Mobile Computers

C63 User Manual

目录

1 Introduction

1.1 Introduction

Chainway C63 is an ultra-high-performance industrial-grade smart handheld terminal with a keyboard launched by Shenzhen Chainway Information Technology Co., Ltd Developed based on Android 13, it uses an octa-core processor and supports optional 27-key/37-key/47-key keyboards. It comes standard with a 6700 mAh removable battery that supports fast charging. It can be equipped with an optional handle and a 5000 mA handle battery, and can be paired with a variety of accessories for a powerful configuration. It also supports optional high-performance barcode scanning, NFC and other rich functions, and has powerful data collection capabilities. Combined with a dual-band Wi-Fi antenna specially optimized for indoor scenarios, it is perfectly suitable for applications in various industries such as logistics, warehouse inventory, production and manufacturing, retail management, asset management, etc., making complex data collection work easy.

1.2 Battery precautions

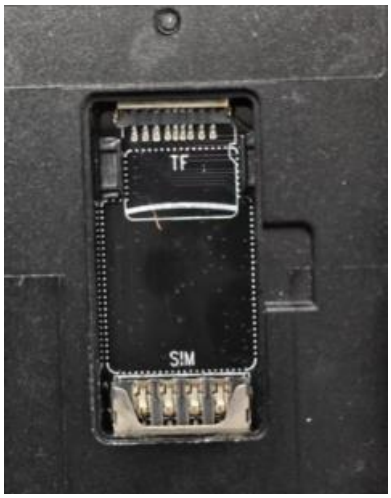
- Do not leave batteries idle for extended periods, whether in production equipment or in a warehouse. If a battery has been used for more than six months, check its charge status or dispose of it properly.
- A battery's service life is typically two to three years, corresponding to 300 to 500 charge cycles. A complete charge cycle is defined as a full charge, a full discharge, and then a full charge again.
- Rechargeable batteries have a finite lifespan and gradually lose their ability to hold a charge. This loss (aging) is irreversible. As a battery loses capacity, its service life (run time) decreases.
- When a battery is not used or idle, it continues to slowly (auto-)discharge. Check the battery's charge status frequently.
- Observe and record the run time of an unused, fully charged battery. Compare the run time of a new battery to that of an older battery. Battery run time will vary depending on product configuration and application.
- Check the battery's charge status regularly.
- Battery recharge time increases significantly when the run time drops below approximately 80% of its original run time. Note: There is a risk of explosion if the battery is replaced with an incorrect model. Always dispose of used batteries according to the instructions.

2 Equipment Appearance and Function Introduction

2.1 Appearance

2.2 Install Micro SD/TF, SIM card

Remove the battery from the device host and find the card slot embedded inside. The style is as follows:



The upper part can be used to insert a TF card, and the lower part can be used to insert a SIM card.

2.3 Battery Charging

Use the original adapter to charge the battery via the USB port. Do not use other brands of adapters to charge the device.

2.4 Button and function area display

The C63 has five side buttons and an optional main keyboard with 27, 37, or 47 keys.

The top of the device has a 2D scanner, a rear HD camera and flash, and an NFC recognition area near the camera.

Button icons and descriptions:


Customizable buttons
Right Scan Key
Main keyboard
Power button
Volume button
Left Scan Key

3 Telephone Functions

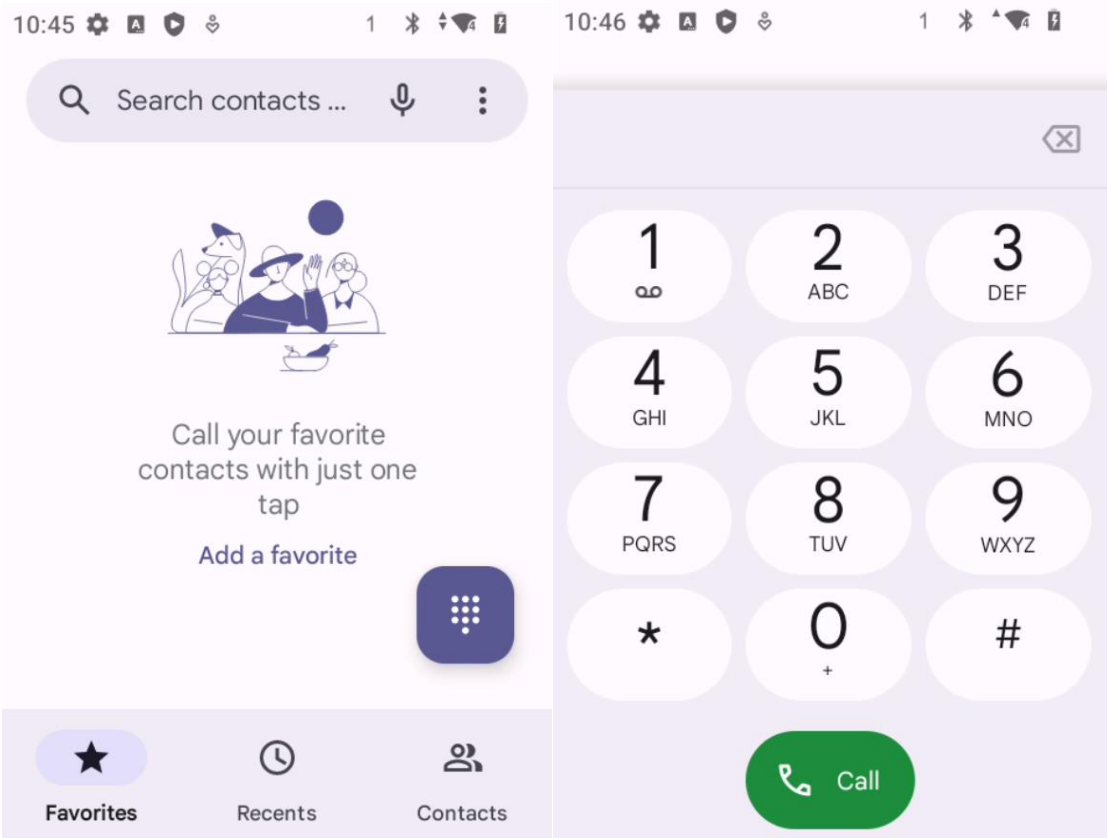
3.1 Make a call

1. Click the icon  ;The bottom of the page contains three parts: Frequently Used Contacts, Recent Calls, and Contacts;

2. Click on the right  ,Enter the dialing interface, tap the number keys and enter the phone number;

3. Tap  ,Make a call;

4. Tap Hang Up  End the call;



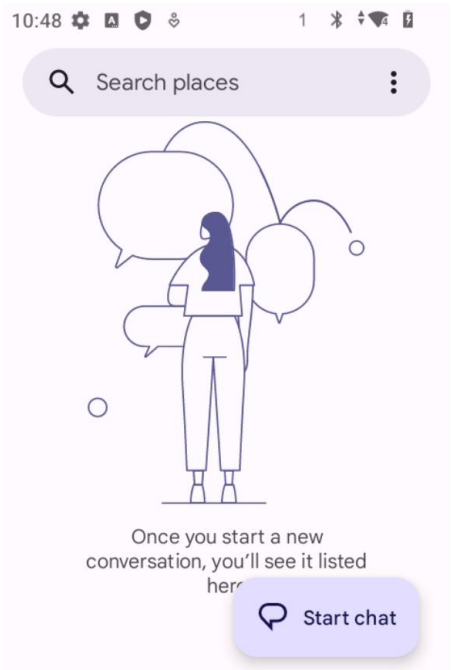
3.2 SMS and MMS

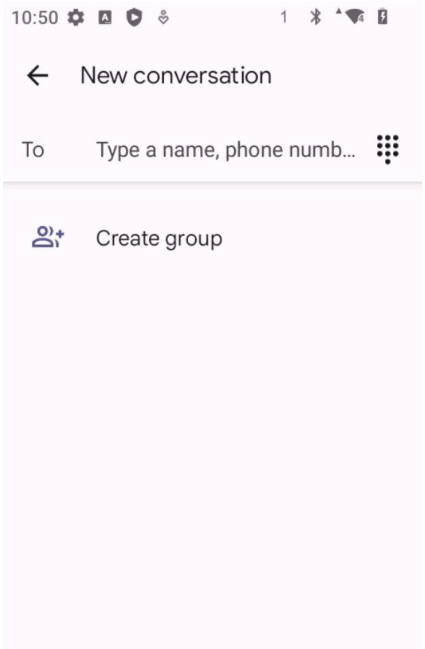
1. Tap  , open the SMS window;

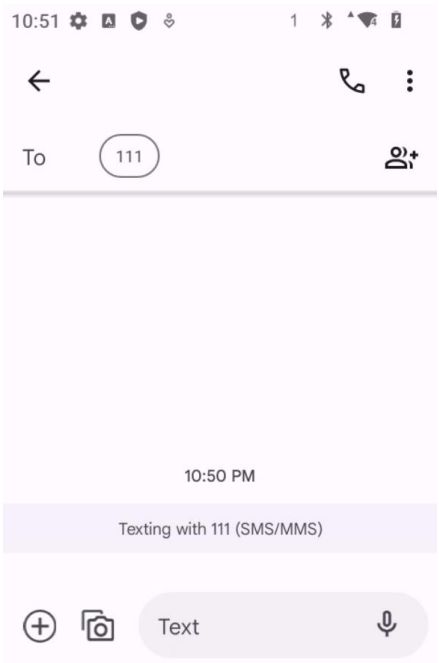
2. Tap  ,Enter a new conversation;

3. After the recipient enters the phone number or name to confirm, they can enter the text to communicate via SMS;

4. Tap  Add pictures and videos; Tap  ,you can add emoticons.



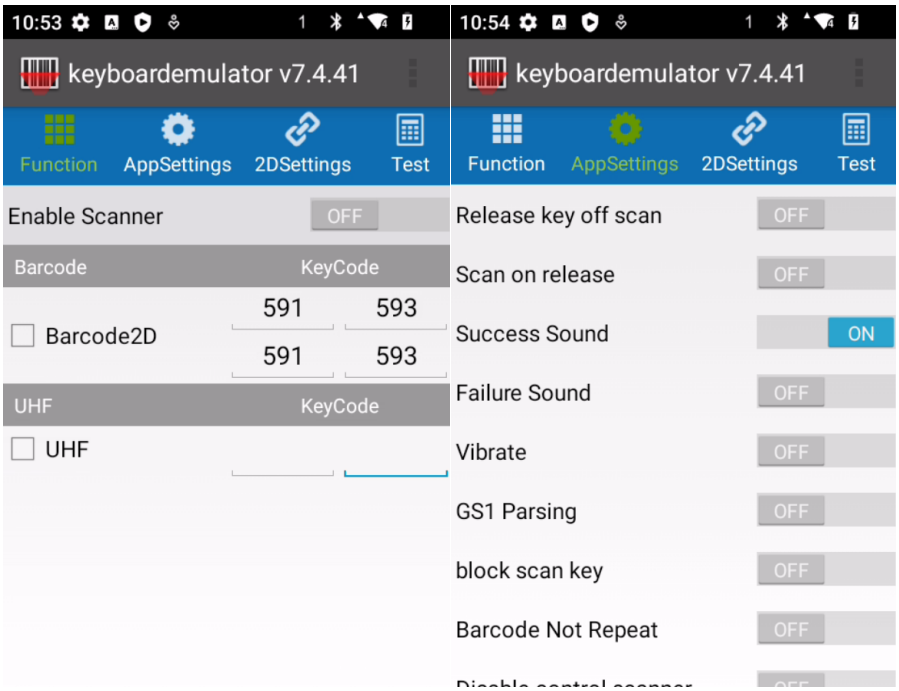




4. Keyboardemulator - Barcode Reading and Writing

The Key Assistant can be used directly in various environments and output formats, including prefix/suffix/Enter/Tab.

For more detailed functionality, please contact technical support personnel, who will provide documentation on how to use the Key Assistant.



Note: Please scan the barcode correctly, otherwise the scan will fail.

One-dimensional barcode

right

Wrong

Two-dimensional barcode

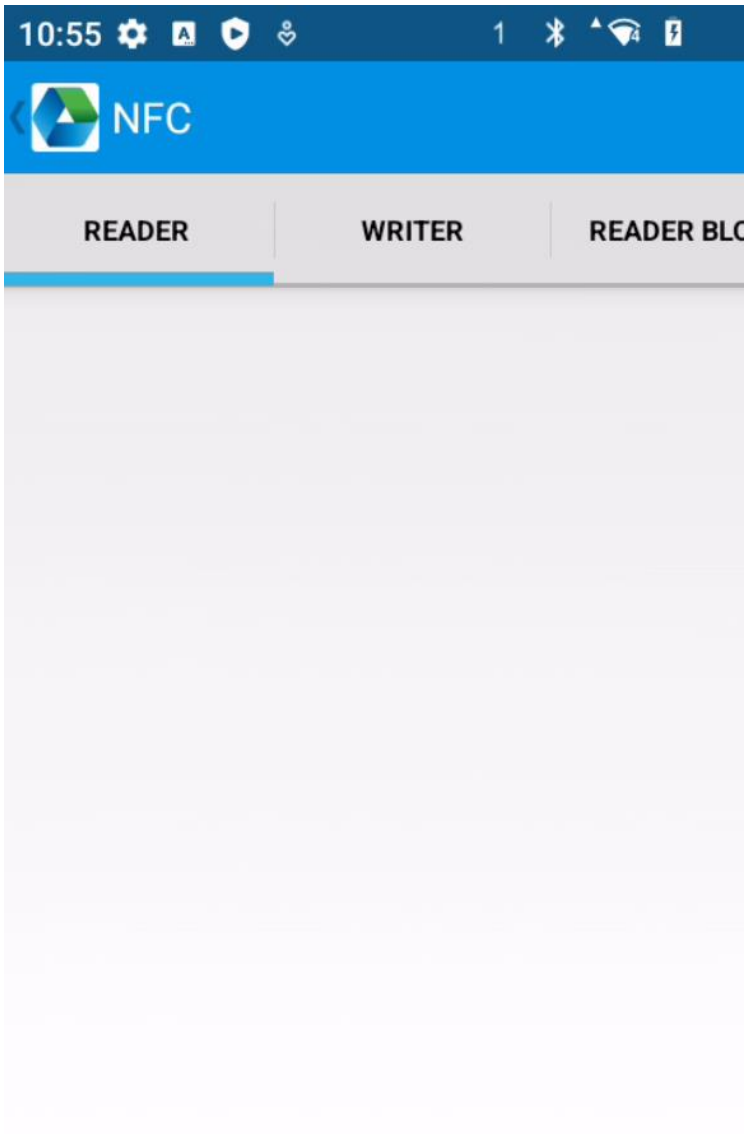
right

wrong

5 RFID Reader/Writer

5.1 NFC

In the App Center of the handheld device, turn on "NFC" to read tags and write information.

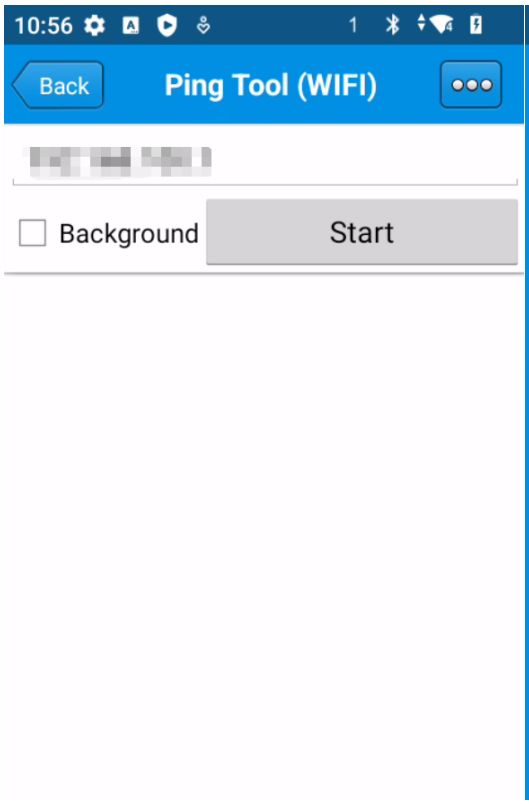

10:55
1
NFC
READER
WRITER
READER BLC

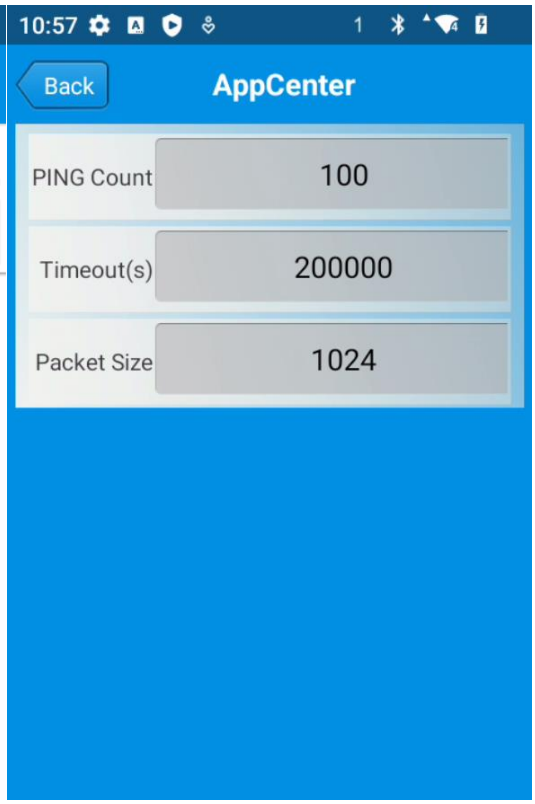
Chapter 6 Other Functions of APP Center

6.1 PING tool

1. Open the "PING Test" function in the App Center on your handheld device.

2. Set the PING parameters and select the external/internal address.



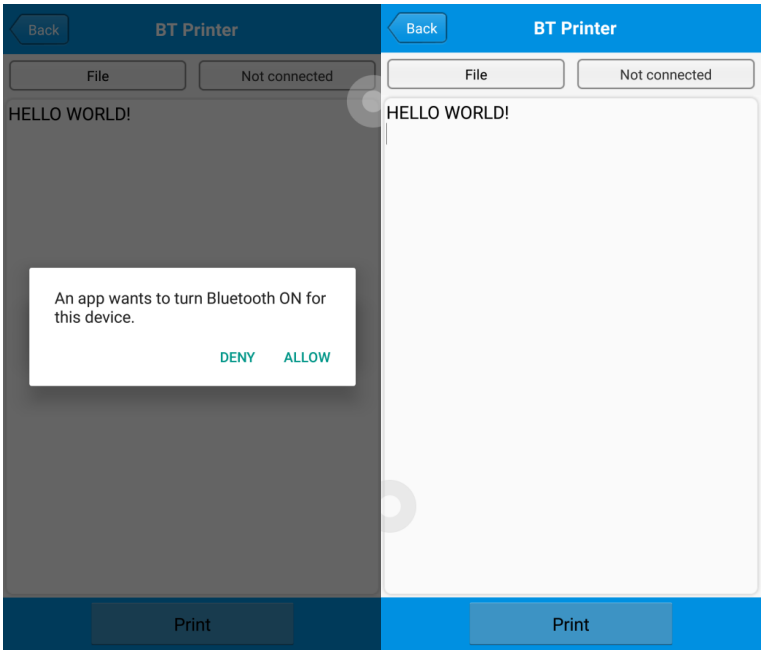


6.2 Bluetooth

1. Open the "Bluetooth Print Test" function in the App Center on your handheld device.

2. In the list of found devices, tap the device you want to connect to start pairing.

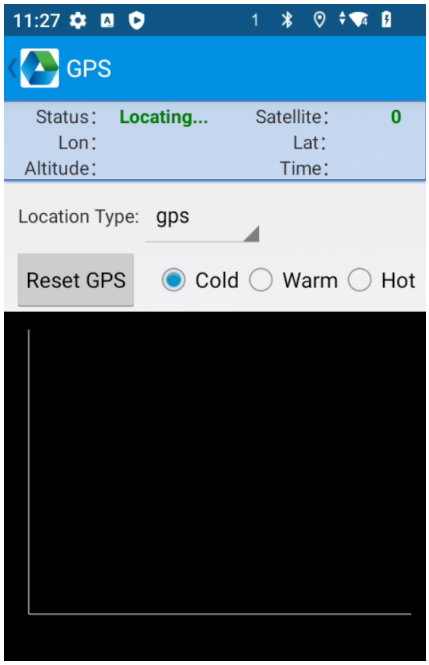
3. Select your printer and tap "Print" to begin printing;



6.3 GPS

1. Open "GPS Positioning Test" in the App Center on your handheld device;

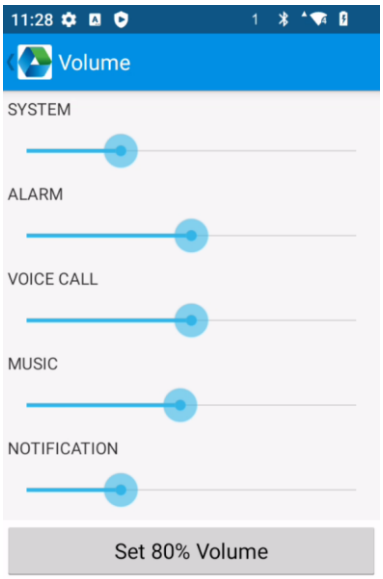
2. Set GPS parameters and obtain GPS data;



6.4 Volume Settings

1. Open "Volume Settings" in the App Center on your phone.

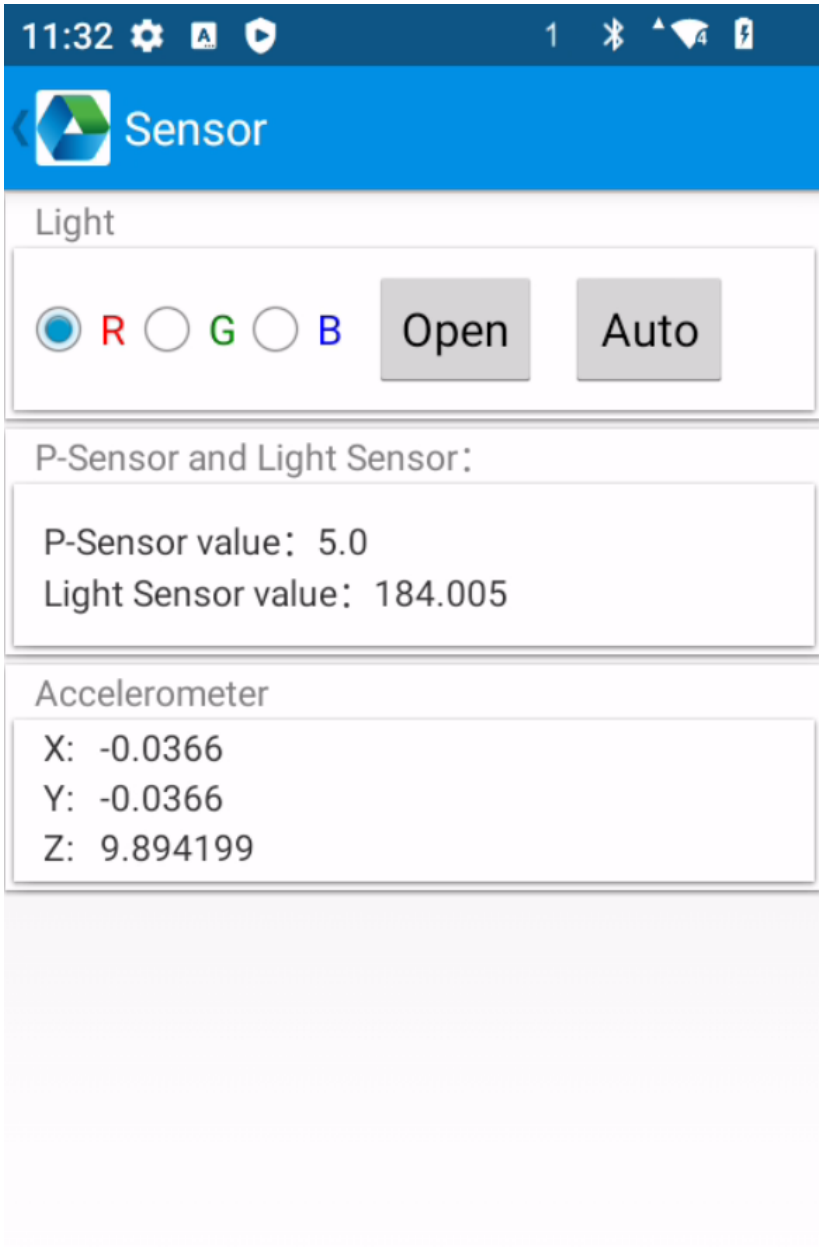
2. Adjust the volume as needed.



6.5 sensor

1. Open "Sensors" in the App Center on your phone.

2. Test the sensors as needed.



6.6 Button test

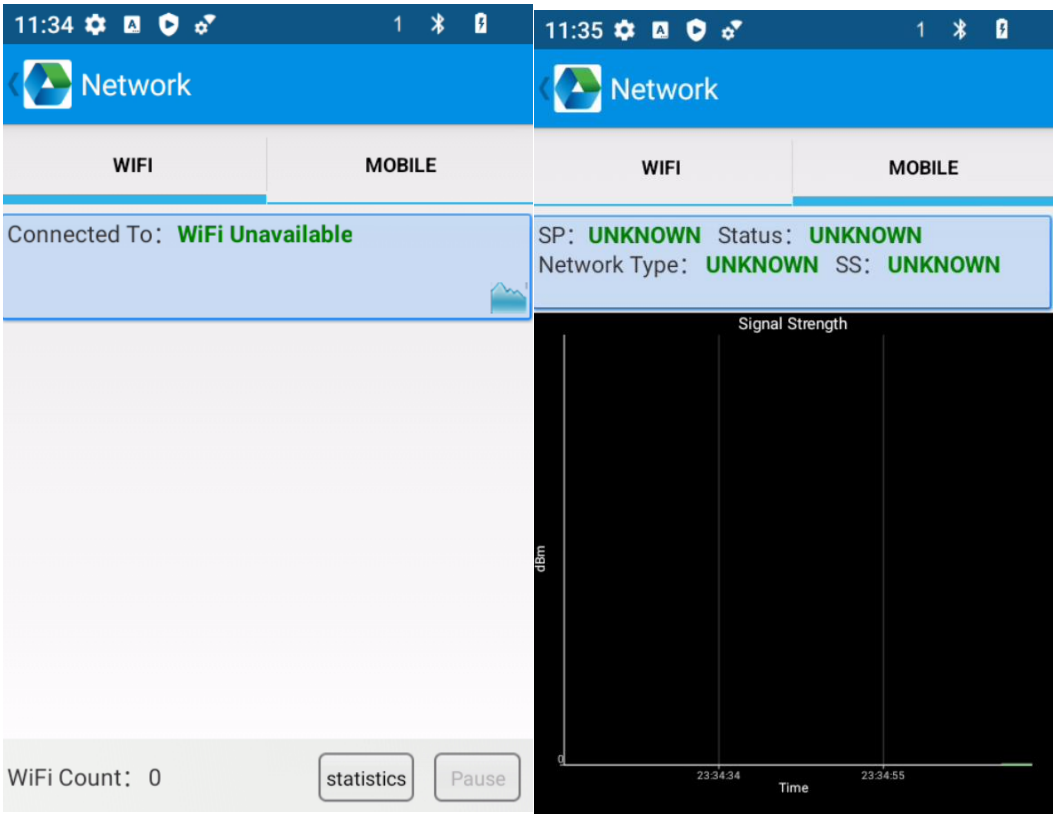
1. Open "Button Test" in the App Center on your handheld device.

2. Set and test the device's main values;

6.7 Network signal

1. In the App Center on your phone, open "Network Signal."

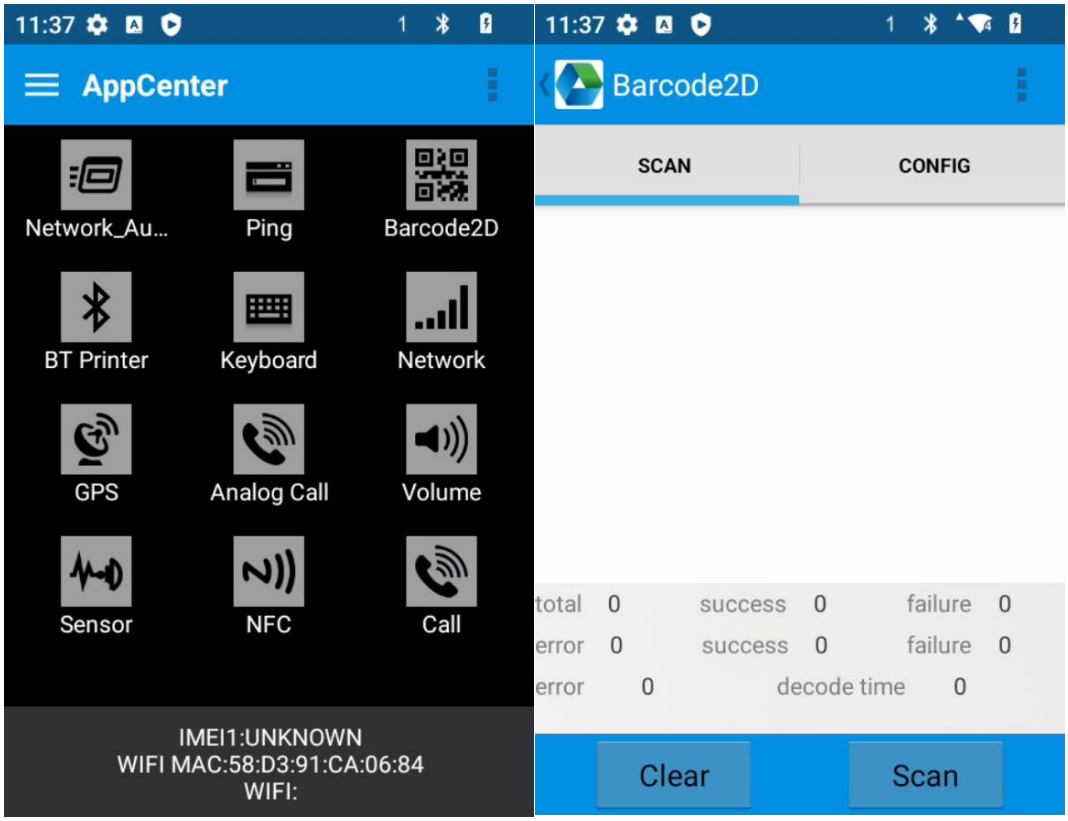
2. Test Wi-Fi/mobile signal as needed;



6.8 scanning

1. In the App Center (press the Multi-Function and Scan buttons simultaneously to access the App Center menu), open "1D Barcode Test" or "2D Barcode Test."

2. Tap the "Scan" button or use the Scan button to start scanning. You can also set the automatic interval parameters.



7 Equipment Specifications

Physical parameters	
size	203.5 x 72.8 x 160mm (with Pistol) 203.5 x 72.8 x 34.8 mm (without Pistol)
Battery	Host including battery and pistol: 571g Host with battery without Pistol: 385g
Display	4-inch HD screen, IPS IGZO 800x 480
keyboard	Side buttons: 1 custom button + 2 scan buttons + 2 volume buttons Main keyboard (optional): 27 keys/37 keys/47 keys;

Battery	The host has a 6700 mAh removable battery and an optional Pistol 5000 mAh removable battery. It supports QC3.0 fast charging and RTC, and has a built-in 50 mAh backup battery. The Pistol battery has a fuel gauge and supports battery hot swapping, which improves system reliability and effectively ensures user data security.
Expansion slots	1 SIM card slot, 1 TF card slot
Audio	1 microphone, back; 1 speaker; earpiece
sensor	Gravity sensor, distance sensor, light sensor, acceleration sensor, geomagnetism, gyroscope
Camera	Rear 13-megapixel camera, autofocus (flash)
Performance parameters	
CPU	Octa-core, 2.0 GHz
operating system	Android 13.0
RAM+ROM	4GB+64GB, UFS
Communication interface	USB Type-C, USB 3.1, OTG, extension pin
Maximum	Expandable MicroSD card supports up to 256GB

capacity expansion	
Usage Environment	
Operating temperature	-20℃to 50℃
Storage temperature	-40℃to 70℃
humidity	5%RH-95%RH (no condensation)
Drop specifications	Within the operating temperature range, all six sides can withstand multiple drops from a height of 1.5 meters to the concrete floor;
Rolling Test	Rolling continuously for 1000 times 0.5 meters, 6 contact surfaces still run stably after rolling, meeting IEC rolling specifications
Sealed environment	IP67, meeting IEC sealing standards
electrostatic protection	±15KV air discharge, ±8KV contact discharge
Data Communication	
WWAN	2G: 850/900/1800/1900MHz 3G: CDMA EVDO: BC0 WCDMA: 850/900/1900/2100MHz

	TD-SCDMA: A/F (B34/B39) 4G:B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B20/B28/B38/B39/B40/B41
WLAN	2.4G/5G dual-band, supports 802.11 a/b/g/n/ac/ax-ready/d/e/h/i/k/r/v, IPV4, IPV6, 5G PA;Fast roaming: PMKID caching, 802.11r, OKC;
Bluetooth	Bluetooth 5.0
GNSS	Integrated GPS, Beidou, GLONASS and Galileo, supports AGPS, built-in antenna
Data collection	
Barcode scanning engine (optional)	Zebra: SE4710/SE4750/SE4850/SE5500/SE5800 Honeywell: N6603/N6703/N6803FR; CM60;
NFC	Operating frequency 13.56MHz Protocol standards: ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc.

Development Environment	
SDK	Become a terminal software development kit
Development language	Java
Development Tools	Eclipse/Android Studio

8 Statement

This document is protected by copyright. Any unauthorized reproduction, modification, distribution, or display of any or all of its contents is a violation of copyright law.

This document is intended to provide users with instructions for using the C63 device. The information and guidelines presented in this document are based on our best knowledge and the author's knowledge at the time of writing. However, due to device upgrades, evolution, and other changes, please note that the content in this document may become outdated. While we strive to ensure the accuracy of the information in this document, we cannot guarantee its completeness, accuracy, or currency.

This document is for reference and guidance purposes only and is provided without any guarantee or warranty. The author assumes no responsibility for any misunderstanding, incorrect operation, loss, or damage. For more information on this document or support using the application, please refer to the official website or contact the technical support team.

Frequency Bands:
GSM 900: 880 MHz to 915 MHz
GSM1800: 1710 MHz to 1785 MHz
WCDMA Band I: 1920 MHz to 19780 MHz
WCDMA Band VIII: 880 MHz to 915 MHz
LTE Band 1: 1920 MHz to 1980 MHz
LTE Band 3: 1710 MHz to 1785 MHz
LTE Band 7: 2500 MHz to 2570 MHz
LTE Band 8: 880 MHz to 915 MHz
LTE Band 20: 832 MHz to 862 MHz
LTE Band 28: 703 MHz to 748 MHz
LTE Band 38: 2570 MHz to 2620 MHz
LTE Band 40: 2305 MHz to 2400MHz
LTE Band 41: 2496 MHz to 2690MHz (non-EU frequency band)
WLAN 802.11b/g/n20: 2412 MHz to 2472MHz
WLAN 802.11n40: 2422 MHz to 2462MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5150 MHz to 5250 MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5250 MHz to 5350 MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5470 MHz to 5725 MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5725 MHz to 5850 MHz
Bluetooth: 2402 MHz to 2480 MHz
GPS: 1575.42 MHz ± 1.023 MHz
BDS: 1561.098MHz
GLONASS: 1602 MHz
GALILEO: 1575.42 MHz
NFC: 13.56MHz

Max power:
GSM 900: 33.06dBm
GSM1800: 31.41dBm
WCDMA Band I: 25.04dBm
WCDMA Band VIII: 24.87dBm
LTE Band 1: 24.04dBm
LTE Band 3: 24.62dBm
LTE Band 7: 25.28dBm
LTE Band 8: 24.71dBm
LTE Band 20: 25.13dBm
LTE Band 28: 23.80dBm
LTE Band 38: 25.24dBm
LTE Band 40: 25.53dBm
LTE Band 41: 23.57dBm
2.4GHz WLAN: 17.48dBm
5GHz WLAN: 17.21dBm
5.8GHz WLAN: 13.97dBm
Bluetooth: 4.79dBm
BLE: 9.89dBm
NFC: 11.74dBuA/m at 3m

Modulation Mode:
GSM: GMSK for GSM/GPRS; GMSK and 8PSK for EDGE
WCDMA: QPSK; HSDPA: QPSK/16QAM; HSUPA: BPSK
LTE: QPSK/16QAM
2.4G WLAN: 802.11b(DSSS): CCK, DQPSK, DBPSK
802.11g(OFDM): BPSK, QPSK,16-QAM,64-QAM
802.11n(OFDM): BPSK, QPSK,16-QAM,64-QAM
5G WLAN: 802.11a/n(OFDM): BPSK, QPSK,16-QAM,64-QAM
802.11ac (OFDM): BPSK, QPSK,16-QAM,64-QAM,256-QAM
Bluetooth: BT(1Mbps): GFSK
BT EDR(2Mbps): π/4-DQPSK
BT EDR(3Mbps): 8DPSK
BLE: GFSK
GPS: BPSK
BDS: QPSK
GLONASS: FDMA
GALILEO: CBOC

NFC: ASK

Antenna Specification:
GSM/WCDMA/LTE: FPC Antenna, Gain(s): GSM 900: -2.1dBi, GSM1800: -0.9dBi;
WCDMA: B1: -0.8dBi, B8: -2.1dBi; LTE: B1: -0.8dBi; B3: -0.9dBi; B7: -1.9dBi; B8: 0.8dBi;
B20: -2.2dBi; B28: -3.7dBi; B38:-1.0dBi; B40: -2.2dBi; B41: 0.8dBi
Bluetooth: FPC Antenna, Gain(s): 2.9dBi;
WLAN: FPC Antenna, Gain(s): 2.4GHz: 2.9dBi; 5GHz: 1.9dBi
GNSS: FPC Antenna.
NFC: Coil Antenna.

CE Maintenance

1. Use careful with the earphone maybe excessive sound pressure from earphones and headphones can cause hearing loss.

2. Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
3. The product shall only be connected to a USB interface of version USB2.0.
4. Adapter shall be installed near the equipment and shall be easily accessible.
5. EUT Operating temperature range: 0° C to 40° C .
6. Adapter： The plug considered as disconnect device of adapter

Power supply and ADP(rating):

Input: AC 100-240V 50/60Hz 0.6A

Output: DC 5.0V 3.0A or 9.0V 2.0A or 12.0V 1.5A 18.0W

7. The device complies with RF specifications when the device used at 5mm you're your body.
8. To prevent possible hearing damage. Do not listen at high volume levels for long periods.

This product may be used in the following European member states subject to the following restrictions. For products that operate in the frequency band 5.150 to 5.350 GHz, wireless access systems (WAS), including radio local area networks (RLANs), shall be restricted to indoor use.

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES
	FI	FR	HR	HU	IE	IS	IT	LI	LT	LU	LV
	MT	NL	NO	PL	PT	RO	SE	SI	SK	TR	

Declaration of Conformity

Shenzhen Chainway Information Technology Co., Ltd hereby declares that this Mobile Data Terminal is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10),This product is allowed to be used in all EU member states.

CE

Federal Communication Commission Interference Statement
FCC ID: 2AC6AC63

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment 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 to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to 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 of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Radiation Exposure Statement:

This device meets the government's requirements for exposure to radio waves.
This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions (10mm) accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.