

When a text message is predefined, you can edit each message before sending it.

1. Press the **【MENU】** button to enter into the MENU mode.
2. Press the **[▲]/[▼]** button to select “SMS” , press the **【MENU】** button to make a choice.
3. Press the **[▲]/[▼]** button to select “Prefabricated SMS” , press the **【MENU】** button to make a choice.
4. Press the **[▲]/[▼]** button to select required Prefabricated SMS ,press the **【MENU】** button to make a choice.
5. When blinking cursor appears, input the SMS by the keyboard, press the **[◀]** button to move to left one, press the **[▶]** button to move to right one. press **【BACK】** button to delete any useless character when there are contents in the edit area, or else it will return to the upper menu when there is no content in the edit area.
6. After finish the SMS content, press the **【MENU】** button to send or save.
7. When editing the SMS content, by pressing the **【MENU】** button to clear the options and clear all the edited contents, can return to the upper menu firstly.
8. After send, press the **[▲]/[▼]** button to the required name or ID, then press the **【MENU】** button to make a choice. Or press the **[▲]/[▼]** button to Manual Dialing, then press the **【MENU】** button to make a choice, input the user ID and press the **【MENU】** button.
9. The LCD shows the SMS :< User/Call group alias or ID>, confirm that the SMS is being sent.
10. If the message sent successfully, a beep sound, and the screen shows the message has been sent.

Or if the message has not been sent, a high-pitched tone sounds and the screen shows that the message has failed to be sent. If the message fails to be sent, the radio will return to the re-send selection screen.

### ●Use the one-touch call button to send prefabricated SMS

1. Press the pre-programmed one-touch call; send a prefabricated SMS to a predefined alias or ID.
2. The LCD shows the SMS :< User/Call group alias or ID>, confirm that the SMS is being sent.
3. If the message sent successfully, a beep sound, and the screen shows the message has been sent.

Or if the message has not been sent, the screen shows that the message has failed to be sent. If the message fails to be sent, the radio will return to the re-send selection screen.

### ●Manage the failed SMS

In the re-send selection screen, you can choose below options:

■ Re-send      ■ Forward      ■ Edit

### ●Re-send SMS

1. Press the **【MENU】** button to re-send the same SMS to the same user/call group alias or ID.
  2. If the message sent successfully, a beep sound, and the screen shows the message has been sent.
- Or if the message has not been sent, the screen shows that the message has failed to be sent.

### ●Forward SMS

Choose forward to send the SMS to another user/call group alias or ID.

1.Press the [ ▲ ]/[ ▼ ] button to select “Forward” ,press the 【MENU】 button to make a choice.

2.Press the [ ▲ ]/[ ▼ ] button to required alias or ID ,press the 【MENU】 button to make a choice.

Or press the [ ▲ ]/[ ▼ ] button to Manual Dialing, then press the 【MENU】 button to make a choice, input the user ID and press the 【MENU】 button.

3. The LCD shows the SMS :< User/Call group alias or ID>, confirm that the SMS is being sent.

4. If the message sent successfully, a beep sound, and the screen shows the message has been sent.

Or if the message has not been sent, a high-pitched tone sounds and the screen shows that the message has failed to be sent.

### ●Edit SMS

Choose Edit to write SMS before send it out.

NOTE: If there is a subject line (as to the SMS received from the Email program), then you can't edit to this subject line.

1.Press the [ ▲ ]/[ ▼ ] button to Edit, then press the 【MENU】 button to make a choice.

2.When blinking cursor appears, input the SMS by the keyboard, press the [ ◀ ] button to move to left one, press the [ ▶ ] button to move to right one.

press 【BACK】 button to delete any useless character when there are contents in the edit area, or else it will return to the upper menu when there is no content in the edit area.

3.After finish the SMS content, press the 【MENU】 button to send or save.

4.When editing the SMS content, by pressing the 【MENU】 button to clear the options and clear all the edited contents, can return to the upper menu firstly.

5.After send, press the [ ▲ ]/[ ▼ ] button to the required name or ID, then press the 【MENU】 button to make a choice.

Or press the [ ▲ ]/[ ▼ ] button to Manual Dialing, then press the 【MENU】 button to make a choice, input the user ID and press the 【MENU】 button.

6. The LCD shows the SMS :< User/Call group alias or ID>, confirm that the SMS is being sent.

7. If the message sent successfully, a beep sound, and the screen shows the message has been sent.

Or if the message has not been sent, a high-pitched tone sounds and the screen shows that the message has failed to be sent.

### ●Manage the already sent SMS

The SMS was sent to another radio, it will be saved to “Sent item” file.

The sent SMS will be always added to the top list of “Sent item” . The “Sent item” file can store at most 50 SMS sent recently. When the file is full, the next sent SMS will automatically update the SMS record.

NOTE: Press the 【BACK】 button to return to the previous screen at any time.

### ●Read the already sent SMS

Use the Menu function:

1.Press the 【MENU】 button to enter into the MENU mode.

2. Press the [ ▲ ] / [ ▼ ] button, Select “SMS”, press the 【MENU】 button to make a choice.

3. Press the [ ▲ ] / [ ▼ ] button, Select “Sent SMS”, press the 【MENU】 button to make a choice.

4. Press the [ ▲ ] / [ ▼ ] button to required SMS, then press the 【MENU】 button to make a choice.

If the SMS was sent by Email program, it will appear a subject line, the icon at the top right of the screen indicates the state of the SMS.

Send the already sent SMS

When read the already sent SMS, you can choose below options:

■ Re-send    ■ Forward    ■ Edit    ■ Delete

1. When reading the SMS, press the 【MENU】 button again.

2. Press the [ ▲ ] / [ ▼ ] button, Select “Re-send”, press the 【MENU】 button to make a choice.

3. The LCD shows the SMS :< User/Call group alias or ID>, confirm that the same SMS is being sent to the same radio.

4. If the message sent successfully, a beep sound, and the screen shows the message has been sent.

Or if the message has not been sent, a high-pitched tone sounds and the screen shows that the message has failed to be sent.

If the message fails to be sent, the radio will return to the re-send selection screen. Press the 【MENU】 button to re-send to the same user/call group alias or ID.

NOTE: Besides press the 【MENU】 button and the [ ▲ ] / [ ▼ ] button, you can return to this SMS by changing the volume or pressing any other button.

The radio will exit the re-sent selection screen when you press the 【MENU】 button to make a individual call or group call or when you response to group call. And you receive SMS/telemetry message/an emergency call or an alarm.

Or you receive a call alert; the radio will also exit the re-sent selection screen. The radio will exit the re-sent selection screen when you press the 【MENU】 button to make a individual call or group call or when you response to group call. And you receive SMS/telemetry message/an emergency call or an alarm. Or you receive a call alert; the radio will also exit the re-sent selection screen.

>Choose Transfer; send the selected SMS to other group call/user alias or ID.

>Choose Edit, edit the SMS before send it out.

>Choose Delete, delete the selected SMS.

NOTE: If you exit the SMS sent screen when you send the SMS, the radio will update the SMS state in the “Already sent item” file, and will not show the reminder or any beep. If the radio mode changed or out of power before the “Already sent item” updated, the radio will not handle the sending SMS, and will show a icon indicated sent failed. Our radio will solve 5 SMS at the same time. And the radio can’ t send new SMS and will automatically show a icon indicated sent failed at this stage.

### ●Delete the already sent SMS in “Already sent item” file

Use the Menu function:

1. Press the 【MENU】 button to enter into the MENU mode.

2. Press the [ ▲ ] / [ ▼ ] button, Select “SMS”, press the 【MENU】 button to make a choice.

3. Press the [ ▲ ] / [ ▼ ] button, Select “Sent SMS”, press the 【MENU】 button to make a choice.

4. Press the [ ▲ ] / [ ▼ ] button to “Delete ALL”, then press the 【MENU】 button to make a choice.

Or you receive a call alert; the radio will also exit the re-sent selection screen. The radio will exit the re-sent selection screen when you press the **【MENU】** button to make a individual call or group call or when you response to group call. And you receive SMS/telemetry message/an emergency call or an alarm. Or you receive a call alert; the radio will also exit the re-sent selection screen.

>Choose Transfer; send the selected SMS to other group call/user alias or ID.

>Choose Edit, edit the SMS before send it out.

>Choose Delete, delete the selected SMS.

NOTE: If you exit the SMS sent screen when you send the SMS, the radio will update the SMS state in the “Already sent item” file, and will not show the reminder or any beep. If the radio mode changed or out of power before the “Already sent item” updated, the radio will not handle the sending SMS, and will show a icon indicated sent failed. Our radio will solve 5 SMS at the same time. And the radio can’ t send new SMS and will automatically show a icon indicated sent failed at this stage.

### ●Delete the already sent SMS in “Already sent item” file

Use the Menu function:

- 1.Press the **【MENU】** button to enter into the MENU mode.
- 2.Press the [ ▲ ] / [ ▼ ] button, Select “SMS ” ,press the **【MENU】** button to make a choice.
- 3.Press the [ ▲ ] / [ ▼ ] button, Select “Sent SMS” , press the **【MENU】** button to make a choice.
- 4.Press the [ ▲ ] / [ ▼ ] button to “Delete ALL” , then press the **【MENU】** button to make a choice.

5.Press the **【MENU】** button when delete SMS. And choose “YES” , the screen will indicate the entire sent item is cleared.

Or Press the [ ▲ ] / [ ▼ ] button to “NO” when delete SMS, and press the **【MENU】** button to return to the previous screen.

When you choose ” Already sent item” and find there is no SMS, the screen will indicate there is empty in the list, and if the key tone is opened, a low tone beep sounds.

### ●Receive SMS

When your radio is receiving a SMS, the screen displays the sender's alias or ID and a text message icon on the left.

When receive SMS, you can choose below options:

■ Read    ■ Read later    ■ Delete

NOTE: If you press the **【PTT】** button while the radio is displaying the prompt screen, the radio will exit the SMS prompt screen and establishes a individual call or group call.

### ●Check the SMS

1.Press the [ ▲ ] / [ ▼ ] button to Read, then press the **【MENU】** button to make a choice.

2. When the chosen SMS opened in the inbox and this SMS was sent from Email program, and then it will appear a subject line.

3.Press the **【MENU】** button to return to the inbox.

Or press the **【MENU】** button to reply/transfer/delete SMS.

Press the [ ▲ ] / [ ▼ ] button to enter into the “Read Later” or delete selection screen.

- Choose “Read Later” and back to the screen before receive SMS.
- Choose delete the received SMS.

## ●Manage the received SMS

This product will save the received message in the Inbox and can store up to 50 received messages.

Support below SMS options:

■ Reply   ■ Transfer   ■ Delete   ■ Delete All

Store messages in your inbox according to the most recently received in sequence.

You can return to the previous screen by pressing the 【BACK】 button at any time.

## ●Read the SMS in the inbox

- 1.Press the 【MENU】 button to enter into the MENU mode.
- 2.Press the [ ▲ ]/[ ▼ ] button, Select “SMS ” ,press the 【MENU】 button to make a choice.
- 3.Press the [ ▲ ]/[ ▼ ] button to Inbox, press the 【MENU】 button to make a choice.
- 4.Press the [ ▲ ]/[ ▼ ] button to read SMS, if this SMS was sent from Email program, then it will appear a subject line.
- 5.Press the 【MENU】 button to the current SMS, then press the 【MENU】 button again to reply/delete/forward this SMS.

 Indicates unread message.    Indicates read message.

## ●Reply the SMS in the inbox

Use the Menu function:

- 1.Press the 【MENU】 button to enter into the MENU mode.
- 2.Press the [ ▲ ]/[ ▼ ] button, Select “SMS ” ,press the 【MENU】 button to make a choice.

3.Press the [ ▲ ]/[ ▼ ] button to Inbox, press the 【MENU】 button to make a choice.

4.Press the [ ▲ ]/[ ▼ ] button to required SMS, then press the 【MENU】 button to make a choice.

if this SMS was sent from Email program, then it will appear a subject line.

5.Press the 【MENU】 button again to enter into the sub-menu.

6.Press the [ ▲ ]/[ ▼ ] button to reply, then press the 【MENU】 button to make a choice.

7.Press the [ ▲ ]/[ ▼ ] button Write SMS, then press the 【MENU】 button to make a choice.

When a blinking cursor appears, edit text messages by the keyboard.

Or press the [ ▲ ]/[ ▼ ] button to the prefabricated SMS, then press the 【MENU】 button to make a choice. After choose the required SMS, a blinking cursor will appear when press the 【MENU】 button, and you can edit your SMS by keyboard if necessary.

8.After finish the edit, press the 【MENU】 button.

9. The LCD shows the SMS :< User/Call group alias or ID>, confirm that the same SMS is being sent.

10. If the message sent successfully, a beep sound, and the screen shows the message has been sent.

Or if the message has not been sent, the screen shows that the message has failed to be sent.

•If the message fails to be sent, the radio will return to the re-send selection screen.

## ●Delete the SMS in the inbox

Use the Menu function:

1. Press the **【MENU】** button to enter into the MENU mode.
2. Press the [▲]/[▼] button, Select “SMS” ,press the **【MENU】** button to make a choice.
3. Press the [▲]/[▼] button to Inbox, press the **【MENU】** button to make a choice.
4. Press the [▲]/[▼] button to required SMS, then press the **【MENU】** button to make a choice.  
if this SMS was sent from Email program, then it will appear a subject line.
5. Press the **【MENU】** button again to enter into the sub-menu.
6. Press the [▲]/[▼] button to delete, then press the **【MENU】** button to make a choice.
7. Press the [▲]/[▼] button to “YES” when the Delete appears, then press the **【MENU】** button to make a choice.
8. The screen will show the SMS has been deleted.
9. The screen will return to the inbox.

#### ●Delete all the SMS in the inbox

Use the Menu function:

1. Press the **【MENU】** button to enter into the MENU mode.
2. Press the [▲]/[▼] button, Select “SMS” ,press the **【MENU】** button to make a choice.
3. Press the [▲]/[▼] button to Inbox, press the **【MENU】** button to make a choice.
4. Press the [▲]/[▼] button to delete all, then press the **【MENU】** button to make a choice.
5. Press the [▲]/[▼] button to “YES” when the Delete appears, then press the **【MENU】** button to make a choice.

6. The screen will show the inbox was emptied.

When you choose” Inbox” and find there is no SMS, the screen will indicate there is empty in the list, and if the key tone is opened, a low tone beep sounds.

#### ●Encryption

Enabling encryption helps prevent unauthorized access to eavesdropping by other users who are on the channel and use the software encryption method. The transmitted signal and user identification parts are not encrypted. Your radio must have been encrypted on the channel to enable to send encrypted transmissions, even when it is not necessarily required to receive transmissions.

#### ●Basic Encryption

The radio can only be assigned one of the above encryption types. To decrypt an encrypted call or data transmission, the radio which need to be pre-programmed and the transmission radio must have the same "Encryption Key" (for Basic Encryption).

If your radio receives encrypted calls with different encryption keys or different key values and key IDs, you will hear the chaotic transmission sound (basic encryption).

Press the Pre-programmed Encryption button to turn on or turn off the encryption.

#### ●ANI ID code display

Under the Analog mode, you can set PTT ID by the program software. The program software operation route: Channel information-> Analog data-> Display PTT ID, tick this option, the LCD will display the ANI ID code when receive the DTMF signal.

## ●Confidentiality

You can active or remote kill any radio in the system. For example, you maybe want to stop using a stolen radio to avoid the radio being used by the thief, and you want to re-start it when you get back.

NOTE: Performing radio remote kill and activation is limited to active the radios with these functions.

## ●Activate or remote kill function of the host computer settings

In the program software, perform as below steps:

1. Edit-> DTMF-> Signal ->Decode ->Response style, chose activation/remote kill.
2. DTMF number-> input corresponding number.
3. In the channel information, choose the corresponding receive signal system (same system as step 2) tick the decode X (the same number as step 2)
4. When receive the corresponding DTMF number, the activation and remote kill function will be achieved.

## ●Radio remote kill

Use the Menu function:

- 1.Press the 【MENU】 button to enter into the MENU mode.
- 2.Press the [ ▲ ]/[ ▼ ] button to the contact list ,then press the 【MENU】 button to make a choice, entries are in alphabetical order.
- 3.Press the [ ▲ ]/[ ▼ ] button to the required alias or ID, then press the 【MENU】 button to make a choice.

Or press the [ ▲ ]/[ ▼ ] button to manual dialing, then press the 【MENU】 button twice to input the user alias or ID, and then press the 【MENU】 button to make a choice.

- 4.Press the [ ▲ ]/[ ▼ ] button to radio remote kill, then press the 【MENU】 button to make a choice.

5. The LCD shows the radio remote kill: <User alias or ID> and the red LED light flash.

6. Wait for confirmation.

7. If success, a beep sound, and the screen indicate the radio successfully remote killed.

- Or if failed, a beep sound, and the screen indicates it is failed to remote kill.
- During the remote kill period, please don' t press the 【BACK】 button, because you will not receive the confirmation information any more.

## ●Radio Activation

Use the Menu function:

- 1.Press the 【MENU】 button to enter into the MENU mode.
- 2.Press the [ ▲ ]/[ ▼ ] button to the contact list ,then press the 【MENU】 button to make a choice, entries are in alphabetical order.
- 3.Press the [ ▲ ]/[ ▼ ] button to the required alias or ID, then press the 【MENU】 button to make a choice.

Or press the [ ▲ ]/[ ▼ ] button to manual dialing, then press the 【MENU】 button twice to input the user alias or ID, and then press the 【MENU】 button to make a choice.

- 4.Press the [ ▲ ]/[ ▼ ] button to radio activation, then press the 【MENU】 button to make a choice.

5. The LCD shows the radio activated: <User alias or ID> and the red LED light flash.

6. Wait for confirmation.

7. If success, a beep sound, and the screen indicate the radio successfully activated.

>Or if failed, a beep sound, and the screen indicates it is failed to activate.

>During the radio activation, please don't press the **【BACK】** button, because you will not receive the confirmation information any more.

### ●Scan the list

The scan function helps you to receive the communication activity from other channels or groups call, further to know the current activity of the relative team members. The radio can support up to 250 scan lists with a maximum of 32 members. Every scan list supports the mix of analog and digital channels. You can add/delete channel or prioritize channel by editing scan list.

### ●Read the scan list

1. Use the channel knob to choose a channel with pre-programmed scan list;
2. Press the **【MENU】** button to enter into the MENU mode;
3. Press the [ **▲** ] / [ **▼** ] button to scan, then press the **【MENU】** button to make a choice;
4. Press the [ **▲** ] / [ **▼** ] button to read the list, then press the **【MENU】** button to make a choice;
5. Use the [ **▲** ] / [ **▼** ] button to read every member in the list.

>If you set the priority, the priority icon will be displayed to the left of member alias, that means this member is priority 1 channel ① or priority 2 channels ② , and if the priority is set as **Ⓝ** , the icon will not displayed. Several priority 1 channel or priority 2 channels is not allowed in one scan list.

>Or Select to delete a channel in the current scan list, but you cannot delete the first channel in the scan list.

Add scan channel

1. Press the **【MENU】** button to enter into the MENU mode.
2. Press the [ **▲** ] / [ **▼** ] button to scan, then press the **【MENU】** button to make a choice.
3. Press the [ **▲** ] / [ **▼** ] button to add channel, then press the **【MENU】** button to make a choice.
4. Press the [ **▲** ] / [ **▼** ] button to choose the required add channel, then press the **【MENU】** button to make a choice.
5. The screen indicates "Success to add channel" and back to the upper menu automatically.

### ●Scan instruction and method

The radio will check if there are any voice activities to the current channel by pre-program the scan list cycling. The red LED indicator light flash and the scan icon **🔍** will appear in the screen.

During the duplex mode scan period, if you are on a digital channel and your radio locks an analog channel, the digital mode will be automatically switched to analog mode during the entire duration call.

There are two ways to scan:

> Manual scan: start to scan by pre-programming the scan turn on/turn off button or the menu function, when start to scan, the radio will detect all the channels/group calls pre-set in the scan list.

> Automatically scan: when you choose a channel/group calls which have been activated, the radio will start to scan from the automatically scanned channel.

## ●Start and stop scan

Press the pre-programmed scan turn on/turn off button or enter into the scan menu function

1. Use the channel knob to choose a channel with pre-programmed scan list;
2. Press the **【MENU】** button to enter into the MENU mode;
3. Press the **[ ▲ ] / [ ▼ ]** button to scan, then press the **【MENU】** button to make a choice;
4. If the scan was stopped, the screen will indicate to open, or if the scan is activated, the screen will indicate to close.
5. Use the **【MENU】** button to make a choice.
6. When the scan is activated, the red LED indicator light flash, and the scan icon  will appear in the screen;

Or when the scan is stopped, the LED light will be off and no scan icon is displayed.

## ●Scan Reply

During scan, the radio will stop at the channel/group calls when the radio detect activity channel/group calls,

This is called as the pre-programmed time limit for the “Scan suspend time” Progress:

1. Hold the radio in a vertical position and keep it 1-2 inches (2.5-5.0cm) from your mouth. If the function of “Free channel beep” enabled. you will hear a short beep sound when release the **【PTT】** button, this indicates the channel is free and wait for your reply.
2. Press the **【PTT】** button during the suspend time. The LED light is red.
3. Release the **【PTT】** button to receive.

4. If you don't response during the suspend time, the radio will go on scanning.

## Menu setting

Menu setting including:

■Radio setting    ■Radio information    ■Radio configuration

### ■Radio setting

You can make the following settings according to your own preferences and actual needs, so as to maximize their performance.

The setting method: Enter into the menu “Setting ->Radio setting” , select the corresponding setting to set.

The setting items are as below list:

| Setting                 | Options and Range | Description of operation                                                                                                                                                                                                                                                                                           |
|-------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| options<br>Offline      | ON                | ON; the function works only when “Allow offline” of current channel of the host computer is ticked                                                                                                                                                                                                                 |
|                         | OFF               | OFF                                                                                                                                                                                                                                                                                                                |
| Tone/Pro<br>mpt tone    | All tones         | Options: Off/On. Turn off all tones when Off is selected, but do not include emergency alarm tone                                                                                                                                                                                                                  |
|                         | Call permission   | Options: Off / Digital / Analog. Pressing the PTT button will transmit the signal through the channel and will sound a tone that prompts the user to start speaking.<br>>OFF: Turn off this function<br>>Digital: Enable this tone only for digital channels<br>>Analog: Enable this tone only for analog channels |
|                         | Touch-tone        | Options: Off/On. There is no prompt tone when Off is selected                                                                                                                                                                                                                                                      |
| Transmis-<br>sion power | Low               | Low power transmission                                                                                                                                                                                                                                                                                             |
|                         | High              | High power transmission                                                                                                                                                                                                                                                                                            |
| Backlight               | Normally on       | Always on (power saving disabled)                                                                                                                                                                                                                                                                                  |

|                        |                   |                                                                                                            |
|------------------------|-------------------|------------------------------------------------------------------------------------------------------------|
| Backlight              | 5~15 sec          | Turn off the backlight automatically when the time is up                                                   |
| Squelch                | Normally          | Normally filter the useless calls or background noise                                                      |
| Level                  | Strictly          | Strictly filter the useless calls or background noise                                                      |
| Boot interface         | Picture           | Display according to the picture provided by the customer                                                  |
|                        | Preset characters | Two lines, can be edited by host computer                                                                  |
| Keypad lock and unlock | Manual            | Press and hold # to lock, press and hold it again to unlock                                                |
|                        | 5/10/15 sec       | Auto lock; lock automatically at set time; press and hold # to unlock                                      |
| Language selection     | English           | English version, including menu, call tips, call logs and all other interfaces                             |
|                        | Chinese           | Simplified Chinese                                                                                         |
| LED Indicator          | OFF               | The indicator (transmission, receiving, boot, etc.) does not work when it is off                           |
|                        | ON                | Default option is on                                                                                       |
| Voice control          | OFF               | VOX is turned off;                                                                                         |
|                        | ON                | It is not necessary to press PTT when this option is on                                                    |
| Power on password      | Enter password    | Input correct password to enter the setup menu; the password can be configured by default on host computer |
| O' clock               | Time              | Set Hour/Minutes/Seconds                                                                                   |
|                        | Date              | Set Year/Month/Date                                                                                        |
|                        | Time zone         | choose time zone                                                                                           |
| Mode selection         | Channel display   | The channel mode is displayed by channel name                                                              |
|                        | Frequency display | The channel mode is displayed by frequency                                                                 |
| Single call match      |                   |                                                                                                            |
| Group call match       |                   |                                                                                                            |

### ●Off line

In case of the repeater failure or beyond the coverage of the repeater station, but both terminals are in the other's communication range, at this time, you can press the **【Off】** shortcut button to switch to the direct mode, further to achieve directly communication between two terminals. Press the pre-programmed **【Repeater / Off】** shortcut button to open the offline function; press this button again to turn off this function.

The menu function operated as below:

1. Press the **【MENU】** button to enter into the MENU mode.
  2. Press the [▲]/[▼] button to setting, then press the **【MENU】** button to make a choice.
  3. Press the [▲]/[▼] button to radio setting, then press the **【MENU】** button to make a choice.
  4. Press the [▲]/[▼] button to off line, then press the **【MENU】** button to make a choice.
  5. If the radio is in the repeater station mode, the screen indicates “turn off” , or if the radio is under off-line mode, the screen indicates “turn off” .
  6. Press the **【MENU】** button to make a choice.
  7. The screen indicates the off-line is turn on, the icon **↔** flash, or the screen indicates off-line is turn off.
  8. The screen back to the upper menu automatically.
- Even when the radio is turn off, the radio is kept off-line situation.

### ●Radio tone/Prompt tone

Including below options:

- ☐ All tones    ☐ Call permission    ☐ Keyboard tones  
☒ All tones

If necessary, you can start or stop all the radio tones and prompt tones (except the emergency tones)

Turn on or turn off all the radio tones according to the all tones on/off by pre-programmed.

The menu function operated as below:

1. Press the **【MENU】** button to enter into the MENU mode.
2. Press the [ **▲** ] / [ **▼** ] button to setting, then press the **【MENU】** button to make a choice.
3. Press the [ **▲** ] / [ **▼** ] button to radio setting, then press the **【MENU】** button to make a choice.
4. Press the [ **▲** ] / [ **▼** ] button to tone/prompt one, then press the **【MENU】** button to make a choice.
5. Press the [ **▲** ] / [ **▼** ] button to all tones, then press the **【MENU】** button to make a choice.
6. Press the **【MENU】** button to choose turn on, then all the tones and prompt tones started, the screen indicates "All tones applied"  
> Or press the **【MENU】** button the choose turn off, then all the tones and prompt tones turned off, the screen indicates "All tones cancelled"

### ●Turn on or off the keyboard sound

If needed, you can activate and deactivate keyboard sounds of keystrokes. The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press [ **▲** ] / [ **▼** ] to set, then press **【MENU】** to select.
3. Press [ **▲** ] / [ **▼** ] to the radio setting, then press **【MENU】** to select.
4. Press [ **▲** ] / [ **▼** ] to tone/hint, then press **【MENU】** to select.
5. Press [ **▲** ] / [ **▼** ] to keyboard sound, then press **【MENU】** to select.

6. Press **【MENU】** and select open, then turn on keyboard sounds, and screen will display "keyboard sound application".

> Press **【MENU】** and select close, then turn off keyboard sounds, and screen will display "keyboard sound cancellation"

### ●Setting transmitting Power

This function can achieve quick switch of high/medium/low power. When communication distance meets your requirements, low power can be selected to save power. When low power does not enable you to communicate with other walkie-talkies away from distance, and then please choose high power.

According to the preprogrammed [Power Level Adjustment] shortcut keys, switch transmitting power of the current channel between high, medium and low. You can set the transmitting power level of each channel to be high or low. The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press [ **▲** ] / [ **▼** ] to set, then press **【MENU】** to select.
3. Press [ **▲** ] / [ **▼** ] to the radio setting, then press **【MENU】** to select.
4. Press [ **▲** ] / [ **▼** ] to transmitting power, then press **【MENU】** to select.
5. Follow the screen prompt to change the current Settings.
6. Press **【MENU】** to select new power level.
7. Return to the previous menu.

Press **【BACK】** return to the home screen, and screen displays the power level icon

Note: An H above the screen indicates the current high power; M indicates the current medium power; L indicates the current low power.

### ●Setting screen backlight

You can turn on or off the screen backlight of the walkie-talkie if needed. This setting will also affect the back light of the menu and numeric keyboard.

According to the pre-programmed backlight automatic on-off key, switches backlight Settings. The menu functions as follows:

- 1.Press 【MENU】 to enter menu mode.
- 2.Press [ ▲ ]/[ ▼ ] to set, then press 【MENU】 to select.
- 3.Press [ ▲ ]/[ ▼ ] to the radio setting, then press 【MENU】 to select.
- 4.Press [ ▲ ]/[ ▼ ] to backlight, then press 【MENU】 to select.
- 5.The screen indicates normally open, 5S, 10S, 15S options, press 【MENU】 to select normally open, then screen backlight is always open and light.
  - Or if select 5S, 10S, 15S, the screen will turn off the screen backlight without any operation after the corresponding time.

### ●Setting squelch level

You can adjust the squelch level of walkie talkie, filters unusable calls of low signal strength or channels of background noise that higher than normal value.

Normally it is default value (that is regular filtering); strictly filter unwanted calls or background noise, in the same time, calls from remote locations can also be filtered out.

Press preprogrammed strict/normal squelch key to switch the squelch level between normal and strict.

The menu functions as follows:

- 1.Press 【MENU】 to enter menu mode.

- 2.Press [ ▲ ]/[ ▼ ] to set, then press 【MENU】 to select.
- 3.Press [ ▲ ]/[ ▼ ] to the radio setting, then press 【MENU】 to select.
- 4.Press [ ▲ ]/[ ▼ ] to squelch, then press 【MENU】 to select.
- 5.Choose strict or normal, then press 【MENU】 to select.
- 6.Press 【BACK】 return to the home screen.

### ●Turn on or off the boot screen

If needed, you can enable and disable the boot screen display. The menu functions as follows:

- 1.Press [MENU] to enter menu mode.
- 2.Press [ ▲ ]/[ ▼ ] to set, then press 【MENU】 to select.
- 3.Press [ ▲ ]/[ ▼ ] to the radio setting, then press 【MENU】 to select.
- 4.Press [ ▲ ]/[ ▼ ] to the boot screen, then press 【MENU】 to select.
- 5.The screen displays open, press 【MENU】 to enable the boot screen display, and the screen displays it is open.
  - Or the screen shows off and press 【MENU】 to turn off the boot screen, the screen displays it is close.

Note: The radio' s boot screen can be set to simple images or short characters by software.

### ●Key locks and unlock

You can lock the radio keyboard to prevent accidental keystrokes.

Methods include manual keyboard locking and automatic keyboard locking; among them the automatic keyboard locking includes 5S, 10S, 15S three time options. The menu functions as follows:

- 1.Press 【MENU】 to enter menu mode.
- 2.Press [ ▲ ]/[ ▼ ] to set, then press 【MENU】 to select.

3. Press [▲]/[▼] to the radio setting, then press 【MENU】 to select.
4. Press [▲]/[▼] to the keypad lock, then press 【MENU】 to select.
5. Press [▲]/[▼] to manual option, then press 【MENU】 to select, the screen displays manual selection. The keyboard needs to be long pressed 【\*】 on the main screen to lock the keyboard.
6. Press [▲]/[▼] to 5S, 10S, 15S, the screen displays the corresponding time. Then, when the user does not have keyboard operation in the corresponding time, the screen shows lock and returns to the home screen.
7. To unlock the keyboard, press 【MENU】 first, then press 【\*】
8. The screen shows the keyboard unlocking and returns to the home screen.

### ●Language selection

This radio supports both Chinese and English language. The menu functions as follows:

1. Press 【MENU】 to enter menu mode.
2. Press [▲]/[▼] to set, then press 【MENU】 to select.
3. Press [▲]/[▼] to the radio setting, then press 【MENU】 to select.
4. Press [▲]/[▼] to language selection, then press 【MENU】 to select.
5. Press [▲]/[▼] to select the corresponding language, then press 【MENU】 to select.
6. The screen shows the language selected and returns to the main screen.

### ●Turn on or off the LED indicator light

If needed, you can enable and disable the LED indicator light. The menu functions as follows:

1. Press 【MENU】 to enter menu mode.
  2. Press [▲]/[▼] to set, then press 【MENU】 to select.
  3. Press [▲]/[▼] to the radio setting, then press 【MENU】 to select.
  4. Press [▲]/[▼] to the LED indicator light, then press 【MENU】 to select.
  5. The screen displays open, press 【MENU】 to enable the LED indicator light, and the screen displays it is open.
    - Or the screen shows off and press 【MENU】 to turn off the LED indicator light, the screen displays it is close.
- > If disable the LED indicator light, Keypad and backlight automatically close.

### ●Turn on or off VOX function

This function allows you to initiate voice activation for hands-free calls on programmed channels. Regardless of when the microphone on the attachment with VOX function detects the voice, the radio will automatically transmit the signal during the programmed time period. Press the 【PTT】 during the radio operation will disable the VOX function, to re-enable the VOX function need perform one of the following operations:

- Close and re-open the radio;
- Change channel through channel knob;
- Perform the following procedure:

Note: Enabling or disabling this function that is limited to radio of activating these functions. The voice sensitivity of VOX is set in the radio configuration.

To turn on or off this function by pre-programmed VOX open/close key.

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to the VOX, then press **【MENU】** to select.
5. The screen displays open, press **【MENU】** to enable the VOX function.
- Or the screen shows off and press **【MENU】** to turn off the VOX function.

### ●Power-on password

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to the power-on password, then press **【MENU】** to select.
5. Type the correct 8-bit password (can preset with the software), then press **【MENU】** to select.
6. If the password is incorrect, the screen displays the wrong password.  
Display options if the password is correct.
7. If the first line indicates open, press **【MENU】** to display the power-on password application, and then you need to type the correct password to start the radio at the next boot. If the first line indicates close, press **【MENU】** to display the boot password cancellation, and start the radio directly at the next boot.
8. Press **[▲]/[▼]** to change power-on password, then press **【MENU】** to select.
9. Type the new 8-bit password, then press **【MENU】** to select.

10. Type the new 8-bit password again, then press **【MENU】** to select.

11. Display password change successfully.

Note: The power-on password must be set to 8-bit.

### ●Clock

Clock setting divided into:

■Time                      ■Date                      ■Time zone

#### ■Time

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to the clock, then press **【MENU】**.
5. Press **[▲]/[▼]** to the time, then press **【MENU】** to select, which indicates the current time.
6. Press **【MENU】** to enter time setting mode.
7. Press **[▲]/[▼]** to move and choose the number that needs to be changed, the selected number will be displayed in reverse, then type the corresponding number to change time through numeric keypad.
8. Press **【MENU】** to save, screen display time saved.

#### ■Date

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to the clock, then press **【MENU】**.
5. Press **[▲]/[▼]** to the date, then press **【MENU】** to select, which indicates the current date.

6. Press **【MENU】** to enter time setting mode.
7. Press **[▲]/[▼]** to move and choose the number that needs to be changed, the selected number will be displayed in reverse, then type the corresponding number to change date through numeric keypad.
8. Press **【MENU】** to save, screen display date saved.

#### ■Time zone

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to the clock, then press **【MENU】**.
5. Press **[▲]/[▼]** to the time zone, then press **【MENU】** to select, which indicates the current time zone.
6. Press **[▲]/[▼]** to move and choose the time zone that needs to be changed.
7. Press **【MENU】** to save, screen display date saved.

#### ●VFO/MR Mode

Mode setting divided into:

- Channel mode
- Frequency mode

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to the mode setting, then press **【MENU】**.
5. Press **[▲]/[▼]** to select channel mode or frequency mode, then press **【MENU】** to select the corresponding mode, the screen display the mode is selected.

6. The main interface will display the channel name or frequency (receiving frequency) according to the selected mode.

In frequency mode, long press **【BACK】** to switch between frequency mode and channel mode. In frequency mode, you can manually type the frequency.

#### ●Single-call matching

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to single-call matching, then press **【MENU】** to select.
5. The screen displays open, press **【MENU】** to enable the single-call matching.
- Or the screen shows off and press **【MENU】** to turn off the single-call matching.

Once the single-call matching function has been closed, you will no longer need to match all single-call ID, enabling direct calls.

#### ●Group-call matching

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio setting, then press **【MENU】** to select.
4. Press **[▲]/[▼]** to group-call matching, then press **【MENU】** to select.

5.The screen displays open, press 【MENU】 to enable the group-call matching.

• Or the screen shows off and press 【MENU】 to turn off the group-call matching.

Once the group-call matching function has been closed, you will no longer need to match all group-call ID, enabling direct calls.

### ●Call-interruption function

1.Use software to check "allow interruption" that are set in the channel parameter.

2.If the radio is in a state of transmitting, when received the channel parameter setting "call-interruption permitted transmitting conditions" for "call-interruption " of another transmitter signals, automatically switch to the receiving state.

### ●Radio information query

Check the relevant information of this product, including: the radio number (name of the owner and the serial number of the radio) and the radio version (firmware version, CPS version, programming time), etc

Note: You can go back to the previous screen at any time by pressing 【BACK】 .

### ●Check radio ID

The menu functions as follows:

1.Press 【MENU】 to enter menu mode.

2.Press [ ▲ ]/ [ ▼ ] to set, then press 【MENU】 to select.

3.Press [ ▲ ]/ [ ▼ ] to the radio setting, then press 【MENU】 to select.

4.Press [ ▲ ]/ [ ▼ ] to the radio number, then press 【MENU】 to select.

5.The screen shows the radio ID and name.

### ●Check radio version

Check and indicate this radio' s firmware version, CPS version information.

The menu functions as follows:

1.Press 【MENU】 to enter menu mode.

2.Press [ ▲ ]/ [ ▼ ] to set, then press 【MENU】 to select.

3.Press [ ▲ ]/ [ ▼ ] to the radio information, then press 【MENU】 to select.

4.Press [ ▲ ]/ [ ▼ ] to the radio version, then press 【MENU】 to select.

5.The screen shows the current firmware version, CPS version.

### ●Radio configuration

The radio configuration is mainly to edit the channel content.

Configure paths: enter the Settings -> radio configuration menu, and select the corresponding configuration items to configure.

#### ■Receiving frequency

The menu functions as follows:

1.Press 【MENU】 to enter menu mode.

2.Press [ ▲ ]/ [ ▼ ] to set, then press 【MENU】 to select.

3.Press [ ▲ ]/ [ ▼ ] to the radio configuration, then press 【MENU】 to select.

4.Use the keyboard to type the correct radio configuration password (software Settings), then press 【MENU】 to select.

5.Press [ ▲ ]/ [ ▼ ] to receiving frequency, then press 【MENU】 to select.

6.The screen shows the receiving frequency of the current channel, then press **【MENU】** to select.

7.Press the keyboard to type the corresponding number, press **[ ▼ ]** to delete the last number, press **【BACK】** to return to the previous menu.

8.After the changes, press **【MENU】** , the screen shows that the receiving frequency has been saved.

Note: According to frequency range of software limit frequency changes when editing and changing frequency, if less than the frequency range of software, then the final change results will be the minimum value settings on the software, the opposite is maximum.

#### ■Transmitting frequency

The menu functions as follows:

1.Press **【MENU】** to enter menu mode.

2.Press **[ ▲ ]/[ ▼ ]** to set, then press **【MENU】** to select.

3.Press **[ ▲ ]/[ ▼ ]** to the radio configuration, then press **【MENU】** to select.

4.Use the keyboard to type the correct radio configuration password (software Settings), then press **【MENU】** to select.

5.Press **[ ▲ ]/[ ▼ ]** to transmitting frequency, then press **【MENU】** to select.

6.The screen shows the transmitting frequency of the current channel, then press **【MENU】** to select.

7.Press the keyboard to type the corresponding number, press **[ ▼ ]** to delete the last number, press **【BACK】** to return to the previous menu.

8.After the changes, press **【MENU】** , the screen shows that the transmitting frequency has been saved.

Note: According to frequency range of software limit frequency changes when editing and changing frequency, if less than the frequency range of software, then the final change results will be the minimum value settings on the software, the opposite is maximum.

#### ●Channel name

The menu functions as follows:

1.Press **【MENU】** to enter menu mode.

2.Press **[ ▲ ]/[ ▼ ]** to set, then press **【MENU】** to select.

3.Press **[ ▲ ]/[ ▼ ]** to the radio configuration, then press **【MENU】** to select.

4.Use the keyboard to type the correct radio configuration password (software Settings), then press **【MENU】** to select.

5.Press **[ ▲ ]/[ ▼ ]** to channel name, then press **【MENU】** to select.

6.The screen shows the current channel name, then press **【#】** to switch input method to type the related letters, numbers, or Chinese characters, and input methods are same as SMS editing.

7.After the changes, press **【MENU】** , the screen shows that the channel name has been saved.

#### ●Transmit time-out timer

The setting of the time-out timer function prevents the user from occupying the channel for a long time. If the continuous transmitting time exceeds the time set by the distributor, the radio will stop transmit and make the warning sound. If want to stop the warning sound, please loose **【PTT】** . If you need to transmit again, please press the PTT button again after a period of time (specifically set by the dealer)

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio configuration, then press **【MENU】** to select.
4. Use the keyboard to type the correct radio configuration password (software Settings), then press **【MENU】** to select.
5. Press **[▲]/[▼]** to time-out timer, then press **【MENU】** to select.
6. The screen shows infinity, 15S, 30S... 555S option (additive increase in the range of 15S), press **[▲]/[▼]** to the corresponding option, then press **【MENU】** to select, if you select to infinity, then the screen display turn off the time-out timer, if you select others, the screen display xxS has been selected.

In the emergency alarm mode, this function is invalid.

## ●CTCSS

CTCSS can be set only under the simulated channel, includes:

- CTCSS encode
- CTCSS decode

### ■CTCSS encode

The menu functions as follows:

1. Press **【MENU】** to enter menu mode.
2. Press **[▲]/[▼]** to set, then press **【MENU】** to select.
3. Press **[▲]/[▼]** to the radio configuration, then press **【MENU】** to select.
4. Use the keyboard to type the correct radio configuration password (software Settings), then press **【MENU】** to select.
5. Press **[▲]/[▼]** to CTCSS, then press **【MENU】** to select.

6. Press **[▲]/[▼]** to CTCSS encode, then press **【MENU】** to select.
7. The screen shows turn off a group of CTCSS encode number, press **[▲]/[▼]** to close, then press **[▲]/[▼]** to select, there is no CTCSS encode value, the screen shows CTCSS encode is closed;
  - Press **[▲]/[▼]** to CTCSS encode value, then press **【MENU】** to select, which already set the corresponding CTCSS encode value, the screen displays CTCSS encode XX.

### ●Add Channel

Method of cooperating MENU:

1. Entering the menu via **【MENU】** button.
2. Press **[▲]/[▼]** to find SETTING, press **【MENU】** to confirm.
3. Press **[▲]/[▼]** to find CONFIGURATION, press **【MENU】** to confirm.
4. Input the correct configuration password (setting by programming), press **[MENU]** to confirm.
5. Press **[▲]/[▼]** to find Add Channel, press **【MENU】** to confirm.
6. Press **[▲]/[▼]** to select the channel, then press **【MENU】** to enter the relevant channel and add the parameters.

### ●Color code

Color code refers to a system. The same color code is necessary for the terminals communicating with each other. The frequency is the integer within 0~15. The color code only can be set in the digital model. Color code can mark a system, and the terminals that communicate with each other must set the same color code. Method of cooperating MENU:

1. Entering the menu via **【MENU】** button.
2. Press **[▲]/[▼]** to find SETTING, press **【MENU】** to confirm.

3. Press [▲]/[▼] to find CONFIGURATION, press 【MENU】 to confirm.
4. Input the correct configuration password (setting by programming), press [MENU] to confirm.
5. Press [▲]/[▼] to find Color code, press 【MENU】 to confirm.
6. Press [▲]/[▼] to select the color code, then press [MENU] to confirm. The color code selected will be in the display.

### ●Relay Station Time Slot

The relay time slot refers to the slot for voice communication or data transmission, which only can be modified within the digital channels.

Method of cooperating MENU:

1. Entering the menu via 【MENU】 button.
2. Press [▲]/[▼] to find SETTING, press 【MENU】 to confirm.
3. Press [▲]/[▼] to find CONFIGURATION, press 【MENU】 to confirm.
4. Input the correct configuration password (setting by programming), press [MENU] to confirm.
5. Press [▲]/[▼] to find Relay Station Time Slot, press 【MENU】 to confirm.
6. Press [▲]/[▼] to select the relay station time slot, then press 【MENU】 to confirm. The time slot selected will be in the display.

The digital channel of host computer can be configured to dual capacity direct mode. This mode supports parallel direct mode transmission of two two-way radios transmitting on 12.5KHz channel bandwidth. The radios in the same communication group must use the same time slot, and the group using slot 1 will not interfere with the group using slot 2.

### ●VOX

The higher the level of VOX is, the lower the sensitivity is, and the louder the sound to trigger the VOX function is. Method of cooperating MENU:

1. Entering the menu via [MENU] button.
2. Press [▲]/[▼] to find SETTING, press 【MENU】 to confirm.
3. Press [▲]/[▼] to find CONFIGURATION, press 【MENU】 to confirm.
4. Input the correct configuration password (setting by programming), press [MENU] to confirm.
5. Press [▲]/[▼] to find Color code, press 【MENU】 to confirm.
6. Press [▲]/[▼] to select the color code, then press 【MENU】 to confirm. The color code selected will be in the display.

Please adjust the voice gain level correctly according to the current environment and normal speaking volume, so as to avoid frequent accidental triggering (sensitivity too high) or difficult to trigger voice control (sensitivity too low).

The sensitivity of voice control transmission can be modified by writing-frequency software, level 1 is the highest sensitivity level, and level 10 is the lowest sensitivity level.

### ●Transmitting contacts

Transmitting contactor only can be modified within the digital channels.

Method of cooperating MENU:

1. Entering the menu via 【MENU】 button.
2. Press [▲]/[▼] to find SETTING, press 【MENU】 to confirm.
3. Press [▲]/[▼] to find CONFIGURATION, press 【MENU】 to confirm.
4. Input the correct configuration password (setting by programming), press 【MENU】 to confirm.

5.Press [▲]/[▼] to find transmitting contactor, press 【MENU】 to confirm.

6.Press [▲]/[▼] to select the contactor, then press 【MENU】 to confirm. The contactor selected will be in the display.

### ●Group Call List

The group call list only can be modified within the digital channels.

Method of cooperating MENU:

1.Entering the menu via [MENU] button.

2.Press [▲]/[▼] to find SETTING, press 【MENU】 to confirm.

3.Press [▲]/[▼] to find CONFIGURATION, press 【MENU】 to confirm.

4.Input the correct configuration password (setting by programming), press [MENU] to confirm.

5.Press [▲]/[▼] to find the group call list, press 【MENU】 to confirm.

6.Press [▲]/[▼] to select the group call list, which can delete or add the group member. Press [▲]/[▼] to add group call list, which can add the new group call.

| Main technological specification |                                                              |
|----------------------------------|--------------------------------------------------------------|
| Frequency range                  | VHF: 136–174MHz<br>UHF: 400–480MHz (Dual Band)               |
| Memory Channel                   | Up to 3000                                                   |
| Frequency Stability              | ± 1.0ppm                                                     |
| Operating Temperature            | –30°C~+60°C                                                  |
| Operating Voltage                | DC 7.4V                                                      |
| Demission                        | 133*62*36mm ( no including the antenna)                      |
| Weight                           | About 300g( Include in battery and antenna )                 |
| Transmission                     |                                                              |
| Output power                     | High:5W Low:1W                                               |
| Output Consumption               | Analog≤1.6A Digital≤0.9A                                     |
| Consumption                      | ≤0.18A                                                       |
| FM modulation                    | 16K ∅F3E@25KHz 141K ∅F3E@20KHz<br>11K ∅F3E@12.5KHz           |
| 4FSK digital modulation          | 12.5KHz for data:7K60FXD 12.5KHz for data and voice :7K60FXE |
| Modulation Distortion            | ≤5%                                                          |
| Signal-to-noise (wide/narrow)    | ≥45dB@25KHz ≥40dB@12.5KHz                                    |
| Adjacent Channel power           | ≤–65dB ≤–60dB                                                |
| Audio Response                   | 9KHz–1GHz: ≤–36dBm                                           |
| Antenna Port Spurious            | 1GHz–12.75GHz: ≤–30dBm                                       |
| Digital Protocol                 | ETSI–TS102 361–1,–2,–3                                       |
| Vocoder type                     | AMBE+2 TM                                                    |

| Reception                     |                              |
|-------------------------------|------------------------------|
| Analog receive sensitivity    | -122dBm (12dB SINAD)         |
| Digital receive sensitivity   | -120dBm (BER≤5%)             |
| Audio power                   | 1W                           |
| Audio distortion              | <10%                         |
| Audio response                | +1 ~ -3dB                    |
| Signal imitation              | ≥70dB                        |
| Intermediation (Wide/ narrow) | ≥62dB/≥58dB                  |
| Adjacent channel selectivity  | ≥65dB/≥60dB                  |
| Receive Current               | ≤380mA                       |
| PM noise                      | ≥45dB@25KHz / ≥40dB @12.5KHz |

Note: All specifications may be modified without prior notice or liability.

## Troubleshooting:

| Problem                                                                  | Reason                                                                       | Solution                                                                                         |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| The radio doesn't start.                                                 | The battery doesn't be installed correctly.                                  | Remove and re-install the battery.                                                               |
|                                                                          | The battery runs out.                                                        | Charging or change a new battery.                                                                |
|                                                                          | The battery is poor contact causing by damaged or dirty.                     | Clearing the contact. Please get contact with our distributor to repair, if you cannot solve it. |
| The sound is small/ intermittent, or on sound when receiving the signal. | Battery voltage is low.                                                      | Charging or change a new battery.                                                                |
|                                                                          | The voice is too small.                                                      | Turn up the sound.                                                                               |
|                                                                          | The antenna is loose.                                                        | Turn off the radio and re-install the antenna.                                                   |
|                                                                          | The speaker is damaged or dirty.                                             | Clear the speaker. Please get contact with our distributor to repair, if you cannot solve it.    |
| Cannot talk with the members in the same group                           | The frequency is different with other members.                               | Resetting the same frequency with them.                                                          |
|                                                                          | In the different digital or analog channels                                  | Correct to the same channel.                                                                     |
|                                                                          | Too far away from each other                                                 | Get close with each other                                                                        |
| Single call or group call does not work in the digital channel           | Be different in the frequency/channel/color code/ time slot                  | Setting the same frequency/ channel/color code/ time slot                                        |
| Other sound in the channel, which is not from the members                | Interference from the same frequency                                         | Change to new frequency, or correct the squelch                                                  |
|                                                                          | The signal is not set yet.                                                   | Set the signal for all radio in the group                                                        |
| The loud noise                                                           | Be too away from other members.                                              | Get close with other members.                                                                    |
|                                                                          | Poor location, such as blocked by tall buildings, or located in the basement | Move to open environment, restart the radio.                                                     |
|                                                                          | Interfere by the environment or electromagnetic                              | Avoid the device interfering the radio                                                           |

Note: As above method still cannot solve your problem, or you meet other problem, please get contact with local distributor to get the technological support.

### ●Maintenance and clean

To keep the performance and extend the service life, please note the content below for maintain the clear the radio.

#### ■Maintenance

- >Do not store the radio in an environment containing a corrosive electronic circuit material.
- >Do not directly lift an antenna or an external microphone in the course of carrying or using a radio.
- >Cover the appendage interface cover, when attachments are not used.

#### ■Clean

- >Please use clean, dry cloth or brush to wipe off the surface of the walkie talkie and the dust attached to the charging pole on a regular basis.
- >Wipe the radio on dirt with dust, lint free cloth, to prevent poor contact.
- >After long term use of radio, walkie talkie buttons, control knobs and chassis are easy to dirty. You can use neutral detergent (do not use strong corrosive chemicals) and wet cloth to clean. After cleaning, make sure the radio is completely dry; otherwise please do not use it.
- >When the walkie talkie does not in use, please attach the cover on the socket.

Note: Please turn off the radio and remove the battery before clearing.

### Disclaimer

The accuracy and completeness of the contents are sought in the process of compilation, but we do not bear any responsibility for the possible errors or omissions. With the continuous development of technology, we reserve the right to change the design and specification of the product without notice. No copy, modification, translation and dissemination of this handbook may be made in any form without the prior written authorization of our department.

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## 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.

NOTE 1: 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, 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.

NOTE 2: Any 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.

Warning! : The portable radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only," meaning it must be used only during the course of employment by individuals aware of the hazards and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment.

The device complies with RF specifications when the device is used at 25 mm from your front face and 0mm from your body, SAR compliance for body-worn operating configurations is limited to the specific belt clip/ holster/accessories tested for this product.

Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Maximum SAR Value (1g): 1.427W/Kg.

| RF Specification                           |                                                    |                                                                              |
|--------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------|
| Support Frequency Range:                   | 136 MHz~174MHz, 400MHz~470MHz                      |                                                                              |
| Permitted frequency range: * <sup>1</sup>  | 136 MHz~174MHz<br>400MHz~406MHz, 406.1MHz~470MHz   |                                                                              |
| Rated Output Power:                        | <input checked="" type="checkbox"/> High Power: 5W | <input checked="" type="checkbox"/> Low Power: 1W                            |
| Modulation Type:                           | Digital :                                          | 4FSK                                                                         |
| Supported Digital Protocol: * <sup>2</sup> | DMR                                                |                                                                              |
| Channel Separation:                        | Digital :                                          | <input type="checkbox"/> 6.25kHz <input checked="" type="checkbox"/> 12.5kHz |
| Emission Designator: * <sup>3</sup>        | Digital:                                           | 7K60FXW, 7K60FXD                                                             |
| Support data rate:                         | 9.6kbps                                            |                                                                              |
| Antenna Type:                              | External                                           |                                                                              |