

Rugged Handheld Computer

- PA768 -



User Manual

Version 2.3

Revision History

Date	Change Description	Version
2022/12/07	First Published Version	V1.0
2022/12/26	Update GPS information in 1.3 Specifications	V1.1
2023/03/09	Update Extended Battery in 1.3 Specifications	V1.2
2023/06/28	Add 1.4.8 BatteryInfo Health Service	V1.3
2023/8/8	Update Battery Notice	V1.4
2023/9/27	Update Battery Notice (charge to around 50%)	V1.5
2023/10/19	Update Battery information (Li-ion battery)	V1.6
2024/01/08	Update BatteryInfo & Add Charging Limit Function Section	V1.7
2024/05/27	Update Specification Descriptions	V1.8
2024/08/07	Update Relevant Battery Information	V1.9
2024/10/15	Change USB-C Hole into USB-C Port	V2.0
2024/12/13	Update CE Compliance	V2.1
2024/12/16	Update Specification Descriptions	V2.2
2024/12/18	Update OS Version	V2.3

Preface

About This Manual

Thank you for purchasing the Unitech product.

This manual explains how to install, operate and maintain our product.

No part of this publication may be reproduced or used in any form, or by any electrical or mechanical means, such as photocopying, recording, or information storage and retrieval systems, without permission in writing from the manufacturer. The material in this manual is subject to change without notice.

Regulatory Compliance Statements

FCC Warning Statement

This device 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 with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with 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.

1. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure requirements, avoid direct contact to the transmitting antenna during transmitting.
3. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC Label Statement

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

RF Radiation Exposure Statement

For body contact during operation, this device has been tested and meets FCC RF exposure guidelines when used with an accessory that contains no metal and that positions the handset a minimum of 1.0 cm from the body.

Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

European Conformity Statement

Unitech Electronics co., Ltd herewith declares that the Unitech product is in compliance with the essential requirements and all other provisions of the RED 2014/53/EU directive.

The declaration of conformity is available for download at :

<https://portal.Unitech.eu/public/Safetyregulatorystatement>

CE RF Exposure Compliance

For body-worn operation, this device has been tested and meets the ICNIRP guidelines and the European Standard EN 62209-2, for use with dedicated accessories, SAR is measured with this device at a separation of 0.5 cm to the body, while transmitting at the highest certified output power level in all frequency bands of this device. Use of other accessories which contain metals may not ensure compliance with ICNIRP exposure guidelines.

In accordance with Directive 2022/2380 of the European Union, we hereby provide specific information regarding the charging capabilities and compatible devices for the CE USB-C Adapter. This notice aims to offer essential details to purchasers for informed use and compliance with the outlined safety and performance standards.

Please note that this device supports fast charging via USB Power Delivery (USB PD), allowing for efficient charging at higher power levels when paired with compatible devices.

For reference to the detailed charging power specifications applicable to each device model, please find the link to consult our cloud-based table or scan the QR code provided below.

For detailed information on charging power specifications:

[Unitech Products USB-C Charging Power Specification Overview](#)



CE Mark Warning



RoHS Statement



This device conforms to RoHS (Restriction Of Hazardous Substances) European Union regulations that set maximum concentration limits on hazardous materials used in electrical and electronic equipment.

Waste electrical and electronic equipment (WEEE)



Unitech has set up a policy and process to meet the 2012/19/EU concerning electronic waste disposal.

For more detailed information of the electronic waste disposal of the products you have purchased from Unitech directly or via Unitech's resellers, you shall either contact your local supplier or visit us at :

<https://portal.Unitech.eu/public/WEEE>

Taiwan NCC Warning Statement

低功率射頻器材技術規範

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。高增益指向性天線只得應用於固定式點對點系統。

MPE警語：

電波功率密度MPE標準值： $1.0\text{mW}/\text{cm}^2$ ，送測產品實測值： $0.103\text{mW}/\text{cm}^2$ ，
建議使用時設備天線至少距離人體20公分。

注意事項：

1. 使用過度恐傷害視力。
2. 使用30分鐘請休息10分鐘；未滿2歲以下幼兒不看螢幕，2歲以上每天看螢幕不要超過1小時。
3. 減少電磁波影響，請妥適使用。

Note:

Within the 5.25-5.35 GHz band, U-NII devices will be restricted to indoor operations to reduce any potential for harmful interference to co-channel MSS operations.

Laser Information

The Unitech product is certified in the U.S. to conform to the requirements of DHHS/CDRH 21CFR Subchapter J and to the requirements of IEC 60825-1. Class II and Class 2 products are not considered to be hazardous. The Unitech product contains internally a Visible Laser Diode (VLD) whose emissions do not exceed the maximum limits as set forth in the above regulations. The scanner is designed so that there is no human access to harmful laser light during normal operation, user maintenance or prescribed service operations.

The laser safety warning label required by the DHHS/IEC for the Unitech product's optional laser scanner module is located on the memory compartment cover, on the back of the unit.

* Laser information only applies to the products with laser components.

CAUTION! Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light. Use of optical instruments with the scanner, including binoculars, microscopes, and magnifying glasses, with will increase eye damage. This does not include eyeglasses worn by the user.

LED Information

The Unitech product contains LED indicator(s) or LED ring whose luminance is not harmful to human eyes during normal operation, user maintenance or prescribed service operations.

*LED information only applies to the products with LED components.

Battery Notice

Performance and Replacement

- For optimal performance, it is recommended to replace rechargeable batteries annually or after 500 charging cycles.
- It's normal for the battery to swell or expand slightly after a year or 500 cycles. This doesn't cause damage but indicates the battery should be replaced and disposed of properly according to local regulations.
- If battery performance drops by more than 20%, it has reached its end of life and should be replaced and disposed of properly.

Battery Life and Conservation

- Battery life depends on the battery type and device usage.
- Avoid fully discharging the battery as this puts stress on it. Several partial charges are better than one full discharge.
- Do NOT expose the battery or device to high temperatures for extended periods, such as in a parked car on a hot day or under direct sunlight. High temperatures can damage the battery. Keep the device within acceptable operating temperatures (refer to the specifications).
- For long-term storage, charge the battery to at least 50% every six months. Leaving the battery uncharged for extended periods will reduce its lifespan.
- If the battery cannot be charged after a long idle period and starts to heat up, do not attempt to charge it. It may be damaged.

Important Cautions

- **Use original batteries only from Unitech.** Using third-party batteries can damage the device and void the warranty.
- **Risk of explosion if the battery is replaced incorrectly.** Dispose of used batteries according to instructions.
- **RISK OF EXPLOSION IF BATTERY IS REPLACED INCORRECTLY.**
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

- 電池若未正確更換，可能會爆炸。請用原廠建議之同款或同等級的電池來更換，請依原廠指示處理廢電池。
- 請依制造商說明書處理用過之電池，如果更換不正確之電池行事會有爆炸的風險，請依制造商說明書處理用過之電池

Charging

- Consider temperature when charging. Charging is most efficient at room temperature or slightly cooler.
- Charge batteries within the specified range of 0°C to 40°C (32°F to 104°F). Charging outside this range can damage the battery and shorten its lifespan.
- **Do not charge batteries below 0°C.** This is dangerous and can make the batteries unstable. Use a battery temperature detecting device to ensure safe charging temperatures.

Maintenance and Safety

- Keep all connectors free of contaminants like dust, grease, mud, and water to ensure proper device operation. Neglecting this can cause communication issues, short circuits, or overheating.
- **To clean the battery connectors:**
 - Remove the main battery from the mobile computer.
 - Dip the cotton part of a cotton-tipped applicator in isopropyl alcohol.
 - Gently rub the cotton part of the applicator back and forth across the connectors on both the battery and the device to remove any grease or dirt. Ensure no cotton residue is left on the connectors.
 - Repeat this process at least three times.
 - Use a dry cotton-tipped applicator and repeat steps 3 and 4.
 - Inspect the area for any remaining grease or dirt and repeat the cleaning if needed.
- **To clean the cradle connectors:**
 - Disconnect the DC power cable from the cradle.
 - Dip the cotton part of a cotton-tipped applicator in isopropyl alcohol.

- Rub the cotton part of the applicator along the pins of the connector, moving it back and forth gently from one side to the other. Do not leave any cotton residue on the connector.
- Rub all sides of the connector with the applicator.
- Remove any lint left by the applicator.
- If there is grease or dirt on other areas of the cradle, use a lint-free cloth and alcohol to clean them.
- Allow the alcohol to air dry for at least 10 to 30 minutes (depending on the ambient temperature and humidity) before powering on the cradle.

CAUTION! *If you clean the battery or cradle connectors with bleach-based chemicals, follow the instructions above to remove any bleach residue from the connectors.*

- If a connector is damaged, have it repaired before using the device to avoid short circuits.
- While charged batteries can be left unused for several months, their capacity may decrease due to internal resistance buildup. They may need recharging before use.
- Store batteries at temperatures between -20°C to 60°C. Higher temperatures can cause faster depletion. Room temperature storage is recommended.
- The above storage information applies only to removable batteries. For devices with non-removable batteries, refer to the product specifications.

Battery Safety Guidelines

- Charge the device in a clean area, away from debris, flammable materials, or chemicals. Take extra care when charging in non-commercial environments.
- Improper battery use can lead to fire, explosion, or other hazards.
- Do not disassemble, open, crush, bend, deform, puncture, or shred the battery.
- Dropping the device can cause the battery to overheat.
- Do not short-circuit the battery or allow metal or conductive objects to touch the battery terminals.
- Do not modify the battery, insert foreign objects, expose it to water or other liquids, or expose it to fire, explosion, or other hazards.
- Do not leave or store the device in hot areas, like parked cars or near heat sources. Do not put the battery in a microwave or dryer.

- Supervise battery usage by children.
- If swallowed, seek medical advice immediately.
- In case of leakage, avoid contact with skin and eyes. If contact occurs, flush the affected area with water for 15 minutes and seek medical advice.
- If you suspect damage to the equipment or battery, contact your service provider for inspection.

Product Operation and Storage Notice

The Unitech product has applicable operation and storage temperature conditions. Please follow the limitation of suggested temperature conditions to avoid failure, damage or malfunction.

**For applicable temperature conditions, please refer to the specification of each product.*

Adapter Notice

1. Please do not leave the power adapter in the socket when it is not connected to your Unitech product for charging.
2. Please remove the power adapter when the battery is fully recharged.
3. The bundled power adapter that comes with your Unitech product is not meant to be used outdoors. An adapter exposed to water or rain, or a very humid environment can cause damage to both the adapter and the product.
4. Please only use the bundled power adapter or same specification of adapter to charge your Unitech product. Using the wrong power adapter can damage your Unitech product.

** The message above only applies to the product connected to the adapter. For the products without using the adapters, please refer to the specification of each product.*

Hearing Damage Warning

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



Figure 1 – Warning label (IEC 60417-6044)

Worldwide Support

Unitech's professional support team is available to quickly answer questions or assist with technical-related issues. Should an equipment problem occur, please contact the nearest Unitech regional service representative.

For complete contact information please visit the Web sites listed below:

Taipei, Taiwan – Headquarters Tel: +886-2-89121122 E-mail: info@hq.ute.com Address: 5F, No. 136, Lane 235, Baoqiao Road, Xindian District, New Taipei City 231, Taiwan (R.O.C.) Website: http://www.ute.com	Europe Tel: +31-13-4609292 E-mail: info@eu.ute.com Address: Kapitein Hatterasstraat 19, 5015 BB, Tilburg, the Netherlands Website: http://eu.ute.com
China Tel: +86-59-2310-9966 E-mail: info@cn.ute.com Address: Room401C, 4F, RIHUA International Mansion, Xinfeng 3rd Road, Huoju Hi-tech District, Xiamen, Fujan , China Website: http://cn.ute.com	Japan Tel: +81-3-62310896 E-mail: info@jp.ute.com Address: Tosei Building 3F.,18-10 Nihonbashi-Hakozakicho, Cyuouku, Tokyo, 103-0015, Japan Website: http://jp.ute.com
Asia & Pacific / Middle East Tel: +886-2-27911556 E-mail: info@apac.ute.com info@india.ute.com info@mideast.ute.com Address: 4F., No. 236, ShinHu 2nd Rd., NeiHu Chiu, 114, Taipei,Taiwan Website: http://apac.ute.com / http://mideast.ute.com	Latin America Tel: +52-55-5171-0528 E-mail: info@latin.ute.com Address: 17171 Park Row, Suite 210 Houston, TX 77084USA (Rep.) Website: http://latin.ute.com
North America Tel: +1-714-8916400 E-mail: info@us.ute.com / info@can.ute.com Address: 6182 Katella Ave, Cypress, CA 90630, USA Website: http://us.ute.com	Please scan QR Code to visit us : 

Warranty Policy

The following items covered under the Unitech Limited Warranty are free from defects during normal use:

The warranty period is varied from each country. Please consult with your supplier or Unitech local office for actual length of warranty period to your purchased product.

Warranty becomes void if equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed or replaced by the user.

Table of Contents

Preface.....	i
Regulatory Compliance Statements	i
Laser Information	vi
LED Information	vi
Battery Notice.....	vii
Adapter Notice.....	x
Hearing Damage Warning	xi
Worldwide Support	xii
Warranty Policy	xiii
Chapter 1 - Overview.....	1
1.1 Package	1
1.2 Product Detail.....	2
1.3 Specifications	4
1.4 Getting Started	7
Chapter 2 – Installation & Operation	16
2.1 Barcode Setting.....	16
2.2 HF Setting	20
2.3 WWAN Setting.....	23
2.4 WLAN Setting.....	26
2.5 PAN Setting	34
2.6 GPS Setting.....	36
2.7 PC Setting	37
2.8 Camera Setting	39
2.9 USS Camera	43
2.10 Performing a Hardware Reset.....	48
2.11 Performing Factory data reset	49
2.12 KeyRemap.....	50
2.13 Split Screen	53
2.14 Network Time Protocol (NTP) Server	55

Chapter 3 – Introduction to Applications.....	57
3.1 Unitech SW Solutions (Overview)	57
3.2 USS (Unitech scan service).....	59
3.3 Enterprise Keyboard.....	64
3.4 Logger	65
3.5 Software Update.....	67
3.6 StageGO.....	69

Chapter 1 - Overview

1.1 Package

Please make sure the following contents are in the PA768 gift box. If something is missing or damaged, please contact your Unitech representative.

The Package Contents

- PA768 Rugged Handheld Computer
- Battery
- Hand Strap
- USB Type-C Cable
- Quick Start Guide

Optional Accessories

- Hand Strap
- USB 3.0 Type-C cable
- Fast charge adaptor
- 9H glass screen protector
- 1 Slot USB cradle
- 1 Slot Charging cradle
- 1 Slot Ethernet cradle
- Multi-Slot Terminal Charging / Ethernet Cradle / Battery Charger
- Standard/UHF gun grip
- Stylus with Coiled strap

1.2 Product Detail

PA768 Product View



1. Barcode Scanner Window
2. Receiver
3. LED Indicator
4. Front Camera
5. Volume Key

6. Scanner Trigger Key
7. Power Key
8. Programmable Key
9. Scanner Trigger Key

Rear View



Bottom View

- | | |
|---------------------------------|---------------------------------|
| 10. Microphone (Sub) | 16. Pogo Pin for gun grip |
| 11. Flash LED | 17. Pogo Pin for cradle |
| 12. Rear Camera | 18. Microphone (Main) |
| 13. Speaker | 19. Hand Strap Attachment Point |
| 14. Hand Strap Attachment Point | 20. USB-C Port |
| 15. NFC | |

1.3 Specifications

System Features	
CPU	Qualcomm Snapdragon™ 6490 Processor, 64bits, Octa Cores up to 2.7 GHz
Memory	6 GB RAM (128GB option) 64 GB UFS Flash
OS	Android 14 (upgradable to Android 16) with GMS & AER certified
Languages support	Multiple languages
Display	
Screen Size	6.3" Color LCD 2340 X 1080 (FHD+) High Resolution Display
Touchpanel	Gorilla Glass with Multi-Touch Capacitive Touch Panel, support stylus, glove, wet-finger Compatibility High sunlight visibility - LCD backlight up to 500nits
Keypad	
Programmable key, Volume up/down key, Left/right scan key, Power key	
Camera	
5 MP Front camera 16 MP Rear Camera with LED flash and auto-focus function, Support Google ARcore	
Indicator Type	
LED, Vibrator	
Symbologies	
Built-in 2D imager engine with red laser aimer, with 1 Mpx & global shutter function Optional Middle range engine support read range up to 10 meters Support all 1D & 2D major barcodes	
RFID	
UHF	UHF gun grip (see RG768)
HF	Support HF/NFC Frequency 13.56Mhz Support: ISO14443A/B, ISO15693, Mifare, Felica (ISO/IEC18092)

Power Source	
Main Battery	Hot Swappable 5100mAh Li-ion battery / battery with cover in one piece
Extended battery	7700mAh / battery with cover in one piece (optional)
Hot Swap	Yes
Regulatory Approvals	
CE, FCC, NCC, VCCI, TELEC, CCC, SRRC, BQB, N-Mark, RoHS 2.0	
Communication	
Bluetooth®	Bluetooth® 5.2 , BLE 5, Class 1
WLAN	Wi-Fi 6E (802.11ax), 2.4GHz & 5GHz & 6GHz, support Dual-Band Simultaneous (DBS) IEEE 802.11a/b/g/n/ac/d/e/h/i/k/r/v/w/mc/ax (2x2 MU-MIMO) Security WPA3, WPA2, WPA & WEP
WWAN	5G Sub 6GHz:N1/N2/N3/N5/N28/N41/N48/N71/N77/N78/N79 (4x4 MIMO) 4G LTE (FDD) – Bands 1, 2, 3, 4, 5, 7, 8, 17, 20, 28, 48 (TDD) – Bands 38, 39, 40, 41 3G UMTS/HSPA+ – Bands 1, 2, 5, 8 2G GSM/GPRS/EDGE (850/900/1800/1900 MHz) *Support Dual Sim Dual 5G *Support 4G LTE Advanced , Up to CAT12 LTE downlink/uplink
GPS	GPS, GLONASS, Galileo, Beidou, QZSS, SBAS, supports L1+L5, a-GPS, XTRA
Sensors	Gyroscope, G-sensor, E-compass, Light & Proximity Sensor
I/O Interfaces	
USB	USB 3.1 type C, support fast charging, OTG
POGO PIN	Bottom pogo pin for cradles, rear pogo pin for gun grips
SIM Slot	Nano SIM Slot x 2
Expansion slot	Micro SD x 1, up to 1 TB
Audio	SmartPA Speaker support 100 dB at 10cm Dual-Microphone support noise cancellation
Enclosure	
Dimensions	167mm x 75.5mm x 17mm (H x W x D)
Weight	297 g (with bumper & standard battery)

Environmental	
Operating temperature	-4°F to 131°F (-20°C to 55°C)
Storage temperature	-40°F to 158°F (-40°C to 70°C), without battery
Relative Humidity	5% ~ 95% (Non-Condensing)
Drop Specification	1.8 meter with bumper 1.5 meter without bumper
Sealing	IP65 & IP68 per IEC 60529
Vibration/Tumble test	Tumble 600 times (1.6 ft./0.5 m)
Software	
MDM Software	SOTI, VMware, 42Gears, and MoboLink
Accessories	
<ul style="list-style-type: none"> ■ Hand Strap ■ USB 3.0 Type-C cable ■ Fast charge adaptor ■ 9H glass screen protector 	<ul style="list-style-type: none"> ■ 1 Slot USB cradle ■ 1 Slot Charging cradle ■ 1 Slot Ethernet cradle ■ Multi-Slot Terminal Charging / Ethernet Cradle / Battery Charger ■ Standard/UHF gun grip ■ Stylus with Coiled strap

Note:

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

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK
	IS	LI	NO	CH	TR		

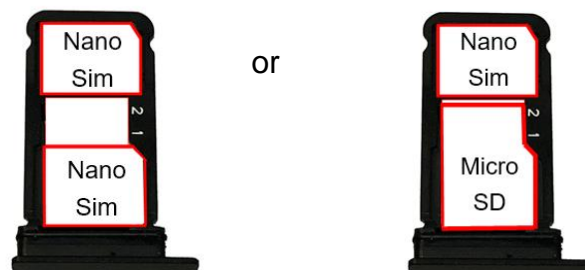
1.4 Getting Started

1.4.1 Inserting the Micro SD/Nano SIM Card

1. Pick out the Micro SD/Nano SIM card holder.



1. You may put in 2 SIM cards or one SIM card and one SD card at a time.



Replacing the Battery

This section describes how to replace the battery.

CAUTION! The battery is designed to be removed by hand. Do not use tools to remove the battery.

NOTE: Do not put labels, asset tags, engravings, stickers, or other objects in the battery slot, as this might compromise the performance of the device or accessories. Performance levels, such as sealing [Ingress Protection (IP)], impact performance (drop and tumble), functionality, or temperature resistance could be affected.

NOTE: If the hand strap is attached, remove the hand strap clip first.

1.4.2 Remove the battery

1. Press and hold both of the plastic buckles at the bottom.



2. Push the battery against the front and lift to remove.



1.4.3 Install the Battery

1. Align the battery with the battery compartment following the picture below.



2. Press and hold both of the plastic buckles at the bottom, then push against the front.



3. Press down the battery to secure in place



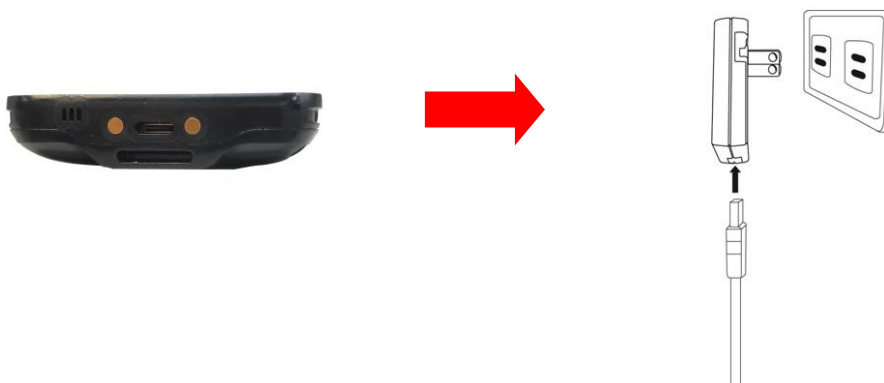
1.4.4 Charging the Battery

Before using the PA768 for the first time, you need to charge it for about 24 hours. For the regular use, you can charge the PA768 for 4 hours to recharge the battery to full capacity.

To charge the PA768, please use the USB charging cable or the cradle.

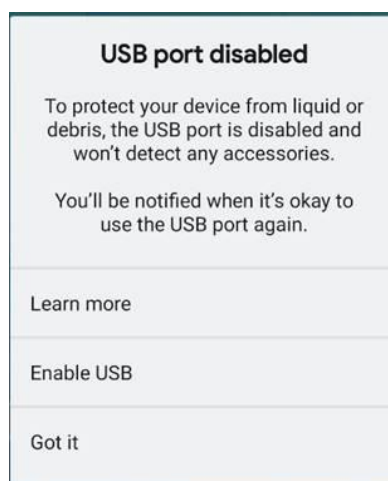
Connect the type C USB cable to the USB port on PA768 and the other end of the USB cable connect to AC power adapter into the electrical outlet on the USB plug.

The charging LED indicator on PA768 is turning red when it is in charging state.



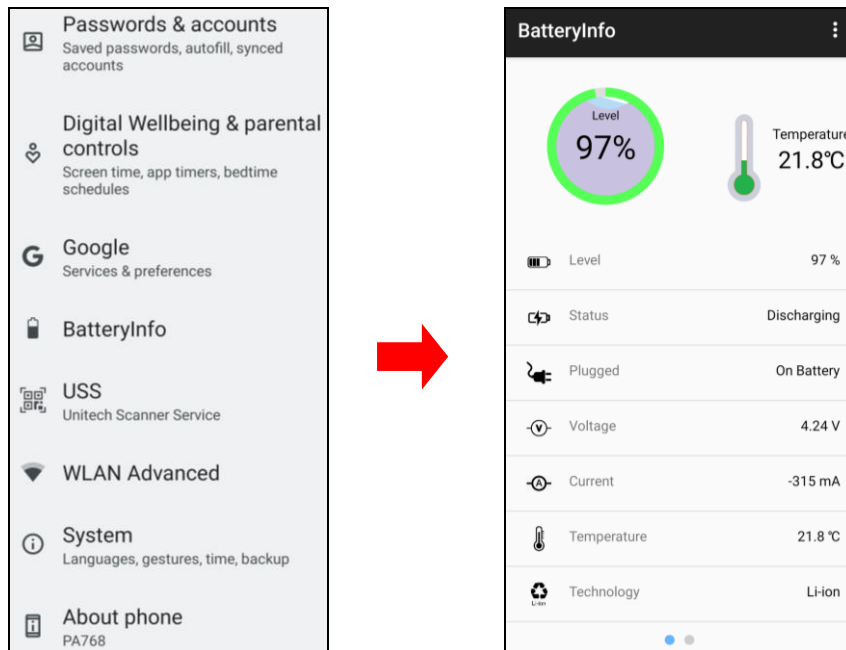
Note:

To protect your device, the USB port will be disabled once it detects contaminants. You will see the following popup window:



1.4.5 Battery Info

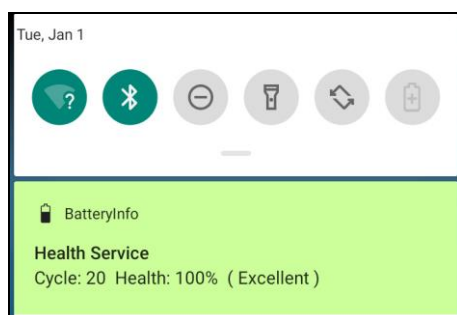
Please go to **Settings** → **BatteryInfo** for more detailed battery information.



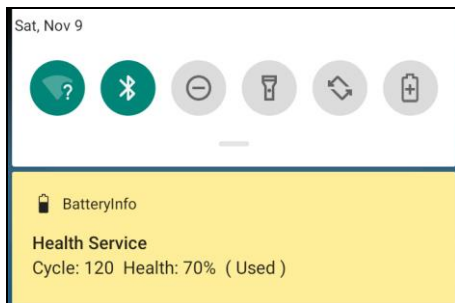
1.4.5.1 BatteryInfo Health Service

BatteryInfo health service information will display on both PA768 lock screen and the notification bar.

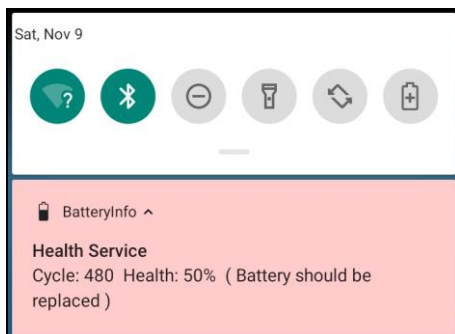
- When the battery health is higher than 80% :



- When the battery health is higher than 60%:



- When the battery health is lower than 60% : (Battery should be replaced)



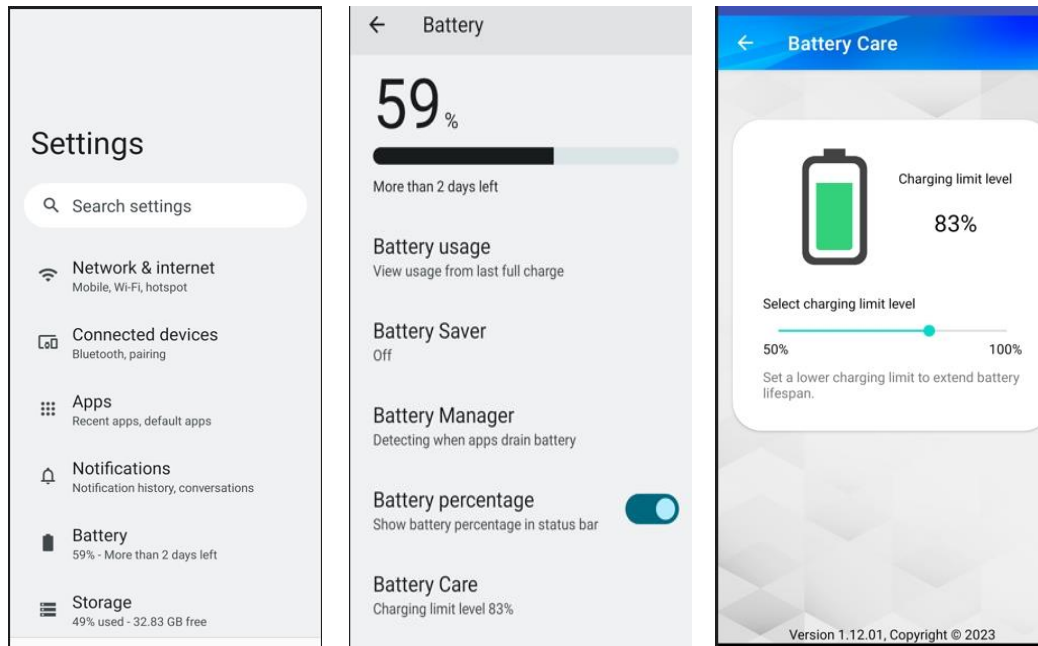
Note:

If the battery is stored for the long term, it might result in accelerated battery health lower. Please try to charge and discharge your batteries several times and check the battery health is at a steady rate. If the battery health is still lower than 60%, the battery should be replaced.

1.4.5.2 Charging Limit Function

To protect the battery, Battery Care enables you to set the maximum power level.

Set a lower charging limit to extend the lifespan of your battery. You can access this feature in **Settings** → **Battery** → **Battery Care**, as shown below to configure the charging limit.



Here's how it works:

1. By default, the charging limit is set to 100%.
2. Avoid full charge cycles (0-100%) and overnight charging.
3. Limiting your PDA's maximum charge to 20-80% is better for the battery's health than topping up to completely full every time.
4. Opting for the 80% Limit will ensure your PDA charges up to approximately 80% and then ceases charging.
5. When frequent charging is necessary, enabling the 50% Limit permits charging up to 50%, effectively extending your battery's lifecycle.
6. Additionally, if you plan to hold your PDA in long-term storage, it's best not to leave it at 100% charge. Instead, recommends that you store batteries at 50% state of charge if you're planning to store them long-term.

1.4.6 Turning on the PA768 for the first time

It is recommended to fully charge PA768 before first use. You can now start up your device to set up the languages, WLAN setting, and date and time.

Power Button

Turn ON your device by pressing the power button on the side of the PA768.



1.4.7 Checking the LED status

Checking the Battery Status

LED	Description
Red Light	<ul style="list-style-type: none"> ● Battery Charging
Green Light	<ul style="list-style-type: none"> ● Battery Fully charged ● Barcode scan good read
Blue Light	<ul style="list-style-type: none"> ● Message
<p>If scanner app is running, LED is controlled by the scanner app. No LED (Red and Green) display when battery is out. (even with AC IN)</p>	

WARNING! *There is a risk of fire and burns if the battery is handled improperly. DO NOT disassemble, crush, puncture, short external contacts, or dispose the battery pack in fire or water. DO NOT attempt to open or service the battery. Dispose of used batteries according to local recycling guidelines in your area.*

Chapter 2 – Installation & Operation

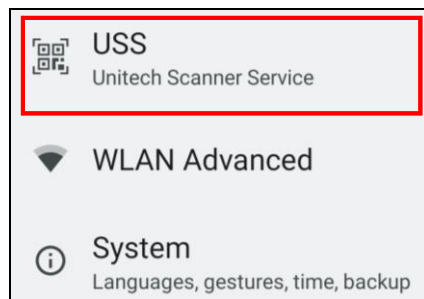
2.1 Barcode Setting

1. On the main screen, scroll up the screen to reach the APPS, and

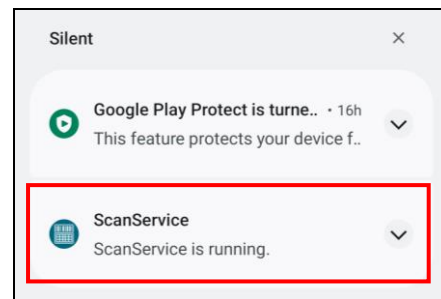


tap **Settings** and then tap **USS** (Unitech scan service).

Or from the notification bar to tap ScanService.



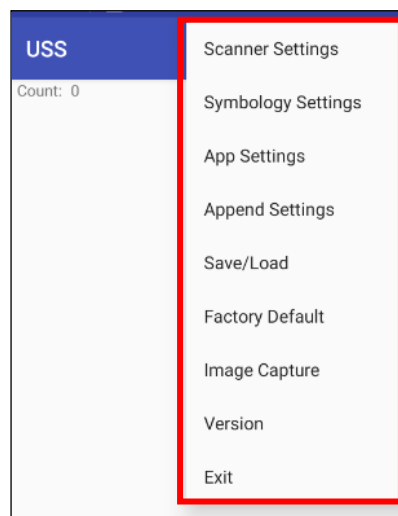
or



2. You now enter the Unitech scan service application.

2.1.1 Settings


After you enter the Unitech scan service application, please tap  on the screen to see all the settings of **USS**.

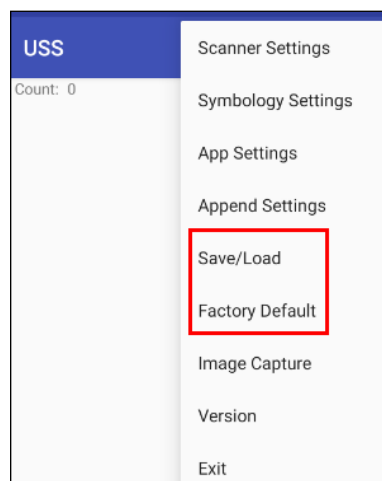


2.1.2 Barcode Scan

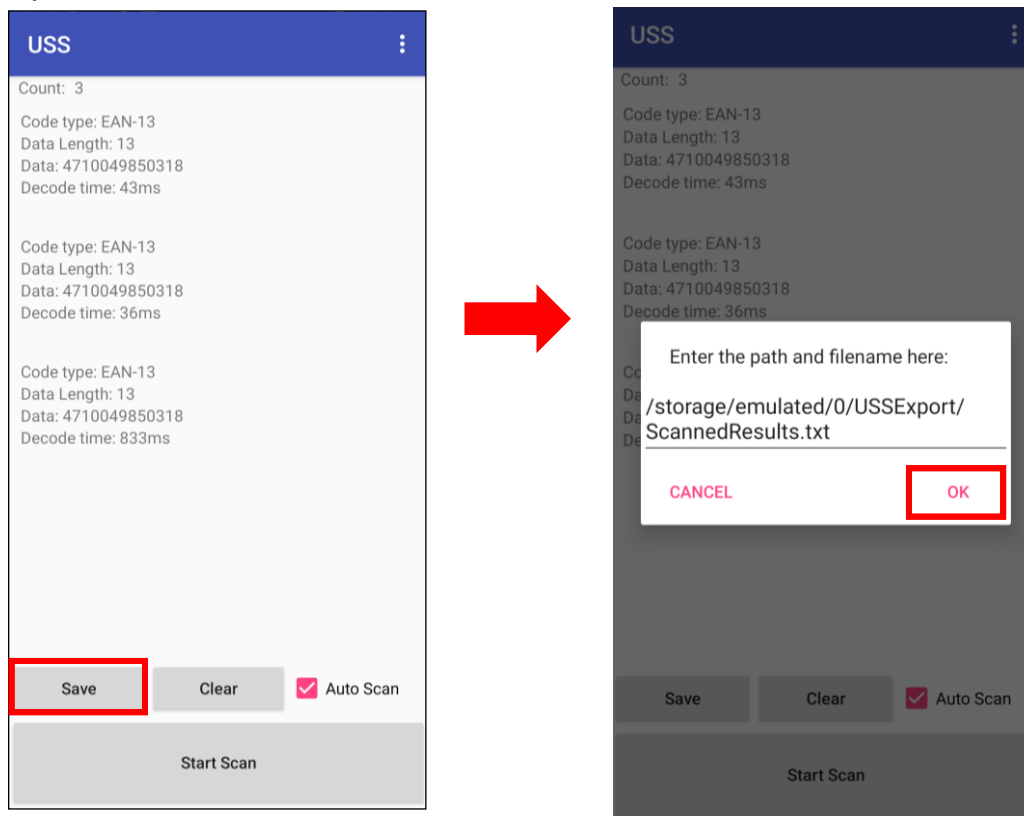
1. Please tap **Start Scan** to get ready for barcodes scan service.
You may tap **Stop scan** to stop scanning, and choose if you want to scan under **Auto scan** mode.



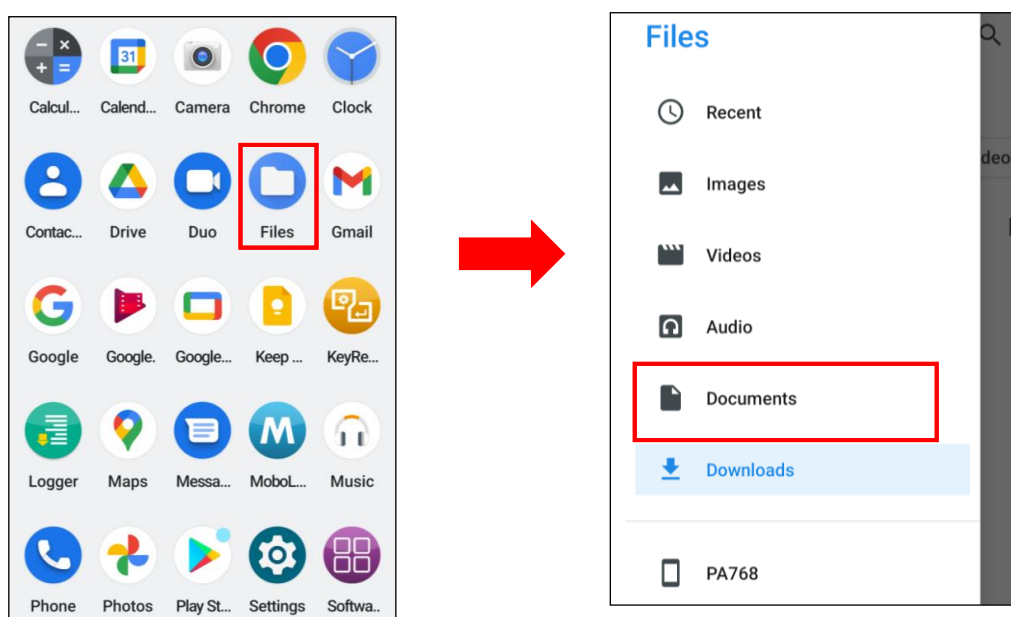
2. For **Save / Load Settings**, and **Factory Default**, Please tap  and to select **Save / Load Settings**, and **Factory Default**.



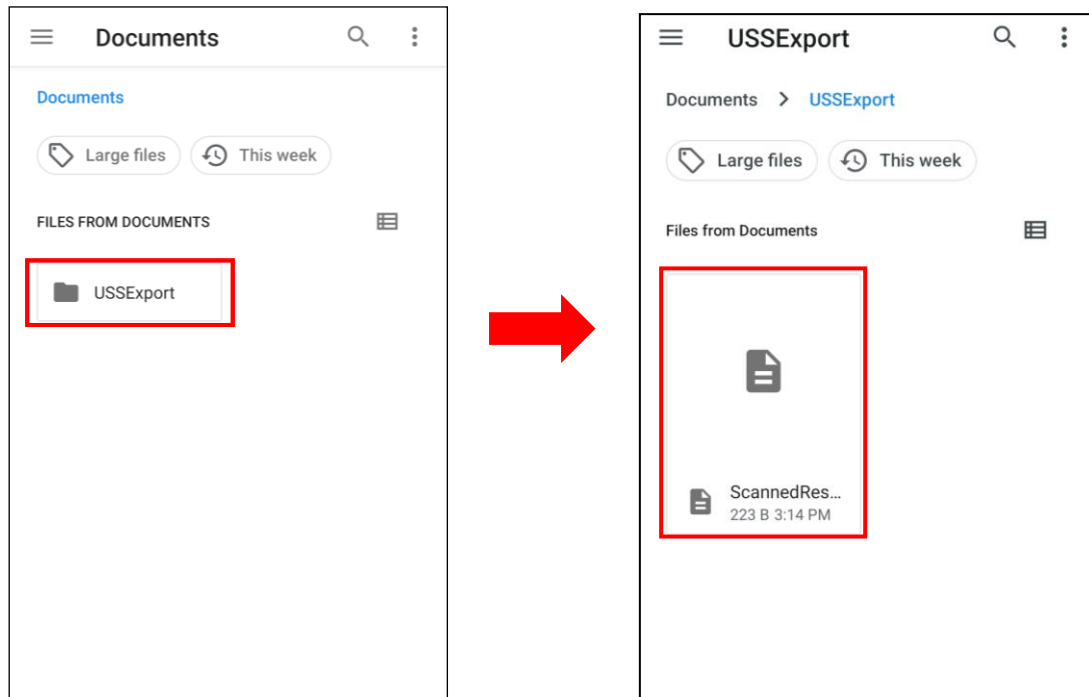
- To save settings, you can also tap **Save** on the screen and input path then tap **OK**.



The saved data is stored in Files → Documents



USSEExport → ScannedResults.txt.



Note: For more information, please refer to [3.1 USS \(Unitech scan service\)](#)

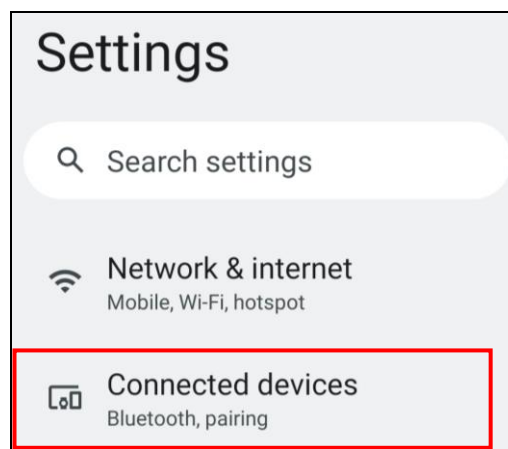
2.2 HF Setting

2.2.1 HF Setting

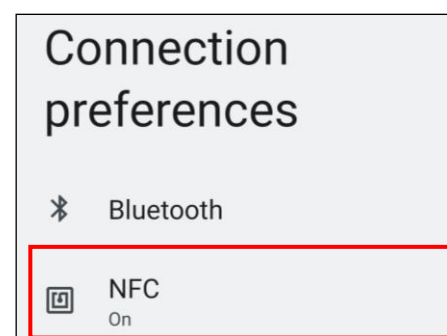
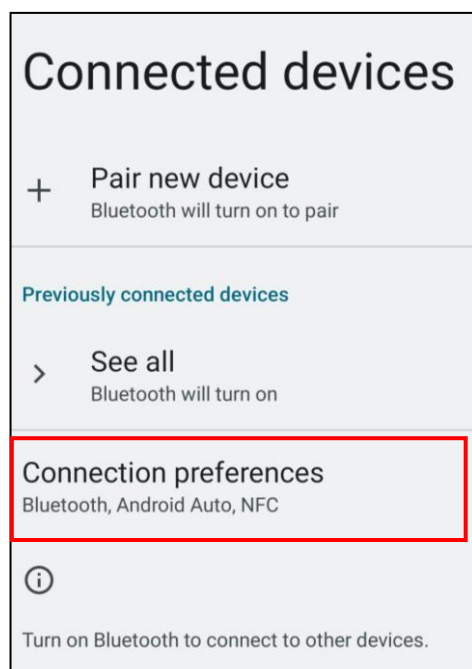
1. On the main screen, scroll the screen from bottom to top to reach the APPS,



and tap **Settings** then **Connected devices**.



2. Tap **Connection Preferences** to enable **NFC**



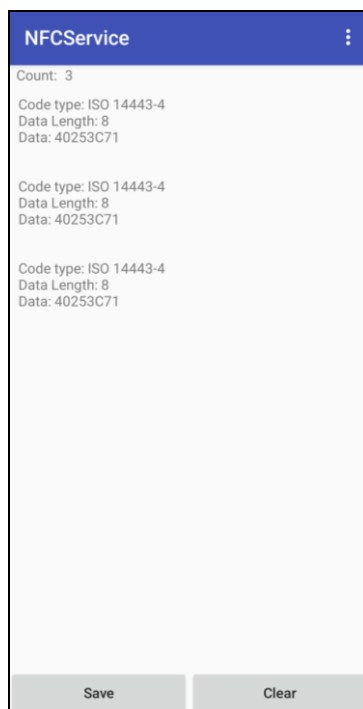
4. Make sure that both devices are unlocked and have NFC turned on. Also make sure that the NFC antenna area of PA768 and the other phone's NFC area are close to one another. Slightly moving the phones until a connection is made. Tap the screen.



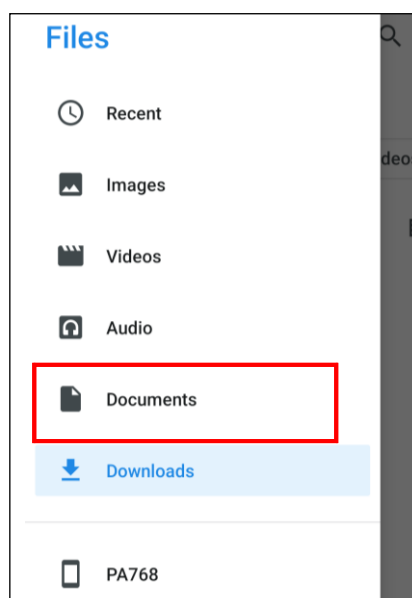
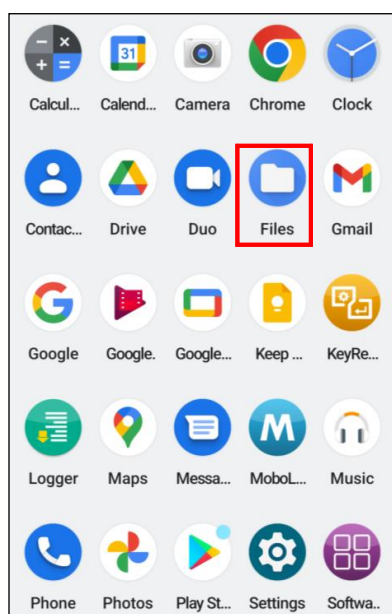
2.2.2 NFCService

On the main screen, scroll the screen from bottom to top to reach the APPS,

and tap **NFCService**



The saved data is stored in Files → Documents

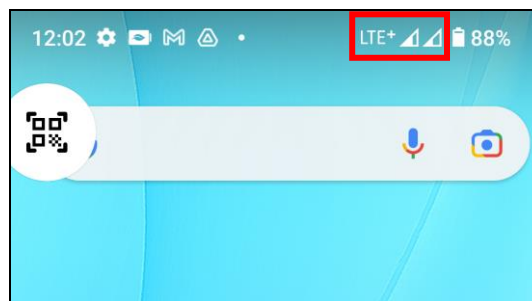


2.3 WWAN Setting

1. Turn off the PA768 to insert the SIM card.

Note : • For the instruction, please refer to [1.4.1 Inserting the Micro SD/Nano SIM Card](#)

2. Turn on the PA768, LTE signal will show at the top of the screen.

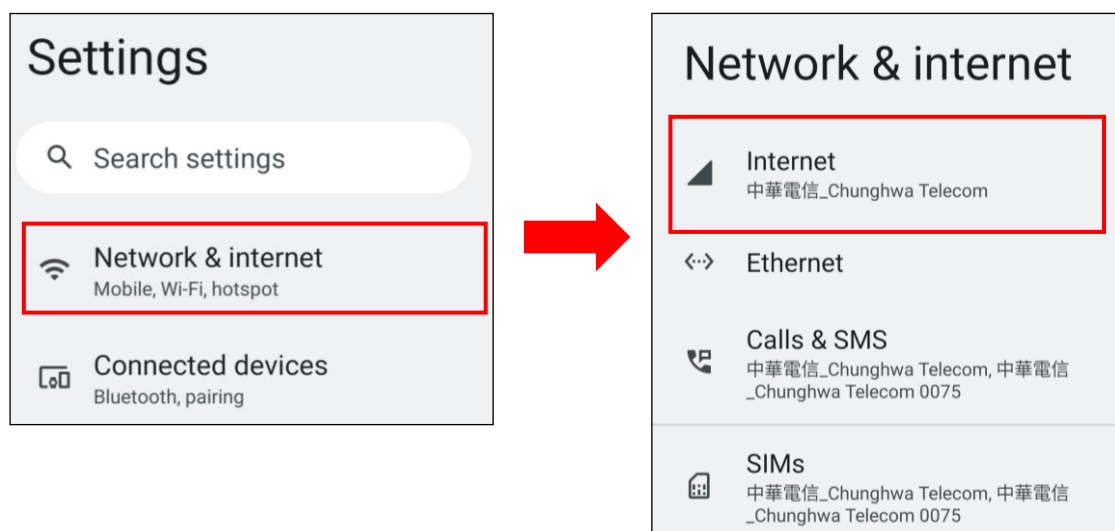


2.3.1 Mobile Network Settings

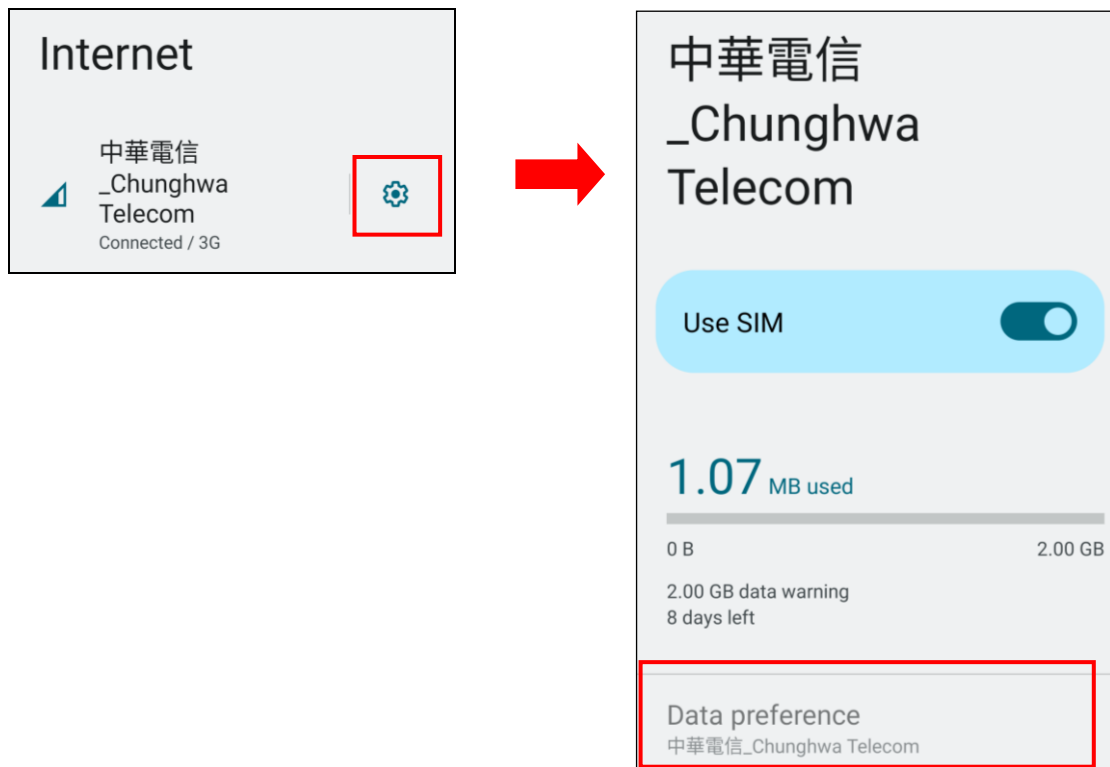
1. On the main screen, scroll the screen from bottom to top to reach the



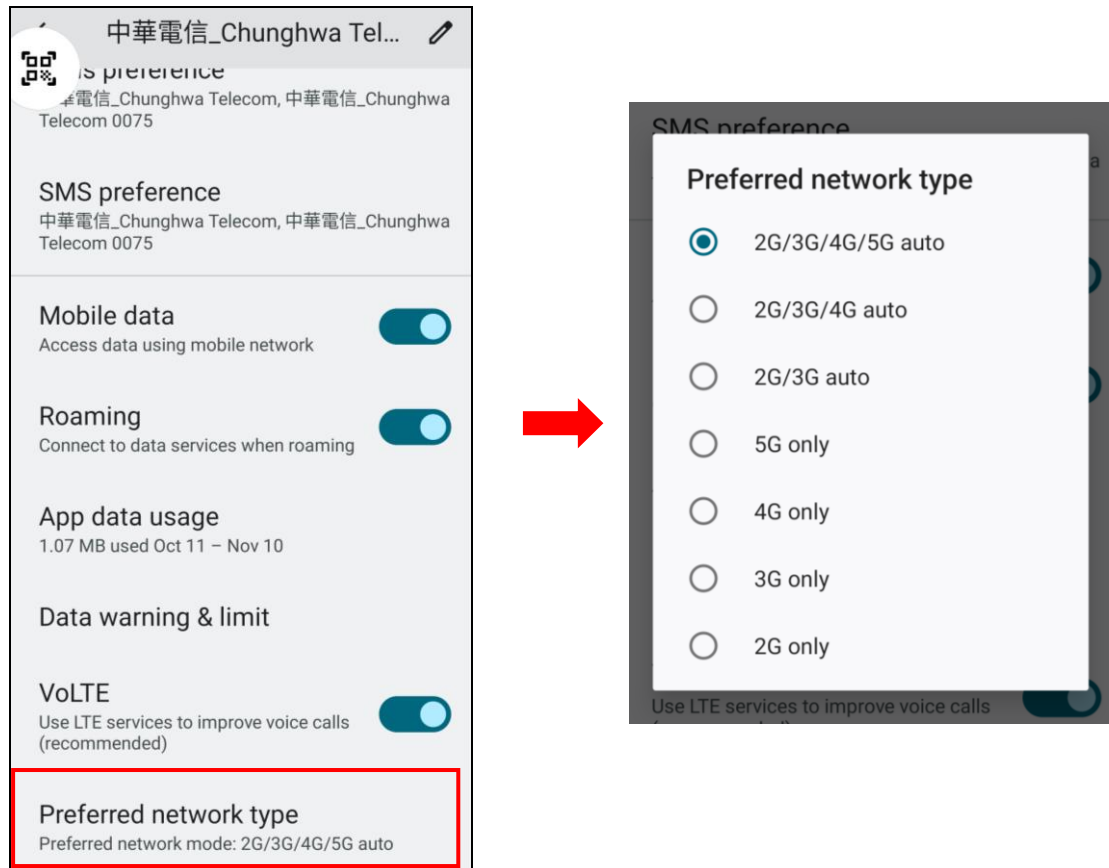
APPS, and tap **Settings** and then tap **Network & internet**.



2. Tap on the settings icon for more network settings.
To switch between 2 SIMs, tap on data preference.



- To choose different network type, please tap **Preferred network type**.

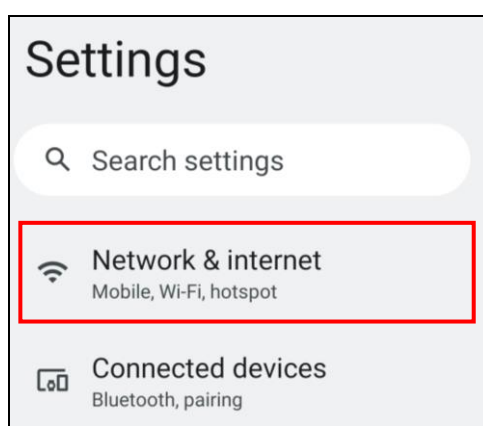


2.4 WLAN Setting

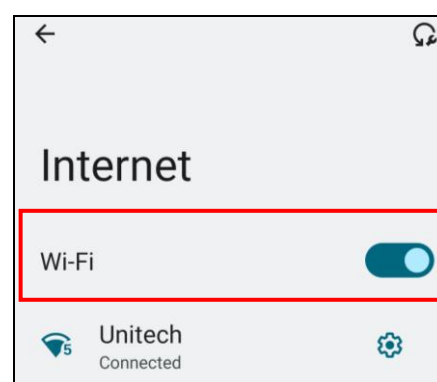
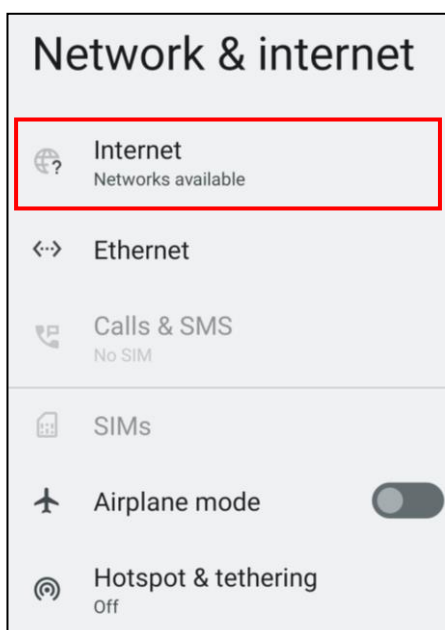
1. On the main screen, scroll the screen from bottom to top to reach the



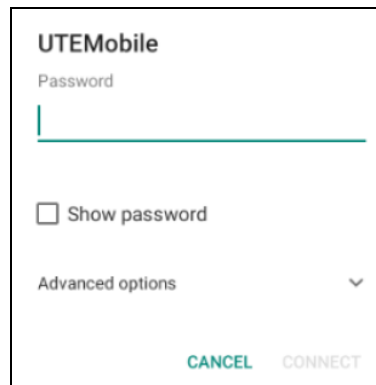
APPS, and tap **Settings** and then tap **Network & internet**.



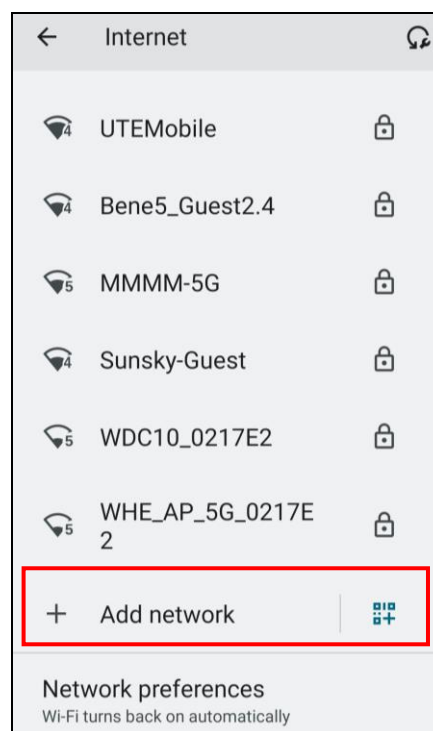
2. Tap Internet and turn WLAN **ON** to see available networks. Tap to choose available networks.



3. Choose the available networks, and enter the Password and tap **Connect**.



4. If the wireless network that you want is not listed, tap **+ Add network** to manually add it.



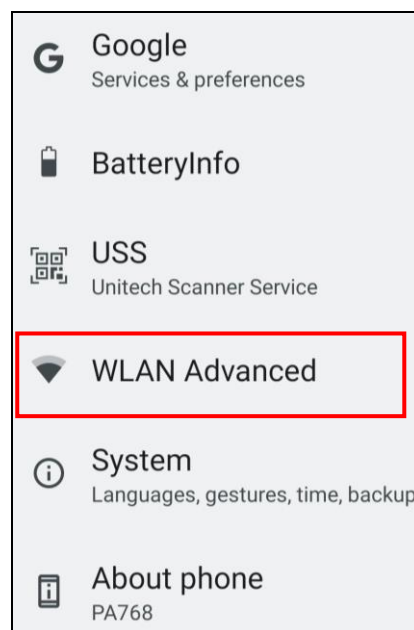
5. When enabled, the icon  is displayed on the status bar.

2.4.1 WLAN Advanced

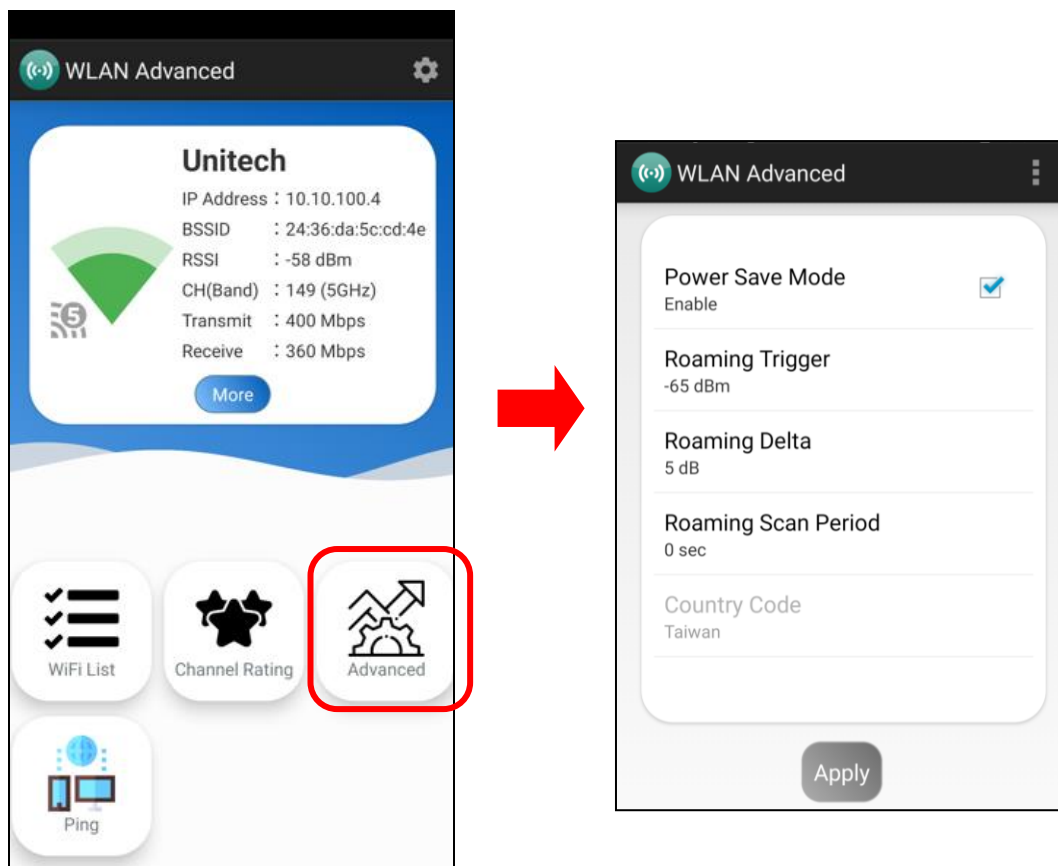
WLAN advanced can enhance the roaming behavior when the device is in areas of particularly low coverage or losing its connection to the network infrastructure and provides the power save mode to control the power consumption setting.

WLAN advanced will help users to manage the seamless roaming.

1. On the main screen, scroll the screen from down to top to reach the APPS, and tap **Settings** then **WLAN Advanced**.



2. Tap on **Advanced**.

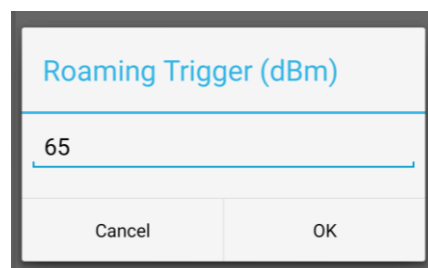


Power Save Mode

Tap to enable the power save mode to set the WLAN module to its optimum power consumption setting.

- **Roaming Trigger (Default : -65 dBm, Range : -10 dBm ~ -120 dBm)**

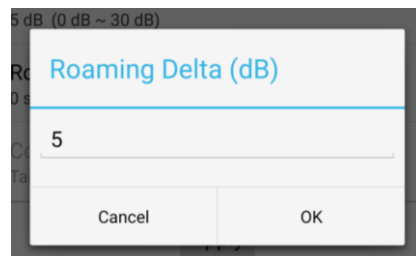
Roaming trigger will help users to look for a better and stronger signal strength (in dBm) by scanning many access points. When the signal strength is lower than roaming trigger value, roaming trigger will start to look for better access points.



A dialog box titled "Roaming Trigger (dBm)" with a text input field containing the value "65". Below the input field are two buttons: "Cancel" and "OK".

- **Roaming Delta (Default : 5 dB, Range : 0 dB ~ 30 dB)**

Based on roaming delta value, the device will roam to a better signal strength access point.

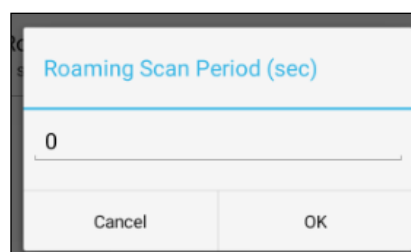


A dialog box titled "Roaming Delta (dB)" with a text input field containing the value "5". Below the input field are two buttons: "Cancel" and "OK".

- **Roaming Scan Period (Default : 0 ms, Range : 0 ms ~ 60 sec)**


The device will stay with the current AP based on the roam period value

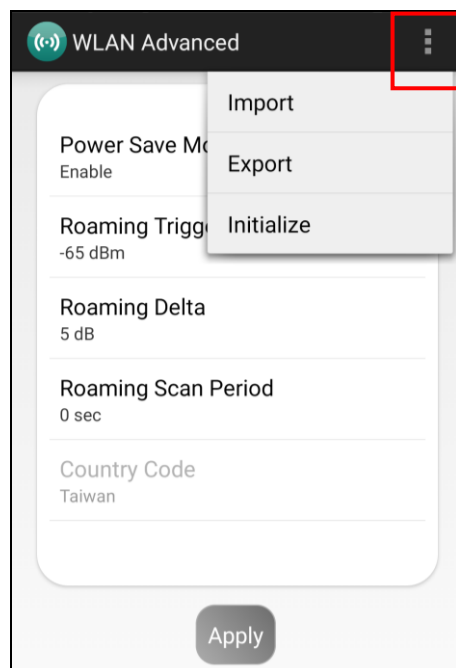
before it roams to a different AP.



A dialog box titled "Roaming Scan Period (sec)" with a text input field containing the value "0". Below the input field are two buttons: "Cancel" and "OK".

2.4.1.1 Other options

Tap  for more options to import / export the current data from the device.
Initialize is able to restore the default settings.



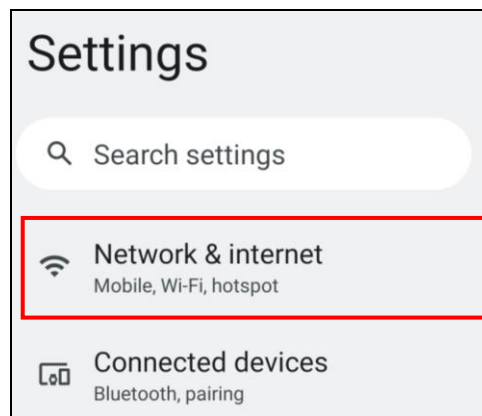
2.4.2 Share Wi-Fi

1. On the main screen, scroll the screen from bottom to top to reach the APPS,

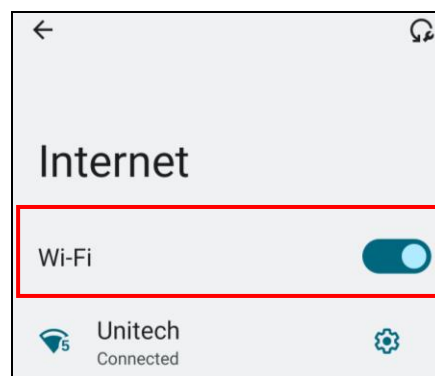


and tap

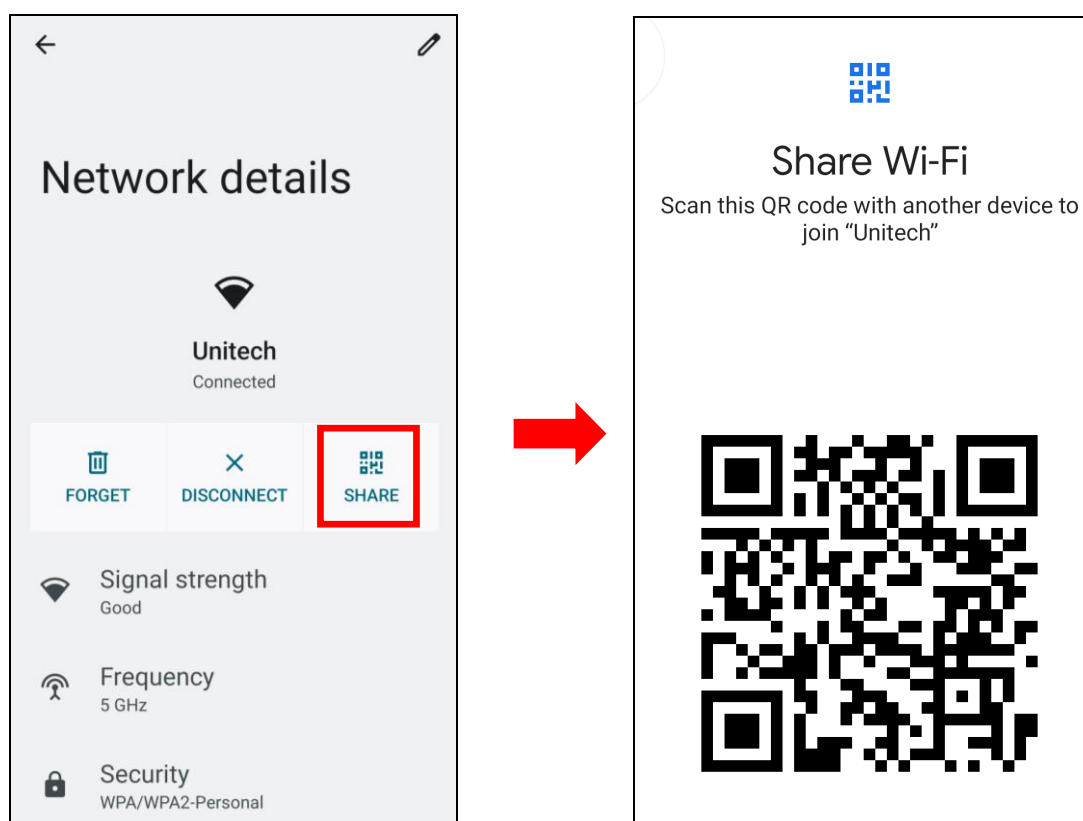
Settings and then tap **Network & internet**.



2. Tap Internet and turn WLAN **ON** to see available networks, then tap to choose the available networks.




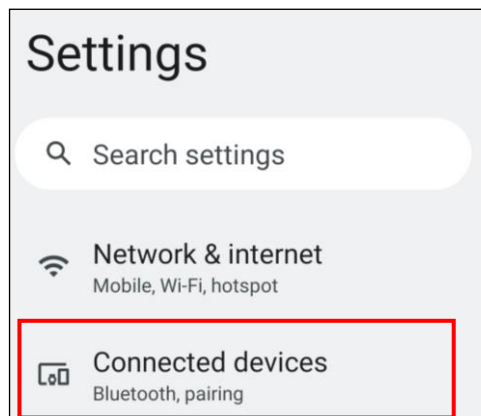
3. When Wi-Fi is connected, tap **“Share”** icon to show QR code.



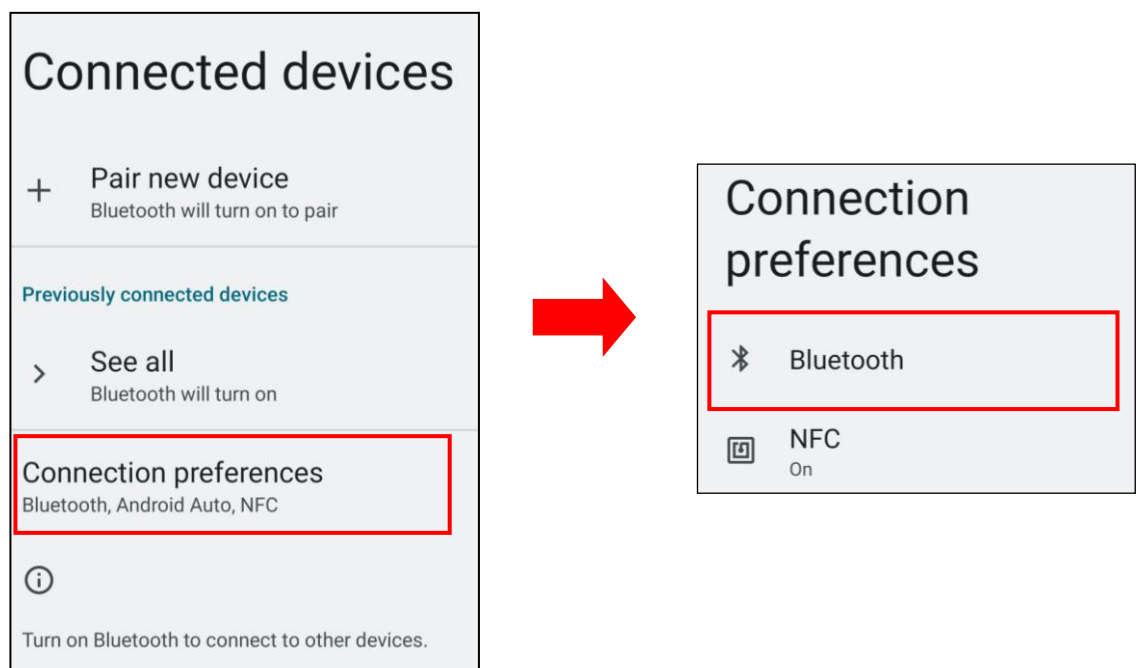
2.5 PAN Setting

1. On the main screen, scroll the screen from bottom to top to reach the

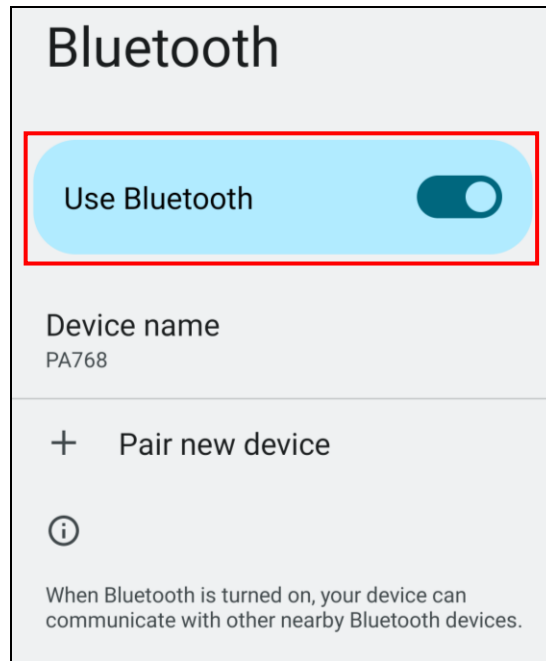
APPS, and tap  **Settings** and then tap **Connected devices**.



2. Tap **Connection Preferences** to enable **Bluetooth®**.



3. Tap **ON / OFF** to enable / disable Bluetooth®.
To pair the available device, turn Bluetooth® **ON** to choose the available device.

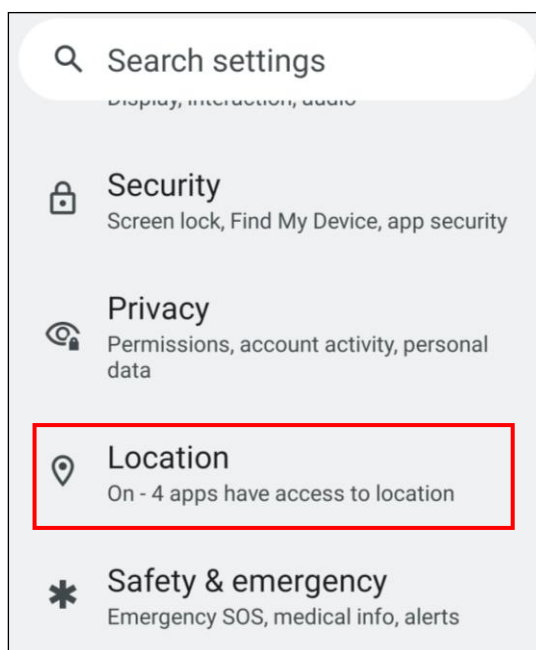


2.6 GPS Setting

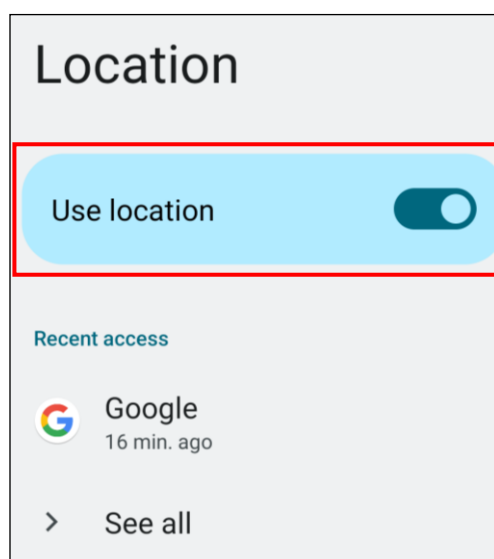
1. On the main screen, scroll the screen from bottom to top to reach the



APPS, and tap **Settings** and then tap **Location**.



2. Tap **ON/OFF** for the permission to use your location information.

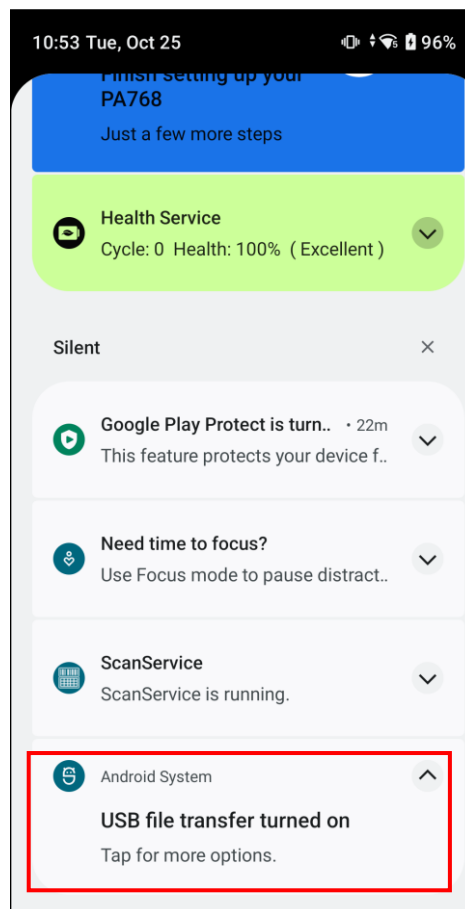


2.7 PC Setting

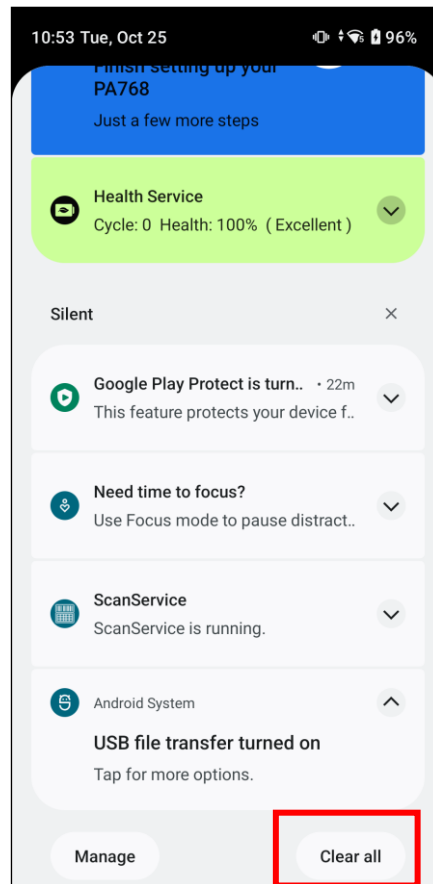
1. Connect PA768 to your computer with the USB type C cable. Your computer will recognize it is USB charging.



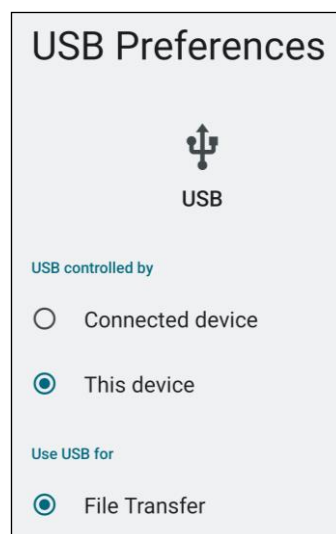
2. Slide down from top, the system will show as follow picture, then you can tap on **Android System Charging this device via USB**.



Note: If you cannot find the Android System Charging this device via USB notification in step 2, click on CLEAR ALL and try again.

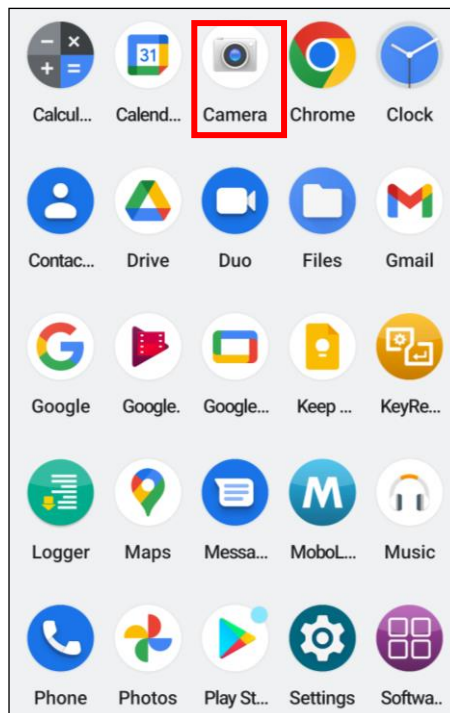


3. Then you can select File Transfer.



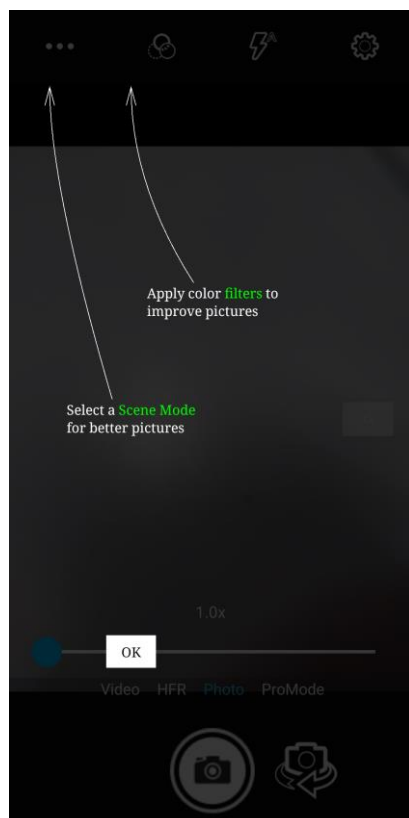
2.8 Camera Setting

1. Scroll the screen from down to top to reach the APPS, and tap **Camera**.




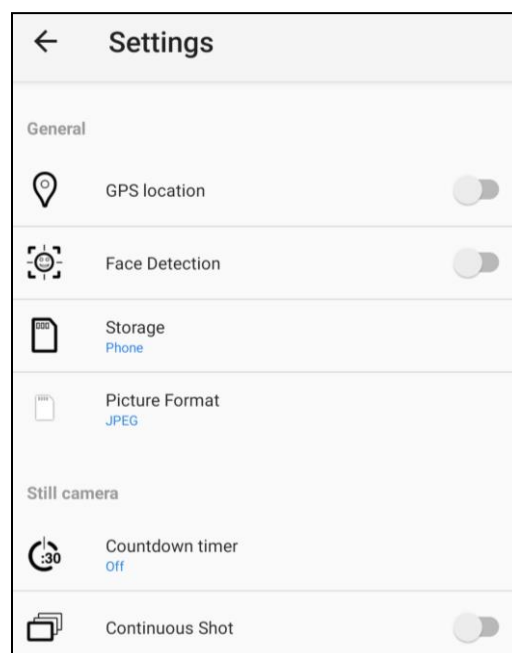
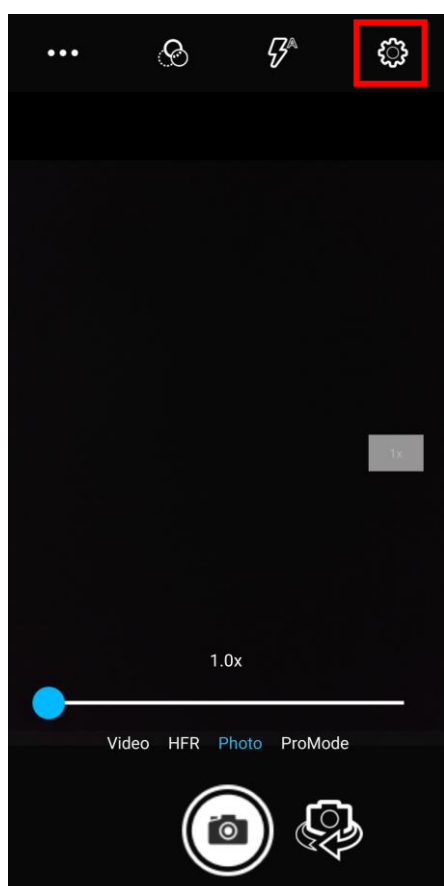
2.8.1 Introduction

For the first time turn on, the screen will show a brief introduction about camera settings.

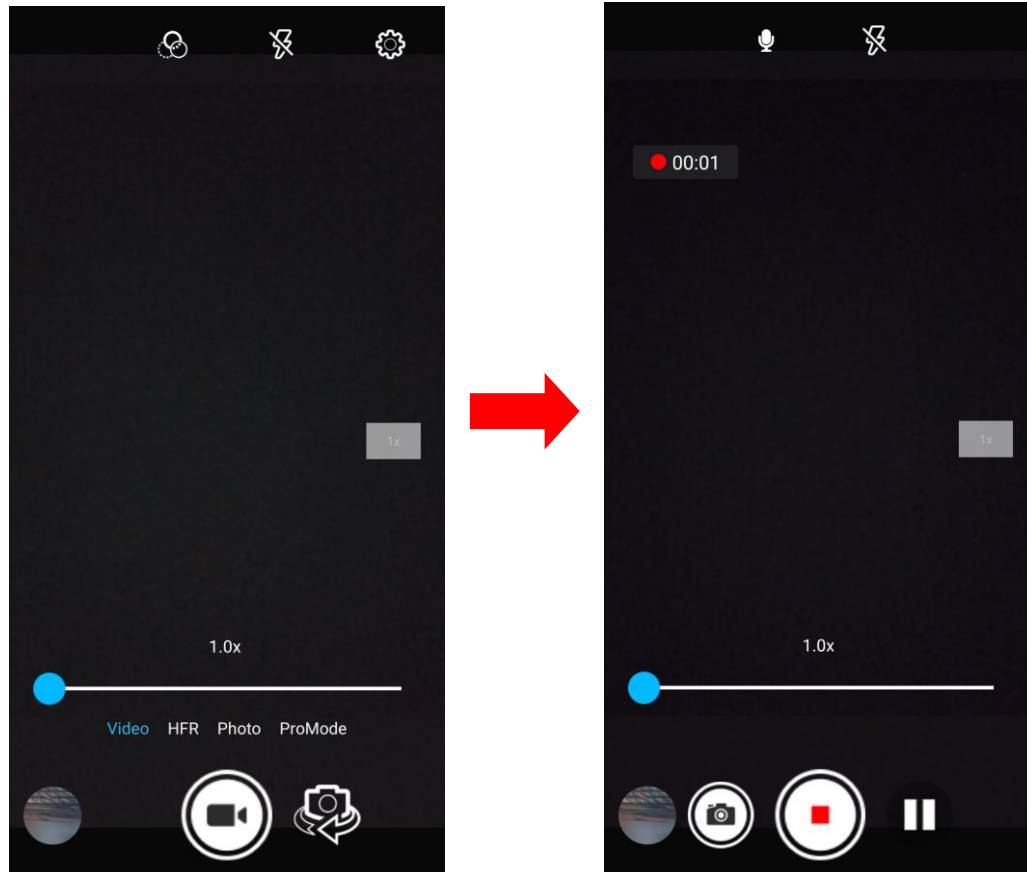


2.8.2 Settings

Please tap  to enter the settings section.

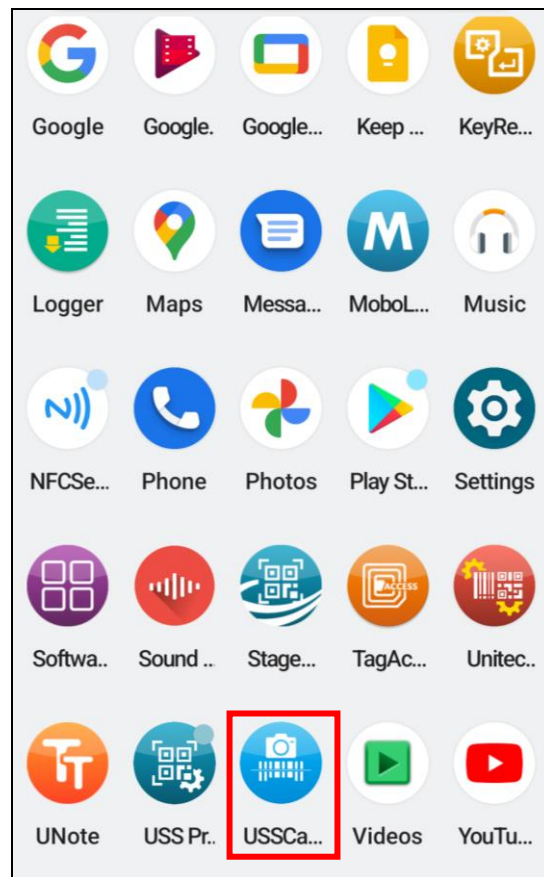


3. Once tap the record button, it will start recording.

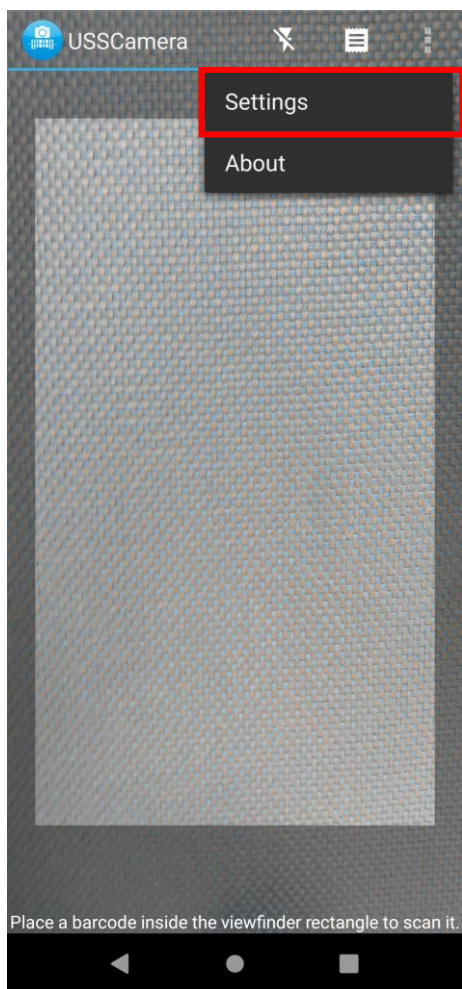


2.9 USS Camera

1. Scroll the screen from down to top to reach the APPS, and tap **USSCamera**.



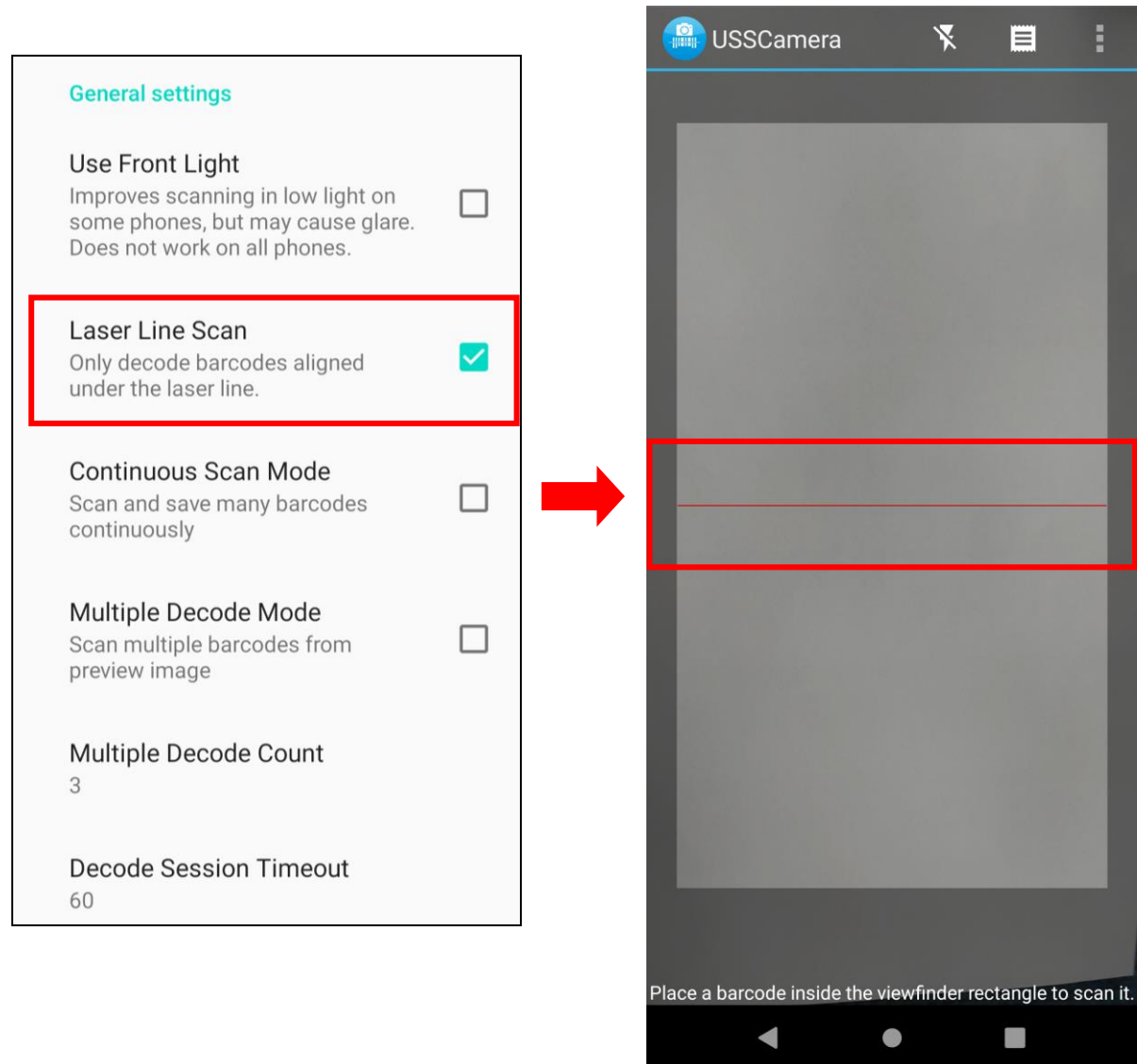
2. Select the types of barcodes from the settings.



When scanning for barcodes, decode...	
UPC-A	<input checked="" type="checkbox"/>
UPC-E	<input checked="" type="checkbox"/>
EAN-13	<input checked="" type="checkbox"/>
EAN-8	<input checked="" type="checkbox"/>
Code 39	<input checked="" type="checkbox"/>
Code 93	<input checked="" type="checkbox"/>
Code 128	<input checked="" type="checkbox"/>
ITF	<input checked="" type="checkbox"/>
Codabar	<input checked="" type="checkbox"/>
RSS-14	<input checked="" type="checkbox"/>
RSS-Expanded	<input checked="" type="checkbox"/>
QR Codes	<input checked="" type="checkbox"/>
Data Matrix	<input checked="" type="checkbox"/>

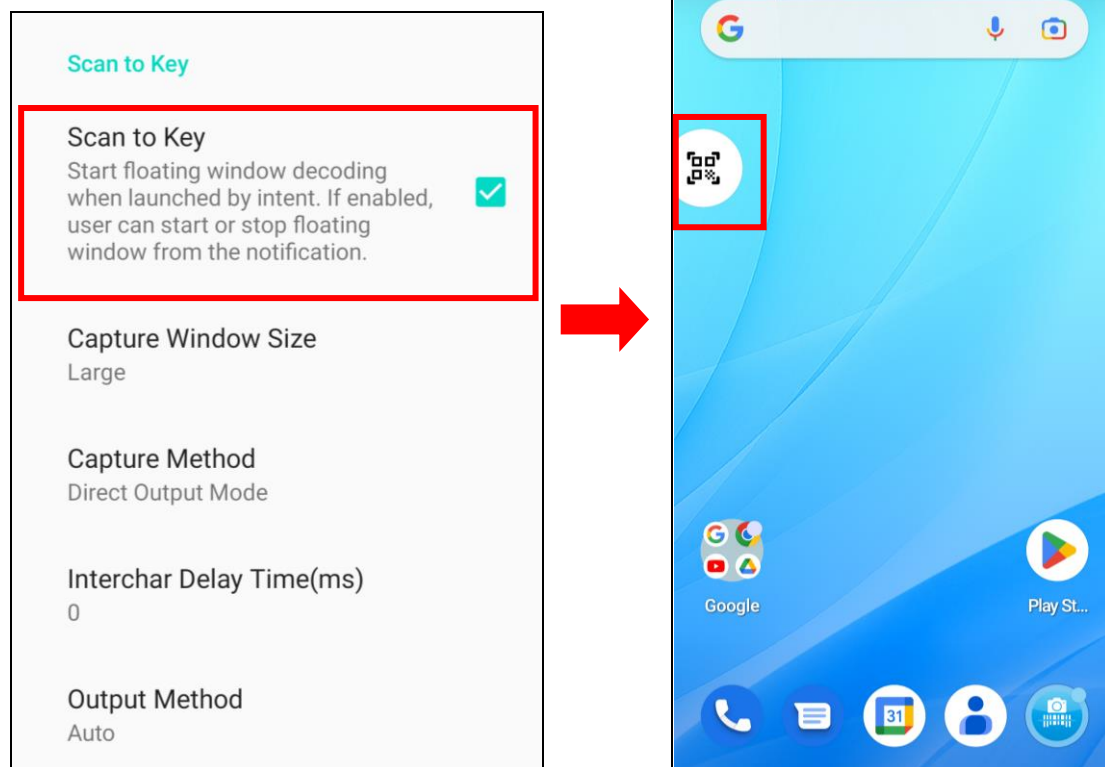
2.9.1 Laser Line Scan

When you select Laser Line Scan, it means only barcodes aligned under the laser line will be decoded.



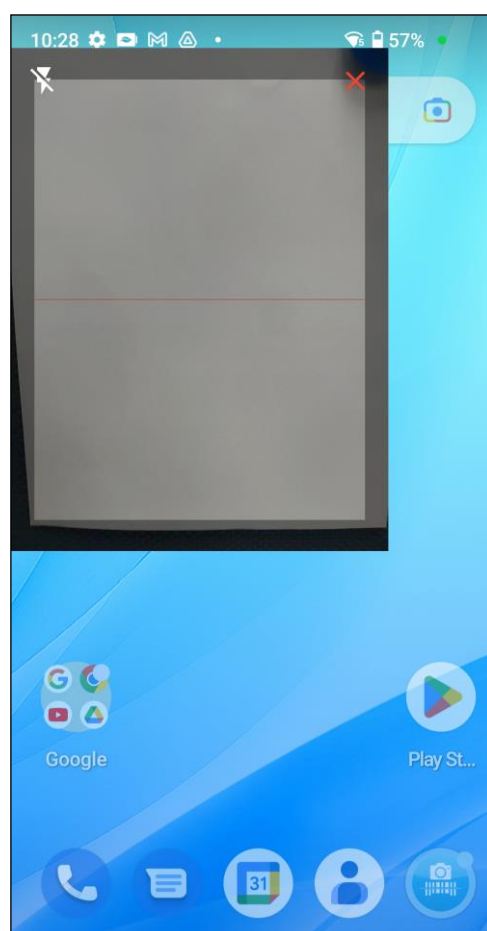
2.9.2 Scan to Key (floating window)

By selecting Scan to Key, start floating window decoding when launched by intent. If enabled, user can start or stop floating window from the notification. The icon will appear on the main screen.



3. The floating window will appear on the main screen.

Note: To close the floating window, simply by not selecting the Scan to Key.



2.10 Performing a Hardware Reset

You may have to perform a reset if the device freezes (i.e., the PA768 no longer responds to the buttons or tapping on the screen). Long press and hold the **Power button** around 10 seconds to restart the device.

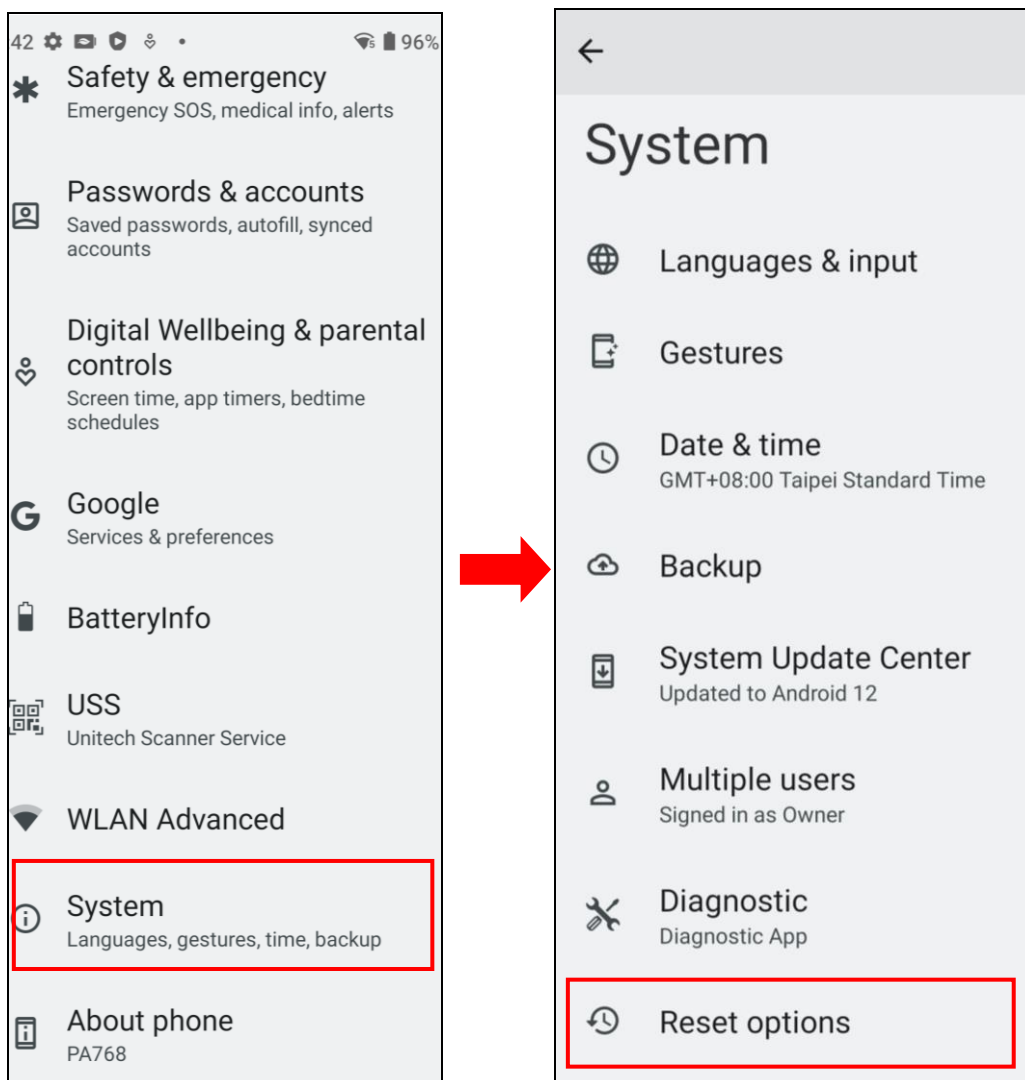


2.11 Performing Factory data reset

1. On the main screen, scroll the screen from bottom to top to reach the APPS,



and tap **Settings** → **System**, then **select** Reset Options.

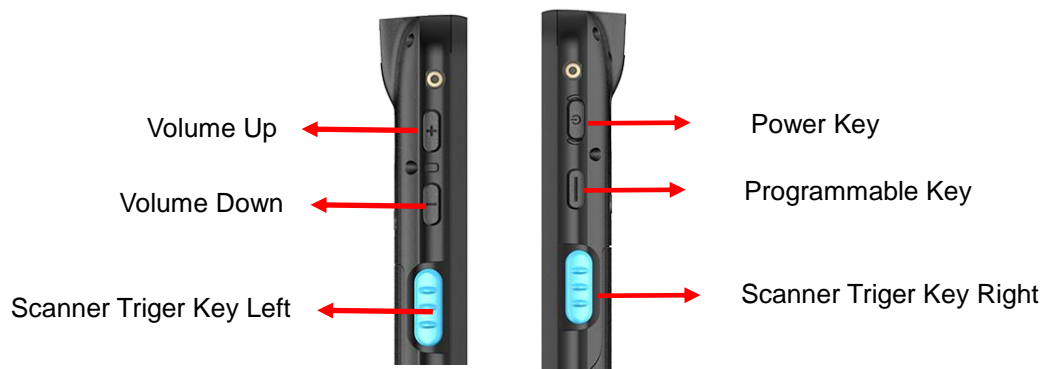


Note: When you select **Erase all data (factory reset)** in the **Reset Options**, it will erase all folders.


2.12 KeyRemap

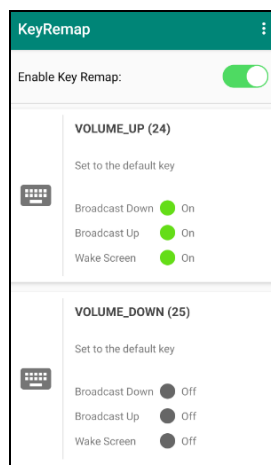
The PA768's keys can be programmed for users to be able to perform different functions or applications.

Four options to use key remap functions: Volume_Up, Volume_Down, Programmable Key 1, Scanner Triger Key Left and Scanner Triger Key Right.



2.12.1 Remap a key


On the main screen, scroll the screen from bottom to top to reach the APPS, and tap KeyRemap . Select the keys to remap and enable key.

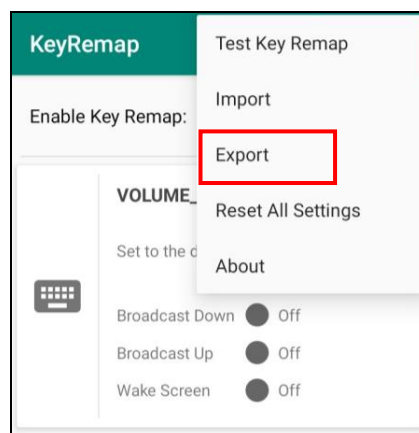


After remapping the key, remember to enable the key remap.

2.12.2 Export / Import a remap Key Configuration file

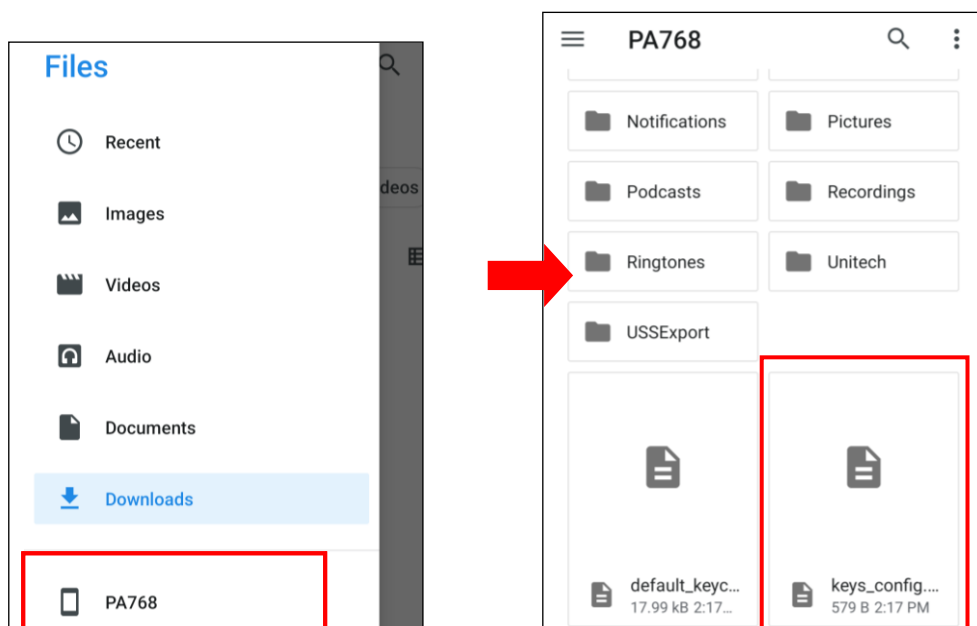
■ Export file

1. Tap 
2. Select **Export**



The remap Key configuration can be exported to a text file or imported into PA768.

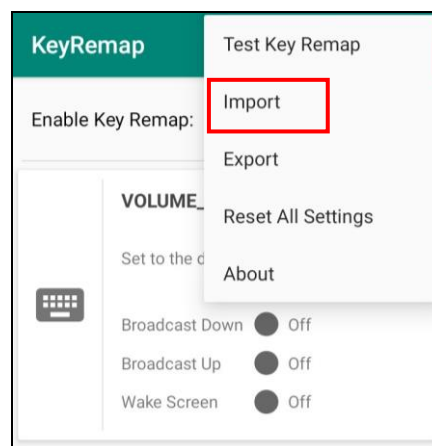
Note: The configuration file (keys_config.txt) is saved in Files.



■ Import file

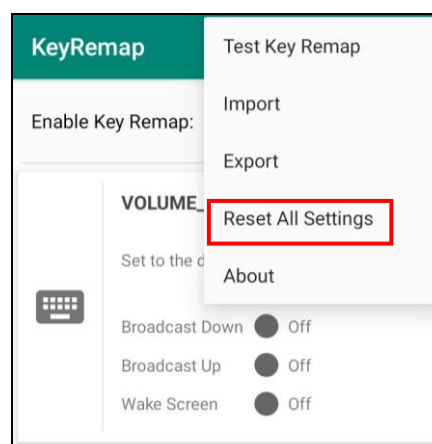
Before importing the file, please make sure the configuration file (keys_config.txt) is in the Files.

1. Tap 
2. Select **Import**



■ Reset all settings

1. Tap 
2. Select **Reset all settings**

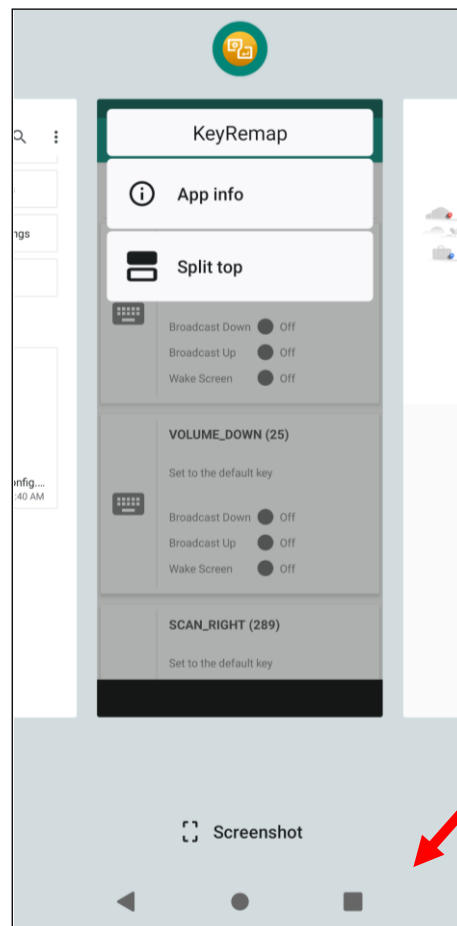


2.13 Split Screen

Split screen function allows you to have two apps work side by side on the same screen. Please follow the steps to enable split screen multitasking.

Note: Some apps may not work with split-screen.

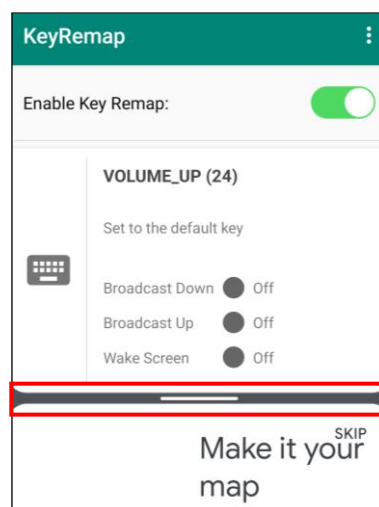
1. Tap **Background APP button** until you see those background apps on the screen.



2. Tap and hold the icon which appears above the APP thumbnail and then select "Split top." The first APP you chose to "Split top" will be on top of the screen. For another APP to show on the bottom half of the screen, simply tap on the APP thumbnail.



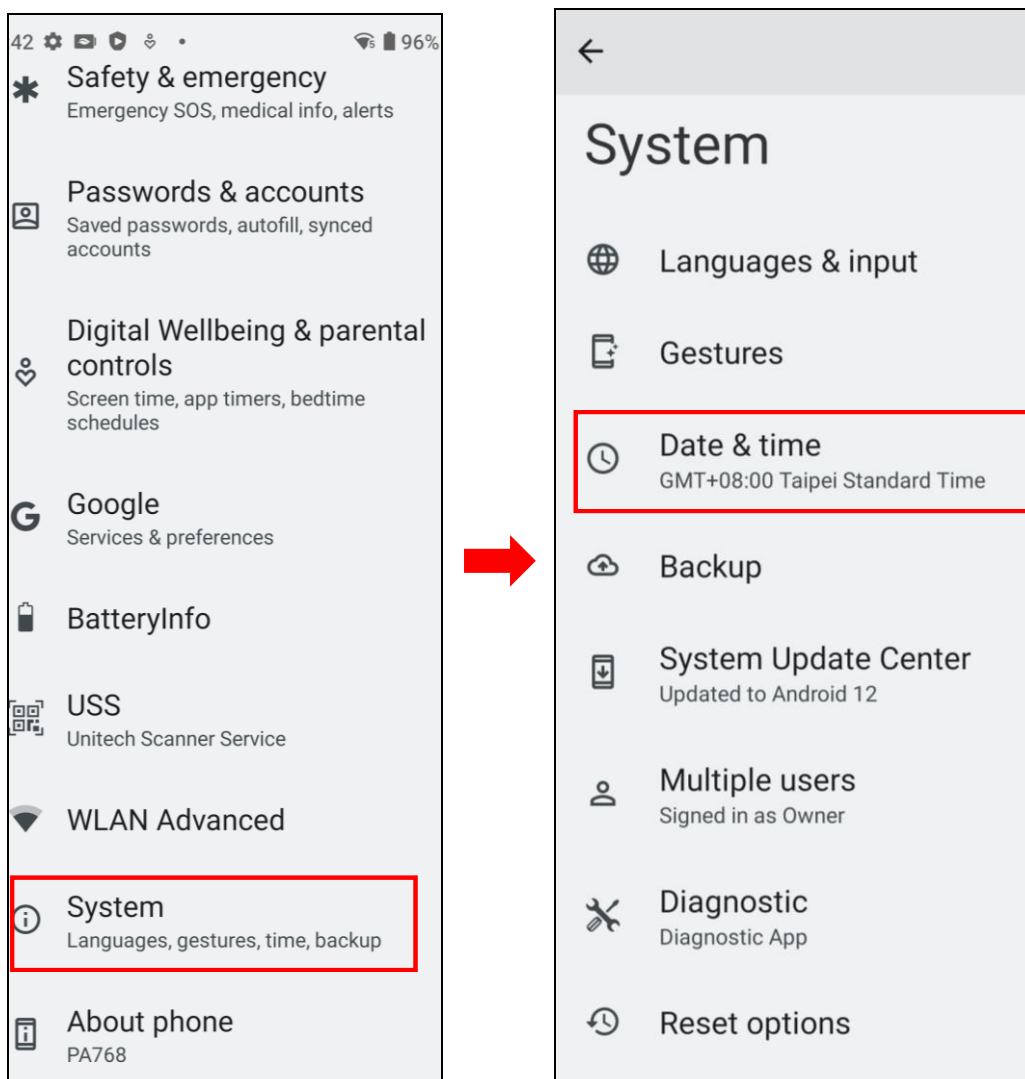
3. To cancel split screen, simply drag up or down the black bar in the middle of two APPs to expand the app that you would like to keep in full screen.



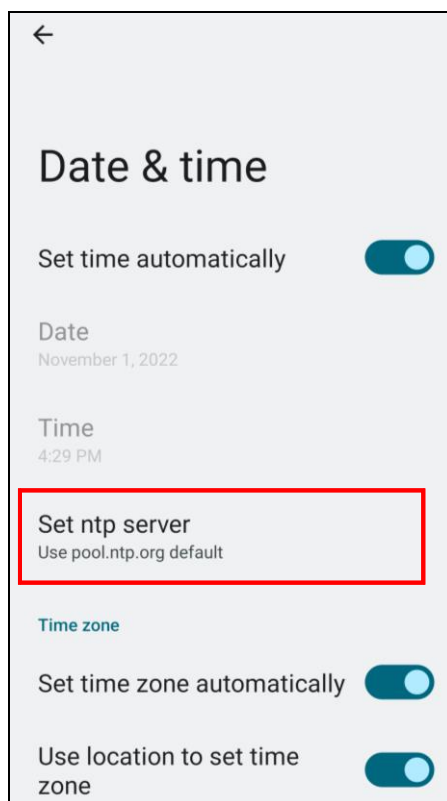
2.14 Network Time Protocol (NTP) Server

The Network Time Protocol is used to synchronize the clocks over the Internet. Allow the users to set the clock by using NTP Server.

1. On the main screen, scroll the screen from bottom to top to reach the APPS, go to **Settings** → **System** → **Data & time**.




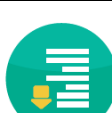








2. Tap **set ntp (Network Time Protocol) Server**.



Chapter 3 - Introduction to Applications

3.1 Unitech SW Solutions (Overview)

Solution	Introduction
 USS Camera	<p>USS Camera capture barcode data using the device camera and send the data to your applications as keyboard inputs.</p> <p>Note: For more details, please refer to 2.9 USS Camera.</p>
 Enterprise Keyboard	<p>Enterprise Keyboard gives various methods for user to input data to enhance efficiency and productivity.</p>
 Key Remap	<p>Key Remap reprogram physical buttons to act as another key or to launch an app.</p>
 Logger	<p>Logger provides an easy and fast way to get logs from a device.</p>
 MoboLink	<p>MoboLink can be your best MDM, MAM and MCM companions. You will be able to monitor and manage in real-time the device health of your devices, the locations, non-compliance event reports, online status, as well as manage the application & file deployments, or schedule to run StageGO configuration scripts remotely.</p>
 Software Update	<p>The Software Update app keeps all your installed Unitech software up-to-date. You can choose to automatically update all apps at once, or select only the ones you wish to update. When new apps are available for this device, you will also be able to install them in just a few taps.</p>

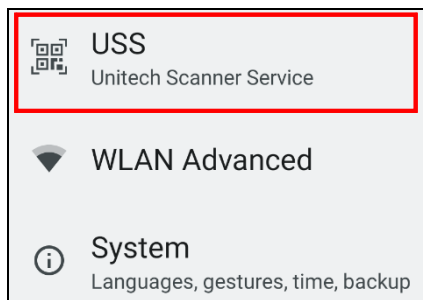
Solution	Introduction
 StageGO	<p>StageGO is a barcode-based device staging solution from Unitech that helps IT admins to swiftly set up a device by just a few barcode scans.</p>
 TagAccess	<p>For versatile functions of RFID command via integrating with Unitech RFID Readers.</p>
 Unitech Scanner Utility	<p>Unitech Scanner Utility is an Android application which helps users connect, configure and use a supported Unitech Bluetooth scanner.</p>
 UNote	<p>UNote is a simple text editor. You can use UNote to save scanned barcodes, open and view log files for troubleshooting, and much more.</p>

3.2 USS (Unitech scan service)

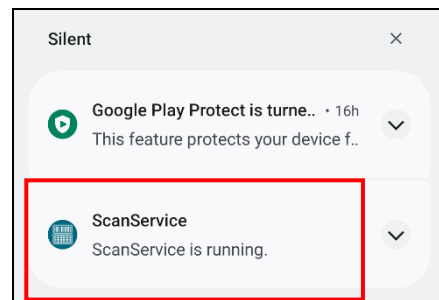
1. On the main screen, scroll the screen from bottom to top to reach the



APPS, and tap **Settings** and then tap **USS** (Unitech scan service).
Or from the notification bar to tap USS (Unitech scan service).



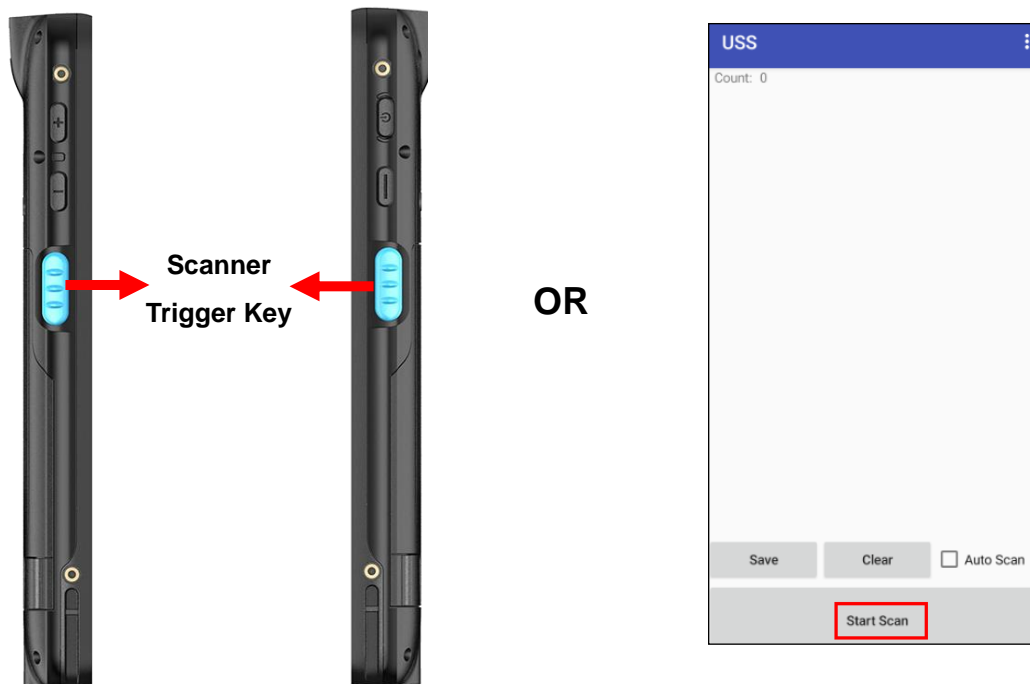
or



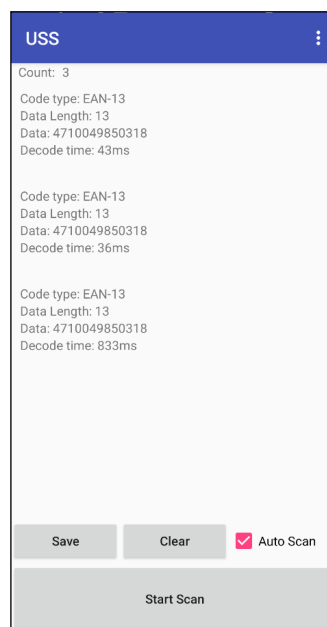
2. You now enter the Unitech scan service application.

3.2.1 How to scan

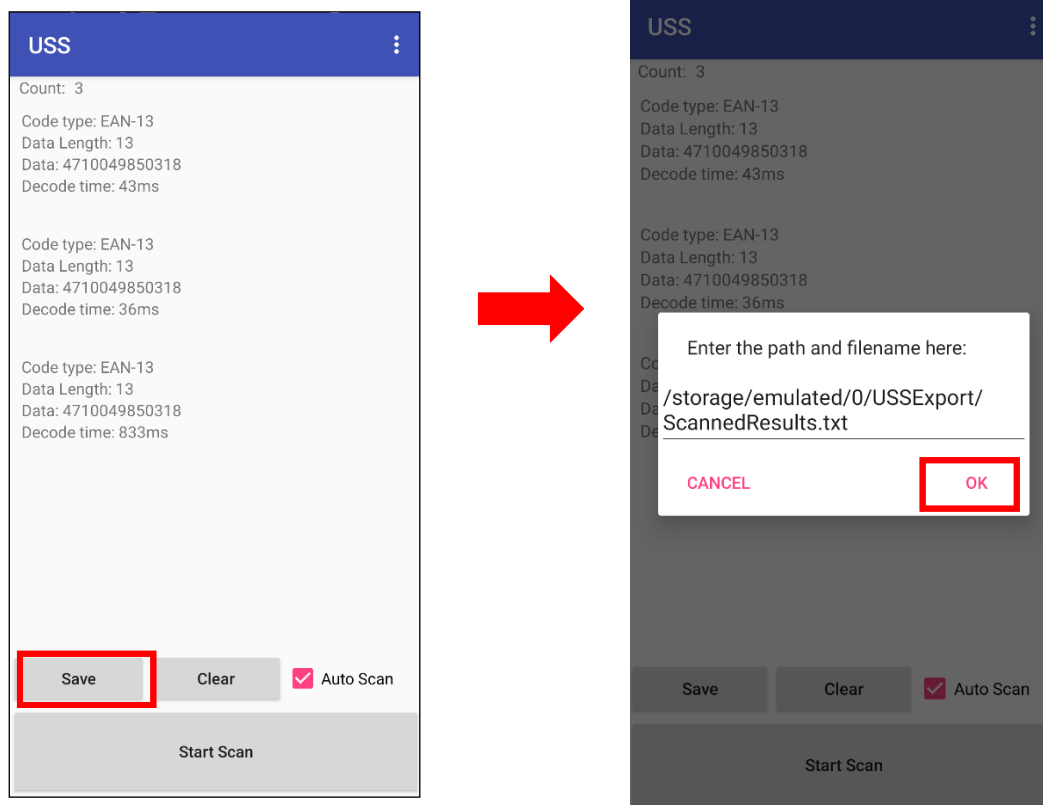
1. Aim the Barcode Scan Engine to the barcode and press one of two scan trigger keys or tap **Start Scan button**.



1. After scanning the barcodes, the barcode information is shown as below.

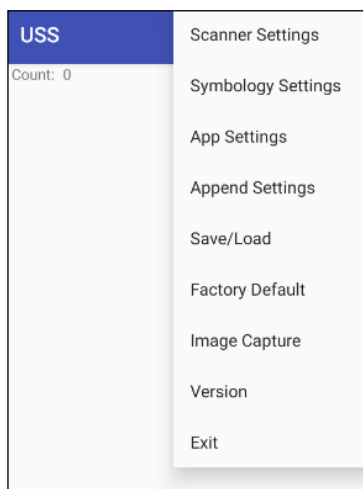


2. To save the scanned data, tap **Save** and enter the path and filename, then tap **OK**.




3. More Options

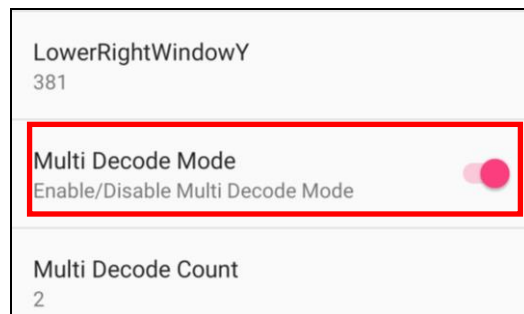
For more options and settings, please tap .



3.2.2 Multi Decode Scan Mode

Multi decode scan function allows users to scan multiple barcodes at once.


1. Tap  , Choose **Scanner Settings**
2. Enable **Multi Decode Mode**, and input the barcode decode count (up to 10 counts) and start multi decode scan.

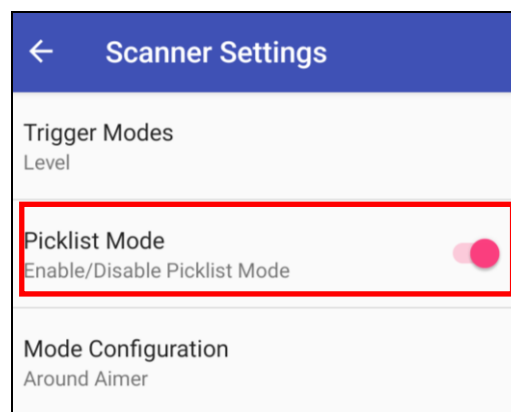


3.2.3 Picklist Mode

Picklist mode enables PA768 to decode only barcodes that are aligned under the laser crosshair or LED aiming dot.

For picklist mode demonstration, please click on our Youtube channel for more information : https://www.youtube.com/watch?v=QjT2E6hxD_k

1. Tap  , Choose **Scanner Settings**
2. Enable **Picklist Mode**, and allows users to easily select and scan a single or specific barcode from a field of barcodes.



3.2.4 More information about USS

For more information about USS, please download the document from the below link:

http://w3.tw.ute.com/pub/cs/manual/uss/USS-RA-1-MANUAL_en20210326.pdf

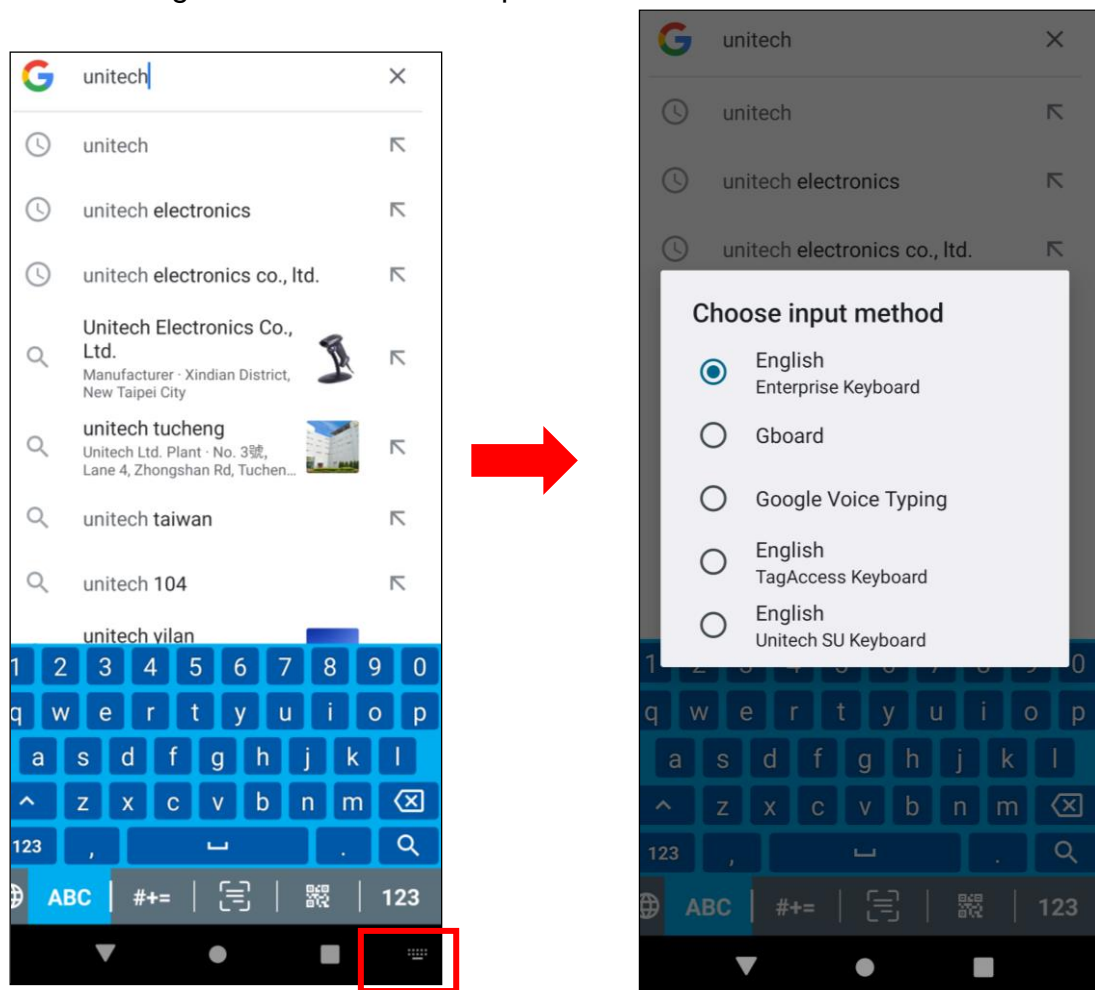
3.3 Enterprise Keyboard

Introduction

Enterprise Keyboard is an AI-assisted virtual keyboard that offers both the traditional typing experience as well as the enterprise-focused typing experiences such as a dedicated number pad, dedicated symbol pad, and a tightly integrated keyboard wedge for collecting barcode and RFID inventory data. The Enterprise Keyboard also uses AI-assisted text recognition technology to enable users to extract text out of the camera image and then type them into an app.

When typing, you can select different input method.

For example, type in the searching bar first, then tap on the keyboard icon on the bottom right to select different input method.

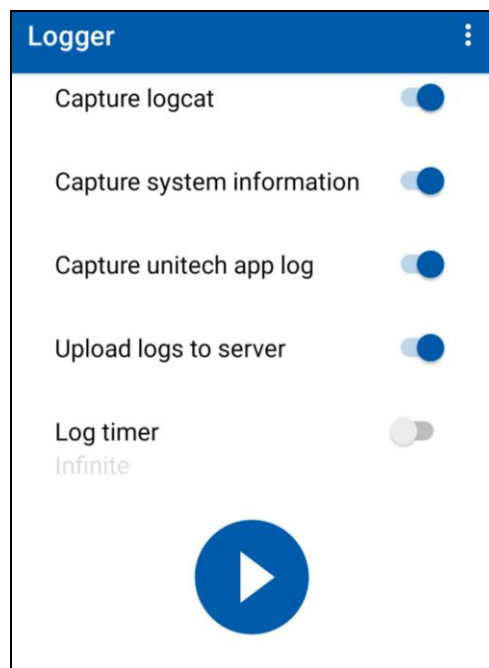


3.4 Logger

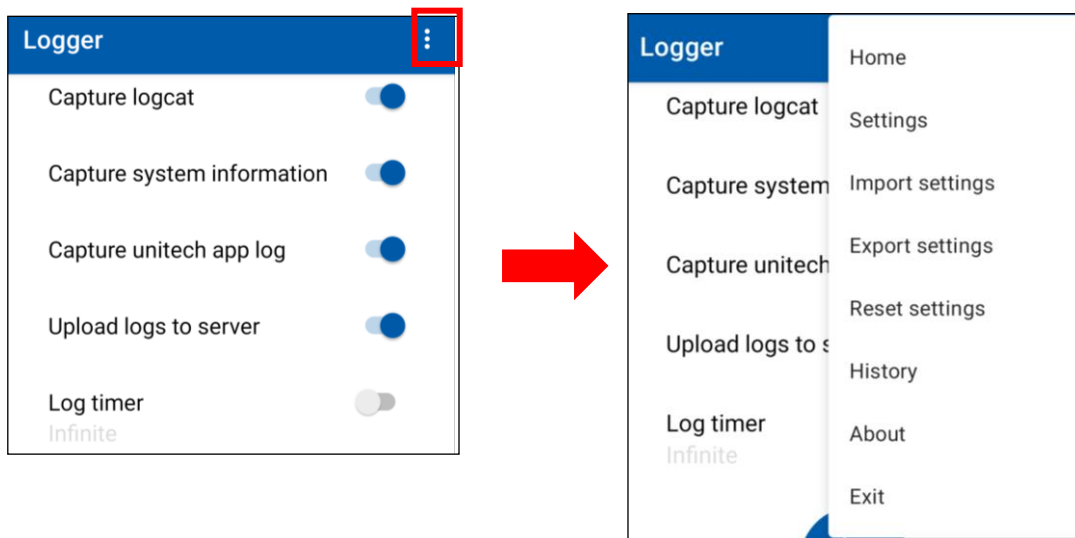
Introduction

The Logger app offers an intuitive way to collect error logs from a device for troubleshooting. No technical skills required. Simply use the Start-Stop buttons to start recording vital system and app logs as one snapshot or as a time-lapse, and then the logs can be automatically submitted to the unitech support team for analysis.


1. Scroll the screen from down to top to reach the APPS, and tap Logger
You will see the page below.

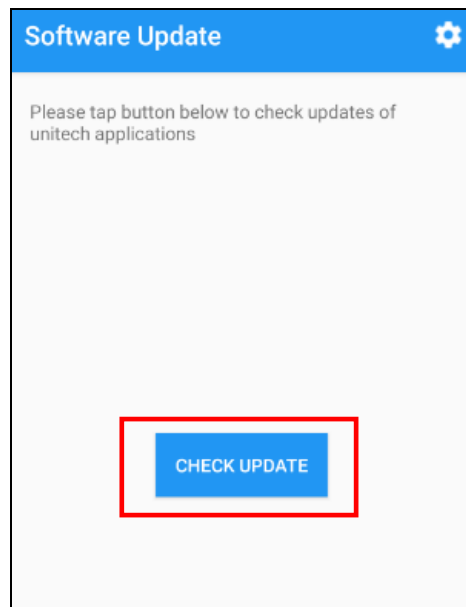


3. Tap on settings to view more.



3.5 Software Update

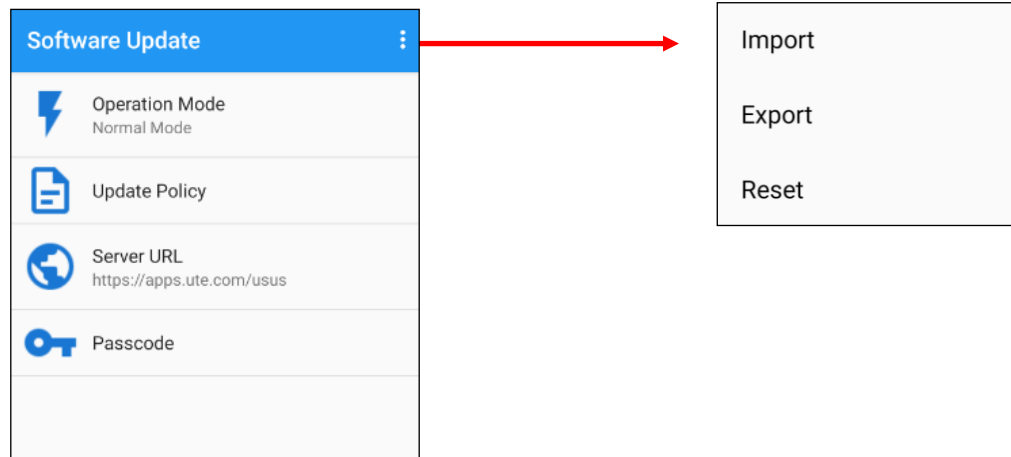
1. On the main screen, scroll the screen from bottom to top to reach the APPS, and tap  **Software Update**.
2. To update or check the latest version of each application, please tap **CHECK UPDATE**.



3. Select the Apps to be updated, and click Update.

3.5.1 Software Update Settings

Tap  for more settings on Software Update.



- **Operation Mode**
 - Normal Mode → User can manually select apps to update
 - Auto Mode → Apps are automatically checked and updated each time Software Update is run.
 - Silent Mode → Similar to Auto Mode, but the GUI is hidden when updating (Software Update is run in the background).
- **Update Policy**
 - App Updates → Configure whether all or only the selected apps are updated, or turn off App Updates altogether.
 - New App → Configure whether new apps are being installed when they become available for your device.
- **Passcode** → Configure a password to access the Software Update Settings menu.
- **Import / Export / Reset** → Import or Export settings to a file, or Reset all settings to factory default. You can find the exported settings file in the Internal Storage: /Unitech/usus/usus_config.stxt

3.6 StageGO

StageGO is a barcode-based device staging solution from Unitech. StageGO helps IT admins to swiftly set up a device by just a few barcode scans.

Features

- Swift and effortless device staging for Unitech Android Mobile Devices.
- Device staging becomes more accessible, time-efficient, and secure.
- Complete device control at your fingertips.
- Data Compression.
- Security and Privacy.
- No installation required.

Using StageGO to configure a device is in 3 simple steps:

Step1: Create Script –



Create
Script

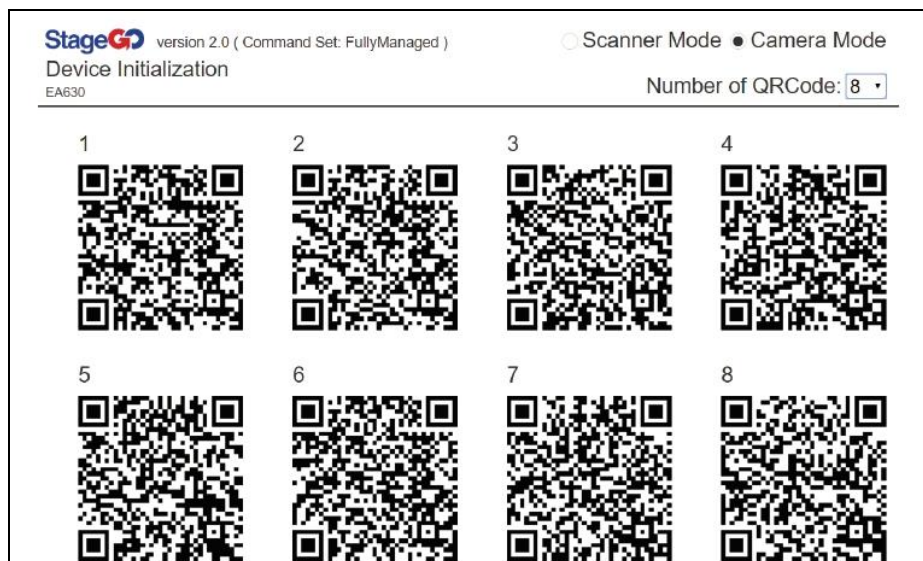
It all begins with IT staff creating a StageGO Script on the easy-to-use and secure web-based Script Editor. A StageGO script can contain one or more staging commands such as change system settings, connect to WiFi, download files, install apps, or set restrictions, etc.





**Print
QRCode**

This is when the script is ready to be transformed into QR Codes and get printed out for distribution to the fields. The QR Codes are always encrypted so that sensitive information such as username and passwords will stay hidden. You can also choose to save your script as an encrypted file and share it with a colleague.



Step 3. Scan QRCode:



The device user scans all the QRcodes into the StageGO app, or alternatively load script from file. The script will then automatically start to execute. Users will be informed of the progress of the execution, and should any execution errors occur, the execution report can be shared to IT admins for investigation.

