



OWNER'S MANUAL

使用说明书

*DIGITAL PORTABLE RADIO*

数字手持终端

*DIGITAL TRUNKING PORTABLE RADIO*

数字集群手持终端



## Preface

Thanks for your favor in our product. This manual is helpful for you to quickly know how to use the product. For detailed features and operations, please refer to the *Feature Description and Operation Manual* along with the product.

To avoid body injury or property loss caused by misoperation, please read the *Safety Information Booklet* carefully before use.

This manual is applicable to the following product:

PD782i Digital Portable Radio

## Icon Conventions



: Indicates functions that are available on digital channel only.



: Indicates functions that are available on analog channel only.

Functions marked with no icon are available on both analog and digital channels.

## Disclaimer

Hytera Communications Corporation Limited (the Company) endeavors to achieve the accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the specifications and designs are subject to change without notice due to continuous technology development. No part of this manual may be copied, modified, translated, or distributed in any manner without the express written permission of us.

We do not guarantee, for any particular purpose, the accuracy, validity, timeliness, legitimacy or completeness of the Third Party products and contents involved in this manual.

If you have any suggestions or would like to learn more details, please visit our website at: <http://www.hytera.com>.

## RF Radiation Information

This product must be restricted to operations in an occupational/controlled RF exposure environment. Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits.

### RF Radiation Profile

Radio Frequency (RF) is a frequency of electromagnetic radiation in the range at which radio signals are

transmitted. RF technology is widely used in communication, medicine, food processing and other fields. It may generate radiation during use.

### RF Radiation Safety

In order to ensure user health, experts from relevant industries including science, engineering, medicine and health work with international organizations to develop standards for safe exposure to RF radiation. These standards consist of:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J;
- American National Standards Institute (ANSI)/ Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992;
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999;
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998;

## FCC Regulations

Federal Communication Commission (FCC) requires that all radio communication products should meet the requirements set forth in the above standards before they can be marketed in the U.S, and the manufacturer shall post a RF label on the product to inform users of operational instructions, so as to enhance their occupational health against exposure to RF energy.

### Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit not more than 50% of the time and

always adhere to the following procedures:

- RF energy will be generated only when the radio is transmitting.
- The radio must be at least 2.5 centimeters away from human body when transmitting.





## EU Regulatory Conformance

As certified by the qualified laboratory, the product is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC.

Please note that the above information is applicable to EU countries only.

# Contents

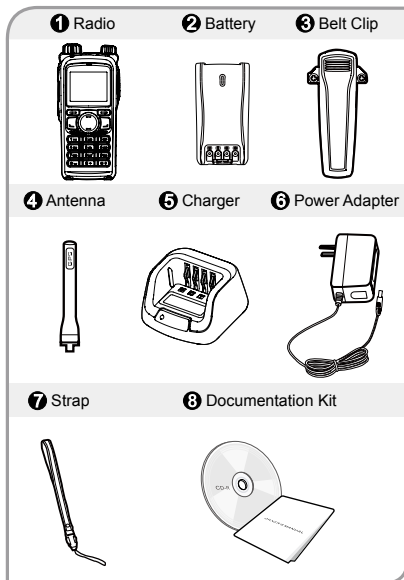
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## Items in the Package

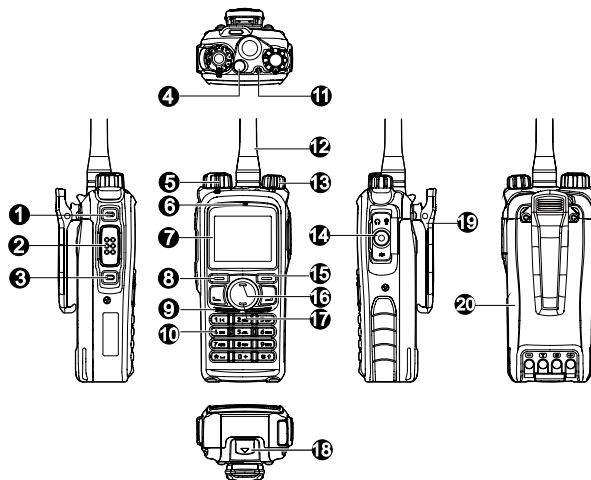
Please unpack carefully and check if all items listed below are received. If any item is missing or damaged, please contact your dealer.



**Note:** The frequency band is marked on the label of antenna; if not, please refer to the label on the radio for frequency band information.

## Product Overview

### Product Controls



No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	SK1 (Side Key 1)	6	Microphone	11	LED Indicator	16	Up Key
2	PTT (Push-to-Talk) Key	7	LCD Display	12	Antenna	17	Down Key
3	SK2 (Side Key 2)	8	OK/Menu Key	13	Power On-Off/Volume Control Knob	18	Battery Latch
4	TK (Top Key)	9	Speaker	14	Accessory Connector	19	Belt Clip
5	Channel Selector Knob	10	Numeric Keypad	15	Back Key	20	Battery

## Programmable Keys

For enhanced convenience, you may request your dealer to program the **TK** (🔑), **SK1, SK2, P1** (📄) and **P2** (📄) as shortcuts to certain functions. Please refer to the Feature Description and Operation Manual along with the product for more details.



**Caution:** The **TK** key is programmed with emergency feature by default (short press: Emergency On; long press: Emergency Off). It is programmable by your dealer.

## LCD Icon

Icon	Name	Radio Status
	DTMF Keypad Icon	The DTMF keypad is active.
	GPS Icon	The GPS feature is active, and valid GPS data is received.
		The GPS feature is active, but no valid GPS data is received.
	Battery Power Icon	More bars indicate more battery power.
	TX Power Icon	Low TX power for the current channel.
		High TX power for the current channel.
	Accessory Icon	An accessory is connected.
	Work Order Icon	One or more new work orders are received.
DM	Operation Mode Icon	Direct Mode: Under this mode, radios communicate with each other directly.
		Repeater Mode: Under this mode, radios communicate with each other via a repeater.
RM		
	Monitor Icon	The Monitor feature is active.

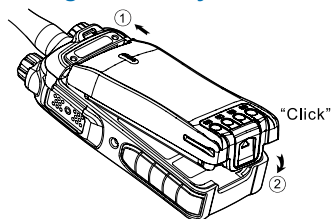
Icon	Name	Radio Status
	Emergency Icon	The radio is in emergency state (except for silent emergency type) or an emergency call is received.
	Roam Icon	The radio is roaming.
	Scrambler/Encrypt Icon	The Scrambler/Encrypt feature is active.
	Scan Icon	The radio is scanning.
		The radio stays on a non-priority channel.
		The radio stays on priority channel 1.
		The radio stays on priority channel 2.
	VOX Icon	The VOX feature is active.
	Missed Call Icon	Missed call(s).
	Message Icon	New message/unread message.
		Inbox is full.
	RSSI Icon	No signal.
		More bars indicate stronger signal strength.
	Speaker Icon	The speaker is unmuted.
	LQO Icon	The LQO feature is active.
	Call/Contact Icon	● Indicates a private call in progress.
		● Indicates a private contact in the contact list.
		● Indicates a group call in progress.
		● Indicates a group contact in the contact list.
		● Indicates an all call in progress.
		● Indicates an all call contact in the contact list.

## LED Indicator

LED Indication	Radio Status
The LED indicator flashes green.	Powering on
The LED indicator glows green.	Receiving
The LED indicator glows red.	Transmitting
The LED indicator flashes orange slowly.	Scanning or Roaming
The LED indicator flashes orange rapidly.	Emergency
The LED indicator glows orange.	Call hung period. No voice is being transmitted or received on the traffic channel during a call. Within such period, you can hold down the <b>PTT</b> key to talk to the other party.

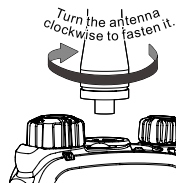
## Before Use

### Attaching the Battery



**Note:** To remove the battery, turn off the radio first, and then slide the battery latch upwards to unlock the battery.

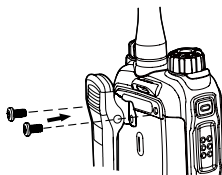
### Attaching the Antenna



**Caution:** Do not hold the radio by its antenna, otherwise the performance and lifespan of the antenna will be reduced.

### Attaching the Belt Clip

1. Remove the screws.
2. Align the screw holes on the belt clip with those on the radio's back, and then tighten the screws.



### Attaching the Accessories

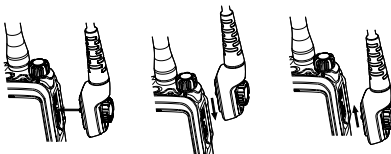
1. Open the accessory connector cover as shown below.



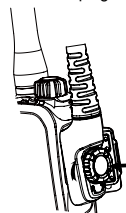
2. Align the accessory (such as an audio accessory, or a programming cable) plug with the accessory connector.



**Caution:** Do not scrape the silicone rubber surrounding the accessory connector screw hole, in order to ensure the waterproof performance of the radio.



3. Tighten the screw on the plug.



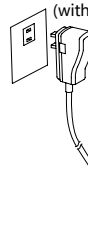
### Charging the Battery



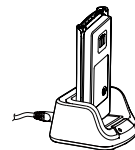
#### Caution:

- Use the charger specified by the Company to charge the battery.
- Make sure the radio is powered off before charging. Read the Safety Information Booklet in advance to get necessary safety information.
- Charge a new battery for at least 5 hours before initial use for best performance.

Charge the Radio  
(with battery attached)



Charge the Battery







Charging Status Indication (on charger):

LED Indication	Charging Status
The LED Indicator flashes red slowly.	Standby (no load)
The LED Indicator glows red.	Charging
The LED indicator glows orange.	90% charged
The LED indicator glows green.	Fully charged
The LED Indicator flashes red rapidly.	Charging failed

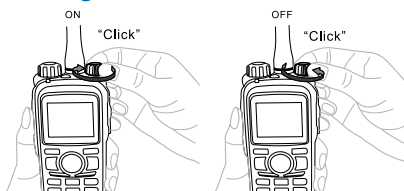
## Checking the Battery Power

You can check the current battery power by holding down the programmed **Battery Power Indicator** key preset by your dealer. And release the key to exit. Battery power indications and alert tone are listed below:

LED Indication/Tone	Icon
The LED Indicator glows green.	
The LED Indicator glows orange.	
The LED Indicator glows red.	
The LED Indicator glows red and an alert tone sounds.	 The battery runs low. Please recharge or replace the battery for proper radio operation

## Basic Operations

### Turning the Radio On/Off



### Adjusting the Volume



### Selecting a Zone

A zone is a group of channels with the same property, which can facilitate convenient management over the channels. The radio supports 64 zones, each of which consists of up to 16 channels. Your dealer can program the zone for your specific needs.

You can select a zone through any of the following ways:

- Menu: Go to "Menu -> Zone", press the **Up/Down** key to select an appropriate zone, and then press the **OK** key to switch to the selected zone.
- Shortcut key: You can toggle to the appropriate zone by pressing the programmed **Zone Up** or **Zone Down** key preset by your dealer.

## Selecting a Channel



**Note:** If the Channel Notify feature is enabled by your dealer, the radio will announce the channel number upon channel switching.

## Inputting via Keypad

You can input alias, call numbers and messages via the keypad of the radio. In the editing mode, you may do as follows.

- Press **##** to switch the text input methods between alphabetic mode and numeric mode
- In the alphabetic mode, press **1<** to input the special characters. But in the numeric mode, pressing **1<** will input the numeric digit 1
- In the alphabetic mode, press **\*>** to input the space. But in the numeric mode, pressing **\*>** will input the special characters

## Locking and Unlocking the Keypad

When the keypad is not in use, you can lock the keypad to prevent accidental keypad operation. The following methods are available for you to lock or unlock the keypad:

- Key Combination: Press **"OK+ \*>"** to lock or unlock the keypad.

- Shortcut key: Press the programmed **Keypad Lock** key to lock or unlock the keypad.
- Menu: Go to "Menu -> Settings -> Radio Set -> Keypad Lock" and then select "Enable" or "Disable".
  - » **Enable:** The keypad will be locked automatically if no operation is made within the preset time period. After the "Enable" option is selected, you can press the **Up/Down** key to set the Keypad Auto Lock Delay Time.
  - » **Disable:** The keypad will not be locked automatically.



**Note:** All keys on the front panel except for **P1** (🔑) and **P2** (🔑) will be locked by default. Moreover, you can go to "Settings -> Radio Set -> Select Locked Key" to configure the following lockable keys or knobs: **TK**, **P1** (🔑), **P2** (🔑), **SK1**, **SK2**, **PTT**, **Channel Selector Knob**, and **Volume Control Knob**.

## Managing the Contact

Contact management allows you to view, edit, delete or add contacts.

### Contact List

The contact list is used to save private call contact, group call contact, and all call contact information such as call alias, call type and call ID.

- Go to the "Menu -> Contact -> Contact List" menu to access the contact list.
- Press the programmed **Contact List** key to access the contact list.

In the "Contact List" menu, you can view, edit or delete

the private contact. You can send to a private call contact the following commands: Alert Call, Radio Check, Remote Monitor, Radio Enable or Radio Disable. Please refer to the *Feature Description and Operation Manual* along with the product for details.

### Favorite Contact

Favorite Contact is used to save the frequently used contacts.

- Go to the "Menu -> Contact -> Favorite Contact" menu to access the favorite contact list.
- Press the programmed **Favorite Contact List** key to access the favorite contact list.

In the favorite contact list, you can view, edit or delete the favorite contacts. You can send to a favorite contact the following commands: Alert Call, Radio Check, Remote Monitor, Radio Enable or Radio Disable. Please refer to the *Feature Description and Operation Manual* along with the product for details.

### New Contact

New Contact is used to add a new contact to the contact list.

Go to the "Menu -> Contact -> New Contact" menu to access the relevant screen. Input the number and alias of a new contact and save it to the private contact list.



#### Note :

- The number and alias of a new contact must be unique.
- You can also save the numbers from the Call Logs into the contact list.


## Call Services

After the radio is powered on, you can make and receive calls. To ensure optimal volume of the receiving radio, keep the microphone about 2.5 to 5 centimeters away from your mouth when transmitting.



### Private Call

#### Initiating a Private Call

When you initiate a private call, the radio will display the icon . You can make a private call through any of the following ways:

#### Preset Contact

You may request your dealer to preset a regular private call contact for each digital channel.

In the home screen, hold down the **PTT** key to initiate a private call to the private contact preset for the current channel.

#### Contact List

1. Go to "Menu -> Contact -> Contact List".
2. Use the **Up/Down** key to select an appropriate contact.
3. Hold down the **PTT** key to initiate a private call.

## Call Logs

1. Go to "Menu -> Call Logs -> Outgoing/Incoming/ Missed".
2. Use the **Up/Down** key to select an appropriate contact.
3. Hold down the **PTT** key to initiate a private call.

## Manual Dial


1. Go to "Menu -> Contact -> Manual Dial".
2. Input the private call number using the numeric keypad.
3. Hold down the **PTT** key to initiate a private call.



### Note :

- If both the Private Call Manual Dial and Group Call Manual Dial are available, you can press **[#\*]** to switch between the two dialing methods, and the radio will display the call type (Private ID/ Group ID).
- If the Default Numeric Key Selection feature is enabled by your dealer, you can enter a private call number in the home screen, and then hold down the **PTT** key to initiate a private call. However, if the DTMF keypad is enabled, the number entered in the home screen is a phone number. You can dial the private call number through the "Manual Dial" menu only.


## Receiving and Responding to a Private Call

When you receive a private call, the radio will display the icon , then you can listen without any operation.

You can hold down the **PTT** key to call back within the preset time. If you do not respond to it, the radio will display appropriate indications.

## Group Call

### Initiating a Group Call

When you initiate a group call, the radio will display the icon . You can make a group call through any of the following ways. The operation is similar to initiating a private call.

#### Preset Contact

In the home screen, hold down the **PTT** key to initiate a group call to the group call contact preset for the current channel.


#### Contact List

1. Go to "Menu -> Contact -> Contact List".
2. Use the **Up/Down** key to select an appropriate contact.
3. Hold down the **PTT** key to initiate a group call.

#### Manual Dial

The operation is the same as initiating a private call.

## Receiving and Responding to a Group Call

When you receive a group call, the radio will display the icon  on the LCD. You can hold down the **PTT** key to call back within the preset time.

## Call on Analog Channel (No Signaling)

To transmit on an analog channel, hold down the **PTT** and speak into the microphone. To receive, release the **PTT** key.

Please refer to the *Feature Description and Operation Manual* along with the product for operation description on how to make and receive calls on the analog channel with signaling.

## Emergency Call

In case of emergency, you can use Emergency Call to ask for help from your companion or the control center. Emergency Call needs to be configured and enabled by your dealer. Please refer to the *Feature Description and Operation Manual* along with the product for details.

## Message Services

Message Services allow you to edit and send a new message, to directly send a quick text message and to forward the messages saved in the InBox, OutBox and Drafts.

### Text Message

1. Go to "Menu -> Message -> New Msg" to enter the relevant screen.
2. Type the text and press the **OK** key. You can save the text message to Drafts, or send it to a private call contact or a group call contact directly.
3. Select the contact or input the contact number manually.
4. Press the **OK** key to send the message. When the message is sent successfully, the radio will display the prompt "Send Success!".

### Quick Text


Quick Text is the frequently used message preset by your dealer. You can send the quick text directly or edit this text before sending it.

### InBox

The InBox saves the received messages and marks each message with a corresponding icon to indicate its status.



-  : Read text message.

-  : Unread text message.

When the InBox is full, the radio will display the icon , and the earliest message will be overwritten by the latest one automatically.

## OutBox

The OutBox saves the sent messages and marks each message with a corresponding icon to indicate its status.

-  : The text message is sent successfully.
-  : The text message is not sent successfully. In this case, you can resend it.

When the OutBox is full, the earliest message will be overwritten by the latest one automatically.

## Drafts

The Drafts saves the edited messages. When the Drafts is full, the earliest message will be overwritten by the latest one automatically.

After the message in the Drafts is sent successfully, it will be removed from the Drafts and be saved into the OutBox. If not sent successfully, the message will be saved into the Drafts and the OutBox.

## Available Features

Available features of this radio are listed below. Please refer to the Feature Description and Operation Manual for detailed feature descriptions.

Feature Type	Detailed Feature
Basic Setting	<ul style="list-style-type: none"> <li>● Password</li> <li>● Language</li> <li>● Indication: Backlight, Brightness, LED, Tone, Vibration</li> <li>● Audio: Mic AGC, Treble Boost, LQO, Audio Feedback Suppression</li> <li>● Scanning: Scan On, Scan Off, Scan List</li> <li>● Managing the Contacts: Contact List, Favorite Contact, New Contact</li> <li>● Other Features: Device Information, Power Level, VOX, One Touch Call/Menu, Renting, Programming, User Assignment ID, Covert Mode</li> </ul>
Digital Features	<ul style="list-style-type: none"> <li>● Voice Services: Group Call, Private Call, All Call, Phone Call</li> <li>● Message Services: New Msg, Quick Text, InBox, OutBox, Drafts</li> <li>● Control Services: Alert Call, Radio Check, Remote Monitor, Radio Enable, Radio Disable, Priority Interrupt, Time-out Timer (TOT)</li> <li>● Personal Security Services: Emergency Alarm, Man Down, Lone Worker</li> <li>● Encrypt</li> <li>● Network: Talk Around, Roam</li> <li>● Other Features: Pseudo Trunking</li> </ul>

Feature Type	Detailed Feature
Analog Features	<ul style="list-style-type: none"> <li>● Voice Services: Call without Signaling, Call with Signaling, Phone Call</li> <li>● Control Services: Compandor, Time-out Timer (TOT), Squelch Off, Squelch Level Adjustment, CTCSS/CDCSS</li> <li>● Personal Security Services: Emergency Alarm, Man Down, Lone Worker</li> <li>● Scrambler</li> <li>● Talk Around</li> </ul>
Accessory-related Features	<ul style="list-style-type: none"> <li>● BT</li> <li>● Positioning Service: GPS On/Off, Position View, GPS Msg, Time Zone, Query Location</li> </ul>
API Features	<ul style="list-style-type: none"> <li>● GPS Report</li> <li>● Radio Registration Service</li> <li>● Telemetry</li> <li>● Work Order</li> </ul>

## Troubleshooting

Phenomena	Analysis	Solution
The radio cannot be powered on.	The battery may be improperly installed.	Remove the battery and then reattach it.
	The battery power may run out.	Recharge or replace the battery.
	The battery may suffer from poor contact caused by dirtied or damaged battery contacts.	Clean the battery contacts.
During receiving, the voice is weak, discontinuous or totally inactive.	The battery voltage may be low.	Recharge or replace the battery.
	The volume level may be low.	Increase the volume by rotating the <b>Volume Control Knob</b> .
	The antenna may get loose or may be improperly installed.	Turn off the radio and reattach the antenna.
	The speaker may be blocked or damaged.	Clean the surface of the speaker.
You cannot communicate with other members.	The frequency or signaling may be inconsistent with that of other members.	Set your TX/RX frequency and signaling to the same as that of other members.
	The channel type (digital and analog) may be set inconsistently.	Make sure all members are on the same digital or analog channel.
	You may be too far away from the group members.	Move towards other members.
Irrelevant communication or noise is heard on the channel.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio may be set with no signaling.	Set signaling for all member radios to avoid interference at the same frequency.
The noise is too loud.	You may be too far away from other members.	Move towards other members.
	You may locate in an unfavorable position. For example, your communication may be blocked by high buildings or frustrated in the underground areas.	Move to an open and flat area, and restart the radio to try again.
	You may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
The GPS cannot locate your position.	GPS signals may not be received due to unfavorable position.	Move to an open and flat area, and try again.
You cannot use the keys.	The keypad may fail to function temporarily.	Restart the radio.
The LCD does not display any information.	The LCD may fail to function temporarily.	Restart the radio.

If the above solutions cannot fix your problems, or you may have some other queries, please contact us or your local dealer for more technical support.



## Care and Cleaning

To guarantee optimal performance as well as a long service life of the product, please follow the tips below.

### Product Care

- Do not pierce or scrape the product.
- Keep the product far away from substances that can corrode the circuit.
- Do not hold the product by its antenna or earpiece cable directly.
- Attach the accessory connector cover when the accessory is not in use.

### Product Cleaning



**Caution:** Turn off the product and remove the battery before cleaning.

- Clean up the dust and fine particles on the product surface and charging piece with a clean and dry lint-free cloth or a brush regularly.
- Use neutral cleanser and a non-woven fabric to clean the keys, control knobs and front case after long-time use. Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations, so as to avoid surface case damage.
- Make sure the product is completely dry before use.

## Optional Accessories

The following items are the main optional accessories for the product, and please consult your local dealer for more other accessories.



**Caution:** Use the accessories specified by the Company only. If not, the Company shall not be liable for any loss or damage arising out of use of unauthorized accessories.

Type	Model	Name
Power Supply	BL2503	Li-ion Battery(2500mAh)
	CH10A06	Dual Pocket MCU Charger Kit (for Li-ion/Ni-MH Batteries)
	CHV09	Vehicle Adapter for Charger
	MCA05	Battery Optimizing System
	MCA06	MCU Multi-unit Rapid-rate Charger
	MCA08	MCU Multi-unit Charger(Thick Battery)
Audio Accessories	ADN-01	Wireless Audio Adapter
	EAN17	3-wire Surveillance Earpiece with Transparent Acoustic Tube(Beige)
	EAN18	3-wire Surveillance Earpiece with Transparent Acoustic Tube (Black)
	EAN23	Detachable Earpiece with Transparent Acoustic Tube
	EHN16	C-Earset
	EHN17	Swivel Earset
	ESN12	Earbud
	ESW01	Wireless Earpiece
	ESW01-N1	Wireless Earset Kit
Cable	SM18N2	Remote Speaker Microphone(IP57)
	PC38	Programming Cable (USB port)
Carrying Accessories	LCBN13	Universal Chest Pack (Nylon)(Black)
	LCY003	Carrying Case (Thick Battery)(Leather)(Swivel)
	LCY006	Carrying Case (Thick Battery)(Leather)(Swivel)



## 致用户

非常感谢您对我们产品的青睐！本手册旨在让您快速掌握本产品的使用，如需了解产品详细功能和操作，请参阅本产品配套的《功能与操作手册》。

为了避免因不当操作而给您带来身体伤害或财产损失，请于使用本产品前详细阅读《安全信息手册》。

本手册适用于以下机型：

PD782i 数字手持终端

## 图标说明



表示数字信道独有的功能，只能在数字信道上使用。



表示模拟信道独有的功能，只能在模拟信道上使用。

未用图标区分的功能在数字信道和模拟信道上都可使用。

## 免责声明

本手册在编制过程中力求内容的准确性与完整性，但对于可能出现的错误或疏漏，我司不承担任何责任。由于技术的不断发展，我司保留不予通知而更改产品设计与规格的权利。未经我司事先书面授权，不得以任何形式对本手册进行复制、修改、翻译和散发。

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## 射频辐射信息

本产品仅限于能够满足射频能量辐射要求的职业应用。使用者必须清楚了解射频辐射危害并可采取相应措施，满足射频辐射限定要求。

## 射频辐射常识

射频指可以辐射到空间的电磁频率，是通讯、医疗、食品加工等领域广泛使用的一种技术，在使用过程中会产生一定的射频辐射。

## 射频辐射安全

为了确保用户的身心健康，来自科学、工程、医药、健康和工业的专家们与相关组织共同研究制定了射频辐射标准和准则，如下所示：

- 美国联邦通信委员会联邦政府法规汇编第47卷第2部分J子部分。

- 美国国家标准协会 (ANSI)/电气和电子工程师协会 (IEEE) 标准C95.1-1992版。
- 电气和电子工程师协会标准C95.1-1999版。
- 国际非电离辐射防护委员会(ICNIRP)于1998年颁布的标准。

## 美国联邦通信委员会监管要求

按照美国联邦通信委员会的监管要求，本产品必须符合美国联邦通信委员会射频辐射限制规定，否则不能在美国市场上销售。并要求制造商可通过在产品上张贴标签的方式，告知用户应注意的事项，提高用户的防辐射意识。

## 射频辐射控制及操作说明

为了使产品发挥最佳性能及确保符合上述标准中有关职业或受控环境中的辐射限制要求，发送时间不得超过额定因数的50%（最高50%的时间发射），且需遵照下列说明：





- 仅在发射（讲话）时产生射频能量辐射，接收（收听）和待机时均不会产生。
- 发射时终端与身体的距离至少保持在2.5厘米以上。

## 欧盟指令符合性声明

本产品经独立第三方机构认证，符合欧盟指令“1999/5/EC”中的相关要求。

请注意，本声明仅适合欧盟国家。

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## 包装清单

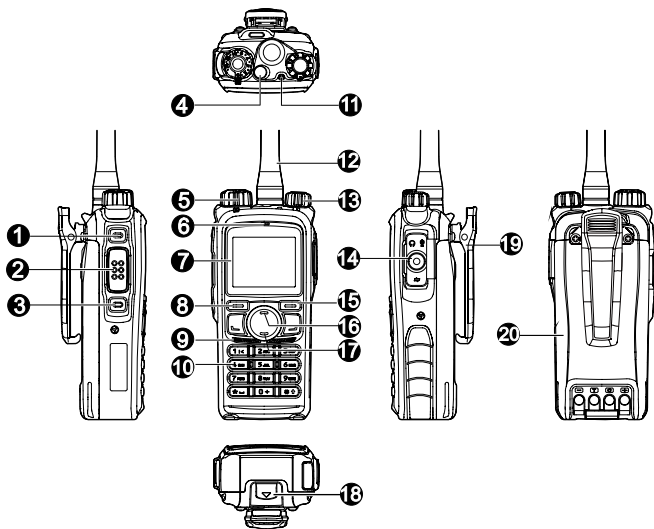
包装盒内含有以下物品。如有任何物品丢失或损坏，请与您所购产品的经销商联系。



**备注：**天线频段请参考天线底部色环标签内容。若标签未注明频段，则参考主机标签上的具体频段。

## 熟悉产品




### 部件介绍



序号	部件名称	序号	部件名称	序号	部件名称	序号	部件名称
1	SK1（侧键1）	6	麦克风	11	LED指示灯	16	上移键
2	PTT键（发射按键）	7	LCD显示屏	12	天线	17	下移键
3	SK2（侧键2）	8	确认/菜单键	13	电源开关/音量控制旋钮	18	电池推钮
4	TK（顶部键）	9	扬声器	14	附件接口	19	皮带夹
5	信道选择旋钮	10	数字键盘	15	返回键	20	电池

## 可编程键

为提升操作便利性，本产品提供5个可编程功能快捷键：


TK (  )、SK1、SK2、P1 (  ) 和 P2 (  )。具体功能请咨询您的经销商，功能的详细介绍可参阅本产品配套的《功能与操作手册》。



**注意：**出厂时，短按【TK】键已设置为“紧急报警开启”功能，长按【TK】键已设置为“紧急报警关闭”功能。您可通过经销商设置为其他功能快捷键。

## LCD图标

LCD图标	图标名称	产品工作状态
	DTMF键盘标识	已开启DTMF键盘
	GPS标识	已开启GPS功能，且收到有效GPS数据
		已开启GPS功能，但未收到有效GPS数据
	电池电量标识	条数越多，电池电量越多
	发射功率标识	当前信道的发射功率为低功率
		当前信道的发射功率为高功率
	附件标识	已连接附件
	工作任务标识	有新的工作任务
DM	工作模式标识	直通模式：本产品与其他终端之间直接通信
RM		中转模式：本产品与其他终端通过中转台的转发进行通信
	监听标识	已开启监听功能
	紧急报警标识	紧急报警状态（秘密报警除外）或接收到紧急报警
	漫游标识	漫游状态
	抗扰/加密标识	已开启抗扰或加密功能

LCD图标	图标名称	产品工作状态
	扫描标识	扫描状态
		扫描停留于非优先信道
		扫描停留于优先信道1
		扫描停留于优先信道2
	声控标识	已开启声控
	未接来电标识	有未接呼叫
	消息标识	接收到短消息，或者有未读短消息
		收件箱的存储空间已满
	信号强度标识	无信号
		条数越多，信号越强
	扬声器标识	已开启扬声器
	音质音量优化器标识	已开启音质音量优化器
	呼叫/联系人类型标识	● 出现在呼叫过程中，表示正在进行个呼
		● 出现在联系人列表中，表示个呼联系人
		● 出现在呼叫过程中，表示正在进行组呼
		● 出现在联系人列表中，表示组呼联系人
	呼叫/联系人类型标识	● 出现在联系人列表中，表示组呼联系人
		● 出现在呼叫过程中，表示正在进行全呼
		● 出现在联系人列表中，表示全呼联系人

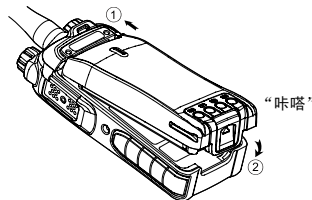
## LED指示灯

LED指示灯	产品工作状态
绿灯闪烁	正在开机
绿灯长亮	正在接收
红灯长亮	正在发送

LED指示灯	产品工作状态
橙灯慢闪	正在扫描或者漫游
橙灯快闪	紧急状态
橙灯长亮	呼叫保持状态，即呼叫成功建立后，各方均处于接收状态，信道资源空闲，此时您可以按住【PTT】键讲话。

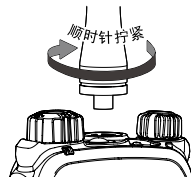
## 用前准备

### 安装电池



**备注：**如需卸下电池，请先关机，然后将底部电池推钮往上提起，并取出电池。

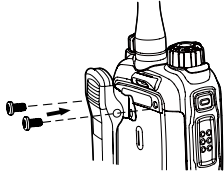
### 安装天线



**注意：**请勿手持天线顶端甩动本产品，否则会降低本产品天线的工作性能和使用寿命。

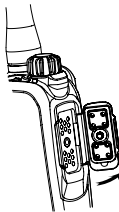
## 安装皮带夹

1. 卸下主机上的皮带夹螺钉。
2. 将皮带夹的螺钉孔对准主机上的螺钉孔，然后用螺钉锁紧。



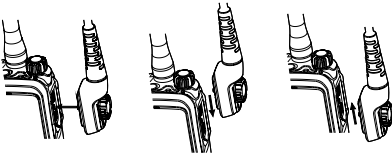
## 安装附件

1. 打开附件接口盖。

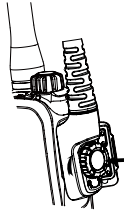


2. 将附件（如音频附件或者编程线等）插头对准附件接口。

**注意：**请小心操作，避免划伤附件接口螺钉口周围的硅胶，以免影响产品的防水性能。



3. 拧紧附件插头上的螺钉。

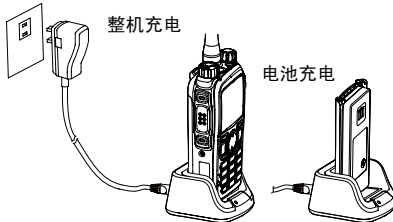


## 充电



**注意：**

- 请使用我司指定的充电座充电。
- 为整机充电时，建议先关机并参阅《安全信息手册》，以获取必要的电池安全信息。
- 为获得最佳电池性能，首次充电时，请至少充电5小时。



观察充电座LED指示灯可了解当前充电状态：

LED指示灯	当前充电状态
红色慢闪	待机（空载）
红色长亮	正在充电
橙色长亮	已电90%
绿色长亮	已充满
红色快闪	充电故障

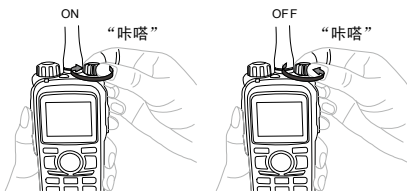
## 查看电量

如果经销商为本产品设置了【电池电量提示】快捷键，那么您可以按住该快捷键通过LED指示灯、提示音及电池电量图标查看电池剩余电量，松开该快捷键取消查看电池剩余电量。

LED指示灯/提示音	电池电量图标
LED指示灯亮绿灯	
LED指示灯亮橙灯	
LED指示灯亮红灯	
LED指示灯亮红灯，同时伴有低电提示音	电量不足，请尽快充电或者更换电池

## 基本操作

### 开机与关机



### 调节音量



### 选择区域

区域是一个信道组，您可以将具有相同属性的信道列入一个区域中，便于您对现有信道进行有效管理。本产品支持64个区域，每个区域最多包含16个信道。您可以通过以下两种方式选择区域：

- 菜单：进入“区域”菜单后，按【上移】/【下移】键来选择所需区域，然后按【确认】键切换至所选区域。
- 可编程键：若经销商为您设置了【区域上调】/【区域下调】快捷键，则按此快捷键可切换至所需区域。

### 选择信道



**备注：**如果经销商为本产品开启了信道播报功能，此处切换信道时本产品将播报信道号。

### 键盘输入

您可通过本产品的数字键盘输入用户别名、号码和短信等。

- 切换输入法：按【】
- 输入特殊字符：按【1<】（数字输入模式除外，在数字输入模式下按此键输入的是数字1）
- 输入空格：按【\*>】（数字输入模式除外，在数字输入模式下按此键输入的是特殊字符）

### 键盘锁定与解锁

当您无需使用键盘时，可锁定键盘以防止误操作键盘。您可通过以下方式来锁定或解锁键盘：

- 组合键：按“【确认】键+【\*>】”来锁定或解锁键盘。
- 编程键：若经销商设置了【键盘锁定】快捷键，您可按该键来锁定或解锁键盘。
- 菜单选择：进入“设置->对讲机设置->键盘锁”菜单，选择“允许”或“禁止”即可。
  - 允许：在键盘自动锁定时间内若无任何对讲机操作，键盘将自动锁定。选择允许后您可通过【上移】/【下移】键设置键盘自动锁定时间。

» 禁止：键盘不会自动锁定。



**备注：**默认的锁定键盘范围是面板上除P1（）和P2（）以外的按键，您可以选择其他需要锁定的键或旋钮，即可选锁键，菜单路径：设置->对讲机设置->可选锁键。可选锁键包括TK、信道选择旋钮、P1（）、P2（）、SK1、音量控制旋钮、SK2、PTT。

### 管理联系人

管理联系人是指管理终端的联系人信息，包括查看、修改、删除、添加联系人等操作。

#### 联系人列表

联系人列表是指用于保存个呼/组呼/全呼联系人信息的列表。

- 在主菜单中选择“联系人->联系人列表”，进入联系人列表。

- 按【联系人列表】快捷键进入“联系人列表”。

在“联系人列表”中，您可以查看联系人的详细信息，或者编辑和删除个呼联系人。您还可对个呼联系人的终端进行如下操作：呼叫提示、对讲机检查、远程监听、对讲机激活或对讲机巡选，具体请参阅本产品配套的《功能与操作手册》。

#### 常用联系人

常用联系人是指用于保存您经常使用的联系人信息，列表来源于联系人列表。

- 在主菜单中选择“联系人->常用联系人”，进入常用联系人列表。

- 按【常用联系人】快捷键进入“常用联系人”。

在常用联系人列表中，您可以查看常用联系人的详细信息，或者编辑和删除常用联系人。您还可对常用联系人列表中的个呼联系人终端进行如下操作：呼叫提示、对讲机检查、远程监听、对讲机激活或对讲机巡选，具体请参阅本产品配套的《功能与操作手册》。



## 新建联系人

新建联系人是指创建新的个呼联系人，并且保存到联系人列表中。

在主菜单中选择“联系人->新建联系人”，进入新建联系人界面。根据提示输入所需的信息，完成创建。

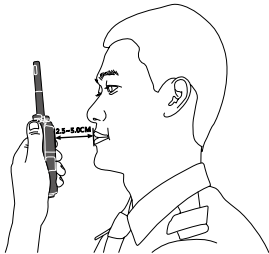


### 备注：

- 新建联系人的号码和别名不能与联系人列表中的其他联系人相同。
- 除了通过本菜单创建联系人以外，您还可以将呼叫记录中的未存储个呼号码保存到联系人列表中。


## 呼叫

开机成功后，您可以进行各种呼叫操作。为保证最佳接收音量，发射时请保持麦克风与嘴的距离为2.5~5厘米。



## 个呼

### 发起个呼

个呼发起时，LCD显示屏显示  图标。您可以通过以下方式发起个呼。

### 通过“发射联系人”

您可通过经销商为每个数字信道预设一个“发射联系人”，该联系人可以是个呼联系人，也可以是组呼或全呼联系人。

在待机界面下，按住【PTT】键即可对当前数字信道上预设的个呼联系人直接发起呼叫。

### 通过“联系人列表”

1. 进入联系人列表，菜单路径“联系人 -> 联系人列表”。
2. 通过【上移】/【下移】键选择您想要呼叫的个呼联系人。
3. 按【PTT】键发起个呼。

### 通过“呼叫记录”


1. 进入已拨/已接/未接呼叫列表，菜单路径“呼叫记录”。
2. 通过【上移】/【下移】键选择您想要呼叫的个呼联系人。
3. 按【PTT】键发起个呼。

### 通过手动拨号


1. 进入拨号界面，菜单路径“联系人 -> 手动拨号”。
2. 通过数字键盘输入个呼号码。
3. 按住【PTT】键发起个呼。



### 备注：

- 本产品同时允许个呼手动拨号和组呼手动拨号时，您可按  键切换，LCD显示屏显示呼叫类型（个呼ID/组呼ID）。
- 本产品允许数字键盘输入时，您可直接在待机界面输入个呼号码，再按【PTT】键发起个呼。但本产品开启DTMF键盘时，在待机界面输入的是电话号码，您只能从手动拨号菜单中进行拨号。


### 接听和回复个呼

接收到个呼后，LCD显示屏显示  图标，您无需任何操作即可接听。

在预设时间内按住【PTT】键可发起回呼。如未进行回呼，则本产品将显示未接呼叫提示。

## 组呼

### 发起组呼

组呼发起时，LCD显示屏显示  图标。您可以通过以下方式发起组呼，操作方式与“个呼”相似。

### 通过“发射联系人”

在待机界面下，按住【PTT】键即可对当前数字信道上预设的组呼联系人直接发起呼叫。


### 通过“联系人列表”

1. 进入联系人列表，菜单路径“联系人 -> 联系人列表”。
2. 通过【上移】/【下移】键选择您想要呼叫的组呼联系人。
3. 按【PTT】键发起组呼。

### 通过手动拨号

操作方法同个呼。

### 接听和回复组呼

接收到组呼后，LCD显示屏显示  图标。在预设时间内按住【PTT】键可发起回呼。

## 模拟信道呼叫（无信令）

在模拟信道上，如需发射，请按住【PTT】键并对着麦克风讲话。如需接收，请松开【PTT】键。

使用信令发起呼叫的操作方法请参阅本产品配套的《功能与操作手册》。

## 紧急报警

遇到紧急情况时，您可以通过此功能来向同伴或控制中心寻求帮助。

紧急报警功能需由经销商为您配置和开启，详情请参阅本产品配套的《功能与操作手册》。

## 短消息



您可以编辑和发送新的短消息，也可以直接发送快捷文本，还可以将收件箱、发件箱、草稿箱中的短消息进行转发。

### 发送短消息

1. 选择“短消息 -> 新建短消息”，进入短消息编辑窗口。
2. 编辑短消息内容后按【确认】键。完成编辑后，您可以将该短消息直接保存到草稿箱或者发送给个人和组呼联系人。
3. 选择联系人或手动输入联系人号码。
4. 按【确认】键发送短消息。发送成功后，界面将提示“发送成功”。

### 快捷文本

快捷文本是经销商为您预设好的常用快捷短消息。您可以选择一条快捷短消息直接发送，或对快捷短消息进行编辑后再发送。

### 收件箱

本产品会将接收到的短消息保存在收件箱中，每条短消息前有相应图标表示该短消息的查阅状态。

- ：已读的短消息。
- ：未读的短消息。

若收件箱已满，则在LCD显示屏上会显示图标，此时如果有新的已收短消息，则最早的短消息将自动被覆盖。

### 发件箱

本产品会将发送的短消息保存在发件箱中，每条短消息前有相应图标表示该短消息的发送状态。

- ：短消息发送成功。
- ：短消息发送失败，此时您可以选择重新发送。

当发件箱已满时，若有新的已发短消息，则最早的短消息将自动被覆盖。

### 草稿箱

本产品可以将已经编辑好的短消息保存在草稿箱中。当草稿箱已满时，如有新的短消息保存到草稿箱中，则最早的短消息将自动被覆盖。

当您草稿箱中的短消息成功发送出去后，本产品会将此短消息保存到发件箱中，并删除草稿箱中的这条短消息。

如果发送失败，则草稿箱和发件箱都会保留该短消息。

## 功能说明

本机型所支持的功能如下表所示，相关功能详细描述请参考《功能与操作手册》。

功能分类	具体功能
基本设置	<ul style="list-style-type: none"><li>● 对讲机密码</li><li>● 语言设置</li><li>● 提示设置：背光灯，亮度，振动，指示灯，提示音</li><li>● 音频设置：麦克风自动增益，无条件高音增强，音质音量优化器，声反馈抑制</li><li>● 扫描设置：开启扫描，关闭扫描，设置扫描列表</li><li>● 管理联系人：联系人列表，常用联系人，新建联系人</li><li>● 其他：查看终端信息，功率级别，声控，一键呼叫，租赁，编程，用户指定ID，隐蔽模式</li></ul>

功能分类	具体功能
数字功能	<ul style="list-style-type: none"><li>● 语音业务：组呼，个呼，全呼，电话呼叫</li><li>● 短消息：新建短消息，快捷文本，收件箱，发件箱，草稿箱</li><li>● 补充业务：呼叫提示，对讲机检查，远程监听，对讲机激活，对讲机遥毙，优先打断，超时禁发</li><li>● 个人安全：紧急报警，倒放，单独工作</li><li>● 加密</li><li>● 网络：脱网，漫游</li><li>● 其他：虚拟集群</li></ul>
模拟功能	<ul style="list-style-type: none"><li>● 语音业务：无信令呼叫，有信令呼叫，电话呼叫</li><li>● 补充业务：压扩，超时禁发，监听，静噪打开，静噪级别调整，亚音频/亚音数码</li><li>● 个人安全：紧急报警，倒放，单独工作</li><li>● 扰频</li><li>● 脱网</li></ul>
附件扩展	<ul style="list-style-type: none"><li>● 蓝牙</li><li>● 定位，GPS开关，位置查看，GPS文本信息，时区，方位查询</li></ul>
API	<ul style="list-style-type: none"><li>● GPS上传</li><li>● 对讲机注册服务</li><li>● 遥测</li><li>● 工作任务</li></ul>

## 故障处理

故障描述	原因分析	解决方法
无法开机	电池可能未正确安装	取出电池并重新装入
	电池电量可能已经耗尽	充电或更换电池
	电池触点污浊或受损而导致接触不良	清洁电池触点
接收信号时声音小、断续或无声	电池电压过低	充电或更换电池
	音量较小	通过【音量控制】旋钮调大音量
	天线松动或安装不到位	关机后重新安装天线
	扬声器堵塞或受损	进行简单的外部清洁
无法与组内其他成员通话	所用频率或信令设置与组内其他成员不同	设置与组内其他成员相同的频率和信令
	数字、模拟信道设置不当	设置相同的数字信道或模拟信道
	距离组内其他成员太远	尽量靠近其他成员，确认位于其有效通讯范围之内
信道中出现其他通话声或杂音	受到同频用户的干扰	更改为新的频点，或调整静噪级别
	未设置信令	对组内所有对讲机进行信令设置，以防止同频干扰，且必须同时更改组内所有手持终端的信令设置
噪声较大	与其他成员之间的通讯距离过远	靠近其他成员
	所处位置不佳，如受高大建筑物阻挡，或位于地下室等	移至开阔平坦地后，开机重试
	受外界环境或电磁干扰	避开可能引起干扰的设备
GPS无法定位	所处位置不佳，以致接收不到GPS信号	移至开阔平坦地后，重试GPS定位
按键无法使用	键盘暂时失灵	重新开关机一次
LCD显示屏无显示	LCD显示屏暂时失灵	重新开关机一次

如上述方法仍未解决您的问题，或您遇到一些其他的故障，请联系当地经销商或我司以获取更多的技术支持。

## 保养与清洁

为了保证本产品发挥其良好性能，以及延长其使用寿命，请熟悉以下内容，以便更好地对本产品进行日常保养与清洁。

### 保养

- 请勿用硬物穿刺或刮花本产品。
- 请勿将本产品存放于含有腐蚀电子电路物质的环境。
- 携带或使用本产品过程中，请勿用手提天线或耳机线。
- 当不使用附件时，请盖好附件接口盖。

### 清洁



**注意：**清洁之前，请关机并取出电池。

- 请定期使用洁净干燥的无绒布或毛刷拭去本产品表面及充电极片附着的粉尘。
- 本产品的按键、控制旋钮和机壳极易变脏。可用中性洗涤剂和无纺布对其进行清洁，请勿用去污剂、酒精、喷雾剂或石油制剂等化学药剂进行清洁，以避免产品表面和外壳受损。
- 清洁之后，务必保证本产品彻底干燥，否则请勿使用。

## 选购配件

本产品主要的选购附件已包含在如下列表中，如需更多附件信息，请咨询您当地的经销商或拨打我司服务热线400-830-7020。



**注意：**请使用我司指定的配件。若擅自使用未经许可的配件，则由此所导致的一切后果，由用户自行负责。

配件类型	配件型号	配件名称
电源类	BL2503	电池 2500mAh
	CH10A06	（锂/镍氢）电池MCU双插槽 充电座套件（含开关电源）
	CHV09	座充车载电源适配器
	MCA05	电池分析仪
	MCA06	锂电/镍电MCU快速排充（仅薄电）
	MCA08	锂电/镍电MCU快速排充（兼容薄电和厚电）
音频类	ADN-01	无线适配器
	EAN17	三线透明管监控耳机（米色）
	EAN18	三线透明管监控耳机（黑色）
	EAN23	分体式透明管耳机
	EHN16	分体C型耳挂式耳机
	EHN17	分体可调节耳挂式耳机
	ESN12	分体式耳塞式耳机
	ESW01	无线耳机
	ESW01-N1	无线耳机套件
线材类	SM18N2	防水扬声器话筒（IP57）
	PC38	编程连接线（USB口）
携带类	LCBN13	手持终端通用尼龙胸包
	LCY003	携带外套（真皮、可旋转）
	LCY006	携带外套（适配厚电）

## 保修范围与期限

我司承诺：凡我司生产的产品，自购买之日起，在正常使用、操作与维护条件下，出现材料或制造工艺方面的缺陷，可享受以下规定的保修服务。

主机	24个月
标配附件（包括电池、充电座）	12个月



## Preface

Thanks for your favor in our product. This manual is helpful for you to quickly know how to use the product. For detailed features and operations, please refer to the *Feature Description and Operation Manual* along with the product.

To avoid body injury or property loss caused by misoperation, please read the *Safety Information Booklet* carefully before use.

This manual is applicable to the following product:

PD782i Digital Trunking Portable Radio.

## Disclaimer

Hytera Communications Corporation Limited (the Company) endeavors to achieve the accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the specifications and designs are subject to change without notice due to continuous technology development. No part of this manual may be copied, modified, translated, or distributed in any manner without the express written permission of us.

We do not guarantee, for any particular purpose, the accuracy, validity, timeliness, legitimacy or completeness of the Third Party products and contents involved in this manual.

If you have any suggestions or would like to learn more details, please visit our website at: <http://www.hytera.com>.

## RF Radiation Information

This product must be restricted to operations in an occupational/controlled RF exposure environment. Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits.

### RF Radiation Profile

Radio Frequency (RF) is a frequency of electromagnetic radiation in the range at which radio signals are transmitted. RF technology is widely used in communication, medicine, food processing and other fields. It may generate radiation during use.

### RF Radiation Safety

In order to ensure user health, experts from relevant industries including science, engineering, medicine and health work with international organizations to develop standards for safe exposure to RF radiation. These

standards consist of:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J;
- American National Standards Institute (ANSI)/ Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992;
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999;
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998;

## FCC Regulations

Federal Communication Commission (FCC) requires that all radio communication products should meet the requirements set forth in the above standards before they can be marketed in the U.S, and the manufacturer shall post a RF label on the product to inform users of operational instructions, so as to enhance their occupational health against exposure to RF energy.

### Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit not more than 50% of the time and always adhere to the following procedures:

- RF energy will be generated only when the radio is transmitting.
- The radio must be at least 2.5 centimeters away from human body when transmitting.

## EU Regulatory Conformance

As certified by the qualified laboratory, the product is in

compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC.

Please note that the above information is applicable to EU countries only.

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## Items in the Package

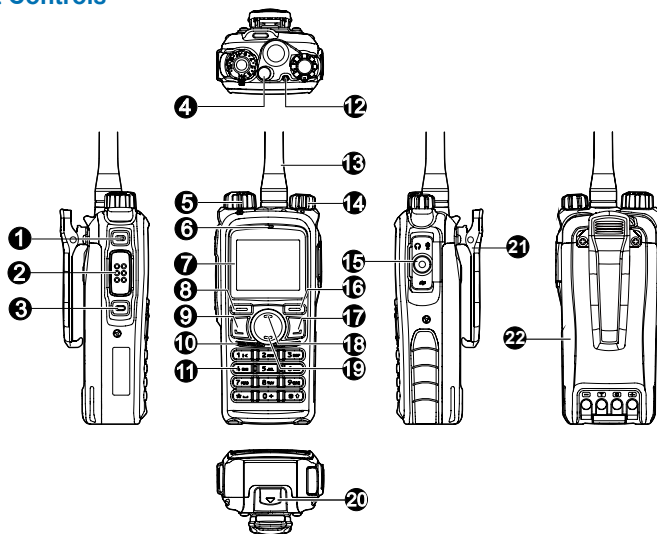
Please unpack carefully and check if all items listed below are received. If any item is missing or damaged, please contact your dealer.



**Note :** The frequency band is marked on the label of antenna; if not, please refer to the label on the radio for frequency band information.

## Product Overview

### Product Controls



No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	SK1 (Side Key 1)	7	LCD Display	13	Antenna	19	Down Key
2	PTT (Push-to-Talk) Key	8	OK/Menu Key	14	Power On-Off/Volume Control Knob	20	Battery Latch
3	SK2 (Side Key 2)	9	Answer/Redial/Call Key	15	Accessory connector	21	Belt Clip
4	TK (Top Key)	10	Speaker	16	Back/Subgroup Key	22	Battery
5	Group Call Selector Knob	11	Numeric Keypad	17	BackDial/End/Home Screen Key	/	/
6	Microphone	12	LED Indicator	18	Up Key	/	/



## Programmable Keys

For enhanced convenience, you may request your dealer to program the **SK1**, **SK2**, and **TK** (🔑) as shortcuts to certain functions. Please refer to the Feature Description and Operation Manual along with the product for more details.



**Caution:** The **TK** key is programmed with emergency feature by default (short press: Emergency On; long press: Emergency Off). It is programmable by your dealer.

## LCD Icon

Icon	Name	Radio Status
	GPS Icon	The GPS feature is active, and valid GPS data is received.
		The GPS feature is active, but no valid GPS data is received.
	Battery Power Icon	More bars indicate more battery power.
	TX Power Icon	Low TX power for the current channel.
		High TX power for the current channel.
	Accessory Icon	An accessory is connected.
<b>TM</b>	Operation Mode Icon	Trunking Mode: In this mode, this radio communicates with other radios via the trunking system.
	Roam Icon	The radio is roaming.
	Hunt Icon	The radio is hunting. This icon will not appear during the Background Hunt, HomeStation Hunt or Multi-site Handover.
	VOX Icon	The VOX feature is active.

Icon	Name	Radio Status
	Missed Call Icon	Missed call(s).
	Message Icon	Unread message(s).
		Inbox is full.
	RSSI Icon	No signal.
		More bars indicate stronger signal strength.
	Knob Operation Mode Icon	The knob is used for selecting the group currently.
		The knob is used for adjusting the volume currently.
	Speaker Icon	The speaker is unmuted.
	LQO Icon	The LQO feature is active.
	Call/Contact Icon	● Indicates a private call in progress.
		● Indicates a private contact in the contact list.
		● Indicates a group call in progress.
		● Indicates a group contact in the contact list.
		● Indicates an all call in progress.
		● Indicates an all call contact in the contact list.

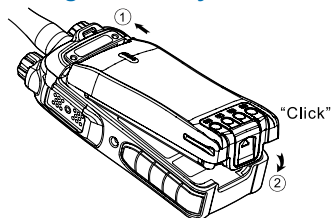
## LED Indicator

LED Indication	Radio Status
The LED indicator flashes green	Powering on
The LED indicator flashes green slowly.	Standby.
The LED indicator glows green.	Receiving.
The LED indicator glows red.	Transmitting.

LED Indication	Radio Status
The LED indicator flashes red.	Establishing a call (the LED indicator on the calling radio flashes).
The LED indicator flashes orange rapidly.	Establishing a Full Off Air Call Set-Up (FOACSU) (the LED indicator on the called radio flashes).
The LED indicator flashes orange slowly.	Hunting
The LED indicator glows orange.	Call hung period. No voice is being transmitted or received on the traffic channel during a call. Within such period, you can hold down the <b>PTT</b> key to talk to the other party.

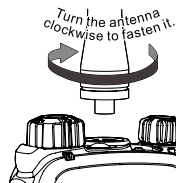
## Before Use

### Attaching the Battery



**Note:** To remove the battery, turn off the radio first, and then slide the battery latch upwards to unlock the battery.

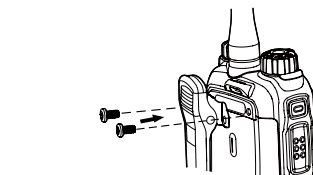
### Attaching the Antenna



**Caution:** Do not hold the radio by its antenna, otherwise the performance and lifespan of the antenna will be reduced.

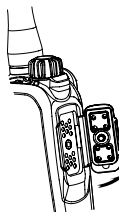
### Attaching the Belt Clip

1. Remove the screws.
2. Align the screw holes on the belt clip with those on the radio's back, and then tighten the screws.



### Attaching the Accessories

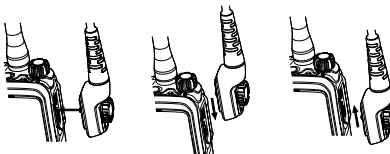
1. Open the accessory connector cover as shown below.



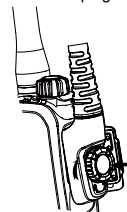
2. Align the accessory (such as an audio accessory, or a programming cable) plug with the accessory connector.



**Caution:** Do not scrape the silicone rubber surrounding the accessory connector screw hole, in order to ensure the waterproof performance of the radio.



3. Tighten the screw on the plug.



### Charging the Battery



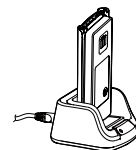
#### Caution:

- Use the charger specified by the Company to charge the battery.
- Make sure the radio is powered off before charging. Read the Safety Information Booklet in advance to get necessary safety information.
- Charge a new battery for at least 5 hours before initial use for best performance.

Charge the Radio  
(with battery attached)



Charge the Battery



Charging Status Indication (on charger):

LED Indication	Charging Status
The LED Indicator flashes red slowly.	Standby (no load)
The LED Indicator glows red.	Charging
The LED indicator glows orange.	90% charged
The LED indicator glows green.	Fully charged
The LED Indicator flashes red rapidly.	Charging failed

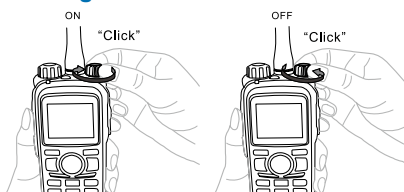
## Checking the Battery Power

You can check the current battery power by holding down the programmed **Battery Power Indicator** key preset by your dealer. And release the key to exit. Battery power indications and alert tone are listed below:

LED Indication/Tone	Icon
The LED Indicator glows green.	
The LED Indicator glows orange.	
The LED Indicator glows red.	
The LED Indicator glows red and an alert tone sounds.	
The battery runs low. Please recharge or replace the battery for proper radio operation	

## Basic Operations

### Turning the Radio On/Off



### Initial Registration

Before the radio can make the communication normally, it needs to register in the system. Once you turn on the radio, it will start hunting the control channels for available base station and attempt to make the registration automatically.

### Hunting the Control Channel

The radio starts hunting the control channel for available base station automatically upon power-on. During hunting, the radio displays "Registering, Please Wait!" with the icon and the LED indicator flashes orange slowly.

There are two hunt plans: Fixed Control Channel and Flexible Control Channel. You may request your dealer to set the appropriate plan for your radio. Please refer to the *Feature Description and Operation Manual* along with the product for details.

### Registering

When the radio searches for a control channel, the radio determines whether the base station allows it to register. Upon successful registration, the radio will display "Registered Successfully!" on the LCD. Then it is ready

for communication. If you want the radio to register with another base station, press the programmed **Manual Current Hunt** key to hunt again.

**Note:** For smooth registration, it is highly recommended to put the frequently used frequencies of base stations in the control channel list via the dealer.

### Adjusting the Volume



### Inputting via Keypad


You can input alias, call numbers and messages via the keypad of the radio. In the editing mode, you may do as follows.

- Press to switch the text input methods between alphabetic mode and numeric mode
- In the alphabetic mode, press to input the special characters. But in the numeric mode, pressing will input the numeric digit 1
- In the alphabetic mode, press to input the space. But in the numeric mode, pressing will input the special characters

### Locking and Unlocking the Keypad

When the keypad is not in use, you can lock the keypad to prevent accidental keypad operation. The following

methods are available for you to lock or unlock the keypad:

- Key Combination: Press "**OK+**  " to lock or unlock the keypad.
- Shortcut key: Press the programmed **Keypad Lock** key to lock or unlock the keypad.
- Menu: Go to "Menu -> Settings -> Radio Set -> Keypad Lock" and then select "Enable" or "Disable".
  - » **Enable:** The keypad will be locked automatically if no operation is made within the preset time period. After the "Enable" option is selected, you can press the **Up/Down** key to set the Keypad Auto Lock Delay Time.
  - » **Disable:** The keypad will not be locked automatically.

## Selecting a Subgroup

You can include the group contacts into a subgroup for efficient management.

You can enter the menu "Subgroup" by pressing the **Menu** or **Subgroup** key, then use the **Up/Down** key to select an appropriate subgroup. Afterwards, select the option "Set as Default" and press the **OK** key to switch to that subgroup.

## Selecting a Group Contact

After the radio is registered successfully after power-on, you can select a group contact through any of the following methods:

- Knob: Rotate the **Group Call Selector Knob** to select an appropriate group contact. An audio alert will be given in case of no group contact preset for this knob.
- Menu: You can enter the menu "Subgroup" by

pressing the **Menu** or **Subgroup** key, then use the **Up/Down** key to select an appropriate subgroup. Afterwards, select "Member" and use the **Up/Down** key to select an appropriate group contact.

- Shortcut key: You can press the programmed **Group Call List** key to access the group call list, and select an appropriate group contact by pressing the **Up/Down** key.

## Managing the Contact

Contact management allows you to view, edit, delete or add contacts.

### Favorite Contact

Favorite Contact is used to save the frequently used private contacts and group contacts.

- Go to the "Menu -> Contact -> Favorite Contact" menu to access the favorite contact list.
- Press the programmed **Favorite Contact List** key to access the favorite contact list.

In the favorite contact list, you can view, edit or delete the favorite contacts.

### Private Contact

Private Contact is used to save private contact information such as call alias, call type and call ID.

- Go to the "Menu -> Contact -> Private Contact" menu to access the private contact list.
- Press the programmed **Private Contact List** key to access the private contact list.

In the private contact list, you can view, edit or delete the private contacts.

### New Contact

New Contact is used to add a new contact to the private contact list.

Go to the "Menu -> Contact -> New Contact" menu to access the relevant screen. Input the number and alias of a new contact and save it to the private contact list.



#### Note:

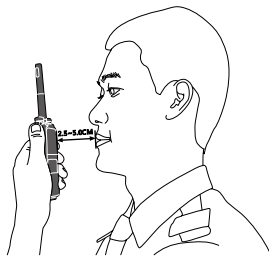
- The number and alias of a new contact must be unique.
- You can also save the numbers from the Call Logs into the private contact list.

## Call Services

After the radio is powered on and registered, you can make and receive calls. To ensure an optimal volume of the receiving radio, keep the microphone about 2.5 to 5 centimeters away from your mouth when transmitting.



**Note:** If the radio does not register successfully or you select an empty group by rotating the **Group Call Selector Knob**, the radio cannot initiate any call.




## Private Call

Private call is a call made to a private contact. There


are two ways to answer the private call: Full Off Air Call Set-Up (FOACSU) and Off Air Call Set-Up (OACSU). The specific way is decided by the settings made for the called radio via the network management application.

- FOACSU: The called party needs to answer the call manually.
- OACSU: The called party answers the call without any operation.


## Initiating a Private Call

When you initiate a private call, the radio will display the icon . After a private call is established, either the calling party or called party can hold down the **PTT** key to talk while the radio displays "PTT Enable" on the LCD. You can make a private call through any of the following ways:


### Favorite Contact and Private Contact


1. Go to "Menu -> Contact -> Favorite Contact/Private Contact".
2. Use the **Up/Down** key to select an appropriate contact.
3. Press  or hold down the **PTT** key to initiate a private call.

### Call Logs



1. Go to "Menu -> Call Logs -> Outgoing/Incoming/Missed".
2. Use the **Up/Down** key to select an appropriate contact.
3. Press  or hold down the **PTT** key to initiate a private call.

### ReDial Call Logs



1. In the home screen, press  to enter the ReDial Call Logs.
2. Use the **Up/Down** key to select an appropriate contact.

3. Press  or hold down the **PTT** key to initiate a private call.


### BackDial Call Logs

1. In the home screen, press  to enter the BackDial Call Logs.
2. Use the **Up/Down** key to select an appropriate contact.
3. Press  or hold down the **PTT** key to initiate a private call.

### Manual Dial





1. In the home screen, input a private call number using the numeric keypad.  
For the dial rules, please refer to "Dial Scheme" in the *Feature Description and Operation Manual* along with the product.
2. Press  ,  or hold down the **PTT** key to initiate a private call.

### Missed Call Screen


Hold down the **PTT** key in the "Missed Call" screen to directly call back the last missed private contact. Also you can press  or hold down the **PTT** key to call back when viewing that private contact.

## Receiving a Private Call



- FOACSU

When you receive a private call, the radio will display the icon  on the LCD. You can press  or hold down the **PTT** key within the preset time period to answer the call. After the call is established successfully, the radio will emit a tone and display the icon  on the LCD as well. If you don't answer this call, the radio will display the icon  to remind you.

- OACSU

The call is established automatically. The radio will display the icon  on the LCD after call setup.

## Voice Communication

After a private call is established, either the calling party or called party can hold down the **PTT** key to talk while the radio displays "PTT Enable" on the LCD. The radio will display the icon  when transmitting and the icon  when receiving.

## Ending a Private Call

The call will be terminated when any of the following situations occurs:


- Neither party holds down the **PTT** key to speak before the preset time period expires.
- The call duration exceeds the time preset by the dealer.
- Either of the parties ends the ongoing call.
- The base station signal is lost.
- Either of the parties selects an empty group via the **Group Call Selector Knob** during the call.
- A pre-emptive call or an emergency call occupies the channel.

## Group Call

The Group Call includes group call and broadcast call. In a group call, both the calling party and the called party can talk. However, in a broadcast call, only the calling party can talk while the called party can listen to it only. The radio cannot make a broadcast call unless the dealer authorizes it.

As a broadcast call is made in the same manner as a group call, we will only detail their differences in the following introductions.


## Initiating a Group Call

When you initiate a group call, the radio will display the icon . You can make a group call through any of the following ways. The operation is similar to initiating a private call.


### Preset Contact

In the home screen, you can hold down the **PTT** key to initiate a group call to the contact currently selected by the **Group Call Selector Knob**.



### Group Contact

1. In the home screen, enter the menu "Subgroup" by pressing the **Menu** or **Subgroup** key.
2. Go to "Subgroup -> Members".
3. Use the **Up/Down** key to select an appropriate contact.
4. Press  or hold down the **PTT** key to initiate a group call.





**Note:** To make a broadcast call, select "Broadcast Call" as the "Call Type", and press the **OK** key,  key or hold down the **PTT** key.

### ReDial Call Logs



1. In the home screen, press  to enter the ReDial Call Logs.
2. Use the **Up/Down** key to select an appropriate contact.
3. Press  or hold down the **PTT** key to initiate a group call.

### BackDial Call Logs


1. In the home screen, press  to enter the ReDial Call Logs.
2. Use the **Up/Down** key to select an appropriate contact.

3. Press  or hold down the **PTT** key to initiate a group call.




### Manual Dial

1. In the home screen, input a group call number using the keypad.  
For the dial rules, please refer to "Dial Scheme" in the *Feature Description and Operation Manual* along with the product.
2. Press ,  or hold down the **PTT** key to initiate a group call.

## Receiving a Group Call

You can answer a group call without any operation after this call is established successfully. And the radio will emit a tone and display the icon  on the LCD as well.

## Voice Communication

- Group call: After a group call is established, either the calling or called party can hold down the **PTT** key to talk while the radio displays "PTT Enable" on the LCD. The radio will display the icon  when transmitting and the icon  when receiving.
- Broadcast call: After the call is established, only the calling party can talk by holding down the **PTT** key. During transmission, the calling radio will display the icon  on the LCD. The called party can only receive the voice.

## Late Entry

With the Late Entry feature, a group member that has missed the start of a group call can join this active group call later without any operation.

The Late Entry feature is applicable to the following situations:

- The radio moves within the coverage area after the group call is established.
- The radio is turned on after the group call is established.
- The radio is busy with other call services when the group call is established. After such other call services end, the radio will join this group call.
- The signal of the base station recovers after the group call is established.
- The radio is added to the group after the group call is established.

## Ending a Group Call

The call will be terminated when any of the following situations occurs:

- No group member holds down the **PTT** key to talk before the preset time period expires (except in the broadcast call).
- The call duration exceeds the time preset by the dealer.
- The calling party ends the in-progress call (if the called party ends the call, he/she will exit this group call but can rejoin via Late Entry feature).
- The base station signal is lost.
- A pre-emptive call or an emergency call occupies the channel.

## Emergency Call

In case of emergency, you can use Emergency Call to ask for help from your companion or the control center. Emergency Call needs to be configured and enabled by your dealer. Please refer to the *Feature Description and Operation Manual* along with the product for details.

## Message Services

Message Services allow you to edit and send a new message, to directly send a quick text message and to forward the messages saved in the InBox, OutBox and Drafts.

### Text Message

1. Go to "Menu -> Message -> New Msg" to enter the relevant screen.
2. Type the text and press the **OK** key. You can save the text message to Drafts, or send it to a private call contact or a group call contact directly.
3. Select the contact or input the contact number manually.
4. Press the **OK** key to send the message. When the message is sent successfully, the radio will display the prompt "Send Success!".

You can send the quick text or status messages, and forward the message saved in the InBox, Outbox or Drafts.

### Quick Text





Quick Text is the frequently used message preset by your dealer. You can send the quick text directly or edit this text before sending it.


### Status Message

Status message is a quick message that contains the message text and the message code, both of which are preset by your dealer. When a status message is sent, only the message code will be transmitted, to ensure privacy of the communications. You can view and send the preset status messages, but cannot edit or delete them.

### InBox





The InBox saves the received messages and marks each message with a corresponding icon to indicate its status.

-  : Read text message.
-  : Unread text message.
-  : Read status message.
-  : Unread status message.

When the InBox is full, the radio will display the icon , and the earliest message will be overwritten by the latest one automatically.

### OutBox

The OutBox saves the sent messages and marks each message with a corresponding icon to indicate its status.

-  : The text message is sent successfully.
-  : The text message is not sent successfully. In this case, you can resend it.
-  : The status message is sent successfully.
-  : The status message is not sent successfully. In this case, you can resend it.

When the OutBox is full, the earliest message will be overwritten by the latest one automatically.

### Drafts

The Drafts saves the edited messages. When the Drafts is full, the earliest message will be overwritten by the latest one automatically.

After the message in the Drafts is sent successfully, it will be removed from the Drafts and be saved into the OutBox. If not sent successfully, the message will be saved into the Drafts and the OutBox.

## Available Features

Available features of this radio are listed below. Please refer to the Feature Description and Operation Manual for detailed feature descriptions.

Feature Type	Detailed Feature
Basic Setting	<ul style="list-style-type: none"><li>● Password</li><li>● Language</li><li>● Indication: Backlight, Brightness, LED, Tone, Vibration</li><li>● Audio: Mic AGC, Treble Boost, LQO, Audio Feedback Suppression</li><li>● Operation Mode Switch</li><li>● Managing the Contacts: Favorite Contact, Private Contact, New Contact</li><li>● Other Features: Device Information, Power Level, VOX, Covert Mode, One Touch Call/Menu, Renting</li></ul>
Mobility management	<ul style="list-style-type: none"><li>● Hunt</li><li>● Roam</li></ul>
Voice Services	<ul style="list-style-type: none"><li>● Group Call</li><li>● Private Call</li><li>● PSTN/PABX Call</li><li>● Broadcast Group Call</li><li>● All Call</li><li>● Priority</li><li>● Call Queue</li><li>● Time-out Timer (TOT)</li></ul>

Feature Type	Detailed Feature
Data Services	<ul style="list-style-type: none"> <li>● Message Services: New Msg, InBox, OutBox, Drafts, Status Message, Quick Text</li> <li>● GPS: Position View, Time Zone, Message with Position, Query Neighbors</li> </ul>
Control Services	<ul style="list-style-type: none"> <li>● Over the Air Programming (OTAP)</li> <li>● Ambience Listening</li> <li>● Interrupt</li> <li>● Override</li> </ul>
Personal Security Services	<ul style="list-style-type: none"> <li>● Emergency Alarm</li> <li>● Man Down</li> <li>● Lone Worker</li> </ul>
Communication Security Services	<ul style="list-style-type: none"> <li>● Authentication</li> <li>● Encrypt</li> <li>● Stun</li> <li>● Revive</li> <li>● Kill</li> </ul>

## Troubleshooting

Phenomena	Analysis	Solution
The radio cannot be powered on.	The battery may be improperly installed.	Remove the battery and then reattach it.
	The battery power may run out. The battery may suffer from poor contact caused by dirtied or damaged battery contacts.	Recharge or replace the battery. Clean the battery contacts.
The radio cannot make a registration.	The radio may not detect signals from the base station.	Make sure the radio is within the coverage of the base station.
	The radio may be unauthorized.	Contact the base station manager to check whether the radio is authorized in the network management system.
The radio registers repeatedly.	The signal may be discontinuous.	Make sure the radio is within the coverage of the base station.
The radio cannot establish a call.	The signal may be poor.	Make sure the radio is within the coverage of the base station.
No voice is heard after a call is established.	The radio ID may be repeated.	Contact the base station manager to check whether the radio ID is repeated in the network management system.
The called party disconnects repeatedly during communication.	The signal may be discontinuous.	Make sure the radio is within the coverage of the base station.
	The battery power may be low.	Recharge or replace the battery.
During receiving, the voice is weak, discontinuous or totally inactive.	The volume level may be low.	Increase the volume by rotating the <b>Power On-Off/Volume Control Knob</b> clockwise, or request your dealer to disable the Digital MIC AGC feature.
	The antenna may get loose or may be improperly installed. The speaker may be blocked or damaged.	Turn off the radio and reattach the antenna. Clean the surface of the speaker.
You cannot communicate with other members.	The signal may be poor.	Make sure you and the group members are within the communication range.
The voice is unclear.	The signal may be poor.	Make sure you and the talk party(ies) are within the communication range.
	The signal may be poor.	Make sure you and the talk party(ies) are within the communication range.
The noise is too loud.	You may locate in an unfavorable position. For example, your communication may be blocked by high buildings or frustrated in the underground areas.	Move to an open and flat area, and restart the radio to try again.
	You may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
You cannot use the keys.	The keypad may fail to function temporarily.	Restart the radio.
The LCD does not display any information.	The LCD may fail to function temporarily.	Restart the radio.

If the above solutions cannot fix your problems, or you may have some other queries, please contact us or your local dealer for more technical support.



## Care and Cleaning

To guarantee optimal performance as well as a long service life of the product, please follow the tips below.

### Product Care

- Do not pierce or scrape the product.
- Keep the product far away from substances that can corrode the circuit.
- Do not hold the product by its antenna or earpiece cable directly.
- Attach the accessory connector cover when the accessory is not in use.

### Product Cleaning



**Caution:** Turn off the product and remove the battery before cleaning.

- Clean up the dust and fine particles on the product surface and charging piece with a clean and dry lint-free cloth or a brush regularly.
- Use neutral cleanser and a non-woven fabric to clean the keys, control knobs and front case after long-time use. Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations, so as to avoid surface case damage.
- Make sure the product is completely dry before use.

## Optional Accessories

The following items are the main optional accessories for the product, and please consult your local dealer for more other accessories.



**Caution:** Use the accessories specified by the Company only. If not, the Company shall not be liable for any losses or damages arising out of use of unauthorized accessories.

Type	Model	Name
Power Supply	BL2503	Li-ion Battery(2500mAh)
	CH10A06	Dual Pocket MCU Charger Kit (for Li-ion/Ni-MH Batteries)
	CHV09	Vehicle Adapter for Charger
	MCA05	Battery Optimizing System
	MCA06	MCU Multi-unit Rapid-rate Charger
	MCA08	MCU Multi-unit Charger(Thick Battery)
Audio Accessories	ADN-01	Wireless Audio Adapter
	EAN17	3-wire Surveillance Earpiece with Transparent Acoustic Tube(Beige)
	EAN18	3-wire Surveillance Earpiece with Transparent Acoustic Tube (Black)
	EAN23	Detachable Earpiece with Transparent Acoustic Tube
	EHN16	C-Earset
	EHN17	Swivel Earset
	ESN12	Earbud
	ESW01	Wireless Earpiece
	ESW01-N1	Wireless Earset Kit
Cable	SM18N2	Remote Speaker Microphone(IP57)
	PC38	Programming Cable (USB port)
Carrying Accessories	LCBN13	Universal Chest Pack (Nylon)(Black)
	LCY003	Carrying Case (Thick Battery)(Leather)(Swivel)
	LCY006	Carrying Case (Thick Battery)(Leather)(Swivel)



## 致用户

非常感谢您对我们产品的青睐！本手册旨在让您快速掌握本产品的使用，如需了解产品详细功能和操作，请参阅本产品配套的《功能与操作手册》。

为了避免因不当操作而给您带来身体伤害或财产损失，请于使用本产品前详细阅读《安全信息手册》。

本手册适用于以下机型：  
PD782i 数字集群手持终端

## 免责声明

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## 射频辐射信息

本产品仅限于能够满足射频能量辐射要求的职业应用。使用者必须清楚了解射频辐射危害并可采取相应措施，满足射频辐射限定要求。

### 射频辐射常识

射频指可以辐射到空间的电磁频率，是通讯、医疗、食品加工等领域广泛使用的一种技术，在使用过程中会产生一定的射频辐射。

### 射频辐射安全

为了确保用户的身心健康，来自科学、工程、医药、健康和工业的专家们与相关组织共同研究制定了射频辐射标准和准则，如下所示：

- 美国联邦通信委员会联邦政府法规汇编第47卷第2部分J子部分。
- 美国国家标准协会 (ANSI)/电气和电子工程师协会 (IEEE) 标准C95.1-1992版。
- 电气和电子工程师协会标准C95.1-1999版。
- 国际非电离辐射防护委员会(ICNIRP)于1998年颁布的标准。

## 美国联邦通信委员会监管要求

按照美国联邦通信委员会的监管要求，本产品必须符合美国联邦通信委员会射频辐射限制规定，否则不能在美国市场上销售。并要求制造商可通过在产品上张贴标签的方式，告知用户应注意的事项，提高用户的防辐射意识。

### 射频辐射控制及操作说明

为了使产品发挥最佳性能及确保符合上述标准中有关职业或受控环境中的辐射限制要求，发送时间不得超过额定因数的50%（最高50%的时间发射），且需遵照下列说明：

- 仅在发射（讲话）时产生射频能量辐射，接收（收听）和待机时均不会产生。
- 发射时终端与身体的距离至少保持在2.5厘米以上。

## 欧盟指令符合性声明

本产品经独立第三方机构认证，符合欧盟指令“1999/5/EC”中的相关要求。

请注意，本声明仅适合欧盟国家。

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## 包装清单

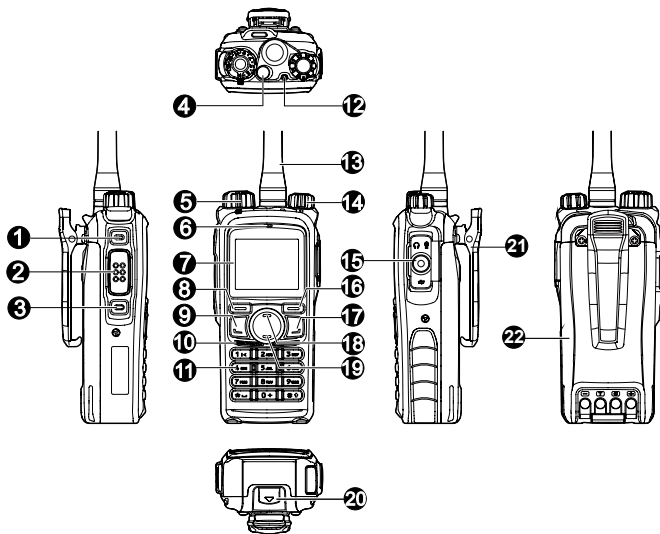
包装盒内含有以下物品。如有任何物品丢失或损坏，请与您所购产品的经销商联系。



**备注：**天线频段请参考天线底部色环标签内容。若标签未注明频段，则参考主机标签上的具体频段。


## 熟悉产品

### 部件介绍



序号	部件名称	序号	部件名称	序号	部件名称	序号	部件名称
1	SK1（侧键）	7	LCD显示屏	13	天线	19	下移键
2	PTT键（发射按键）	8	确认/菜单键	14	电源开关/音量控制旋钮	20	电池推钮
3	SK2（侧键）	9	接听键/重拨键/发起呼叫键	15	附件接口	21	皮带夹
4	TK（顶部键）	10	扬声器	16	返回/组群键	22	电池
5	组呼选择旋钮	11	数字键盘	17	回拨键/挂机键/返回待机界面键	/	/
6	麦克风	12	LED指示灯	18	上移键	/	/

## 可编程键





为提升操作便利性，本产品提供3个可编程功能快捷键：SK1、SK2和TK（）。具体功能请咨询您的经销商，功能的详细介绍可参阅本产品配套的《功能与操作手册》。



**注意：**出厂时，短按【TK】键已设置为“紧急报警开启”功能，长按【TK】键已设置为“紧急报警关闭”功能。您可通过经销商设置为其他功能快捷键。

## LCD图标

LCD图标	图标名称	产品工作状态
	GPS标识	已开启GPS功能，且收到有效GPS数据
		已开启GPS功能，但未收到有效GPS数据
	电池电量标识	条数越多，电池电量越多
	发射功率标识	当前发射功率为低功率
		当前发射功率为高功率
	附件标识	已连接附件
	工作模式标识	集群模式：本产品与其他终端通过集群系统的调度进行通信
	漫游标识	漫游状态
	扫描标识	扫描状态（背景扫描、回望扫描、越区切换不显示该图标）
	声控标识	已开启声控
	未接来电标识	有未接呼叫
		接收到短消息，或者有未读短消息
		收件箱的存储空间已满

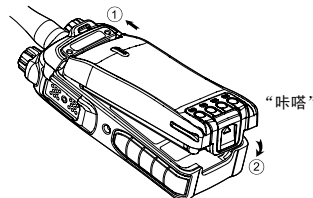
LCD图标	图标名称	产品工作状态
	信号强度标识	无信号
		条数越多，信号越强
	旋钮操作模式标识	旋钮处于组呼选择模式
		旋钮处于音量调节模式
	扬声器标识	已开启扬声器
	音质音量优化器标识	已开启音质音量优化器
	呼叫/联系人类型标识	● 出现在呼叫过程中，表示正在进行个呼
		● 出现在联系人列表中，表示个呼联系人
		● 出现在呼叫过程中，表示正在进行组呼
		● 出现在联系人列表中，表示组呼联系人
		● 出现在呼叫过程中，表示正在进行全呼
		● 出现在联系人列表中，表示全呼联系人

## LED指示灯

LED指示灯	产品工作状态
绿灯闪烁	正在开机
绿灯慢闪	正常待机
绿灯长亮	正在接收
红灯长亮	正在发射
红灯闪烁	正在建立呼叫（主叫方显示）
橙灯快闪	正在建立FOACSU个呼（被叫方显示）
橙灯慢闪	正在扫描
橙灯长亮	呼叫保持状态，即呼叫成功建立后，各方均处于接收状态，信道资源空闲，此时您可以按住【PTT】键讲话。

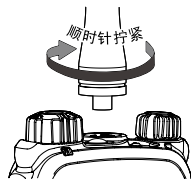
## 用前准备

### 安装电池



**备注：**如需卸下电池，请先关机，然后将底部电池推钮往上提起，并取出电池。

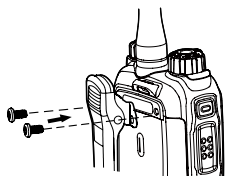
### 安装天线



**注意：**请勿手持天线顶端甩动本产品，否则会降低本产品天线的工作性能和使用寿命。

### 安装皮带夹

- 卸下主机上的皮带夹螺钉。
- 将皮带夹的螺钉孔对准主机上的螺钉孔，然后用螺钉锁紧。



## 安装附件

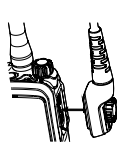
1. 打开附件接口盖。



2. 将附件（如音频附件或者编程线等）插头对准附件接口。



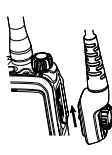
**注意：**请小心操作，避免划伤附件接口螺钉口外围的硅胶，以免影响产品的防水性能。



✓

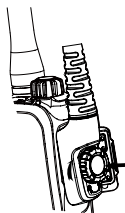


✗



✗

3. 拧紧附件插头上的螺钉。



## 充电

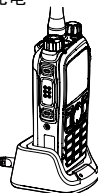


**注意：**

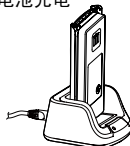
- 请使用我司指定的充电座充电。
- 为整机充电时，建议先关机并参阅《安全信息手册》，以获取必要的电池安全信息。
- 为获得最佳电池性能，首次充电时，请至少充电5小时。



整机充电



电池充电



观察充电座LED指示灯可了解当前充电状态：

LED指示灯	当前充电状态
红色慢闪	待机（空载）
红色长亮	正在充电
橙色长亮	已电90%
绿色长亮	已充满
红色快闪	充电故障

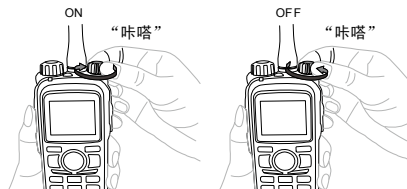
## 查看电量

如果经销商为本产品设置了【电池电量提示】快捷键，那么您可以按住该快捷键通过LED指示灯、提示音及电池电量图标查看电池剩余电量，松开该快捷键取消查看电池剩余电量。

LED指示灯/提示音	电池电量图标
LED指示灯亮绿灯	
LED指示灯亮橙灯	
LED指示灯亮红灯	
LED指示灯亮红灯，同时伴有低电提示音	 电量不足，请尽快充电或者更换电池

## 基本操作

### 开机与关机




### 初次登记

为保证本产品的正常使用，开机后本产品将自动选择适合的基站上网登记。

### 扫描控制信道

本产品到基站登记时，需要先扫描控制信道以搜索可进行登记的集群系统基站。

开机后自动开始扫描。扫描控制信道所采用的方式有固定控制信道和灵活控制信道两种，详情请参阅本产品配套的《功能与操作手册》。您需要通过经销商配置本产品采用的扫描方式。

扫描时，LCD显示屏上显示“注册中，请等待！”和扫描状态图标，LED指示灯橙灯慢闪。

## 登记

扫描到基站信号时，判断该基站是否允许本产品入网登记。登记成功后，LCD显示屏提示“注册成功！”，此时您可以进行通信。如果您想选择其他的基站进行登记，可按【手动执行扫描】快捷键重新扫描。






**备注：**为保证登记顺畅，请通过经销商将常用的基站频点写入扫描控制信道列表。

## 调节音量




## 键盘输入

您可通过本产品的数字键盘输入用户别名、号码和短信等。

- 切换输入法：
- 输入特殊字符：（数字输入模式除外，在数字输入模式下按此键输入的是数字1）
- 输入空格：（数字输入模式除外，在数字输入模式下按此键输入的是特殊字符）

## 键盘锁定与解锁

当您无需使用键盘时，可锁定键盘以防止误操作键盘。您可以通过以下方式锁定或解锁键盘：

- 组合键：按“【确认】键+”来锁定或解锁键盘。
- 编程键：若经销商设置了【键盘锁定】快捷键，您可按该键来锁定或解锁键盘。
- 菜单选择：进入“设置->对讲机设置->键盘锁”菜单，选择“允许”或“禁止”即可。
  - » 允许：在键盘自动锁定时间内若无任何对讲机操作，键盘将自动锁定。选择允许后您可通过【上移】/【下移】键设置键盘自动锁定时间。
  - » 禁止：键盘不会自动锁定。

## 选择群组

您可以将不同的组呼联系人放入同一个群组中，以便对现有组呼联系人进行有效管理。

选择群组：通过【菜单】键或【群组】键进入“群组”菜单后，按【上移】/【下移】键来选择所需群组。进入所选群组后，选择“设置为默认”，然后按【确认】键切换至所选群组。

## 选择组呼联系人

开机登记成功后，您可以通过以下方式选择组呼联系人：

- 旋钮：旋转【组呼选择】旋钮选择所需的组呼联系人。当旋钮没有对应的组呼联系人时，本产品将发出提示音，提示您当前选择的为空组。
- 菜单：通过【菜单】键或【群组】键进入“群组”菜单后，按【上移】/【下移】键来选择所需群组。进入所选群组后，选择“成员”，然后按【确认】键进入所选群组对应的组呼列表菜单，通过【上移】/【下移】键来选择所需组呼联系人。
- 快捷键：如果经销商已为您设置【当前组呼联系人】快捷键，那么您可以按此快捷键进入当前群组对应的

组呼列表菜单，然后按【上移】/【下移】键选择所需组呼联系人。

## 管理联系人

管理联系人是指管理本产品的联系人信息，包括查看、修改、删除、添加联系人等操作。

## 常用联系人

常用联系人是指用于保存您经常使用的联系人信息，包括个呼联系人、组呼联系人等。

- 在主菜单中选择“联系人->常用联系人”，进入常用联系人列表。
  - 按【常用联系人列表】快捷键进入常用联系人列表。
- 在常用联系人列表中，您可以查看常用联系人的详细信息，或者添加和删除常用联系人。

## 个呼联系人

个呼联系人是指用于保存个呼联系人信息。

- 在主菜单中选择“联系人->个呼联系人”，进入个呼联系人列表。
  - 按【个呼联系人】快捷键进入个呼联系人列表。
- 在个呼联系人列表中，您可以查看个呼联系人的详细信息，或者编辑和删除个呼联系人。

## 新建联系人

新建联系人是指创建新的个呼联系人，并且保存到个呼联系人列表中。

在主菜单中选择“联系人->新建联系人”，进入新建联系人界面。根据提示输入所需的信息，完成创建。



**备注：**

- 新建联系人的号码和别名不能与个呼联系人列表中的其他联系人相同。
- 除了通过本菜单创建联系人以外，您还可以将呼叫记录中的未存储个呼号码保存到个呼联系人列表中。

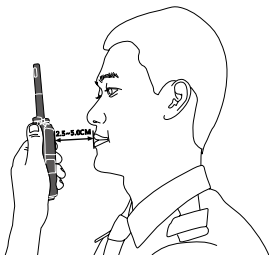


## 呼叫

开机成功后，您可以进行各种呼叫操作。为保证最佳接收音量，发射时请保持麦克风与嘴的距离为2.5~5厘米。



**备注：**当本产品未登记或【组呼选择】旋钮选择“空组”时，不能发起呼叫。




## 个呼

个呼是指对某个个呼联系人发起的呼叫。个呼接听方式分为：手动摘机呼叫（FOACSU）和自动摘机呼叫（OACSU），接听方式由集群系统设置。


- 手动摘机呼叫（FOACSU）：被叫方需要手动接听建立呼叫。
- 自动摘机呼叫（OACSU）：被叫方接收到呼叫后自动建立呼叫。

## 发起个呼


个呼发起时，LCD显示屏显示  图标。个呼建立后，主叫和被叫都可以在PTT空闲时（LCD显示屏提示“PTT允许！”）按住【PTT】键进行讲话。您可以通过以下方式发起个呼。

### “常用联系人/个呼联系人”



1. 进入联系人列表，菜单路径“联系人 -> 常用联系人/个呼联系人”。

2. 通过【上移】/【下移】键选择您想要呼叫的个呼联系人。
3. 按  或者【PTT】键，发起个呼。



### “呼叫记录”

1. 进入已拨/已接/未接呼叫列表，菜单路径“呼叫记录”。
2. 通过【上移】/【下移】键选择您想要呼叫的个呼联系人。
3. 按  或者【PTT】键，发起个呼。



### “重拨”呼叫记录

1. 在待机界面下，通过  键进入“重拨”呼叫记录列表。
2. 通过【上移】/【下移】键选择您想要呼叫的个呼联系人。
3. 按  或者【PTT】键，发起个呼。


### “回拨”呼叫记录

1. 在待机界面下，通过  键进入“回拨”呼叫记录列表。
2. 通过【上移】/【下移】键选择您想要呼叫的个呼联系人。
3. 按  或者【PTT】键，发起个呼。

### 手动拨号

1. 在待机界面下，通过数字键盘输入个呼号码。  
拨号规则请参阅本产品配套《功能与操作手册》中的“拨号方案”。
2. 按 、【PTT】键或者 ，发起个呼。

### 提示界面的“未接呼叫”


在“未接呼叫”提示界面选择某个未接个呼，按【PTT】键对该未接个呼发起呼叫。还可以查看该号码后，按  或者【PTT】键呼叫该号码。

## 接听个呼



- 手动摘机呼叫（FOACSU）

接收到个呼后，LCD显示屏显示  图标。如果您在预设时间内按  或【PTT】键，将建立呼叫。呼叫建立成功后，LCD显示屏显示  图标，同时本产品将发出提示音。如未进行接听，则显示  以提醒用户有未接呼叫。

- 自动摘机呼叫（OACSU）

自动建立呼叫。呼叫建立成功后，LCD显示屏显示  图标。

## 语音通信

个呼建立后，主叫和被叫都可以在PTT空闲时（LCD显示屏提示“PTT允许！”）按住【PTT】键进行讲话。发送语音时，本产品的LCD显示屏显示  图标；接收语音时，LCD显示屏显示  图标。

## 结束通信


当出现以下情况时，语音通信将结束：

- 双方无人按【PTT】键讲话，超过预设时间。
- 通话总时间超过预设时间（该时间可由经销商配置）。
- 通话过程中，主叫或被叫的任意一方挂机。
- 基站信号丢失。
- 主叫或被叫的【组呼选择旋钮】指向空组。
- 预占呼叫或紧急呼叫抢占了本通话的业务信道。

## 组呼

组呼分为普通组呼和广播组呼。普通组呼中，主叫和被叫均可以发射语音，而广播组呼中，仅主叫可以发射语音，被叫只能接收语音。当经销商为您开启广播组呼限时，您才能发起广播组呼。两种组呼的操作方法大部分相同，此处仅介绍普通组呼，下文仅在差异处进行区分。


## 发起组呼

组呼发起时，LCD显示屏显示  图标。您可以通过以下方式发起组呼，操作方式与“个呼”相似。


### 预设联系人

在待机界面下，按【PTT】键可以对当前【组呼选择】旋钮对应的组呼联系人发起组呼。



#### “组呼联系人”

1. 按【菜单】键，进入主菜单，选择“组群”；或者按【组群】键，进入“组群”菜单。
2. 选择“组群->成员”。
3. 通过【上移】/【下移】键选择您想要呼叫的组呼联系人。
4. 按  或者【PTT】键，发起普通组呼。





**备注：**如果你想发起“广播组呼”，您可以选择组呼联系人的“呼叫类型”为“广播组呼”，再通过按【确认】键、 或者【PTT】键发起组呼。

#### “重拨”呼叫记录

1. 在待机界面下，通过  进入“重拨”呼叫记录列表。
2. 通过【上移】/【下移】键选择您想要呼叫的组呼联系人。
3. 按  或者【PTT】键，发起普通组呼。



#### “回拨”呼叫记录

1. 在待机界面下，通过  进入“回拨”呼叫记录列表。
2. 通过【上移】/【下移】键选择您想要呼叫的组呼联系人。
3. 按  或者【PTT】键，发起普通组呼。



#### 手动拨号

1. 在待机界面下，通过数字键盘输入您想要呼叫的组呼号码。




拨号规则请参阅本产品配套《功能与操作手册》中的“拨号方案”。

2. 按 、【PTT】键或者  键，发起组呼。

## 接听组呼

接收到组呼后，此时您无需按  键，本产品将自动建立呼叫。建立呼叫成功后，LCD显示屏显示  图标，同时发出提示音。

## 语音通信

- 普通组呼：组呼建立后，主叫和被叫都可以在PTT空闲时（LCD显示屏提示“PTT允许！”）按住【PTT】键进行讲话。发送语音时，本产品的LCD显示屏显示  图标；接收语音时，LCD显示屏显示  图标。
- 广播组呼：组呼建立后，仅主叫可以按住【PTT】键进行讲话。发送语音时，主叫的LCD显示屏显示  图标。被叫仅能接收语音。

## 迟后进入

组呼建立后，在通话过程中允许未能加入该组呼的成员加入该呼叫。该成员不需要执行任何操作，可自动加入该呼叫。

本功能常用于以下情况：

- 组呼发起时，被叫未在通话组工作范围内，在通话过程中进入到通话组工作范围。
- 组呼发起时，被叫未开机，通话过程中被叫开机了。
- 组呼A发起时，被叫正参与其他个呼B或组呼C，结束该呼叫（B或C）后，A通话还在进行。
- 组呼发起时，被叫所在位置基站信号弱或受到无线干扰，通话过程中被叫所在位置信号好转。
- 组呼发起后，新加入该组的成员。

## 结束通信

当出现以下任一情况时，语音通信将结束。

- 无人按【PTT】讲话，超过预设时间。（广播组呼除外）
- 通话总时间超过预设时间（该时间可由经销商配置）。
- 通话过程中，主叫挂机（被叫挂机仅自身退出组呼通信，通过“迟后进入”可以重新加入该呼叫）。
- 基站信号丢失。
- 预占呼叫或紧急呼叫抢占了本通话的业务信道。

## 紧急呼叫

遇到紧急情况时，您可通过此功能来向同伴或控制中心寻求帮助。

紧急呼叫功能需由经销商为您配置和开启，详情请参阅本产品配套的《功能与操作手册》。

## 短消息

您还可以编辑和发送新的短消息，也可以直接发送快捷文本，还可以将收件箱、发件箱、草稿箱中的短消息进行转发。

## 发送短消息

1. 选择“短消息->新建短消息”，进入短消息编辑窗口。
2. 编辑短消息内容后按【确认】键。完成编辑后，您可以将该短消息直接保存到草稿箱或者发送给个人和组呼联系人。
3. 选择联系人或手动输入联系人号码。
4. 按【确认】键发送短消息。发送成功后，界面将提示“发送成功”。

您也可以直接使用快捷文本或状态消息进行发送，还可以将收件箱、发件箱、草稿箱中的短消息进行转发。

## 快捷文本





快捷文本是经销商为您预设好的常用快捷短消息。您可选择一条快捷短消息直接发送，或对快捷短消息进行编辑后再发送。


## 状态消息

状态消息是一种操作便捷的短消息，发送的是状态编码而非消息内容，故具有一定的保密性。消息内容由经销商配置，您可以查看和发送，但不能修改或删除状态消息。

## 收件箱





本产品会将接收到的短消息保存在收件箱中，每条短消息前有相应图标表示该短消息的查阅状态。

- ：已读的短消息。
- ：未读的短消息。
- ：已读的状态消息。
- ：未读的状态消息。

若收件箱已满，则在LCD显示屏上会显示图标，此时如果有新的已收短消息，则最早的短消息将自动被覆盖。

## 发件箱

本产品会将发送的短消息保存在发件箱中，每条短消息前有相应图标表示该短消息的发送状态。

- ：短消息发送成功。
- ：短消息发送失败，此时您可以选择重新发送。
- ：状态消息发送成功。
- ：状态消息发送失败，此时您可以选择重新发送。

当发件箱已满时，若有新的已发短消息，则最早的短消息将自动被覆盖。

## 草稿箱

本产品可以将已经编辑好的短消息保存在草稿箱中。当草

稿箱已满时，如有新的短消息保存到草稿箱中，则最早的短消息将自动被覆盖。

当您草稿箱中的短消息成功发送出去后，本产品会将此短消息保存到发件箱中，并删除草稿箱中的这条短消息。如果发送失败，则草稿箱和发件箱都会保留该短消息。

## 功能说明

本机型所支持的功能如下表所示，相关功能详细描述请参考《功能与操作手册》。

功能分类	具体功能
基本设置	<ul style="list-style-type: none"><li>● 对讲机密码</li><li>● 语言设置</li><li>● 提示设置：背光灯，亮度，指示灯，提示音，振动</li><li>● 音频设置：麦克风自动增益，无条件高音增强，音质音量优化器，声反馈抑制</li><li>● 模式切换</li><li>● 管理联系人：常用联系人，个呼联系人，新建联系人</li><li>● 其他：查看终端信息，功率级别，声控，隐蔽模式，一键呼叫，租赁</li></ul>
移动管理	<ul style="list-style-type: none"><li>● 扫描</li><li>● 漫游</li></ul>

功能分类	具体功能
语音业务	<ul style="list-style-type: none"><li>● 组呼</li><li>● 个呼</li><li>● PSTN/PABX呼叫</li><li>● 广播呼叫</li><li>● 全呼</li><li>● 呼叫优先级</li><li>● 呼叫排队</li><li>● 超时禁发</li></ul>
数据业务	<ul style="list-style-type: none"><li>● 短消息：新建短消息，收件箱，发件箱，草稿箱，状态消息，快捷文本</li><li>● GPS：位置查看，时区，带位置短消息，周边人员查询</li></ul>
补充业务	<ul style="list-style-type: none"><li>● 空口写频</li><li>● 环境侦听</li><li>● 强插</li><li>● 强拆</li></ul>
个人安全	<ul style="list-style-type: none"><li>● 紧急报警</li><li>● 倒放</li><li>● 单独工作</li></ul>
通信安全	<ul style="list-style-type: none"><li>● 鉴权</li><li>● 加密</li><li>● 遥晕</li><li>● 复活</li><li>● 遥毙</li></ul>

## 故障处理

故障描述	原因分析	解决方法
无法开机	电池可能未正确安装	取出电池并重新装入
	电池电量可能已经耗尽	充电或更换电池
	电池触点污污或受损而导致接触不良	清洁电池触点
无法登记	不能检测到基站信号	确保本产品在基站的有效信号范围内
	不是基站的合法用户，不能进行登记	联系基站负责人，确认本产品是否为基站网管系统的合法用户
反复登记	信号时断时续	确保本产品在基站的有效信号范围内
不能建立呼叫	通讯信号质量差	确保本产品在基站的有效信号范围内
呼叫建立后没有声音	终端ID可能重复	联系基站负责人，确认网管系统中终端ID是否重复
呼叫中或被叫反复下线	信号时断时续，下线又迟后进入呼叫	确保本产品在基站的有效信号范围内
接收信号时声音小、断续或无声	电池电量过低	充电或更换电池
	音量较小	通过【电源开关/音量控制】旋钮增大音量或者联系经销商关闭数字麦克风自动增益功能
	天线松动或安装不到位	关机后取下天线并重新装上，再开机
	扬声器堵塞或受损	进行简单的外部清洁
无法与组内其他成员通话	通讯信号质量差	确保通话成员在有效通讯范围内
语音不清晰	通讯信号质量差	确保通话成员在有效通讯范围内
噪声较大	通讯信号质量差	确保通话成员在有效通讯范围内
	所处位置不佳，如受高大建筑物阻挡，或位于地下室等	移至开阔平坦地后，开机重试
	受外界环境或电磁干扰	避开可能引起频率干扰的设备
按键无法使用	键盘暂时失灵	重新开关机一次
LCD显示屏无显示	LCD显示屏暂时失灵	重新开关机一次

如上述方法仍未解决您的问题，或您遇到一些其他的故障，请联系当地经销商或我可以获取更多的技术支持。

## 保养与清洁

为了保证本产品发挥其良好性能，以及延长其使用寿命，请熟悉以下内容，以便更好地对本产品进行日常保养与清洁。

### 保养

- 请勿用硬物穿刺或刮花本产品。
- 请勿将本产品存放于含有腐蚀电子电路物质的环境。
- 携带或使用本产品过程中，请勿用手提天线或耳机线。
- 当不使用附件时，请盖好附件接口盖。

### 清洁




**注意：**清洁之前，请关机并取出电池。

- 请定期使用洁净干燥的无绒布或毛刷拭去本产品表面及充电极片附着的粉尘。
- 本产品的按键、控制旋钮和机壳极易变脏。可用中性洗涤剂和无纺布对其进行清洁，请勿用去污剂、酒精、喷雾剂或石油制剂等化学药剂进行清洁，以避免产品表面和外壳受损。
- 清洁之后，务必保证本产品彻底干燥，否则请勿使用。

## 选购配件

本产品主要的选购附件已包含在如下列表中，如需更多附件信息，请咨询您当地的经销商或拨打我司服务热线400-830-7020。

 **注意：**请使用我司指定的配件。若擅自使用未经许可的配件，则由此所导致的一切后果，由用户自行负责。

配件类型	配件型号	配件名称
电源类	BL2503	电池 2500mAh
	CH10A06	（锂/镍氢）电池MCU双插槽 充电座套件（含开关电源）
	CHV09	座充车载电源适配器
	MCA05	电池分析仪
	MCA06	锂电/镍电MCU快速排充（仅薄电）
	MCA08	锂电/镍电MCU快速排充（兼容薄电和厚电）
音频类	ADN-01	无线适配器
	EAN17	三线透明管监控耳机（米色）
	EAN18	三线透明管监控耳机（黑色）
	EAN23	分体式透明管耳机
	EHN16	分体C型耳挂式耳机
	EHN17	分体可调节耳挂式耳机
	ESN12	分体式耳塞式耳机
	ESW01	无线耳机
	ESW01-N1	无线耳机套件
线材类	SM18N2	防水扬声器话筒（IP57）
	PC38	编程连接线（USB口）
携带类	LCBN13	手持终端通用尼龙胸包
	LCY003	携带外套（真皮、可旋转）
	LCY006	携带外套（适配厚电）

## 保修范围与期限

我司承诺：凡我司生产的产品，自购买之日起，在正常使用、操作与维护条件下，出现材料或制造工艺方面的缺陷，可享受以下规定的保修服务。

主机	24个月
标配附件（包括电池、充电座）	12个月



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