Hytera

DIGITAL PORTABLE RADIO

数字手持终端

OWNER'S MANUAL

使用说明书

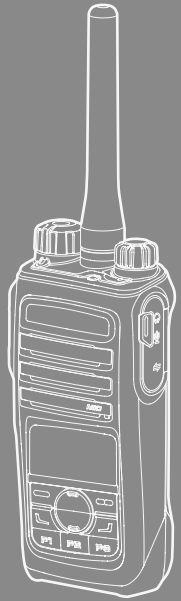

Hytera
海能达

Preface

Thanks for your favor in our product. This manual is helpful for you to quickly know how to use the product. Please refer to the corresponding Feature Book for detailed features and operations.

This manual is applicable to the following product:
PD56X Digital Portable Radio (X may represent 2, 5, 6 or 8)

DIGITAL PORTABLE RADIO



Instructional Icons

Indicates functions that are available on digital channel only.

Indicates functions that are available on analog channel only.

Functions marked with neither the above icons are available on both analog and digital channels.

Disclaimer

Hytera Communications Co., Ltd. (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 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.

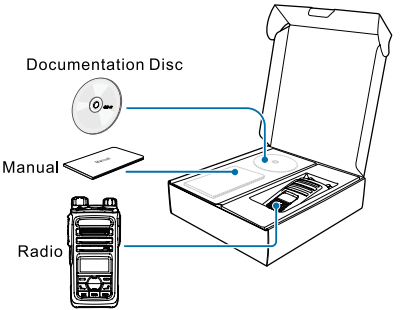
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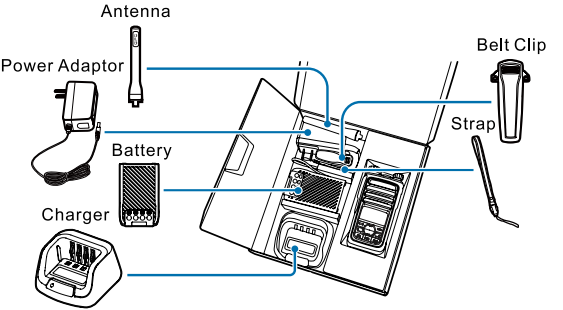
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Items in the Package

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

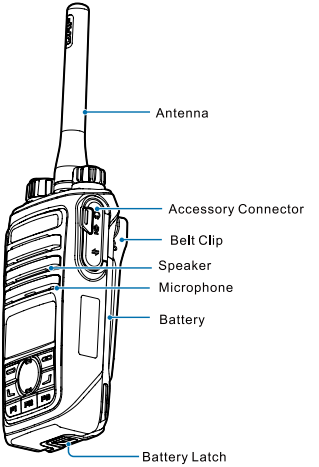




Note All pictures in this manual are for reference only.

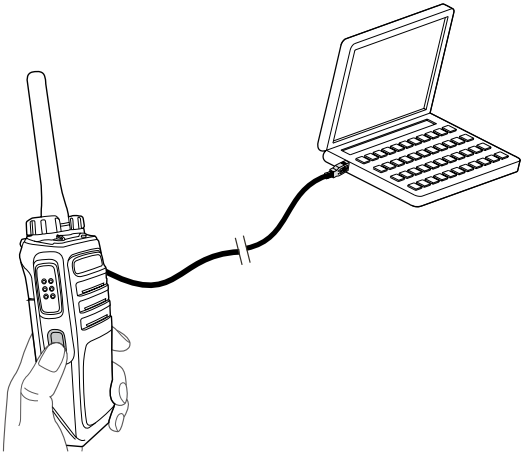
Product Controls





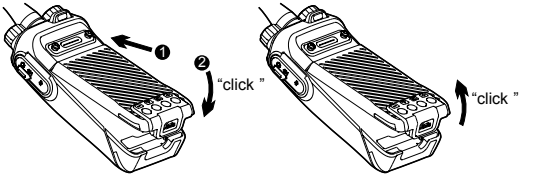
Programmable Keys

For enhanced convenience, you may request your dealer to program the **SK1**, **P1**, **P2**, **P3**, **P4** and **P5** as shortcuts to certain functions. Please refer to the corresponding Feature Book for more details. fore Use



Assembling the Radio

1. Attaching the Battery



Assemble Disassemble

Note

- To remove the battery, turn off the radio first.
- If not attached with battery specified by Hytera, the radio will give an alarm tone to remind you when powering on. Afterwards, the radio will operate properly but the icons of battery power and RSSI will remain unchanged during operation.

2. Attaching the Antenna

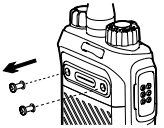


Assemble Disassemble

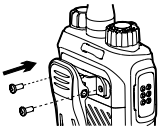
Caution

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

3.Attaching the Belt Clip

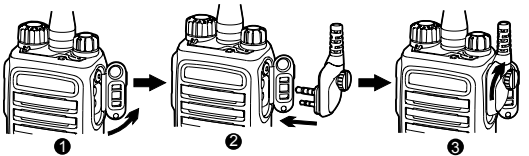


❶ Remove the screws



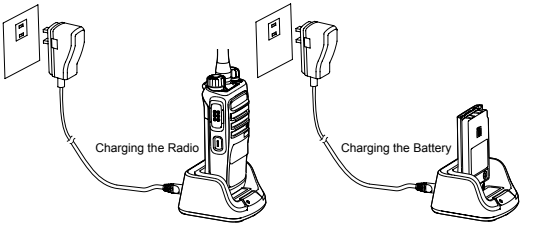
❷ Assemble the Belt Clip

4.Attaching the Accessories



❶ ❷ ❸

Charging the Battery



LED Indication	Current 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 flashes orange slowly	Low current charging
The LED Indicator glows green	Fully charged
The LED Indicator flashes red rapidly	Charging error

Caution

- Make sure the radio is powered off before charging. Read the Safety Information Booklet in advance to get necessary safety information.
- To achieve optimal battery performance, please charge the battery for at least 5 hours before initial use.

LCD Icon

Icon Name	Icon	Radio Status
Battery Power Icon		More bars indicate more battery power.
TX Power Icon		Low power for the current channel.
		High power for the current channel.
Accessory Icon		An accessory is connected.
Operation Mode Icon	DM	Direct Mode Operation: Under this mode, radios can communicate with each other directly.
	RM	Repeater Mode Operation: Under this mode, radios communicate with each other via a repeater.
Monitor Icon		The Monitor feature is enabled.
Roam Icon		The radio is roaming.
Scrambler/ Encrypt		The Scrambler/Encrypt feature is enabled.
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.

Icon Name	Icon	Radio Status
VOX Icon		The VOX feature is enabled.
Missed Call Icon		Missed call(s).
Message Icon		Unread message(s).
		Inbox is full.
RSSI Icon		No signal.
		More bars indicate better signal strength.
Speaker Icon		The speaker is unmuted.
LQO Icon		The LQO feature is enabled.
Call/Contact Icon		● Indicates Private Call during a call. ● Indicates Private Contact in the contact list.
		● Indicates Group Call during a call. ● Indicates Group Contact in the contact list.
		● Indicates All Call during a call. ● Indicates All Call Contact in the contact list.

LED Indicator

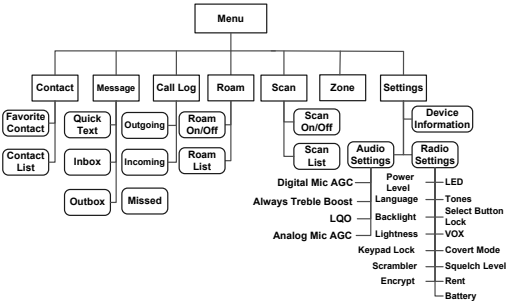


LED Indication	Product Status
The LED indicator flashes green	Powering on
The LED indicator glows green	Receiving
The LED indicator glows red	Transmitting
The LED indicator flashes orange slowly	Scanning or roaming
The LED indicator flashes orange rapidly	Emergency
The LED indicator glows orange	The call is established successfully, and you can hold down the **PTT** key to talk

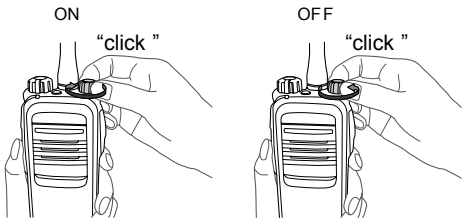
The following menu structure shows all the customizable menu items, which can be programmed by your dealer as per your actual requirements.

To select and confirm the options shown in the menu, press the **OK/ Menu** key and then press the **Up** or **Down** key to select your needed option, finally press the **OK/Menu** key. This manual only provides a menu path when instructing menu operations, for example, to access the contact list, go to “Contact -> Contact List”.

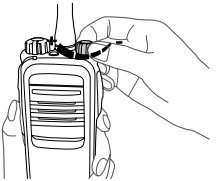
The radio supports menu reset function. When you do not operate the menu for a preset time period configured by the dealer, the radio will automatically return to the home screen. You may request the dealer to change the auto reset time or disable the feature.



Powering On/Off



Adjusting the Volume



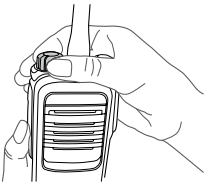
Selecting a Zone

A zone is a group of channels exhibiting the same property, which is programmed by your dealer and can facilitate convenient management over the channel. The radio support 32 zones, and each zone consists of up to 16 channels.

- Via the menu: Go to “Menu -> Zone”, press the **Up** or **Down** key to select an appropriate zone, and then press the OK/Menu key to confirm it.
- Via Programmable Keys: You can toggle to the appropriate zone by pressing the programmed **Zone Up** or **Zone Down** key preset by your dealer.



Selecting a Zone



Selecting a Channel

Selecting a Channel

After the radio is powered on, you can rotate the **Channel Selector Knob** to select an appropriate channel. You can also switch to the designated channel directly by pressing the programmed **Preset Channel** key preset by your dealer.

If the Channel Notify feature is enabled by your dealer or by you via the menu “Settings -> Radio Settings -> Tones”, the radio will announce the channel number upon channel switching.

Locking and Unlocking the Keypad

When the keypad is not in use, you can lock the keypad to avoid mishandling. You can lock or unlock the keypad through any of the following methods:

- Default: Long press **P3** key to lock/unlock the keypad.
- Programmable Key: Press the programmed **Keypad Lock** key preset by your dealer.
- Menu Navigation: Go to “Settings -> Radio Settings -> Keypad Lock” to enable or disable the feature.
  - » Enable: The keypad will be locked automatically if there is no radio operation within the preset time.
  - » Disable: The keypad will not be locked automatically. However, you can lock or unlock the keypad via the default way or **Keypad Lock** key mentioned above.

Note You can go to “Settings -> Radio Settings -> Select Button Lock” to configure the lockable keys or knobs.

Contact

You can manage the contacts via the “Contact” menu.

Contact List

The Contact List is used to save Private Call/Group Call/All Call contacts information which is preset by the dealer. You can access the “Contact List” menu by going to “Contact -> Contact List” or by pressing the programmed **Contact List** key.

In the “Contact List” menu, you can check the detailed contact information (such as Call ID). You can send to a private call contact the following commands: Alert Call, Radio Check, Remote Monitor (Optional), Radio Enable (Optional) or Radio Disable (Optional). Please refer to Feature Book for details.

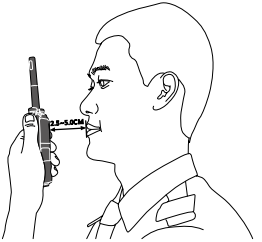
Favorite Contact

The Favorite Contact is used to save regular Private Call/Group Call/All Call contacts information which is configured by you. You can access the “Favorite Contact” menu by going to “Contact -> Favorite Contact” or by pressing the programmed **Favorite Contact** key.

You can add, view or delete the Favorite Contact information in the “Favorite Contact” menu. You can send to a private call contact the following commands: Alert Call, Radio Check, Remote Monitor (Optional), Radio Enable (Optional) or Radio Disable (Optional). Please refer to Feature Book for details.

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: It is a voice call between individual user and another individual user.
- Group call: It is a voice call between one individual user and a predefined group of users. All parties in the group can communicate with each other.
- All call: It is a one-way voice call from any user to all users on a channel.



Call on Digital Channel

You can initiate a private call, group call or all call (programmed by your dealer) through the same operations on digital channel. When calling back, the radio will make a call to the calling party in private call and all call (your radio must be programmed to allow you to call back in an all call); but in group call, the radio will make a call to all parties involved when calling back.

Here takes the private call between Radio A and Radio B as example:

- Preset contact

1. Radio A and Radio B select the same digital channel.
   You may ask your dealer to preset a regular private call/group call/all call contact for each digital channel.
2. Radio A holds down the **PTT** key to initiate a call.
   By holding down the **PTT** key, Radio A can talk to the microphone when the LED indicator glows red and the radio displays the icon .
3. Radio B can receive the call without any operation. When receiving, the LED indicator glows green and the radio displays the icon .Radio B can hold down the **PTT** key to talk when the LED indicator glows orange and the radio displays the icon .
   If Radio B does not respond it, the radio will display appropriate indications.
4. Radio A can receive the call without any operation. When receiving, the LED indicator glows green and the radio displays the icon .
   Radio A can hold down the **PTT** key to talk when the LED indicator glows orange and the radio displays the icon .
   If Radio A does not respond it, the call will end.

- Contact List or Call Log

1. Radio A and Radio B select the same digital channel.
2. Radio A accesses the contact list via menu “Contact -> Contact List”, “Contact -> Favorite Contact” or “Call Log -> Outgoing/Incoming/Missed”.
3. Radio A presses the **Up** or **Down** key to select Radio B.
4. Radio A holds down the **PTT** key to initiate a call.
   By holding down the **PTT** key, Radio A can talk to the microphone when the LED indicator glows red and the radio displays the icon .
5. Radio B can receive the call without any operation. When receiving, the LED indicator glows green and the radio displays the icon . Radio B can hold down the **PTT** key to talk when the LED indicator glows orange and the radio displays the icon .
   If Radio B does not respond it, the radio will display appropriate indications.
6. Radio A can receive the call without any operation. When receiving, the LED indicator glows green and the radio displays the icon . Radio A can hold down the **PTT** key to talk when the LED indicator glows orange and the radio displays the icon .
   If Radio A does not respond it, the call will end.

Note The Call Hang Time (the duration of LED indicator glowing orange) is preset by your dealer.

Call on Analog Channel

- On the analog channel without signaling, the calling operations are the same as that on the digital channel. The difference is that the called parties are all the users on the channel, rather than the preset contact for the channel.
- Please refer to the corresponding Feature Book for operation description on how to make and receive calls on the analog channel with signaling.

You can send the Quick Text message directly. In the inbox, you can reply, forward or delete the text message, and in the outbox you can also resend, forward or delete the message.

Operation: Press the **OK/Menu** key and select the “Message” menu.

Quick Text

Quick Text are frequently used messages preset by your dealer. You can select a Quick Text message and send it directly.

Inbox

The radio saves the received messages into the Inbox and gives every messaae a corresponding icon to indicate its status.

- : Read message
- : Unread message

The inbox can save up to 20 received messages. 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 radio saves the sent messages into the Outbox and gives every message a corresponding icon to indicate its status.

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

The Outbox can save up to 20 sent messages. When the Outbox is full, the earliest message will be overwritten by the latest one automatically.

Available features of this radio are listed below. Please refer to the corresponding Feature Book for details.

Feature Type	Detailed Feature
Radio Features	● Checking the Device Information ● Radio settings: Power Level, Language, Backlight, Lightness, LED Indicator, Alert Tone and Covert Mode ● Convenient functionality: Shortcuts, Call Log, One Touch Call and VOX ● Rent ● Audio Optimization: Mic AGC, Audio Feedback Suppression and LQO
Conventional Common Features	● Scan ● Talk Around
Digital Features	● Access management: Time-out-Timer (TOT) and Transmission Management ● Basic voice services: Private Call and Group Call ● Auxiliary voice service: All Call ● Data Service: Message ● Security: Encryption ● Supplementary Services: Alert Call, Radio Check, Remote Monitor (Optional), Radio Enable (Optional) or Radio Disable (Optional) ● Patented features: Pseudo Trunking and Priority Interrupt (Optional) ● Mobility management: Roam (Optional)

Feature Type	Detailed Feature
Analog Features	Access management: Time-out-Timer (TOT), Transmission Management, Monitor, Squelch Off and Adjust Squelch Level Voice services Security: Scrambler Signaling: HDC1200, 5-Tone and 2-Tone

注意

Follow the instructions below when using the VOX feature:

- You can only enable or disable the VOX feature for one channel instead of all of the channels at a time.
- When using the VOX feature, holding down the internal or external **PTT** key will disable the VOX feature for the current channel. In such case, you can enable the VOX feature by switching the channel, pressing the programmed **VOX** key or restarting the radio.
- The VOX feature settings will remain the unchanged when the radio is powering on and off.
- The VOX Gain Level includes Internal MIC VOX Gain Level and External MIC VOX Gain Level, which can be configured by your dealer or via the menu.
- The VOX MIC Selection can be set to Only External and External First, which is set to Only External by default and can be configured by your dealer.
- To use the VOX feature with an external microphone, make sure the PTT/VOX switch is switched to "VOX" before the radio is powered on and the VOX feature is enabled.
- No matter the VOX feature is enabled or disabled after the radio is powered on, if the PTT/VOX switch is switched to "PTT", you can talk by holding down the internal or external **PTT** key. In such case, switching the PTT/VOX switch to "VOX" will keep the radio transmitting. To make the radio function properly, switch the PTT/VOX switch to "PTT" or restart the radio.

Troubleshooting

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

Phenomena	Analysis	Solution
The radio fails to power on.	The battery may be improperly installed.	Remove the battery and then reattach it.
	The battery power may be used up.	Recharge or replace the battery.
	The battery may be poorly connected due to dirtied or damaged battery contacts.	Clean the battery contacts. If the problem cannot be solved, contact your dealer or authorized service center for inspection and repair.
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 **Volume Control Knob**.
	The antenna may be loosened or improperly installed.	Reattach the antenna after turning off the radio.
	The speaker may be blocked or damaged.	Clean the surface of the speaker. If the problem cannot be solved, contact your dealer or authorized service center for inspection and repair.
You cannot communicate with other members.	The frequency or signaling may not match 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.
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.
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.

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 directly.



Do not hold the product by its 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 radio. For more information of other accessories, please consult your local dealer.

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



Power Supply: MCA08 MCU Multi-unit Rapid-rate Charger (for Li-Ion/Ni-MH batteries),
CH10A06 Dual-Pocket MCU Charger Kit(for Li-Ion/Ni-MH battery, including Dual-Pocket Charger and Switching Power),
PS7501 AC/DC Adaptor,
MCA05 Battery Optimizing System
BL2010 2000mAh Li-Ion battery



Audio: EAM15 3-Wire Earpiece with Transparent Acoustic Tube (Beige),
ESM14 Remote Earbud,
EAM17 Remote Earpiece with Transparent Acoustic Tube,
EHM20 Remote Swivel Earset,
EHM19 Remote C-Earset,
SM26M1 Remote Speaker Microphone,
SM13M1 Remote Speaker Microphone (IP55)



Cable: PC63 Data Cable(USB Port)



Carry Accessories: NCN01 Nylon Carrying Case (Half-folded) (Non-swivel)(Black),
LCBN13 Universal Chest Pack (Nylon) (Black)

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，请参考《功能手册》。

本手册适用于以下机型：
PD560 数字手持终端

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。
本手册中涉及的第三方产品和内容归第三方所有，我司对其准确性、有效性、及时性、合法性或完整性均不提供保证。
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。

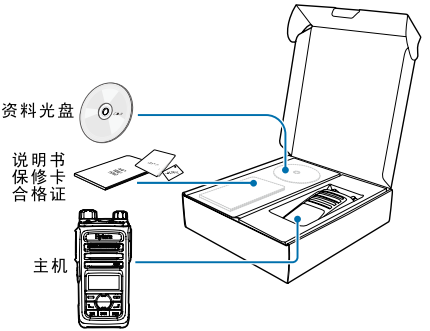
目 录

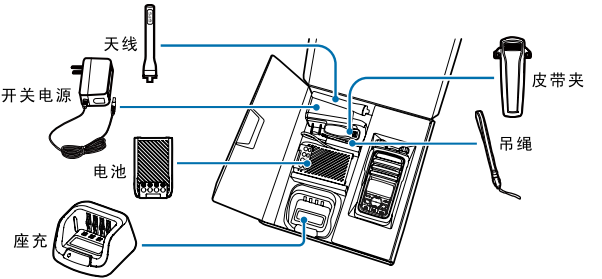
1. 包装清单 ---- 1
2. 熟悉本产品 ---- 2
   部件介绍 ---- 2
   可编程键 ---- 3
3.用前准备 ---- 3
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包装清单

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。

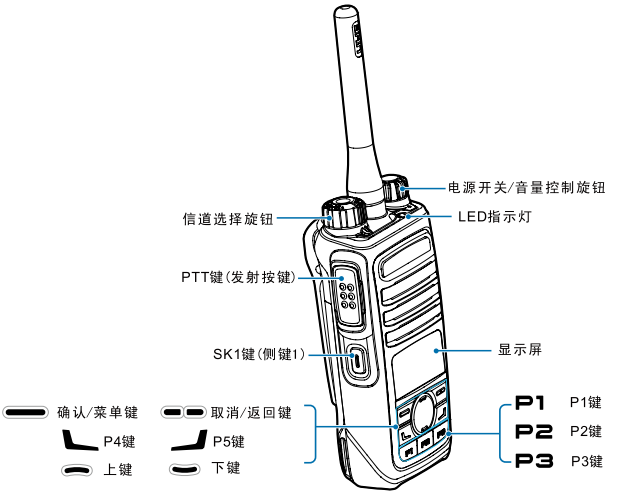
备注 天线频段请参考天线底部色环标签内容。若标签未注明频段，则参考主机标签上的具体频段。

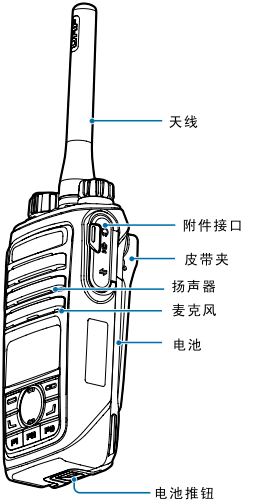




备注 本手册的所有图片仅为示例，请以实物为准。

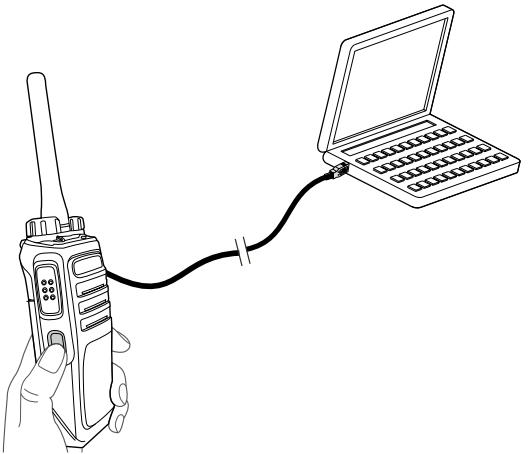
部件介绍


电源开关/音量控制旋钮
信道选择旋钮
LED指示灯
PTT键(发射按键)
SK1键(侧键1)
显示屏
确认/菜单键
取消/返回键
P4键
P5键
上键
下键
P1
P1键
P2
P2键
P3
P3键


天线
附件接口
皮带夹
扬声器
麦克风
电池
电池推钮

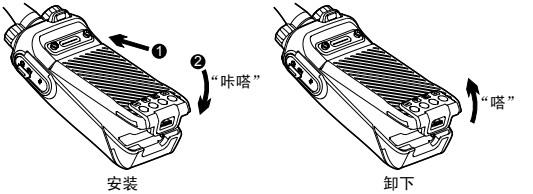
可编程键

为了提升操作便利性，本产品提供6个可编程键：SK1、P1、P2、P3、P4、P5。可由您的经销商编程为功能快捷键，详情请咨询您的经销商。各功能的详细介绍您可以参考对应的《功能手册》。



安装本机

1. 安装电池



备注

- 如需卸下电池，需先关闭本产品。
- 如安装非 Hytera 电池，开机上电提示告警音，开机后正常使用，但使用过程中电池电量和信号强度标识不会变化。

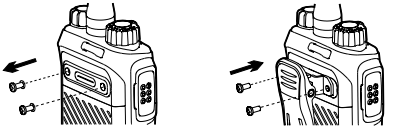
2. 安装天线



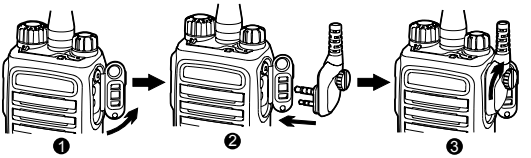
注意

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。

3. 安装皮带夹

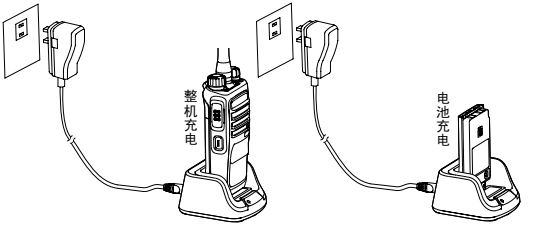


4. 安装附件



充电

请使用我司指定的充电座对电池进行充电，充电示意图如下图所示。



指示灯显示	当前充电状态
红色LED慢闪	待机（空载）
红色LED长亮	正在充电
橙色LED长亮	电池已充满90%的电量
橙色LED慢闪	正在激活
绿色LED长亮	电池已经充满
红色LED快闪	充电过程中出现故障

注意

- 为本产品充电时，建议关闭本产品，并提前参阅《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。

LCD图标

图标名称	图标显示	产品状态
电池电量标识		条数越多，电池电量越多
发射功率标识	L	当前信道功率为低功率
	H	当前信道功率为高功率
附件标识		已连接附件
工作模式标识	DM	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
漫游标识		漫游状态
扰频/加密		已开启扰频或加密功能
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		有未接听的呼叫
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
		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	Q	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



状态指示

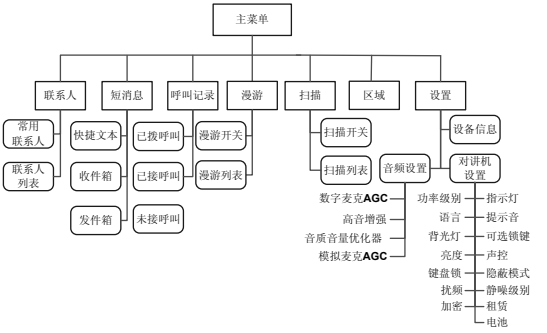
指示灯状态	产品状态
绿灯闪烁	正在开机
绿灯长亮	正在接收
红灯长亮	正在发送
橙灯慢闪	正在扫描或者漫游
橙灯快闪	紧急状态
橙灯长亮	呼叫保持状态，即呼叫成功建立后，各方均处于接收状态，信道资源空闲，此时您可以按住【PTT】键讲话。

菜单导航

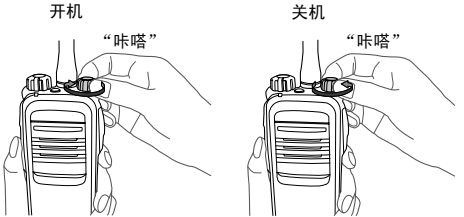
本产品菜单结构如下图所示，展现的是本产品的所有菜单项，您可通过经销商配置是否显示各菜单项。

您需要先按【确认/菜单】键进入主菜单，再通过【上】键/【下】键定位到您需要的子菜单或选项后按【确认/菜单】键进行确认，以完成您的设置。本文档介绍菜单操作时，仅介绍菜单项的顺序，例如，进入联系人列表的路径为“联系人 -> 联系人列表”。

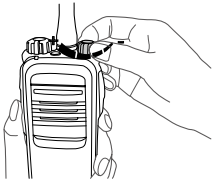
本产品菜单具有自动复位功能，如您在预编程时间（由经销商配置）内没有对菜单进行任何操作，本产品将自动返回待机界面。您可以通过经销商修改自动复位时间、取消自动复位。



开机与关机



调节音量



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

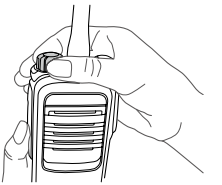
选择区域

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，这样便于您对现有信道进行有效管理。本产品支持32个区域，每个区域最多包含16个信道。

- 菜单：进入“区域”菜单后，按【上】/【下】键来选择所需区域，然后按【确认 / 菜单】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。



选择区域



选择信道

选择信道

开机后，旋转【信道选择】旋钮即可选择所需信道。你也可以通过按【预设信道】快捷键（由经销商设置），切换到指定信道。

如果经销商为本产品或者您通过菜单“设置 -> 对讲机设置 -> 提示音”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。

- 默认：通过长按【P3】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。
  - » 禁止：键盘不会自动锁定。但您可通过默认方式或【键盘锁定】快捷键来锁定或解锁键盘。

备注 需要锁定的按键范围可通过“设置 -> 对讲机设置 -> 可选锁键”菜单路径设置。

管理联系人

您可通过本产品的“联系人”菜单，管理您的联系人。

联系人列表

联系人列表用于保存个呼/组呼/全呼联系人信息，联系人信息由经销商配置。您可以从“联系人 -> 联系人列表”菜单或按【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。您还可对个呼联系人的对讲机进行如下操作：呼叫提示、对讲机检查、远程监听（选配）、对讲机激活（选配）或对讲机遥毙（选配），具体请参见《功能手册》。

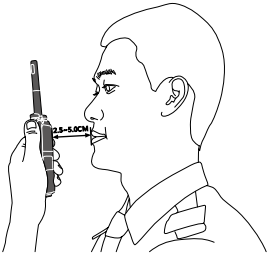
常用联系人

常用联系人用于保存经常联系的个呼/组呼/全呼联系人信息，常用联系人信息由您设置。您可以从“联系人 -> 常用联系人”菜单或按【常用联系人】快捷键进入“常用联系人”。

在“常用联系人”中，您可以添加、查看或删除常用联系人的信息。您还可对个呼联系人的对讲机进行如下操作：呼叫提示、对讲机检查、远程监听（选配）、对讲机激活（选配）或对讲机遥毙（选配），具体请参见《功能手册》。

开机成功后，您可以进行各种呼叫操作。为了保证接收方最佳接收音量，发射时请保持麦克风距离嘴大约2.5～5厘米。

- 个呼：对单个用户发起呼叫。
- 组呼：对组内的所有用户发起呼叫。
- 全呼：对当前信道上所有用户发起呼叫。



数字信道呼叫

您可在数字信道上进行个呼、组呼和全呼（全呼权限需要由经销商开启）。各呼叫的操作方法相同，区别在于：组呼过程中，回呼的对象是所有参与呼叫的人；个呼过程中，回呼的对象是主叫；全呼具有回呼权限需要由经销商开启。

以个呼操作用户A呼叫用户B为例，操作过程如下：

- 通过“发射联系人”方式

1. A和B选择相同的数字信道。
   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/组呼/全呼联系人。
2. A按住【PTT】键发起呼叫。
   LED红灯长亮且LCD显示图标期间，A对着麦克风讲话，讲话结束后松开【PTT】键。
3. B无须任何操作即可接听呼叫，接收语音期间LED绿灯长亮且LCD显示图标。
   LED橙灯长亮期间且LCD显示图标，B可按住【PTT】键对着麦克风讲话。
   如未进行回呼，则本产品将显示未接呼叫提示以提醒您。
4. A无须任何操作即可接听呼叫，接收语音期间LED绿灯长亮且LCD显示图标。
   LED橙灯长亮期间且LCD显示图标，A可按住【PTT】键对着麦克风讲话。
   如未进行回呼，则呼叫结束。

- 通过“联系人”或“呼叫记录”方式

1. A和B选择相同的数字信道。
2. A进入联系人列表，菜单路径“联系人->联系人列表”、“联系人->常用联系人”或“呼叫记录->已拨呼叫/已接呼叫/未接呼叫”。
3. 通过【上】/【下】键选择个呼联系人B。

4. A按住【PTT】键发起呼叫。
   LED红灯长亮且LCD显示图标期间，A对着麦克风讲话，讲话结束后松开【PTT】键。
5. B无须任何操作即可接听呼叫，接收语音期间LED绿灯长亮且LCD显示图标。
   LED橙灯长亮期间且LCD显示图标，B可按住【PTT】键对着麦克风讲话。
   如未进行回呼，则本产品将显示未接呼叫提示以提醒您。
6. A无须任何操作即可接听呼叫，接收语音期间LED绿灯长亮且LCD显示图标。
   LED橙灯长亮期间且LCD显示图标，A可按住【PTT】键对着麦克风讲话。
   如未进行回呼，则呼叫结束。

备注 LED 橙灯长亮时间（即呼叫保持时间）由经销商设置。

模拟信道呼叫

- 在不带信令的模拟信道上，呼叫的操作方法同数字信道，区别在于，呼叫对象是选择该信道的所有用户，而不是信道关联的“发射联系人”。
- 使用信令发起呼叫的操作方法请参见本产品配套的《功能手册》。

您可以直接发送快捷文本，还可以将收件箱的短消息进行回复、转发和删除。发件箱中的短消息进行重发、转发和删除。
操作方法：您可通过【确认/菜单】键进入“短消息”菜单，路径：“短消息”。

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。

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

本产品最多支持20条收到的短消息。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

本产品最多支持20条已发送的短消息。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。

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《功能手册》。

功能分类	具体功能
整机功能	● 查看终端信息。 ● 设置对讲机：功率级别，语言，背光灯，亮度，指示灯，提示音，隐蔽模式。 ● 操作便利性：功能快捷键，呼叫记录，一键呼叫，声控。 ● 租赁。 ● 声音优化：麦克风自动增益控制，音频反馈抑制和音质音量优化器
常规公用功能	● 扫描。 ● 脱网。
数字功能	● 接入管理：超时禁发，发射管理。 ● 基本语音业务：个呼，组呼。 ● 辅助语音业务：全呼。 ● 数据业务：短消息。 ● 安全：加密。 ● 补充业务：呼叫提示，对讲机检查，远程监听（选配），对讲机激活（选配）和对讲机遥毙（选配）。 ● 专利功能：虚拟集群，优先打断（选配）。 ● 移动管理：漫游（选配）。
模拟功能	● 接入管理：超时禁发，发射管理，监听，静噪打开，静噪级别调整。 ● 语音业务。 ● 安全：扰频。 ● 信令：HDC1200，五音，两音。

注意

本机型使用声控功能时需注意以下几点：

- 声控功能为信道参数，只能为每个信道开启或关闭此功能，不能为整机所有信道一次性开启或关闭此功能。
- 在声控功能使用过程中，按下本机型的内部或外部【PTT】键可使当前信道声控功能无效，此时需要通过切换信道、【声控】快捷键或再次开机方式才能恢复声控功能。
- 声控功能设置状态在本机型开机或关机时将保存原来设置状态，不会丢失设置数据。
- 声控增益级别分为“内部声控增益级别”和“外部声控增益级别”，可通过经销商设置或者功能菜单设置。
- 麦克风选择方式分为“仅外部”和“外部优先”，默认为“仅外部”，可通过经销商设置。
- 如果通过外部麦克风使用声控功能，开机前需先将耳咪上的 PTT/VOX 切换开关置为“VOX”，同时确保声控功能开启。
- 无论声控功能是否开启，如果开机后 PTT/VOX 切换开关置为“PTT”，可按住内部或外部【PTT】键进行讲话，但不允许将 PTT/VOX 切换开关切换至“VOX”，否则会导致长发射现象，当出现此现象时，需要将 PTT/VOX 切换开关切换回“PTT”或重新开机，即可使对讲机恢复到正常使用状态。

故障处理

如下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。

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	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。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，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。但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。
按键无法使用	键盘暂时失灵	重新开关机一次。
LCD无显示	LCD暂时失灵	重新开关机一次。

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。



携带或使用本产品过程中，请勿用手提耳机线。



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。



电源类：
- MCA08锂电/镍电MCU快速排充
- CH10A06锂电/镍氢电MCU双插槽充电座套件（包括双兜座充和开关电源）
- PS7501 AC/DC适配器
- MCA05电池分析仪
- BL2010 2000mAh锂电



音频类：
- EAM15三线透明管耳机（米色）
- ESM14分体耳塞式耳机
- EAM17分体透明管式耳机
- EHM20分体可调节耳挂式耳机
- EHM19分体C型耳挂式耳机
- SM26M1扬声器话筒
- SM13M1扬声器话筒（IP55)



线材类：
- PC63写频&下载双功线材



携带类：
- NCN011尼龙携带外套
- LCBN13手持终端通用尼龙胸包

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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