

ShenZhen Chainway Information Technology Co.,Ltd

Smart Healthcare Handheld Terminal

H100 User Manual



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Statement

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Chapter 1 Product Intro

1.1 Product Intro

H100 is the smart handheld terminal that introduced by Chainway, which is specially designed for healthcare industry. H100 is an Android 6.0 mobile computer, it is ultra-thin and pocketable enough to satisfy all healthcare providers. Both patient and staff information can be collected automatically with 1D/2D barcode scanning, NFC, fingerprint recognition, and camera, or be synchronized to the hospital backend system with real-time network connectivity.

H100 will not only provide better healthcare services to medical staffs and patients, but also it will be in favor of upgrading management works of hospital.

H100 is specially designed for healthcare industry, its integrated design makes it with features such as ultra-thin, awesome holding and exquisite. The housing is also specially designed for medical industry so that it can be sterilized by alcohol. Meanwhile, it is integrated with pupil scanning lamp that makes it convenient for medical staff to check vital signs of patients.

This device is integrated with best-in-class Zebra 2D barcode scanning engine which make it accurate and fast to identify various 1D/2D codes. For the image collection functional purposes, H100 is also integrated with 1.3M high-resolution auto-focus camera and NFC communication technology.

H100 adopts 5 inch high-resolution (1920*1080) screen. Its rugged capacitive touch panel supports operation with wet hands or gloves, which is often the case in healthcare steps. It integrated with precise fingerprint identification module to verify fingerprint to gain access to PDA and prevent patients' information leakage in effective way. Alternatively, it will avoid data distribution in case of device missing.

This device can fully support fast 4G LTE network connectivity which makes it easy for mobile working, it configured with WIFI wireless connection to facilitate data transfer more stable. Meanwhile, H100 also support Bluetooth, it can connect various Bluetooth devices that accords to its communication protocol.

1.2 Precautions before using battery

- Do not leave battery unused for long time, no matter it is in device or inventory. If battery has been used for 6 months already, it should be checked for charging function or it should be disposed correctly.
- The lifespan of Li-ion battery is around 2 to 3 years, it can be circularly charged for 300 to 500 times. (One full battery charge period means completely charged and completely discharged.)
- The lifespan of chargeable battery is limited and it will lose its charge retention regularly. This loss is irrevocable. When battery lost its capacity, the lifespan would be cut.
- When Li-ion battery is not in used, it will continue discharge slowly. Therefore, battery charging status should be checked frequently and take reference of the related battery charging information on the manuals.
- Observe and record the information of a new unused and non-fully charged battery. On the basis of operating time of new battery and compare with a battery that has been used for long time. According to product configuration and application program, the operating time of battery would be different.
- Check battery charging status at regular intervals.
- When battery operating time drops below about 80%, charging time will be increased remarkably.
- If a battery is stored or otherwise unused for an extended period, be sure to follow the storage instructions in this document. If you do not follow the instructions, and the battery has no charge remaining when you check it, consider it to be damaged. Do not attempt to recharge it or to use it. Replace it with a new battery.
- Store the battery at temperatures between 5 °C and 20 °C (41 °F and 68 °F).

Chapter 2 Installation instructions

2.1 Appearance

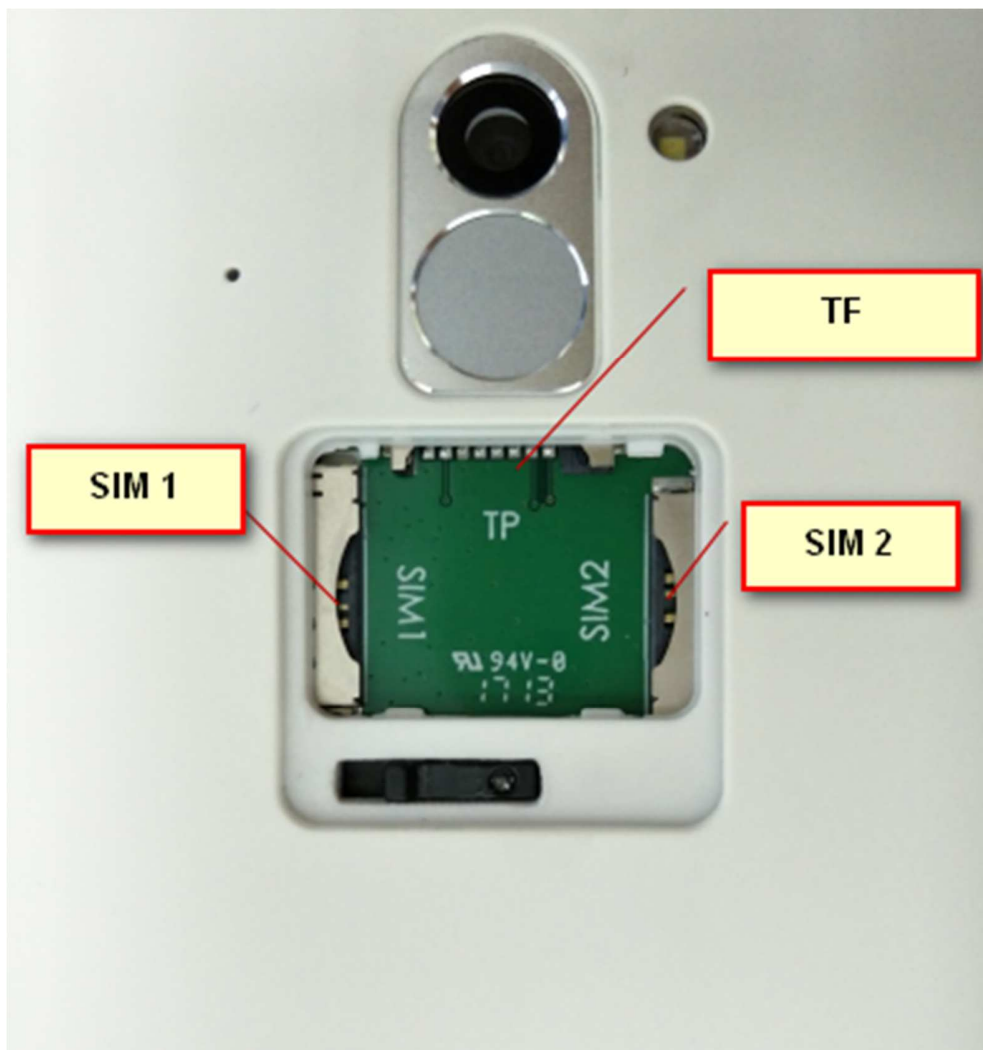
H100 back and front appearances are showing as follows:





2.2 Install TF card and SIM card

Use the ejector pin to open the cover from back side, SIM card socket and TF card socket can be found in following picture:



2.3 Battery charge

By using USB Type-C contact, the original adaptor should be used for charging the device. Make sure not to use other adaptors to charge the device.

2.4 Power button

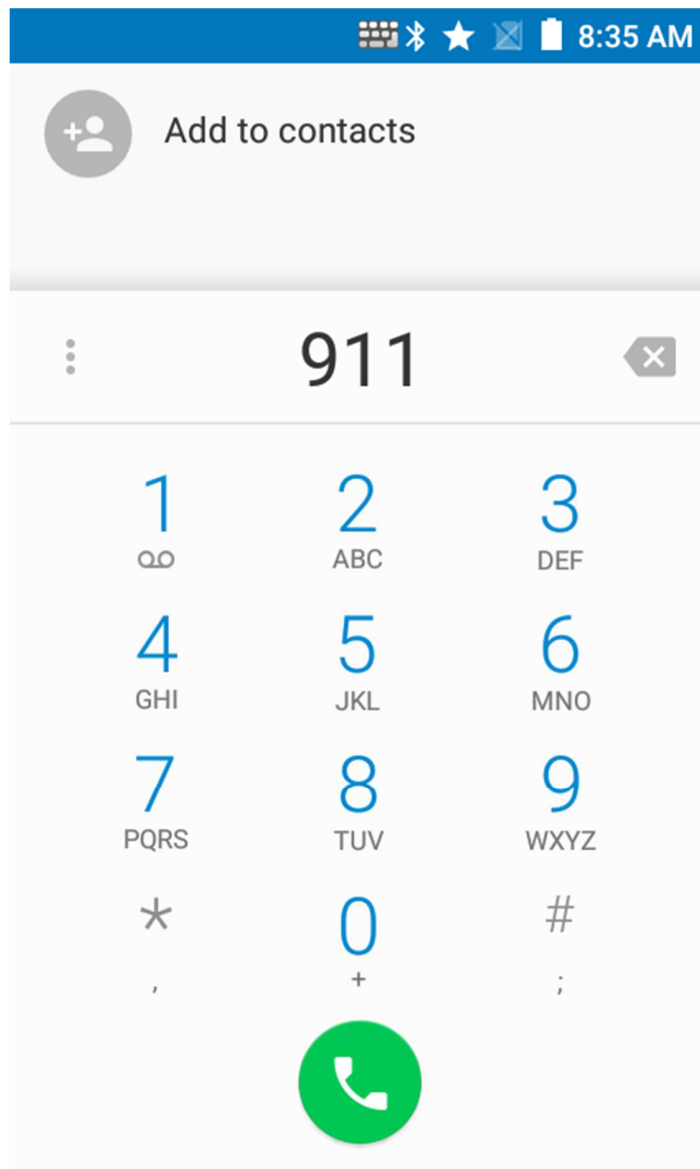
Switching-on or switching-off function can be executed by long press power button on the right for 3 seconds. Short press power button can start on or stand by the device.



Chapter 3 Telephone function

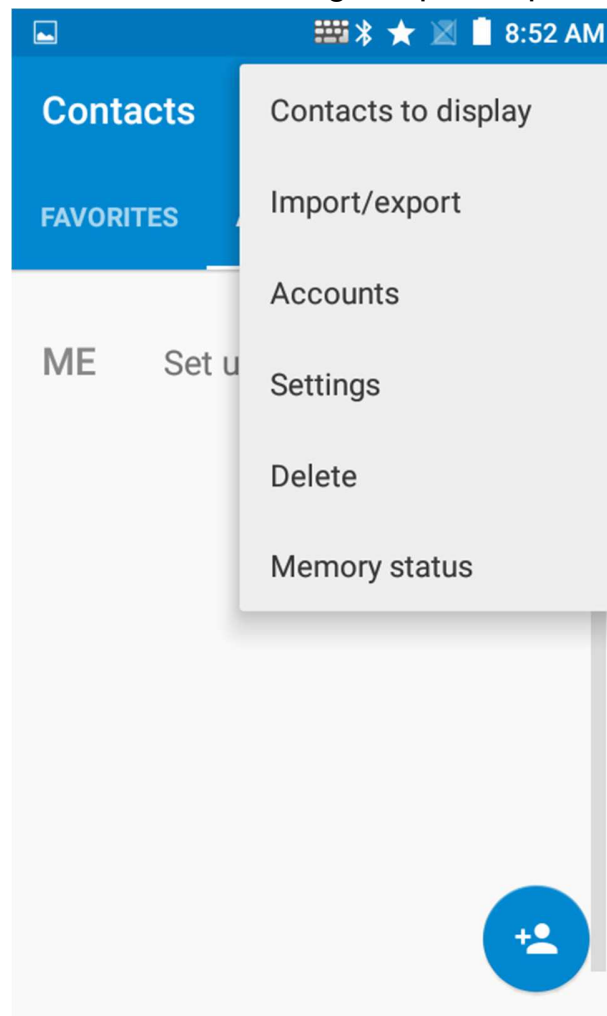
3.1 Dial numbers

1. Click the icon on desktop .
2. Click number key to input phonenumber.
3. Click  to dial.



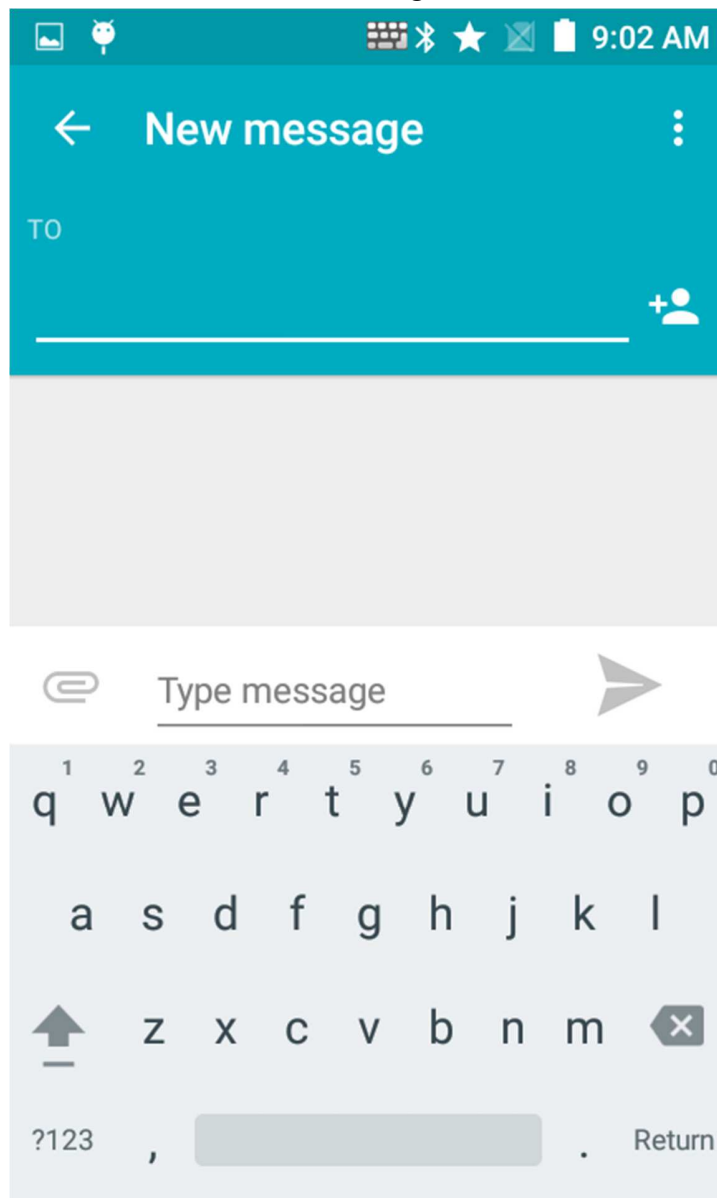
3.2 Contacts

1. Click icon  on desktop to open contacts list.
2. Click icon  to add new contact.
3. Click  on the right top to import/export contacts.



3.3 SMS and MMS

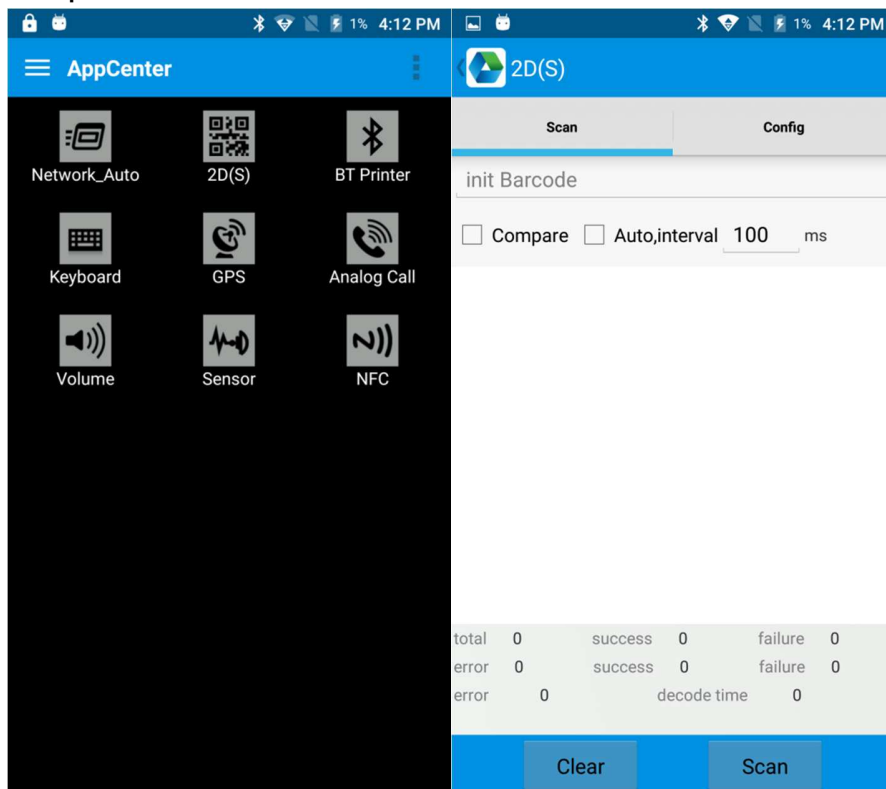
1. Click icon  to open message window.
2. Click  to input message receiver and content.
3. Click  to send message.



Chapter 4 Barcode reader



1. In the application App center to open “2D(S)”.
2. Click the key “Scan” or scanning button to start scanning. And the parameter auto interval can be set also.



 Caution: Please scan codes in correct way otherwise the scanning will be failed.

1D barcode:



Correct



Incorrect

2D code:



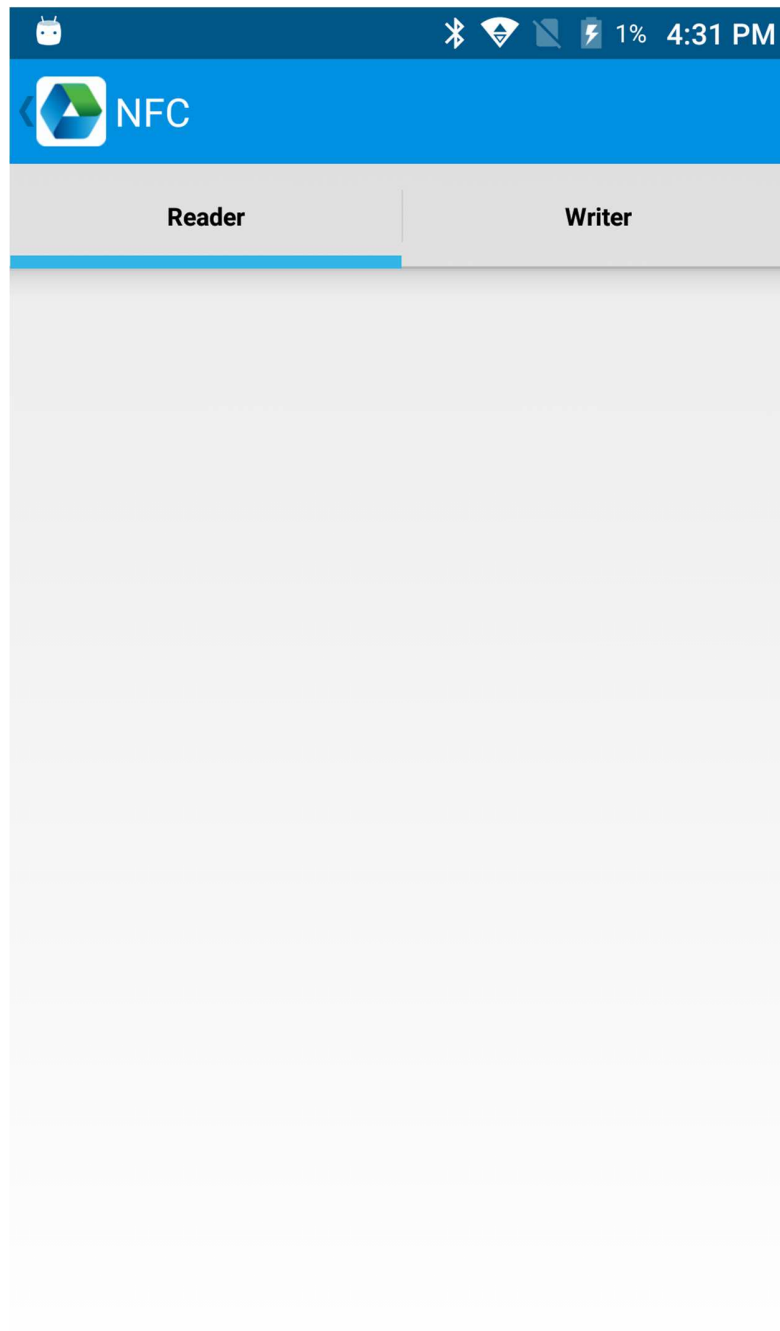
Correct



Incorrect

Chapter 5 NFC

1. In App Center to click icon NFC to read and write information.

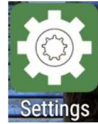


Chapter 6 Pupil scanning lamp

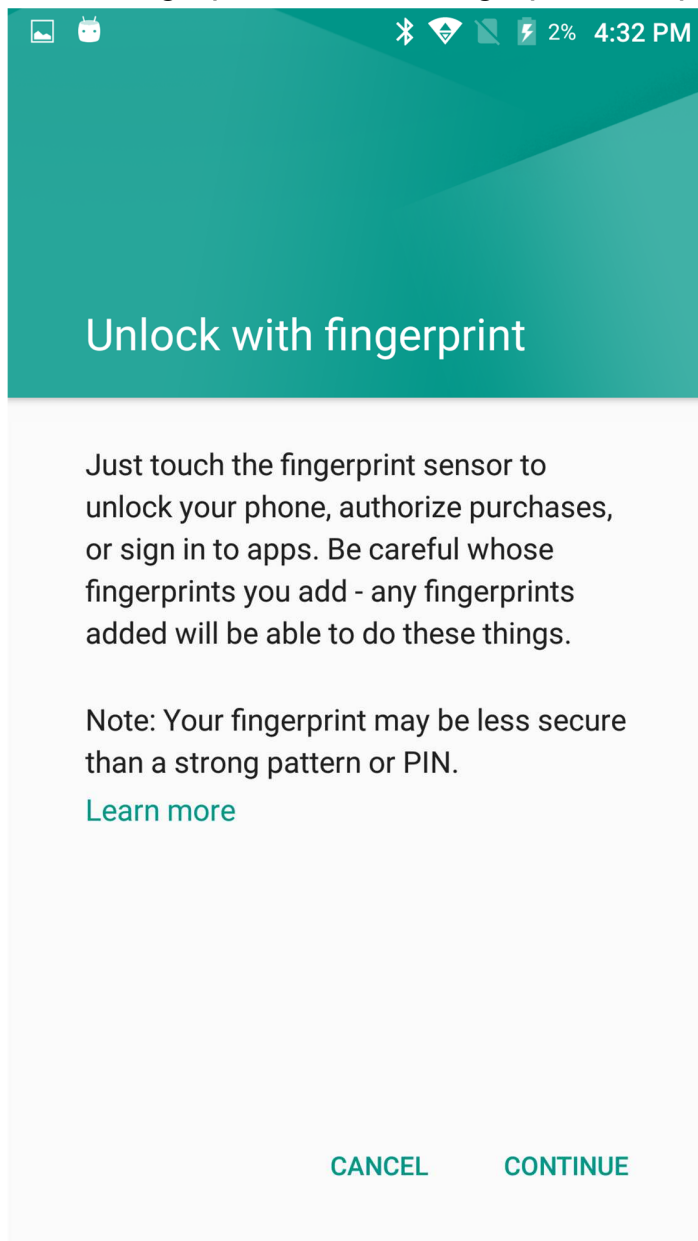
Switch on the device and press button on left side to turn on pupil scanning lamp.



Chapter 7 Fingerprint identification

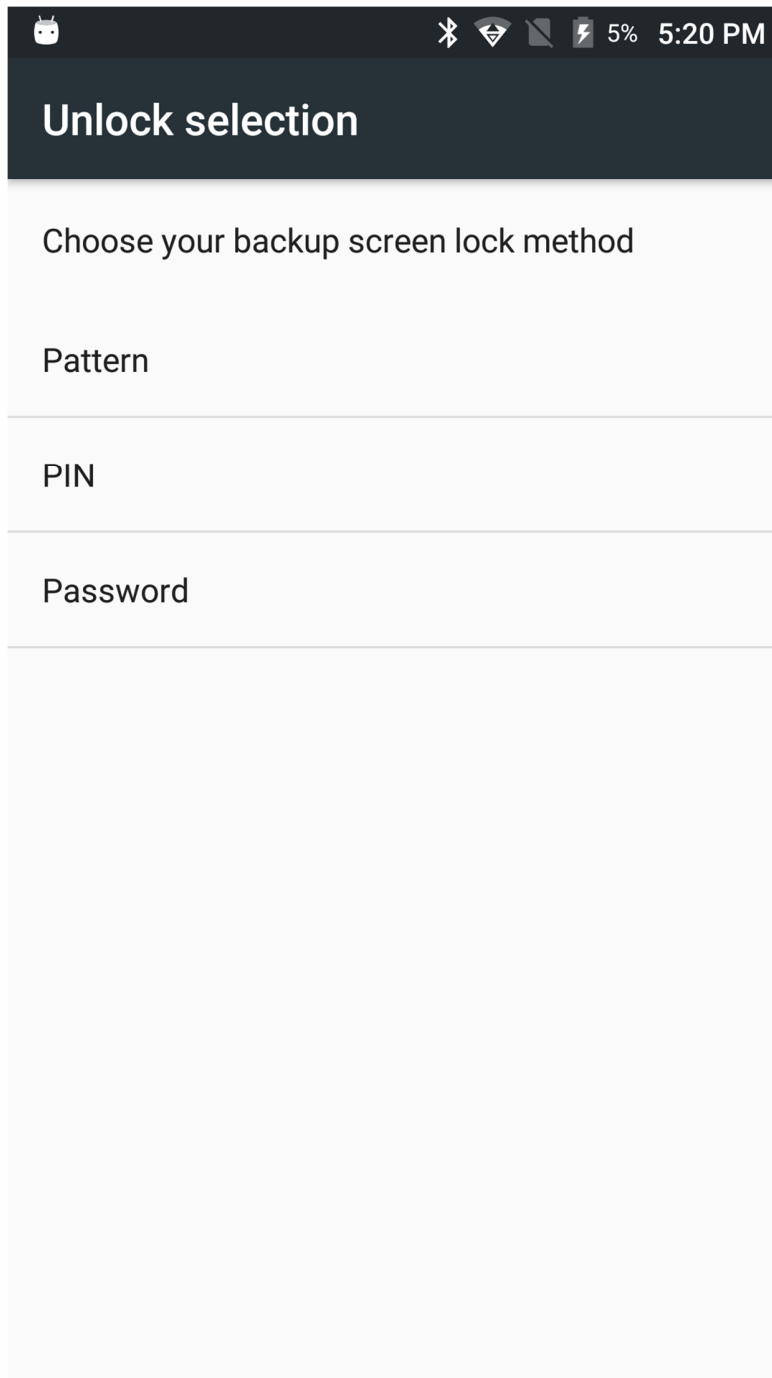


1. Click icon "Setting" to enter system setup.
2. Click "Security".
3. Click "Fingerprint" to enter fingerprint setup option.

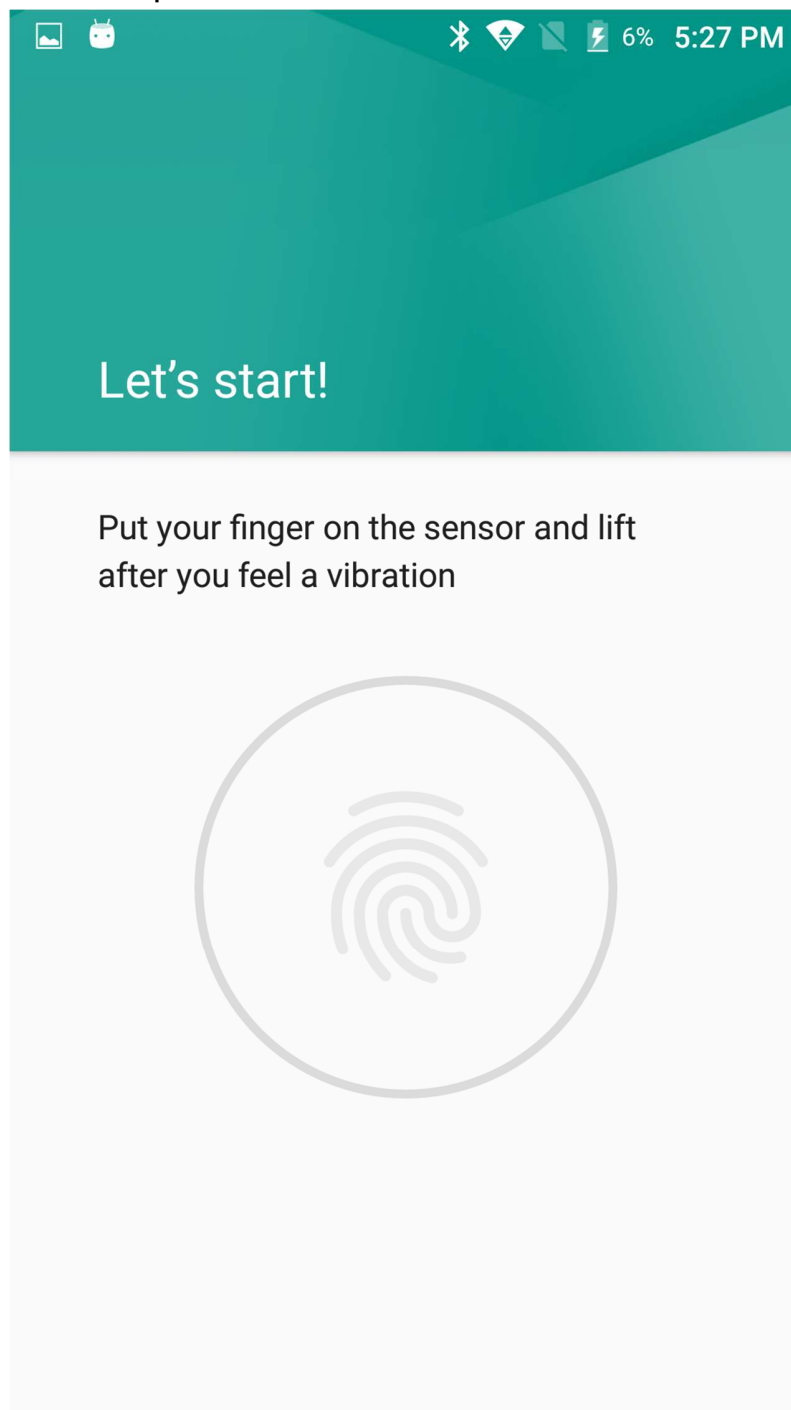


Click “CONTINUE” to setup.

4. Click “SET UP SCREEN LOCK” to continue setting up.
5. Setup spare screen unlock method to unlock without using fingerprint. Pattern, PIN code and password can be selected for different setup.



6. After setting up spare unlock method, we should continue to setup fingerprint unlock. After find out fingerprint sensor, click "NEXT".
7. Entering fingerprint according to instructions and this process will be repeated for a few times.



8. If multiple fingerprints are needed, then click “ ADD ANOTHER” to enter other fingerprints, otherwise clicking “DONE”.
9. After this, the screen can be unlocked by fingerprint.

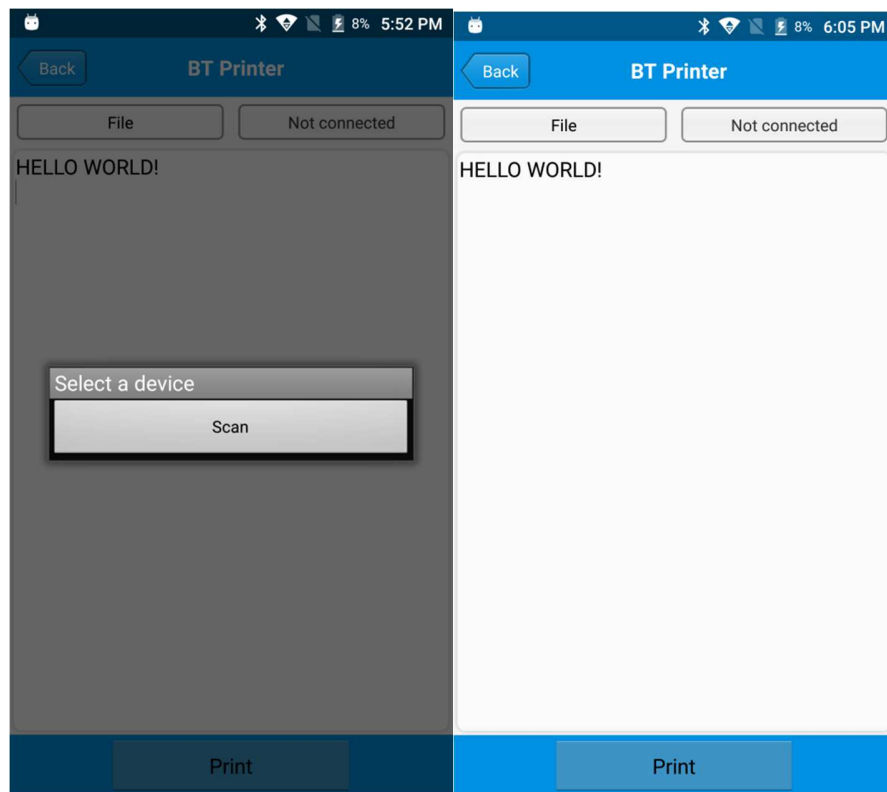
Chapter 8 Other functions

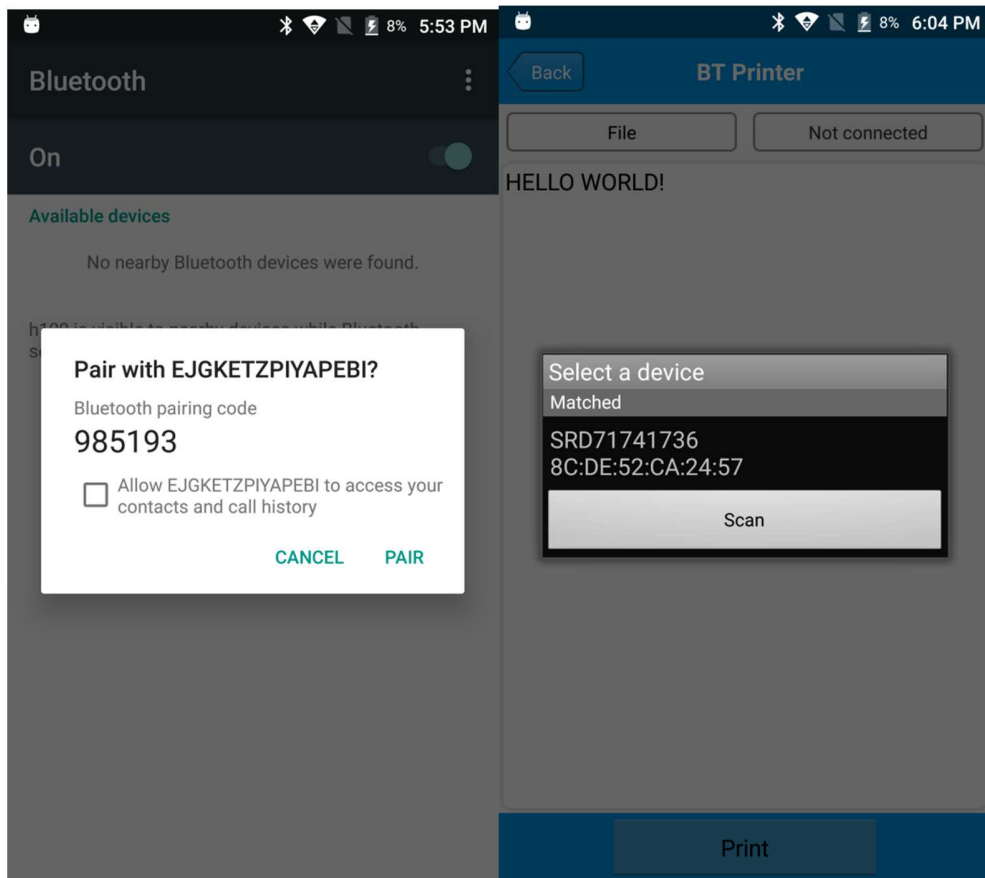
8.1 PING tool

1. In App Center, open “Ping” for test.
2. Setup PING parameter and select external/internal address.

8.2 Bluetooth

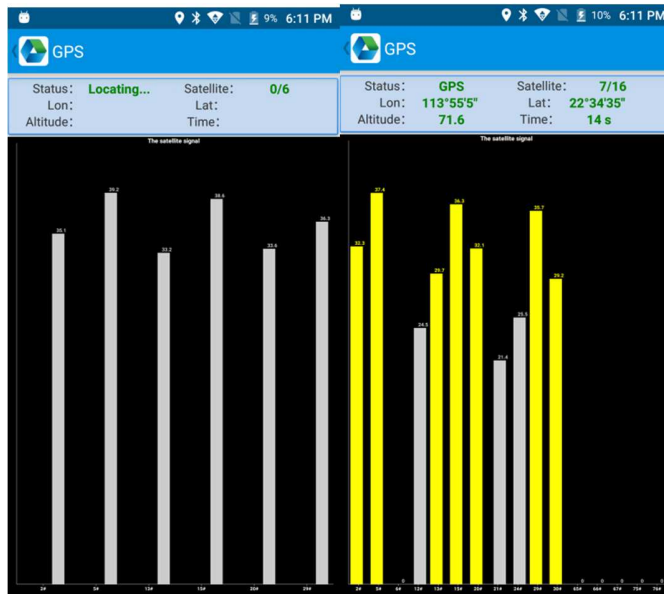
1. In App Center, open “BT Printer” for test.
2. In the list of device searching, click the device that you want to connect to pair.
3. Select printer and click “Print” to start printing content.





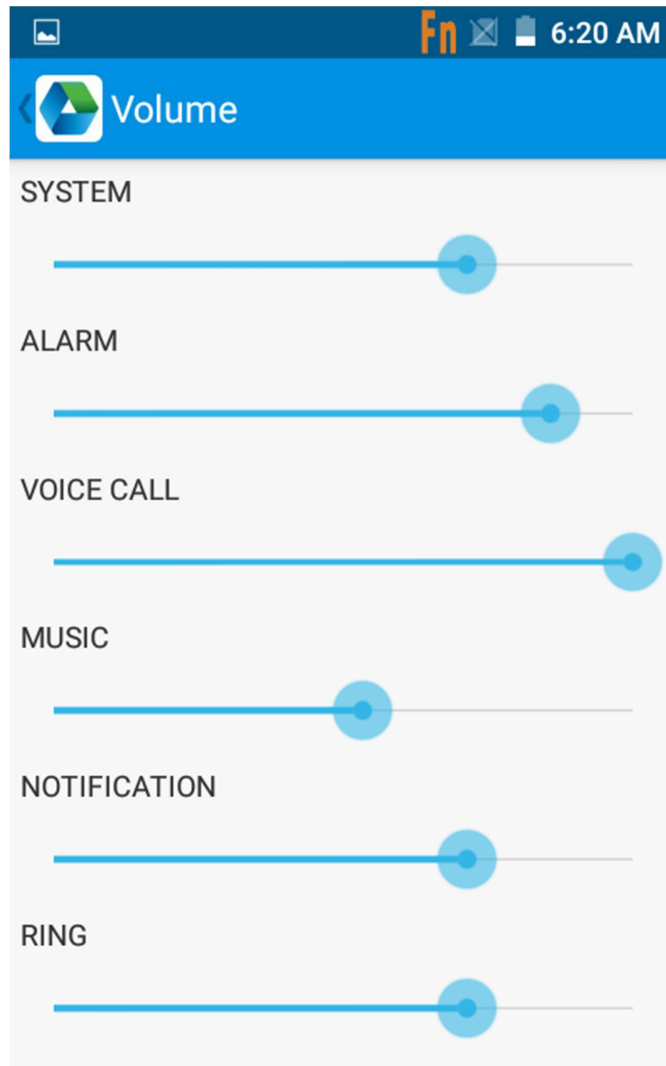
8.3 GPS

1. In App Center, open “GPS” for positioning test.
2. Setup GPS parameter to access GPS data.



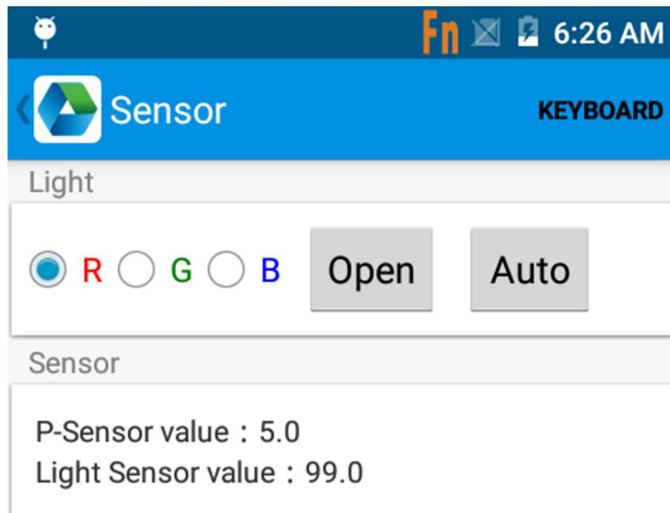
8.4 Volume setup

1. In App Center, open “Volume”
2. Setup the volume by requirements.



8.5 Sensor

1. In App Center, open “Sensor”.
2. Setup the sensor by requirements.

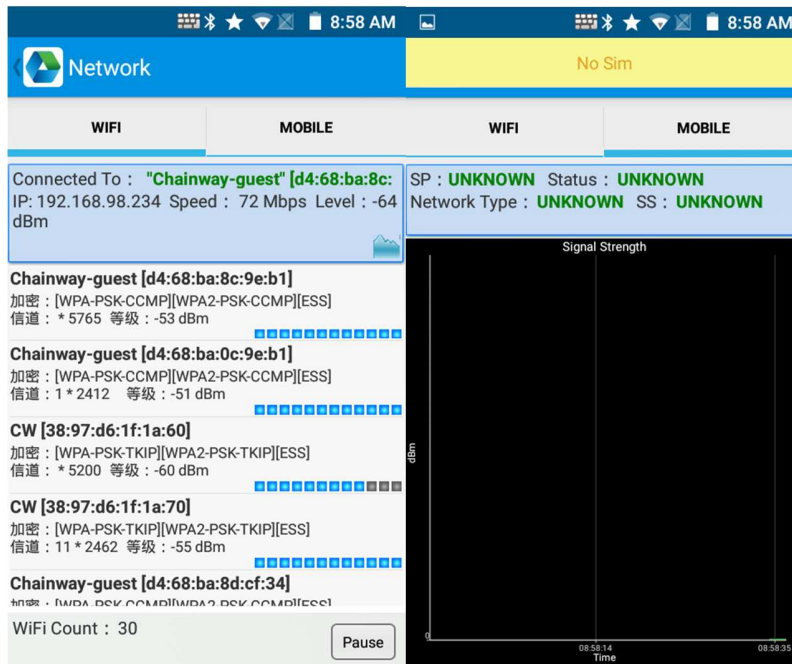


8.6 Keyboard(optional)

1. In App Center, open “Keyboard”.
2. Setup and test the main value of device.

8.7 Network

1. In App Center, open “Network”.
2. Test WIFI/Mobile network by requirements.



Chapter 9 Device specification

Physical characteristics

Size	154.8mm*73.8mm*14.5mm/6.09*2.91*0.57in
Weight	227 g/8.0oz
Display	5.0 Inch high-resolution, 1920*1080
Touch panel	Power key, 2 scanning keys, multifunction key, HOME key, TP key and menu key
Battery	Internal battery(non-removable)
Extension slot	2 micro SIM card slot, 1 TF card slot
Audio	Speaker, microphone, voice call supported
Camera	1.3MP autofocus camera with flash light
Communication Interface	USB2.0 Type-C
Pupil lamp	Yellow LED light.
Sensor	Gravity sensor, light sensor, proximity sensor, vibration motor

Performance

CPU	Cortex-A53 1.3GHz Quad-core.
OS	Andriod 6.0
RAM	2GB RAM
ROM	16GB ROM
Expansion	Supports up to 32 GB Micro SD card

Communication

WWAN	2G: 900/1800MHz 3G: 900/1900/2000/2100MHz 4G: TDD-LTE: B38, B39, B40, B41 FDD-LTE: B1, B3, B5
WLAN	IEEE802.11 a/b/g/n (2.4G/5G dual band), internal antenna
Bluetooth	Bluetooth 4.0, BLE

User environment

Operating temp.	-4°F to 122°F / -20°C to 50°C
Storage Temp.	-40°F to 158°F / -40°C to 70°C
Humidity	5% RH - 95% RH non condensing
Sealing	IP65
Drop specification	Multiple 1.5m/4.9ft drops to the concrete across the operating temperature range

Data collection

Scan engine	Zebra SE4710
NFC	13.56MHz, ISO/IEC 18092 (ECMA 340) / ISO/IEC 21481 (ECMA 352)
Fingerprint	Capacitive Sensor

Developing environment

SDK	Chainway software development kit
Language	Java
Tool	Eclipse/Android Studio