

Mobile Data Terminal

C61 User Manual



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Statement

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Chapter 1 Product intro

1.1 Intro

Chainway C61 is a new generation rugged handheld computer with robust performance. Built with Android™ 9 OS and Qualcomm Octa-Core processor, it supports numeric/QWERTY keypad, abundant accessories like trigger handle, and features powerful removable battery. And it delivers optional barcode scanning, RFID, NFC, etc. This mobile computer can fulfill applications in logistics, warehousing, retail, etc.

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 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°C to 50°C.

Note:

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

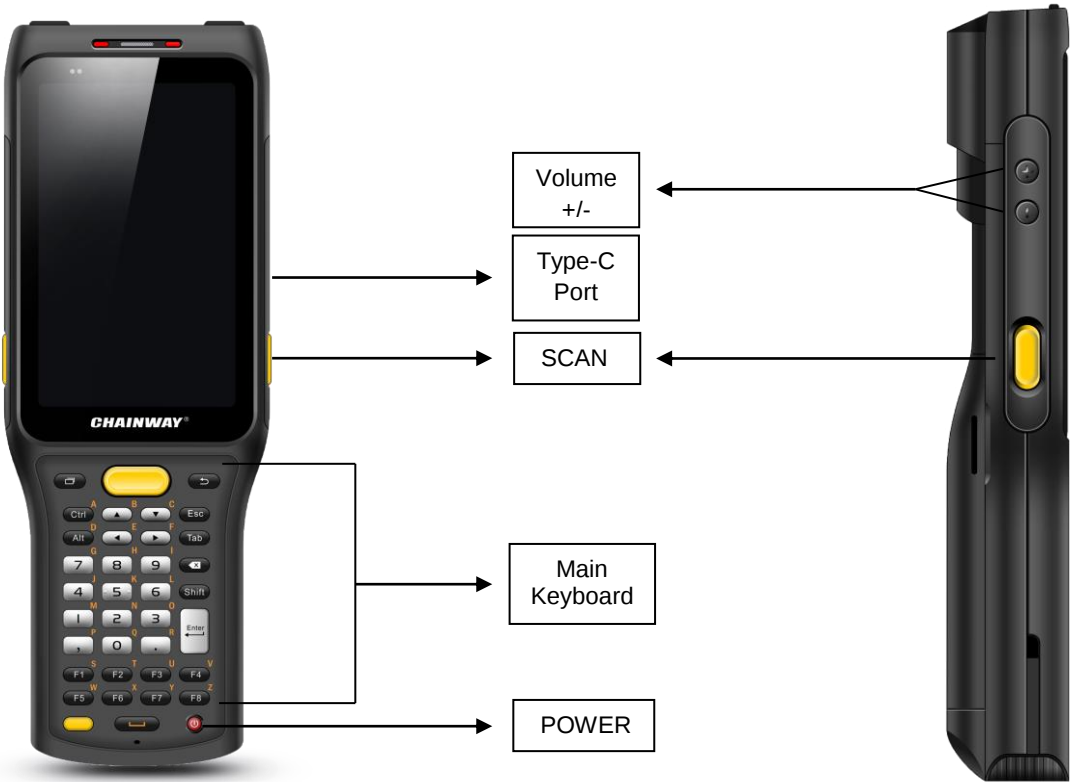
Chapter 2 Installation instructions

2.1 Appearance

C61 back and front appearances are showing as follows:

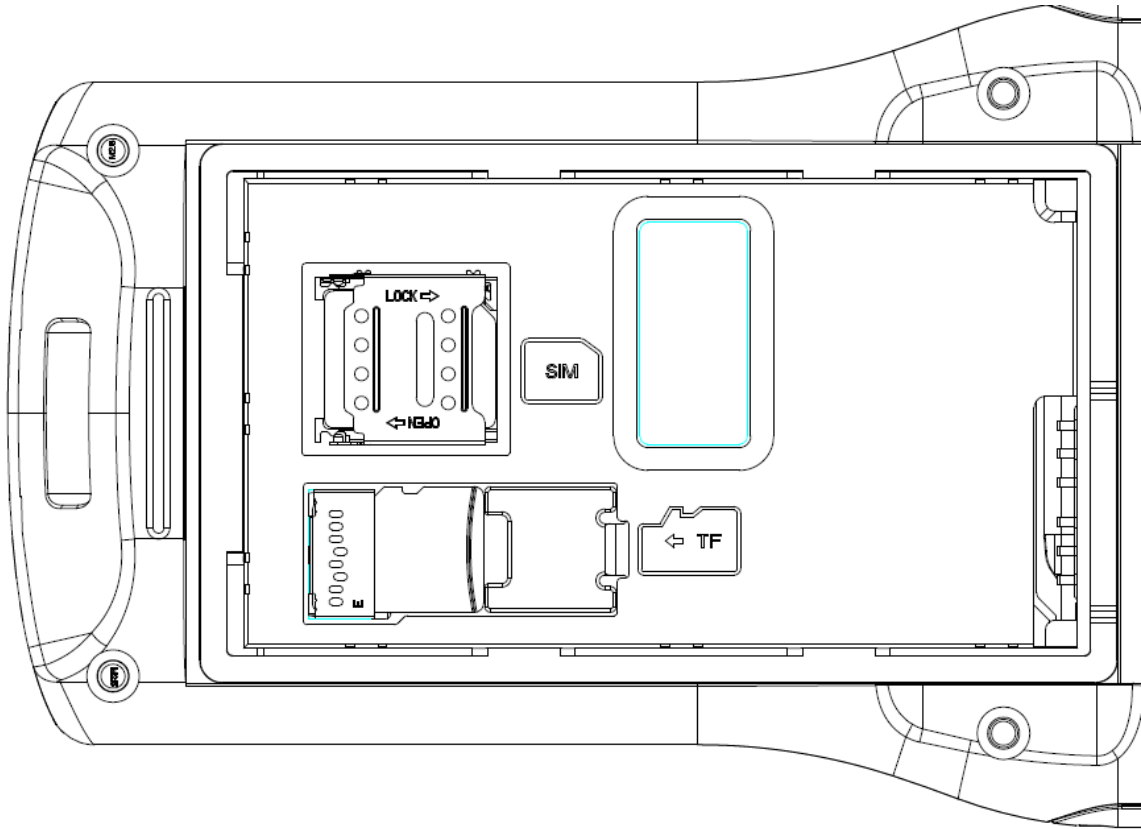


Buttons instruction



2.2 Install Micro SD and SIM cards

The cards sockets are showing as follows:



2.3 Battery charge

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 display

C61 has main keyboard that contains

10 numeric keys+2 symbolic keys, 4 direction keys, 2 Android function keys, ENTER/ESC/TAB/ALT/CTRL/BACK/DELETE, 10 user-defined function keys (reuse with letter keys), 1 POWER key, 1 SCAN key, 1 Alt key, 38 keys in total.

Side keys: 2 SCAN keys+2 volume keys+1 user-defined key, 2D scanning module locates on the top. HD camera and flashlight locate at rear. NFC identification surrounds the camera.

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

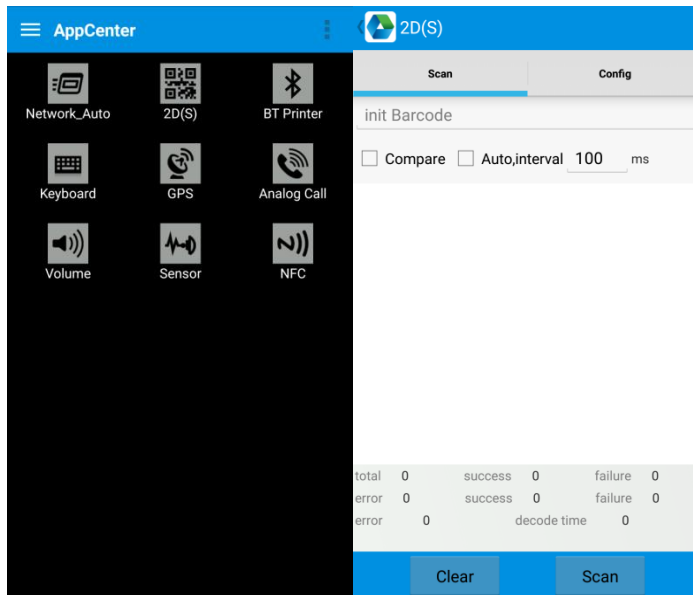
1. Click contacts to open contacts list.
2. Click icon  to add new contacts.
3. Click icon  to import/export contacts.

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.

2D code:



Correct



Incorrect



Max. radiant power: 0.6mW

Wave length: 655nm

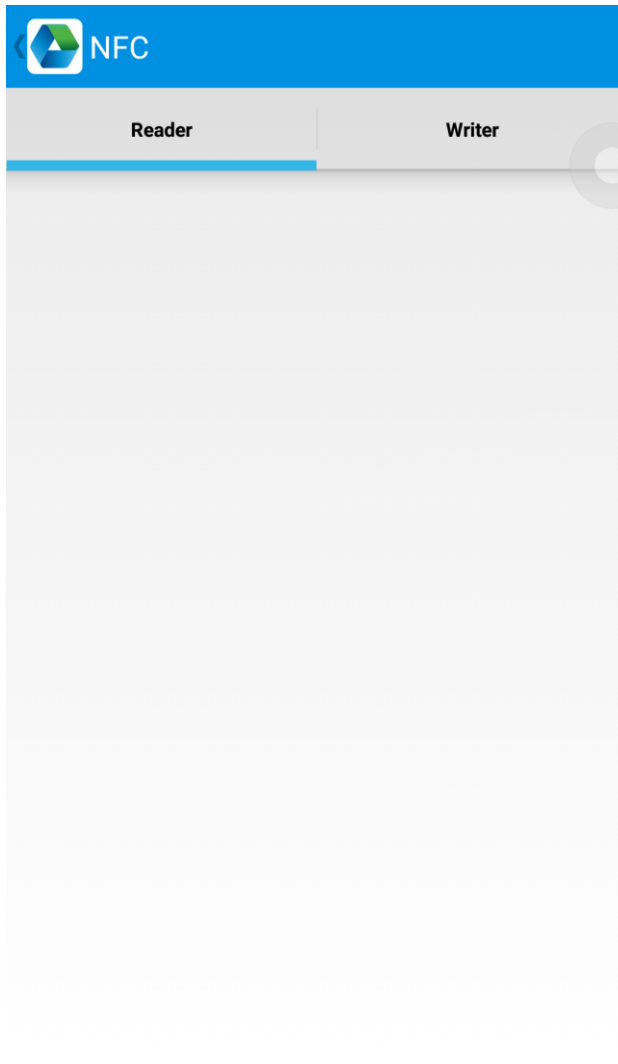
IEC 60825-1 (Ed.2.0).

21CFR 1040.10 and 1040.11 standard.

Chapter 5 RFID reader

5.1 NFC

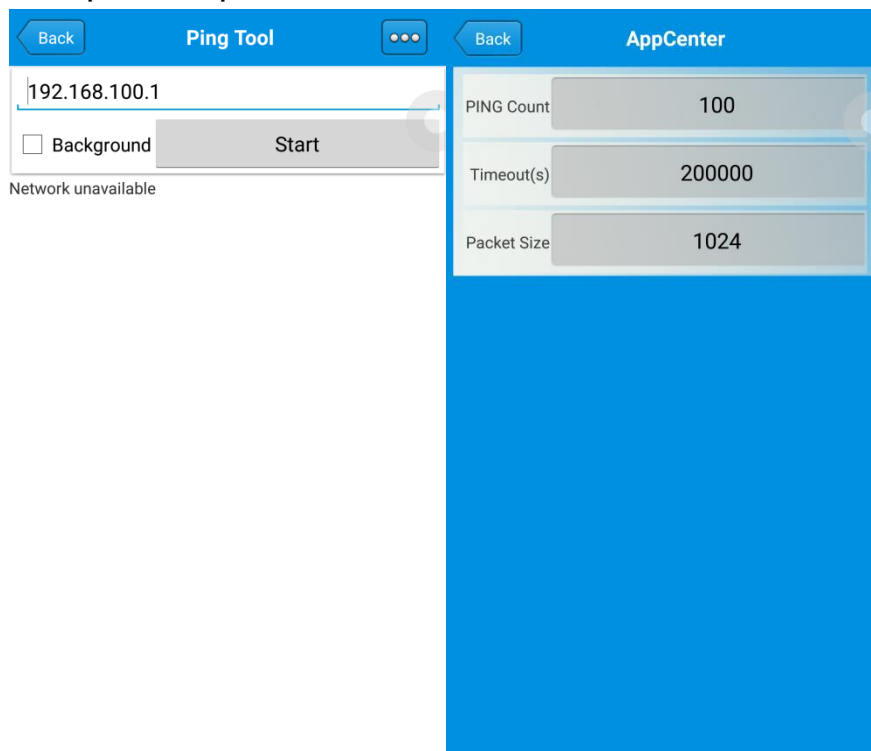
Click App Center, open “NFC” to read and write tag information.



Chapter 6 Other functions

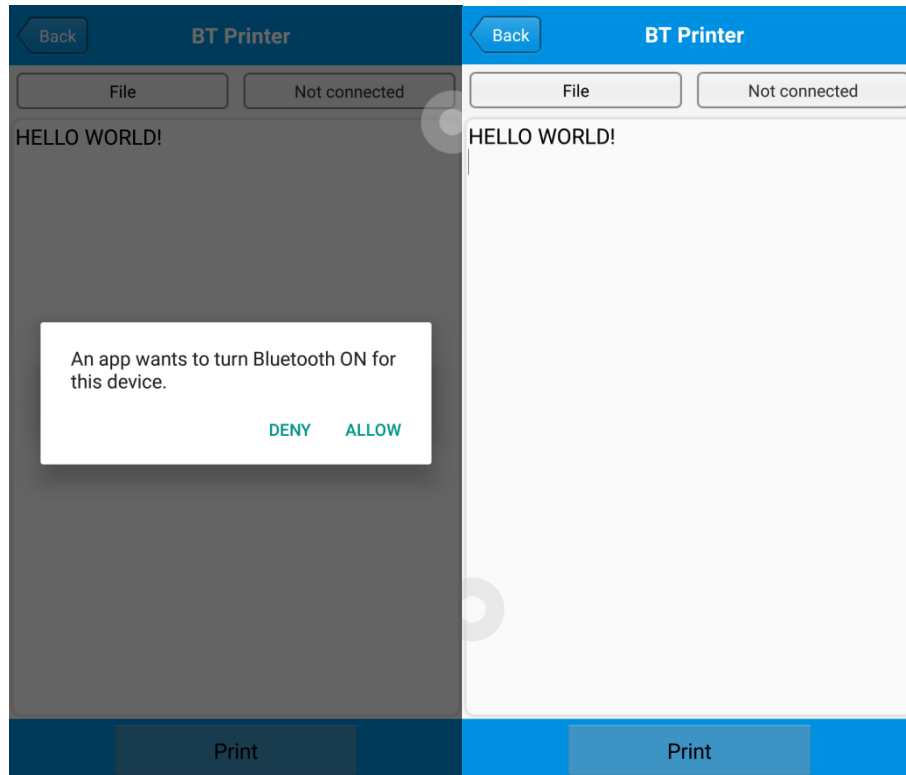
6.1 PING tool

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



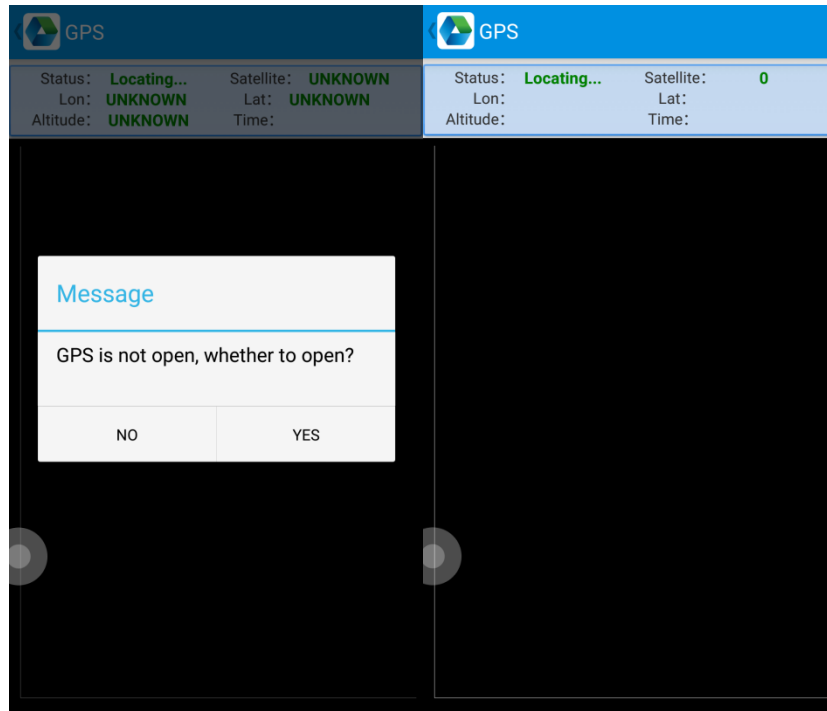
6.2 Bluetooth

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.



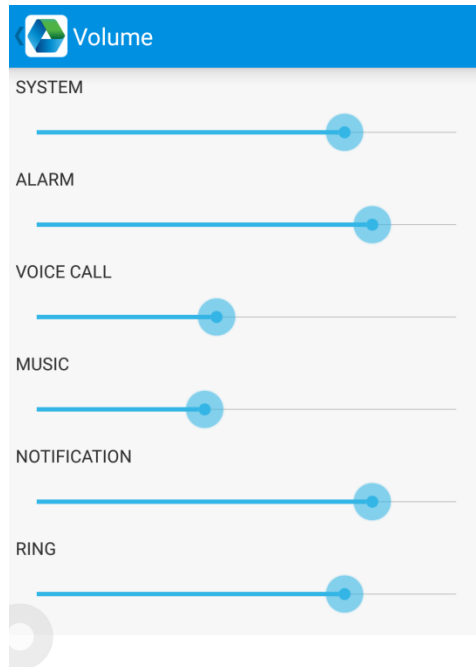
6.3 GPS

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



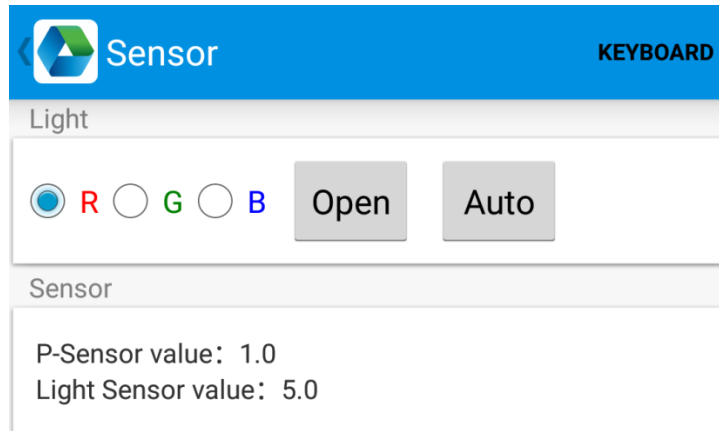
6.4 Volume setup

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



6.5 Sensor

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

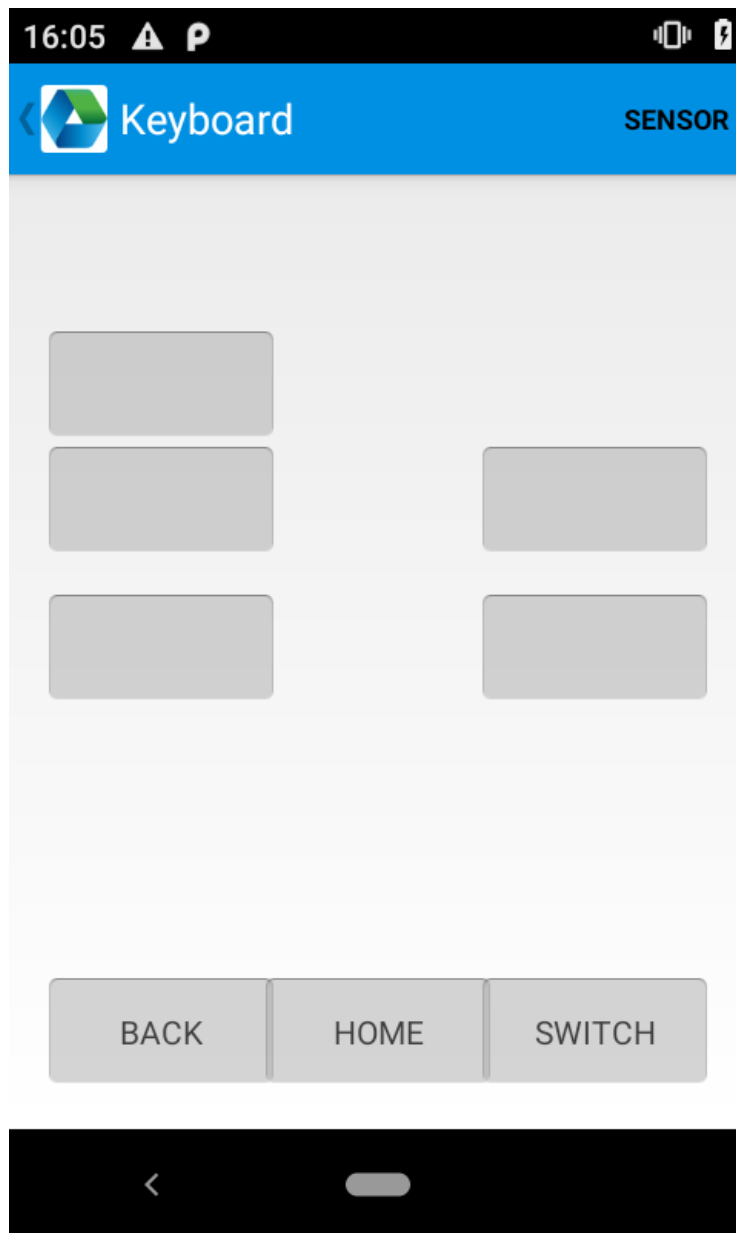


The screenshot shows the 'Sensor' app interface. At the top is a blue header bar with a back arrow, a sensor icon, the text 'Sensor', and the word 'KEYBOARD' on the right. Below the header is a section titled 'Light' in a light gray bar. Under 'Light', there are three radio buttons labeled 'R' (red), 'G' (green), and 'B' (blue). The 'R' radio button is selected. To the right of these buttons are two gray buttons labeled 'Open' and 'Auto'. Below the 'Light' section is another section titled 'Sensor' in a light gray bar. Under 'Sensor', there are two lines of text: 'P-Sensor value: 1.0' and 'Light Sensor value: 5.0'.



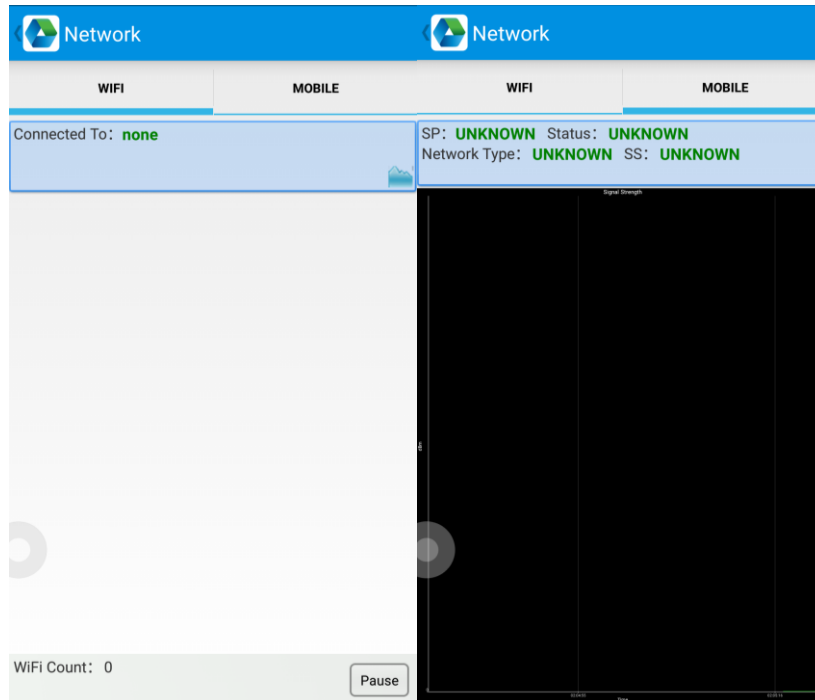
6.6 Keyboard

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



6.7 Network

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



6.8 Keyboard emulator

The keyboard emulator can be used in multiple operating background and output formats directly. And it includes Prefix/Suffix/Enter/TAB.

Please check Keyboard emulator manual for more details.

keyboardemulator v2.2.9.6.2

Function AppSettings 2DSettings Test

Enable Scanner OFF

Barcode	KeyCode
☐ Barcode1D	280
☒ Barcode2D	278

RFID	KeyCode
☐ 14443A	280
☐ 15693	

UHF	KeyCode
☐ UHF	280

LF	KeyCode
☐ IDCard	
☐ Animal	
☐ HiTag	
☐ HDX	280
☐ EM4450	
☐ TinyAniTag	
☐ EM4305	

Chapter 7 Device characteristic

Physical characteristics

Size	202.0 x 72.5 x 32.0 mm / 7.95 x 2.85 x 1.26 in.
Weight	390 g / 13.76 oz.
Display	4-inch display, LTPS LCD screen
Main Keyboard	37 keys in total Side keys: 2 SCAN keys + 2 volume keys + 1 user-defined key
Battery	5200 mAh removable main battery, 5200 mAh optional pistol battery, support QC3.0 and RTC Standby: over 300 hours (only main battery) Continuous use: over 12 hours (depending on user environment) Charging time: 2.5hours (charge device by standard adaptor and USB cable)
Expansion	Supports up to 128 GB Micro SD card
Expansion Slot	1 slot for SIM card, 1 slot for TF card
Audio	1 Microphones, 1 Speaker
Camera	13MP autofocus camera with flashlight

Performance

CPU	Qualcomm 1.8 GHz Octa-core
OS	Android 9
RAM	3GB
Communication Interface	USB3.0, Type-C
ROM	32GB
Max. expansion	Supports up to 128 GB Micro SD card

User environment

Operating temp.	-20°C to 50°C
Storage Temp.	-40°C to 70°C
Humidity	5%RH - 95%RH non condensing
Sealing	IP65, IEC sealing standard
Drop specification	Multiple 1.8 m / 5.9 ft. drops (at least 20 times) to the concrete across the operating temperature range

Communication

WAN	EU/CH: 2G: 850/900/1800/1900 MHz 3G: CDMA EVDO: BC0 WCDMA: 850/900/1900/2100 MHz TD-SCDMA: A/F(B34/B39) 4G: B1/B3/B5/B7/B8/B20/B38/B39/B40/B41 US: 2G: 850/900/1800/1900MHz 3G: 850/900/1900/2100MHz 4G: B2/B4/B5/B7/B17/B38
WLAN	Support 802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.2/4.1+HS/4.0/3.0+HS/2.1+EDR

Data collection

Barcode scanning	SE4710/SE4750/SE4850
RFID	NFC 13.56Mhz

Developing Environment

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

