

The Hytera logo is displayed in a light gray font on a dark gray rectangular background. The word "Hytera" is written in a clean, sans-serif typeface.

Preface

Thanks for your favor in our product. To derive optimum performance from the product, please read this manual and the supplied Safety Information Booklet carefully before use.

This manual is applicable to the following model:
X1e

Instructional Icons

The following icons are available through this manual:

Alert Icons



Caution: indicates situations that could cause damage to your product.



Note: indicates tips that can help you make better use of your product.

Function Icons



: indicates functions that are available on digital channel only.



: indicates functions that are available on analog channel only.

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

Term Explanation

Key Operation

Short press: to press a key and release it quickly.

Long press: to press a key and remain holding it down for a predefined period (2 seconds by default).

Hold down: to press a key and remain holding it down.

Private Call

Private Call is a call initiated by a single user to another user.

Group Call

Group Call is a call initiated by a single user to a group.

All Call

All Call is a call initiated by a single user to all the other users on a channel.

Squelch

This technology can remove excessive background noises, improving your communication quality.

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U.S. Patent Nos. #6,912,495 B2, #6,199,037 B1, #5,870,405, #5,826,222, #5,754,974, #5,701,390, #5,715,365, #5,649,050, #5,630,011, #5,581,656, #5,517,511, #5,491,772, #5,247,579, #5,226,084 and #5,195,166.

Disclaimer

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.

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

RF Radiation Information

The radio is not intended for use by general population in an uncontrolled environment. It is only for occupational use and only applied to work-related conditions.

The radio must be only used by users, who are fully aware of the hazards of the exposure and who are 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 no more than 50% of the time and always adhere to the following procedures:

Your radio radiates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

FCC Statement

This equipment has been tested and found to comply with

the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates 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


Operation is subject to the following two conditions: 1. This device may not cause harmful interference, and 2. This device must accept any interference received, including interference that may cause undesired operation.

Note:” Changes or modifications to this unit not expressly















approved by the party responsible for compliance could void the user’s authority to operate the equipment.”

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.

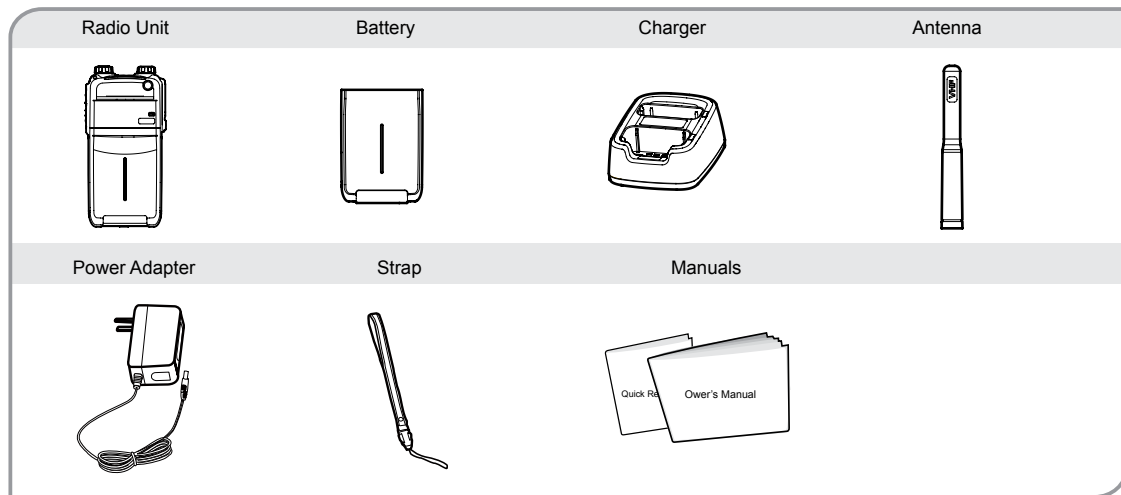
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Checking Items in the Package

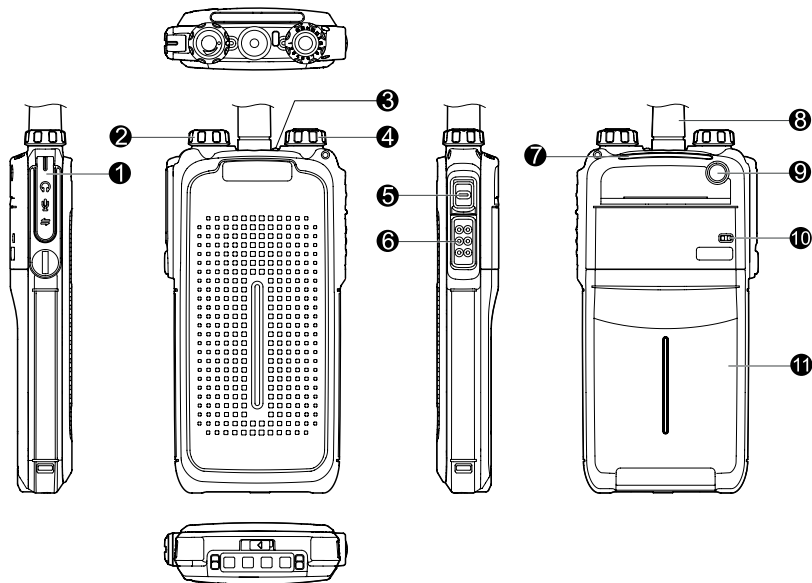
Please unpack carefully and check that all items listed below are received. If any item is missing or damaged, please contact your dealer.



Note: The antenna may vary with different frequency bands. And the frequency band is marked on the label of antenna; if not, please refer to the label on the terminal for frequency band information.

Product Overview

Product Controls












No.	Part Name
1	Accessory Jack
2	Radio On-Off/Volume Control Knob
3	LED Indicator
4	Channel Selector Knob
5	SK (Side Key)
6	PTT Key
7	Speaker
8	Antenna
9	TK (Top Key)
10	Microphone
11	Battery

Product Overview

Programmable Keys

For enhanced convenience, you may request your dealer to program the keys **SK** and **TK** as shortcuts to the functions listed below:

No.	Shortcut Key	Function
1	Zone Up	To select a desired zone quickly
2	Zone Down	
3	Adjust Power Level	To adjust power level quickly
4	Talk Around	To directly communicate with other radios
5	Monitor 	To adjust the condition for incoming signal match
6	Monitor Momentary 	
7	Squelch Off 	To always unmute speaker no matter whether carrier is present or not
8	Squelch Off Momentary 	
9	Scan	To receive signals on other channels
10	Nuisance Temporary Delete	To temporarily ignore unwanted channel activity

11	Emergency	To summon help in emergent situations
12	Adjust Squelch Level 	To temporarily adjust the squelch threshold required for the radio to unmute
13	Battery Strength Indicator	To indicate the battery strength
14	Man Down	To activate Emergency in the case that the radio is positioned aslant for a preset time period due to an unexpected situation
15	Scrambler  /Encrypt 	To encrypt your voice so as to guarantee privacy of your communication
16	Lone Worker	To protect the operators from accidents
17	One Touch Call 1-5	To make corresponding services
18	Telemetry 	To supervise remote devices
19	Roam 	To communicate between sites in the IP Multi-site Connect system.

Product Overview



Note:

- (1) Long and short press of a key can be assigned with different functions by your dealer.
- (2) The TK is programmed as the Emergency key by default, and is programmable by your dealer.

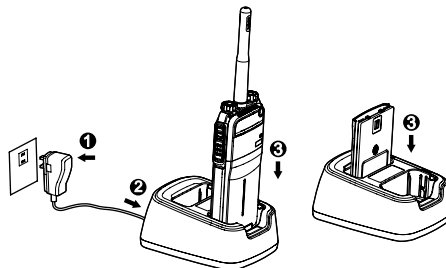
Before Use

Charging the Battery

Power off the radio before charging it.

Use only the charger and battery specified by Hytera. Charger LED can indicate the charging process.

Charging Diagram



Procedures

1. Connect the power adapter to AC socket. See arrow ① .
2. Plug the power adapter into the rear jack of the charger. See arrow ② .
3. Place the radio with the battery attached, or the battery alone, into the charger.

Before Use

- The charging process initiates when LED glows red, and is completed when LED glows green.



Note: To achieve optimal battery performance, please charge the battery for 3 hours before initial use.

LED Indicator

LED Indicator	Charger Status
Red LED flashes slowly.	Standby (no load)
Red LED glows.	Charging
Orange LED glows.	90% charged
Green LED glows.	Fully charged
Red LED flashes rapidly.	Failure

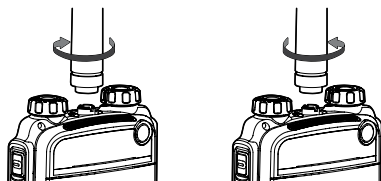


Caution: Be sure to read the Safety Information Booklet, to get necessary safety information.

Assembling Accessories

Assembling the Antenna

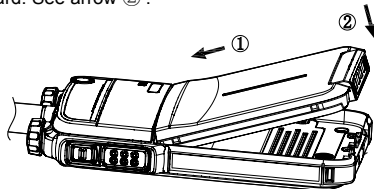
Turn the antenna clockwise to fasten it.



To remove the antenna, rotate it counter-clockwise.

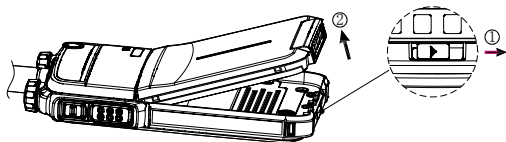
Assembling the Battery

- Insert the battery into top of the radio. See arrow ①.
- Slightly press the bottom of the battery until a click is heard. See arrow ②.



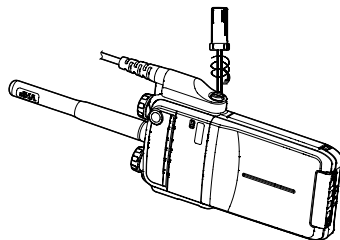
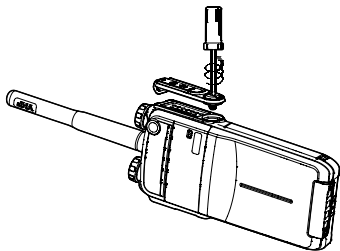
To remove the battery, turn off the radio first. Then push the lock to loosen the battery latch (as indicated by ①), and slide the battery latch upwards to unlock the battery.

Before Use



Assembling the Audio Accessory

1. Open the accessory jack cover as the arrow shown.
2. Align the plug with the accessory jack.
3. Tighten the screw on the plug.



To remove accessories, loosen the screw.



Caution: Please attach the accessory properly; otherwise, waterproof performance of the radio may get affected.

Status Indication

LED Indicator

The top LED indicator will help you easily identify the current radio status.

LED Indication	Radio Status
LED flashes green.	Powering on
LED glows red.	Transmitting
LED glows green.	Receiving
LED flashes orange slowly.	Scanning
LED flashes orange rapidly.	Emergency
LED glows orange.	After voice communication ends, you can hold down the PTT key to talk while the LED is glowing orange.
LED flashes red and blue.	Pairing the Bluetooth
LED flashes blue.	Paired successfully

Basic Operations

Turning the Radio On/Off

Rotate the **Radio On-Off/Volume Control** knob clockwise/counter-clockwise until a click is heard to turn the radio on/off.

Adjusting the Volume

After turning the radio on, rotate the **Radio On-Off/Volume Control** knob clockwise to increase the call volume, or counter-clockwise to decrease it.

Selecting a Zone

A zone is a group of channels exhibiting the same property, and is programmed by your dealer. The radio supports 3 zones: Zone 1, Zone 2 and Zone 3. Each zone contains 16 channels at most.

You may quickly toggle to your desired zone by pressing the programmed **Zone Up** or **Zone Down** key. In the process, you will hear one alert tone for Zone 1, two alert tones for Zone 2 and three alert tones for Zone 3.

Selecting a Channel

After turning the radio on, rotate the **Channel Selector** knob to select a desired channel.

Basic Operations

Switching the Channel Mode

Each channel can be programmed as either analog channel or digital channel. If the current zone includes both analog and digital channels, you may quickly switch between digital and analog through the **Channel Selector** knob.

Enabling/Disabling the Bluetooth

Short press the SK key twice to enable/disable the Bluetooth. If it is enabled, the LED will flash blue.

To use the Bluetooth function properly, please arrange the radio by any of the following way:

- Wear the radio and the Bluetooth earpiece on the same side of your body, with the radio's front side facing your body. The distance between the radio and Bluetooth earpiece must not exceed 0.5m.
- Place the radio at a place no more than 2m away from the Bluetooth earpiece, with the radio's rear side facing the Bluetooth earpiece.



Caution: Please use our POA43 Bluetooth earpiece.

Call



Note:

- Your dealer may preset a contact for each digital channel. The preset contact could be a Private Call contact, a Group Call contact or an All Call contact.
- To ensure optimal volume of the receiving radio, hold the palm microphone approximately 2.5 to 5 centimeters away from your mouth.

Private Call

Transmitting a Private Call

In the standby mode, hold down the **PTT** key to transmit a Private Call to the Private Call contact preset for the current channel.

Receiving and Responding to a Private Call

When a Private Call is received, you can listen to it without any operation, and you may hold down the **PTT** key within the preset time period to call back.

Call

Group Call

Transmitting a Group Call

In standby mode, hold down the **PTT** key to transmit a Group Call to the Group Call contact preset for the current channel.

Receiving and Responding to a Group Call

When a Group Call is received, you can listen to it without any operation, and you may hold down the **PTT** key within the preset time period to call back.

All Call

Transmitting an All Call

In standby mode, hold down the **PTT** key to transmit an All Call to the All Call contact preset for the current channel.



Note: You can transmit an All Call only when it is enabled by your dealer.

Receiving an All Call

When an All Call is received, you can listen to it without any operation.



Note: You cannot respond to an All Call.

Calls on Analog Channels

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

Functions and Operations

Adjust Power Level

With this feature, you may switch power levels quickly. Generally, we recommend you to adopt low power for battery saving. However, if you cannot communicate with radios located at a distant place with low power, please select high power.

Operation:


Press the programmed **Adjust Power Level** key to switch between high power and low power (from low power to high power: a high-pitched tone sounds; from high power to low power: a low-pitched tone sounds).

Scan

The Scan feature allows you to listen to communication activities on other channels so that you can keep a close track of your team members.

Operation:

1. To enable the feature, press the programmed **Scan** key in standby mode (a high-pitched tone sounds); or Switch to a channel for which the feature “Auto Scan” is enabled via the programming software.

2. After the feature is enabled, your radio will scan according to the scan list set for the channel on which scanning starts. The scanning process is as follows:
 - During scanning, the LED flashes orange.
 - When activities are detected on a channel, the radio will stay on the channel to receive current activities, and the LED glows green.
 - If you don't want to hear activities on the channel, press the programmed **Nuisance Temporary Delete** key to remove the channel from the scan list temporarily.
 - If you want to continue staying on the channel, press the programmed **Monitor** or **Squelch Off** key during scan stay. 
3. To exit the scanning process, press the programmed **Scan** key again (a low-pitched tone sounds).

Talk Around

This feature allows you to continue communication even when the repeater malfunctions, or when your radio is out of the repeater's range but within the coverage range of other radios.

Operation:

Functions and Operations

Press the programmed **Talk Around** key to enable the feature (a high-pitched tone sounds). To disable the feature, press this key again (a low-pitched tone sounds).

Monitor

To adjust match conditions for signal receiving, you can enable the feature "Monitor".

Operation:

- Press the programmed **Monitor** key to enable the feature (a high-pitched tone sounds). To disable the feature, press this key again (a low-pitched tone sounds).
- Hold down the programmed **Monitor Momentary** key to enable the feature (a high-pitched tone sounds). To disable the feature, release this key (a low-pitched tone sounds).

Squelch Off

If the feature "Squelch Off" is enabled, your radio's speaker will keep unmuted no matter whether carrier is present.

Operation:

- Press the programmed **Squelch Off** key to enable the feature, and the radio sounds background noise (a high-

pitched tone sounds). To disable the feature, press this key again (a low-pitched tone sounds).

- Hold down the programmed **Squelch Off Momentary** key to enable the feature, and the radio sounds background noise (a high-pitched tone sounds). To disable the feature, release this key (a low-pitched tone sounds).

Adjust Squelch Level

This feature allows you to adjust the squelch threshold required for the radio to unmute.

Generally, "Tight" is used in high noise environment. It requires stronger signal for the radio to unmute. If the squelch level is set to Open, the speaker will keep unmuted irrespective of the satisfaction of decoding conditions.

Operation:

Press the programmed **Adjust Squelch Level** key to switch among Tight, Open and Normal (from Tight to Open, a low-pitched tone and background sound are heard; from Open to Normal, a high-pitched tone is heard and the background sound disappears; from Normal to Tight, a high-pitched tone is heard).

One Touch Call

You can request your dealer to set the **One Touch Call** key. By pressing such programmed key, you can make corresponding services detailed as below:

- Services on the analog channel: to make a call to the 5-Tone or 2-Tone contact.
 - Services on the digital channel:
 - To send message to the Group Call contact.
 - To send message or make control services to the Private Call contact.
- The control services contain: Alert Call, Radio Check, Remote Monitor, Radio Enable or Radio Disable.

Alert Call

You can send an alert call to a Private Call contact. The called party will see the alert and can call you back.

Radio Check

You can send a Radio Check command to a Private Call contact, so as to confirm whether it is powered on or running on the current channel without disturbing it.

Remote Monitor

You can enable the microphone of a Private Call contact, and monitor its activities or background voices remotely.

Radio Enable

You can enable the radio of a Private Call contact remotely and allow it to be used normally.

Radio Disable

You can disable the radio of a Private Call contact remotely and disallow it to be used normally.

Telemetry

This feature allows you to remotely supervise the device connected with a radio. With this feature, you can control the device and view its status in the case that you are away from the device.

The method for supervising the device is programmable by your dealer. The available methods are:

- To supervise the device via the radio
 - If a device is connected with a radio, you can use another radio to supervise the device. All the radios involved should be configured with the Telemetry feature. For example, the dealer enables the Telemetry feature for both Radio A and Radio B, and assign the Telemetry feature to the **SK** key on Radio A. To supervise the device C, connect it with Radio B, and press the **SK** key on Radio A.

Functions and Operations

- To supervise the device via a third-party software
If the Telemetry feature is enabled for the radio by your dealer, you can supervise the device connected with the radio via a third-party software.

Roam

This feature allows the radio to communicate between sites in the IP Multi-site Connect system. If enabled, the radio can communicate via any site in the IP Multi-site Connect system, thus ensuring seamless communication in the system.

Operation:

Go to “Menu -> Settings -> Radio Set-> Roam”, and select “Enable” or “Disable”.

Press the programmed **Roam** key to enable or disable the feature.

Emergency

In case of an emergency, you can use the feature to ask for help from your companion or control center. The Emergency process has the highest priority. You can make emergency operation even when your radio is transmitting or receiving.

To enable the feature on a channel, an emergency system

must be assigned to the channel via the programming software. In addition, the Emergency type, Emergency ID type and Emergency mode are settable via the programming software.

Emergency Type

For each Emergency mode, there are four Emergency types available. You can select one of them via your dealer:

Emergency Type	Description
Siren Only	In Emergency mode, the radio will sound shrill alarm tone.
Regular	In Emergency mode, the radio will give audible and visible indication.
Silent	In Emergency mode, the radio won't give any audible or visible indication.
Silent with Voice	In Emergency mode, the radio won't give any audible or visible indication, but will receive voice ACK from the companion or control center automatically.

Emergency ID Type

Your radio supports two Emergency ID types. You can select one of them via your dealer:

Functions and Operations

Emergency ID Type	Description
None	No signaling is used when the radio sends alarm information.
HDC1200	HDC1200 signaling is used when the radio sends alarm information.

Emergency Mode

Your radio supports three Emergency modes. You can select one of them via your dealer (Note: For the following operation methods, we take the “Regular” type as an example).

Emergency Mode	Description
Alarm	In this mode, you can send alarm information to your companion or control center by pressing the programmed Emergency key, but you cannot talk with them.
Alarm with Call	In this mode, you can send alarm information by pressing the programmed Emergency key. When the alarm tone disappears (None) or after the Emergency ID is sent (HDC1200), you can speak into the microphone, allowing your voice and background noise to be transmitted automatically (you do not need to hold down the PTT key).

Call Only	In this mode, press the programmed Emergency key to go to the Revert Channel, and speak into the microphone, allowing your voice and background noise to be transmitted automatically (you do not need to hold down the PTT key).
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Operation Methods for Analog Emergency



Alarm (None & HDC1200)

Operation: Press the programmed **Emergency** key to send alarm information, and the LED glows red. (None: If “Local Emergency Alarm” is enabled via the programming software, an alarm tone will sound.)

The following methods are available for you to exit the Emergency mode:

1. Once the Alarm Cycles expire, the radio will exit the Emergency mode automatically.
2. Long press the programmed **Emergency** key.
3. Hold down the **PTT** key. The radio will transmit on the channel on which the radio operates before entering the Emergency mode. (HDC1200)

Functions and Operations

Alarm with Call (None & HDC1200)

Operation:

1. Press the programmed **Emergency** key to send alarm information, and the LED glows red. (None: If “Local Emergency Alarm” is enabled via the programming software, an alarm tone will sound.)
2. When the alarm tone disappears (None) or after the Emergency ID is sent (HDC1200), you can speak into the microphone to make an emergency call.
3. When the LED flashes orange, your radio is receiving.

Two methods are available for you to exit the Emergency mode:

1. After the preset Alarm Cycles and Voice Cycles expire, the radio will exit the Emergency mode automatically. (None)
2. Long press the programmed **Emergency** key.

Call Only (HDC1200)

Operation:

1. Press the programmed **Emergency** key to go to the Revert Channel, and the LED glows red.
2. If the feature “Alarm with Call to Follow” is enabled, you can speak into the microphone to make an emergency call when the LED glows red.

3. When the LED flashes orange, your radio is receiving. To exit the Emergency mode, long press the programmed **Emergency** key.



Note: Your dealer may set the number of alarm cycles and alarm duration (None), number of polite retries and impolite retries (HDC1200), number of voice cycles, duration of each transmission and TX interval.

Operation Method for Digital Emergency

Alarm

Operation: Press the programmed **Emergency** key to send alarm information. At this time, the LED glows red.

Two methods are available for you to exit the Emergency mode:

1. Once the Alarm Cycles expire, the radio will exit the Emergency mode automatically.
2. Long press the programmed Emergency key.

Functions and Operations

Alarm with Call

Operation:

1. Press the programmed **Emergency** key to send alarm information. At this time, the LED glows red.
2. When the LED solidly glows red, you can speak into the microphone to make an emergency call.
3. When the LED flashes orange quickly, you can receive. And when a call is received, the LED glows green solidly.
4. If the preset Voice Cycles expire, you can press the **PTT** key to make the emergency call again (the LED glows red). Release the **PTT** key to receive (the LED flashes orange quickly); when a call is received, the LED glows green solidly.

To exit the Emergency mode, long press the programmed **Emergency** key.

Call Only

Operation:

1. Press the programmed **Emergency** key to go to the Revert Channel.
2. If the feature "Alarm with Call to Follow" is enabled, you can speak into the microphone to make an emergency call when the LED glows red.

3. When the LED flashes orange, your radio is receiving. If the preset Voice Cycles expire, you can hold down the **PTT** key to make the emergency call again (the LED glows red). After the emergency call is transmitted, please release the **PTT** key to receive.

To exit the Emergency mode, long press the programmed **Emergency** key.



Note: Your dealer may set the number of polite retries and impolite retries, number of voice cycles, duration of each transmission and TX interval.

Man Down

With this feature, your radio will alarm automatically to summon help from your companion if it is positioned aslant for a certain time period.

Operation:

1. To enable the feature,
 - Press the programmed **Man Down** key (a high-pitched tone sounds); or

Functions and Operations

- Turn on the radio if the feature is enabled via the programming software.
- 2. Your radio will sound a pre-alert tone if it is positioned aslant for a preset time period, and will enter the Emergency mode if you do not place it vertically within such time period. To exit the Emergency mode, please place it upright.
- 3. To disable the feature,
 - Press the programmed **Man Down** key (a low-pitched tone sounds).

Scrambler /Encrypt

The Scrambler/Encrypt feature can encrypt your audio signals to prevent eavesdropping. Thus privacy of your communication is guaranteed.

Operation:

- Press the programmed **Scrambler/Encrypt** key to enable Scrambler or Encrypt on the current channel (a high-pitched tone sounds); press the key again to disable the feature (a low-pitched tone sounds).
- If the Scrambler/Encrypt feature is enabled for a channel via the programming software, switch to the channel

to enable the feature, or exit the channel to disable the feature.

Lone Worker

This feature is ideal for persons who work lonely. If you encounter an incident and cannot operate your radio within the preset time period, your radio will alarm automatically to summon help from your companion.

Operation:

1. To enable the feature,
 - Press the programmed **Lone Worker** key (a high-pitched tone sounds); or
 - Turn on the radio if the feature is enabled via the programming software.
2. If you cannot operate your radio within a preset response period, your radio will give alerts before this period expires (dependent on the settings by your dealer). At this time, you can terminate such alerts by rotating a knob or pressing a key. When the response period expires, your radio will trigger the current emergency system automatically.
3. To disable the feature,

Functions and Operations

Press the programmed **Lone Worker** key (a low-pitched tone sounds).



Note: If the Lone Worker feature is not disabled before your radio is powered off, it will remain enabled when powered on again.

Battery Strength Indicator

This feature allows you to know the current battery strength.

Operation:

Hold down the programmed **Battery Strength Indicator** key, and the radio will give a specific indication to represent the current battery strength. Release the key to exit.

Indication	Battery Strength
Green LED glows.	High
Orange LED glows.	Medium
Red LED glows.	Low
Red LED glows and the low battery alert sounds.	Insufficient

Busy Channel Lockout

If enabled via the programming software, this feature can prevent your radio interfering with other transmitting terminals on the same channel. If you hold down the **PTT** key while the channel is in use, your radio will keep beeping, alerting you to transmission prohibition. To stop beeping, please release the **PTT** key. When the channel is free, you can press and hold down the **PTT** key to transmit.

Time-out Timer (TOT)

The purpose of TOT is to prevent any user from occupying a channel for an extended period. If the preset time expires, the product will automatically terminate transmission and keep beeping. To stop beeping, please release the **PTT** key. You must wait for a certain time period (preset by your dealer) to initiate another transmission.

If the pre-alert function is set by your dealer, your radio will alert you to the TOT expiration in advance.



Note: This feature is null in Emergency mode.

Functions and Operations

Pseudo Trunking

If enabled via the programming software, If your radio operates on a channel with this feature enabled and one time slot is already occupied, it can transmit and receive on the other free time slot, allowing you to communicate timely under emergent situations.

MIC AGC

If enabled via the programming software, your product will process the audio signals during transmission, providing improved audio for the receiving product.

Radio Registration Service

If enabled via the programming software, your radio will automatically register in the system within a certain period after power-on. Then it can acquire online information of other radios via accessing specific servers within the valid registration period.

GPS Revert

If enabled via the programming software, your registered radio

will transfer its positioning information to the system when the system requires such information.

Troubleshooting

Phenomena	Analysis	Solution
The product can not be powered on.	The battery may be improperly installed.	Remove the battery and attach it again.
	The battery 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. If the problem can not be solved, contact your dealer or authorized service center for inspection and repair.
During receiving signals, the voice is weak, discontinuous or totally inactive.	The battery strength may be too low.	Recharge or replace the battery.
	The volume may be set to a low level.	Increase the volume.
	The antenna may get loose or may be improperly installed.	Power off the product, and re-install the antenna.
You can not communicate with other members.	The speaker may be blocked or damaged.	Clean surface of the speaker. If the problem can not be solved, contact your dealer or authorized service center for inspection and repair.
	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/analog) may be set inconsistently.	Make sure all members are on the same digital/analog channel.
	You may be too far away from the group members.	Move towards other members.

Troubleshooting

Irrelevant communication or noise is heard on the channel.	You may be interrupted by products using the same frequency.	Change the frequency, or adjust the squelch level.
	The product may be set with no signaling.	Set signaling for all member products 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 be at 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 product.
	You may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.
The GPS cannot locate your position.	No GPS signal is received.	Move to an open and flat area, and restart the product.
The 2.4G Bluetooth cannot be paired.	The battery power for the Bluetooth may run low.	Charge the Bluetooth.
	The Bluetooth may be too far away from the product.	Move the Bluetooth towards the product.

If the above solutions can not 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 with any edged instruments or hard objects.
- 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 jack cover when the product is not in use.

Product 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.



Caution: Power off and remove the battery before cleaning.

The Hytera logo is displayed in a light gray font on a dark gray rectangular background. The word "Hytera" is written in a clean, sans-serif typeface.

致用户

非常感谢您对我们产品的青睐！为了确保您最大限度地享用本产品所带来的各项便利，请于使用前详细阅读本手册和《安全信息手册》。

本手册适用以下机型：

X1e

图标说明

本手册中会使用以下图标，各图标含义如下：

使用提示图标



注意：表示可能会导致产品损坏或人身伤害的事项。



备注：表示有助于您更好地了解和使用本产品的事项。

功能区分图标



：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。

术语说明

按键操作

短按：按下并快速松开。

长按：按下并保持预编程的持续时间（默认为 2 秒）。

按住：一直按住该按键。

个呼

个呼是对单个用户发起呼叫。

组呼

组呼是单个用户对组内的所有用户发起呼叫。

全呼

全呼是单个用户对信道上所有其他用户发起的呼叫。

静音

该技术可滤除过度的背景噪声，用于解决通话质量和噪声问题。

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如需更多信息或对本手册有任何建议，欢迎访问我们的网站：

<http://www.hytera.com>，或拨打我司服务热线 400-830-7020。

射频辐射信息

本机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%，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。

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。

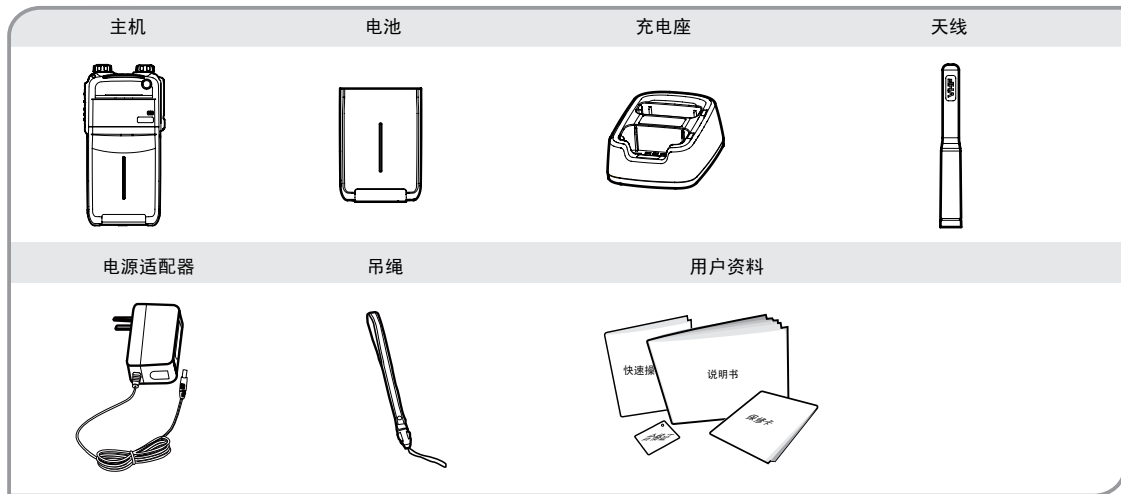
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检查包装内物品

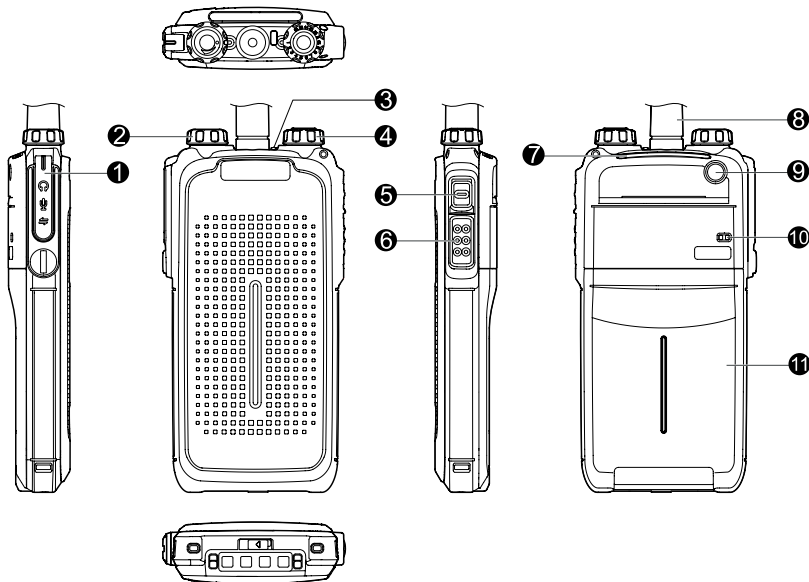
包装盒内含有以下物件。如有任何物件丢失或损坏，请与您所购产品的经销商联系。



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。

熟悉本机

部件介绍



序号	部件名称
1	附件接口
2	电源开关 / 音量控制旋钮
3	LED 指示灯
4	信道选择旋钮
5	SK (侧键)
6	PTT 键 (发射按键)
7	喇叭
8	天线
9	TK (顶部键)
10	麦克风
11	电池

可编程键

为了提升操作便利性，本机的线控耳机上有一个可编程键【SK】，可由您的经销商编程为功能快捷键（见下表）。

编号	快捷键名称	用途
1	区域上调	快速选择区域
2	区域下调	
3	功率级别调整	快速调整发射功率
4	脱网	与其他终端直接通信
5	监听 	调整信号接收匹配条件
6	暂态监听 	
7	静噪打开 	
8	暂态静噪打开 	无论是否有载波，始终打开喇叭
9	扫描	收听其他信道上的通信活动
10	噪声信道临时删除	暂时删除不感兴趣的活动信道
11	紧急报警	紧急情况下寻求帮助
12	静噪级别调整 	调整接收信号时所需要的信号强度
13	电池电量提示	提示电池剩余电量

编号	快捷键名称	用途
14	倒放	如遇意外情况致使对讲机倒下或平放一段时间，其将自动触发报警
15	扰频  / 加密 	可实现语音加密，保障通信私密性
16	单独工作	为单独工作的人员提供安全保护
17	一键呼叫 1 ~ 5	快速发起业务
18	遥测 	通过对讲机监控外部设备
19	漫游 	在多个基站下通信



备注：

- 1) 同一按键的短按和长按可实现不同功能，具体由经销商设置。
- 2) 【TK】键出厂时预设为“紧急报警”快捷键，您可通过经销商设为其他功能快捷键。

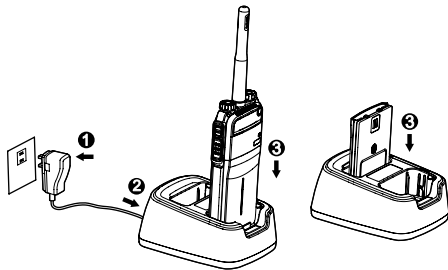
用前准备

给电池充电

充电时请务必保证对讲机处于关机状态。

请使用我司指定的充电座对电池进行充电；充电座的指示灯可显示充电状态。

充电示意图



充电操作步骤

1. 将电源适配器的插头插入电源插座，如图示步骤①；
2. 将电源适配器的另一端插入充电座背面的插孔，如图示步骤②；
3. 将电池或装有电池的对讲机正确插入充电座，如图示步骤③；
4. 指示灯亮红灯时，表示充电开始；指示灯变为绿灯时，表示充电完成。



备注：为获得最佳电池性能，首次充电时，请充满3小时。

充电指示灯

指示灯显示	当前状态
红色 LED 慢闪	待机（空载）
红色 LED 长亮	正在充电
橙色 LED 长亮	已充满 90%
绿色 LED 长亮	电池充满
红色 LED 快闪	故障

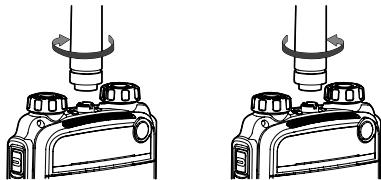


注意：请参阅《安全信息手册》，以获取必要的电池安全信息。

安装附件

安装天线

沿顺时针方向旋转天线直至旋紧。

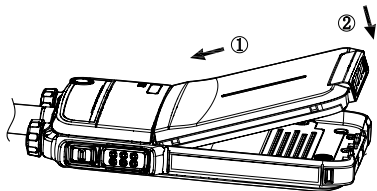


如需卸下天线，逆时针旋转即可。

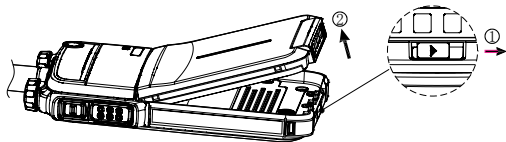
用前准备

安装电池

1. 按①所示插入电池；
2. 轻压电池底部，直至听到“咔嗒”一声②。

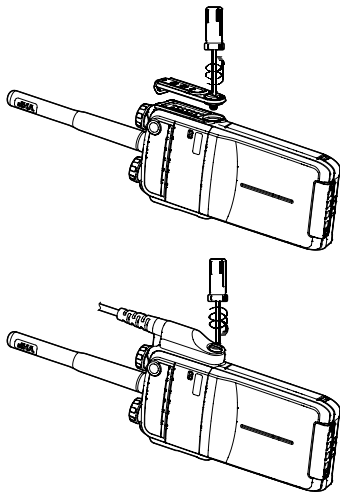


如需卸下电池，请先关闭对讲机。按①所示箭头方向拨动卡扣以松开电池推钮，然后将底部电池推钮往上提起并取出电池。



安装音频附件

1. 按箭头所示方向打开附件接口盖；
2. 将附件插头对准附件接口；
3. 将附件插头上的螺钉拧紧。



如需取下附件，拧松螺钉即可。



注意：请正确安装附件，否则对讲机的防水性能可能会受到影响。

状态指示

LED 指示灯

顶部 LED 指示灯让您轻松掌握对讲机当前的操作状态。

指示灯状态	对讲机状态
绿灯闪烁	正在开机
红灯长亮	正在发送
绿灯长亮	正在接收
橙灯慢闪	正在扫描
橙灯快闪	紧急状态
橙灯长亮	语音结束后，在橙灯长亮期间，用户可以按住【PTT】键通话。
红、蓝灯间隔闪烁	正在配对蓝牙
蓝灯间隔闪烁	蓝牙配对成功

基本操作

开机与关机

如需开机，请顺时针旋转【电源开关 / 音量控制】旋钮直到听到“咔嗒”声；如需关机，请逆时针旋转此旋钮直到听到“咔嗒”声。

调节音量

开机后，顺时针旋转【电源开关 / 音量控制】旋钮可增大语音接收音量，逆时针旋转可减小语音接收音量。

选择区域

区域是一个信道组，即您可将具有相同属性的信道列入一个区域中，这样便于您对现有信道进行有效管理。本机支持 3 个区域：区域 1、区域 2 和区域 3。每个区域最多包含 16 个信道。按【区域上调】或【区域下调】快捷键，即可在三个区域之间切换。每切换到一个区域时，同时会响与区域号数相同的提示音。

选择信道

开机后，旋转【信道选择】旋钮即可选择所需信道。

数模切换

对讲机中的每个信道都可通过经销商配置为模拟信道或数字信道。

基本操作

若当前区域包含数字信道和模拟信道，您可使用【信道选择】旋钮切换至模拟信道或数字信道。

开启与关闭蓝牙

连续两次短按侧面【SK】键，开启或关闭蓝牙。LED 蓝灯间隔闪烁表示蓝牙开启成功。

使用蓝牙功能时，请按以下说明正确放置主机。

- 主机与蓝牙耳机佩戴在身体的同侧，且主机背面（电池所在面为正面）朝外，主机与耳机之间距离不能超过 0.5 米。
- 将主机放置在距离蓝牙耳机不超过 2 米的地方，且主机背面面向蓝牙耳机。



注意：请使用我司指定蓝牙耳机 POA43。

呼叫



备注：

- 您可通过经销商为每个数字信道预设一个联系人，该联系人可以是个呼联系人，也可以是组呼或全呼联系人。
- 为了保证接收方对讲机的最佳接收音量，发射时请保持麦克风距离嘴大约 2.5 到 5 厘米。



发起个呼

在待机状态下，按住【PTT】键即可对当前数字信道上预设的个呼联系人发起个呼。

接收和回复个呼

接收到个呼后，您无需任何操作即可接听，在预设时间内按住【PTT】键可发送回呼。



发起组呼

在待机状态下，按住【PTT】键即可对当前数字信道上预设的组呼联系人发起组呼。

呼叫

接收和回复组呼

接收到组呼后，您无需任何操作即可接听，在预设时间内按住【PTT】键可发送回呼。

全呼

发起全呼

在待机状态下，按住【PTT】键即可对当前信道上预设的全呼联系人发起全呼。



备注：只有当经销商为您开启全呼功能后，您才可发起全呼。

接收全呼

接收到全呼后，您无需任何操作即可接听。



备注：您无法对接收到的全呼进行回复。

模拟信道呼叫

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。

功能与操作

功率级别调整

此功能可实现功率级别的快速切换。当通信距离满足您的需求时，可选择低功率以节约电量。而当低功率无法使您与距离较远的其他对讲机通信时，请选择高功率。

操作方法：

按【功率级别调整】快捷键，使当前信道的发射功率在高、低之间切换（切换至高功率时，响升调提示音；切换至低功率时，响降调提示音）。


扫描

扫描功能可助您收听其他信道上的通信活动，从而了解相关组员当前的活动状况。

操作方法：

1. 在待机状态下，按【扫描】快捷键即可开启扫描（响升调提示音）；或
若某个信道已启用“自动扫描”功能，则切换至该信道时，对讲机会自动开启扫描。
2. 开启扫描后，对讲机将根据开启扫描时所在信道上设置的扫描列表进行扫描。扫描过程如下：
 - 扫描时，LED 闪橙灯。
 - 扫描到某个信道上活动时，对讲机将停留在该信道上进行收听，LED 亮绿灯。

功能与操作

- 若您无需收听该信道上的活动，在扫描停留时按【噪声信道临时删除】快捷键将该信道暂时删除。
 - 若您想继续收听该信道上的活动，在扫描停留时按【监听】/【静噪打开】快捷键。
3. 若要退出扫描，再次按【扫描】键即可（响降调提示音）。

脱网

如遇中转台故障或超出中转台的覆盖范围，但两部终端均处于对方的通讯范围内，此时，用户通过此功能实现两部终端直接通话。

操作方法：

按【脱网】快捷键即可开启脱网功能（响升调提示音）；再次按该键即可关闭此功能（响降调提示音）。

监听

开启“监听”功能可调整信号接收匹配条件。

操作方法：

- 按【监听】快捷键开启此功能（响升调提示音）；再次按该键即可退出（响降调提示音）。
- 按住【暂态监听】快捷键开启此功能（响升调提示音）；松开该键即可退出（响降调提示音）。

静噪打开

开启“静噪打开”功能时，无论是否有载波，对讲机始终打开喇叭。

操作方法：

- 按【静噪打开】快捷键开启此功能（响升调提示音），此时响“沙沙”的背景噪音；再次按该键即可退出（响降调提示音）。
- 按住【暂态静噪打开】快捷键开启此功能（响升调提示音），此时响“沙沙”的背景噪音；松开该键即可退出（响降调提示音）。

静噪级别调整

您可通过调整静噪级别来调整接收信号时所需要的信号强度。一般情况下，静噪级别越高，要求接收到的信号强度也越高。若设置为“常开”（即静噪级别为0），无论解码条件是否满足，直接打开喇叭放出背景音。

操作方法：

按【静噪级别调整】快捷键即可在“加强”、“常开”、“正常”间依次切换（由“加强”切换至“常开”时，响降调提示音且有背景音；由“常开”切换至“正常”时，响升调提示音且背景音消失；由“正常”切换至“加强”时，响升调提示音）。

一键呼叫

您可以通过经销商设置【一键呼叫】快捷键，按该快捷键即可发起相应的业务。具体业务分类如下：

- 模拟信道上的业务：对五音联系人或两音联系人发起呼叫。
- 数字信道上的业务：
 - 对组呼联系人，可发送文本消息。
 - 对个呼联系人，可发送文本消息、发起补充业务。补充业务包括：呼叫提示、对讲机检查、远程监听、激活、遥毙。

呼叫提示

您可向某个联系人发起呼叫提示（五音信令下不可用），对方看到提示后可直接进行回拨。

对讲机检查

您可在不干扰对方的情况下，对某个联系人发起对讲机检查，以确认对方是否开机或在当前信道使用。

远程监听

您可远程激活某个联系人的麦克风，秘密监听对方的语音和背景音信息。

对讲机激活

您可向某个联系人发送激活命令，使其对讲机恢复正常使用。

对讲机遥毙

您可向某个联系人发送遥毙命令，使其对讲机无法正常使用。

遥测

遥测是指远程监控与对讲机连接的设备，您在远离设备的情况下，也能够随时查看设备的运行状态并对设备进行控制。您可通过以下两种方式监控远程设备，具体由经销商定义。

- 通过对讲机监控远程设备。

外部设备与对讲机连接时，您可通过其他的对讲机监控该设备，本过程涉及的对讲机都需要配置遥测功能。例如，经销商为对讲机 A 和对讲机 B 配置了遥测功能，并为 A 的【SK】键关联遥测功能。将外部设备 C（例如，音箱）与 B 连接，当您按下该【SK】键时可监控 C。
- 通过第三方软件监控远程设备。

经销商为对讲机配置遥测功能后，您可通过第三方软件监控与对讲机连接的外部设备。

漫游

漫游是指对讲机能够在多个基站下通信，这些基站必须属于同一 IP 互联系统中。开启漫游功能后，对讲机可在同一 IP 互联系统的任意基站下通信，从而保证了 IP 互联系统的通信连续性。

开启 / 关闭漫游功能的操作方法：

按【漫游】快捷键，开启或关闭漫游功能。

紧急报警

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。紧急报警有最高优先权，无论对讲机处于发射或接收状态，您都可进行报警。

如需在某个信道上启用报警功能，您必须通过写频软件为此信道关联一个紧急报警系统。报警类型、报警 ID 类型和报警模式也可通过写频软件设置。

报警类型

在每个报警模式下，有以下 4 种报警类型，您可通过经销商任选其一：

报警类型	说明
仅鸣笛	报警时，对讲机只发出尖锐的报警音。
正常	报警时，对讲机会给出可听和可视提示。
秘密	报警时，对讲机不会给出任何可听提示或可视提示。
秘密有语音	报警时，对讲机会自动接收来自同伴或控制中心的语音回复，但不会给出任何可听提示或可视提示。

报警 ID 类型

本对讲机支持以下 2 种报警 ID 类型，您可通过经销商任选其一。

报警 ID 类型	说明
无信令	发送报警时不带任何信令。
HDC1200	发送报警时使用 HDC1200 信令。

报警模式

本对讲机支持以下 3 种报警模式，您可通过经销商任选其一（备注：以下操作方法以“正常”报警类型为例）。

报警模式	说明
紧急警报	在此模式下，您只能通过按【紧急报警】快捷键向同伴或控制中心发送报警信息，不能与对方进行通话。
警报呼叫	在此模式下，按【紧急报警】快捷键向同伴或控制中心发送报警信息。当警报音结束（无信令）/ 报警码发送结束（HDC1200）后，只需对着麦克风讲话而无需按住【PTT】键，您的语音和周围的背景音将被发送至接收方。
紧急呼叫	在此模式下，按【紧急报警】快捷键进入报警发射信道，并对着麦克风讲话而无需按住【PTT】键，您的语音和周围的背景音将被发送至接收方。

模拟模式下的报警操作方法



紧急警报（无信令和 HDC1200）

操作方法：

按【紧急报警】快捷键发送报警信息，此时红灯长亮（无信令：若通过写频启用“本地紧急警报”，本机将会响报警音）。

退出报警有以下三种方式：

1. 报警循环次数用完后，对讲机将自动退出紧急报警模式。
2. 长按【紧急报警】快捷键立即退出报警。
3. 按住【PTT】键退出报警，对讲机返回报警进入前所在信道发送语音。（HDC1200）

警报呼叫（无信令和 HDC1200）

操作方法：

1. 按【紧急报警】快捷键发送报警信息，此时红灯长亮（无信令：若通过写频启用“本地紧急警报”，本机将会响报警音）。
2. 当警报音结束（无信令）/报警码发送结束（HDC1200）后，可对着麦克风讲话，发送紧急呼叫。
3. 当 LED 闪橙灯时，可进行接收。

退出报警有以下两种方式：

1. 当所设定的报警音次数和紧急呼叫次数用完后，对讲机将自动退出紧急报警模式。（无信令）
2. 长按【紧急报警】快捷键立即退出报警。

紧急呼叫（HDC1200）

操作方法：

1. 按【紧急报警】快捷键进入报警信道，此时红灯长亮。
2. 若设置了“自动呼叫”功能，亮红灯时，可对着麦克风讲话，发送紧急呼叫。
3. 当 LED 闪橙灯时，可进行接收。

若要退出报警模式，长按【紧急报警】快捷键即可。



备注：可通过编程设定紧急警报次数和紧急警报音持续时间（无信令）、礼貌发射次数和非礼貌发射次数（HDC1200）、紧急呼叫次数、每次发送时间、发送间隔。

数字模式下的报警操作方法



紧急警报

操作方法：

按【紧急报警】快捷键发送报警信息。此时红灯亮。

退出报警有以下两种方式：

1. 报警循环次数用完后，对讲机将自动退出紧急报警模式。
2. 长按【紧急报警】快捷键立即退出报警。

警报呼叫

操作方法：

1. 按【紧急报警】快捷键发送报警信息。此时红灯亮。
2. 当红灯长亮时，可对着麦克风讲话，发送紧急呼叫。
3. 当橙灯快闪时，可进行接收；接收到呼叫后，绿灯长亮。
4. 当所设定的“紧急呼叫次数”用完后，若需要再次发起紧急呼叫，可按【PTT】键（红灯长亮）。讲话完毕后松开【PTT】键进行接收（橙灯快闪）；接收到呼叫后，绿灯长亮。

若要退出报警模式，长按【紧急报警】快捷键即可。

紧急呼叫

操作方法：

1. 按【紧急报警】快捷键进入报警信道。
 2. 若设置了“自动呼叫”功能，亮红灯时，可对着麦克风讲话，发送紧急呼叫。
 3. 当LED闪橙灯时，可进行接收。
- 当所设定的“紧急呼叫次数”用完后，若需要再次发起紧急呼叫，可按住【PTT】键（LED亮红灯）。讲话完毕后松开【PTT】键进行接收。

若要退出报警模式，长按【紧急报警】快捷键即可。



备注：可通过编程设定礼貌发射次数、非礼貌发射次数、紧急呼叫次数、每次发送时间和发送间隔。

倒放

此功能开启后，如果您的对讲机倒下或平放一段时间，其将自动触发报警，告知同伴您遇到意外情况。

操作方法：

1. 开启倒放
 - 按【倒放】快捷键开启此功能（响升调提示音）；或
 - 若此功能已通过写频软件开启，开机即可开启此功能。
2. 功能开启后，若您的对讲机倒下或平放达预设时间，将会发出提示音。如果您在提示音持续期间没有将对讲机竖立起来，您的对讲机将自动报警；若要取消报警，请将您的对讲机扶正。
3. 关闭倒放
 - 按【倒放】快捷键关闭此功能（响降调提示音）。

扰频 / 加密

扰频功能可实现语音加密，使没有此功能的用户无法接收到您的真实语音，从而使您的通信得到保密。

加密功能可实现语音加密，使没有此功能或密钥不匹配的用户无法接收到您的真实语音或短消息，从而使您的通信得到保密。

操作方法：

- 按【扰频 / 加密】快捷键可在当前信道开启扰频或加密（响

功能与操作

升调提示音)；再次按该键关闭此功能(响降调提示音)。

- 若某个信道已通过写频软件启用扰频或加密功能，则切换至该信道时，对讲机会自动开启扰频或加密；退出该信道则关闭此功能。

单独工作

此功能非常适合单独工作的人员使用。若在单独工作期间遇到意外情况，不能在预设时间内操作对讲机，对讲机将自动进行报警，告知同伴或控制中心以获取帮助。

操作方法：

1. 开启单独工作

按【单独工作】快捷键开启此功能(响升调提示音)；或若此功能已通过写频软件开启，开机即可开启此功能。

- ##### 2. 若您在预设的响应时间内未操作对讲机，对讲机将在该响应时间到达前进行提示(视经销商设置)；此时，您可通过有效的物理操作(旋钮或按键操作)结束提示。响应时间到达后，对讲机将自动开启当前信道的报警系统。

3. 关闭单独工作

按【单独工作】快捷键关闭此功能(响降调提示音)。



备注：若您未在关机前关闭单独工作功能，则下次开机时该功能仍然有效。

电池电量提示

此功能可使您了解电池剩余电量。

操作方法：

按住【电池电量提示】快捷键，对讲机将给出不同提示来表示当前电池电量；松开该按键即可退出。

提示	电池电量
绿灯亮	高
橙灯亮	中
红灯亮	低
红灯亮 + 低电提示音	不足

繁忙信道锁定

此功能可通过写频软件开启，以防止干扰同一信道上正在发射的其他用户。当您在其他用户占用该信道时按住【PTT】键，对讲机将发出“嘟”音，提示您无法发射。若要停止“嘟音”，请松开【PTT】键。当该信道空闲时，按住【PTT】才能进行发射。

超时禁发

此功能可防止用户过久地占用信道。如果连续发射时间超过经销商编程设定的时间，对讲机则会停止发射并且响警告音。若要停止警告音，请松开【PTT】键。如需再次发射，请间隔一段

功能与操作

时间后（具体由经销商设置）再次按住【PTT】键。
若经销商编程设定预警告功能，则在超时禁发所设定时间快到前给出预告警提示，告诉您发射即将被禁止。



备注：处于紧急报警模式时，本功能无效。

虚拟集群

此功能可通过写频软件开启。当您的对讲机在开启此功能的信道上工作时，如果某一时隙已被占用，您还可在另一个空闲时隙上进行发射和接收。在某些紧急情况下，可助您及时传递和接收重要信息。

麦克风自动增益控制

此功能可通过写频软件开启。功能开启后，您的对讲机发送语音时，会对语音进行处理，使接收方接收到的语音比较平缓。

对讲机注册服务

此功能可通过写频软件开启。功能开启后，您的对讲机将在开机后的一定时间内自动在系统注册，注册成功后可通过访问特定服务器在有效注册时间内获取其他对讲机的在线信息。

GPS 回复

此功能可通过写频软件开启。功能开启后，如果系统要求上传 GPS 信息，您的对讲机在注册成功后自动将其位置信息传输到系统。

故障处理指南

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。如仍不能解决问题，请联系经销商或我司指定维修点进行检修。
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	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。如仍不能解决问题，请联系经销商或我司指定维修点进行检修。
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。
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。
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。
2.4G 蓝牙无法配对	蓝牙电量不足	为蓝牙充电。
	蓝牙与主机距离太远	将蓝牙移近主机。

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

- 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以避免其表面和外壳受损。清洁之后，务必保证本产品彻底干燥，否则请勿使用。



注意：在您进行清洁之前，请关机并取出电池。

质量保证与维修条款

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。

1. 保修的范围与期限

主机	24 个月
标配附件（包括电池、充电座）	12 个月

2. 保修的申请

如申请我司产品保修服务，必须提供有效的我司产品保修卡或有效购机发票原件作为凭证；保修期内，我司产品的相关标志，包括序列号码标签等，应保持清晰完整且不得撕毁。

- 1) 产品保修卡是指由我司或我司授权的经销商填写并盖章的完整保修卡。保修卡上填写内容应包含产品名称、产品制造序列号（编号）、购买产品日期、销售单位等有效信息；
- 2) 有效购机发票是指财税部门统一监制的发票，是产品售出的重要凭证。发票上应填写产品名称、产品制造序列号（编号）、销售日期、购机金额等有效信息。

注意：

- 1) 防爆终端必须寄回我司客服总部进行维修；
- 2) 防水终端（防水级别达 6 级及以上）必须寄回我司客服总部、我司驻外维修站或经我司授权的经销商维修站进行维修；

质量保证与维修条款

- 3) 请将产品包装好，附上所需凭证及详细的故障说明寄至原购点或我司指定的售后服务点。您也可以通过拨打我司的服务热线 400-830-7020 获得帮助。

3. 本服务保证条款不包括以下内容：

- 1) 超出保修有效期限；
- 2) 未按说明书要求使用、维护及保养所造成的故障或损坏；
- 3) 在非正常和非常规情况下使用本产品所造成的故障或损坏；
- 4) 未经我司授权的改造、改动、拆卸、使用非原装的附件或电池，或未经我司授权的情况下对产品进行软件升级、固件拆动等所造成的故障或损坏；
- 5) 非材料或加工问题所造成的天线故障或损坏；
- 6) 主机上的我司相关标志或序列号码标贴被撕毁、序列号被抹除或无法辨认的产品；
- 7) 购买日期无法鉴定的产品；
- 8) 不可抗力所造成的故障或损坏；
- 9) 正常及常规磨损；
- 10) 如下情况的电池：
 - a. 电池外壳密封有任何人为破损或启封现象；
 - b. 在产品规定之外的设备或维护条件下，进行充电或使用而造成的故障或损坏。

特别说明：

1. 在法律允许的限度内，我司在任何情况下都不对超过产品购买价格的损失承担责任，同时不对任何使用损失、时间损失、商业损失、利润或收入损失、不能使用产品而导致的附带的、特殊的或继发性损坏承担责任。
2. 由于采用本产品所使用的环境、系统等各不相同，我司在本保修条款下不对整个系统的覆盖范围、覆盖区域或运行状况承担责任。
3. 本维修条款是根据国家相关保修条例所制定的，由于技术发展与市场调整等因素，条款内容也将进行相应的修改，具体修改请以我司客户服务中心发布的维修条款变动通知为准。其他未尽事宜请以国家相关条例为准。

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