

DR6 Rugged Handheld Computer



User's Manual



Table of Contents

Chapter 1 - Overview	1
1.1 Package	1
1.2 Product Detail	2
1.3 Specifications	4
1.4 Getting Started	7
Chapter 2 – Installation & Operation	14
2.1 Barcode Setting	14
2.2 HF Setting	
2.3 WWAN Setting	21
2.4 WLAN Setting	24
2.5 PAN Setting	32
2.6 GPS Setting	34
2.7 PC Setting	35
2.8 Camera Setting	37
2.9 USS Camera	41
2.10Performing a Hardware Reset	46
2.11 Performing Factory data reset	47
2.12 KeyRemap	48
2.13 Split Screen	
2.14 Network Time Protocol (NTP) Server	53
Chapter 3 – Introduction to Applications	55
3.1 USS (scan service)	55
3.2 Enterprise Keyboard	
3.3 Logger	61
3.4 Software Update	63
3.5 StageGO	65



Chapter 1 - Overview

1.1 Package

Please make sure the following contents are in the DR6 gift box. If something is missing or damaged, please contact your Wasp representative.

The basic package contents

- DR6 Rugged Handheld Computer
- Battery
- Hand Strap
- USB Type-C Cable
- Quick Start Guide

Optional accessories

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



1.2 Product Detail

DR6 Product View

Top View



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

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



Rear View



Bottom View

- **10.** Microphone (Sub)
- 11. Flash LED
- 12. Rear Camera
- **13.** Speaker
- 14. Hand Strap Holes
- **15.** NFC

- **16.** Pogo Pin for gun grip
- 17. Pogo Pin for cradle
- 18. Microphone (Main)
- 19. Hand Strap Hole
- 20. USB Type-C Hole



1.3 Specifications

System Features	
CPU	Qualcomm Snapdragon™ 6490 Processor, 64bits,
	Octa Cores up to 2.7 GHz
Memory	6 GB RAM
	64 GB UFS Flash (128GB option)
os	Android 12 with GMS & AER certified
GMS certified	GMS certified
Languages support	Multiple languages
Display	
Screen Size	6.3" Color LCD 2160 X 1080 (FHD+) High Resolution Display
Touchpanel	Gorilla Glass with Multi-Touch Capacitive Touch Panel,
	support stylus, glove, wet-finger Compatibility
	High sunlight visibility - LCD backlight up to 500nits
Keypad	
Programmable key, Volum	ne up/down key, Left/right scan key, Power key
Camera	
5 MP Front camera	
16 MP Rear Camera with	LED flash and auto-focus function,
Support Google ARcore	
Indicator Type	
LED, Vibrator	
Symbologies	
Built-in 2D imager engine	with red laser aimer, with 1 Mpx & global shutter function
Support all 1D & 2D major	barcodes
RFID	
UHF	UHF pistol grip (see RG768)
HF	Support HF/NFC
	Frequency 13.56Mhz
	Support: ISO14443A/B, ISO15693, Mifare,
	Felica(ISO/IEC18092)



Power Source			
Main Battery	Hot Swappable 5100mAh Li-Polymer battery /		
	battery with cover in one piece		
Extended battery	7600mAh / battery with cover in one piece (optional)		
Hot Swap	Yes		
Regulatory Approvals			
CE, FCC, NCC, VCCI, TELEC, CCC, SRRC, BQB, N-Mark, RoHS 2.0			
Communication			
Bluetooth [®]	Bluetooth® 5.2 , BLE 5, Class 1		
WLAN	WLAN 6E+DBS, 2.4GHz & 5GHz & 6GHz		
	IEEE 802.11a/b/g/n/ac/d/h/i/k/r/v/ac/ax (2x2 MU-MIMO)		
	Security WPA3, WPA2, WPA & WEP		
WWAN	5G Sub 6GHz:N1/N2/N3/N5/N28/N41/N71/N77/N78/N79		
	(4x4 MIMO)		
	4G LTE(FDD) – Bands 1, 2, 3, 4, 5, 7, 8, 17, 20, 28		
	(TDD) – Bands 38, 39, 40, 41		
	3G UMTS/HSPA+		
	2G GSM/GPRS/EDGE (850/900/1800/1900 MHz)		
GPS	GPS, GLONASS, Gallileo, Beidou, QZSS, SBAS,		
	supports L1+L5, a-GPS, XTRA		
Sensors	Gyroscope, G-sensor, E-compass, Light & Proximity Sensor		
I/O Interfaces			
USB	USB 3.1 type C, support fast charging, OTG		
POGO PIN	Bottom pogo pin for cradles, rear pogo pin for pistol grips		
SIM Slot	Nano SIM Slot x 2		
Expansion slot	Micro SD x 1, up to 256 GB		
Audio	SmartPA Speaker support 100 dB at 10cm		
	Dual-Microphone support noise cancellation		
Enclosure			
Dimensions	167mm x 75.5mm x 17mm (H x W x D)		
Weight	270 g		
Environmental			
Operating temperature	-4°F to 131°F (-20°C to 55°C)		



Storage temperature	-40°F to 158°F (-40°C to 70°C), without battery		
Relative Humidity	5% ~ 95% (Non-Condensing)		
Drop Specification	1.8 meter with bumper		
	1.5 meter without bumper		
Sealing	IP67		
Vibration/Tumble test	Tumble 600 times (1.6 ft./0.5 m)		
Software			
MDM Software	SOTI, AirWatch, 42Gears, 12Manage, and MoboLink		
Accessories			
■ Hand Strap	■ 1 Slot USB cradle		
■ USB 3.0 Type-C cable	e I Slot Charging cradle		
■ Fast charge adaptor	1 Slot Ethernet cradle		
■ 9H glass screen prote	ector Multi-Slot Terminal Charging / Ethernet		
	Cradle /Battery Charger		
	Standard/UHF pistol grip		
	Stylus with Coiled strap		

Note:

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





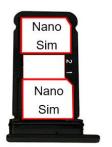
1.4 Getting Started

1.4.1 Inserting the Micro SD/Nano SIM Card

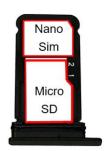
1. Pick out the Micro SD/Nano SIM card holder.



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



or





1.4.2 Install the Battery

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



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



3. Press down the battery to secure in place





1.4.3 Remove the battery

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



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





1.4.4 Charging the Battery

Before using the DR6 for the first time, you need to charge it for about 24 hours. For the regular use, you can charge the DR6 for 4 hours to recharge the battery to full capacity.

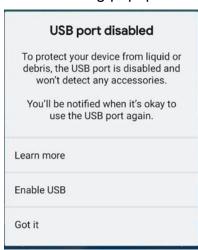
To charge the DR6, please use the USB charging cable or the cradle.

Connect the type C USB cable to the USB port on DR6 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 DR6 is turning red when it is in charging state.



Note:

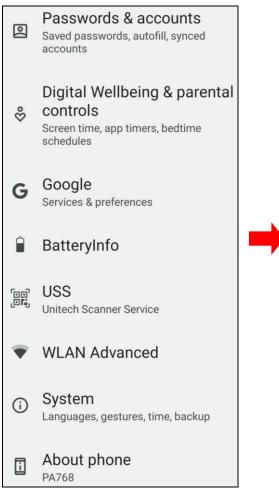
To protect your device, the USB port will be disabled once it detects contaminants. You will see the following popup window:

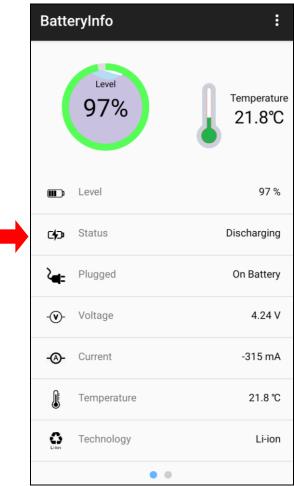




1.4.5 Battery Info

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







1.4.6 Turning on the DR6 for the first time

It is recommended to fully charge DR6 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 DR6.





1.4.7 Checking the LED status

Checking the Battery Status

LED		Description
Red Light	•	Battery Charging
Green Light	•	Battery Fully charged
	•	Barcode scan good read
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.



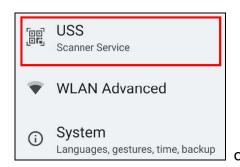
Chapter 2 – Installation & Operation 2.1 Barcode Setting

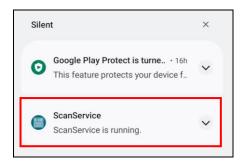
1. On the main screen, scroll up the screen to reach the APPS, and



Settings settings and then tap USS (Wasp scan service).

Or from the notification bar to tap ScanService.

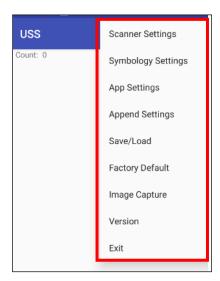




You now enter the **USS** application.

2.1.1 Settings

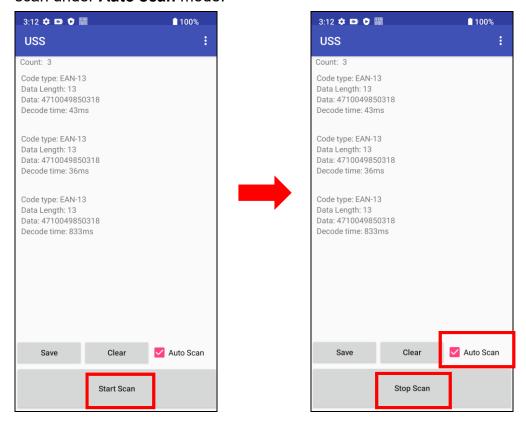
After you enter the application, please tap the to see all the settings of USS.





2.1.2 Barcode Scan

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

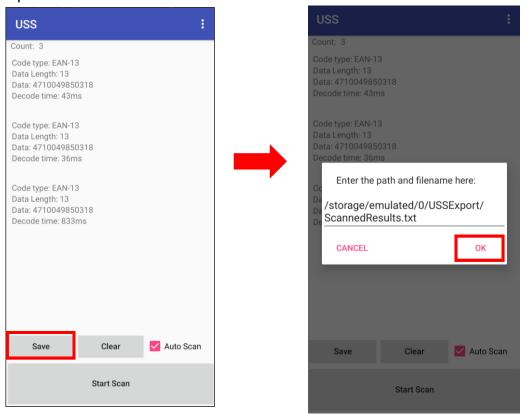


 For Save / Load Settings, and Factory Default, Please tap and to select Save / Load Settings, and Factory Default.

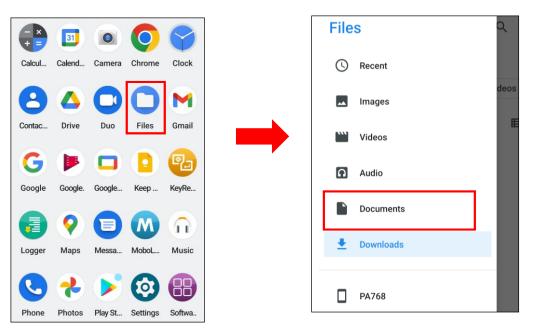




3. To save settings, you can also tap **Save** on the screen and input path then tap **OK**.

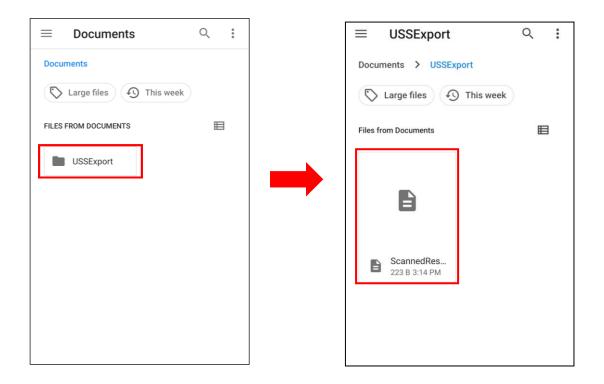


The saved data is stored in Files →Documents





 $USSExport \rightarrow ScannedResults.txt. \\$



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



2.2 HF Setting

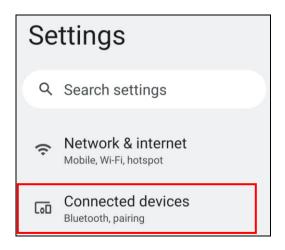
2.2.1 HF Setting

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

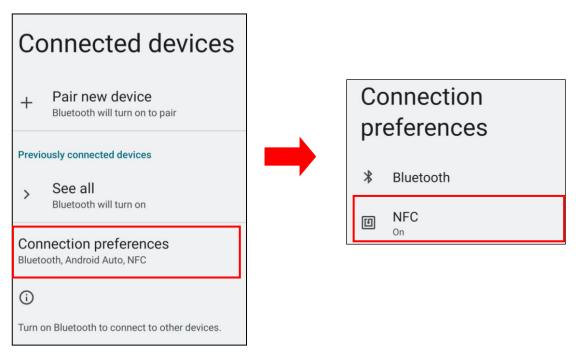


and tap **Settings**

then Connected devices.



2. Tap Connection Preferences to enable NFC





4. Make sure that both devices are unlocked and have NFC turned on. Also make sure that the NFC antenna area of DR6 and the other phone's NFC area are close to one another. Slightly moving the phones until a connection is made. Tap the screen.





2.2.2 NFCService

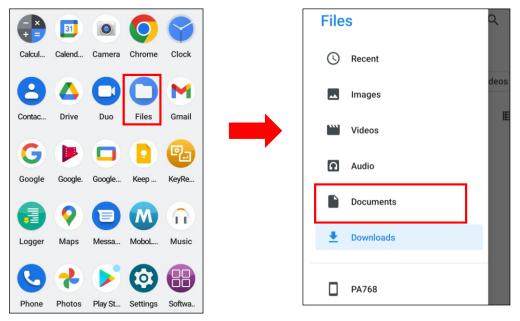
On the main screen, scroll the screen from bottom to top to reach the APPS,



and tap NFCService



The saved data is stored in Files →Documents

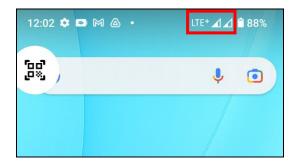




2.3 WWAN Setting

- 1. Turn off the DR6 to insert the SIM card.

 Note: For the instruction, please refer to 1.4.1 Inserting the Micro SD/Nano SIM Card
- 2. Turn on the DR6, LTE signal will show at the top of the screen.



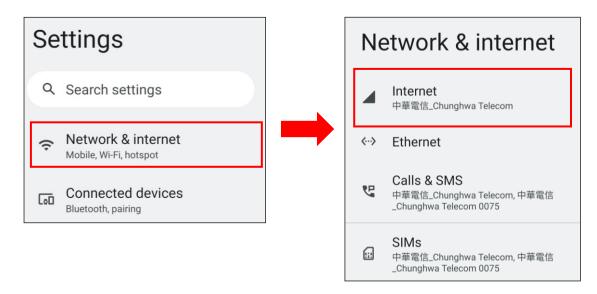
2.3.1 Mobile Network Settings

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



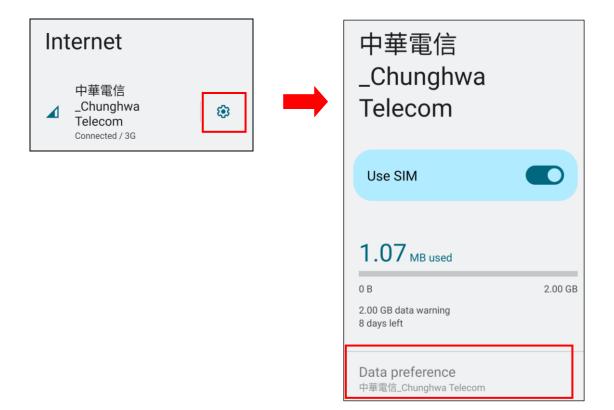
APPS, and tap \[

Settings and then tap Network & internet.



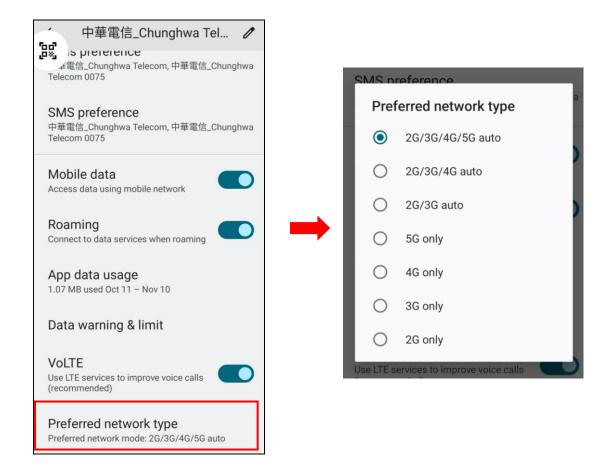


2. Tap on the settings icon for more network settings. To switch between 2 SIMs, tap on data preference.





3. To choose different network type, please tap Preferred network type.





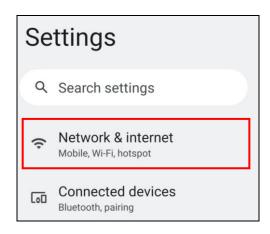
2.4 WLAN Setting

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

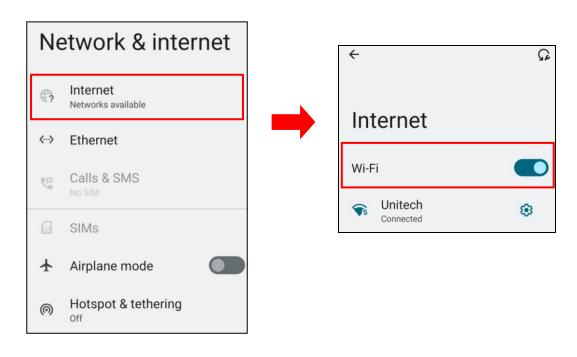


APPS, and tap

Settings and then tap Network & internet.



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

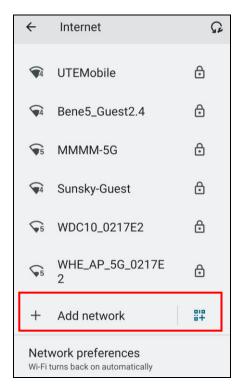




3. Choose the available networks, and enter the Password and tap Connect.



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



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



2.4.1 WLAN Advanced

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

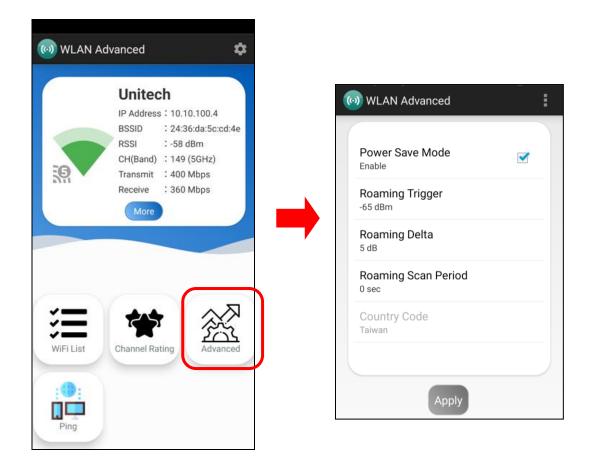
WLAN advanced will help users to manage the seamless roaming.

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





2. Tap on Advanced.





Power Save Mode

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

Roaming Trigger (Default : -65 dBm, Range : -10 dBm ~ - 120 dBm)
 Roaming trigger will help users to look for a better and stronger signal strength (in dBm) by scanning many access points. When the signal strength is lower than roaming trigger value, roaming trigger will start to look for better access points.

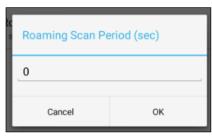


Roaming Delta (Default : 5 dB, Range : 0 dB ~ 30 dB)
 Based on roaming delta value, the device will roam to a better signal strength access point.



Roaming Scan Period (Default : 0 ms, Range : 0 ms ~ 60 sec)
 The device will stay with the current AP based on the roam period value

before it roams to a different AP.

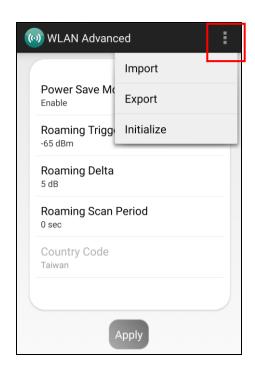




2.4.1.1 Other options

Tap for more options to import / export the current data from the device.

Initialize is able to restore the default settings.





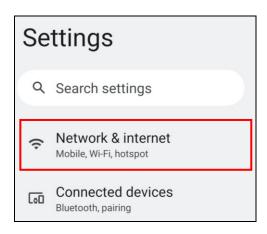
2.4.2 Share Wi-Fi

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



and tap

Settings and then tap Network & internet.



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





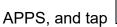
3. When Wi-Fi is connected, tap "Share" icon to show QR code.





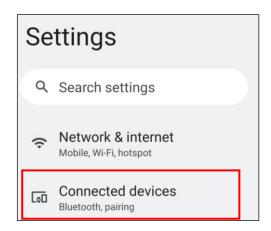
2.5 PAN Setting

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

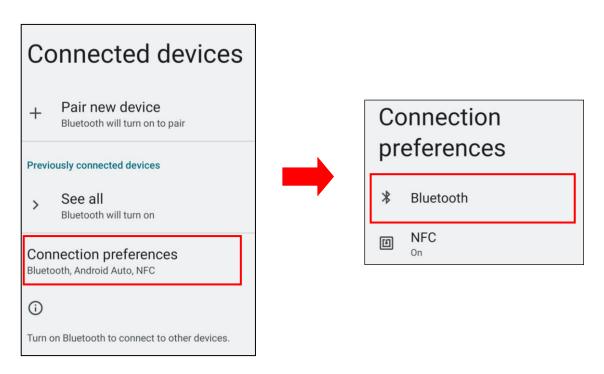




Settings and then tap Connected devices.

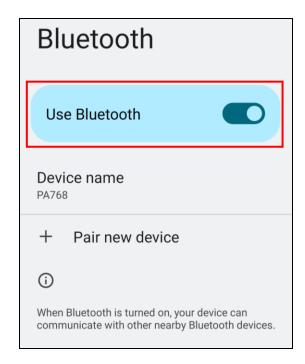


2. Tap Connection Preferences to enable Bluetooth®.





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





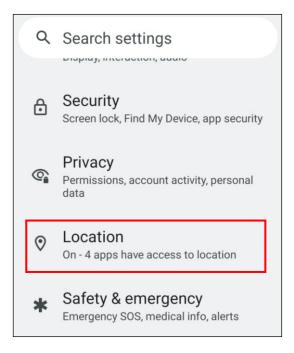
2.6 GPS Setting

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

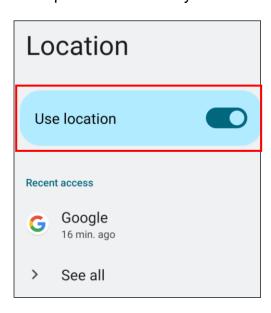


APPS, and tap

Settings and then tap Location.



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



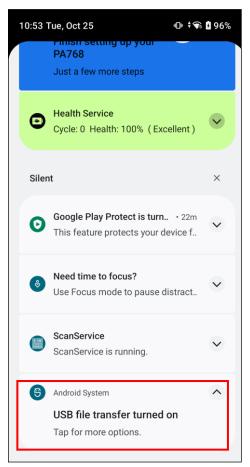


2.7 PC Setting

 Connect DR6 to your computer with the USB type C cable. Your computer will recognize it is USB charging.

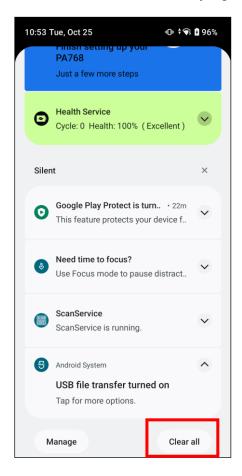


2. Slide down from top, the system will show as follow picture, then you can tap on **Android System Charging this device via USB**.





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



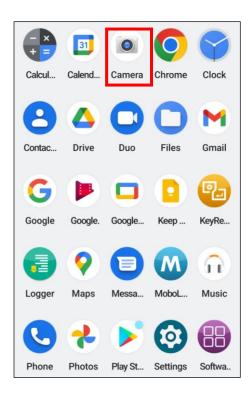
3. Then you can select File Transfer.





2.8 Camera Setting

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





2.8.1 Introduction

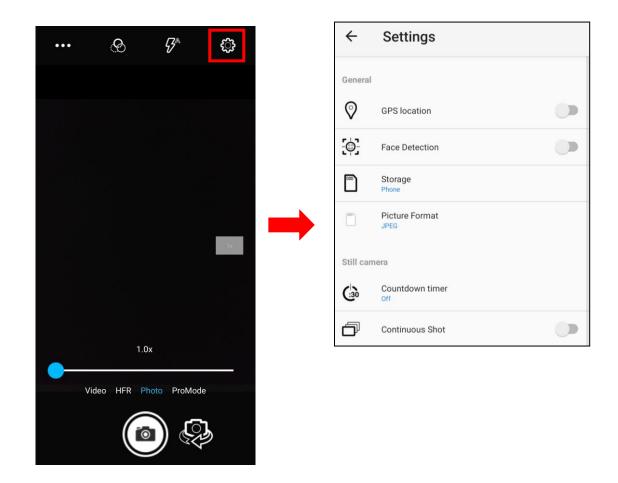
For the first time turn on, the screen will show a brief introduction about camera settings.





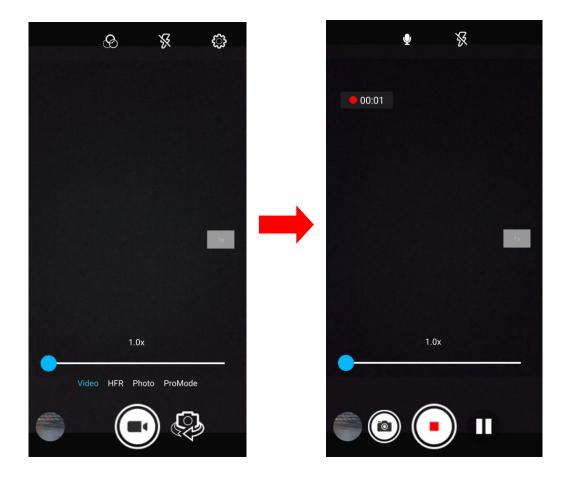
2.8.2 Settings

Please tap to enter the settings section.





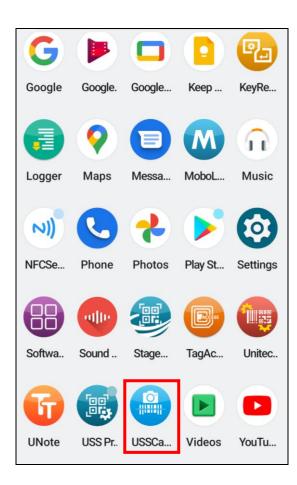
3. Once tap the record button, it will start recording.





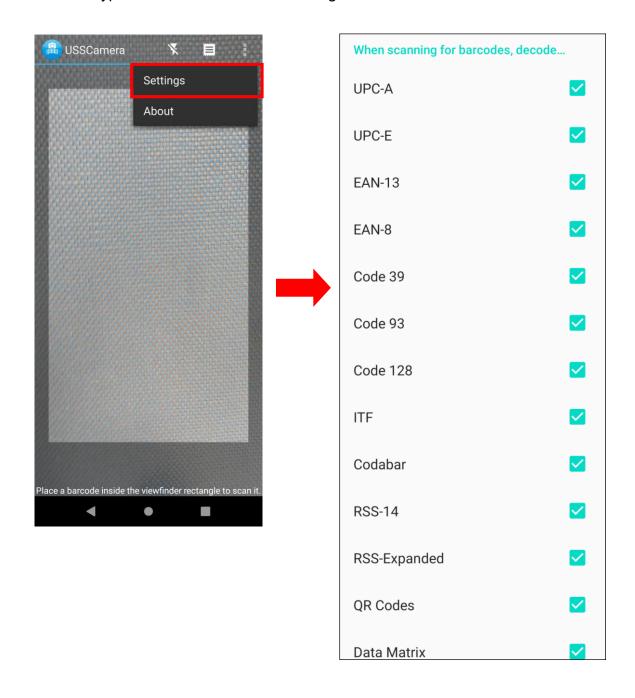
2.9 USS Camera

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





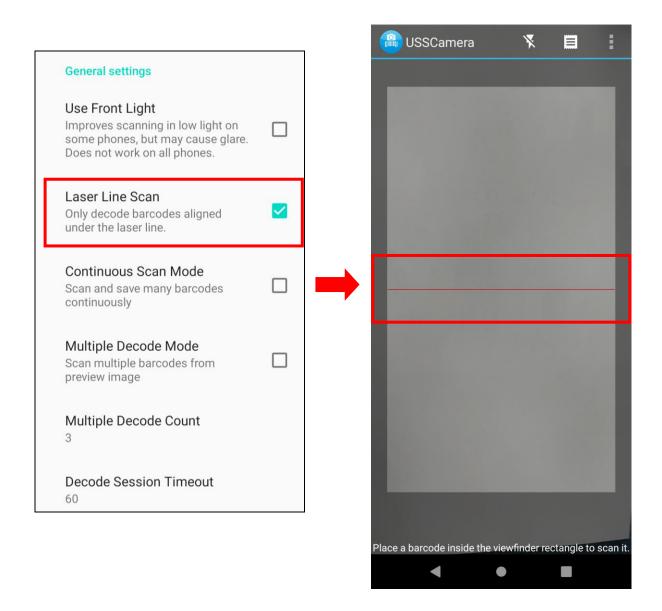
2. Select the types of barcodes from the settings.





2.9.1 Laser Line Scan

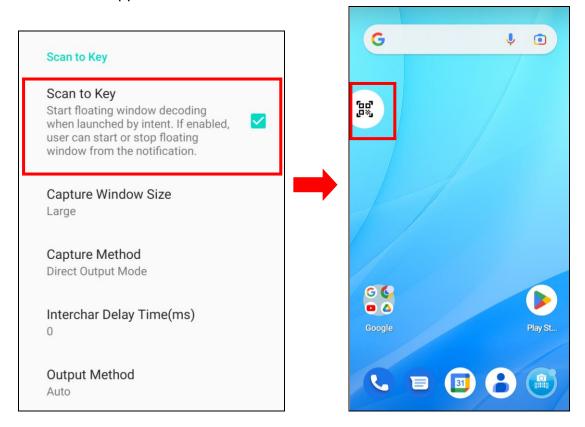
When you select Laser Line Scan, it means only barcodes aligned under the laser line will be decoded.





2.9.2 Scan to Key (floating window)

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





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

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





2.10 Performing a Hardware Reset

You may have to perform a reset if the device freezes (i.e., the DR6 no longer responds to the buttons or tapping on the screen). Long press and hold the **Power button** around 10 seconds to restart the device.





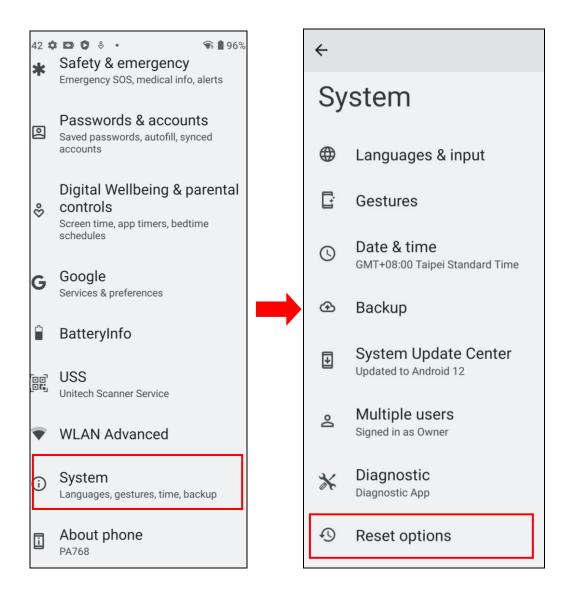
2.11 Performing Factory data reset

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



and tap **Settings**

→ **System,** then **select** Reset Options.



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



2.12 KeyRemap

The DR6's keys can be programmed for users to be able to perform different functions or applications.

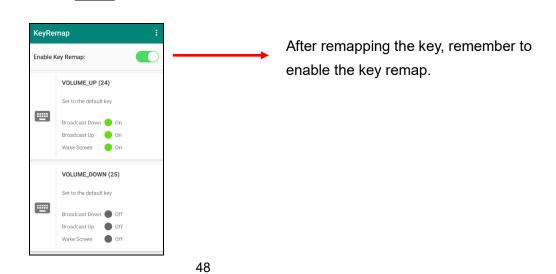
Four options to use key remap functions: Volume_Up, Volume_Down, Programmable Key 1, Scanner Trigger Key Left and Scanner Trigger Key Right.



2.12.1 Remap a key

KeyRemap

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



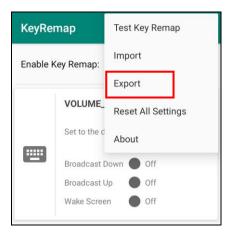


2.12.2 Export / Import a remap Key Configuration

file

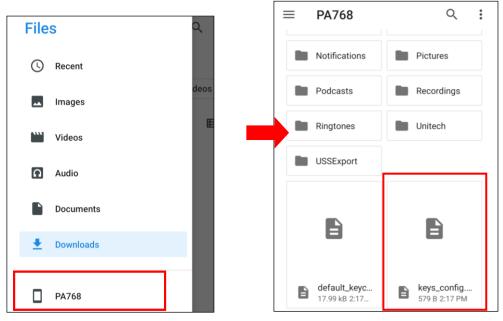
■ Export file

- 1. Tap
- 2. Select Export



The remap Key configuration can be exported to a text file or imported into the DR6.

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

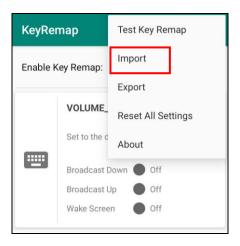




■ Import file

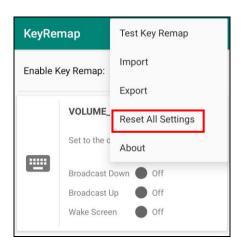
Before importing the file, please make sure the configuration file (keys_config.txt) is in the Files.

- 1. Tap
- 2. Select Import



■ Reset all settings

- 1. Tap
- 2. Select Reset all settings



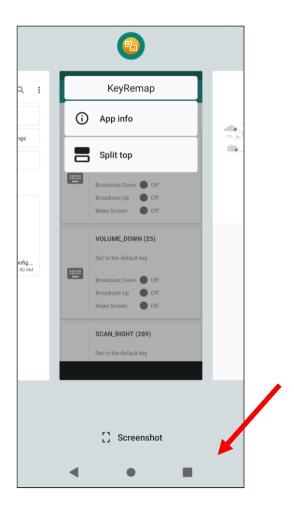


2.13 Split Screen

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

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

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





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

KeyRemap

App info

Split top

Split top

Broadcast Down Off
Broadcast Up Off
Wake Screen Off

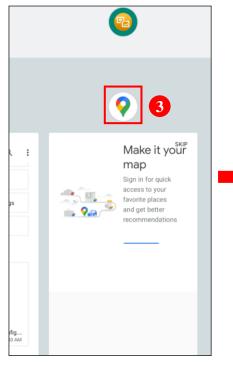
Volume_Down (25)

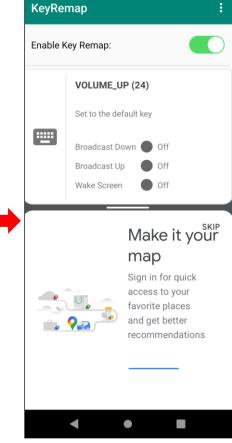
Set to the default key

Broadcast Up Off
Wake Screen Off

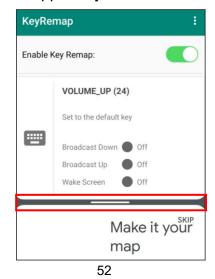
SCAN_RIGHT (289)

Set to the default key





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

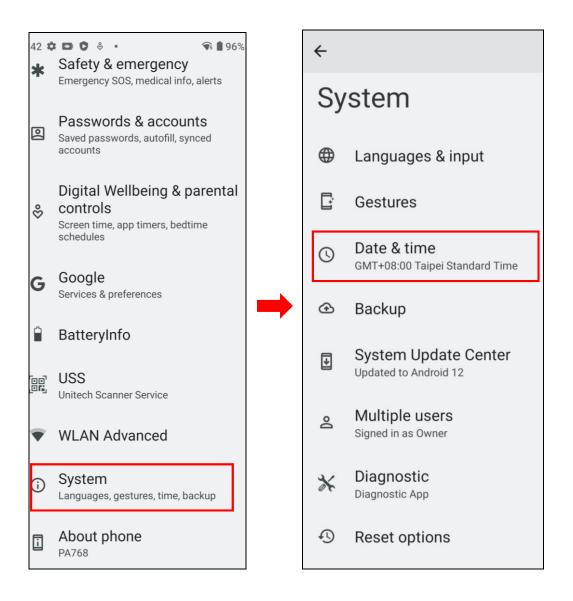




2.14 Network Time Protocol (NTP) Server

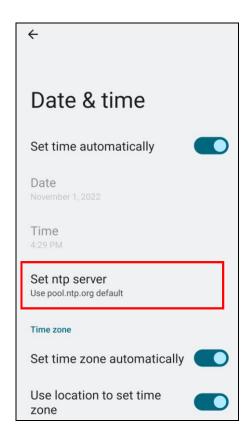
The Network Time Protocol is used to synchronize the clocks over the Internet. Allow the users to set the clock by using NTP Server.

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





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





Chapter 3 – Introduction to Applications

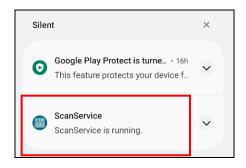
3.1 USS (Wasp scan service)

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

APPS, and tap Settings and then tap USS (Wasp scan service).

Or from the notification bar to tap USS (Wasp scan service).



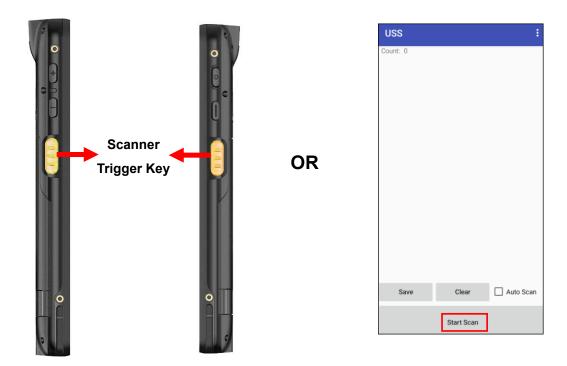


2. You now enter the Wasp scan service application.



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**.

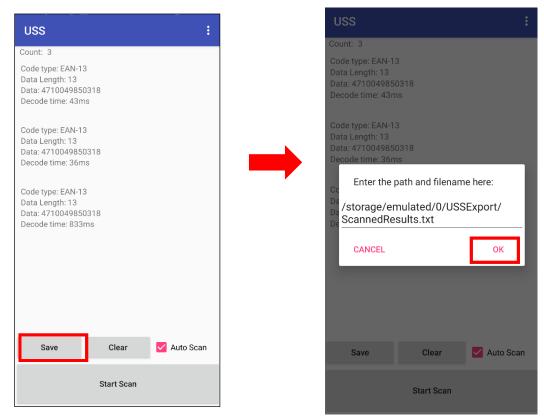


1. After scanning the barcodes, the barcode information is shown as below.



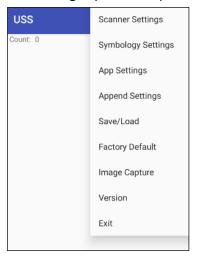


2. To save the scanned data, tap **Save** and enter the path and filename, then tap **OK**.



3. More Options

For more options and settings, please tap

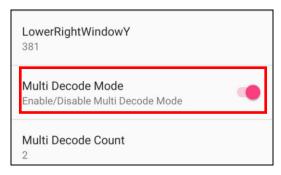




3.1.2 Multi Decode Scan Mode

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

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

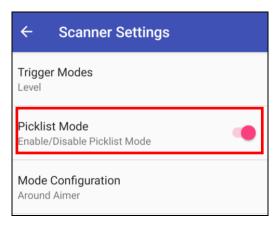


3.1.3 Picklist Mode

Picklist mode enables DR6 to decode only barcodes that are aligned under the laser crosshair or LED aiming dot.

For picklist mode demonstration, please click on our Youtube channel for more information: https://www.youtube.com/watch?v=QjT2E6hxD k

- 1. Tap 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.





3.1.4 More information about USS

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

http://w3.tw.ute.com/pub/cs/manual/uss/USS-RA-1-MANUAL en20210326.pdf

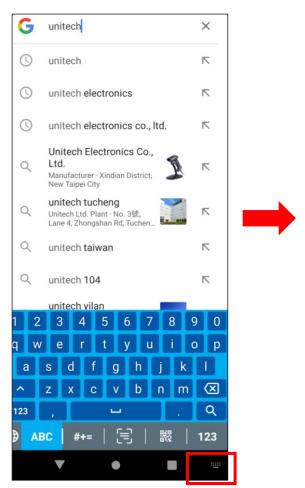
3.2 Enterprise Keyboard

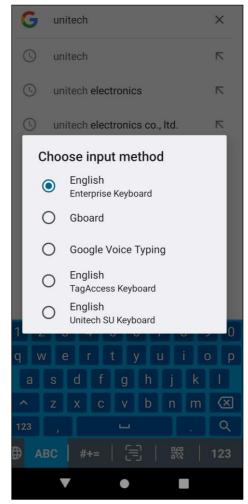
Introduction

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

When typing, you can select different input method.

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





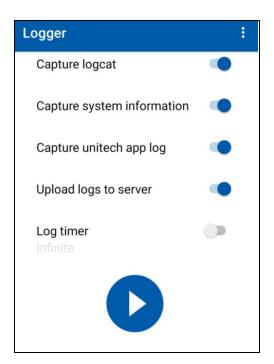


3.3 Logger

Introduction

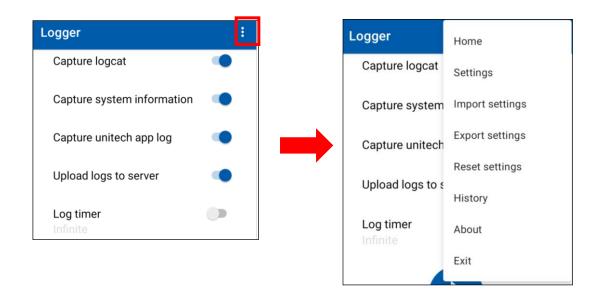
The Logger app offers an intuitive way to collect error logs from a device for troubleshooting. No technical skills required. Simply use the Start-Stop buttons to start recording vital system and app logs as one snapshot or as a time-lapse, and then the logs can be automatically submitted to the Wasp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

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





3. Tap on settings to view more.





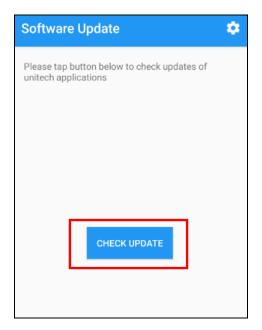
3.4 Software Update

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



APPS, and tap Software Update

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

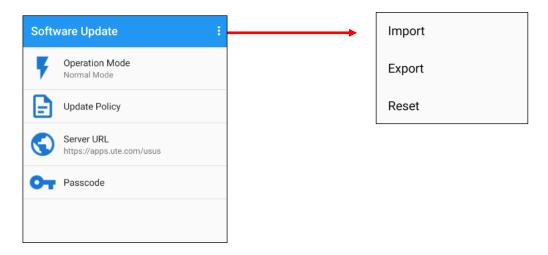


Select the Apps to be updated, and click Update.



3.4.1 Software Update Settings

Tap for more settings on Software Update.



Operation Mode

- Normal Mode → User can manually select apps to update
- Auto Mode → Apps are automatically checked and updated each time Software Update is run.
- Silent Mode → Similar to Auto Mode, but the GUI is hidden when updating (Software Update is run in the background).

Update Policy

- App Updates → Configure whether all or only the selected apps are updated, or turn off App Updates altogether.
- New App → Configure whether new apps are being installed when they become available for your device.
- Passcode → Configure a password to access the Software Update Settings menu.
- Import / Export / Reset → Import or Export settings to a file, or Reset all settings to factory default. You can find the exported settings file in the Internal Storage: /Unitech/usus/usus_config.stxt



3.5 StageGO

StageGO is a barcode-based device staging solution for Wasp mobile devices. StageGO helps IT admins to swiftly set up a device by just a few barcode scans.

Features

- Swift and effortless device staging for Wasp 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 -



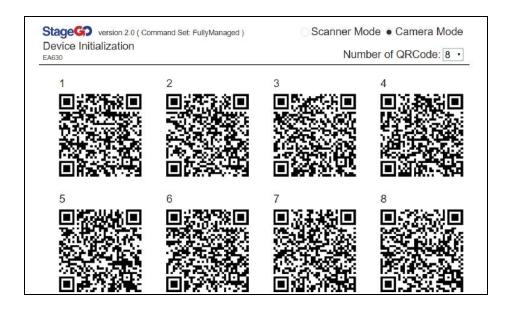
It all begins with IT staff creating a StageGO Script on the easy-to-use and secure web-based Script Editor. A StageGO script can contain one or more staging commands such as change system settings, connect to WiFi, download files, install apps, or set restrictions, etc.







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.





Step 3. Scan QRCode:



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



