SHENZHEN CHAINWAY INFORMATION TECHNOLOGY CO., LTD

Mobile Data Terminal

C72 User Manual

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Statement

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Chapter 1 Product Intro

1.1 Intro

C72 device is a smart mobile PDA that integrated with various features such as UHF, wireless communication, data acquisition, wireless transmission and data processing etc. It is configured with Andriod 6.0 OS and it possesses high reliability and expansibility. With a set of advanced data acquisition options, C72 can be operated in various industries to acquire precise and abundant datum automatically. Meanwhile, the device can match the options with staffs accordingly. The corporation which deployed C72 will realize the deployment work is simple and maintenance work will be remarkably decreased.

C72 is highly rugged, compact and durable. With IP65 water and dust proof capability, the device has met IEC sealing standard. Therefore, it can be operated by staffs such as railway inspector, road toll operator, vehicle inspector, delivery postman, power supply inspector, storage administrator, financial & insurance, police officers, security tracing etc. Wherever your staff' locations are, C72 can remain its connectivity with the system to make sure business in high-effective operating.

C72 mobile data terminal adopted 4G LTE technology to realize multipath communication and calling function for field work, data exchange efficiency has been enhanced simultaneously. Therefore, C72 will bring the largest investment return for enterprises.

1.2 Precaution 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 check 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.)
- 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).

1.3 Charger

The charger type is GME10D-050200FGu, output voltage/current is 5V DC/2A. The plug considered as disconnect device of adapter.

1.4 Notes

Note: Using the incorrect type battery has danger of explosion.
Please dispose the used battery according to instructions.

Note: Due to the used enclosure material, the product shall only be connected to a USB Interface of version 2.0 or higher. The connection to so called power USB is prohibited.

Note: The adapter shall be installed near the equipment and shall be easily accessible.

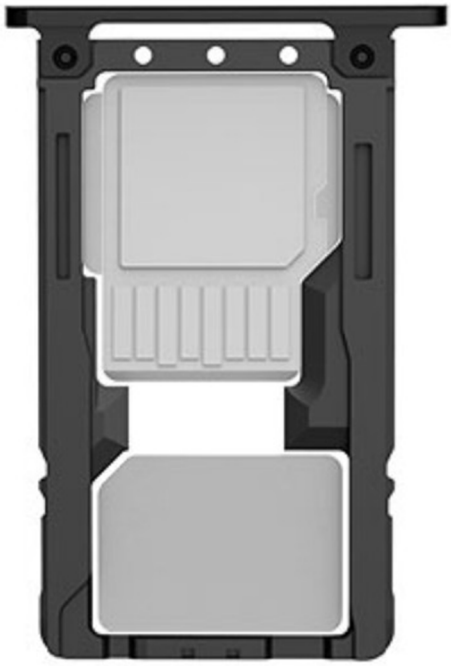
Note: The suitable temperature for the product and accessories is 0-10℃ to 50℃.

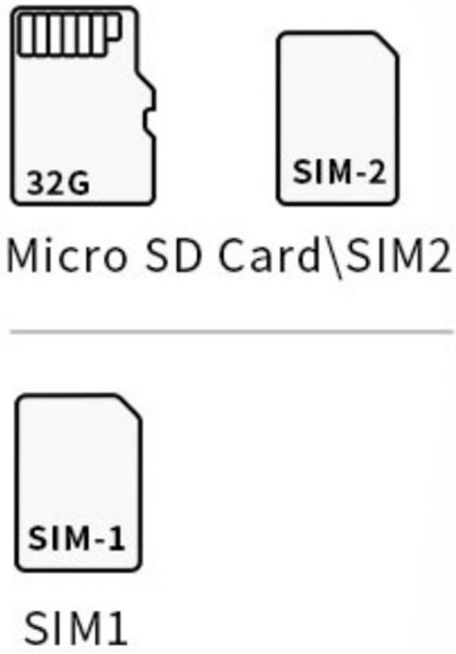
Note: CAUTION RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

2. Chapter 2 Installation Guide

2.1 Appearance

2.2 Install Micro SD, SIM cards





2.3 Battery Charging

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 Buttons and Function Area

C72 has 4 side buttons and 4 main keys, handheld connection port locates at rear, 2D scanning module and camera locate at top.

Buttons instruction

Button		Description
Side button	1.Power	Located on left side, press to ON/OFF device.
	2.Function key	Located on left side, its function can be defined by software.
	3.SCAN	Scanning button located on both sides. There are two scanning buttons.
Main button	4.Menu	Display main menu.
	5.Home	Touch it back to main screen.
	6.Enter	Press to confirm current selection.
	7.Backspace	Return to last step to setup.

Chapter 3 Call function

3.1 Calling numbers

1. Click icon .
2. Click number key to input phone numbers.
3. Click icon to call.
4. Click icon to end call.

3.2 Contacts

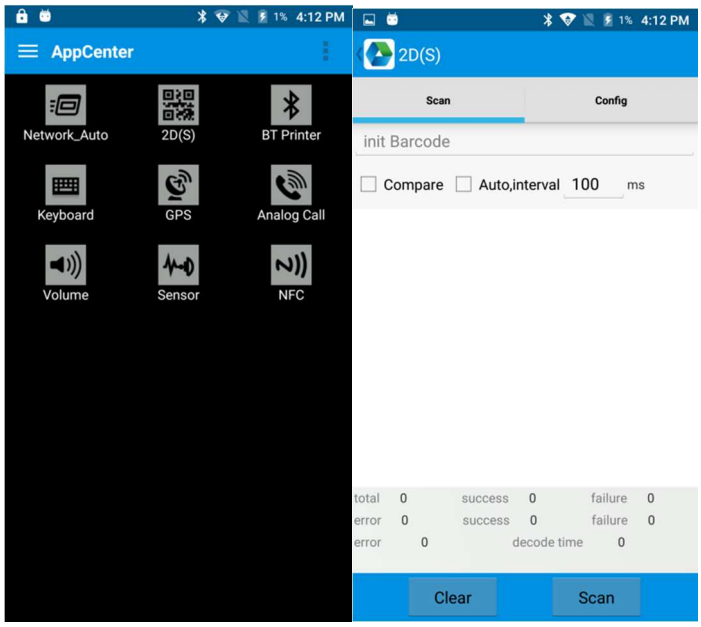
1. Click contacts to open contacts list.
2. Click icon to add new contacts.
3. Click icon to import/export contacts.

3.3 SMS and MMS

1. Click to open message window.
2. Click to input message receiver and contents.
3. Click to send out messages.
4. Click to add attachment pictures and videos.

Chapter 4 Barcode reader-writer

1. In App Center, to open 2D barcode scan test.
2. Press “SCAN” button or click scan key to start scanning, the parameter “Auto interval” can be adjusted.



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

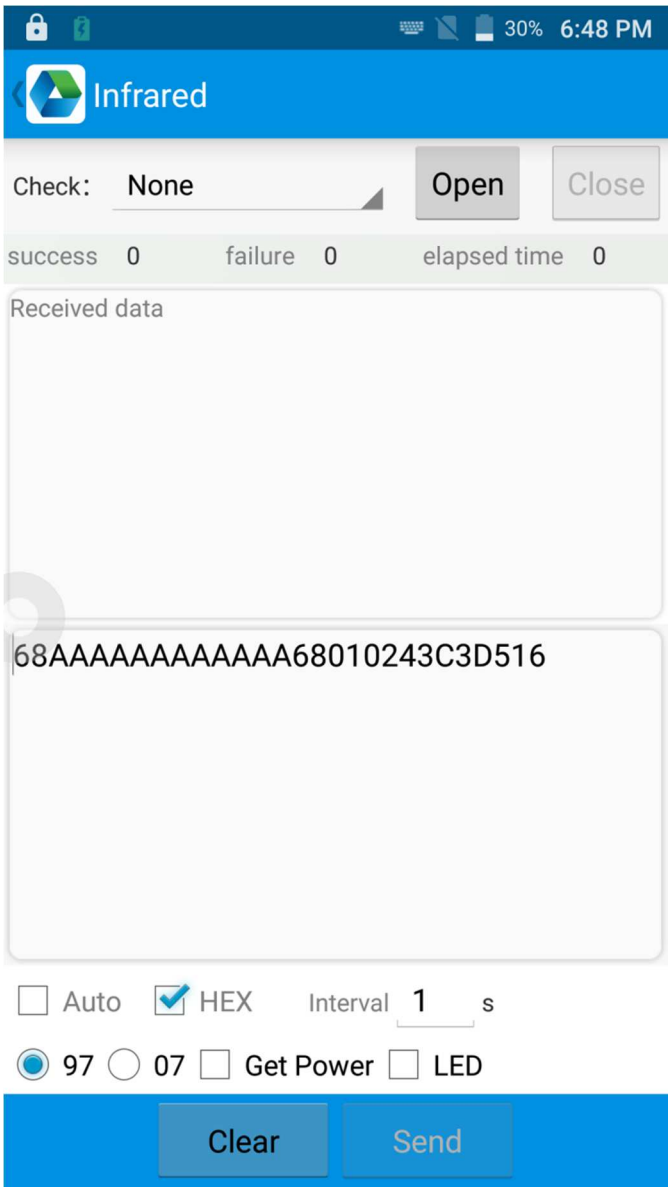
1D barcode:

2D code:

Max. radiant power: 0.6mW
Wave length: 655nM
IEC 60825-1 (Ed.2.0).
21CFR 1040.10 and 1040.11 standard.

Chapter 5 Infrared read-write function

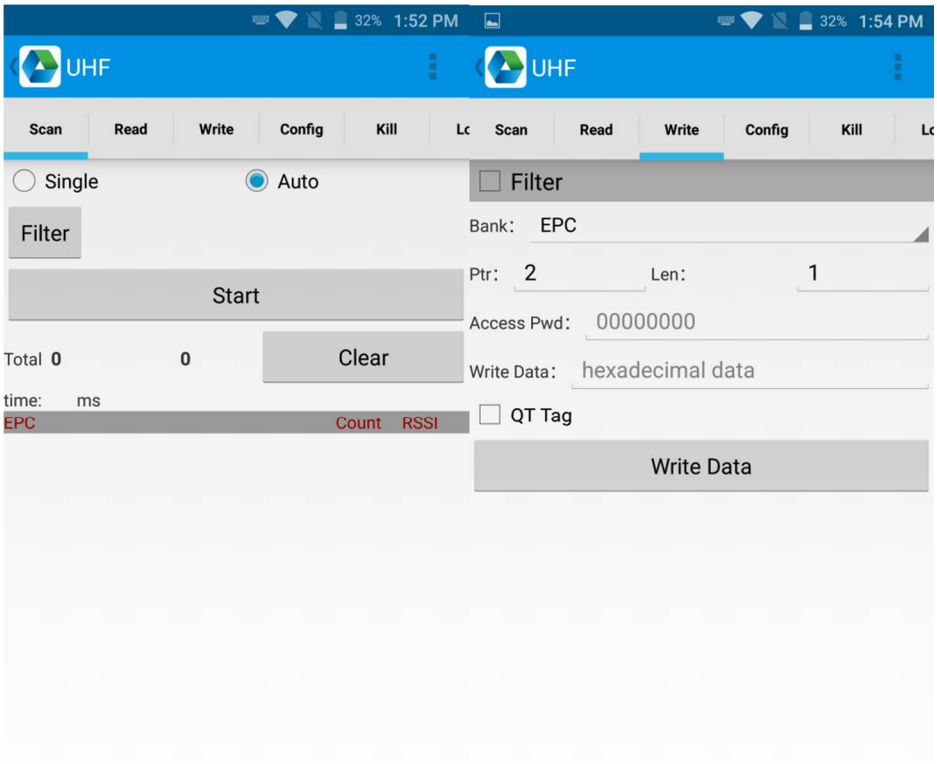
1. Open infrared function in App Center.
2. Click button “Open” to start infrared scanning function. Click “LED” for infrared scanning aim assist. Depending on different application status to compile different commands to realize infrared read and write function.

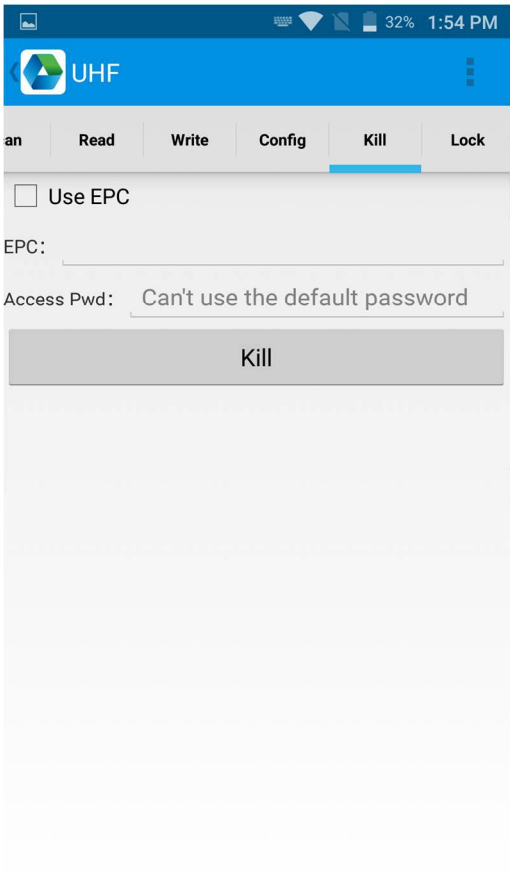


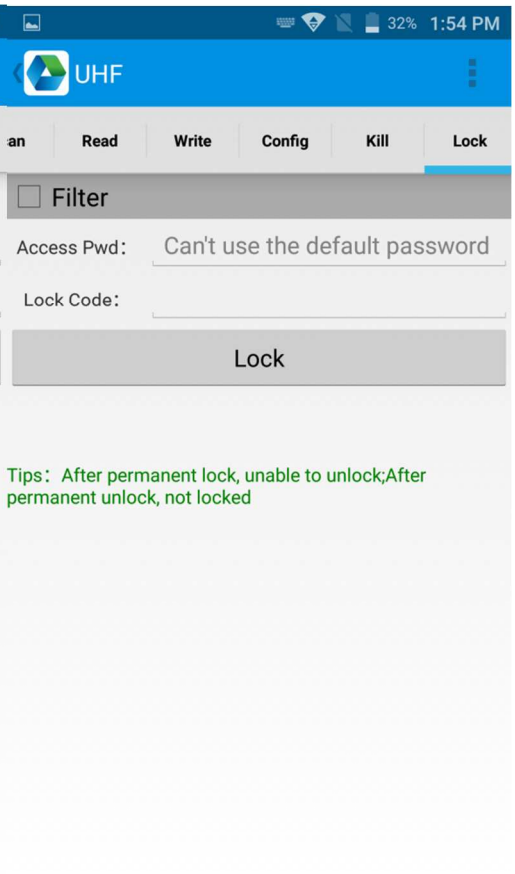
Chapter 6 RFID reader

6.1 UHF

Click App Center, open “UHF” to scan, read and write tag information, also kill and lock tags.



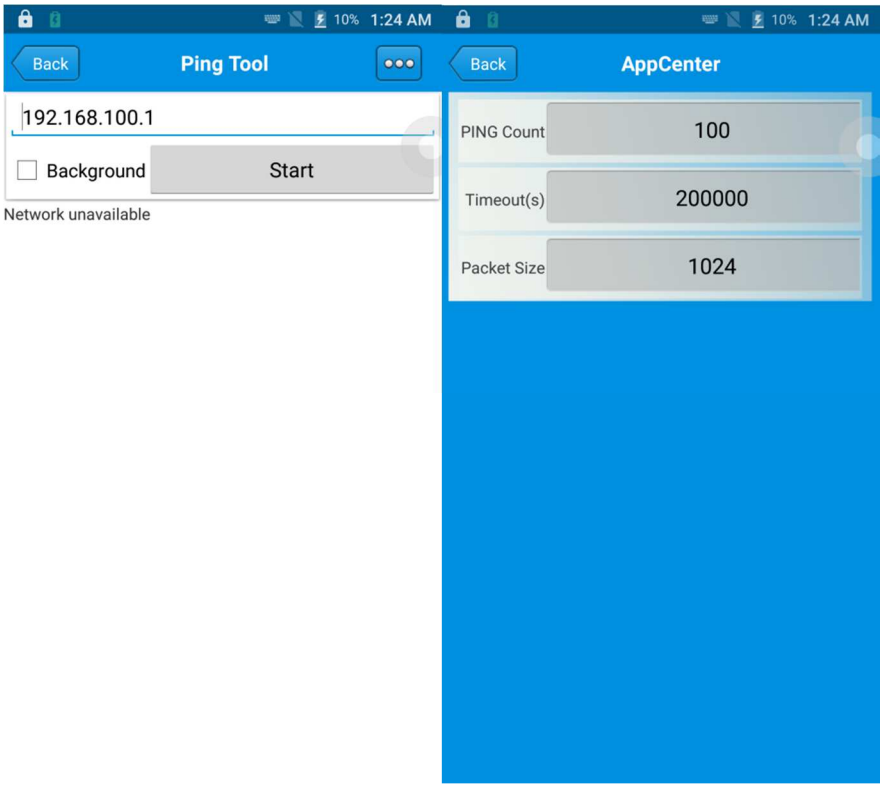

32% 1:54 PM
UHF
an
Read
Write
Config
Kill
Lock
Use EPC
EPC:
Access Pwd:
Can't use the default password
Kill


32% 1:54 PM
UHF
an
Read
Write
Config
Kill
Lock
Filter
Access Pwd:
Can't use the default password
Lock Code:
Lock
Tips: After permanent lock, unable to unlock;After permanent unlock, not locked

Chapter 7 Other functions

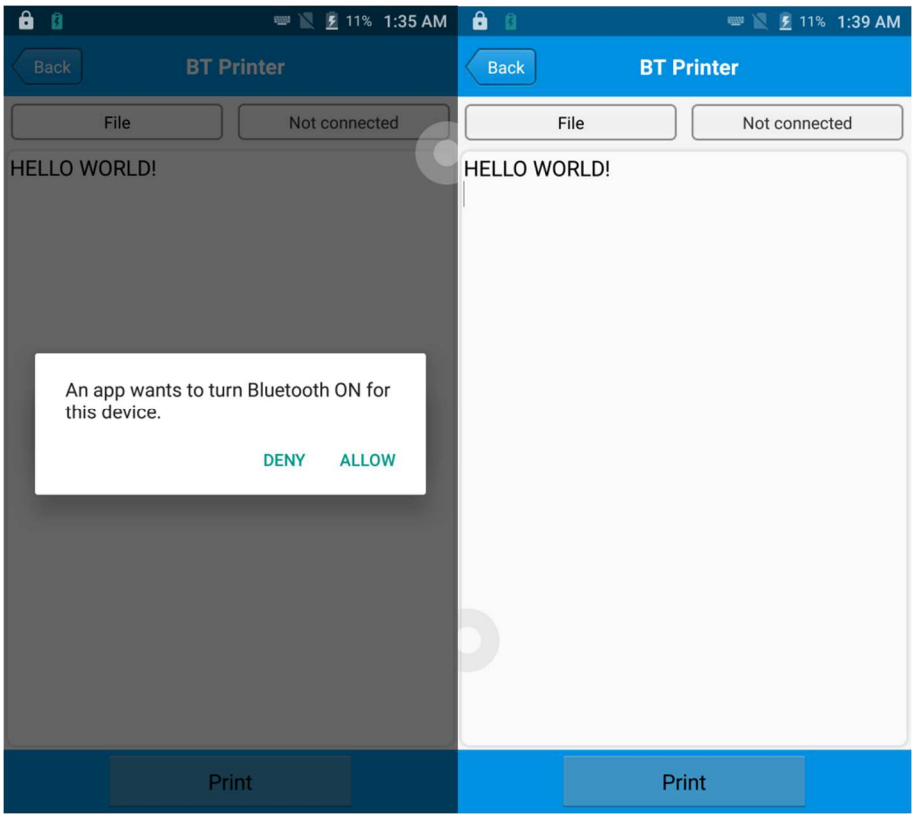
7.1 PING tool

1. Open “PING” in App Center.
2. Setup PING parameter and select external/internal address.



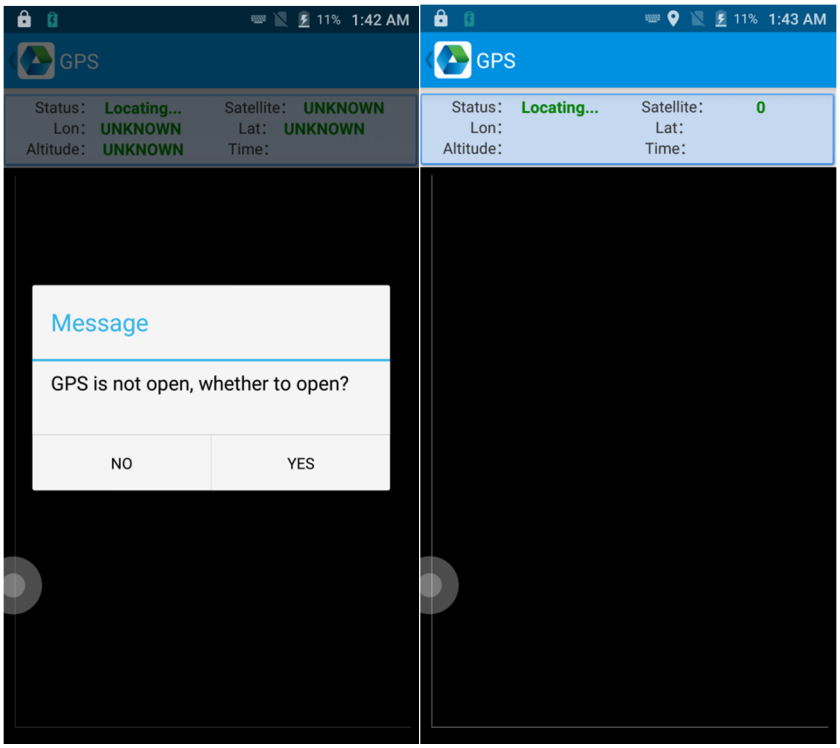
7.2 Bluetooth

1. Open “BT Printer” in App Center.
2. In the list of detected devices, click the device that you want to pair.
3. Select printer and click “Print” to start printing contents.



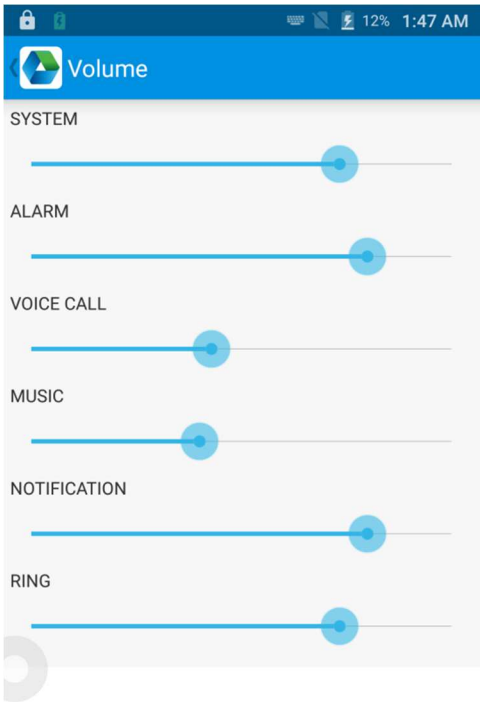
7.3 GPS

1. Click “GPS” in App Center to open GPS test.
2. Setup GPS parameters to access GPS information.



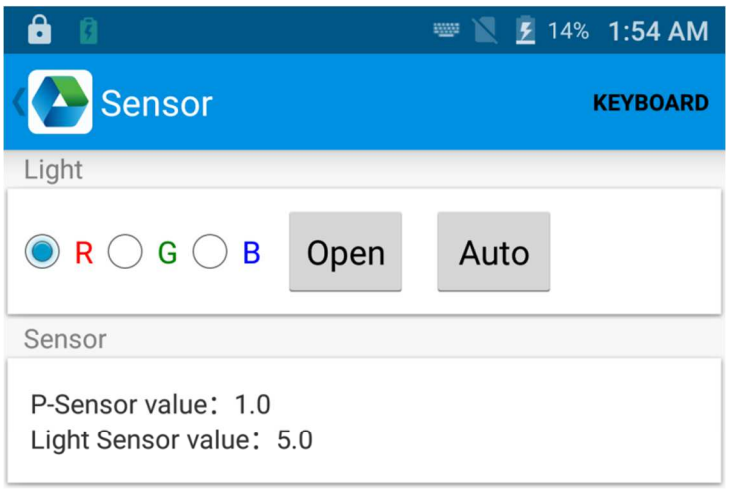
7.4 Volume setup

1. Click “Volume” in App Center.
2. Setup volume by requirements.



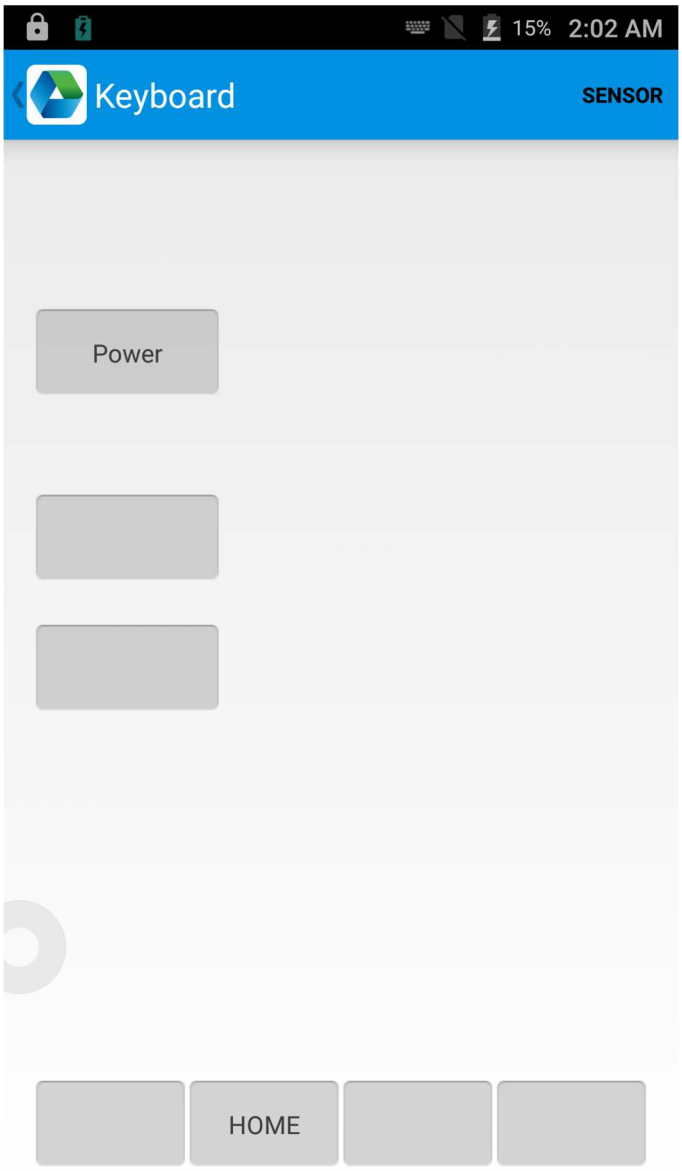
7.5 Sensor

1. Click “Sensor” in App Center.
2. Setup the sensor by requirements.



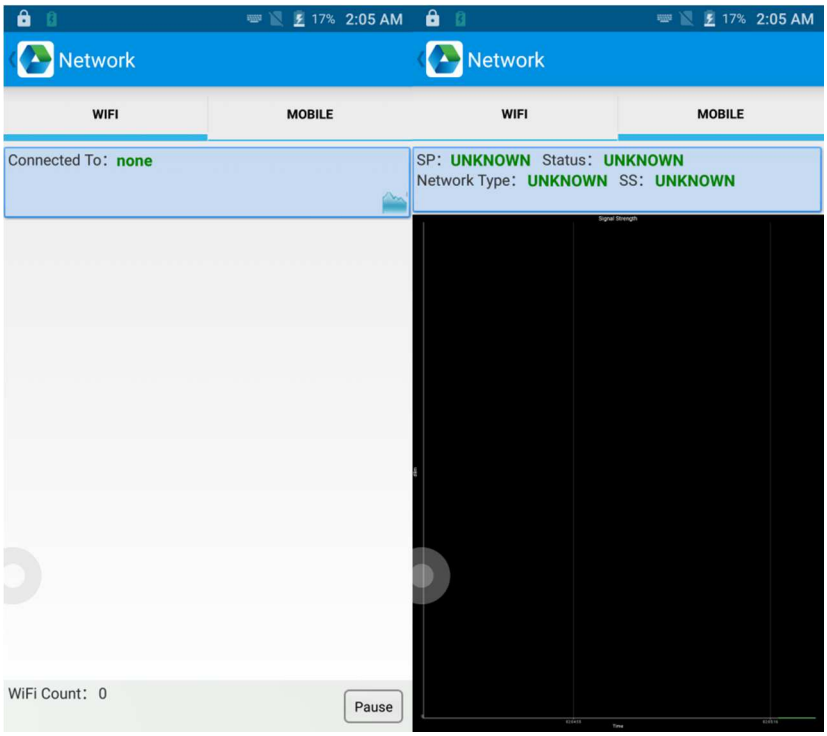
7.6 Keyboard

1. Click “Keyboard” in App Center.
2. Setup and test the main value of the device.



7.7 Network

1. Click “Network” in App Center.
2. Test WIFI/Mobile signal by requirements.



Chapter 8 Device characteristic

Physical characteristics

Size	164.2mm*80.0mm*24.3mm
Weight	654g (battery included)
Display	5.2 inch，IPS FHD 1920*1080P
Touch panel	4 main keyboards, 1 power button, 2 scan buttons, 1 multi-function button
Battery	Li-ion, rechargeable, 8000mAh
Expansion	Supports up to 32 GB Micro SD card
Expansion Slot	1 slot for SIM card, 1 slot for SIM or TF card, PSAM supported
Audio	speaker, 2 microphones, voice call
Camera	13MP autofocus camera with flashlight

Performance

CPU	Cortex-A53 1.3GHz Quadcore
OS	Andriod 6.0
RAM	2GB RAM
Communication Interface	USB2.0,Type-C
ROM	16GB
Max.expansion	Supports up to 32 GB Micro SD card

User environment

Operating temp.	-20℃ to 50℃
Storage Temp.	-20℃ to 70℃
Humidity	5%RH - 95%RH non condensing
Sealing	IP65, IEC sealing standard
Drop specification	Multiple 1.5m/4.0ft drops to the concrete

Communication

WAN	**EU:** 2G: 850/900/1800/1900MHz 3G: 850/900/1900/2100MHz 4G: B1, B3, B5, B7, B8, B20, B40 **US:** 2G: 850/900/1800/1900MHz 3G: 850/900/1700/1900MHz 4G: B2, B4, B7, B12, B17 **CN:** 2G: 900/1800MHz 3G: 900/1900/2000/2100MHz 4G: B1, B3, B5, B38, B39, B40, B41
WLAN	IEEE802.11a/b/g/n, embedded antenna, 5 Gigabit WIFI max. power 14.69 dBm
WPAN	Bluetooth 4.0

Data collection

Barcode scanning	2D CMOS scanning engine(Honeywell N6603/Zebra SE4710)
RFID	UHF

Developing Environment

SDK	Chainway software develop kit
Language	Java
Develop	Eclipse/Android Studio

Appendix

Restrictions:

AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	GR	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK

This device is restricted to indoor use where operated in the European Community using frequency in 5150MHz-5350MHz to reduce the potential for interference.

Simplified EU declaration of conformity

Hereby, ShenZhenChainway Information Technology Co., Ltd declares that the radio equipment type C71 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:www.chainway.net

Signature:

SAR Information

The SAR limit of Europe is 2.0 W/kg. Device types C71 has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use at the ear is 0.219W/kg and when properly worn on the body is 1.216 W/kg. This device was tested for typical body-worn operations with the back of the handset kept 0.5cm from the body. To maintain compliance with RF exposure requirements, use accessories that maintain a 0.5cm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with RF exposure requirements, and should be avoided.