**PMR**
**digital**

**Digital**
Two-Way Radio

# INSTRUCTION MANUAL

## LCD DISPLAY

**Digital**
Two-Way Radio

## To the user：

Thanks for purchasing our transceiver. We believe it will provide great convenience to your work and life.

With novel design and stable performance, you will experience professional and humanized design from our transceiver.We believe that you will be satisfied with the quality and functions, and provide you with convenient, quick, reliable two way voice communication.

Please read the manual carefully before using the product, for better experience functionality and performance of this digital radio.

## User Instructions：

● Do not operate it in flammable, explosive or other transc-eiver-forbidden places such as petrol station, gas station, hospital, airport etc.
● Do not expose it to direct sunlight for a long time; do not place it near any heating devices.
● Do not put it in extremely dusty, moist or splash place; do not place it on unstable surface.
● If it emits smoke or strange odours, remove the battery from the product immediately and contact us or the local dealer.
● Cannot be transmitted without antenna installed.
● Refer service to the well-trained professional technicians only.

# CONTENTS

**Main Functions Features:**

- Digital/Analog Modes
- Chinese/English Menu Display, Large Color Screen
- Multi-call Modes: Individual Call, Group Call, All Call
- Remote Kill and Revive Function
- SMS Function; Edit, Send and Receive
- Emergency Alarm Function: Local and Remote Alarm
- Scan Function: Carrier, Time, Search etc.
- Call Digital Encryption Function
- Call Recording and Playback (Optional)
- GPS Receive Positioning (Optional)

## ■ Supplied Accesories

Please carefully unpack the product and check the main equipment and accessories listed in the following table. If any items are missing or have been damaged during shipment, please contact the dealer immediately.

| Items | Quantity |
|---|---|
| Transceiver | 1 |
| Antenna | 1 |
| Adaptor | 1 |
| User's Manual | 1 |
| Desktop Charger | 1 |
| Battery | 1 |
| Belt Clip (With Screws) | 1 |

| | | |
|---|---|---|
| Antenna | Adaptor | User's Manual |
| Desktop Charger | Battery | Belt Clip |
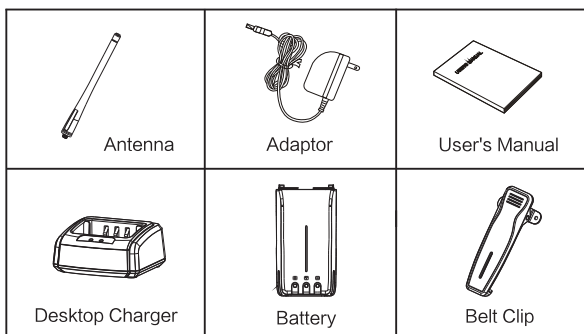
## ■ Charging Precautions

1. Well connect adaptor cable and desktop charger, connect adaptor to AC power, light up charger orange light for 2 seconds then out.
2. Insert battery or transceiver with battery into battery grove, make sure well connected and stable, charger red light on or flashing, start charging.
3. Green light on when full charging.
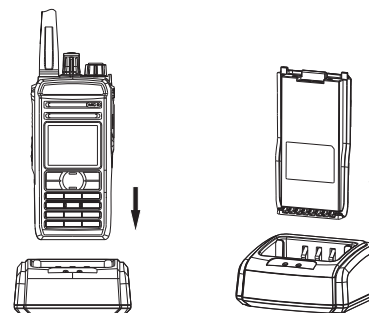


※ **Notice:**

It is suggested to power off before charging, or else battery status can't be well judged by charger.

## ■ Install/Remove Battery Pack

1. Lay battery pack in the battery groove, press battery bottom and push forward until hearing clicked sound, so battery pack fixed well.
2. Press "PUSH" clip on top and lightly pull downward to remove battery pack.

## ※ Notice:
1. Never short circuit battery terminal and throw battery in fire.
2. Never try to remove shell and install battery in dangerous environment, electric spark will cause explosion.

## ■ Install Antenna

Please carefully unpack the product and check the main equipment and accessories listed in the following table. If any items are missing or have been damaged during shipment, please contact the dealer immediately.
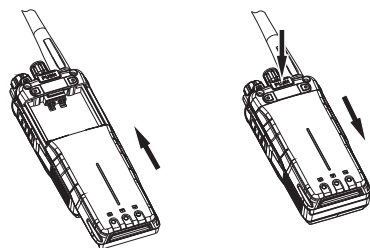
### ◆ Install Antenna
Insert supplied antenna into antenna base, tighten antenna by rotating in clockwise direction until consistent with the base.

### ◆ Remove Antenna
Rotate in anti-clockwise direction to remove antenna.
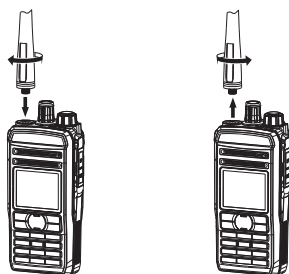


## ■ Install Belt Clip

Remove battery first and aim belt clip at two screw holes on equipment, then screw on by screwdriver. Unscrew to remove belt clip.



## ■ Install External Loudspeaker/Microphone

Open rubber plug and insert loudspeaker/microphone into jacks.

## ■ External View



① Antenna

② [PF1] Side Key:

Programmable key can be set as different functions by PC programming software, check details in chapter of "Programmable Key".

③ [PTT] Key:

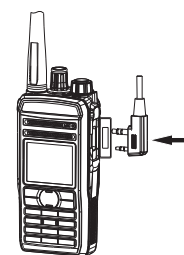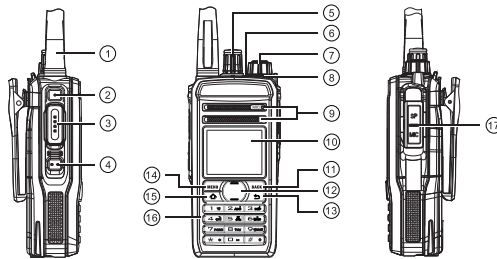Press to transmit signal, release to switch receive standby status.

④ [PF2] Side Key:

Programmable key can be set as different functions by PC programming software, check details in chapter of "Programmable Key".

⑤ Channel Knob:

Rotate to choose from CH1~CH16.

⑥ Alarm Key:

Short press to activate alarm mode, long press to switch off.

⑦ Power/Volume Control Knob:

For power on/off and adjust the volume.

⑧ Status Indicator Light:

Red light on while transmitting, green light on while receiving, red light flash while low battery.

⑨ Loudspeaker/Microphone

⑩ LCD Screen

⑪ [**BACK**]Back/Delete Key:

Press this key to return to previous menu while in menu mode, to delete the number or text input while in messages editing or ID number key in mode.

⑫ [▭]Up/Down Selection Key:

Upward/downward selection while in menu mode.

⑬ [↰]Return Key:

Press this key to return normal mode.

⑭ [**MENU**]Menu Key:

Press this key to enter menu mode while in normal mode.

⑮ [⌂]Enter:

Confirm the information input, to enter next menu while in menu mode.

⑯ [ 0~9\*\# ]Numeric Keypad:

Press numeric keypad to input number, English, Chinese SMS in text editing mode.

⑰ Loudspeaker/Microphone Jack:

For external loudspeaker/microphone jack.

## ■ Programmable Key

For users operating the transceiver according to own operation habit, certain keys can be set as function shortcut keys by PC programming software, including [PF1]/[PF2] Side Key, [MENU]Menu Key, [BACK] Return/Delete Key. [PF1]/[PF2] can be set as long press key or short press key, [MENU]/[BACK] Key can be set as short press key. Alternative functions as follows:

● No Function: Press this key but without any response.

● Standby Interface: Press to return standby interface while in menu status.

● Power Level Adjustment: High/Low power switched.

● Call Log: Enter call log menu directly.

● Monitor: Press to cancel CTCSS/DCS function while current analog channel with CTCSS/DCS, sound output while with carrier signal, and

press again to return initial status.

- Emergency Alarm On: Activate emergency alarm function; press this key to send out alarm sound while in case of emergency.
- Emergency Alarm Off: Press this key to stop emergency alarm.
- Keypad Lockout: Key locked and unlocked switch. All keys are locked except for [PTT] and emergency alarm.
- Squelch On/Off: For receiving weak signal on analog channel.
- Squelch Level Adjustment: Adjust received signal strength for squelch on.
- Contacts List: Directly enter "Contacts List" interface, quickly select the number we need to contact.
- Scan: Receive all channels signal; press this key for scan on/off.
- Temporarily Remove Noise Channel: Temporarily skip uninterested channels while scanning.
- Remote Kill: Make the other transceiver can't be used.
- Revive: Make killed transceiver can be used again.
- Whisper: Talk to microphone in a low voice, the other can still hear clearly. Press this key to switch on/off whisper function.
- Battery Level Display: Current battery level displayed.
- Zone upward switch: Switch to previous zone.
- Zone downward switch: Switch to next zone.

## ■ LCD Display Screen

| Icon | Instruction |
|------|-------------|
| ▼₁₁₁₁ | Indicate signal strength, more scroll bar with stronger signal. |
| ✉ | Inco shows when with unread SMS. |
| ✉ | Inco shows when inbox is full. |
| ♺ | Inco shows when scanning. |
| H | Inco shows when current channel with high power. |
| L | Inco shows when current channel with low power. |
| N | Inco shows when current channel with narrow band in analog channel mode. |

| Icon | Instruction |
|------|-------------|
| 🔒 | Inco shows when keypad locked. |
| 🔊 | Inco shows when loudspeaker on. |
| ⚠ | Inco shows when in emergency alarm status(except for secret alarm). |
| 👤 | Inco shows when current number is individual call number. |
| 👥 | Inco shows when current number is group call number. |
| 👥👥 | Inco shows when current number is all call number. |
| 📞→ | Inco shows when transmitting signal. |
| 📞← | Inco shows when receiving signal. |
| 📞 | Call hold state, not need to redial. |
| 401.12500 | Show channel frequency. |
| CH 8 | Show channel number or channel name. |

## ■ Text Input

Various text inputs selectable for different functions use, such as editing SMS and so on.

### ◆ Input Methods Switching

Input methods including Pinyin Input, Smart English Input, Number Input, and Stroke Input.

Enter text input interface (such as editing SMS), press [#] to switch input methods, corresponding input method displayed on upper right corner of the screen, Pinyin [拼] ,Lowercase [abc] , uppercase [ABC] , number [123] , stroke [笔].

### ● Pinyin Input

According to the required Chinese characters Pinyin order, press corresponding key with letters show, letters or monogram will be displayed in Pinyin display area, press [○] . key to select monogram and [MENU] key to confirm, and then use [○].key to select required

Chinese characters, press [**MENU**] key to confirm.

- Smart English Input

  Input English letters, corresponding monogram will be displayed in display area, and then press [**MENU**] key to confirm. Press [#] key for uppercase and lowercase switch.

- Number Input

  Input numbers by pressing numeric key directly.

- Stroke Input

  Input stroke combinations, press [◯] .key to select Chinese characters, press [**MENU**]  key to confirm.

◆ **Input Key Description**

- [0] Key as space key or number [0] key, in non−number input status, [0] key as space key, while in number input status as number [0].
- [1] Key as delimiter or number [1] key, in Pinyin input status, [1] key as delimiter, while in number input status as number [1].
- [2]− [9] Key for keying in number, letter, pinyin, selecting content etc.
- [#] for Input Method switching.
- [∗] display symbol before inputting, and for Pinyin switch when key in Pinyin.
- [**BACK**] as backspace key, can be used for deleting content in input field, or move cursor from candidate region to input field.
- [◯]As page turning for candidate region content.

■ **Power On/Off**

Rotate Power/Volume Control Knob in clockwise direction to power on, and a beep prompt tone. Rotate this knob in anti−clockwise direction until click sound heard to power off.

■ **Channel Selection**

In standby status, rotate Channel Knob to select channels, channels can't be switched while "Channel Lock" Function is activated.

■ **Volume Adjustment**

Rotate Power/Volume Control Knob to adjust volume.

■ **PTT Transmitting**

◆ **Transmitted Power Selection**

- Enter Menu Item "Set", select Submenu Item "Power".
- Then Press [**MENU**] key to enter "Power level set", high power (Inco shows H) and low power (Inco shows L) be selectable.
- If for long distance communication, please choose high power; and lower power for short distance communication to save battery power.

◆ **Analog Channel**

- Press and hold [PTT] key and speak on the microphone with normal volume.
- Release [PTT] key and back to receiving status.

◆ **Digital Channel**

  Call contacts in ways as below:
- Enter "Contacts" to choose contact person, hold [PTT] key and speak on the microphone with normal volume.
- Enter "Call Log" Menu, then "Outgoing Call" or "Incoming Call" menu item to choose contact person, hold [PTT] key and speak on the microphone.

- In standby status, hold [PTT] key and speak on the microphone. Default contact number as call out number, which can be set in Menu or by PC programming software.
- In standby status, manual input call number, then hold [PTT] key and speak on the microphone.

## ■ Receiving

Receiving signal strength is displayed on LCD Screen while same channel signal received.
- In Analog channel mode, when analog signal received with same CTCSS, and switch on loudspeaker to output calling person voice.
- In Digital channel mode, when individual call, group call, all call received, and switch on loudspeaker to output calling person voice.

Available menu items will be different from Digital and Analog channel, which also can be set by PC programming software.

**Menu Operation Method:**

1. Press [**MENU**] to enter submenu.
2. Press [ ⊖ ] Up/Down to select menu items.
3. Press [ ⌂ ] to enter menu items.
4. Press [**BACK**] to return previous menu.
5. Press [ ↰ ] ESC to quit menu operation and back to standby status.
6. Repeat Step 1−5 as above for all menu operations.

※ **Notice:**

During menu operation, press [PTT] to transmit directly, release [PTT] to return original operation interface.

## ■ Digital Mode Menu

If digital channel is used, available menu items listed as below:

```
Main Menu
|--- Call Log
|--- Contacts
|--- Scan
|--- Messages
|--- Zone Select
|--- Setting
|--- Application Software (Apps)
|--- Channel Information
|--- Radio Information
```

### ◆ Call Log

Press [MENU] to enter main menu then choose "Call Log" item, submenu includes Dialed Calls, Received Calls, Delete All. Dialed and Received calls are recorded. When records are full, earliest call will be replaced by new call
If remote kill and revive functions are activated by PC programming software, also can call in these two ways.

Call Log
|--- Dialed Call
|--- Received Call
|--- Delete All

● Dialed/ Received Call

Enter "Dialed Call" or "Received Call" list, choose one call record and press [PTT] to call out.

● Delete All

Choose "Call Log", then "Delete All" menu item; enter to delete all Dialed and Received call record.

● Enter "Dialed Call" or "Received Call" menu item, choose one call log and press [PTT] to call this number, or press [**MENU**] to enter s ubmenu and view Details, Status Inquire, Add Number, Set Default, delete. Also can achieve remote kill or revive if activated by PC Prog– ramming software. Details as below:

☆ Details: View call log name, number, call type etc.

☆ Add Number: Add selected call log to contact list.

☆ Status Inquire: Check status inquire for one individual call contact without interference, to confirm whether power on or in current channel.

☆ Remote kill: Send remote kill instruction to one contact, to make it unable to use.

☆ Revive: Send revive instruction to one contact, to make it able to use.

☆ Set Default: Call log can be set as default contact for this channel. In the status except for "Dialed Call", "Received Call", "Contacts List", press [PTT] to call default contact. One default contact for one channel, which can be set by PC programming software or in menu.

☆ Delete: To delete this call log.

◆ Contacts

Press [**MENU**] to enter main menu then choose "Contacts" item, submenu includes Contacts list and Add new contacts.

● Contacts List

1. Enter "Contacts list" by "Contacts" Menu or press "Contact list"

shortcut.

2. Edit "Contacts list" by PC programming software or individual call contacts only by manual input.

3. Enter "Contacts list" menu item, choose one contact and press [PTT] to call this number, or press [**MENU**] to enter submenu and view details, status inquire, set default, edit, delete. Also can achieve remote kill or revive if activated by PC Programming software.

4. Submenu items including status inquire, set default, edit, remote kill, revive etc. functions details, please refer to "Call log", other functions details as below:

☆ Details: View contact name, number, call type etc.

☆ Edit: Edit and revise contacts name, number, press [**MENU**] to save and quit.

☆ Delete: To delete this contact record.

● Add New Contacts

Add new contacts into contacts list, contact number at 7 digits at most.

◆ Scan

Enter main menu then choose "Scan" item, then press [**MENU**] again to check submenu of Scan On or Available List:

Scan
|--- Scan On
|--- Available List

● Scan On

Press [MENU] for Scan on to receive signal in other channels. When scan on, press [**MENU**] to show items as follows:

Scan
|--- Scan List
|--- Add Temp CH
|--- Del Temp CH
|--- Scan OFF

1. Scan List

Each channel can be related to a Scan List by PC programming software setting so as to start scanning. Each scan list includes 16 channels at most, can be digital channels or analog channels. Choose Scan List menu item to check other available channels in the list, available channels can be added or deleted for the scan list.

※ **Notice:**

If available channels revised for this channel list, available channels will be revised also for other channels which also related to this scan list.

2. Add/Delete Temp CH

When scanning, if stopped in an unnecessary channel such as inter－ference channel, we can choose "Del Temp CH" to delete this channel and continue scanning. If another channel needs to be tem－porarily added into scan list, choose "Add Temp CH" to add. After quitting scanning, temporarily added or deleted channels operation becomes invalid.

3. Scan OFF

Choose "Scan OFF" and press [**MENU**] to confirm, will quit scanning and back to main interface.

● **Available List**

Enter main menu then choose "Scan" item, then press [**MENU**] again to check submenu of Scan On or Available List:

```
        Scan
        |--- Current CH
        |--- Scan List
        |--- Add CH
```

1. Current CH

Press [**MENU**] to check current working channel.

2. Scan List

Enter "Scan List" Menu item, available channels displayed in the screen, press [**MENU**] again to enter "Del CH" item, press [**MENU**] to delete selected channel from list.

3. Add CH

Enter "Add CH", channels can be added displayed in the screen, 16 channels maximum. Choose one channel, press [**MENU**] to confirm and add channel into list.

◆ **Messages**

Enter main menu then choose "Scan" item, then press [**MENU**] again to check submenu of Scan On or Available List:

```
        Messages
        |--- Write Messages
        |--- Template Messages
        |--- Inbox
        |--- Outbox
        |--- Drafts
```

● **Write Messages**

We can edit messages to send or save into Drafts. Send contacts can be selected in "Messages Edit Menu".

1. Edit Messages:
☆ Input messages content by keypads.
☆ Press [☺] Up/Down to select menu items.
☆ Press [BACK] to delete.

2. After editing messages, press [**MENU**] to select from several operations:
☆ Send: Send messages to Individual Call, Group Call, All Call contacts.
☆ Send And Save: Send messages to Individual Call, Group Call, All Call contacts and save to Outbox.
☆ Save: Save messages to Drafts.

☆ Templates: Choose messages from Templates and insert to this editing message.
☆ Clear: Clear editing message.

● Template Messages

Template messages are set by supplier; we can choose from them, after reading, press [**MENU**] to send to Individual Call, Group Call, and All Call contacts.

● Inbox

Received messages saved here. ⊠Inco shows when new message received. ⊠Inco shows when inbox is full, earliest message will be replaced by new received message. Choose one message and press [**MENU**] to enter submenu of Details and Delete All.
☆ Details: We can reply, forward or delete selected message.
☆ Delete All: Clear all messages in Inbox.

● Outbox

Send messages saved here. When outbox is full, earliest message will be replaced by new sent message.
Choose one message and press [**MENU**] to enter submenu of Details and Delete All.
☆ Details: We can reply, forward or delete selected message.
☆ Delete All: Clear all messages in Outbox.

● Drafts

Drafts saved here. When draft box is full, earliest message will be replaced by new draft message.
Choose one message and press [**MENU**] to enter submenu of Details and Delete All.
☆ Details: We can send, edit or delete selected message.
☆ Delete All: Clear all messages in Drafts.

◆ **Zone Select**

Several channels can form a zone. We can use this item to select required zone, 16 zones available.

◆ **Settings**

We can set the parameters as below accordingly:

```
Settings
|--- Power Level
|--- Squelch Level
|--- Whisper
|--- Keypad Lock
|--- Channel Lock
|--- Alert Tone
|--- Backlight
|--- Home Screen
|--- Battery Saving
|--- Language
|--- Voice Enhance
|--- Voice Encrypt
|--- Password
```

● Power Level

We can set high/low power for current channel. High power for long distance communication, but need more power support. Inco H shows for high power, Inco L shows for low power. Each channel power can be set separately.

● Squelch Level

We can set squelch level from 0~9. Higher level selected with lower interference from noise or extraneous signal, but not easy to receive weak signal. Lower level selected with higher interference from noise or extraneous signal, but easy to receive weak signal.

● Whisper

We can switch on/off whisper function. When whisper on, we can speak into microphone with low voice and the other can still hear clearly.
Also it can be switched on/off by whisper shortcut.

- Keypad Lock

    We can switch on/off keypad lock function. When function on, keypad will be locked when no operation in certain time, only [PTT], Emergency Call Shortcut, Keypad Lock Shortcut can be operated.

- Channel Lock

    We can switch on/off channel lock function. When function on, can't switch channels by keypad.

- Alert Tone

    We can switch on/off alert tones.

- Backlight

    We can set backlight status here.
    ☆ Always: Backlight always on.
    ☆ Delay Closure: Backlight on when operation, and close without operation at certain time.

- Home Screen

    We can choose which information displayed on the screen, including Channel Number, Channel Name, Channel Freq, Zone NO., and Zone Alias.

- Battery Saving

    We can switch on/off battery saving, it extends radio use time.

- Language

    We can select Chinese or English as interface alert language.

- Voice Enhance

    We can switch on/off voice enhance, and choose from level 1-4.

- Voice Encrypt

    We can switch on/off voice encrypt function, if digital list is set for current channel, "Digital List" will be displayed after entering this menu, press [MENU] again to switch on/off. If current channel doesn't set encrypt list, "None" will be shown when entering digital list.
    Voice Encrypt set on/off for current digital channel only; other channels need to be set separately.
    Only digital channels with digital list set has voice encrypt function, digital list can be set by PC programming software.

- Password

    We can set 10 digits power on password here.

◆ Application Software (Apps)

    We can use Calculator in this item.

◆ Channel Info

    We can check the current channel information in this item, including Channel Mode (Digital/Analog), TX Freq, RX Freq.

◆ Radio Info

    We can check radio information in this item, including Radio ID, Radio Model, Freq Range, HW Version, Firmware Version, Date Version, APP Version, and Last Program Time.

■ Analog Mode Menu

    If analog channel is used, available menu items listed as below:

    Main Menu
    |--- Scan
    |--- Zone Select
    |--- Settings
    |--- Apps
    |--- Channel Info
    |--- Radio Info

    Menu items Scan, Zone Select, Setting, Apps, Radio Info operations are same as Digital Mode, please refer to "Digital Mode Menu".
    We can check the current channel information in this item, including Channel Mode, TX Freq, RX Freq, TX Signal, and RX Signal.

We can check the current channel information in this item, including Channel Mode.

## ■ TOT (Time Out Timer)

This function avoids users occupying channel for long time. If continuous transmitting time exceeds supplier setting time, radio will stop transmitting and sound warning tone, please release [PTT]. Please wait for certain time, which can be set by PC programming software, then press [PTT] to transmit again. If pre-warning is set by PC software, pre-warning will be issued before stop transmitting.

## ■ Keypad Lock

Most keys can be locked to avoid incorrect operation.

### ◆ Keypad Lock

Press [#] over 2 seconds to lock keypads, 🔒 Inco displayed.

### ◆ Keypad Unlock

Press [#] again over 2 seconds to unlock keypads, 🔒 Inco disappeared.

## ■ Channel Scan

Channel scanning searching for channels with signal. When scanned, radio will stop on this channel for your communication. Different scan restart modes can be set by PC software, including time control scan and carrier control scan.

### ◆ Time Control Scan

Radio stops scanning and stays on a busy channel, stay for a certain time, which can be set by PC software, then go on scanning even signal exists.

### ◆ Carrier Control Scan

Radio stops scanning and stays on a busy channel until signal vanish,

after certain delayed time, which can be set by PC software, automatically resume scanning.
Enter [MENU] then choose "Scan ON" item and confirm, then radio will scan on corresponding scan list. If we want to stop scanning, press [MENU] then choose "Scan OFF".

### ◆ Scan Reply Channel

When scanning, press [PTT] to transmit on a preset channel, which set by PC software.

## ■ CTCSS/DCS

CTCSS/DCS can be set by PC software when on analog channels, 50 groups of CTCSS and 105 groups of DCS included.

## ■ Emergency Alarm

In case of an emergency, press alarm key to send SOS alarm, long press alarm key or restart radio to stop alarm.

### ◆ Alarm Type:

For acousto-optic reaction set when emergency alarm.
- None: No alarm function means can't press alarm key to activate alarm.
- Whistle Only: Radio issues whistle only.
- Regular: With alarm acousto-optic reaction, reply from others can be received.
- Secret: Without alarm acousto-optic reaction, reply from others can't be received.
- Secret with voice: Without alarm acousto-optic reaction, reply from others can be received.

### ◆ Alarm Mode:

For contents sent out when emergency alarm, which can be set by PC software.
- Emergency Alarm: After pressing alarm key, radio sends out alarm

only and then automatically quit alarm status.
- Emergency Alarm and Call: After pressing alarm key, radio sends out alarm, then press [PTT] to send emergency call.
- Emergency Alarm and Background Sound Automatically Sent: After pressing alarm key, radio sends out alarm, and then background sound automatically sent in periodicity by means of emergency call.

※ **Notice:**

Emergency Alarm: Alarm signals sent by radio makes other radios send alarm.
Emergency Call: Call mode with more optimized than normal call, to ensure smooth communication in case of emergency.

## ■ Voice Encrypt

Voice encryption function is for ensuring call privacy.

### ◆ Encryption Key Setting

- In PC software "Menu Settings", activate "Voice Encrypt" option.
- Fill encryption keys in "Voice Encryption Key List" under "Voice Encryption" in PC software, more digits for better confidentiality performance, 32 digits at most, total 30 groups of key list can be set.
- Choose encryption list wanted among channels in PC software, then input key data in radio.

### ◆ Encryption Switch

- Enter "Settings" item, then choose "Voice Encryption" item.
- Press [MENU] twice to enter "Digital List" item, choose to switch on/off. When switched on, current digital channel call voice is encrypted; when switched off; current digital channel call voice isn't encrypted.

| General Specifications | | |
|---|---|---|
| Frequency Range | 400-470MHz | |
| Channel Capcacity | 256 | |
| Channel Space | 12.5KHz | |
| Frequency Stability | ±1.5ppm | |
| Operating Voltage | DC7.4V±15% | |
| Dimension（W×H×D） | 60mm×135mm×35mm（Antenna Excluded） | |
| Weight | 262g（With Battery and Belt Clip） | |
| Battery Pack | 1800mAh（Li-ion Battery） | |
| | | |
| | | |
| Receiver | | |
| Analog Sensitivity | ≤0.2μV/−121dBm | |
| Digital Sensitivity | −119dBm (BER ≤5%);−117dBm (BER ≤1%) | |
| Intermodulation | ≥50dB @12.5 kHz; ≥55dB @25 kHz | |
| Adjacent Channel Selectivity | ≥50dB @12.5 kHz; ≥55dB @25 kHz | |
| Co-channel Rejection | ≥−8dB | |
| Block | ≥85dB | |
| Audio Power | >1W（16Ω） | |
| Audio Distortion | ≤5% | |
| Transmitter | | |
| RF Power | 5W/1W | |
| Modulation Sensitivity | 10±3mV | |
| Spurious RF Components | ≤−58dB | |
| Adjacent Channel Power | ≤−55dB @12.5KHz; ≤−65dB @12.5KHz | |
| 4FSK Modulation Accuracy | ≤5% | |
| Audio Distortion | ≤5% | |

## Troubleshooting

| NO. | Troubles | Troubleshooting |
|-----|----------|-----------------|
| 1 | Power-on no response | ● Battery power exhausted, please charge or replace battery.<br>● Battery not installed correctly, please remove and reload. |
| 2 | The battery is easily exh-austed after fully charging | ● Battery pack life is ending, please replace it. |
| 3 | Low voice | ● Distance between lips and microphone is too large, best to be 3-10cm.<br>● Incorrect volume setting, please rotate volume knob in clockwise to increase volume. |
| 4 | Cannot communicate | ● Incorrect channel parameters setting, reset parameters.<br>● Incorrect ID information, please choose correct ID.<br>● Communication distance out of effective range. |

FCC Statement:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.
Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

The highest SAR value reported under this standard during product certification for use at the face is 0.720 W/kg and when properly worn the the body is 2.37W/kg, This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0 cm. must be maintained between the user's body and the interphone,including the antenna. Third-party belt-clips, holsters and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided.