

MBA5-P23

User guide



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Background

Description	Date	Version	Author	Auditor
First parution	29/04/2019	V1.0	CLO	ACA

1 Product introduction

1.1 Introduction

The MBA5-P23 has the particularity of integrating UHF RFID technology with a powerful module and a large antenna allowing blind reading and writing of identifiers up to a distance of 8.5m! In addition, autonomy is one of its strengths thanks to its 8000 mAh long-lasting battery

With a 5" FHD touchscreen that offers reading comfort, you can also use the smartphone with wet hands or gloves. Moreover, it has a 1.3 GHz quadcore processor, a high power that will allow a fast data processing.

It also has Wireless communication: NFC, 4G/LTE, Wifi, Bluetooth, GPS.

With IP65 protection grade, it is totally protected against dust and is waterproof.

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 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.)
- When Li-ion battery is not in use, it will continue to 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 is considered as a disconnect device or adapter.

1.4 Notes

Note 1:

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

Note 2:

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 3:

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

Note 4:

The suitable temperature for the product and accessories is 010°C to 50°C.

Note 5:

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

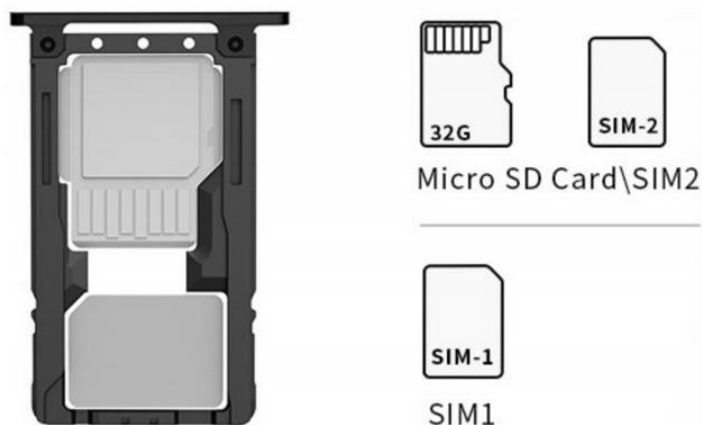
2 Installation instructions

2.1 Appearance



2.2 Install Micro SD and SIM cards

The cards sockets are showing as follows:



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






Buttons instructions



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 button	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.

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

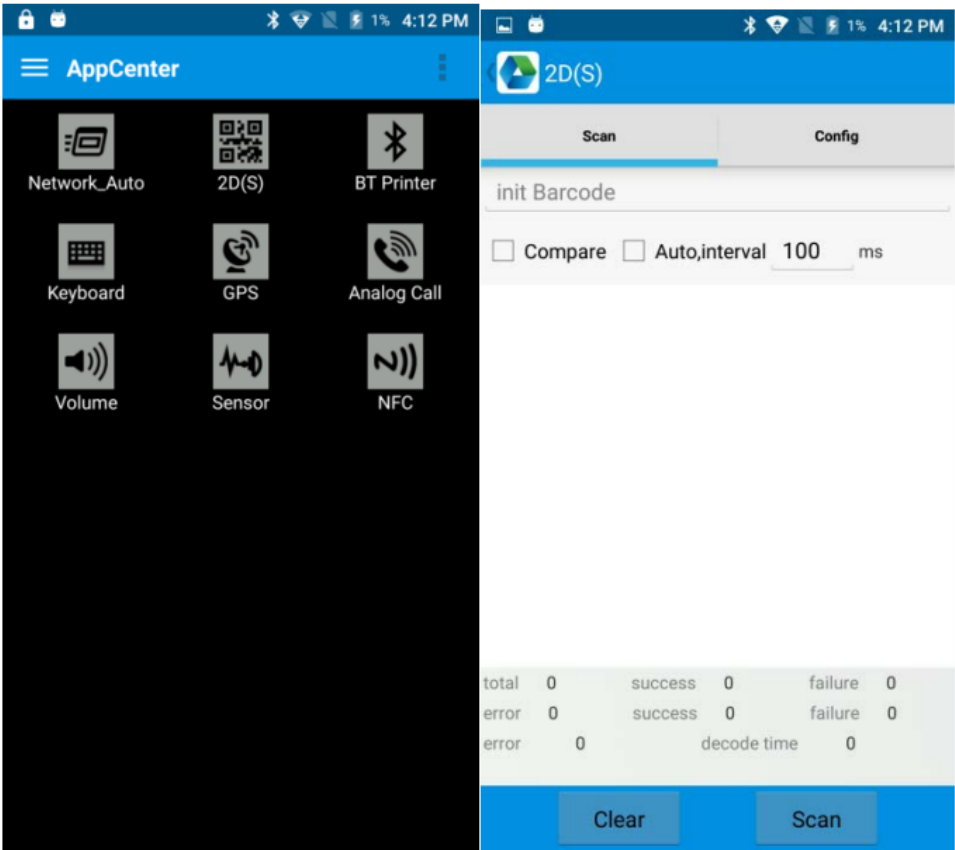
1. Click contacts to open contacts list.
2. Click icon  to add new contacts.
3. Click icon  to import/export contacts.

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.

4 Barcode reader-writer

- 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 barcode:



Max. radiant power: 0.6mW

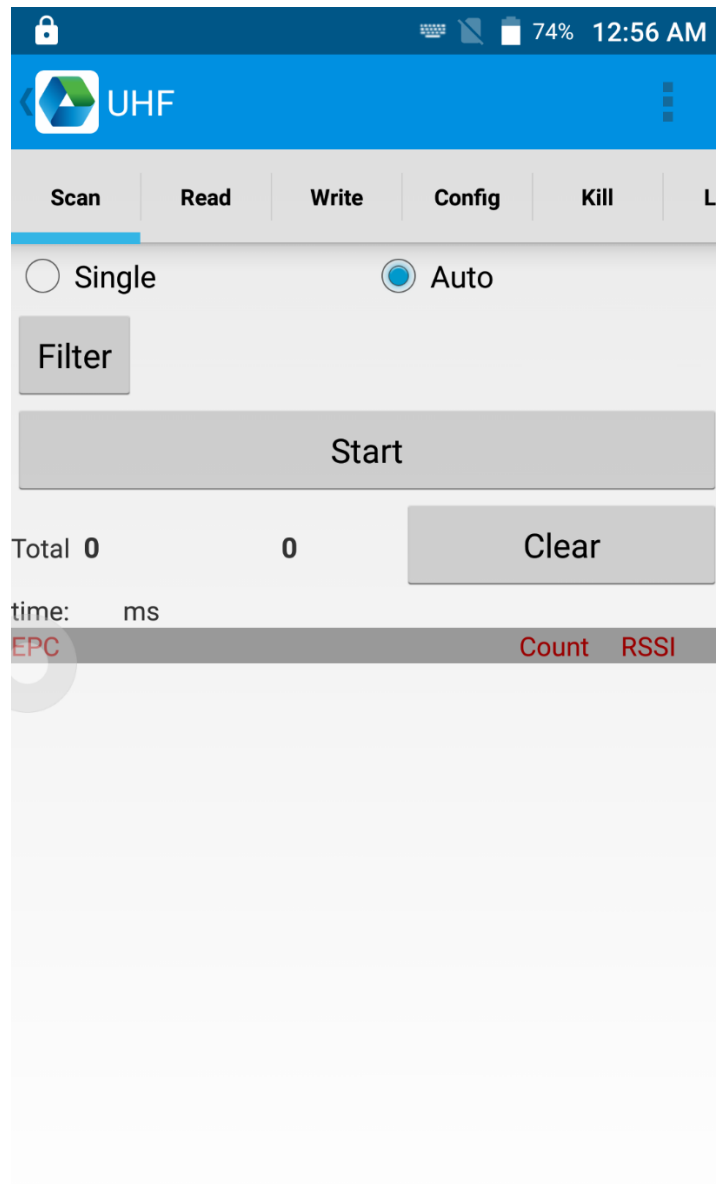
Wave length: 655nm

IEC 60825-1 (Ed.2.0). 21CFR 1040.10 and 1040.11 standard.

5 UHF RFID reader

5.1 UHF Scan function

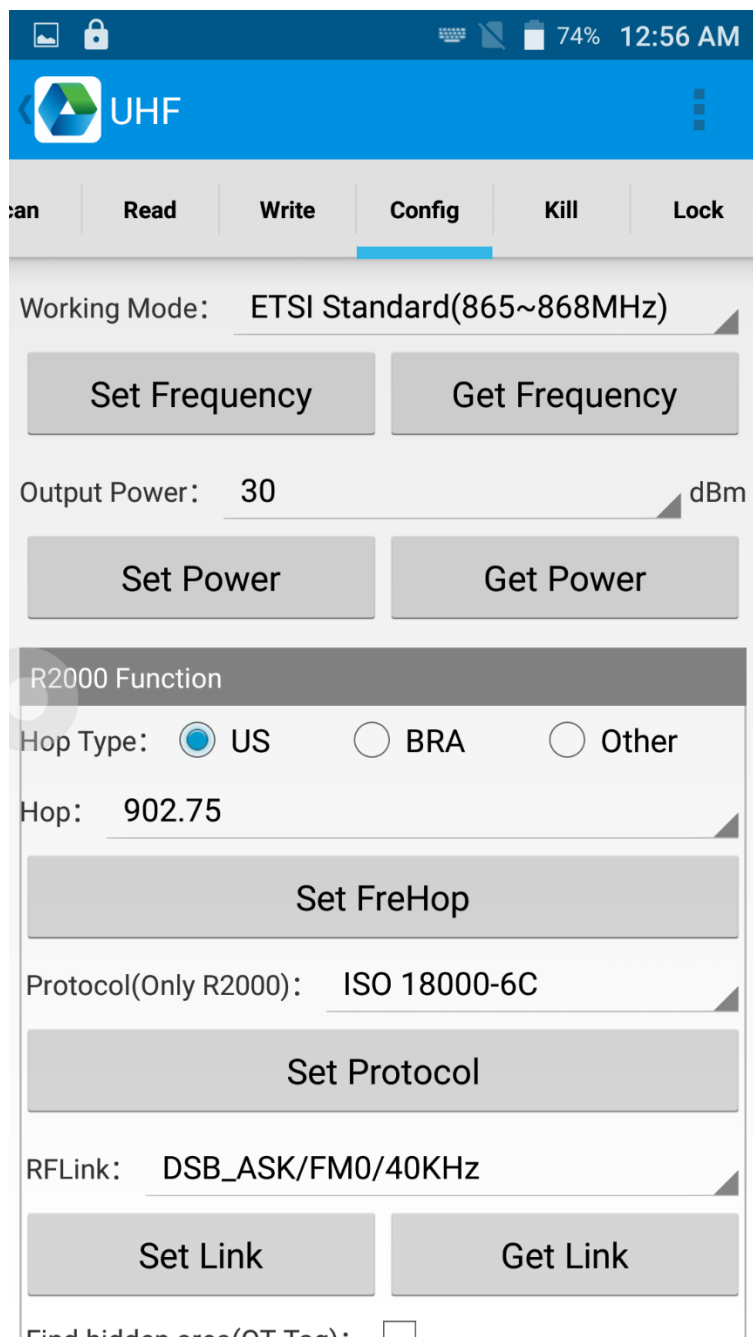
1. Open App Center, open “UHF”.



2. Select SINGLE or AUTO and click START, the UHF tags could be read.
3. Click STOP in demo to stop reading of UHF tags.
4. Click CLEAR to clean all EPC information.

5.2 UHF configuration

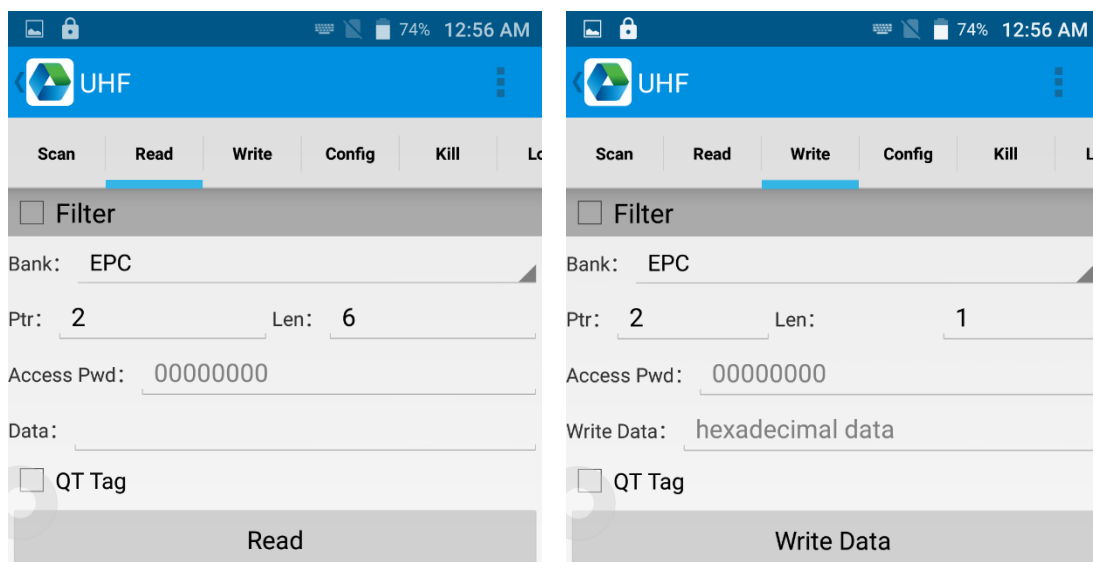
Click CONFIG in demo to adjust working mode and output power.



The screenshot shows a mobile application interface for UHF configuration. At the top, there's a status bar with icons for signal, lock, keyboard, and battery (74%), along with the time 12:56 AM. Below this is a blue header with a back arrow, a UHF icon, and a menu icon. A navigation bar contains buttons: Scan, Read, Write, Config (highlighted), Kill, and Lock. The main content area is divided into sections: 1. Working Mode: A dropdown menu showing 'ETSI Standard(865~868MHz)'. Below it are 'Set Frequency' and 'Get Frequency' buttons. 2. Output Power: A dropdown menu showing '30' dBm. Below it are 'Set Power' and 'Get Power' buttons. 3. R2000 Function: A section header. Below it, 'Hop Type' has three radio buttons: 'US' (selected), 'BRA', and 'Other'. Below that is a 'Hop' dropdown menu showing '902.75', with a 'Set FreHop' button. 4. Protocol(Only R2000): A dropdown menu showing 'ISO 18000-6C', with a 'Set Protocol' button. 5. RFLink: A dropdown menu showing 'DSB_ASK/FM0/40KHz', with 'Set Link' and 'Get Link' buttons. At the bottom, there's a checkbox labeled 'Find hidden ones(OT Tag):' which is currently unchecked.

5.3 UHF Tag Reading and Writing

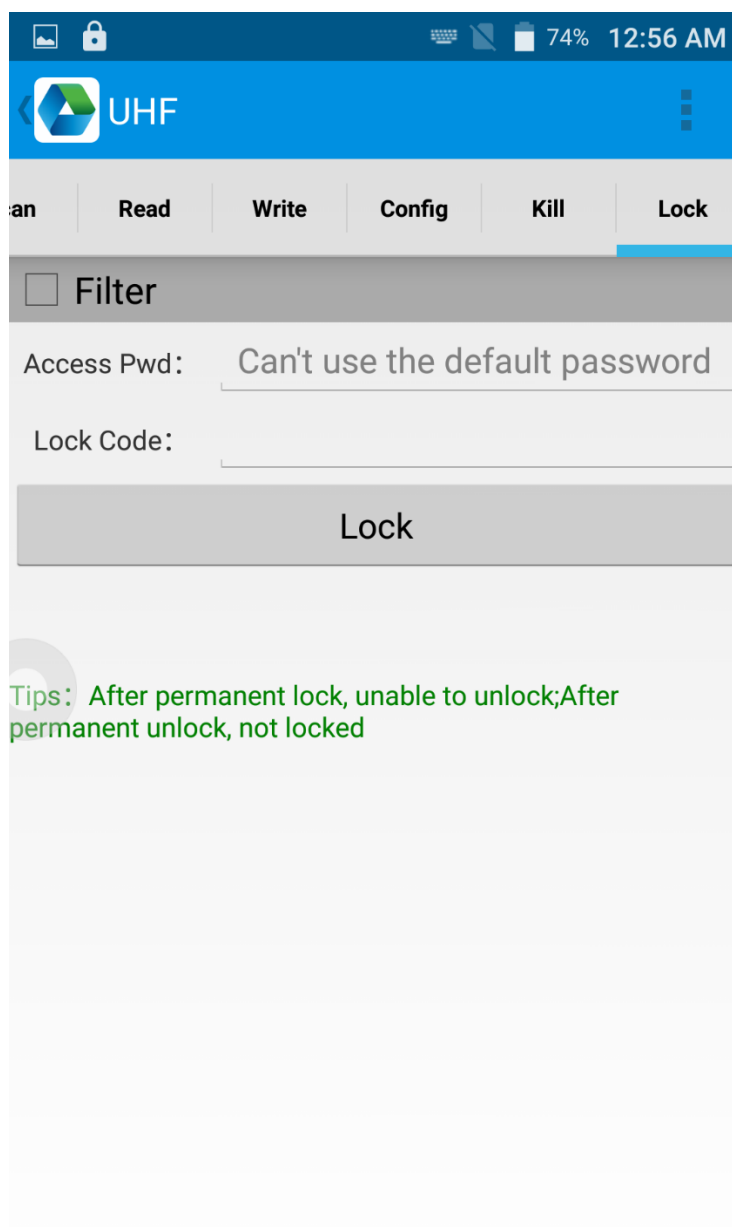
The storage of one tag has 4 zones: RESERVED, EPC, TID and USER. Normally, the default password is 00000000. And TID zone can only be read, other zones can be read and written.

The image displays two side-by-side screenshots of a mobile application interface for UHF tag management. Both screens have a blue header with the 'UHF' logo and a status bar at the top showing 74% battery and 12:56 AM. The left screenshot is in 'Read' mode, with the 'Read' tab selected. It features a 'Filter' checkbox, a 'Bank' dropdown set to 'EPC', 'Ptr' (2) and 'Len' (6) fields, an 'Access Pwd' field with '00000000', and a 'Data' field. A 'Read' button is at the bottom. The right screenshot is in 'Write' mode, with the 'Write' tab selected. It has the same 'Filter' checkbox and 'Bank' dropdown. The 'Ptr' is 2 and 'Len' is 1. The 'Access Pwd' is '00000000'. The 'Write Data' field contains 'hexadecimal data'. A 'Write Data' button is at the bottom. Both screens also have 'Scan', 'Config', 'Kill', and 'Loc' tabs visible in the header.

5.4 UHF Tag Lock and Kill

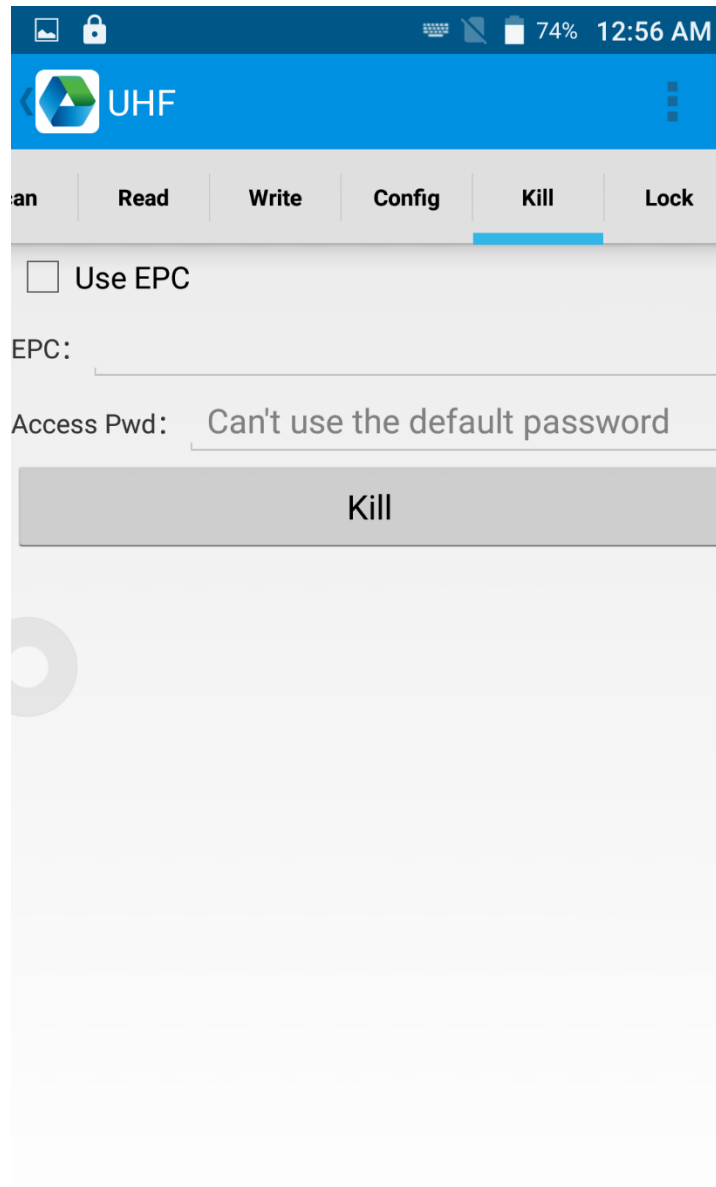
5.4.1 Lock Function

For example. User could try to lock down EPC zone.

A screenshot of a mobile application interface for UHF tag management. The top status bar shows a lock icon, signal strength, 74% battery, and the time 12:56 AM. The app header is blue with a back arrow, a UHF icon, and a menu icon. Below the header is a navigation bar with tabs: "an", "Read", "Write", "Config", "Kill", and "Lock". The "Lock" tab is selected and highlighted in blue. The main content area has a grey header with a checkbox and the label "Filter". Below this are two input fields: "Access Pwd:" with the text "Can't use the default password" and "Lock Code:". A large grey button labeled "Lock" is positioned below the input fields. At the bottom, a green tip message reads: "Tips: After permanent lock, unable to unlock; After permanent unlock, not locked".

5.4.2 Kill Function

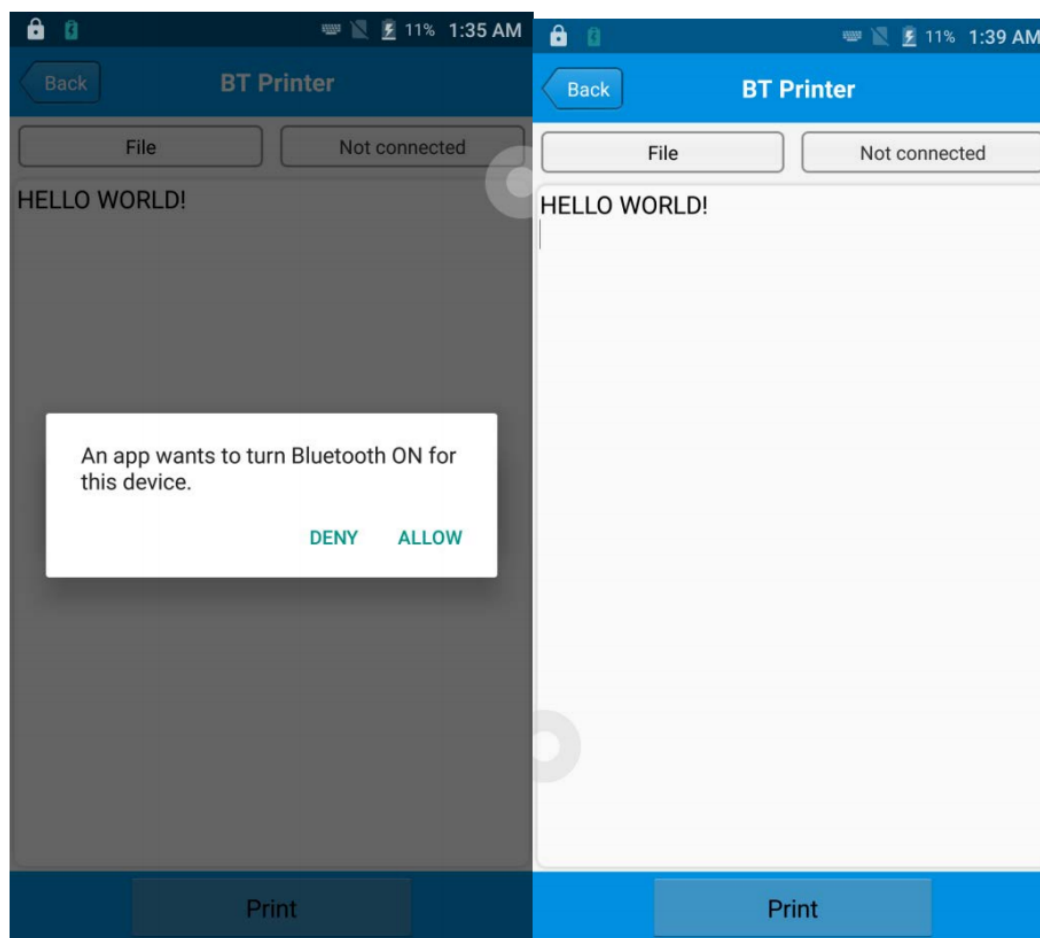
Kill function can be used to kill the tag permanently. Input the correct access password and click kill.

The screenshot shows a mobile application interface for UHF tags. At the top is a status bar with icons for signal, lock, keyboard, and battery (74%), along with the time 12:56 AM. Below this is a blue header bar with a back arrow, a UHF icon, and a menu icon. A horizontal menu contains tabs for "an", "Read", "Write", "Config", "Kill", and "Lock", with "Kill" currently selected and highlighted in blue. The main content area has a checkbox labeled "Use EPC" which is unchecked. Below it is a text input field labeled "EPC:". Further down is another text input field labeled "Access Pwd:" containing the text "Can't use the default password". At the bottom of the form is a large grey button labeled "Kill".

6 Other functions

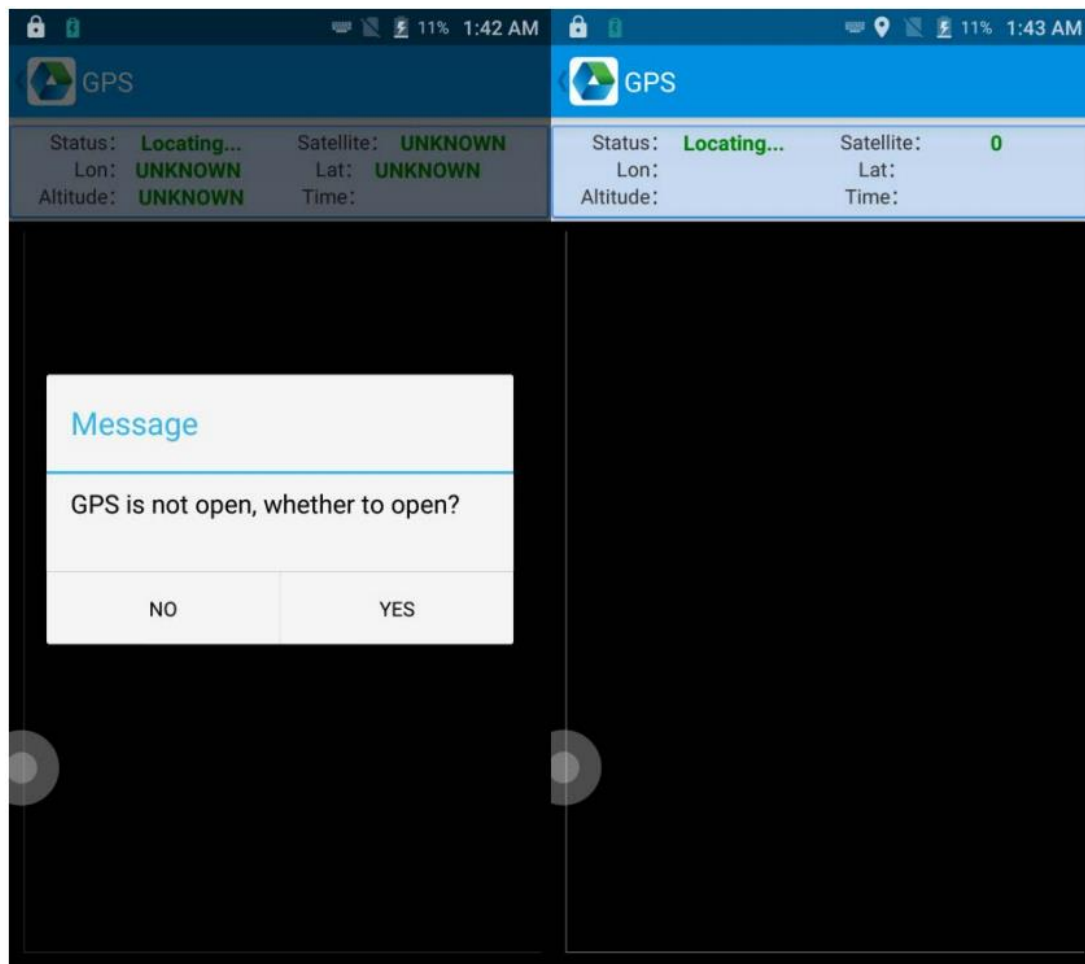
6.1 Bluetooth

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.



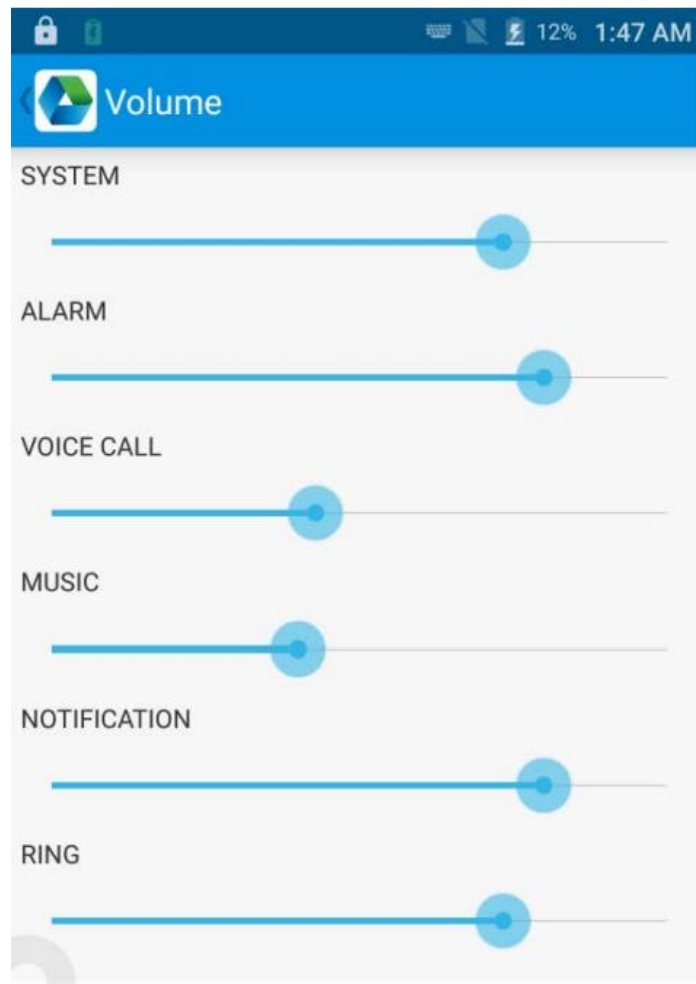
6.2 GPS

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



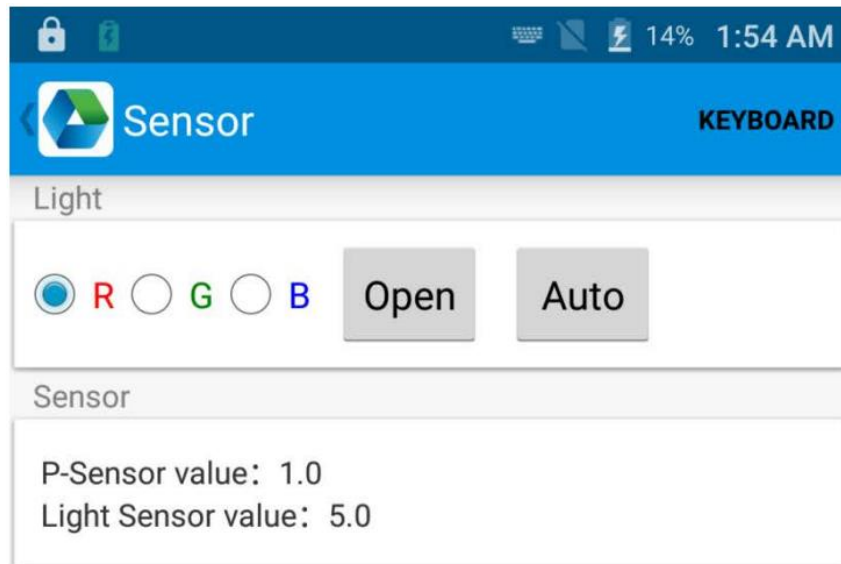
6.3 Volume setup

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



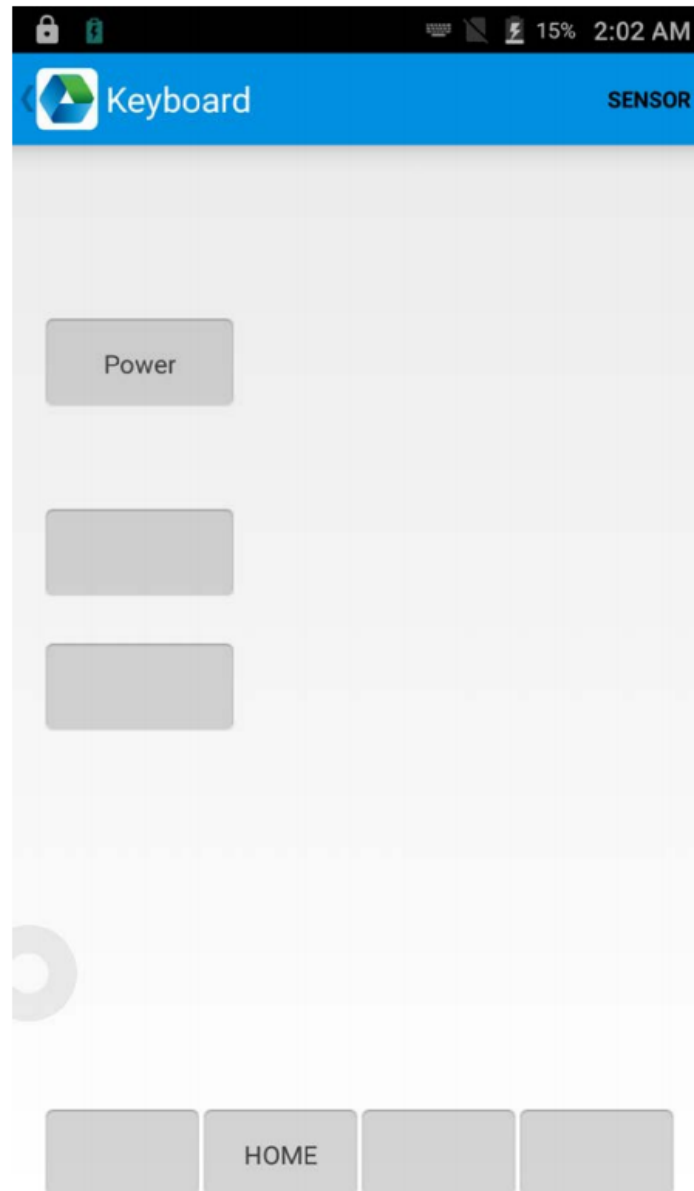
6.4 Sensor

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



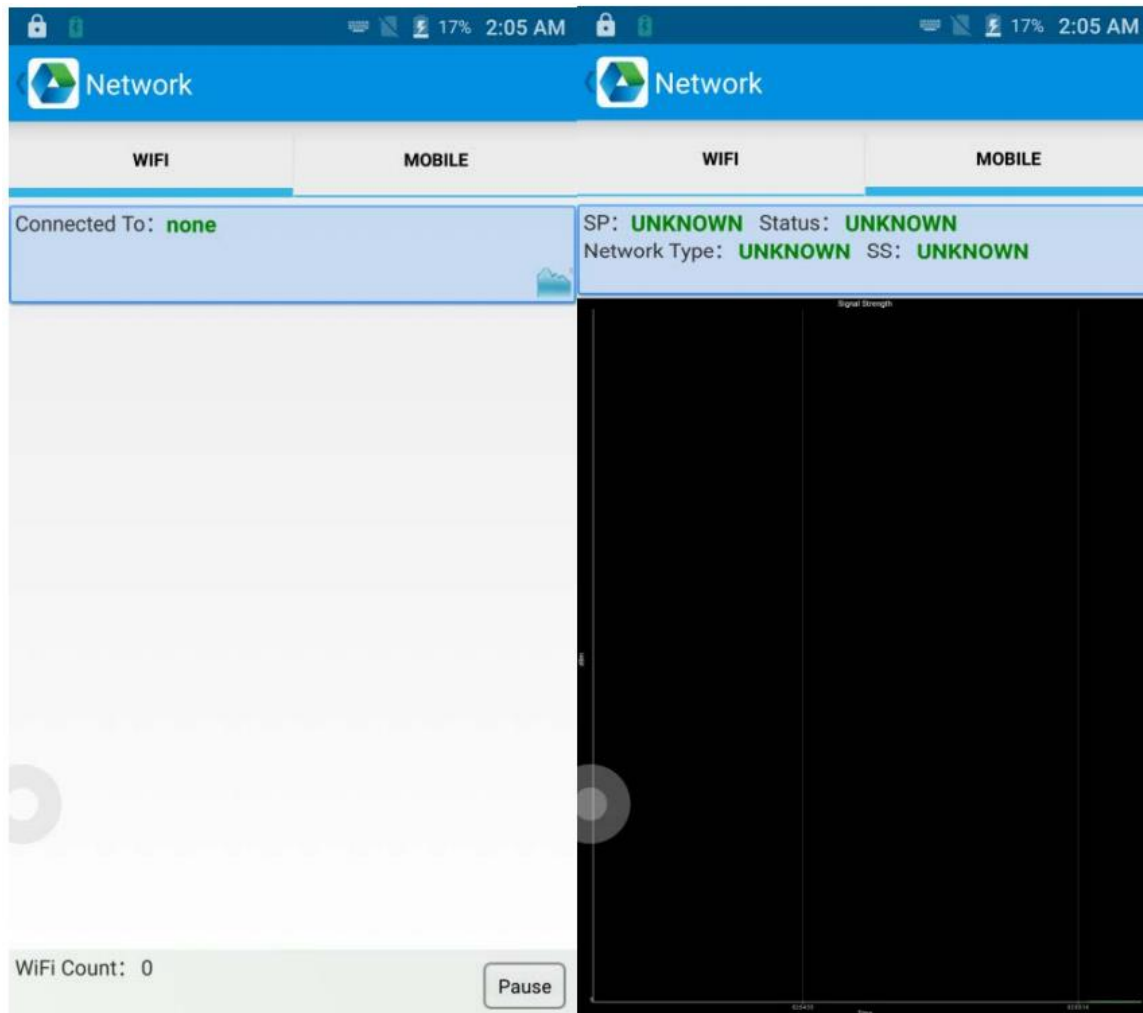
6.5 Keyboard

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



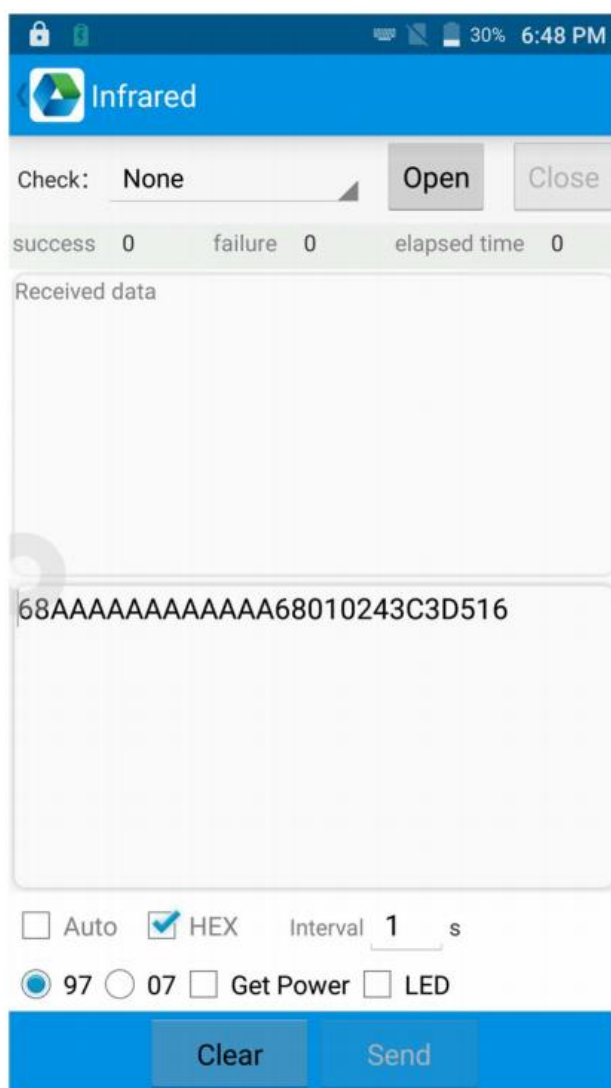
6.6 Network

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



6.7 Infrared read-write function (option)

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.

The screenshot shows a mobile application interface titled "Infrared". At the top, there's a status bar with a lock icon, signal strength, 30% battery, and the time 6:48 PM. Below the title bar, there's a "Check:" dropdown menu set to "None", and two buttons: "Open" and "Close". Underneath, there's a row of statistics: "success 0", "failure 0", and "elapsed time 0". A large text area labeled "Received data" contains the hexadecimal string "68AAAAAAAAAAAA68010243C3D516". At the bottom, there are several controls: a checkbox for "Auto" (unchecked), a checked checkbox for "HEX", an "Interval" field set to "1" with a unit of "s", a radio button selected for "97" (with "07" as an alternative), and two checkboxes for "Get Power" and "LED" (both unchecked). At the very bottom, there are two buttons: "Clear" and "Send".

7 Accessories



Case + anti strangulation strap



Cradle