

# **Rugged Handheld Computer**





### **User's Manual**

Version 1.3

© 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd. All product and company names are trademarks, service marks, or registered trademarks of their respective owners



# **Revision History**

Date	Change Description	Version
20211012	First Published Version	V1.0
20211014	Update Chapter 1, add Front Camera to 1.2	V1.1
20211101	Add ISBN to Chapter 3	V1.2
20211103	Update 1.3	V1.3



# **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

i



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



#### **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.

#### **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 : <u>https://portal.unitech.eu/public/WEEE</u>



#### **Taiwan NCC Warning Statement**

#### 低功率電波輻射性電機管理辨法

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。

SAR標準值2.0W/KG, 送測產品實測值為: 0.395 (W/KG)

注意事項:

- 1. 使用過度恐傷害視力。
- 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. 减少電磁波影響,請妥適使用。
- 因應各地區/國家開放頻道不同,請依據當地主管機關與電信業者實際公告資訊 為主,如服務細則有所變更,請自行洽詢電信業者,恕不另通知。
- 無線資訊傳輸設備避免影響附近雷達系統之操作。

#### 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**

- 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.
- The length of time that a battery lasts depends on the battery type and 3. 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
  - 如果更换不正确之电池行事会有爆炸的风险 请依制造商说明书处理用过之电池

#### **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.

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

xii © 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd. All product and company names are trademarks, service marks, or registered trademarks of their respective owners



# 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.



unitech because we care 

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	
1.3 Specifications	4
1.4 Getting Started	
Chapter 2 – Installation & Operation	
2.1 Barcode Setting	
2.2 HF Setting	
2.3 WWAN Setting	
2.4 WLAN Setting	
2.5 PAN Setting	
2.6 GPS Setting	
2.7 PC Setting	
2.8 Camera Setting	
2.9 Performing a Hardware Reset	
2.10 Performing Factory data reset	
2.11 KeyRemap	
2.12 Split Screen	



2.13 Network Time Protocol (NTP) Server	44
Chapter 3 – Introduction to Applications	46
3.1 USS (unitech scan service)	46
3.2 Files	52
3.3 Software Update	53
3.4 StageGO	54



# **Chapter 1 - Overview**

# 1.1 Package

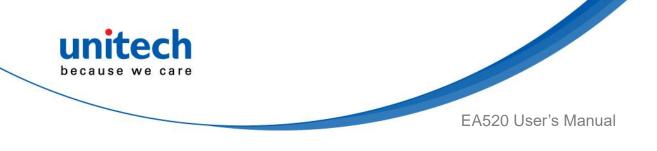
Please make sure the following contents are in the EA520 gift box. If something is missing or damaged, please contact your unitech representative.

#### The Package Contents

- EA520 Terminal
- Battery
- Quick Start Guide
- Regulatory Compliance Statements

#### **Optional Accessories**

- USB Type C Cable
- Power Adapter (with US plug)
- Power Adaptor (with US/EU/UK/AU plug)
- 1-slot Charging Cradle
- 1-slot USB Cradle
- Gun Grip
- Boot Case
- Hand Strap Package
- Glass Screen Protector



# **1.2 Product Detail**

### **EA520 Product View**



- 1. Barcode Scanner Window
- 2. Receiver
- 3. Volume Key
- 4. Scanner Triger Key
- 5. Programmable Key

- 6. Sim Card Slot
- 7. Scanner Triger Key
- 8. Power Key
- 9. LED Indicator



**Rear View** 

- 10. POGO Pin
- 11. USB Type C Port
- 12. Rear Camera
- 13. Flash LED Light
- 14. Speaker

- 15. Hand Strap Holes
- **16.** POGO Pin connector for Gun Grip
- 17. NFC
- 18. Battery Cover Latch
- 19. Front Camera



# **1.3 Specifications**

System Features				
CPU	2GHz, 64bits Octa-core Processor			
Memory	4 GB RAM			
	64 GB Flash			
OS	Android™11			
GMS certified	GMS certified			
Languages support	English, Simplified Chinese, Traditional Chinese, Japanese, Spanish,			
	German, French, Italian, Portuguese, Korean and multiple languages			
Others	Input Chinese/ English			
	Supports handwriting and soft keyboard			
Display				
Screen Size	5.0" TFT-LCD HD (720 x 1280) color screen			
Touchpanel	Gorilla Glass 3. Ultra sensitive capacitive touch screen, compatible with			
	gloves and supports wet resistance			
Keypad				
Side SCAN button x 2 (Le	ft / Right), User-defined function button (programmable key),			
volume up/down buttons,	on/off button			
Camera	Camera			
8MP front camera				
13M rear camera with LEE	D flash and auto-focus function			
Indicator Type				
LED, Speaker, Vibrator				
Symbologies				
Support all major 1D and 2D barcodes				
RFID				
HF	Support HF/NFC, Frequency 13.56Mhz, ISO14443 A/B,			
	ISO15693, Felica(ISO/IEC18092), Mifare compliance			

4



EA520 User's Manual

Power Source		
Main Battery	3.8V 4100mAh Li-ion battery	
	Removable	
	RTC battery : RTC backup only	
<b>Regulatory Approv</b>	als	
CE, FCC, NCC, CC	C, SRRC, VCCI, TELEC, RoHS, BQB, N-Mark, BSMI for battery	
Communication		
Bluetooth®	Bluetooth <sup>®</sup> 5 supported	
WLAN	802.11 a/b/g/n/ac/d/e/h/i/j/k/r/v, 2.4G+5GHz, support fast roaming,	
	VoWiFi, hotspot	
	Compliant with WFA, WPA/WPA2	
WWAN	Global:	
	4G LTE FDD: B1/B2/B3/B5/B7/B8/B20/B28A/B28B	
	TDD: B38/B39/B40/B41	
	3G WCDMA: B1/B5/B8	
	2G GSM: 850,900,1800,1900MHz	
	Americas :	
	4G LTE FDD-B1/B2/B4/B5/B7/B12/B13/B14/B17/B28A/B28B	
	TDD-B38/B40/B41	
	3G WCDMA: B1/2/4/5/8	
	2G GSM: 850,900,1800,1900MHz	
GPS	AGPS, GPS, GLONASS, Beidou, Galileo support	
Sensors	Light Proximity, Accelerometer, e-Compass, Gyroscope sensor	
Fingerprint	Optional	
I/O Interfaces		
USB	USB 2.0 (Type-C)	
OTG	Yes, over USB Type-C	
POGO PIN	Charging via cradle	
SIM Slot	Dual SIM , support LTE + LTE	
Expansion slot	MicroSD, up to 128 GB	
Audio	One speaker (90±3dB @ 10cm), One receiver,	
	Dual noise-cancelling microphones	



EA520 User's Manual

Enclosure			
Dimensions	151.1mm x 76.8mm x 13.7mm		
Weight	242 g (with battery)		
Environmental			
Operating temperature	-20°C to 60°C		
Storage temperature	- 40°C to 70°C (without battery)		
Charging temperature	0°C to 45°C		
Relative Humidity	95% ( non-condensing )		
Drop Specification	1.5m , 1.8m with boot case		
Sealing	IP67		
Vibration/ Tumble test         0.5m tumbles for 300 cycles and 600 drops			
Software			
SOTI, AirWatch, 42Gears, and MoboLink			
Accessories			
USB Type C Cable	• Gun grip		
Terminal Power Adapter	(with US plug) • Boot Case		
Terminal Power Adaptor	(with universal plugs) • Hand Strap Package		
Single Slot Charging Cra	• Glass Screen Protector		

• Single Slot USB Cradle

#### 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	ΗU	IE
		LV					
Ð	PT	RO	SK	SI	ES	SE	UK
	IS	LI	NO	CH	TR		



# **1.4 Getting Started**

### 1.4.1 Remove Battery Cover to install Battery

Remove the battery cover in the direction as shown in the picture below: 1. Turn the latch to the left to unlock the battery cover.



2. Lift the battery cover up to 45 degrees (45°) angle by pulling the bottom-left corner up then gently take the cover off.





3. Align the battery with the bottom slot in the battery compartment.



4. Press down the battery and secure in place.



© 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd. All product and company names are trademarks, service marks, or registered trademarks of their respective owners



### **1.4.2 Install the Battery Cover**

Insert the battery cover in the direction as shown in the picture below:1.There are three hooks on the battery cover. Align the hooks with the recesses on the battery compartment.





2. Insert the battery cover up to 45 degrees (45°) angle, from top to bottom.



- 3. Align the battery cover with the recesses of the battery compartment and press the battery cover down to secure in place. Make sure there is no gap between the device and the battery cover.
- 4. Lock the battery cover by turning the latch to the right **a**. Make sure the battery cover is securely closed, or you may not be able to turn on the terminal.





### 1.4.3 Remove the battery

Pull the plastic sheet and remove the battery from the top.





© 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd. All product and company names are trademarks, service marks, or registered trademarks of their respective owners



### **1.4.4 Charging the Battery**

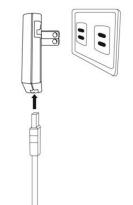
Before using the terminal for the first time, you need to charge it for about 24 hours. For the regular use, you can charge the terminal for 4 hours to recharge the battery to full capacity.

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

Connect the type C USB cable to the USB port on EA520 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 EA520 is turning red when it is in charging state.







### 1.4.5 Turning on the terminal for the first time

It is recommended to fully charge EA520 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 terminal.





### **1.4.6 Checking the LED status**

#### **Checking the Battery Status**

LED	Description	
Red Light	Battery Charging	
	<ul> <li>Twinkling to indicate battery low status (less than 15%)</li> </ul>	
Green Light	Battery Fully charged	
	<ul> <li>Barcode scan good read</li> </ul>	
Blue Light	Message	
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)		

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.



# 1.4.7 Installing SIM/ SD Card

1. Loosen the screw (in counterclockwise direction) with a screwdriver to remove the card holder.



2. Place the SIM Card following the picture below.



© 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd. All product and company names are trademarks, service marks, or registered trademarks of their respective owners

an SD Card.



If you insert two SIM Cards, you can choose either SIM 1 or SIM 2 to be your data preference.



#### Note :

- 1 · Please use standard SIM card.
- 2 . Do not push too hard when SIM card . TF card . SD card are inserted into the slot.



# Chapter 2 – Installation & Operation

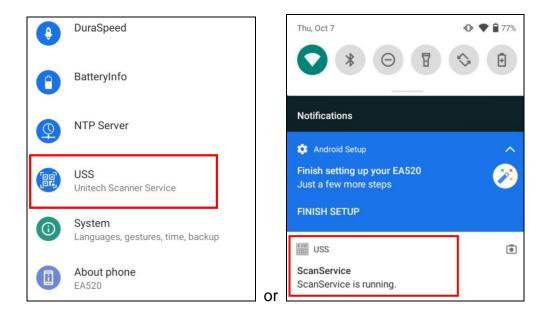
# 2.1 Barcode Setting

0

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 USS (unitech scan service).



2. You now enter the unitech scan service application.



# 2.1.1 Settings

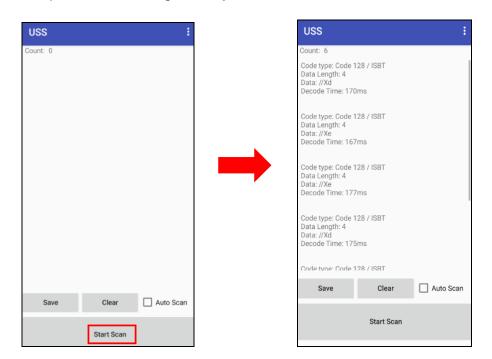
i on After you enter the unitech scan service application, please tap 1. the screen to see all the settings of USS.

USS	Scanner Settings
Count: 0	Symbology Settings
	App Settings
	Append Settings
	Save/Load
	Factory Default
	Image Capture
	Version
	Exit
Save	Clear 🗌 Auto Scan
	Start Scan



### 2.1.2 Barcode Scan

1. Please tap Start Scan to get ready for barcodes scan service.



2. For Save / Load Settings, and Factory Default,



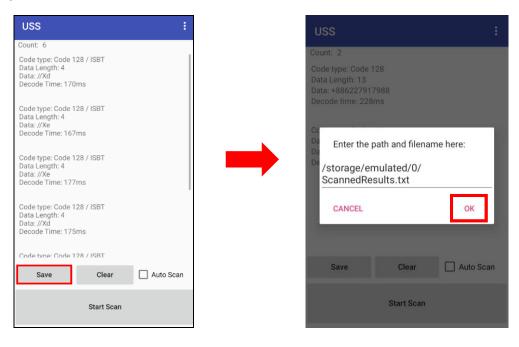


USS	Scanner Settings
Count: 0	Symbology Settings
	App Settings
	Append Settings
	Save/Load
	Factory Default
	Image Capture
	Version
	Exit
Save	Clear 🗌 Auto Scan
	Start Scan

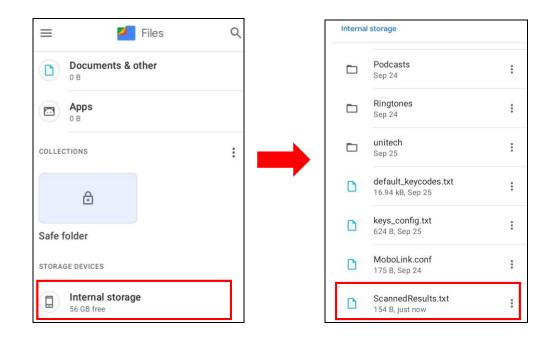
17 © 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd. All product and company names are trademarks, service marks, or registered trademarks of their respective owners



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



The saved data is stored in Files. (Please see 3.2 Files)

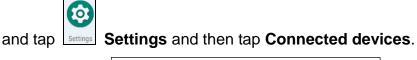


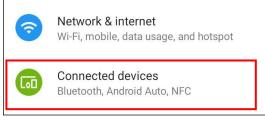
Note: For more information, please refer to 3.1 USS (unitech scan service)



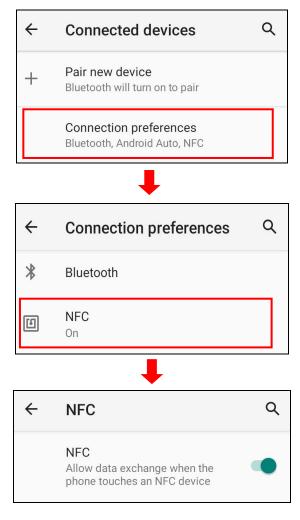
# 2.2 HF Setting

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





Tap Connection Preferences to enable NFC 2.





 Make sure that both devices are unlocked and have NFC turned on. Also make sure that the NFC antenna area of EA520 and the other phone's NFC area are close to one another. Slightly moving the phones until a connection is made. Tap the screen.





## 2.3 WWAN Setting

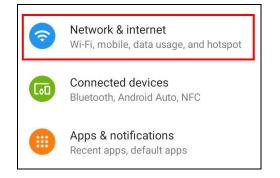
- 1. Turn off the terminal to insert the SIM card. *Note : ●* For the instruction, please refer to <u>1.4.7 Installing SIM/ SD Card</u>.
- 2. Turn on the terminal, 4G signal will show at the top of the screen.



#### 2.3.1 Mobile Network Settings

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

and tap Settings and then tap Network & internet.



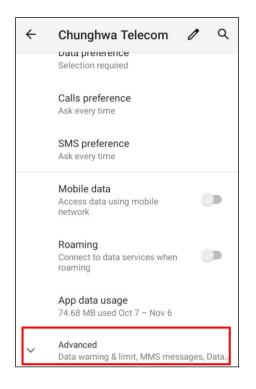


EA520 User's Manual

2. Tap Mobile network for more network settings.

←	Network & internet	۹
((•	Wi-Fi Unitech	
	Mobile network 2 SIMs	
¥	Airplane mode	
0	Hotspot & tethering Off	
0	Data Saver Off	
~	Advanced VPN, Private DNS	

3. Scroll down and tap on advanced.





To choose different network type, please tap **Preferred network type**. 4.

÷	Chunghwa Telecom 🥒 🔍	÷	С	Chunghwa Telecom	1 0	•
	4G Calling Use 4G services to improve voice and other communications (recommended)	P	U	G Calling se 4G services to improve ferred network type		
	Preferred networks	l	٢	2G/3G/4G auto (defaul	t)	
	Preferred network type 2G/3G/4G auto (default)	l	0	2G/3G auto		
	20/00/40 4410 (401441)		0	4G Only		
	Settings version		0	3G Only		
	CALLING		0	2G Only		
	Wi-Fi calling Off				CANCEL	
	NETWORK		N	ETWORK		
	Automatically select network		A	utomatically select netwo	ork 🕚	

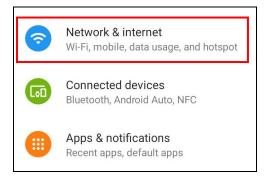


## 2.4 WLAN Setting

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



Settings and then tap Network & internet.



2. To see available networks, turn WLAN **ON**. And tap to choose the available networks.

÷	Network & internet	م
((.	<b>Wi-Fi</b> Unitech	
	Mobile network 2 SIMs	
	Airplane mode	
0	Hotspot & tethering Off	
0	Data Saver Off	
~	Advanced VPN, Private DNS	



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

– Wi-Fi	Q
UTEMobile Password	
Show password	
Advanced options	~
CANCEL	CONNECT

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

÷	Wi-Fi	۹
	Use Wi-Fi	
$\bigtriangledown$	HP-Print-24-LaserJet 1102	
$\bigtriangledown$	Y075070	ĉ
$\bigtriangledown$	yaqui	£
$\Diamond$	Zyxele3df48	Ô
+	Add network	812

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

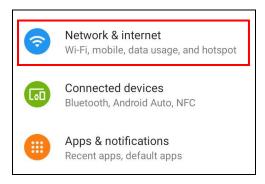


#### 2.4.1 Share Wi-Fi

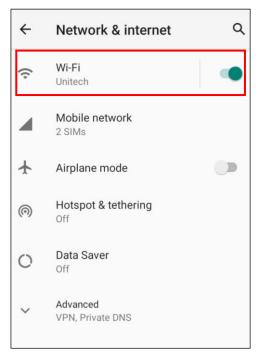
1. On the main screen, scroll the screen from down to top to reach the APPS,



and tap Settings and then tap Network & internet.

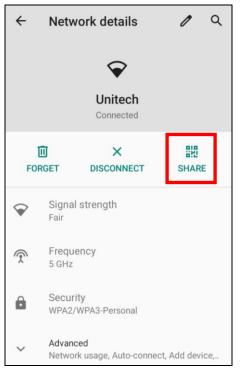


2. To see available networks, turn WLAN **ON**. And tap to choose the available networks.





When Wi-Fi is connected, tap "Share" icon to show QR code.







## 2.5 PAN Setting

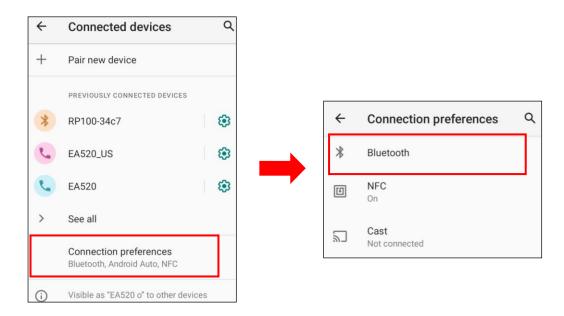
1. On the main screen, scroll the screen from down to top to reach the APPS,



Settings and then tap Connected devices.



#### 2. Tap Connection Preferences to enable Bluetooth<sup>®</sup>.





 Tap ON / OFF to enable / disable Bluetooth<sup>®</sup>. To pair the available device, turn Bluetooth<sup>®</sup> ON to choose the available device.

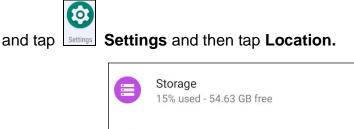
÷	Bluetooth Q
	On 💽
	Device name EA520 o
+	Pair new device
(i)	When Bluetooth is turned on, your device can communicate with other nearby Bluetooth devices.

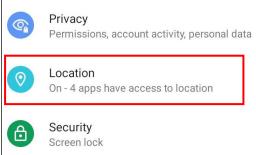
*Note*: You can only use Bluetooth<sup>®</sup> to transfer files between two EA520, and can not use USB or NFC to transfer files.



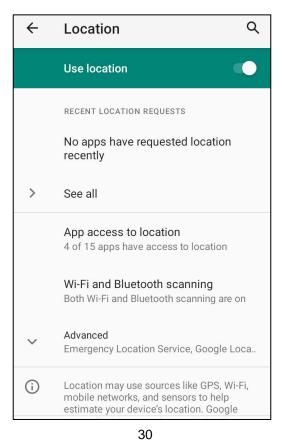
## 2.6 GPS Setting

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





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



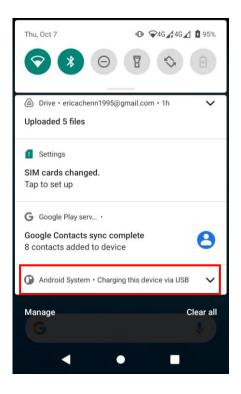


## 2.7 PC Setting

1. Connect EA520 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**.

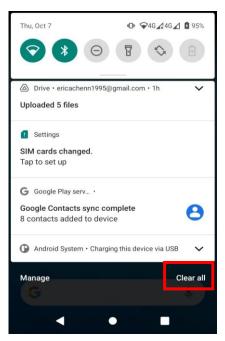


© 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd. All product and company names are trademarks, service marks, or registered trademarks of their respective owners

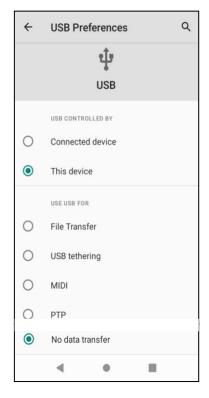
31



*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.



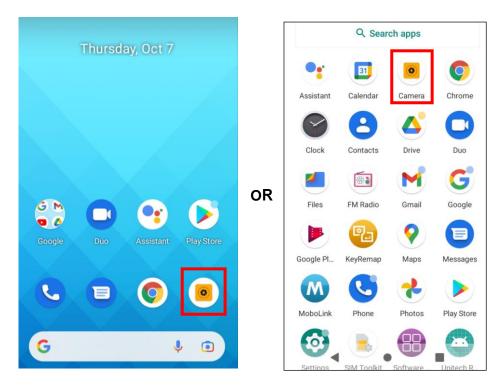
32



## 2.8 Camera Setting

1. Camera on the main screen, or scroll the screen from down to Тар 0

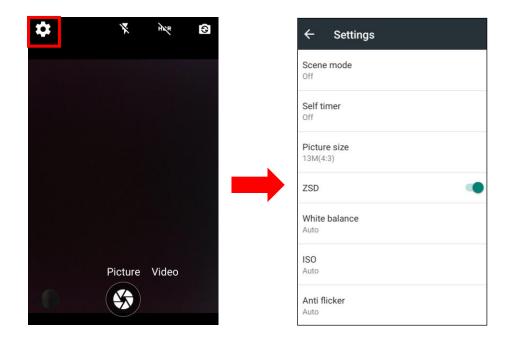
top to reach the APPS, and tap Camera.





#### 2.8.1 Settings

Please tap to enter the settings section.



#### 2.8.2 Scene Mode Setting

Please tap and select Scene mode to access mode settings.

🎝 🦹 🤾 🕅	← Settings	÷	Scene mode	
	Scene mode Off		Off	۲
		2-	Auto	0
	Self timer Off	)	Night	0
	Picture size 13M(4:3)		Sunset	0
			Party	0
		-	Portrait	0
	White balance Auto	**	Landscape	0
Picture Video	ISO Auto	±,	Night portrait	0
	Anti flicker	M	Theatre	0
	Auto	R	Beach	0

34

© 2021 unitech Electronics Co., Ltd. All rights reserved.

unitech is a registered trademark of unitech Electronics Co., Ltd.

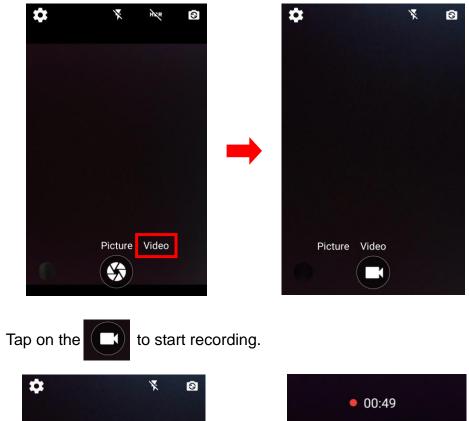
All product and company names are trademarks, service marks, or registered trademarks of their respective owners

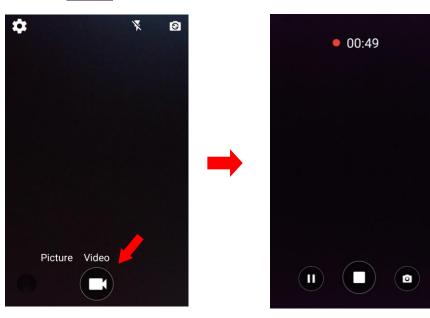


### 2.8.3 Record Videos

2.

1. Tap on Video to switch to the Video mode.







# 2.9 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). Long press and hold the **Power button** around 10 seconds to restart the device.





## 2.10 Performing Factory data reset

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

and tap Settings a	and then tap <b>System.</b>
8	Digital Wellbeing & parental controls Screen time, app timers, bedtime schedules
C	Google Services & preferences
•	DuraSpeed
•	BatteryInfo
9	NTP Server
	USS Unitech Scanner Service
0	System Languages, gestures, time, backup
	About phone EA520

2. Tap Advanced for more options, and then tap Reset options.

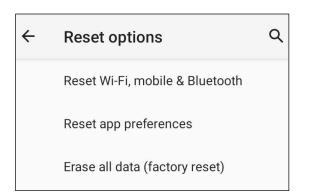
		<del>~</del>	System	Q
4	System Q		Languages & input Gboard	
⊕	Languages & input Gboard	C	Gestures	
[`+	Gestures	0	Date & time GMT+08:00 Taipei Standard Time	
0	Date & time GMT+08:00 Taipei Standard Time		Backup Off	
٢	Backup Off	5	Reset options Network, apps, or device can be res	set
~	Advanced	Do	Multiple users Signed in as Owner	
	Reset options, Multiple users, System upd	ŧ	System updates	

37



3. You can reset the system on **Reset options**.

When you select Erase all data (factory reset), it will erase all folders.

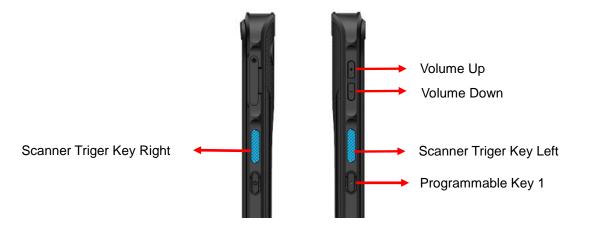




## 2.11 KeyRemap

The EA520'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.

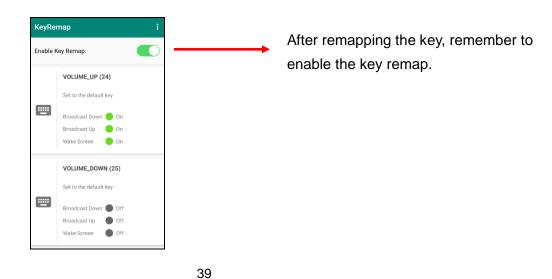


### 2.11.1 Remap a key

On the main screen, scroll the screen from down to top to reach the APPS, and

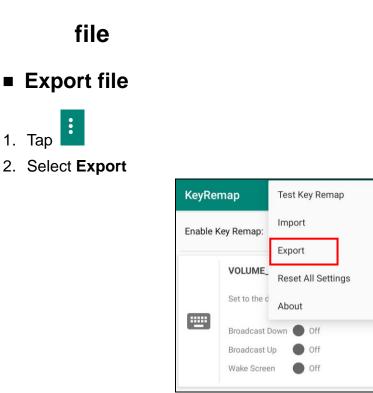


KeyRemap. Select the keys to remap and enable key.





### 2.11.2 Export / Import a remap Key Configuration

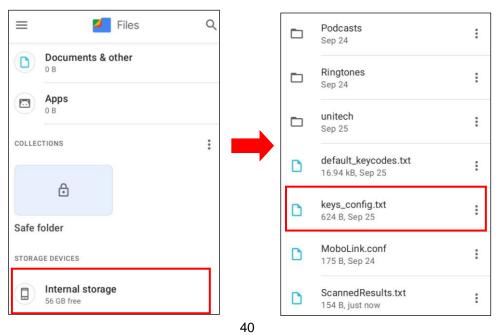


The remap Key configuration can be exported to a text file or imported into EA520.

Note: The configuration file (keys\_config. is saved in Files.

(For Files setting, please refer to 3.2 Files.)

1. Tap



© 2021 unitech Electronics Co., Ltd. All rights reserved. unitech is a registered trademark of unitech Electronics Co., Ltd.

All product and company names are trademarks, service marks, or registered trademarks of their respective owners



#### Import file

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



2. Select Import

KeyRe	map	Test Key Remap
Enable	Key Remap:	Import
	· · ·	Export
	VOLUME_	Reset All Settings
_	Set to the c	About
<u> </u>	Broadcast [	Down 🌑 Off
	Broadcast U	Jp Off
	Wake Scree	n 🕒 Off

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

KeyRe	map	Test Key Remap
Enable	Key Remap:	Import
		Export
	VOLUME_	Reset All Settings
_	Set to the d	About
<u> </u>	Broadcast [	Down 🔵 Off
	Broadcast L	Jp 🌑 Off
	Wake Scree	en 🕒 Off
	,I	



## 2.12 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.

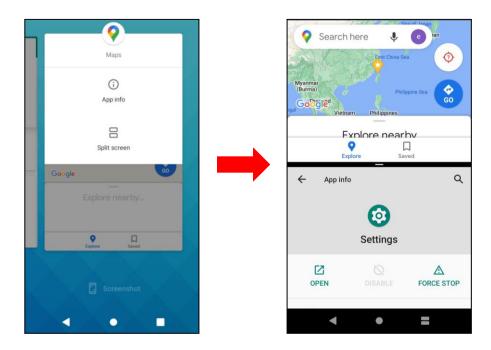
Note: Some apps may not work with split-screen.

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





 Tap and hold the icon which appears above the APP thumbnail and then select "Split screen." First APP "Split screen" 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 the two APPs to expand the app that you would like to keep in full screen.

Search I	ter Andreas Conta	an
Myanmar (Burma) gal Vietnar		ppine Sea
F	kolore near	
← App info		Q
<		`
	0	
< түр шо		
C OPEN	0	A FORCE STOP



# 2.13 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.

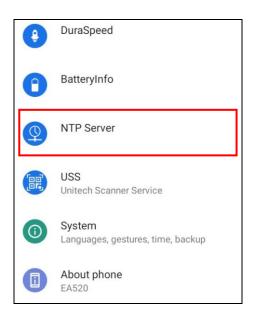
1. On the main screen, scroll the screen from down to top to reach the APPS,



Settings and then tap NTP (Network Time Protocol)

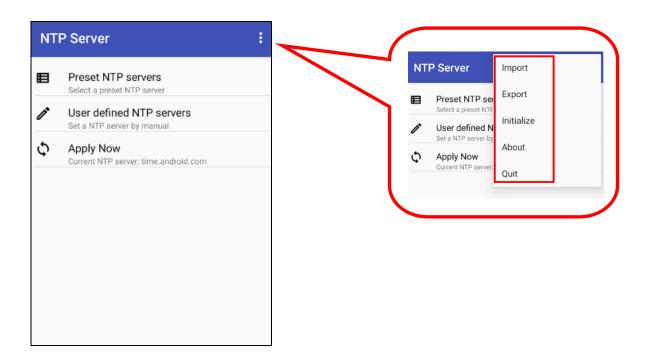
Server.

and tap





2. On NTP Server, please choose the system preferences to set up network time.





# Chapter 3 – Introduction to Applications

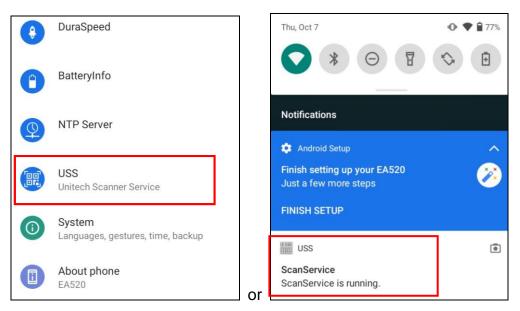
## 3.1 USS (unitech scan service)

1. On the main screen, scroll the screen from down 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 ).

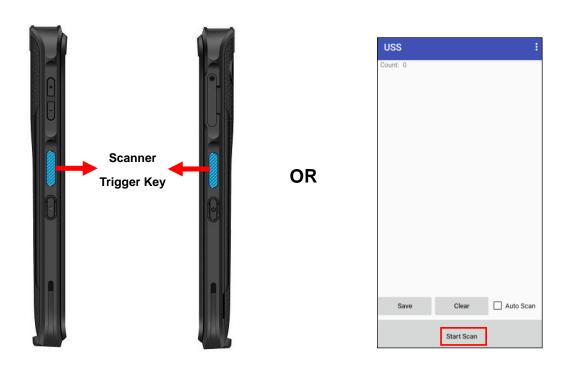


2. You now enter the unitech scan service application.



#### 3.1.1 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**.





- 2. After scanning the barcodes, the barcode information is shown as below.
- 3. To save the scanned data, tap **Save** and enter the path and filename, then tap **OK**.

USS	8	USS		
Count: 6		055		
Code type: Code 128 / ISBT Data Length: 4 Data: //Xd Decode Time: 170ms		Count: 2 Code type: Code 12	8	
Code type: Code 128 / ISBT Data Length: 4 Data: //Xe Decode Time: 167ms		Data Length: 13 Data: +8862279179 Decode time: 228m	S	
Code type: Code 128 / ISBT Data Length: 4 Data: //Xe Decode Time: 177ms		De Enter the pa De /storage/em ScannedRes		ne her
Code type: Code 128 / ISBT Data Length: 4 Data: //Xd Decode Time: 175ms		CANCEL	_	
Code type: Code 128 / ISBT				
Save Clear	Auto Scan	Save	Clear	
Start Scan			Start Scan	

4. More Options

For more options and settings, please tap

USS	Scanner Settings
Count: 0	Symbology Settings
	App Settings
	Append Settings
	Save/Load
	Factory Default
	Image Capture
	Version
	Exit
Save	Clear Auto Scan
	_
	Start Scan

48



#### 3.1.2 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.

← Scanner Settings	:
LowerRightWindowY 422	
Multi Decode Mode Enable/Disable Multi Decode Mode	Enable
Multi Decode Count 2	

### 3.1.3 Bookland ISBN

The Bookland ISBN format supports two types of barcodes, including Bookland ISBN-10 and Bookland ISBN-13.

The default of EA520 is Bookland ISBN-10. If you are unable to scan the barcode, please switch to Bookland ISBN-13 following the instructions below.

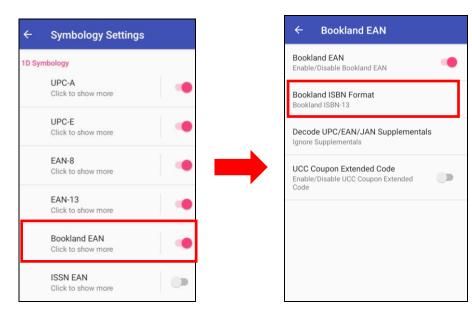
1.Please tap i and tap on Symbology Settings.

USS	Scanner Settings
Count: 0	Symbology Settings
	App Settings
	Append Settings
	Save/Load
	Factory Default
	Image Capture
	Version
	Exit
Save	Clear Auto Scan
\$	Start Scan

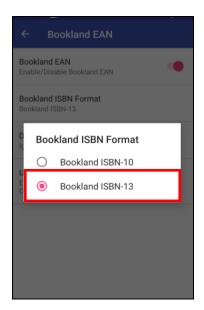
49



2. Tap on Bookland EAN, then tap on Bookland ISBN Format.



3, Select Bookland ISBN-13.



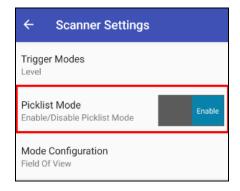


#### 3.1.4 Picklist Mode

Picklist mode enables EA520 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 : <u>https://www.youtube.com/watch?v=QjT2E6hxD\_k</u>

- 1. Tap i, 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.



## 3.1.5 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



## 3.2 Files

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

tap	Files	Files.

× 1

1

		📕 Files	Q
CATEG	ORIES		
F	Downloa 0 B	ads	
	Images 0 B		
	Videos <sup>0 B</sup>		
J	Audio 0 B		
	Docume 0 B	nts & other	
	<b>Аррз</b> 0 В		
≺ ci	<b>≻</b> ean	Browse	<b>↓</b> → Share
		•	



## 3.3 Software Update

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

and tap **Software Update** and then tap **App Update Center**.

2. To update or check the latest version of each application, please tap **CHECK UPDATE.** 

Please tap button below to check updates of unitech applications	4
CHECK UPDATE	

3. Tap if for more settings on Software Update.

Softv	vare Update :	Import / Export/
F	Operation Mode Normal Mode	
₽	Update Policy	
€	Server URL https://apps.ute.com/usus	
От	Passcode	



## 3.4 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 -



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.





EA520 User's Manual



This is when the script is ready to be transformed into QRCodes and get printed out for distribution to the fields. The QRCodes 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 ecnrypted file and share it with a colleague.

Stage version 2.0 (Cor Device Initialization EA630	e version 2.0 (Command Set: FullyManaged) the Initialization		Scanner Mode  • Camera Mode Number of QRCode: 8 •		

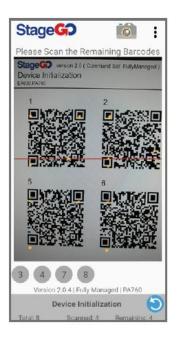


Step 3. Scan QRCode:



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.



Executing	
PAUSE	
	10/35
00:10	

