

Smart handheld terminal

BX6200 User Manual



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Chapter 1 Introduction and Appearance

1.1 Introduction

The BX6200 is an all-round industrial handheld terminal centered around "multi-function integration" and "high-performance stability". The device can flexibly be equipped with functions such as barcode/UHF/fingerprint/face recognition, security (PSAM), and is equipped with a high-end eight-core CPU to ensure robust computing power and system reliability. Its design perfectly fits diverse industry applications such as logistics warehousing, smart manufacturing, attendance inspection, and ticketing management, helping customers achieve efficient and secure mobile operations.

Tip: The product features are modular optional and cannot be assembled with all functions simultaneously. Please consult the technical personnel for specific configuration details.

1.2 Appearance and Equipment Diagram Explanation

The portable smart terminal is equipped with a multi-functional keypad layout, including physical keys and dual-side shortcuts. This ergonomic design caters to diverse operating habits and ensures high efficiency across various professional scenarios.

- 1) **Front Panel:** Features 3 dedicated navigation keys (from right to left: **Back, Home, and Menu**).
- 2) **Left Side:** Features 2 keys, including **Volume Control** and a dedicated **Scan/Customizable** button.
- 3) **Right Side:** Features 2 keys, including the **Power** button and a secondary **Scan/Customizable** button.





Chapter 2 Safety Precautions

2.1 Laser safety



Do not look directly at the scanning laser to avoid eye injuries!

2.2 battery safety

1) Charger usage specifications

It is necessary to use the official standard charger of the device for charging. It is strictly prohibited to use mobile phone fast charging heads, USB ports for power banks, or any other unofficial charging devices to prevent permanent damage or safety risks caused by battery overcharging or overheating due to voltage or current mismatch.

2) Suggestions for daily charging and battery management

To extend the battery life, it is recommended to maintain the battery level within the range of 30% to 80% during daily use. After the device is fully charged, the charger should be disconnected in a timely manner to avoid the battery being in a 100% high voltage saturation state for a long time.

3) Long term idle equipment disposal

If the device needs to be idle for more than a month, please make sure to shut it down first and charge the battery to around 50% for storage. Afterwards, the battery should be checked and recharged to 50% every two months to prevent it from entering a deep discharge state due to self discharge, which may result in inability to recharge or damage.

4) Temperature requirements for use and charging environment

Please use and charge at a suitable ambient temperature. Avoid operating in environments that are too low, too high, or directly exposed to sunlight. Extreme temperatures can significantly accelerate battery capacity degradation and may trigger device protection mechanisms.

- 5) **Strictly prohibit charging during high load operation**
The device generates significant heat during high load operation (such as enabling batch card reading, continuous data transmission, and running large applications). It is strictly prohibited to use the battery while charging for a long time in such scenarios, in order to prevent the rapid increase in battery temperature caused by overlapping heating, which can accelerate aging and pose safety hazards.
- 6) **Handling of abnormal battery conditions**
If the battery or device is found to have bulges, leakage, abnormal heating, abnormal noise, or inability to charge, it should be immediately stopped and the charger disconnected. Please do not disassemble or handle it yourself. Contact after-sales technical support for safety testing and replacement.
- 7) **Physical Security and Storage Warning**
Please avoid strong impact, puncture, or disassembly of the equipment. When stored, it should be placed in a dry, cool place and kept away from flammable materials, high temperature sources, and humid environments.
- 8) **Warranty terms association prompt**
Battery performance degradation or equipment damage caused by the use of non-standard chargers, use in non compliant environments, or failure to comply with this specification may not be covered by the product warranty.

Chapter 3 Quick Start

3.1 Battery installation

Attention: Before disassembling the battery, be sure to turn off the device and remove the external power source. It is absolutely forbidden to directly remove the battery while turning it on, otherwise it may damage the device.

- 1) Push the battery cover latch to the right to unlock it.
- 2) Remove the battery cover, place the battery flat into the battery compartment, and align the contacts correctly.
- 3) Close the battery cover and push the latch back to the left until it locks.







Tip: To avoid frequent disassembly that may affect the lifespan of components, it is recommended not to disassemble the battery unless necessary.

3.2 Startup and Shutdown

power on

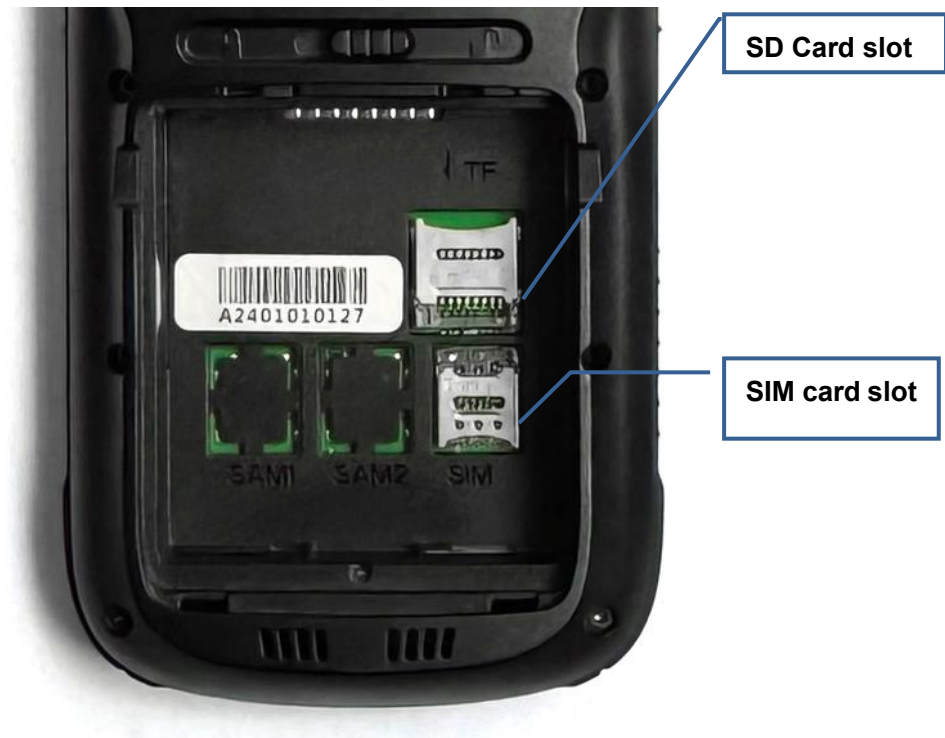
- 1) You can press and hold the power button,  Turn on the machine. In deep sleep mode, short press the power button to wake up the system.

Shut down

- 2) When the machine is turned on and not in sleep mode, press the power button briefly  Until the option menu pops up on the right side of the screen with slight vibration feedback, select the shutdown option to shut down normally.

3.3 Install SIM, Micro SD/TF card

- 1) Remove the device host battery and insert the card into the corresponding slot according to the direction shown in the diagram. The style is as follows:




3.4 Direct Charging/Battery Charging Instructions

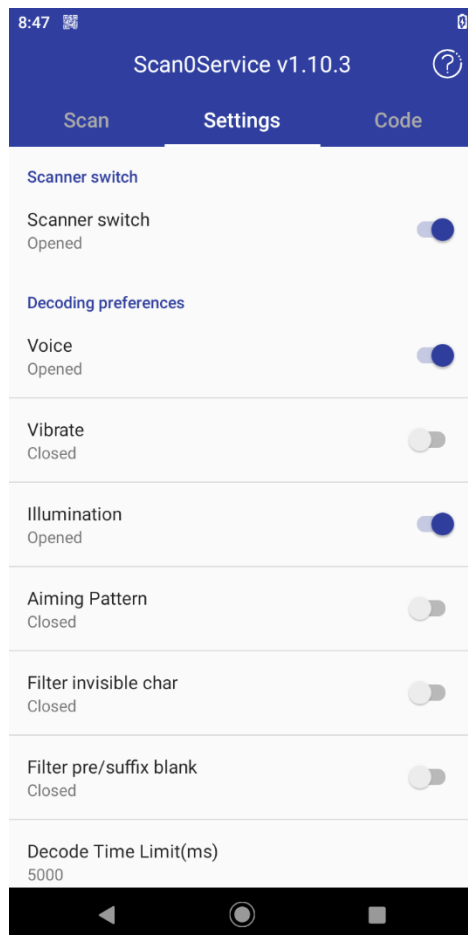
- 1) Please make sure to use the original power adapter and data cable provided by the factory to charge the device, and avoid using other brands of adapters to prevent device damage or abnormal charging.
- 2) If you need to charge the battery separately, please use the original charging dock for operation.
- 3) After connecting the charger to the power supply, plug the data cable into the Type-C interface of the device for charging.
- 4) Attention: Please avoid pulling or forcibly unplugging the Type-C interface during operation to avoid damaging the device or charger.
- 5) The battery that comes with the device must be fully charged before first use.
- 6) Do not disassemble the battery during the charging process.
- 7) When the battery is completely depleted, the device will automatically shut down.

Chapter 4 Data Collection

4.1 Scanning Service




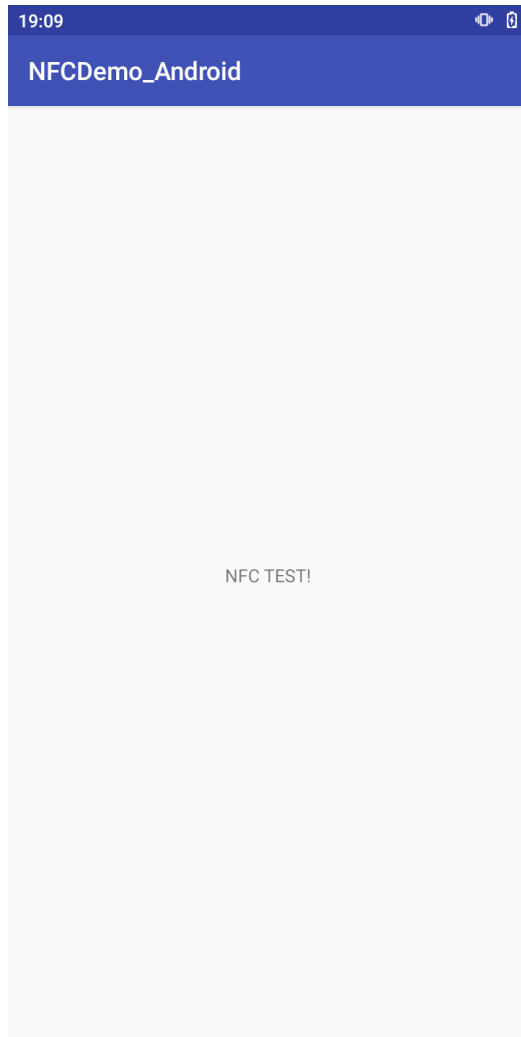
- 1) Locate this icon on the PDA's main interface  , Once you enter the main interface and turn on the scan switch, press the left/right scan button on the machine to scan normally.
- 2) Click the settings button to configure the basic settings for the scanning tool.



For more detailed feature introductions, please contact the relevant technical support personnel, who will provide the user manual.


4.2 NFC

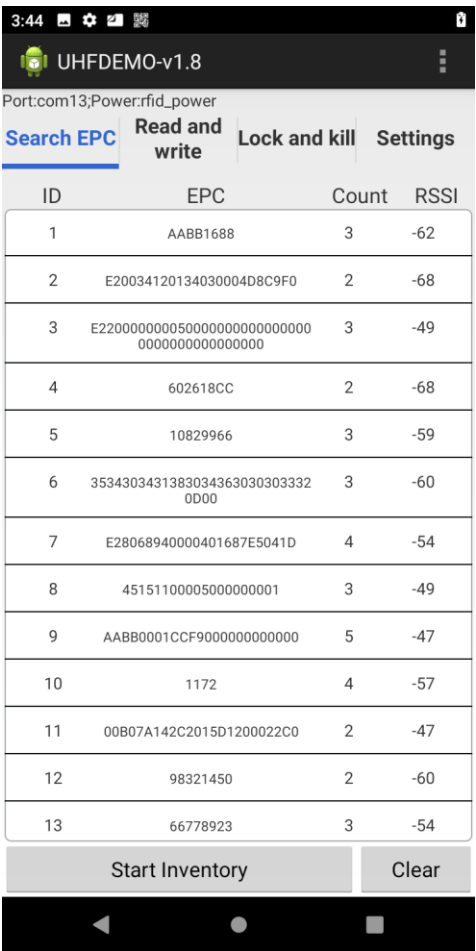
Turn on the nfc function in the settings, find this icon  in the desk and click to enter the NFC application. and then put the nfc card close to the nfc area . there will be a sound or text prompt.



4.3 UHF

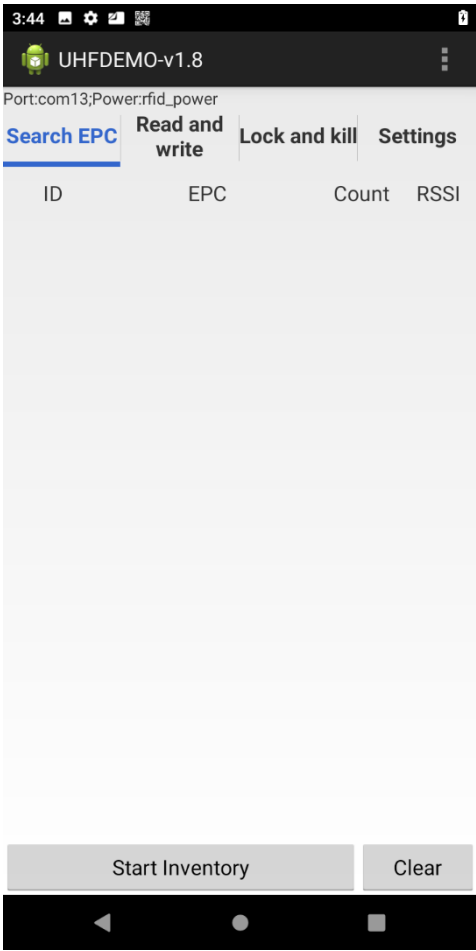
4.3.1 Inventory EPC

Search for this icon on the startup desktop  , Click on the icon to enter the UHF application.



ID	EPC	Count	RSSI
1	AABB1688	3	-62
2	E20034120134030004D8C9F0	2	-68
3	E22000000005000	3	-49
4	602618CC	2	-68
5	10829966	3	-59
6	3534303431383034363030303033320D00	3	-60
7	E28068940000401687E5041D	4	-54
8	451511000050000000001	3	-49
9	AABB0001CCF9000000000000	5	-47
10	1172	4	-57
11	00B07A142C2015D1200022C0	2	-47
12	98321450	2	-60
13	66778923	3	-54

Start Inventory Clear



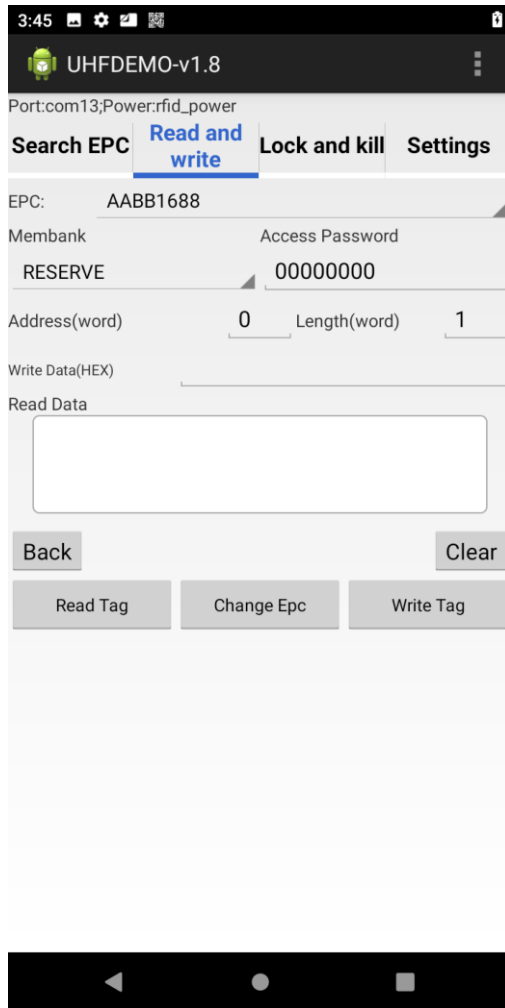
ID	EPC	Count	RSSI
----	-----	-------	------

Start Inventory Clear

Click to start inventory, and the device will search for cards according to the set working method.

- 1) Start Inventory: Click on Start Inventory to start reading label information, which defaults to obtaining EPC code.
- 2) Clear: Click to clear the current card search data.
- 3) Frequency: Display the number of times the current tag has been searched for.
- 4) RSSI: displays the signal strength when the tag is found.

4.3.2 Read and write

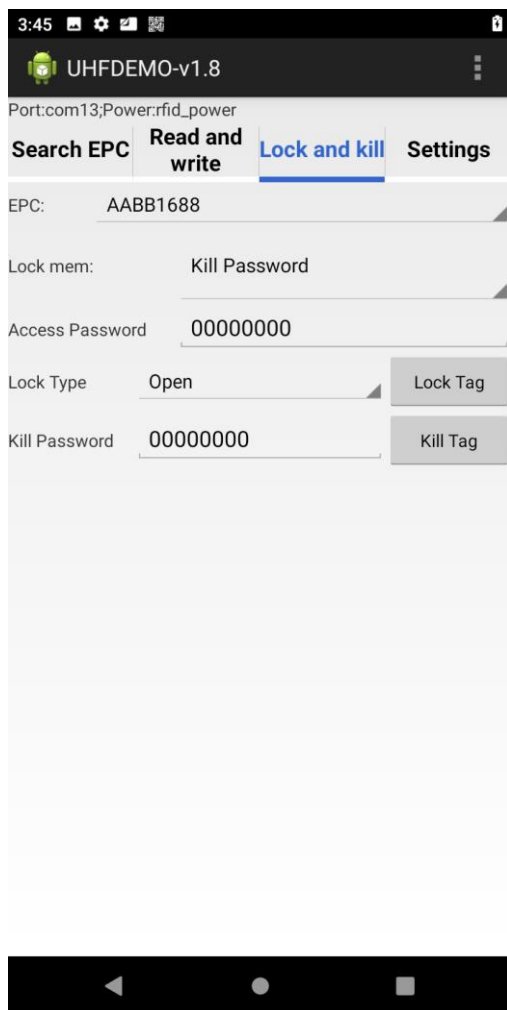


Select a found tag, choose the read-write tag area, enter the corresponding read-write tag conditions, click on the read-write tag to complete the read-write tag operation.

- 1) EPC: Read tags can be selected and read/write operations can be performed.
- 2) Data area: Select the read/write label area, which can include Reserve area, User area, EPC area, and TID area.
- 3) Access password: Used in conjunction with tag reading/writing, the password used for reading or writing cards.
- 4) Starting address: Used in conjunction with reading/writing tags, select the address bit for reading or writing.
- 5) Length: Used in conjunction with reading/writing tags, select the length for reading or writing.
- 6) Write data: Used in conjunction with writing tags to display the current content of the written tag.

- 7) Read data: Used in conjunction with tag reading to display the current read tag data.
- 8) Read label: Read the data at the set position, and the read data will be displayed in the read data above the label button.
- 9) Write label: Write data to the set location. Please enter the data to be written in the write data section above the write label button.
- 10) Clear: Clear the contents of the read data box above the read/write label.

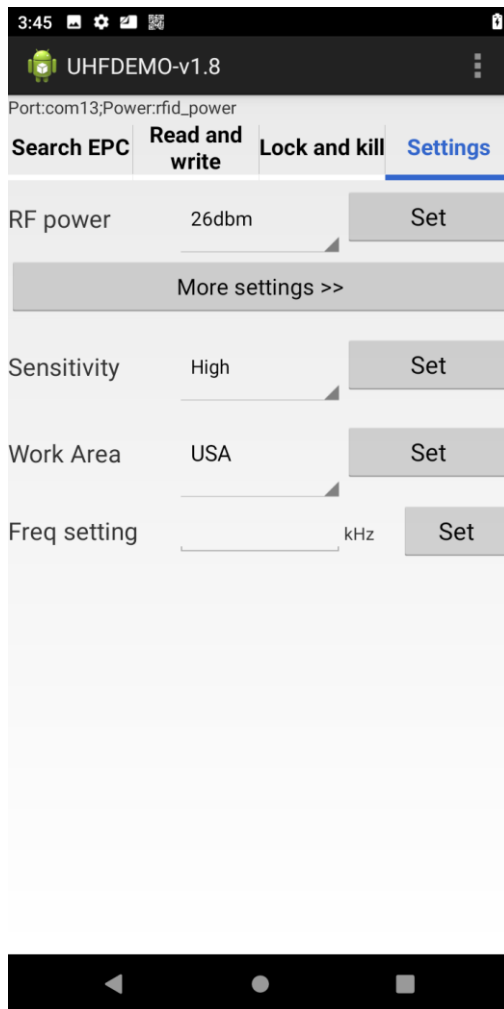
4.3.3 Lock and deactivate



After the tag is locked, the default password (8 zeros) cannot be used to write the tag, only the self set password can be used for tag writing operations.

- 1) EPC: Read tags can be selected, locked, or destroyed.
- 2) Locked area: Lock a certain area of the tag, which can be selected as Kill Password area, Access Password area, EPC area, TID area, User area.
- 3) Access password: Lock tag password, default password is 8 zeros, the first 4 bytes of the password area are the destruction password, and the last 4 bytes are the access password.
- 4) Lock type: Lock the tag, which can be open, locked, or permanently locked (cannot be unlocked after operation).
- 5) Destruction password: (the first 4 bytes of the password area) First, change the destruction password in the password area to non-zero, and then use the modified password for the operation. The destruction password must be non-zero in order to take effect.

4.3.4 Settings

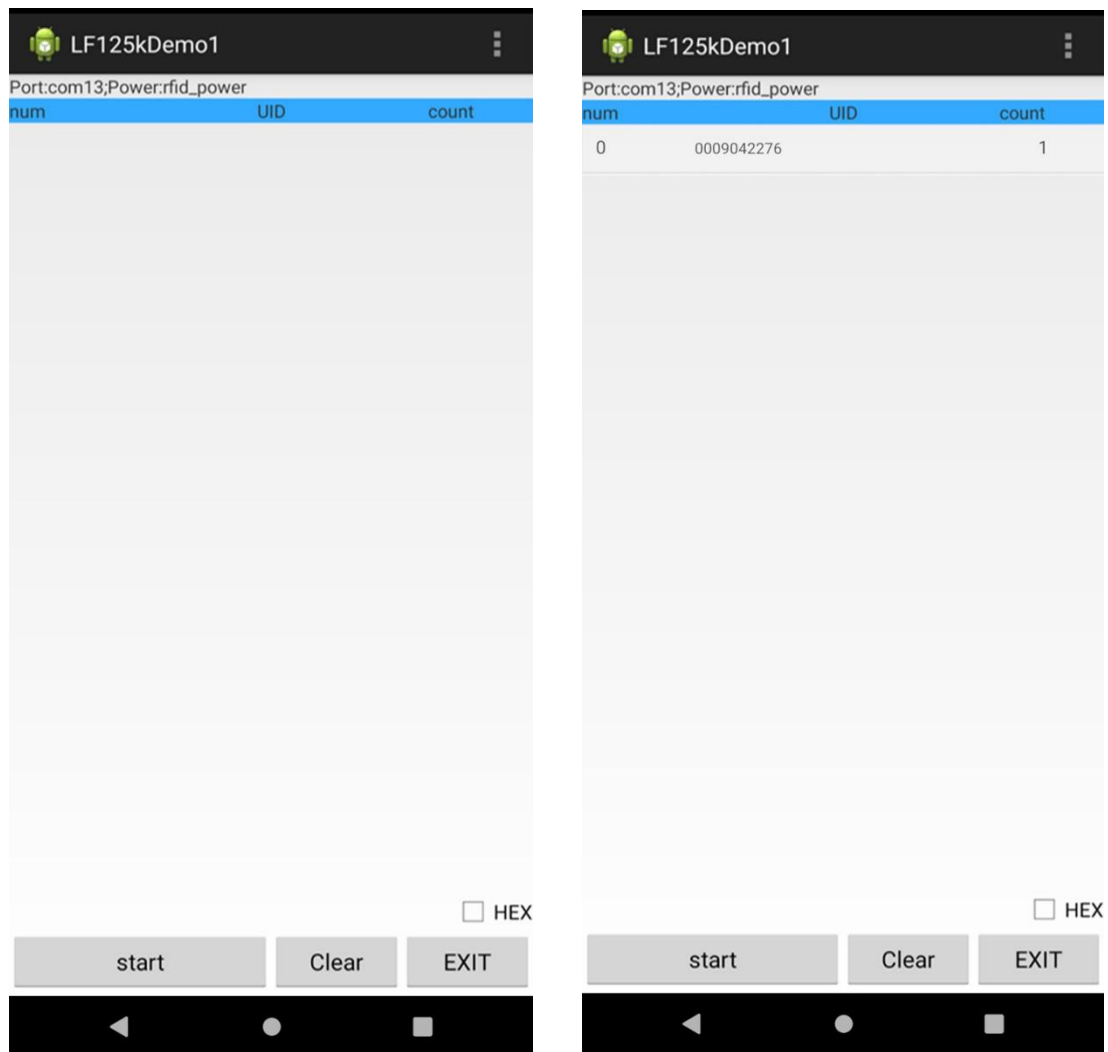


Basic parameter settings can be made for the work area and output power

- 1) RF power: Power setting operation can be performed on the current card seeking antenna.
- 2) Work area: You can set the work area of the current device.

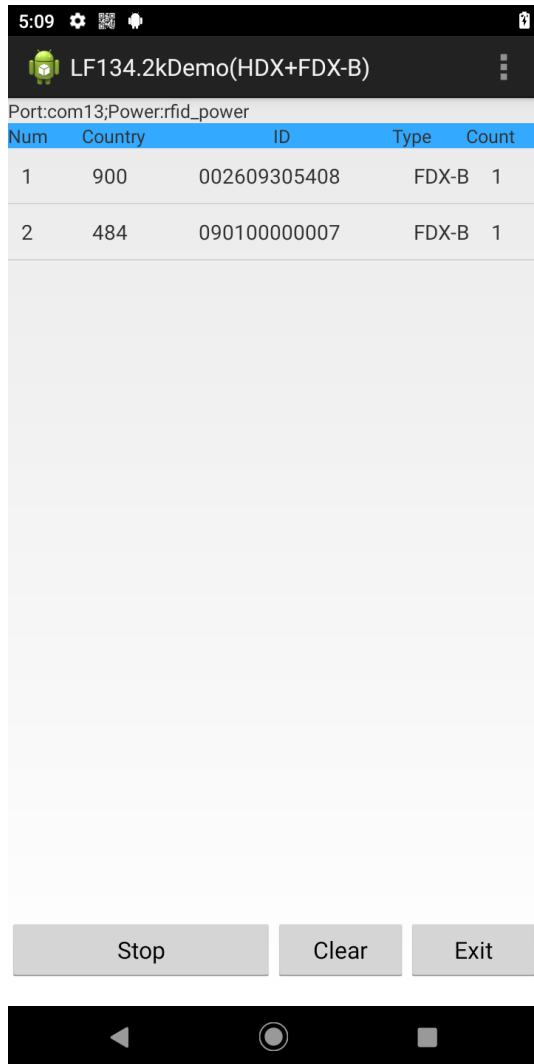
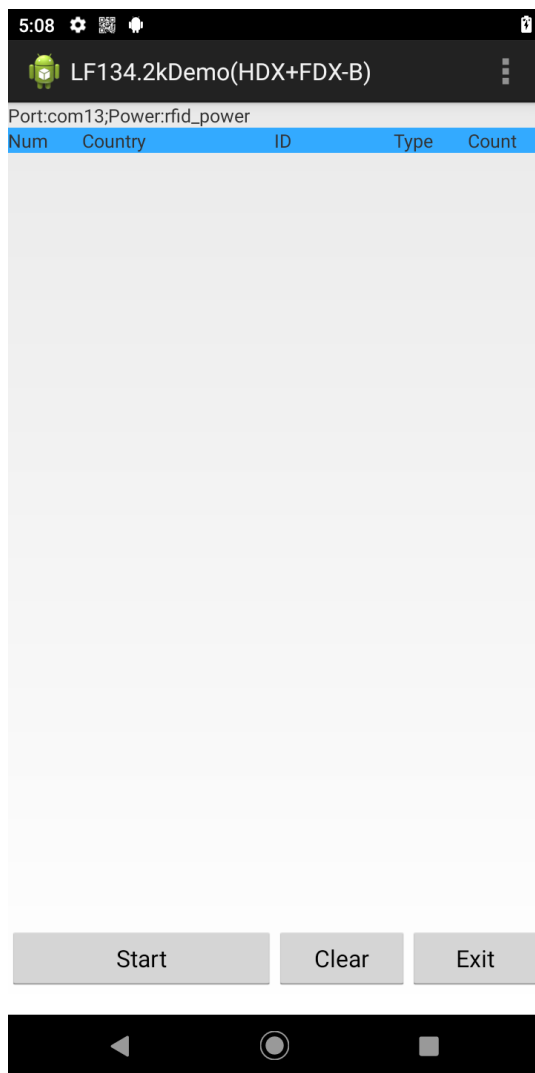
4.4 LF 125K

- 1) Find LF 125K demo on the desktop and click the icon to enter the 125K application.
- 2) And click start and put the corresponding card or tag close to the back rfid area . there will be a sound or text prompt.




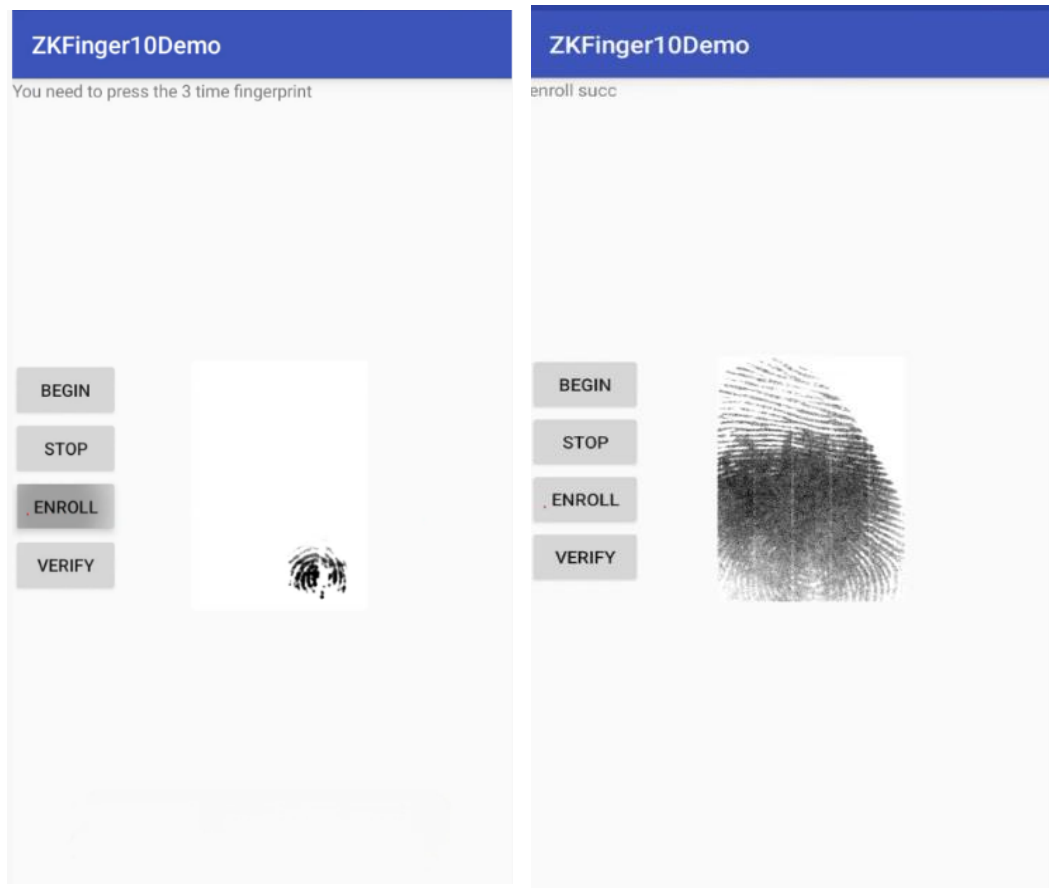
4.5 LF 134.2K

- 1) Find LF 134.2K demo on the desktop and click the icon to enter the 134K application.
- 2) And click start and put the corresponding card or tag close to the back rfid area . there will be a sound or text prompt

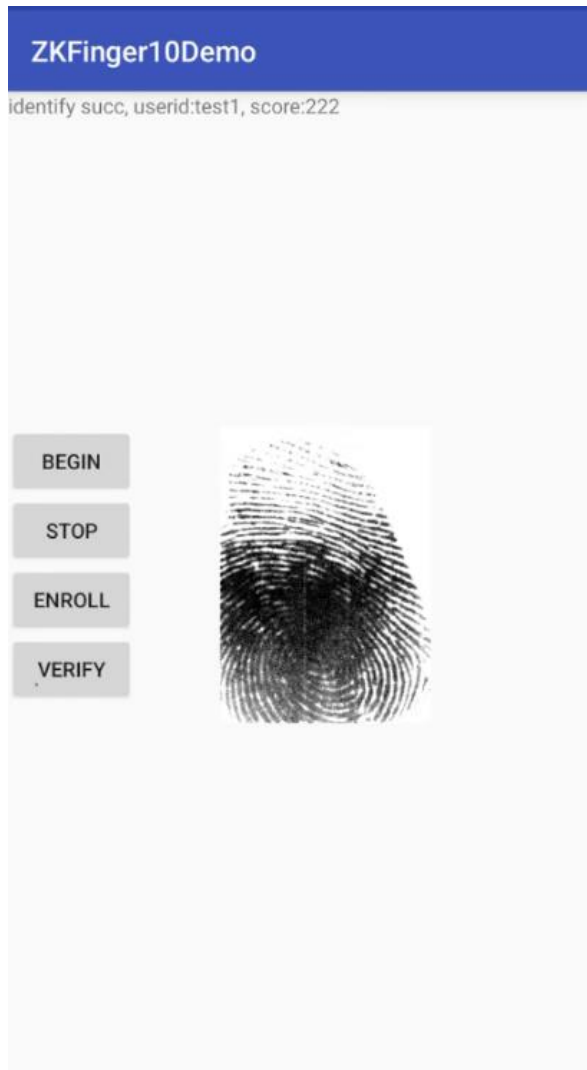


4.6 Fingerprint

- 1) Find this icon  on the desktop after turning on your device, and click the icon to access the fingerprint application.
- 2) BEGIN/STOP: Start or stop the fingerprint information input process.
- 3) ENROLL: Click to input fingerprint information three times as prompted, and it will show enroll succ.







VERIFY: Click to compare and verify the already registered fingerprint information.

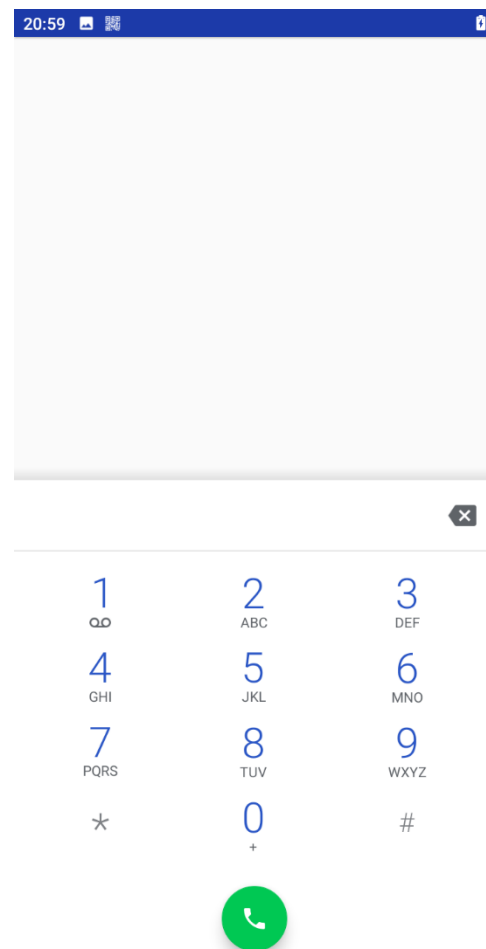
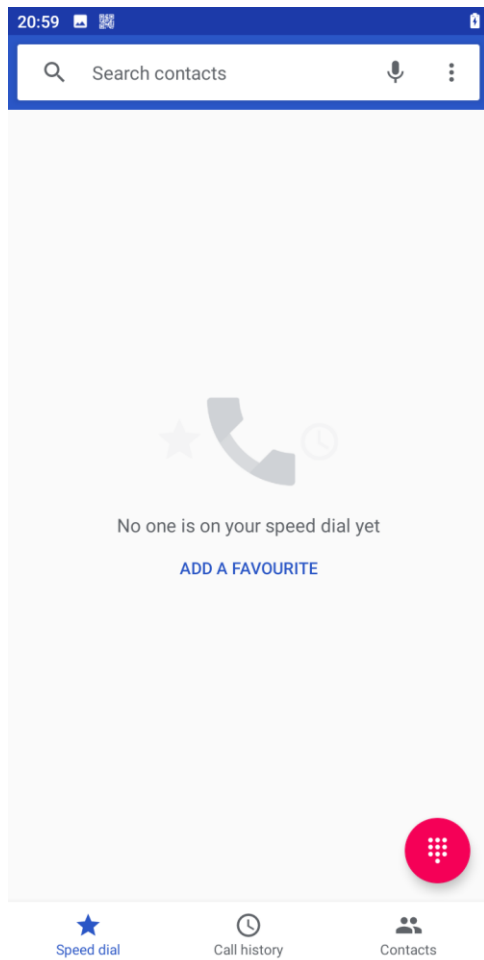


Remark: Due to differences in functional modules and android OS version upgrade, some display pages may deviate from the above. If you have any operational questions or secondary development needs, please directly consult our sales staff or ask for after-sales.





Chapter 5 Communication and GPS

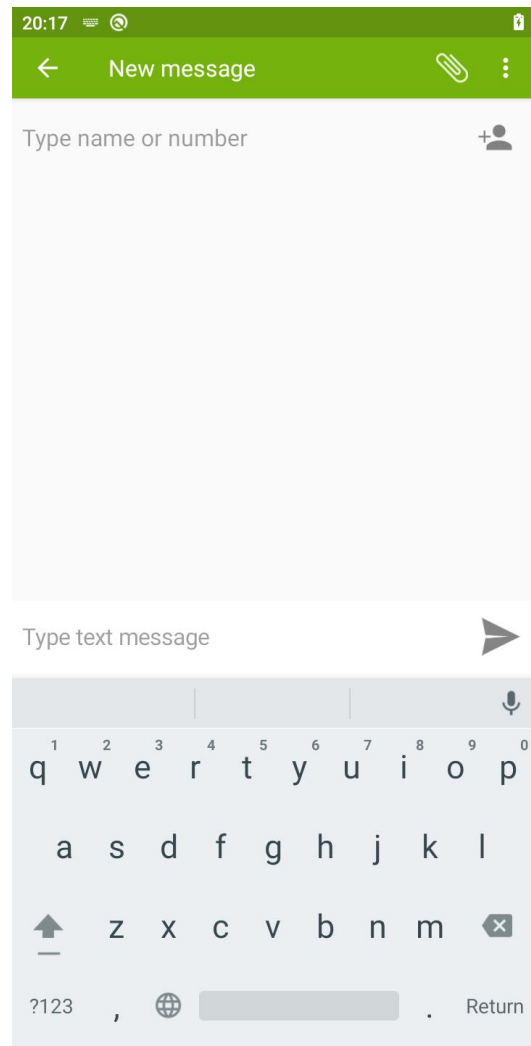
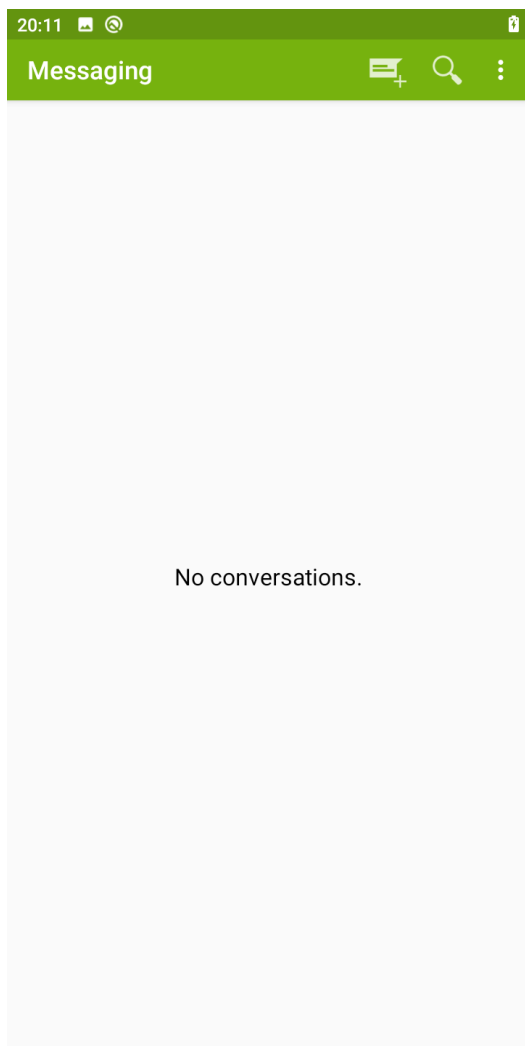
5.1 Dial

- 1) Click on the icon : The bottom of this page contains three parts: speed dial, call history, and contacts.
- 2) Click on the right side , Enter the dialing interface, press the number keys, and enter the phone number
- 3) Tap , make a phone call
- 4) tap , End the call



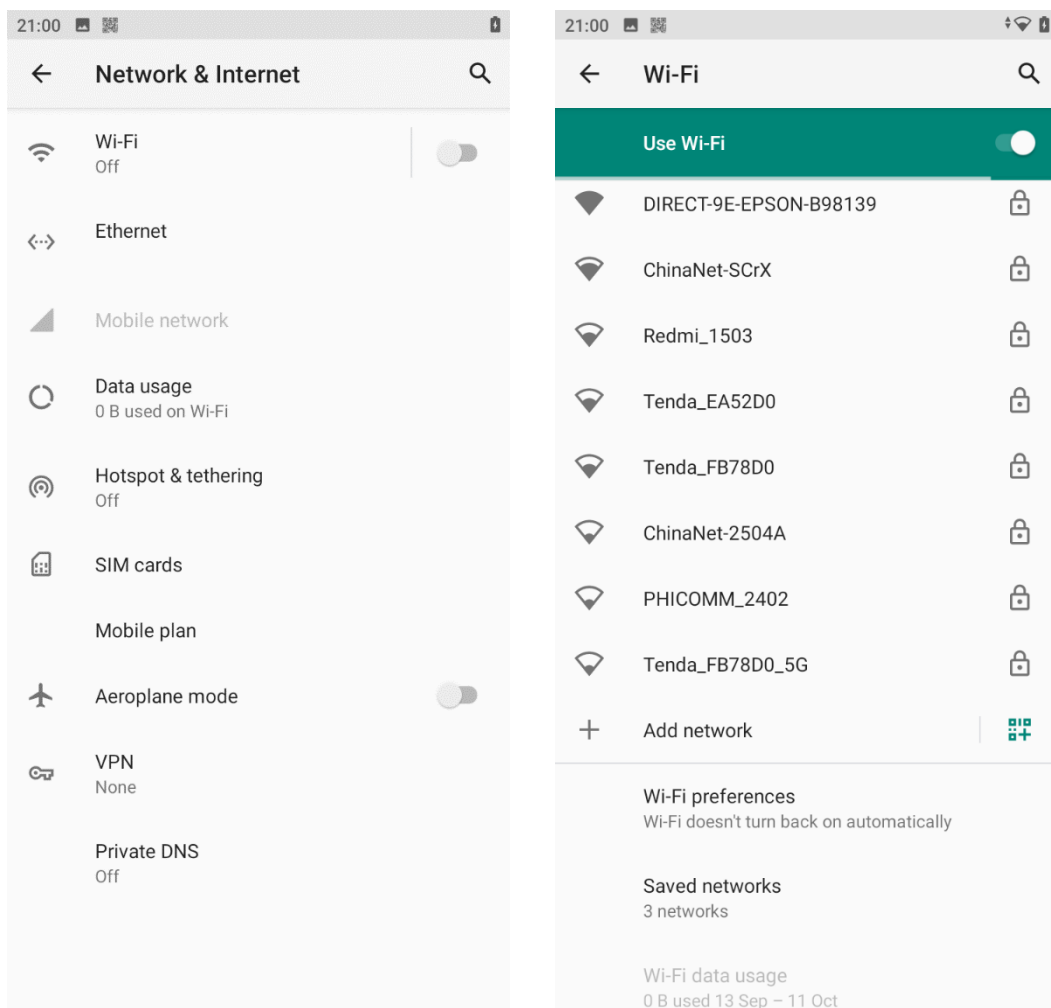
5.2 Text message

- 1) Tap , Open the SMS window
- 2) Tap , Enter a new conversation
- 3) After the recipient confirms their phone number or name, they can input text for SMS communication
- 4) Tap  Add pictures, videos, etc; Tap , Insert common phrases.



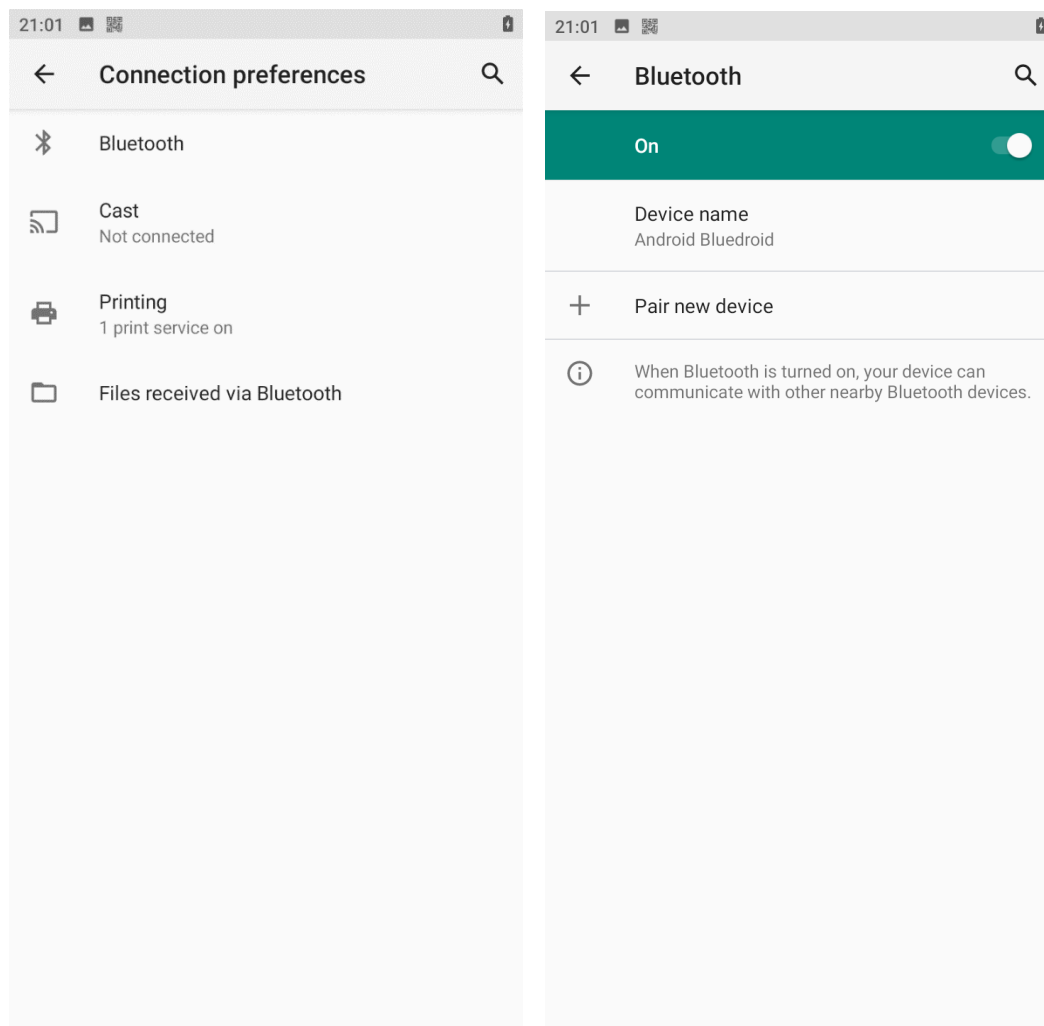
5.3 Network connection

- 1) Enter the "Settings" menu of the device.
- 2) Select the Network and Internet option.
- 3) Click "Internet" to enter the wireless network management interface.
- 4) Turn on the "WLAN" switch on the right, click on "WLAN", and the system will automatically scan and display a list of available networks.
- 5) Select the target wireless network to connect to from the list.
- 6) According to network requirements, enter the correct password (if required) to complete the connection.
- 7) You can also pull down the notification bar (shortcut settings panel) from the top of the screen, directly click on the "WLAN" icon, and then select the target network from the pop-up list and enter the password to quickly connect.




5.4 Bluetooth connection

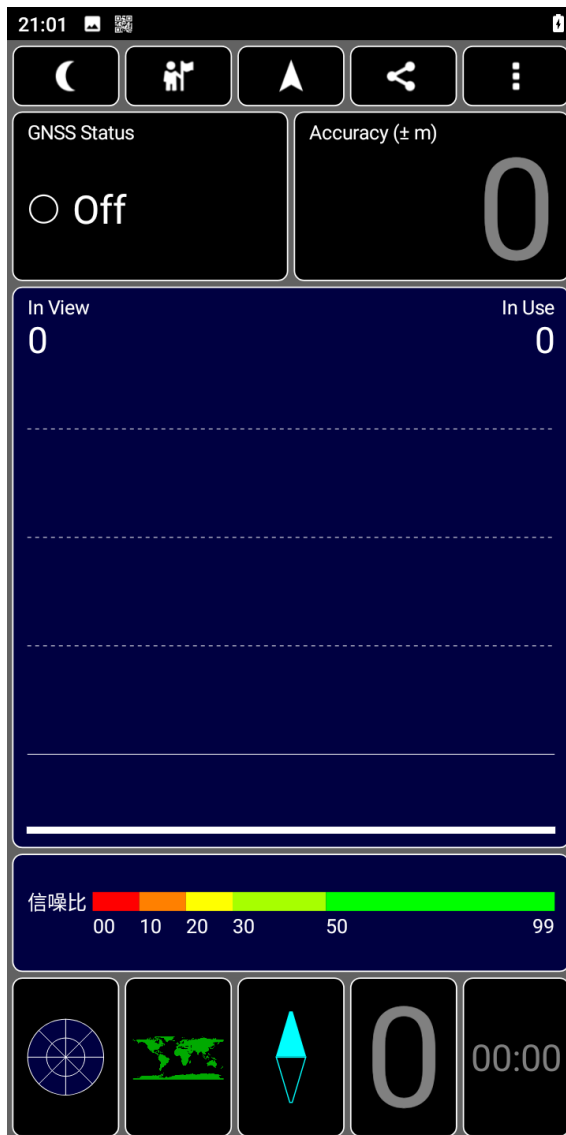
- 1) Enter the "Settings" menu of the device.
- 2) Select the 'Connected Devices' option.
- 3) Click on 'Connection Preferences' to enter the management interface.
- 4) After clicking on "Bluetooth", turn on the right switch to use the Bluetooth function normally.
- 5) You can also pull down the notification bar (quick settings panel) from the top of the screen and directly click on the "Bluetooth" icon to turn it on.
- 6) In the list of devices found, click on the device you want to connect to pair it with;
- 7) After entering the PIN code in the pop-up pairing request dialog box, click OK to connect the device;
- 8) Devices that have been successfully paired can be renamed or unpaired by clicking the settings button on the right, and corresponding operations can be carried out according to needs.



5.5 GPS




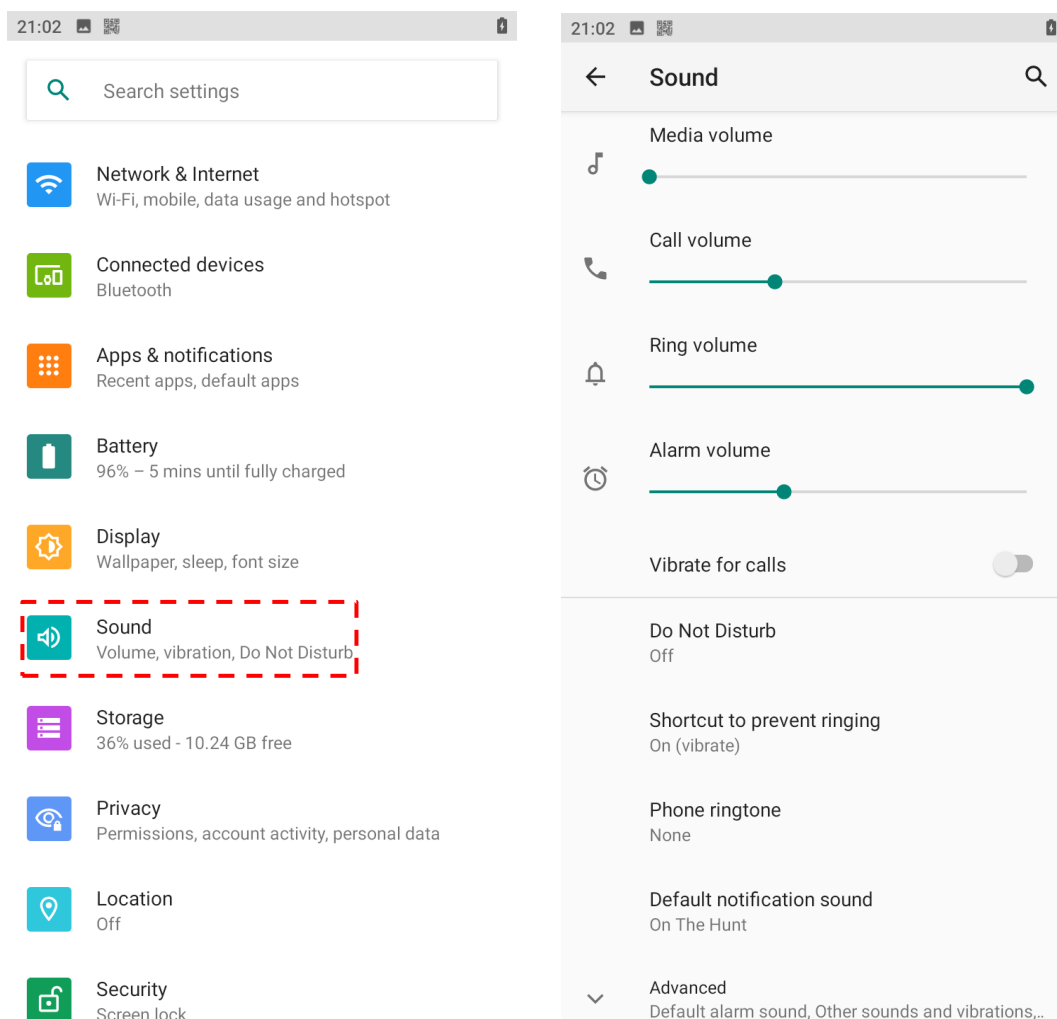
- 1) Click on the icon , open the "GPS positioning test".
- 2) Set GPS parameters to obtain GPS data information.



Chapter 6 Settings and Management

6.1 Volume adjustment

- 1) Find this icon in the settings  : can set media, call, ringtone, and alarm volume, and can also set icon functions.




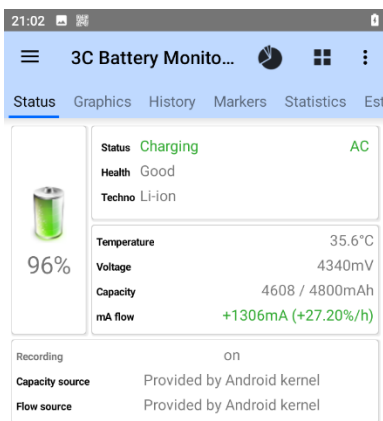
6.2 Power and battery management

- 1) Due to the fact that the battery only has a small amount of power for testing purposes when it leaves the factory, it is important to charge the machine before using it.
- 2) Charging the battery through a power adapter takes about 4 hours or more for the first charge. The LED light stays on red during charging and turns green when the battery is fully charged.
- 3) The optimal operating temperature is room temperature of 18-25 °C .

Temperatures below -10 or above 50°C will not charge the battery.

- 4) If the wireless network service or data collection program is enabled, the battery power will be significantly reduced. It is recommended to turn off the program when not using this function to save power.

- 5) Enter the  3C Battery Monitor Pro program to understand the battery status.



Tip: If the product is not used for a long time, please charge the whole machine at least once every two months.

Chapter 7 Equipment Maintenance

7.1 Troubleshooting

Common faults and solutions

Fault 1: The device cannot start

Fault description: After the user presses the power button, the device does not respond and cannot start.

Troubleshooting steps:

- Check if the device has battery life, and if necessary, charge or replace the battery.
- If the above steps do not solve the problem, it is recommended to backup the data and restore the factory settings.

Fault 2: Equipment experiencing lagging phenomenon

Fault description: The device experiences lag, no response, and other phenomena during operation, which affects its use. Troubleshooting steps:

- Check the device memory to ensure it is not overloaded. You can try clearing the cache or closing other applications.
- Check the device memory to ensure it is not overloaded. You can try clearing the cache or closing other applications.
- Check the device for viruses or malicious software, and if necessary, run antivirus software for scanning.
- If the above steps do not solve the problem, it is recommended to backup the data and restore the factory settings.

Fault 3: The device cannot connect to the network

Fault description: The device cannot connect to Wi Fi or mobile networks.

Troubleshooting steps:

- Check if the device has turned on the Wi Fi switch or mobile data switch
- Check if the device is within the signal coverage range and try to connect close to the signal source.
- If it is a Wi Fi network issue, try restarting the Wi Fi router or entering the WiFi password again to connect.
- If it is a mobile network issue, you can try replacing the SIM card or contacting the operator for consultation.
- If the above steps do not solve the problem, it is recommended to backup the data and restore the factory settings.

Fault 4: Abnormal display on the device screen

Fault description: Abnormal display phenomena such as splash screen and

flashing screen appear on the device screen

Troubleshooting steps:

- Check if the equipment has been physically damaged by external factors. If necessary, seek assistance from professional maintenance personnel.
- Try restarting the device to see if it can solve the issue of abnormal display.
- Check if the device needs to update the system or application, and if so, update it.
- If the above steps do not solve the problem, it is recommended to backup the data and restore the factory settings.

Fault 5: The device cannot be charged

Fault description: After the device is connected to the power adapter and powered on, the charging light does not light up and the device screen has no response

Troubleshooting steps:

- Replace the power adapter for charging and eliminate any issues with the power adapter and charging cable;
- If the user has purchased a matching charging dock, try charging with the dock to see if it can be charged, because when the battery is completely empty, the battery will enter a sleep state and needs to be activated by charging with the dock.
- When using the Ethernet charging dock for charging, please turn off the internet switch on the dock.
- If the above steps do not solve the problem, it is recommended to backup the data and restore the factory settings.
- The above steps did not solve the problem. It is recommended to contact after-sales service for further processing.

7.2 Precautions

- 1) During the troubleshooting process, it is essential to follow the steps to avoid operational errors that may cause more serious problems
- 2) If the user is unable to successfully resolve the issue, it is recommended to contact after-sales service or professional repair personnel for assistance. Do not disassemble the equipment or use improper repair methods without authorization.
- 3) When troubleshooting, users should pay attention to their own safety and avoid personal injury caused by improper maintenance.
- 4) This troubleshooting manual is only applicable to the troubleshooting of

common faults, and more complex issues require professional maintenance personnel to handle.

7.3 Preventive measures for faults

1) Regular maintenance and cleaning

Regularly clean the surface and heat dissipation holes of the product to avoid the accumulation of dust and dirt that may affect its performance.

2) Proper use of power adapter

Use a power adapter that meets the requirements to avoid overloading the power supply and ensure the stability of the power supply.

3) Prevent the product from getting damp

The product should avoid prolonged exposure to humid environments such as kitchens, bathrooms, etc. to prevent circuit short circuits or component corrosion.

4) Prevent product collision

Avoid external impacts or drops on the product to prevent internal components from becoming loose or damaged.

5) Timely backup of data

Regularly backup important data to prevent data loss or irreparable situations.

Chapter 8 Explanation of Secondary Development

If you need a secondary development package or other technical assistance, please contact your corresponding business manager or technical engineer.