

# BX6100 Manual



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# 1.Product introduction

## 1.1 Precautions for Laser Scanning



Do not look directly into the scanning beam to avoid hurting your eyes.

## 1.2 Safety Precautions

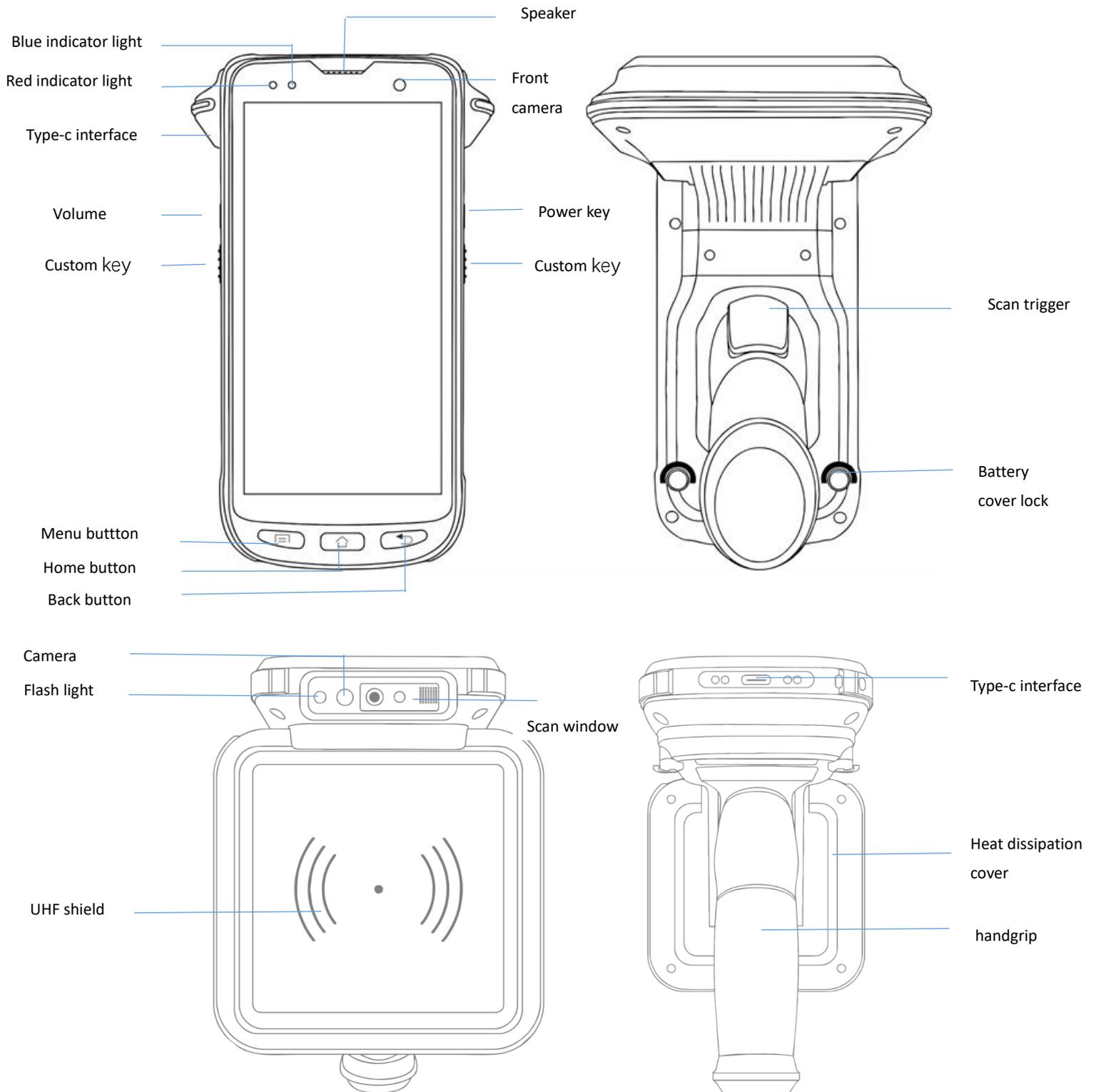
- 1) Your device is only allowed to use the specified batteries and chargers provided by our company; using any other products may cause the battery to leak, overheat, even burst or short-circuit and catch fire.
- 2) It is forbidden to use the charger in the case of short circuit, otherwise it may cause electric shock, fire and damage to the charger.
- 3) Please do not use the power adapter when the power cord is damaged, otherwise it may cause electric shock and uncontrollable risks.
- 4) Please do not disassemble or modify the power adapter, otherwise it may cause personal injury, electric shock, fire and damage to the power adapter.
- 5) Please use a soft dry cloth to clean the device, battery and power adapter.
- 6) Do not wipe the device with solutions such as alcohol, thinner or benzene.

## 1.3 Maintenance precautions

- 1) This product is waterproof and dustproof, but operation in extremely high/low temperatures or humid environments should still be avoided.
- 2) Pressing the screen too hard may damage the screen. Do not use a resistive touch pen to tap the screen to avoid scratching or damaging the screen.  
To clean the screen, spray a small amount of commercial LCD screen cleaner onto a soft cloth, avoid spraying cleaner directly on the screen.
- 3) Do not use any chemical cleaners to wipe the LCD screen.
- 4) Keep the scanning window clean and free of stains, and do not use sharp objects to scratch it.
- 5) If you do not use this product for a long time, please download and save the data to your computer for storage. At the same time, unplug the device battery to power off the device promptly.
- 6) When used for the first time or restored to use after storage, the machine's battery will take a long time to complete charging.

7) If a machine failure is found, please record the cause of the machine failure and contact the maintenance personnel in time.

## 1.4 Product appearance introduction



## Key Description:

The BX6100 data collector has a total of 8 physical buttons, including three function keys on the front (Home button, Menu button, and Back button), 2 buttons on the left (volume button, and custom function button) on the right side. 2 buttons (power button, custom function button respectively), and finally 1 scan trigger on the handgrip

Key		Introduction
	Home	Click Home key will turn back to home page
	Menu	Click Menu will open task manager
	Back	Click back will return to the previous interface or exit the application. In the text input interface, click will turn off the on-screen keyboard
	Power	Short press in standby mode to sleep/wake up the device. Press and hold for 3 seconds when it is turned off to turn on the device.
	Volume	Press and hold to increase the system volume. When the system volume is at its maximum, press again to decrease the volume.
	Right custom button	Custom key/barcode scanning
	Left custom button	Custom key/barcode scanning
	Scan trigger	In barcode mode, use it to control barcode scanning in UHF mode, use it to control tag inventory

## First time use

Press and hold the power button 3S to turn on the Power. When the system is working, short press the Power button, and the device will enter sleep state; while in the sleep

state, short press the Power button, the system will wake up and light up the screen.

#### Power on

You can turn on the machine by pressing the power button. In deep sleep mode, short press the power button to wake up the system.

#### Power off

When the machine is turned on, long press the power button for 2 seconds in the non-sleeping state. The option menu will pop up on the right side. Select the power off option to shut down normally.

#### Restart

When the machine is turned on, long press the power button for 2 seconds in non-sleeping state, the option menu will pop up on the right side, select the restart option, and it will shut down and restart normally.

#### Screenshot

When the machine is turned on and in non-sleeping state, press and hold the power button for 2 seconds. The options menu will pop up on the right side. Select the screenshot option to take screenshots normally.



## 1.5 Install Micro SD card and SIM card

Insert the SIM,SD card as shown in the figure



## 1.6 About battery installation and charging

**Install the battery:** The battery of this product is removable. When installing the battery, please follow the following steps:

You need to Unscrew two battery cover screw buckles first, and push the battery back cover downward in the direction as shown in the figure to replace the battery. (It is not recommended to frequently disassemble the battery.)



## About battery charging:

Since the battery only has a small amount of power for testing when it leaves the factory, you must charge it before using it when you receive the machine.

Charging time : Charge the battery through the power adapter. The first charging time takes about 6 hours. when in charging,the red indicator light will light up , and when full charged,the blue indicator light will light up.

Charging temperature: The optimal operating temperature is room temperature 18~25°C. The battery will not be charged when the temperature is below -10 °C or above 50 °C.

Battery powered: If the wireless network service or data collection program is turned on, the battery power will be greatly consumed. It is recommended to close the program when not using this function to save power.

Tips: If you do not use the product for a long time, please charge the whole machine at least once every two months.

## Precautions when using batteries

If the battery is exhausted, you may not be able to turn on the phone immediately when you first plug in the charger. This is normal. Please continue charging for 30 minutes before turning on the phone.

The battery can be charged repeatedly, but the battery is a consumable product. If you find that the standby time of the device is significantly reduced, please replace it with a new battery.

Battery charging time changes with temperature conditions and battery usage. Please charge within the range of -10°C~50°C.

When the battery power is low, the device will pop up a low battery prompt. When the battery power is too low, the device will automatically shut down.

## LED indicator light

The LED indicator light on the upper left side of the machine indicates the battery status and charging status of the machine according to different colors:

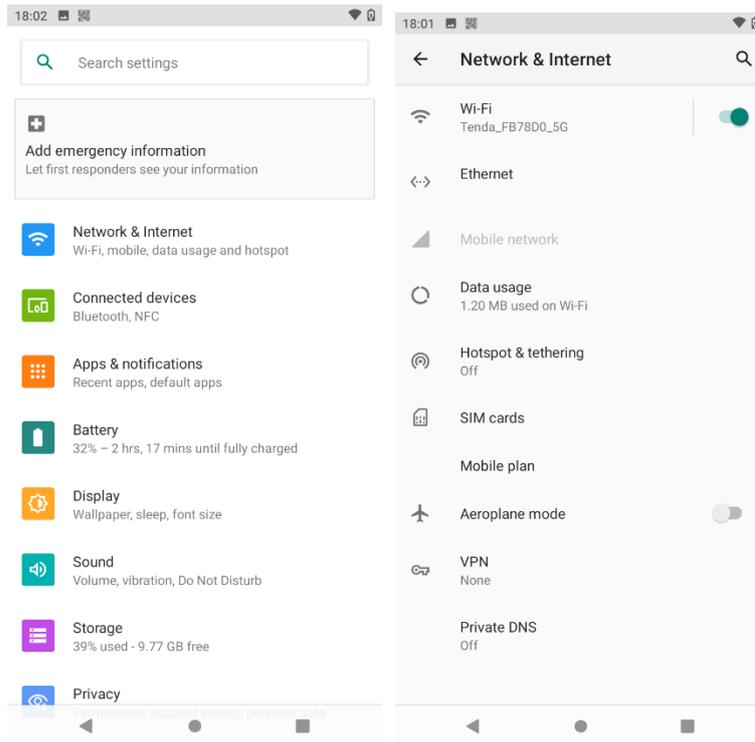
When the USB, power adapter, or tail plug is plugged in, the light turns red to indicate that the battery is charging;

When the USB, charging adapter, or tail plug is plugged in, the light will turn blue to indicate that the battery is fully charged.

## 2. Network and settings

### 2.1 WiFi

Wi-Fi : Settings - Network&internet - Wi-Fi, Click wifi and you will see the discovered Wi-Fi network will appear in the Wi-Fi network list. Click on one of Wi-Fi network to connect to it

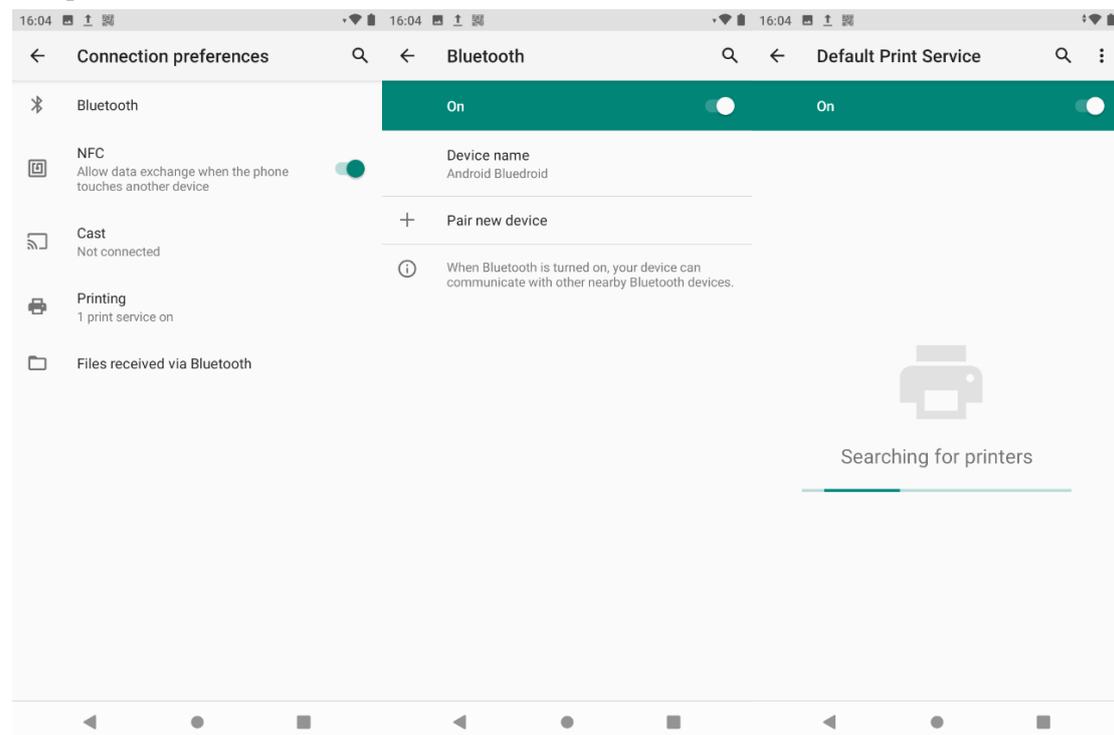


## 2.2 Bluetooth

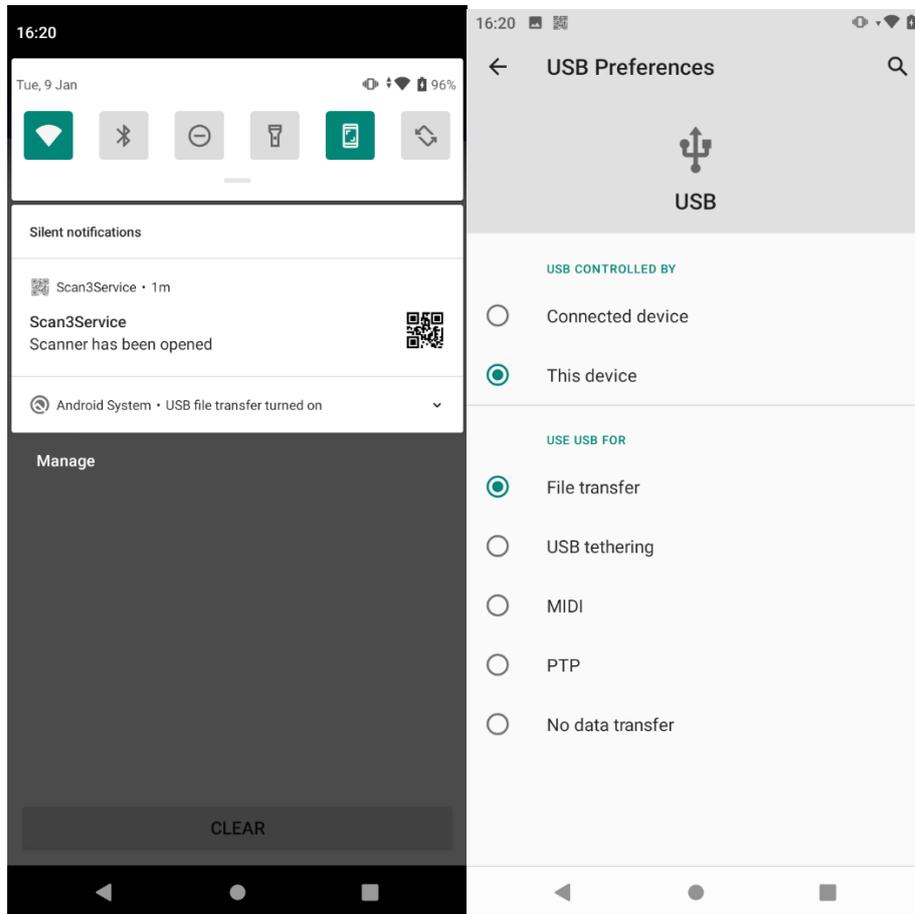
(1) Click the Bluetooth off/on button, click Pair with new device, turn on and search for other Bluetooth devices, and select the Bluetooth device to be connected for matching;

(2) For successfully paired devices, click the settings button on the right to rename the device, cancel pairing and other options, and perform corresponding operations according to needs.

(3) print service; turn on the print service and searching for bluetooth printers to pair and print



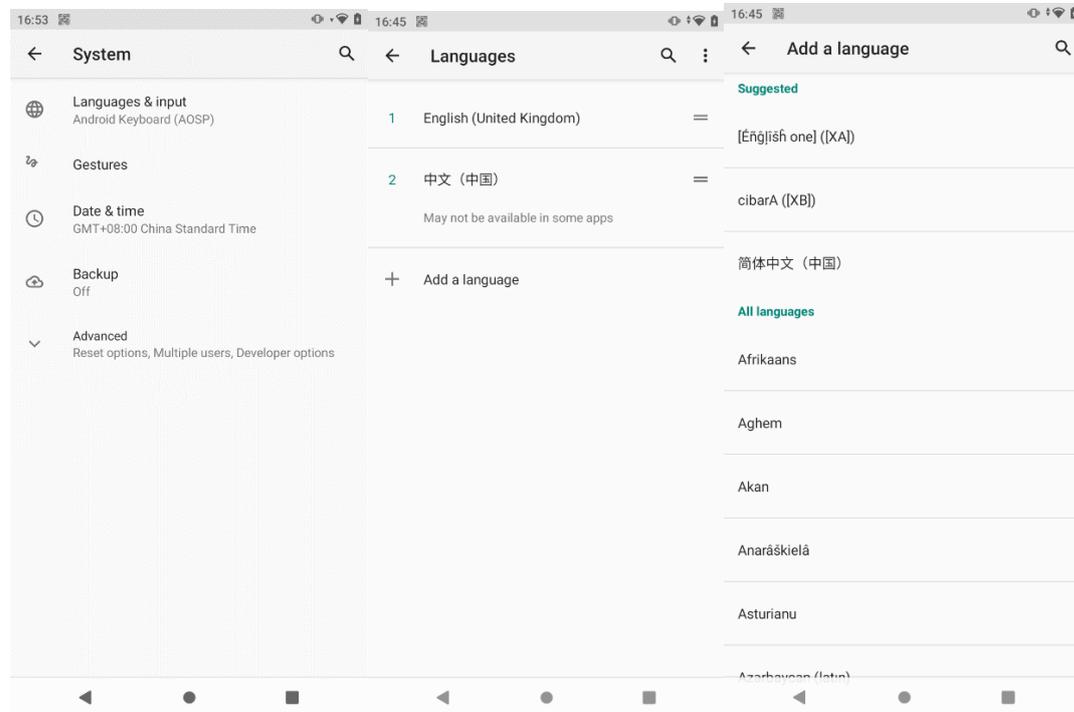
## 2.3 USB connection



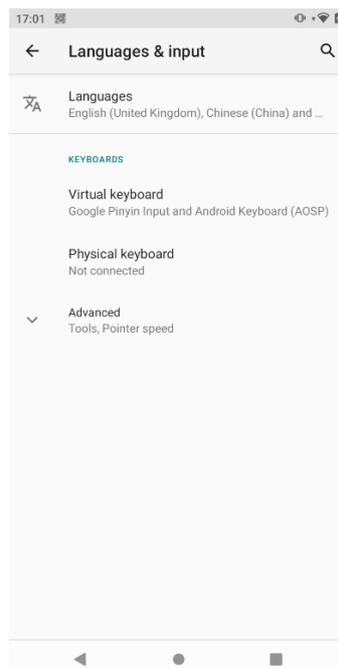
## 2.4 Language & input

System – language&input:

Freely set language: search the language that you want, and click to add into option, and push to the first line, the system language will change accordingly



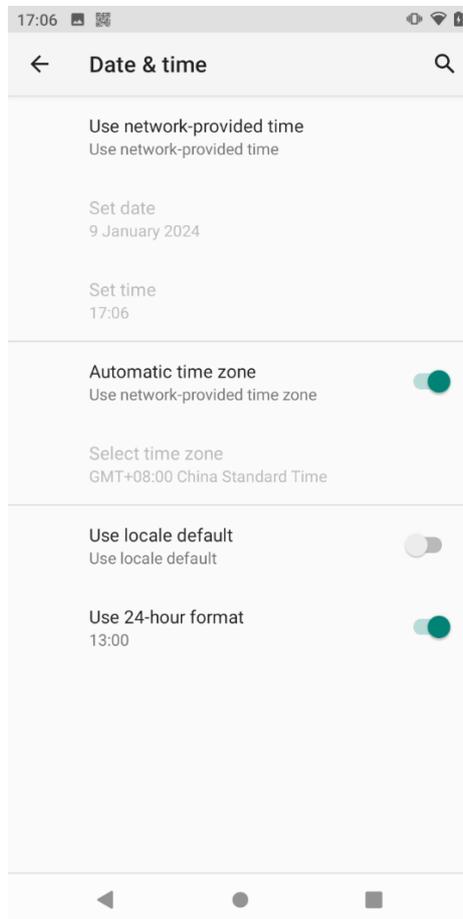
Select your favorite keyboard and input method, and set text-to-language output and pointer speed. If other input methods are installed, they will be displayed on this interface.



## 2.5 Date and time

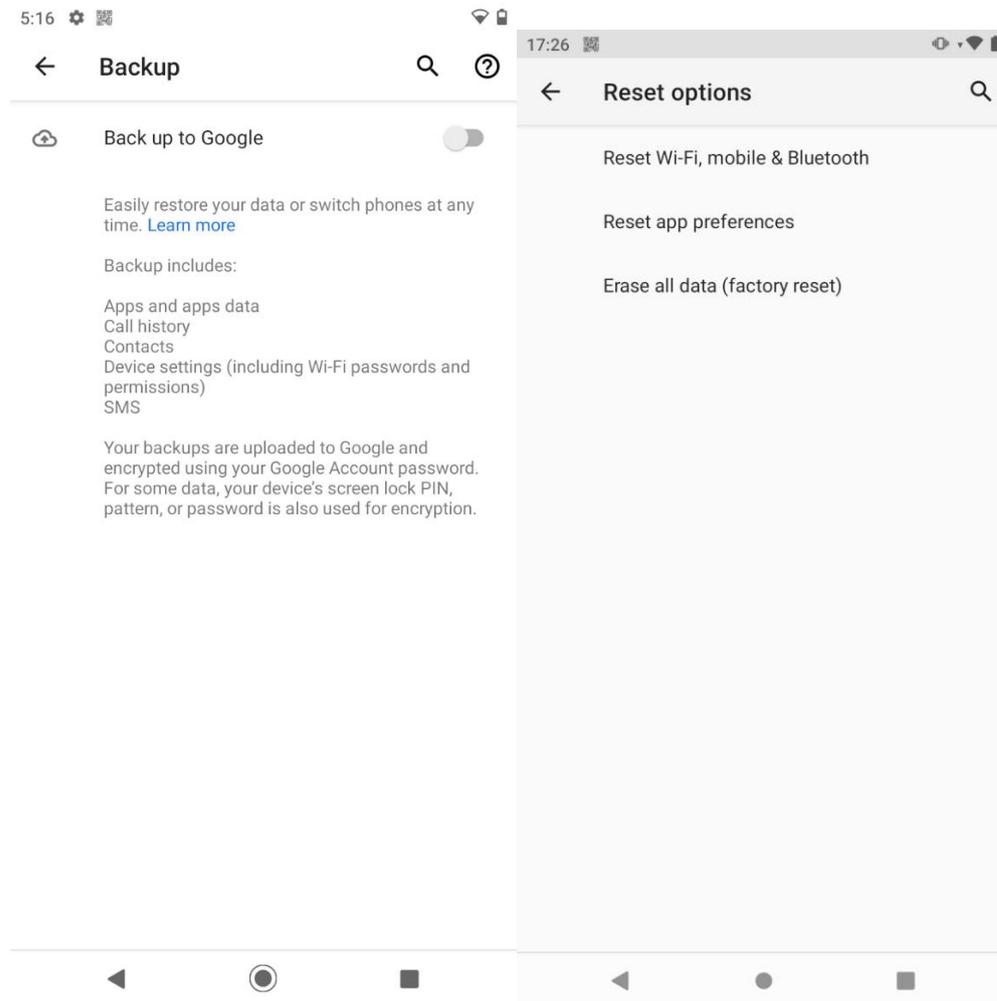
### Settings – System - Date&Time

You can use network-provided time, or manually set the date and time, select the time zone, and you can also choose the display format of the time



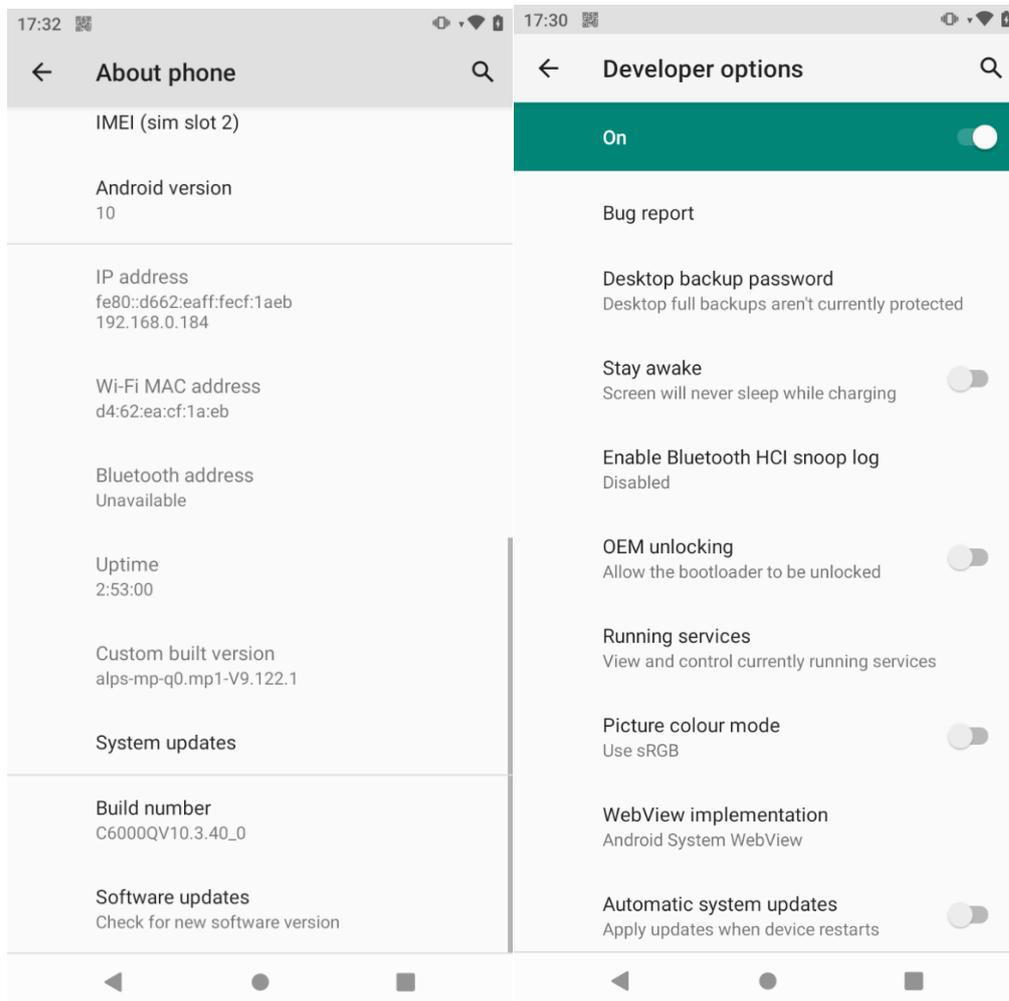
## 2.6 Backup and reset options

### Back up or restore data, restore factory settings



## 2.7 Developer options

Settings-->About phone-->Build number, click the version number multiple times to open the developer options(system-developer options), and then you can get some other information on the device.

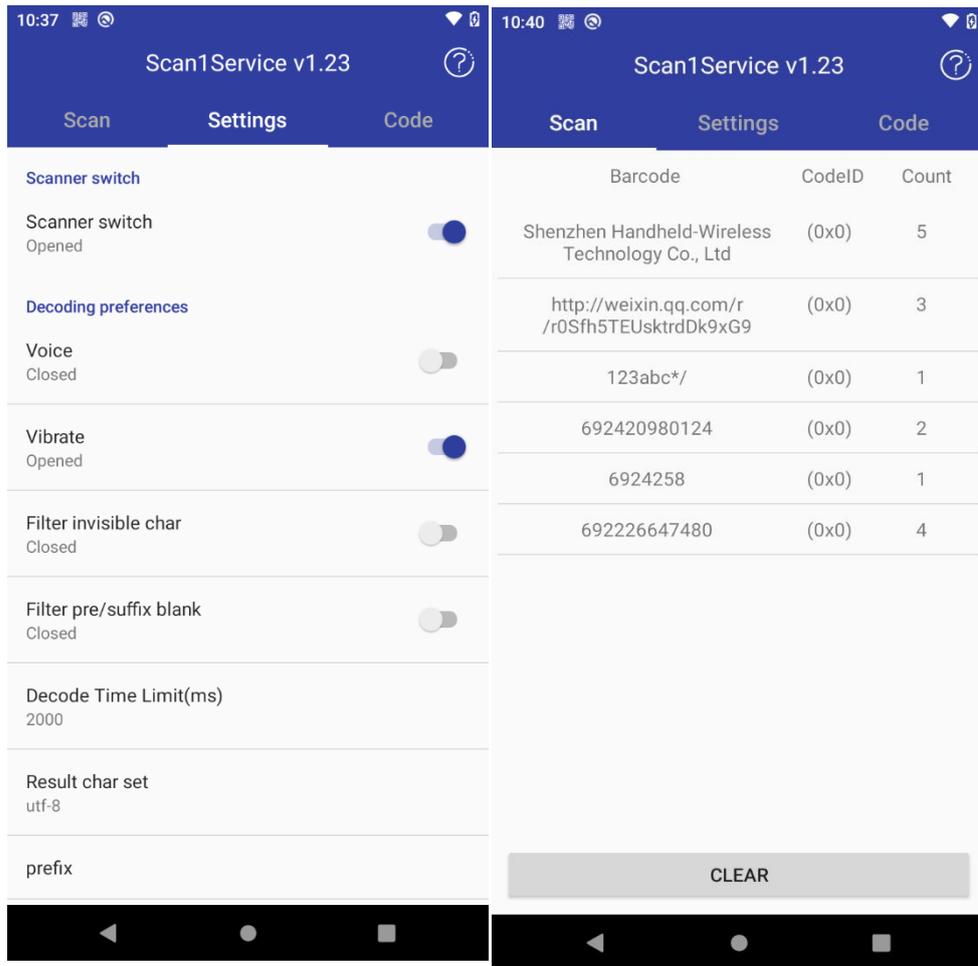


### 3.Barcode scanner



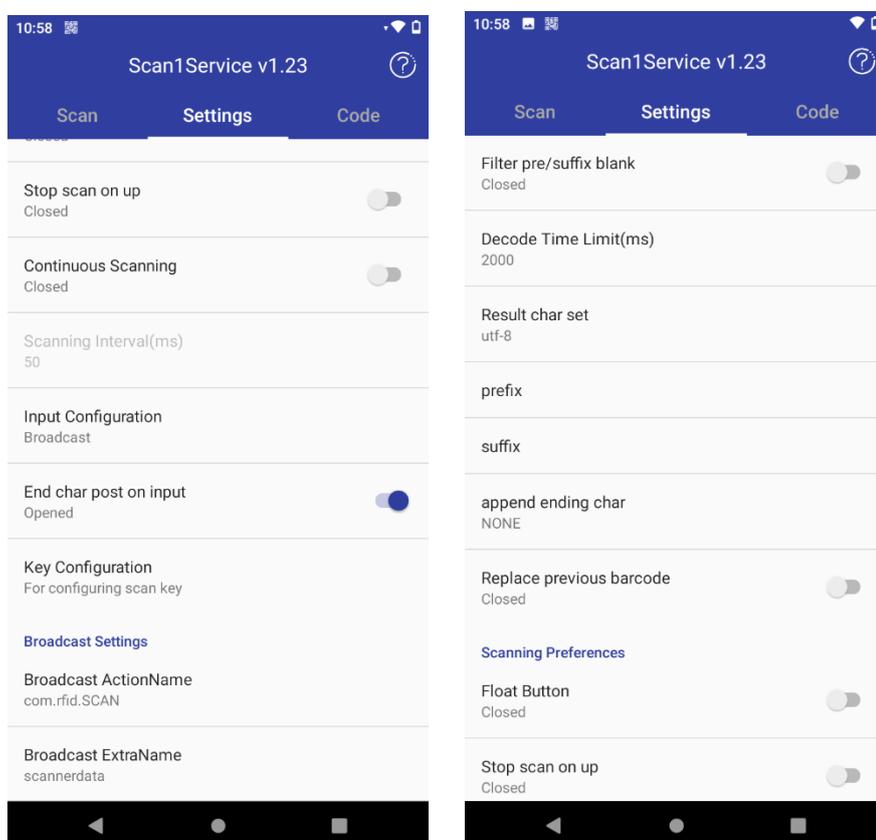
3.1 Find the barcode icon , open the app to enter the main interface, turn on the scan switch button, and press the scan button to scan normally.

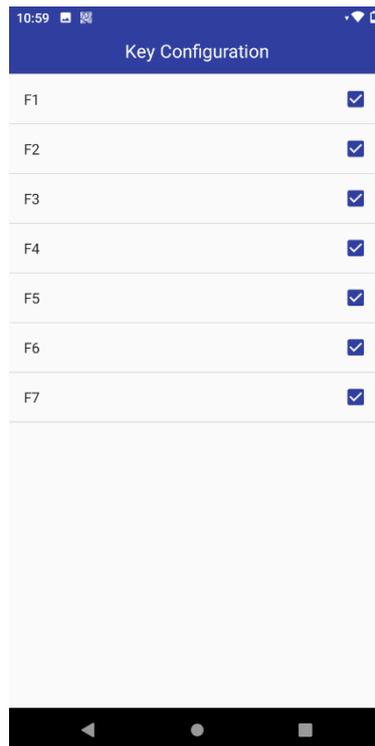
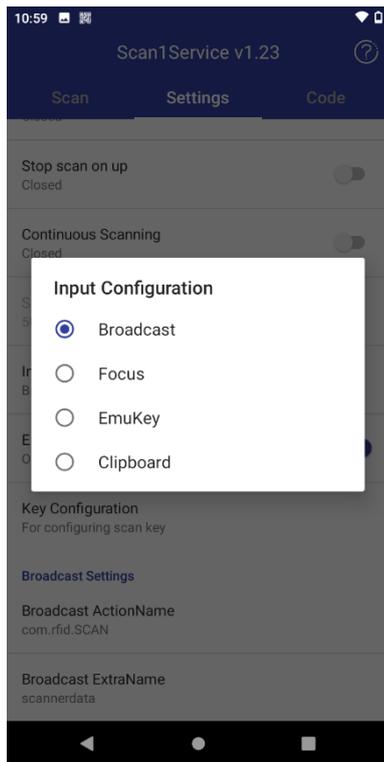
And then turn to [Scan] page to see the scanned barcode and the number of scans.



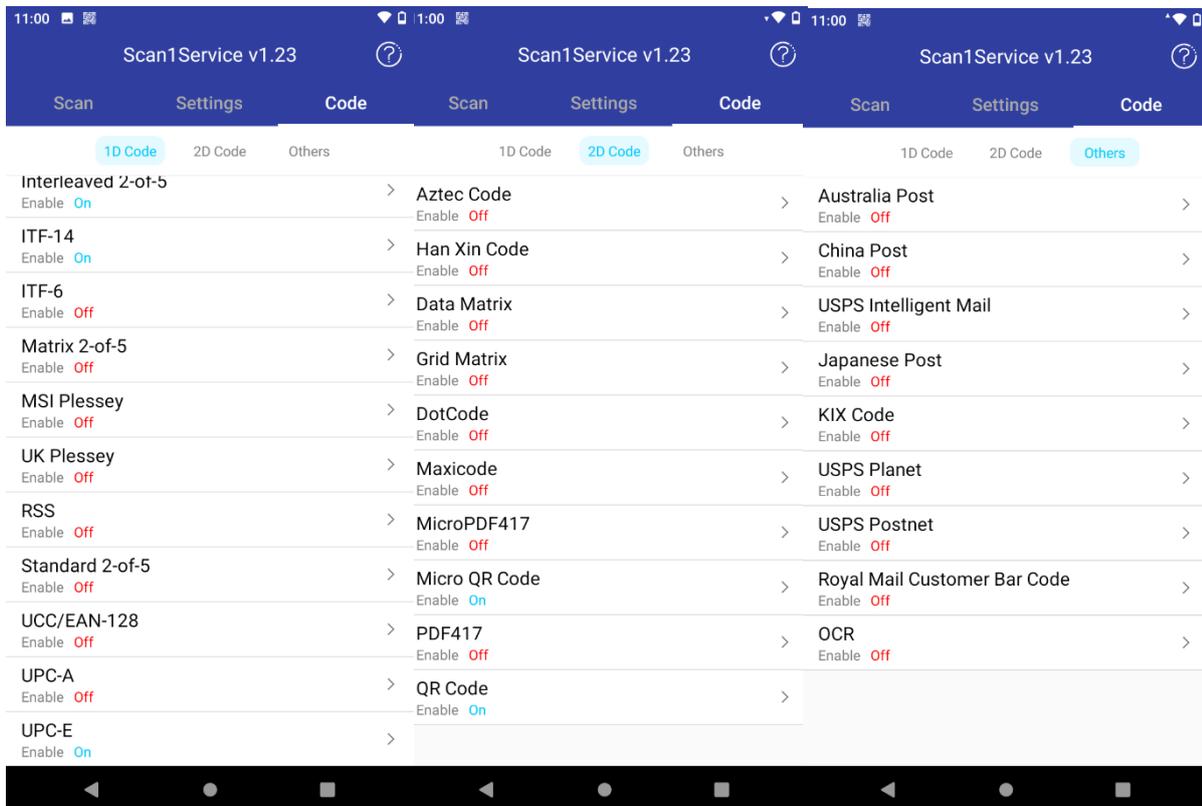
3.2. Turn to [Settings] page to set the basic scanning details,

- (1) Voice: When turned on, there will be a sound prompt when scanning;
- (2) Vibrate: When turned on, scanning will give a vibration prompt;
- (3) Filter pre/suffix blank: You can filter spaces before and after the barcode by yourself;
- (4) Prefix: You can add your own barcode output prefix (which can be numbers, letters, special characters, etc.);
- (5) Suffix: You can add your own barcode output suffix (which can be numbers, letters, special characters, etc.);
- (6) append ending char: You can choose the barcode end output symbol yourself, including Enter, Tab, Space, None;
- (7) Continuous scanning: When turned on, the scanning will automatically continue scanning;
- (8) Input configuration: You can choose to send in Broadcast, Focus, Emukey, or Clipboard mode (Emukey”Emulate key” requires selecting an input method that supports hard keyboard),
- (9) Key settings: You can set the scanning buttons by yourself, including F1, F2, F3, F4, F5, F6, F7, (the handheld trigger can be used for scan controlling when the F4 is chosen )





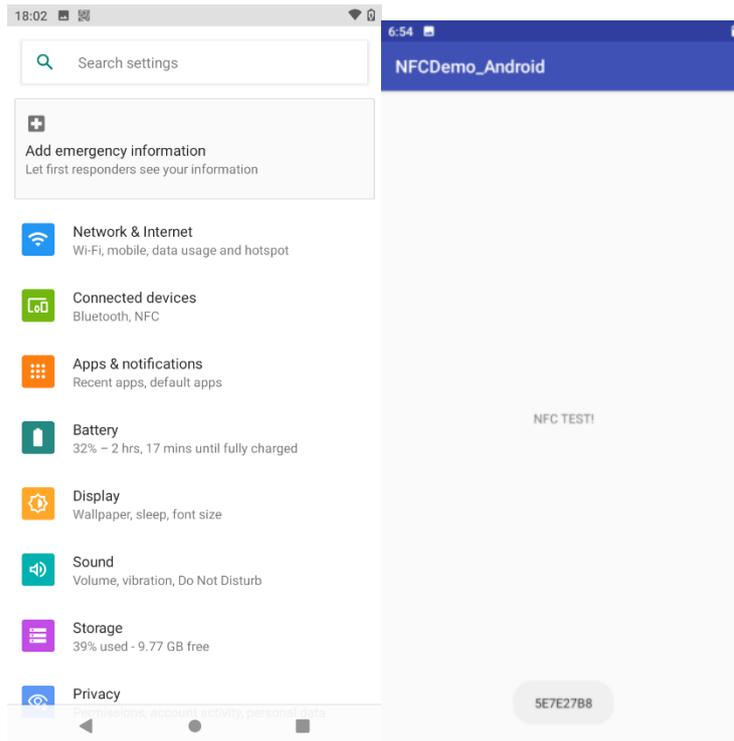
3.3 Trun to [Code] to choose the required barcode type and trun on;



**Tips:** The scanned page may be slightly different due to different scanning engines. If you have any questions in operation, please contact us directly.

# 4.NFC

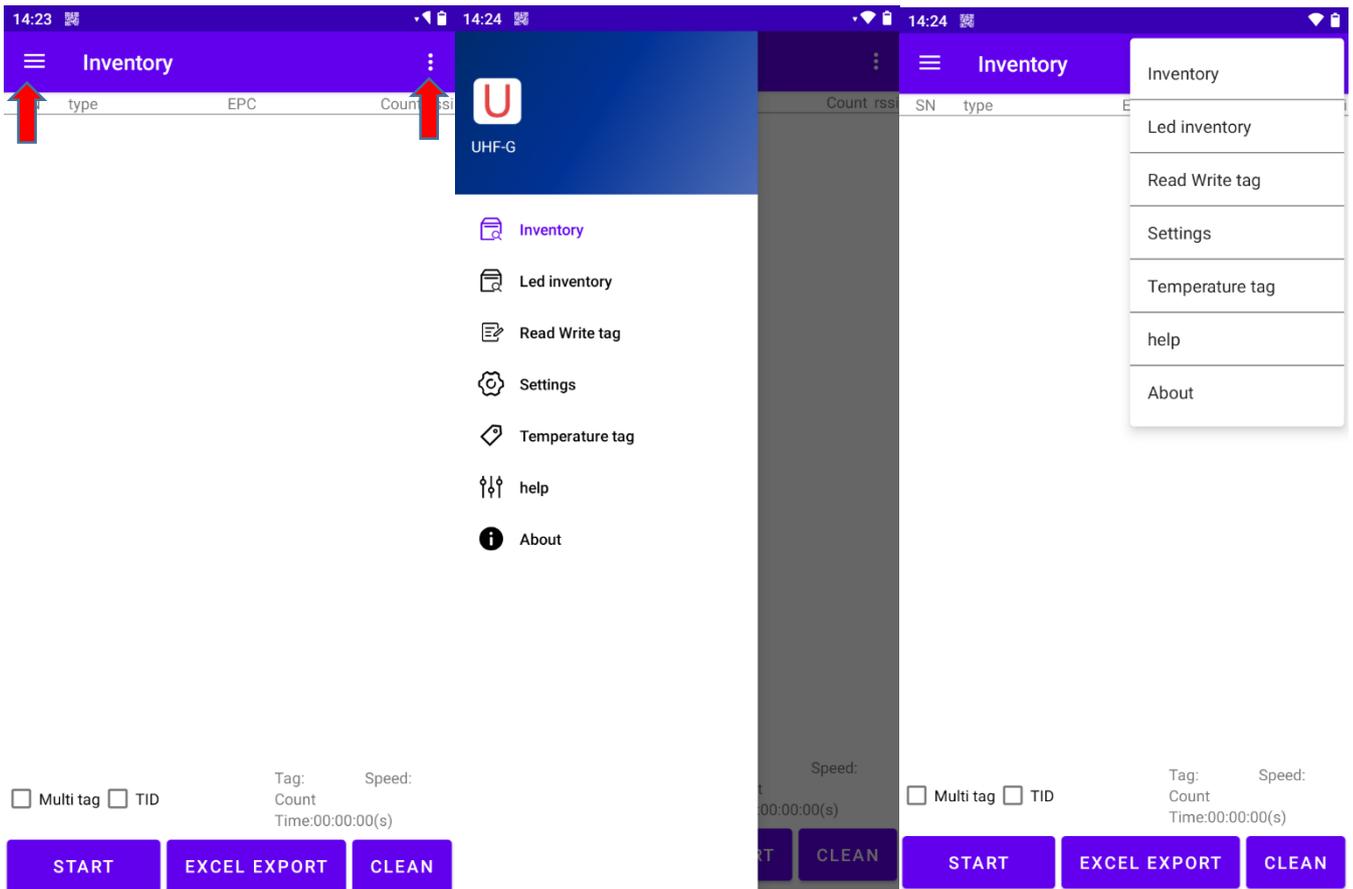
Turn on the nfc function in the settings,find this icon  in the desk and click to enter the NFC application. and then put the nfc card close to the nfc area . there will be a sound or text prompt.



# 5.UHF RFID

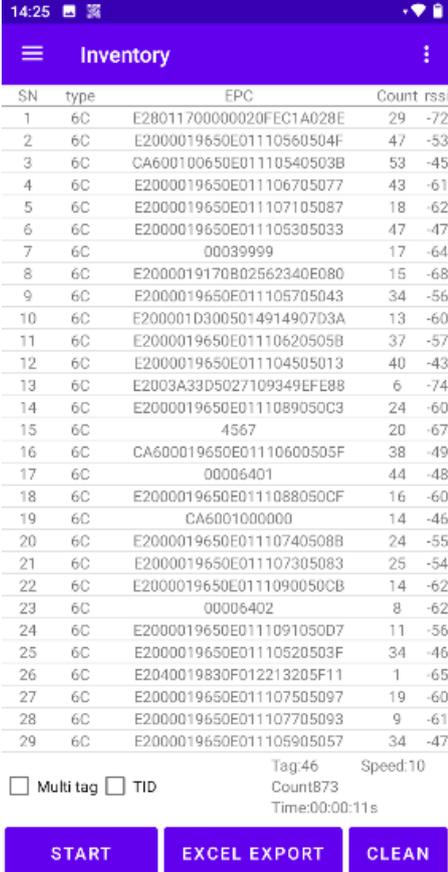
5.1 Find this icon  on the desktop and click on it to enter the UHF application

Click the icon  or  to bring up a menu, including inventory, Led tag inventory, read and write tags, settings, temperature tags, help, about, etc. Select any option to enter the corresponding interface.



## 5.2 Inventory interface

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



The screenshot shows a mobile application interface titled "Inventory". It features a table with columns for SN, type, EPC, Count, and rssi. Below the table are checkboxes for "Multi tag" and "TID", and a status area displaying "Tag:46", "Speed:10", "Count:873", and "Time:00:00:11s". At the bottom, there are three buttons: "START", "EXCEL EXPORT", and "CLEAN".

SN	type	EPC	Count	rssi
1	6C	E28011700000020FEC1A028E	29	-72
2	6C	E2000019650E01110560504F	47	-53
3	6C	CA600100650E01110540503B	53	-45
4	6C	E2000019650E011106705077	43	-61
5	6C	E2000019650E011107105087	18	-62
6	6C	E2000019650E011105305033	47	-47
7	6C	00039999	17	-64
8	6C	E2000019170B02562340E080	15	-68
9	6C	E2000019650E011105705043	34	-56
10	6C	E200001D3005014914907D3A	13	-60
11	6C	E2000019650E01110620505B	37	-57
12	6C	E2000019650E011104505013	40	-43
13	6C	E2003A33D5027109349EFE88	6	-74
14	6C	E2000019650E0111089050C3	24	-60
15	6C	4567	20	-67
16	6C	CA600019650E01110600505F	38	-49
17	6C	00006401	44	-48
18	6C	E2000019650E0111088050CF	16	-60
19	6C	CA6001000000	14	-46
20	6C	E2000019650E01110740508B	24	-55
21	6C	E2000019650E011107305083	25	-54
22	6C	E2000019650E0111090050CB	14	-62
23	6C	00006402	8	-62
24	6C	E2000019650E0111091050D7	11	-56
25	6C	E2000019650E01110520503F	34	-46
26	6C	E2040019830F012213205F11	1	-65
27	6C	E2000019650E011107505097	19	-60
28	6C	E2000019650E011107705093	9	-61
29	6C	E2000019650E011105905057	34	-47

Multi tag  TID

Tag:46 Speed:10  
Count:873  
Time:00:00:11s

START EXCEL EXPORT CLEAN

- (1) Multi-tag: After selection, the device starts to read EPC in multi-tag mode.
- (2) TID: After selection, the device can also display the TID code when reading the tag.:
- (3) Start: Click Start to start reading label information. The default is to obtain the EPC code. (Start inventory and stop inventory can also be used using the buttons on the handle)
- (4) EXCEL export: After obtaining the EPC code, click EXCEL export to save the EPC information as an xls document. If the save is successful, you will be prompted for the save path of the document:
- (5) Clear : Click to clear the current search data.
- (6) Tag: Displays the total number of current card-finding tags.
- (7) Speed: Displays the current speed when searching for card tags.
- (8) Count: Displays the total number of times the current tags have been searched.
- (9) Time: Displays the current total time spent searching for card tags.
- (10) RSSI: Displays the signal strength when the tag is found.

14:25

### Inventory

SN	type	EPC	Count	rssti
1	6C	E2801170000020FEC1A028E	29	-72
2	6C	E2000019650E01110560504F	47	-53
3	6C	CA600100650E01110540503B	53	-45
4	6C	E2000019650E011106705077	43	-61
5	6C	E2000019650E011107105087	18	-62
6	6C	E2000019650E011105305033	47	-47
7	6C	00039999	17	-64
8	6C	E2000019170B02562340E080	15	-68
9	6C	E2000019650E011105705043	34	-56
10	6C	E200001D3005014914907D3A	13	-60
11	6C	E2000019650E01110620505B	37	-57
12	6C	E2000019650E011104505013	40	-43
13	6C	E2003A33D5027109349EFE88	6	-74
14	6C	E2000019650E0111089050C3	24	-60
15	6C	4567	20	-67
16	6C	CA600019650E01110600505F	38	-49
17	6C	00006401	44	-48
18	6C	E2000019650E0111088050CF	16	-60
19	6C	CA6001000000	14	-46
20	6C	E2000019650E01110740508B	24	-55
21	6C	E2000019650E011107305083	25	-54
22	6C	E2000019650E0111090050CB	14	-62
23	6C	00006402	8	-62
24	6C	E2000019650E0111091050D7	11	-56
25	6C	E2000019650E01110520503F	34	-46
26	6C	E2040019830F012213205F11	1	-65
27	6C	E2000019650E011107505097	19	-60
28	6C	E2000019650E011107705093	9	-61
29	6C	E2000019650E011105905057	34	-47

Tag:46 Speed:10  
Count:873

Multi tag  TID

Export success Path=/storage/emulated/0/Download/Tag\_2024-01-10 14-25-49.xls

STOP EXCEL EXPORT CLEAN

14:44

### Inventory

SN	type	EPC	Count	rssti
1	6C	E2000019650E01110620505B	38	-57
Tid:		E2003412013302000148095F		
2	6C	484849456548494549554849575157	17	-58
		4848534857		
Tid:		E2003412013102000148092B		
3	6C	E2000019650E011107505097	40	-57
Tid:		E2003412013202000148099B		
4	6C	E2000019650E011104505013	68	-58
Tid:		E20034120131020001480917		
5	6C	CA6001000000	14	-60
Tid:		E20034120131020001480A03		
6	6C	4567	30	-63
Tid:		E20034120138020001480933		
7	6C	CA600100650E01110540503B	5	-59
Tid:		E2003412012B02000148093F		
8	6C	00006401	56	-59
Tid:		E20034120130020001480983		
9	6C	00039999	7	-62
Tid:		E200341201340200014809DF		
10	6C	12345678	16	-55
Tid:		E2003412012E020001480927		
11	6C	E2000019650E011105305033	43	-65
Tid:		E2003412012D020001480937		
12	6C	E2000019650E0111091050D7	3	-62
Tid:		E2003412012D0200014809DB		
13	6C	E2000019650E01110520503F	36	-61
Tid:		E20034120130020001480943		
14	6C	E2000019650E011106905073	4	-47
Tid:		E2003412012E020001480977		
15	6C	E2000019650E011107105087	21	-59

Tag:26 Speed:2  
Count:656  
Time:00:00:35s

Multi tag  TID

STOP EXCEL EXPORT CLEAN

### 5.3 LED Inventory

SN	type	EPC	Count	rssi
1	6C	E2000019650E011105705043	7	-60
2	6C	E220000000005	4	-37

select epc:

select epc:

E2000019650E011105705043



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

- (1) Start inventory: Click Start Inventory to start reading LED label information. The default is to obtain the EPC code. (Start inventory and stop inventory can also be used by pressing the buttons on the handle)
- (2) Clear screen: Click to clear the current card search data.
- (3) Select epc: click the EPC in the list and it will show here
- (4) Count: Displays the number of times the current tag has been searched.
- (5) RSSI: Displays the signal strength when the tag is found.

## 5.4. About Read and write tag

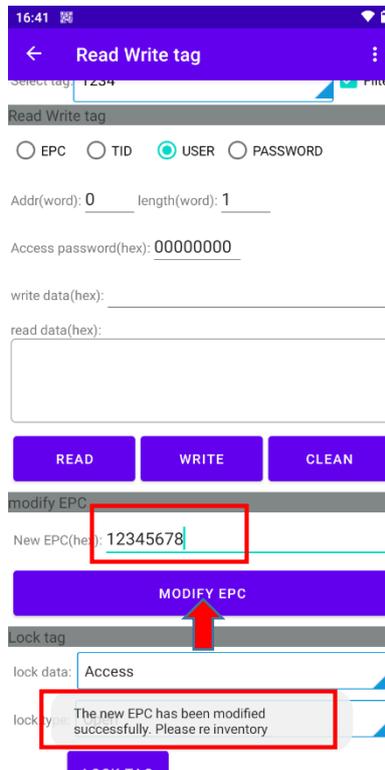
5.4.1 Turn to Read and write tag page and you can select read tags and perform read and write operations.

### 5.4.2. Read and write tags

Read and write tags: Select a found tag, select the read and write tag area, enter the corresponding read and write tag conditions, and click read and write tags to complete the read and write tag operation.

- (1) Select the read/write tag area: PASSWORD area, User area, EPC area, and TID area can be selected.
- (2) Starting address: Used with read tag/write tag, select the address bit to read or write.
- (3) Length: Used in conjunction with reading tags/writing tags, select the length to read or write.
- (4) Access password: Used in conjunction with reading tags/writing tags, the password used when reading or writing to the card.
- (5) Write data: Used in conjunction with write tags to display the content of the currently written tag.
- (6) Reading data: Used in conjunction with reading tags, it displays the currently read tag data.
- (7) Read: Read the data at the set position, and the read data will be displayed in the read data above the read tag button.
- (8) Write: Write the data at the set position. Please enter the data to be written in the write data above the write label button.
- (9) Clean : clear the content in the read data box above the read label/write label.

5.4.3. Modify EPC: Enter the double-byte length EPC and **click the Modify EPC** button. After the modification is successful, there will be a prompt that the new EPC number has been modified successfully.



#### 5.4.4. Lock tags:

After the tag is locked, the default password (8 zeros) cannot be used to write the tag. You can only use the self-set password to write the tag.

- (1) Lock data: Lock a certain area of the label, optional EPC, TID , USER area.
- (2) Access & kill password: Lock tag password, the default password is 8 0s, the first 4 bytes of the password area are the kill password, and the last 4 bytes are the access password.
- (3) Lock type: Lock the tag, and you can choose open, lock, or permanent lock (cannot be unlocked after the operation).

#### 5.4.5. Kill tags

Destroy this label (the destroyed label is permanently invalid and cannot be restored, please use it with caution)

- (1) Kill password: (the first 4 bytes of the password area) first change the destruction password of the password area to non-0, and then operate with the modified password. (The destruction password must be non-zero to take effect).

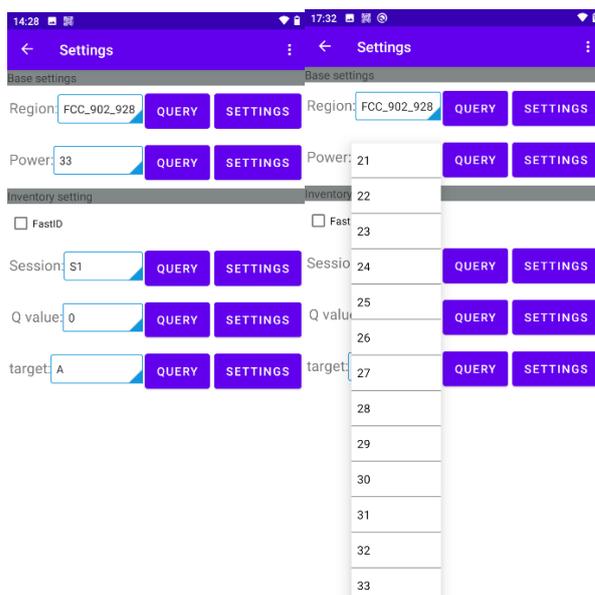
### 5.5. About Settings

#### Basic settings

- (1) Region(UHF RFID Working frequency band): The current equipment working frequency band can be chosen and set.
- (2) Power: You can set the power of the current rfid antenna within the rf power.

#### Inventory settings

- (1) FastID: After turning on, the data read by the device changes from EPC data to EPC+ID data (some tags do not support this function)
- (2) Session: For different tag quantities and placement environments, it is generally recommended to choose SO/S1.
- (3) Q value: The Q value of the tag can be queried and set.
- (4) Inventory method: The tag inventory method can be queried and set.



**Warm tips:** If you need secondary development kits or need help in other technical or operating issues , please contact us directly