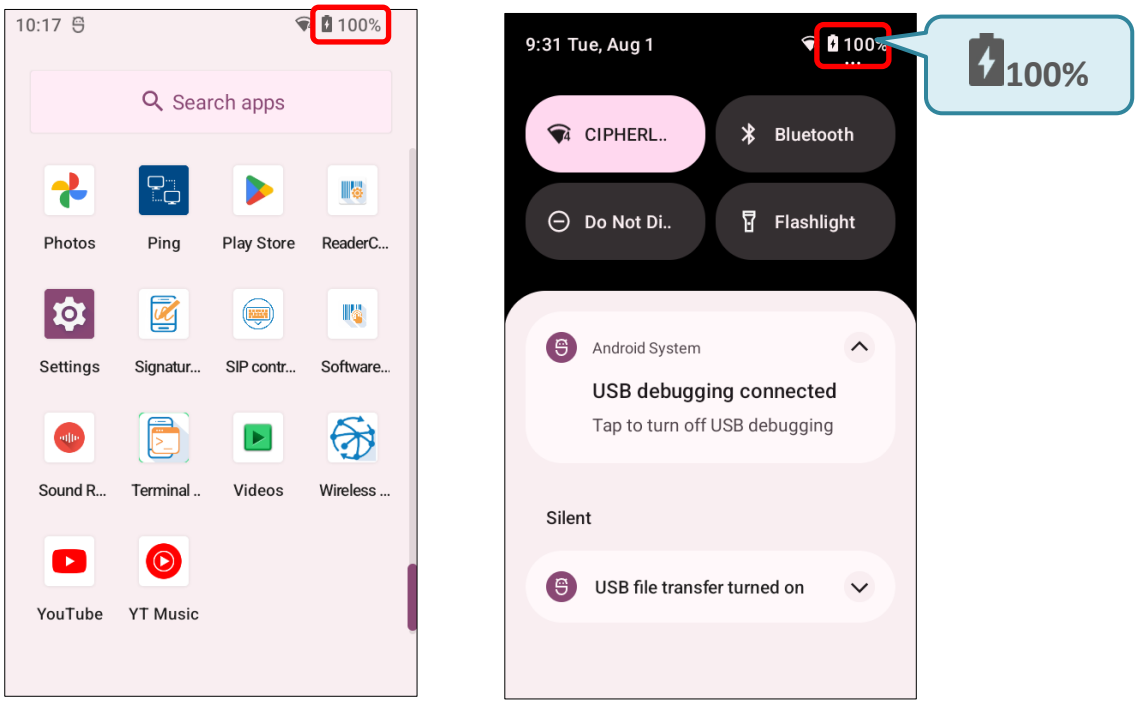
(3) To prevent data loss, replace the main battery with a well-charged spare battery pack.

(4) When the mobile computer has been on backup battery for 5 minutes, the system will shut down. Promptly replace the main battery to avoid data loss.

2.1.1. BATTERY STATUS INDICATORS

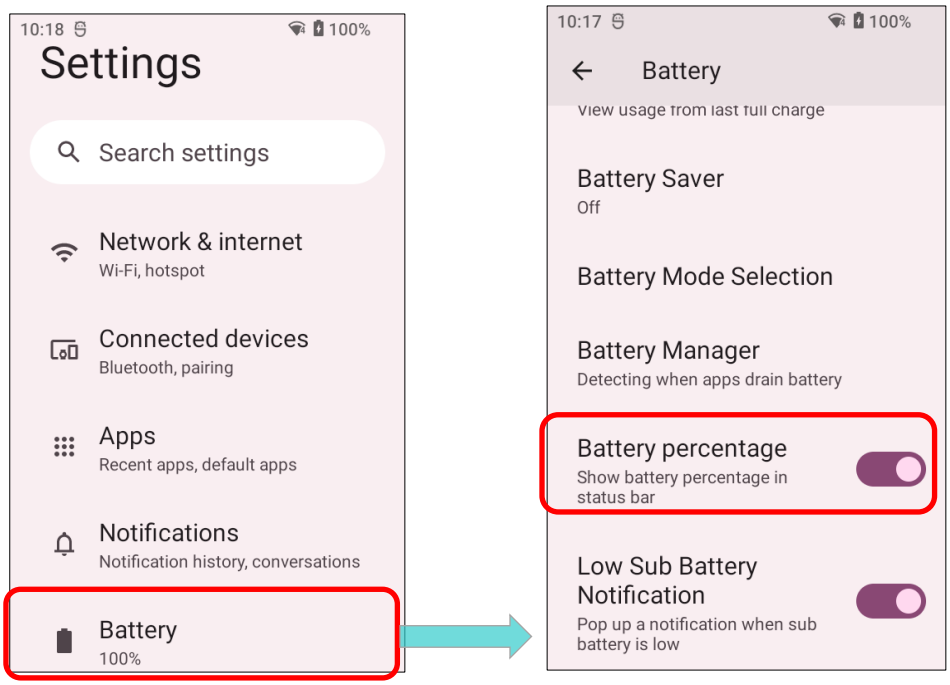
The primary power source for the mobile computer is the main battery pack. Consequently, when the main battery level becomes low, it is essential to either replace the battery pack with a charged one or promptly recharge it. Above all, it is advisable to regularly back up important data.

You can tell the remaining battery level in the main battery by checking the battery status icon on the **Status Bar**.



Battery Icon	Description
	Main battery is fully charged.
	Main battery level is partially drained.
	Main battery level is low (5%~15%).
	Main battery level is very low and needs charging immediately (<5%).
	External power source is connected and main battery is being charged.

The battery percentage displayed next to the battery icon on the status bar can be toggled on or off in **App Drawer (All Apps)** | **Settings** | **Battery** | **Battery percentage.**



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 its battery life. To ensure maximum performance, recharge the battery periodically to prevent it from draining completely and to maintain overall battery health.

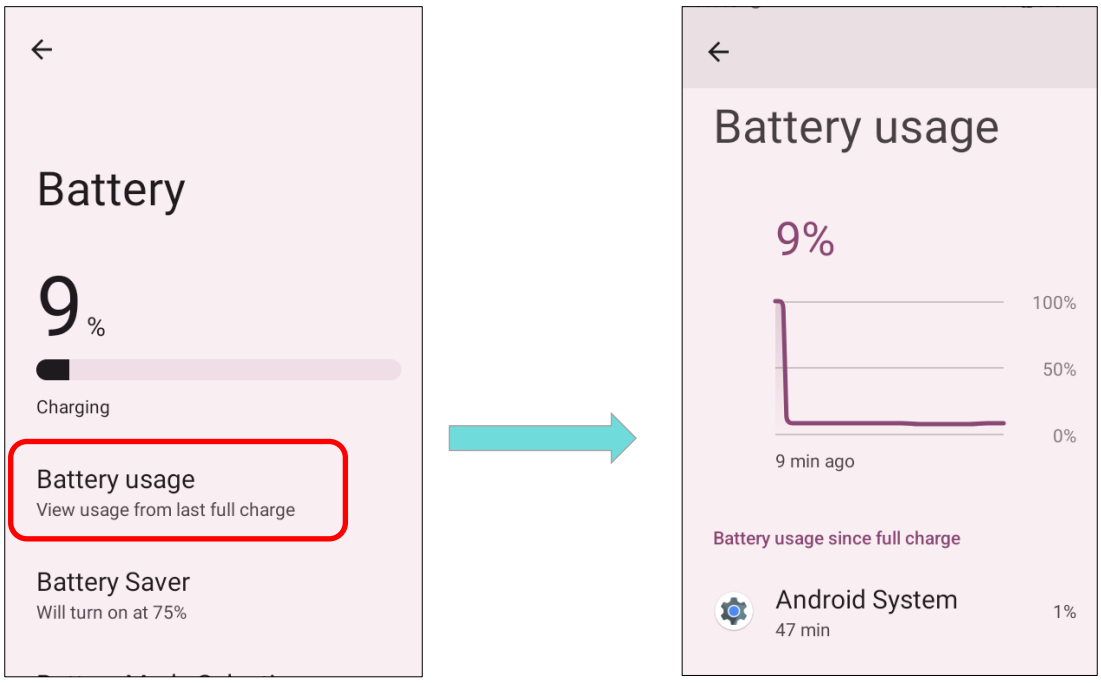
2.1.2. MONITOR BATTERY LEVEL

MAIN BATTERY LEVEL

The primary source powering the mobile computer is the main battery, which also feeds the backup battery on the main board to retain data stored in DRAM. When the main battery level is low, recharge or replace it promptly. Crucially, regularly back up important data to safeguard your work.

To check main battery level, please go to **App Drawer (All Apps)** | **Settings** | **Battery**

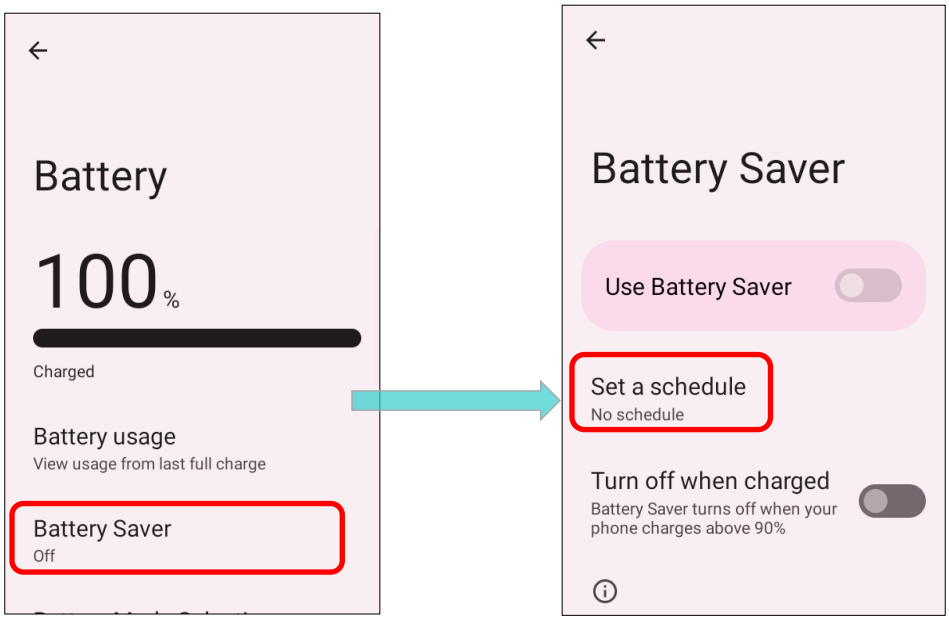
Battery level percentage is displayed to offer a clear indication of the remaining battery power. When you tap on "**Battery usage**", it directs you to the corresponding page, where you can observe the rate of battery discharge since the last battery charging session, the duration the device has been operating on battery power, and identify the applications that are consuming the most battery power.



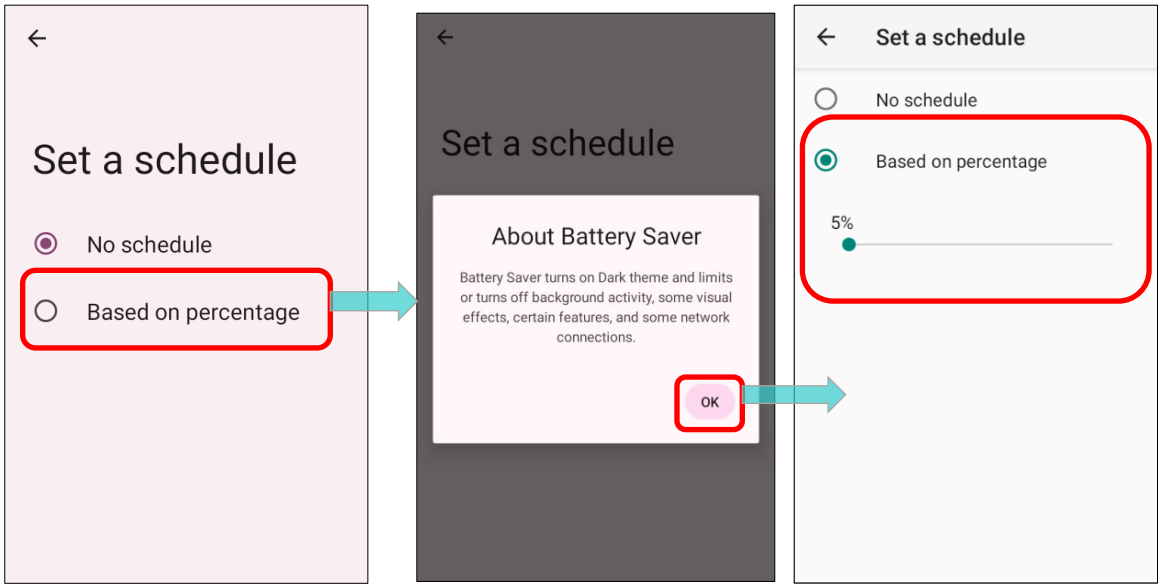
BATTERY SAVER MODE

You can enable the **Battery Saver mode** to active automatically when the main battery is low. This mode will limit the use of location services, vibration and most background processing data.

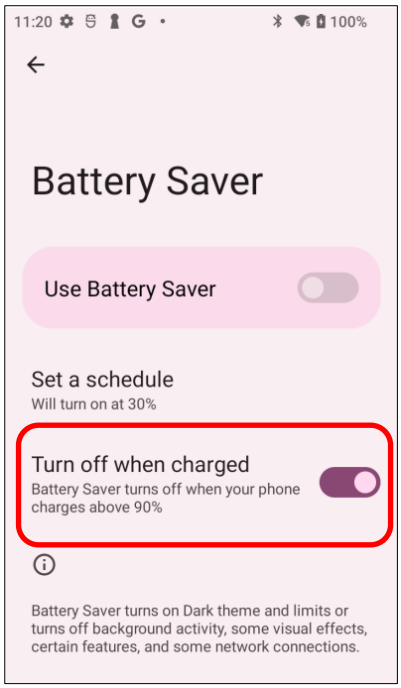
1) On Battery screen, tap "**Battery saver**" to enter "**Battery Saver**" page, and then tap on "**Set a schedule**".



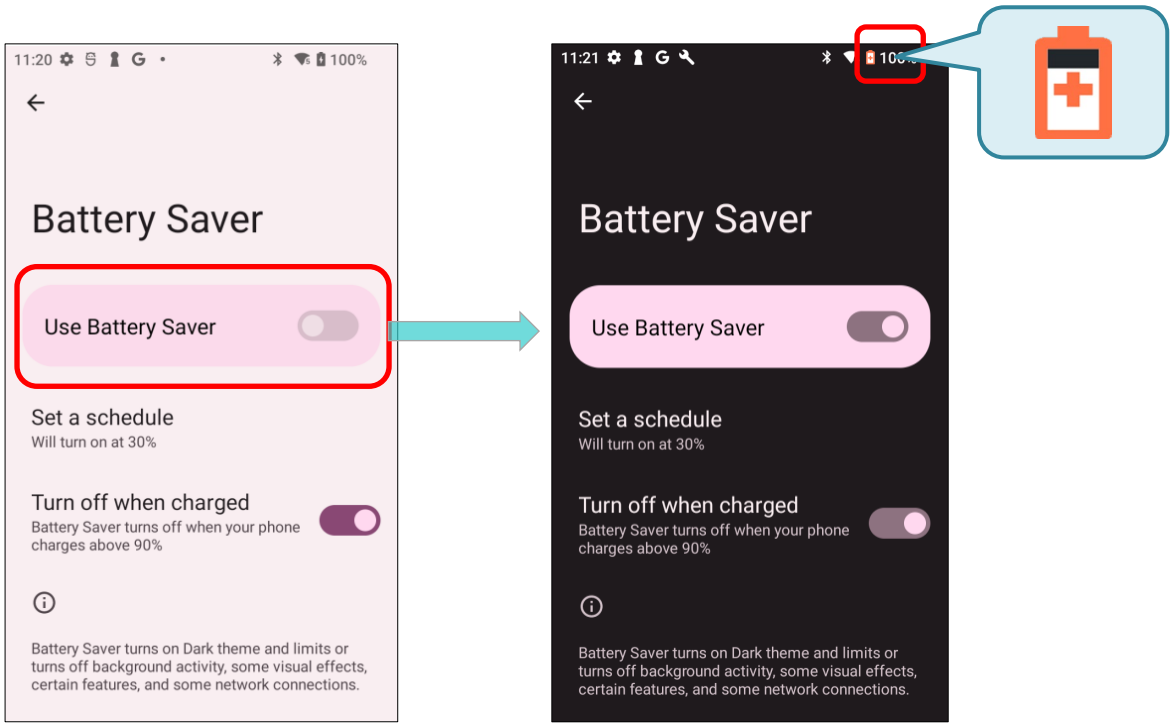
2) Tap "**Based on percentage**" to display a slider that allows you to set the activation threshold for the battery saver mode based on the battery power percentage. The default setting is **5%**.



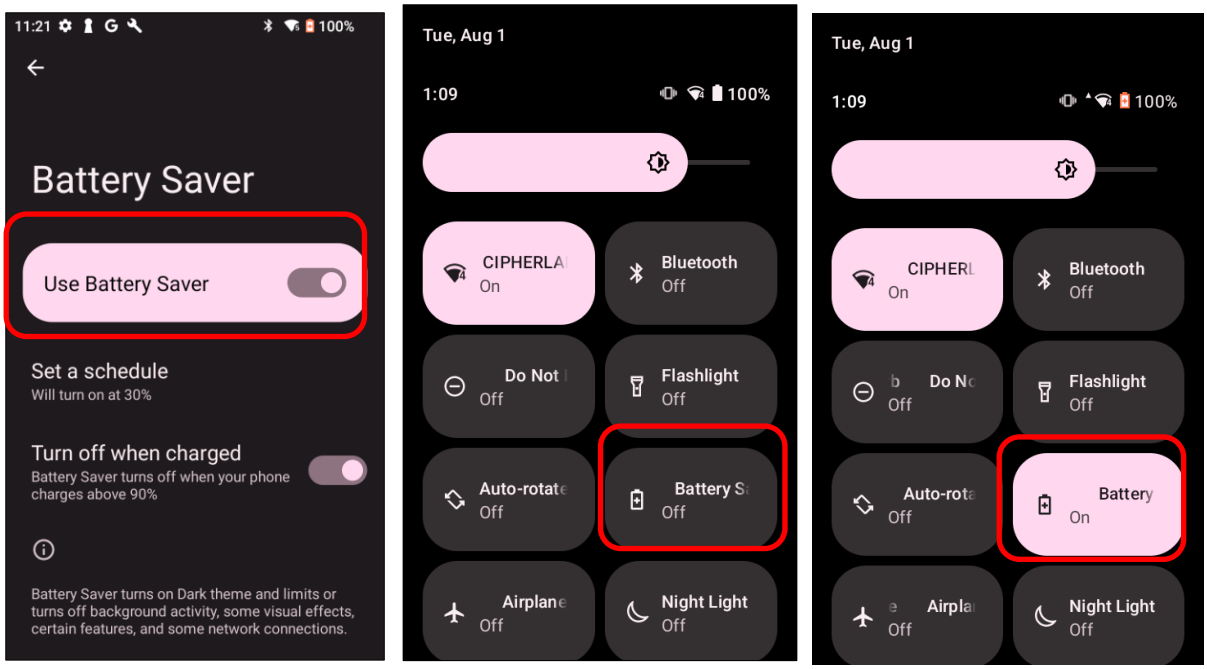
Enabling "**Turn off when charged**" on the "**Battery Saver**" page will automatically deavtivate the battery saver mode once the battery power reaches **90%**.



Tap on " **Use Battery Saver**" to activate the battery saver function directly, and the battery icon on the status bar will turn orange once this feature is enabled.



Additionally, you can swipe down from the status bar to reveal the Quick Settings Menu and tap the battery saver icon  to enable or disable it.



Icon	Description
	Battery saver mode is **OFF.**
	Battery saver mode is **ON**.

Note:

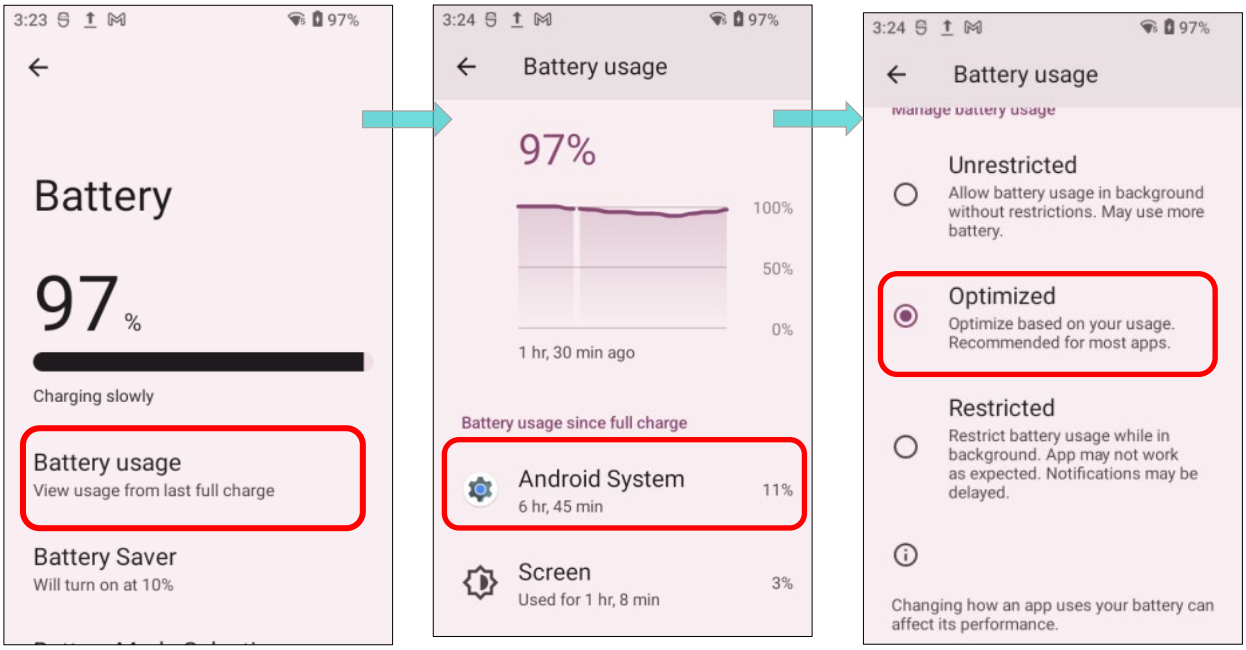
Battery saver mode will automatically deactivate when your device is being charged.

BATTERY OPTIMIZATION

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

1) On the Battery screen, tap " **Battery usage**," then select any item under " **Battery usage since full charge**".

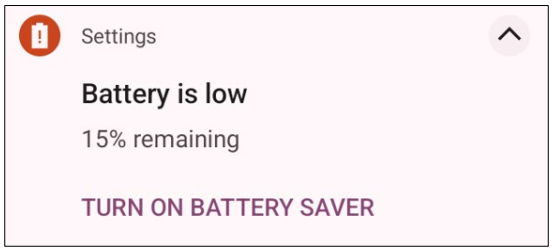
2) Tap to enter its detail page and select "**Optimized**."

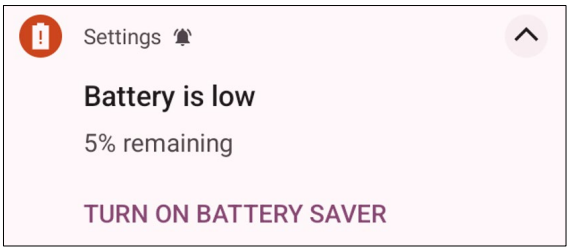


LOW BATTERY ALERT

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

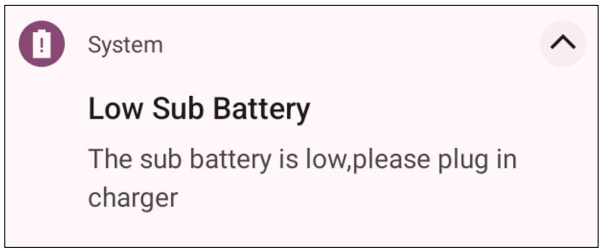
When you open the Notifications Drawer, you'll notice this warning in the notifications list. You can either activate Battery Saver Mode, connect the mobile computer to an external power source, or promptly replace the main battery pack. For instructions on replacing the main battery pack, refer to the Replace Main Battery section.





LOW SUB BATTERY ALERT

When the main battery of the RK26 mobile computer is depleted, it will automatically enter suspension mode, relying on the backup battery for 5 minutes. If the backup battery's power becomes low, a " **Low Sub Battery** " notification will prompt you to connect the device to an external power source for immediate charging. It's important to note that you should not replace the main battery at this moment to prevent potential data loss.



2.1.3. REPLACE MAIN BATTERY

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

SHUT DOWN TO REPLACE THE MAIN BATTERY

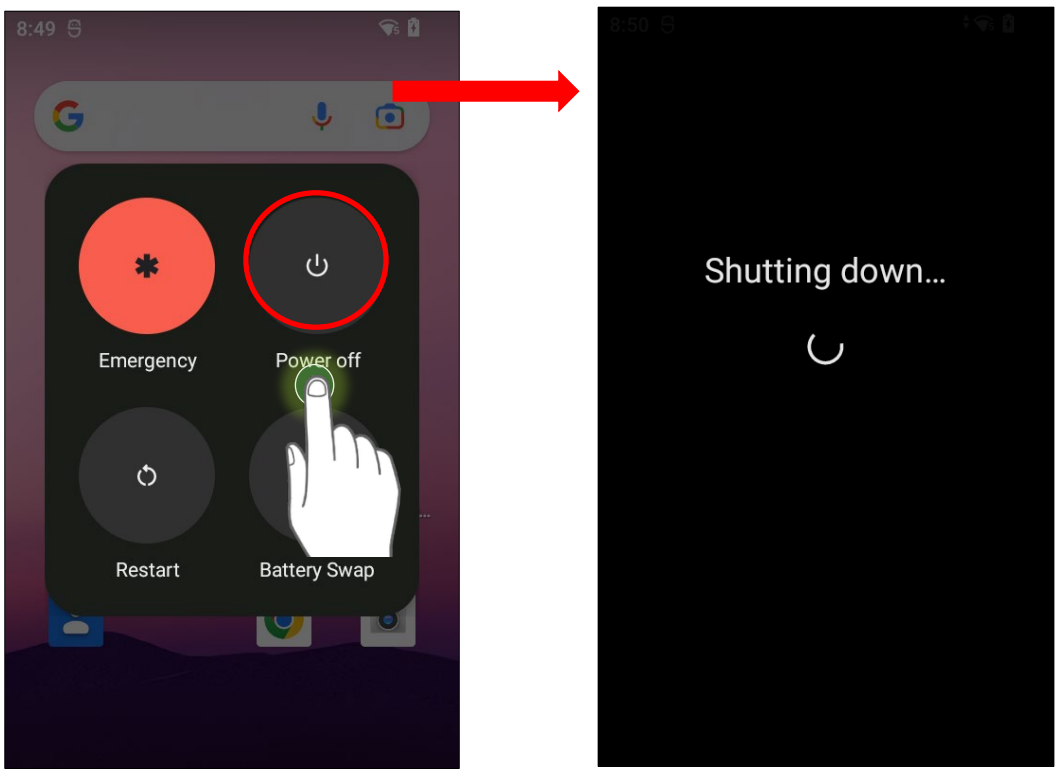
Shut the device down to replace the main battery, please:

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 on "**Power off**". The mobile computer will power off.

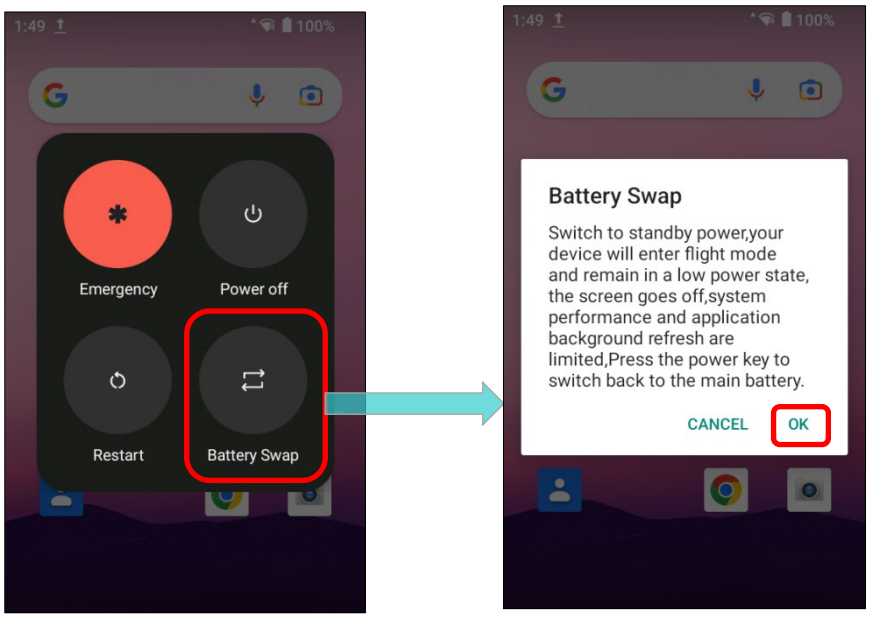
4) Follow the steps as Install/ Remove Battery describes to remove the main battery and replace it with the new one.



BATTERY SWAP

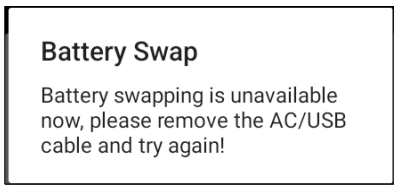
The RK26 backup battery provides system power during battery swap. When battery cover is removed, the system enters suspend mode and remains inactive until the battery cover is reattached. Please refer to "Low Sub Battery Alert" section to ensure the sub-battery is fully charged before initiating the battery swap process.

1) Press and hold the power button on the top end of the mobile computer, and select "**Battery Swap**" and confirm by tapping "**OK**" in the pop-up menu. The system will prepare to enter suspend mode, indicated by the illuminated red Status LED on the front panel.



Note:

Make sure to remove the AC or USB cable before proceeding "Battery Swap".



2) Observe the red light on the front panel. Once it goes off, the device is in complete suspend mode, indicating that the main battery is ready to be replaced. Remove the battery and replace it with a new one.

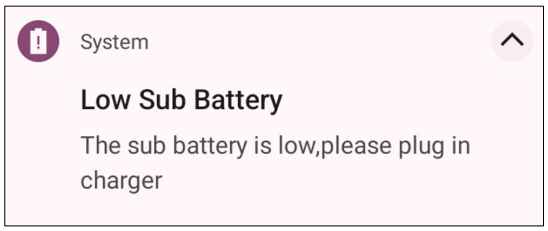
3) Once the main battery is removed, the system can remain in suspend mode for at least 5 minutes. Please replace with a fully-charged main battery as soon as possible.

4) Ensure that the battery latch is properly locked before pressing the power button to wake up the mobile computer from suspend mode.

Warning:

(1) Do not attampt battery swapping before the mobile computer's operating system is ready. Removing the battery cover during power-up process may cause system failure.

(2) The backup battery maintains the mobile computer in suspension when the main battery is depleted. To prevent data loss, DO NOT replace the main battery when backup battery's power is low. Connect the RK26 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, you can proceed with the main battery replacement.



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.

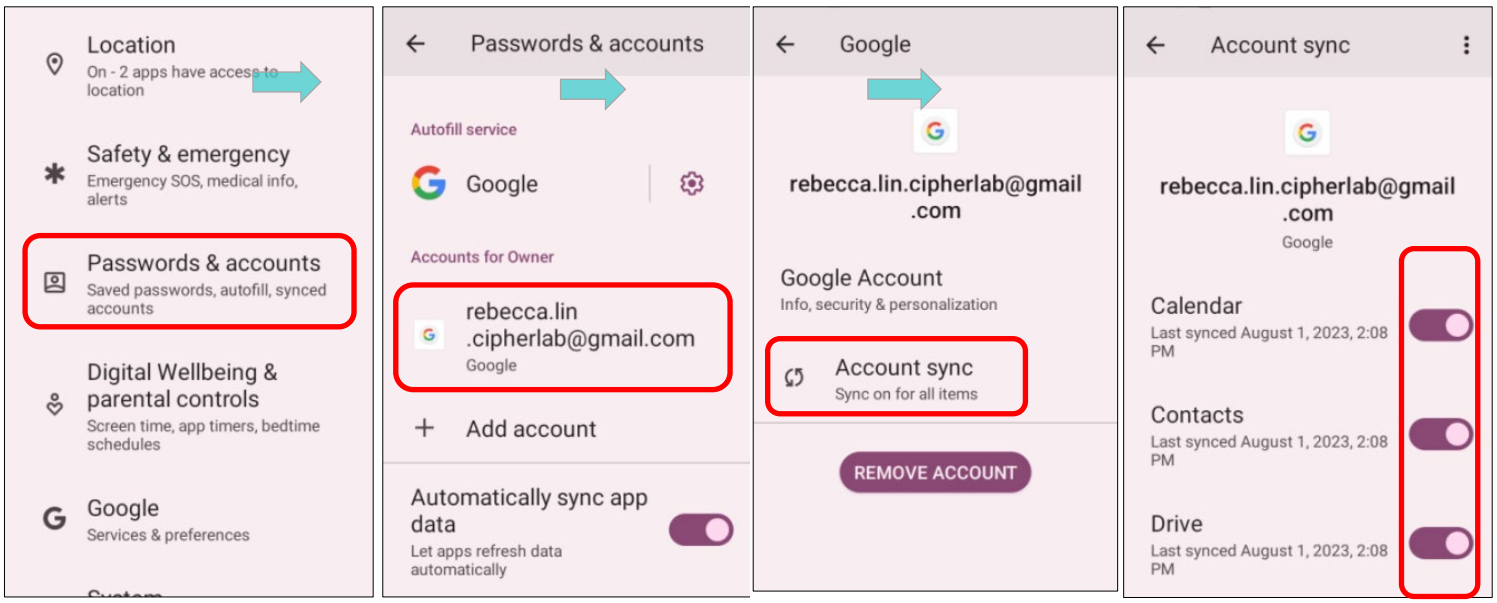
Warning:

Using backlight, wireless connectivity, and peripheral devices while on battery power can significantly 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 in Screen Timeout Settings.
- Adjust and reduce the screen brightness level in Screen Brightness settings.
- 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 (All Apps)** | **Settings** | **Passwords & accounts** | **your Google Account** | **Account sync** and disable the data syncing services of your desired items.

- Enable **Battery saver** mode and **Battery optimization** mode. Please refer to Battery Saver Mode and Battery Optimization.



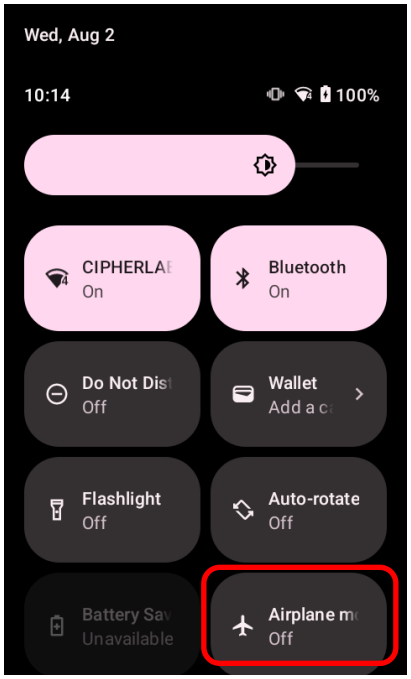
ENTER AIRPLANE MODE

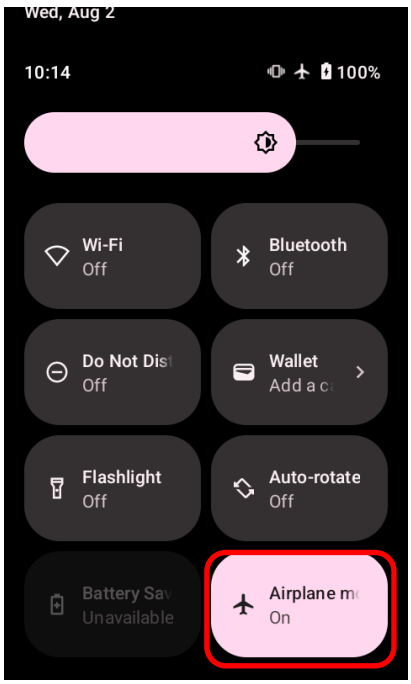
Enable **Airplane Mode** to turn off all wireless radios, including call functions, Bluetooth, Wi-Fi, and 3G/4G on your mobile computer. This will significantly reduce battery power consumption.

To enter **Airplane** mode, please:

1) 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.





Icon	Description
	Airplane mode is **OFF**.
	Airplane mode is **ON**.

2.1.5. BATTERY PRECAUTIONS

To preserve battery life and avoid battery bulge:

- Avoid using your device continuously while connected to a power supply or cradle for charging. If you need to do so, ensure "**Balance Mode**" is turned on.

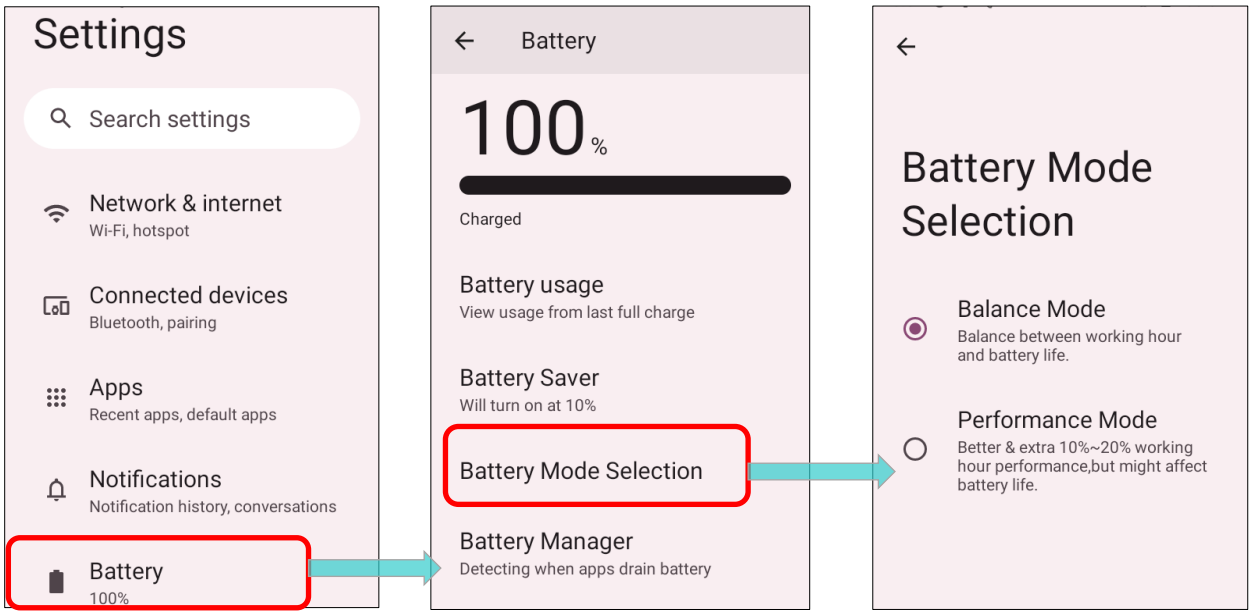
- Do not continuousely connect your RK26 mobile computer to a power supply or cradle for charging if the main battery is fully charged. If continuous connection is necessary, ensure "**Balance Mode**" is turned on.

BATTERY MODE SELECTION

In "**Balance Mode**", the device optimizes performance while conserving battery life. In contrast, "**Performance Mode**" prioritizes device performance over battery conservation.

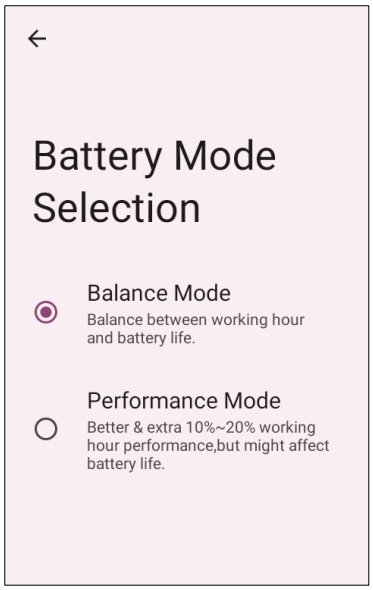
The default battery mode is set to "**Balance Mode**". Follow the steps below to switch between "**Balance Mode**" and "**Performance Mode**":

1) Go to **App Drawer (All Apps)** | **Settings** | **Battery**, and tap on "**Battery Mode Selection**".

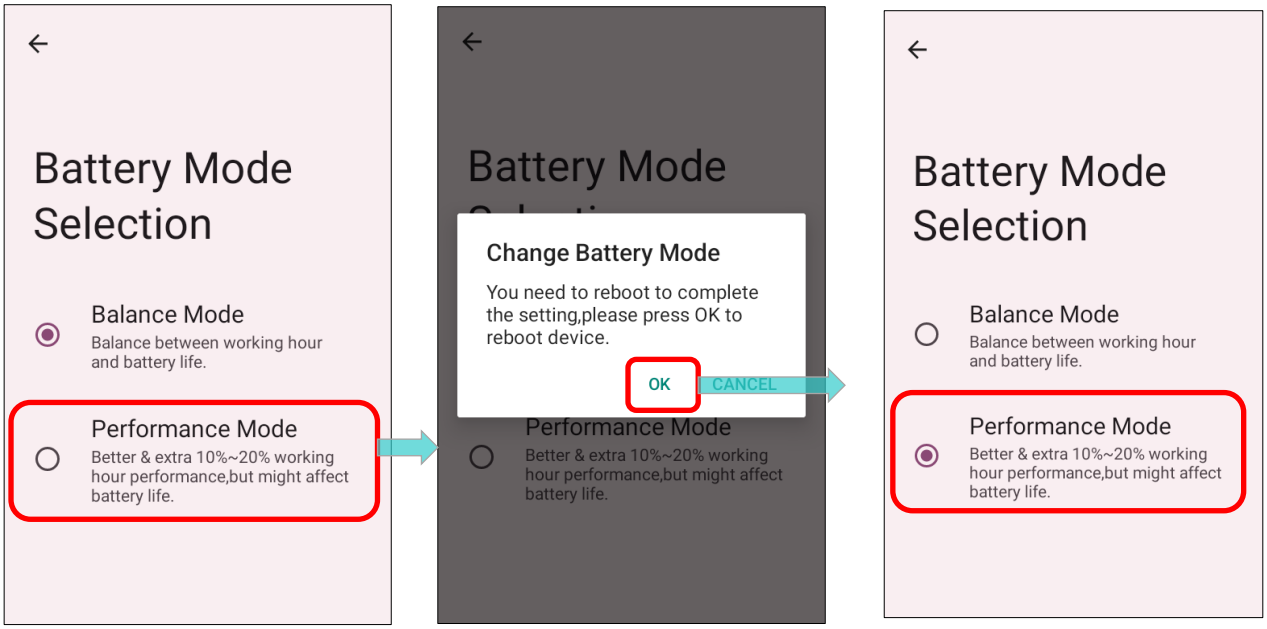


2) Tap on the radio button to select "**Balance Mode**" or "**Performance Mode**".

Mode	Description
Balance Mode	Strike a balance between working hours and battery life.
Performance Mode	Provide a 10% to 20% boost in working hours with potential impact on battery life.



3) After changing the mode, a pop-up message appears, indicating the device needs to reboot for the change to take effect. Tap "**OK**" to confirm, and the device will automatically shut down and reboot.



PRECAUTIONS WHEN CHARGING THE MAIN BATTERY FOR A LONG TIME

Avoid using RK26 mobile computer with heavy system loading for extended periods while it is being charged. Continuously charging and discharging during this time may lead to battery bulge.

For safty reasons, it is a normal for the battery status not to show full recharg when the RK26 mobile computer is connected to an external power supply for an extended period. To adress this, simply unplug and then reconnect the charging cable to initiate the battery recharge.

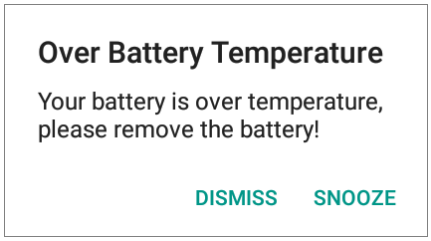
When connected to a snap-on cable/ charging & communication cradle/USB Type-C cable for external power supply, the RK26 mobile computer automatically stops charging the battery once the battery level reaches 100%.

BATTERY TEMPERATURE ANOMALY

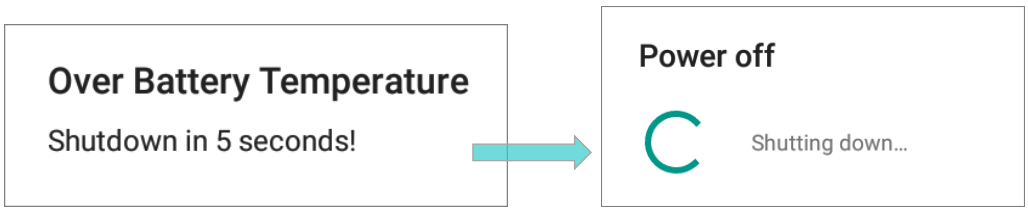
High ambient temperature or continuous usage of the device while charging can result in an increase in battery temperature. The RK26 mobile computer will automatically suspend battery charging or shut down for safety purposes. Once the battery temperature returns to normal, charging can be resumed.

The warning massage "**Over Battery Temperature**" will appear to instruct you to remove the battery if the RK26 battery temperature reaches **55℃**. It will also prompt an automatic shutdown if the RK26 battery reaches **60℃**.

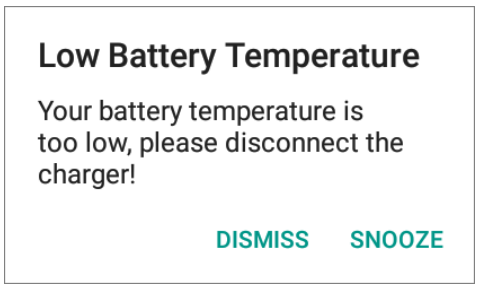
- At 55℃



- At 60℃



Using RK26 mobile computer in low-temperature environment may lead to automatic shotdown. If the battery temperature reaches **0℃** or falls below **0℃** during charging, the front panel will flash, and a warning window will appear, prompting the user to disconnect the charger.The RK26 mobile computer will also automatically suspend battery charging.



To preserve battery life, please disconnect the charger immediately and charge your RK26 mobile computer under suitable temperature conditions.

2.2. MEMORY

- Flash Memory (ROM)

64GB Flash memory to store OS and software programs

- Random-access Memory (RAM)

4GB 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 **1TB**). When selecting an SD card for optimal compatibility and performance with the RK26, ensure you choose the appropriate capacity. When using an SDXC card, use a new card and ensure it hasn't been used in other host devices such as 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 power the device and maintain it in a suspended state. A fully charged backup battery can retain the data stored in the RAM for up to 5 minutes. However, once the backup battery is also drained, the mobile computer will shut down, preserving only the contents of the RTC (Real-Time Clock). All other unsaved data will be lost.

If you want to put away the mobile computer for a couple of days, please be aware that data loss can occur when both the main battery and backup battery are fully discharged. Therefore, it is necessary to backup data and files before putting away the device.

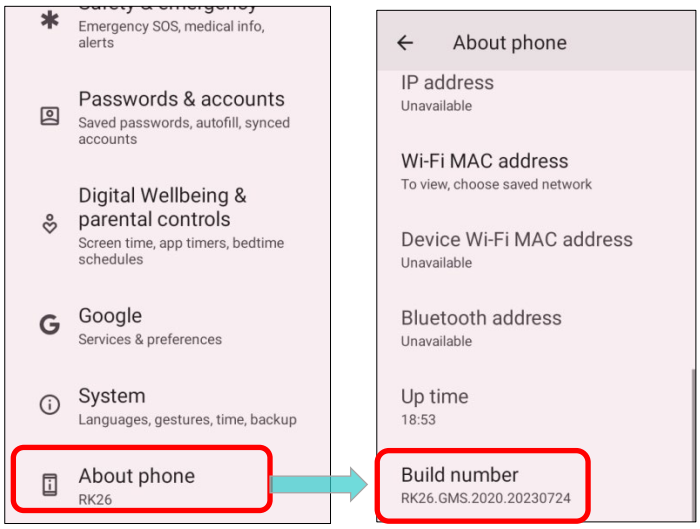
2.2.1. CHECK MEMORY USAGE

The memory manager can offer a glance of how the device is using its RAM. To check the memory usage, you have to enable "**Developer Option**" in advanced.

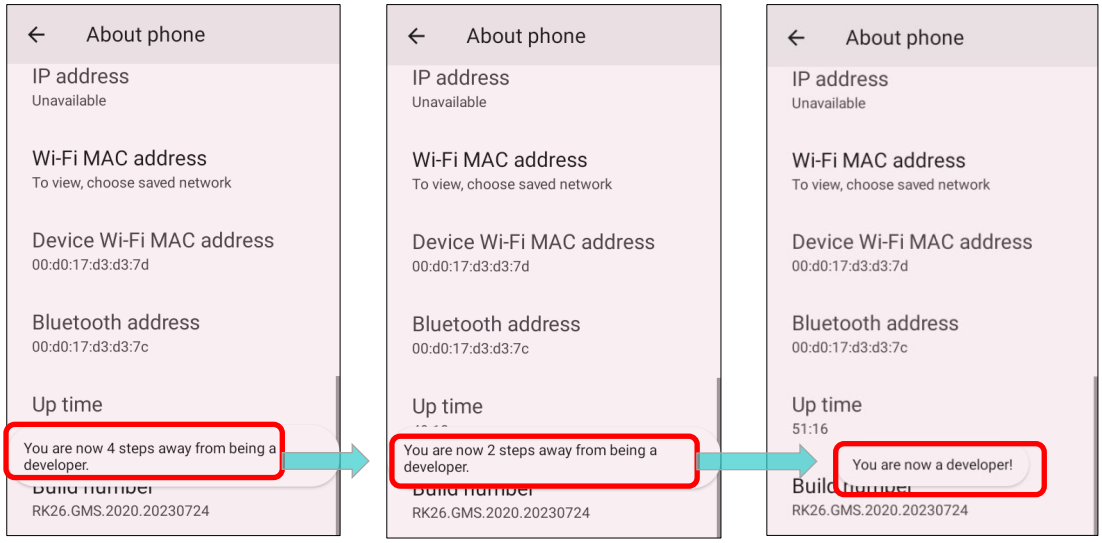
ENABLE DEVELOPER OPTIONS

To enable "**Developer Option**":

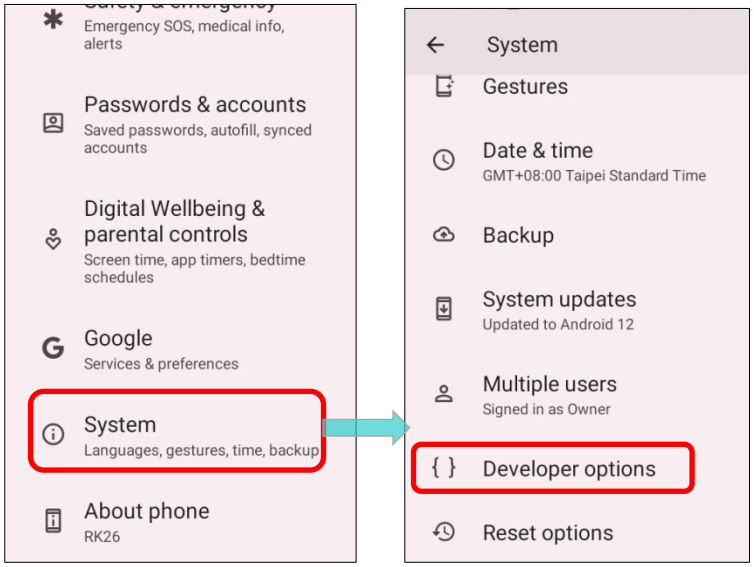
1) Go to **App Drawer (All Apps)** | **Settings** | **About Phone** , and swipe to the bottom to find "**Build number**".



2) Tap on "**Build number**" 7 times to enable it. During the process, you'll see a prompt with a countdown reading "**You are now X steps way from being a developer.**" Once the prompt "**You are now a developer!**" showing up, you have succeeded in entering developer mode.

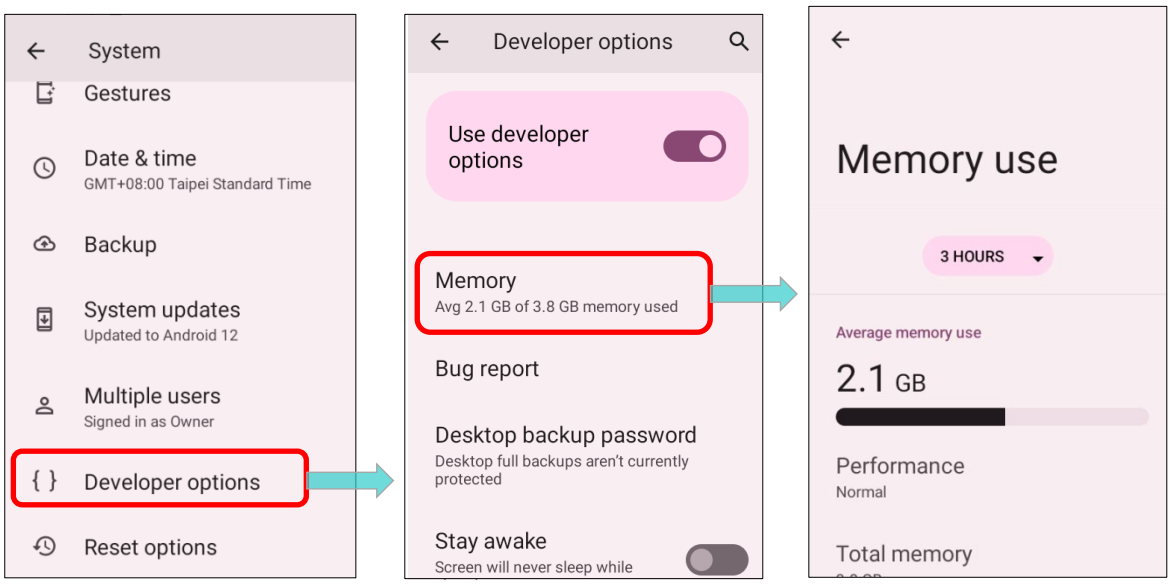


You can find Developer option { } is now enabled in **System** page.

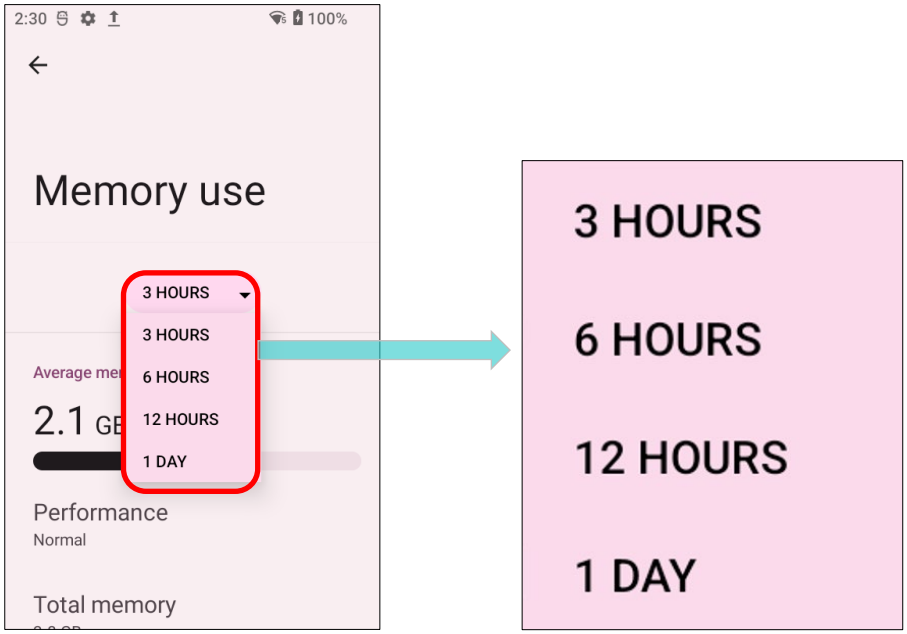


CHECK MEMORY USAGE

Go to **App Drawer (All Apps)** | **Settings** | **System** | **Developer option** { } | **Memory** to enter memory manager screen.

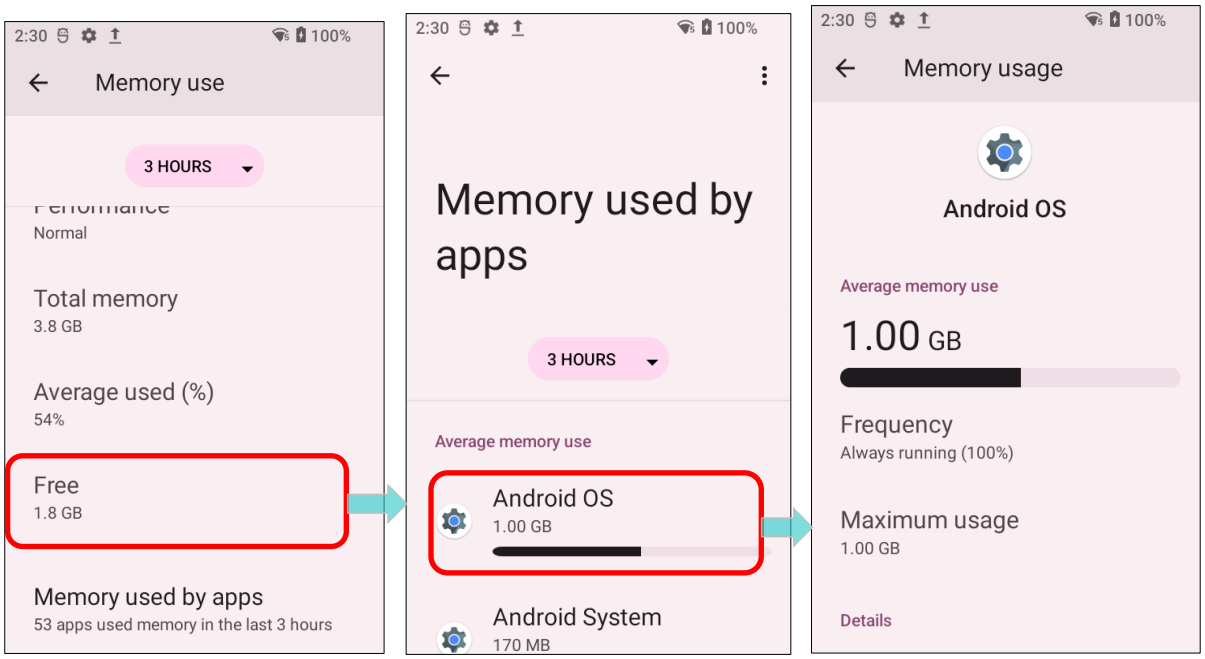


On the main screen, it tells you not only the used and free memory space of the RAM, but how your pattern of usage has impacted the device's overall performance. To figure out how the system and apps have been taking up the memory over a longer period, tap the dropdown list to choose a different time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



2.2.2. MANAGE STORAGE SPACE

On your Android device, the SD card can function as an extension of your device's internal storage, which typically comes with 16 GB of flash memory for storing the operating system, applications, and files, rather than just serving as portable storage.

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

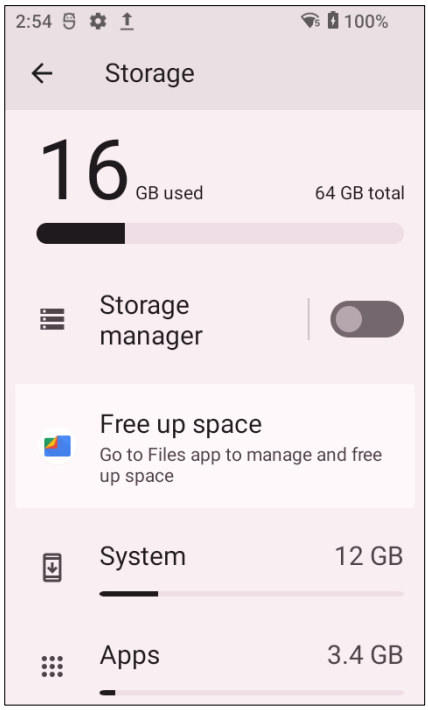
By default, all the videos, photos and downloaded files are directly saved to the device's internal storage. If you have previously inserted and mounted an SD card as portable storage, you could transfer/save photos & other media in this SD card; if the SD card is set as internal storage, photos, files,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

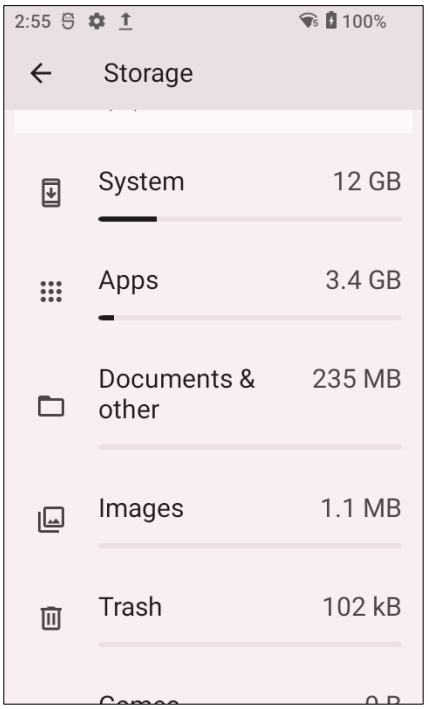
- SD card as portable storage in Storage Settings page

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.

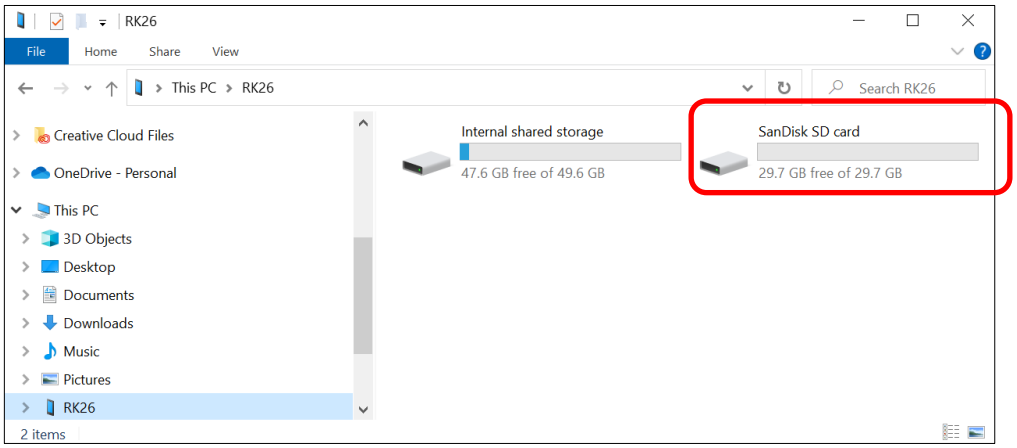




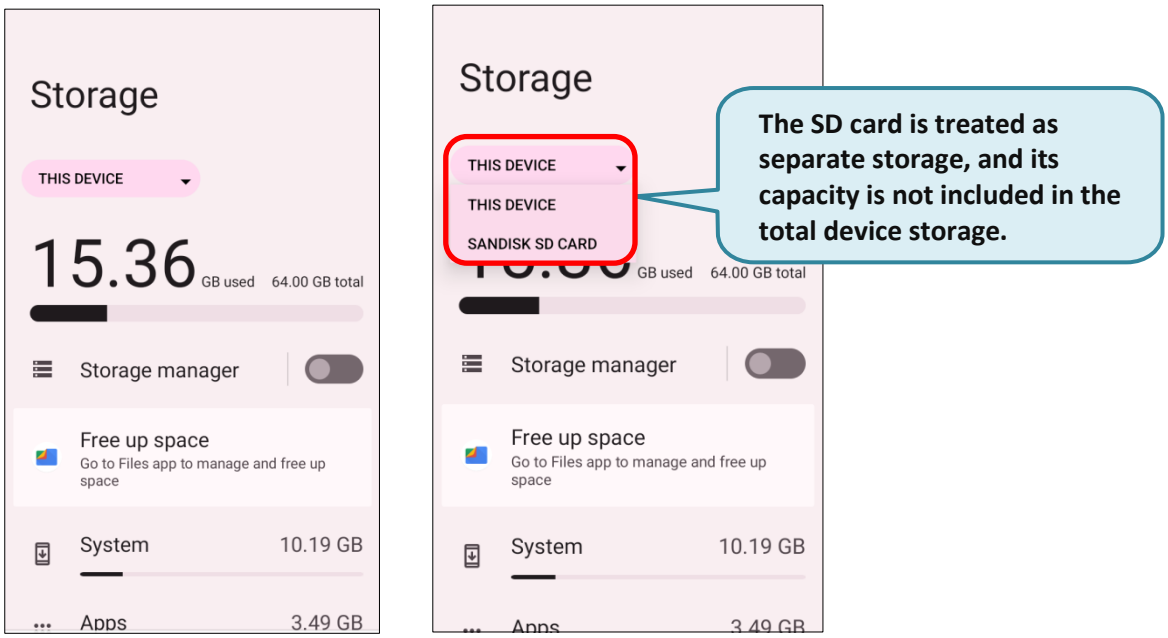
SET UP SD CARD AS PORTABLE STORAGE

Using an SD card as a portable storage device allows you to use it like a USB disk. You can easily swap it between your Android device and a computer to facilitate the transfer of files. This becomes particularly handy when there is a need to offload files that are consuming too much storage space.

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



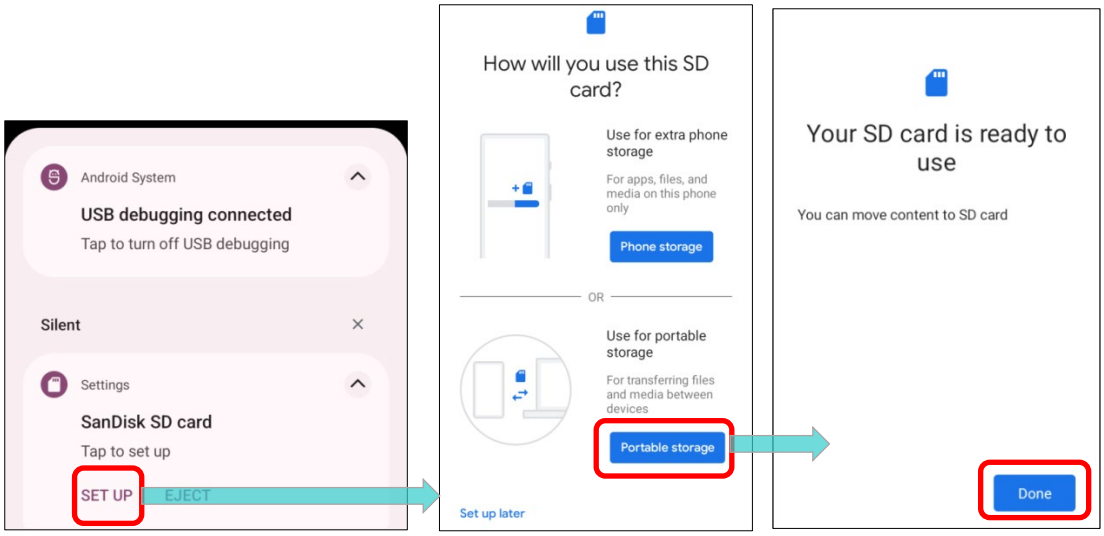
On **Storage** screen, this disk can be managed separately.



To start:

1) Insert the SD card. A notification icon , signifying the detection of an SD card, will appear in the status bar. Swipe down from the status bar and select "**SET UP**".

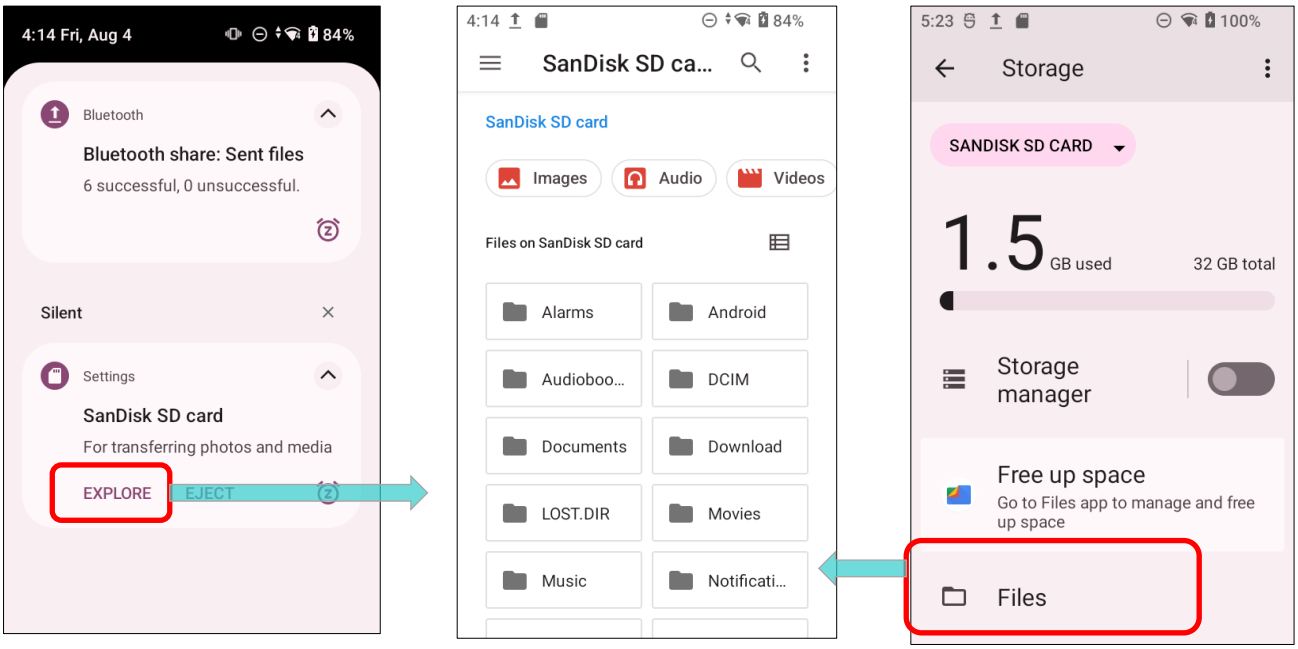
2) Tap "**Portable storage**", and complete the setting by tapping "**DONE**".



3) 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.

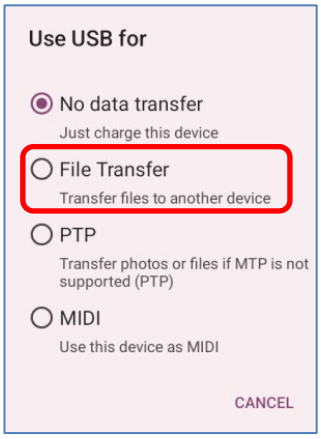
OR

Tap "**Files**" in **Storage** page to check it.



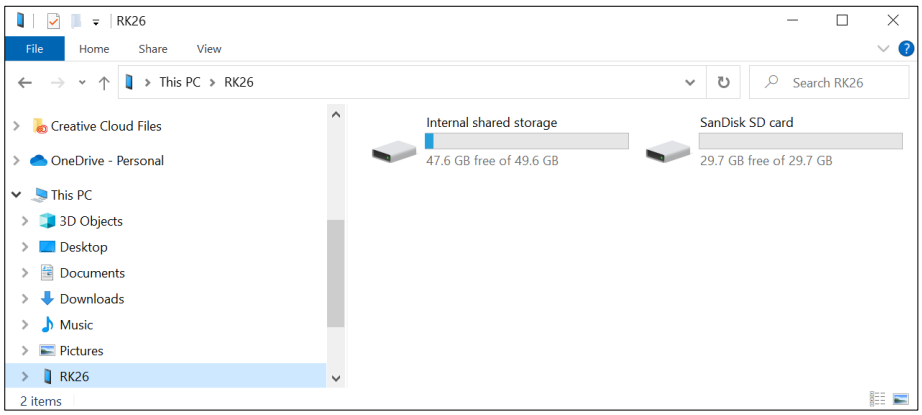
TRANSFER PHOTOS & MEDIA BETWEEN THE DEVICE & PC

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 a USB Type-C cable/ the snap-on cable/ the cradle, and "**USB Preference**" page shows up. Tap to choose "**File Transfer**".

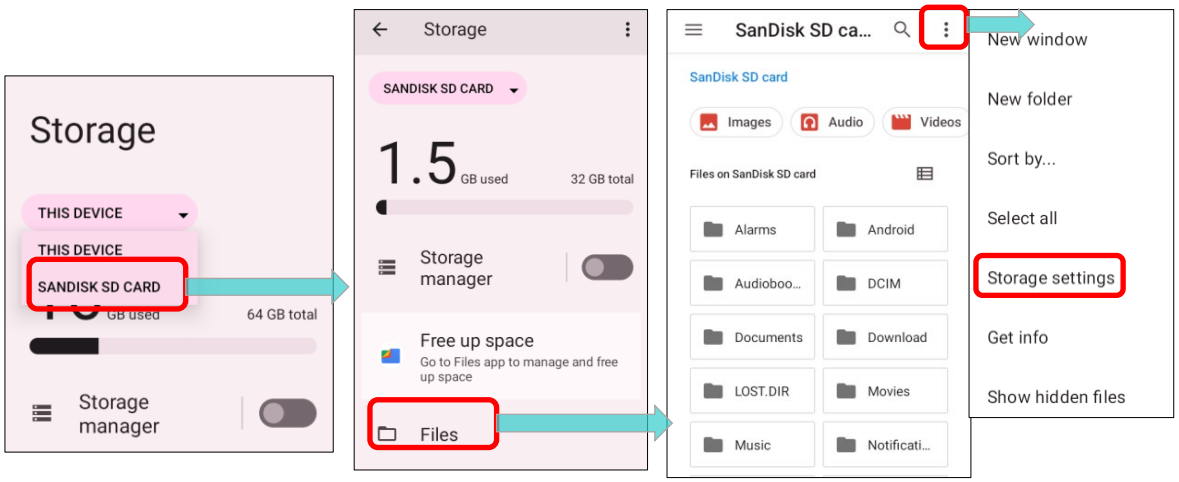
2) You will find the disk content is readable from PC client. Please make sure the USB cable is properly connected while transferring files over USB connection.



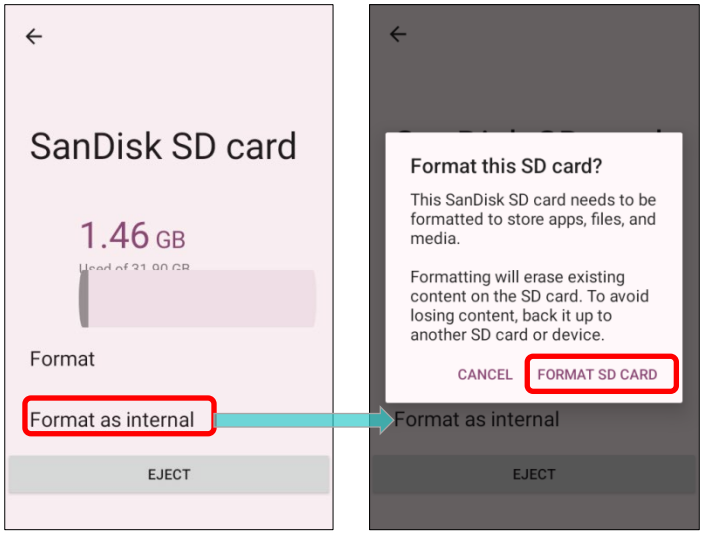
CONVERT THE SD CARD TO INTERNAL STORAGE

You can always convert the SD Card from portable storage to internal storage. Before you start, make a backup of the files on this disk if you would like to keep them.

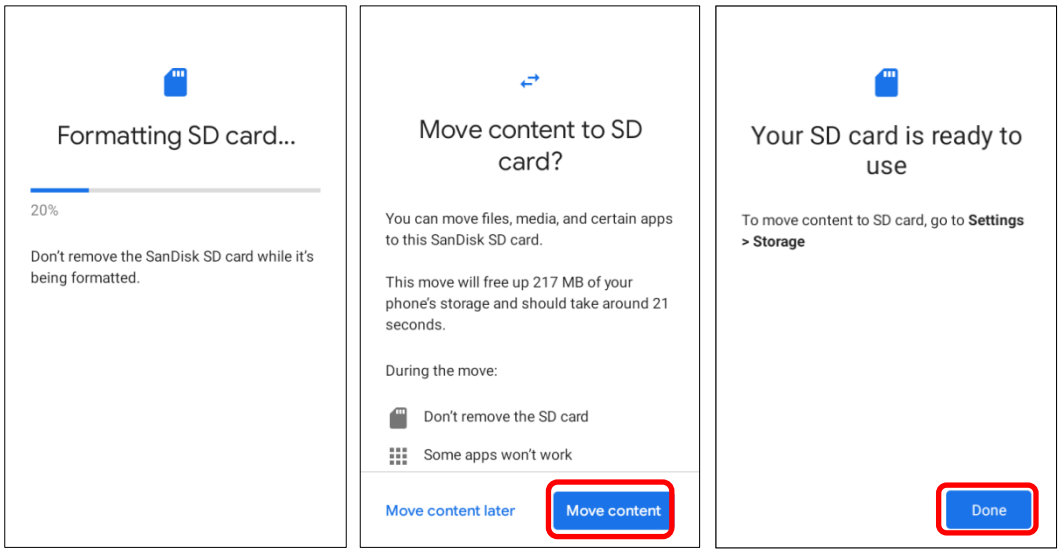
1) On **Storage** screen under **SANDISK SD CARD**, tap **Files** to access page with the files on the SD card. Tap **More** ⋮ to select "**Storage settings**".



2) By selecting "**Format as internal**", the device will eventually format this SD card into a specific file format only readable by this device.
3) On "**Format this SD card**" popup window, tap "**FORMAT SD CARD**" to format the card.



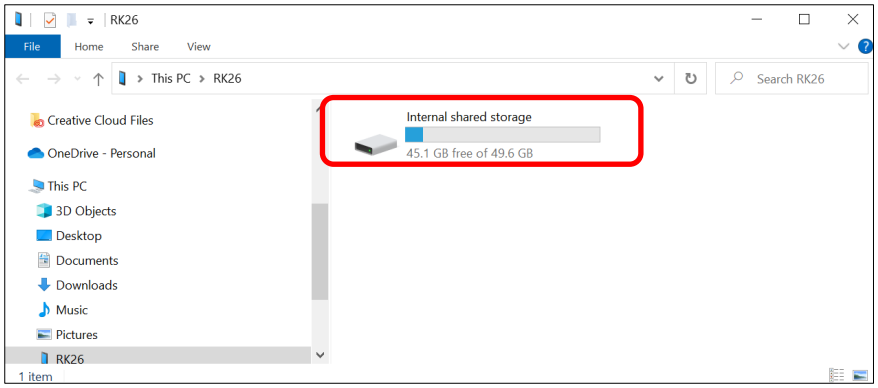
4) You will then be asked whether to move multimedia files to this new SD card right away or later; tap to make your choice.
5) When the formatting is completed, tap "**DONE**".



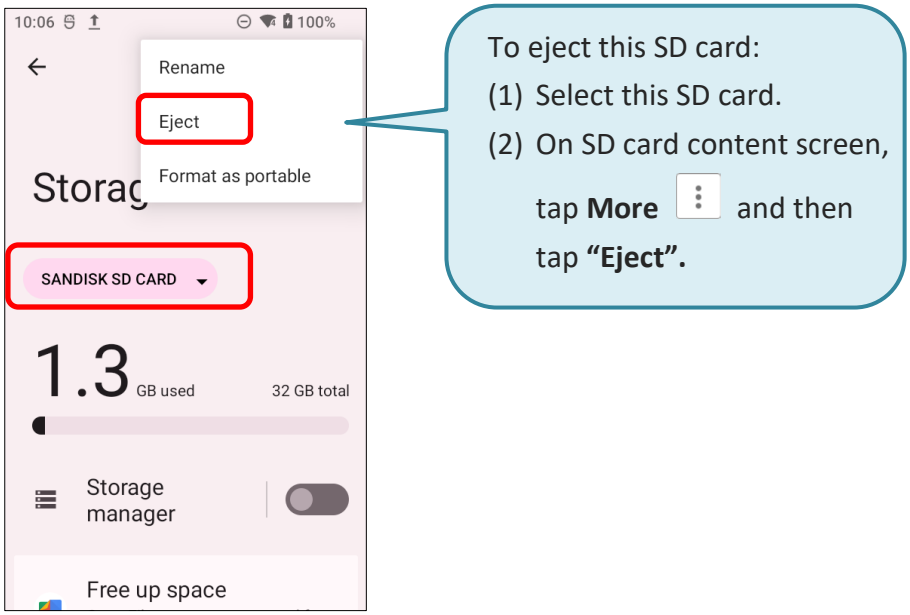
SET UP SD CARD AS INTERNAL STORAGE

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**, 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.

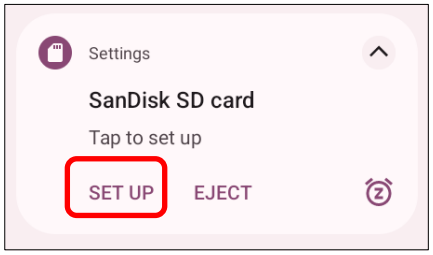


Warning:

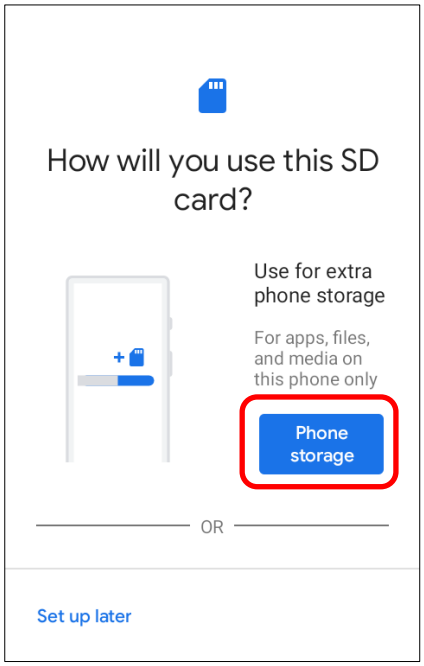
Do not physically remove the SD card from the device without ejecting this card in advance.

To Start:

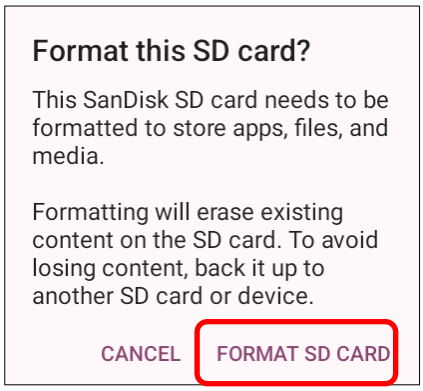
1) Insert the SD card. A notification will pop up indicating that an SD card is detected tap "**SET UP**".



2) Tap on "**Phone storage**".

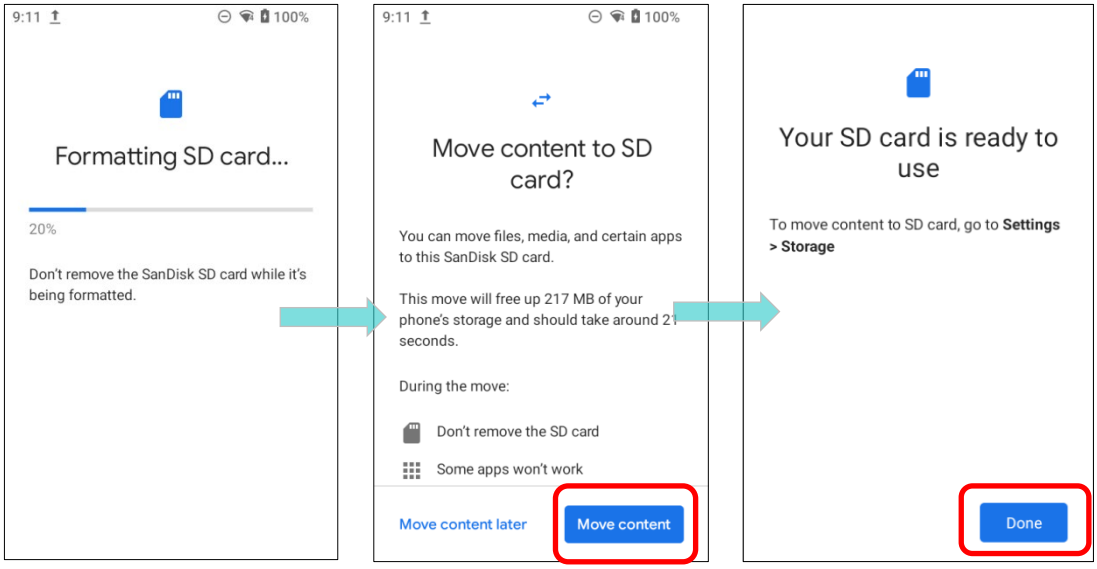


3) On the popup window, select "**FORMAT SD CARD**".



4) You will then be asked to whether to move media files to this new SD card, tap to make your choice.

5) When the setting is completed, tap "**DONE**".



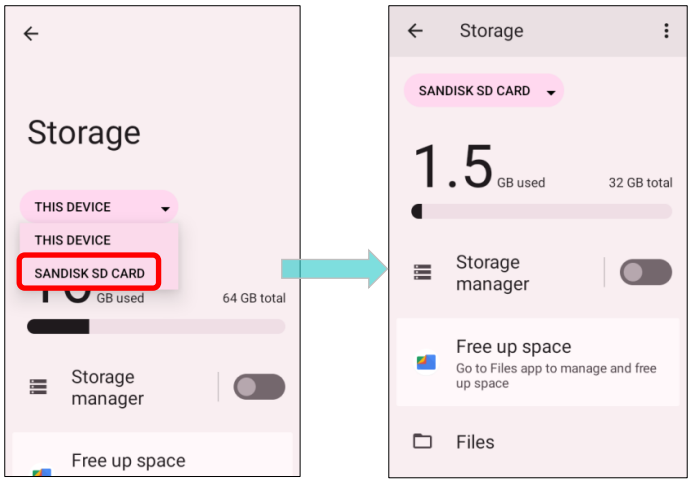
Note:

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

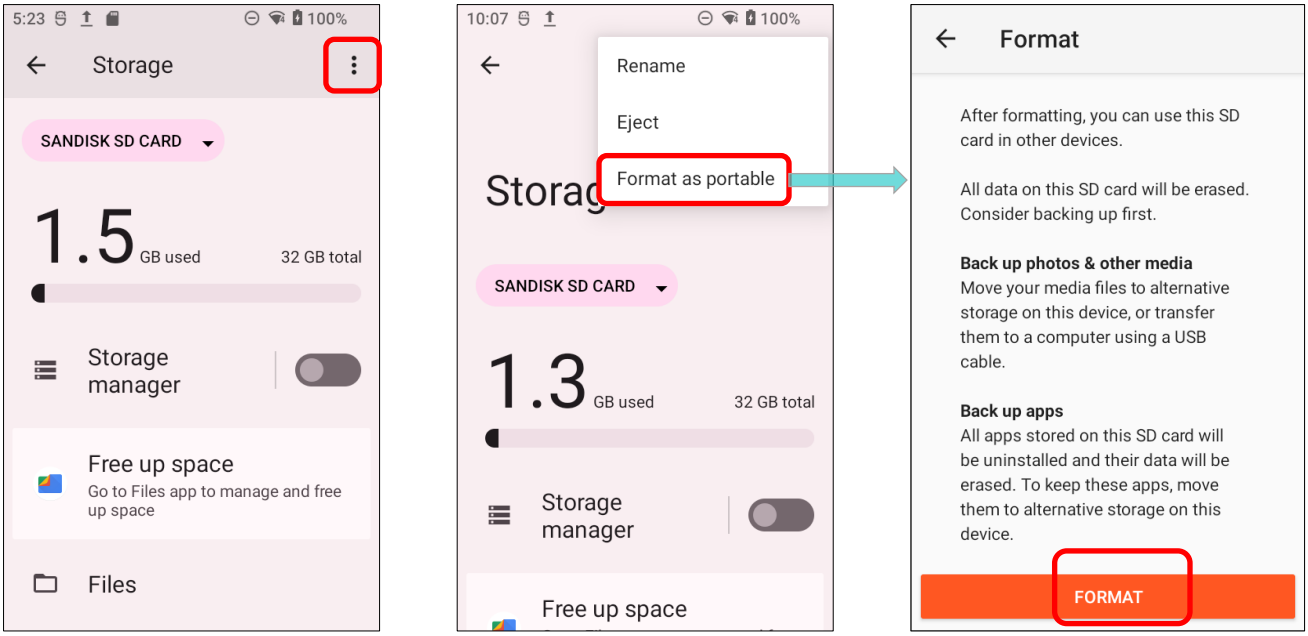
You can always convert the SD Card from internal storage to portable storage. Before you start, make a backup of the files on this disk if you would like to keep them.

1) Enter the SD card content screen from **Storage** screen by tapping on "**SANDISK SD CARD**".

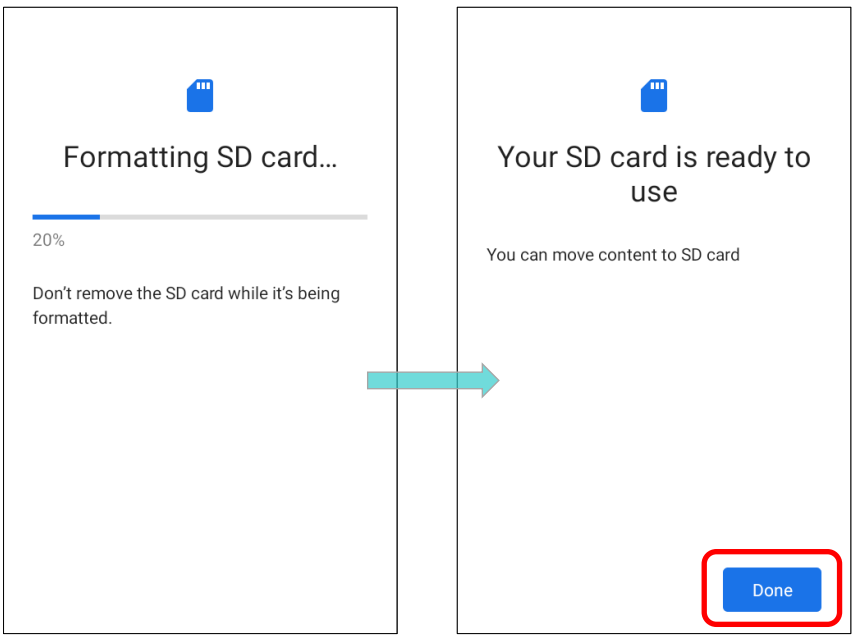


2) Tap **More** and then tap "**Format as portable**".

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

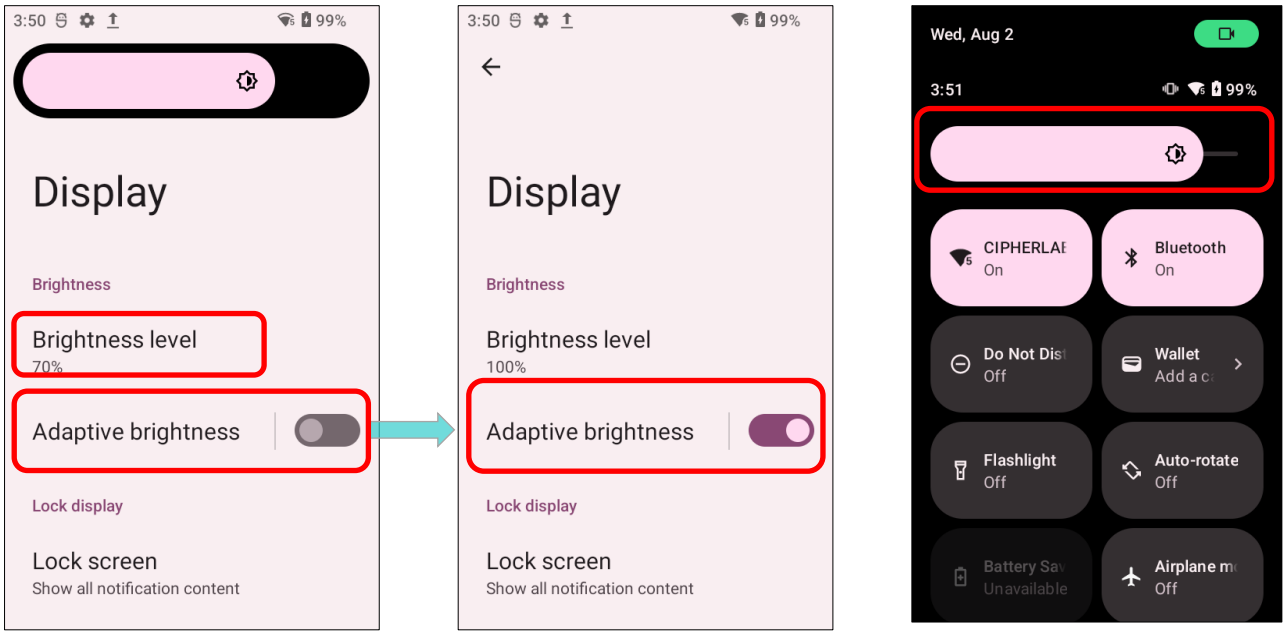
The mobile computer comes with a 4.0 inch, LCD, Corning Gorilla Glass 3 display with 480RGBx800 resolution. The LED backlight of the screen, which helps ease reading under dim environments, can be controlled manually and automatically.

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

2.3.1. SCREEN BRIGHTNESS

1) Go to **App Drawer (All Apps)** | **Settings** | **Display** | **Brightness level**.
2) 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.



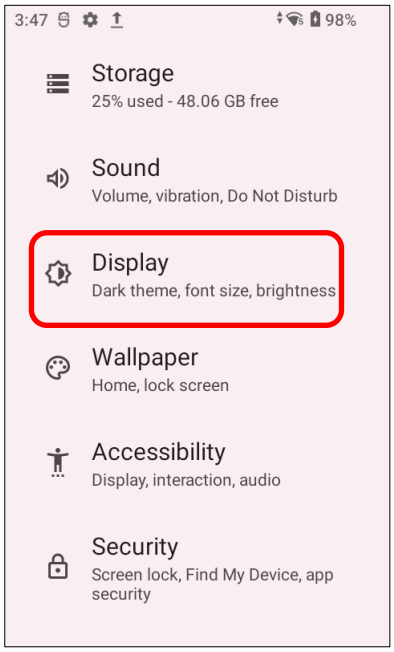
Note:

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

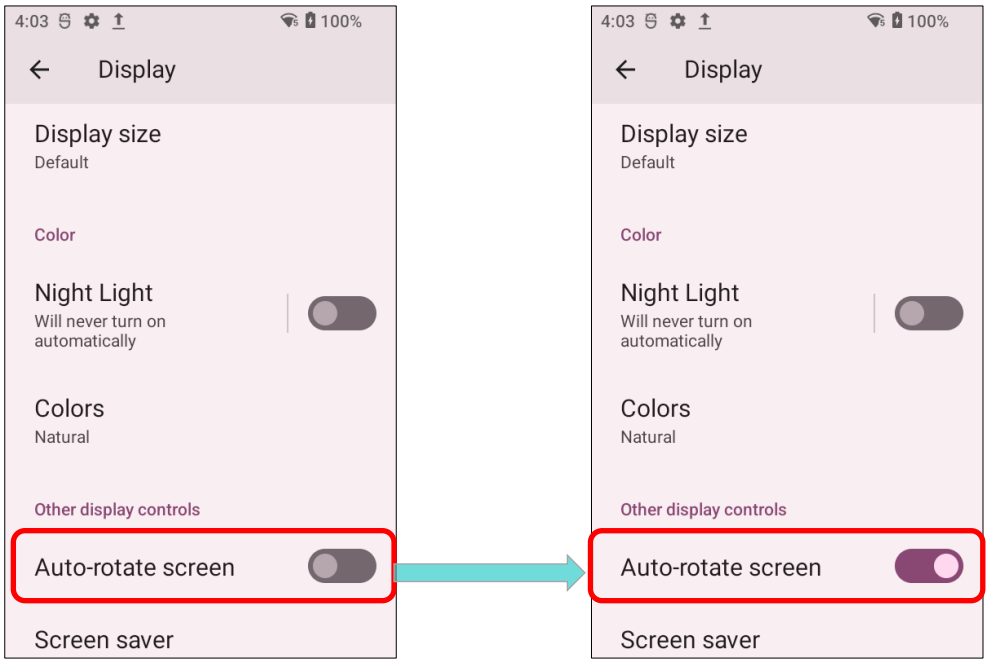
2.3.2. SCREEN ROTATION

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 (All Apps)** | **Settings** | **Display** .

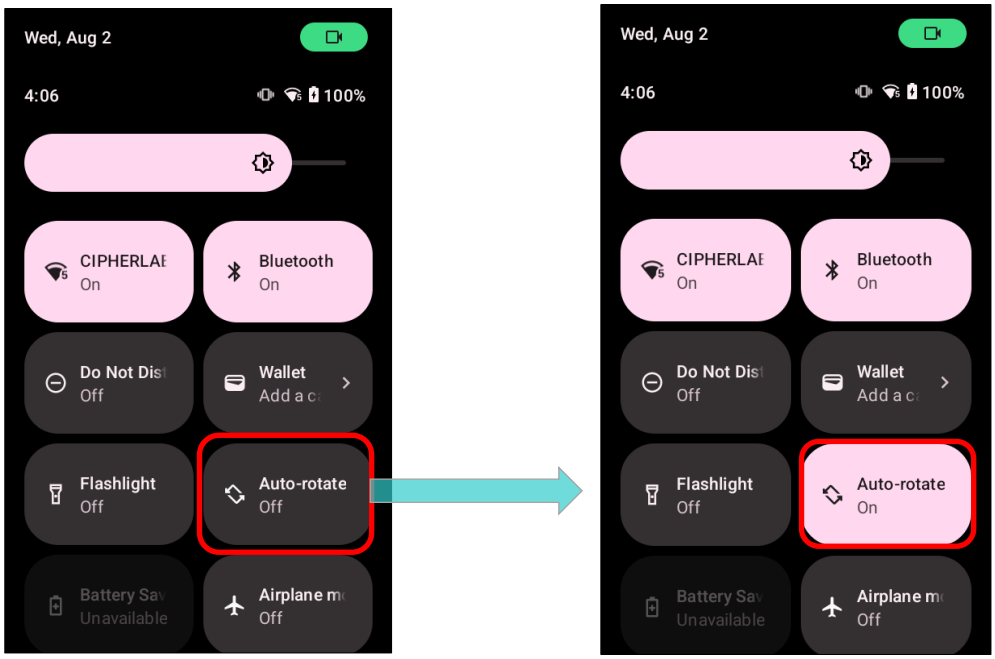


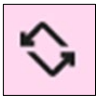
2) Switch on or off **Auto-rotate screen**.



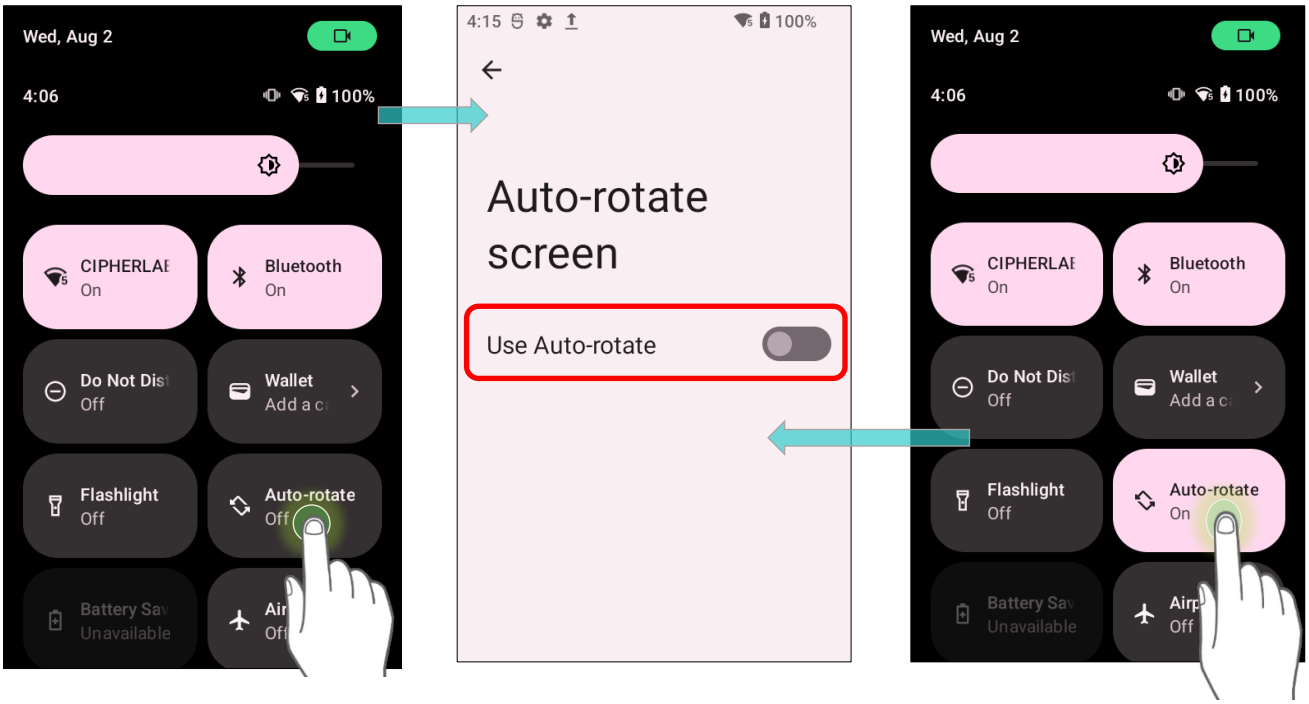
OR

Swipe down from the top of the screen to open **Quick Settings Panel** or **Quick Settings Menu** and tap the **Auto rotate** icon  to enable screen rotation.



Icon	Description
	Auto rotate mode is **OFF**.
	Auto rotate mode is **ON**.

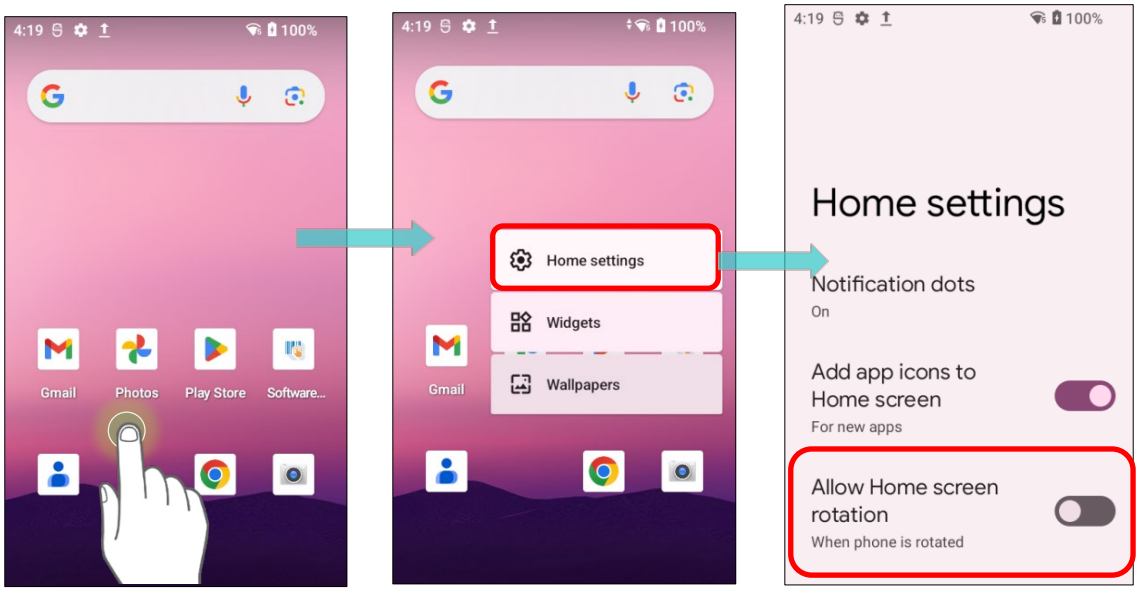
You can enter "**Auto-rotate screen**" page to enable or disable screen rotation by long pressing the **Auto rotate** icon on **Quick Settings Panel** or **Quick Settings Menu**.



HOME SCREEN ROTATION

To enable Home screen rotation, please make sure **Auto Rotation** is enable.

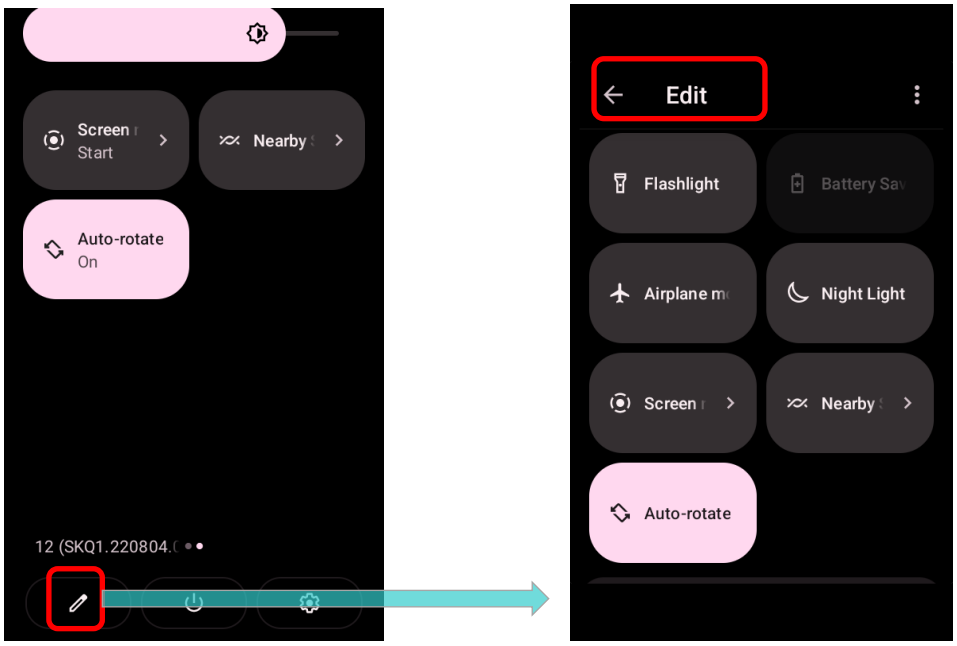
1) Press any empty spot on Home screen.
2) Tap "Home Settings" and enable "**Allow Home screen rotation**".



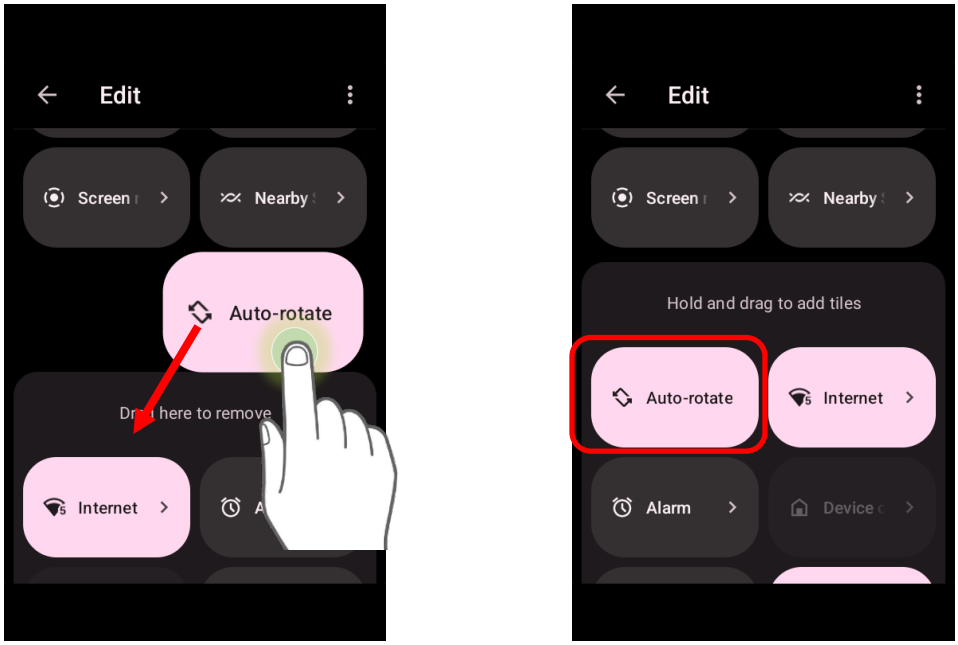
REMOVE AUTO ROTATION FROM QUICK SETTING MENU

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

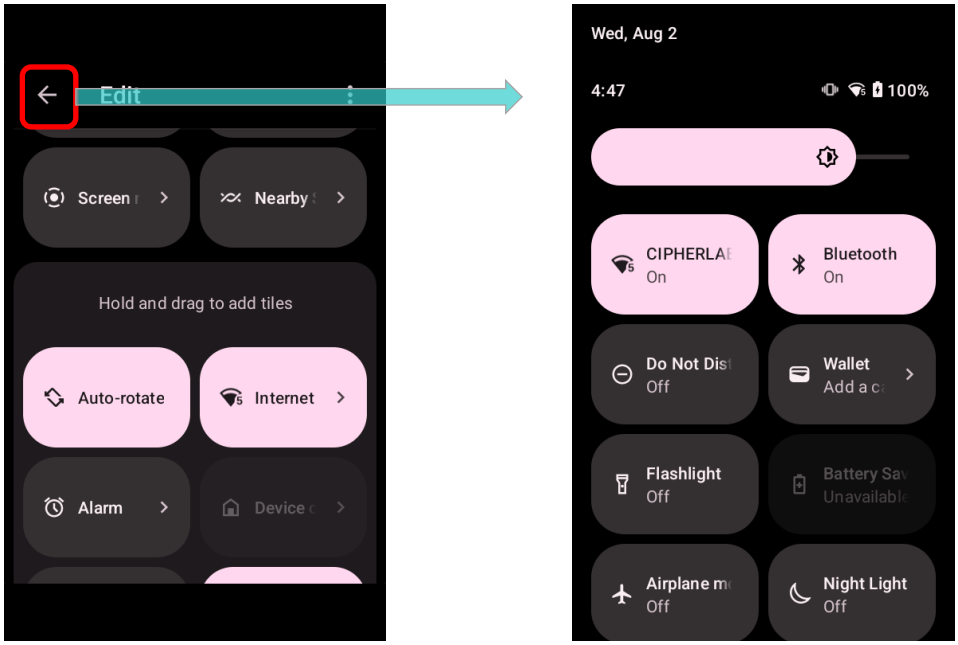
1) Swipe down from the top of the screen to open **Quick Settings Menu**, and tap on **Edit** button to get into **Edit** page.



2) Tap on and hold the **Auto rotate** icon, and drag it to the "**Drag here to remove**" area and then release it.



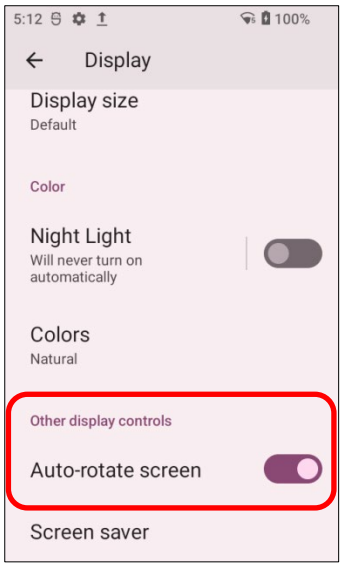
3) Return to the **Quick Settings Menu**, the **Auto rotate** switch icon is now hidden.



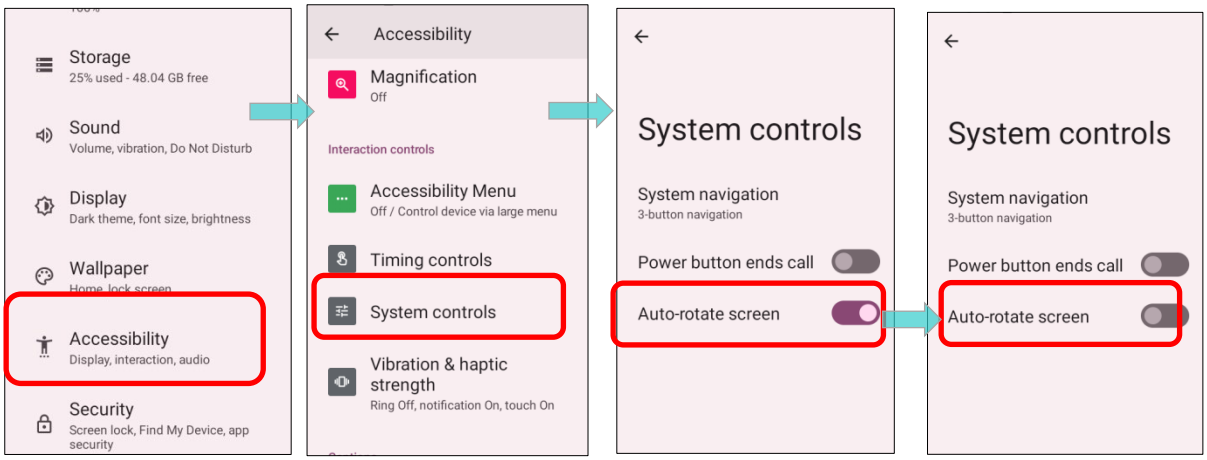
REMOVE AUTO ROTATION FROM DISPLAY SETTINGS

Go to **App Drawer (All Apps)** | **Settings** | **Accessibility** and switch off **Auto-rotate screen**. By doing so, the auto-rotation option will be hidden in **Settings** | **Display** .

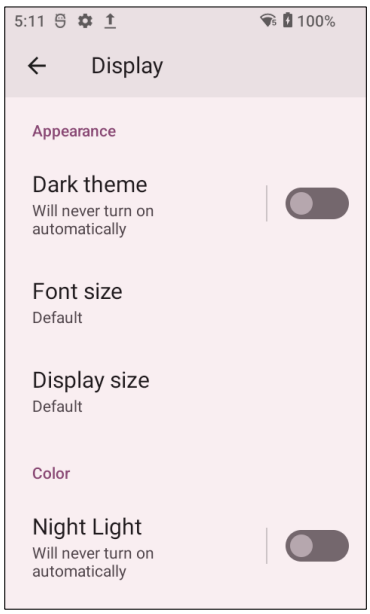
- The original "**Display**" page where the function "**Auto-rotate screen**" is listed on.



- Switch off "**Auto-rotate screen**" on "**Accessibility**" page.



- Now the function "**Auto-rotate screen**" is hidden on "**Display**" page.



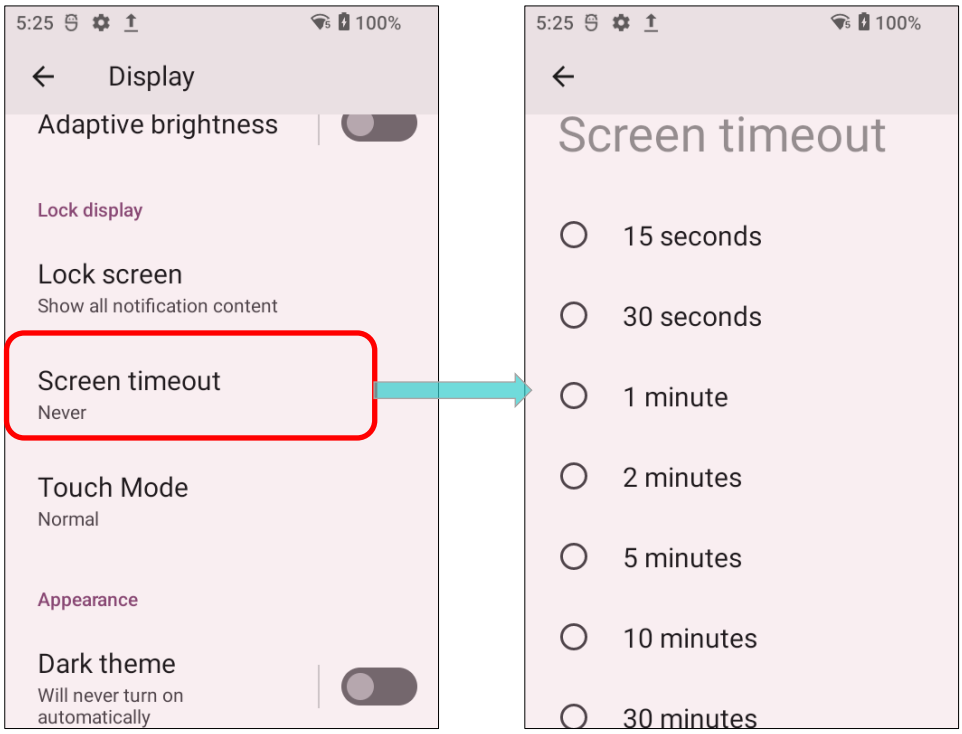
Note:

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 (All Apps)** | **Settings** | **Display** | **Screen timeout**.

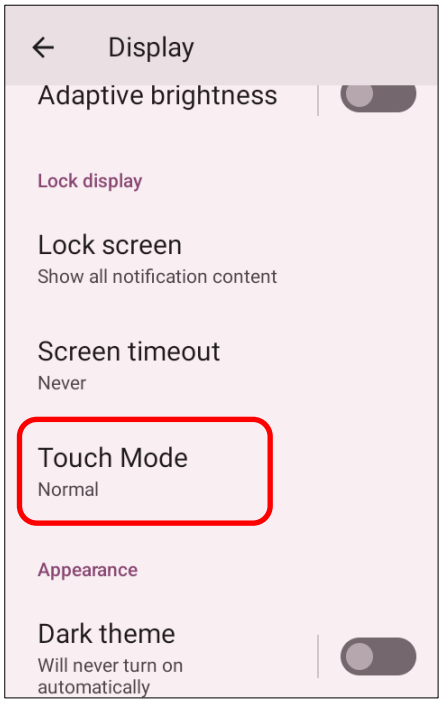
Tap in and choose the timeout duration that best suits your needs.

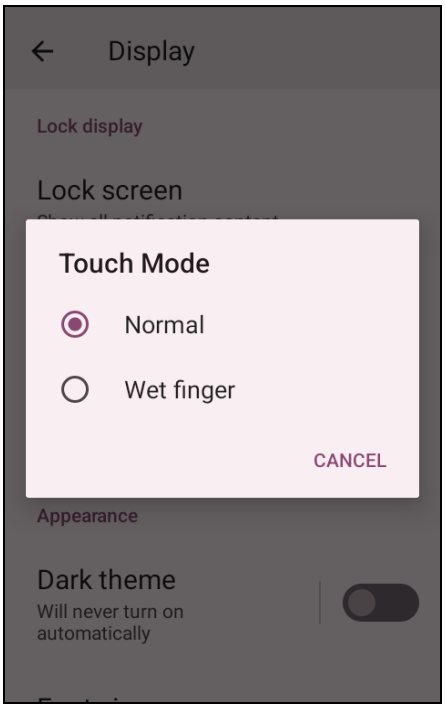


2.3.4. TOUCH MODE

Go to **App Drawer (All Apps)** | **Settings** | **Display** | **Touch Mode**, and select the touchscreen mode according to the environment you use with the mobile computer:

Touch Mode	Description
Normal	The default setting of "**Touch Mode**" is "**Normal**" which is for bare fingers, gloves, and styluses.
Wet finger	The mode "**Wet finger**" is applied to a humid environment or in drizzly weather with bare fingers only.

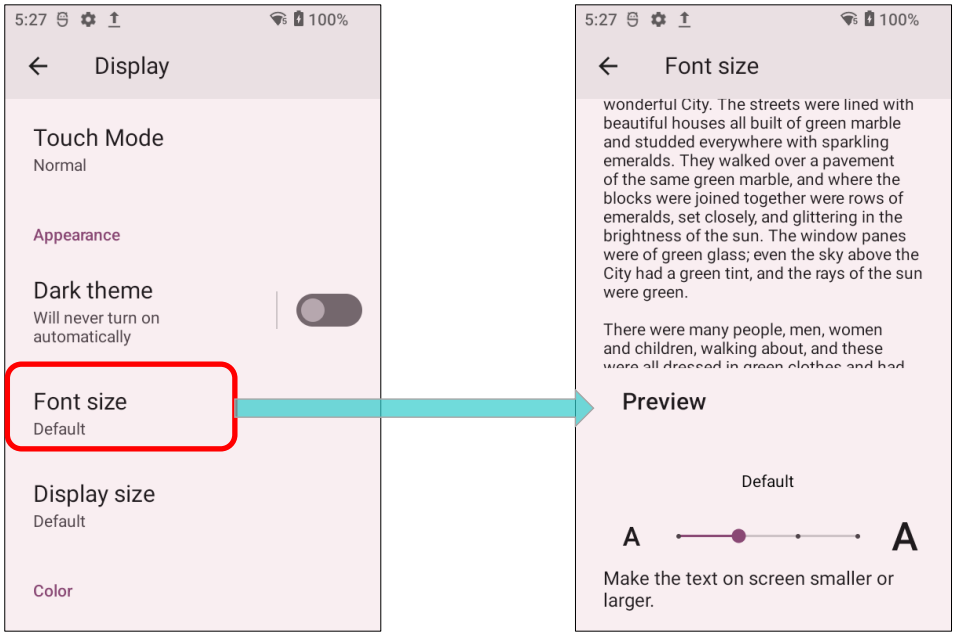




2.3.5. TEXT SIZE & DISPLAY SIZE

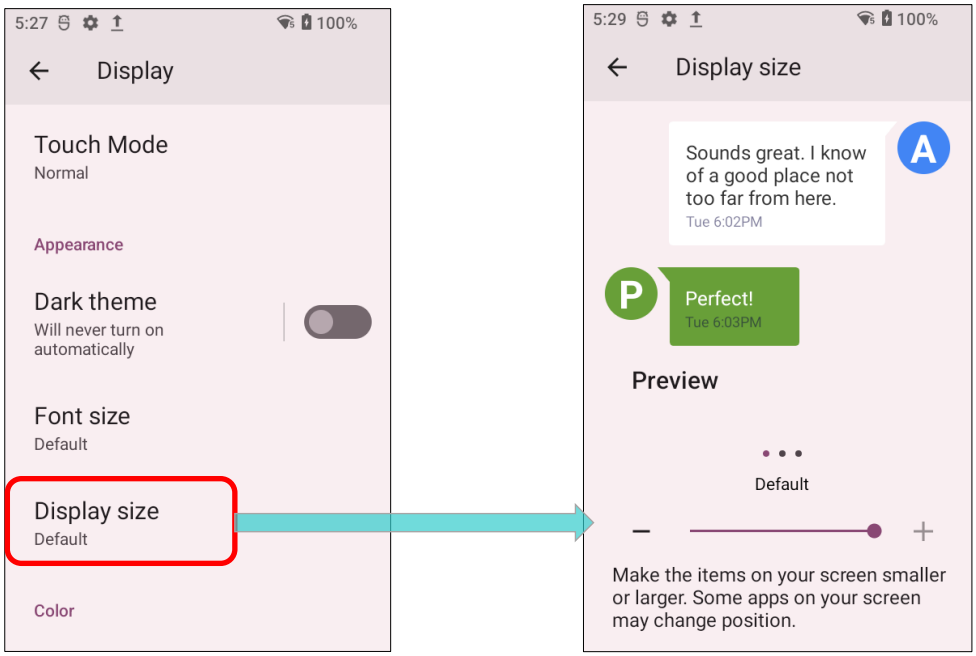
Go to **App Drawer (All Apps)** | **Settings** | **Display** | **Font size**.

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



Go to **App Drawer (All Apps)** | **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 (100%)
	Red, solid	Charging the mobile computer (0% to 95%)
	Red, blinking	Charging temperature error (lower than 0 ℃ or exceed 45℃)
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
System notification	White, blinking	New notification

Note:

For Scanner decode and Scanner beam LED to function, LED notification must be enabled in the app "Reader Configuration".

2.4.2. AUDIO

The speaker is utilized for playing sounds for Windows events, programs, and audio files. It can also be programmed for status feedback. In noisy environments, you may prefer connecting a headset, which is supported via the 3.5 mm DIA stereo earphone jack located on the upper right side of the device. Bluetooth headsets are also compatible with the mobile computer.

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

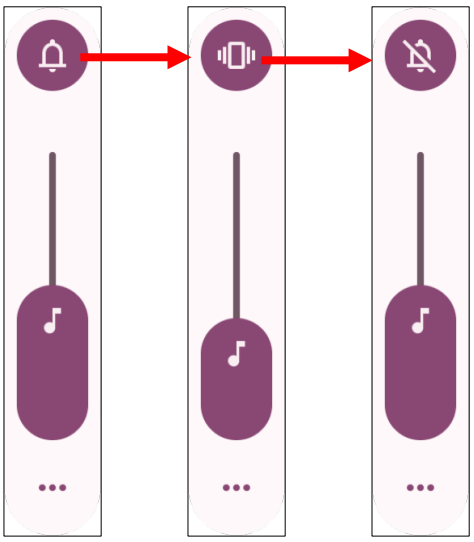
The mobile computer features an integrated vibrator that is programmable for tactile feedback, providing assistance in noisy environments.

You can also set the mobile computer to vibrate only, muting all system sounds and replacing them by the vibrator.

QUICK SOUND MENU

Press down **Volume Up** or **Volume Down** key to open quick sound menu on any screen.

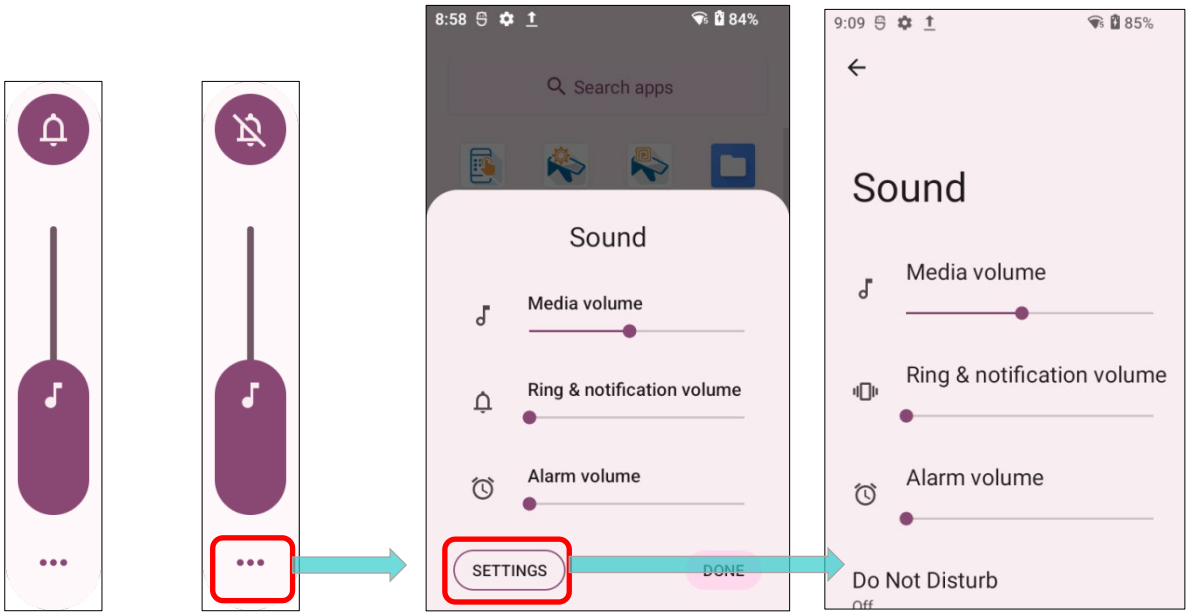
Tap on the icon , or to switch between ringing, vibration, and mute.



Item	Description
	Calls and notifications will ring.
	Calls and notifications will vibrate.
	Calls and notifications will be muted.

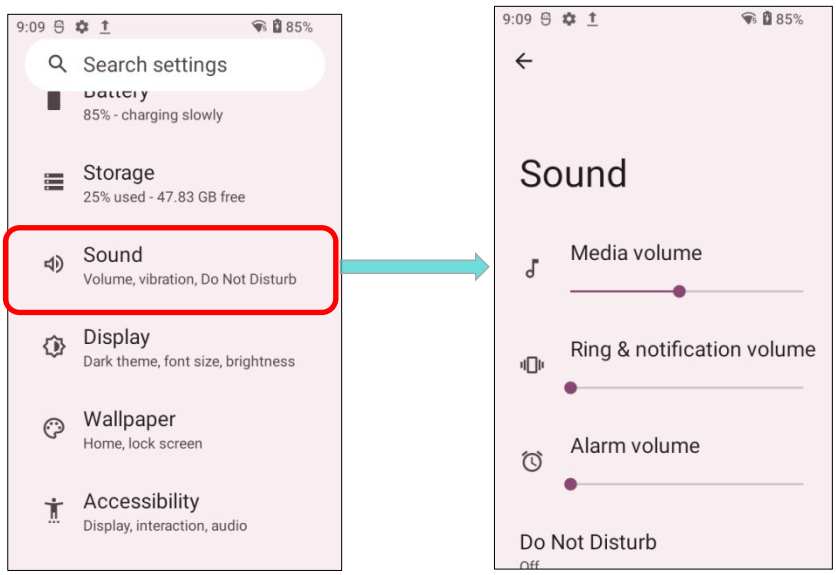
The media volume can be adjusted by pressing the **Volume Up** or **Volume Down** key, or dragging the slider on quick sound menu.

Tap on the settings icon  will open the pop-up volume panel; tap on "**SETTINGS**" will directly enter the Sound Settings page.



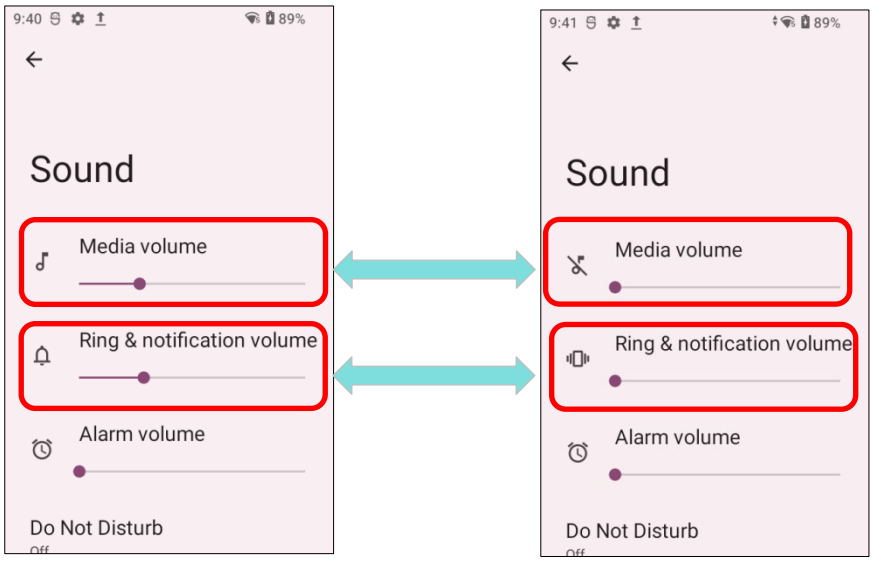
SOUND SETTINGS

Go to **App Drawer (All Apps)** | **Settings** | **Sound** for more sound settings.

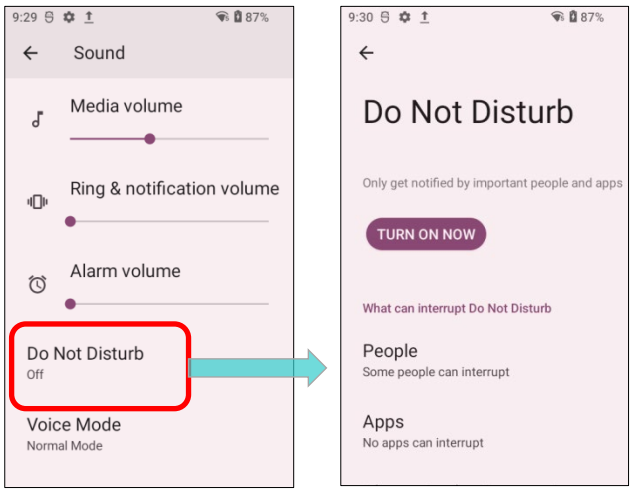


On "**Sound**" settings page, you can:

- Adjust the volume for **Media** , **Ring and notification** , and **Alarm** by dragging the sliders.
- The Media icon turns to if Media volume is off.
- The Ring and notification icon turns from to to indicate the volume is off and vibration is on.



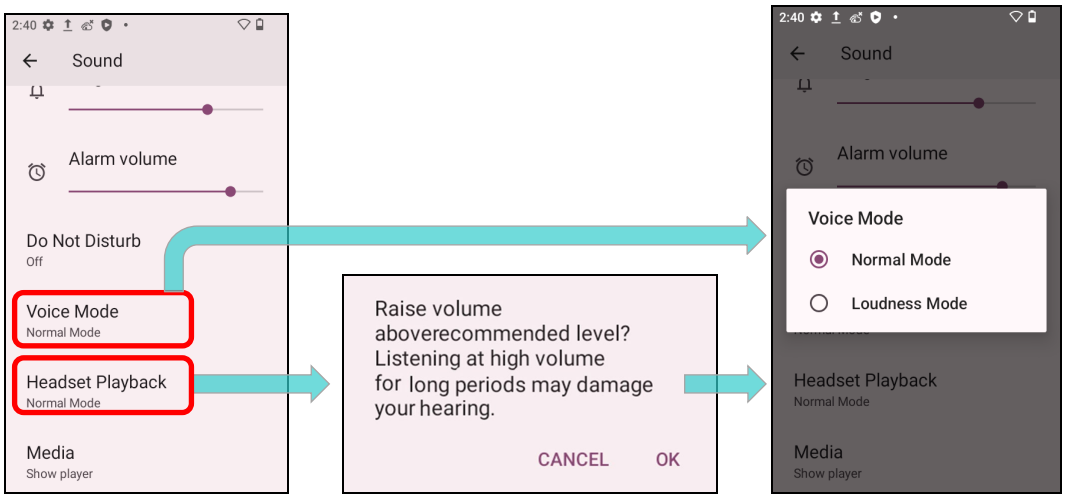
- Enter "**Do Not Distrub**" for its detailed settings.



- Enter "**Voice Mode**" or "**Headset Playback**" to adjust volume in a loud environment.

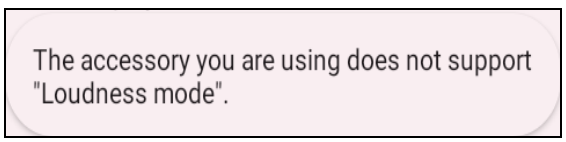
  1) Tap on "**Loudness Mode**" under **Voice Mode** to enlarge the volume of **headset microphone** for at leas 3dB.

  2) Tap on "**Loudness Mode**" under **Headset Playback** to enlarge the volume of **headset earphone** for at least 3dB. A causion window pops up when you select **Loudness Mode**.

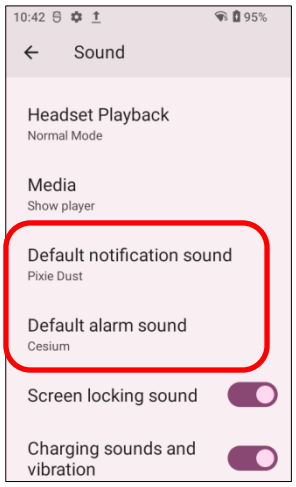


Note:

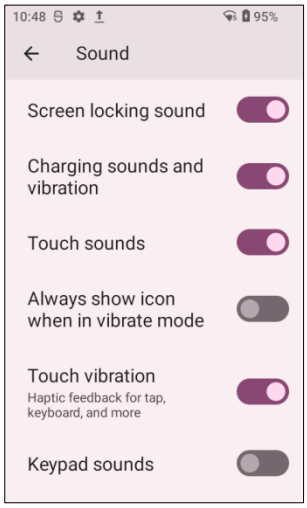
You can enable 'Loudness Mode' only when a headset is connected; otherwise, you will receive an incompatibility notification, as shown below.



- Tap "**Default notification soud**" and "**Default alarm sound**" to select your preferred sound.



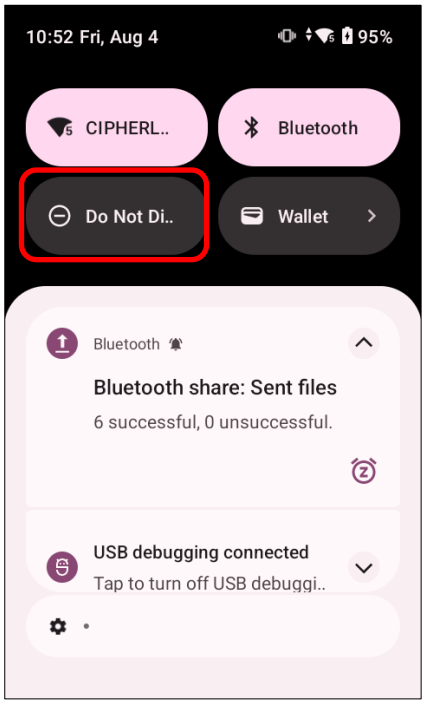
- Swipe down the Sound Setting page to turn on or off the switches of other items related to sounds and vibrations.

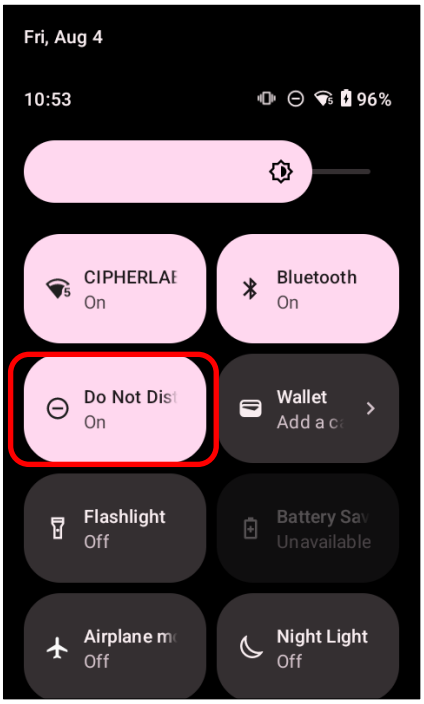


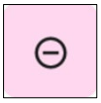
DISABLE UNWANTED NOTIFICATIONS WITH "DO NOT DISTURB"

You can temporarily disable specific notifications (vibration or sound) using "**Do Not Disturb**" in Quick Settings Panel / Quick Setting Menu. Additionally, you can schedule the duration of this disabled status, allowing notifications to automatically switch to the enabled state according to your arrangement.

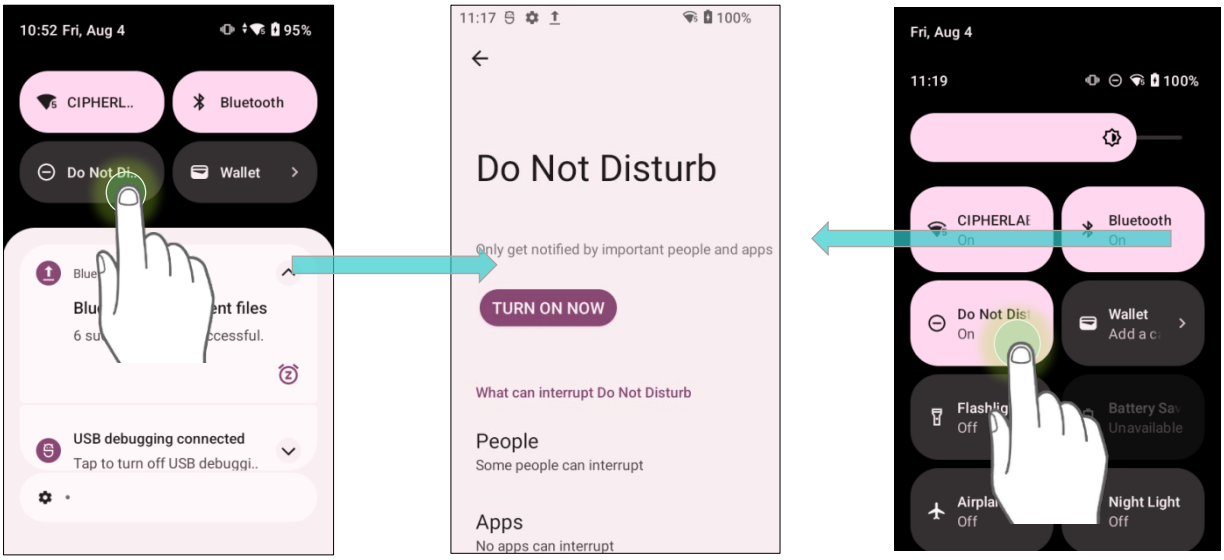
Swipe down from the status bar, tap "**Do not disturb**" in the **Quick Settings Panel** or **Quick Settings Menu** to enable the feature and make adjustments.





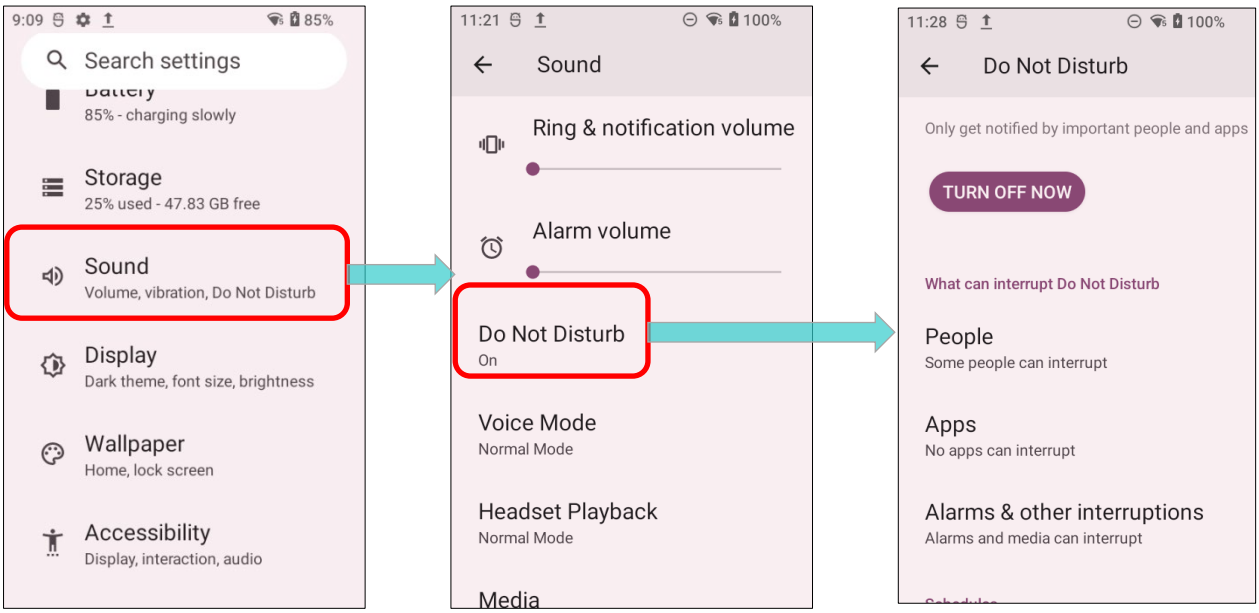
Icon	Description
	DND mode is **OFF**.
	DND mode is **ON**.

You can enter "**Do Not Disturb**" page for further settings by long pressing the **Do Not Disturb** icon on **Quick Settings Panel** or **Quick Settings Menu**.



OR

Go to [App Drawer (All Apps)] | **Settings** | **Sound** | **Do Not Disturb**

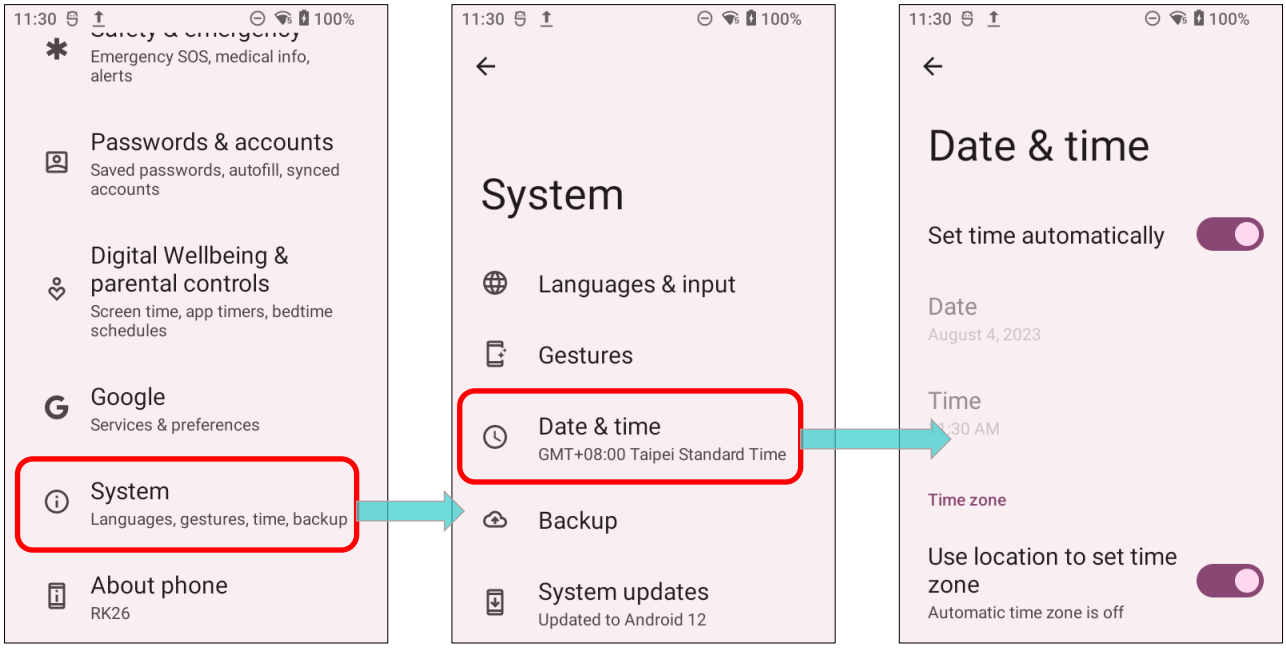


2.5. DATE AND TIME

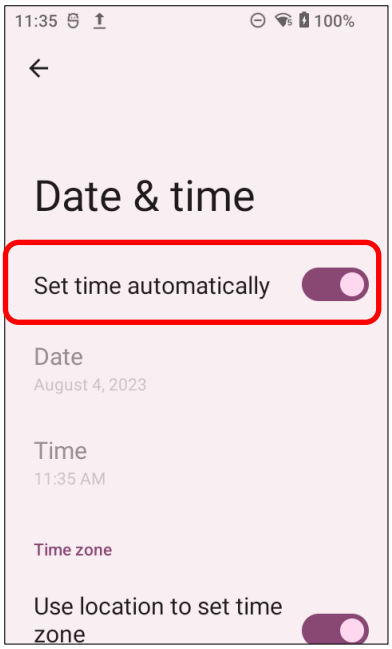
By default, the mobile computer automatically synchronizes the date and time to the WWAN network (if connected).

To set the date and time manually:

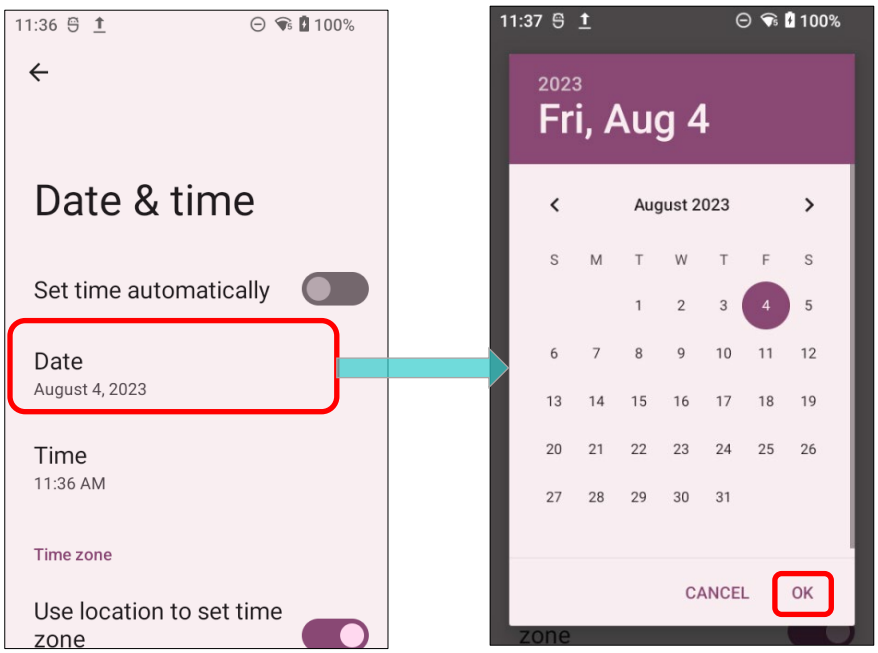
1) Go to App Drawer (All Apps) | **Settings** | **System** | **Date & time**



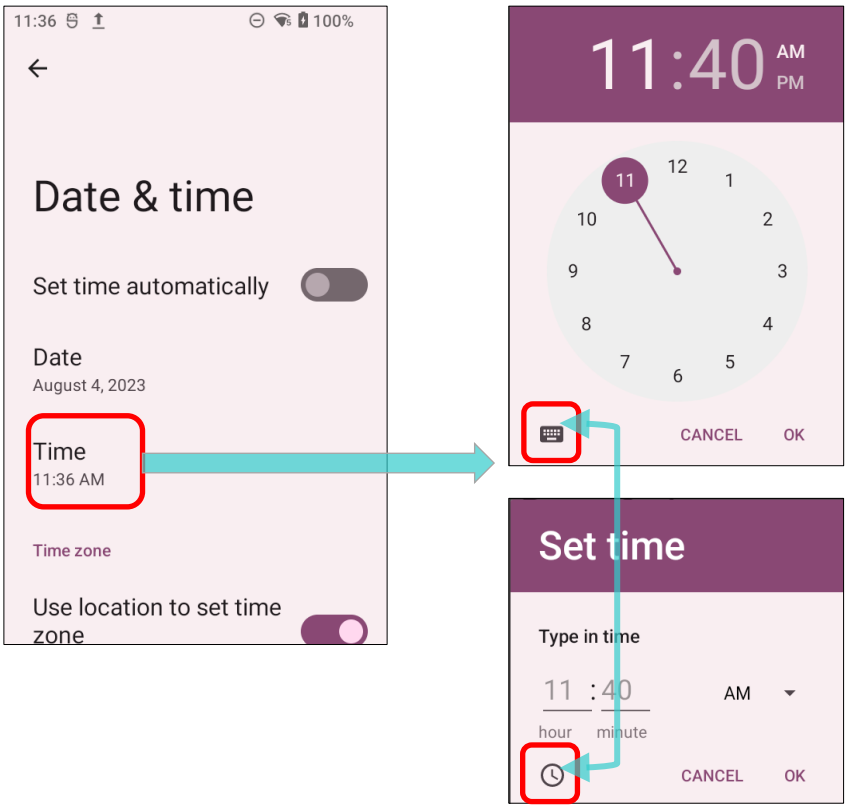
2) Tap to turn off "**Set time automatically**" to disable using network-provided time.



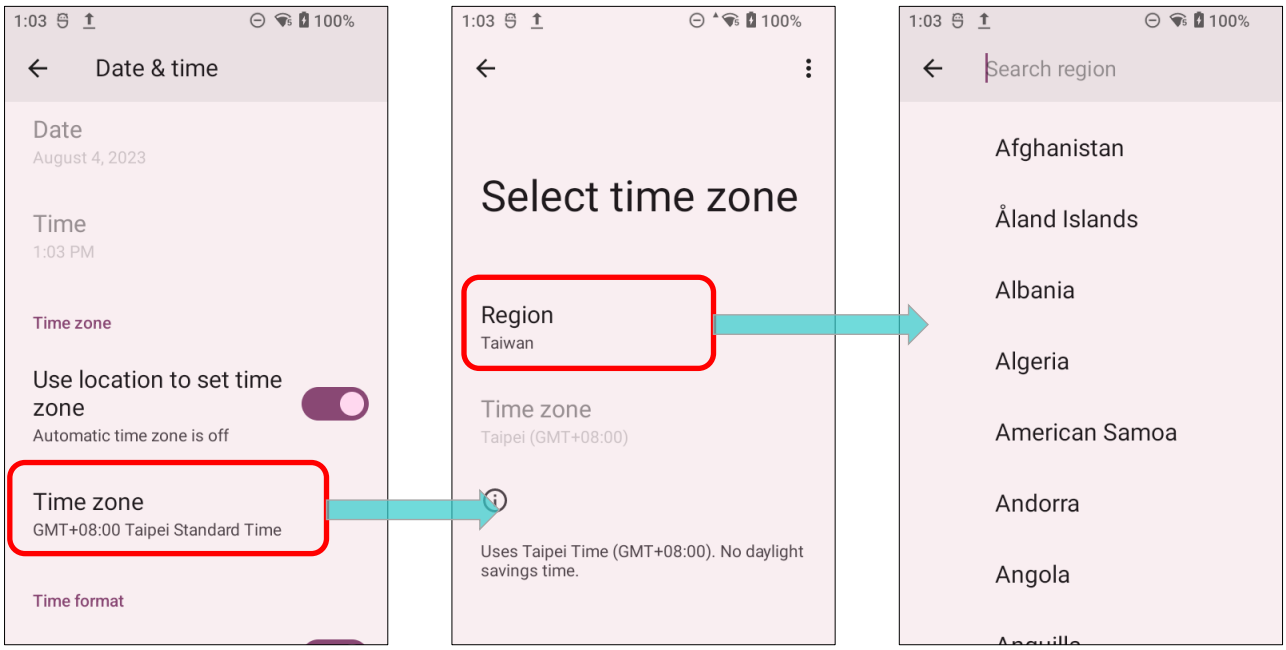
3) Disable "**Set time zone automatically**" and then tap "**Date**" to select the correct month, date and year. Tap "**OK**" to save.

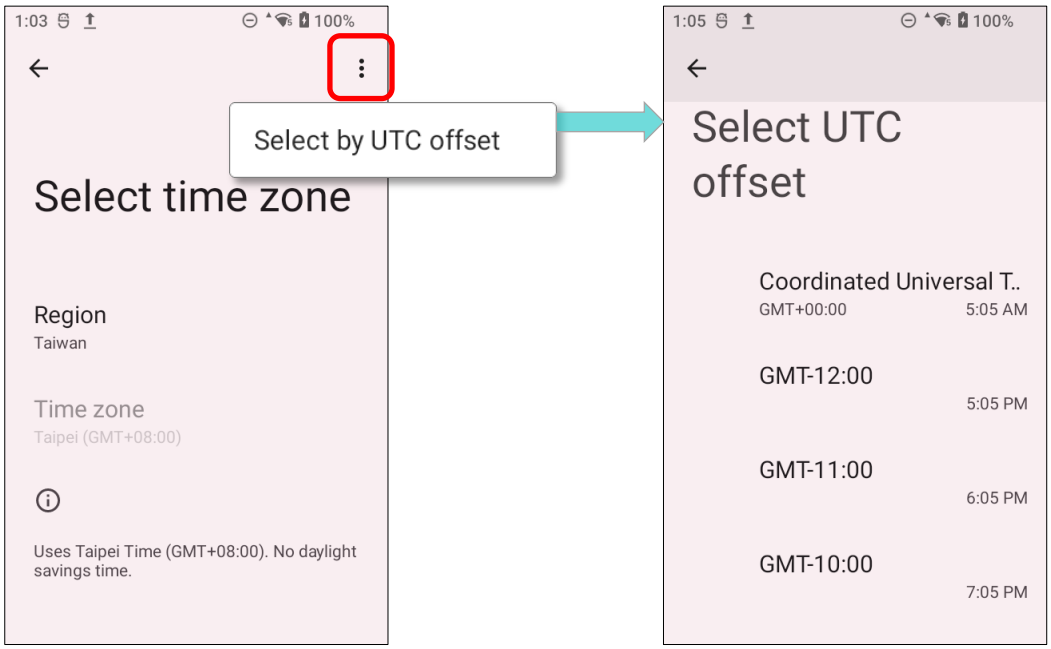


4) Disable "**Set time zone automatically**" and then tap "**Time**" to set the correct time. Tap "**OK**" to save.

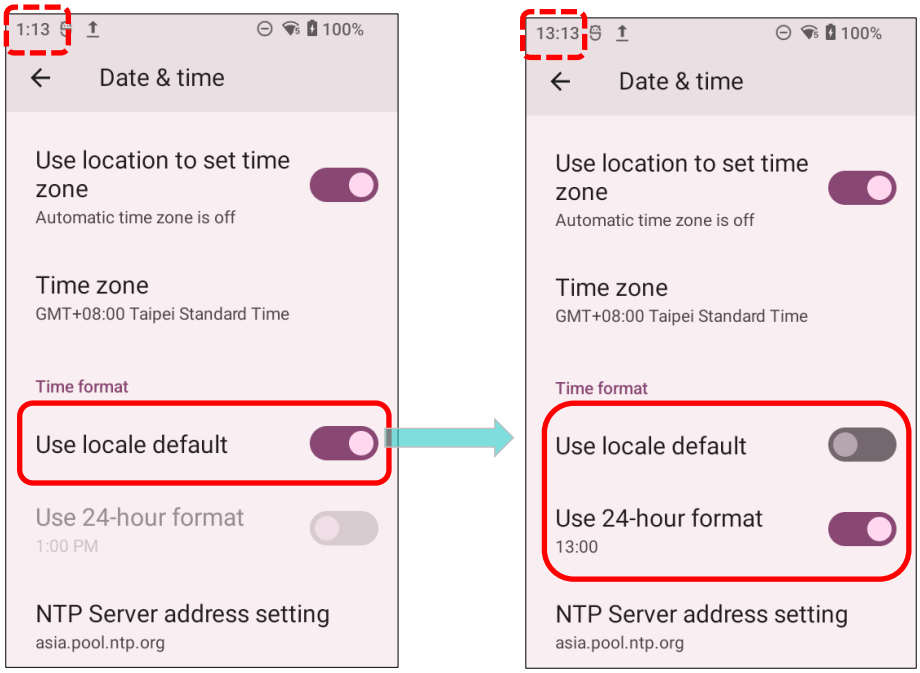


5) Tap "**Time zone"** to select the correct time zone by "**Region**" or by "**UTC offset**".

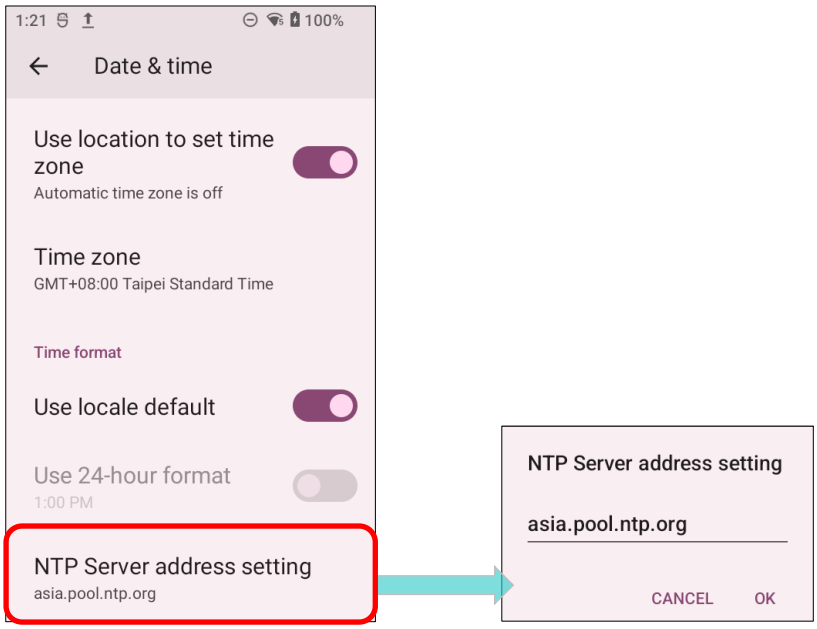




6) Disable "**Use locale default**" and tap "**Use 24-hour format**" to switch on or off to change the displayed time.

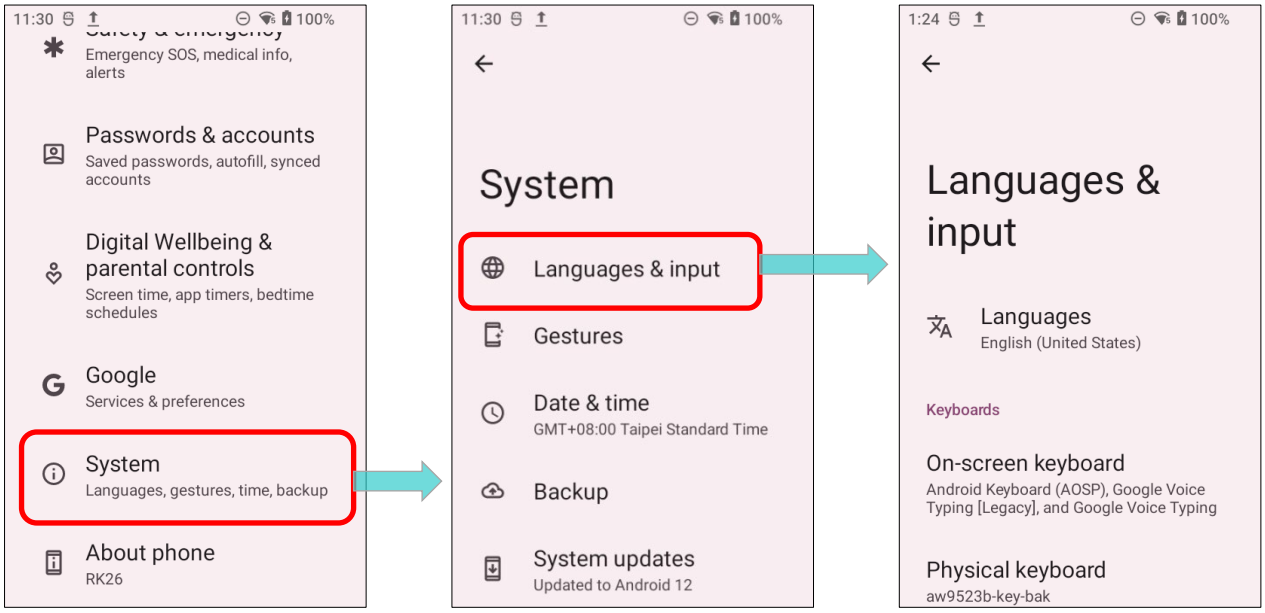


7) Tap "**NTP Server address setting**" to input NTP server address and tap "**OK**" to save.



2.6. LANGUAGE & KEYBOARD INPUT

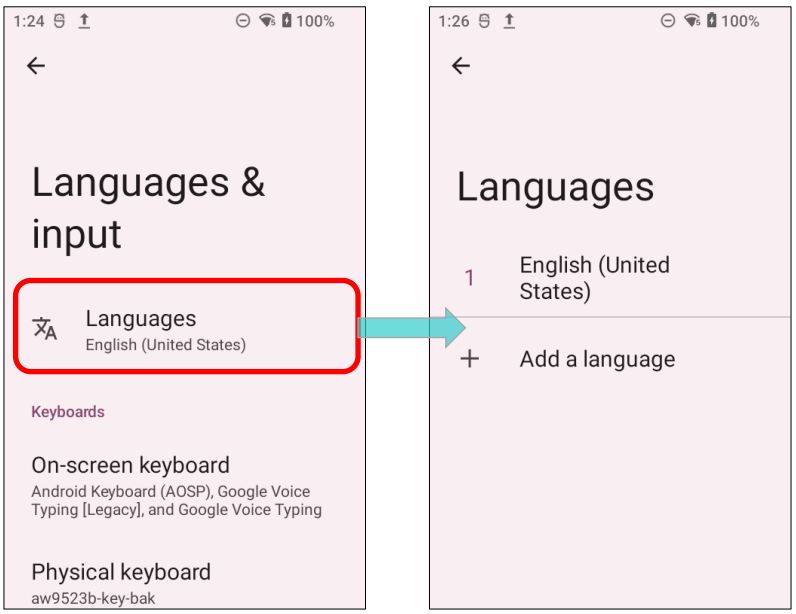
Tap App Drawer (All Apps) | **Settings** | **System** | **Language & input** to change the system language, default keyboard type, and configure keyboard input and speech settings.



2.6.1. CHANGE DISPLAY LANGUAGE

To change display language:

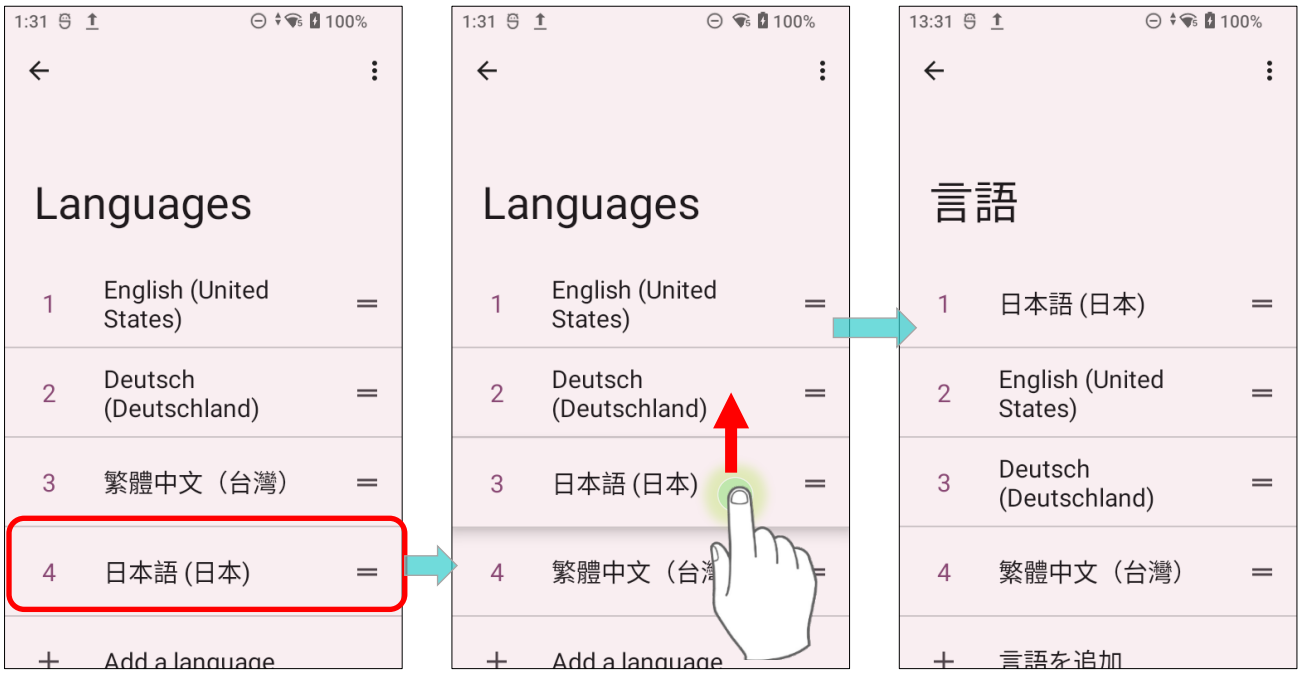
1) On Language & input scree, tap on "**Language**" to get into "**Language preference**" page.



2) Click "**Add a language**" to select your desired system language.



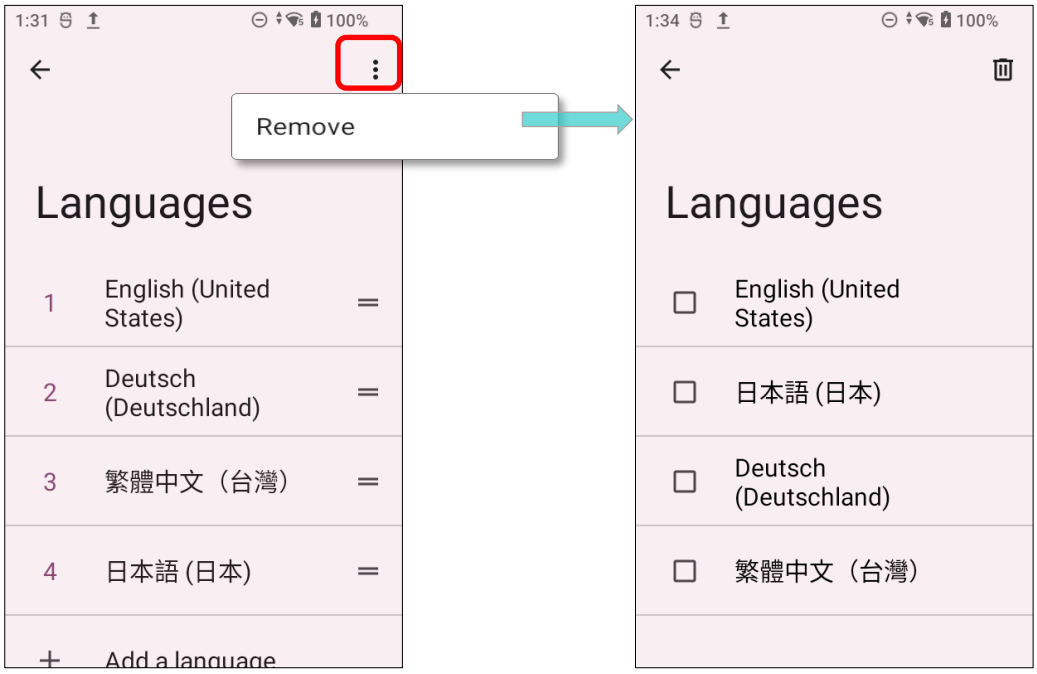
3) Press and hold your desired system language to change its sorting order to the 1st by dragging. Once it is released, the new language setting will immediately be applied.



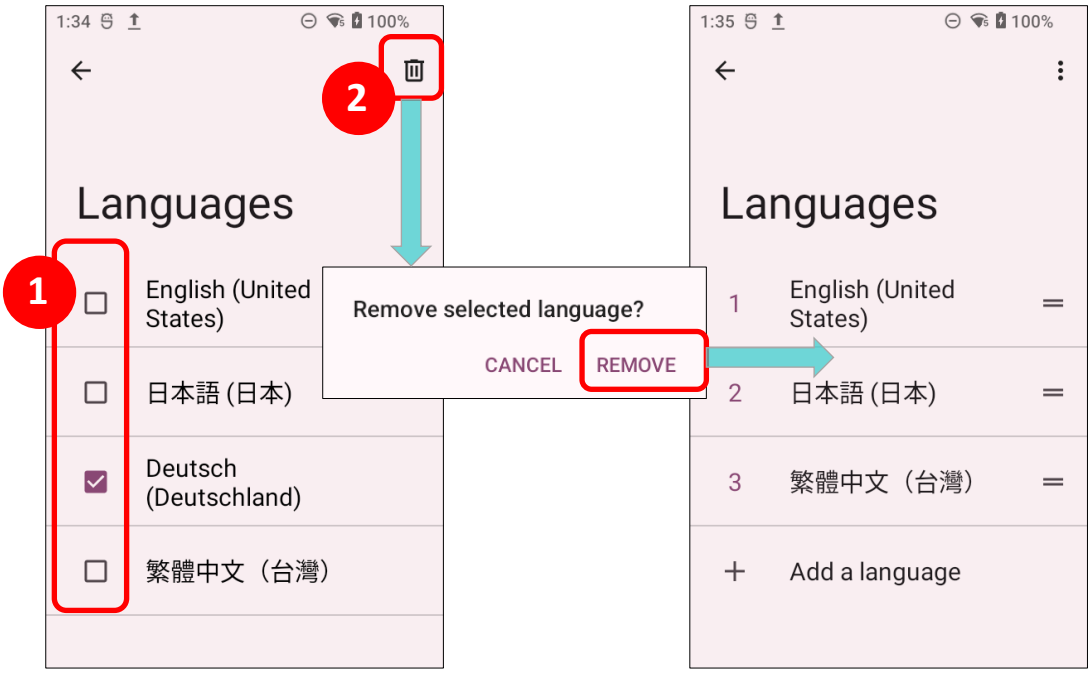
DELETE LANGUAGE

To delete language(s):

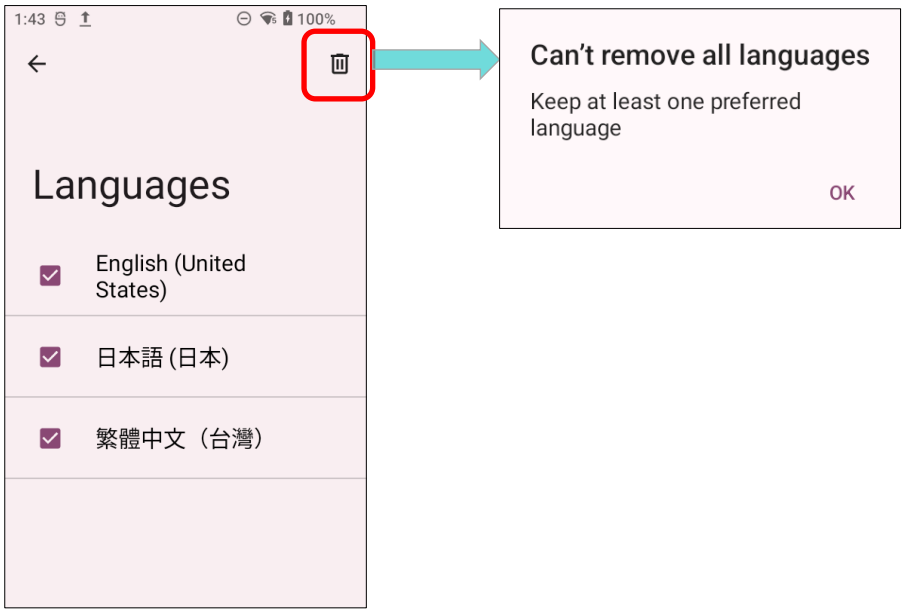
1) Tap more button ⋮ in the upper right corner and tap "**Remove**" option.



2) Select the language to delete.



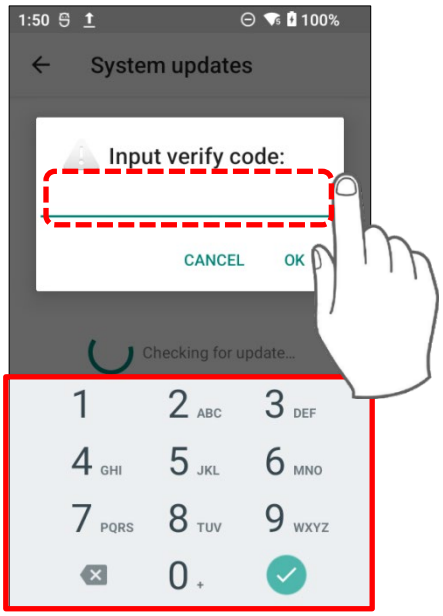
Please note that you have to leave at least one language on the list.



2.6.2. ON-SCREEN KEYBOARD

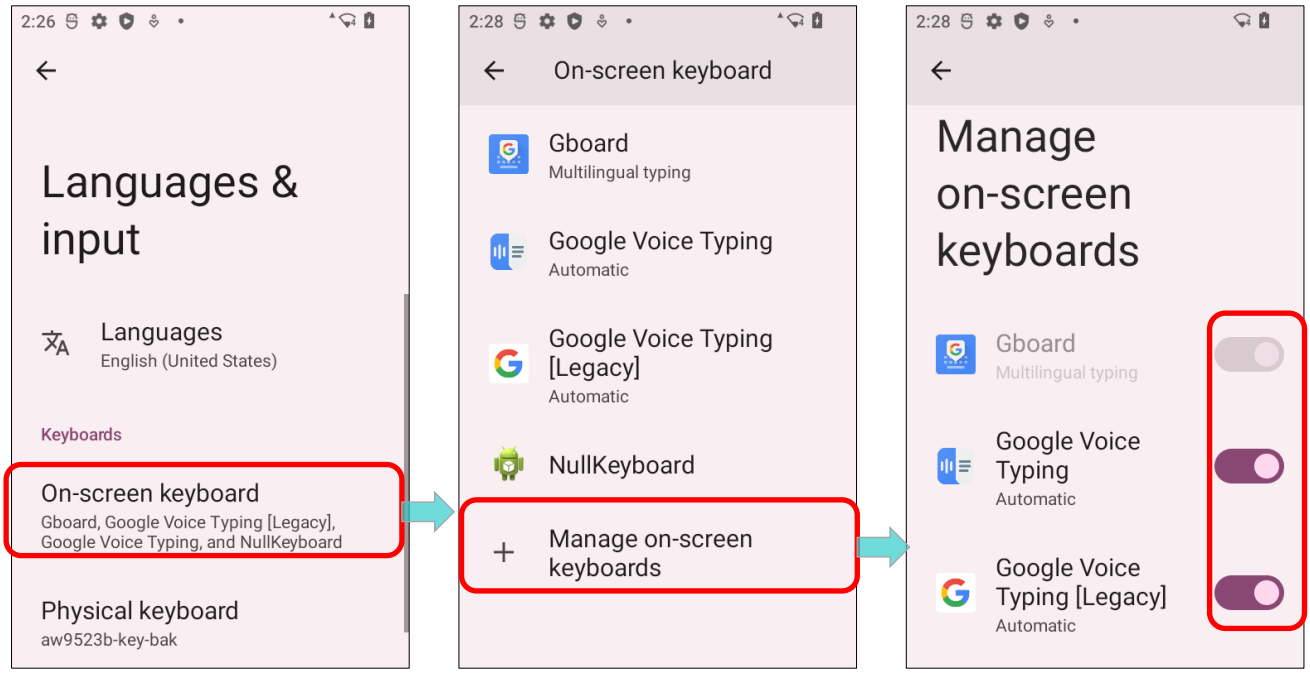
Tap a text input field to automatically open an on-screen keyboard. The virtual keyboard will vary depending on the data type (text or numbers) this field requires.





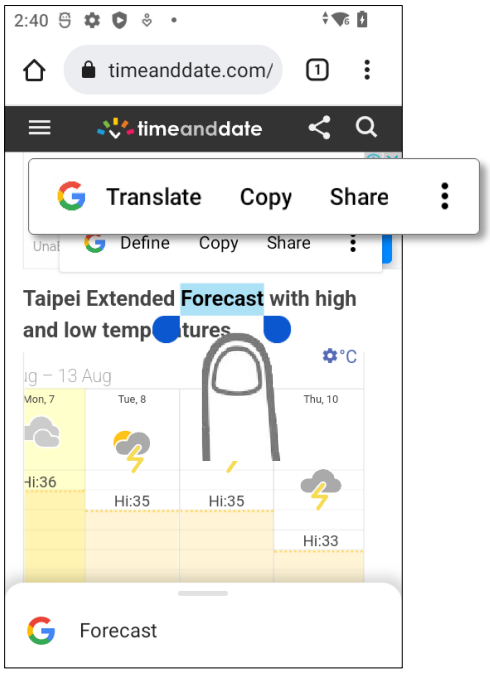
SELECT KEYBOARD (INPUT METHOD)

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



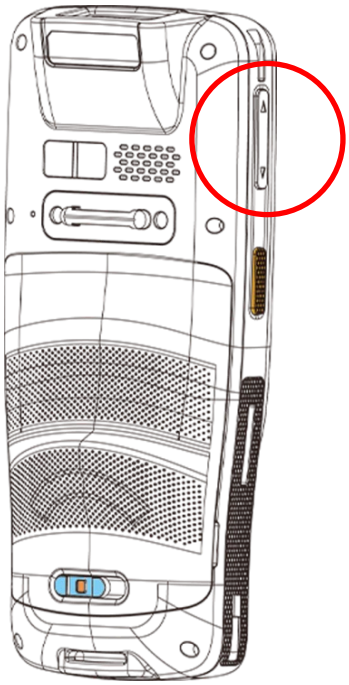
EDIT TEXT

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.



2.7. SOUND AND VOLUME

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



2.8. DATA CAPTURE

2.8.1. 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.

2.8.2. DIGITAL CAMERA

An integrated 16 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

CHAPTER3. PHYSICAL KEYPAD

This chapter introduces the physical keypad of the RK26 mobile computer, which includes both a 28-key model and a 25-key model. The physical keypad receives supplementary backlight along with the screen and supports multi-key operations, allowing for simultaneous hits of two keys. It is capable of entering numbers, letters, symbols, and punctuation marks.

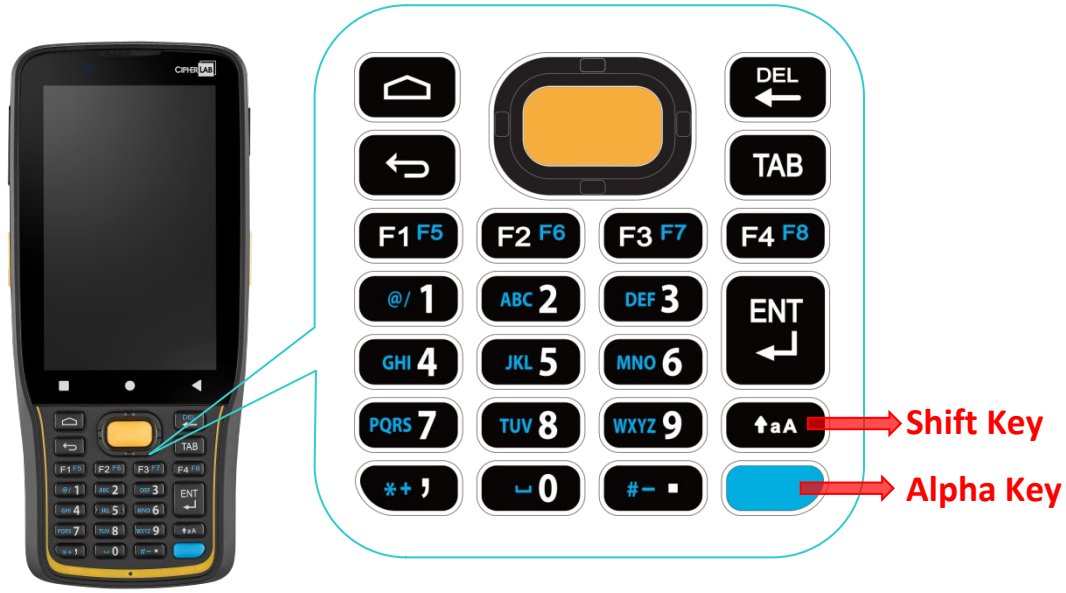
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3.7.Keypad Lock 122
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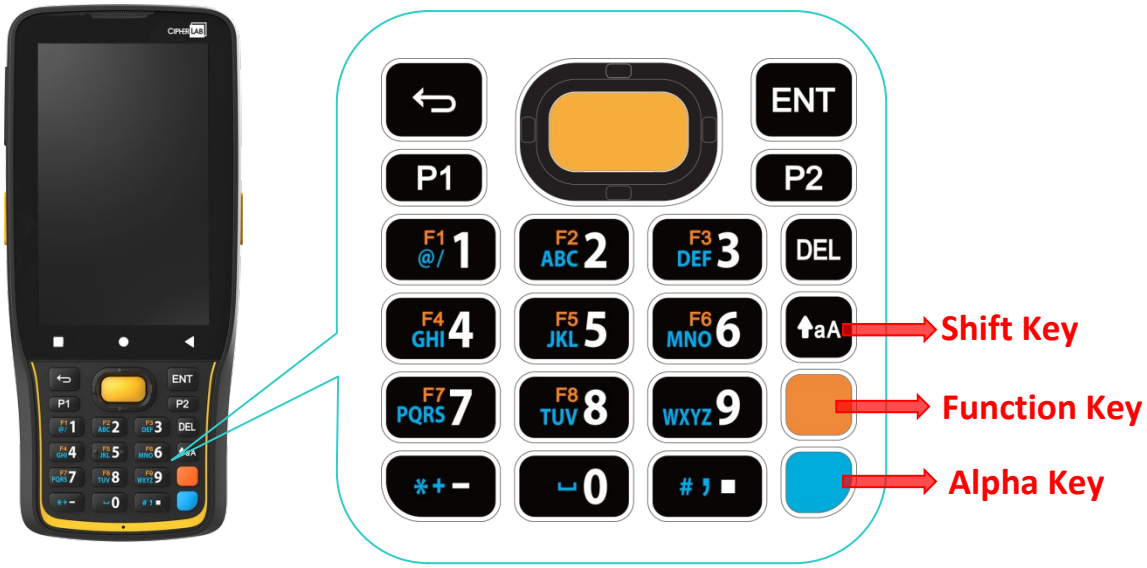
3.1. OVERVIEW

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.

28-KEY MODEL



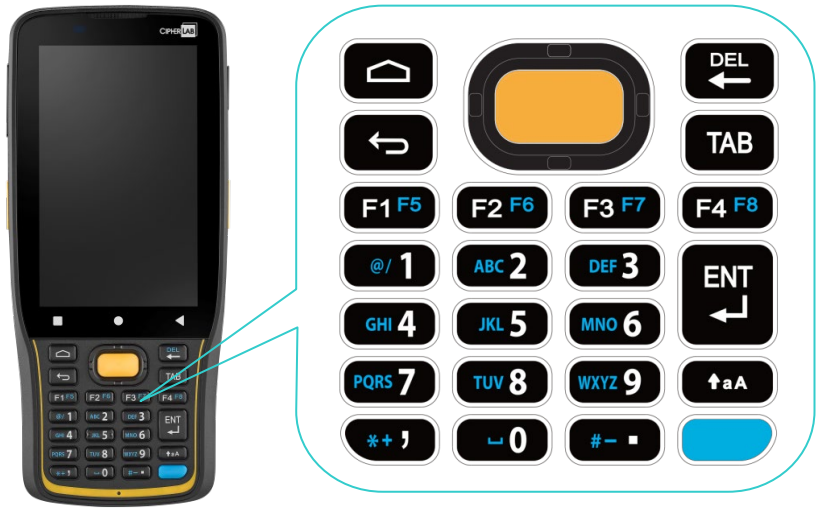
25-KEY MODEL



3.2. BASIC KEY

Basic Keys deliver the following functions:

3.2.1. 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.

3.2.2. BASIC KEY OF 25-KEY MODEL

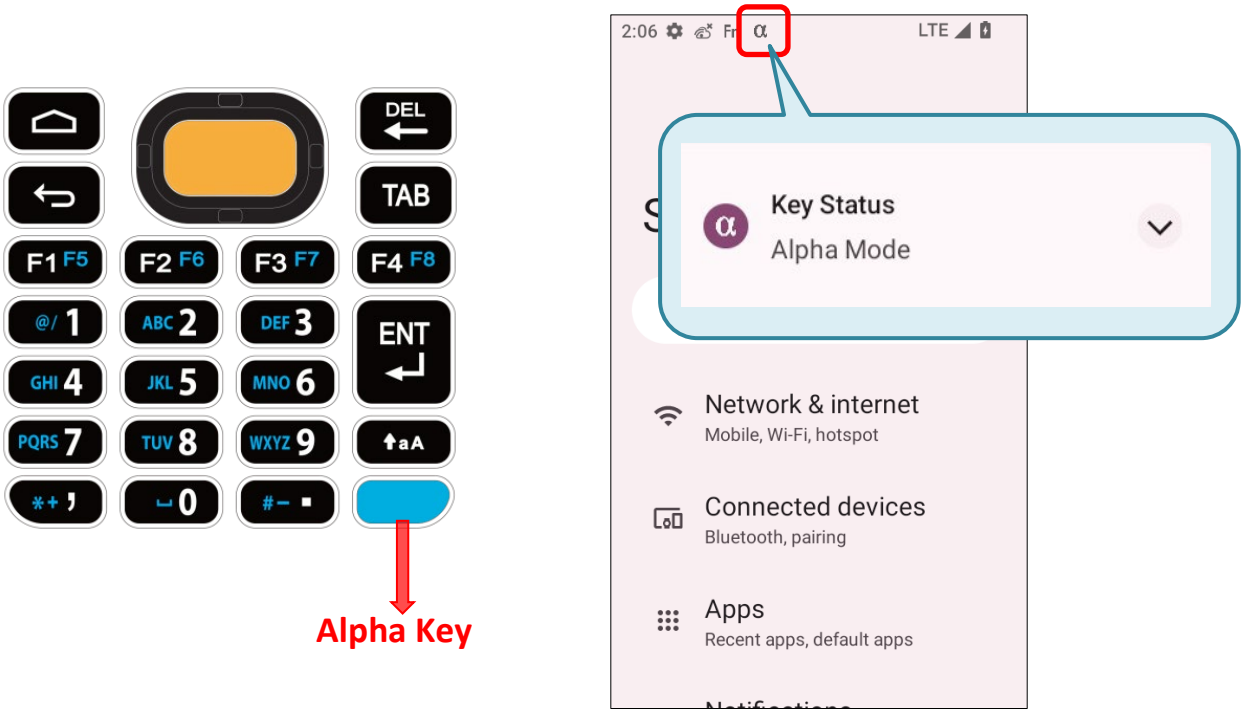


Key		Description
Scan		Press the scan key to read a barcode in place.
Arrows		The arrow keys are circled around the center scan key. These can be used to move the cursor up, down, left or right during text input, or move between items in certain applications.
Back		Returns to the previous screen or closes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

3.3. ALPHA KEY

3.3.1. 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, an icon α 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

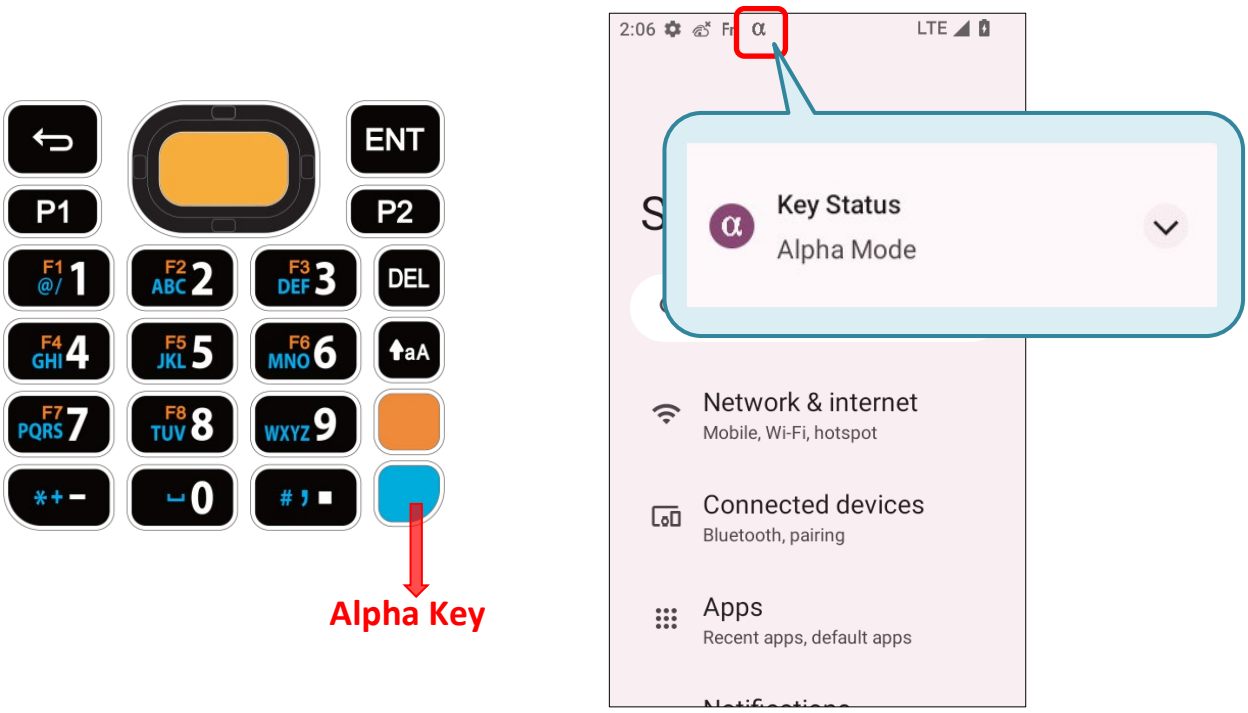


Note:

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.

3.3.2. 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 icon α 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:

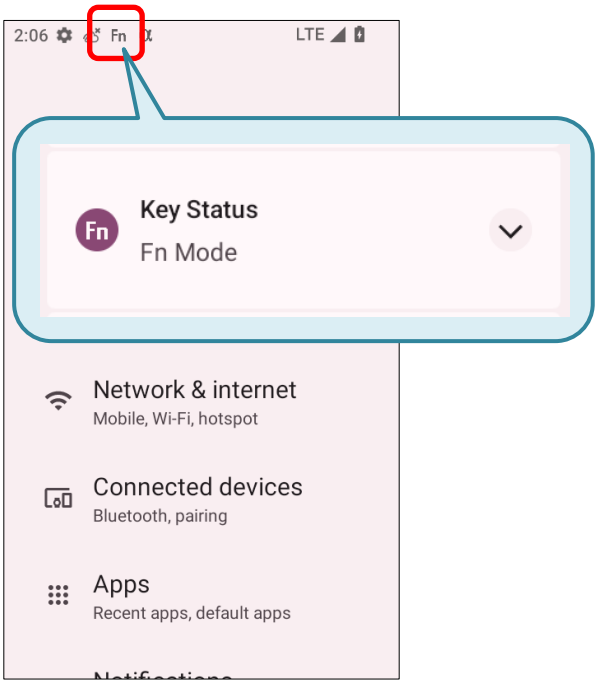
Alpha mode can coexist with Shift mode & Function Mode. When both Shift mode and Alpha Mode are active, the input letters will be uppercase. Please refer to Key Functions in Different Modes for details.

3.4. 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, an icon Fn shows up in the status bar to indicate that **Function Mode** is on:



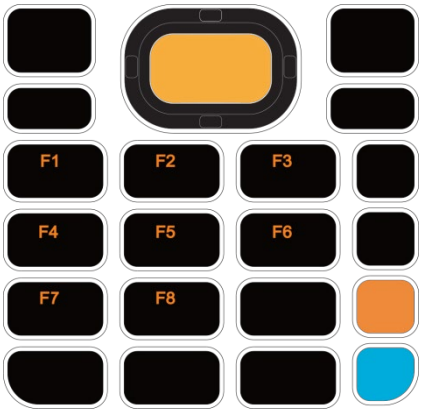


With Function Mode on, you can perform various functions by pressing buttons engraved in orange (refer to Key Functions in Different Modes for details). Note that keypad will instantly switch back from **Function Mode** to **Default Input Mode** upon pressing any button.

- Default Input Mode



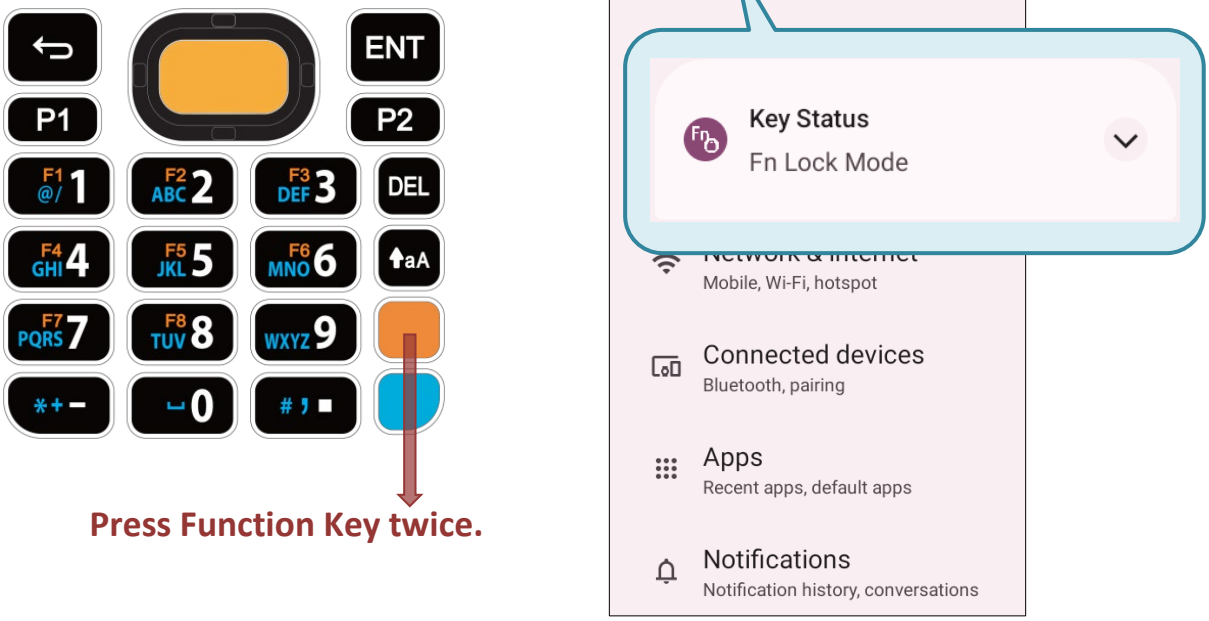
- Function Mode



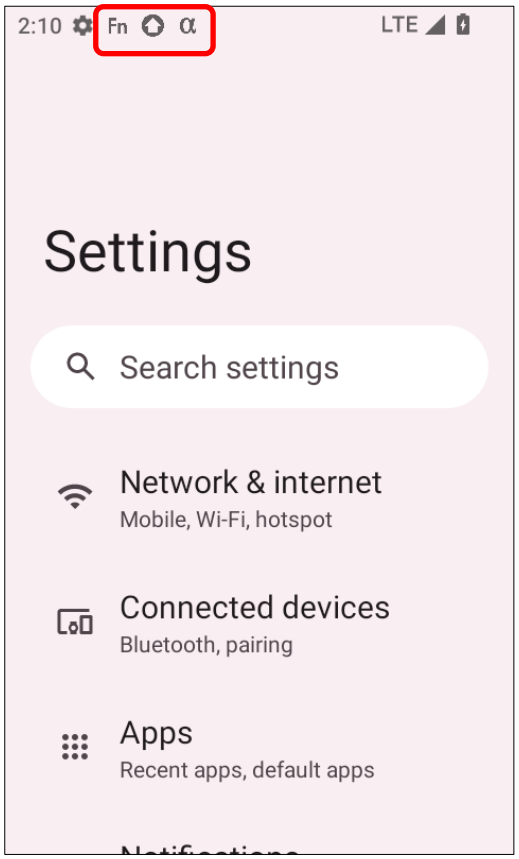
Note:

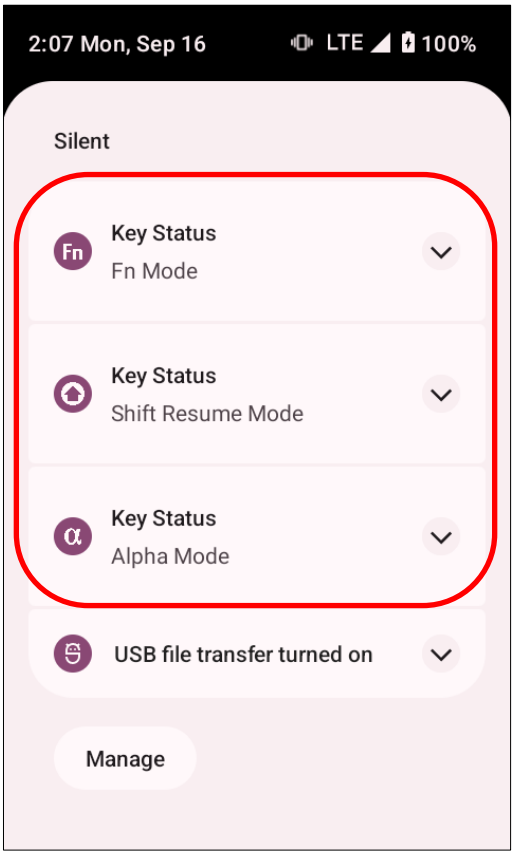
Function mode can coexist with Shift mode & Alpha Mode. Please refer to **Key Functions in Different Modes** for details.

Press **Function key** twice, and the keypad will enter **Fn Lock Mode** (**Function Lock Mode**) with an icon appears in the status bar. The keypad stays in **Function Lock Mode** till the **Function key** is pressed again.



In **Function Lock Mode**, you can still enable **Alpha mode** and **Shift mode** if it is needed. Please refer to **Key Functions in Different Modes** for details.



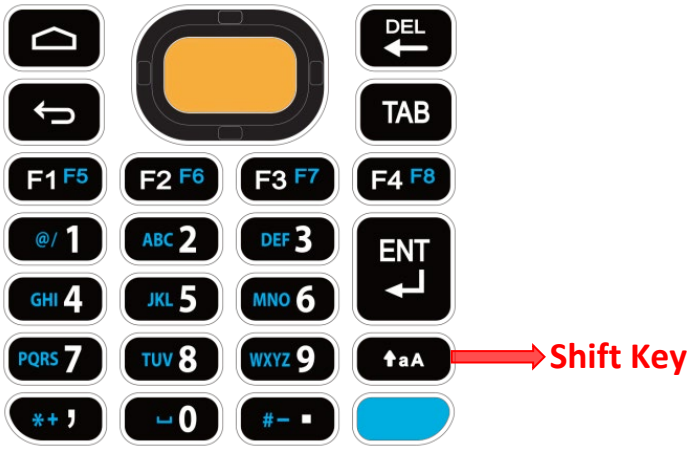


3.5. SHIFT KEYS

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, with the exception of entering **Keypad Lock Mode** by pressing the **Backspace key** for the **28-key Model** or the **Delete key** for the **25-key Model**.

- 28-key Model Keypad

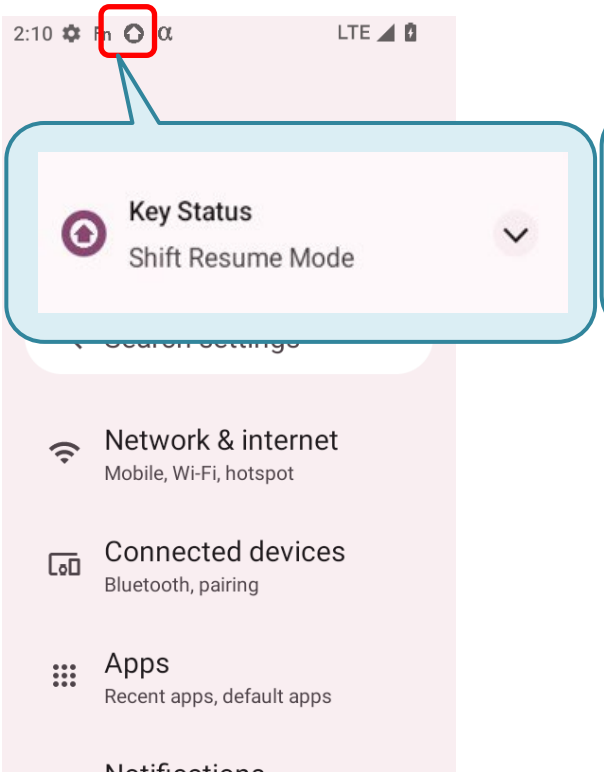


- 25-key Model Keypad

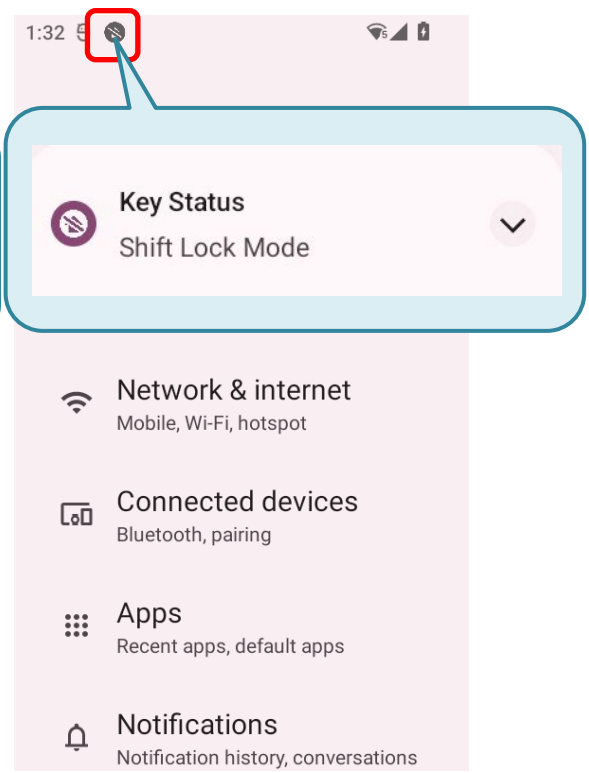


When the Shift key is pressed twice, the keypad will enter **Shift Lock Mode** with an icon appears in the status bar, and the keypad stays in Shift Lock Mode till the Shift key is pressed again.

- Shift Resume Mode



- Shift Lock Mode



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

3.6. KEY FUNCTIONS IN DIFFERENT MODES

3.6.1. FOR 28-KEY MODEL KEYPAD

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

3.6.2. FOR 25-KEY MODEL KEYPAD

Default Input Mode	Alpha Mode	Shift Mode	Function Mode
P1	N/A	N/A	N/A
P2	N/A	N/A	N/A
1	@/	! (exclamation mark)	F1
2	ABC	@ (at sign)	F2
3	DEF	# (pound)	F3
4	GHI	$ (currency symbol)	F4
5	JKL	% (percent)	F5
6	MNO	^ (caret)	F6
7	PQRS	& (ampersand)	F7
8	TUV	* (asterisk)	F8
9	WXYZ	((parentheses)	N/A
0	␣	) (parentheses)	0
-	*+	< (less than sign)	- (hyphen)
.	#,	> (more than sign)	. (period)
ENT	N/A	Return to the next line or start a new paragraph in text input field.	N/A

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

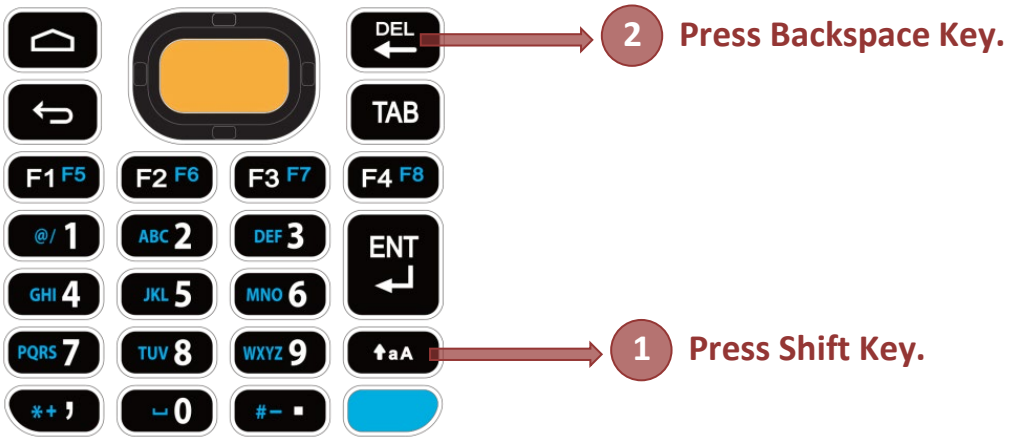
Note: If Alpha Mode and Function Mode are activated simultaneously, the output will follow the mode that was activated later.

3.7. KEYPAD LOCK

Keypad lock is for user to lock all keys on the keypad to prevent any accidental pressing of the keys.

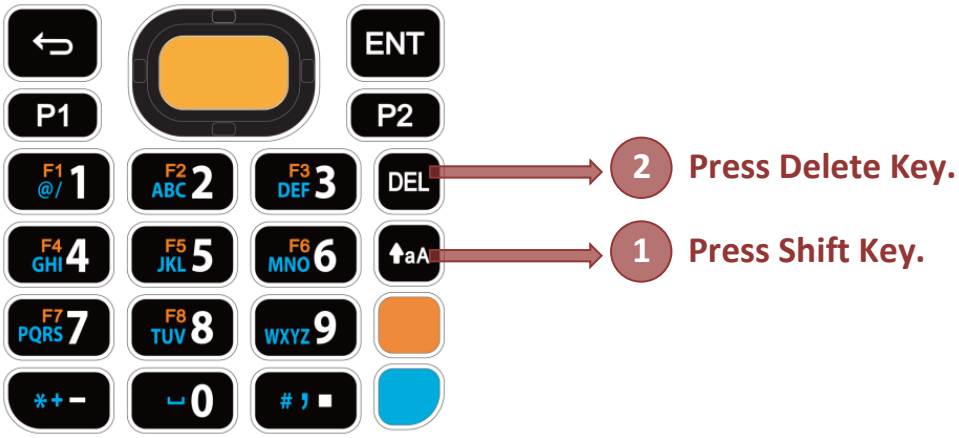
28-KEY MODEL

To lock the keypad of **28-Key Model**, please press **Shift key** and then **Backspace key**.



25-KEY MODEL

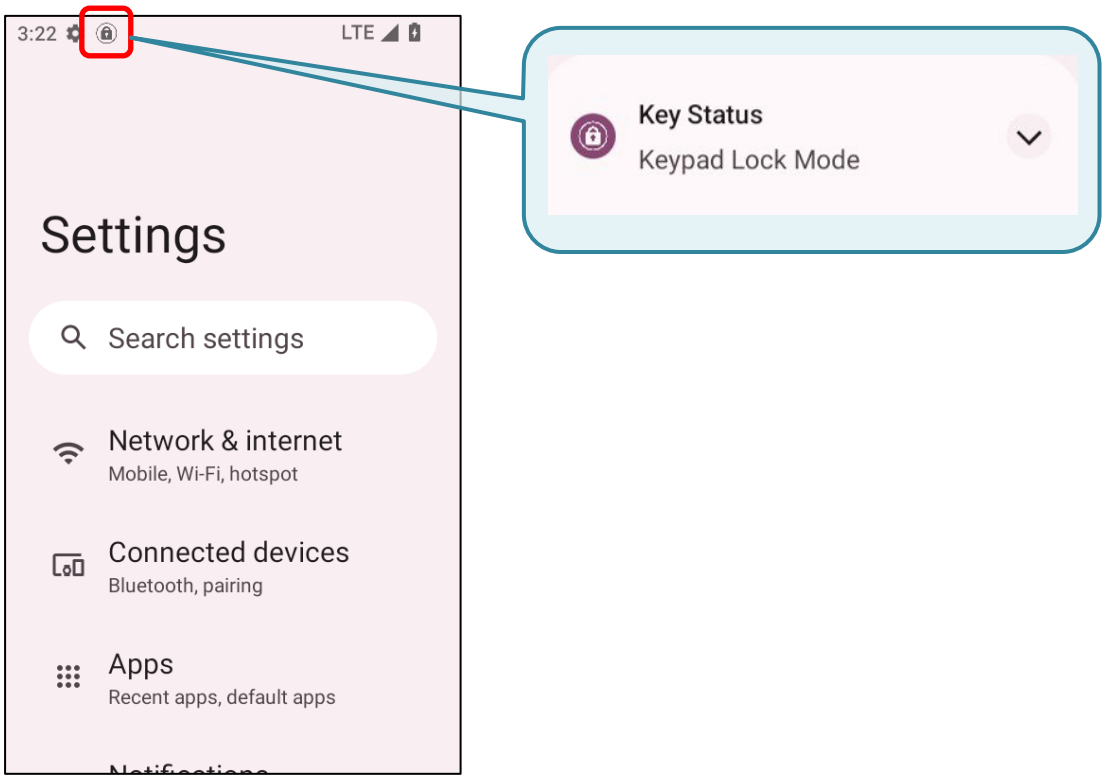
As to **25-Key Model**, the keypad lock mode can be triggered by pressing **Shift key** and **Delete key**.



Note:

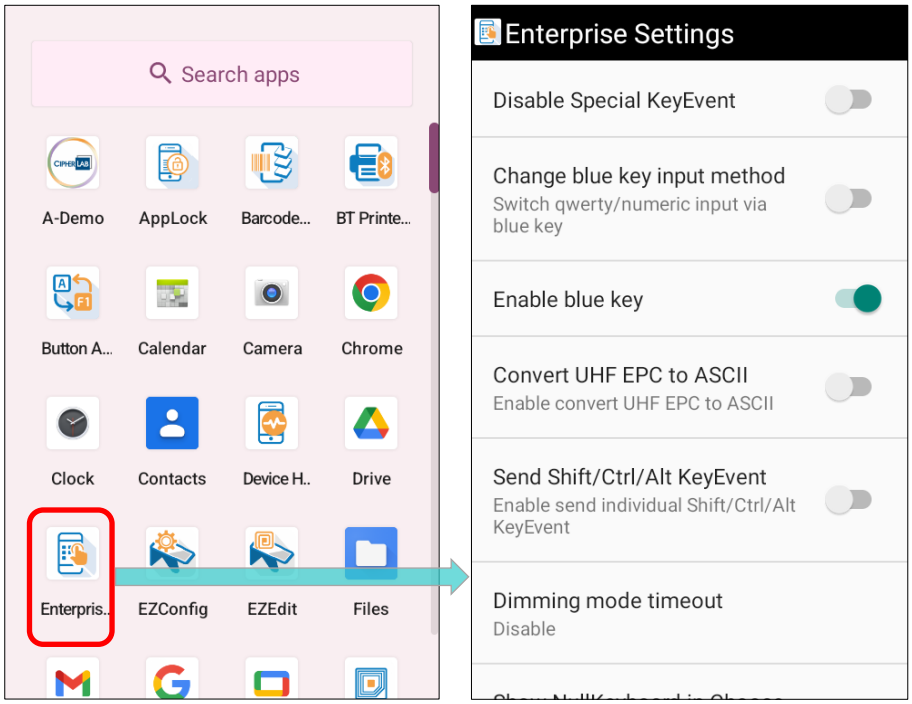
When Alpha Mode is on, the hot key combination (Shift + Backspace) would not work for 28-key Model, because Backspace key becomes "Delete" in Alpha Mode. For 25-key Model, the hot key combination (Shift + Delete) would not work.

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.



3.8. ENTERPRISE SETTINGS

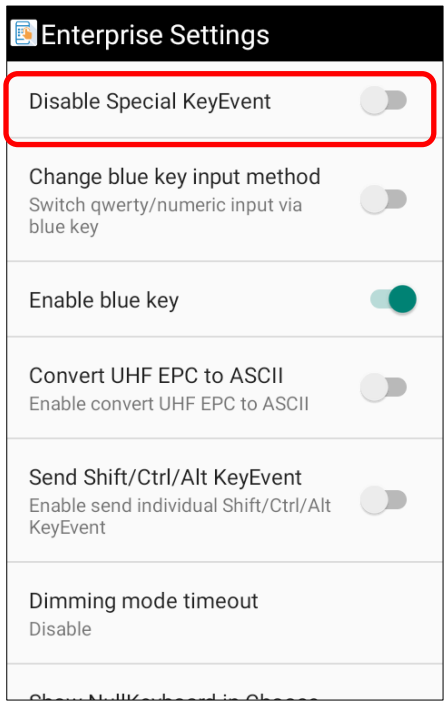
The app "**Enterprise Settings**" helps you to control the physical keypad. Go to **App Drawer (All Apps)** and tap on "**Enterprise Settings**" for the following functions:



3.8.1. DISABLE SPECIAL KEYEVENT

"**Disable Special KeyEvent**" is to disable the special keycode (which is not defined by Android) sent by pressing **Function Key**, **Alpha Key**, and **Trigger Keys**.

The default setting of "**Disable Special KeyEvent**" is off. Simply tap on the switch to turn it on.

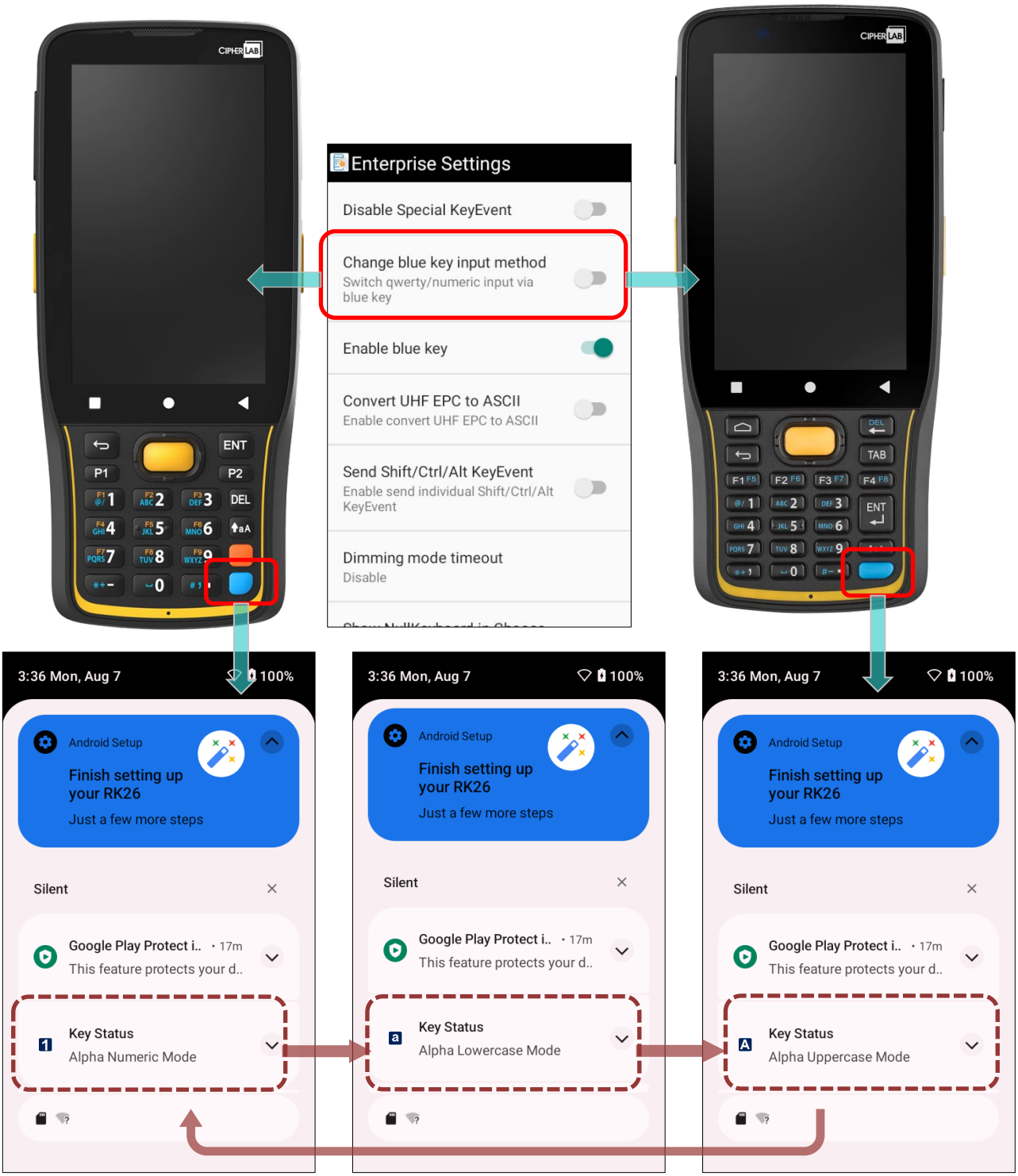


Note:

Turning on "Disable Special KeyEvent" will not affect barcode scanning by pressing trigger keys.

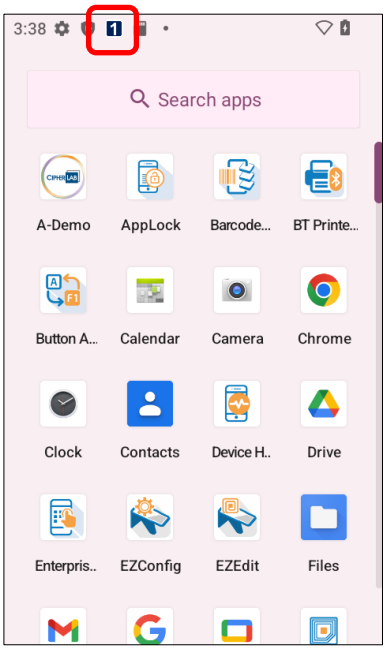
3.8.2. CHANGE BLUE KEY INPUT METHOD

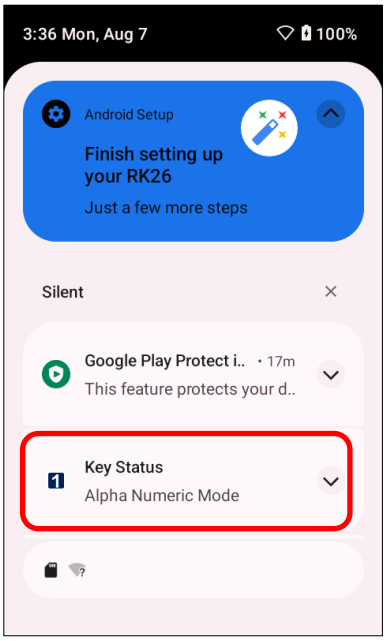
You can turn on "**Change blue key input method**" to change input mode of the physical keypad. By enabling this function, you can cycle through **Alpha Numeric Mode**, **Alpha Lowercase Mode**, and **Alpha Uppercase Mode** with simply pressing **Alpha Key** (the blue key).



ALPHA NUMERIC MODE

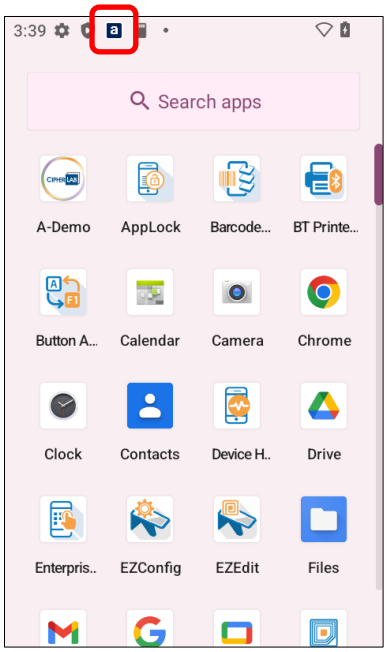
Once you turn on "**Change blue key input method**", the physical keypad changes to be numeric keypad immediately. An icon  shows up in the status bar to indicate **Alpha Numeric Mode** is on.

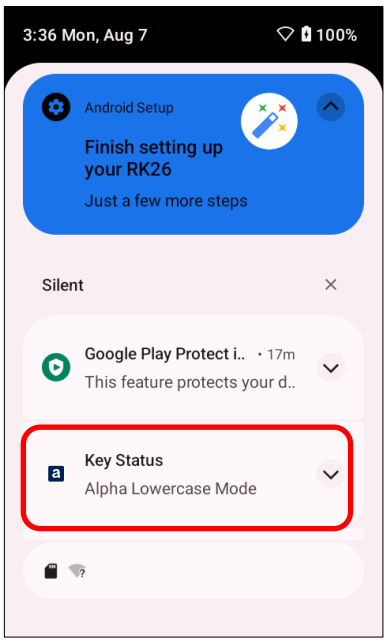




ALPHA LOWERCASE MODE

In **Alpha Numeric Mode**, press **Alpha Key** (the blue key) once, and the physical keypad will change to be lowercase keypad with an icon  appears in the status bar.

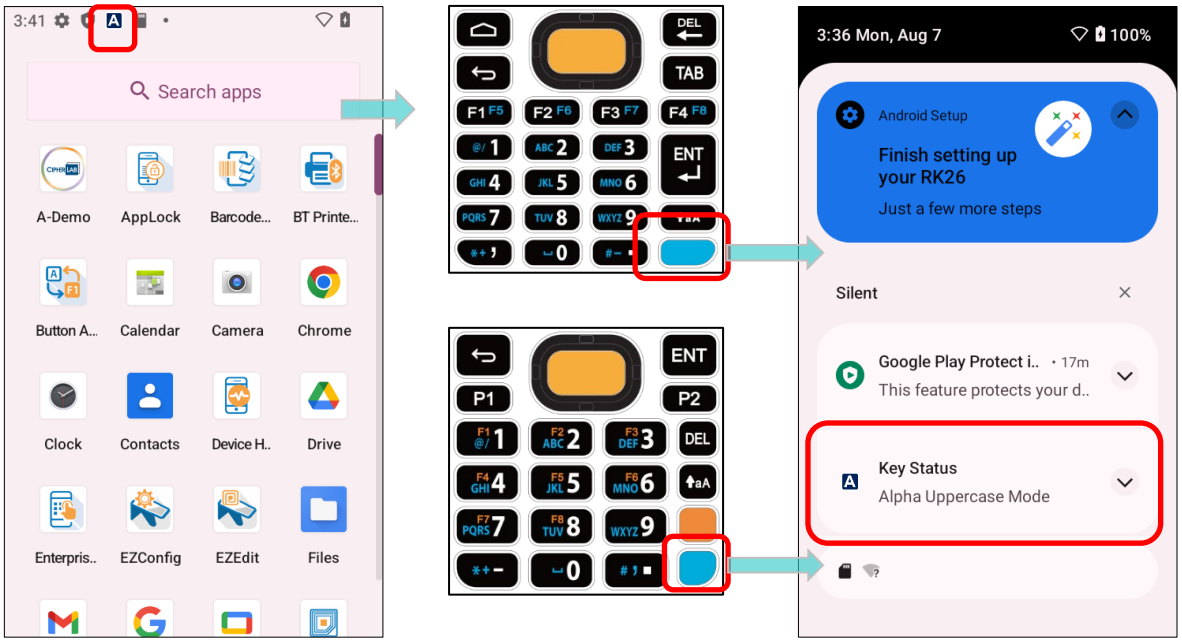




ALPHA UPPERCASE MODE

In **Alpha Numeric Mode**, press **Alpha Key** (the blue key) twice, or press **Alpha Key** (the blue key) once in **Alpha Lowercase Mode** to change the physical keypad into uppercase keypad with the **Alpha Uppercase Mode** icon shows up in the status bar.

Press **Alpha Key** (the blue key) again to switch to **Alpha Numeric Mode**.

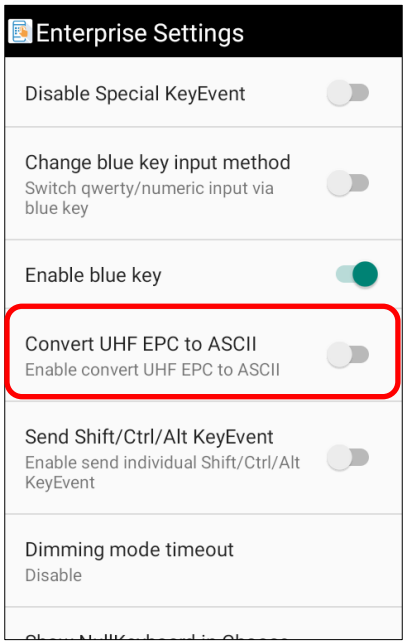


3.8.3. CONVERT UHF EPC TO ASCII

Enable "**Convert UHF EPC to ASCII**" to work with RK26 UHF RFID Reader to convert the EPC code (hexadecimal) to ASCII code under the following conditions:

- All the decoded EPC code (hexadecimal) corresponds to ASCII code must be visible characters. If not, the EPC code would not be converted and remaind as hexadecimal values.

- If the last two values are 00, the 00 will be deleted and then the EPC code is converted to ASCII code, e.g. the decoded EPC code is 3538355959504a5442434900, and it becomes ASCII mode EPC "585YYPJTBCI" after being converted.



3.8.4. VERSION

The version information about **Enterprise Settings** is listed right below "**Convert UHF EPC to ASCII**".

Chapter 4

CHAPTER4. BASIC OPERATION

This chapter covers fundamental skills for working with the RK26 mobile computer, such as operating the home screen, checking system status and managing notifications. The subsequent chapters introduce additional utilities and applications for data collection, processing, and transmission.

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4.5. Back up Your Data 153
4.6. Reset to Factory Default 155

4.1. 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.

LOCK SCREEN

To enter the **Home** screen, you need to unlock the Lock screen.

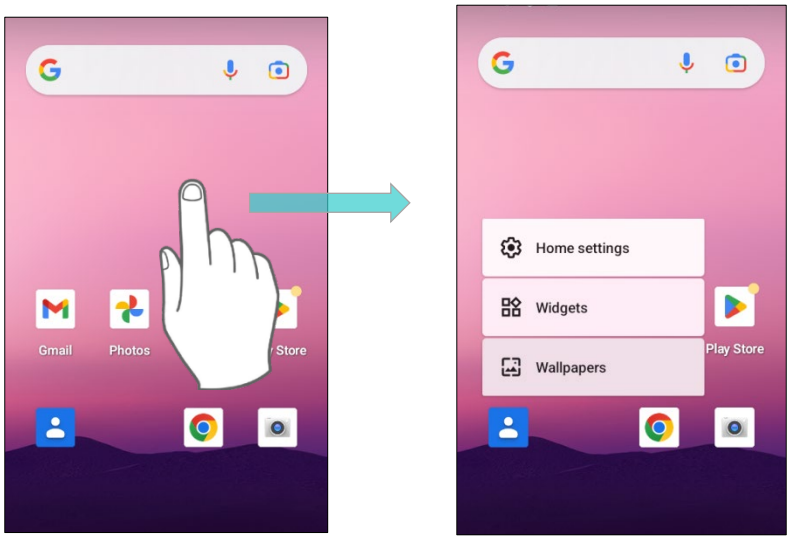
Simply swipe up from the bottom of the screen toward the top to unlock the screen. You may need to further draw a pattern, input PIN or password depends on the lock you set in the security page.

APP DRAWER

To open **App Drawer**, please long-swipe up from the bottom of the screen.

CHANGE HOME SCREEN WALLPAPER

1) Tap and hold any empty spot on the home screen.
2) Tap **Wallpapers** in the menu that appears, and select the app you would like to use.



3) Select an image to apply as the wallpaper.
4) Tap **SET WALLPAPER.**

4.1.1. APPLICATION & WIDGET ON HOME SCREEN

ADD APPLICATION SHORTCUT TO HOME SCREEN

To add an application to Home screen:

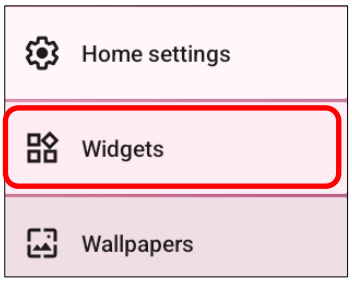
1) Open **App Drawer (All Apps)** on the home screen you would like to customize.
2) Locate the application to add, tap and hold the application icon.
3) Drag the application icon upward and the home screen will appear. Keep dragging the app icon and move it to your preferred position and release to have it placed.

Long pressing certain applications such as Chrome or Gmail may show the **app shortcuts**. To add such applications from **App Drawer** to **Home** screen, please:

1) Keep tapping and holding the application icon and drag it upward.
2) The **Home** screen will appear. Drag the application icon to your preferred position and release to have it placed.

ADD WIDGET TO HOME SCREEN

1) Tap and hold any empty spot on the home screen, and select "**Widgets**" from the appeared menu.



2) In the widget selection list, scroll to locate your desired widget.
3) Tap and hold the widget until the home screen layout appears. Drag the widget to your preferred position and release to have it placed.
4) For a setting shortcut, you will have to select a specific setting from the shortcuts list.

ADD AN ACTION ICON FROM APP SHORTCUT TO HOME SCREEN

To create an **Action** icon from the **app shortcuts** to Home screen, please:

1) Long press an application icon (no matter on the **Home** screen or the **App Drawer**) to unfold its **app shortcuts**.
2) Tap and hold an **Action** from the **app shortcuts** and drag it to the preferred position on the Home screen.
3) Release the **Action** icon to have it placed.

ARRANGE THE APPLICATIONS AND WIDGETS ON HOME SCREEN

To move or remove a shortcut/widget, on the home screen you would like to customize, tap and hold it to enter layout edit mode, an option "**X Remove**" will appear on top of the screen, to which you can drag the unwanted shortcut/widget to remove it. Drag the icon to the preferred position and release it to have it placed.

To resize a widget, tap and hold it until a white frame appears. Tap and drag a white dot to re-scale the widget.

ARRANGE THE APPLICATIONS WITH APP SHORTCUTS ON HOME SCREEN

To move or remove those applications which offer app shortcuts, please hold and drag the application icon to anywhere on the screen, and layout edit mode appears. Drag the application icon to "**X Remove**" on the top of the screen to remove it, or to the preferred position and release it to have it placed.

4.1.2. FOLDER ON HOME SCREEN

CREATE FOLDER

1) On the home screen you would like to customize, tap and hold the application shortcut you would like to move, drag the icon on the top of another icon to create a folder.
2) As these icons overlap, a folder is created.
3) After you let go your finger, these icons are enclosed in a square.

NAME A FOLDER

1) Tap the folder you would like to name.
2) The folder will expand to a full rectangle to show all the shortcuts in it. Tap "**Edit Name**" and edit the folder name.
3) Tap **Done** button on the on-screen keyboard.
4) Tap elsewhere on the screen, the folder will shrink to a small circle with its new name.

REMOVE FOLDER

1) Tap and hold the folder you would like to remove.
2) Drag the folder to the top of the screen where the option **"X Remove**" is located.

Note:

Please note when you remove a folder, the shortcuts contained in it will be removed as well.

4.1.3. CURRENT APPLICATIONS

To reveal the **Recent App Menu**, please tap on the **Recent Apps** button "□".





On this screen, you can:

SWITCH BETWEEN APPLICATIONS

Slide to the left or right to check the listed applications, tap on your desired one to open it on the screen.

END APPLICATION

Swipe an application up to close it.

Note:

Close unused applications in order to release RAM. Remember to save your data or settings before closing any application.

4.2. STATUS BAR

The left side of the status bar shows **notification icons**, and the right side of the status bar shows **status icons**.

4.2.1. ICONS ON STATUS BAR

STATUS ICONS

Icon	Description
	The device has been connected to a Bluetooth device.
	The device is currently connected to a Wi-Fi network and performing data transmission.
	Airplane mode is active, which means all radios are inactive now.
	Alarm is active.
	All sounds are silent except for alarms (Vibration mode).
	The main battery is fully charged.
	The main battery is partially drained.
	Main battery level is very low and needs charging immediately (<15%).
	External power source is connected and main battery is being charged.

NOTIFICATION ICONS

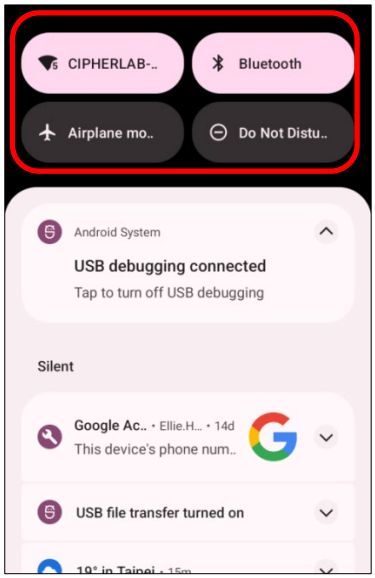
Icon	Description
	Android System notification such as "**USB debugging connected**" or "**USB file transfer turned on**". Open Notifications Drawer for more details.
	The device is performing data synchronization.
	There is an upcoming event.
	The device is downloading data. / Download completed.
	The device is uploading data. / Upload completed.
	An open Wi-Fi network is available.
	A memory card has been inserted.
	The headset has been inserted.
	Wi-Fi hotspot is active.
	Wi-Fi will turn on automatically when there's the saved network with a strong signal nearby.

4.2.2. OPEN QUICK SETTING MENU

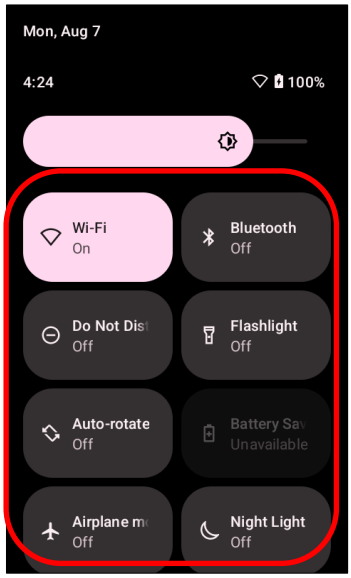
The **status icons** are related to essential settings regarding the device's remaining power, Bluetooth status or Wi-Fi connectivity status. The status bar offers a quick access for you to easily make adjustments of the settings.

By short swipe from the status bar, **Quick Setting Panel** will be revealed. To open **Quick Setting Menu**, please use two fingers to swipe from the top to the bottom of the screen. You can tap on each status icon on the menu to switch among different modes or enter the settings.

Quick Setting Panel

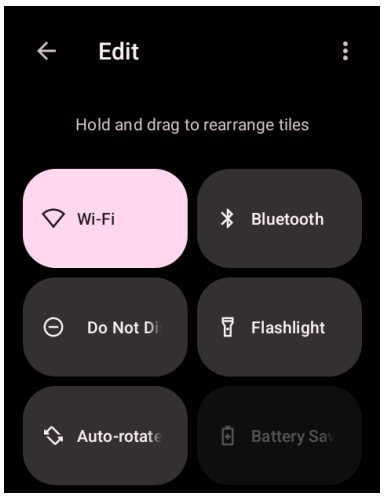


Quick Setting Menu

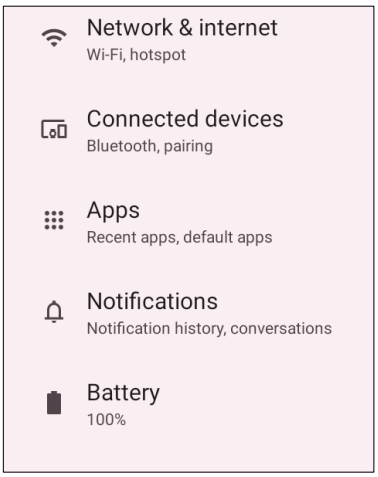


Tap on the two buttons,  and  , on the bottom side of the **Quick Setting Menu** will respectively enter the below pages:

-  **Quick Setting Menu Edit Page**



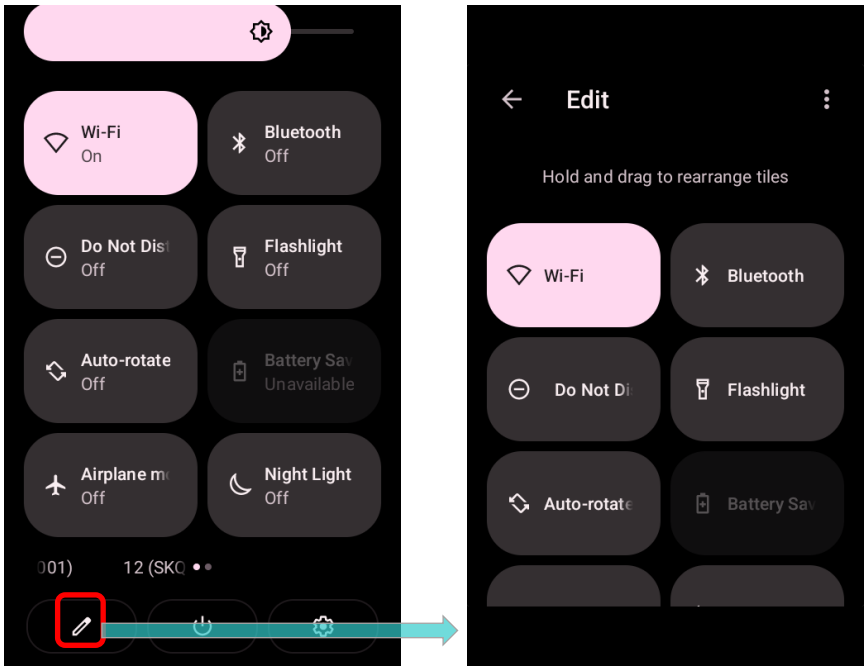
-  **"Settings"** Page



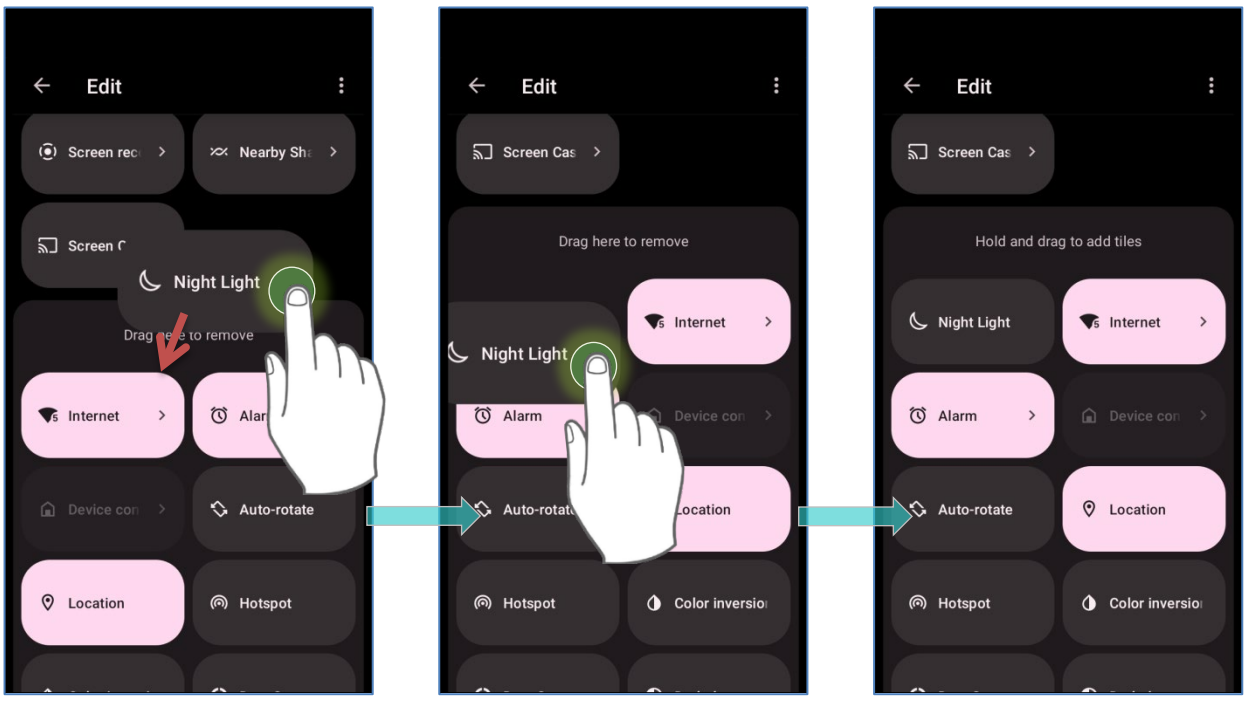
EDIT QUICK SETTING MENU

To customize **Quick Setting Menu**, please:

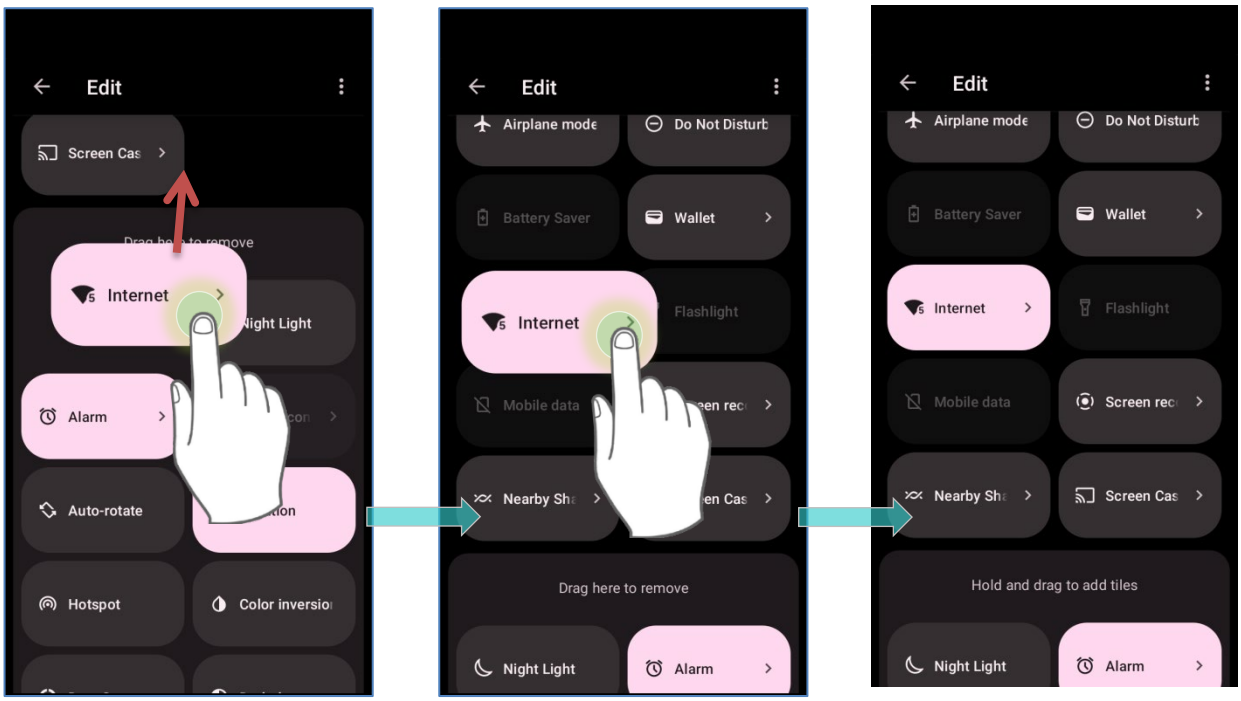
1) Click "**EDIT**" to get into **Edit** page.



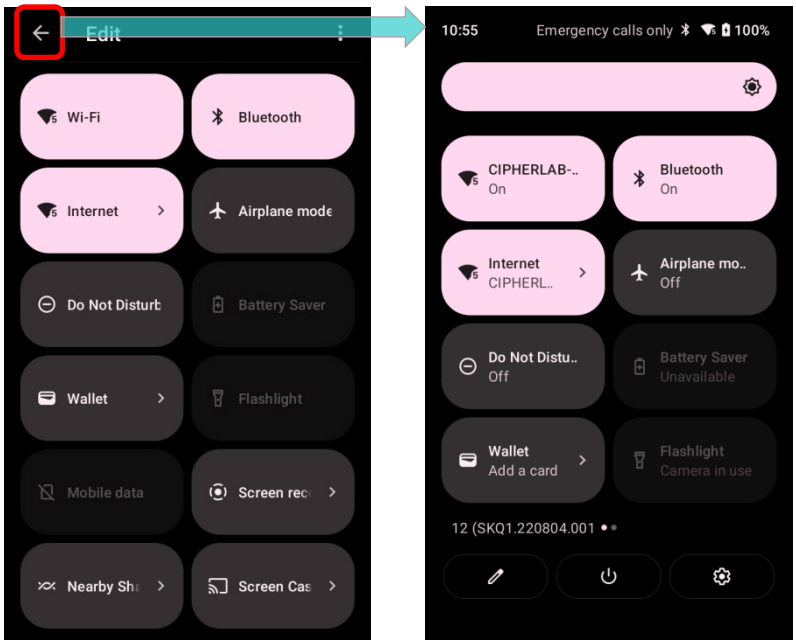
2) **Remove**: To remove certain item, please tap on and hold the icon to be removed, and drag it to the "**Drag here to remove**" area and then release it.



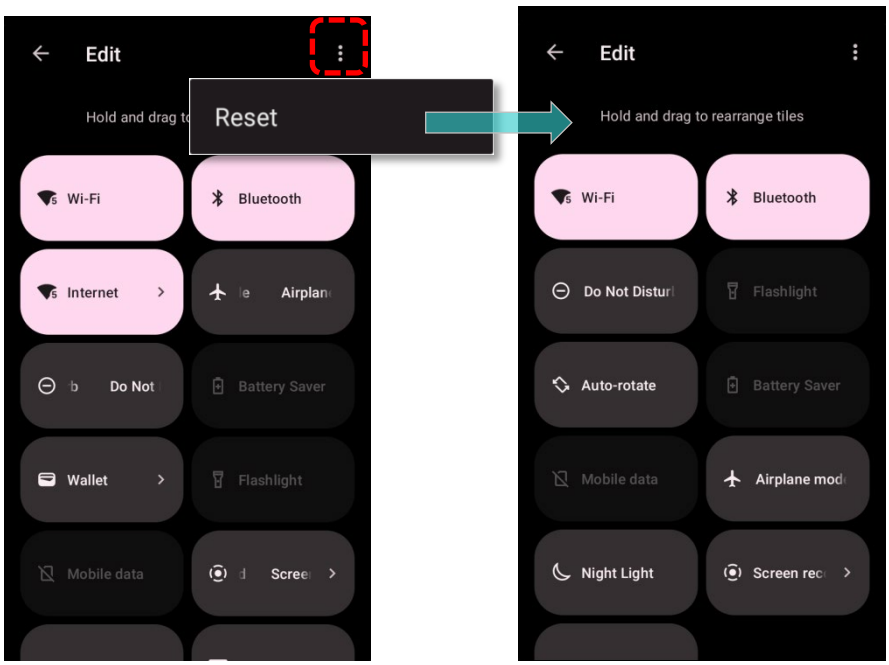
3) **Add**: To add certain item, please tap on and hold the icon to be added and drag it to the upper area and then release it.



4) Return to the **Quick Settings Menu**, all the settings are done.



To reset the **Quick Setting Menu**, please tap on "**EDIT**" to enter **Edit** page. Tap on **More** icon in the upper-right corner, and then "**Reset**".

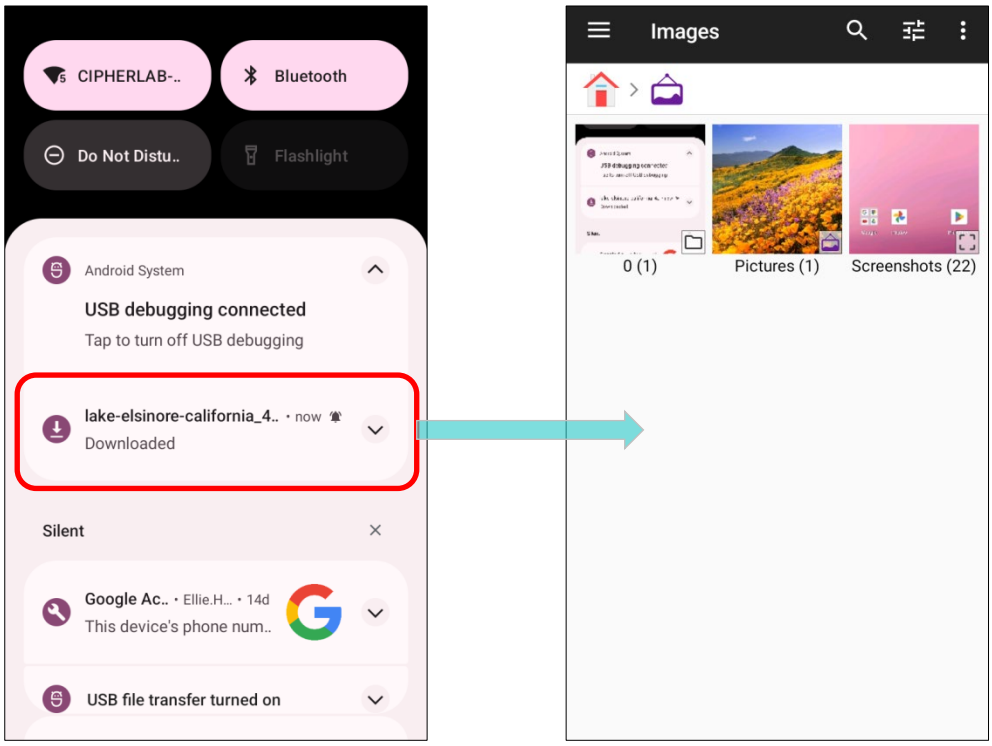


4.2.3. OPEN NOTIFICATIONS DRAWER

The **notifications icons** on status bar inform you of the new events such as incoming calls, messages or USB connection.

CHECK OUT NOTIFICATION

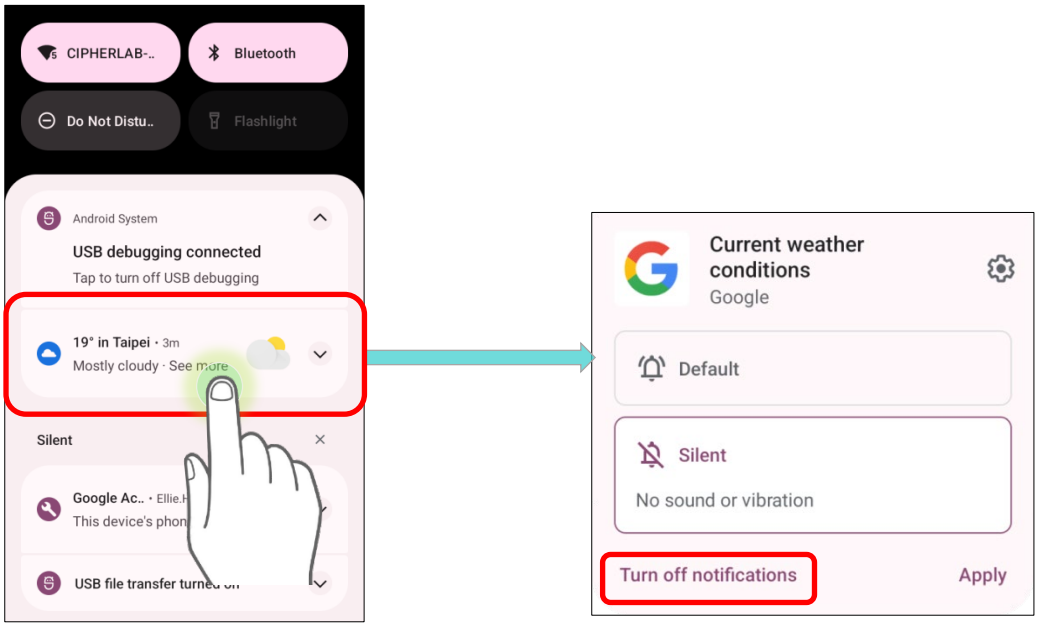
To check out details of the events, swipe down from the status bar to open Notifications Drawer.



Tap on the individual notification card to carry out immediate action or to open the corresponding application.

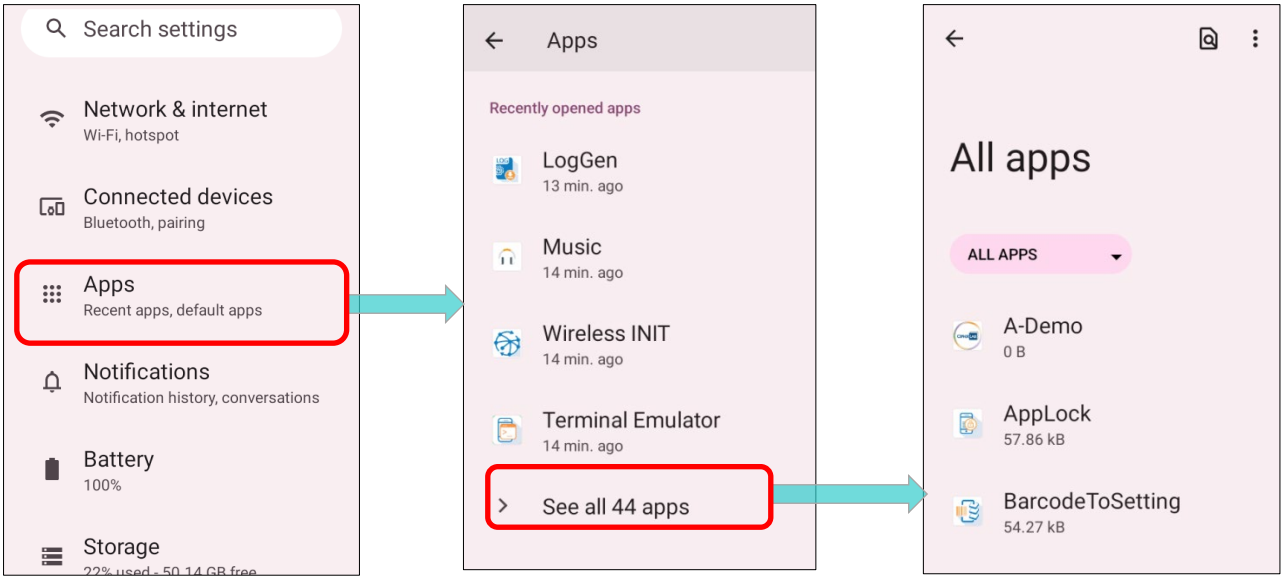
DISABLE NOTIFICATION

You can turn off the notification of a specific app by tapping and holding on the notifications card until the corresponding app name reveals. Tap "**Turn off notifications**" to turn it off.

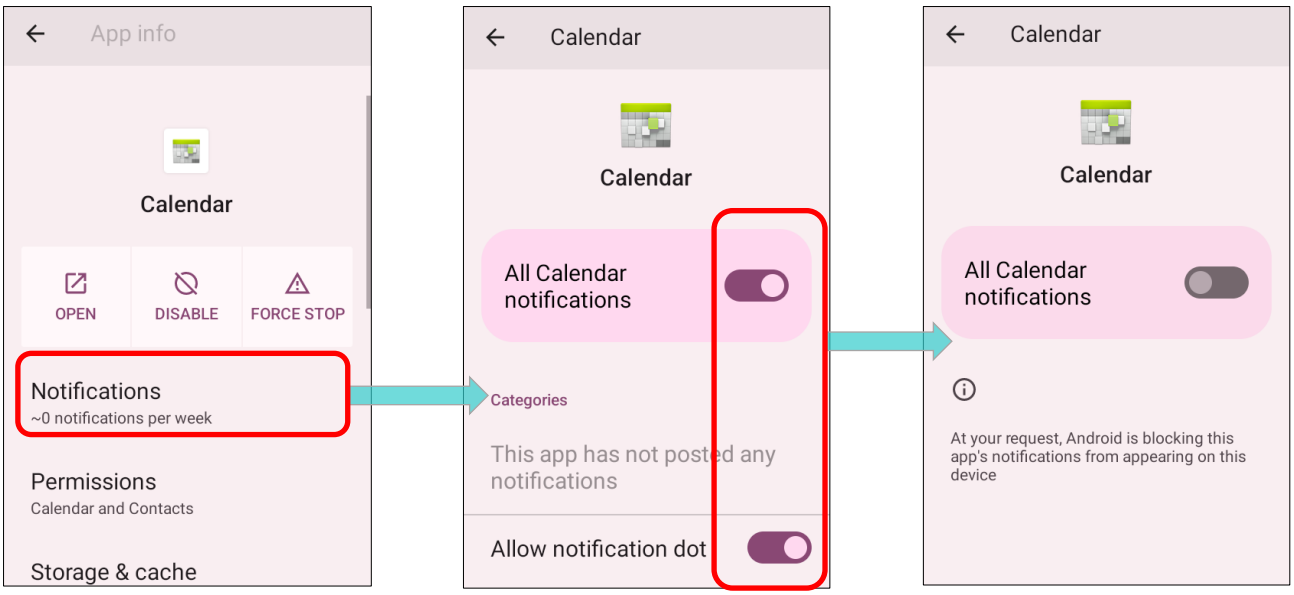


OR

1) Go to App Drawer (All Apps) | **Settings** | **Apps** | **See all XX apps** to find the app you would like to change its notification settings.

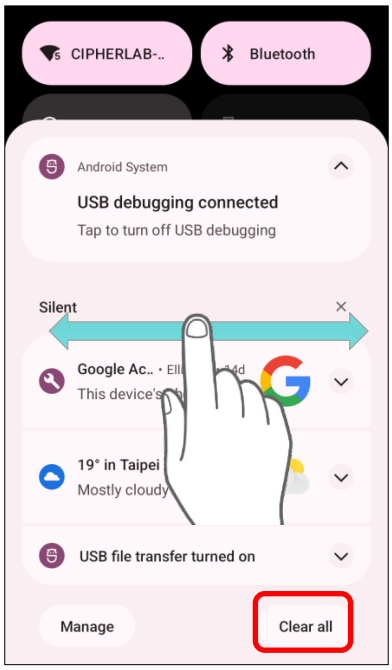


2) Tap the App icon to enter the "**App info**" page, and tap "**Notifications**" to switch on or off "**Show notifications**" and other settings.



CLEAR NOTIFICATION

To dismiss a single notification, simply swipe the notification card right or left. You can also dismiss all notifications at a time by tapping "**CLEAR ALL**". Ongoing notifications and notifications that require subsequent activity to be cleared will remain on the list.



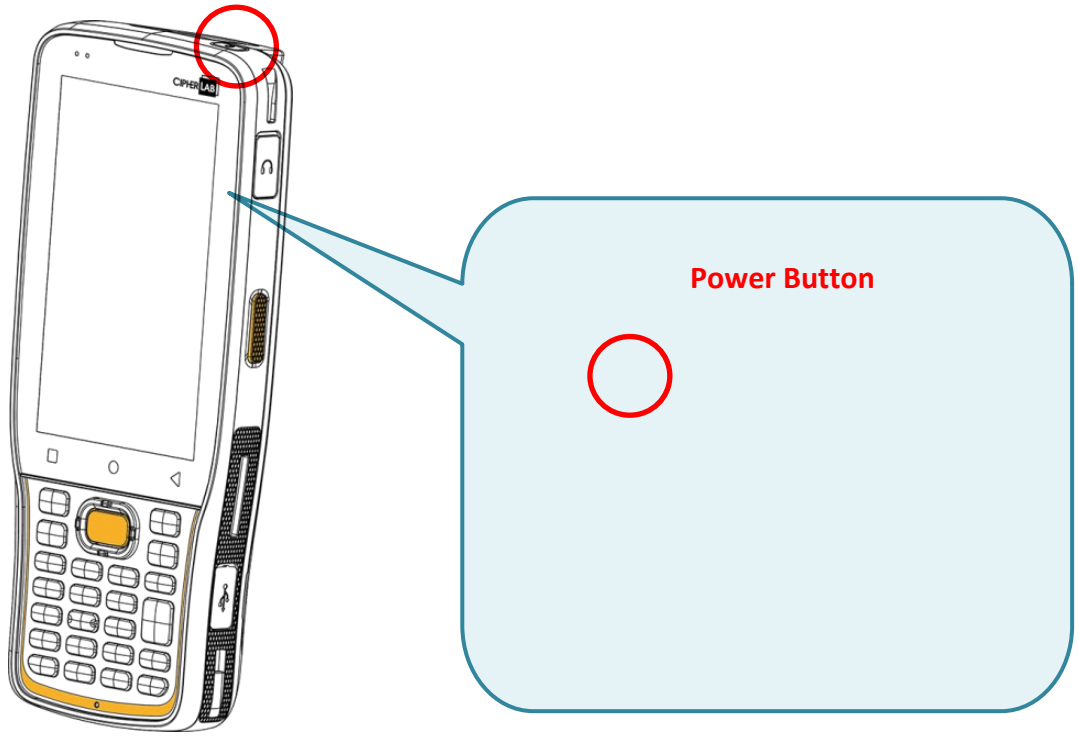
4.3. SUSPEND & LOCK

4.3.1. SUSPEND DEVICE

The mobile computer operates continuously once it is powered on. To minimize power consumption and prevent unintended operation, suspend the mobile computer if you are not actively using it. The mobile computer can be quickly awoken from suspend mode to operate as needed. When the mobile computer enters suspend mode, the system is in a power-saving status, meaning the device will not respond to screen touch, and volume keys and side buttons will also be unavailable until the device is unlocked.

SUSPEND RK26

Press the power button to suspend the mobile computer. The mobile computer will automatically suspend when the time period set in Screen Timeout Settings has passed without any activity.

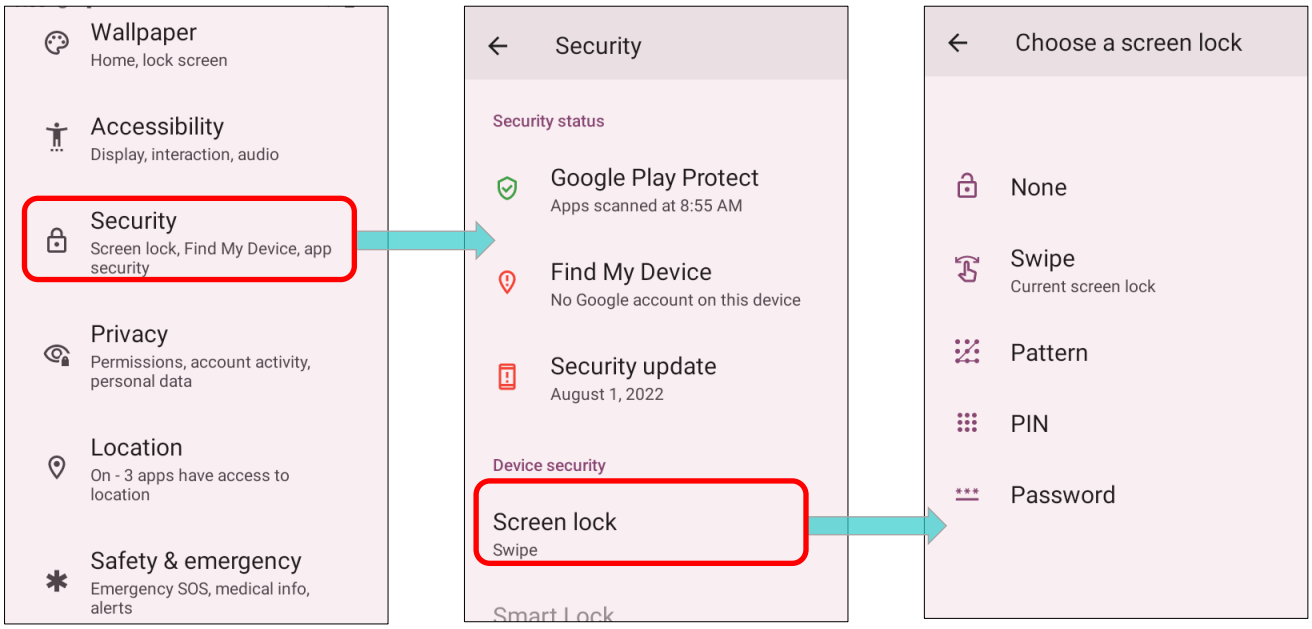


4.3.2. LOCK DEVICE

Setting a screen lock allows you to protect your personal data on this device while the device is not at your hand. With various types of screen lock available and Smart Lock, you can not only enjoy the benefits of this function but also great convenience.

LOCK RK26

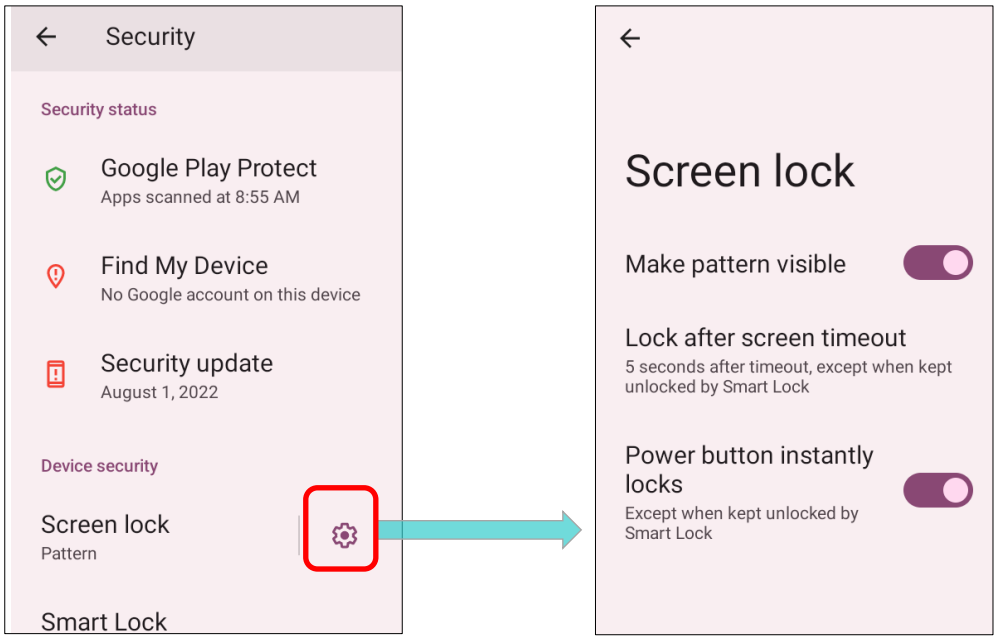
Go to **App Drawer (All Apps)** | **Settings** | **Security & location** | **Screen lock** to change the lock method.



The lock methods:

Item		Description
	None	Disable screen lock.
	Swipe	Default slide gesture.
	Pattern	Enter a pattern to unlock.
	PIN	Uses the PIN code to unlock.
	Password	Enter a password of at least 4 characters to unlock.

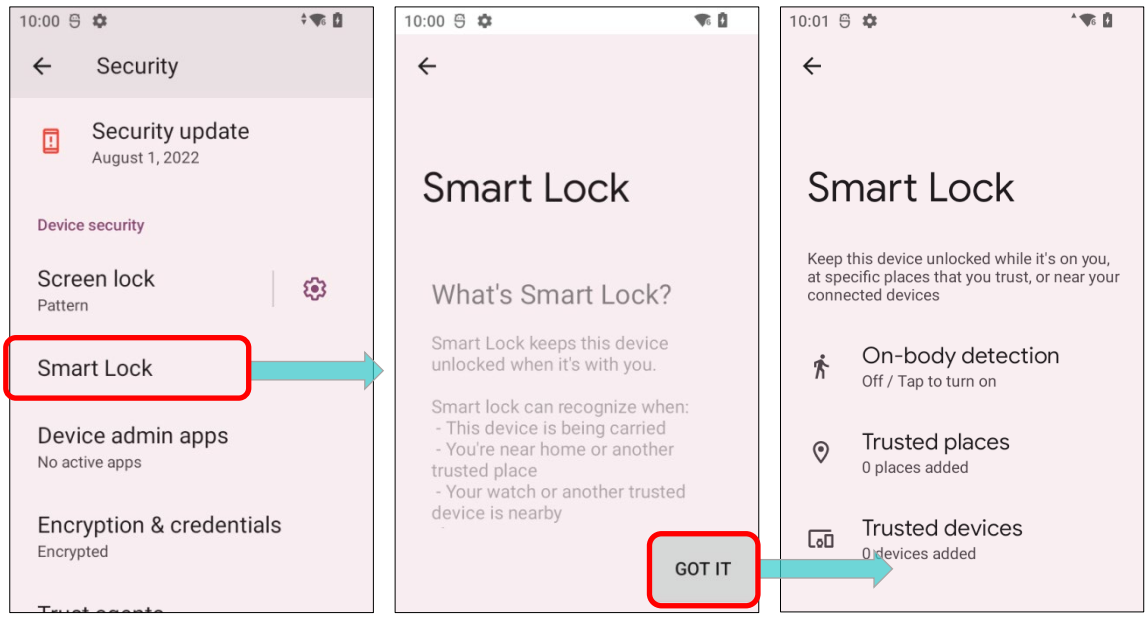
By selecting a **Pattern**, **PIN**, or **Password** method, you can access **Screen Lock** advanced settings.



Screen Lock advanced settings:

Item	Description
Make pattern visible	Switch to make the unlock pattern you are drawing to be visible or invisible.This function only works when setting pattern as screen lock.
Lock screen message	Set the time interval between screen timeout and automatically locking the screen.
Power button instantly lock	Switch to enable/ disable instantly lock screen by pressing power button.

You can also access **Smart Lock** to customize personal lock settings.



4.4. OS UPDATE

Updating the operating system on the mobile computer helps maintain it at an optimized state. You may choose to update the system by establishing a wireless network connection to the Internet and downloading the update file from the OTA server.

Note:

The mobile computer will shut down during system update. Save any unfinished tasks and data before updating the system in order to avoid data loss.

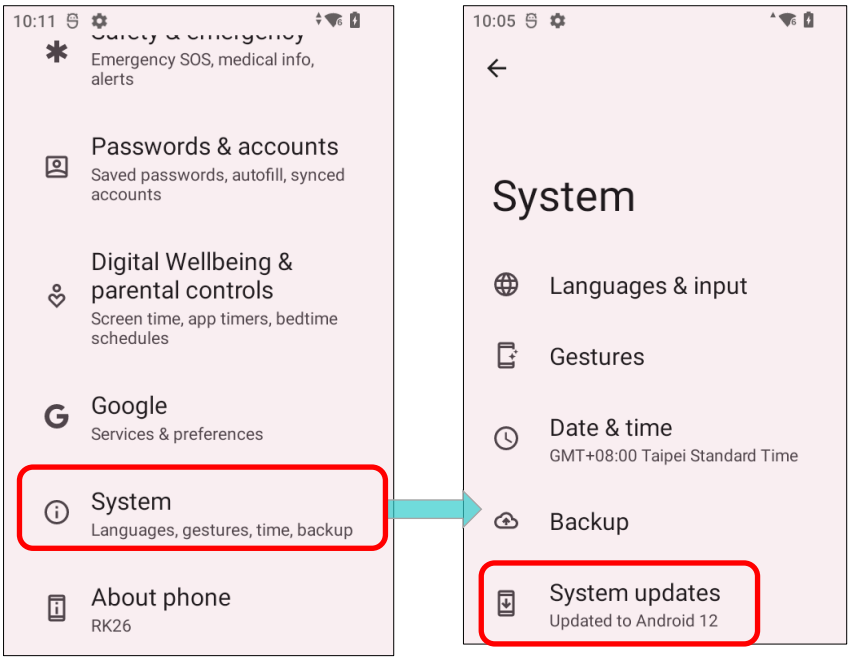
4.4.1. NETWORK UPDATE

In order to check for and download the latest system update file on the server, make sure a wireless network connection to the Internet is established on the mobile computer.

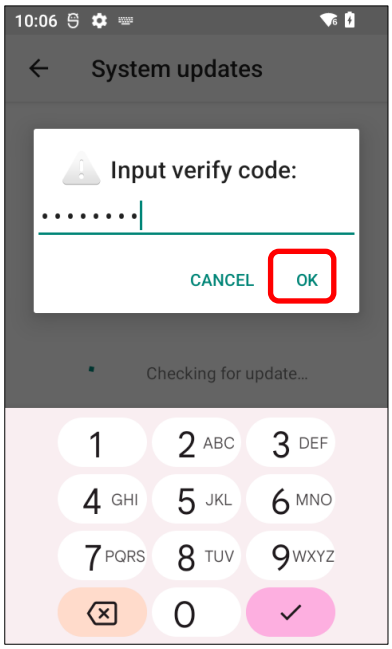
Note:

To avoid any additional charges to your wireless data plan, Wi-Fi connection to the Internet is recommended for downloading the file.

1) Go to **App Drawer** | **Settings** | **System** | **Advanced** | **System updates** .



2) A window pops up asking you to input the password for system update. Please contact with support@cipherlab.com.tw for the password. Enter the password and tap **OK**.



3) The mobile computer searches for the latest system update file on the server. Tap **DOWNLOAD AND INSTALL** to download the update file.

4) When a new system update file is detected on the server, a notification icon will appear on the status bar, and a text notification will pop up in the notifications panel.

AUTOMATIC UPDATE

The automatic update feature of RK26 mobile computer is off by default, and you can change the setting by **ADC** (Android Deployment Configurator) to turn it on.

By enabling automatic update feature, RK26 mobile computer automatically detects whether there's the latest OS update and downloads it. The update is scheduled to proceed on early morning when the device is on and left idle.

4.4.2. SD CARD UPDATE

RK26 mobile computer automatically searches the available update files in your mobile computer's storage and then install it.

Please obtain the latest system update image file, and rename and copy the file as "**sdupdate.zip**" onto the folder "**sdupdate**" of your SD card. Insert the SD card into the memory card slot on the device. Press the power button to power it on.

OR

Transfer the update image file to the root directory of the device's internal storage via a USB Type-C cable/ the snap-on cable.

The newest version of OS will be automatically installed and take effect next time the device is booted up.

Note:

Make sure the SD card is properly inserted in the mobile computer; otherwise, the system is regarded as currently up to date.

4.5. BACK UP YOUR DATA

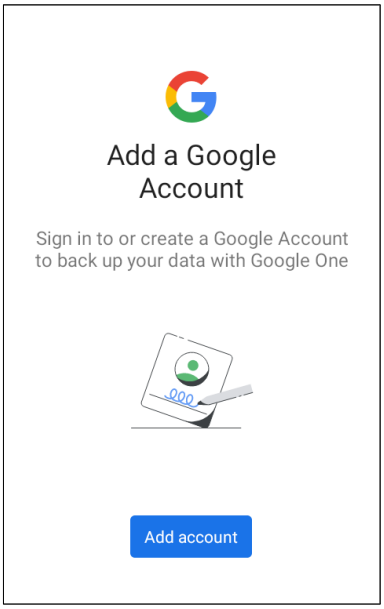
With **Backup**, you can have your personal data (Google calendar settings, Google contacts, Google Chrome browser data and Gmai settings) and certain system settings under your Google Account backed up (over network connection) on the cloud. This allows you to easily restore the settings on this device after a Factory Reset (refer to Reset to Factory Default).Follow the steps below to start your backup settings:

1) Make sure your device is connected with network.

2) Go to **App Drawer (All Apps)** | **Settings** | **Google** | **Backup**

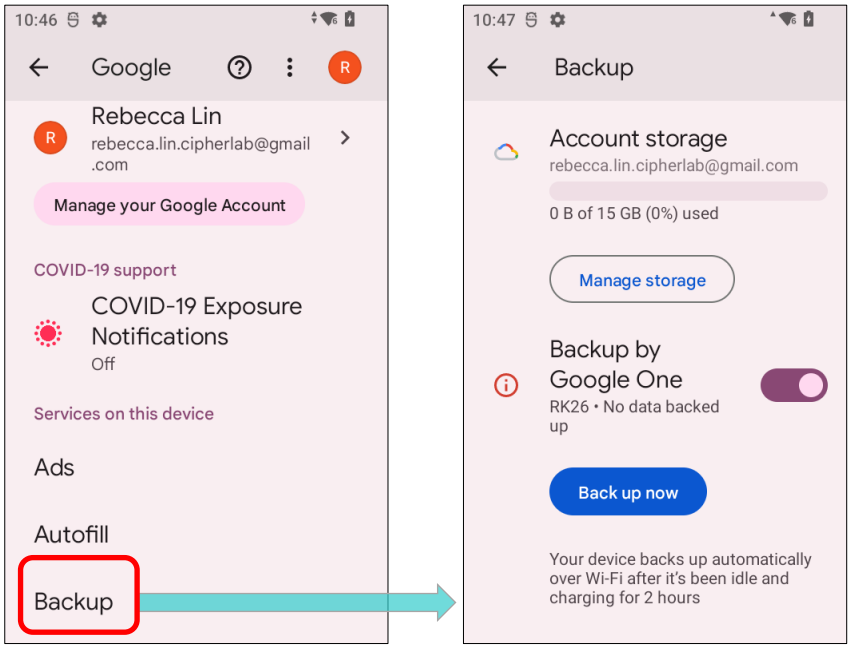
OR

Go to **App Drawer (All Apps)** | **Settings** | **System** | **Backup** and enable **Back up to Google Drive**.



To restore your backed up personal data of your Google Account, just tap on "**Add Account**" to sign in with your Google Account.

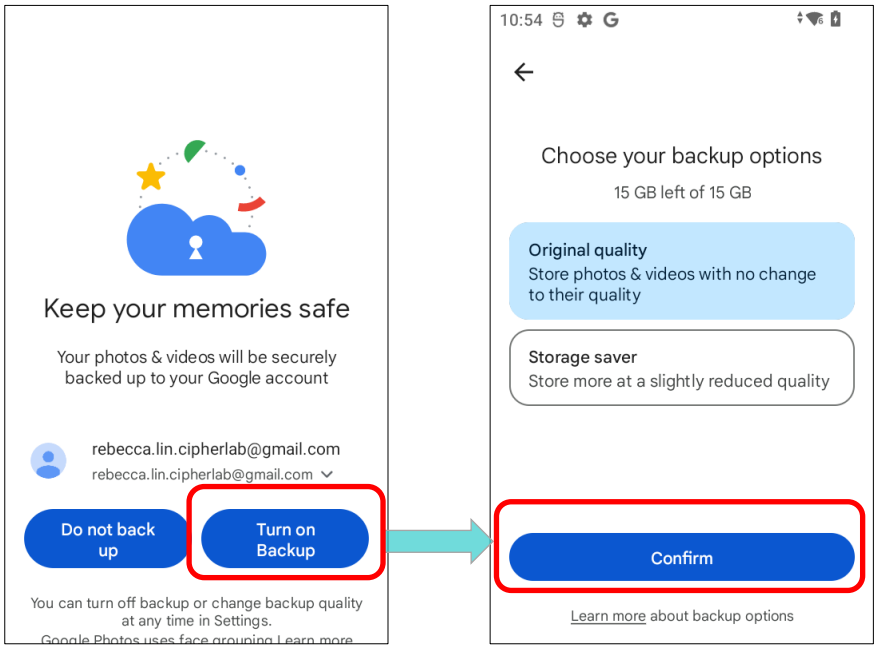
3) Tap to turn on "**Backup by Google One**".



To restore your backed up personal data of your Google Account, just add that account to the device.

Note:

(1) To back up your photos and videos, tap *Photos* in App Drawer and log in your Google Account to sync the files on your device with Google Photo Library.



(2) To back up other data such as audio or video files on the device's storage, you can make use of the Google Drive service.

(3) Backup may not handle certain app progress data and settings.

4.6. RESET TO FACTORY DEFAULT

Performing a factory reset will erase all data on your mobile computer (including, files as well as your installed apps and their associated data) and revert the device back to its original state in which it is powered on for the first time.

It is strongly recommended that following the instructions in **Back Up Your Data** to back up important data before performing a factory reset.

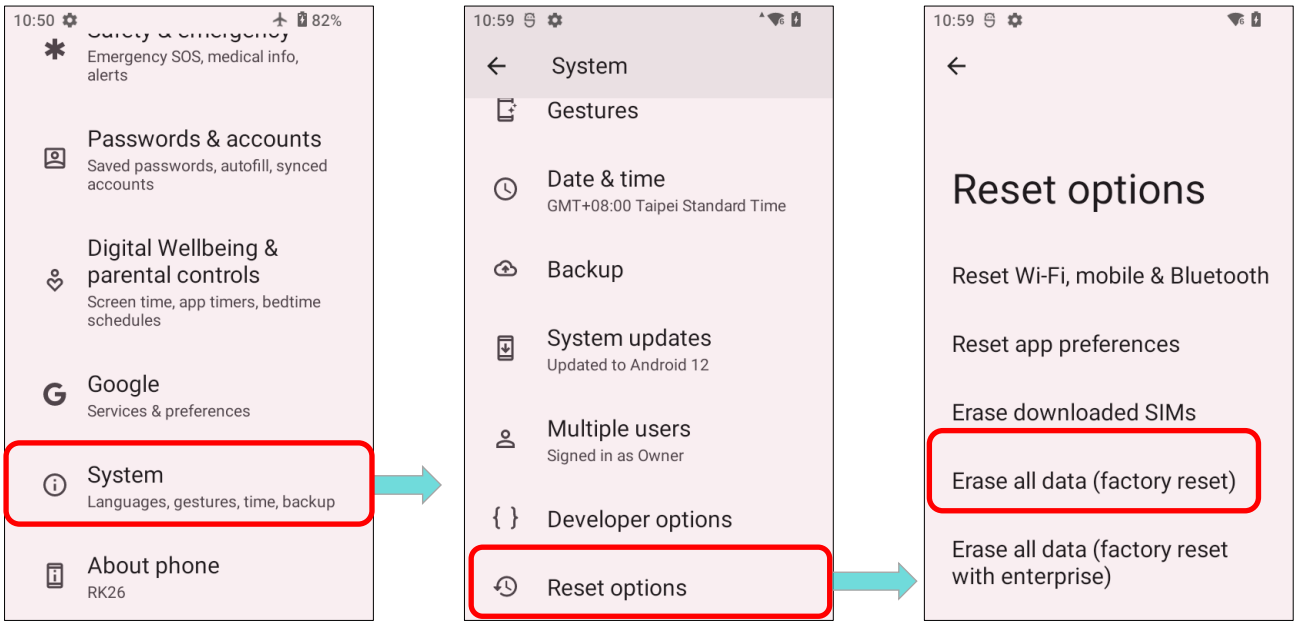
When setting your RK26 mobile computer by **ADC** (Android Deployment Configurator), the settings will automatically backup to "**enterprise partition**" of your RK26 mobile computer, and the settings saved in enterprise partition will not be erased by proceeding "**Factory data reset**". To erase all the settings, please select "**Erase all data** (**factory reset with enterprise**)".

4.6.1. ERASE ALL DATA (FACTORY RESET)

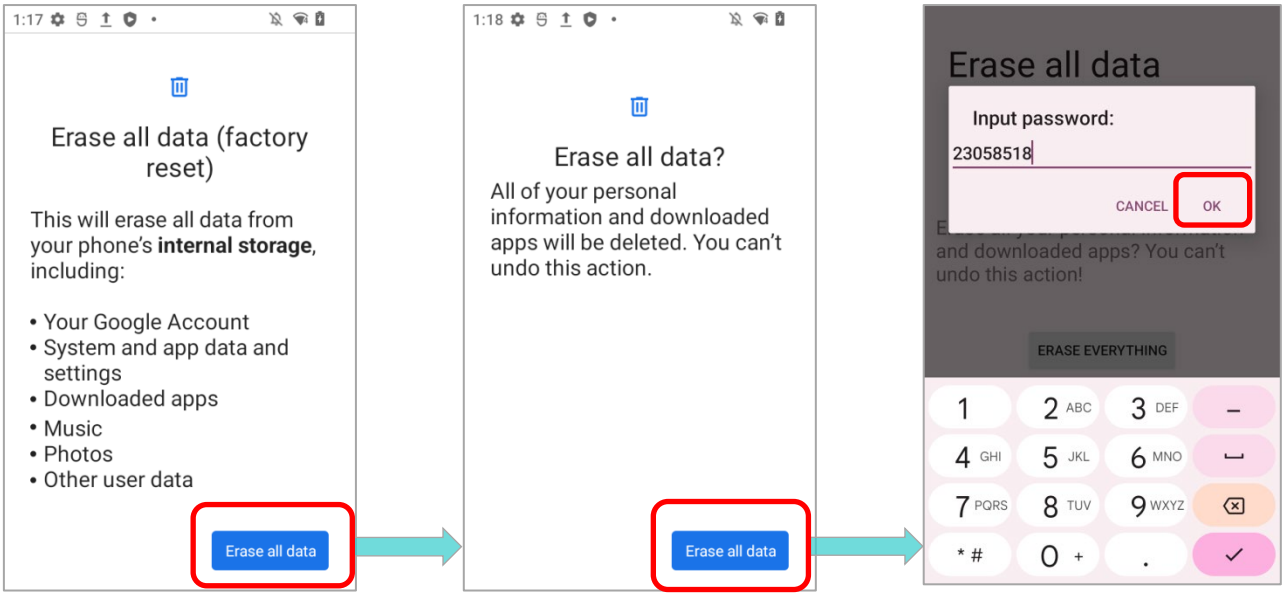
"**Erase all data (factory reset)**" will erase all the data except of the settings backed up in enterprise partition by ADC (Android Deployment Configurator).

To start:

1) Go to **App Drawer (All Apps)** | **Settings** | **System** | **Advanced**| **Reset options** and **Erase all data (factory reset)**.



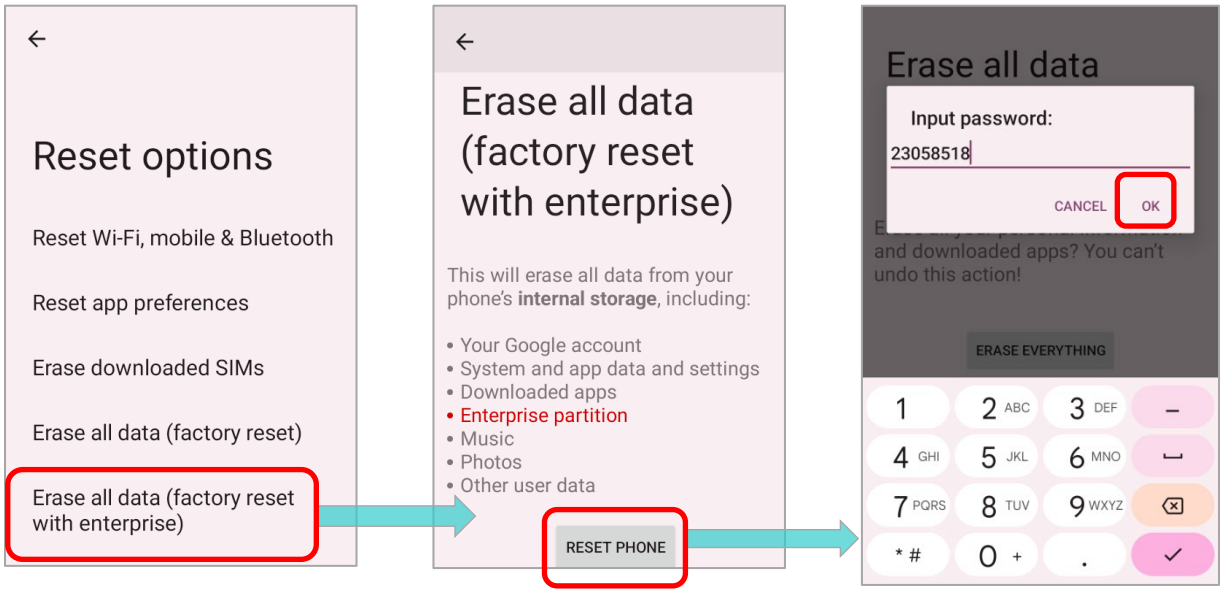
2) Confirm the action by tapping on the buttons and input the verification code (please contact with support@cipherlab.com.tw to obtain your verification code). Finally, tap "**OK**" to perform a factory reset.



4.6.2. ERASE ALL DATA (FACTORY RESET WITH ENTERPRISE)

Go to **App Drawer (All Apps)** | **Settings** | **System** | **Advanced**| **Reset options** and **Erase all data (factory reset with enterprise)**.

Confirm the action by tapping on the buttons and input the verification code (please contact with support@cipherlab.com.tw to obtain your verification code). Finally, tap **OK** to perform a factory reset.



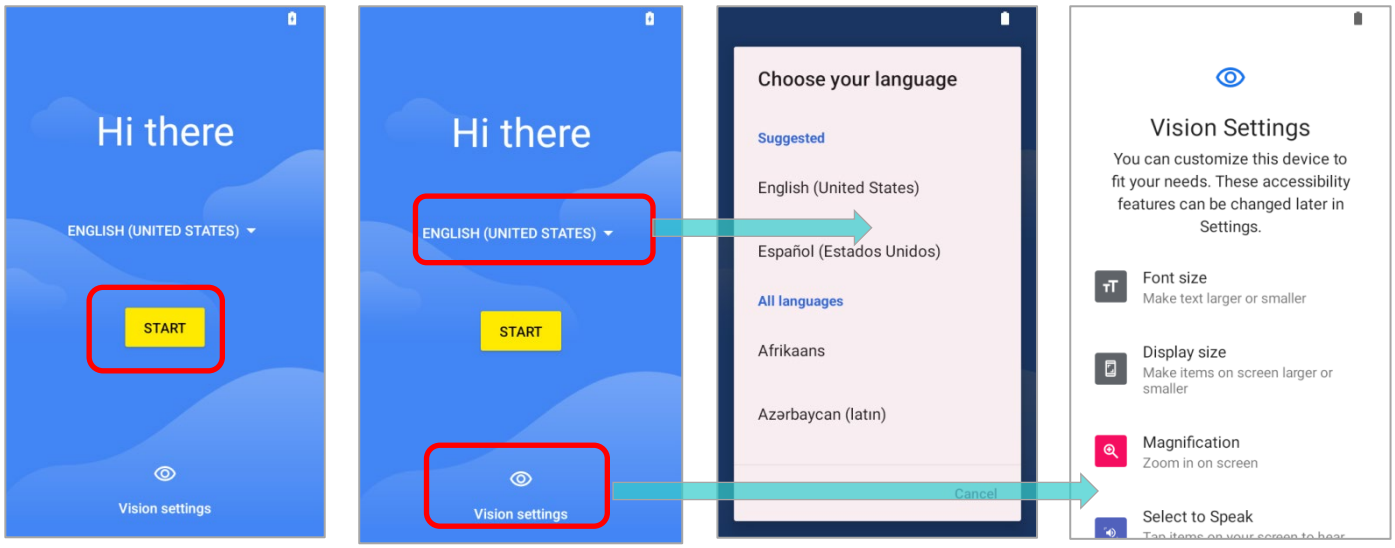
4.6.3. WELCOME WIZARD

As the mobile computer boots up for the first time after the reset, the Welcome Wizard will run you through setting up the environment as well as restoring apps and data. During setup, you can tap **SKIP** to continue to the next step (you can finish the respective settings in App Drawer (All Apps)| **Settings** at any time).

Please note that to have the backed up data in your Google Accounts restored right in this stage, log in to a Wi-Fi network when prompted to **Connect to Wi-Fi**.

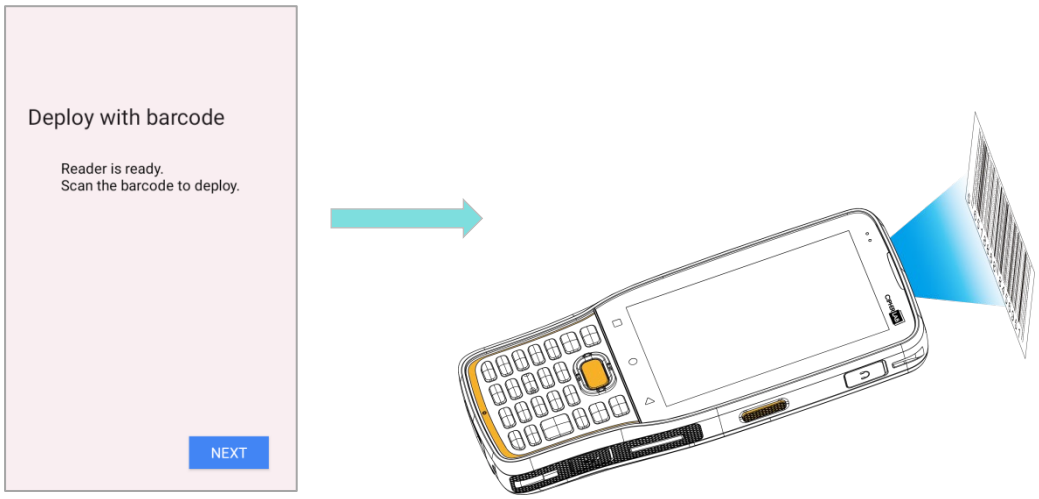
- Step 1

Tap on "**START**" to proceed, or tap to enter "**Choose your language**" / "**Vision Settings**".



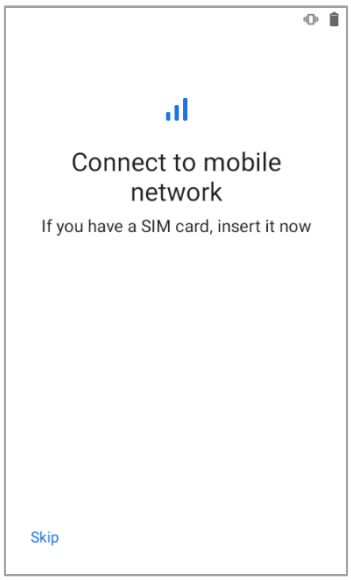
- Step 2

Press the trigger to scan the settings barcode generated by ADC (Android Deployment Configurator) to deplay the settings, or tap on "**Next** " to comtinue setting up by Welcome Wizard.



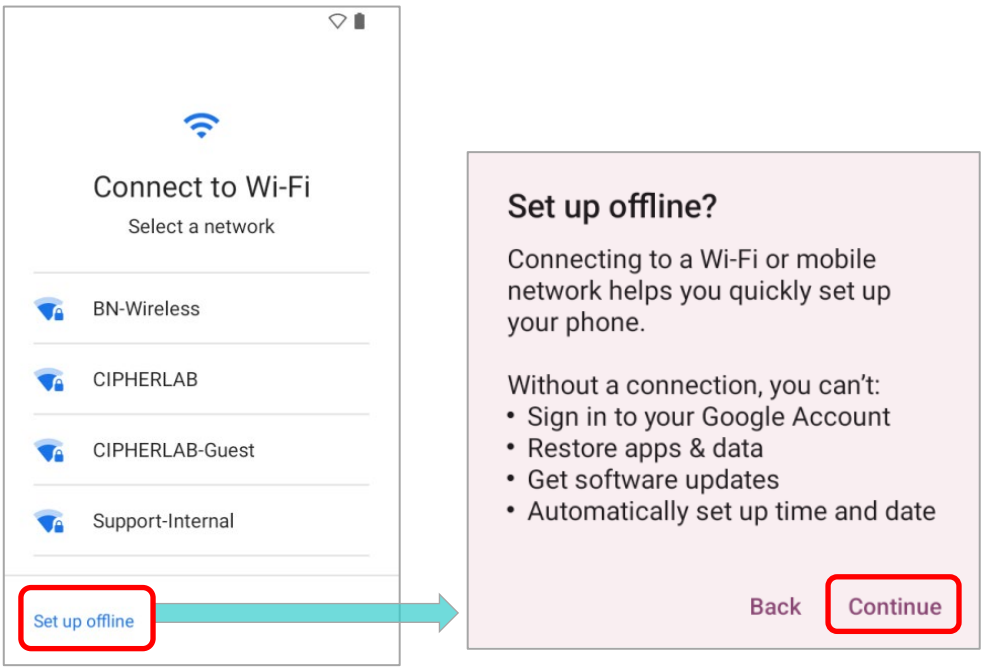
- Step 3

Insert your SIM to connect to mobile network, or tap on "**SKIP**" to the next step.



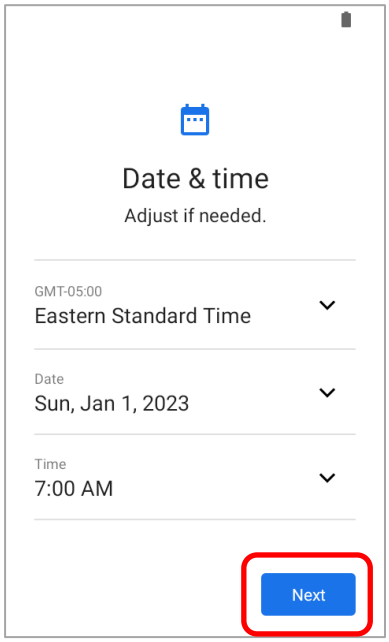
- Step 4

Select a Wi-Fi network to log in or tap on "**Set up offline**" and confirm with "**CONTINUE**" to the next step. If logged in a Wi-Fi network, you will be further asked to sign in your Google Account to restore data.



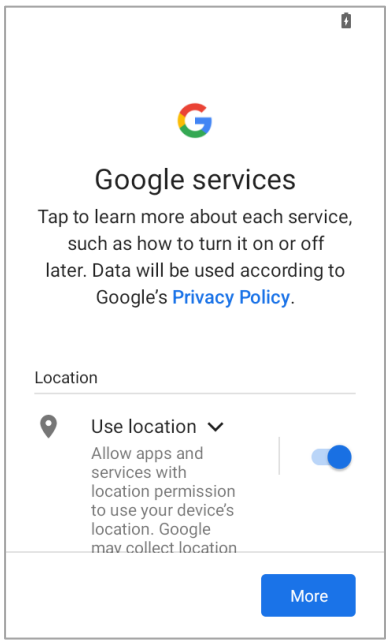
- Step 5

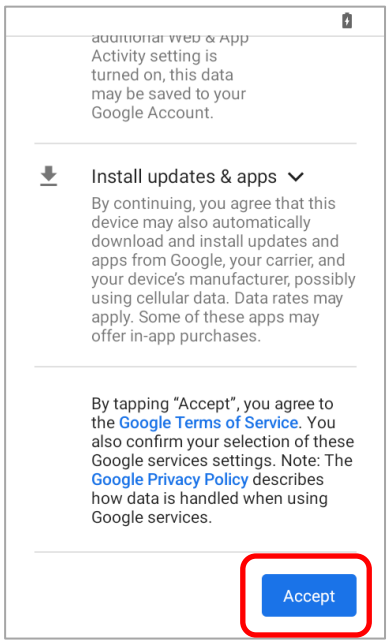
Set date and time, or merely skip this step by tapping "**NEXT**".



- Step 6

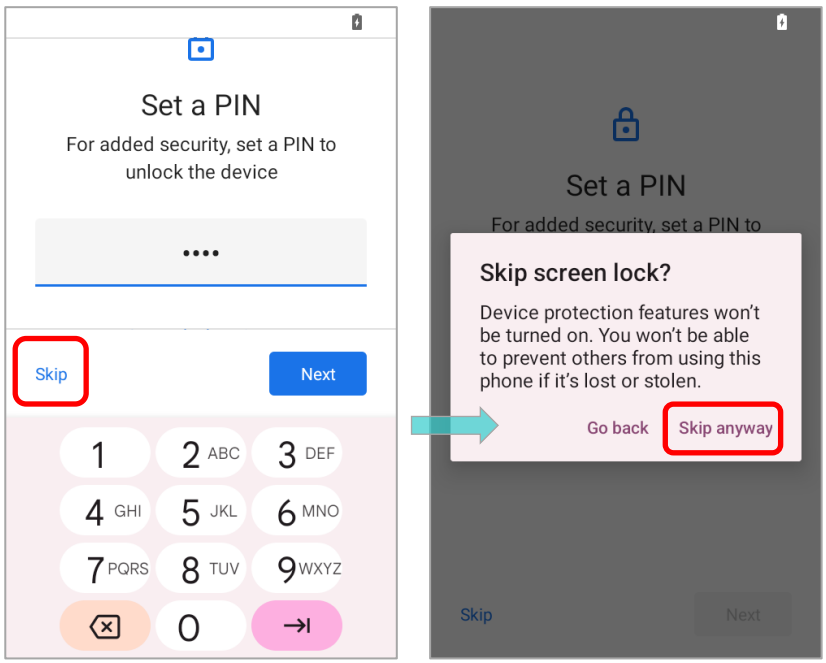
Choose Google services that you want to be enabled, and scroll to the bottom of the page to tap "**ACCEPT**" to proceed.





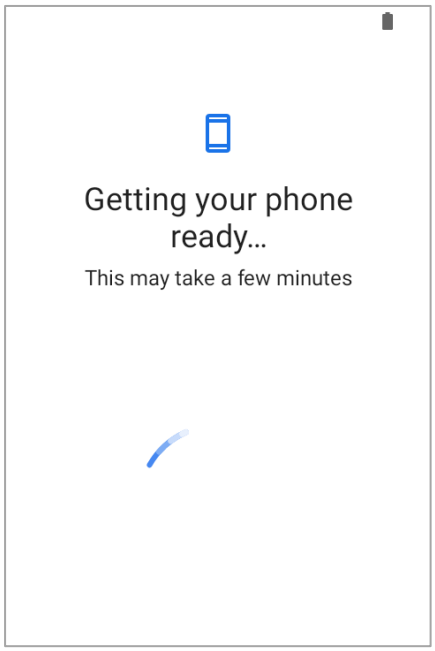
- Step 7

Set up a PIN to protect this device and tap "**Next**", or merely "**SKIP**" this step**.**



- Step 7

It takes few seconds to complete the settings.



Once the initial setup is completed, the **Home** app screen shows up. Apps and settings will be restored in the background.

Chapter 5

CHAPTER5. WIRELESS RADIOS

This chapter will guide you through the configuration and establishment of wireless network connections using the integrated Wi-Fi module of the RK26 mobile computer.

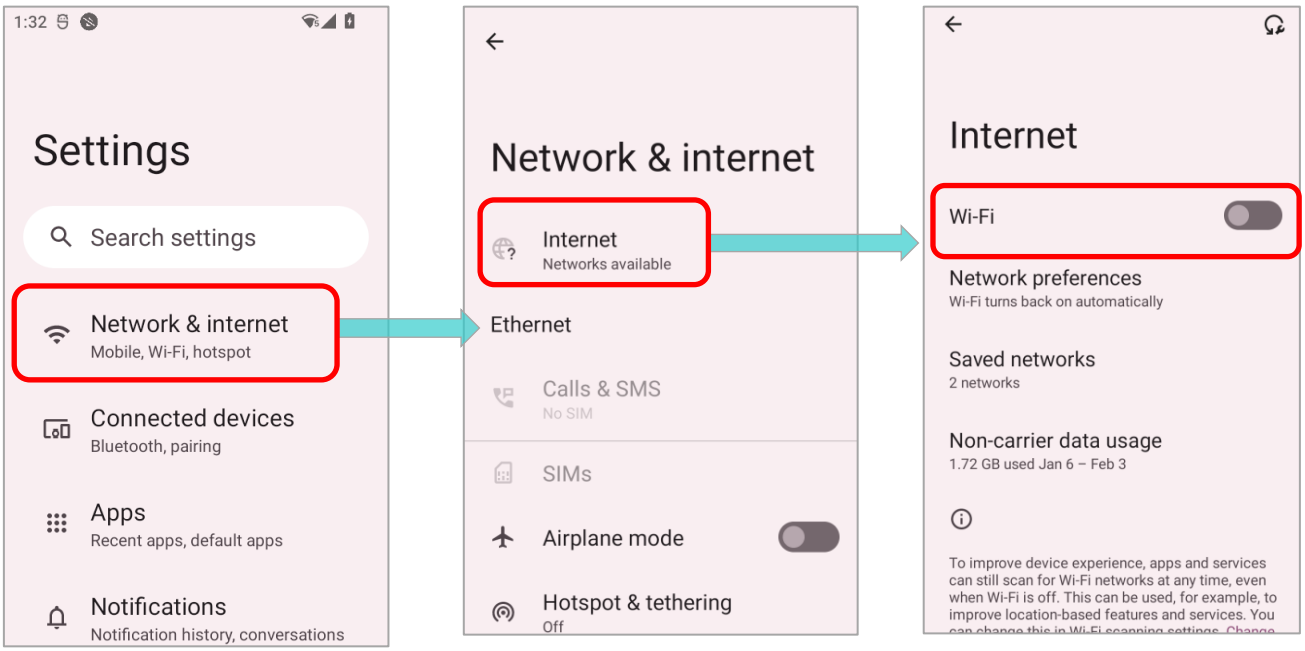
IN THIS CHAPTER

5.1 Use Wireless Local Area Network (Wi-Fi) 162
5.2 Use Bluetooth 174
5.3 Use Near Field Communications 182

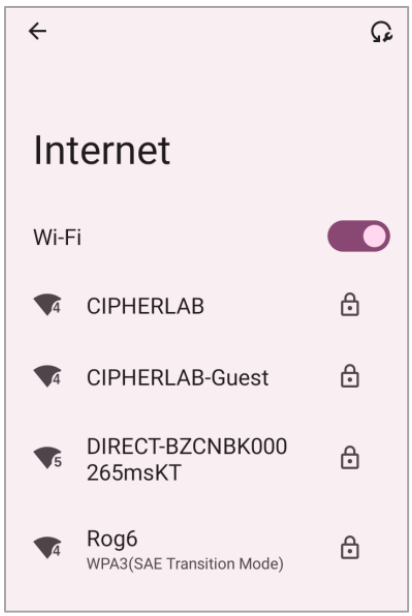
5.1 USE WIRELESS LOCAL AREA NETWORK (WI-FI)

5.1.1. CONNECT TO WI-FI NETWORKTO POWER ON WI-FI:

1) Go to App Drawer (All Apps)| **Settings** | **Network & internet**



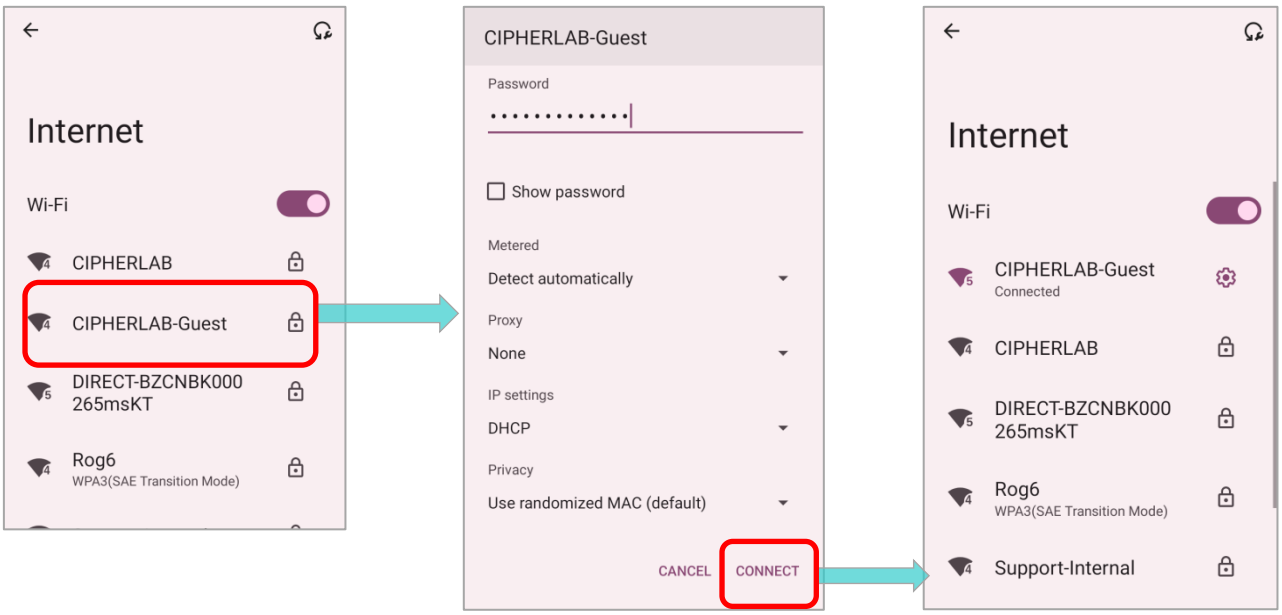
2) Tap the Wi-Fi switch to scan for available networks.



3) Select a network to connect.

If the network is an open one, the mobile computer will attempt to connect to it directly. When connected, the status will change to show "**Connected**".

If the network is a secured one, the mobile computer prompts a dialog to enter the password for the connection.

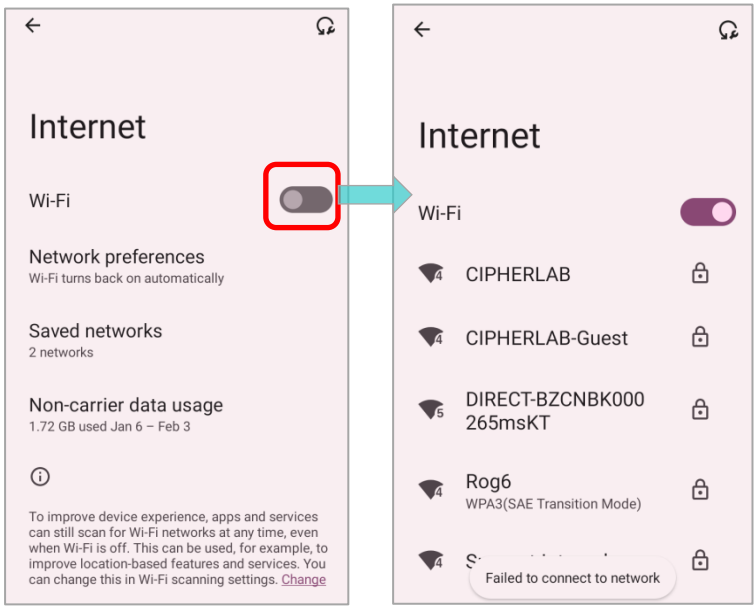


5.1.2. MANUALLY ADD WI-FI NETWORK

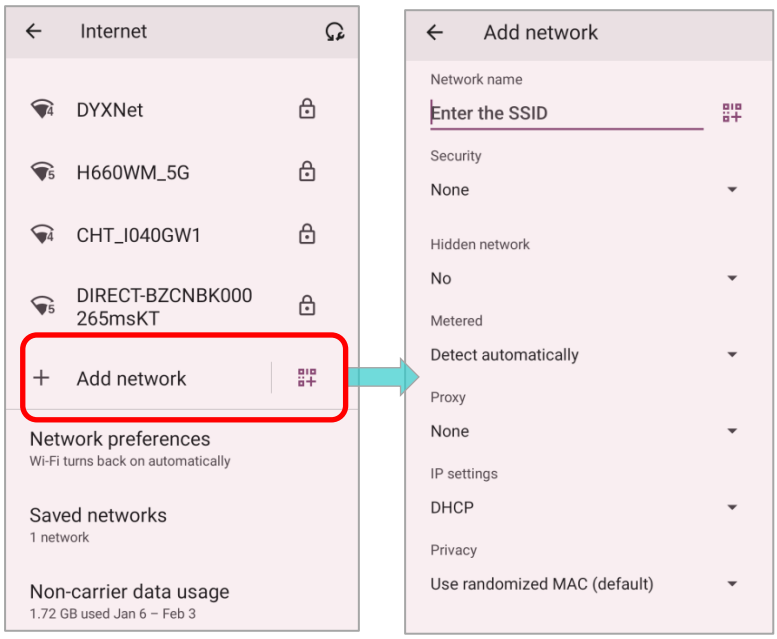
If the network you would like to connect to does not broadcast its SSID, or if the network is out of range, you may add it manually.

1) Go to App Drawer (All Apps) | **Settings** | **Network & internet**

2) Tap the Wi-Fi switch to turn it on.



3) Scroll down to the bottom of the page, and select "**Add network**".

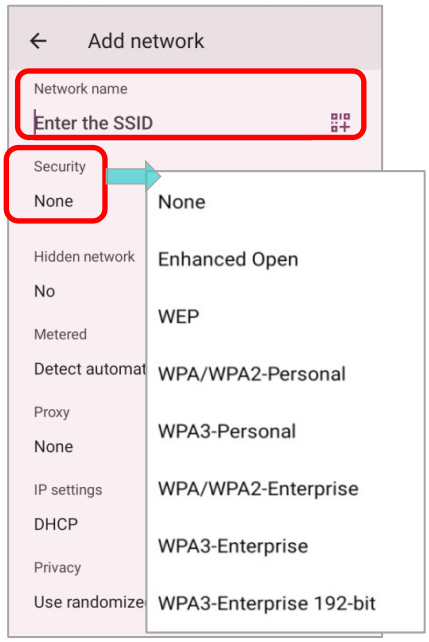


4) On "**Add network**" page, enter the name of the network in the **Network name** field, and select a security method (None, WEP, WPA/WPA2 PSK, 802.1x EAP, OWE, or SAE).

- **Enhanced Open** is for public networks and provides no authentication.

- For WEP, WPA/WPA2-Personal, and WPA3-Personal connections:
  Enter the required password and tap **Save**.

- For **WPA/WPA2/WPA3-Enterprose** connections:
  Select the **EAP method** in the drop-down box (PEAP, TLS, TTLS, PWD, SIM, AKA), and the **Phase 2 authentication** in the drop-down box (None, MSCHAPV2, GTC). Select a **CA certificate** and User certificate if required.
  Enter your username in the Identity box and the password in the Password box if required.



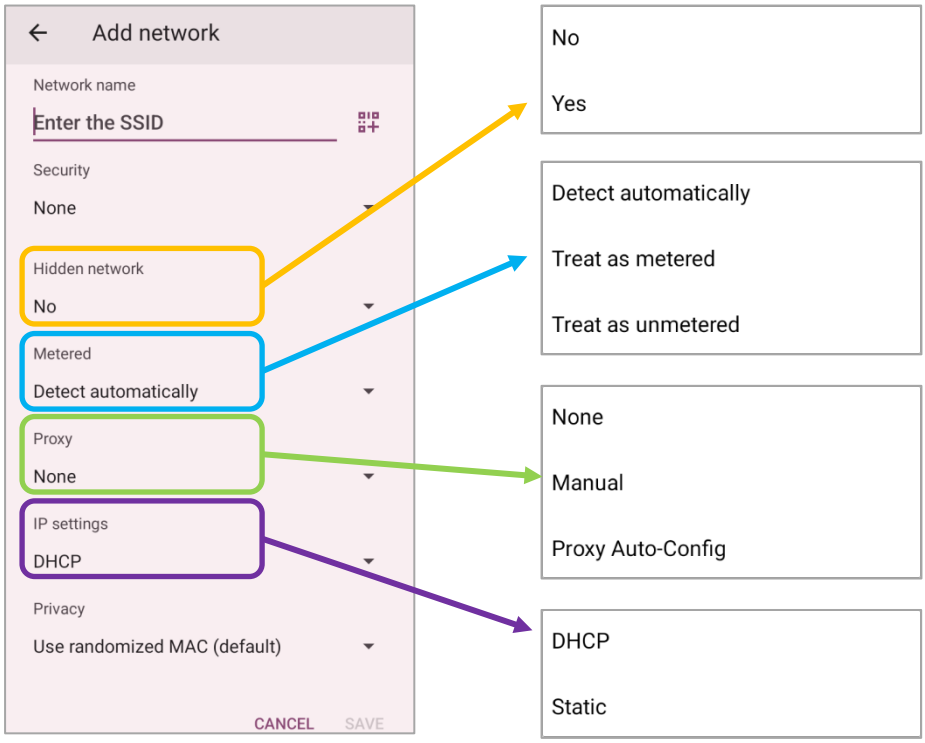
Note:

Certificates may be installed under **App Drawer** | Settings | Network & internet | Internet | Network preferences | Install certificates.

The mobile computer supports the following certificate file extensions:

File Extension Type	Standard Certificate	Key Stored
Description	DER-encoded X.509 certificates saved in .crt or .cer files.	X.509 certificates saved in PKCS#12 key store files with a .p12 or .pfx extension.
How to install	change the extension to .crt or .cer.	Change the extension to .p12 or .pfx.

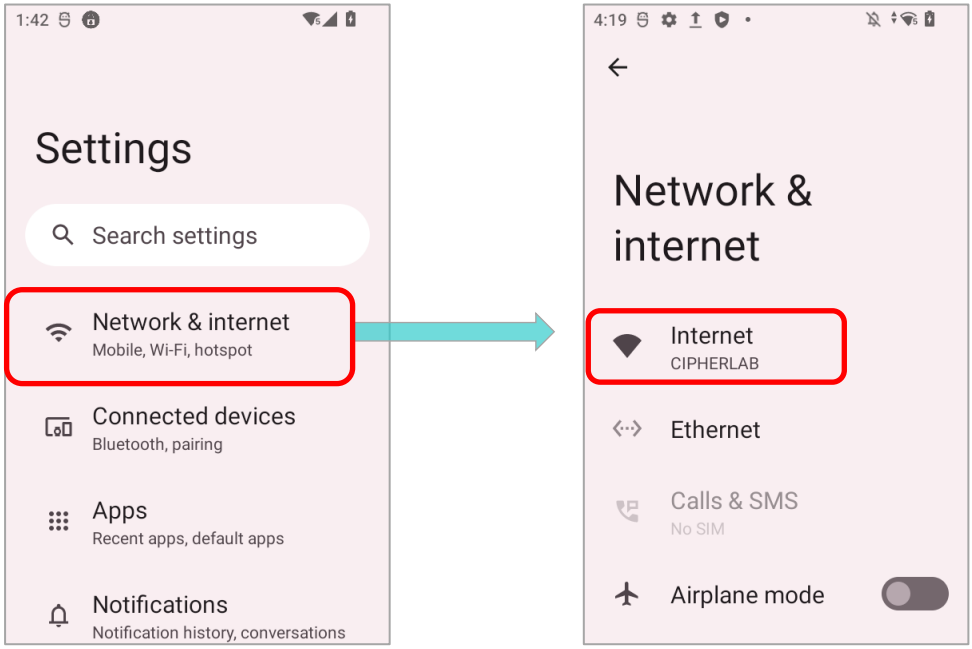
5) If necessary, select the **Proxy** server and **IPv4** settings. By default, no proxy is set and IP settings are set to **DHCP**.



5.1.3. WI-FI PREFERENCES

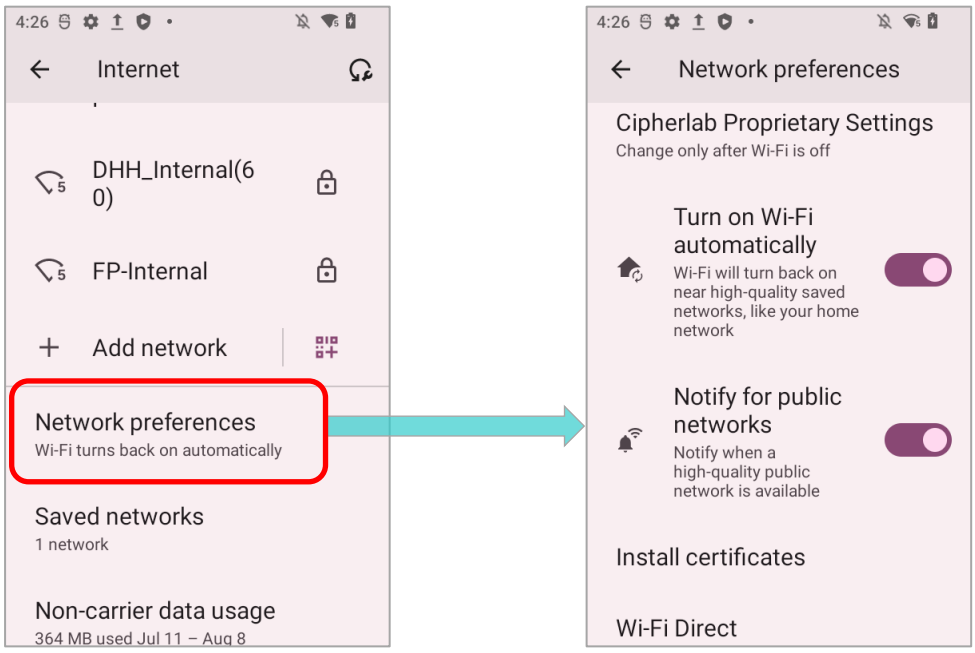
To access advanced Wi-Fi settings:

1) Go to **App Drawer (All Apps)** | **Settings** | **Network & internet** | **Internet**



2) Scroll down to the bottom of the page to enter "**Network preferences**".

The available settings are as bellow:

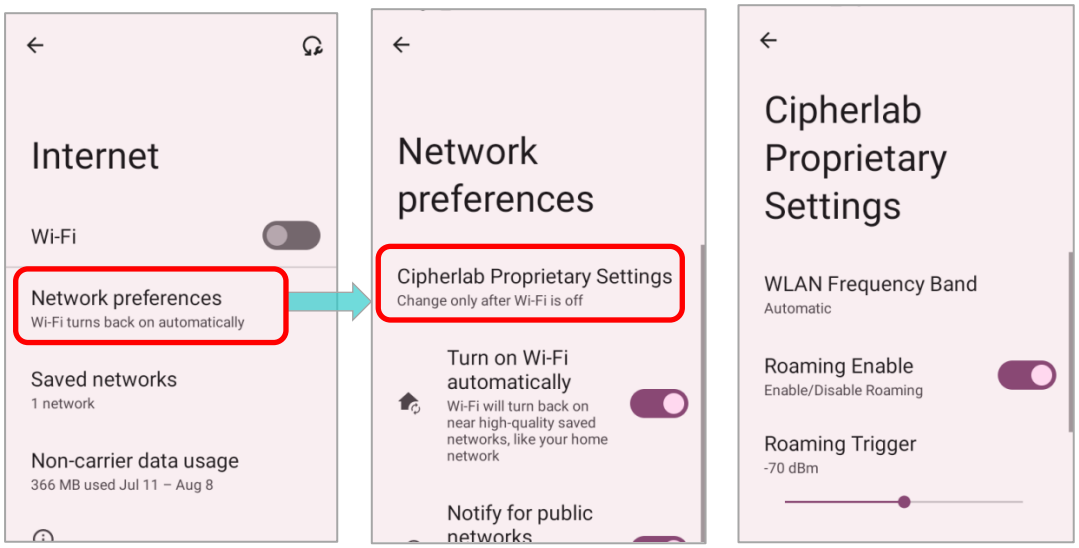


Item	Description
Cipherlab Proprietary Settings	Tap to enter the page for further settings. Please refer to **Cipherlab Proprietary Settings** for details.
Turn on Wi-Fi automatically	Even you've turned off Wi-Fi, the device will automatically turn on your Wi-Fi connection when there's the saved network with a strong signal nearby.
Notify for public networks	Notify when a high-quality open network is available.
Install certificates	Installs certificates recently downloaded or placed on the internal storage.
Wi-Fi Direct	Enables your device to connect with a Wi-Fi Direct-capable device.

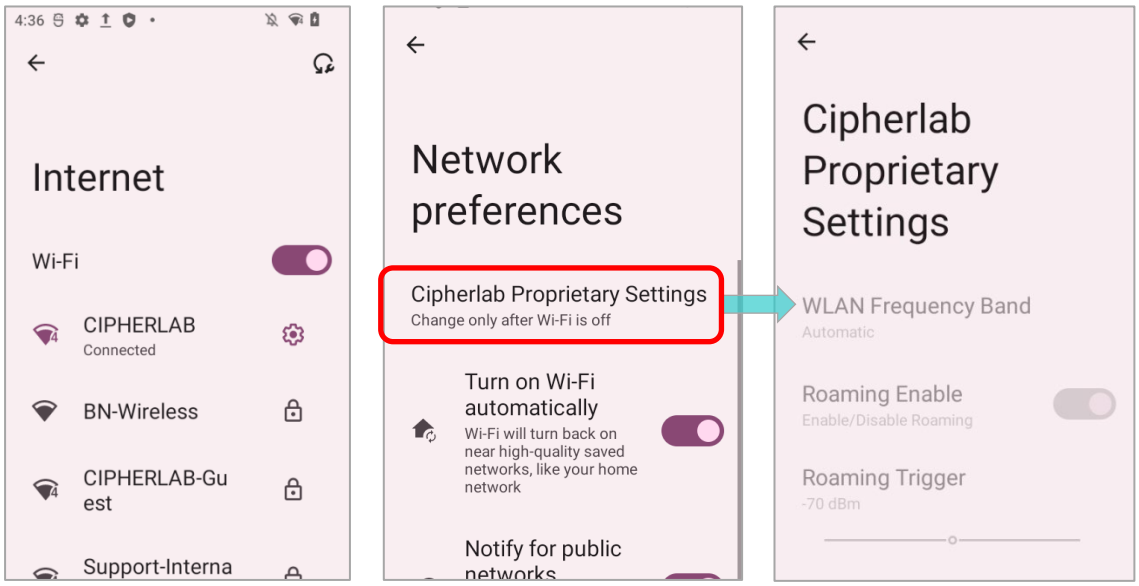
CIPHERLAB PROPRIETARY SETTINGS

To configure the grayed out options listed on "**Cipherlab Proprietary Settings**", Wi-Fi must be turned off. Turn on Wi-Fi again to apply the setting(s) once the configuration is done.

1) Turn Off Wi-Fi, tap on Network **Preferences| Cipherllab Proprietary Settings** to configure the settings.



2) Turn On Wi-Fi to apply the settings. Note that you are not able to configure the settings when Wi-Fi is on.



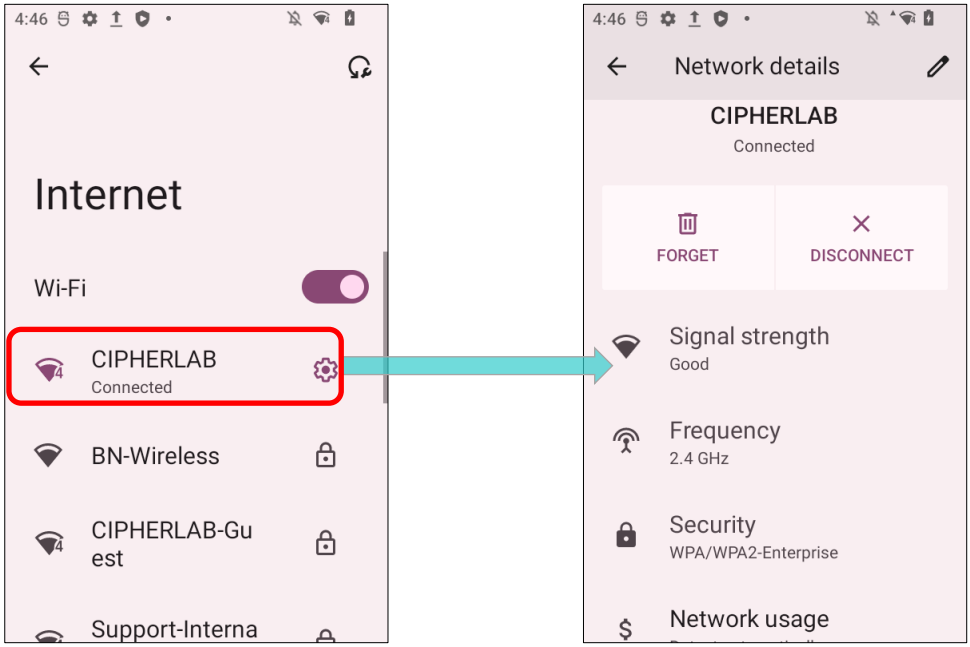
Item	Description
Wi-Fi Frequency Band	Select **Automatic, 5 GHz** only, or **2.4 GHz** only for your Wi-Fi frequency band. The default setting is Automatic.
Enable Roaming	Select whether to enable Wi-Fi roaming or not.
Roaming Trigger	The signal strength when triggering Wi-Fi roaming. The higher value means the sensitivity of triggering roaming is higher.
Roaming Delta	The qualification for roam candidates. The higher value means the signal strength of candidate APs should be higher than the current connected AP.
Enable Fast Transition	Enable 802.11r Fast Transition feature.
Background scan interval	The frequency of background scans when the device does not connect the internet. The shorter time means the scanning frequency is higher.
Set Country Code	Select the Wi-Fi country code for your device.
Enable WLAN Blacklist	Deny the Wi-Fi AP (access point) which is failed to access for several times, and add the denied AP to the blacklist.
Captive Portal Detection	To determine Internet connectivity when the device connects to a network.
Channel Selection	Select the Wi-Fi channel(s) to narrow down frequency band of the 2.4GHz (802.11b/g/n/ax) or 5 GHz (802.11a/n/ax).
Reset to Default	Restore all the settings in “Cipherlab Propruetary” to default.

5.1.4. MODIFY WI-FI NETWORK

MODIFY THE CONNECTED NETWORK

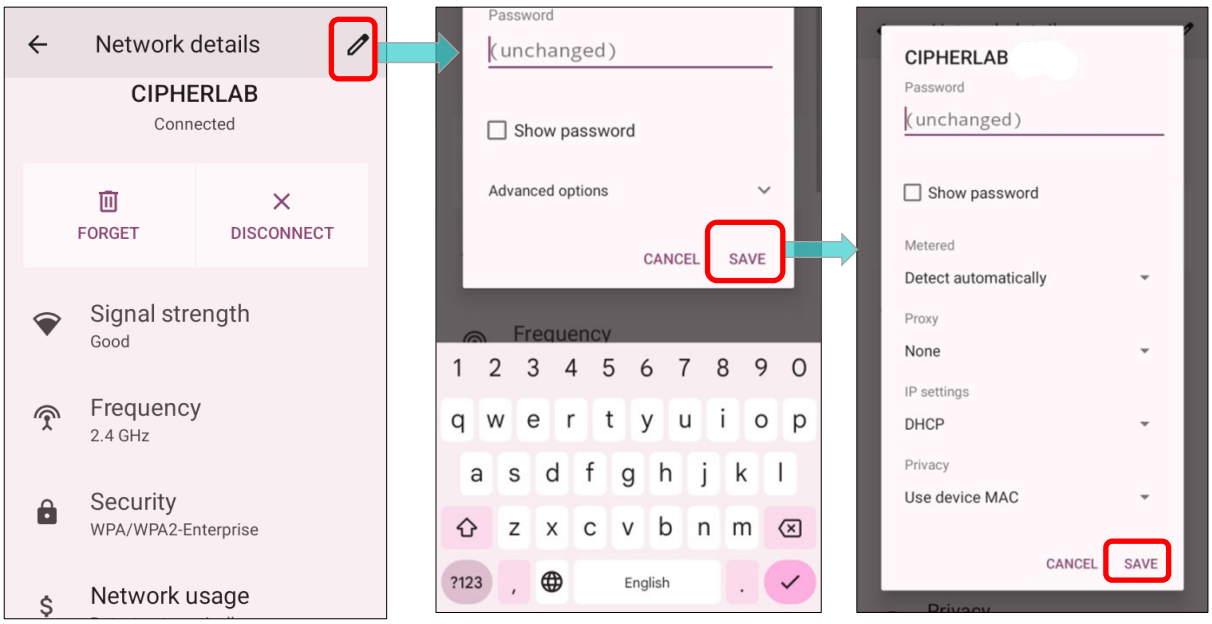
To change the settings for a connected network:

1) Tap a connected network in the Wi-Fi hotspot list to enter its "**Network details**" page.



2) Tap on "**Edit** " button to open the pop-up menu.

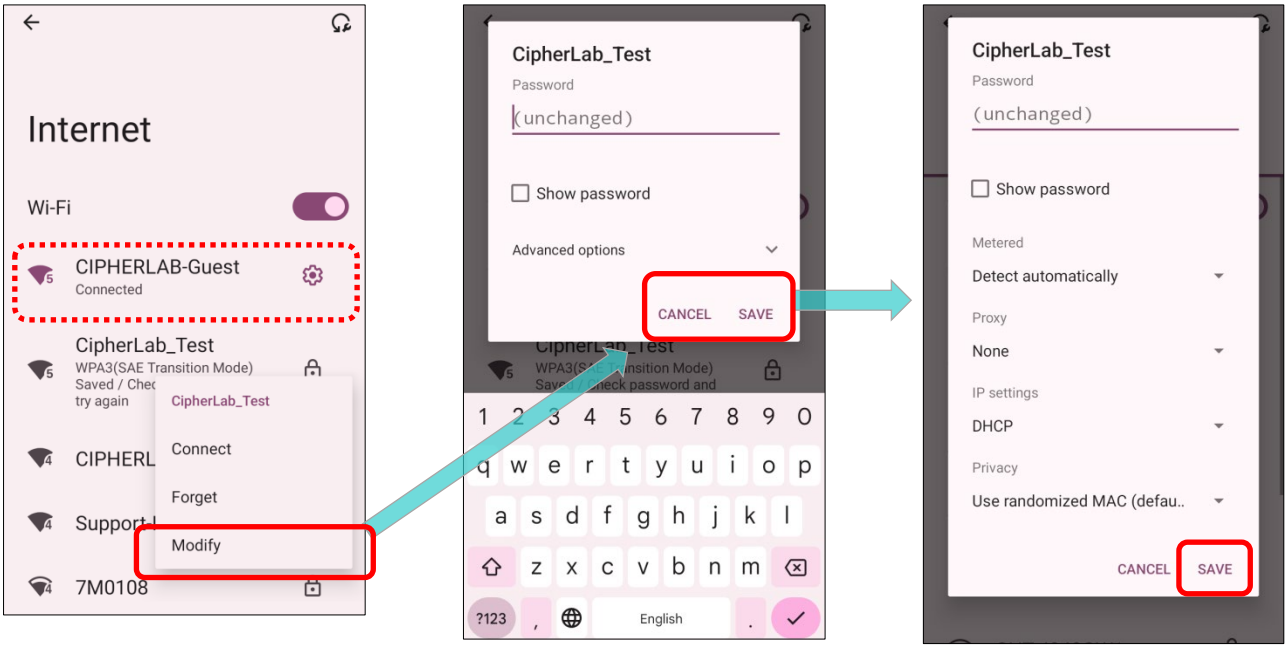
3) Modify the network settings, and tap "**Save"**.



MODIFY THE SAVED NETWORK

To change the settings for a saved network:

1) Tap and hold a saved network in the Wi-Fi hotspot list.
2) Tap "**Modify"** in the pop-up menu.
3) In the dialog box that opens, modify the network settings, and tap "**Save"**.

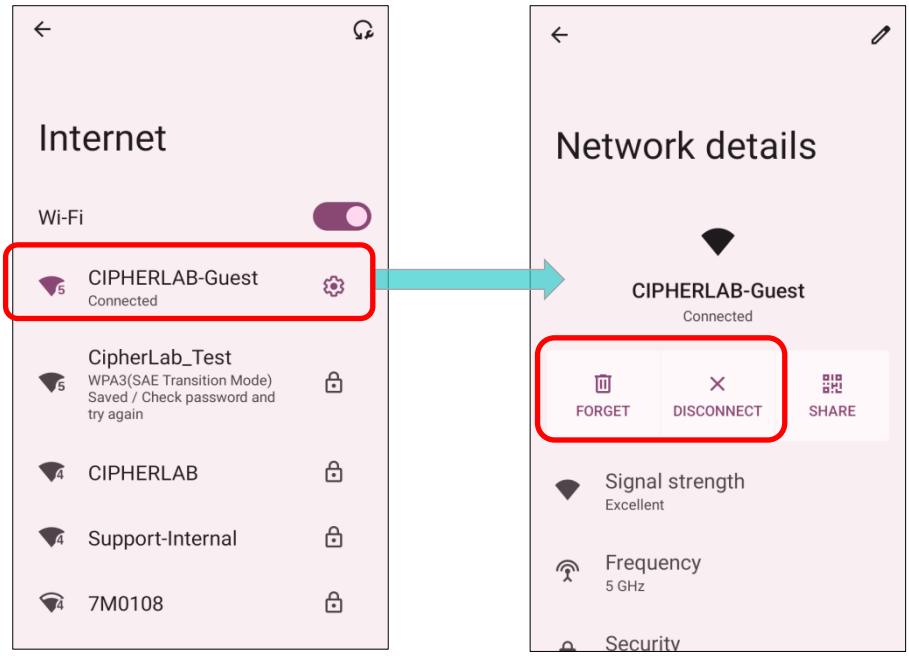


5.1.5. DISCONNECT WI-FI NETWORK

To disconnect a connected network

1) Tap a connected network in the Wi-Fi hotspot list to enter its "**Network details**" page.

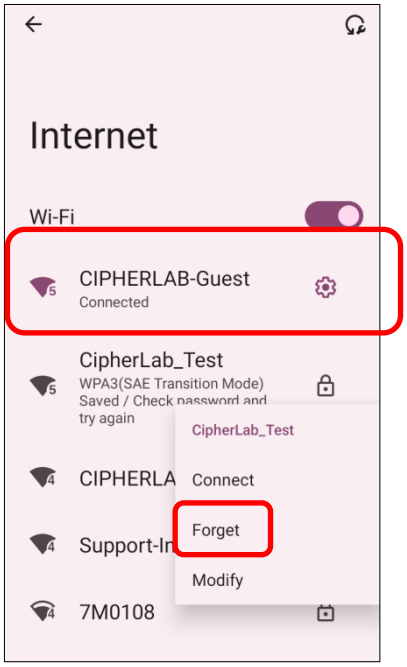
2) Tap "**FORGET"** or "**DISCONNECT"** button to disconnect.



To forget a saved network:

1) Tap and hold a connected network in the Wi-Fi hotspot list.

2) Tap "**Forget"** in the pop-up menu.



5.2 USE BLUETOOTH

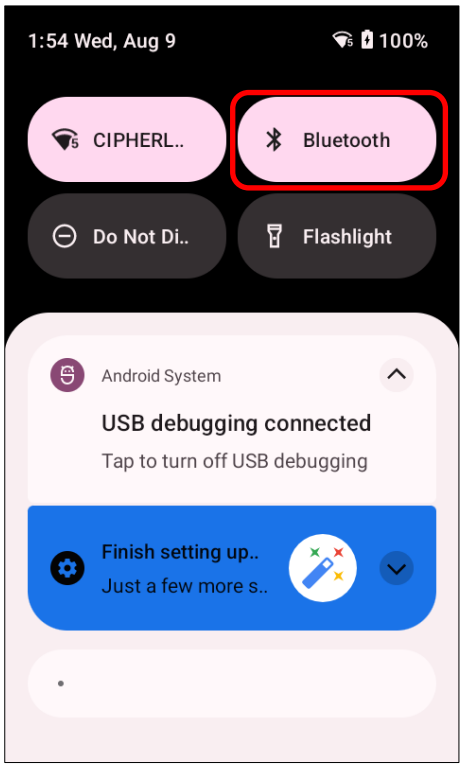
The RK26 mobile computer lets you configure Bluetooth settings and manage Bluetooth services provided on remote devices.

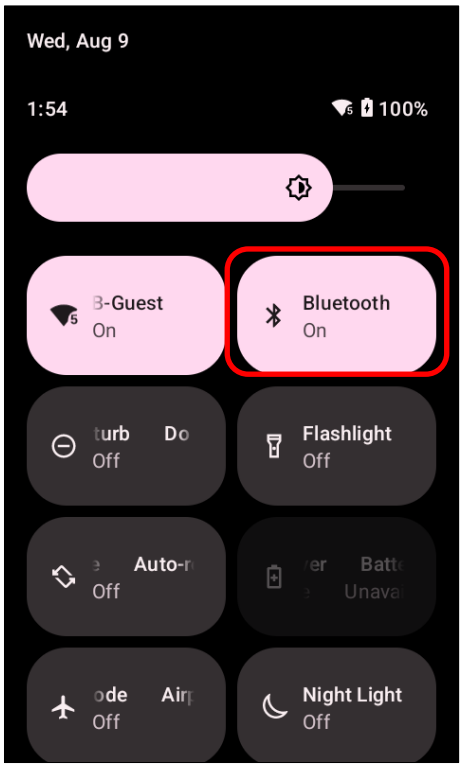
5.2.1. BLUETOOTH PROFILES

Bluetooth Profiles Supported		
Generic Access Profile	(GAP)	For device discovery and authentication.
Service Discovery Access Profile	(SDAP)	Discovers services on remote devices.
Headset Profile	(HSP)	Describes how a Bluetooth enabled headset should communicate with a Bluetooth enabled device
Hands-Free Profile	(HFP 1.6)	Allows using a hands-free device to place and receive calls.
Serial Port Profile	(SPP)	Sets up a virtual serial port to connect two Bluetooth devices.
Generic Object Exchange Profile	(GOEP)	Provides a basis for other data profiles.
Object Push Profile	(OPP)	Pushes and pulls objects to and from a push server.
Hands Free Profile	(HFP)	Connects the Audio Gateway device to the Hands Free device.
Personal Area Networking Profile	(PAN)	Uses Bluetooth Network Encapsulation Protocol for Bluetooth transmission.
Advanced Audio Distribution Profile	(A2DP)	Streams stereo-quality audio to a wireless headset or speaker.
Audio Video Remote Control Profile	(AVRCP)	Allows controlling of television and Hi-Fi equipment.
General Audio/Video Distribution Profile	(GAVDP)	Provides a basis for A2DP and VDP.
Human Interface Device Profile	(HID)	Provides a low latency Bluetooth connection with keyboards, pointing devices, etc.
Phone Book Access profile	(PBAP)	Transfers Phone Book Objects to a car kit to display the information of an incoming call received on the mobile computer, or initiate a call.
Out of band and Near Field Communications	(OOB, NFC)	Manages the pairing process by using NFC.
Symbol Serial Interface Profile	(SSI)	Supports additional scanner.
Human Interface Device Profile	(HID)	Provides a low latency Bluetooth connection with keyboards, pointing devices, etc.
Dial-up Networking Profile	(DUN)	Provides a standard to access the Internet and other dial-up services over Bluetooth.

5.2.2. TURN ON BLUETOOTH

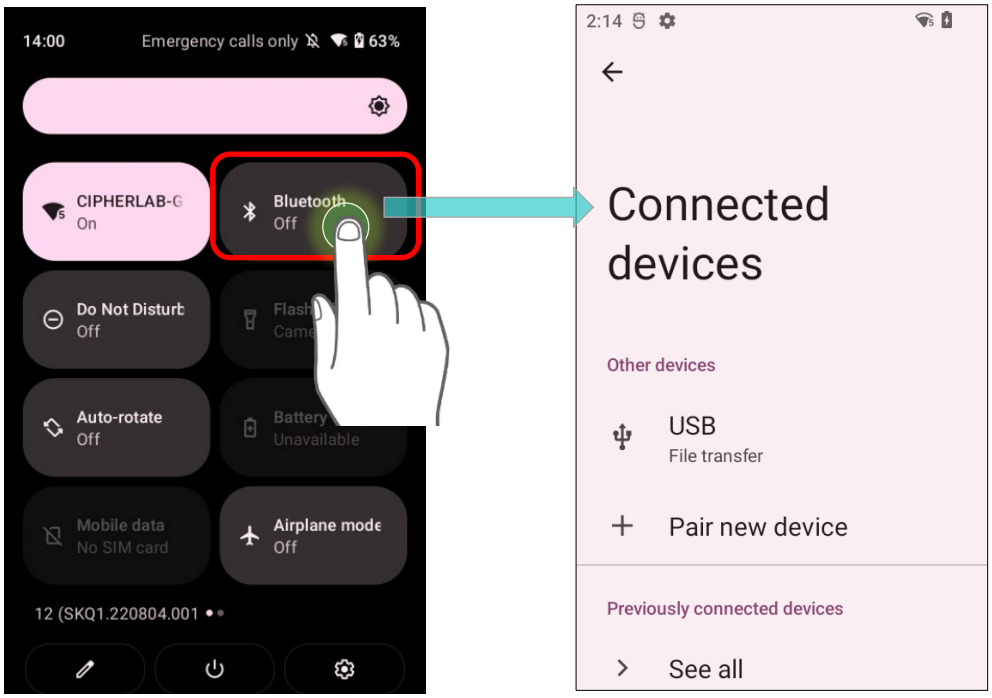
Bluetooth is turned on by default, and you can turn it on or off by tapping on the Bluetooth icon  on **Quick Settings Menu** or **Quick Settings Panel**:





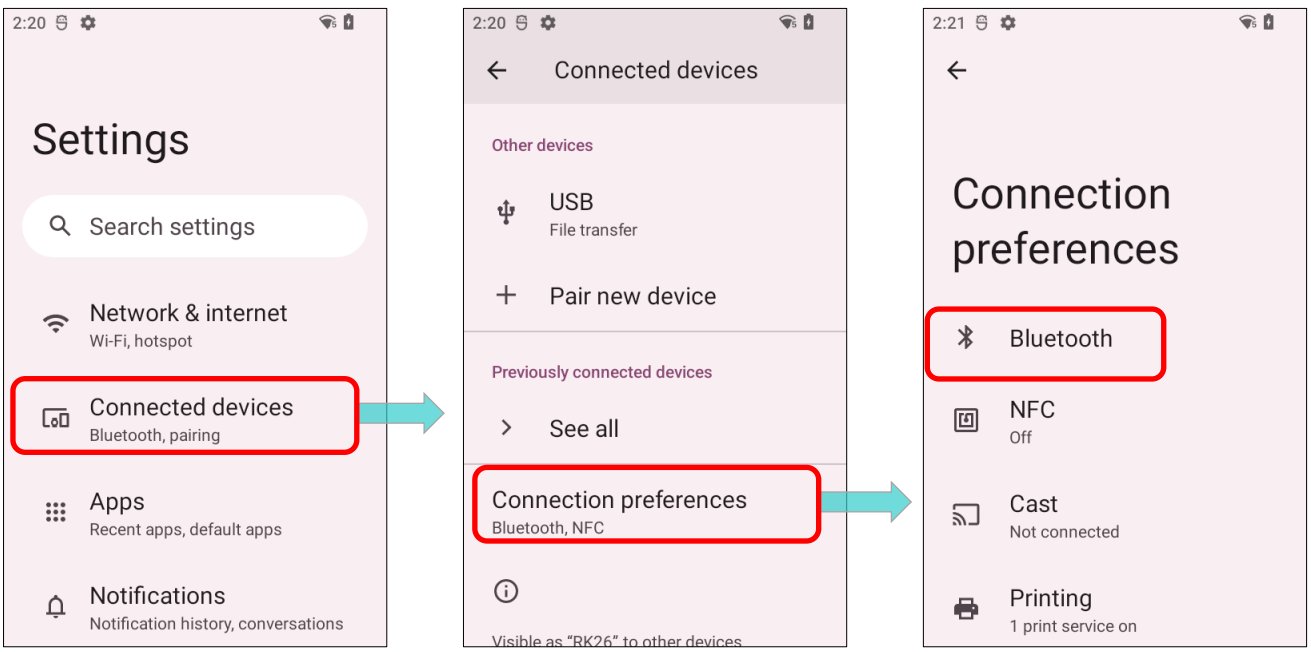
Icon	Description
	Bluetooth is **OFF.**
	Bluetooth is **ON**.

To enter "**Connected devices**" page for further Bluetooth settings, please long press the Bluetooth icon on **Quick Settings Menu** or **Quick Settings Panel**:

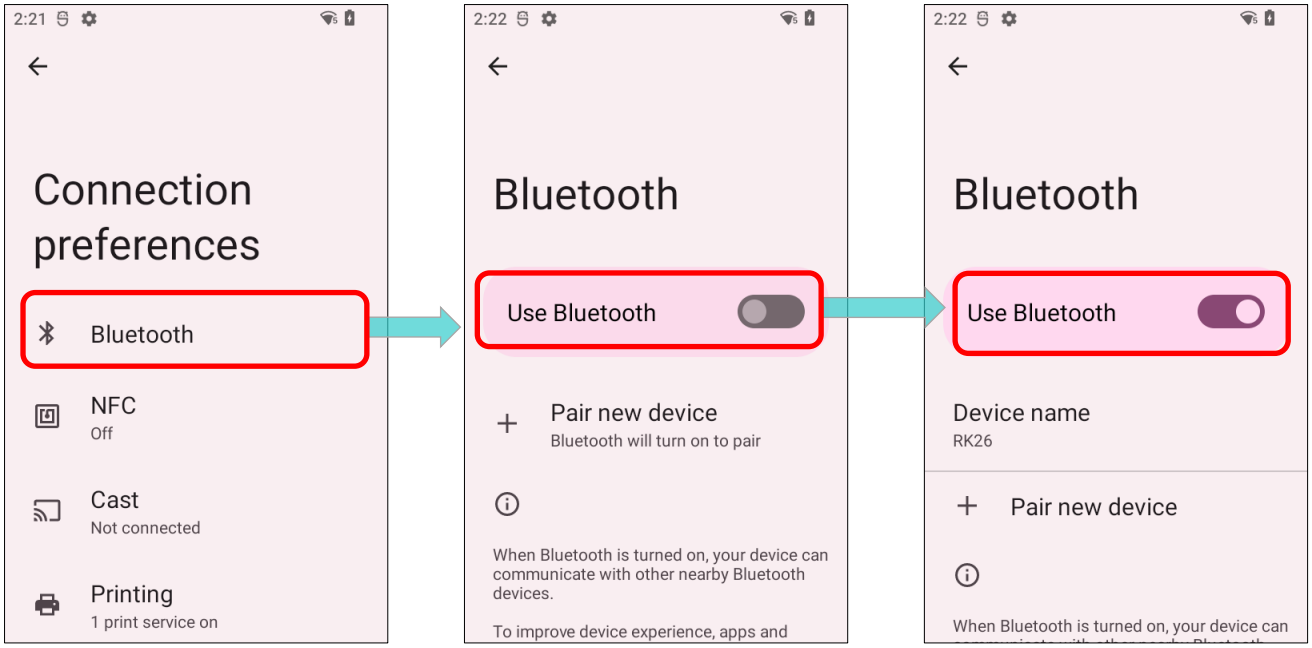


OR

1) Go to **App Drawer (All Apps)** | **Settings** | **Connected devices** | **Connection preferences** | **Bluetooth** .



2) Tap the switch to turn on this function while enabling the Bluetooth visibility of this device.



Note:

Having been turned on, Bluetooth is active 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.

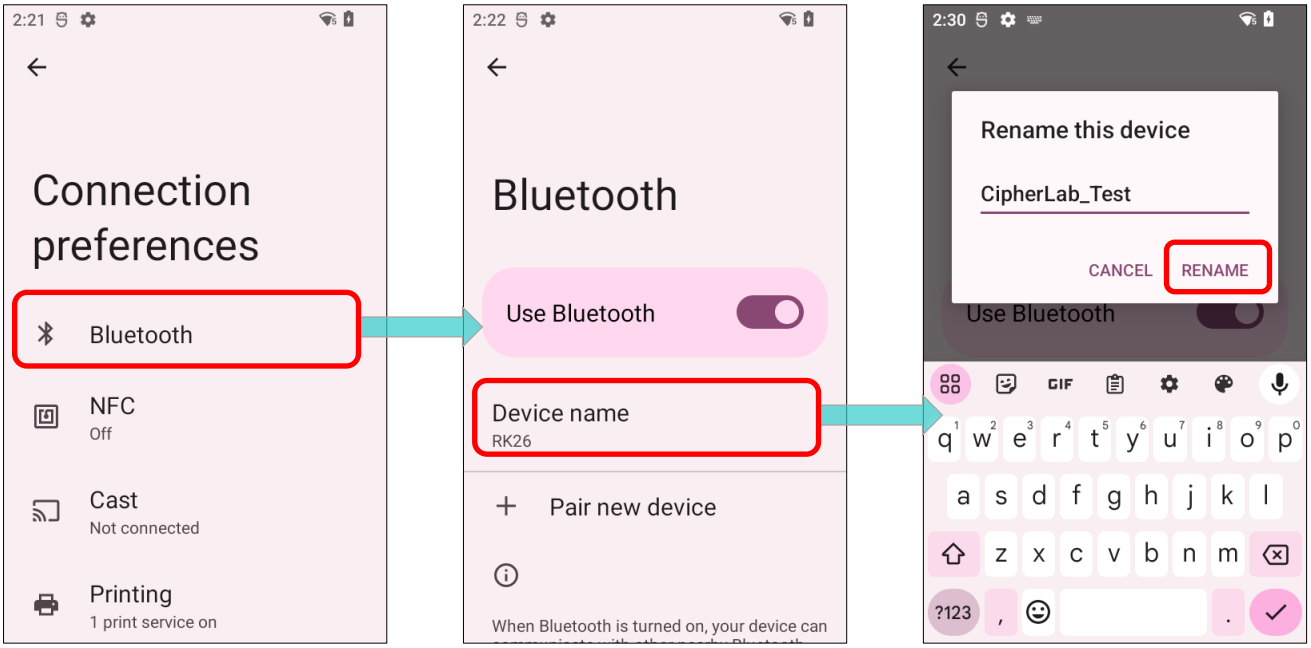
5.2.3. CHANGE BLUETOOTH NAME

To change the Bluetooth name of this mobile computer:

1) Go to App Drawer (All Apps) | **Settings** | **Connected devices** | **Connection preferences** | **Bluetooth** .

2) Tap "**Device name**" and the pop-up window "**Rename this device**" shows up.

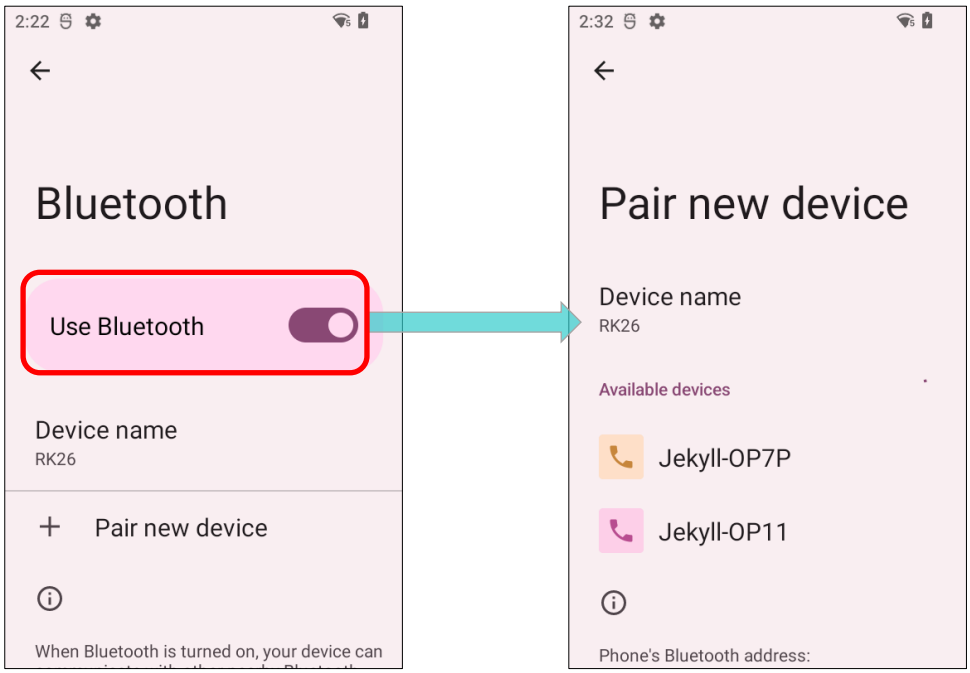
3) Type a new name in the field and tap **RENAME**.



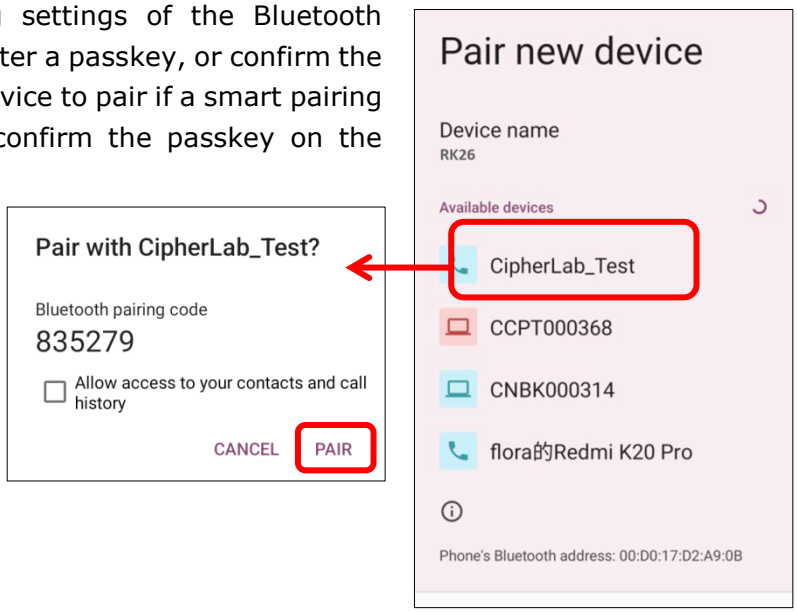
5.2.4. PAIR BLUETOOTH DEVICES

1) Go to App Drawer (All Apps) | **Settings** | **Connected devices** | **Connection preferences** | **Bluetooth** .

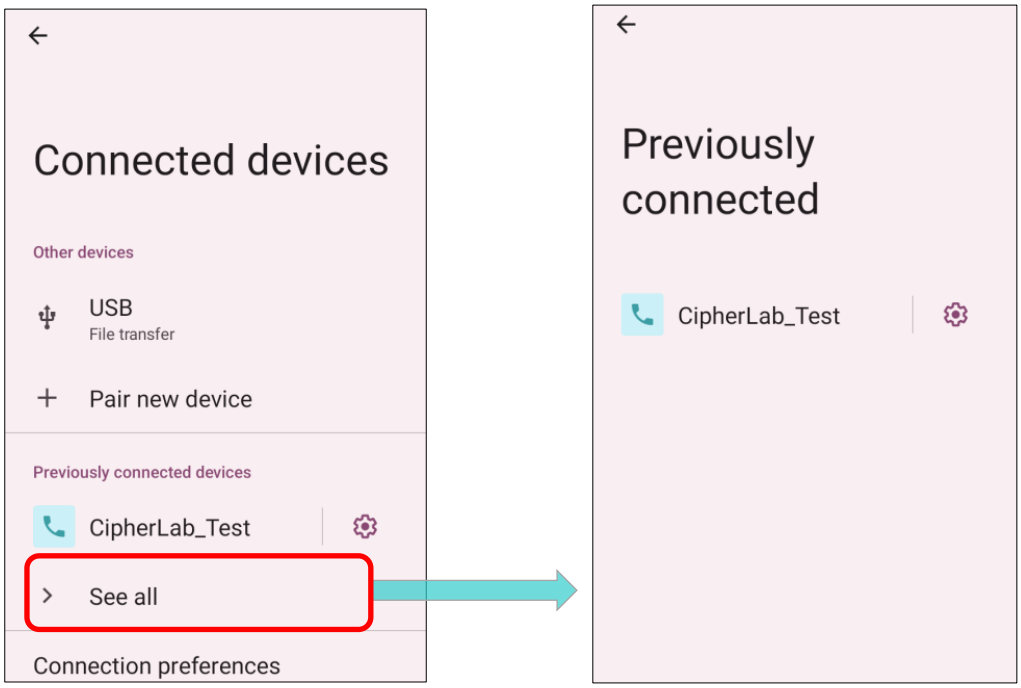
Tap the switch to **On** to scan for available Bluetooth devices nearby. Scroll through the list and tap the device you would like to pair.



2) The **Bluetooth pairing request** window opens. Depending on the pairing settings of the Bluetooth device, you may need to enter a passkey, or confirm the assigned passkey on the device to pair if a smart pairing method is applied. Enter/confirm the passkey on the device to pair.



3) Once pairing is done, the Bluetooth device will be listed in the **Previously connected devices** page. Go to **App Drawer (All Apps)** | **Settings** | **Connected devices** to check the connected device(s) list.



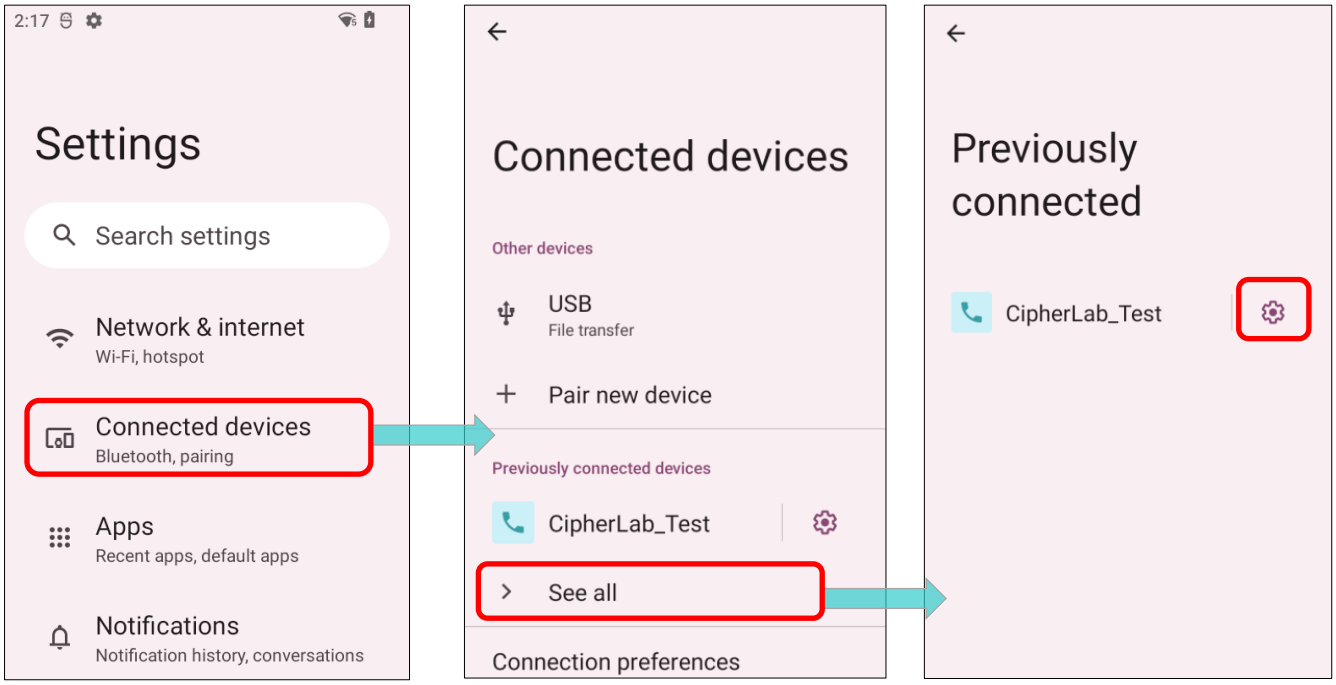
Note:

If the device you would like to pair with is not listed, make sure Bluetooth visibility is enabled on the device.

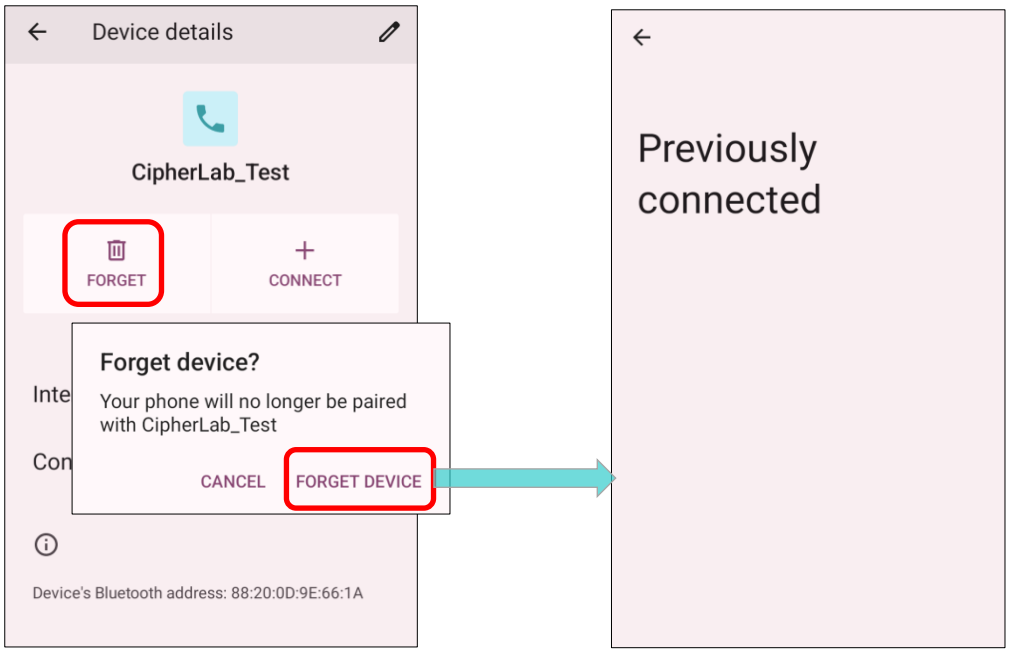
5.2.5. UNPAIR BLUETOOTH DEVICE

To unpair a paired device:

1) In the **Previously connected devices** list, tap the settings button next to the paired device.



2) On the **Device details** screen, tap **FORGET**.



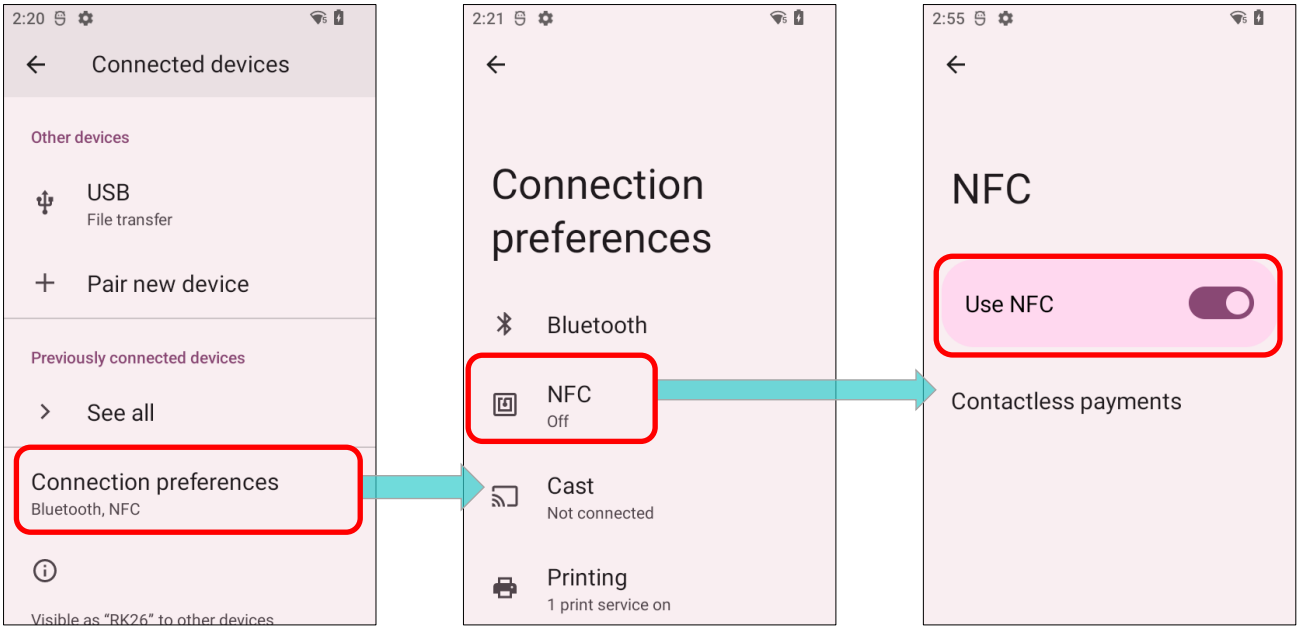
5.3 USE NEAR FIELD COMMUNICATIONS

Near field communications (NFC) uses close proximity (4 cm or less) to establish radio communication through electromagnetic fields. With NFC enabled, the mobile computer can collect information from NFC tags, exchange information with other NFC supported devices, and even change information on the NFC tag if authorized.

Before starting to communicate through NFC, perform the following:

1) Go to App Drawer (All Apps) | **Settings** | **Connected devices** | **Connection preferences** | **NFC**.

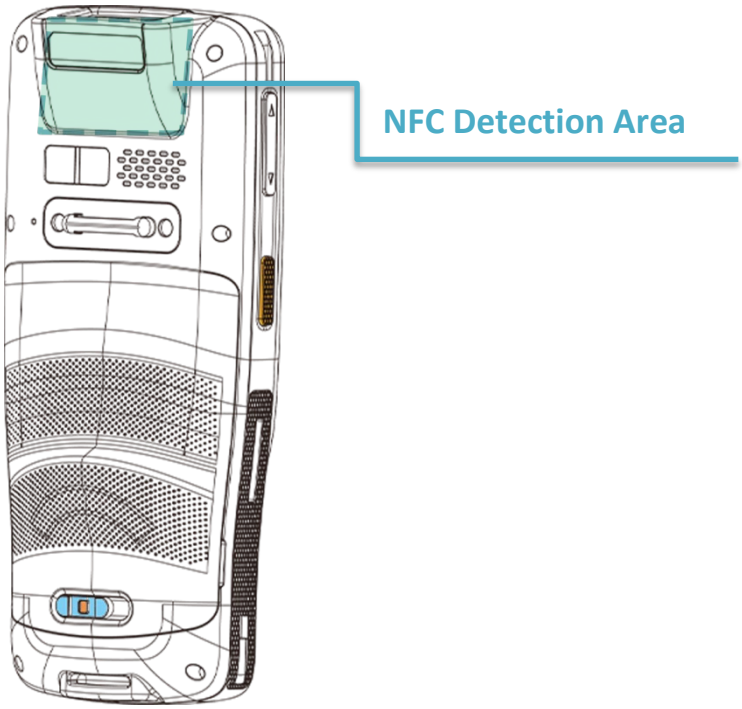
2) Tap on the switch to turn on "**NFC**".



5.3.1 PAIR WITH NFC ENABLED BLUETOOTH DEVICES

1) On the device you would like to pair with, make sure NFC is enabled and Bluetooth discovery is enabled.

2) Hold the mobile computer without covering the antenna area.



3) Move the mobile computer in proximity with the device for pairing. A screen notification will appear to indicate that pairing is successful.

Note:

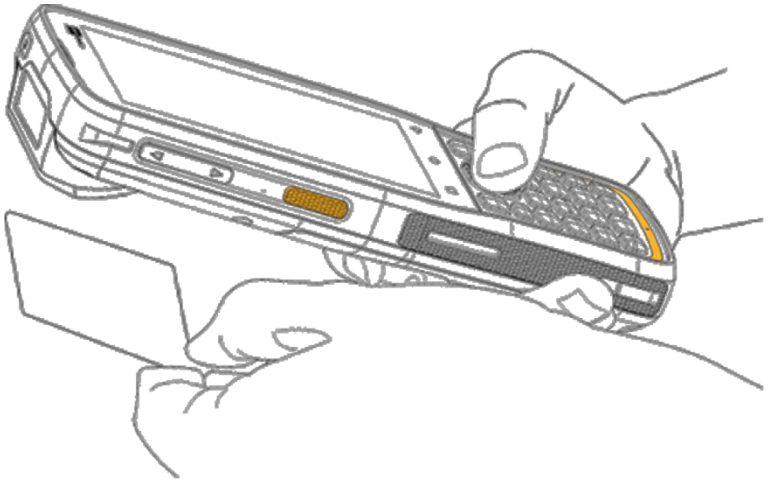
Once the data begins to transfer, the two devices only need to be held within a 10 m (32.8 ft.) range; they no longer have to be held within close range in order to transfer successfully.

COMMUNICATION WITH NFC

1) On the mobile computer, launch an NFC enabled application.

2) Hold the mobile computer without covering the antenna area.

3) Place the mobile computer close to the NFC tag or device until the application indicates data transfer is complete.



Chapter 6

CHAPTER6. USING THE PHONE

The RK26 mobile computer allows making phone calls and connecting to the network over Wideband Code Division Multiple Access (WCDMA). Insert the SIM card before turning on the power. Refer to Installing SIM Card and Memory Card.

Note:

If the SIM card is not in position, you may make emergency calls if the service is supported.

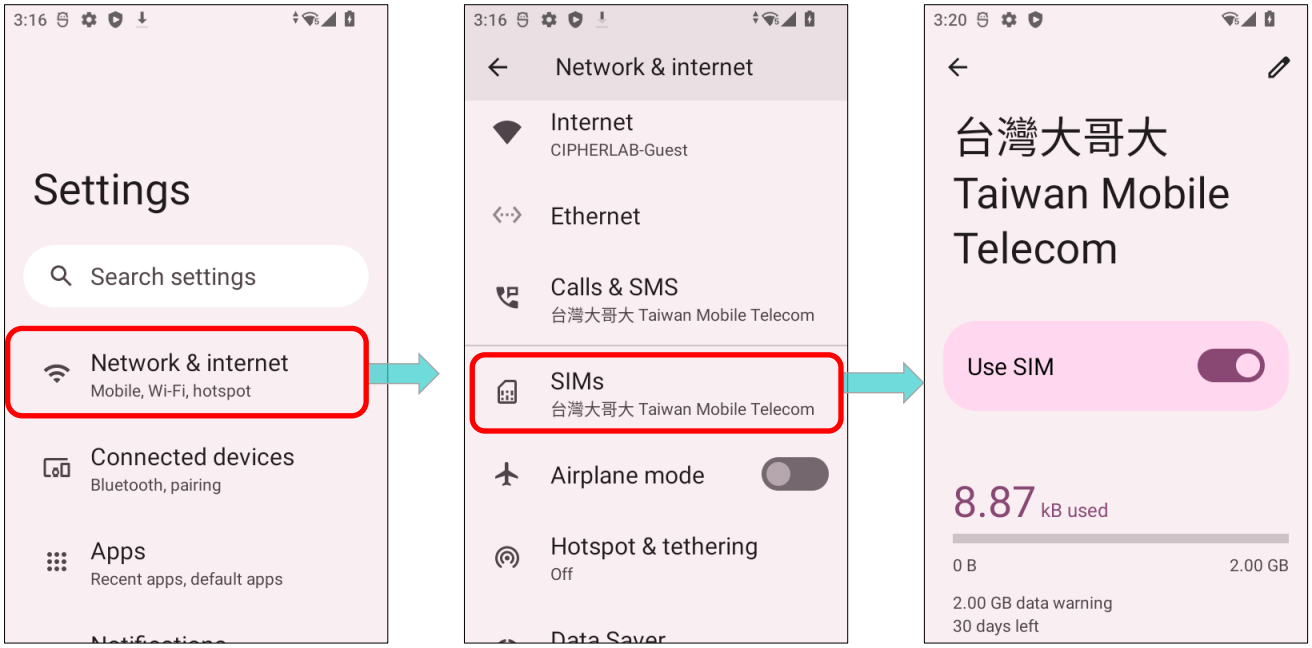
IN THIS CHAPTER

6.1. SIM Card Management 186
6.2. Phone Application 189
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6.4. In-call Volume 201

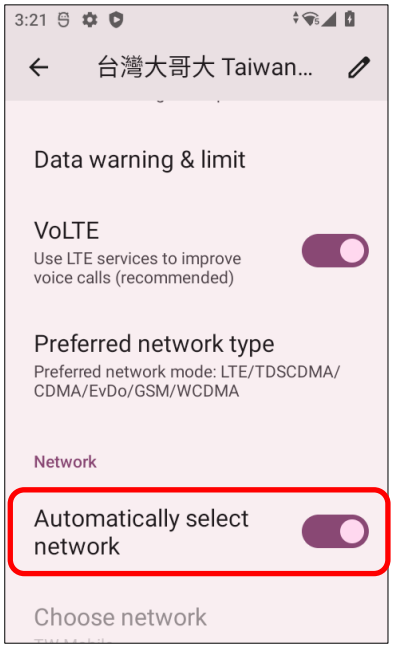
6.1. SIM CARD MANAGEMENT

The default setting for celluar networks is "**Automatically select network**". To manually select the cellular network, please:

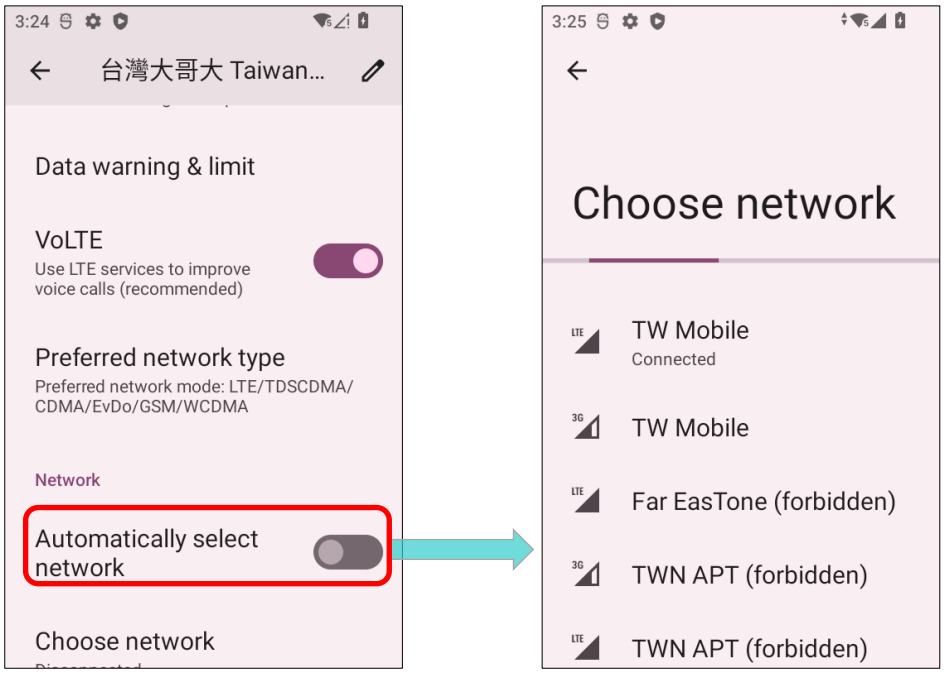
1) Go to **App Drawer (All Apps)** | **Settings** | **Network & Internet** | **SIMs**.



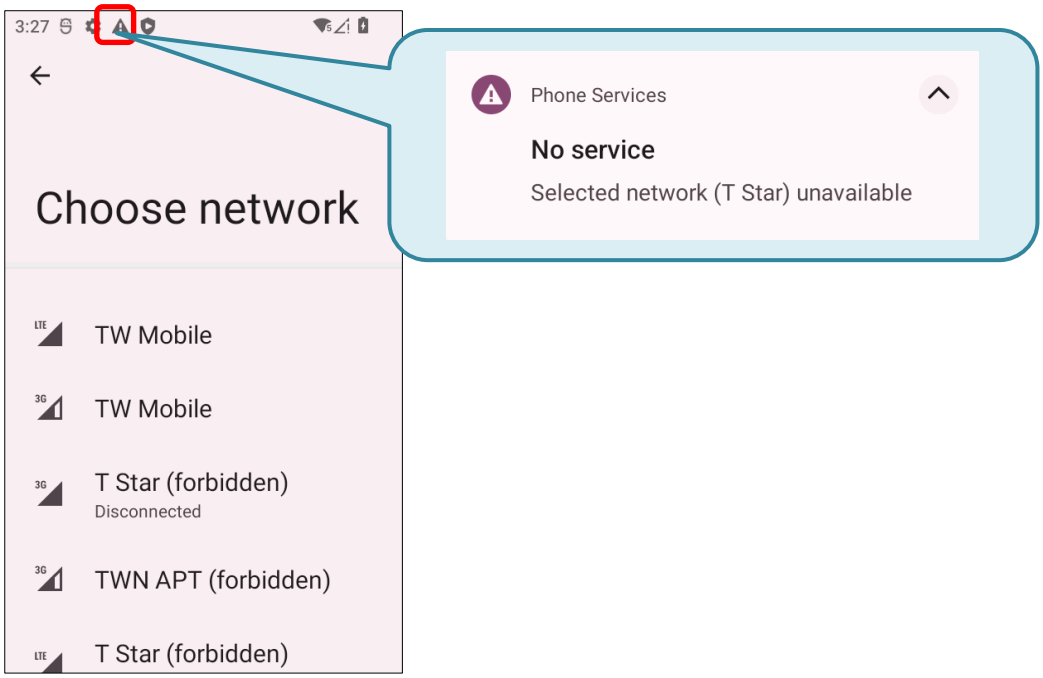
2) On the mobile network page, scroll to find "**Automatically select network**" to disable it.



3) By turning off "**Automatically select network**", "**Choose network**" pops up to list the network after searching. Select your preferred network from the list.



4) A notification appears if the selected network is unavailable. Please repeat the aforesaid steps to select the network again.



Note:

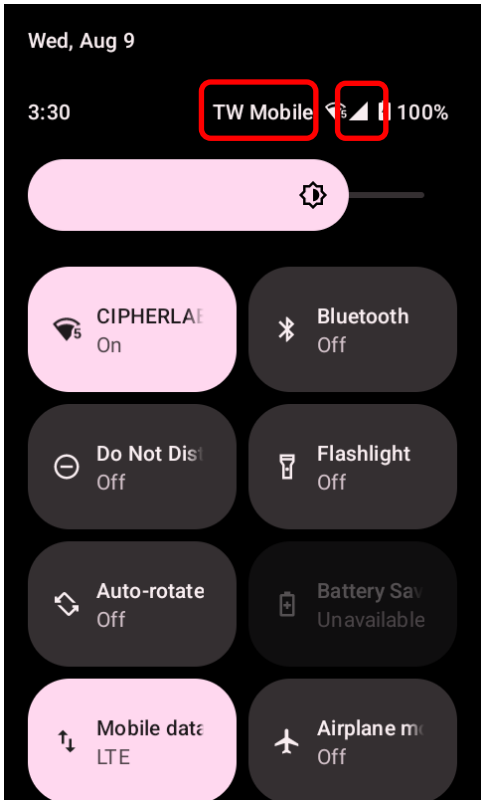
When both SIM cards are both inserted and enables, they are both active and ready to receive an incoming call but not able to be connected at the same time.

EMERGENCY CALLS

Depending on your service provider, the mobile computer might support making emergency phone call when the SIM card is locked, or even when no SIM card is inserted. Emergency phone numbers will vary by country.

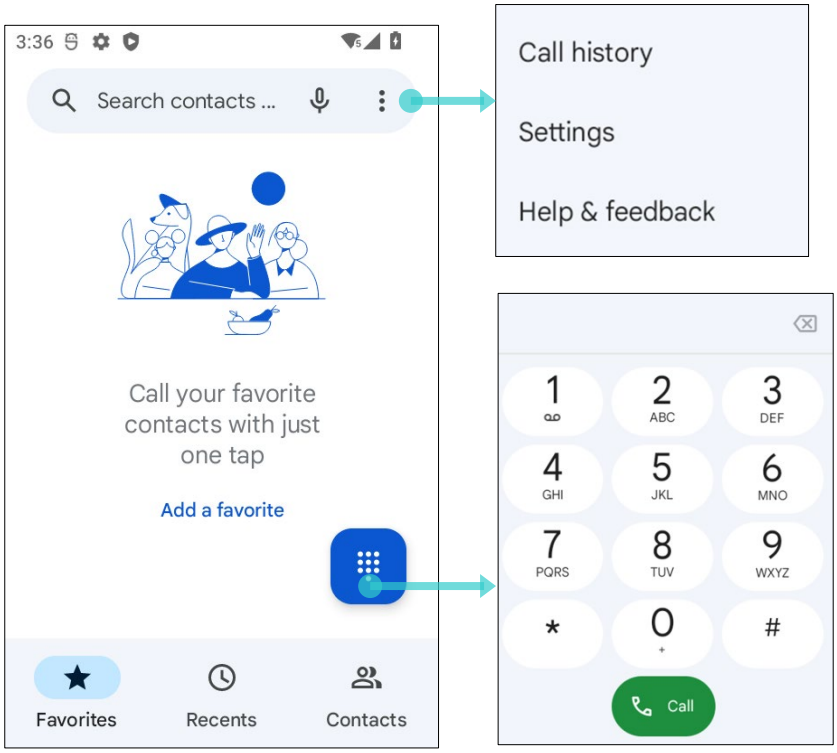
6.2. PHONE APPLICATION

When a SIM card is installed on the mobile computer, a signal icon appears on the upper-right of the **Quick Settings Menu** to indicate the signal strength of the connection.



6.2.1 PHONE INTERFACE

To launch the phone application, please go to **App Drawer (All Apps)** | **Phone** .



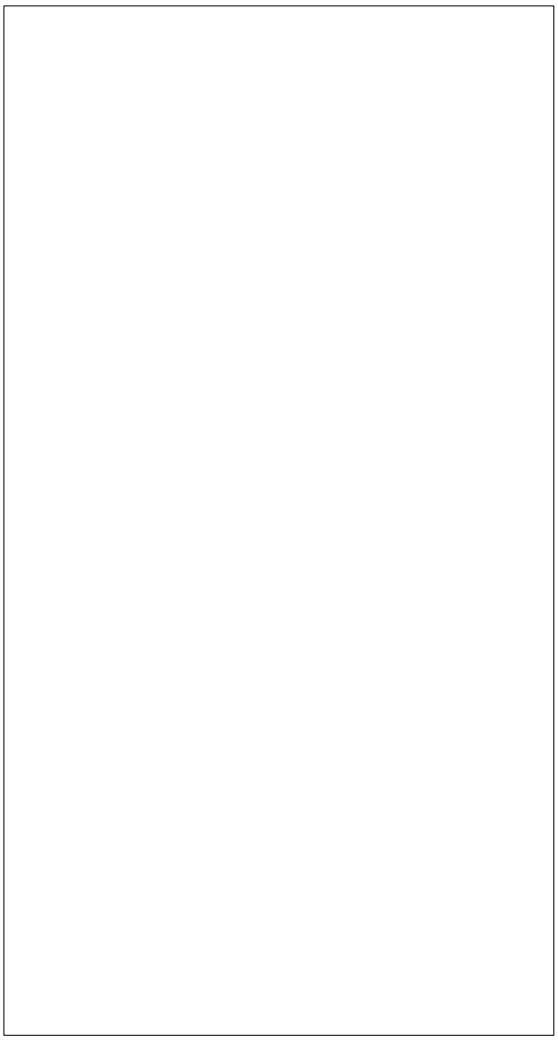
The application "**Phone**" contains 3 tab pages:

Item		Description
☆	Favorites	Display your favorite contacts & your frequent calls.
🕒	History	List all the call history.
👥	Contacts	List your contacts.

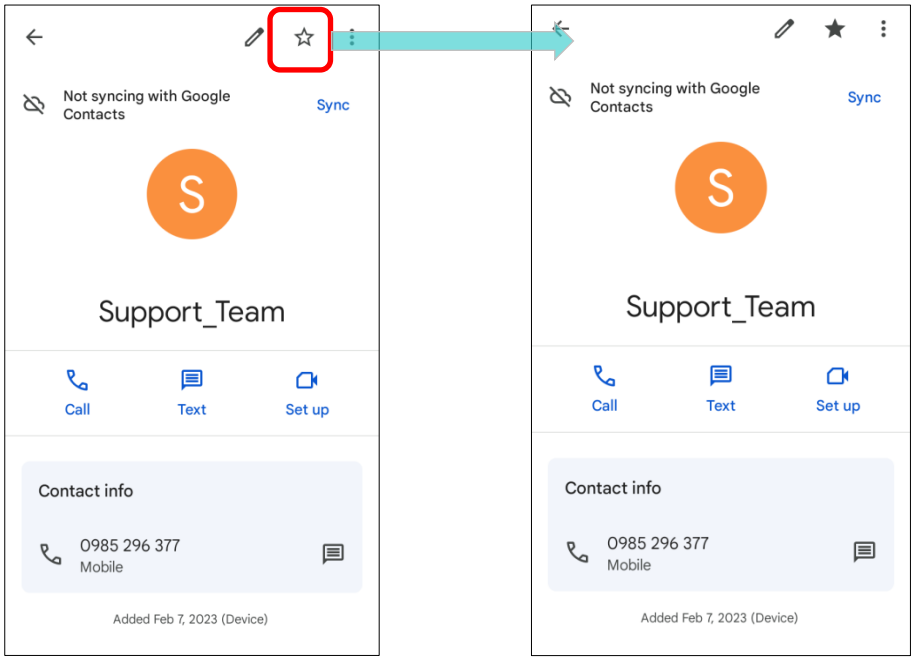
ADD FAVORITE CONTACTS

Your favorite contacts are displayed on "**Favorites**" ☆ tab pages for quickly making phone calls. To add a favorite contact:

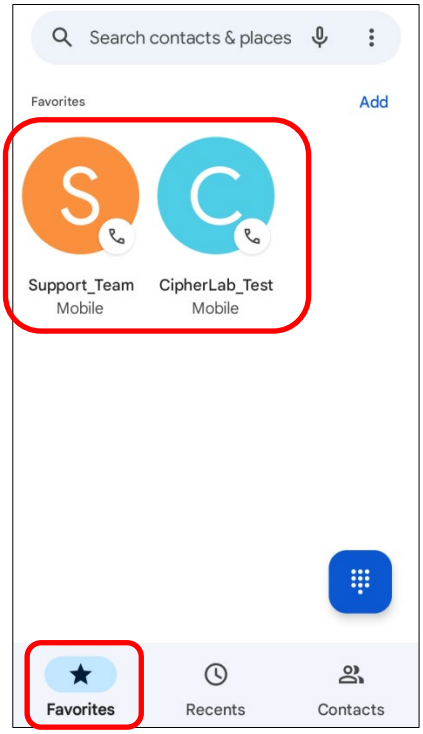
1) On "**Contacts**" tab page, tap on the contact you would like to set to be your favorite to enter the contact detail page.



2) Tap on the start mark on the upper-right to mark this contact as your favorite.



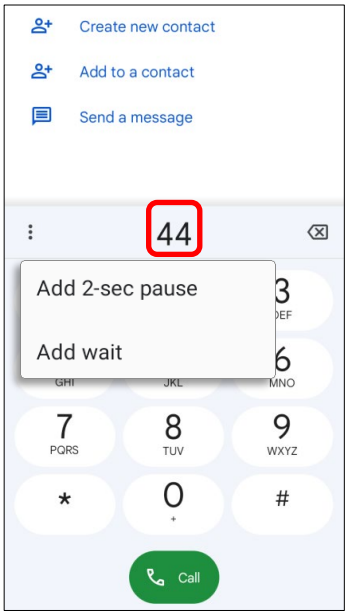
Return to "**Favorites**" ☆ tab page, the contact you just marked as favorite is now displayed on "**Favorites**" ☆ tab page.



6.2.2 PLACE CALL

Tap  to expand the dial pad, enter the phone number in the dial pad, and tap  to initiate the call.

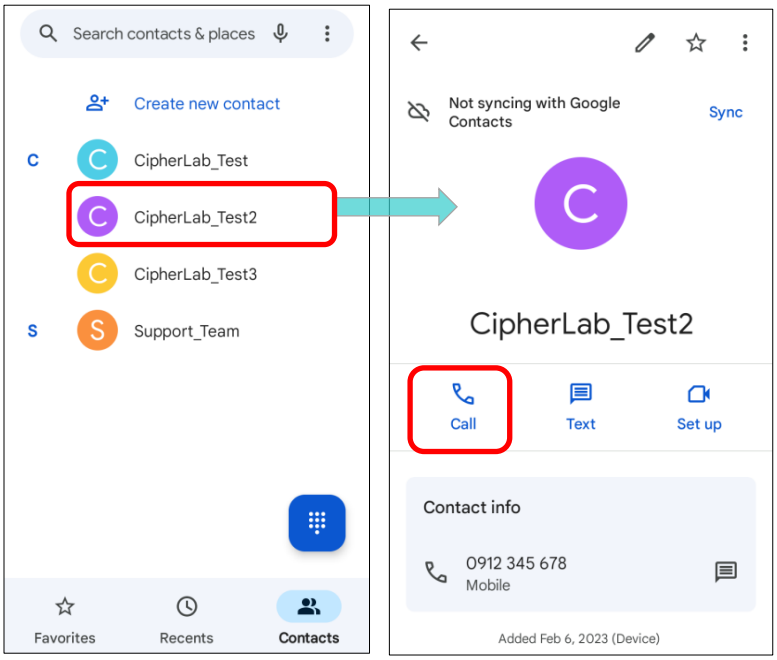
If you need to frequently make calls to an interactive voice system, you may tap  next to the number and select **Add 2-sec pause** for soft pause (a pause of 2 seconds to the buttons) or a hard pause (a pause that will wait for your confirmation to send the following digits).



PLACE CALL BY USING CONTACTS

To make a call by using contacts:

1) In the phone application page, tap to enter "**Contact**"  tab page.
2) Tap a contact to enter the contact detail page and then tap on "**Call**"  to initiate a call.



6.2.3 DURING A CALL

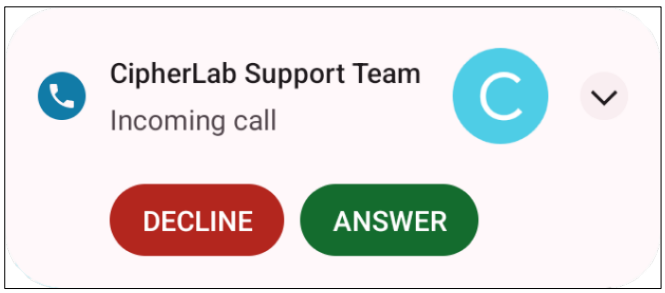
When a call is connected, the phone keypad features the following buttons:



Button		Description
	Mute	Mute the call.
	Keypad	Open the numeric keypad.
	Speaker	Turn on the speaker.
	Add call	Add another person to the call.
	Hold	Place the call on hold.
	Hang up	End the call.

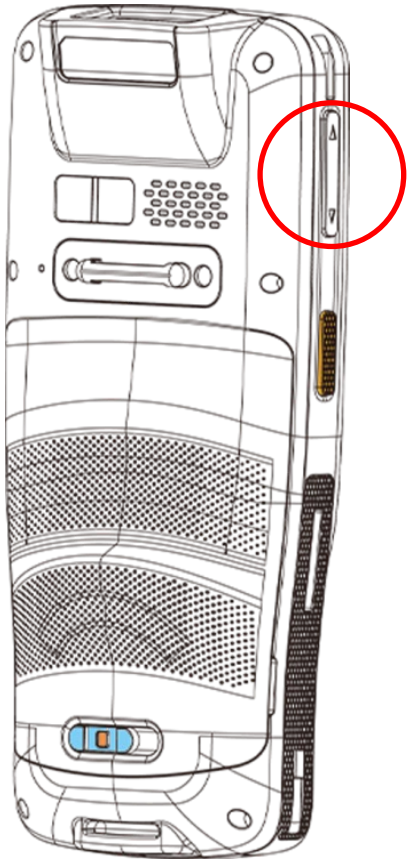
6.2.4 RECEIVE INCOMING CALL

When a call is incoming on the mobile computer, tap "**Answer**" to pick it up.



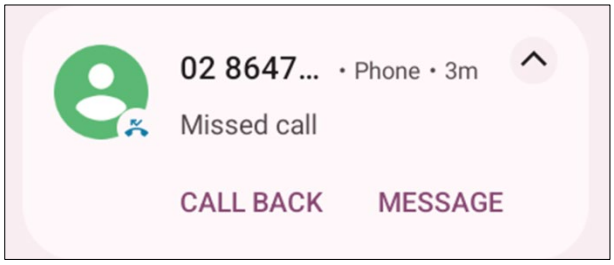
Incoming calls will be logged in the **Phone** application; in the case of a missed call, a notification will be displayed. See Check Missed Calls.

To mute the ringtone of an incoming call, press the volume down button.



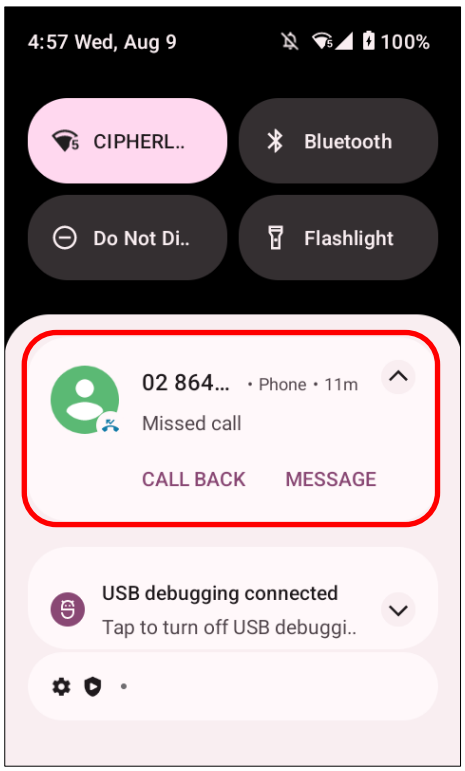
6.2.5 CHECK MISSED CALLS

If you have a missed call, a notification icon will appear on the status bar. The missed calls notification will also be displayed on the lock screen.



(Turning on or off the notification function on **App Drawer (All Apps)** | **Settings** | **Notifications** | **Notifications on lock screen**)

Unlock the screen and use the Notifications Drawer to manage the missed call.



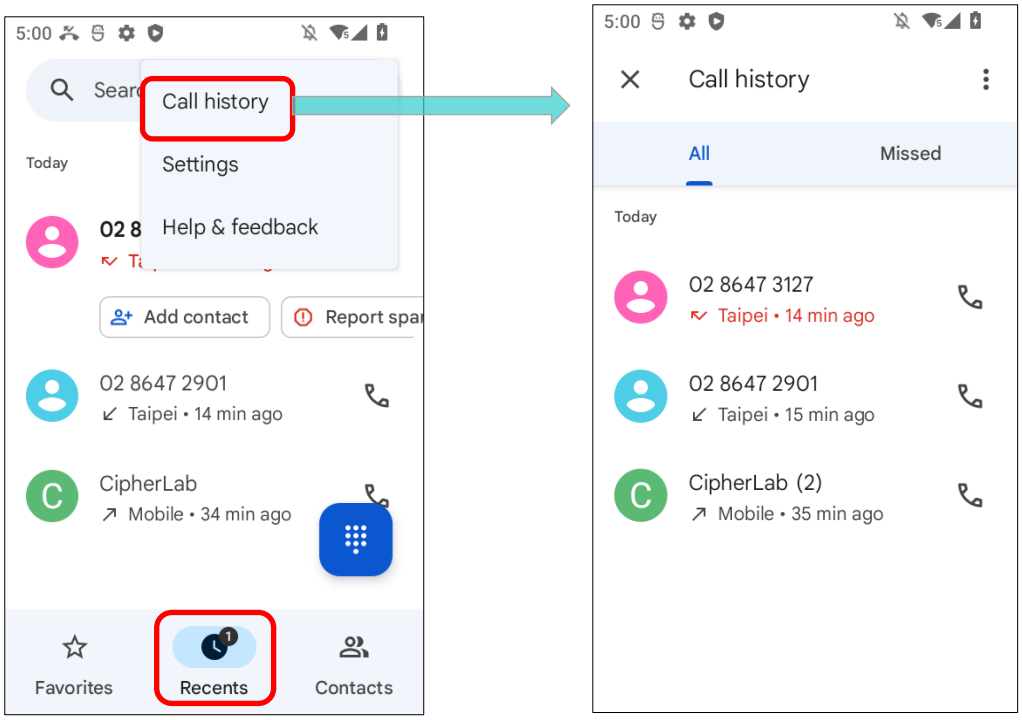
6.2.6 CALL HISTORY

To check the call history:

On the Phone application, tap to enter **Recents** tab page where a list of history calls is displayed.

OR

Tap on the more button and then **Call history**.



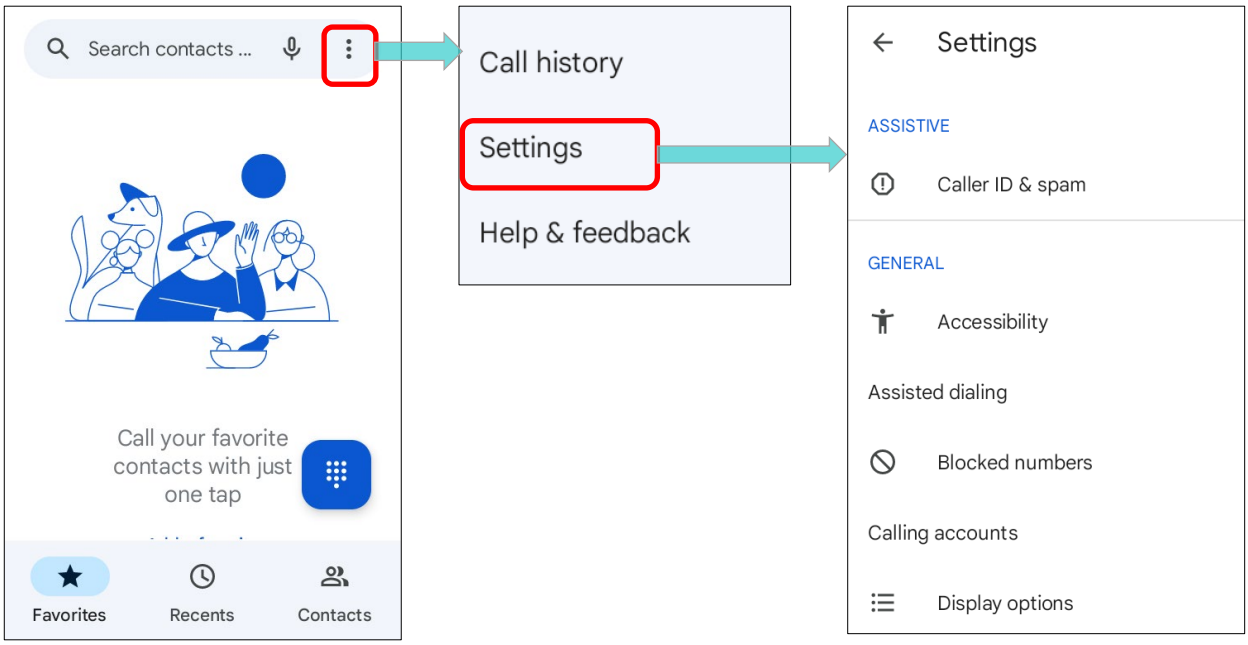
Item	Description
↙↗	Connected calls.
↙	Missed calls.

Tap the phone icon next to a call record to place back the call.

To clear call history, tap on the more button on **Call history** page and then continue tap on the more button to tap "**Clear call history**".

6.2.7 CALL SETTINGS

Tap on more button  and select "**Settings**" to enter the settings page:



Tap on each setting for more setting options.

6.2.8 MAKE MULTI-PARTY CALLS

To make multi-party conference calls:

1) On the Phone application page, enter the 1st number to call and tap 

to initiate the call.

2) After the call has begun, tap **Add call** to add another member. The 1st call will be put on hold.

3) Select the 2nd member from call log or contacts to call directly, or tap the dial pad to input the phone number to call and tap 

to initiate the call.

4) When the 2nd call is connected, the first call will continue to be on hold. Tap the merge call button to add the 1st call to the conversation. A three-party conference call is initiated.

   - To add a 4th member, please tap . The three-party call will be put on hold. Follow the step similar to step 3 to initiate the call. When the call is connected, the three-party call will continue to be on hold. Tap the merge call button to add the three-party call to the conversation. A four-party conference call is then initiated.

   - Tap **Manage Conference Call** to view all members of the call.

   - To remove a member, tap next to the member.

   - To speak with a member in private, tap next to the member, and the conference call will be put on hold. Tap to return back to the conference call.

6.3. AUDIO MODES

The mobile computer offers three different audio modes for phone calls:

HANDSET MODE

This is the default audio mode which uses the receiver above the touchscreen for audio output during calls.

SPEAKER MODE

This mode uses the built-in speaker for audio output during calls.

HEADSET MODE

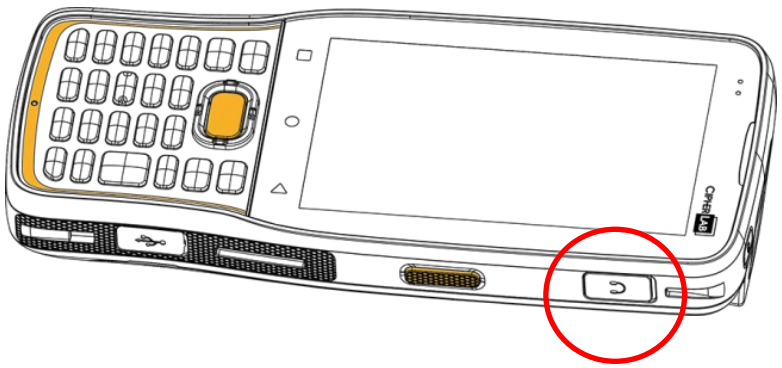
Connect a Bluetooth headset or a wired headset to the mobile computer for audio output during calls.

USE BLUETOOTH HEADSET

See Pair Bluetooth Deices to connect the mobile computer to a Bluetooth device. The speaker phone becomes muted when a Bluetooth headset is connected.

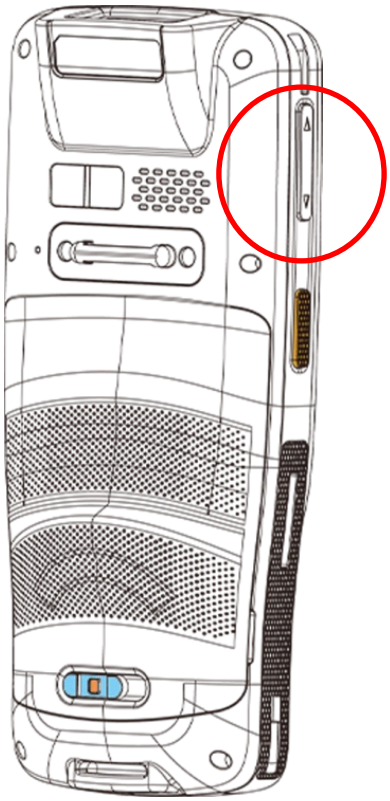
USE WIRED HEADSET

Insert a wired headset in the Headset Jack. The speaker phone becomes muted when a wired headset is connected.



6.4. IN-CALL VOLUME

Use the Volume Buttons to adjust the ringer volume and system sound level. When in the middle of a call, use the volume buttons to adjust in-call conversation volume.



Chapter 7

CHAPTER7. CIPHERLAB UTILITIES

This chapter gives the introduction about the built-in applications developed by CipherLab

IN THIS CHAPTER

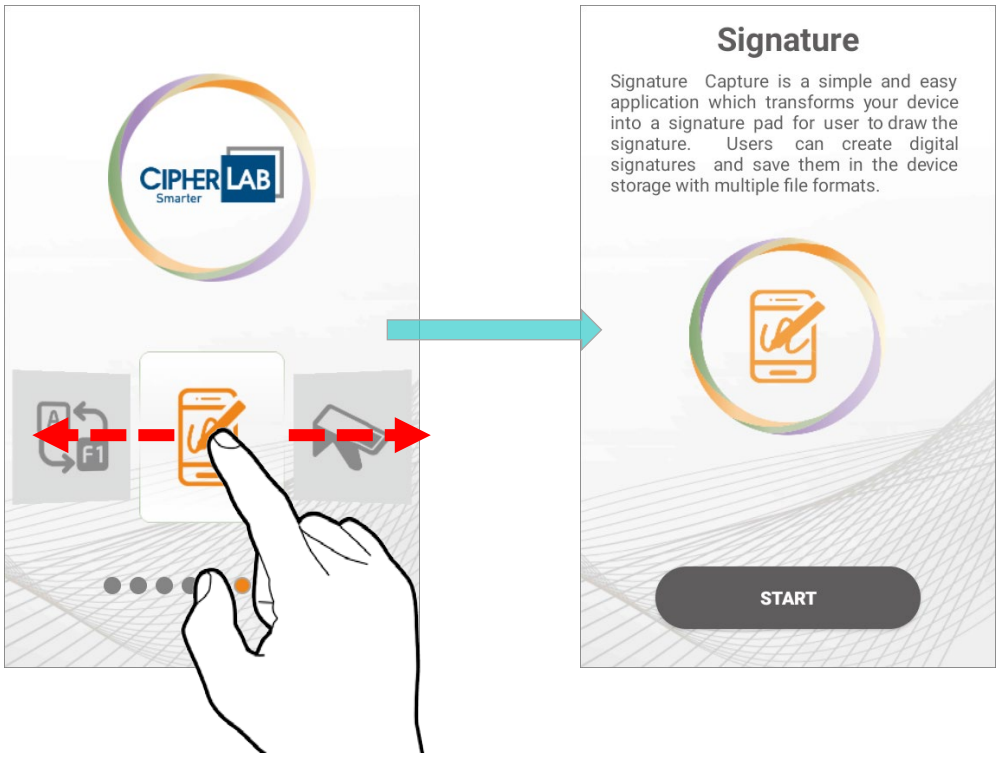
7.1. A-Demo 203
7.2. AppLock 205
7.3. Barcode To Setting 206
7.4. BT Printer Mate 211
7.5. Button Assignment 211
7.6. Device Health Dashboard 212
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7.16. Terminal Emulation 231
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7.1. A-DEMO

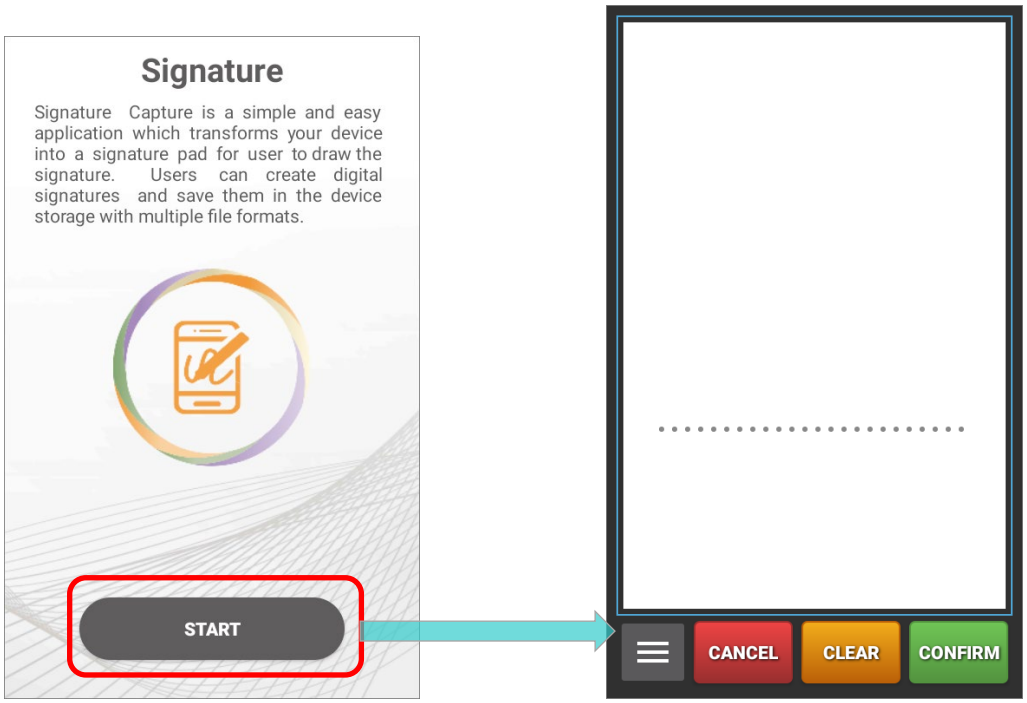
"**A-Demo**" is an application which gives the brief introduction about all the built-in applications developed by CipherLab.



Enter the main screen and swipe left or right to select the item to get the function introduction.



Users can launch those apps by tapping "**START**" on the app's introduction page.



7.2. APPLOCK



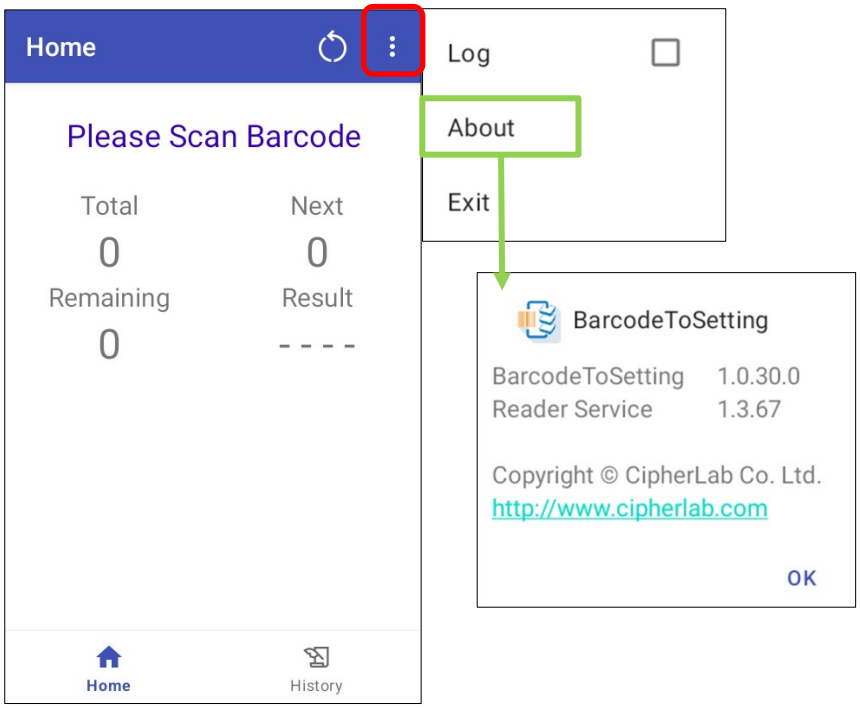
AppLock controls the interface provided to users. It dominates over the O.S. and limits the system resources made available to users. Properly tuned, AppLock gives way to ordinary working applications while locking out those that are not so productive.

If you have a collection of mobile computers, you can apply a uniform user environment to the entire group without the need of great time and effort. This can be done easily by reduplicating a copy of master settings to your entire set of mobile computers.

For the operation instruction of **AppLock**, please refer to **AppLock User Guide for Android**.

7.3. BARCODE TO SETTING

"**BarcodeToSettings**" is to read the setting barcodes generated by **ADC** (Android Deployment Configurator) to apply the configuration. Launch "**BarcodeToSettings**" and the main screen shows as below:



Item	Description
Total	The total amount of the barcodes to be scanned.
Next	The item number of the next barcode to be scanned.
Remaining	The amount of the remaining barcodes to be scanned.
Result	The setting result will be "Success" or "FAIL"
Data initialize	Initialize the data of the barcode(s) you just scanned.

The setting barcode(s) you generated by **ADC** might be 1D or 2D as the example figures shows:

1) 1D barcodes:

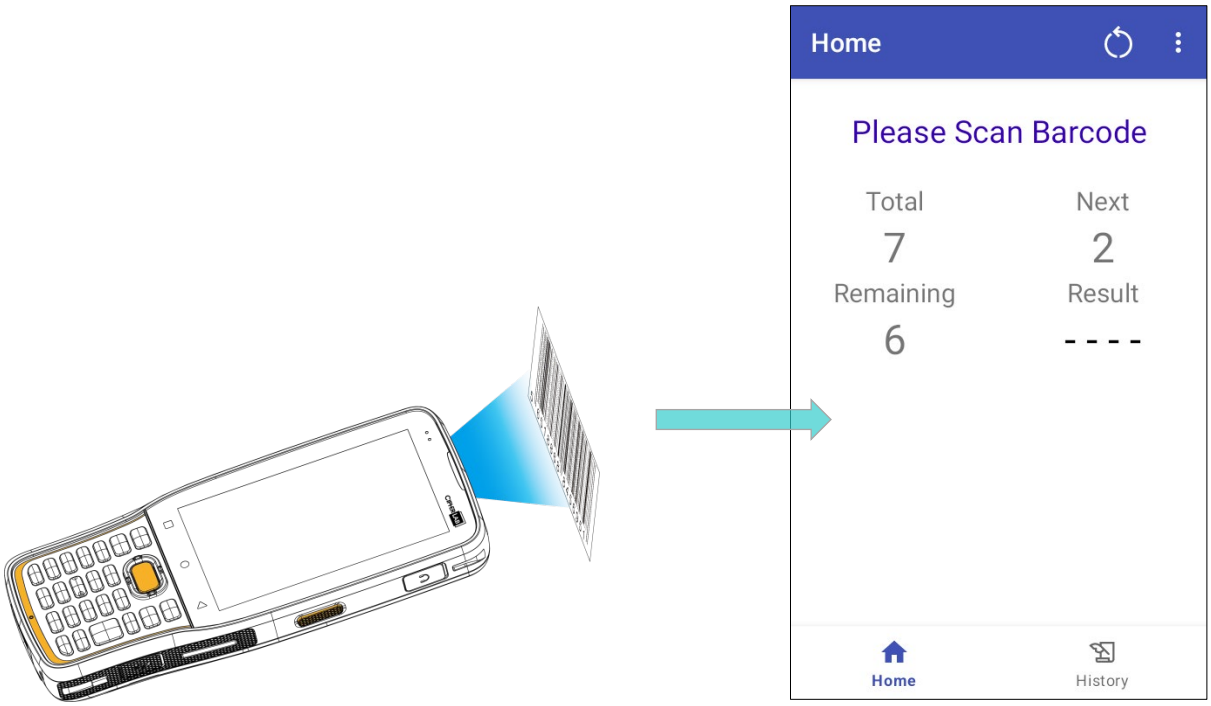


2) 2D barcode:

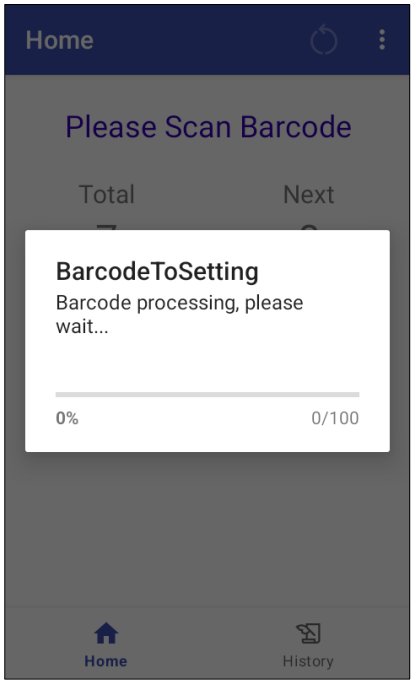


HOW TO APPLY THE SETTINGS BY SCANNING BARCODE(S)

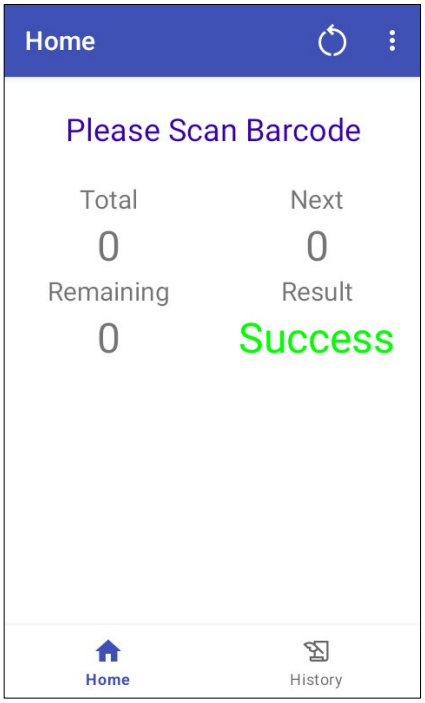
Simply aim the scanning window at the barcode to read and press any of the side trigger. The scanning light beams to read the printed barcodes.



It takes few seconds for your device to apply the configuration after scanning the setting barcode(s) is done.

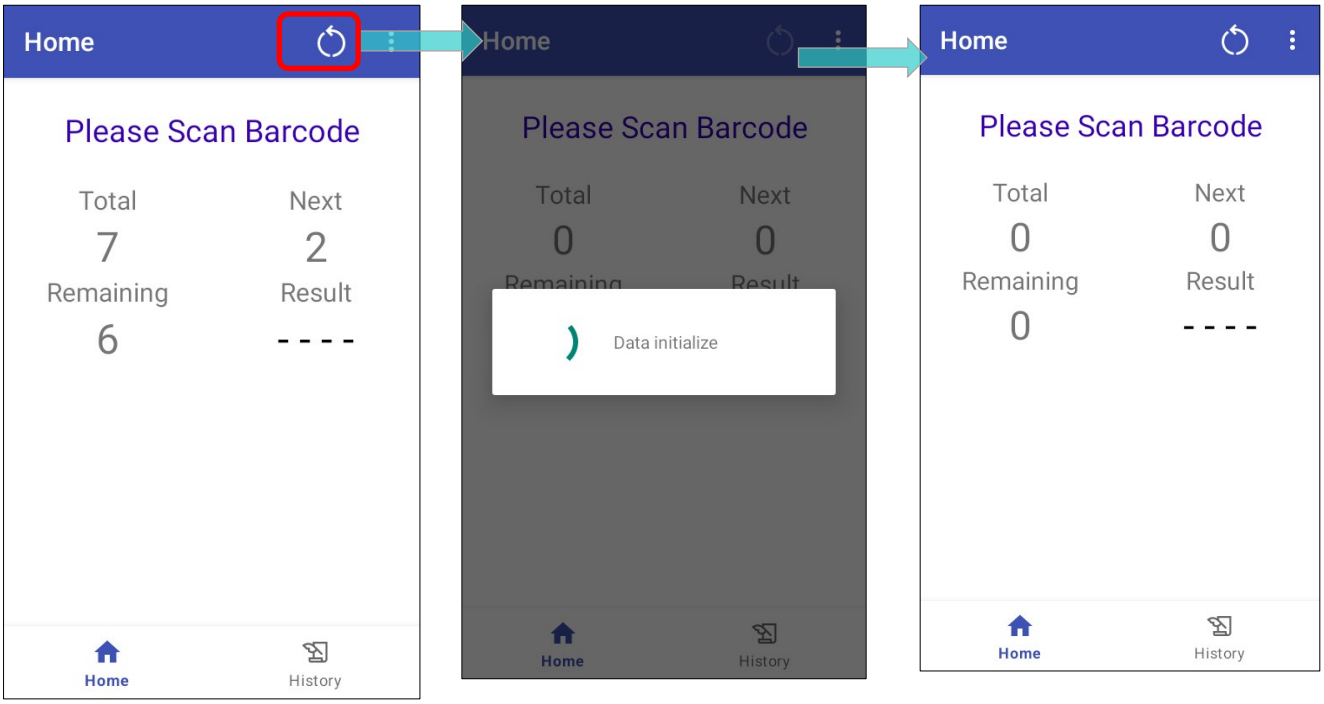


Configuration is complete.



CLEAR DATA

You may carry out "**Data initialize**" during the scanning procedure (before it starts to apply the configuration) to start over. Or you may tap on "**Data initialize**" button after completing configuration so that you can scan other barcodes you generated to apply other settings.



MORE MENU

Tap on the more button  on the action bar to open the more menu.

The items on the more menu are:

Item	Description
Log	Check the checkbox to enable recording of events that occurs during "BarcodeToSetting" runs.
About	Show the current version of "BarcodeToSetting" and "Reader Service".
EXIT	Close and leave the application "BarcodeToSetting".

7.4. BT PRINTER MATE



BT Printer Mate is an application which provides user interface to pair with Bluetooth printers.

7.5. BUTTON ASSIGNMENT



Button Assignment can redefine the functions of physical keys so that they trigger different actions. Settings made to one or more keys can be saved as a profile, allowing users to switch conveniently in between different sets of settings.

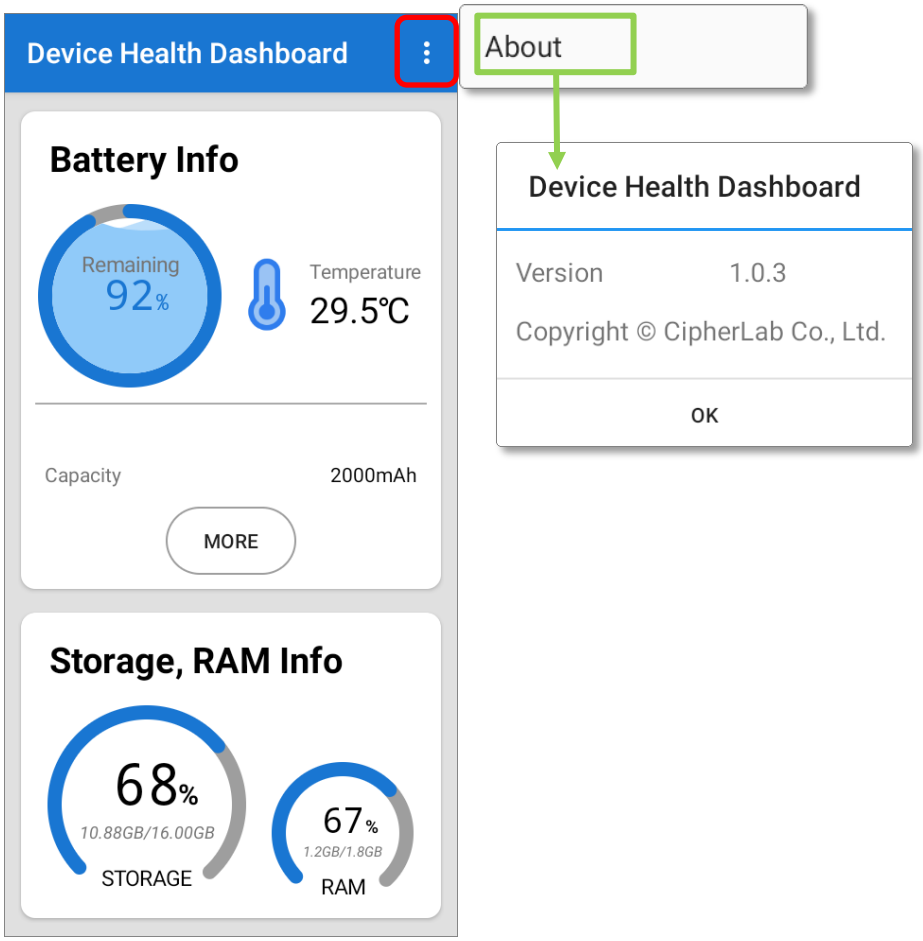
Users can change key behavior of the device with keypad by the application "**Button Assignment**" while changing the key behavior of device without keypad by "**Programmable Keys**" in settings.

Please refer to **Button Assignment User Guide for Android**.

7.6. DEVICE HEALTH DASHBOARD

"**Device Health Dashboard**" is for detecting the battery health status and showing the storage & RAM information of the device.

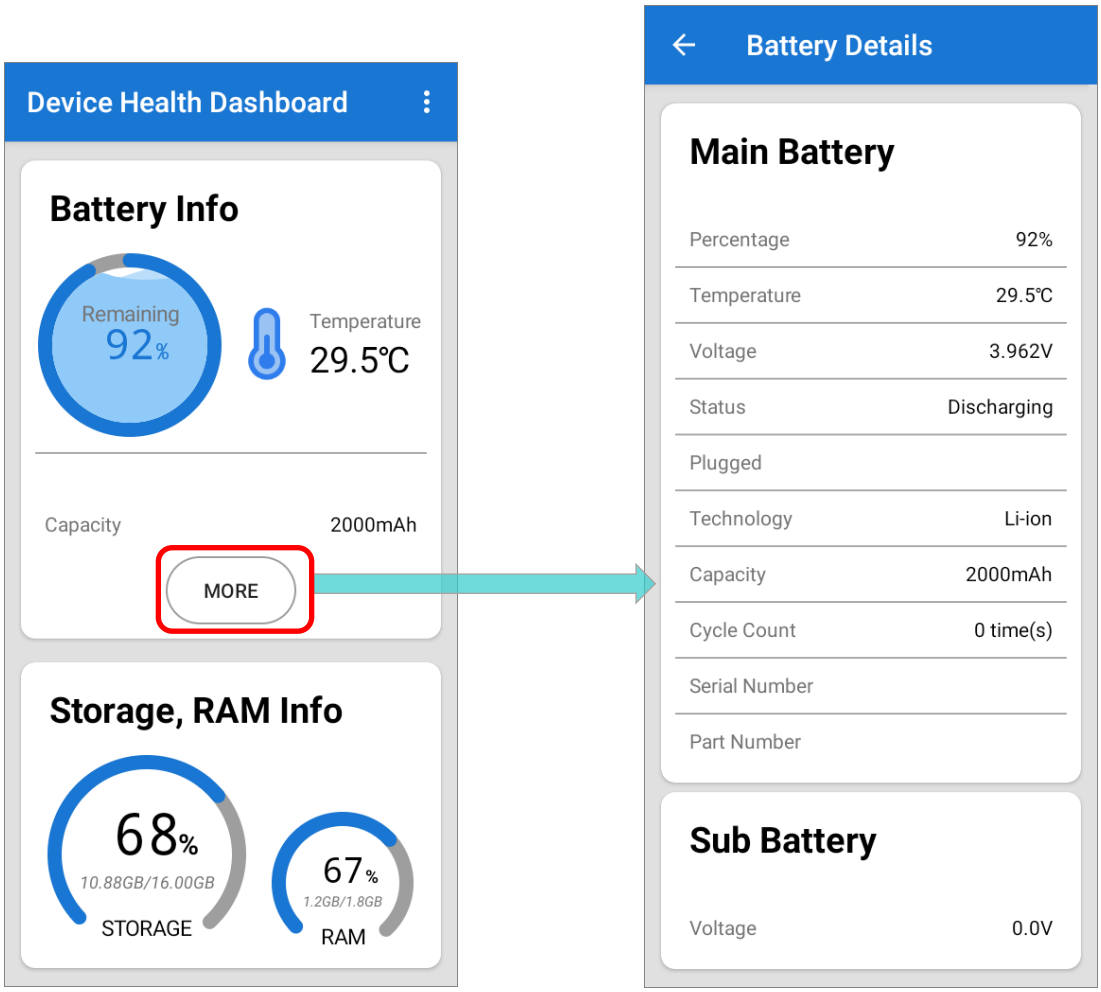
Please go to **App Drawer (All Apps)** and tap on the app "**Device Health Dashboard**" to enter its main page, and here you can check "**Battery Info**" and "**Storage, RAM Info**".



To check the app version information, please tap on the more button on the action bar, and then "**About**".

CHECK THE BATTERY INFORMATION

To check the battery details, please tap on "**More**" button of "**Battery Info**".



7.7. ENTERPRISE SETTINGS

For the details about  **Enterprise Settings** in RK26 mobile computer, please refer to **Enterprise Settings**.

DIMMING MODE TIMEOUT

"**Dimming Mode Timeout**" is disabled by default.

To enable this function, choose the provided option of idle time.

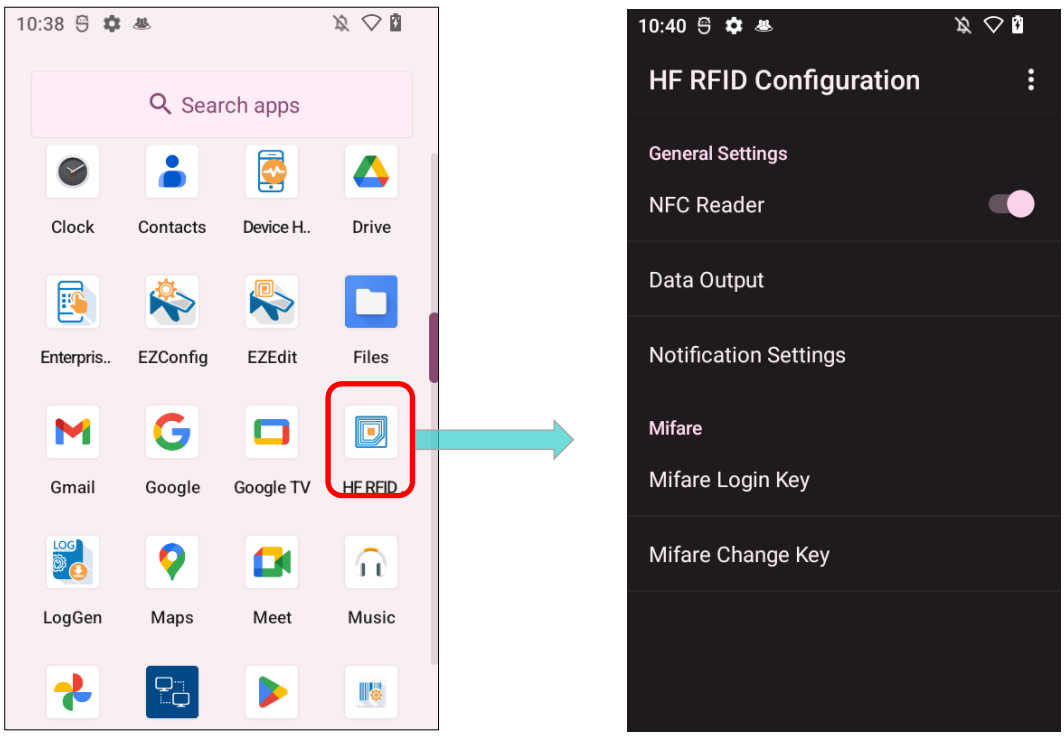
The screen will be dimmed automatically for the purpose of the power saving when the selected idle time is timeout. Instead of entering into the suspend mode, the background and APPs still keep running during the dimming mode.

VERSION

The version information about Enterprise Settings is listed on the bottom of the page.

7.8. HF RFID CONFIGURATION

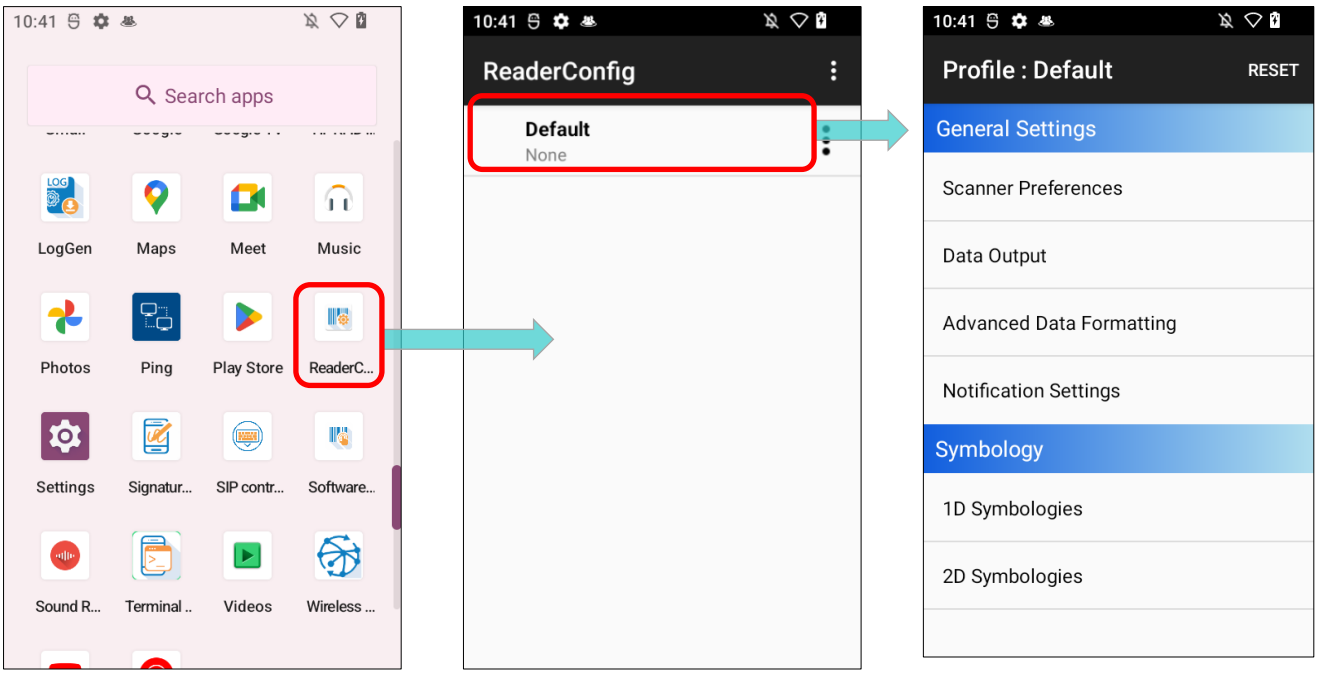
HF RFID Configuration is a NFC application which is for reading and writing NFC tags and RFID compatible chips by putting the NFC tag/ RFID chip close to the NFC detecting area of your device. User can control how the NFC reader works by settings in HF RFID Configuration and enabling it.



Please refer to **HF RFID Configuration User Guide for Android**.

7.9. READER CONFIG

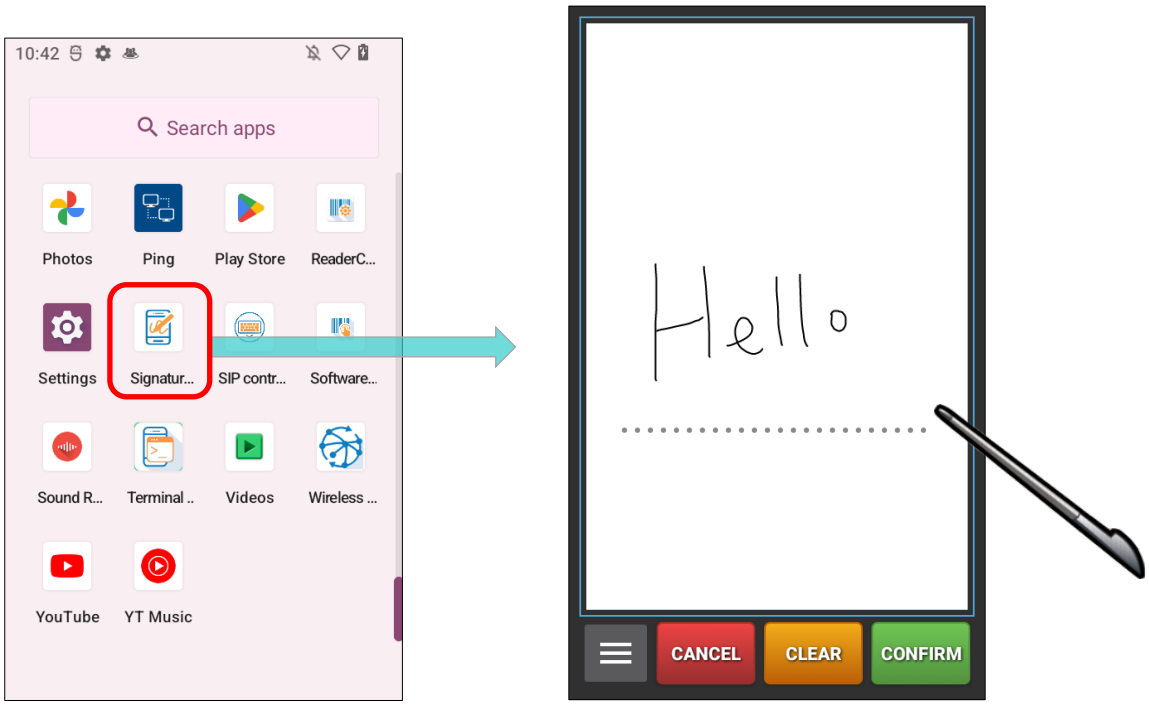
ReaderConfig, a built-in app for configuring the scan engine inside the mobile computer, allows users to set their scanner preferences and the way to output decoded data. Symbology and scanner settings can be saved and exported as a profile for importing again or implementing identical ReaderConfig settings on multiple devices.



Please refer to **ReaderConfig User Guide for Android**.

7.10.SIGNATURE CAPTURE

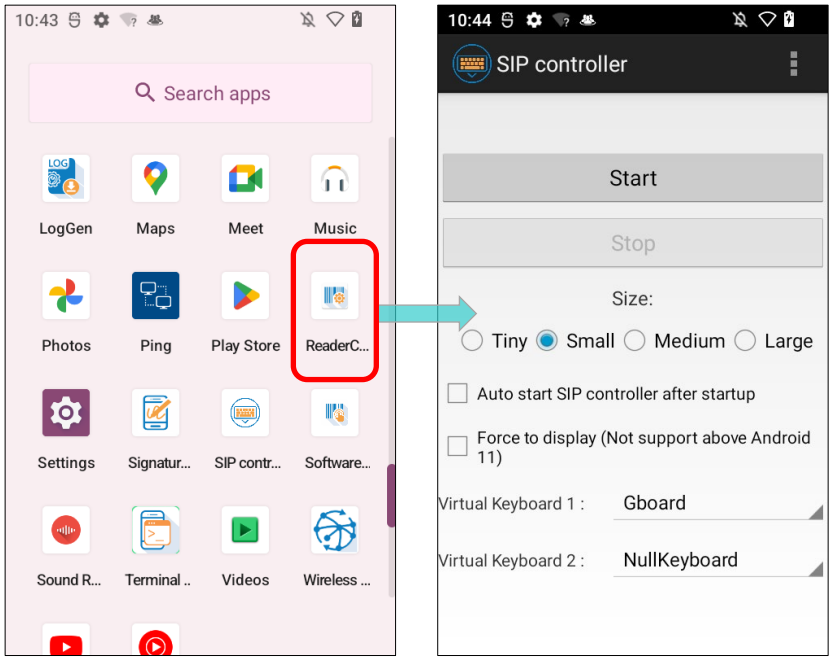
Signature Capture is a simple and easy application which transforms your device into a signature pad for user to draw the signature. Users can create digital signatures and save them in the device storage with multiple file formats.



Please refer to **Signature Capture User Guide for Android**.

7.11.SIP CONTROLLER

SIP Controller, a built-in application for quickly open or close virtual keyboard by tapping on the floating button.

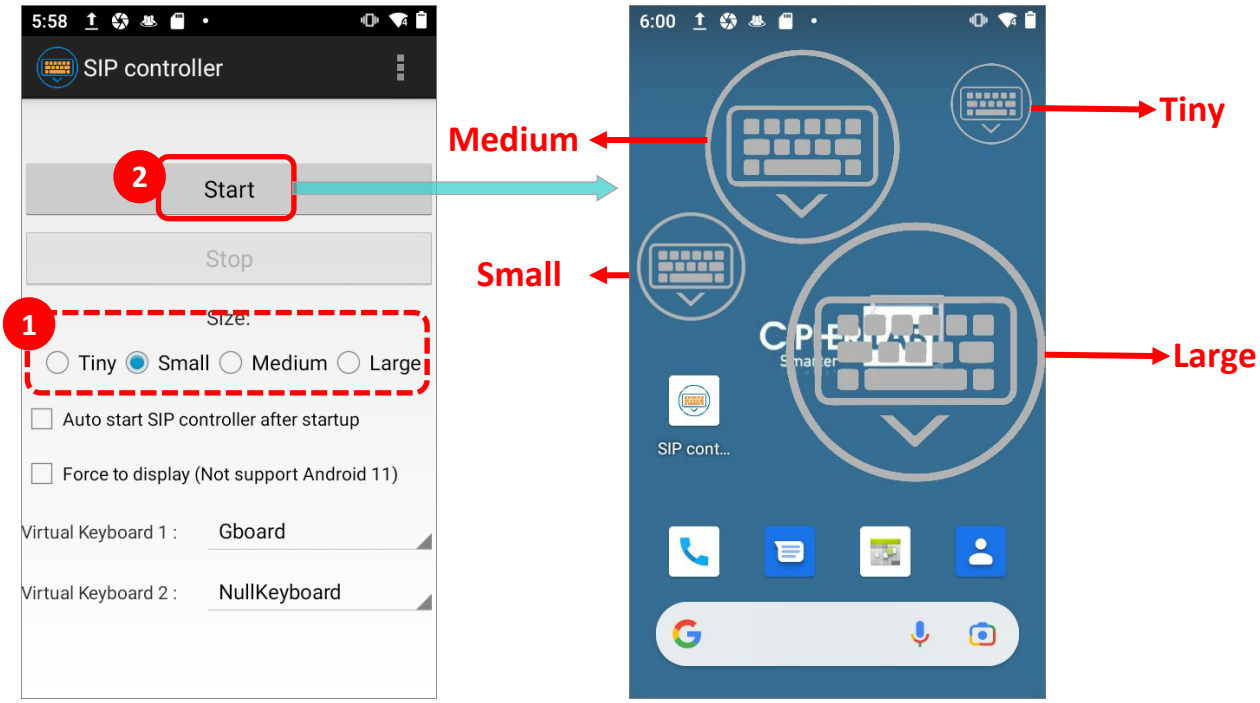


LAUNCH SIP CONTROLLER

To launch SIP Controller:

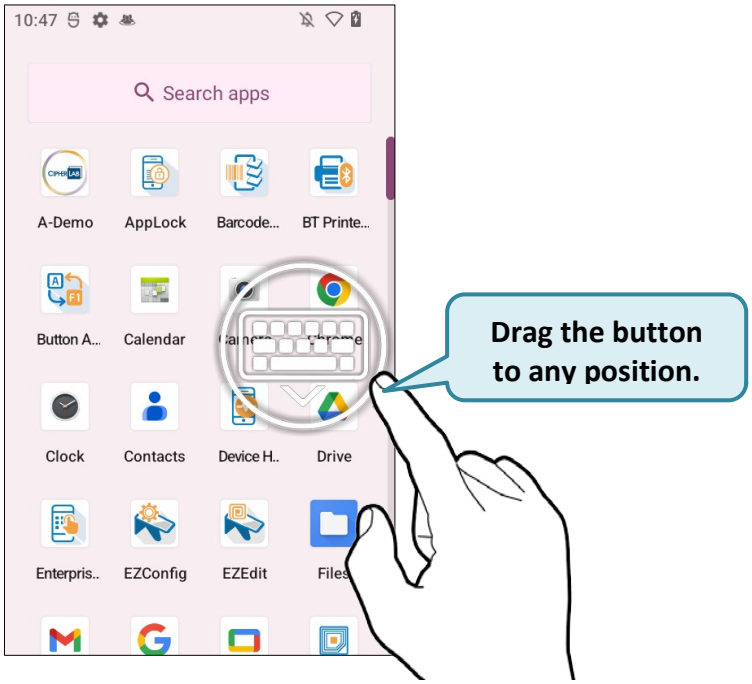
1) On App Drawer screen, tap on "**SIP Controller**" to enter the main screen.

2) Select the button size, and then tap on "**Start**".



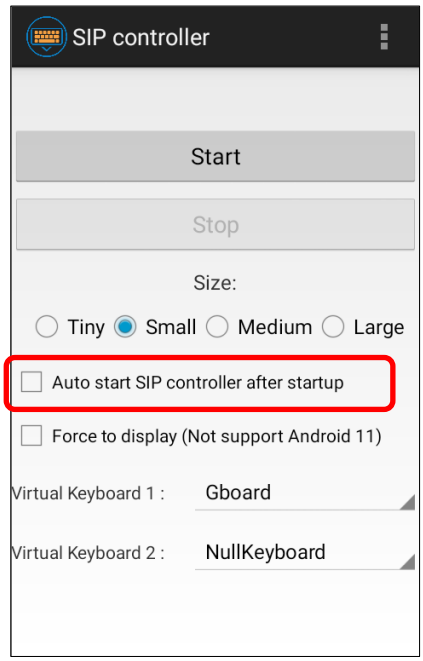
3) Now the "**SIP Controller**" button  appears on screen, and you can invoke the virtual keyboard by tapping on it. You can drag this button to any position on the screen.





AUTO START

By enabling "**Auto start SIP controller after startup**", **SIP Controller** will automatically start up on device boot up. Simply check the checkbox to enable this function.

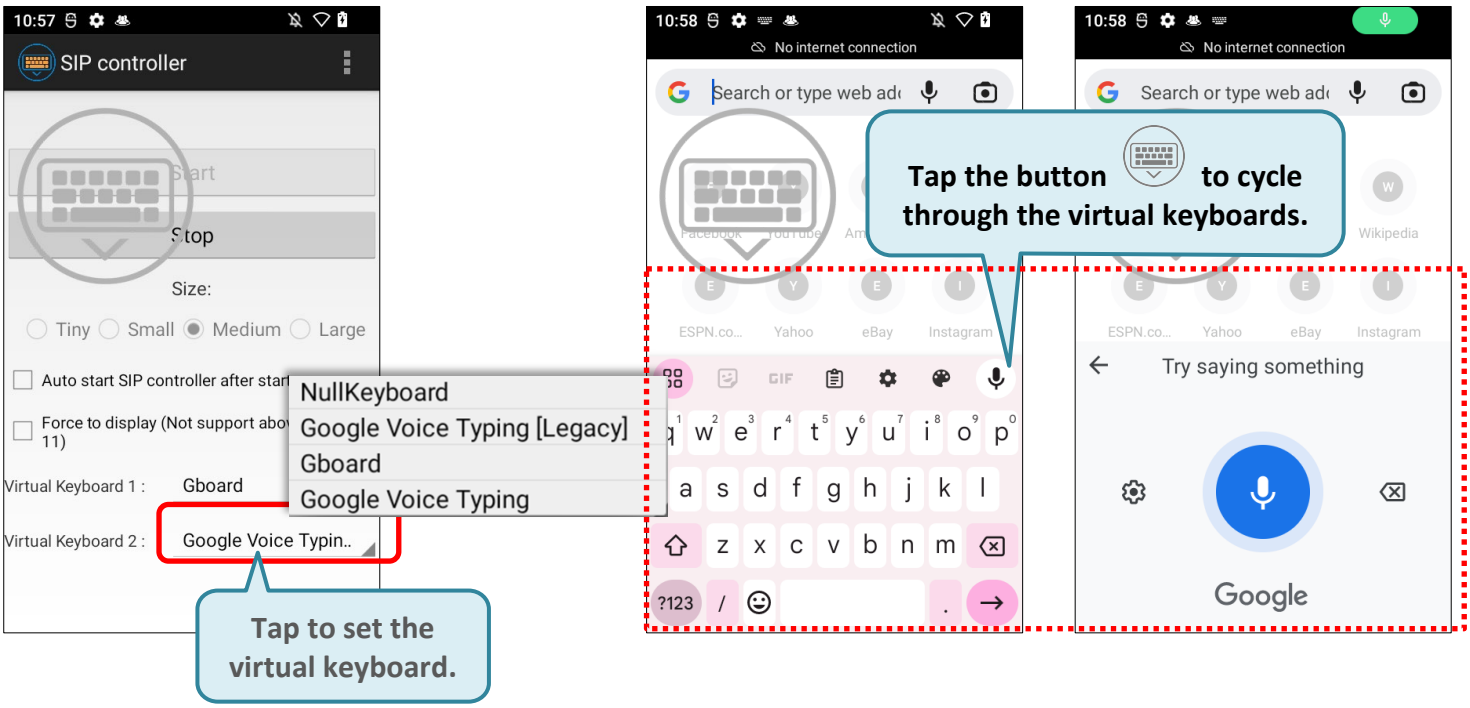


FORCE TO DISPLAY

"**Force to display**" is to invoke the virtual keyboard even without the input field.

SWITCH VIRTUAL KEYBOARD

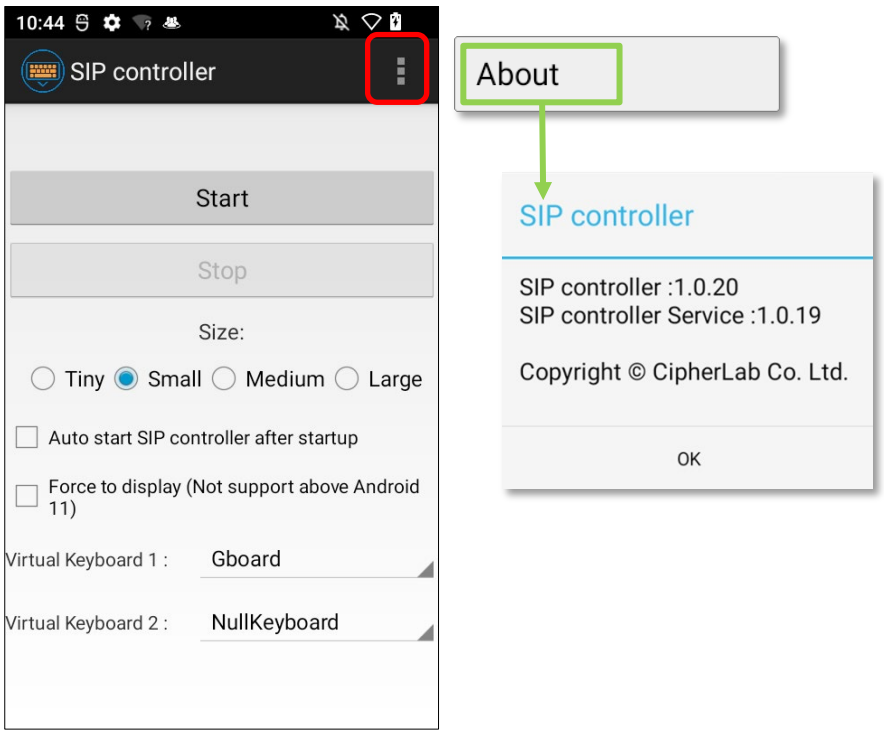
You can set "**Virtual Keyboard 1**" and "**Virtual Keyboard 2**" to be the keyboards invoked by **SIP Controller**. Tap on the button to cycle through "**Virtual Keyboard 1**" and "**Virtual Keyboard 2**" you set.



As to the keyboard to be selected on the drop-down menu, please refer to On-screen Keyboard for how to enable the keyboard.

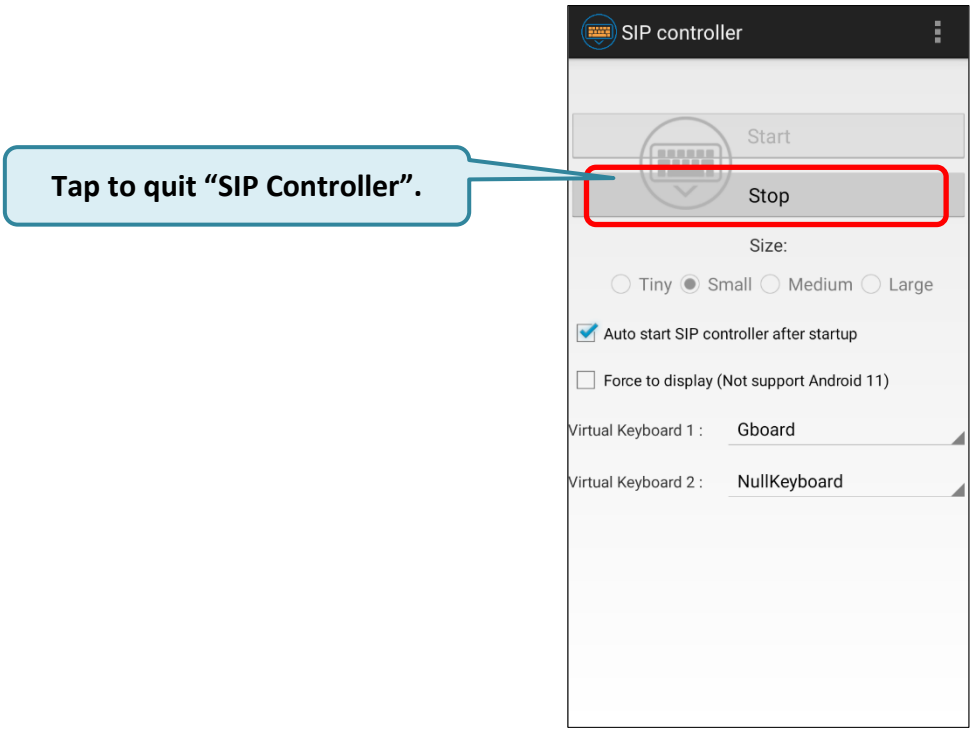
VERSION INFORMATION

Tap on the more button on the action bar and select "**About**" to check the current version of **SIP Controller**.



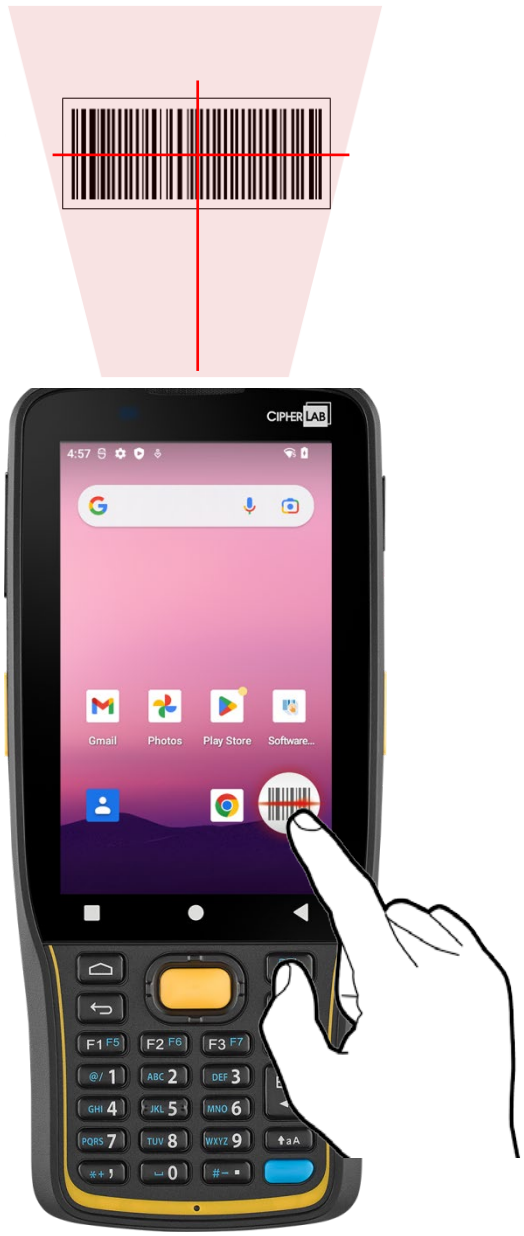
EXIT SIP CONTROLLER

Tap on "**Stop**" to disable **SIP Controller** on-screen button.



7.12.SOFTWARE TRIGGER

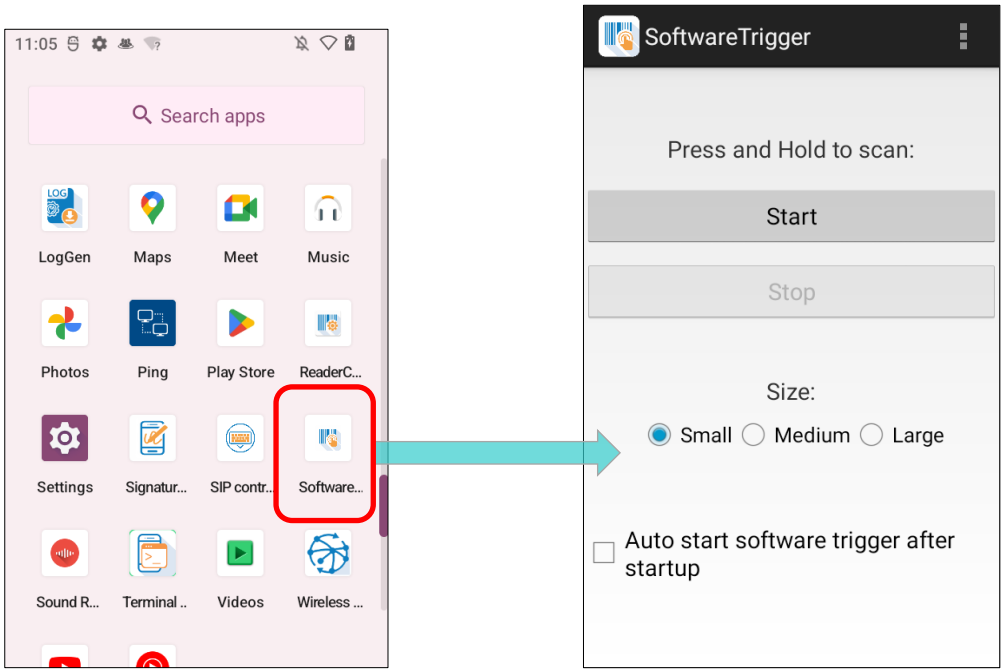
Software Trigger is an application running on mobile device. Serving as a real trigger key, it always floats on top of all other programs for convenient trigger control of the barcode scanner; by tapping and holding this virtual button, the device will keep casting a red beam to scan the code.



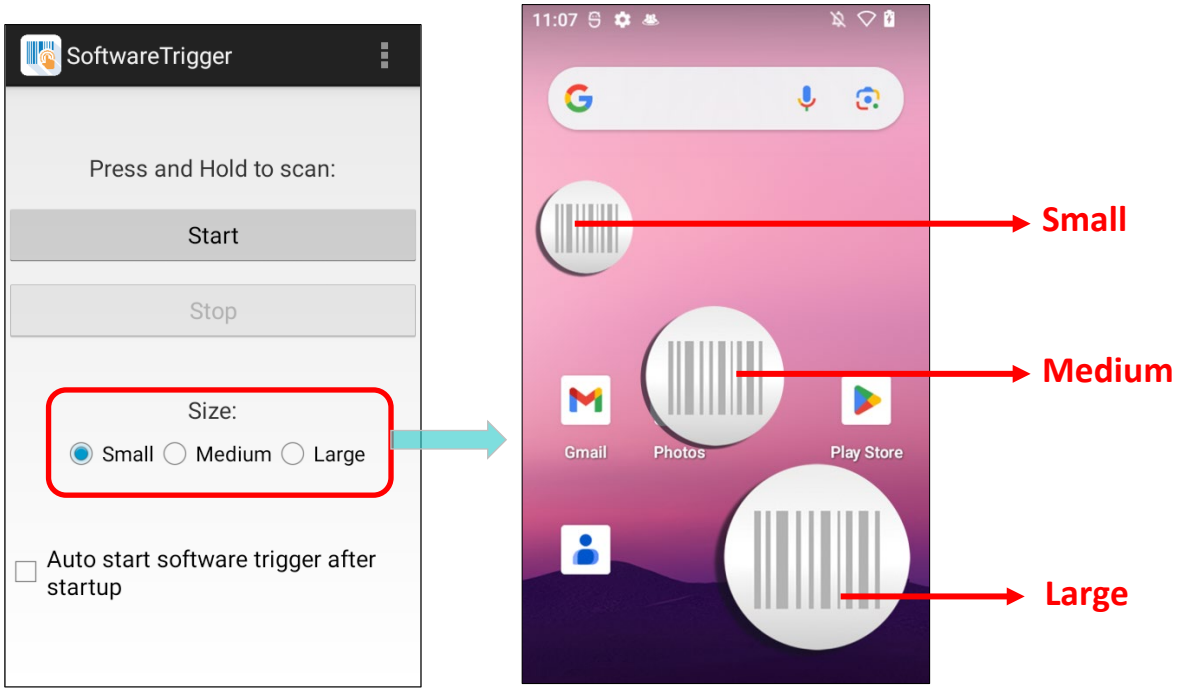
LAUNCH SOFTWARE TRIGGER

Please follow the steps below to launch **Software Trigger**:

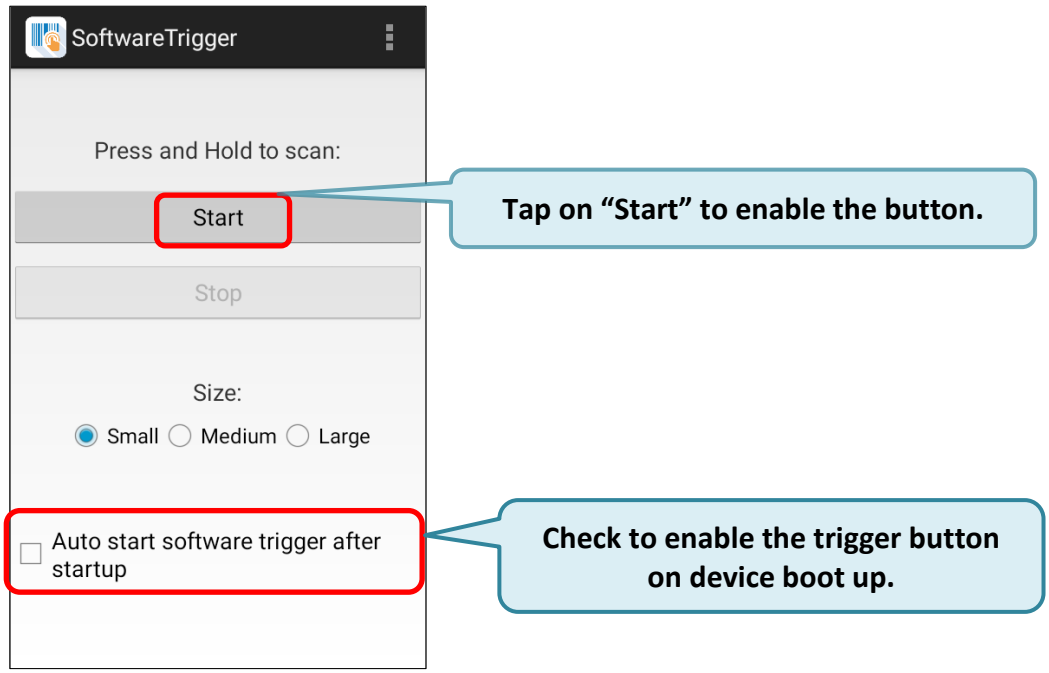
1) Go to **App Drawer** and tap on the app "**Software Trigger**"  to enter the main screen.



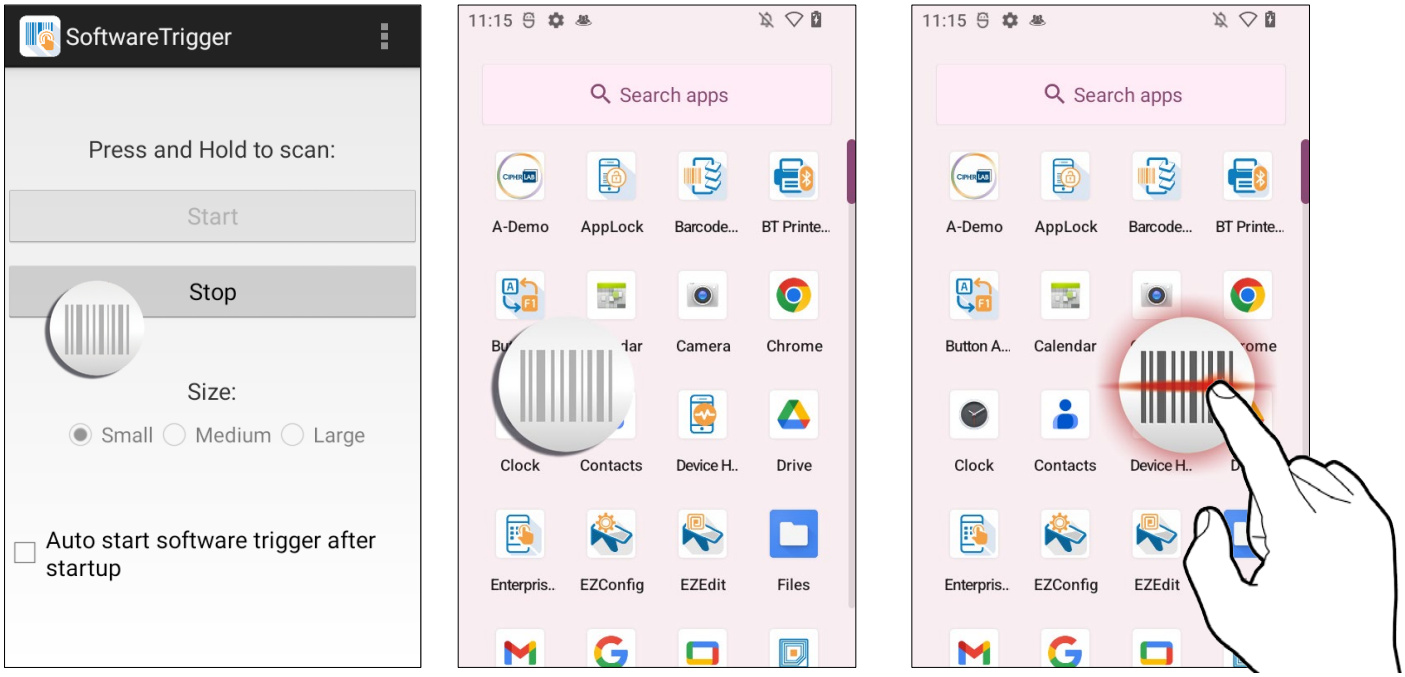
2) Select the size of the virtual trigger button:



3) Tap "**Start**" to enable the button. You can check "**Auto start software trigger after startup**" to have this application automatically launch right after the device starts up.

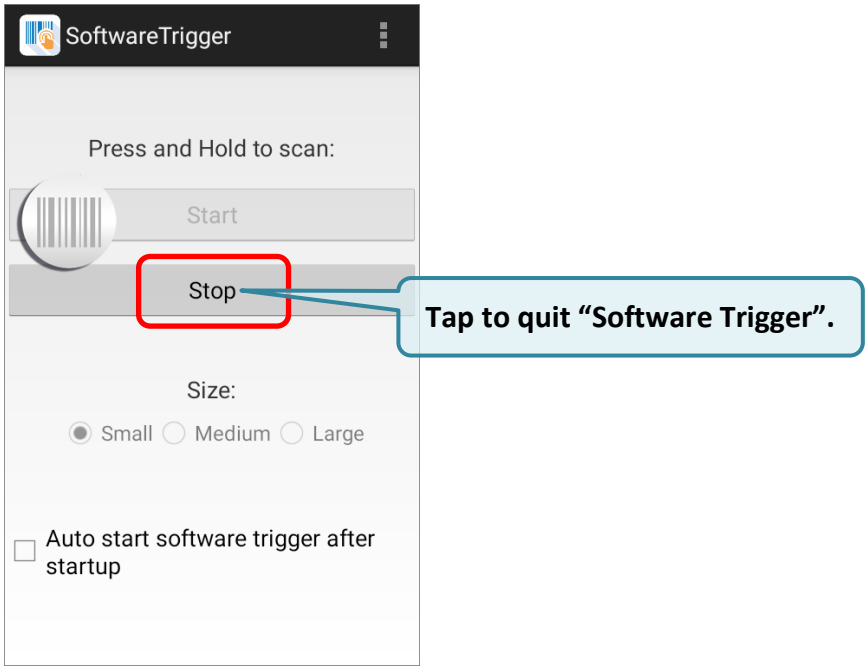


4) An always-accessible software keys will appear on your screen. This trigger button can be dragged to the position on the screen where you feel easy to control the trigger.



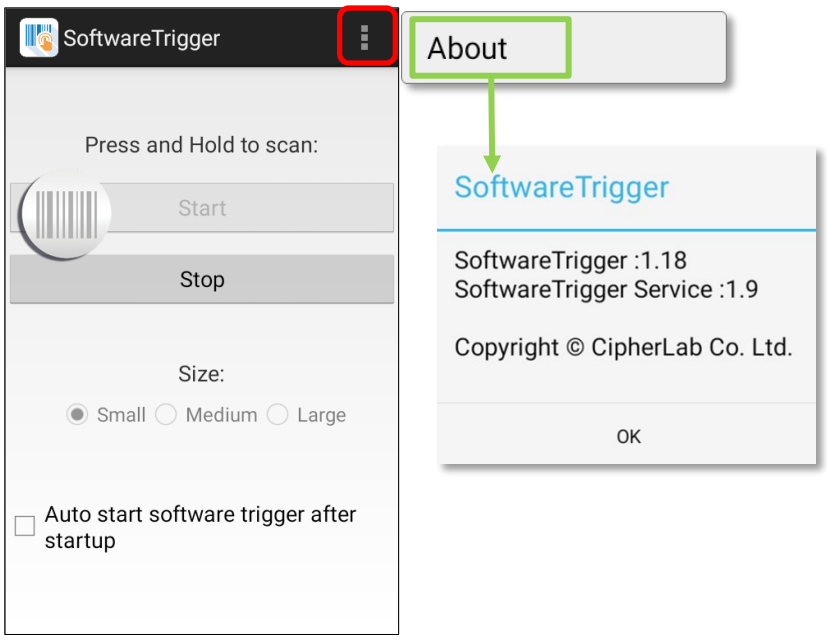
EXIT SOFTWARE TRIGGER

To disable this virtual trigger button, enter **Software Trigger** application screen, and tap "**Stop**".



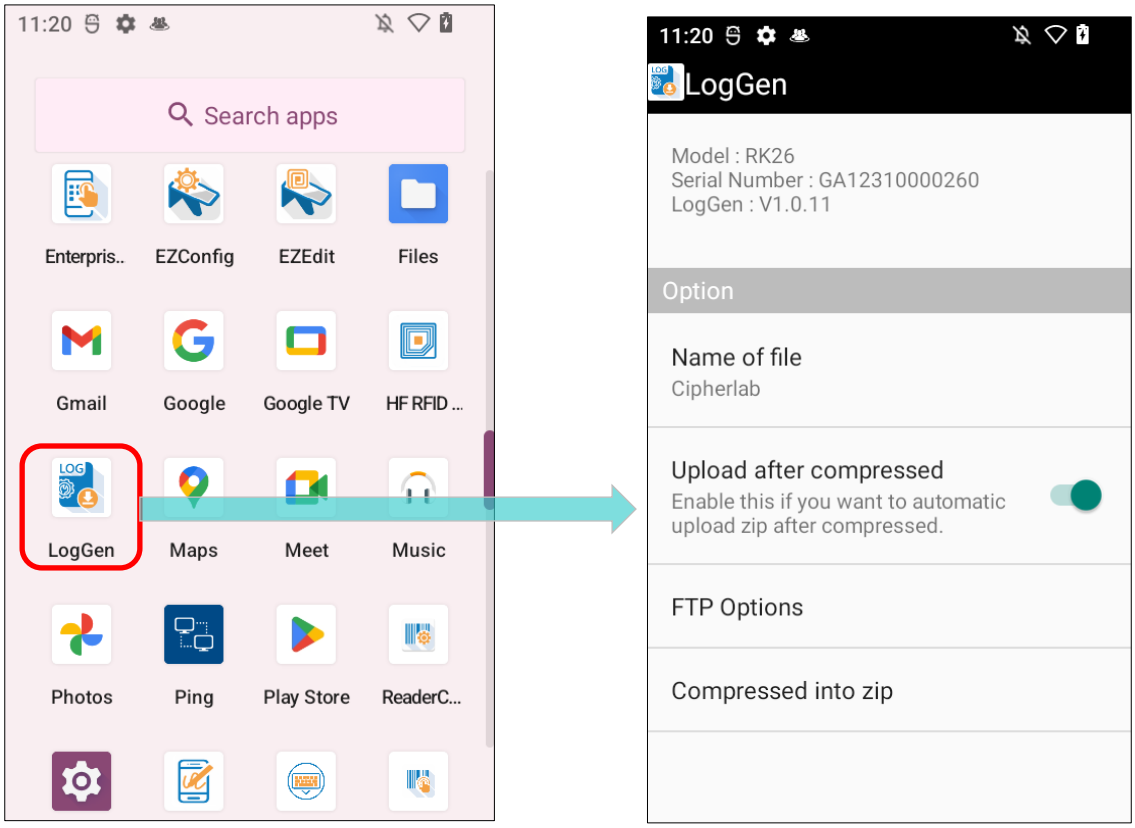
VERSION INFORMATION

To check the current version of **Software Trigger**, please tap on the more button on the action bar and select "**About**".



7.13. LogGen

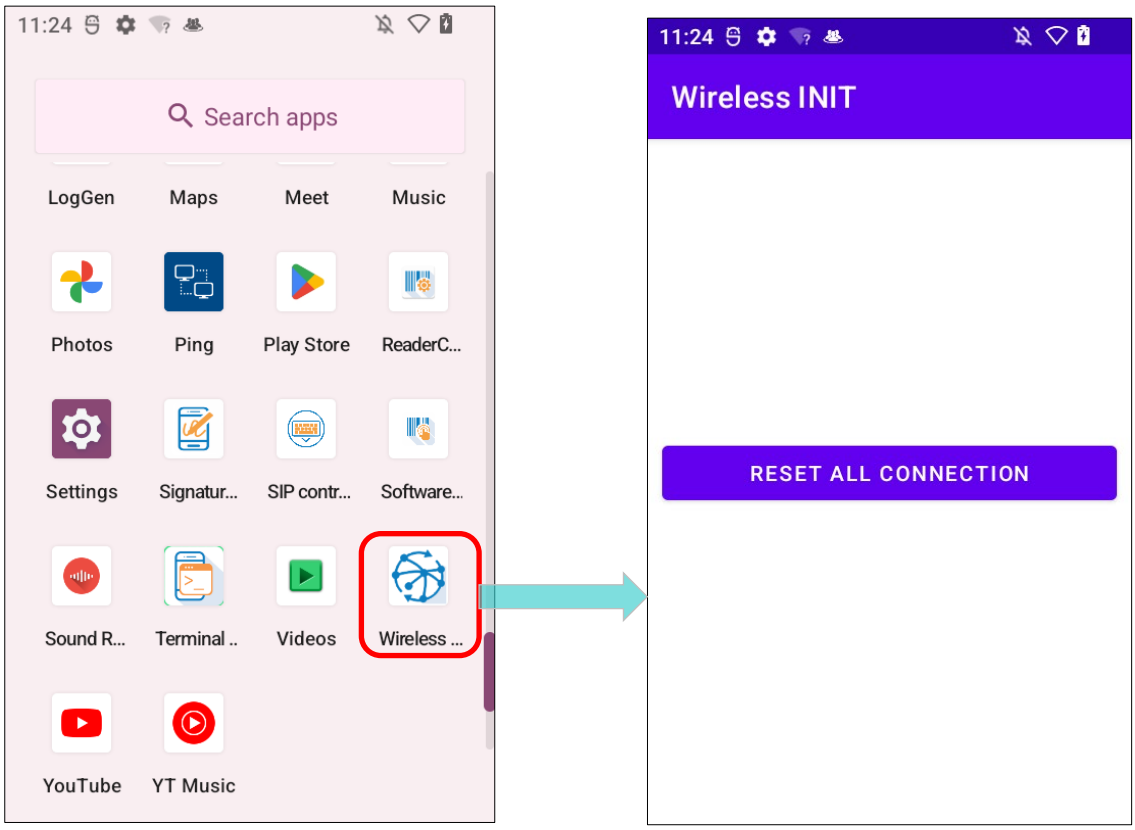
LogGen, a hostlog generator utility, is especially designed to assist on-site operator collecting all event logs (except TE log on Android 11) of mobile computers. Through the tap on one button of this App, logs belonging to this device will be generated easily. Based on the history of these events, IT personnel can simulate the real environment to solve the problem and remove the obstacle occurred locally/remotely.



Please refer to LogGen User Guide for Android.

7.14. WirelessInit

Wireless Init, a useful wireless reconnection utility, is especially designed for on-site operators who encounter the unstable network to reset and reconnect all wireless connection, including Bluetooth, Wi-Fi and 4G LTE/5G in action through the tap on one button of this App.



Please refer to Wireless Init User Guide for Android_v1.0.

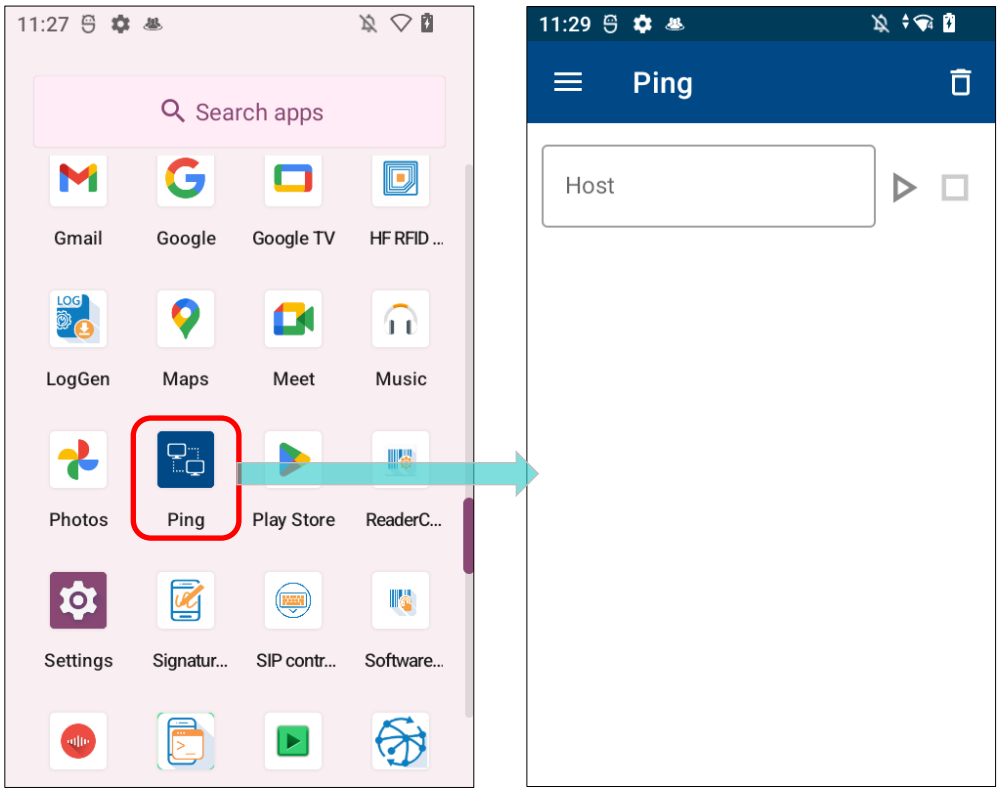
7.15. PING

Ping, a handy network diagnostic utility, consists of **Ping, Traceroute,** and **Wi-Fi status** three useful tools to diagnose the current network status.

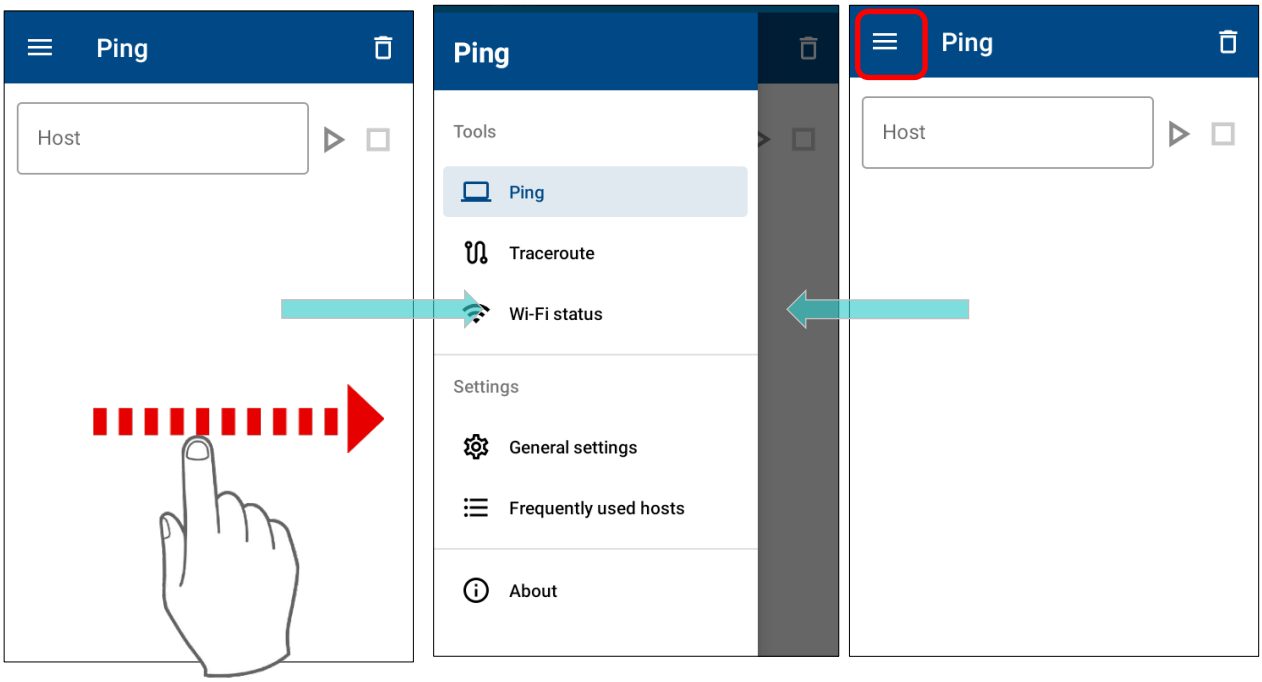
LAUNCH PING APPLICATION

Please follow the steps below to launch **Ping**:

1) Go to App Drawer (All Apps) and tap on the app "**Ping**" to enter the ping screen directly.



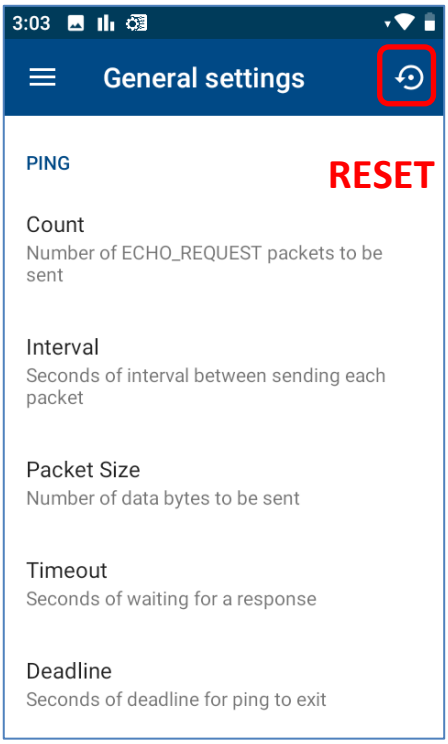
2) **Option Menu** containing other functions can be revealed by tapping on the menu button or swiping from the leftmost side of the screen to the right side.



Tool	Description
Ping	To know that if the specific host still keeps alive by entering IP address, domain name or the host name of the remote host.
Traceroute	To track the route packets to a given host by entering IP address, domain name or the host name of the remote host.
Wi-Fi Status	To view the current status of Wi-Fi connection.

GENERAL SETTINGS FOR TOOLS

To configure the tool-related settings, please tap **General Setting** on **Option Menu.** And the following setting page will be displayed. You can reset all settings of this application by tapping Reset icon.

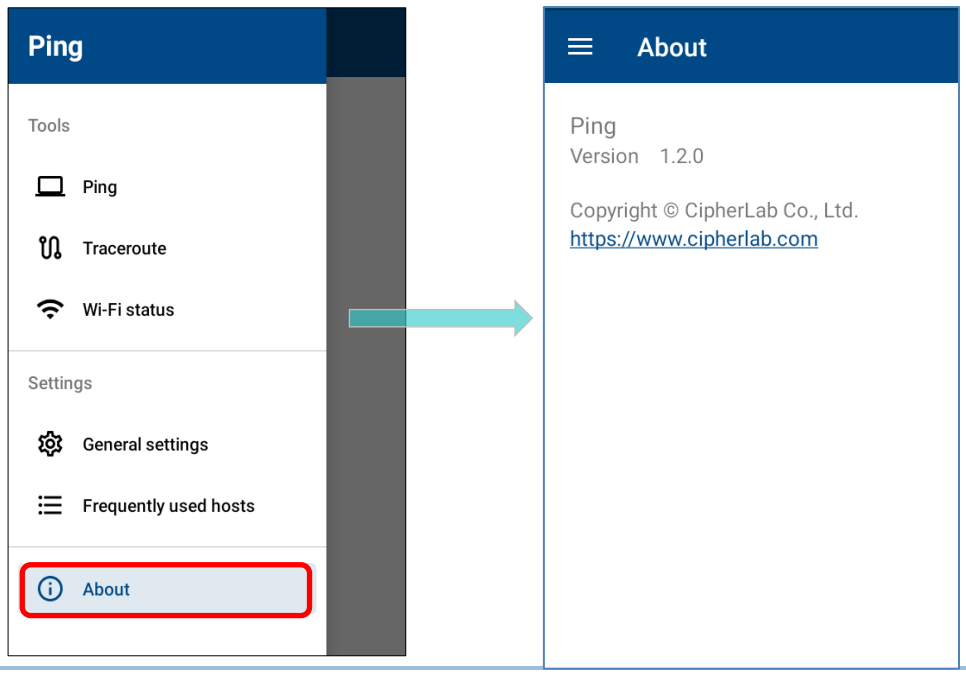


Settings	Description
Ping	
Count	Specify the total amount of packets that will be sent to the destination host.
Interval	Specify the waiting time before sending the next packet to the destination host.
Packet Size	Specify the number of data bytes to be sent. Default packet size is 56 bytes.
Timeout	Specify the waiting time for the host response.
Deadline	Specify the execution time of sending request to the remote host.
TTL	Specify the maximum number of routers that the packet can go through.
ToS (Type of service)	Increase the quality of service for the packet to be sent.

MTU Discovery strategy	Since the default MTU(Maximum Transmission Unit) of Ethernet is 1500 bytes, the packet will break into fragments if the data size is larger than 1500 bytes. You may optionally change MTU discovery strategy for some purpose. Three MTU Discovery strategies we provide are as follows: -Prohibit fragmentation, even local one -Do PMTU discovery, fragment locally when packet size is large -Do not set DF flag
Traceroute	
IP address mapping	By disabling the function of IP address mapping, Traceroute tool will only show IP address during tracking route without converting IP address into the host name.
NQueries	Specify the number of probe packets to be sent per hop. By default, Traceroute tool will send 3 probe packets per hop.
Wait Time	Set up the waiting time of the response to one probe for the traceroute. Default waiting time is 5 seconds.
Max TTL	Specify the amount of TTL for the traceroute. Default is 30 (max.).
Wi-Fi Status	
Refresh Rate	Specify the updating refresh rate. Default is 3 seconds.

VERSION INFORMATION

To check the current version of Ping, please tap **About** on **Option Menu**.



7.16. TERMINAL EMULATION



Terminal Emulation is brought to support mobile devices, which are high performance products powered by the Android platform. The application is developed for industries which make extensive use of terminal emulators. It enables your mobile computer to act as a terminal emulator while communicating with a host of the same environment.

MIRROR VT/5250 Terminal Emulation is a telnet client with extended ability to launch and configure reader module(s). It links to available reader module(s) when a physical scan button is pressed, to collect decoded data and submit data to the host afar.

Please refer to **Terminal Emulation User Guide (Android)**.

7.17. ENDECLOUD



EnDeCloud for Android is a Web-based project configuration web service.This web service offers administrators with a swift method to set up a large amount of devices and activate their intended applications.

Besides the configuration deplymenyt management and app configuration, the enhencement of existing monitoring functions are also implemented in EnDeCloud web service.

Please refer to **EndeCloud User Guid for Android** for more details.

7.18. EZCONFIG & EZEDIT



EZConfig is an application which works with the UHF RFID Reader for reading UHF RFID tags.  **EZEdit**, another built-in application to work with the UHF RFID Reader, allows users to check or make changes to the 4 memory banks (**EPC**, **TID**, **Reserved**, and **User**) of the captured tags.

Please refer to **EZConfig & EZEdit User Guide** for more details.

7.19. WMDS AGENT

WMDS (Wireless Mobile Deployment System) for Android is a windows-based server program that can deploy the configuration projects (created by **Android Deployment Configurator**) to Android devices through wireless network.

"**WMDSAgent**"  makes this mobile computer become an enrolled device once it is successfully connected to WMDS server.

Please refer to **WMDS User Guide for Android** for more details.

SPECIFICATIONS

PLATFORM, PROCESSOR & MEMORY

Operating System & CPU	
OS Version	Android 12 with GMS Certified
CPU	QCM4290, Octa-core 2GHz*4+1.8GHz*4

Memory	
ROM	64GB FLASH
RAM	4GB LPDDR4X
Expansion Slot	One Micro SDHC card slot (up to 32GB) SDXC supported (up to 1TB) Nano SIM socket x2 (support 2G/3G/4G Data SIM card)

COMMUNICATION & DATA CAPTURE

Communication	
USB Client	USB 3.1 Type-C
WPAN	Bluetooth 5.1 EDR/2.1 BLE/V4.2
WLAN	IEEE 802.11 a/b/g/n/ac/ax/e/d/h/i/r/k/v/w/mc, support fast roaming Support WiFi 6 in WiFi only SKU.
WWAN	Built-in WWAN modem for Quad-band GSM, UMTS, LTE functions: GSM/GPRS/EDGE/WCDMA/UMTS/HSDPA/HSUPA/HSPA+/LTE Frequency band GSM: Quad Band(850/900/1800/1900Mhz) TD-SCDMA: Band34, Band39 WCDMA: Band1, Band2, Band5, Band8 TDD-LTE: Band38, Band39, Band40, Band41 FDD-LTE: Band1,Band2, Band3, Band4, Band5, Band7, Band8, Band13, Band17, Band20
GPS	GPS, GLONASS, BeiDou, GALILEO, AGPS

Data & Image Capture	
Digital Camera	Rear 16MP x1 (Support PDAF, Auto-Focus) with LED flash; Flash Mode: Center Lux: > 50 Lux@100cm. Torch Mode: Center Lux: > 10 Lux@100cm. 0.7F Uniformity: > 50%, 1.0F(Corner) Uniformity: > 20% Support ISP face detection function. Support Low lux capture.
Barcode Reader	SE4750SR / SE4750MR / SE4100 / SE5500
HF RFID Reader	NFC support ISO14443A, ISO14443B, ISO15693, Felica

ELECTRICAL CHARACTERISTICS

Li-Polymer	
Main Battery Pack	Rechargeable Li-polymer battery: 3.8V, 4000 mAh Charging temperature: 0-45℃ Minimum charging time: 3 hours @25℃ Support Warm Swap battery For the first time charging the main battery, please charge it for at least 8 to 12 hours. The allowed battery charging ambient temperature is between 0℃ to 45℃. It is recommended to charge the battery at room temperature (18℃ to 25℃) for optimal performance. Please note that battery charging stops when ambient temperature drops below 0℃ or exceeds 45℃.
Backup Battery	Rechargeable Li-Polymer battery: 3.7V, 75 mAh Data retention for 5 minutes Charging time: 4 hours
RTC Battery	Rechargeable Li-ion battery : 3V, 3.0mAh, SMD type Keeps the time for at least 72 hours

Power Adaptor		
Power Supply Cord with Universal Power Adaptor	Input	AC 100~240 V, 50/60 Hz
	Output	DC 5V, 2A BSMI, CCC, FCC, CE, RCM, PSE, PSB

Working Time	
Performance Mode	SE4750 : 12 hours, SE4100 : 12 hours, SE5500 : 10 hours
Balance Mode	SE4750 : 10 hours, SE4100 : 10 hours, SE5500 : 8 hours

PHYSICAL CHARACTERISTICS

Color Touch Screen Display	
Display	4.0 inch, WVGA (480x800) IPS
Touch Panel	Corning® Gorilla® Glass 3 Support CTP waterproof
Resolution	800(RGB) X 480 Pixel

Notifications	
Status LED	Tri-color LED x1(Green/Red/Blue) for operating system notification. Bi-color LED x1(Green/Red) for main battery charge status indicator.
Audio	Integrated with one speaker, microphones with echo and noise cancellation, HD voice support

Dimensions & Weight	
Dimensions	168 mm (L) x 73.8mm (W) x 26.5mm (H) ±1mm
Weight	292g (with 4000mAh battery pack and SE4750 reader) ±5g 299g (with 4000mAh ergonomic battery pack) ±5g

ENVIRONMENTAL CHARACTERISTICS

Temperature	
Operating	-20℃ to 50℃
Storage	-30℃ to 70℃
Charging	0℃ to 40℃

Humidity	
Operating	10% to 90% (non-condensing)
Storage	5% to 95% (non-condensing)

Resistance	
Impact Resistance	Multiple drops onto concrete at 1.5m on all six sides (1.8m with rubber boot)
Tumble Test	150 tumbles (300 drops/hits) at 0.5 meter per applicable IEC tumble specifications
Splash/Dust Resistance	IP65 per applicable IEC sealing specifications
Electrostatic Discharge	±15 kV air discharge, ±8 kV contact discharge

PROGRAMMING SUPPORT

Development Environment & Tools	
JAVA	Environment Android studio Software Development Kit: JAR
C#	Environment: Visual Studio Software Development Kit: DLL (Xamarin Library)

APPENDIX I

APPLICATION MENU

Icon	Name	Description
	**A-Demo**	An application which give the brief introduction about CipherLab's applications. Users can launch those apps by tapping "START" on the app's introduction page.
	**AppLock**	An application used to limit the system resources made available to users.
	**BarcodeToSettings**	An application for reading the setting barcodes generated by ADC (Android Deployment Configurator) to apply the configuration.
	**BT Printer Mate**	An application for providing user interface to pair with Bluetooth printers.
	**Button Assignment**	The application "Button Assignment" can redefine the functions of physical keys so that they trigger different actions. Settings made to one or more keys can be saved as a profile, allowing users to switch conveniently in between different sets of settings.
	**Enterprise Settings**	An application to control how the physical keypad works.
	**HF RFID Configuration**	An application for the configuration of RFID & NFC.
	**Reader Config**	Sets scanner preferences, data output format and destination, symbology settings, and reads barcodes.
	**Signature Capture**	A simple and easy application which transforms your device into a signature pad.
	**SIP Controller**	An application for quickly open or close virtual keyboard by tapping on the floating button.
	**Software Trigger**	An application serving as a real trigger key, floating on top of all other programs for convenient trigger control of the barcode scanner.

Icon	Name	Description
	File	Browses and manages files on the local storage and storage card.
	Google Meet	Google Meet provides secure, easy-to-use video meetings that work for everyone so that you can connect and collaborate on what matters most.
	Google Photos	Google Photos is the home for all your memories to help you find and relive all the moments that matter.
	Google Play	Google Play is your entertainment unbound. It brings together all of the entertainment you love and helps you explore it in new ways, anytime, anywhere.
	Chrome	Chrome is a fast, secure browser built by Google that helps you search, browse, and get things done online.
	Gmail	Connect, create, and collaborate with Gmail, part of Google Workspace.
	Drive	Store, access, and share securely with Google Drive, part of Google Workspace.
	Google	Find quick answers, explore your interests, and stay up to date with Discover.
	Google TV	Google TV brings together movies, shows, live TV and more from across apps and subscriptions and organizes them just for the user. And helps the user discover new things to watch with recommendations based on their interests.
	Maps	Google Maps gives you more than just reliable, real-time navigation. It also helps you find things to do and places you'll love across the world and around the corner. With millions of businesses on Google Maps, you can connect with the places you're interested in, and make your plans happen.
	Camera	Takes pictures and shoots videos.
	Settings	Opens settings to configure the mobile computer.

Icon	Name	Description
	**Messages**	Sends SMS and MMS messages.
	**Music**	An application for playing the music stored on your device.
	**Phone**	Places and receives calls, accesses voicemail, views call history, manages phone contacts, and adjusts phone settings.
	**Ping**	A network diagnostic application which contains the useful tools for analyzing the current network status.
	**Sound Recorder**	Records and plays audio information.
	**Videos**	An application for playing the videos stored on your device.
	**Calendar**	Creates and manages events, meetings and appointments.
	**Calculator**	Performs mathematical calculations.
	**Clock**	Sets date, time, time zone according to your locale, and sets and manages alarms.
	**Terminal Emulation**	The application is developed for industries which make extensive use of terminal emulators. It enables your mobile computer to act as a terminal emulator while communicating with a host of the same environment.
	**EnDeCloud**	EnDeCloud is a web-based project configuration web service. It offers administrators with a swift method to set up a large amount of devices and activate their intended applications.
	**EZConfig**	EZConfig is an application which works with the UHF RFID Reader for reading UHF RFID tags.
	**EZEdit**	EZEdit is an application to work with the UHF RFID Reader for reading from and writing onto Gen2 RFID tags.
	**WMDSAgent**	Wireless Mobile Deployment System for Android is a windows-based server program that can deploy the configuration projects (created by Android Deployment Configurator) to Android devices through wireless network.

	**Contacts**	Manages contact information, and shares or exports/imports the information to other devices or SD card.
	**YouTube**	Enjoy your favorite videos and channels with the official YouTube app.
	**YouTube Music**	A music streaming service application developed by YouTube. which allows users to browse through songs and music videos on YouTube.

APPENDIX II

OPEN SOURCE LICENSE

The Reader Config involves the android-serialport-api project of Apache License Version 2.0, January 2004.

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