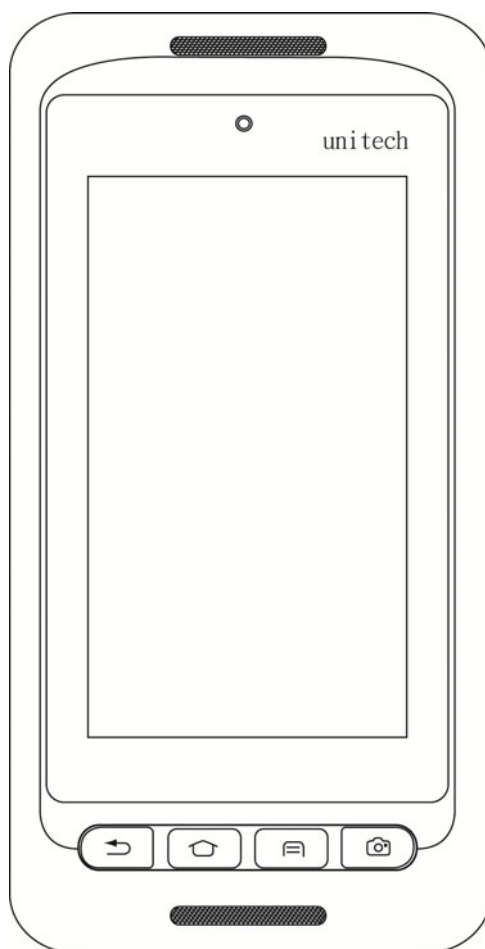


Rugged Handheld Computer

- PA720 -



User's Manual

Version 2.1

Revision History

Date	Change Description	Version
20160726	first published version	1.0
20160817	Modified 2.3, 2.4	1.1
20160829	Modified power source Add Mobolink	1.2
20160930	Update Preface	1.3
20161216	Update Specification	1.4
20170103	Update Specification	1.5
20170109	Delete SIM Card caution	1.6
20170426	Add BC logo	1.7
2017626	Add RED information	1.8
20170825	Add information for UL	1.9
20171011	Add start up & scan service info	2.0
20171108	Add camera API in 1.3 Specification	2.1

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.

Operation on the 5.15 - 5.25GHz frequency band is restricted to indoor use only. The FCC requires indoor use for the 5.15-5.25GHz band to reduce the potential for harmful interference to co-channel Mobile Satellite Systems. Therefore, it will only transmit on the 5.25-5.35 GHz, 5.47-5.725 GHz and 5.725 – 5.850 GHz band when associated with an access point (AP).

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 1.5 cm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Canadian Compliance Statement

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte les exigences du Règlement sur le matériel brouilleur du Canada.

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 EMC 2014/30/EU directive and the Low Voltage 2014/35/EU directive.

The declaration of conformity is available for download at :

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

CE RF Exposure Compliance

This device meets EU requirements (1999/519/EC) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

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.

CE Mark Warning



This equipment complies with the requirements of Directive 1999/5/EC of the European Parliament and Commission from 9 March, 1999 governing Radio and Telecommunications Equipment and mutual recognition of conformity. The highest CE SAR values for the device are as follows :

0.274 W/kg @ 10g (Head)

1.470 W/kg @ 10g (Body)

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 EU directive 2002/96/EC and update 2003/108/EC 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

低功率電波輻射性電機管理辦法

第十二條：經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者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。

第十四條：低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機需忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

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；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。

SAR 標準值 2.0W/Kg，送測產品實測值為 0.217 W/kg@10g

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, 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

1. To guarantee optimal performance, it is recommended that rechargeable batteries be replaced every year, or after 500 charging cycles are completed. It is normal for the battery to balloon or expand after one year or 500 cycles. Although it does not cause damage, it cannot be used again and must be disposed of according to the location's safe battery disposal procedures.
2. If a battery performance decreases more than 20%, the battery is at the end of its life cycle. Stop use and ensure the battery is disposed of properly.
3. The length of time that a battery lasts depends on the battery type and how the device is used. Conserve the battery life by doing the following:
 - Avoid fully uncharging the battery because this places additional strain on it. Several partial uncharges with frequent charges are better than a fully uncharged battery. Charging a partially charged battery does not cause harm to the unit.
 - Keep the battery cool. Avoid hot vehicles. For prolonged storage, keep the battery at a 40% charge level.
 - Do not leave the battery uncharged and unused for an extended period of time, the battery will wear out and the longevity of the battery will be at least half of one with frequent charges.
4. Protect battery life by not over or under charging the battery.
5. Please do not leave battery unused for long time without charging it. Despite unitech's safety precautions, the battery pack may begin to change shape. If so, stop using it immediately. Please check to see if you are using a proper power adapter to charge the battery or contact your service provider for service.
6. If you cannot charge the battery after it has been idle for an extended period of time and it begins to heat up, please do not try to charge it. It may not be functional anymore.
7. Please only use the original battery from unitech. Using a third party battery can damage our products. Please note that when such damage occurs, it is not covered by unitech's warranty policy.

CAUTION!

- RISK OF EXPLOSION IF BATTERY IS REPLACED INCORRECTLY. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
- 如果更換不正確之電池行事會有爆炸的風險
請依製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
請依製造商說明書處理用過之電池

Battery charge notice

It is important to consider temperature when the battery pack is charging. Charging is most efficient at normal room temperature or in a slightly cooler environment. It is essential that batteries are charged within the stated range of 0°C to 40°C. Charging batteries outside of the specified range could damage the batteries and shorten their life cycle.

CAUTION! Do not charge batteries at a temperature lower than 0°C. This will make the batteries unstable and dangerous. Please use a battery temperature detecting device for a charger to ensure a safe charging temperature range.

CAUTION! To ensure the unit working properly, please keep all connectors away from the contaminants staying inside of them such as dust, grease, mud, and water. The negligence may cause the unit with no communication, short circuited, overheated and so on.

CAUTION! If the connector is damaged, please ensure the connector is being fully repaired before use the unit to avoid causing short circuited.

Storage and safety notice

Although charged batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens, they will require recharging prior to use. Batteries may be stored at temperatures between -20°C to 60°C, however they may deplete more rapidly at higher temperatures. It is recommended to store batteries at room temperature.

** The message above only applies to the usage of the removable batteries.
For the products with non-removable batteries / without batteries, please refer to the specification of each product.*

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

Zx.3 Warning

The warning shall be placed on the equipment, or on the packaging, or in the instruction manual and shall consist of the following:

- the symbol of Figure 1 with a minimum height of 5 mm; and
- the following wording, or similar :

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



Figure 1 – Warning label (IEC 60417-6044)

Alternatively, the entire warning may be given through the equipment display during use, when the user is asked to acknowledge activation of the higher level.

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:

<p>Taipei, Taiwan – Headquarters</p> <p>Tel: +886-2-89121122</p> <p>E-mail: info@hq.ute.com</p> <p>Address: 5F, No. 136, Lane 235, Baoqiao Road, Xindian District, New Taipei City 231, Taiwan (R.O.C.)</p> <p>Website: http://www.ute.com</p>	<p>Europe</p> <p>Tel: +31-13-4609292</p> <p>E-mail: info@eu.ute.com</p> <p>Address: Kapitein Hatterasstraat 19, 5015 BB, Tilburg, the Netherlands</p> <p>Website: http://eu.ute.com</p>
<p>China</p> <p>Tel: +86-59-2310-9966</p> <p>E-mail: info@cn.ute.com</p> <p>Address: Room401C, 4F, RIHUA International Mansion, Xinfeng 3rd Road, Huoju Hi-tech District, Xiamen, Fujan , China</p> <p>Website: http://cn.ute.com</p>	<p>Japan</p> <p>Tel: +81-3-35232766</p> <p>E-mail: info@jp.ute.com</p> <p>Address: Kayabacho Nagaoka Building 8F.,1-5-19 Shinkawa, Chuo-Ku, Tokyo, 104-0033, Japan</p> <p>Website: http://jp.ute.com</p>
<p>Asia & Pacific / Middle East</p> <p>Tel: +886-2-27911556</p> <p>E-mail: info@apac.ute.com info@india.ute.com info@mideast.ute.com</p> <p>Address: 4F., No. 236, ShinHu 2nd Rd., NeiHu Chiu, 114, Taipei,Taiwan</p> <p>Website: http://apac.ute.com / http://mideast.ute.com</p>	<p>Latin America</p> <p>Tel: +52-55-5171-0528</p> <p>E-mail: info@latin.ute.com</p> <p>Address: 17171 Park Row, Suite 210 Houston, TX 77084USA (Rep.)</p> <p>Website: http://latin.ute.com</p>
<p>North America</p> <p>Tel: +1-714-8916400</p> <p>E-mail: info@us.ute.com / info@can.ute.com</p> <p>Address: 6182 Katella Ave, Cypress, CA 90630, USA</p> <p>Website: http://us.ute.com</p>	<p>Please scan QR Code to visit us :</p> 

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.

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Chapter 1 - Overview

1.1 Package

Please make sure the following contents are in the PA720 gift box. If something is missing or damaged, please contact your unitech representative.

The standard package contents

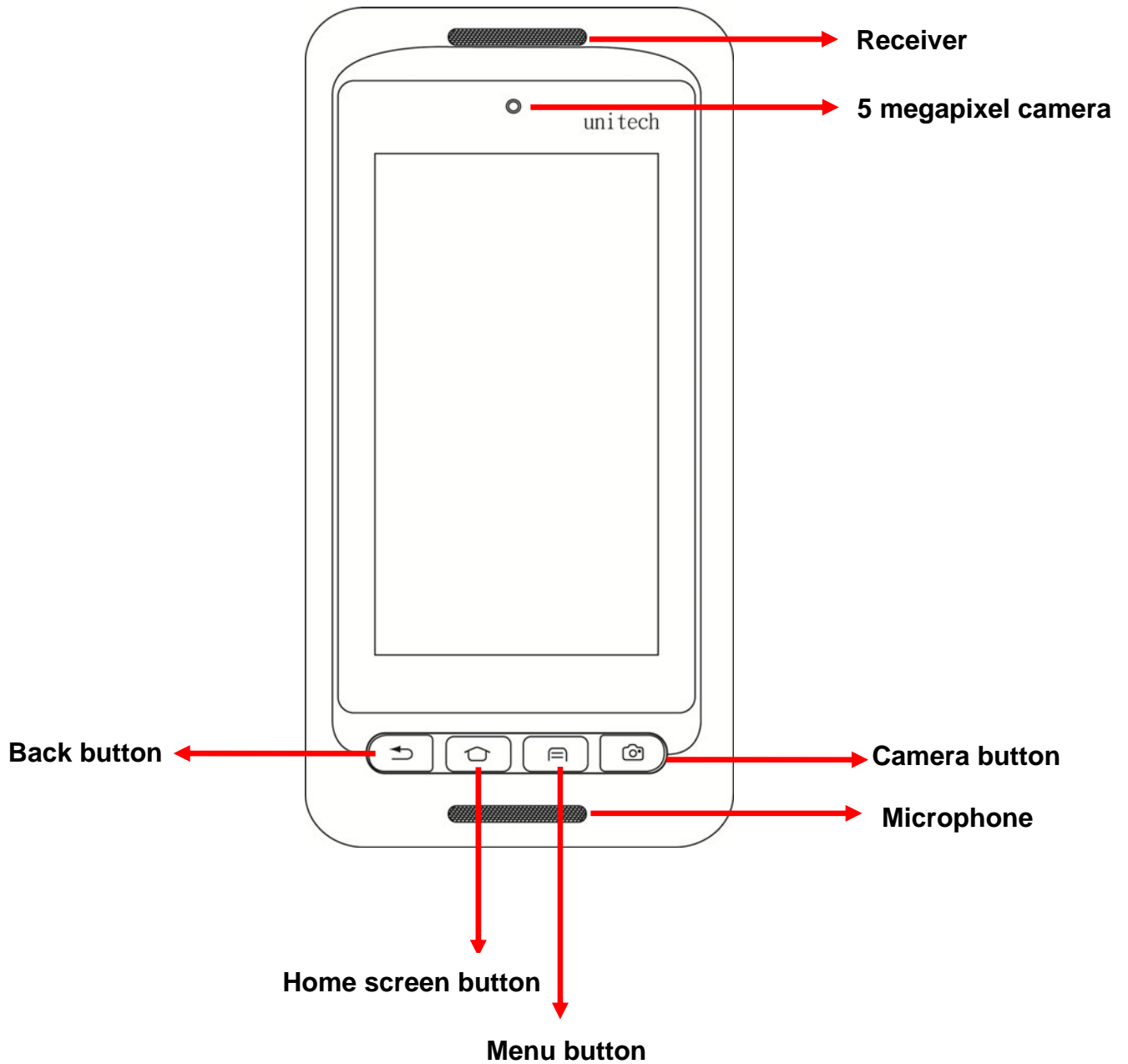
- PA720 Terminal
- Battery
- Hand Strap
- Regulatory Compliance Statements

Optional accessories

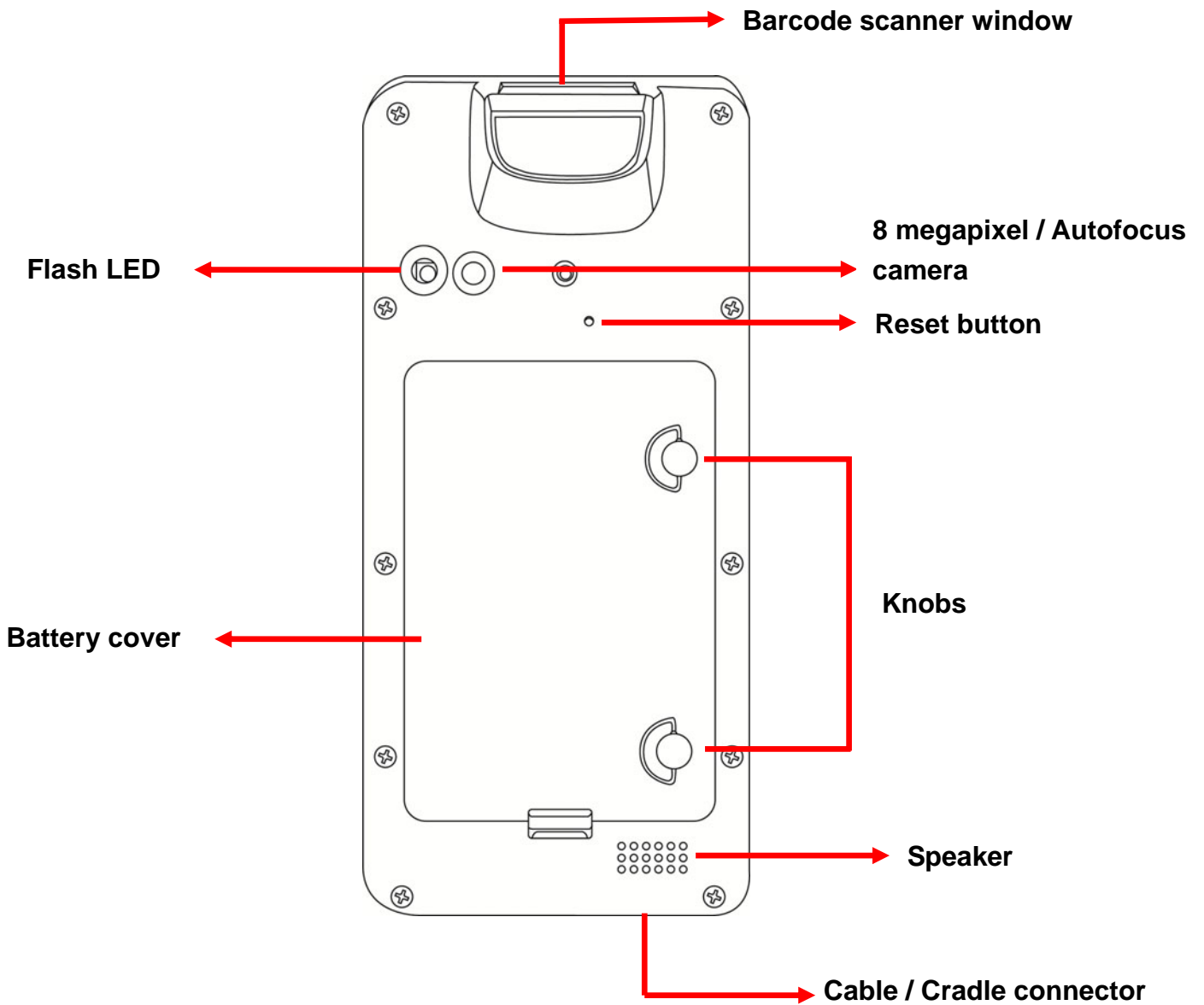
- Single Slot USB Cradle
- Single Slot Ethernet Cradle
- 4 slot Ethernet Cradle
- 4 slot Terminal Charger
- 4 slot battery Charger
- USB charging and communication cable cap
- Plugs + Power Adapter
- Stylus

1.2 Product Detail

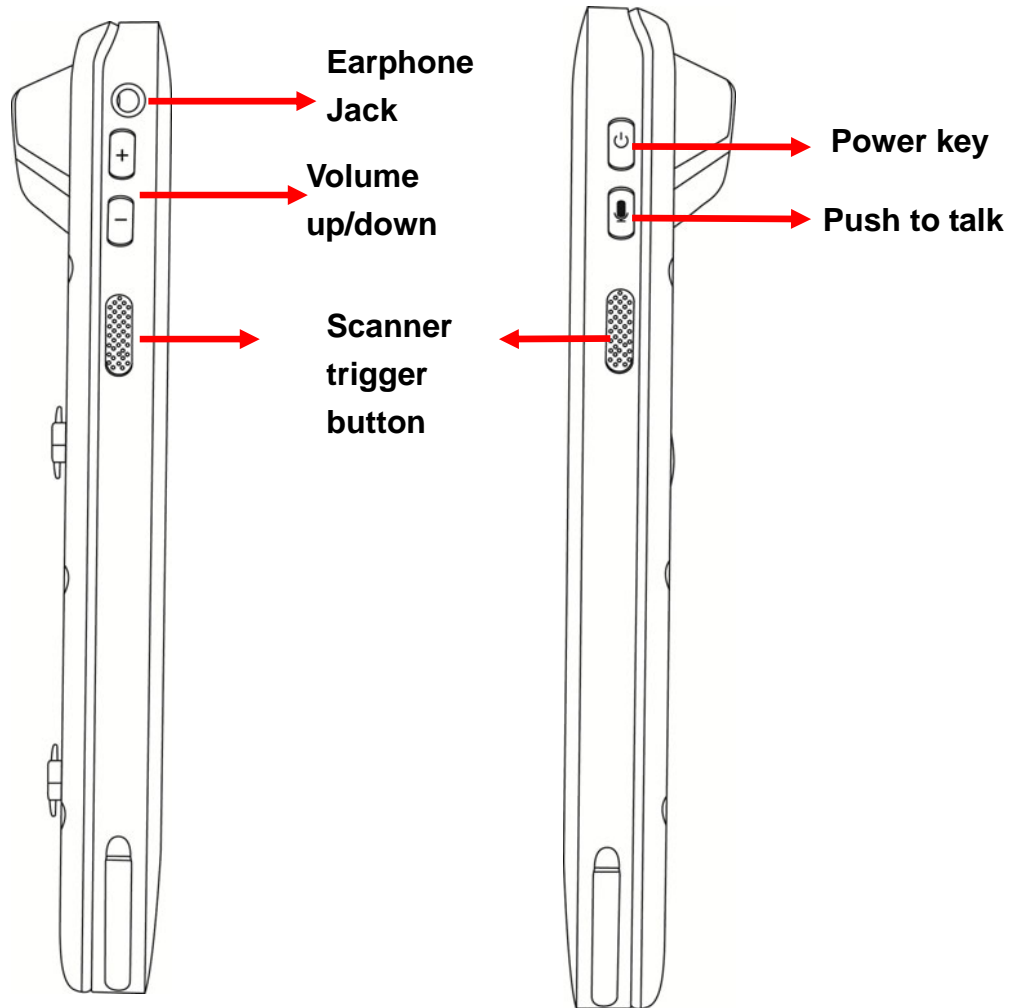
PA720 Front View



PA720 Rear View



PA720 Left and Right View



1.3 Specifications

System Features		
CPU	MT8735 1.3GHz Qual Core ARM A53 64bit	
Memory	3GB Mobile SDRAM 16GB eMMC / MLC Flash	
Expanded slot	MicroSD, up to 128GB	
OS	Android 6.0	
Languages support	English, Simplified Chinese, Traditional Chinese, Japanese, Spanish, German, French and multiple languages	
Display		
Gorilla Glass III with 5-point capacitive touch panel		
4.67" Color 450 cd/m ² Brightness 720x1280 dots Color Transmissive type's TFT		
Keypad		
4 x Function key	1 x Power key	1 x Push To Talk key
2 x Scan trigger button	2 x Volume key	
Indicator		
1 x LED Indicator Vibrator		

Symbologies

1D (SE655)

- UPC/EAN
 - ◆ UPC-A
 - ◆ UPC-E
 - ◆ UPC-E1
 - ◆ EAN-8
 - ◆ EAN-13
 - ◆ Booklan EAN
 - ◆ Bookland ISBN Format
 - ◆ Decode UPC/EAN/JAN Supplementals
 - ◆ Transmit UPC-A Check Digit
 - ◆ Transmit UPC-E Check Digit
 - ◆ Transmit UPC-E1 Check Digit
 - ◆ UPC-A Preamble
 - ◆ UPC-E Preamble
 - ◆ UPC-E1 Preamble
 - ◆ Convert UPC-E to A
 - ◆ Convert UPC-E1 to A
 - ◆ EAN-8/JAN-8 Extend
 - ◆ UCC Coupon Extended Code
 - ◆ ISSN EAN
- Code 128
- Code 39
- Code 93
- Code 11
- Interleaved 2 of 5
- Discrete 2 of 5
- Codabar
- MSI
- Chinese 2 of 5
- Matrix 2 of 5
- GS1 DataBar(RSS)

<p>2D (SE4750) (2D is only available when the 2D imager is on your device)</p>	<ul style="list-style-type: none"> ■ 2D symbologies <ul style="list-style-type: none"> ◆ PDF417 ◆ MicroPDF417 ◆ Code128Emulation ◆ DataMatrix ◆ DataMatrixInverse ◆ Maxicode ◆ QRcode ◆ MicroQR ◆ Aztec ◆ Aztec Inverse ◆ Han Xin ◆ Han Xin Inverse ■ 1D symbologies ■ UPC/EAN <ul style="list-style-type: none"> ◆ UPC-A ◆ UPC-E ◆ UPC-E1 ◆ EAN-8 ◆ EAN-13 ◆ Booklan EAN ◆ Bookland ISBN Format ◆ Decode UPC/EAN/JAN Supplementals ◆ Transmit UPC-A Check Digit ◆ Transmit UPC-E Check Digit ◆ Transmit UPC-E1 Check Digit ◆ UPC-A Preamble ◆ UPC-E Preamble ◆ UPC-E1 Preamble ◆ Convert UPC-E to A ◆ Convert UPC-E1 to A ◆ EAN-8/JAN-8 Extend ◆ UCC Coupon Extended Code ◆ ISSN EAN 	<ul style="list-style-type: none"> ■ Code 128 ■ Code 39 ■ Code 93 ■ Code 11 ■ Interleaved 2 of 5 ■ Discrete 2 of 5 ■ Codabar ■ MSI ■ Chinese 2 of 5 ■ Matrix 2 of 5 ■ Postal Codes <ul style="list-style-type: none"> ◆ US Postnet ◆ US Planet ◆ Transmit US Postal Check Digit ◆ UK Postal ◆ Transmit UK Postal Check Digit ◆ Japan Postal ◆ Australian Postal ◆ Netherlands KIX Code ◆ USPS 4CB/One Code/Intelligent Mail ◆ UPU FICS Postal ■ GS1 DataBar (RSS) ■ Composite <ul style="list-style-type: none"> ◆ Composite CC-C ◆ Composite CC-A/B ◆ Composite TLC-39
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Engines	
1D	SE655 : Illumination/AIMER : LED 630 ± 30 nm Optical Resolution : 5 mil (minimum readable bar code module size) Scan Repetition Rate : Nominally 50 scans/second Print Contrast : 20% (minimum print contrast) Ambient Light Immunity Light Source: 4845(lux) ± 5%
2D	SE4750SR (LASER AIMER) : Sensor Resolution: 1280 x 960 pixels Illumination Element: 2 x Warm white LED Minimum Bar Code Print Contrast : 20% Ambient Light: Max 107,639 lux (direct sunlight) Wavelength: 655 ± 10 nm Beam divergence: 48.0° horizontal, 38.0° vertical Pulse duration: 1.7ms Maximum power :0.6 mW
Audio	
Speaker , 3.5mm Audio Jack, Receiver, Microphone	
Regulatory Approvals	
CE, RoHS compliance, FCC, NCC, VCCI, TELEC, CCC, SRRC, BSMI	
Communication	
USB	USB 2.0 Host / Client
WLAN	IEEE 802.11 a/b/g/n
PAN	Bluetooth 4.1
WWAN	GSM/GPRS/EDGE 850/900/1800/1900 MHz UMTS 850/900/1900/2100 MHz LTE FDD Band 1/2/3/5/7/8/20 TDD Band 38/39/40/41 DL: 150Mbps/ UL: 50Mbps SIM slot x1
RFID/HF	Frequency: 13.56MHz Tag Support: ISO15693, ISO14443A , ISO14443B Support NFC SAM slot x 1(option)
GPS (Optional, available on WWAN version)	12 x 12 mm patch antenna Support GPS / GLONASS

Camera and Flash Light	
8MP CMOS sensor rear autofocus camera with LED flash light 5MP front camera	
External Storage	
Support MicroSD memory card up to 128GB	
Other Sensors	
G-sensor , Light + Proximity sensor , E-Compass	
Power Source	
Standard Battery	Minimum: 3120mAh/3.6V, full charge should over 95% capacity Typical: 3220mAh/3.6V, full charge should over 95% capacity
Extended Battery	Minimum: 4660mAh/3.6V, full charge should over 95% capacity Typical: 4800mAh/3.6V, full charge should over 95% capacity
Enclosure	
Weight	Approximately 287g (including standard battery, without hand strap)
Dimension	Approximately 171.3mm (L) x 29.3mm (H) x 80mm (W)
Environmental	
Operating temperature	-4°F to 122°F (-20°C to 50°C)
Storage temperature	-22°F to 140°F (-30°C to 60°C)
Charging Temperature	32°F to 113°F (0°C to 45°C)
Relative Humidity	5% ~ 95% (non-condensing)
Drop test to Concrete	1.5 meter
Environmental Sealing	IP65
Vibration and Shock test	MIL-STD-810G, 514.4 process II
Software	
Android 6.0 API level 23 Support camera API only (Camera 2 API is not available.)	

Radio Type / Description		Transmitter Frequency	Maximum Output Power
GSM	GSM900	880-915MHz	32.5dBm
	DCS 1800	1710-1785MHz	29.5dBm
UMTS	FDD 1	1920-1980MHz	22.5dBm
	FDD 8	880-915MHz	22.5dBm
LTE	FDD 1	1920-1980MHz	22.5dBm
	FDD 3	1710-1785 MHz	22.5dBm
	FDD 7	2500-2570MHz	22.5dBm
	FDD 8	880-915MHz	22.5dBm
	FDD20	832-862MHz	22.5dBm
WLAN 2.4GHz	IEEE 802.11b	2400-2483.5MHz	20dBm
	IEEE 802.11g	2400-2483.5MHz	17.5dBm
	IEEE 802.11n	2400-2483.5MHz	18dBm
WLAN 5GHz	IEEE 802.11a	5150-5350MHz	17dBm
		5470-5725MHz	17dBm
	IEEE 802.11n	5150-5350MHz	16dBm
		5470-5725MHz	16dBm
Bluetooth	Bluetooth	2400-2483.5MHz	8dBm
RFID	NFC	13.56MHz	<25dBuA/m

Note:

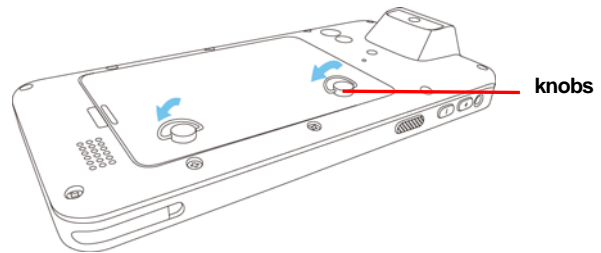
Requirements in

AT/BE/BG/CZ/DK/EE/FR/DE/IS/IE/IT/EL/ES/CY/LV/LI/LT/LU/HU/MT/NL/NO/PL/PT/RO/SI/SK/TR/FI/SE/CH/UK/HR. 5150MHz~5350MHz is for indoor use only.

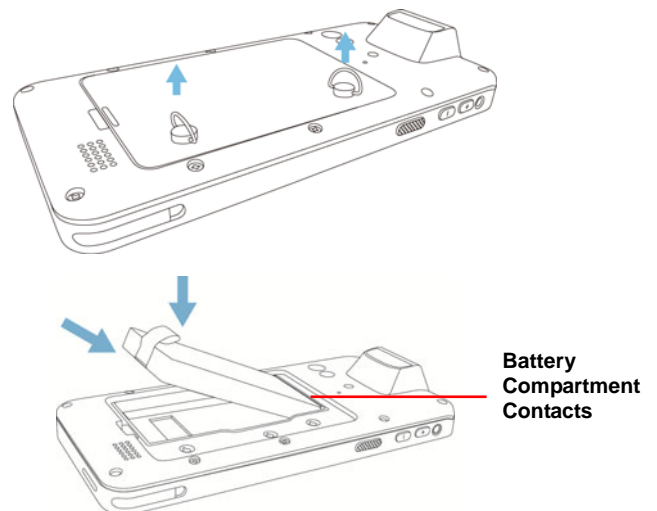
1.4 Getting Started

1.4.1 Installing the Battery

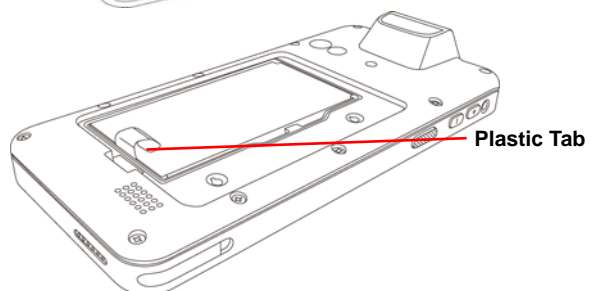
1. To loosen the two knobs on the battery cover by turning counterclockwise.
And pull the two knobs up to remove the battery cover.



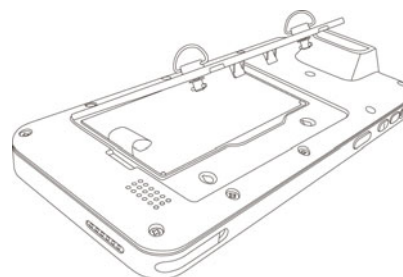
2. Slide and position the battery pack, making sure the battery contacts are aligned with the contacts in the compartment.



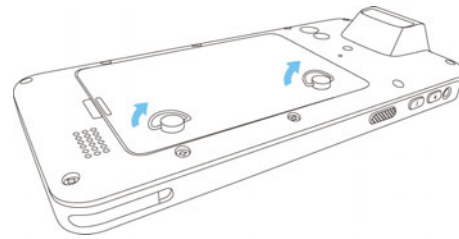
3. Use your thumb to snap the battery in place.



4. Put back the battery cover.



5. To tighten the two knobs on the battery cover by turning clockwise.



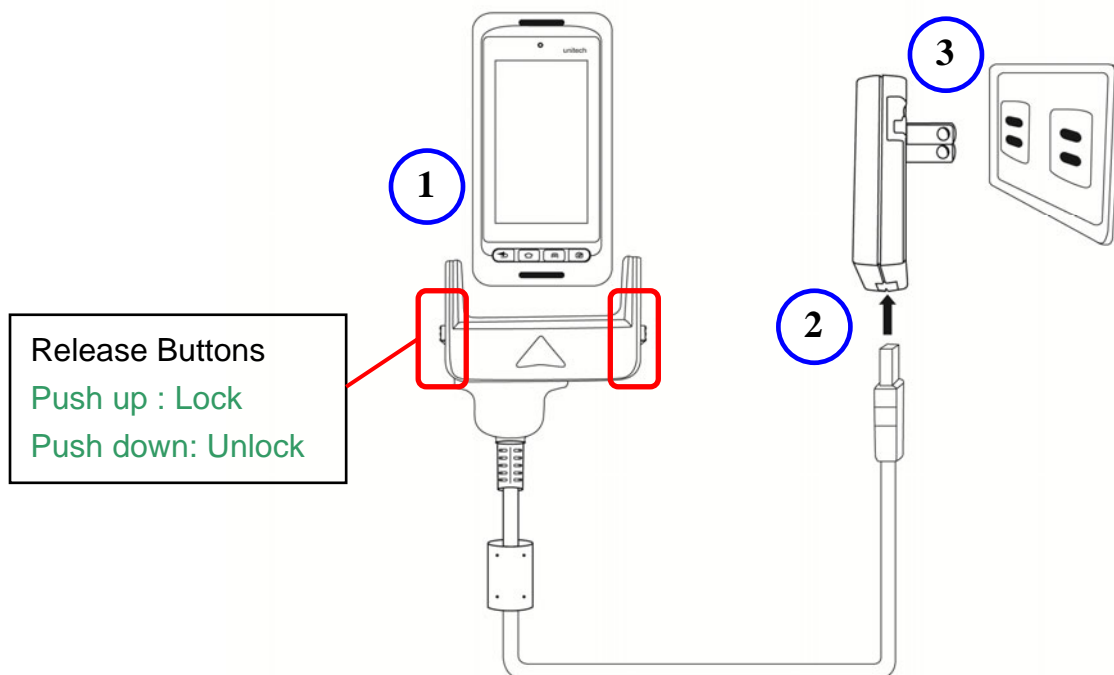
NOTE: After installing the battery, make sure the battery cover is securely closed, or you may be unable to turn ON the terminal.

WARNING! There is a risk of fire and burns if the battery pack 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 pack. Dispose of used batteries according to local recycling guidelines in your area.

1.4.2 Charging the Battery

Before using the terminal for the first time, you need to charge it for about 24 hours. After that, you can charge the terminal for 4 hours to recharge the battery to full capacity. Charge the terminal using the USB charging cable or the docking station.


1. After PA720 is connected to the charging cable, push up the release buttons on the both sides of the USB charging cable to lock PA720.
2. Use USB charging cable to connect the AC adapter.
3. Plug the AC adapter cord into an electrical outlet.



1.4.3 Turning on the terminal for the first time

After you have initially charged your device for about 24 hours, the device is ready to be used. You can now start up your device. You can then set up the languages, WiFi setting, and date and time.

Power-On Button

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

1.4.4 Checking the LED status

	Status	LED	Description
Terminal	Scan	Green light blinks once	Successful reading
	Message	Blue light blinks	Message received
	Power	Solid Red light	Being charged
		Solid Green light	Fully charged

Checking the Battery Status

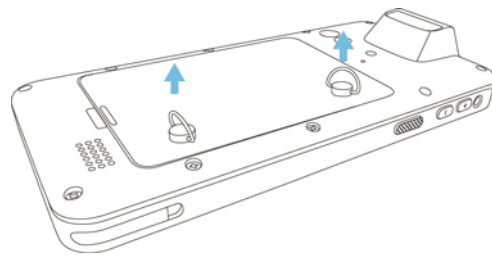
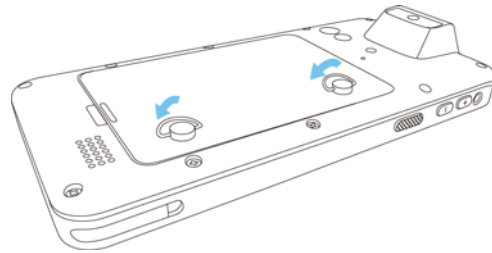
If the battery level becomes low in the course of normal use, a status icon appears on the device screen indicating low or very low battery status. In both cases, connect PC with USB to back up your data, and then recharge your device as soon as possible.

1.4.5 Using the SD/SIM Card

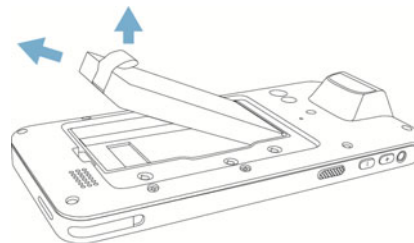
The PA720 has SD/SIM card slots inside the battery compartment.

Inserting a SD/SIM Card

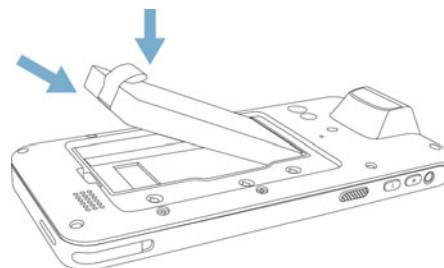
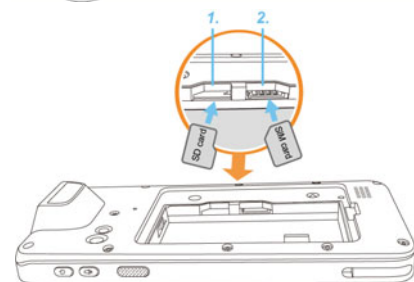
1. To loosen the two knobs on the battery cover by turning counterclockwise. And pull the two knobs up to remove the battery cover.



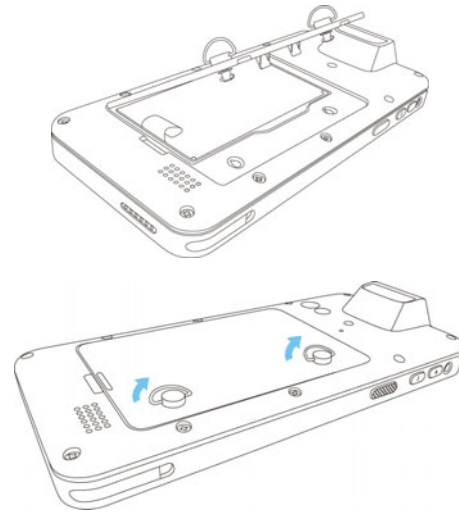
2. Remove the battery cover and the main battery.



3. Now you can access the SD card slot and SIM card slot. Put the battery back into the battery cover.



4. Replace the battery cover.
To tighten the two knobs on the battery cover by turning clockwise.


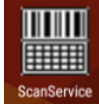


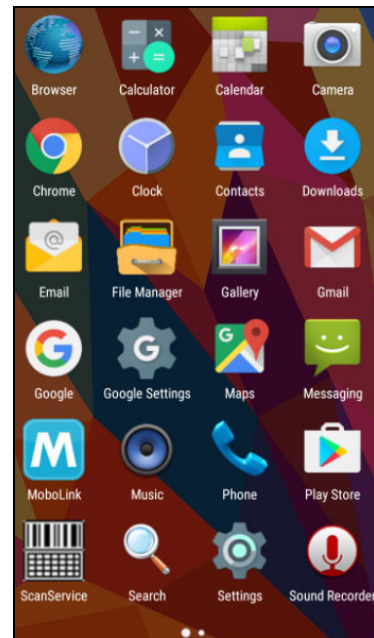
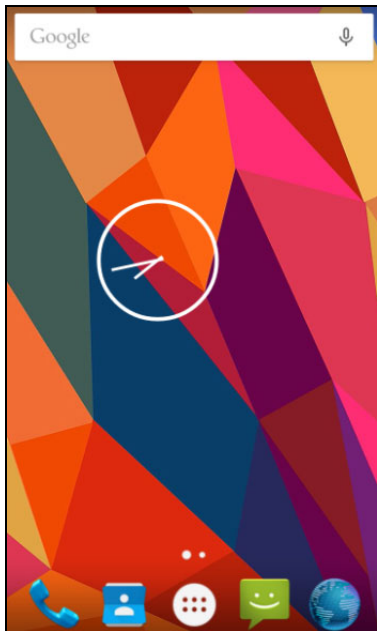
Removing the SD/SIM Card

1. To loosen the two knobs on the battery cover by turning counterclockwise.
2. Remove the battery cover and the main battery.
3. Press the card in and release. The card pops out.
4. Remove the card from the slot.
5. Put the battery back into the battery cover.
6. Replace the battery cover.
7. To tighten the two knobs on the battery cover by turning clockwise.

Chapter 2 – Installation & Operation

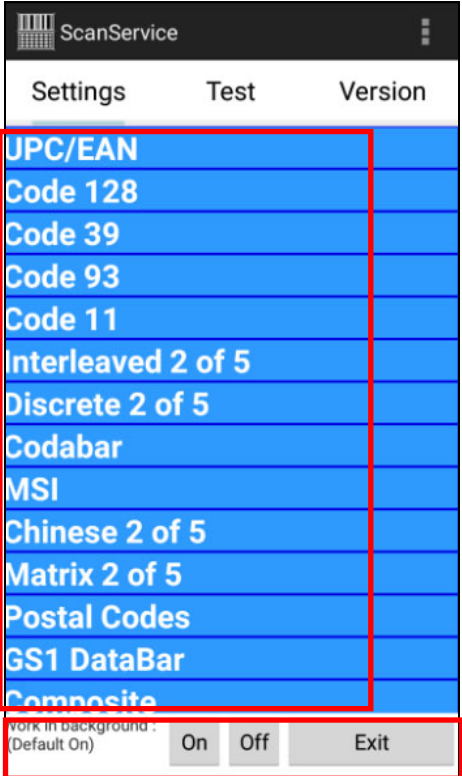
2.1 Barcode Setting

1. Tap  go to APPS, and tap  **ScanService.**



2. You are now enter the **ScanService** application:
There are three main items : **Settings, Test and Version.**

■ Settings




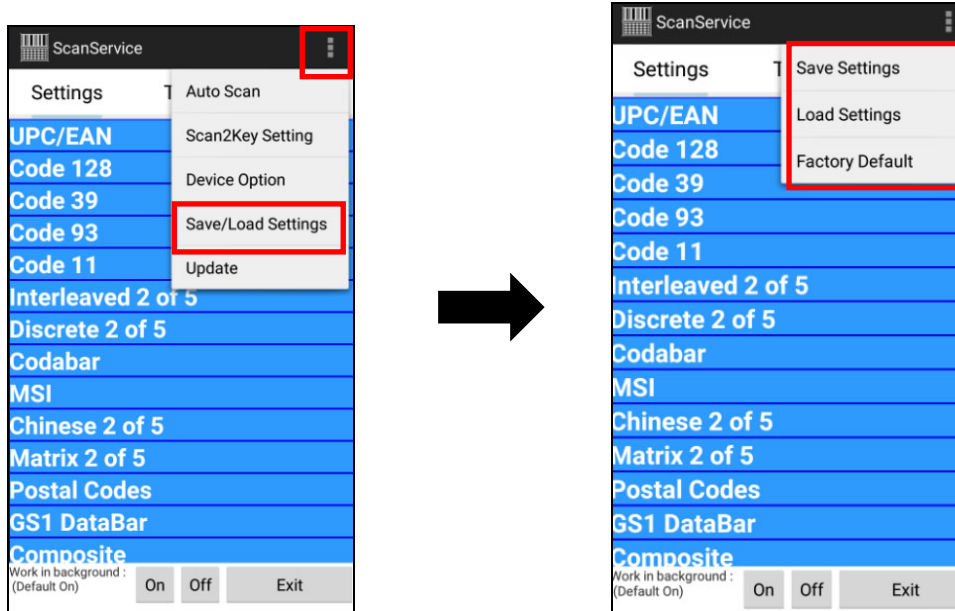
The screenshot shows the ScanService application interface. At the top, there are three tabs: 'Settings', 'Test', and 'Version'. Below the tabs is a list of barcode symbologies: UPC/EAN, Code 128, Code 39, Code 93, Code 11, Interleaved 2 of 5, Discrete 2 of 5, Codabar, MSI, Chinese 2 of 5, Matrix 2 of 5, Postal Codes, GS1 DataBar, and Composite. At the bottom, there is a section for 'Work in Background (Default On)' with 'On', 'Off', and 'Exit' buttons. A red box highlights the list of symbologies and the bottom control section. Two callout boxes with arrows point to the list and the bottom section.

Tap the default barcode symbologies for a different application

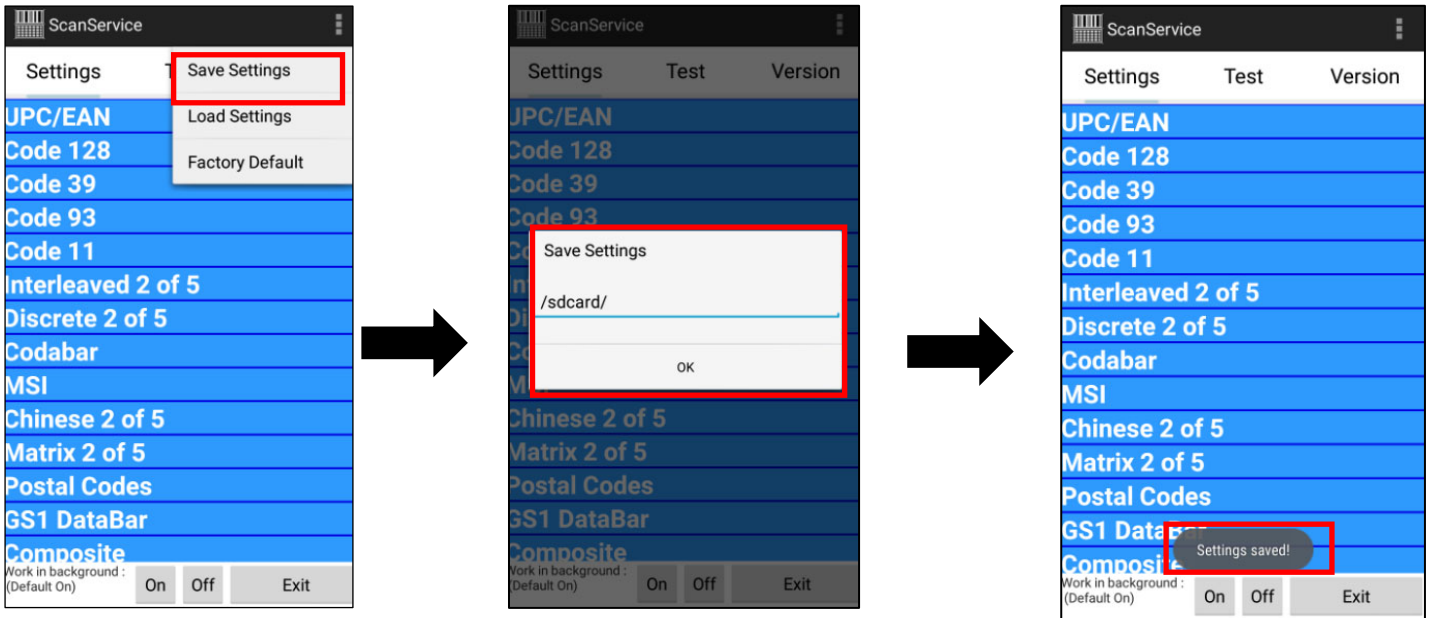
Tap **On / Off** to enable / disable to work in background
Tap **Exit** to leave **ScanService**

- For **Save / Load Settings**, and **Factory Default** section,

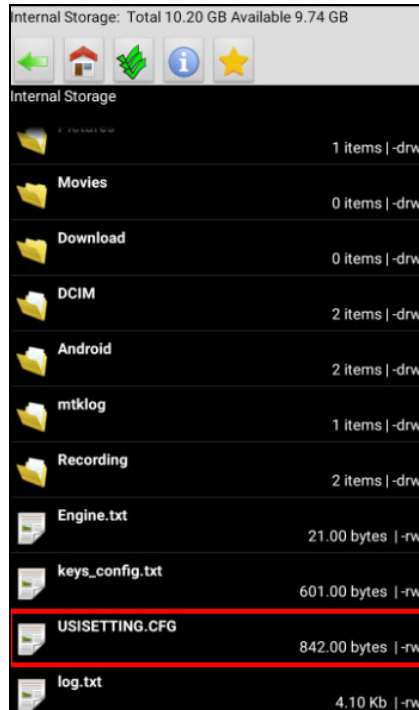
Please tap  and then tap **Save / Load Settings**.



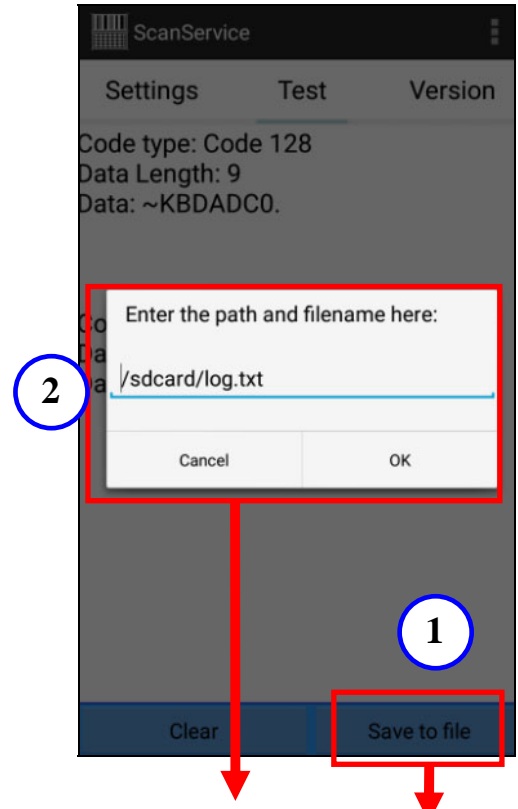
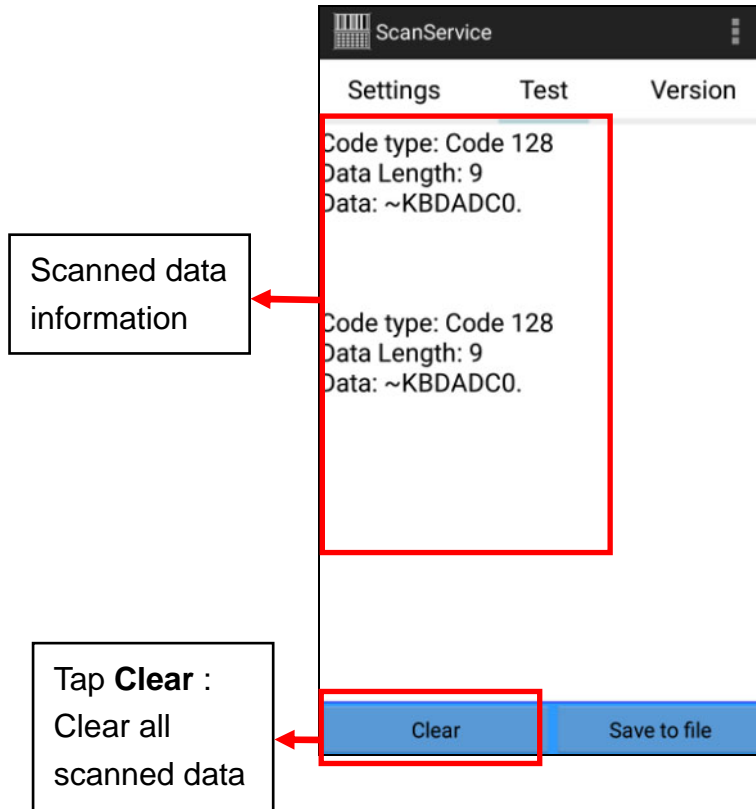
To save settings, please tap **Save Settings -- OK**



The save setting data is stored in File Manager. (Please see [3.2 File Manager](#))

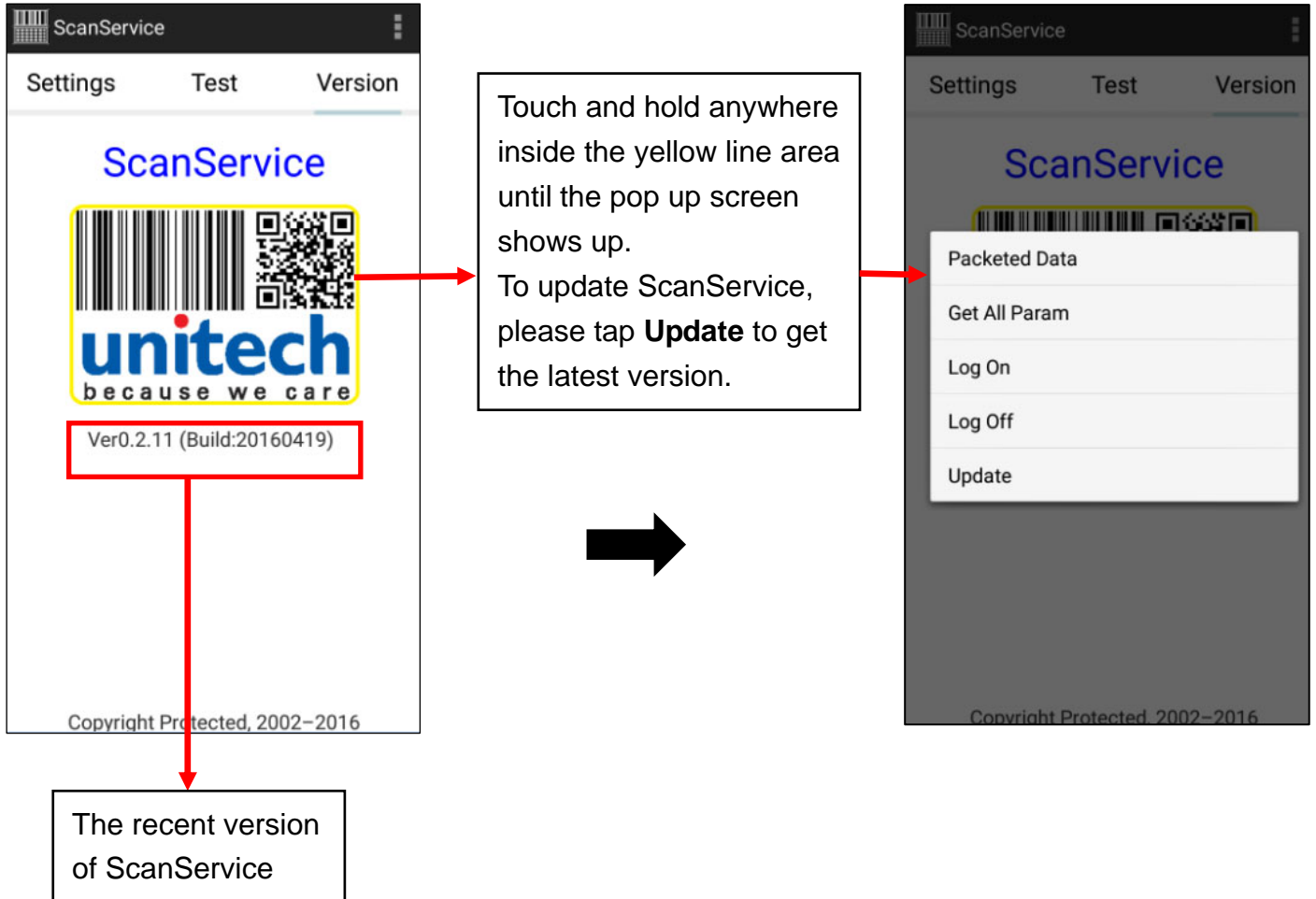


■ Test




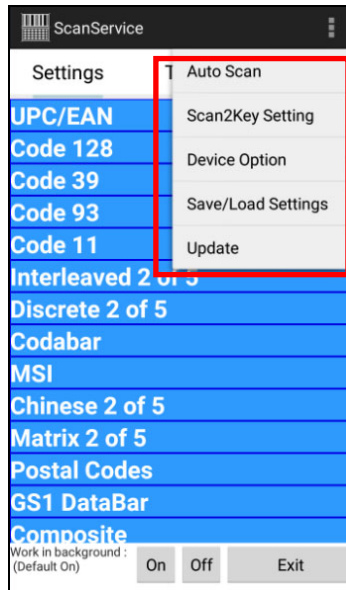
- ① Tap **Save to file**.
- ② Choose the path and filename to save the scanned data.

■ Version


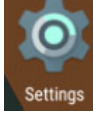


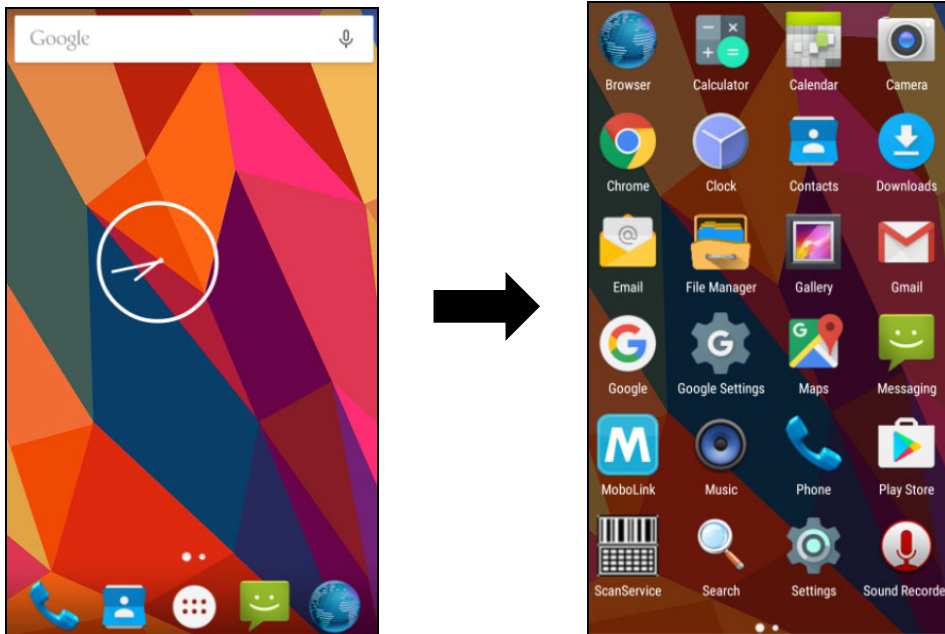
■ More Options

For more options and settings, please tap .

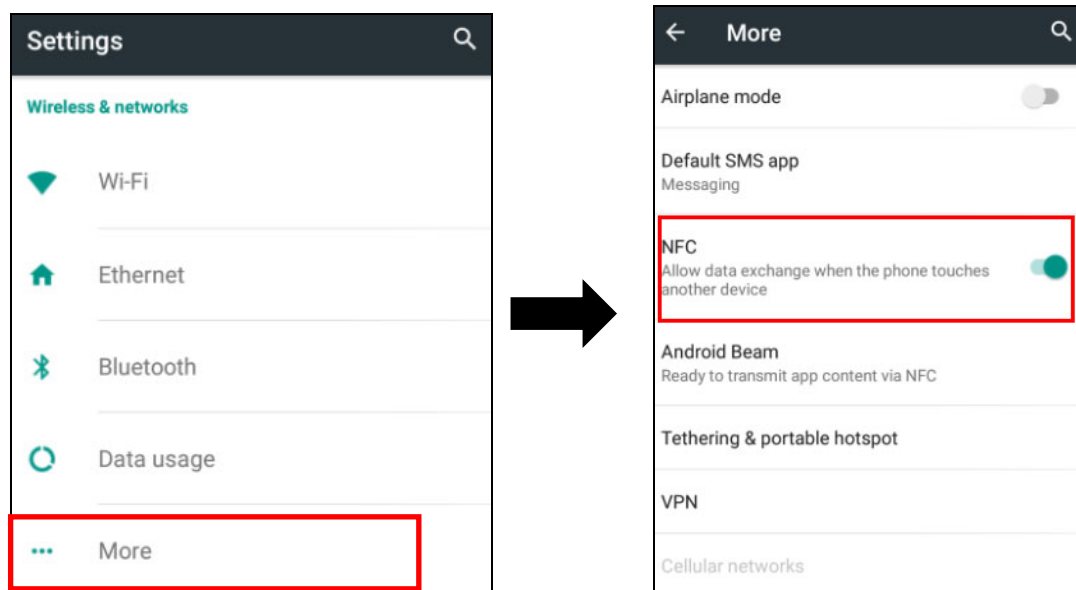


2.2 HF Setting

1. Tap  go to APPS, and tap  **Settings.**



2. Tap **More** and you will find **NFC**, and tap to enable / disable **NFC**.



2.3 UHF Setting

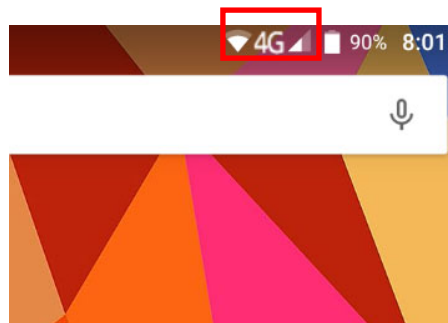
Current model is not available.

2.4 MSR Setting


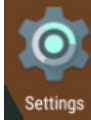
Current model is not available.

2.5 WWAN Setting

1. Turn off the terminal to insert the SIM card.
Note : • For the instruction, please refer to [1.4.5 Using the Micro SD/SIM Card](#).
• It only applies to the device which supports WWAN.
2. Turn on the terminal, 4G signal will show at the top of the screen.

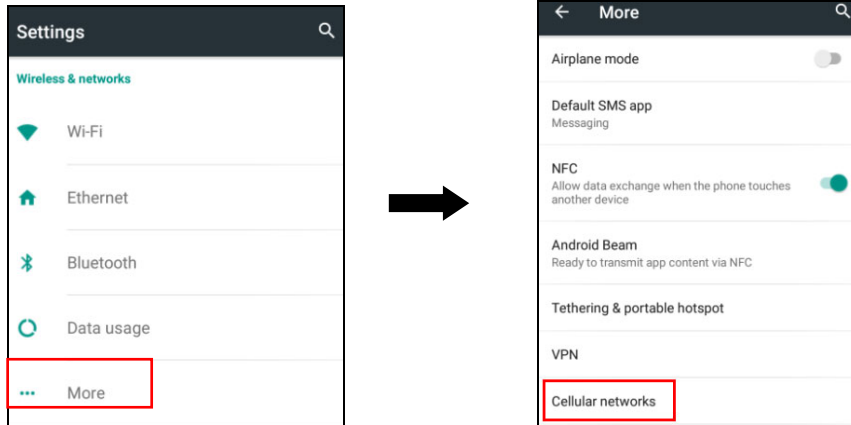


2.5.1 Mobile network settings

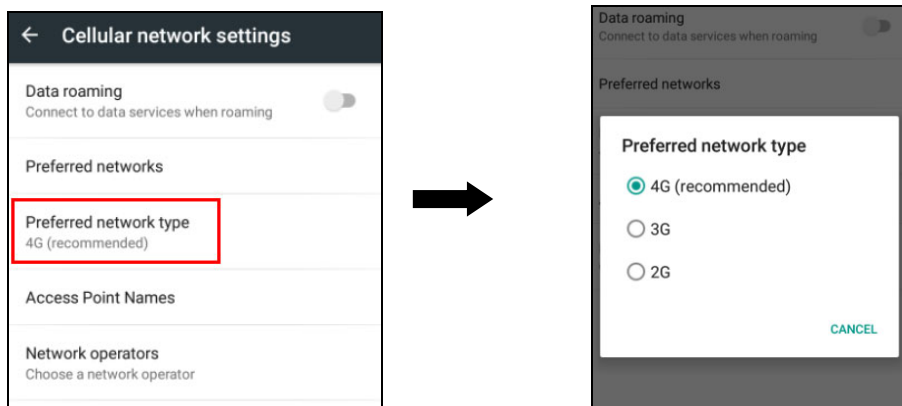
1. Tap  go to APPS, and tap  **Settings.**




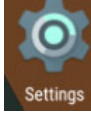
2. Go to Wireless & networks, Tap **More**, and tap **Cellular networks**.

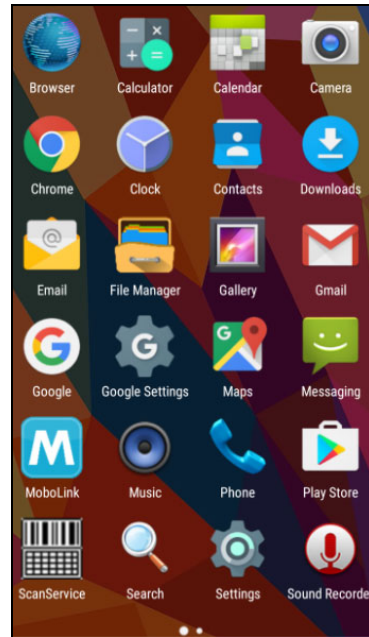
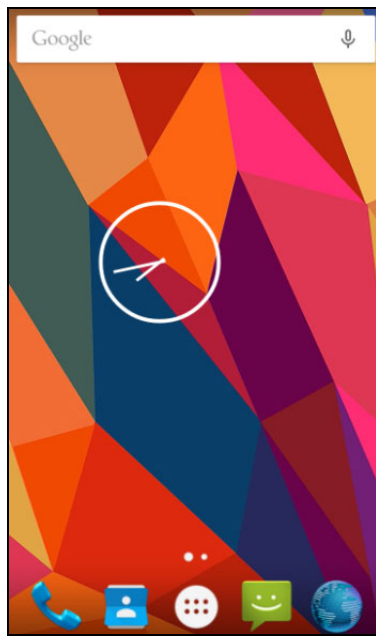


3. You can have more **Cellular network settings** in this section. For network type, please tap **Preferred network type**.

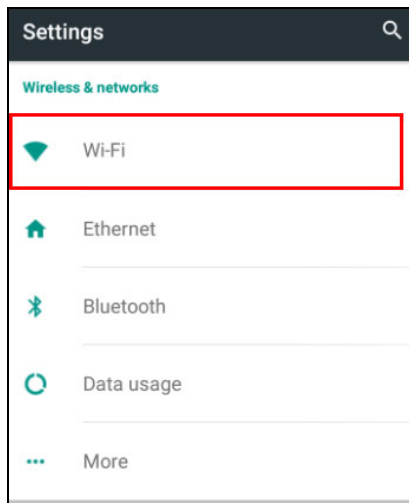


2.6 WLAN Setting

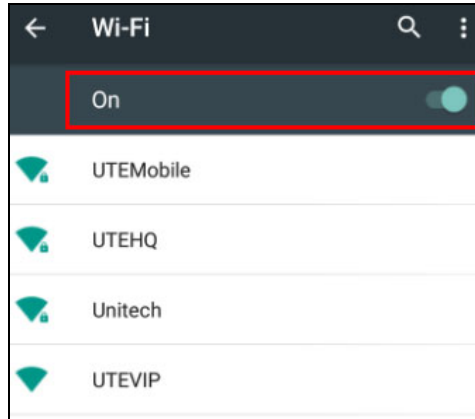
1. Tap  go to APPS, and tap  **Settings**.



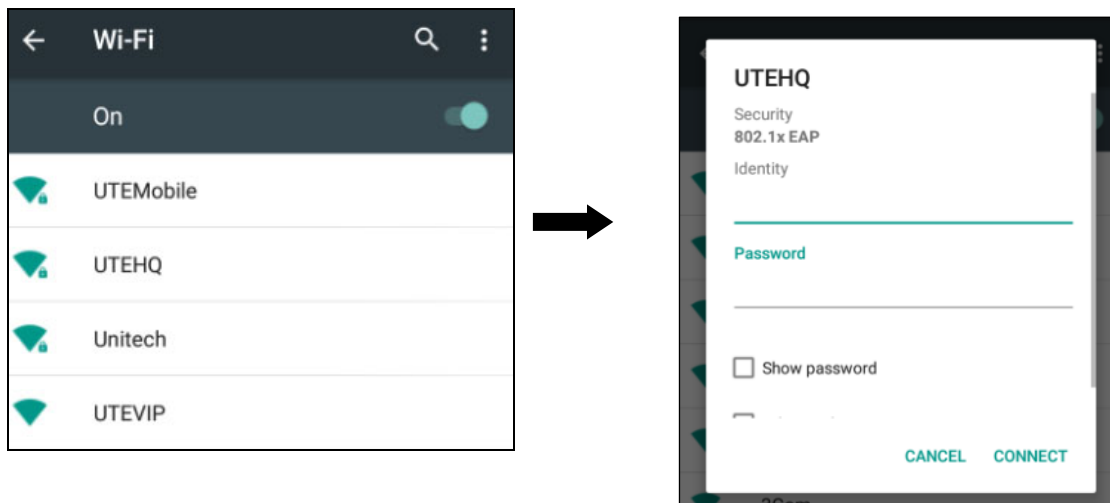
2. Go to Wireless & networks, Tap **Wi-Fi**




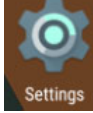
3. To see available networks, turn Wi-Fi **ON**.
And tap to choose the available networks.

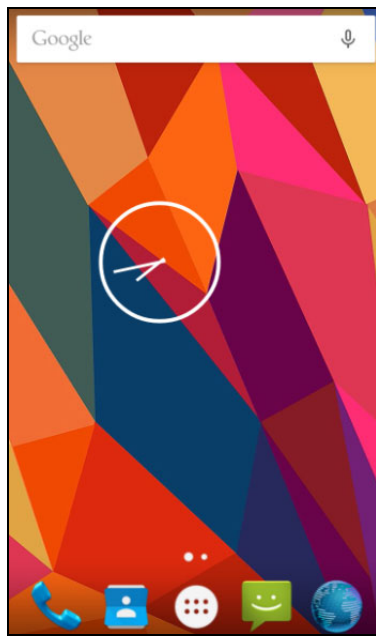


4. Choose the available networks, and enter the Password and tap **Connect**.

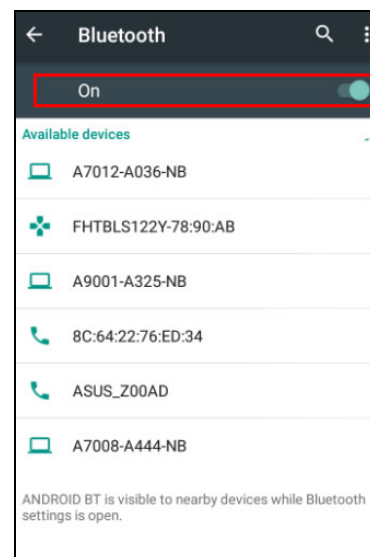
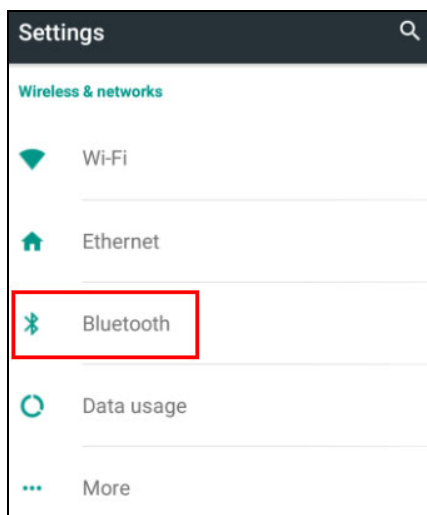


2.7 PAN Setting


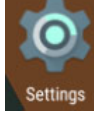
1. Tap  go to APPS, and tap  **Settings**.

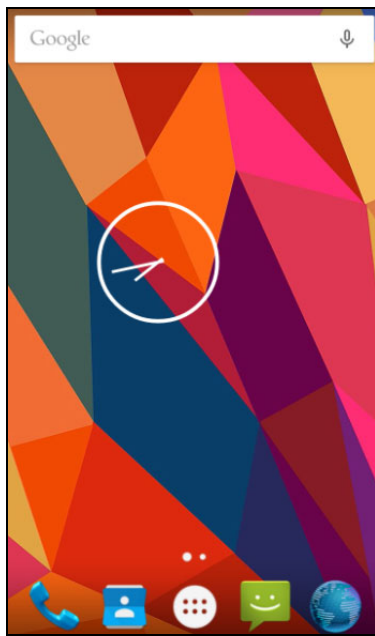


2. Go to Wireless & networks, Tap **Bluetooth (PAN)**
Tap **ON / OFF** to enable / disable Bluetooth (PAN).
To pair the available device, turn Bluetooth **ON** to choose the available device.

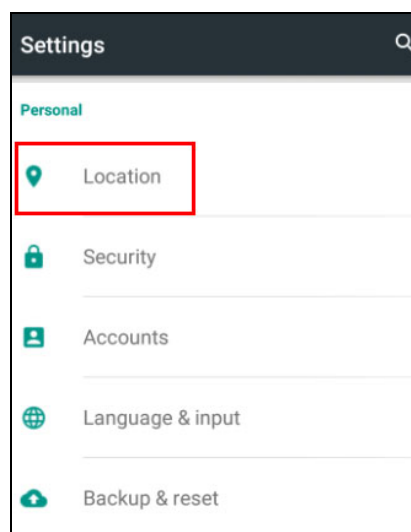


2.8 GPS Setting

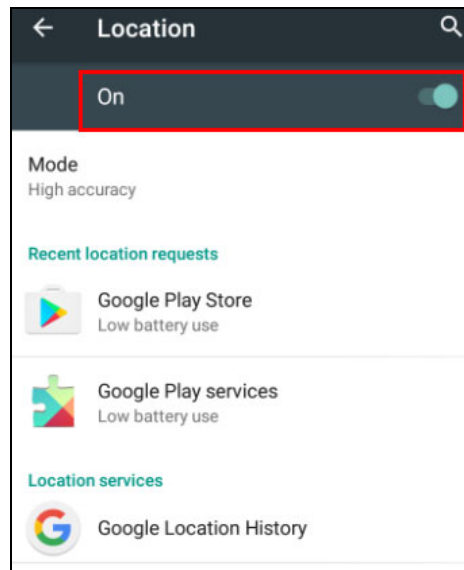
1. Tap  go to APPS, and tap  **Settings.**



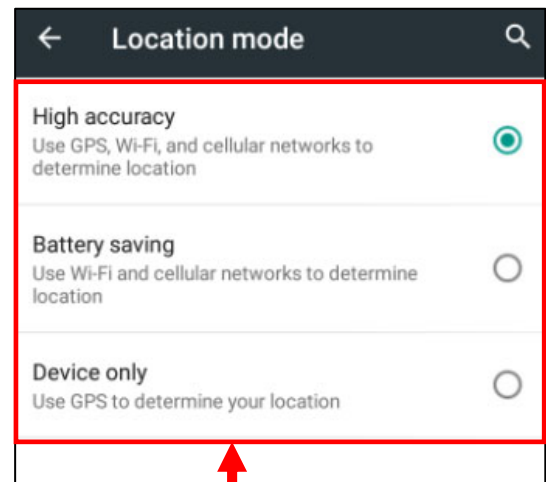
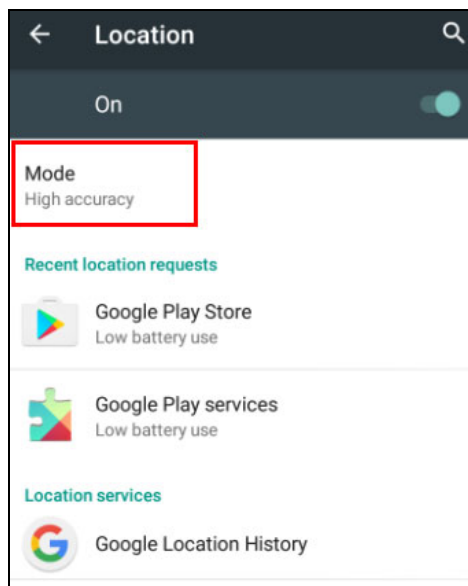
2. Go to **PERSONAL** , Tap **Location**.



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



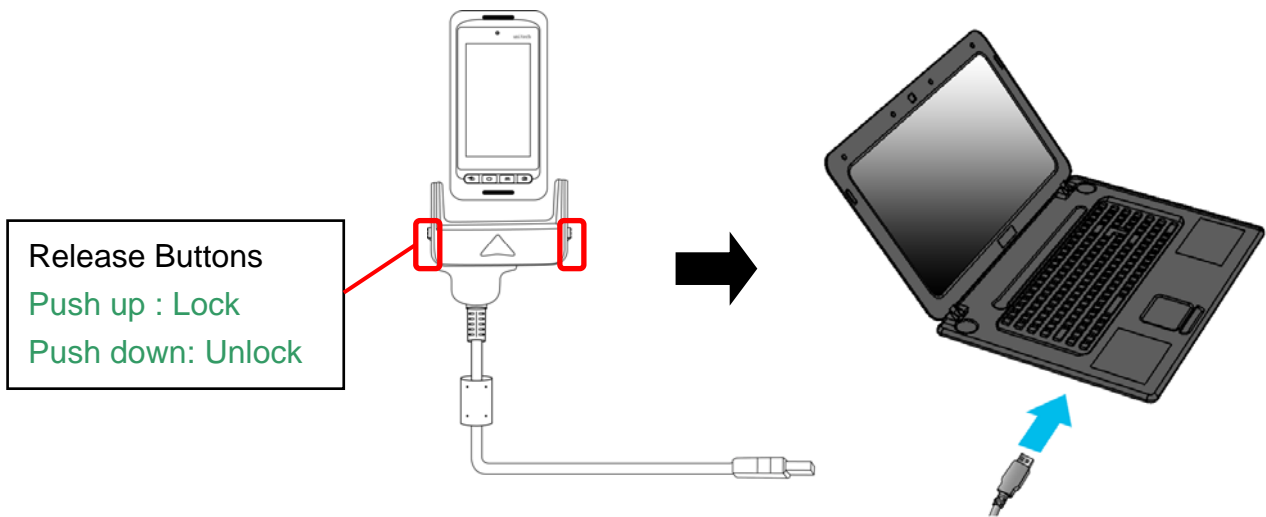
4. Tap **Mode** for more location mode settings.



- **High accuracy :**
Use GPS, Wi-Fi and cellular networks to determine location
- **Battery saving :**
Use Wi-Fi and cellular networks to determine location
- **Device only :**
Use GPS to determine your location


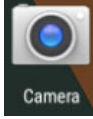
2.9 PC Setting

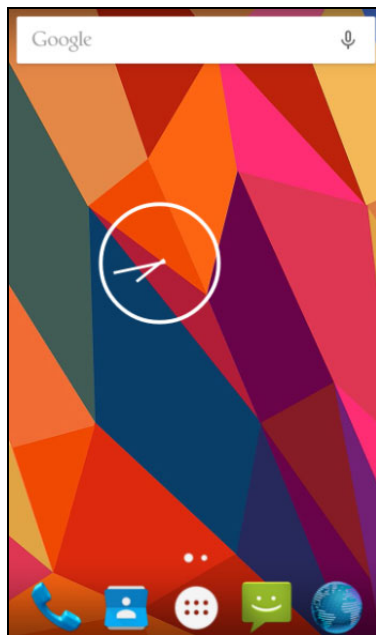
1. Connect the USB charging cable to the USB port of the PC device.



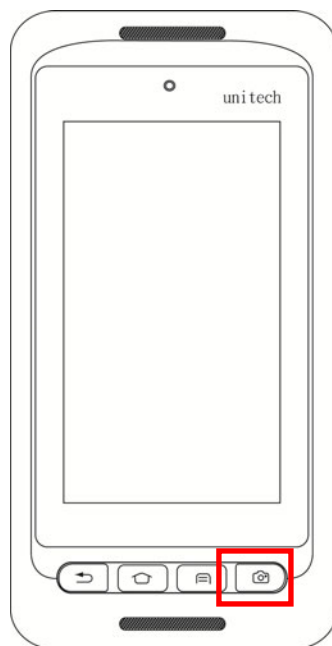
2. After connecting the terminal to PC with USB, you can find a removable storage on **my computer**.

2.10 Camera Setting

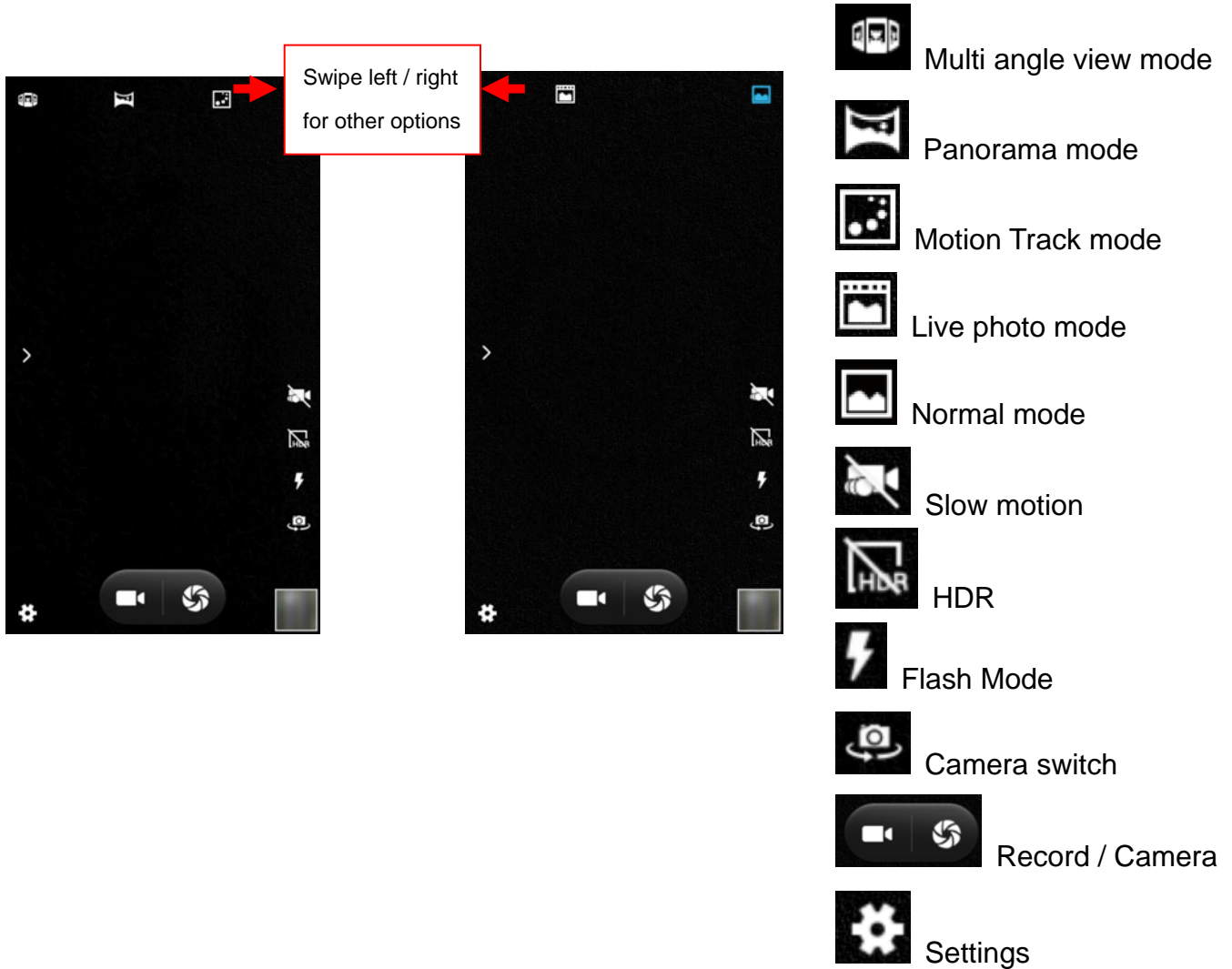
1. Tap  go to APPS, and tap  **Camera**.














Or use the camera button as below :



2. The following are the introduction of the camera interface.

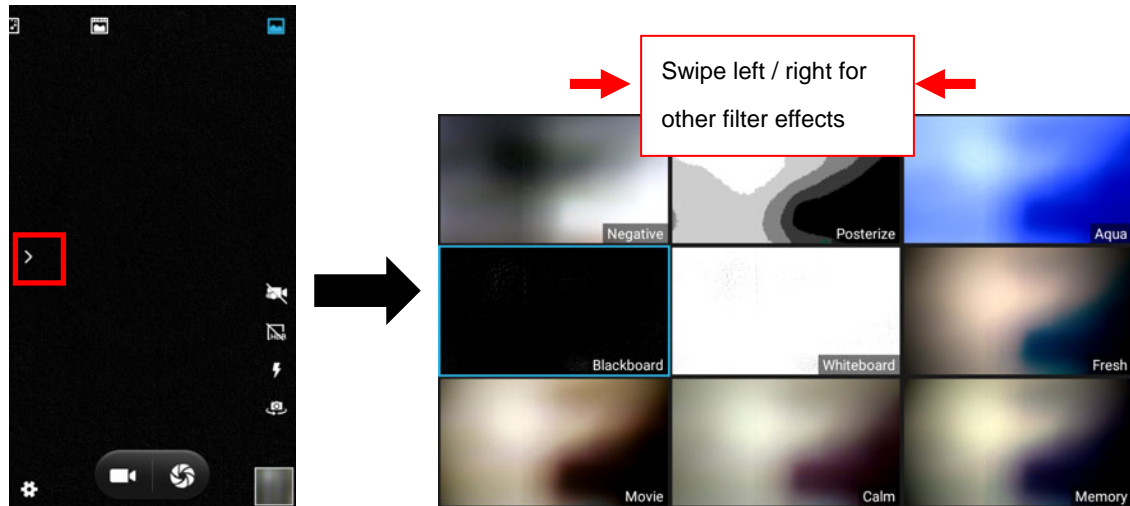



Swipe left / right
for other options

-  Multi angle view mode
-  Panorama mode
-  Motion Track mode
-  Live photo mode
-  Normal mode
-  Slow motion
-  HDR
-  Flash Mode
-  Camera switch
-  Record / Camera
-  Settings

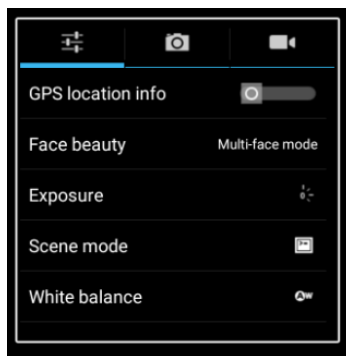
3. More options / settings

- camera filter effects (for normal mode only)

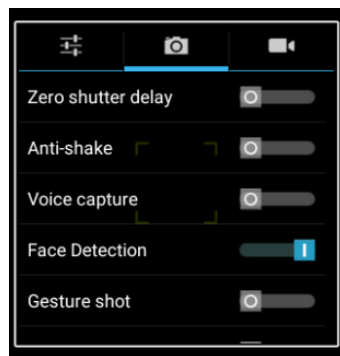


- Tab  for More settings as below.

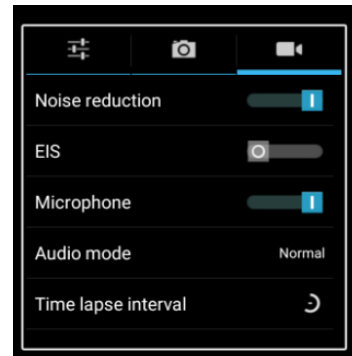
Main settings



Camera settings



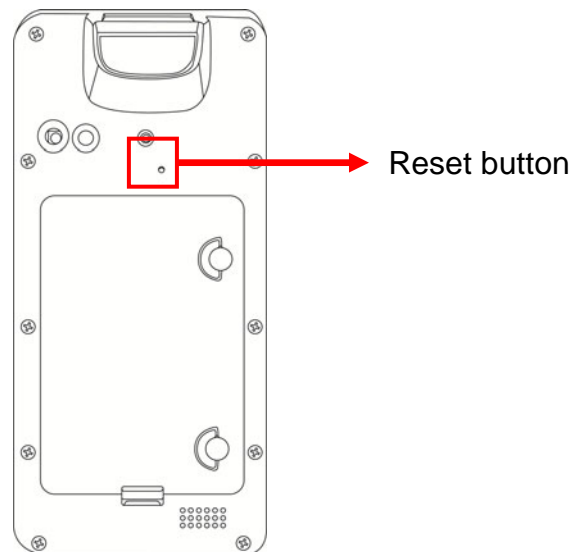
Video Setting



2.11 Performing a Hardware Reset


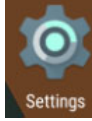
You may have to perform a reset if the device freezes (i.e., the terminal no longer responds to the buttons or tapping on the screen).

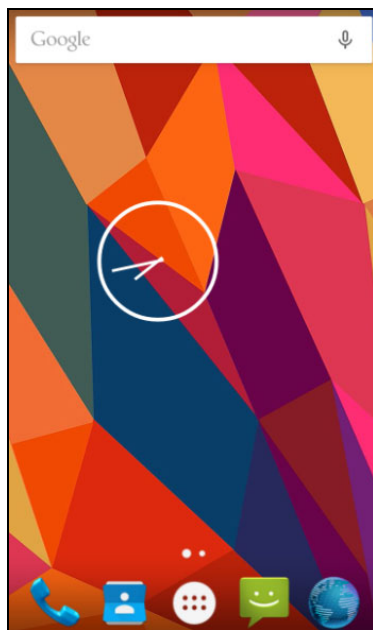
1. Use a pin, a paper clip, or tip of a pen.
2. Lightly press the reset button located on the back side of PA720.



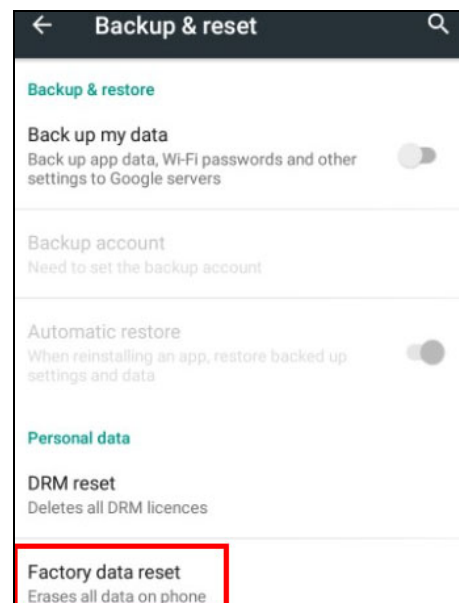
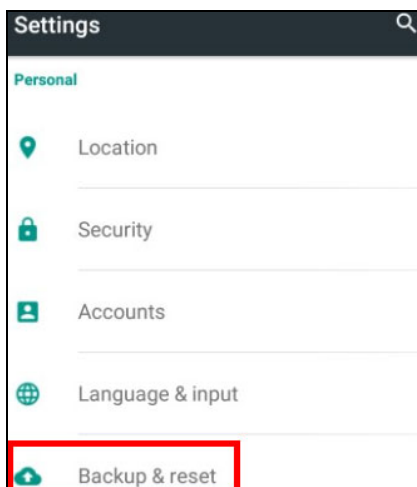
3. The terminal will restart the system after you press the reset button.

2.12 Performing Factory data reset

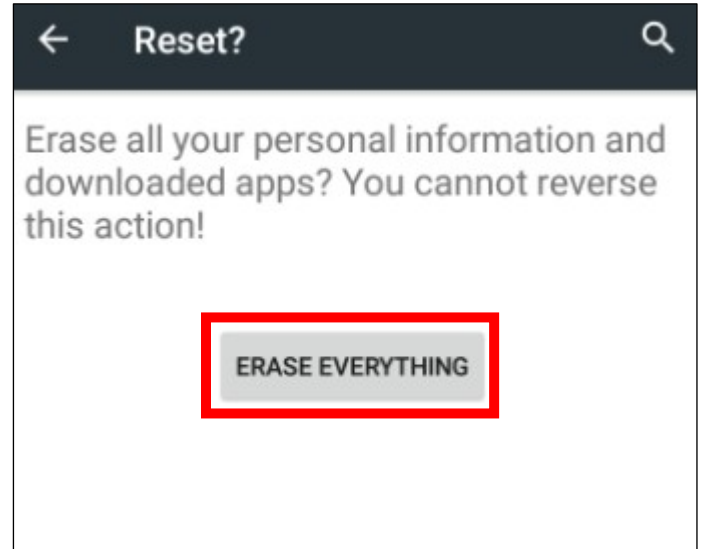
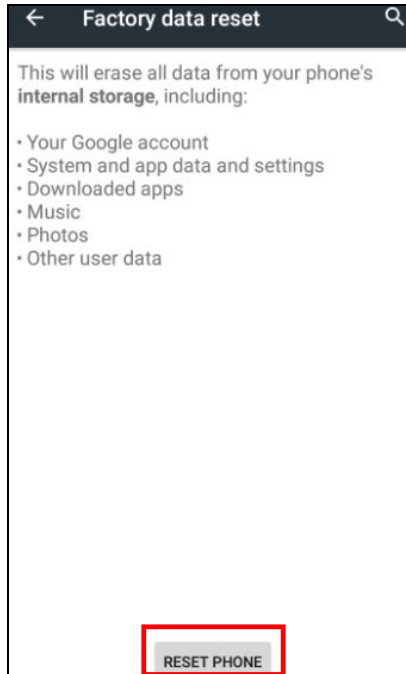
1. Tap  go to APPS, and tap  **Settings**.



2. Go to **PERSONAL** , tap **Backup & reset**
3. Go to **PERSONAL DATA**, tap **Factory data reset**




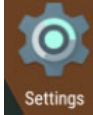
4. Tap **Reset phone** and then tap **ERASE EVERYTHING**

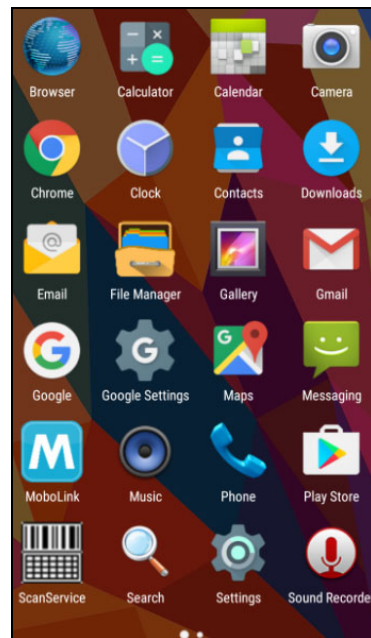
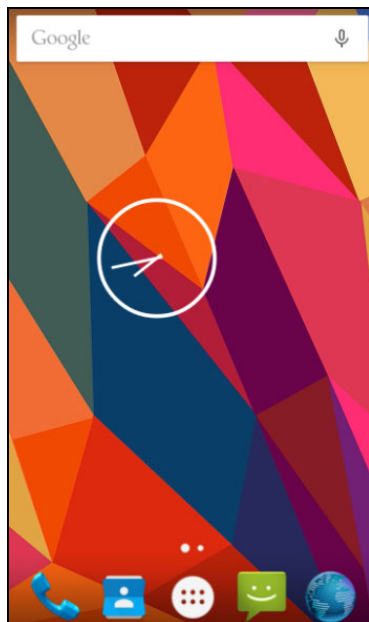


2.13 Programmable Keys

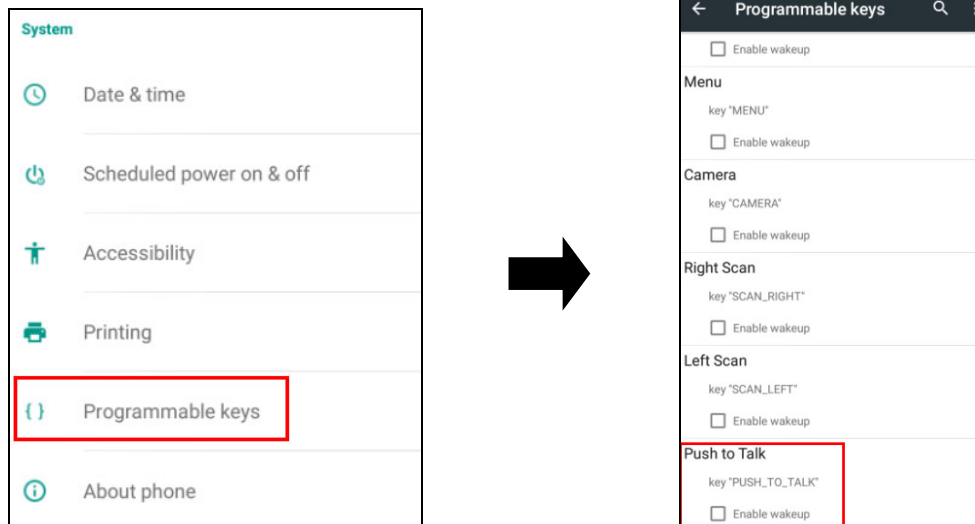
The PA720's keys can be programmed for users to be able to perform different functions or applications.

2.13.1 Programming a key

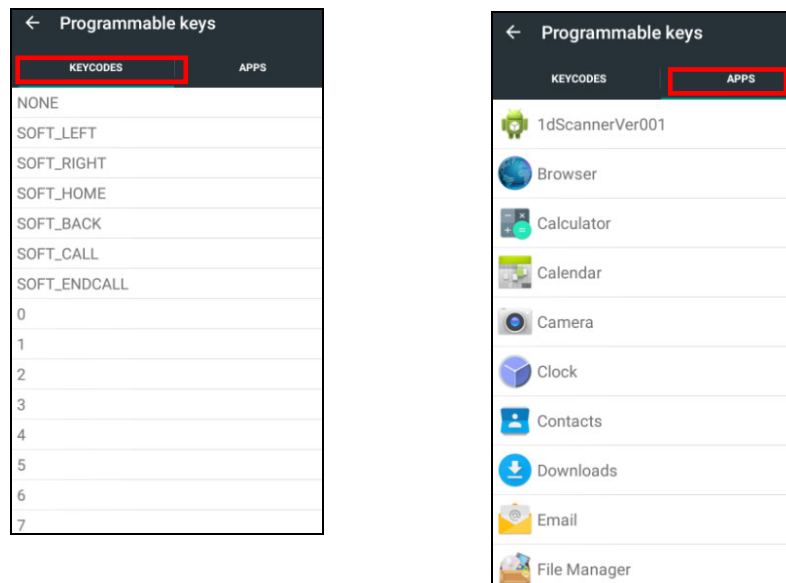
1. Tap  go to APPS, and tap  **Settings**.



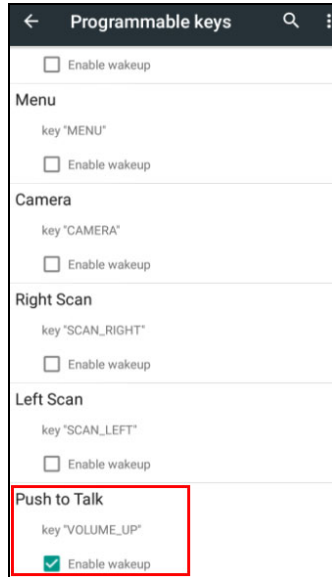
2. Go to SYSTEM, Tap **Programmable keys**, and select the keys to remap.
(ex. tab *Push toTalk*)



3. Tab one of **KEYCODES** or **APPS** that lists the available functions or applications and select one shortcut to map to the key.
(ex. tab *VOLUME_UP*)



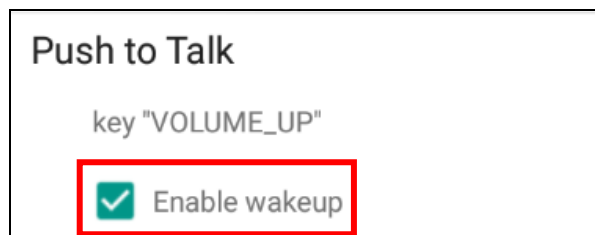
4. The key is successfully mapped to a key code.



2.13.2 Enable/ Disable wakeup

After the key is mapped to a key code, check the **Enable wakeup** checkbox to wake PA720 by pressing the programmable keys when PA720 is in sleep mode.

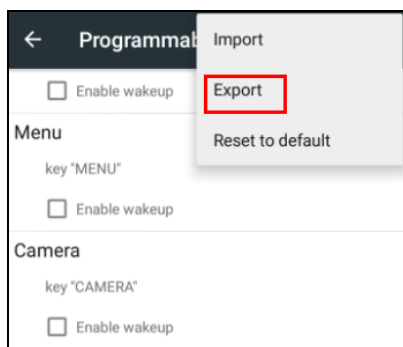
Note: This function only applies to **KEYCODES**.




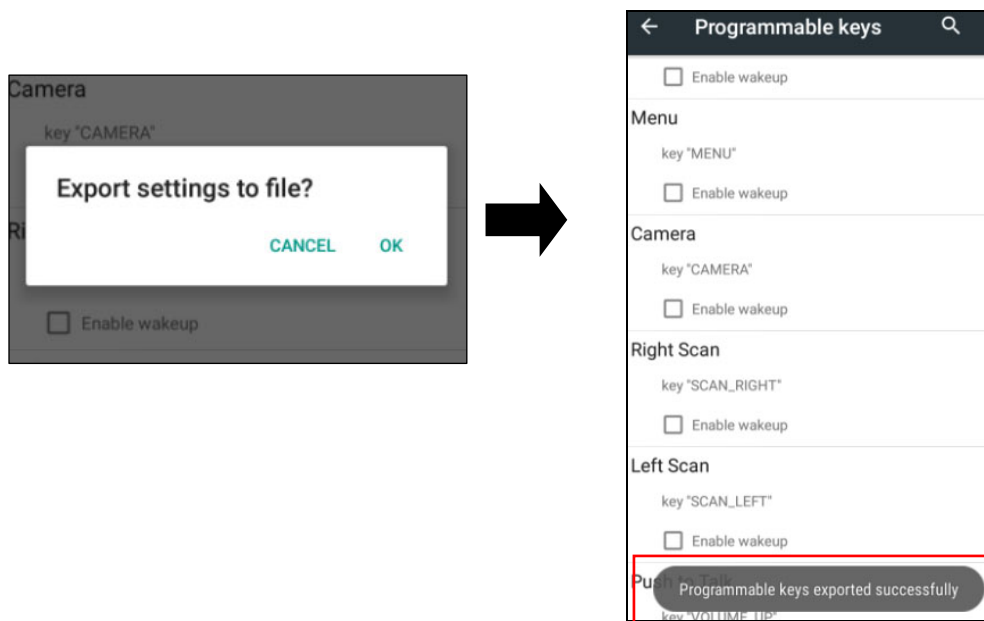
2.13.3 Export / Import a Programmable Key Configuration file

■ Export file

1. Tab 
2. Select **Export**



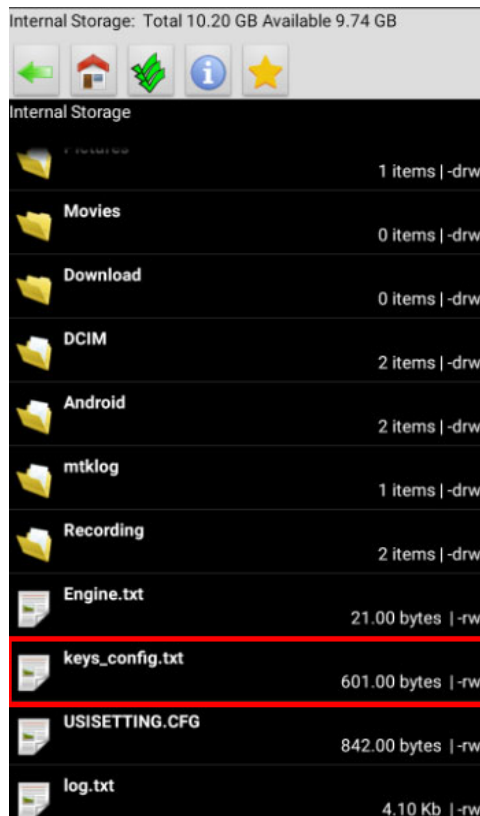
3. Tab **OK**  Programmable keys exported successfully



The Programmable Key configuration can be exported to a text file or imported into PA720.

Note: The configuration file (*keys_config.txt*) is saved in File Manger.

(For File Manager setting, please refer to [3.2 File Manager](#))

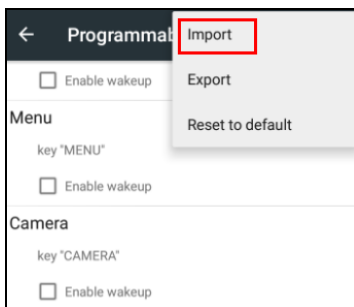


■ Import file

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

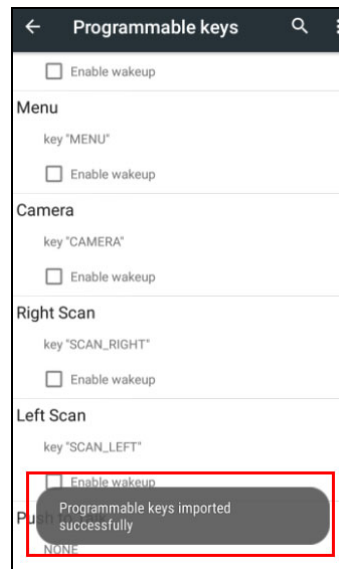
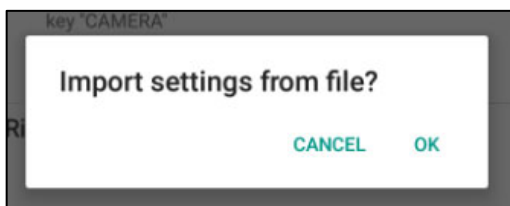
1. Tab 

2. Select **Import**



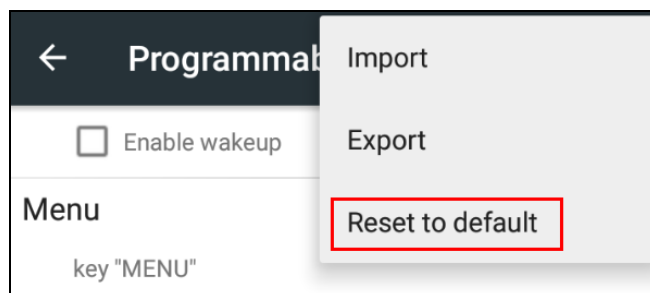
3. Tab **OK**  **Programmable keys imported successfully**

The new configuration will be applied immediately after import.



2.13.4 Reset default

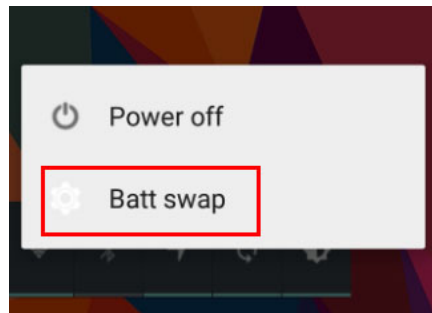
1. Tap 
2. Select **Reset to default**



2.14 Battery Swap

Please follow the steps for the battery swap.

1. Long press power button until you see the pop up window and tap **Batt swap**.


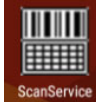


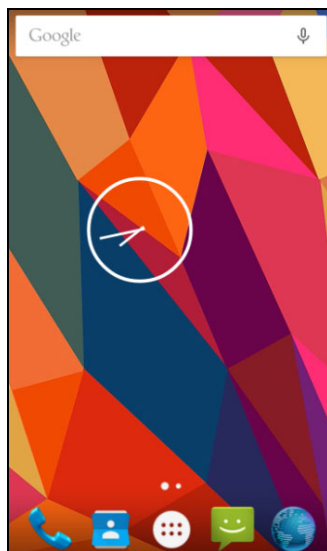
2. The LED indicator will start showing solid red light. **Please swap the battery after the LED red light goes off.** Make sure do not turn on PA720 during the battery swap.
3. When the battery swap is done, you can press the power button to restart PA720.

Note :Please see [1.4.1 Installing the Battery](#) for more information.

Chapter 3 – Introduction to Applications

3.1 Scan Service

1. Tap  go to APPS, and tap  **ScanService.**

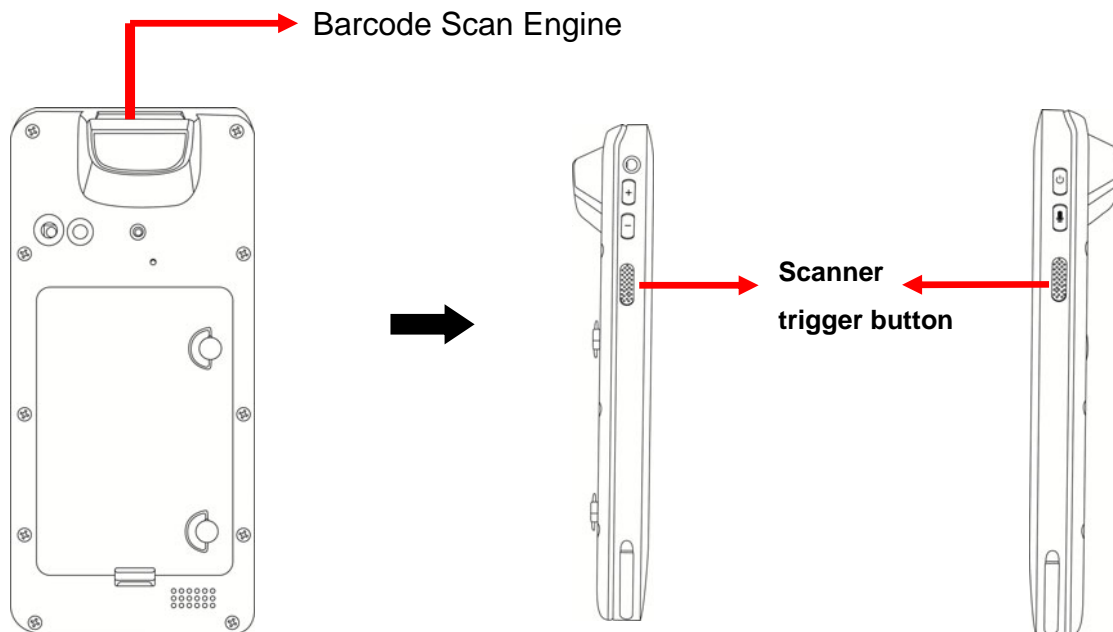


Note : ■ For more Scan Service settings, please refer to [2.1 Barcode Setting](#). or link to http://w3.tw.ute.com/pub/cs/software/ScanService/document/ScanService_UM.pdf.

2. You are now enter the **ScanService** application. Tap **Test** to start scanning barcodes.



3. Aim the Barcode Scan Engine to the barcode and press one of two scan trigger buttons.



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

Scanned data information

Tap **Clear** :
Clear all scanned data

Enter the path and filename here:
/sdcard/log.txt

Cancel OK

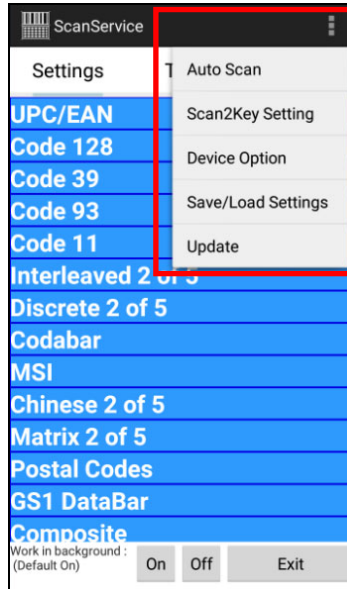
Clear Save to file

Clear Save to file

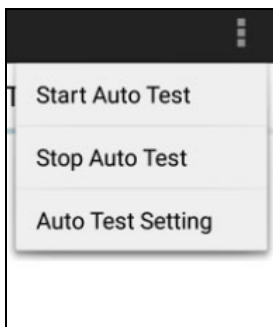
① Tap **Save to file**.
② Choose the path and filename to save the scanned data.

■ More Options

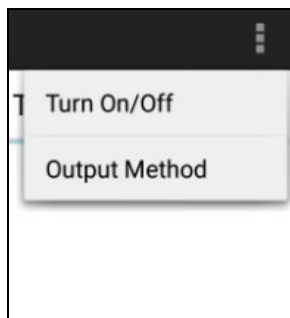
For more options and settings, please tap .



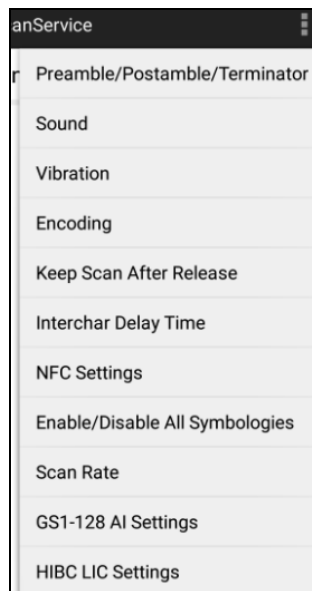
■ Auto Scan



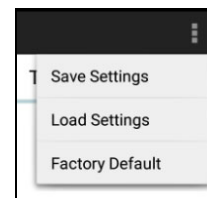
■ Scan2Key Setting



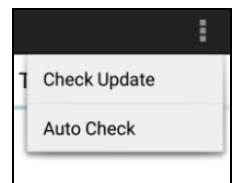
■ Device Option



■ Save/ Load Settings



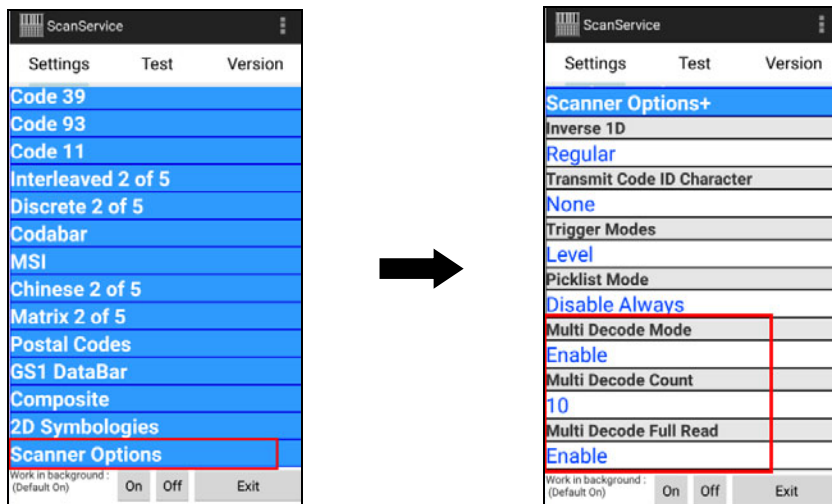
■ Update



3.1.1 Multi Decode Scan


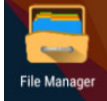
Multi decode scan function allows users to scan multiple barcodes at once.

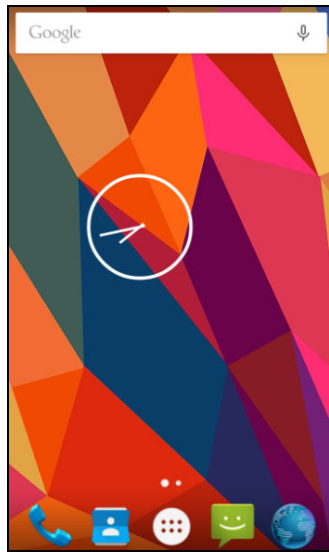
1. Go to **Settings**, Choose **Scanner Options**
2. Enable **Multi Decode Mode**, and input the barcode decode count, back to **Test** screen and start multi decode scan.





For video demonstration, please go to unitech youtube channel :
<https://youtu.be/coJ6y0hqT9c>

3.2 File Manager


1. Tap  go to APPS, and tap  **File Manager.**




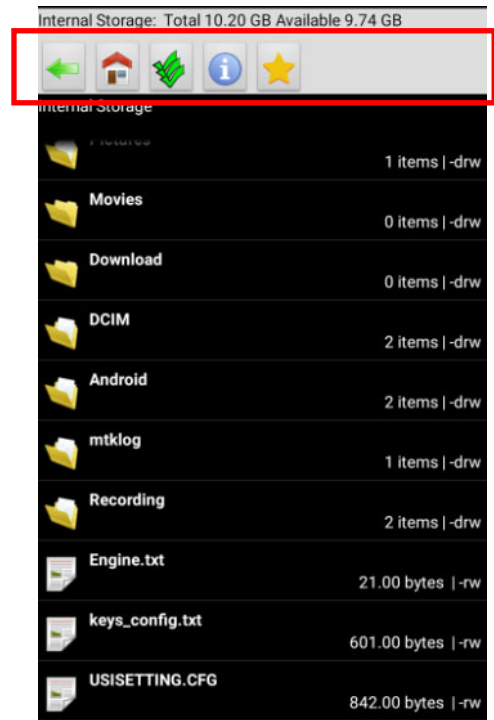
2.  : Return to the previous page

 : Main page



 : Folder setting

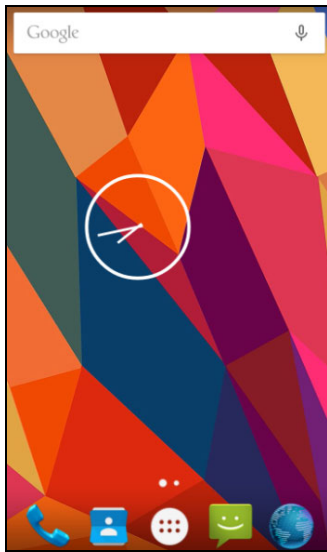
 : Folder Information

 : Solutions

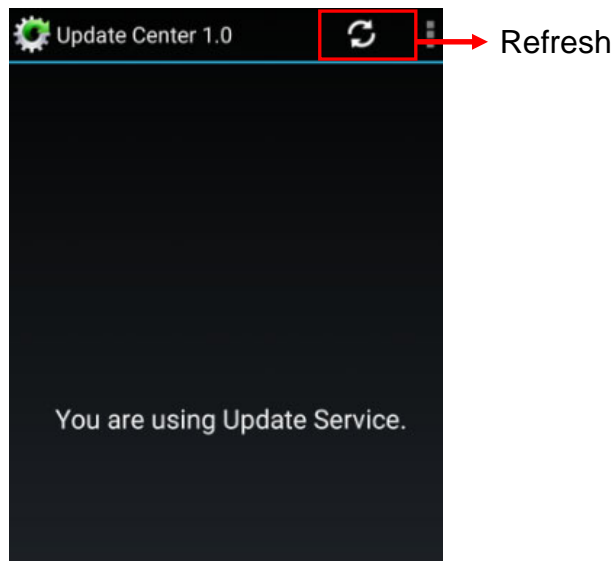


3.3 Update Center



1. Tap  go to APPS, and tap  **Update Center.**

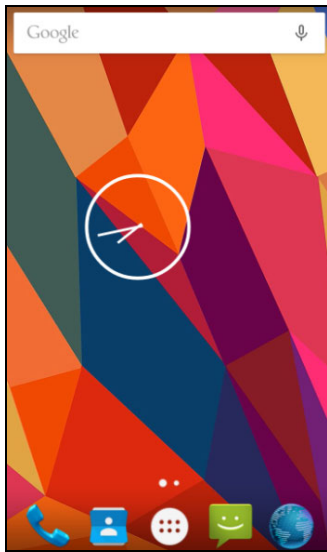


2. To update or check the latest version of software and applications, you will need to do it manually.

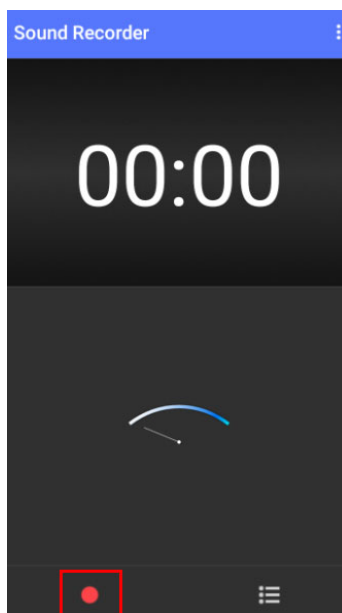


3.4 Sound Recorder

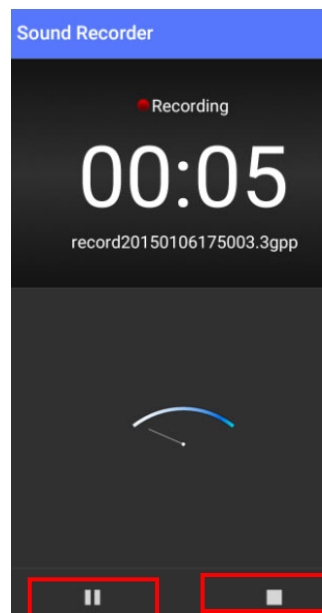
1. Tap  go to APPS, and tap  **Sound Recorder**.



2. **Recording** : Tap red dot to start the sound recording.




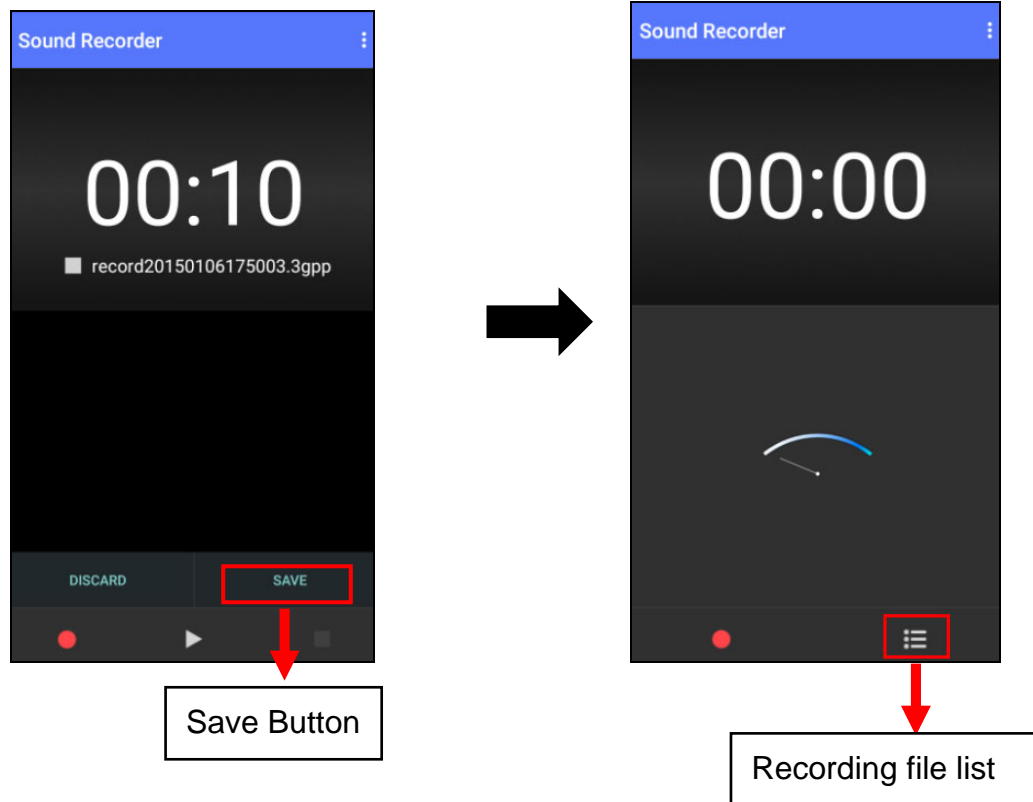
Record Button





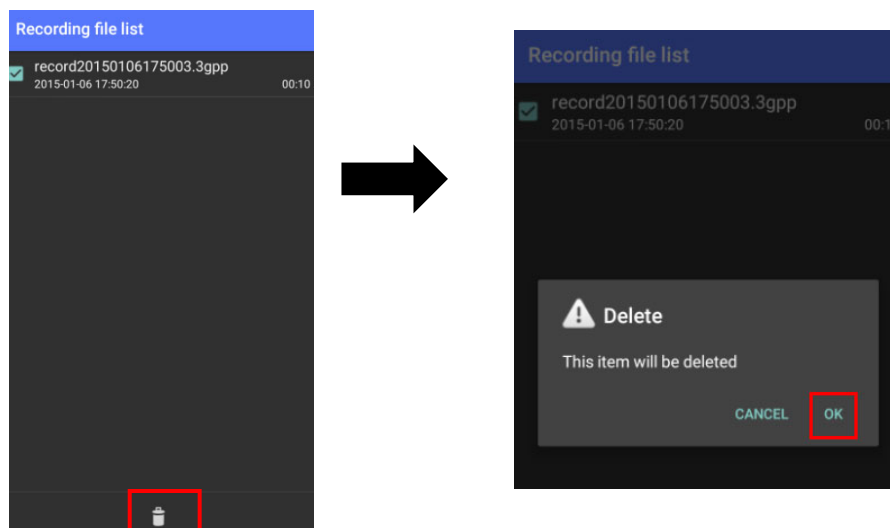
Pause

Stop

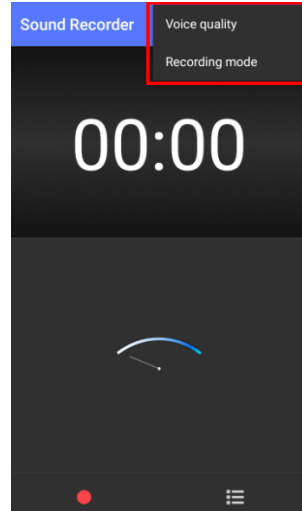
3. **Save files** : Tap stop button during the sound recording and choose **save**.
Tap  to the recording file list.



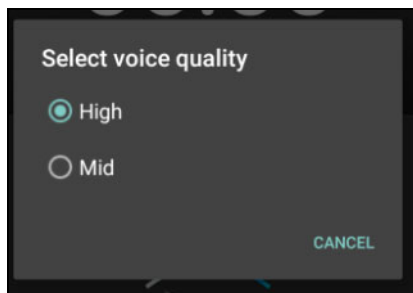
4. **Delete files** : Tap  to the recording file list and long press the file you choose to remove. Tap  and press OK to delete the file.



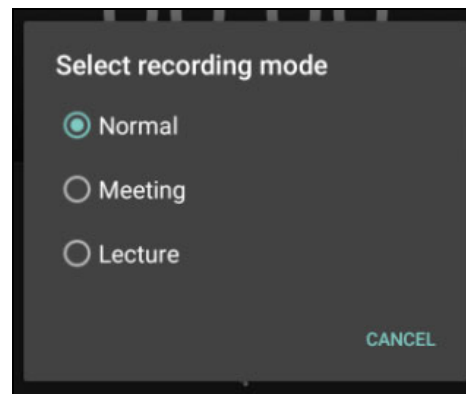
5. More settings : Tap  for **Voice quality / Recording mode**.



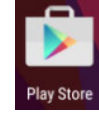
■ **Voice quality**



■ **Recording mode**

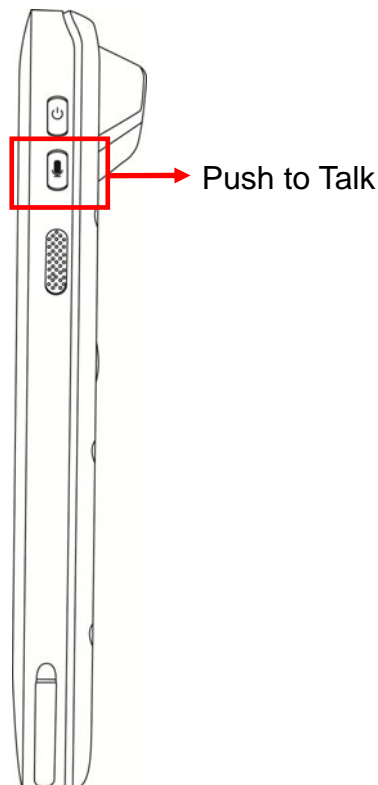


3.5 Push to Talk





To operate push to talk, please go to Google Play store to download the walkie talkie apps which can support any android device.

For example, *Zello PTT Walkie Talkie* is the most recommended walkie talkie app.



3.6 MoboLink

MoboLink is a software platform that helps unitech customers to remote manage their purchased devices and applications. The core of the **MoboLink** platform provides functionalities in the MDM (Mobile Device Management) and MAM (Mobile Application Management) domains, and then further extends into other management functions such as alert notification management and account management.

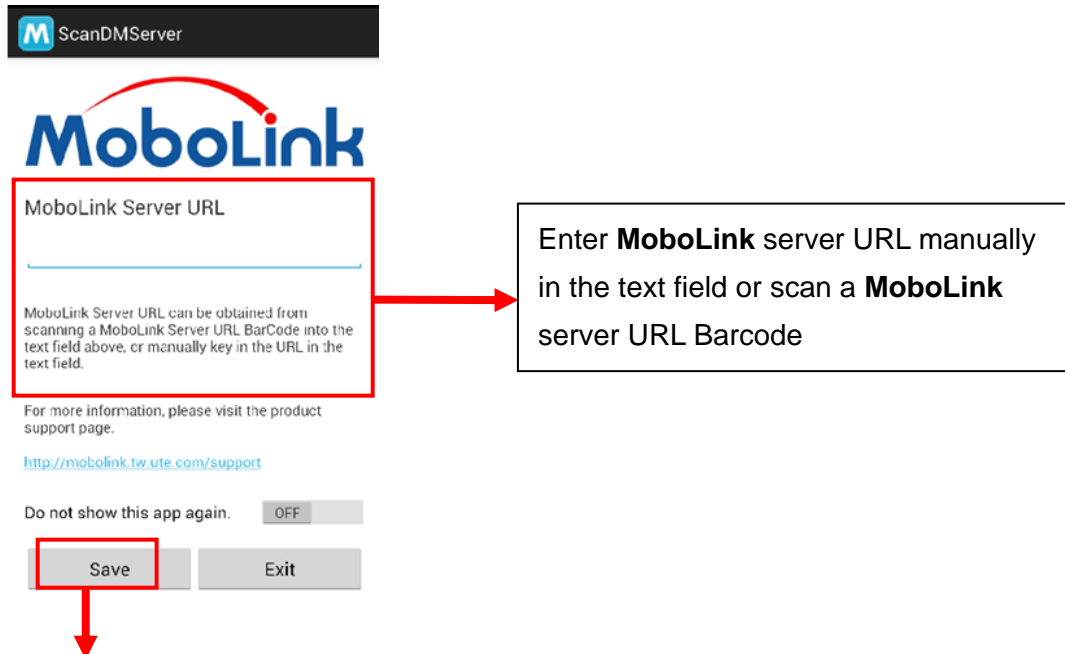
1. Tap  go to APPS, and tap  **MoboLink**

MoboLink will run in the background.

*Note: If there is no internet connection, **MoboLink** will be activated after few seconds.*



2. **MoboLink** setting is as below :



Enter **MoboLink** server URL manually in the text field or scan a **MoboLink** server URL Barcode

Tap "**Save**" to initiate **MoboLink** Server URL

3. **MoboLink** screen information is as below:



Slide **ON/OFF** button to show **MoboLink**

Tap "**Exit**" to leave the screen

3.6.1 More about MoboLink

For detailed operation, solution and usage, please refer to **MoboLink** user's guide. (<http://mobolink.tw.ute.com/support>)

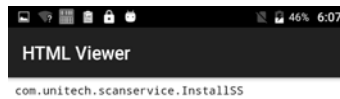


3.7 Startup

This application is a 3rd-party application installation at boot up.

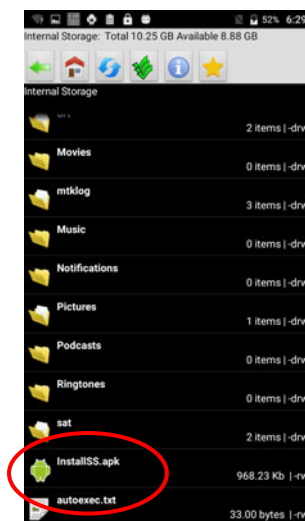
Startup Setup Procedure

1. Edit the installation list with following format in autoexec.txt.
Package name + **“.”** + **APK file name (no extended file name)**
For example: **com.unitech.scanservice.InstallSS**

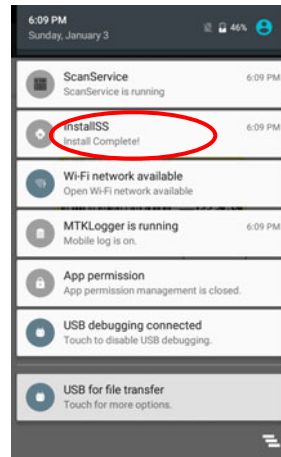


You can check the **package name** through command: # adb shell am monitor or any apk information checking tool (e.g. apk-info_V0.6). Also, rename **APK file name** to match it to the installation list in autoexec.txt

2. Copy autoexec.txt and APK file to be installed to either external SD card or device internal storage. Rename the **APK file name** to match the installation list in autoexec.txt if needed.



3. Reboot the system and it will start to install the 3rd-party APK file specified in autoexec.txt. After installation completes, an "Install Complete!" will pop up in notification list.



- Note :**
1. Please ensure the format follows package name + ".apk" + apk file name.
 2. The installation priority follows USB disk → SD card → device internal storage.
 3. Only one application can be installed through startup.exe.
 4. For 3rd-party application list sample, please download from here:
http://w3.tw.ute.com/pub/cs/software/Startup/Startup_samples.zip