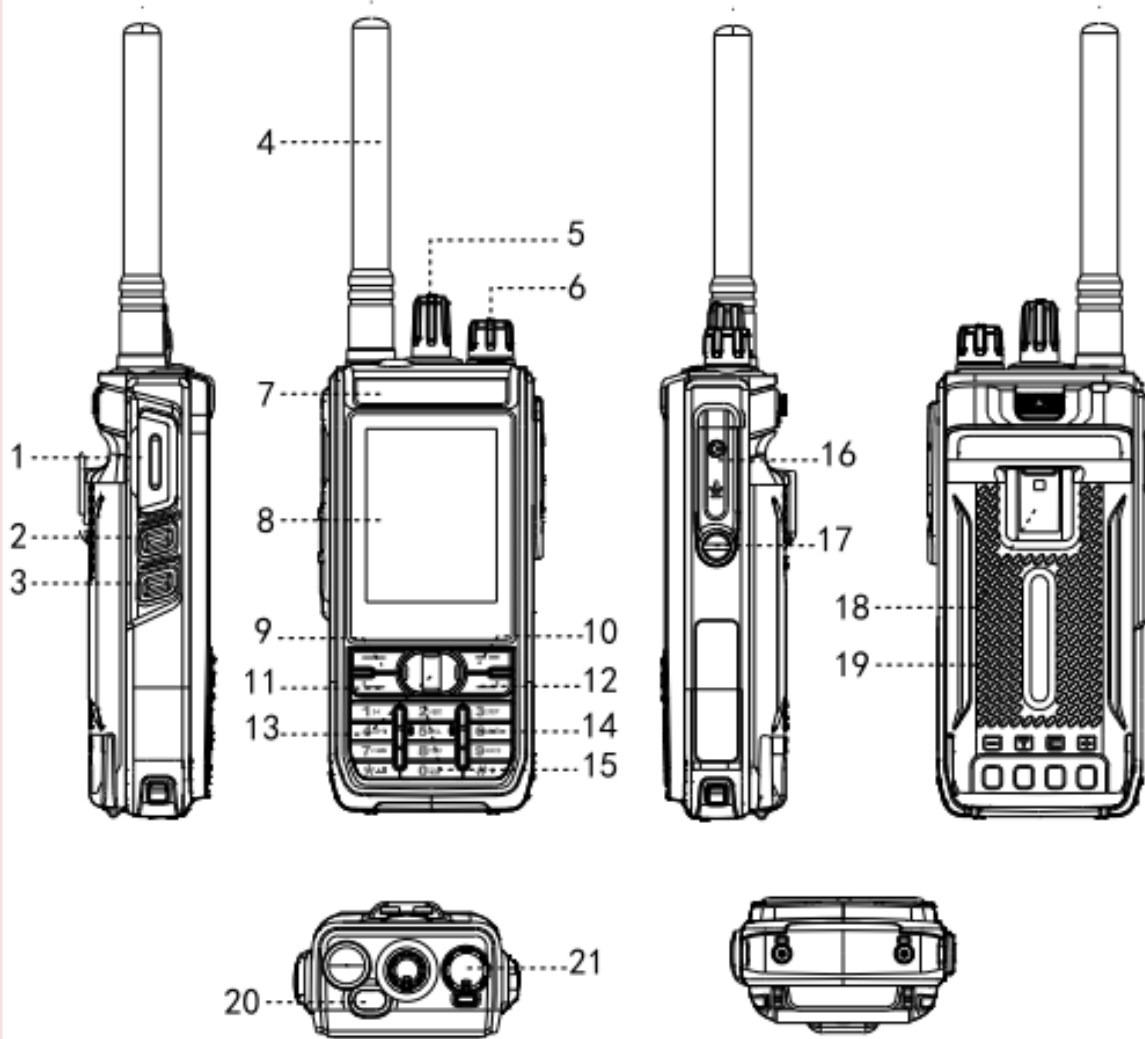




Quick Start

- ☛ Digital Trunking Radio
- ☛ Support DMR
- ☛ Data Service
- ☛ Durable Quality
- ☛ IP68 Standard
- ☛ Intrinsically safe version for optional

1. Radio Quick Review



NO.	Items	NO.	Items
1	PTT Button	11	Call Button
2	SK1 Button	12	Hang-up Button
3	SK2 Button	13	Navigation Button
4	Antenna	14	Main Keypad
5	Channel Switch	15	Speaker
6	Power On/Off, Volume Switch	16	Accessories Jack
7	LOGO Label	17	Screw of Accessory Jack Cover
8	LCD	18	Belt Clip
9	Confirm Button	19	Battery
10	Cancel Button	20	SoS Button
		21	LED

2. Quick Review about LCD



2.1 The interface divided to: Status display area, Time display area, Main display area, Operation display area.

- Status display area: Display the current status icon of the handheld radio, including signal strength high and low power indication, unread SMS indication, positioning indication, alarm indication, power indication, etc.
- Time display area: display current time, date, week, channel mode
- Main display area: display area name, channel name, receiving frequency, transmitting frequency
- Operation display area: display menu, contact list, working mode;

2.2 Icon on Status display area:

No.	Icon	Icon represents content
1		signal strength. The more signal bars, the stronger the signal
2		High output power
		Low output power
4		Keypad lock
5		Audio accessories attach
6		Remote stun
7		Device failure or not written parameters or not write frequency
8	DM	Conventional mode
	TM	Trunking mode
9		Battery capacity
10		Unread message

3. Quick review about keypad

Keypad is composed of a standard 3*4 keyboard, navigation keys, confirmation key, return key, call key and hang up key. The 3*4 keyboard can realize the input of numbers, symbols, Chinese characters and English.

4. Working principle

4.1 Direct mode



[Direct mode] is for the radio to communicate directly with the radio through the radio frequency signal of the air interface. The system only consists of radio terminal.

4.2 Trunking Mode



[Trunk mode] It consists of base stations, servers, dispatching consoles, handheld terminals and other equipment. The server and the base station uniformly manage the frequency resources and service requests of the terminal equipment.

5. Functions Operation Instructions

5.1 Power On/off, Volume Adjust

Rotate the On/Off/Volume Knob illuminated until you hear a click.

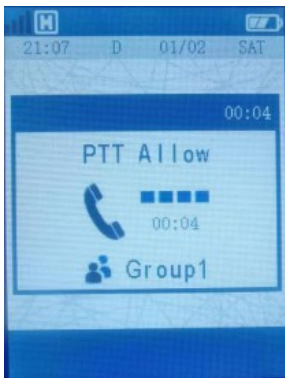
Rotate the volume knob counter-clockwise to power off the radio.



5.2 The voice call under conventional mode

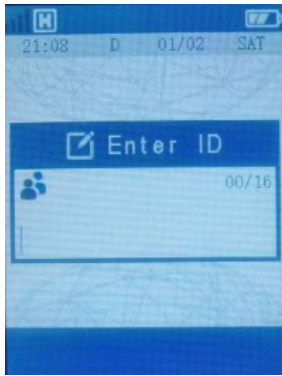
5.2.1 PTT call

Under standby status, press PTT to call. The red indicator light is on, and the LCD displays the calling group number.



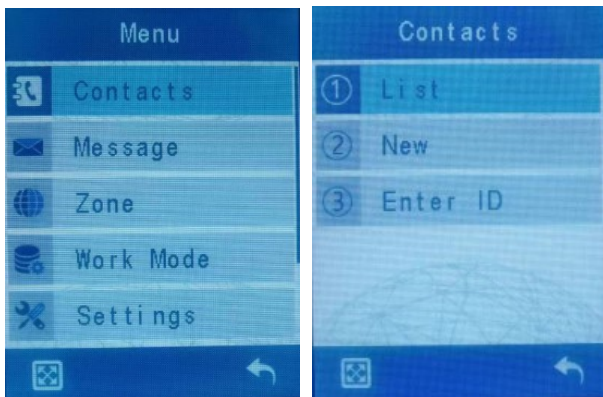
5.2.2 Manual Dialing Call

Press the **[Call Button]** in standby mode to enter the dialing interface. Enter the target ID, and then press PTT to initiate a call. At this time, the red indicator light is on, and the LCD displays the call status and ID number.



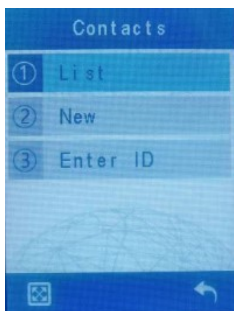
5.2.3 Contacts

Under standby, press confirmation button to enter '**Contacts**', then enter the "**Contacts list**", press PTT at the selected contact to initiate a call, and the red indicator light is on LCD, displays call status and contacts.



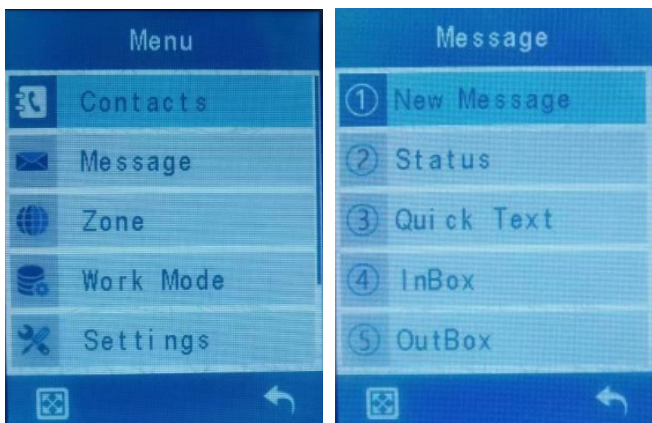
5.2.4 List under Contacts

After enter Contacts, select 'List'. Contacts include 3 sub-menu: List、New、Enter ID.



5.3 Message under conventional mode

Under Menu, select 'Message'. The message menu include: New Message, Status, Quick Text, InBox, OutBox.



5.3.1 New Message

Enter the menu list, select [Message], [New Message] to enter the new message editing interface. The input

methods include uppercase English, pinyin, numbers, and lowercase English. Press the "" key to switch the input method; the "left" of the direction key can delete the input content, and the direction key "up" and "down" switch the cursor position, "return" key to return to the previous menu. If you choose the pinyin input method, after inputting the pinyin, "up" and "down" can switch the pinyin to be selected; press the "select" key to select the pinyin. If there is no number to be selected on the page, use the "Up" and "Down" keys to switch the Chinese character display page; use the "Left" or "Back" key to return to the previous operation.

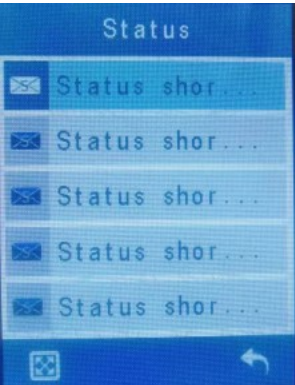


Send a text message by selecting a contact list, or manually enter a number to send a text message.



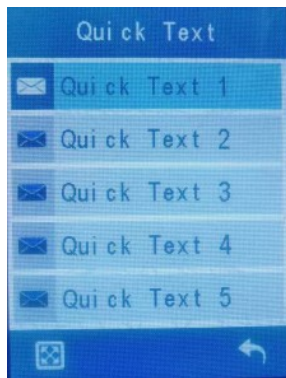
5.3.2 Status under Message

Select the content with sending in the list, and use the [Select] key to view the specific content of the status message.



5.3.3 Quick Text

Select the content with sending in the list, and use the [Select] key to view the specific content of the status message.



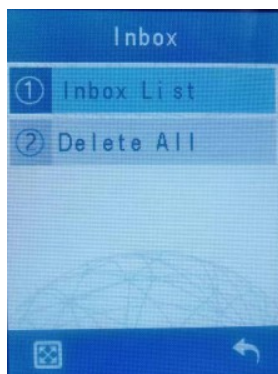
5.3.4 Text Message Received

When receiving a text message that matches the local number, the local receiving group list, and the all-call number within the team, a prompt box for receiving the text message will pop up. Press the [Back] key to return to the interface before receiving SMS, and use the [Select] key to perform operations such as reply, forward, and delete.



5.3.5 Inbox

【Inbox】 include Inbox List and Delete All.



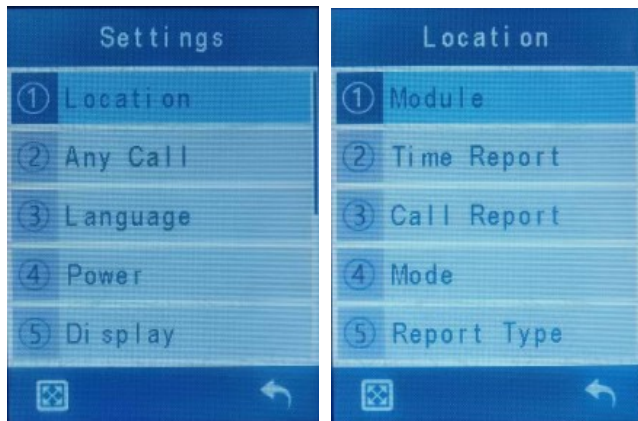
5.3.6 Outbox

【Outbox】 include: outbox list and delete all.

5.4 Settings

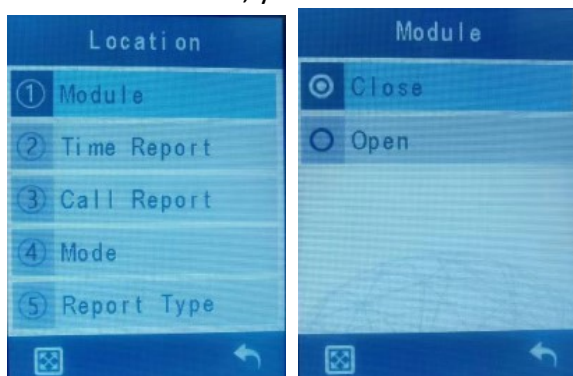
5.4.1 Location

【Location】 is divided into 5 parts: Module、Time Report、Call Report、Mode



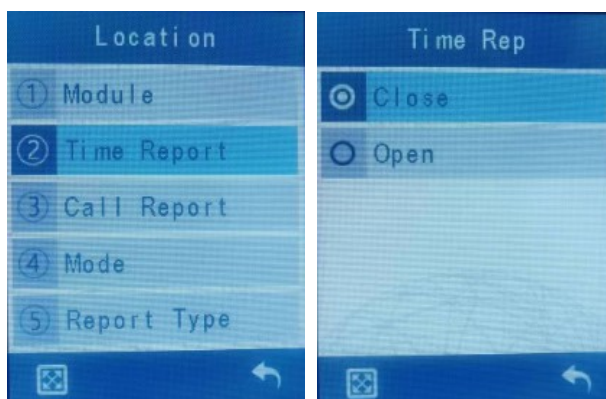
5.4.1.1 Module

Enter **【Module】** , you could choose to 'Close' or 'Open'.



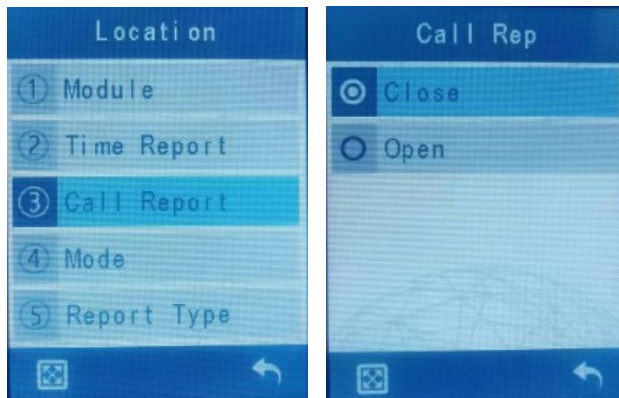
5.4.1.2 Time Report

Enter [Time report], you can choose to enable or disable the scheduled report. After the timing report function is enabled, the device will periodically report its own positioning information to the positioning receiving channel during positioning. The dispatching console can display the geographic location information of the equipment in real time.



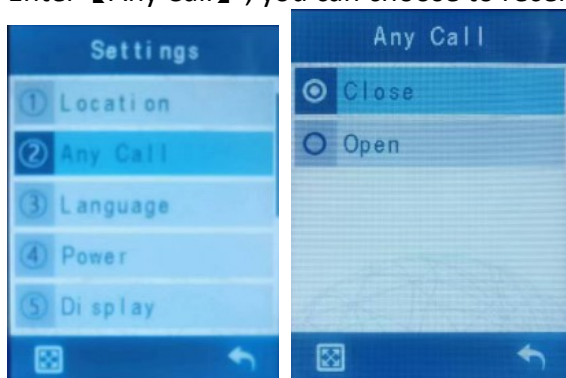
5.4.1.3 Call Report

Enter [Call report], you can choose to enable or disable the scheduled report. After the timing report function is enabled, the device will periodically report its own positioning information to the positioning receiving channel during positioning. The dispatching console can display the geographic location information of the equipment in real time.



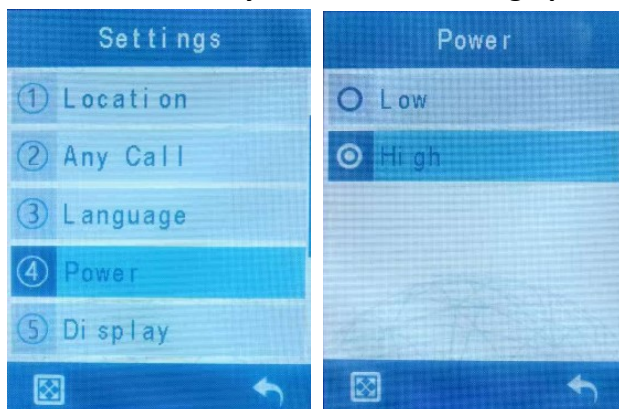
5.4.2 Any Call

Enter **【Any Call】** , you can choose to receive only group list calls and any calls that meet the agreement.



5.5 Power

Enter **【Power】** , you could choose High power or Low power.



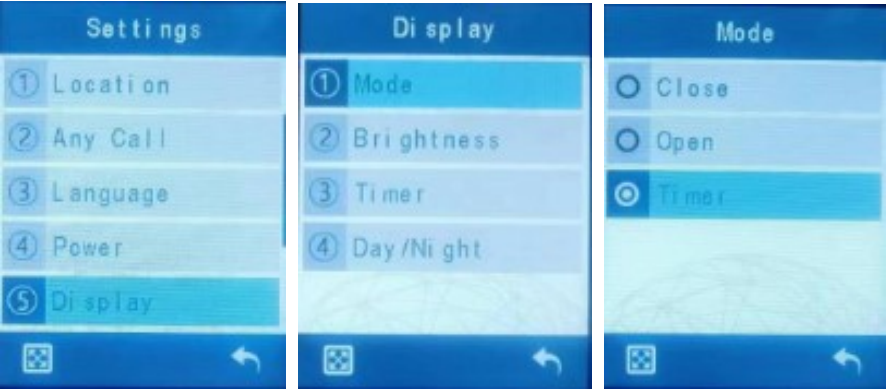
5.6 Display

【Display】 is divided into four parts: backlight mode, backlight brightness, backlight time, day/night.



5.7.1 Mode

Enter **【Mode】** , you could choose ‘close’ means close bright, ‘open’ means open the bright, or you could choose ‘time’ which means delay to close the bright.



5.7.2 Brightness

Enter **【Brightness】** , you can adjust the brightness of LCD.



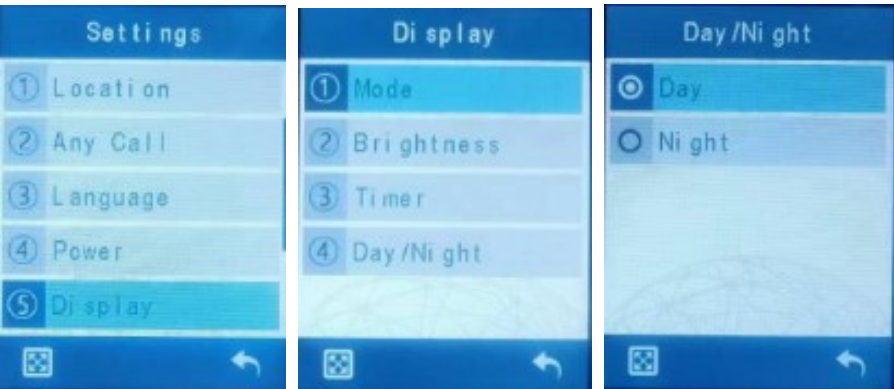
5.7.3 Timer

Enter **【Timer】** , you could delay to close the brightness of LCD. Time can be setup as: 5S、10S、15S、20S、25S、30S、35S、40S、45S、50S、55S and 60S.



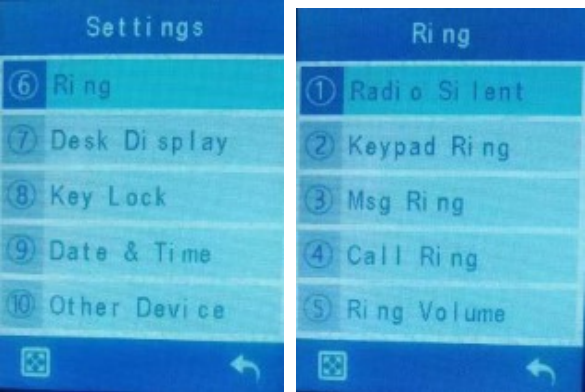
5.7.4 Day/Night

Enter **【Day/Night】** , you could setup the LCD display mode to day mode and night mode.



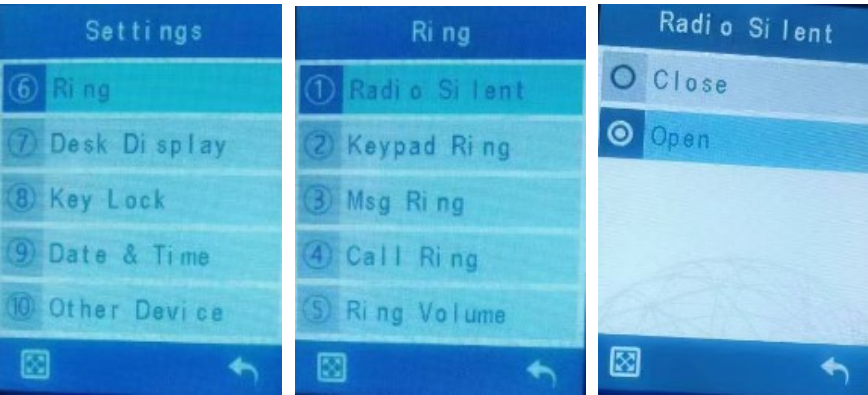
5.8 Ring

【Ring】 is made by: Radio silent、Keypad Ring、Msg Ring、Call Ring and ring volume.



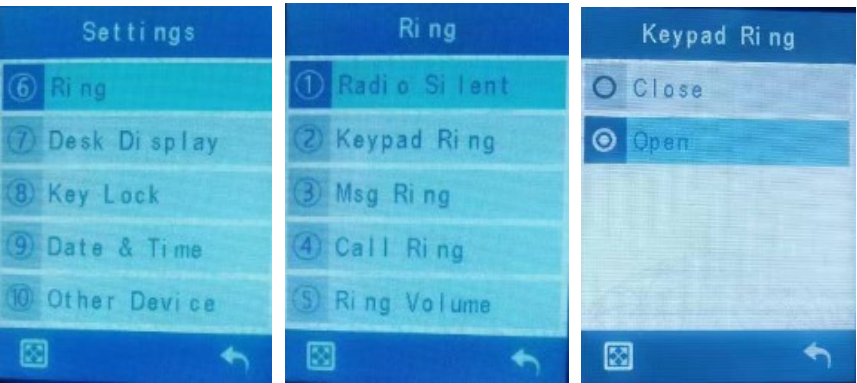
5.8.1 Radio silent

Enter 【Radio silent】 , you could choose ‘Close’ or ‘Open’. If choose ‘Open’, the radio will be silent.



5.8.2 Keypad Ring

Enter 【Keypad Ring】 , you could choose ‘Close’ or ‘Open’. If choose ‘Open’, the keypad tone will be turned off.



5.8.3 Msg Ring

Enter 【Msg】 , you could choose ‘Close’ or ‘Open’. If choose ‘Open’, the message tone will be turned off.



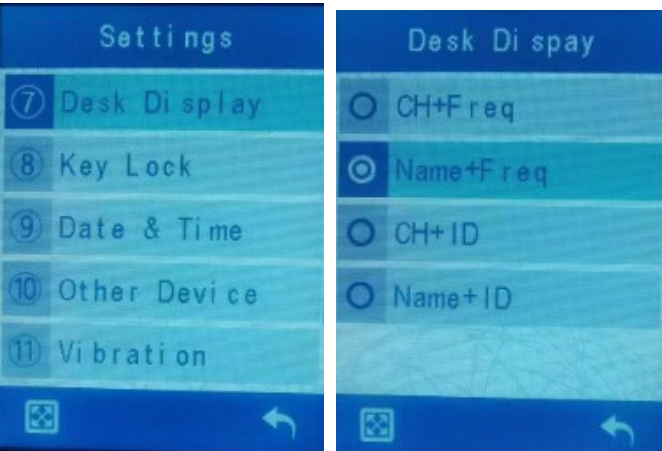
5.8.4 Call Ring

Enter **【Call Ring】** , you could choose ‘Close’ or ‘Open’. If choose ‘Open’, the call ring will be turned off.



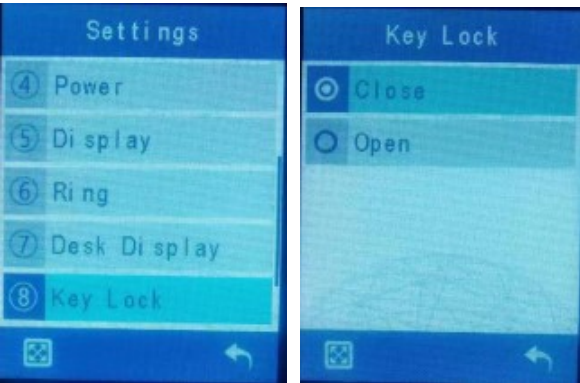
5.9 Desk Display

Enter **【Desk Display】** , you could setup the standby interface.
You could choose ‘CH+Freq’, ‘Name+Freq’, ‘CH+ID’, ‘Name+ID’



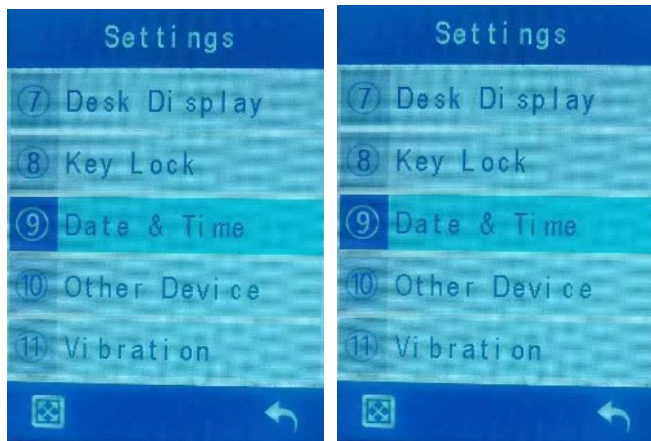
6.0 Key lock

Enter **【Key lock】** , you could choose ‘close’ or ‘open’. After the function is enabled, if you do not operate the keyboard for a long time, the keyboard will be locked and you need to press the [*#] key to unlock it.



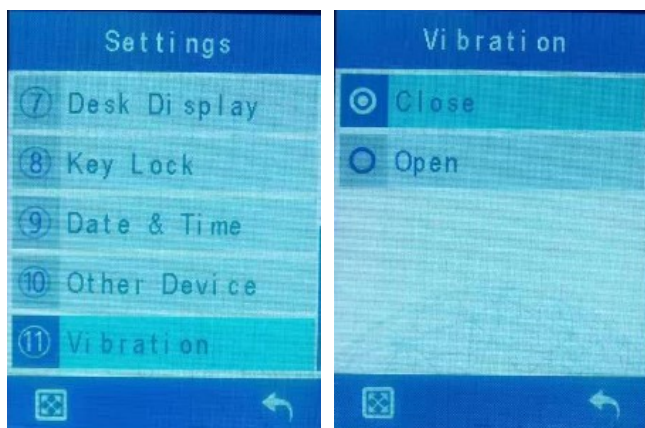
6.1 Date & Time

Enter **【Date & Time】** , you could set up the date&time on radio. The radio has an automatic time calibration function, and when the positioning module is positioned, it will automatically correct the time as the positioning time.



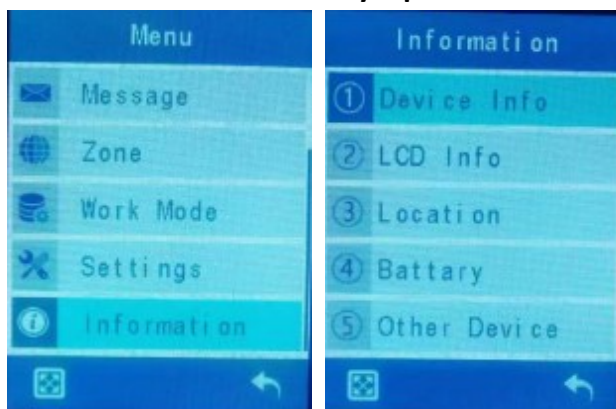
6.2 Vibration

Enter **【Vibration】** , you could choose 'close' or 'Open'. When you choose 'Open', there will be vibration prompts when power on and off, calling, and receiving text messages.



6.4 Information

【Information】 is made by 4 parts: Device info, LCD Info, Location, Battery, Other Device.



6.4.1 Device info

Through **【Device info】** , you could check device name, device type, local ID, group ID, Serial number, booth version, software version, last pro date, last pro time, etc.

Through **【LCD Info】** , you could check boot version, software version, serial number etc.

Through **【Location】** , you could check state, satellites, Latitude, etc.

Through **【Battery】** , you could check current battery capacity.

RED Caution

1. Frequency:400-470MHz, TX Power:<5W
2. RF exposure information: The device complies with RF exposure require when the device used at 25mm form your face and 0mm from the body with the belt-clips.
3. Hereby, Lisheng Communications Co., Ltd. declares that this product is in compliance with essential requirements and other relevant provisions of Directive 2014/53/EU. This product is allowed to be used in all EU member states.
4. AC adapter
The adapter shall be installed near the equipment and shall be easily accessible.
5. Lithium Battery
Risk of explosion if battery is replaced by an incorrect type, dispose of used battery according to the instructions.
6. The device operating temperature range is -20~55℃.

Country	Frequency Range(MHz)
Austria(AT)	444.9 - 444.900001, 450 - 456, 457.33 - 457.330001, 457.45 - 458.3,460 -470
Belgium(BE)	406.1-430 ,440-470
USA (US)	400-470Mhz
Bulgaria(BG)	410 -430,440-470
Croatia (HR)	406.1-430 ,440-470
Cyprus (CY)	406.1-430 ,440-470
Czech Republic (CZ)	448 - 451.3 ,457.38 - 461.3 ,467.38 - 470
Denmark(DK)	406.1-430 , 450 - 470
Estonia(EE)	406.1 - 410,412.5 - 420 , 422.5-430 ,440 - 442.5, 443 - 450,446 -446.2,450 -453 ,457.575 - 463,467.575 -470
Finland(FI)	407.525 - 408.55,410.0125 - 410.8875,417.525 - 417.9, 419.15 - 419.525,419.55625 - 419.71875,420.0125 - 420.8875,426.35 - 427.5,427.525 - 427.9, 429.15 - 429.525,429.55625- 429.71875,440.0125 - 440.5875, 440.60625 - 440.89375,442.775 - 443, 443.025 - 444, 444.025 - 444.525,444.55 - 444.975,445 - 446, 447.00625 - 447.29375,447.30625 - 447.70625, 449.025 - 449.525,449.55 - 449.975, 450.325 - 452.475, 452.525 - 452.975,453.0125 - 453.6625,469.725 - 469.975
France (FR)	406.1-430,444.5-447, 451.5-460, 461.5-470
Germany(DE)	406.1-430 ,440-470
Greece(EL)	406.1-430 ,440-470
Hungary(HU)	417 - 420,442 - 445,456 - 460, 461.3 - 470
Ireland (IE)	410 - 430,440 - 455, 456 - 459,460 - 470
Italy(IT)	440-443,445-470
Latvia (LV)	406.1-430,440-450,456 -470
Lithuania(LT)	406.1 - 410 , 413 - 418.6 ,423- 428.6 ,440 - 450 , 450 - 452.9875 ,458.1125 - 462.9875 ,467.4875 - 467.5875
Luxembourg (LU)	410-430,440- 470
Malta(MT)	406.1-430 ,440-470
Netherlands(NL)	410 -430,440-470

Poland(PL)	448 - 449.5,457 - 460,467 - 470
Portugal (PT)	148 - 149.9,150.05 - 156.4875 , 156.8375 - 174
Romania(RO)	408 - 410.8,415 - 420.8,425 - 429.8, 440 - 450.55, 457.5 - 458.2, 460 - 460.55,467.5 - 468.2
Slovakia(SK)	441.025 - 451.31,455.73 - 461.31,465.73- 470
Slovenia(SI)	406.1-430 ,440-470
Spain(ES)	406.1-430 ,440-470
Sweden(SE)	406.1 -430, 442 - 444,444.5875 - 452.5, 457.5 - 462.5,467.5 - 470
United Kingdom (UK)	410-430 ,440-470

FCC STATEMENT:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

RF Exposure Statement:

SAR tests are conducted using standard operating positions accepted by FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each product are performed in positions and locations as required by the FCC. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with and accessory designated for this product or when used with and accessory that contains no metal. To maintain compliance with FCC RF exposure guidelines, hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face.

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.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.