- 1. Press [\blacktriangle] / [\blacktriangledown] key to reply, then press [MENU] key to select and find contacts.
- 2. Press [\blacktriangle] / [\blacktriangledown] key to the desired user alias or ID, then press [MENU] key to select.
- >Or press [] / [] key to enter the manual dialing and input the target radio ID, then press [MENU] key to select
- 3. Screen display "Message is sending...",make sure that a message is being sent.
- 4. If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".
- Or if the message is not sent successfully, a high pitched tone will be issued, and the screen will display "SMS failure".

Manage outgoing sent

Once the message is sent to another radio, it will be saved in the "outbox". The latest sent SMS is always added to the top of the "outbox" list. The Outbox folder can store up to 100 recently sent messages. When the folder is full, the next message will automatically change the old message in the folder.

Note: At any time, press[BACK]key to return to the previous screen.

View the sent message

User menu function:

- 1. Press [MENU] key to enter the menu mode
- 2. Press [\blacktriangle] / [\blacktriangledown] key to message, then press [MENU] key to select

- 3. Press [\blacktriangle] / [\blacktriangledown] key to outbox, then press [MENU] key to select
- 4. Press $[\blacktriangle] / [\blacktriangledown]$ key to browse the SMS list of the inbox. If text messages come from e-mail programs,then a topic line will appear.
- 5. Press [MENU] key to select and read the current message, then press [MENU] key to resend, forward, edit or delete the message.

•Resend the sent message

When you view the sent text messages, you can choose the following options:

- Resend
 Forward
 Delete
- 1. When you look at a short message, press [MENU] key again
- 2.Press [\blacktriangle] / [\blacktriangledown] key to resend, then press [MENU] key to select
- 3. Screen display "Message is sending...", confirm send the same message to the same target radio
- 4.If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".
- >Or if the message is not sent successfully, a high pitched tone will be issued, and the screen will display "SMS failure". 5.Press [MENU] to resend SMS to the same user/call group alias or ID.

Note: In addition to pressing [MENU] and [BACK] key, if you change the volume and press any other key, you will return to this message. When you press [PTT] to initiate a single call

or group call, or to respond to a group call, the radio will exit the resend selection screen. If you receive SMS or remote sensing information, emergency call or alarm, or receive a call prompt, the radio will also exit the resend screen. If you respond to a single call by [PTT] key(except when radio is showing the uncalled screen), or at the end of the full call, the screen display will return to the resend selection. Press $[\blacktriangle] / [\blacktriangledown]$ key enter to reply, edit, or delete the selection screen.

>Select reply, send the selected SMS to other call groups/user aliases or ID.

>Select edit, edit the selected SMS before sending it.

>Select delete, delete selected SMS.

•Delete all the sent SMS in the "outbox"

User menu function:

- 1. Press [MENU] key to enter the menu mode
- 2. Press [▲] / [▼] key to message, then press [MENU] key to select
- 3. Press [\blacktriangle] / [\blacktriangledown] key to delete message, then press [MENU] key to select
- 4. Press [▲] / [▼] key to outbox, then press [MENU] key to select
- 5. Press [MENU] key when prompted "Delete the outbox?", and the screen display "SMS has been deleted".
- >When you select the "outbox" but there is no SMS, the screen will display "empty box".

•Receive the message

When your radio receives short messages, the screen displays "receive short messages"

Note: If the promo screen is displayed on radio and press [PTT] key, radio will exit the SMS prompt screen and create a single call or group call.

View the message

- 1. Radio send short message alert when receive short message, the screen display"receive SMS".
- 2. Read short messages by pressing [MENU] key to confirm
- 3. Press [MENU] key to return to the inbox
- > Or press [MENU] key to reply, forward, edit and delete message.

Manage incoming message

Use the inbox to manage SMS. The inbox can store up to 100 messages.

The radio supports the following short message options:

• Reply • Forward • Delete

Store the text messages in the inbox according to the order of recent reception.

Note: At any time, press[BACK] key to return to the previous screen.

•View the message in the inbox

1. Press [MENU] key to enter the menu mode

- 2. Press [▲] / [▼] key to message, then press [MENU] key to select
- 3. Press [\blacktriangle] / [\blacktriangledown] key to inbox, then press [MENU] key to select
- 4. Press [▲] / [▼] key to browse the SMS list of the inbox. If text messages come from e-mail program, a topic line will appear.
- 5. Press [MENU] to select and read the current message, then press the [MENU] key to reply, forward, edit or delete the message.
- > Unread message with a sign \bowtie ,read message with a sign \bowtie .

•Reply short message in the inbox

User menu function:

- 1. Press [MENU] key to enter the menu mode
- 2. Press [▲] / [▼] key to message, then press [MENU] key to select
- 3. Press [\blacktriangle] / [\blacktriangledown] key to inbox, then press [MENU] key to select
- 4. Press [▲] / [▼] key to the required message, press [MENU] key to select and browse the current SMS. If text messages come from e-mail programs,then a topic line will appear.
- 5. Press [MENU] key again to enter the submenu. Press $[\Delta] / [\nabla]$ key to enter the reply, then press [MENU] key with the flashing cursor, enter the SMS editing state, and edit the short message with the keyboard.

- >Or press [MENU] key and [▲] / [▼] key to insert shortcut text, and press [MENU] key and [▲] / [▼] key to select the required shortcut text, and then press [MENU] key with flickering cursor, if need, edit your message with the keyboard.
- 6. After writing SMS, press [MENU] key and [▲] / [▼] key to send, screen display" short message is sending", make sure that a message is being sent.
- 7. If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".
- >Or if cannot send SMS, the screen will display "SMS failure". If the message fails, the radio will return to the resend selection screen.

•Delete messages from the inbox

User menu function:

- 1. Press [MENU] key to enter the menu mode
- 2. Press [▲] / [▼] key to message, then press [MENU] key to select
- 3.Press [\blacktriangle] / [\blacktriangledown] key to inbox, then press [MENU] key to select
- 4.Press [\blacktriangle] / [\blacktriangledown] key to the required message, and press [MENU] key to select and browse the current SMS. If text messages come from e-mail programs,then a topic line will appear.
- 5. Press [MENU] key again to enter the submenu.
- 6. Press [▲] / [▼] key enter to delete, then press [MENU] key to select

- 7. When display"confirm to delete?", press [MENU] key and the screen display"SMS has been deleted".
- 8. The screen returns to the inbox.

Delete all message in the inbox

User menu function:

- 1. Press [MENU] key to enter the menu mode
- 2. Press [▲] / [▼] key to message, then press [MENU] key to select
- 3.Press [\blacktriangle] / [\blacktriangledown] key to delete message, then press [MENU] key to select
- 4..Press [\blacktriangle] / [\blacktriangledown] key to inbox, then press [MENU] key to select
- 5. When screen display"delete inbox?", press [MENU] key and the screen display"SMS has been deleted".
- •When you select "inbox" but there is no SMS, the screen displays "empty inbox".

Encryption

Encryption means encrypt the voice or data of the end-to-end, which provides reliable security for voice or data, and can effectively prevent eavesdropping or stolen.

Basic encryption

Radio only can allocate one of the above encryption types. To decrypt the encrypted call or transmission data, the pre programmed radio must have the same "encrypted key" with transmitted radio(suitable for basic encryption).

If your radio receives an encrypted call from a different encryption key or a different key value and a key ID, you will hear the sound of a messy transmission (basic type encryption). Press preset[encryption]key to turn on or off the encryption function..

Note: In conventional mode, open encryption is the encryption of the current channel. When the channel is switched, the terminal will automatically turn on encryption.

•ANI Identity code display

In analog mode, PTT ID can be configured by write frequency software.

Programming software operation path: Channel > Analog> PTT ID display options check, when receiving DTMF signal, ANI identity code will be displayed on the screen.

Scanning list

Scanning means that when radio scanned on a channel and has activities, it will stay on the channel for listening, so as to understand the current activities of the relevant group members.

The scanning list is a list of channels for radio scanning. Your radio can support 250 scanning lists at most, and each list has a maximum of 32 channels. Each scanning list supports the mixing of analog and digital channels. You can edit can lists to add/remove channels or set priorities for channels.

Start and stop scanning

Press the preset [scan switch] key or enter the scan menu function. The menu operation is as follows:

- Select a pre programmed scan list channel by pressing
 [▲] / [▼] key.
- 2. Press $[\blacktriangle] / [\blacktriangledown]$ key to enter the menu mode
- 3. Press [▲] / [▼] key to scan, then press [MENU] key to select
- 4. Press [\blacktriangle] / [\blacktriangledown] key to scan switch, then press [MENU] key to select
- 5. The screen displays the "open" and "close" options, press [▲] / [▼] key to open, and then press [MENU] key to confirm and activate scan. The LED indicator slowly flashes to orange and displays the scan icon ♥;
- >If you press [\blacktriangle] / [\blacktriangledown] key to close, then press [MENU] to confirm and close scan. When the scan is turned off the LED indicator lights off and the scan icon is not displayed.

•View/add a scan list

- 1.Select a pre programmed scan list channel by pressing $[\blacktriangle] / [\blacktriangledown]$.
- 2.Press [MENU] key to enter the menu mode
- 3.Press [\blacktriangle] / [\blacktriangledown] key to scan, then press [MENU] key to select
- 4.Press [▲] / [▼] key to scan list, then press [MENU] key to select
- 5.Press [▲] / [▼] key to select the operated scan list, and press [MENU] key to select

- >If you select "no", no scanning list is added.
- 6.Press [▲]/[▼] key to enter "edit/view" menu, then press [MENU] key to select
- 7.Press [\blacktriangle] / [\blacktriangledown] key to view the channel in the scan list and press [MENU] key to set or delete the priority channel in the scan list.
- >Or select the "add channel" in the current scan list, then add a new channel by pressing [MENU] key.
- 8. Select a channel in the current scan list:
- >If do not need to scan, you can choose to" delete the channel" to delete a channel in the current scan list, but you cannot delete the first channel in the scan list.
- >If need to listen the activities of a channel first, you can choose the "priority channel" as the priority channel 1 or the priority channel 2.

Note: If priority is set, the priority icon[P1] or [P2] displayed on the left side of the channel /member alias, which indicates that the channel/member is priority channel 1 or priority channel 2. If priority is not set, priority icon is not displayed. In a scan list, there should not be multiple priority 1 or priority 2 channels.

Scanning instructions and methods

When the scan is started, your radio checks the current channel for voice activity by means of a circular pre programmed scan list. The LED indicator slowly flashes to orange and the scanning icon appears on the screen.

During a digital and analog hybrid scan, if you are on a digital channel and you radio locks an analog channel, it will automatically switch from digital mode to analog mode during the entire duration of the call. Vice versa.

There are two kinds of scanning methods:

>Manual scanning: start scanning according to pre programming for scan open /close key or menu function, the radio will detect all channels / call groups in the presupposed scan list.

>Automatic scanning: when you select a channel/conversation group that has activated automatic scanning, the radio starts scanning from the channel that are activated automatically.

Scanning reply

The radio detects the active channel/call group when scanning, the radio stays at the channel/call group for listening (this is called the "scan hanging time" preprogramming time limit), and the LED indicator light is bright green. The scan stays on the non-priority channel, and the display icon is ① . If it stays in priority channel 1 or 2, the displays icon is [P1] of [P2].

1.Hold the radio and put it in a vertical position and maintain a distance of 1 to 2 inches (2.5 to 5 centimeters) with the mouth. If the "channel available hint" is enabled, when the transmitter is released [PTT] key, you will hear a short note, which indicating that the channel is available and waits for your answer.

- 2.Press [PTT] key during the hanging time, and the LED indicator is red.
- 3.Release[PT] key to listen.
- 4.If you do not respond within the hanging time, the radio will continue to scan.

Menu setting

The setting menu includes the following:

Radio Set

Radio Info

Radio Cfg

Radio set

You can set the following settings for your machine according to your preferences and actual needs so that it can maximize its effectiveness.

Setting method: Press the [MENU] key to enter the "Settings -> Radio Set" menu, select the appropriate setting items.

Talk around

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:

- 1.Press the[MENU] button to enter into the MENU mode.
- 2.Press the [\blacktriangle] / [\blacktriangledown] button to setting, then press the [MENU] button to select.
- 3.Press the [\blacktriangle] / [\blacktriangledown] button to radio setting, then press the [MENU] button to select.
- 4.Press the [\blacktriangle] / [\blacktriangledown] button to off line, then press the [MENU]button to select.

- 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 select.
- 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.

Tones/Alerts

Contains the following options:

- >Silence
- >Keypad Tone
- >Low power tone
- >SMS alert tone
- >Single call tone
- >Group call tone
- >Channel Notify

Silence

If needed, you can enable or disable the mute of the radio (except for the emergency warning).

The menu function operates as follows:

- 1. Press [MENU] to enter menu mode.
- 2. Press [\blacktriangle] / [\blacktriangledown] to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.

- 4. Press [▲] / [▼] to "Tones/Alerts", then press [MENU] to select.
- 5. Press [\blacktriangle] / [\blacktriangledown] to Silence, then press[MENU]to select.
- 6. Press[MENU]to "On" ,the Mute function will be enabled, the screen displays "Setting successful" .
- >or Press[MENU]to "off" ,the Mute function will be off, the screen displays "Setting successful" .

Note: After Radio silence turn on, the first line of the screen will show \P^{\times} ,all key tones and channel announcements will be turned of

•Turn on or off Keypad Tone

If desired, you can activate and deactivate keystrokes on the keyboard. The menu function operates as follows:

- 1. Press [MENU] to enter menu mode.
- 2. Press $[\blacktriangle] / [\blacktriangledown]$ to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [▲] / [▼] to "Tones/Alerts", then press [MENU] to select.
- 5. Press [\blacktriangle] / [\blacktriangledown] to Keypad Tone, then press [MENU] to select.
- 6. Press [MENU] to "On" ,then press the [MENU] key to confirm that the key Beep is enabled. The display shows "Key Beep On" .
- >or Press [MENU] to "off" ,then press the [MENU] key to confirm turning off the keyboard sound. The screen displays "Key Beep Off"

Turn on/off channel Notify

If needed, you can activate and deactivate the channel Notify feature.

The menu function operates as follows:

- 1. Press [MENU] to enter menu mode.
- 2. Press $[\blacktriangle] / [\blacktriangledown]$ to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [▲] / [▼] to "Tones/Alerts", then press [MENU] to select.
- 5. Press [\blacktriangle] / [\blacktriangledown] to "Channel Notify", then press [MENU] to select.
- 6. Press [MENU] to "On" ,then press the [MENU] key to confirm that the Channel Notify is enabled. The display shows "Channel Notify On" .

>or Press [MENU] to "off" ,then press the [MENU] key to confirm turning off Channel Notify. The screen indicates "Channel Notify Off".

Note: After the channel Notify is turned on, when the walkie-talkie is switched on or the channel is switched, the current channel number will be broadcasted.

•TX 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 $[\blacktriangle] / [\blacktriangledown]$ to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [\blacktriangle] / [\blacktriangledown] to "TX power", then press [MENU] to select.
- 5. Follow the screen prompt to change the current Settings.
- 6. Press [MENU] to select new power level.
- >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.

Set 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 [\blacktriangle] / [\blacktriangledown] to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [▲] / [▼] to backlight, then press [MENU] to select.
- 5. The screen indicates normally open, normally off,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.

Backlight delay time setting

The backlight delay time setting applies only to the backlight timing mode. The menu function operates as follows:

- 1. Press [MENU] to enter menu mode.
- 2. Press [\blacktriangle] / [\blacktriangledown] to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [\blacktriangle] / [\blacktriangledown] to "Backlight" , then press [MENU] to select.
- 5. The screen displays "Backlight" and "Backlight Delay" options. Press the [▲] / [▼] to select "Backlight Delay" and press the [MENU] key to select.
- 6.The screen shows "Backlight Delay XX(s)", press [▲]/ [▼] to select more appropriate delay time (05 to 15 seconds optional), then press [MENU] to confirm backlight delay setting, indicated "backlight 5 sec/10sec/15sec" is displayed and back to the upper menu.

Note: If the backlight is set to timed off, if you select 5S to 15S, the screen will turn off the screen backlight after the corresponding time without any user operation.

Squelch

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.

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 [\blacktriangle] / [\blacktriangledown] to "squelch", then press [MENU] to select.
- 5. Choose "strict" or "norma" I, then press [MENU] to select. Press [BACK] return to the home screen

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 $[\blacktriangle] / [\blacktriangledown]$ to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.

- 4. Press [\blacktriangle] / [\blacktriangledown] to the screen, then press [MENU] to select.
- 5. Press [\triangle] / [∇] o select "images" or "default character", then press [MENU] to enable the corresponding boot screen.

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

Language

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

- 1. Press [MENU] to enter menu mode.
- 2. Press [\blacktriangle] / [\blacktriangledown] to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [\blacktriangle] / [\blacktriangledown] to language selection, then press [MENU] to select.
- 5. Press [\blacktriangle] / [\blacktriangledown] to select the corresponding language, then press [MENU] to select. The screen shows the language selected and returns to the main screen.

Note: When select Chinese, if channel notify is turned on, the channel number will be notify to Chinese. When select English, if channel notify is turned on, the channel number will be notify to English.

●Turn LED on or off

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 $[\blacktriangle] / [\blacktriangledown]$ to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [\blacktriangle] / [\blacktriangledown] 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.

Note: If the LED indicator is turned off, The transmitting and receiving indicators will be turned off.

Vox

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 [] / [] Key;
- Perform the following procedure

Note: Enabling or disabling this function that is limited to radio of activating these functions.

The menu functions as follows:

- 1. Press [MENU] to enter menu mode.
- 2. Press $[\blacktriangle] / [\blacktriangledown]$ to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [\blacktriangle] / [\blacktriangledown] 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.

Gain level

The higher the gain level, the higher the voice level, and the lower the sensitivity. The louder the voice volume is, the higher the voice control level is. The menu function operates as follows:

- 1. Press [MENU] to enter menu mode.
- 2. Press $[\blacktriangle] / [\blacktriangledown]$ to set, then press [MENU] to select.
- 3. Press [\blacktriangle] / [\blacktriangledown] to the radio setting, then press [MENU] to select.
- 4. Press [\blacktriangle] / [\blacktriangledown] to "VOX", then press [MENU] to select.
- 5. The screen shows "voice control switch" and "gain level" selection
- 6.Press [\blacktriangle]/[\blacktriangledown] to select the appropriate gain level value, and then press [MENU] to select. The screen displays "Setup Successful" .

Note: Please adjust the voice control gain level correctly according to the current environment, the user's normal speech volume, etc., so as to avoid frequent accidental triggering of voice control (high sensitivity) or difficulty in triggering voice control (low sensitivity).

>The voice-activated transmit gain level can be modified by the write frequency software, level 1 is the highest sensitivity level, and level 9 is the lowest sensitivity level.

Match single call

The menu functions as follows:

- 1. Press [MENU] to enter into the Menu mode.
- 2. Press $[\blacktriangle] / [\blacktriangledown]$ to enter into Setting, then press [MENU] to select.
- 3. Press [▲] / [▼] to enter into Radio Setting,then press [MENU] to select.
- 4. Press [▲] / [▼] to enter into Single call, then press [MENU] to select.
- 5. The LCD indicate "ON/OFF" options, press [] / [] to select ,then press [MENU] to save, and select the matched type.
- >Select"ON" to start the match of single call.
- >Select"OFF"to over the match of single call. After turn off the single call match function, it will not need to match all the single call ID, and can communicate directly.

Match group call

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [\blacktriangle]/[\blacktriangledown] to enter into Setting, then press [MENU] to select.
- 3.Press $[\blacktriangle] / [\blacktriangledown]$ to enter into Radio Setting,then press [MENU] to select.
- 4.Press [▲] / [▼] to enter into Group call,then press [MENU] to select.
- 5.The LCD screen indicate "ON/OFF" options, press [▲]/[▼] to select ,then press [MENU] to save, and select the matched type.
- >Select"ON" to start the match of group call.
- >Select"OFF"to over the match of group call.After turn off the group call match function, it will not need to match all the group call ID, and can communicate directly.

Voice Recorder(optional)

Note: The voice recorder is optional function, it depends on the firmware version. Low version will not support the voice recorder function. This recorder function will record the whole process of communication effectively and save the communication to the terminal. This radio can record up to five hours.

♦Voice recorder ON-OFF

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press $[\blacktriangle] / [\blacktriangledown]$ to enter into Setting, then press [MENU] to select.

- 3.Press [▲]/[▼] to enter into Radio Setting,then press [MENU] to select.
- 4.Press [▲]/[▼] to enter into Recording,then press [MENU] to select.
- 5.Press [▲] / [▼] to enter into setting,then press [MENU] to select.
- 6.Press [▲] / [▼] to enter into option of "ON/OFF", then press [MENU] to select.
- >After start the voice recorder function, the radio will record for every call, and save into the record menu.
- >If necessary, can ask dealer to pre-programmed the [Recording switch] key to turn on or turn off the function.

Voice recorder selection

The voice recorder for this radio can be selectn to receive record, or transmit record, or receive and transmit record.

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [▲]/[▼] to enter into Setting, then press [MENU] to select.
- 3.Press [▲] / [▼] to enter into Radio Setting,then press [MENU] to select.
- 4.Press [▲]/[▼] to enter into Recording,then press [MENU] to select.
- 5.Press [▲]/[▼] to enter into setting,then press [MENU] to select.
- 6.Press [▲]/[▼] to enter into the record selection,then press [MENU] to select.

7.The LCD screen will indicate choice of "Receive record√ Transmit record√ Receive/transmit record″, press [▲]/
[▼] to select, and then press [MENU] to confirm.

>If select "Receive record", only record the incoming call during the communication;

>If select "Transmit record", only record the outgoing call during the communication;

>If select "Receive/transmit record", record both incoming call and outgoing call during the communication.

♦Voice recording list check and playback

Voice recording list management including record playback, record deletion, record properties view.

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.
- 3.Press [▲] / [▼] to enter into Radio Setting,then press [MENU] to select.
- 4.Press [▲] / [▼] to enter into Recording,then press [MENU] to select.
- 5.Press [▲] / [▼] to enter into list,then press [MENU] to select.
- 6.The LCD screen will indicate the catalog of recorders, press [▲] / [▼] to select the record file,and then press [MENU] to select.

>If select Play, the LCD screen will indicate the record play and playback the selectn record;

>If select "Delete", the record will be deleted;

>If select "Detail", you can check the ID,call in/call out,date, time,record duration etc.

♦Voice recorder deletion

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.
- 3.Press [▲] / [▼] to enter into Radio Setting,then press [MENU] to select.
- 4.Press [\blacktriangle] / [\blacktriangledown] to enter into Recording,then press [MENU] to select.
- 5.Press [\blacktriangle] / [\blacktriangledown] to enter into Delete all,then press [MENU] to select.
- 6.The LCD screen will indicate "Confirm to delete??",then press [\blacktriangle] / [\blacktriangledown] to select the record file,and will delete all the record files.

Radio information search

Search the radio information, including: radio number(the name of the owner and serial number for the radio)and the radio version(firmware version, CPS version)etc.

Note: Press [BACK] to return to the previous screen at anytime.

•Check the Radio ID

The menu functions as follows:

- 1.Press[MENU] to enter into the Menu mode.
- 2.Press [\blacktriangle] / [\blacktriangledown] to enter into Setting, then press [MENU]to select.

- 3.Press [\blacktriangle] / [\blacktriangledown] to enter into Radio information,then press[MENU]to select.
- 4.Press [▲] / [▼] to enter into Radio number,then press [MENU]to select.
- 5. The LCD screen will indicate the owner's name and radio ID.

Check the Radio version

Check and indicate the radio is firmware version and CPS version information.

The menu functions as follows:

- 1.Press [▲]/[▼] to enter into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.
- 3.Press [▲] / [▼] to enter into Radio information,then press [MENU] to select.
- 4.Press [\blacktriangle] / [\blacktriangledown] to enter into Radio version,then press [MENU] to select.
- 5.The LCD screen will indicate the current firmware version and 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.

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 into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.
- 3.Press [▲] / [▼] to enter into Radio setting,then press [MENU] to select.
- 4.Press [▲] / [▼] to enter into transmit time-out timer,then press [MENU] to select.
- 5.The LCD screen indicates "TOT": XXX, press [\blacktriangle] / [\blacktriangledown] to the corresponding option (additive increase in the range of 5S), then press [MENU] to select.

Note: In the emergency alarm mode, this function is invalid.

Transmitting contacts

Transmitting contactor only can be modified under the digital channels.

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.

- 3.Press [▲] / [▼] to enter into Radio setting,then press [MENU] to select.
- 4.Press [\blacktriangle] / [\blacktriangledown] to enter into transmitting contacts,then press [MENU] to select.
- 5.Press [\blacktriangle] / [\blacktriangledown] to select the transmitting contacts in the list, then press [MENU] to select. The LCD screen will indicate "Set successfully" and return to the previous menu.

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. The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.
- 3.Press [▲] / [▼] to enter into Radio setting,then press [MENU] to select.
- 4.Press [\blacktriangle] / [\blacktriangledown] to enter into color code,then press [MENU] to select.
- 5.Press [▲] / [▼] to selcet the the color code, then press [MENU] to select. The LCD screen will indicate "Set successfully" and return to the previous menu.

Time slot

The time slot is a time slot for selecting a voice call and data transmission, and the set time slot value is time slot 1 or time slot 2. Can only be set under the digital channel. The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.
- 3.Press [▲] / [▼] to enter into Radio setting,then press [MENU] to select.
- 4.Press [\blacktriangle] / [\blacktriangledown] to enter into time slot,then press [MENU] to select.
- 5.Press [▲] / [▼] to selcet the time slot,then press [MENU] to select. The LCD screen will indicate be time slot has been set and return to the previous menu.

Note: Unse the dual-capacity direct mode, the host digital channel can be configured to be on or off. This mode supports parallel direct mode transmission of two walkie-talkies, and the two transmissions are within the channel bandwidth of 12.5 kHz. The radioes in the same distribution group must use the same time slot, and the group using time slot 1 will not interfere with the group using time slot 2.

•CTCSS

CTCSS can be set only under the analog channel, including:

• CTCSS encode • CTCSS decode

◆Trasmitting CTCSS/DCS

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press [▲] / [▼] to enter into Setting, then press [MENU] to select.
- 3.Press [\blacktriangle] / [\blacktriangledown] to enter into Radio setting,then press [MENU] to select.
- 4.Press [▲] / [▼] to enter into CTCSS,then press [MENU] to select.
- 5.Press [\blacktriangle] / [\blacktriangledown] to enter into transmitting CTCSS,then press [MENU] to select.
- 6.The LCD screen indicates options of
- "None/CTCSS/DCS_N/DCS_I", press [▲] / [▼] enter into None, and press [MENU] to select, then will be no CTCSS trasmitting, the LCD indicates "setting successfully";
- >Or press [\blacktriangle] / [\blacktriangledown] enter into CTCSS , and press [MENU] to select CTCSS,press [\blacktriangle] / [\blacktriangledown] to select the corresponding data, and press [MENU] to confirm the setting,the LCD indicates "setting successfully";
- >Or press [\blacktriangle] / [\blacktriangledown] enter into DCS_N , and press [MENU] to select positive DCS,press [\blacktriangle] / [\blacktriangledown] to select the corresponding data, and press [MENU] to confirm the setting,the LCD indicates "setting successfully";
- >Or press [\blacktriangle] / [\blacktriangledown] enter into DCS_I , and press [MENU] to select reverse DCS,press [\blacktriangle] / [\blacktriangledown] to select the corresponding data, and press [MENU] to confirm the setting,the LCD indicates "setting successfully".

♦Receiving CTCSS/DCS

The menu functions as follows:

- 1.Press [MENU] to enter into the Menu mode.
- 2.Press $[\blacktriangle] / [\blacktriangledown]$ to enter into Setting, then press [MENU] to select.
- 3.Press $[\blacktriangle] / [\blacktriangledown]$ to enter into Radio setting,then press [MENU] to select.
- 4.Press $[\blacktriangle] / [\blacktriangledown]$ to enter into CTCSS,then press [MENU] to select.
- 5.Press [\triangle] / [∇] to enter into receiving CTCSS,then press [MENU] to select.
- 6.The LCD screen indicates options of
- "None/CTCSS/DCS_N/DCS_I", press [▲]/[▼] enter into None, and press [MENU] to select, then will be no CTCSS receiving, the LCD indicates "setting successfully";
- >Or press $[\blacktriangle]/[\blacktriangledown]$ enter into CTCSS, and press [MENU] to select CTCSS,press $[\blacktriangle]/[\blacktriangledown]$ to select the corresponding data, and press [MENU] to confirm the setting,the LCD indicates "setting successfully";
- >Or press [▲]/[▼] enter into DCS_N, and press [MENU] to select positive DCS,press [▲]/[▼] to select the corresponding data, and press [MENU] to confirm the setting,the LCD indicates "setting successfully";
- > Or press $[\blacktriangle]/[\blacktriangledown]$ enter into DCS_I, and press [MENU] to select reverse DCS,press $[\blacktriangle]/[\blacktriangledown]$ to select the corresponding data, and press [MENU] to confirm the setting,the LCD indicates "setting successfully".

| Main technological | specification | |
|-------------------------|--|--|
| Frequency range | VHF: 136-174MHz UHF: 400-470MHz (Dual Band) | |
| Memory Channel | 1024 | |
| Frequency Stability | ±1.0ppm | |
| Operating Temperature | -30 °C ~+60 °C | |
| Operating Voltage | DC 7.4V | |
| Demission | 132*63*36mm (no including the antenna) | |
| Weight | About 270g (Include in battery and antenna) | |
| Transmission | | |
| Output power | High:5W/Low:1W | |
| Output Consumption | Analog≤1.6A Digital≤0.9A | |
| FM modulation | 16K¢F3E@25KHz 141K¢F3E@20KHz | |
| (wide/narrow) | 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 | ≥45dB@25KHz ≥40dB@12.5KHz | |
| (wide/narrow) | | |
| Adjacent Channel power | ≤-65dB/≤-60dB | |
| Audio Response | +1 \sim -3dB | |
| Antenna Port Spurious | 9KHz-1GHz: ≤-36dBm1GHz-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 | |
| (Wide/ narrow) | | |
| 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/ intermit— tent, 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 environ- ment 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.

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 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): 1.77W/Kg.