To customers

Thank you very much for using two-way radios.
This product has a newly developed function menu and humanism operation design, making it easy to use.
It will meet your requirement by the compact size and reasonable price.

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FUNCTION

- Out put power: 50W
- dual band
- dual display
- dual time slot
- 1000 channel
- 1000 contacts
- 250 Zone
- Private call
- group call call call in digital mode
- Record
- 1750 Hz
- Talkaroud
- Scan
- Encryption
- Side– key programmable
- Lone worker
- Emergency
- Monitor
- Squelch
- VOX
- Remote kill/ Stun/Actiate
- Group match/ single Match

User's Manual

Getting Familiar

Safety And Overview

Overview

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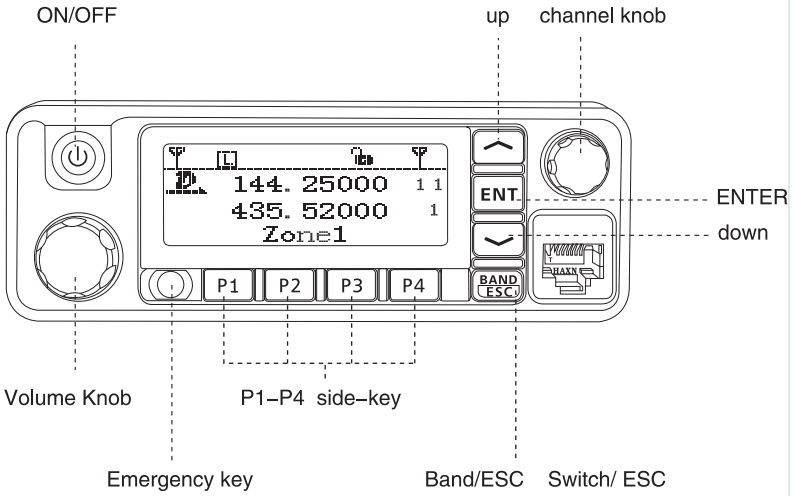
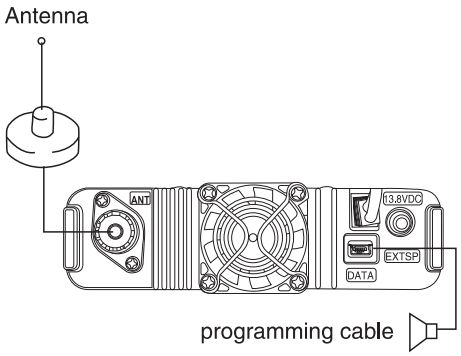
Getting Familiar

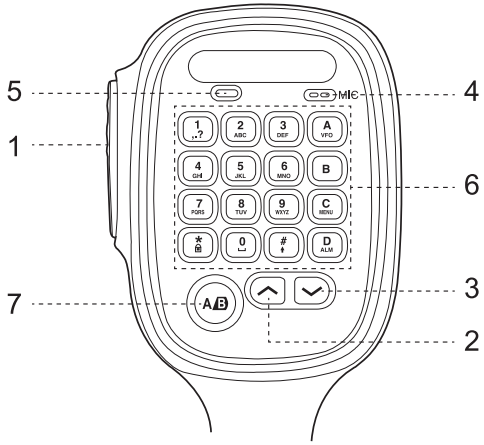


Note: Either Long press or short press of side–key1 (P1) / side–key 2 (P2) /side key 3 (P3) / side–key 4 (P4) can be programmed via software for the following function:

1. None– function 2. All warning tone on/OFF 3. Emergency ON 4. Emergency OFF
5. High/Low Power 6. Monitor 7. One Touch Access 8. One Touch Access
9. One Touch Access 10. One Touch Access 11. One Touch Access
12. One Touch Access 13. Repeater/ Talk around 14. Scan ON/OFF
15. Tight/ Normal Squelch 16. Privacy ON/OFF 17. VOX ON/OFF 18. Zone Select
19. Lone Work ON/OFF 20. Record ON/OFF 21. Record Playback
22. Delete All record 23. Record replay 24.1750Hz

This radio has 1000 channels, 1000 contacts, 250 Zone, which can add 64 channel.





NO.	Icon	Function
1	PTT	Press the key to transmit
2	∧	Decrease volume or setting value
3	∨	Increase volume or setting value
4	MIC	Speak here during transmission
5	Indicate light	Indicate light will red during transmission
6	Number Key	Input channel number or DTMF dial out etc.
7	A/B	Exchange to the home screen and sub screen

Safety and Overview

SAFETY & RFR

Before using this radio, please read the manual which contains important operating instruction for safe usage, RF Energy Awareness, Control information and operational instructions for compliance with RF Energy Exposure limits in Applicable national and international standards.
Also read the Operational instruction for safe use.

Overview

Switch on

Press the key for 1s. the LED indicator lights up, the Screen will show the picture (which can be designed).
Note: If the Tone/Alerts is forbidden, there will not any sound when the power on. Here if need to power off the radio just press the key for 2 s.

Adjust Volume

Clockwise the volume knob to higher the volume or anticlockwise to lower.

Launch and Receive Calls

Emergency Function

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Launch and Receive Calls

Zone Selection

Zone is a channel Group. Each radio can set 250 Zone with Max 64 channels.

Menu Function：

1. press ENT key/ [MENU] to enter the menu.
2. press [^ or v]key to choose, after that with ENT/[MENU]/to confirm.
3. Screen shows the chosen zone and name by it.
4. Move the [^ or v]to choose, after press ENT/MENU to confirm.
5. screen shows the chosen zone and name by it.

ID Selection of Channels, User's ID or Group ID

Select the needed Zone (if there are more than one zone) ,using the channel knob to select the channel, user's name or ID, group name or ID.

Receive and Reply Group Call

The radio must be under a group, and then can receive the group call.

When received the group call:

1. LED indicator on.
2. on the top of the middle screen will show RSSI mark: First line will show the group name, income call ID will be in the middle, group call ICON will be the last(only under digital mode)
3. Hold the microphone and place it between your lip within 2.5–3cm.
4. Press [PTT] key to answer the call.

5. release [PTT] key to receive the call.
6. if there is no any voice activity, the call end.

Receive and Reply the single call

Single call means one on one call, only with two types: One is testing presence of radio before call, and another one is to call immediately.

When receive one single call:

1. LED indicator on.
2. on the top of the middle screen will show RSSI mark: First line will show the group name, income call ID will be in the middle, group call ICON will be the last (only under digital mode)
3. Hold the microphone and place it between your lip within 2.5–3cm.
4. Press [PTT] key to answer the call.
5. release [PTT] key to receive the call.

Receive all calls

All call means a radio call up all other user's in a channel to public and important information.

When received one all call：

1. LED indicator on.
2. on the top of the middle screen will show RSSI mark: First line will show the group name, income call ID will be in the middle, group call ICON will be the last(only under digital mode)
3. End of one all call, radio back to receive all call screen, if under the FREE CHANNEL MESSAGE SOUND function, when release the [PTT] key, you will hear a message sound, means the channel is free to use, but can not reply it.

Note: when receive one all call, if you turn over to another channel, the radio stop to receive all

call. During one all call, you can use any re–programmed key until the call finished.

Launch a radio call

You can choose a channel, user's ID or group call with following method：

- channel knob
- Pre–programmed key
- Contacts
- Manual dialing(only for single call)

Using channel knob to make a call

Group call

The radio should be under the group then can have the group call.

1. Turn over channel knob, use group name or ID to choose channel.
2. Hold the microphone and place it between your lip within 2.5–3cm.
3. press [PTT] key to call/.Screen shows group name or ID with Group mark.
4. release [PTT] key to receive, when target radio is replying, Screen shows group mark or name or ID.
5. If there is no any transmitter within the time limited, the call failed.
6. When radio back to home screen, you can make a group call with contacts.

Single call

1.Turn over channel knob, use the name or user's ID to choose channel.
2. Hold the microphone and place it between your lip within 2.5–3cm.
3. on the top of the middle screen will show RSSI mark: First line will show the group name, income call ID will be in the middle, group call ICON will be the last (only under digital mode).
4. Release [PTT] key to receive, when target radio is replying, Screen shows group mark or name or ID
5. if on the FREE CHANNEL MESSAGE SOUND function, let go [PTT] key, you can hear a message sound(means it channel is free for you to answer) If there is no any transmitter within the time limited, the call failed.
6. you will receive a message sound and screen shows call finished.

You can make a single call with contacts or use keypad to search the target radio to make a call.

ALL call

Radio must be programmed with this function, so that you can send information to every one who are under the channel.

1. Turn over channel knob, use group name or ID to choose channel.
2. Hold the microphone and place it between your lip within 2.5–3cm.
3. press [PTT] key to call/.Screen shows group name or ID with Group mark. Users under the channel can not reply the call.

Use A key to make a group call or single call

Single key call function is convenient for you to set a name or ID for group call or single call with long press or short press the program key.

Set a name or ID for a key there are more than one single call key

1. press pre–programmed call key.
2. Hold the microphone and place it between your lip within 2.5–3cm.
3. press [PTT] key to call/.Screen shows group name or ID with Group mark， and the group call/ single call ICON.

4. release [PTT] key to receive, when target radio is replying, Screen shows group mark or name or ID.
5. if on the FREE CHANNEL MESSAGE SOUND function, let go [PTT] key, you can hear a message sound(means it channel is free for you to answer).

If there is no any transmitter within the time limited, the call failed.

Emergency Function

Emergency alarm only use to transfer emergency situations, you can release a emergency call at any time and anywhere, Even the radio is busy in transmit or receive. MD–9600 support 3 types Emergency call：

- Emergency alarm
- Emergency alarm and call
- Emergency alarm and voice

Receive emergency call

1. When receiving emergency call, number of emergency calls and alarms received, exchange the sender name or ID.
2. with a alarm sound and LED indicator on.
3. if the radio have activated, then will confirm the emergency alarm automatically. When the radio receive the emergency alarm, screen shows the emergency alarm warning mark, until send with a confirm message then can logout. While, you will not receive any calls and notices from other radio during this situation.

Note: short press alarm KEY, then with the pre– programmed off key, delete all received emergency call and logout the emergency mode.

Reply the emergency call

When received the emergency call：

1. press any key to stop the emergency call alarm.
2. Hold the microphone and place it between your lip within 2.5–3cm. if on the FREE CHANNEL

MESSAGE SOUND function, let go [PTT] key, you can hear a message sound(means it channel is free for you to answer).

3. press [PTT] key to have a call, radio under the emergency call mode.
4. release [PTT] key, when reply the emergency call, the screen shows group mark or ID and call ID.
5. After the call, shortpress ESC key, then press pre–programmed emergency key to off, delete all the emergency call and logout.
6. Radio back to home screen.

Emergency Alarm

This function called not– speech signal and allows to send emergency alarm and will trigger on another radio.

1. press pre–programmed power on key.
2. screen shows sending emergency call, exchange ID with other radio. Emergency call mark will show on the home screen.
3. When receive the emergency call, the radio issues the emergency call and screen shows emergency call send out successfully.

If the radio does not receive any confirm with the emergency call and out of the sending times, the radio will with a message sound and screen shows the emergency call failed.

4. radio logout the emergency mode and back to home screen, If the radio under silence mode, there will not any sounds or reminder during the emergency mode.

Emergency Alarm call

This function allows you to send emergency call to other radio, after confirmed by the radio, the two radio can contact by a pre–programmed channel.

1. press pre–programmed power on key.
2. screen shows sending emergency call, exchange ID with other radio. Emergency call mark will show on the home screen.
3. When receive the emergency call, the radio issues the emergency call and screen shows emergency call has received.
4. Hold the microphone and place it between your lip within 2.5–3cm.
5. Press [PTT] key for a call, then screen will show group ICON.
6. release [PTT] for receiving.
7. if on the FREE CHANNEL MESSAGE SOUND function, let go [PTT] key, you can hear a message sound(means it channel is free for you to answer), press the [PTT] to answer the call or press pre–programmed emergency call to off and logout the mode.
8. radio back to home screen, If the radio is under the silence mode, there are not any sounds or notices during the emergency mode, not receive calls from target radio, until press the PTT key.
9. If the radio under WITH VOICE MUTE mode, there are not any sounds or notices during the emergency mode, not receive calls from target radio, Until press the PTT key to call or receive, then the screen will show up.

Voice emergency Alarm

This function allows you to send emergency call to others, after confirm, the microphone of radio will activate, allows you to call other radio without press [PTT] Key. If press [PTT] key during this mode, radio will ignore [PTT] and stay on emergency mode.

Note：if you press [PTT] key during this time, hold the key before duration within limits, release [PTT] key to transmit.

1. press the pre–programmed emergency start key.

2. Screen shows sending emergency alarm, LED will show the emergency call Mark.
3. Screen will show emergency call successful; you can talk to the microphone clearly. When this function on, radio will transmit automatically without press [PTT] Key before duration within limits.
4. During transmit, LED will show Emergency alarm mark.
5. When the Emergency microphone ends, radio will stop transmitting, press [PTT] key to transmit again, If the radio under Silence mode, there is no any sound or notices.

Restart Emergency Mode

The radio will restart emergency model when meet the following situation:

- It will logout the emergency mode when the radio change the channel under the emergency mode. If activate the emergency alarm in new channel, the radio will start Emergency mode.
- Under Emergency call/ transmit, press pre–programmed emergency key. It will logout the emergency and restart the emergency alarm.

Logout Emergency mode

The radio will logout emergency mode when any of the following situation happen：

- confirm with the received emergency call or
- Meet with the max emergency call or
- Press the pre–programmed emergency off key or
- press [PTT] key

Note: if turn off the radio, emergency mode will be logout. Then radio will not under emergency mode when radio on again.

Menu Operation

Radio Settings

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Menu Operation

Character Input

You can use the 3x4 alphanumeric keypad in the microphone to input the character/

Radio contains two mode:

- English letter
- Numeral input mode

Note: when input the radio ID, only numeral mode available.

KEY	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1	.	,	?	!	@	&	'	%	-	:	*	#
2	a	b	c	2	A	B	C						
3	d	e	f	3	D	E	F						
4	g	h	i	4	G	H	I						
5	j	k	l	5	J	K	L						
6	m	n	o	6	M	N	O						
7	p	q	r	s	7	P	Q	R	S				
8	t	u	v	8	T	U	V						
9	w	x	y	z	9	W	X	Y	Z				
0	0	blank											
*	*												
#	Switch input mode.												

Numeral input：

Under Numeral input mode, press the keypad to get desired number, press * can show *, press # to switch the input mode.

Menu Application

1. press ENT / MENU to enter Menu, then press [^ or v] to choose the desired menu.
2. press ENT / MENU , choose one function or enter a sub menu.
3. press ESC to return the higher level menu.

Note: after a period time not activity radio will automatically exit and return to the main menu screen (hang time can be set by the programming software).

Radio check(ONLY digital mode)

If there are any activation, this feature allows you to determine whether there is other radio active inside the system, and does not disturb the users, none– voice or visual notice appears on the target radio/

Send radio check

Using Menu：

1. press ENT / MENU to enter Menu.
2. press [^ or v] to button to select contacts, then press ENT to select.
3. Move to the required user alias or ID, then press ENT / MENU to select.(only in single call mode)

Or press [^ or v] to manual dialing, and then press ENT to select.(only in single call mode)

If there are before calling ID, show ID and along with flashing cursor, using the keypad editing ID, press ENT.

4. Press [or] to radio detection, then press ENT to select.
5. When screen displays radio detection: User Alias or ID, it is indication the ongoing of radio detection.
6. waiting for confirmation.
7. If the target radio is active in the system, then it makes a prompt sound, screen will show that target radio has responded shortly7.

Or if the target radio in the system is not active, then it makes a prompt sound, screen will show that target radio No available shortly.

8. Radio returns to user alias or ID screen, If you press ENT when waiting de confirmation, made a prompt sound, radio will end all retry and exit detection mode.

Monitor

Using Monitor function to open the microphone of target radio (only the user's alias or ID), You can use the function to monitor any sound around target radio.

The radio should be set to be allow use this function via the programming software.

Start Monitor

Using Menu：

1. press ENT / MENU to enter Menu.
2. press [or] to button to select contacts, then press ENT / MENU to select.
3. Move to the required user alias or ID, then press ENT / MENU to select.

Or press [or] to manual dialing, and then press ENT / MENU to select.

If there are before calling ID, show ID and along with flashing cursor, using the keypad editing ID, press ENT / MENU.

4. press [or] to choose Monitor, then press ENT / MENU to select.
5. Radio will make a prompt sound.
6. waiting for confirmation.
7. Screen show Monitor successes or failed.

Contact setting

Contacts is Address book, in which, each entry corresponds to an alias or ID used to start the call. In addition, each items, according to the different content setting, relate to three types of call: group calling , single call, all call. Your radio support digital address book, The contacts entries display in the followings information:

- Contacts
- New contact
- Manual dial

Group call with Contacts

1. press ENT / MENU to enter Menu.
2. press or to button to select contacts, then press ENT to select， entries arrange in alphabetical order.
3. Move to the required user alias or ID, then press ENT to select.
4. Hold the microphone and place it between your lip within 2.5–3cm.
5. press [PTT] to start calling, the screen display the calling alias or ID, as well as ICON of group call.
6. release [PTT] to receive, when any user response within the group, you will see the call icon of ID on the screen.
7. if you enable the CHANNEL FREE PROMPT function, when the target radio release the [PTT]

button, you will hear a short beep, said this channel is idle, waiting for your answer, Press the [PTT] to answer. If in a pre–programmed group called hang time without voice activity, the call is ended.

Single call with Contacts

1. press ENT to enter Menu.
2. press [^ or v] to button to select contacts, then press ENT / MENU to select， entries arrange in alphabetical order.
3. Move to the required user alias or ID, then press ENT / MENU to select.
4. Hold the microphone and place it between your lip within 2.5–3cm.
5. press [PTT] to start calling, The first line will show Alias or ID, the second line will show Single call ICON.
6. Release [PTT] to receive, when any user response, the screen will show the ID.
7. if you enable the CHANNEL FREE PROMPT function, when the target radio release the [PTT] button, you will hear a short beep, said this channel is idle, waiting for your answer, Press the [PTT] to answer. If in a pre–programmed group called hang time without voice activity, the call is ended.
8. You will hear a sound shortly, screen will shows the call ended.

Call Log

Your radio can record all the recent dialed, received and not answered call. Use the calling record function view and manage the recent calls.

Checking New Call's Number

Menu items can show the not answer call ,received calls and dialed call.

1. Press [MENU] key to enter the menu mode.
2. Move the [^ or v] key to the Call Log, and then press [MENU] key to choose.
3. Move [^ or v] to the required list, and then press [MENU] key too choose.
4. The screen on the top of the list shows the recent entries.
5. Press [or]check list, press (PTT) at the current selected aliases or ID to start a call.

Miss Call

Whenever you miss call, two way radio will display a not answered call, select view or view later.

Note:

If you press (PTT),when you're viewing missing call number, radios will exit the missing call screen and establishing a single call again.

1. The screen shows the missing call, and the missing call's number and view.
2. Press [MENU] view missing call's ID, missing call's record list displayed on the screen.
   Press [MENU] to store or delete this entry; Or move [^ or v] key to view later, and then press [MENU] key choice, return to the main screen.

Storing Missed Call's Alias Or ID

1. Press [MENU] key to enter Menu.
2. Move the [^ or v] key to Call Log, and then press [MENU] key to choose.
3. Move the [^ or v] key to missed call, and then press [MENU] key to choose.

4. Move [⌃ or ⌄] key to missed call's alias or ID, and then press [MENU] key to choose
5. Move the [⌃ or ⌄] key to store, and then press [MENU] key to choose
6. Radio Shows flashing cursor, if needed, enter the ID alias, and then press [MENU] ey.
7. The screen contacts have been saved.
   You can also enter ID without alias.

Deleting Calling Log's Record

1. Press [MENU] key to enter the Menu.
2. Move the [⌃ or ⌄] key to Call Log and then press [MENU] key to choose.
3. Move the [⌃ or ⌄] key to missed call, and then press [MENU] key to choose.
4. Move [⌃ or ⌄] key to missed call's alias or ID, and then press [MENU] key to choose
5. Move [⌃ or ⌄] key to delete the entries,then press [MENU] key to select if you need to delete this entry.
6. Select "yes" ,then press [MENU] key to delete the entries, screen appears entry deleted; Or select "no" ,press [MENU] key to return to previous screen.

When you select a call list but there is no entry in, the screen will display the list is empty, if the keyboard is open at this time, will be a low tone hint sound.

Call Alert Operation

Call alert makes you can suggest a specific radio users in the possible time to call you back. This feature applies only to the user alias or ID, and can be used through the menu by address book or manual dialing.

Receiving And Checking Call Alert

When you receive a call alert, screen shows call prompt, alternating transmit radio's alias or ID

1. YOU will hear sound of repeat, LED light turn and shine red.
2. Then press and release [PTT] to confirm the prompt, or press [MENU] to select "neglect" to exit the call reminder.

Starting Call Alert From Contact List

1. Press [MENU] key to enter the Menu.
2. Move the [⌃ or ⌄] key to Contacts, and then press [MENU] key to choose.
3. Move [⌃ or ⌄] key to missed call's alias or ID, and then press [MENU] key to choose Or move [⌃ or ⌄] key to manual dialing, and then press [MENU] key to choose, a flashing cursor appears,then enter the user ID you want to call, and then press [MENU] key.
4. Move[⌃ or ⌄] key to Call Alert, the screen display Call Alert:< user s alias or ID >,and then press [MENU] key and instructions have been sent Call Alert.
5. When the radio send call alert, the LED indicator for the red light.
6. If you receive calls prompt confirmation, issued a prompt, and display the call alert success.

Or prompt confirmation if not received a call, send a hint sound, and the screen call failure.

Message Function

Your radio can receive the message or send the message.

Edit and send Message

Using the Menu：

1. press ENT / MENU to enter Menu.
2. press [^ or v] to button to select MESSAGE, press ENT / MENU to enter.
3. press [^ or v] to button to write MESSAGE, press ENT / MENU to enter.
4. A flashing cursor appears, using the keypad to input message, press ^ to move to the left one, press v to the right one, when editing area have content, press ESC to delete any useless character, other wise when editing area without content to return to the higher level menu.
5. after writing the message, press MENU to ENT to choose to send or save.
6. when on the process of editing, user can choose by press the MENU key to empty option to empty all the content of the editor, quickly return to the higher level menu.

Send Quick Text

Two way radio support maximum 50 programming of prefabricated text messages by the agent:

When a predefined text message, you can edit every message before you can send each message.

Using the Menu

1. Press [MENU] key to enter the Menu.
2. Move the [^ or v] key to Messages, and then press [MENU] key to choose.
3. Move [^ or v] key to Quick Text, press [MENU] key to choose

4. Move [^ or v] key to the required quick text,press [MENU] key to choose
5. A flashing cursor appears, using the keyboard to input messages, press [^] key to move to the left one, press[v]button to the right one, when editing area have content ,press the [BACK] key to delete any useless character, otherwise when editing area without content to return to the higher level menu.
6. After writing the text message, press [MENU] to choose to send or save.
7. If the messages sent successfully, issued a prompt sound, and the screen displays text message has been sent.

Or if the message was not sent, issued a high tone hint sound, and screen displays text message sent failure. If message sent failure, radio will return to chance to return to the retransmission selection screen.

8.After Choose send move [^ or v] to the alias or ID, and then press [MENU] key to choose.

Or move [^ or v] key to manual dialing, and then press [0 k] key choice. Enter the user alias or ID, then Press [MENU].

9. The screen shows message: < user/group name or ID > call, text messages were a being sent to confirm.
10. If the messages sent successfully, issued a prompt sound, and screen display text message has been sent. Or if the message can't send, send out a high tone hint sound, screen display message sent failure, failure if the SMS messages, intercom chance to return to the retransmission selection screen.

Send Quick Text With A Key

1. Press Preprogrammed,single bond calls to a predefined alias or ID sends a prefabricated text messages.
2. The screen displays a text message: < user/group name or ID > call, to confirm text messages were being sent
3. If the messages sent successfully, issued a prompt sound, and the screen display text message has been sent.

Or if you cannot send text messages, screen display text message sent failure. If message sent failure, intercom chance to return to the retransmission selection screen.

Manage The Failed SMS

In retransmission selection screen, you can choose the following options:

- Resend,
- Forward,
- Edit

Ressending Message

1. Press [MENU] to resend same message to same user/group name or ID.
2. If the messages sent successfully, issued a prompt sound, and display messages sent or if you cannot send text messages, screen display text message sent failure.

Forwarding message

Choose to forward message to another User/group name or ID.

1. Move the [^ or v] key to forward, and then press [MENU] key choose.

2. Move [^ or v] to the alias name or ID, and then press [MENU] key to choose.

Or move [^ or v] key to manual dialing, and then press [MENU] button to choose, enter your user ID and press [MENU] key.

3. The screen display a text message: < user/group name or ID > call, to confirm text messages were being sent
4. If the messages sent successfully, issued a prompt sound, and the screen display text message has been sent.

Or if the message was not sent, issued a high tone hint sound, and screen displays text message sent failure.

Editing Message

Choosing edit to edit message before you edit.

Note: if you have a subject line (receive text messages from email program), you can't edit the subject line.

1. Move [^ or v] key to edit, then press [MENU] key to choose
2. A flashing cursor appears, using the keyboard to input messages, press [^] key to move to the left one, press [v] button to the right one, when editing area have content, press the [BACK] key to delete any useless character, otherwise when editing area without content to return to the higher level menu.
3. After writing the text, press [MENU] choose to send or save
4. When in the process of editing, can choose by pressing the [MENU] key to empty option to empty all the content of the editor, quickly return to the higher level menu

5. Choose after [^ or v] button to send the required alias or ID, and then press [MENU] key to choose

Or move [^ or v] key to manual dialing, and then press [MENU] button, enter your user ID and press [MENU] key

6. Screen displays message: < user/group name or ID > call, to confirm text messages were being sent
7. If the messages sent successfully, issued a prompt sound, and the screen display text message has been sent.

Or if the message was not sent, issued a high tone hint sound, and screen displays text message sent failure.

Manage The Sent Sms

Once a message is sent to another radio, it will be saved in the "sent items". Send after sending a text message has always been to "sent items" at the top of the list. The sent items folder can store up to 50 recently send text messages. After the folder is full, the next send text messages will automatically replace the earlier messages in this folder.

Note: at any time pressing the [BACK] key can return to the previous screen.

Chack The Sent Messages

Using the menu function:

1. Press [MENU] button to enter the Menu.
2. Move the [^ or v] key to Messages , and then press [MENU] key to choose

3. Move [^ or v] to sent items, and then press [MENU] key to choose
4. Move the [^ or v] key to the SMS, and then press [MENU] key choose. If the message from the email program, a subject lines, will appear in the top right corner of the screen icon indicates state of SMS.

Sending the sent messages

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

- Resend
- Forward,
- Edit
- Delete

1. Check the message, press [MENU] key again
2. Move the [^ or v] key to resend, then press [MENU] key to choose.
3. The screen displays: < user/group name or ID > call, confirm that it is preparing to send the same message to the same target radio
4. If the messages sent successfully, issued a prompt sound, and the screen display text message has been sent.

Or if the message was not sent, issued a high tone hint sound, and screen displays text message sent failure. If message sent failure, intercom chance to return to the retransmis sion options screen. Press the [MENU] key to send SMS weight to the same user/group name or ID.

Note: Except for Pessing the [MENU] , [^ or v] key, if you change the volume and the press

any other key, will return to this message. When you press [PTT] for a single call or group call, or as a response to the group calling,radio will exit the retransmission selection screen.

If received text messages or remote sensing information, emerge-ncy call, or call the police, or call reminder, radio will exit the retransmission selection screen.

If you press [PTT]in response to a single call (in addition to the radio in the show did not answer the call screen), or at the end of all call, the screen will return to resend selection screen. Press [MENU] key, enter the forwarding, edit, or delete selection screen.

- choose forward, will choose the SMS sent to speak to other groups/user alias or ID.
- choose to edit, to edit the selected text messages before sending
- choose delete, delete the selected text.

Note: if you screen out SMS messages when send text messages, so radios will be in the "sent items" folder for SMS status updates, not the tip or by voice prompt. If the messages in the sent items folder state before update, walkie-talkie pattern changed or blackout, wal kie-talkie will not be able to complete the ongoing message processing, and automatically start tag to the icon of failure. This radio can handle 5 text messages at the same time. At this stage, the radio can't send a new message, and automatically start tag icon to send failure.

Deleting all Sent Messages In the "Sent Items"

Using the Menu Function

1. Press the [MENU] button to enter the Menu.
2. Move the [^ or v] key to Messages, and then press [MENU] key choice.
3. Move [^ or v] to Sent Items, and then press [MENU] key choice.
4. Move the [^ or v] key to delete all, and then press [MENU] key choice.

5. When it appears to delete messages, press [MENU] button, select "yes" project has clear screen display has been sent.

Or delete the text, move [^ or v] to no, and click [MENU] key to return to the previous screen.

When you select the "sent items" but not one of them text messages, the screen will display the list is empty, if the keyboard is open at this time, will be a low tone hint sound.

Receive SMS

When your radio are receiving SMS, the left of the screen shows the sender alias or ID ICONS and text messages.

When receive text messages, you can choose the following options:

- reading?
- Reading Later
- delete

Note: when the radio shows tip on the screen, please press (PTT), two way will exit and to establish a single call or text message screen group call.

Check the SMS

1. Move the [^ or v] key to Read, And then press [MENU] key to choose
2. the selected text messages on the inbox opened, if the message is from the email program, it will appear a subject line.
3. Click [MENU] key to return to your inbox.

Or press [MENU] to reply,forward or delete messages.

Move [^ or v] key to enter later view or delete selection screen:
Later, select view screen before returning to receive messages.
Choose delete, delete receive text messages.

Manage Received SMS

Use your inbox to manage messages. inbox can store up to 50 text messages at Most.
Two way radio supports the following text options:

- Reply
- Forward
- delete
- Delete all

store the message in the inbox in the order of received time .
Note: at any time according to the [BACK] key can return to the previous screen.

Check The Inbox SMS

1. Press the [MENU] button to enter the Menu.
2. Move the [^ or v] key to Messages, and then press [MENU] key to choose
3. Move [^ or v] to the inbox, and then press [MENU] key to choose.
4. Move the [^ or v] key to check the message. If the messages are from the email program, it will appaer a subject line.
5. Press the [MENU] key to choose the current text, then press [MENU] key again to reply, delete, or forward this message.

Unread messages: , Already read message:

Reply The Inbox SMS

Use the menu function:

1. Press [MENU] button to enter the Menu.
2. Move the [^ or v] key to message, and then press [MENU] key to choose
3. Move [^ or v] to the inbox, and then press [MENU] key to choose
4. Move the [^ or v] key to the SMS, and then press [MENU] key to choose. If the messages are from the email program, it will appear a subject line.
5. Press again [MENU] button to enter submenu.
6. Move [^ or v] to reply, and then press [MENU] key to choose.
7. Move [^ or v] to write messages, and then press [MENU] key choice, a flashing cursor, using a keyboard editing text messages.

Or move [^ or v] key to prefabricated text messages, and then press [MENU] key to choose.
Choose the required message after press [MENU] a flashing cursor, if needed, with the keyboard editing your message.

8 After Writing the text, press [MENU] .

9. The screen displays message : < user/ call group name or ID >, to confirm. text messages were being sent
10. If the messages sent successfully, issued a prompt sound, and screen display text message has been sent.

Or if you cannot send text messages, screen display text message sent failure. If message sent failure, radio return to the retransmission selection screen.

Deleting the Inbox messages

Use the menu function:

1. Press the [MENU] button to enter the Menu.
2. Move the [^ or v] key to message, and then press [MENU] key to choose
3. Move [^ or v] to the inbox, and then press [MENU] key to choose
4. Move the [^ or v] key to the SMS, and then press [MENU] key choice. If the messages are from the email program, it will appaer a subject line.
5. Press again [MENU] button to enter submenu.
6. Move the [^ or v] key to delete, and then press [MENU] key to choose.
7. Delete messages, move [^ or v] key to "yes", then press [MENU] key to choose.
8. Screen appears short message has been deleted.
9. The screen back to inbox.

Deleting all messages in the Inbox

Use the menu function:

1. Press the [MENU] button to enter the Menu.
2. Move the [^ or v] to the Message, and then press [MENU] key to choose.
3. Move [^ or v] to the inbox, and then press [MENU] key to choose.
4. Move the [^ or v] key to delete all, and then press [MENU] key to choose.
5. When it appears Deleting the messages, move [^ or v] select yes, and then press [MENU] key to choose
6. Then The screen inbox was empty already.

When you select the "inbox" but not one of them text messages, the screen will display the list is empty, if the keyboard is open at this time, will be a low tone hint sound.

Encryption

If you enable this feature, which is beneficial to prevent other users on the channel by using the method of software encryption for unauthorized eavesdropping. The launch of signaling and user identification part unencrypted. Your radio must be enabled on the channel encryption function, can send encrypted, even if the receiving transmission is not must request to do so.

Basic encryption

Two way radio can only be assigned more than one type of encryption. If users Call for encryption or decryption of data transmission, must make to be preprogrammed walkie-talkies and launch radio has the same "encryption keys" (suitable for basic encryption).

If your radio to receive different encryption keys or key values and key encryption call ID, you will hear the sound of the transport chaos encryption (basic).

Press the preliminary programming encryption keys on or off.

DTMF

Dual Tone Multi-Frequency (DTMF) function allows to operate radio when there is interference in the radio system.

To initiate a DTMF call

1. Press and hold [PTT] key.

2. Enter number you need.

You can disable DTMF tone by turning off all radio tone and prompts.

Secrecy

You can activate or kill any radio in the system. For example, you might want to disable a stolen radio, to prevent thieves use it, and enable it when you get it back.

Note: radio kill or activation is limited to activate the radios with these functions.

Radio Disable

Use menu mode

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to Contacts, and then press [MENU] key to select, entries are in alphabetical order.
3. Move [^ or v] key to the required alias or ID, and press [MENU] key to select.

Or move [^ or v] key to Manual Dial, then press twice [MENU] key to enter a user alias or ID, and press [MENU] key to select.

4. Move [^ or v] key to radio disable, and then press [MENU] key to select.
5. The display shows the radio disable: <user alias or ID> and the LED indicator light is red.
6. Wait for confirmation.
7. If successful, emit a beep and the screen displays radio disable successfully.

Or if it fails, emit a beep and the screen displays radio fail to disable.

During radio disable operation, do not press the [BACK] key, because you will not get a confirmation message.

Scaning List

Create a scan list and assign to a single channel / talkgroup, your radio can support up to 250 scan lists, each up to 16 members. Each scan list support mixed analog and digital channels. You can edit the scan list to add / delete channels or set the priority channel.

Check members of list

1. Use the channel knob to select a channel with pre-programmed scan list;
2. Press the [MENU] key to enter the menu mode;
3. Move [^ or v] key to scan, and then press the [MENU] key to select;
4. Move [^ or v] key to Viewlist the list, and then press the [MENU] button to select;
5. Use [^ or v] key to see members of list.

If you set the priority, the priority icon is displayed in the left of member alias, indicating that the member is the Priority 1 or Priority 2 channel; if the priority is set to N, no priority icon.

In a scan list, you can not have more than one Priority 1 or Priority 2 channel.

Scanning Instruction

When scanning, your radio can view if there is a voice activity in current channel through circulating pre-programmed scan list. LED lights flashing for a red light, and the scan icon appears on the screen.

When scanning in dual mode, if you're in a digital channel and your radio locking an analog channel, radio will switch automatically from digital mode to analog mode throughout the duration of the call. And vice versa.

There are two scanning methods

- Manual Scan: According to a pre-programmed scan on / off key or menu function to start the scan, when you start scanning, radio will detect all channels / contact groups on pre-programmed scan list.
- Auto Scan: When you select an already activated auto scan channels / contact groups, radio scans from the activated auto scan channel.

Start/Stop Scan

Press Pre-programmed Scan On / Off KeyOr Enter The Scan Menu Function

1. Using the channel knob to select a channel of pre-programmed scan list;
2. Press [MENU] to enter menu mode;
3. Move [^ or v] to scan, and then press [MENU] to select;
4. If the scan is disabled, the screen displays on or if the scan is activated, the screen displays off.
5. Press [MENU] to select
6. When the scan is activated, LED indicator flashes red and displays scan icon ; or when scanning is disabled, LED light goes out and does not display the scan icon.

Scanning Reply

Radio detect active channel/contact group when scanning, at this time radio will stay in the channel/ contact group, which is called "Scan hang time" pre-programmed time.

Procedure:

1. Hold the radio in a vertical position and keep one to two inches (2.5 to 5.0 cm) distance from the mouth. If you enable the "channel idle tone" function, when transmitting radio release [PTT] key, you will hear a short beep, indicating that the channel is idle, waiting for your respond.
2. Within the hang time by pressing [PTT] button, LED indicator light is red.
3. Release [PTT] key to respond.
4. If you do not respond within the hang time, radio will continue down the scan

Utilities

Utilities includes the following contents:

- Radio settings
- Radio Info
- Program Radio

Radio settings

Radio Setting includes:

- Talkaround
- Tones/Alerts
- Power
- Backlight

- Squelch
- Intro Screen
- Keypad Lock
- LED Indicator
- VOX
- Passwd Lock
- Record
- Clock
- Mode

Talkaround

When the transponder does not work, or when the radio located outside the range of the transponder but located within the range of other radios call, you can continue to communicate. This is called "talk around."

Press Pre-programmed repeater / talk around button, you can switch between repeater / talk around mode.

Use the menu function

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press the [MENU] key to select.
4. Move [^ or v] key to talk around, and then press [MENU] key to select.
5. If radio is currently in repeater mode, you can see the open, or if radio is currently in talk around you can see the close.
6. Press [MENU] key to select.
7. Screen showing turn on talk around "I→I" or turn off talk around.
8. The screen automatically returns to the previous menu.

Even after the shutdown, still remains talk around.

Tones/Alerts

including the following contents:

- All Tones
- Talk Permit
- Keypad Tones

All Tones

If desired, you can enable or disable all radio tone and prompts (except emergency incoming tone).

Press pre-programmed all Beep ON / OFF to turn on or off all radio tones.

Use the menu function:

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press the [MENU] key to select.
4. Move [^ or v] key to tones/alerts, and then press [MENU] key to select.
5. Move [^ or v] key to all tone, and then press [MENU] key to select.
6. Press [MENU] key to select on, then enable all tone and prompts, screen displays all tone

is open.

Or press [MENU] key to select Off, then turn off all tones and prompts, screen displays all tone is off.

Keypad Tones

If desired, you can activate and deactivate call admission tone.

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press the [MENU] key to select.
4. Move [^ or v] key to tones/alerts, and then press [MENU] key to select.
5. Move [^ or v] key to keyboard tone, then press [MENU] key to select.
6. Press [MENU] key to select Open, then enable the keyboard tone, the screen shows keyboard tone is turned on.

Press [MENU] key to select off, then turn off the keyboard sound, the screen shows keyboard tone is turned off.

Power

You can set each channel power level to high or low. Setting: High-power radio implement communications with relatively far distance radios. Low-power radio implement communications with relatively close distance radios.

Press pre-programmed high / low power selection key, you can switch high / low transmit power.

Using the menu function:

1. Press the [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press the [MENU] key to select.
4. Move [^ or v] key to power, and then press [MENU] key to select.
5. Follow the on-screen instructions to change the current settings.
6. Press [MENU] key to select the new power level.
7. Return to the previous menu screen.

Press [ESC] to return to the main screen, the screen displays the power level icon.

Backlight

You can turn on or off the screen backlight according to the need. This setting also affects the menu button and the keyboard backlight.

Press a pre-programmed automatical backlight key to switch backlight settings

Using the menu function:

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press the [MENU] key to select.
4. Move [^ or v] key to backlight, and then press [MENU] key to select.
5. The screen displays always open, 5S, 10S, 15S options, press [MENU] key to select always open, the screen will remain lit and won't turn off, or if you choose 5S, 10S, 15S, the sc-

reen backlight will be off in the corresponding time under users without any operations.

Squelch

You can adjust radio squelch level, thus filtering low signal intensity useless call or channel higher than normal value. Setting: Normal is the default, strict filtering (useless) call or background noise. However, a call from a remote location may also be filtered out.

Press pre-programmed strict / normal squelch button to switch between normal and strict squelch level.

Using the menu function:

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press [MENU] key to select.
4. Move [^ or v] key to squelch, and then press [MENU] key to select.
5. Select strict or normal, and then press [MENU] key to select.
6. The screen returns to the previous menu.

Intro Screen

If desired, you can enable and disable the Intro Screen display.

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to tight.
3. Move [^ or v] key to radio settings, and then press the [MENU] key to tight.
4. Move [^ or v] key to Intro Screen, then press [MENU] key to select.

5. The screen is on, press [MENU] key to enable the Intro Screen display, the screen displays the boot screen display on.

Or the screen is off, press [MENU] key to close the Intro Screen display, the screen displays the boot screen display off.

Keypad Lock

You can lock the keypad to prevent accidental key input. Ways include manual and automatic keypad lock, which includes 5S, 10S, 15S three options.

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press [MENU] key to select.
4. Move [^ or v] key to keypad lock, then press [MENU] key to select.
5. Move [^ or v] key to manual, and then press [MENU] key to select, screen show to select Manual, you need to long press [* +] key to lock keypad on the main interface.
6. Move [^ or v] key 5S, 10S, 15S, the screen shows to select the corresponding time, then keypad will be locked and return to the main screen if user have not any keypad operation after corresponding period of time.
7. To unlock the keypad, press [MENU] key, then press [* +] key.
8. Screen shows unlock keyboard, and then return to the main screen.

LED Indicator

If desired, you can activate and deactivate the LED.

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press [MENU] key to select.
4. Move [^ or v] key to LED indicator, and press [MENU] key to select.
5. The screen displays open, press [MENU] button to enable LDE light, screen shows to turn on the LED light.

Or The screen displays off, press [MENU] button to turn off the LED light, screen shows to turn off the LED light.

If you disable the LED light, buttons and keyboard backlight automatically turns off.

VOX

This function allows you to initiate voice-activated hands-free calls on pre-programmed channels. Whenever a microphone with VOX function detect voice, radio will automatically transmit signals within pre-programmed period of time.

During radio operation press [PTT] key will disable VOX function, to re-enable the VOX function, do one of the following:

- Turn off and return on radio
- Through the channel knob to change the channel, or
- Perform the following procedure:

Note: Enabling or disabling this function is limited to activate radios of these function.

Press pre-programmed VOX on / off key, to turn on or off this function.

Using the menu function:

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press the [MENU] key to select.
4. Move [^ or v] key to VOX, and then press [MENU] key to select.
5. Screen shows VOX off and VOX level 1-10S, if you choose to turn off, press [MENU] key to disable the VOX function, emitting a beep and the screen displays VOX off. If you choose 1-10S, VOX function is enabled, and the voice transmit sensitivity is on the corresponding level. If you activate the call allowing sound, you can initiate a call using a trigger word. Waiting sound end (if activated), and then speak clearly into the microphone.

Passwd Lock

1. Press [MENU] key to enter the menu mode.
2. Move[^ or v] key to utilities, and then press [MENU] key to select.
3. Move[^ or v] key to radio settings, and then press [MENU] key to select.
4. Move[^ or v] key to passwd lock password, and then press [MENU] key.
5. Use the keypad to enter the correct 8 digits password (You can pre-set by software), and then press the [MENU] key.
6. If the password is incorrect, the screen displays an error code. If the password is correct,

the screen displays options.

7. If the first line shows open, press [MENU] key to display the power-on password application. Next time you need to enter the correct password to turn on radio. If the first line shows off, press [MENU] key to display the power-on password cancellation, next time you can directly turn on radio.
8. Move[^ or v] key to change power-on password, and then press [MENU] key to select.
9. Enter 8 digits new password, and then press [MENU] key to select.
10. Once again, enter 8 digits new password, and then press [MENU] key to select.
11. Screen displays that password was successfully changed.

Note: The power-on password must be set to eight digits.

Record (Be able to record for more than 8 hours when it's 3000 channels & 10000 contacts)

Record On/Off

Note: Record function is only available on digital mode

1. You can set one of the Buttons Definitions to turn on/off the record
2. Menu operations
   (1)Press [MENU] to enter menu mode
   (2) Move [^ or v] to Utilities, then press [MENU] to select

(3) Move [^ or v] to select Radio Settings,
(4) Move [^ or v] to Record
(5) Move [^ or v] to Turn On/ Turn Off
(6) Press [MENU] to select

When the record function is turned on, each digital call will be recorded and stored in the Call Log submenu

Record Check/Playback

1 Press [MENU] to enter menu mode
2 Move [^ or v] to Call Log, press [MENU] to select
3 Move [^ or v] to Record, press [MENU] to select
4 Move [^ or v] to record Directory (records will be stored each day), press [MENU]
5 Move [^ or v] to select the record you need
6 Press [MENU] to choose from: Play, Destination ID, Source ID, Date, Time ,Tx/Rx, RecordTime
7 Press [MENU] to select

Clock

Clock settings are divided into:

- Time
- Date

Time

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press [MENU] key to select.
4. Move [^ or v] key to clock, and then press [MENU] key.
5. Move [^ or v] key to time, and then press [MENU] key to display the current time.
6. Press [MENU] key to enter time setting interface.
7. Move [^ or v] key to move left and right to select the desired number, the selected number will reverse video display, then enter the corresponding numbers to change the time via the numeric keypad.
8. Press [MENU] key to save, the screen displays the time has been saved.

Date

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press [MENU] key to select.
4. Move [^ or v] key to clock, and then press [MENU] key.
5. Move [^ or v] key to date, and then press [MENU] key to display the current date.
6. Press [MENU] key to enter the time setting interface.

7. Move [^ or v] key to move left and right to select the desired numbers, the selected numbers will reverse video display, then enter the corresponding number to change the date via the numeric keypad.
8. Press [MENU] key to save, the screen displays the date has been saved.

Mode

Mode settings are divided into:

- CH Mode
- MR Mode

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio settings, and then press [MENU] key to select.
4. Move [^ or v] key to mode and then press [MENU] key.
5. Move [^ or v] key to select CH mode or MR mode, then press [MENU] key to select the corresponding mode, the screen displays this mode is selected.
6. The main screen will show channel name or frequency (receiving frequency) according to the selected mode.

Private call match

1. press ENT/ MENU to enter the menu.
2. choose the UTILITIES.
3. press ENT/ MENU to enter radio setting,choose Private call Match to confirm.

Note：when Private call match is on，you can communicate the radio directly without the ID match.

Group call match

1. press ENT/ MENU to enter the menu.
2. choose the UTILITIES.
3. press ENT/ MENU to enter radio setting,choose Private call Match to confirm.

Note：when Group call match is on，you can communicate the radio directly without the ID match.

Interrupt：

1. Open the Interrupt in the software.
2. If the radio has et to be allow interrupt , when received the radio which is also set to be : TX interrupt in call criteria. When radio will be in receiving automatically.

Radio Info

Radio contains the following information:

- My Number
- Versions

Note: At any time you can return to the previous screen by pressing the [BACK] key.

My Number

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.

3. Move [^ or v] key to radio information, and press [MENU] key to select.
4. Move [^ or v] key to my number, then press [MENU] key.
5. The display shows radio ID and name.

Versions

Display radio firmware version.

1. Move [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to radio information, and press [MENU] key to select.
4. Move [^ or v] key to radio versions, and then press [MENU] key.
5. The screen will display the current firmware version, Codeplug version.

Program Radio

Radio configuration mainly includes editing the channel contents

Channel contents can be edited include:

- RX Frequency
- TX Frequency
- Channel Name
- Time out Timer
- CTC/DCS
- Color Code
- Repeater Slot

Rx Frequency

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software), and then press [MENU] key to select.
5. Move [^ or v] key to receiving frequency, and then press [MENU] key to select.
6. The screen displays receiving frequency of the current channel, and then press [MENU] key to select.
7. Press the number keys to enter the corresponding number, press [^] key to delete the last number, press [BACK] to return to the previous menu.
8. After finish the change, press [MENU] key, the screen displays receiving frequency has been saved.

Note: Editing frequency will be limited within the frequency range setted by programming software, if less than the write frequency range setted by software, the final change result will be the minimum frequency of frequency range setted on software, otherwise it is maximum.

Tx Frequency

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.

3. Move [^ or v] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software), and then press [MENU] key to select.
5. Move [^ or v] key to transmitting frequency, and then press [MENU] key to select.
6. The screen displays transmitting frequency of the current channel, and then press [MENU] key to select.
7. Press the number keys to enter the corresponding number, press [MENU] key to delete the last number, press [BACK] to return to the previous menu.
8. After finish the change, press [MENU] key, the screen displays transmitting frequency has been saved.

Note: Editing frequency will be limited within the frequency range setted by programming software, if less than the write frequency range setted by software, the final change result will be the minimum frequency of frequency range setted on software, otherwise it is maximum.

Channel Name

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software), and then press [MENU] key to select.

5. Move [⌃ or ⌄] key to the channel name and press [MENU] key to select.
6. The screen displays the current channel name, press the [# ⇧] key to switch the input method to enter the relevant letters, numbers or characters, the same as the input method and text editing.
7. After the change is complete, press [MENU] key, the screen displays channel name has been saved.

TOT

1. Press [MENU] key to enter the menu mode.
2. Move [⌃ or ⌄] key to utilities, and then press [MENU] key to select.
3. Move [⌃ or ⌄] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software), and then press [MENU] key to select.
5. Move [⌃ or ⌄] key to TOT, and then press [MENU] key to select.
6. The screen displays infinite, 15S, 30S ... 555S and other options (increasing 15S each time), move [⌃ or ⌄] key to the corresponding option, then press [MENU] key to select; if you choose infinite, the screen displays transmit time close, if you select others, the screen display corresponding time selected.

CTC/DCS

CTCSS/DCS can only be set on analog mode, including:

- CTCSS/DCS encoding

- CTCSS/DCS decoding

Encode

1. Press [MENU] key to enter the menu mode.
2. Move [⌃ or ⌄] key to utilities, and then press [MENU] key to select.
3. Move [⌃ or ⌄] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software), and then press [MENU] key to select.
5. Move [⌃ or ⌄] key to CTCSS/DCS, and then press [MENU] key to select.
6. Move [⌃ or ⌄] key to CTCSS/DCS encoding, and then press [MENU] key to select.
7. Screen display off and a set of CTCSS/DCS encoding value, move [⌃ or ⌄] key to off, and then press [MENU] key to select, and there will be no CTCSS/DCS encoding value, screen displays CTCSS/DCS encoding value off; move [⌃ or ⌄] key to CTCSS/DCS encoding value, and then press [MENU] key to select, then set the corresponding value, screen displays the corresponding CTCSS/DCS encoding value.

Decode

1. Press [MENU] key to enter the menu mode.
2. Move [⌃ or ⌄] key to utilities, and then press [MENU] key to select.
3. Move [⌃ or ⌄] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software),

and then press [MENU] key to select.

5. Move [^ or v] key to CTCSS/DCS, and then press [MENU] key to select.
6. Move [^ or v] key to CTCSS/DCS decoding, and then press [MENU] key to select.
7. Screen display off and a set of CTCSS/DCS decoding value, move [^ or v] key to off, and then press [MENU] key to select, and there will be no CTCSS/DCS decoding value, screen displays CTCSS/DCS decoding value off; move [^ or v] key to CTCSS/DCS decoding value, and then press [MENU] key to select, then set the corresponding value, screen displays the corresponding CTCSS/DCS decoding value.

Color Code

Color code only can be set on digital channels.

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software), and then press [MENU] key to select.
5. Move [^ or v] key to color code, then press [MENU] key to select.
6. Move [^ or v] key to select color code values, and then press [MENU] key to select. Screen shows X(the selected color code value) is selected.

Repeater Slot

Repeater slot only can be set on digital channels.

1. Press [MENU] key to enter the menu mode.
2. Move [^ or v] key to utilities, and then press [MENU] key to select.
3. Move [^ or v] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password (programmed by software), and then press [MENU] key to select.
5. Move [^ or v] key to repeater slot, and then press [MENU] key to select.
6. Move [^ or v] key to select repeater slot values, and then press [MENU] key to select. Screen shows X(the selected repeater slot value) is selected.

VOX level

1. Press [MENU] to enter menu mode
2. Move [^ or v] to Utilities, then press the [MENU] key
3. Move [^ or v] to radio Programming Radio then press [MENU]
4. Input the correct password of radio set by software press [MENU]
5. Move [^ or v] to VOX then press [MENU]
6. Move [^ or v] to set the VOX level you need, there are level 1-10 to be selected.

Tx Contact

1. Press [MENU] to enter menu mode
2. Move [^ or v] to Utilities, then press the [MENU] key
3. Move [^ or v] to radio Programming Radio then press [MENU]

4. Input the correct password of radio set by software press [MENU]
5. Move [^ or v] to Tx Contact then press [MENU]
6. Move [^ or v] to select the Contacts you need, radio will show the info “TxCotact Selected”

Group List

1. Press [MENU] to enter menu mode
2. Move [^ or v] to Utilities, then press the [MENU] key
3. Move [^ or v] to radio Programming Radio then press [MENU]
4. Input the correct password of radio set by software press [MENU]
5. Move [^ or v] to GroupList then press [MENU]
6. Move [^ or v] to GroupList , you will be able to add and delete group members from the selected group list. Or you can move [^ or v] to select to add group list.

Specifications

General

Frequency Range(MHz)	Tx:144-148&420-450MHz Rx:136-174&400-480Mhz
Channel	1000
PLL Channel Spacing	6.25/25/12.5/25KHz
Voltage Rating	DC 13.8V
Operating Temperature	-30℃~+60℃
Storage Temperature	-30℃~+85℃
Dimention	143x50x175 mm
Compatible With American Military Standard	(MIL-STD-810C/D/E)

Transmitter

FM Hum and Noise	-40dB @12.5kHZ	-45dB @25Khz
Modulation limited	+/-2.5kHz @ 12.5kHZ	+/-5.0kHZ @ 25kHZ
Conducted/radiated emission	-36 dBm ＜ 1GHz	-30 dBm ＞1Ghz ＜ 4GHz
Adjacent channel power	-60 dB @12.5kHZ	-65 dB @ 25kHZ
Audio Response	+1dB~-3dbB	
Audio distortion	3%	
FM modulation	12.5kHZ: 11KOF3E	25kHZ: 16KOF3E
4FSK digital modulation	12.5kHZ only data:7K60FXD	12.5kHZ data and audio:7K60FXE
Digital Protocol	ETSI TS 102361-1，-2，-3	
Digital vocoder type	AMBE++	
Digital agreement	DMR	

Receiver	
Frequency stability (-20℃ +60℃, +25℃)	+/-1.0ppm
Digital Sensibility	0.3uV/-117.4dBm(BER 5%) 0.7uV/-110dBm(BER 1%)
Analogue Sensibility	0.35uV/-116dBm(20dB SINAD) 0.22uV/-120dBm(20dB SINAD)
Rated audio	5W
Adjacent Channel Selectivity	TIA603C:60 dB @ 12.5kHz ETSI: 60 dB @ 12.5kHz
Intermodulation	TIA603C:65 dB ETSI: 65 dB
C0-channel Rejection	12 dB @ 12.5kHz
Spurious Rejection	TIA603C:70 dB ETSI: 70 dB
Audio distortion @ rated audio	≤3%
FM Hum and Noise	-40dB @12.5kHZ -45dB @25Khz
Audio response	+1dB~-3dbB
Spurious emission	-57dBm@＜1GHz -47dBm@＞1GHz
Bolck	84dB

Warranty card

Note:

1. This warranty card is only applicable to two-way radio of the above-listed model and serial number.
2. The warranty card is an important document for the end-user to enjoy warranty service, please keep it well.
3. The warranty card shall be filled and chopped by the dealer, or it is invalid.

Customer's name: Gender:

Add and postal code:

Customer's Tel:

Model:

Serial number:

Purchasing date:

Invoice No.:

Dealer: Stamp:

Add and postal code of the dealer:

Contact Tel:

Handling people:

Thank you for buying two-way radios, we will do our best to provide you with a stable, clear and efficient wireless communication services. In order for you to enjoy a better quality warranty service, please focus on the following information:

The products warranty period begins from the purchasing date, if product failure under normal use within warranty period occurs, according to the contents of this warranty, (the radio is guaranteed for 12 months, accessories 6 months), please carry the warranty card originals and purchase invoice to designated authorized warranty repair station for warranty service.

The following situations occur during warranty period will be implemented in paid service:

(1) Failure to produce the warranty card
(2) The card has altered traces or inconsistent with the product
(3) Defect or damage caused by abnormal or non-normal use
(4) Defect or damage caused by misuse, accident, water or negligence
(5) Defect or damage caused by improper testing, operation, maintenance, installation, disassembly or adjustment
(6) Defect or damage caused by unauthorized repair or disassembly
(7) Defect or damage caused by force majeure
(8) Wear and tear under normal use

When you are in need of repair, please send the radio, warranty card and purchase invoice together by post or take directly to designated authorized service stations, shipping costs should be borne by the user.

Maintenance record

Carry-in date			
Completion date			
Fault description			
Maintenance staff numbers			
Maintenance personnel No.			
Signature			

This warranty card to be kept by the user, no replenishment if lost

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 including received interference that may cause undesired operation.

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.
Replacement of any transmitter component (crystal, semiconductor, etc) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.