

ShenZhen Chainway Information Technology Co., Ltd.

Mobile Data Terminal

C66 User Manual

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Statement

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Chapter 1 Product intro

1.1 Intro

Chainway C66 is a newly-developed rugged handheld computer with large screen and strong extensibility. Based on Android 11.0 OS, it is equipped with Qualcomm Octa-core processor for high-speed processing. With 5.5-inch high-definition display, it is integrated with barcode scanning and other functions. The data collection device supports quick charge and UHF sled for good extensibility that can meet the needs in logistics, warehouse, manufacturing, retail, asset tracking, power patrol inspection, 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 NA010050020, 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 USBInterface of version 2.0 or higher. Theconnection to so called power USB is prohibited.

The pin under the bottom of the device is supported to used to charge, but not developed yet.

Note:

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

Note:

The suitable temperature for the product and accessories is -20°C to 50°C.

Note:

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

Chapter 2 Installation instructions

2.1 Appearance

C66 front appearance is as below:



Buttons instruction

Button		Description
Side button	1. Power	Locate on right side, press to ON/OFF device.
	2. PTT key	Locate on right side, its function can be defined by software.
	3.SCAN	Scanning button located on both sides. There are two scanning buttons.
	4. Volume +/-	Volume up and down

2.2 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.

Note:

1. Main logic is pistol grip battery will work as power bank to give power to main device battery, when device battery power is under 50 percent, it start to charge the main device battery. It will keep charging until pistol grip battery is at percentage of 15%.
2. Once installed the pistol grip to main device, must restart the device once so the pistol grip battery will be correctly detected.
3. When put the device with pistol grip together to charge, it will charge main device battery first, once main device battery is up to 95%, it will start to charge pistol grip battery.

2.3 Buttons and function area display

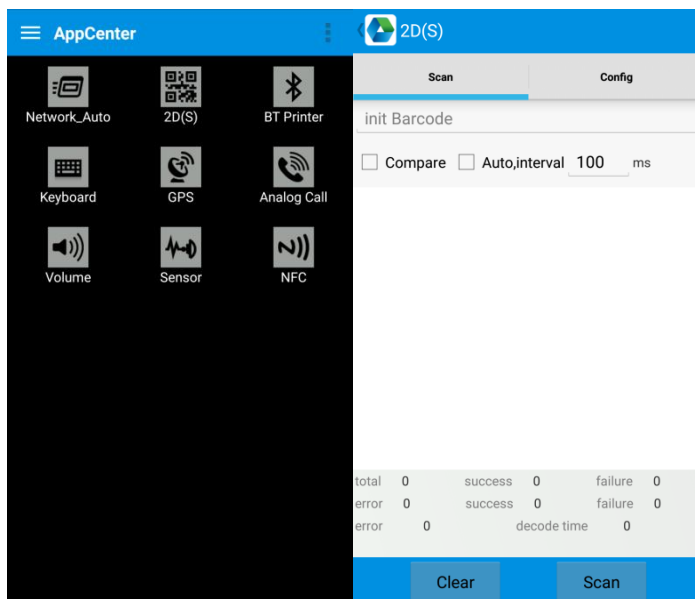
C66 has 6 side buttons, 2D scanning module locates on the top. HD camera and flashlight locate at rear.



Chapter 3 Call function

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



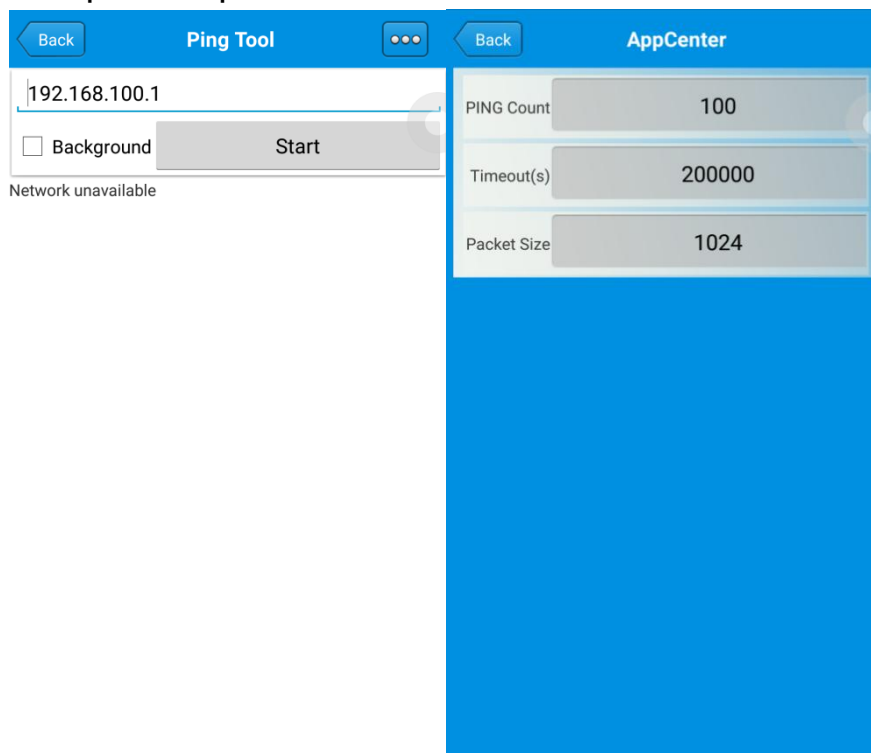
Incorrect

Chapter 5 RFID reader

Chapter 6 Other functions

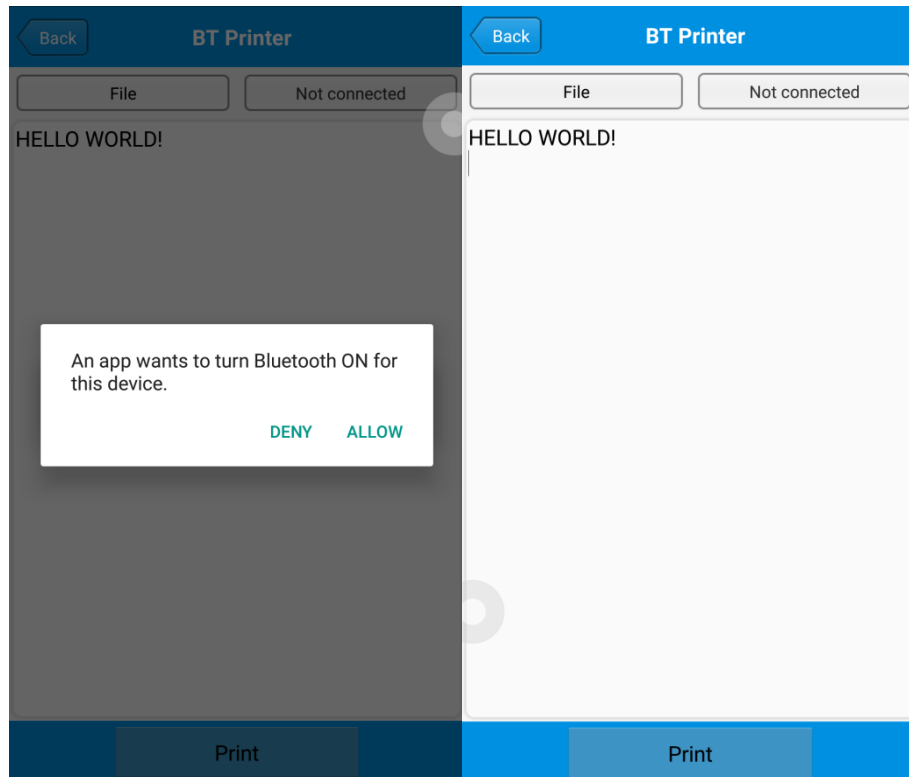
6.1 PING tool

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



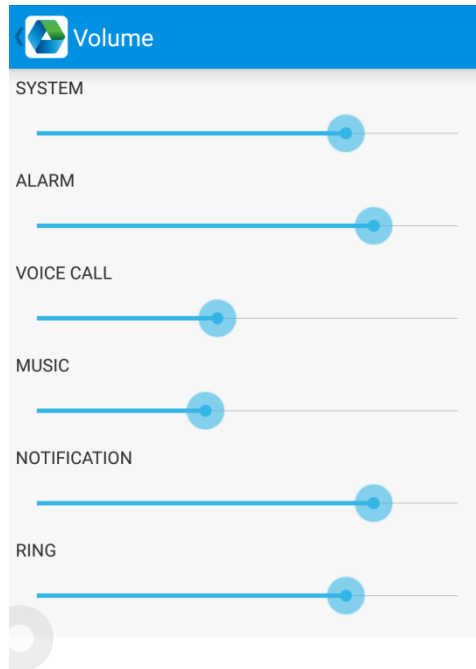
6.2 Bluetooth

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.



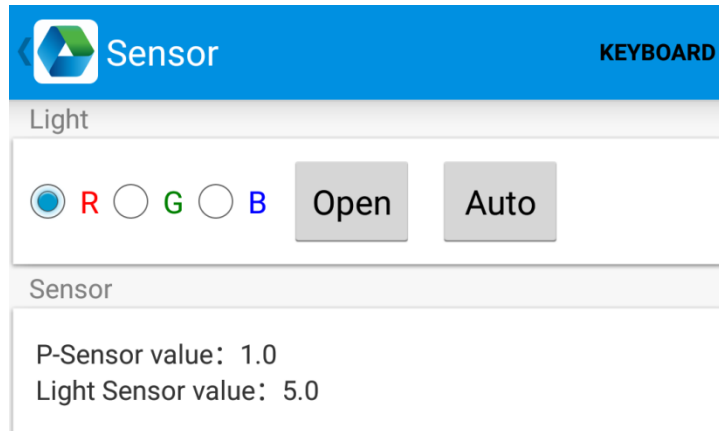
6.3 Volume setup

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.

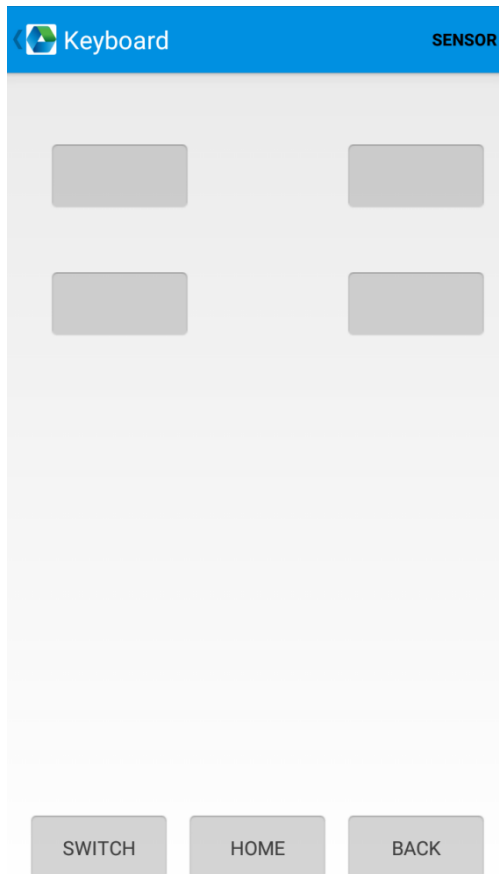


The screenshot shows the 'Sensor' app interface. At the top is a blue header bar with a back arrow, a sensor icon, the text 'Sensor', and the word 'KEYBOARD' on the right. Below the header is a section titled 'Light' in a light gray bar. Under 'Light', there are three radio buttons labeled 'R' (red), 'G' (green), and 'B' (blue). The 'R' 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'.



6.5 Keyboard

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



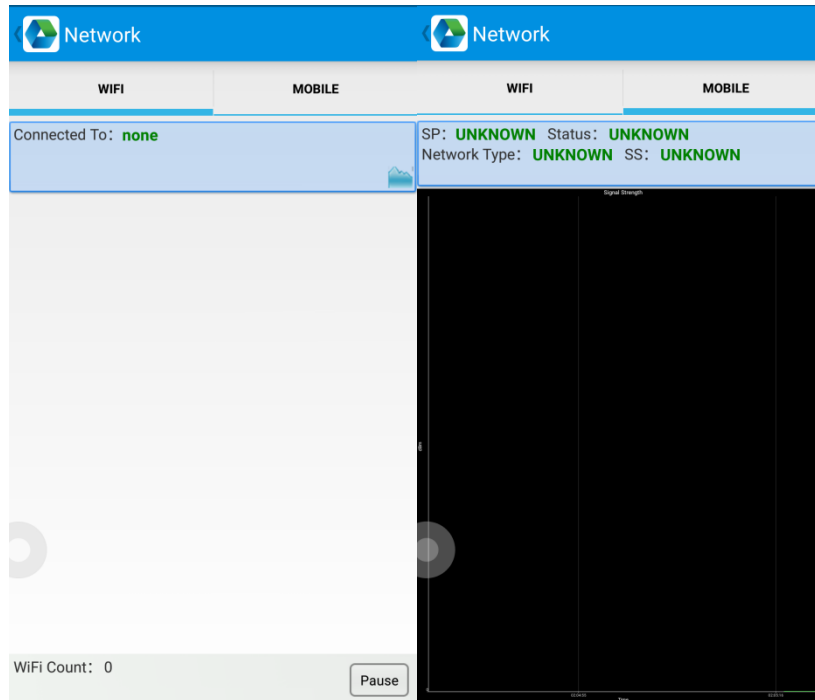
6.6 OTG Function

C66 Cradle OTG Connection:

1. Install C66 rubber boot.
2. Pay attention to installing direction of RB-C66-RRHP Type C & Pogo Pin.
3. Install device onto cradle and select OTG mode on pop-up menu to switch on OTG.

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.

Note:

For each model, keycode of side button would be different, user needs to use keyboard in appcenter to check keycode and bind in Barcode2D.

keyboardemulator v2.2.9.6.2

Function AppSettings 2DSettings Test

Enable Scanner OFF

Barcode KeyCode

☐ Barcode1D

☒ Barcode2D 280 278

RFID KeyCode

☐ 14443A

☐ 15693 280

UHF KeyCode

☐ UHF 280

LF KeyCode

☐ IDCard

☐ Animal

☐ HiTag

☐ HDX 280

☐ EM4450

☐ TinyAniTag

☐ EM4305

Chapter 7 Device characteristic

Physical characteristics

Size	160x76x15.5mm / 6.3*2.99*0.61in
Weight	<287g/10.12oz(with battery)
Display	5.5-inch display, IPS LTPS 1440*720
Touch panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Battery	5200 mAh main battery
Expansion	Supports up to 128 GB Micro SD card
Audio	2 Microphones, 1 for noise reduction
Camera	13MP autofocus camera with flashlight

Performance

CPU	Qualcomm 2.0 GHz Octa-core
OS	Android 11
RAM	3GB
Communication Interface	USB3.1, Type-C, OTG
ROM	32GB
Max. expansion	Supports up to 128 GB Micro SD card

User environment

Operating temp.	-20 ~ 50℃
Storage Temp.	-40℃ to 70℃
Humidity	5%RH - 95%RH non condensing
Sealing	IP65, IEC sealing standard
Drop specification	Multiple 1.8m/5.91ft drops (at least 20 times) to the concrete across the operating temperature range Multiple 2.4m/7.87ft drops (at least 20 times) to the concrete after installed rubber bumper
Charging temperature	-20 ~ 40 °C

WLAN	Support 802.11 a/b/g/n/ac/ax-ready/d/e/h/i/k/r/v, 2.4G/5G dual-band, IPV4, IPV6, 5G PA; Fast roaming: PMKID caching, 802.11r, OKC; Operating Channels: 2.4G(channel 1~13), 5G(channel 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132, 136,140,144,149,153,157,161,165), Depends on local regulations; Security and Encryption: WEP, WPA/WPA2-PSK(TKIP and AES), WAPI- PSK—EAP-TTLS, EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS, PEAP-GTC, etc.
Bluetooth	Bluetooth 5.1, BR+EDR+LE

Data collection

Barcode scanning	SE4710
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Developing Environment

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

FCC statements:

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.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.

NOTE: 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 or more 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.

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types C66(FCC ID: 2AC6AC66W) has also been tested against this SAR limit.


The exposure standard for wireless mobile hotspots 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 (10 mm) positions accepted by the FCC with the mobile hotspot transmitting at its highest certified power level in all tested frequency bands. The SAR guideline includes a considerable safety margin designed to assure the safety of all persons regardless of age and health.

The FCC has granted an Equipment Authorization for this model mobile hotspot with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines.

The device for operation in the band 5150 – 5350 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

CE statements:

Declaration of Conformity Hereby, Shenzhen Chainway Information Technology Co., Ltd. declares that the radio equipment type C66 is in


compliance with directive 2014/53/EU 

The declaration of conformity is available at the following internet address: www.chainway.net

Specific Absorption Rate (SAR)

- Your device is tested to comply with applicable requirements and regulations of the European Union of human exposure to radio wave.
- Specific Absorption Rate (SAR) is used to measure radio waves absorbed by a body. The device complies with RF specifications when the device used at a distance of 5 mm from your body. The SAR limit is 2.0 W/kg averaged over 10 gram of tissue in the European Union.
- This product was tested and recorded the maximum SAR value was 0.633 W/kg for the head, 1.319 W/kg for the body, 2.353 W/kg for the limbs.

5150 – 5350 MHz can be used indoor only.

	AT	BE	BG	CH	CY	CY	DE	DK
	EE	EL	ES	FI	FR	HR	HU	IE

	IS	IT	LI	LT	LU	LV	MT	NL
	PL	PT	RO	SE	SI	SK	TR	UK(N I)

Frequency bands and power

	Bands	Operation Frequency	Max.Power
Bluetooth	2.4GHz	2402-2480 MHz	EIRP 11.93 dBm
Wi-Fi	2.4GHz	2412-2472MHz	EIRP 18.25 dBm
	5GHz	5180-5240MHz	EIRP 18.30 dBm
		5260-5320MHz	EIRP 17.39 dBm
		5500-5700MHz	EIRP 17.62 dBm
		5745-5825MHz	EIRP 13.80 dBm
RFID		865-868MHz	Pe.r.p. 23.58 dBm

