Trilogy
Easy Access Radio
Chertsey Radio Club

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Trilogy-850 User manual

Welcome to your new Trilogy Digital Radio

Thank you for purchasing a Trilogy 850 radio from Chertsey radio club.
We have worked very hard with the manufacturer to ensure these radios are designed and produced to strict EU standards. The radio boasts ergonomic design and comprehensive Digital and analogue functions.

Please do read through this guide to get familiar with your radio and use the quick user guide as well.

Your radio comes fully programmed with your DMR ID and some of your local repeaters, so should work without any programming from you.

If you need help or have questions please do get in contact with us.

Getting Started：

Before you use this user manual, please review the following information carefully.

- ◆ How to use this user manual
- ◆ What information that your dealer / System Administrator can inform you

How to use this user manual

This user guide intriduces the basic operation of your Trilogy DMR / Analogue radio. You rdaio comes pre-programmed with your local repeaters and DMR ID to make this *EASY ACCESS* for you.

In this manual we use the following icons to show the difference between features in Analogue and in Digital modes.

- This icon indicates the function is only available in Analog mode
- This icon indicates the function is only available in Digital mode

[ ]In any operating screen, you can press this button to return back to Home screen.

Note: There is no special icon shown for features that workable in both Analog and Digital mode.

You can check with your dealer or system administrator for the following:

- ◆ Is your radio with default settings or any preset channels that the distributor usually set?
- ◆ Which buttons are have been designed to operate other features?
- ◆ What optional accessories can be used with your radio?

Preparation for operating the radio

Please assemble your radio by following steps:

1) The battery pack is not charged at the factory, charge it firstly before use.
2) Check the charger indicator, when charging is completed, the indicator lights up solid green.
3) Install the battery to the radio
4) Install the antenna
5) Install the belt clip
6) Install the general interface cover (dust cover)
7) Switch the radio power ON and adjust the volume.

Charging the battery pack

Please use charger, adaptor and battery pack supplied only by us. The charger can indicate the charging status.

Charging diagram

Charging steps:

1. Plug the AC adaptor into an AC outlet, like arrow (1)
2. Plug the AC adapter cable into the adapter jack located on the back of the charger, like arrow(2)

3. Place the battery pack or the radio with a battery pack into the charger, like arrow (3)
4. The indicator lights up solid red and charging starts. When charging is completed, the indicator lights up solid green. Then remove the battery pack or the radio from the charger.
Note: For optimum battery life and performance, charge the battery pack or the radio (with a battery pack) at least 12 hours before initial use.

Charging indicators

LED indicator	Current state	Description
Flashes red and then OFF	Electrify but on standby	No-load
Lights Red	Charging	Insert battery
Lights Green	Fully charged	Charging completed
Flashes Red	Failure	For maintenances

Note:

1. It is normal if the charger LED flashes red for a short time when the charger is just connected.
2. If a second battery is replaced to charge, please wait until the current battery is fully charged (lights green).If the charger indicator flashes red during charging:
(1) Please check if the battery pack is well connected with the charger.
(2) The battery pack is damaged or failed
(3) The surrounding temperature is too high or too low.

⚠ **Note:** Please read the "Battery Safety Information" before useing the charger.

Installing the battery pack

1. Align the battery pack to the battery slot like diagram 1
2. Sliding the battery pack to the battery slot till the battery lock to the right place like diagram 2

To remove the battery, turn off the radio firstly. Then slide the battery latch upwards to unlock the battery, like diagram 3.

Install the general interface cover (dust cover)

1. Remove two screws (as per diagram 1), then open the jack stopper.
2. Plug the accessory into according jack of the radio as per diagram②, and then press it lightly for well contact.
3. To remove the accessory by plugging it out as per diagram③ direction.

Reminder: If the installation can't be use, please check if the accessory is appropriate or installed incorrect.

Installing the antenna

Turn off the radio, holding the base of antenna, and then screw it into the connector on the top of transceiver and turn clockwise until secure.

To remove the antenna, turn off the radio firstly, and rotate it anticlockwise.

Installing the belt clip

Align the belt clip to the two screw holes on the back of the radio, and then tighten the screws by using special screw driver.

To remove the belt clip, unscrew the screws.

Turning the radio ON

Turn the ON / OFF/ Volume Control Knob clockwise until a click sound is heard. Then you hear a confirmation sound and a welcome image is shown on the radio display.

Note: There is no sound if the radio prompt tones or alert tone is disabled. is If the radio is not power on, please check the battery firstly to make sure it is installed properly. If the radio is still not power on, please contact your dealer.
To turn off the radio, rotate anticlockwise the volume control, till a click sound is heard. The display will show power OFF message or a prompt tone will be heard.

Adjusting the volume

Rotate clockwise the volume control to increase the volume after power on. The Volume Increasing Progress Bar will appear on the display simultaneously.

Rotate anticlockwise the volume control to decrease the volume. The Volume Increasing Progress Bar will appear on the display simultaneously.

Content (I)

Knowing more about the radio controls setting
Please review the following sub-directory firstly:

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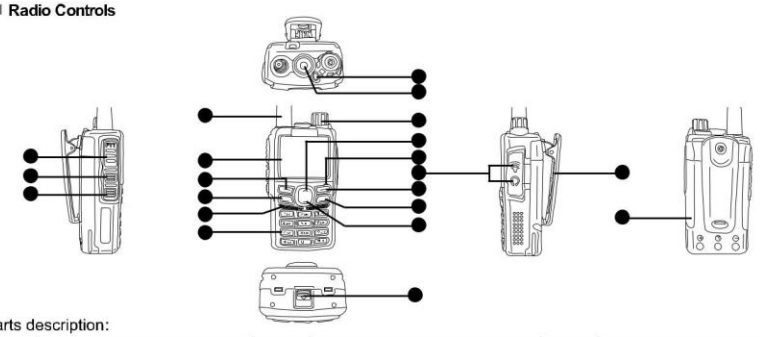
Radio Controls Introduction

■ **Radio Controls**



Parts description:

NO.	Part Name	NO.	Part Name	NO.	Part Name
1	PTT key(Transmit key)	8	Speaker	15	SP/MIC connector
2	SK1 (Side key 1)	9	Numeric Keypad	16	Back key
3	SK2 (Side key 2)	10	Digital / Analog (LED) Indicator	17	Programmable key (P2)
4	Antenna	11	Lamp	18	Down key
5	LCD display	12	Power switch/ volume control	19	Battery latch
6	OK / Menu key	13	Up key	20	Belt clip
7	Programmable key (P1)	14	MIC	21	Li-ion battery pack

Note: Buttons like [SK? /P?] are programmable keys.

■ Programmable keys

You dealers can pre-set the programmable keys based on the length of a button press.

Pre-setting can be shortcuts of radio functions.

◆ Short press — Pressing and Releasing quickly (programmable range is from 50ms-750ms)

◆ Long press — pressing and holding for programmed length(programmable range is from 500ms-5000ms)

Note: The programmable duration for a key press can be used for all radio functions / utility functions or setting, except Emergency Call feature.

■ Radios functions can be preset by programmable keys

1. Radio activation — it is allowed to enabled a target radio remotely
2. Radio inspection — determine whether a system radio is activated or not
3. Radio kill — it is allowed to kill a target radio
4. Remote monitor — switch on the microphone of a target radio but without any indicators
5. Monitor — Always monitor the selected channels? communication till this function being disabled .
6. Encryption ON/OFF — turn ON /OFF encryption feature
7. Emergency mode ON — start an emergency alarm or call
8. Emergency mode OFF — cancel an emergency alarm or call
9. Zone switch — change the current working zone (allowed to select from a zone list)
10. Scan ON/OFF — turn ON /OFF scanning feature
11. Contacts list — direct access to the Contacts list
12. Voice Operating Transmission (VOX) ON /OFF — switch between VOX feature ON and Off
13. Man down alarm ON /OFF — switch between man down alarm automatically feature ON and OFF. (Optional)

■ Other settings and utility functions can be pre-set by programmable keys

1. Backlight ON /OFF — turn display backlight ON or OFF
2. Keypad lock — witch keypad between locked and unlocked
3. Squelch level adjustment — select the proper squelch level for receiving.
4. High/Low power selection — switch transmit power level between high and low

■ Access to features preset

You can access to the different radio features through one of the following ways:

• Short pressing or long pressing related preset keys.

OR

• Using the following menu button [MENU]:

1. For accessing to Menu list, press [MENU] key, then press [UP] or [DOWN] key to access the menu features.
2. Press [MENU] key to select the needed feature or enter

into the needed submenu.

3. Press [BACK] key or [ ]to return to the previous Menu or screen.

Note: If the radio is inactivity after a period of time, the radio will not automatically exit the menu and will stays in operation screen.

■ Use the keyboard

You can input user alias, ID or write a message thru the keyboard. Many characters require pressing one button several times to get. The following form shows the pressing times to get a certain character by pressing one button.

Pressing times

Secret Key	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	.	,	'	?	!	-	(	)	@	/	:	_	;	-	&	%	*	=	<	>	$	[	]	{	}	~	^	'	#	;
2 abc	A	B	C																											
3 def	D	E	F																											
4 ghi	G	H	I																											
5 jkl	J	K	L																											
6 mno	M	N	O																											
7 pqrs	P	Q	R	S																										
8 tuv	T	U	V																											
9 wxyz	W	X	Y	Z																										
0	Note: In Number editing mode, short press this button to enter number "0", while in Number, English and Chinese editing mode, long press this button toenter "+" symbol.																													
*	Note: In Number, English and Chinese editing mode, short press this button to enter "*" symbol and long press it to enter space.																													

#	Note: In Number, English and Chinese editing mode, short press this button to enter "#" symbol and long press to switch between Number, English and Chinese(Pinyin) editing mode ("AB"Capital letters, "ab"Lowercase letters, "12" Numbers and "PY-Chinese Pinyin")

■ PTT button

There are two basic functions of [PTT] button: Transmitting and Receiving.

◆ Press [PTT] button to transmit the signals to other radios

◆ Release [PTT] button to receive signals from other radios

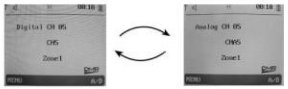
◆ If the Individual /Group Call or Prompt Tones is activated, the PTT Sidetone will be heard when you press or release [PTT] button.

◆ If the Individual / Group Call or Prompt Tone is activated, you will hear the PTT Sidetone when your radio is receiving or communication is finished.

Note: You can use programming software to turn off all radio alert tones and prompt tones or just disabled partial radio alert tones and prompt tone.

■ Switching between Digital and Analog mode

For your convenience, each channel can be programmed as either analog channel or digital channel.



◆ In standby mode, press [Digital / Analog] button for at least 3 seconds, the current channel will be switched between Analog and Digital mode.

◆ If the radio is switched from Digital to Analog, some features maybe unavailable, where digital feature (for example SMS) icons will be hidden in the menu list.

◆ There is also shared feature list for functions being available both in Digital and Analog mode.

Note: During scanning, the radio also can switches between Analog and Digital mode, but scanning mode will be disabled.

■ Radio status indicators

The below icons appears on LCD display; also appears in Contact list indicating ID type.

◆ Individual call:

Indicates an individual call is starting. In contact list, it indicates alias, name, ID No, encode etc.

◆ Group call:

Indicates a group call is starting. In contact list, it indicates alias, name, ID No, encode etc.

◆ General call:

Indicates a General call is starting. In contact list, it indicates alias, name, ID No, encode etc.

■ Icons on LCD display

The liquid crystal display (LCD) of the radio shows radio status, character input and Menu items.

The following icons are appears on LCD display.

◆ Receiving signals (RSSI)

Indicates no signal is received

The Number of signal strength bars indicates the signal strength of your radio. Five bars indicate the strongest signal. This icon is only appeared in receiving.

◆ Monitor

Indicates it is monitoring the selected channel

◆ Power level

"L" means the radio is set at low power

"H"means the radio is set at high power

◆ Ringing tones are disabled.

Tones are turned off.

◆ VOX

Appears when VOX is activated.

◆ GPS available

This icon appears when GPS is activated for locating

There is no icon appearing, if GPS is not available or out of range or not receiving data from satellite when GPS is enabled.

◆ Scan

Indicates Scanning is started

◆ Priority scan

"P": in scanning list, channels with "P"are set as priority scan channels

◆ Unread SMS

Indicates there is unread SMS in inbox

Indicates the inbox is full

◆ Emergency alarm

Indicates the radio is in emergency mode

◆ Safety

Indicates communication encryption is activated

◆ Battery pack

The number of bars indicates the remaining battery level.

◆ CTCSS

"QT" means CTCSS is activated

* In standby mode, "QT" appearing means CTCSS is available in receiving.

* In transmitting, "QT" appearing means CTCSS is available in transmitting

◆ CDCSS

"DQT" means DCS is activated

* In standby mode, "DQT" appearing means DCS is available in receiving.

* In transmitting, "DQT" appearing means DCS is available in transmitting.

■ LED Indicator

The LED Indicator indicates the working status of the radio.

- Lighting Red — radio is transmitting.
- Light Green — radio is receiving.
- Flashing red light — the battery is in low power.

Note:

① In analog mode, when the LED indicator flashes or lights green, it indicates the radio detects the active signal over the air.

② If the busy channel lockout function is turned on, the radio will refuse to transmit signal when you press the [PTT] key.

Content (II)

After you understand how your radio is configured, you are able to use it more deftly.Use this directory to familiar with the basic call feature:

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Using the UP & Down key to Initiate a Call.....14
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Initiating and Receiving Calls

■ Choose a Zone

A zone is a group of channels. Your radio supports up to 16 zones, with a maximum of 16 digital channels and 16 analogue channels per zone.

Choose a working zone by following steps:

Procedure:

1. Press the preset "Zone Switch" key to switch in zones.

OR

2. Follow the steps below.

① Press the [Menu]key to access the main menu.

② Use [▲/▼] key to choose [Setting], and press "OK" to access the sub-menu.

③ Use [▲/▼] key to choose "Zone" in sub-menu, and press "OK" to access zone list (1-16 Zones).

④ Use [▲/▼] key to choose a desired zone in zone list and press "OK" to confirm. Now you can see "Zone Settled" on the display.

⑤ After the radio returns to the home screen, the Zone No. displays at the bottom of the screen.

Note:

The No. and names showing in Zone list need to be preset by your dealer or System Administrator. (The maximum No. is 16 zones)

■ Choose a Channel, User ID, or Group ID

After choosing the desired zone (provided that there is multiple zones preset in the radio), choose a working channel, user alias or ID, or Group alias or ID with the channel selector.

Prompt:

◆ When choosing a channel, you can see the information of current channel is displayed on the screen, such as channel name, channel number, frequency, ID, etc. (it depends on the preset information and display mode the user choose).

◆ You can change current working channel mode by pressing [Analog / Digital] key. (Analog / Digital Mode)

■ Receiving and Answering to a Radio Call

In the current channel, you can receive or answer the call from user(s) with the same user ID or group ID. In transmitting, the LED indicator lights red, while in receiving, it lights green (Provided that LED indicator is turned on).

Note: To decode an encrypted call, your radio must have same encryption key, or same Key Value AND Key ID (preset by your dealer) as the transmitting radio. (The encryption can be preset by your dealer or yourself)
Please refer to ***Encryption*** on Page 42 for more detailed information.

Receiving and Answering to a Group Call

To receive a group call, your radio must be programmed as part of that group.

Procedure:

When receiving a group call (the Group Call icon displays on screen),

1) LED lights up green (if the LED indicator is turned on).
2) The first line shows the caller alias or ID, and the second line shows Group Call icon (only appears in digital mode).
3) To answer/reply, hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
4) If the "Rx Begin Tone" feature for group call is enabled, you will hear a short tone when the transmitting radio press the [PTT] Key, means your radio is in receiving.
5) If the "Rx End Tone" feature for group call is enabled, you will hear a short tone when the transmitting radio release the [PTT] Key, means your radio is free to response, at this moment, you can press the [PTT] Key and speak clearly into the microphone to answer the call.
6) If the "Tx Begin Tone" feature for group call is enabled, you will hear a short tone when you press the [PTT] Key, then you can speak clearly into the microphone.
7) If the "Tx End Tone" feature for group call is enabled, you will hear a short tone when you release the [PTT] Key, means you are available for receiving. .

Please refer to ***Initiate a Group Call*** on Page 14 for more detailed information.

Receiving and Answering to a Private Call

A private call refers to a call from an individual radio to another individual radio. There are two kinds of Private Call for selection:

1. Make radio remote detection to make sure the receiver radio is existed.
2. Ready to initiate a call.

Procedure:

When receiving a private call (the Private Call icon displays on screen):

1) LED lights up green (if the LED indicator is turned on).
2) The first line shows the caller alias or ID, and the second line shows Group Call icon (only appears in digital mode).
3) To answer/reply, hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
4) If the "Rx Begin Tone" feature for private call is enabled, you will hear a short tone when the transmitting radio press the [PTT] Key, means your radio is in receiving.

5) If the "Rx End Tone" feature for private call is enabled, you will hear a short tone when the transmitting radio release the [PTT] Key, means your radio is free to response, at this moment, you can press the [PTT] Key and speak clearly into the microphone to answer the call.
6) If the "Tx Begin Tone" feature for private call is enabled, you will hear a short tone when you press the [PTT] Key, then you can speak clearly into the microphone.
7) If the "Tx End Tone" feature for private call is enabled, you will hear a short tone when you release the [PTT] Key, means you are available for receiving. .

Please refer to ***Initiate a Private Call*** on Page 14 for more detailed information.

Receiving and Answering a General Call

A general call is a call from an individual radio to all radios in the same channel.

Procedure:

When receiving a general call (the General Call icon displays on screen):

1) LED lights up green (if the LED indicator is turned on).
2) The first line shows the caller alias or ID, and the second line shows Group Call icon (only appears in digital mode).
3) To answer/reply, hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
4) If the "Rx Begin Tone" feature for general call is enabled, you will hear a short tone when the transmitting radio press the [PTT] Key, means your radio is in receiving.
5) If the "Rx End Tone" feature for general call is enabled, you will hear a short tone when the transmitting radio release the [PTT] Key, means your radio is free to response, at this moment, you can press the [PTT] Key and speak clearly into the microphone to answer the call.
6) If the "Tx Begin Tone" feature for general call is enabled, you will hear a short tone when you press the [PTT] Key, then you can speak clearly into the microphone.
7) If the "Tx End Tone" feature for general call is enabled, you will hear a short tone when you release the [PTT] Key, means you are available for receiving. .

Please refer to ***Initiate a General Call*** on Page 15 for more detailed information.

Note:

1.If you switch to another channel while receiving the General Call, the radio will stop receiving that general call.
2.During a General Call, you are not able to use any pre-programmed key until the call ends.

■ Initiate a Radio Call

You can choose a channel, user ID, or group alias by following instructions:

1. Use [▲/▼] key
2. Choose from the Contacts list thru Menu or Preset

buttons.

3. Manual Dial the user ID in the "Contacts" this is only available in private call.

Note: Your radio can only transmit voice with encryption only when the "Encryption" feature is turned on. Your target radio must have the same encryption key OR the same Key Value and Key ID with your radio to decode the transmission.

Please refer to ***Encryption*** on Page 42 for more detailed information.

Using the UP & Down key to Initiate a Call

Initiating a Group Call

To initiate a group call, your radio must be programmed as part of that group.

Procedure:

1. Rotate the [▲/▼] key to choose the channel with preset group alias or ID.
2. Hold the radio vertically 2.5cm to 5cm(1 to 2 inches) from your mouth.
3. Press the [PTT] key to initiate a call, the LED indicator lights up solid red, the group call icon will appear on the display, also the group alias or ID will be shown on the display.
4. Release the [PTT] key and listen to the response, when the target radio answers, the LED indicator lights up solid green. Then you see the display appears the group call icon, the group alias or ID, and transmitting radio alias or ID.
5. If the "Tx Ended Tone" is enabled, you will hear a short tone when the transmitting radio is releases the [PTT] key, means the channel is free for you to answer. At this moment, you can press the [PTT] key and speak clearly into the microphone to answer the call.

Note:

You also can initiate a group call through Contacts. (Please refer to **Initiating a Group Call** on Page 14 for more detailed information.)

Initiating a Private Call

To initiate a private call, your radio must be programmed as part of that private alias or ID.

Procedure:

1. Rotate the [▲/▼] key to choose the channel with preset private alias or ID.
2. Hold the radio vertically 2.5cm to 5cm(1 to 2 inches) from your mouth.
3. Press the [PTT] key to initiate a call, the LED indicator lights up solid red, the private call icon will appear on the display, also the caller alias or ID will be shown on the display.
4. Release the [PTT] key and listen to the response, when the target radio answers, the LED indicator lights up solid green. Then you see the display appears the private call icon, the caller alias or ID etc.

5. If the "Tx Ended Tone" is enabled, you will hear a short tone when the transmitting radio is releases the [PTT] key, means the channel is free for you to answer. At this moment, you can press the [PTT] key and speak clearly into the microphone to answer the call.

Note:

You also can initiate a private call through Contacts. (Please refer to **Initiating a private Call** on Page 14 for more detailed information.)

Initiating a General Call

This feature allows you to transmit a call to all radios on the same channel. Your radios must be programmed to allow to use this feature.

Procedure:

1. Rotate the [▲/▼] key to choose the channel with preset general alias or ID.
2. Hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
3. Press the [PTT] key to initiate a call, the LED indicator lights up solid red, the general call icon will appear on the display, also the caller alias or ID will be shown on the display.
4. Release the [PTT] key and listen to the response, when the target radio answers, the LED indicator lights up solid green. Then you see the display appears the general call icon, the caller alias or ID etc.
5. If the "Tx Ended Tone" is enabled, you will hear a short tone when the transmitting radio is releases the [PTT] key, means the channel is free for you to answer. At this moment, you can press the [PTT] key and speak clearly into the microphone to answer the call.

Note: Users on the channel can't answer to a general call.

Initiating a Group Call or Private Call

Procedure:

1. Press the preset [Contacts] Key to initiate a private or group call.
2. Hold the radio vertically 2.5cm to 5cm(1 to 2 inches) from your mouth.
3. Press the [PTT] key to initiate a call, the LED indicator lights up solid red, the private call, caller alias or ID, and the group call or private call icon will appear on the display.
4. Wait for the "Tx Begin Tone" to finish (if enabled), and speak clearly into the microphone.
5. Release the [PTT] key and listen to the response, when the target radio answers, the LED indicator lights up solid green. Then you see the display appears the call type icon, the caller alias or ID, and the transmitter radios alias or ID.
6. If the "Tx Ended Tone" is enabled, you will hear a short tone when the target radio is releases the [PTT] key , means the channel is free for you to answer. At this moment, you can press the [PTT] key and speak clearly into the microphone to answer the call.
7. If there is no voice activity in the preset time, then this call will be ended. The radios will be back to main menu.

Initiating and Receiving Calls

■ Manual dial to initiate a private call

Procedure:

1. Press preprogrammed "Contacts" key, and press [▲/▼] key to select sub menu-Manual dial.
2. Press "OK" key to enter Manual dial interface.
3. Input ID numbers directly.
4. Hold the radio vertically 2.5cm to 5cm(1 to 2 inches) from your mouth.
5. Press the [PTT] key to initiate a call, the LED indicator lights up solid red, the private call alias or ID, and the private call icon will appear on the display.
6. Wait for the "Tx Begin Tone" to finish (if enabled), and speak clearly into the microphone.
7. Release the [PTT] key and listen to the response, when the target radio answers, the LED indicator lights up solid green. Then you see the display appears the private call icon, the caller ID or users ID.
8. If the "Tx Ended Tone" is enabled, you will hear a short tone when the target radio is releases the [PTT] key, means the channel is free for you to answer. At this moment, you canpress the [PTT] key and speak clearly into the microphone to answer the call. Or if there is no voice activity in the preset time, then this call will be ended.
9. When the call is end, press "Delete" key or press the [▰] key to returns to the Home Screen.

■ Talk Around

You can continue to communicate by using talk around feature when the repeater is not operating, or when two way radio is out of the repeater's range but within the talking range of other radios. This is known as "Talk Around"

Procedure:

1. Press preprogrammed "Talk Around" key to switching between talk around and repeater mode.

Note: When your radio works in talk around mode, the talk around icon " ⊢⊣ " will appear on the display.

■ Monitoring features

▮ Monitor Momentary (Monitoring a channel)

Use the monitor feature to make sure a channel is free before transmitting.

Procedure:

1. Press and hold the preset [analog monitor] key and listen to the activity.
2. The LED indicator lights up solid green. (If LED indicator is enabled)
3. When you hear the activity of radio or "white noise"(the channel is free), press [PTT] to talk and release PTT to listen.

▮ Permanent Monitor

Use permanent monitor feature to continuously monitor a channel.

Procedure:

1. Press the preset [permanent monitor] key and listen to activity.
2. The LED indicator lights up solid green.
3. When you hear the activity of radio or "white noise"(the channel is free), press [PTT] to talk and release [PTT] to listen.

Content (III)

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Advanced Functions (pre-programmed by programming software)

DMR Service

For more information on turn on or off the radios setting and advanced functions through preprogrammed (by programming software), please review the following details.

Calling Duration

Users can preprogram the calling duration of a radio after ending call by using the programming software.
(Range from 30ms to 300ms)

Remote Monitor Duration

Users can limit the duration of the radio that being remote monitor by other users.
(Range from 10s to 120s)

Remote Monitor

Users can turn on or off for allowing your radio to receive and process the remote monitor instruction from other radios through pre-programmed (by programming software).
This instructs indicate receiver radio within the range of remote monitor to revive its own Mic & transmitter. The radio will initiate a call silently and not give any notice to your radio about remote monitor.

Note:

The function is available ONLY in Digital mode.

Radio Killing

Users can turn on or off to allow the radio to receive and process "Radio kill" instruction from another radio, and disable it remotely through pre-programmed (by programming software). This function can prevent the radio is used when it is stolen or lost.

Note:

The function is available ONLY in Digital mode.

Radio Check

Users can turn on or off for allowing other radios to check whether your radio is active in the system with no bother to that radio through pre-programmed (by programming software).

Note:

The function is available ONLY in Digital mode.

Radio Revive

Users can turn on or off for allowing your radio to receive and process "Radio revive"(revive your radio remotely) instruction from other radio through pre-programmed (by programming software). This function can be used when a stolen or lost radio has been recalled.

Note:

The function is available ONLY in Digital mode.

Call Alert

Users can turn on or off to allow other radios use the alert function to request you call back when you are available through pre-programmed (by programming software). But No voice communication.

Advanced Functions (pre-programmed by programming software)

Note:

The function is available ONLY in Digital mode.

Encryption Level

This function can add encryption to selected digital channel. The encryption is a scrambling solution based on the software, but not very reliable, it just for preventing eavesdrops. The portions of transmission signal and the user identification are not encrypted. The receiver and transmitter radio must be preset to have the same encryption level or the same Key Value and Key ID, then can decrypt an encryption-enable call or receive encrypted transmitting data. You can enable or disable the encryption function through custom buttons of Short press or Long press (The Encryption ON/OFF) or Encryption ("Eetting" menu). Your radio must enable "Encryption" function on the channel or the "Encryption" function of your radio to send an encrypted transmission signal. If the encryption function of Channel or your radio is enabled, the encryption icon will displays on the radio with LED.

Options:

◆ OFF — Turn off all encryption function of your radio.

◆ Low — Allow to add basic encryption to selected digital channel. For every radio, users must choose an initialization encryption key from preset list. If the initialization encryption key of receiving radio and the transmitting radio is different, you will hear a chaotic transmission.

◆ Middle — Allow to add strong encryption to selected digital channel. Every channel with encryption ON must be connected with a initialization encryption key value. If the Key ID of the transmitting radio is not match with all Key ID of the receiving radio, the receiving radio will hear nothing.

◆ High — Allow to add enhanced encryption to selected digital channel. Every channel with encryption ON must be connected with a s initialization encryption key value. If the Key ID of the transmitting is not match with all Key ID of the receiving radio, the receiving radio will hear nothing.

Note:

The function is available ONLY in Digital mode. However, encryption function of a channel or a radio is not supported on some models.

Content (IV)

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View the setting of menu function and operation

■ Text Messaging

Your radio can receive text message from an individual radio. The maximum length of characters for a text message is 138. Any text message in the writing/ editing screen will be saved to "Outbox" automatically.
Note: Press [ ] at any time to return to the Home screen.

Inbox

Receiving a Message

When your radio is receiving message, the radio will give a Message Tone (if enabled) and the display will show the message icon [ ]

Reading a Message

Procedure:

1. Press [Menu] Key to access the menu.
2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press [▲/▼] key to select "Inbox" and press [OK] key.
4. Press [▲/▼] key to choose messages, and press [OK] key, then open message.
5. Press [Back] key to return to the Inbox.

Or:

Press [OK] key to access the Reply, Forward, Edit, or Delete message menu.
Press key to choose menu, then press [OK] key.
(Please refer to: the details operation for Reply, Forward, Edit, or Delete message.)
6. Press [Back] key to return to the previous menu.

Note:

If there have unread message or received new message in the inbox, the display will show message icon [ ].

Managing Received Message

Use the inbox to manage text messages. The inbox can store up to 30 messages. Your radio provides the following options for text messages:

- Reply
- Forward
- Edit
- Delete

Note:

Sort the order of text messages in Inbox are in accordance with the most recently received.

Tips: Long press [ ] at anytime to back to the Home Screen.

Replying to a Received Message

Procedure:

1. Press【Menu】 Key to access the menu.
2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press [▲/▼] key to select "Inbox" and press [OK] key.
4. Press [▲/▼] key to choose messages, and press [OK

] key, then open message.
5. Press [OK] Key to access the submenu of Inbox.
6. Press to select "Reply" and press [OK] key. A flashing cursor appear, use the keypad to write the message.
Or:
Press [OK] key to access the Send, Insert common message or Exit Editor menu.
Press [▲/▼] key to select Insert common message, and press [OK] key. A flashing cursor appear, if need, use the keypad to edit your message.
7. After finished writing, press [OK] key to access the submenu.
8. Press [OK] key to select "Send" and press [OK] key.
9. The display will show "MSG sending"
10. If the message is sent successfully, the display will appear "MSG sent"
Or:
If the message is failed to send, the display will appears "Waiting-timeout"
11. The screen returns back to the previous menu.

Forwarding to a Received Message

To select the message from Inbox and send it to another users / Group call alias or ID.

Procedure:

1. Press [Menu] Key to access the menu.
2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press [▲/▼] key to select ?Inbox? and press [OK] key.
4. Press [▲/▼] key to choose messages, and press [OK] key, then open message..
5. Press [OK] Key to access the submenu of Inbox.
6. Press [▲/▼] key to select "Forward" and press [OK] key.
Press [▲/▼] key to select "Search" and press [OK] key.
Press [▲/▼] key to choose contacts alias or ID, and press [OK] key to send message.
Or:
Press key to select "Write Number" through keypad to input contacts ID number, press [OK] key to send message.
7. The display will show "MSG sending"
8. If the message is sent successfully, the display will appear "MSG sent"
Or:
If the message is failed to send, the display will appears "Waiting-timeout"
9. The screen returns back to the previous menu.

■ Editing to a Received Message

You can edit or modify the message on the Inbox before send.

Procedure:

1. Press [Menu] Key to access the menu.

View the setting of menu function and operation

2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press[▲/▼]key to select "Inbox" and press [OK] key.
4. Press[▲/▼]key to choose messages, and press [OK] key, then open message.
5. Press [OK] Key to access the submenu of Inbox.
6. Press [▲/▼] Key to select "Edit" and press [OK] key.
7. A flashing cursor appear, use the keypad to write the message.
Press[▲/▼] Key to move one space to the left or right, press[Delete]key to delete any useless words before the flashing cursor.
Or:
Press [#] key to switch input mode. The current input method will be shown at the top of the display. (When it displays "AB" it means you are able to type capital letters. "ab" it means you are able to input lowercase letters. "12" it means you are able to type numbers from 0 to 9. "PY" it means you are able to type Chinese with Pinyin method.)
8. After finished writing, press [OK] key.
Press [▲/▼] key to select "Search" and press [OK] key.
Press [▲/▼] key to choose contacts alias or ID, and press [OK] key to send message.
Or:
Press [▲/▼] key to select "Write Number" through keypad to input contacts ID number, press [OK] key to send message.
The display will show "MSG sending"
If the message is sent successfully, the display will appear "MSG sent"
Or:
If the message is failed to send, the display will appears "Waiting-timeout"
Or:
Press Key to select "Insert common message"and press [OK] key.
Press [▲/▼] Key to choose the Quick Note, and press [OK] key. A flashing cursor appear, if need, use the keypad to edit the message.
Or:
Press [▲/▼] Key to select "Save" and press [OK] key. Then the message will be saved to "Outbox"
The screen returns back to the previous menu.
Or:
Press [▲/▼] Key to select "Exit Editor"and press [OK] key.
The screen returns back to the previous menu.

■ Delete a Received Message

Procedure:

1. Press【Menu】 Key to access the menu.
2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press [▲/▼] key to select "Inbox" and press [OK] key.

4. Press [▲/▼] key to choose messages, and press [OK] key, then open message.
5. Press [OK] Key to access the submenu of Inbox.
6. Press [▲/▼] Key to select "Delete"and press [OK]key.
7. The display will show "Confirm to delete"
Press [OK] key to delete, the display will show "Deleted"
Or:
Press【Cancel】key to return to the previous menu.
8. The screen returns back to the previous menu.

Writing a Text Message

Procedure:

1. Press [Menu] Key to access the menu.
2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press [▲/▼] key to select "Writing a Text Message" and press [OK] key.
4. A flashing cursor appear, use the keypad to write the message.
5. Press [▲/▼] Key to move one space to the left or right.
6. Press [Delete] key to delete any useless words before the flashing cursor.
Or:
Press [#] key to switch input mode. The current input method will be shown at the top of the display. (When it displays "AB" it means you are able to type capital letters. "ab" it means you are able to input lowercase letters. "12" it means you are able to type numbers from 0 to 9. "PY" it means you are able to type Chinese with Pinyin method.)
7. After finished writing, press [OK] key.
8. Press [▲/▼] key to choose sub menu, and press [OK]key.
Press [▲/▼] key to select "Insert common message" and press [OK] key.
Or:
Press [▲/▼] Key to choose the Quick Note, and press [OK] key. A flashing cursor appear, if need, use the keypad to edit the message.
Or:
Press [▲/▼] Key to select "Save"and press [OK] key. Then the message will be saved to "Outbox"
The screen returns back to the previous menu.
Or:
Press Key to select "Exit Editer" and press [OK] key.
The screen returns back to the previous menu.
Or:
Press [▲/▼] key to select "Search" and press [OK]key.
Press [▲/▼] key to choose contacts alias or ID, and press [OK] key to send message.
Or:
Press [▲/▼] key to select "Write Number" through keypad

to input contacts ID number, press [OK] key to send message.
The display will show "MSG sending"
If the message is sent successfully, the display will appear "MSG sent"
Or:
If the message is failed to send, the display will appears "Waiting-timeout"
9. The screen returns back to the previous menu.

Outbox

Procedure:

1. Press [Menu] Key to access the menu.
2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press [▲/▼] key to select "Outbox" and press [OK] key.
4. Press [▲/▼] key to choose messages, and press[OK]key.
5. A flashing cursor appear, use the keypad to write the message.
6. Press [▲/▼] Key to move one space to the left or right.
7. Press [Delete] key to delete any useless words before the flashing cursor.
Or:
Press [#] key to switch input mode. The current input method will be shown at the top of the display. (When it displays "AB" it means you are able to type capital letters. "ab" it means you are able to input lowercase letters. "12" it means you are able to type numbers from 0 to 9. "PY" it means you are able to type Chinese with Pinyin method.)
8. After finished writing, press [OK] key.
9. Press [▲/▼] key to choose sub menu, and press [OK]key.
Press key to select "Insert common message" and press [OK] key.
Or:
Press [▲/▼] Key to choose the Quick Note, and press [OK] key. A flashing cursor appear, if need, use the keypad to edit the message.
Or:
Press [▲/▼] Key to select "Save"and press [OK] key. Then the message will be saved to "Outbox"
The screen returns back to the previous menu.
Or:
Press [▲/▼] Key to select "Exit Editer" and press [OK] key.
The screen returns back to the previous menu.
Or:
Press [▲/▼] key to select "Search" and press [OK] key.
Press [▲/▼] key to choose contacts alias or ID, and press [OK] key to send message.
Or:

Press [▲/▼] key to select "Write Number" through keypad to input contacts ID number, press [OK] key to send message.
The display will show "MSG sending"
If the message is sent successfully, the display will appear "MSG sent"
Or:
If the message is failed to send, the display will appears "Waiting-timeout"
10.The screen returns back to the previous menu.

Common message

You radio can preprogram the common message through software or through add Quick note to edit, it supports up to 50 Quick Noted. While Quick Notes are preset, you can view, edit, delete or send any predefined Quick Notes before send.

Procedure:

1. Press [MENU] key to access the menu.
2. Press [▲/▼] key to select "Message" and press [OK] key.
3. Press [▲/▼] key to select "Quick Notes" and press [OK] key.
4. Press [▲/▼] key to read the current message.
5. Press [OK] key again to access the sub menu.

◆ **Display Content**

Procedure:

The display will show the contents of the selected Quick Notes.
Press [Back] key to return to the previous menu.

◆ **Add Quick Notes**

Procedure:

Enter the editing Quick Notes. When a blinking cursor appears, use the keypad to type message.

Press [▲/▼] key to move one space to the left or right, and use keypad to input text.

Press [Delete] key to delete any unwanted characters, and hold [#] key to change the input method, which will be shown at the top of the display.

("AB" it means you are able to type capital letters. "ab" it means you are able to input lowercase letters. "12" it means you are able to type numbers from 0 to 9."PY" it means you are able to type Chinese with Pinyin method.)

Press [OK]key again to access the sub menu.

Press key to scroll down to select one of the following options under the sub menu, and press [OK]key.

- Save quick notes: save the edited notes.
- Exit Editor: return to the previous menu.

◆ **Edit Quick Notes**

Procedure:

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The display will show the contents of the selected Quick Notes.
When a blinking cursor appears, use the keypad to type message.

Press [▲/▼] key to move one space to the left or right, and use keypad to input text.

Press [Delete] key to delete any unwanted characters, and hold [#] key to change the input method, which will be shown at the top of the display.

("AB" means you are able to type capital letters. "ab" means you are able to input lowercase letters. "12" means you are able to type numbers from 0 to 9."PY" means you are able to type Chinese with Pinyin method.)

Press [OK] key again to access the sub menu.

Press [▲/▼] key to scroll down to select one of the following options under the sub menu, and press [OK] key.

- Save quick notes: save the edited notes.
- Exit Editor: return to the previous menu.

◆ **Delete Quick Notes**

You can delete any unwanted quick notes.

Procedure:

The display will show "Confirm to delete"

Press [OK] key to delete the quick note or press [Cancel] key to return to the previous menu.

◆ **Send Quick Notes**

You can send any quick notes or edit any of them before sending.

Procedure:

The display will show the content of the selected Quick Note.

Press [▲/▼] key to move one space to the left or right, and use keypad to input text.

Press [Delete] key to delete any unwanted characters, and hold [#] key to change the input method, which will be shown at the top of the display.

("AB" means you are able to type capital letters. "ab" means you are able to input lowercase letters. "12" means you are able to type numbers from 0 to 9."PY" means you are able to type Chinese with Pinyin method.)

Press [OK] key again to access the sub menu.

Press [▲/▼] key to select the desired Contacts or ID.

Or press [▲/▼] key to select "Manual Dial" and use keypad to input the ID number. Press [OK] to send the quick note.
The display will show "Sending". If the quick note is sent successfully, it will show "Sent". Other wise, it will show "Failed".

6. Press [Back] key to return to the previous menu.

Clear the Message List

You can clear the messages in the Inbox, Outbox and quick

notes.

Procedure:

1. Press [MENU] key to access the menu.
2. Press [▲/▼] key to select the "Message" and press [OK] key.
3. Press [▲/▼] key to select "Clear All" and press [OK] key.
4. Press [▲/▼] key access the sub menu.

Press [▲/▼] key to select Inbox.

OR

Press [▲/▼] key to select Outbox.

OR

Press [▲/▼] key to select Quick Note.

5. Press [OK] key to confirm.
6. Press [OK] key and the display shows "Confirm to delete?"
7. Press [OK] key to clear the selected list. Or press [Cancel] key to cancel.
8. The display will return to the previous menu.

Note: Lists cannot be restored after deletion.

■ Contacts

Contact provides "Address-book" for the portable radio, Each entry refers to an alias or ID that you use to make a call. Each contact will be connected with **one** of four types of calls below:

① Group Call
② Private Call
③ General Call
④ Dispatch Call.

Note: if the encryption feature is activated on a channel, you can make the encrypted group call, private call and general call on that channel. Only when the desired radio/radios has/have the same encryption key OR the same Key Value and key ID as your radio, the transmission can be decoded correctly.

◆ You radio can support at most 64 Contacts.
◆ Each contact is provided with the following information:
- Call type
- Call alias
- Call ID

Note:
You can add, delete or edit the user ID for the digital contact list.

View Contact List

Procedure:

Press the user-defined [Contact] key to access contact list and proceed to step 4.

OR

Follow the steps below to access contact list.

1. Press [MENU] key to access the menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select "Contact List" and press [OK] key.
4. Press [▲/▼] key to choose the desired alias or ID and press [OK] key.
5. Press [▲/▼] key to select "Info" and press [OK] key.
6. Display will show the information of a contact, such as name, number and attribute.
7. Press [BACK] key to return to the previous menu.

Add Contact

Procedure:

Press the user-defined [Contact] key to access contact list and proceed to step 4.

OR

Follow the steps below to access contact list.

1. Press [MENU] key to access the menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select "Contact List" and press[OK]key.
4. Press [▲/▼] key to choose the desired alias or ID and press [OK] key.
5. Press [▲/▼] key to select "Add Contact" and press [OK] key.
6. Display will show the information of a contact, such as name, ID number and attribute.
7. Press [▲/▼] key to select "Name" and press [OK] key.
8. When a blinking cursor appears, use the keypad to type the name. Or Hold [#] key to change the input method, which will be shown at the top of the display. ("AB" means you are able to type capital letters. "ab" means you are able to input lowercase letters. "12" means you are able to type numbers from 0 to 9."PY" means you are able to type Chinese with Pinyin method.)
9. Press [▲/▼] key to move one space to the left or right.
10. Press [Delete] key to delete any unwanted characters.
11. Press [OK] key to save the name.
12. It will return to the previous menu.
13. Press [▲/▼] key to select "ID Number" and press [OK] key.
14. When a blinking cursor appears, use the keypad to type the ID number, at most 8 numbers.
15. Press [▲/▼] key to move one space to the left or right.
16. Press [Delete] key to delete any unwanted characters.
17. Press [OK] key to save the ID number.
18. It will return to the previous menu.
19. Press [▲/▼] key to select "Save Contact" and press [OK] key.
20. The display will show "Contact saved"
21. The display will return to the previous menu.

Note:

◆ You can save a contact only when name and ID number is inputted.

◆ The call type of the added contact must be "Private Call"

■ Edit Contact

Procedure:

Press the user-defined [Contact] key to access contact list and proceed to step 4.

OR

Follow the steps below to edit contact.

1. Press [MENU] key to access the menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select "Contact List" and press[OK]key.
4. Press [▲/▼] key to choose the desired alias or ID and press [OK] key.
5. Press [▲/▼] key to select "Edit Contact" and [OK] key.
6. Display will show the information of a contact, such as alias, ID number and attribute.
7. Press [▲/▼] key to select "Alias" and press [OK] key.
8. When a blinking cursor appears, use the keypad to type the alias. Or Hold [#] key to change the input method, which will be shown at the top of the display.

("AB" means you are able to type capital letters. "ab" it means you are able to input lowercase letters. "12" means you are able to type numbers from 0 to 9. "PY" means you are able to type Chinese with Pinyin method.)

9. Press [▲/▼] key to move one space to the left or right.
10. Press [Delete] key to delete any unwanted characters.
11. Press [OK] key to save the alias.
12. The screen will return to the previous menu.
13. Press [▲/▼] key to select "ID Number" and press [OK] key.
14. When a blinking cursor appears, use the keypad to type the ID number, at most 8 numbers.
15. Press [▲/▼] key to move one space to the left or right.
16. Press [Delete] key to delete any unwanted characters.
17. Press [OK] key to save the ID number.
18. The screen will return to the previous menu.
19. Press [▲/▼] key to select "Save Contact" and press [OK] key.
20. The display will show "Contact saved"
21. The display will return to the previous menu.

Note:

◆ You can save a contact only when alias and ID number is inputted.

◆ Only "Private Call" contact can be edited.

■ Delete Contact

Procedure:

Press the user-defined [Contact] key to access contact list and proceed to step 4.

OR

Follow the steps below to delete contact.

1. Press [MENU] key to access the menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select "Contact List" and press[OK]key.
4. Press [▲/▼] key to choose the desired alias or ID and press [OK] key.
5. Press [▲/▼] key to select "Delete Contact" and press [OK] key.
6. The display will show "Contact deleted"
7. Press [OK] key to the contact. Or press [Cancel] key to cancel.
8. The screen will return to the previous menu.

■ Send message from the Contact List

Procedure:

Press the user-defined [Contact] key to access contact list and proceed to step 4.

OR

Follow the steps below to edit contact.

1. Press [MENU] key to access the menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select "Contact List" and press [OK]key.
4. Press [▲/▼] key to choose the desired alias or ID and press [OK] key.
5. Press [▲/▼] key to select "Send Message" and [OK] key.
6. When a blinking cursor appears, use the keypad to type the message.

■ Initiate a call from Contact

Procedure:

1. Press the user-defined [Contact] key. The contacts will be listed alphabetically.
2. Press [▲/▼] key to choose the desired alias or ID.
3. Hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
4. Press [PTT] key to initiate a call. Meanwhile, the LED light will turn red (if turned on).
5. The display will show the alias or ID and the icon.
6. You can speak clearly into the microphone until the "Tx Begin Tone" ends (if it has been turned on.)
7. Release the [PTT] key and wait. If anyone in the group make response, the LED lights green (if enabled). And the display will show the call type icon, Group Call ID or Private call ID.

8. If the "Rx Ended Tone" feature is enabled, you will hear a short tone when the transmitting radio release the [PTT] key, which means your radio is free to respond.

OR

You can initiate a call from menu.

1. Press【Menu】 key to access main menu.
2. Press [▲/▼] key to choose the "Contact" and press [OK] key.
3. Press [▲/▼] key to choose the "Contact List" and press [OK] key.
4. Press [▲/▼] key to choose the desired alias or ID. The contacts will be listed alphabetically.
5. Hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
6. Press [PTT] key to initiate a call. Meanwhile, the LED light will turn red (if turned on). The display will show the alias or ID and the icon.
7. You can speak clearly into the microphone until the "Tx Begin Tone" ends (if it has been turned on.)
8. Release the [PTT] key and wait. If anyone in the group make response, the LED light turn green (if enabled). And the display will show the call type icon, Group Call ID or Private call ID.
9. If the "Rx Ended Tone" feature is enabled, you will hear a short tone when the transmitting radio release the [PTT] key, which means your radio is free to respond.

" Manual dial " to initiate a private call

Procedure:

1. Press【Menu】 key to access main menu.
2. Press [▲/▼] key to choose the "Contact" and press [OK] key.
3. Press [▲/▼] key to choose the "Manual Dial" and press [OK] key.
4. When a blinking cursor appears, use the keypad to type the ID number, for a maximum of 8 numbers.
5. Press [▲/▼] key to move one space to the left or right.
6. Press [Delete] key to delete any unwanted characters.
7. Finish inputting.
8. Hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
9. Press [PTT] key to initiate a call. Meanwhile, the LED light will turn red (if turned on). The display will show the alias or ID and the icon.
10. You can speak clearly into the microphone until the "Tx Begin Tone" ends (if it has been turned on.)
11. Release the [PTT] key and wait. If anyone in the group make response, the LED light turn green (if turned on). And the display will show the call type icon, Group Call ID or Private Call ID.
12. If the "Rx Ended Tone" feature is enabled, you will hear

a short tone when the transmitting radio release the [PTT] key, which means your radio is free to respond.

Advanced Services

Advanced services are needed to be programmed by software beforehand, and can be accessed by the user-defined keys or through Contact menu.

Radio Detection

If this is activated, you can check whether the target radio is available or not without disturbing. The target radio won't receive any audio or visible notice. This function is only available for the user alias or ID.

Send Radio Detection

Procedure:

1. Press the user-defined key [Radio Detection].
2. Press [▲/▼] key to select the desired alias or ID, and press [OK].
3. The display will show "Detecting..."
4. Wait for confirmation.
5. If the target radio is available in the system, the display will show "Detection succeeded" Otherwise, it will show "Detection Failed"
6. The screen will returns to the previous menu.

OR

Send radio detection through the menu.

Procedure:

1. Press [Menu] to access the main menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select the desired sub menu.

Press [▲/▼] key to select "Contact List" and press [OK] key.

Press [▲/▼] key to select the desired alias or ID number, and press [OK] key.

Press [▲/▼] key to select "Advanced Services" and press [OK] key.

OR

Press [▲/▼] key to choose the "Manual Dial" and press [OK] key.

When a blinking cursor appears, use the keypad to type the ID number, for a maximum of 8 numbers.

Press [▲/▼] key to move one space to the left or right.

Press [Delete] key to delete any unwanted characters.

Press [OK] key.

The display will show Advanced Services, and press [OK] key.

4. Press [▲/▼] key to select "Radio Detection" and press [OK] key.
5. The display will show "Detecting..."
6. Wait for confirmation.
7. If the target radio is available in the system, the display will show "Detection succeeded" Otherwise, it will show "Detection Failed"
8. The screen will return to the previous menu.

Note:

◆ If you press [Back] key when waiting for the confirmation, the radio will terminate the detection and returns to the previous menu.

◆ Your radio must be programmed through programming software to use this function.

Call Alert

It allows you to alert the target radio to reply to you at its convenience. This is available only for the alias or ID of the private call.

Send Call Alert

Procedure:

Press the user-defined [Contact] key to access contact list.

OR

1. Press [Menu] to access the main menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press key to select the desired sub menu.

Press [▲/▼] key to select "Contact List" and press [OK] key.

Press [▲/▼] key to select the desired alias or ID number, and press [OK] key.

Press [▲/▼] key to select "Advanced Services" and press [OK] key.

OR

Press [▲/▼] key to choose the "Manual Dial" and press [OK] key.

When a blinking cursor appears, use the keypad to type the ID number, for a maximum of 8 numbers.

Press [▲/▼] key to move one space to the left or right.

Press [Delete] key to delete any unwanted characters.

Press [OK] key.

The display will show Advanced Services, and press [OK] key.

4. Press [▲/▼] key to select "Call Alert" and press [OK] key.
5. The display will show "Alerting..."
6. Wait for confirmation.
7. If the alert order is sent to the target radio successfully, the display will show "Alert succeeded" Otherwise, it will show "Alert Failed".
8. It will return to the previous menu.

Note:

◆ If you press [Back] key when waiting for the confirmation, the radio will terminate the call alert and return to the previous menu.

◆ Your radio must be programmed through programming software to use this function.

Receive or respond to the call alert

If you receive a call alert, the display will alternate between "Call Alert" and caller alias or ID.

View the setting of menu function and operation

Procedure:

1. You will hear a short tone repeatedly (if activated).
2. Press [PTT] to reply to the private call directly within 5 seconds after call alert is received.

OR

Press [OK] key to refuse to reply the private call and exit the call alert mode.

The screen will return to the main screen.

Note:

◆If you don't reply to the call alert in 5 seconds, the radio will exit the call alert automatically and mark this as a missed call (which can be checked in the call log).

Remote Monitor

Use the remote monitor function to switch on the microphone of a target radio (user alias or ID only). No audio or visible indication is shown to the target radio. You can use this function to monitor the surrounding activities of the target radio.

Send Remote Monitor

Procedure:

1.Press the user-defined key [Remote Monitor].

2. Press [▲/▼] key to select the desired alias or ID, and press [OK].
3. The display will show "Monitoring..."
4. Wait for confirmation.
5. If the target radio is activated successfully, the display will show "Monitoring" and starts to receiving the audio signals from the target radio until the preset monitor time runs out. Otherwise, the display will show "Monitor Failed"
6. The screen will return to the previous menu.

OR

Send remote monitor from the menu.

Procedure:

1. Press [Menu] to access the main menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select the desired sub menu.

Press [▲/▼] key to select "Contact List" and press [OK] key.

Press [▲/▼] key to select the desired alias or ID number, and press[OK] key.

Press key to select "Advanced Services" and press [OK] key.

OR

Press [▲/▼] key to choose the "Manual Dial" and press [OK] key.

When a blinking cursor appears, use the keypad to type the ID number, for a maximum of 8 numbers.

Press [▲/▼] key to move one space to the left or right.

Press [Delete] key to delete any unwanted characters.

Press [OK] key.
The display will show Advanced Services, and press [OK] key.
4. Press [▲/▼] key to select "Remote Monitor" and press [OK] key.
5. The display will show "Monitoring..."
6. Wait for confirmation.
7. If the target radio is activated successfully, the display will show "Detection succeeded" and starts to receiving the audio signals from the target radio until the preset monitor time runs out.Otherwise, the display will show "Monitor Failed"
8. It will return to the previous menu.

Note:

◆ If you press [Back] key when waiting for the confirmation, the radio will terminate remote monitor and return to the previous menu.

◆ Your radio must be programmed through programming software to use this function.

Remote Kill:

You can kill any other radios in the system. For example, you may want to kill a stolen radio to prevent the thief from using it, and re-activate that radio when it is retrieved.

Send Remote Kill:

Procedure:

1.Press the user-defined key [Remote Kill].
2. Press [▲/▼] key to select the desired alias or ID, and press [OK].
3. The display will show "Remote killing..."
4. Wait for confirmation.
5. If the target radio is killed successfully, the display will show "Remote Kill succeeded" and the target radio will be forbidden to be used.
Otherwise, the display will show "Kill Failed"
6. The screen will return to the previous menu.

OR

Send remote kill from the menu.

Procedure:

1. Press【Menu】to access the main menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to select the desired sub menu.
Press [▲/▼] key to select "Contact List" and press [OK] key.
Press [▲/▼] key to select the desired alias or ID number, and press [OK] key.
Press [▲/▼] key to select "Advanced Services" and press [OK] key.

OR

Press key to choose the "Manual Dial" and press [OK] key.
When a blinking cursor appears, use the keypad to type the ID number, for a maximum of 8 numbers.
Press [▲/▼] key to move one space to the left or right.
Press [Delete] key to delete any unwanted characters.
Press [OK] key.

The display will show Advanced Services, and press [OK] key.
4. Press [▲/▼] key to select "Remote Kill" and press [OK] key.
5. The display will show "Remote killing..."
6. Wait for confirmation.
7. If the target radio is killed successfully, the display will show "Remote Kill succeeded" and the target radio will be forbidden to be used.
Otherwise, the display will show "Kill Failed"
8. It will return to the previous menu.

Note:

◆ If you press [Back] key when waiting for the confirmation, the radio will terminate radio kill and return to the previous menu.

◆ Performing Radio Kill is limited to radios with these function activated. Check with your dealer or system administrator for detailed information.

◆ Your radio must be programmed through programming software to use this function.

Radio Revive

Users can activate any other radios which have been killed. For example, users might want to re-activate and use a stolen radio which has been killed.

Send Radio Revive

Procedure:

1. Press the preset [Radio Revive] key
2. Press [▲/▼] key to select the desired caller alias or ID user, then press [OK] key
3. Radio screen will display/show radio revive
4. Waiting for confirmation
5. It will send out the remote revive signal to the target radio, if the signal is picked up successfully by the target radio, the display will show "Revive Succeeded"

OR

It will show "Revive failed"
6. Return to the previous menu.

OR

Send Radio Revive instruction via menu.

Procedure:

1. Press [Menu] key to access menu.
2. Press [▲/▼] key to select "Contact" and press [OK] key.
3. Press [▲/▼] key to access the sub menu.
Press [▲/▼] key to select "Contact list" and press [OK] key
Press [▲/▼] key to select a caller alias or ID and press [OK] key
Press [▲/▼] key to select "Advance Services"and press [OK] key

OR

Press [▲/▼] key to select " Manual Dial" and press [OK] key
When a blinking cursor appears, use the keypad to input the contact ID. (up to 8 digits)
Press [▲/▼] to move one space to the left or right.
Press [Delete] key to remove any unwanted characters or

enter a contact ID by input from the keyboard. After finish editing, press [OK] key.
Display screen shows the sub menu of "Advance Services" then press [OK] key
4. Press [▲/▼] key to select "Remote Revive"and press [OK] key
5. Radio screen will display/show radio revive。
6. Waiting for confirmation
7. If the display shows the target radio is "Revive Succeeded" then the target radio is available to use.
OR
If the target radio is failed to revive then it will show "Revive failed".
Return to the previous menu.
Note:
◆ While waiting for confirmation, press [Back] key to end / terminate the Radio Revive, and returns to the previous menu
◆ Only the radio with this function activated can carry out this function. Please contact your dealer or system administrator for further information.
◆ Your radio must be programmed to allow user to use this function.

Emergency Alarm

Emergency alarm function is mainly used to indicate an emergency situation. User can initiate an emergency call any time at radio screen or even while the channel is in used.

◎ Your dealer can set the key duration when pressing emergency call button:
• Short press --- shorter than a long press
• Long press --- 500 milliseconds to 5000 milliseconds
◎ Your radio supports 3 emergency alarm modes:
• Emergency Alarm
• Emergency Alarm&Call
• Emergency Alarm&Voice
The alarm is a non-voice signaling, which can enable another radio to respond. This function can be used when users press the emergency alert button.
◎ Your radio alarm supports following types:
• Disable --- the radio can't send the alarm signal
• Standard?Radio Transmitter --- the radio can send the alarm signal and show audio and visual alert
• Silent --- Radio Alarm signaling --- the radio can send the alarm signal, but don't provide any audio or visual prompt that indicates as "Emergency"mode, or in addition there will be no any sounds received.
• Silent with Audio --- Radio Alarm Signaling, the radio can send the alarm signal without showing audio or visual alert and radio will send the emergency alarm on the eligible channel.
Note:
◆It is available only in digital mode.

Receiving Emergency Alarm
When the radio receives an emergency alarm, the screen displays a hint for receiving an emergency alarm until the confirmation is sent and users don't exit from the emergency mode. Users won't be able to receive any other alert or any calls until users exit the emergency alarm.
Procedure:
When the emergency alarm is received, the screen will display the emergency call icon, numbers of received alarms and also the characters which are alternately displayed the sender's ID and the radio will send out ringtone at the same time.

Response Emergency Alarm
Procedure:
When the radio receives an emergency alarm:
1. Press any key to stop receiving an emergency alert.
2. To answer / reply, hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.. If the "Rx End Tone" feature is enabled, you will hear a short tone when the transmitting radio release the [PTT] Key, means the channel is free to response.
3. Press [PTT] key to start a call with a radio with an emergency call. LED indicator lights red (if enabled), and the radio is in an emergency call mode.
4. Waiting for the "TX Begin Tone" to end (if enabled) then user can speak clearly into the microphone.
5. Release [PTT] key to receive. When the target radio is responding, the LED indicator lights green (if enabled).Users will see a group call icon, group alias, or ID.
6. After the call is over, short press the [ ] key, then press the emergency alarm button to clear all the notifications for receiving an emergency call and exit the emergency mode.
7. The radio screen will show "Exit emergency mode" and return to the main screen.

Sending Emergency Alarm
If users are allowed to send an emergency alarm, it is non-voice signal, the screen of the target radio will shows the visual characters or icon as well as an alert tone.
Procedure:
1. Press the pre-programmed [emergency alarm ON / OFF] key.
2. The screen alternates between an emergency call character and ID of the target radio. Then the emergency call icon will appear on the main screen.
3. When an emergency alarm is received to the target radio, the radio will make an emergency/urgent call, the screen will display "Sent Succeeded".
OR
If the radio hasn't received any emergency alert from the target radio, it will beep and the screen will display "Sent Failed".
4. Exit the Emergency alarm mode, and return to the main screen.

Note:
If your radio is set to "silent" option, no audio or visible indication is shown to the your radio

■ Sending Emergency Alarm&Call

This feature allows users to send an emergency alarm to the target radio. After confirmation, both radios will communicate with a default emergency channel.

Procedure:

1. Press the pre-programmed [Emergency alarm ON / OFF] key.
2. The screen alternates between an emergency call character and ID of the target radio. Then the emergency call icon will appear on the main screen.
3. When an emergency alarm is received to the target radio, the radio will make an emergency/urgent call, the screen will display "Sent Succeeded"
4. To answer / reply, hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth.
5. Press [PTT] key to start a call with the target radio. The LED indicator lights red (If enabled) and the radio is in an emergency call mode.
6. Waiting for the "TX Begin Tone" to end (if enabled) then user can speak clearly into the microphone.
7. Release [PTT] key to receive. When the target radio is responding, the LED indicator lights green (If enabled).Users will see a group call icon, call group alias, or ID.
8. If enabled the "RX Ended Tone" function, when the radio release the [PTT] button, users will hear a short tone which said the channel is idle and waiting for your answer please Press [PTT] to answer.

OR

Press the preset [Emergency Alarm Switch] button to exit the emergency alarm mode.

9. Return to the previous menu.

Note:

◆ If your radio is set to "silent" option, the screen will not send any sound or voice while in the emergency call mode, neither from the target radio to receive a respond to any call until users press the [PTT] key to initiate a call.

◆ If your radio is set to "silent" option, no audio or visible indication is shown to the target radio. The radio will prompt only when you press [PTT] key to initiate or respond to a call.

■ Sending Emergency Alarm with Voice

This feature allows users to send an emergency alarm to the target radio/radios. After confirmation, your radio microphone (MIC) and the transmitter will be automatically activated, allowing you to communicate with other target radios without the need to press [PTT] key. This activation of the microphone function is called an "Emergency microphone"

If the user press [PTT] key during the programmed emergency microphone transmission period, the radio ignores the [PTT] press and remains in emergency mode.

View the setting of menu function and operation

Note: ◆ If the user presses the [PTT] key during emergency microphone, and continue to press [PTT] key after the emergency microphone duration expires. Then the radio continues to transmit the call until you release the [PTT] key.

Procedure:

1. Press the pre-programmed [Emergency alarm ON / OFF] key.
2. The screen alternates between an emergency call character and ID of the target radio. Then the emergency call icon will appear on the main screen.
3. When the screen shows "emergency alarm sent successfully", users can speak clearly with the microphone(MIC), when the "Emergency microphone" is activated, radio will automatically start to transmit signals without needing to press the [PTT] key until a default emergency microphone time is over then it will stop to transmit.
4. The LED indicator lights red (If enabled) and the radio is in an emergency call mode.
5. After the emergency microphone is over, the radio will automatically stop transmit the signals. To start again, press [PTT] key to transmit.

Note:

◆ If your radio is set to "silent" option, no audio or visible indication is shown in the emergency call mode, neither from the target radio to receive any response, until an emergency mic transmitting time is over and you have to press the [PTT] key.

◆ If your radio is set to "silent with voice" option in emergency call mode when you use the emergency microphone to initiate a call, or when the default emergency microphone time has ended, no audio or visible indication is shown but only when you press [PTT] key, these indication will appear again.

Attention:

◆ If the emergency alarm fails, the radio returns to the main screen

■ Re-initiate Emergency mode

◎ There are two situations which may appear for the following:

1. When the radio is in emergency mode, and the channel is changed, this will allow radio to exit the emergency mode. If you need to activate an emergency alarm on the new channel, you need to re-press the preset [emergency alarm switch] key, and then restart the emergency call.
2. Press the preset [emergency alarm ON/OFF] key while emergency alarm is activated and is transmitting, this will enable the radio to exit the emergency alarm mode, users need to re-press the preset [emergency alarm ON/OFF] key, and then restart the emergency alarm call.

◎ Automatic or manual exit emergency mode

1. The emergency alarm acknowledgement is received while your radio is activating emergency alarm (For emergency alarm ONLY), your radio will exit emergency mode.
2. The maximum number of attempts to perform an emergency

alarm call, it will automatically exit emergency alarm mode.
3. When the preset [Emergency Alarm Switch] key is pressed, your radio will exit emergency alarm manually.

Note:

◆ If your radio is powered off during an emergency call, it will exist the emergency mode. The radio will not reinitiate the emergency mode when the radio is turned on.

Encryption

If this feature is enabled, it is advantageous to prevent other users from using the software encryption method without authorization. Part of the transmitted signal and user identification is not encrypted. The radio must enable the channel's encryption function to transmit the encrypted signal, although this is not required to receive / transmit. At the same time in the encryption of the channel, the radio can receive a clear transmission signal.

◎ Your radio supports the following types of encryption:

- Low — Basic encryption
- Widdle — Strong encryption
- High — Enhanced encryption

Tips:

◆ Only one of the above mentioned groups can be assigned to a radio.

◎To decrypt the encrypted call or data transmission, user must have the same encryption key or the same key level, key value and key ID. If user receive a different encryption key, key value and ID key with encryption call , user can hear the confusing transmission of signals (basic encryption) or listen to nothing(Enhanced / super strong encryption).

◎When user's radio activate the encryption, the icon is displayed on the top of the screen.[ ]

Procedure:

1. Press the preset [Encryption ON/OFF] key
2. While turn on , the icon [ ] is displayed on the top of the screen.
3. While turn off, the icon [ ] is disappeared on the top of the screen.

Note:

◆ Your radio must be pre-programmed to allocate the key values, Key ID and encryption type.

◆ Some types of radios may not provide a single channel encryption or not encryption function. Please contact your dealer or system administrator for further information.

■ Call Log

Your radio will record all recent call, received and missed call. Users can use call log to view and manage the recent call activity.

◎ Users can perform the following tasks in each call list:

- Check/ View
- Talk time

- Send Message
- Delete
- Clear the list

Checking the latest call activity

Check the list of missed calls, received calls and outgoing calls.

Procedure:

1. Press [Menu] key to access menu.
2. Press [▲/▼] key to select "Call Log" and press [OK] key
3. Press [▲/▼] key to select "Missed calls", Incoming calls and Outgoing calls?and press [OK] key
4. Screen will display the most recent call log
5. Press [▲/▼] key to select caller alias or ID.

To answer/ reply, hold the radio vertically 2.5cm to 5cm (1 to 2 inches) from your mouth. . Hold [PTT] key to the caller alias or ID. If enabled, LED indicator light will turn to red, the screen will display the caller alias or ID as well as a call icon. Waiting for the "TX Begin Tone" to end (if enabled) then user can speak clearly into the microphone. Release [PTT] key to wait for the answer.

If anyone from the group responses, the LED indicator will lights green (if enabled) then users can see the call icon, group call ID or user ID on the screen.

If "TX Begin Tone" is enabled, you will hear a short beep when the target radio is released [PTT]. Press [PTT] key to answer

OR

Press [Menu] key to access menu.
Press [▲/▼] key to select "Search"
Press [OK] key
The Screen displays the selected alias or ID number.
Press [Back] key to return to the previous menu

OR

Press [▲/▼] key to select "Talk Time"
Press [OK] key
The screen displays the time and the duration of the call.
Press [Back] key to return to the previous menu

OR

Presskey to select "Send Message"
Press [OK] key
The Screen displays the input bar and a blinking cursor.
Please refer to ***Write Messgaes*** on Page 25 for more detailed information.

OR

Press [▲/▼] key to select "Delete"
Press [OK] key
The screen displays to confirm deletion of the character
Press [OK] key. Delete the selected contact name or ID or press the cancel key. Cancel the selected contact list or ID.
6. Press [Back] key to return to the previous menu.

Clear Call Log list

Procedure:

1. Press [Menu] key to access menu.
2. Press [▲/▼] key to select "Call Log" and press [OK] key
3. Press [▲/▼] key to select "Clear the list" and press [OK] key.
4. Press [▲/▼] Key to select required list to delete. (Missed calls, incoming calls, outgoing calls). Then press [OK] Key to confirm.
5. The screen displays the call log has been cleared.
6. Press [Back] key to return to the previous menu.

Attachment

Users can view some general information from the attachment menu

Note:

◆ Some information of the radios only support to view if the radio with the optional functions.

View attachment information

Procedure:

1. Press [Menu] key to access menu.
2. Press [▲/▼] key to select "Attachment" and press [OK] key
3. Press [▲/▼] key to select "List" and press [OK] key
4. The screen displays information of the entry lists.
5. Press [▲/▼] key to select Temperature menu
Press [OK] key
The screen displays the temperature value.
Press [Back] key to return to the previous menu.

OR

Press [▲/▼] key to select "Flashlight"
Press [OK] key, the screen displays Flashlight ON / OFF
Press [▲/▼] key to select "ON/Off"
Press [OK] key, the screen displays the setting has been completed.
Press [Back] key to return to the previous menu

OR

Press key to select "Date" then press [OK] key
The screen displays the current date.(the date is set)
Return to the previous menu
5. Press [Back] key to return to the previous menu.

GPS (Optional)

You can choose to purchase the radio with or without GPS feature. GPS feature allows you to check or send your current longitude, latitude, time, date, altitude and speed etc data.

GPS ON/OFF

Procedure:

1. Press [Menu] key to access menu.
2. Press [▲/▼] key to select "GPS"and press [OK] key
3. The screen displays the available options of GPS
4. Press [▲/▼] key to select desired option and press [OK] key
Press [▲/▼] key to select "GPS ON/OFF"and press [OK] key
Press [▲/▼] key to select "GPS ON"and press [OK] key

The screen displays the setting is done, when GPS is turned ON, the GPS icon will show on the main screen.
Your radio returns to the previous menu.

OR

Presskey to select "GPS OFF" and press [OK] key
The screen displays the setting is done, when GPS is turned OFF, the GPS icon will disappeared on the main screen.
Your radio returns to the previous menu.
5. Press [Back] key to return to the previous menu

View Location and GPS data transmission

Procedure:

1. Press [Menu] key to access menu
2. Press [▲/▼] key to select "GPS" and press [OK] key
3. The screen displays the GPS menu options
4. Press [▲/▼] key to select "List" and press [OK] key
Press [▲/▼] key to select "Position" and press [OK] key.
The screen displays the GPS information.
Press [▲/▼] key to view GPS entries.
Press [Back] key to return to the previous menu

OR

Press [Send] key to send GPS data.
The screen displays sub-menu options.
Press [▲/▼] key to select "Search contacts"and press [OK] key
The screen displays Contact lists
Press [▲/▼] key to select the desired contact alias or ID.
Press [OK] key and send the GPS data.
The screen displays "Sending message" or "Message has been sent"
The screen returns to Contact List.
Press [Back] key to return to the previous menu

OR

Press [▲/▼] key to select "Input number"and press [OK] key
The screen displays a blinking cursor and users can input the contact ID with keyboard number.
Press [▲/▼] key to move the cursor to the left or right.
Press [delete] key to delete the character before the cursor.
After the input is completed, press [OK] key and start sending GPS data.
The screen displays "Sending message"or "Message has been sent"
The screen returns to the contact ID menu.
Press [▲/▼] key to move the cursor to the left or right.
Press [delete] key to delete the cursor
5. Press [Back] key to return to the previous menu

Time-zone Position Calibration

Procedure:

1. Press [Menu] key to access menu
2. Press [▲/▼] key to select "GPS"and press [OK] key
3. The screen displays the GPS menu options
4. Press [▲/▼] key to select "Time zone"and press [OK] key

The screen displays the Time zone menu
Press [▲/▼] key to select "Auto Aligning"
The screen displays "Waiting..."
Press [Back] key to cancel the auto calibration and return to the menu
OR
Press [▲/▼] key to select "Manual Aligning"
The screen displays Time zone lists.
Press [▲/▼] key to select current time zone entry and press [OK] key.
The screen displays the Calibration is complete.
The screen returns to previous menu.
5. Press [Back] key to return to the previous menu
Note:
◆ When GPS is in automatic calibration, you may need to wait for a moment, until the screen will show "Waiting in progress" disappears then it will finish.
◆ GPS Manual settings to calibrate the time, select the actual time difference (+, -).

■ Settings

You can customize the functional options of your radio according to your preferences.
You can carry out the following tasks in **Settings** under the menu:

- Machine Properties
- Parameter Setting
- Regional Settings
- Time Setting
- Tone Setting
- General Setting
- Restore Factory Settings
- Function Setting
- Signaling Setting
- Encryption Settings (Only Applicable To This Type)

Machine Properties
If your dealer or system administrator allows you to settings the radio, you can set the menu and other operation settings to see your radio Call id and Group ID.

■ View ID Radio
Check your radio ID number and Group ID information.
Procedure :
① Press 【Menu】 Key to access the menu
② Press [▲/▼] key to select "Settings", and press [OK] button.
③ Press [▲/▼] key to select "Machine Properties", and press [OK] button. to check radio ID or Group ID.
④ Press [▲/▼] key to return to the previous menu.
Press [▲/▼] key to select Private Call , and press [OK] button.
OR

Press [▲/▼] key to select GroupCall , and press [OK] button.
4. Radio displays the current selected call or group call ID information.
5. Press [BACK] key to return to the previous menu.

Parameter Setting
If your dealer or system administrator allows you to default the radio settings, then you can set menu and other operatings system by parameters, call time, high/low power, relay time slot and power saving mode,etc..

■ Call Time Limit
To avoid affecting communications of others due to the long time transmitting, you can turn the call time limit function ON or OFF. When enables the call time limit function, your radio will begin timing the moment you press the [PTT] button,when reaching the set time limit, the radio will automatically stop transmitting. Unless you release the【PTT】button and press it again.
Procedure:
1. Press [Menu] Key to access the menu.
2. Press [▲/▼] key to select "Settings", and press [OK] button.
3. Press [▲/▼] key to select "Parameter Setting ", then press [OK] button.
4. Press [▲/▼] key and choose from the following options, then press [OK] button.
Press [▲/▼] key to select "Call Time Limit" then press [OK]button.
Press [▲/▼] key to select "Time Limit Setting", then press [OK] button.
The screen displays the talk time length (in seconds). (Setting range: 500S ~ 20S)
Press [▲/▼] key to select the time value.
After complete the selection.
Press [▲/▼] key , according to the confirmation, the screen shows "Long call placement has been set" or press [BACK] key to return to the previous menu.
OR
Press [▲/▼] key to select "ON/OFF Call Time Limit" then press [OK] button.
Press [▲/▼] key to select "ON/OFF Menu [▲/▼] then press [OK] button.
The screen displays the setting is completed and return to the previous menu.
5. Press[BACK] key to return to the previous menu.

■ High / Low Power
If it is allowed by dealer or system administrator, users can set and check the output power level through menu display.
Note:
◆ Radios with high power can communicate with target radio in a longer distance.
◆ Radios with low power can communicate with the target

radio in a shorter distance.

Procedure:

Press the preset High/Low Power key to switch between high power and low power.

OR

Choose the power level from the menu:

1. Press [Menu] key to access the main menu.
2. Press [▲/▼] key to select "Settings"and press [OK] key.
3. Press [▲/▼] key to select "Parameter Setting" and press [OK] key.
4. Press [▲/▼] key to select "High/Low Power"and press[OK] key.

Press [▲/▼] key to select "High Power" and press [OK] key.
The screen shows "Powered selected" and backs to the previous menu.

OR

Press [▲/▼] key to select "Low Power" and press [OK] key.
The screen shows "Power Selected" and backs to the previous menu.

5. Press [Back] key to return to the previous menu.

Repeater Timeslot

If it is allowed by dealer or system administrator, users can set and check the repeater timeslot through menu display.

Procedure:

1. Press [MENU] key to access the main menu.
2. Press [▲/▼] key to select "Settings" and press [OK] key.
3. Press [▲/▼] key to select "Parameter Setting" and press [OK] key.
4. Press [▲/▼] key to select "Repeater Timeslot" and press [OK] key.
5. Press [▲/▼] key to select the sub-menu.

Press [▲/▼] key to select "Timeslot 1" and press [OK] key.
The screen shows "Timeslot selected" and backs to the previous menu.

OR

Press [▲/▼] key to select "Timeslot 2" and press [OK] key.
The sreen shows "Slot Selected" and backs to the previous menu.

6. Press [Back] key to return to the previous menu.

Power Saving Mode

If it is allowed by dealer or system administrator, users can set or check the Power Saving Mode of the radio through menu display, to improve the energy utilization and extend the battery operating time.

Procedure:

1. Press [MENU] key to access the main menu.
2. Press [▲/▼] key to select "Settings" and press [OK] key.
3. Press [▲/▼] key to select "Parameter Setting" and press [OK] key.

4. Press [▲/▼] key to select "Power Save Mode" and press[OK] key.
5. Press [▲/▼] key to select the sub-menu.

Press [▲/▼] key to "ON/OFF" and press [OK] key.
Press [▲/▼] key to select ON or OFF, and press [OK] key.
The screen shows "Saved" and backs to the previous menu.

OR

Press [▲/▼] key to select "Deferred Starting Time" and press [OK] key.
The screen shows the starting time of Power Saving Mode on the display.
Press [▲/▼] key to select the Starting Time (range: 10s-60s), then press [OK] key.
The screen shows "Selected" and backs to the previous menu.

OR

Press [▲/▼] key to select "Sleep Time Ratio" and press [OK] key.
The Sleep Time Ratio will be listed on the display.
Press [▲/▼] key to select your desired ratio, and press [OK] key.
The screen shows "Selected" and backs to the previous menu.

6. Press [Back] key to return to the previous menu.

Note:

The settings are valid ONLY when the Power Saving Mode is turned on.
Please set the sleep time ratio reasonably according to the actual need (The longer the sleep time you set, the longer the battery working time would be. But it may also cause delay in re-connect the signal).

Zone Setting

A zone is a group of channels. Your radio supports up to 16 zones, with a maximum of 16 digital channels and 16 analog channels per zone.

Select a Zone

If it is allowed by dealer or system administrator, users can set and check the zone information through menu display.

Procedure:

Press the preset [Zone] key to choose a zone for the radio.

OR

Follow the steps below.

1. Press the [Menu] key to access the main menu.
2. Press [▲/▼] key to select [Setting], and press [OK] to access the sub-menu.
3. Press [▲/▼] key to select [Zone] in sub-menu, and press [OK] to access zone list.
4. There are the zone lists (16 zones at most).
5. Press [▲/▼] key to select a desired zone in zone list and press [OK] to confirm.
6. The screen shows "Zone Selected"
7. The radio returns to the home screen.

Note:

◆ The number and names of the zones in the list should be preset by your distributor or system administrator (there can be a maximum of 16 zones).

◆ The zone is showed on the screen after it is selected.

Time Setting

If it is allowed by dealer or system administrator, users can set and check the date, time, and date format through menu display.

Procedure:

Setting the time,date and date display format.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings" then press [OK] key
3. Press [▲/▼] key, select "Time Settings" then press [OK]key
4. Press [▲/▼] key to select the desired sub-menu.

Press [▲/▼] key to select "Date" and press [OK] key.

There is year/month/day (depending on the date format).

Press [▲/▼] key and then input the date.

The screen shows "Date Saved" when the date is set. Please press [Back] to return to the previous menu.

OR

Press [▲/▼] key to select "Date Format" and press [OK] key.

There is different date format listed on the display, Y/M/D, M/D/Y, D/M/Y.

Press [▲/▼] key to select the desired date format, and press [OK] key.

The screen shows "Date Format Saved" and backs to the previous menu.

Prompt Tone

Users can set or check the prompt of the radio through the menu, if it is allowed by the distributor or system administrator. You can set or check the prompt of following functions:

- Profiles
- Keytone
- Low Battery Alert
- Message Tone
- Private Call Tone
- Group Call Tone
- Call Alert Tones

Profiles

If it is allowed by dealer or system administrator, users can set and check the profile tone of the radio through menu display.

Profile Setting

There are 4 profiles available on your radio:

- Standard — turn on all prompts
- Silent — turn off all prompts
- Vibrate — vibrate but without prompts (optional)
- Vibrate on Ring — vibrate with prompts on (optional)

View the setting of menu function and operation

Note:

Those profiles with "- ! -"are optional or not available at present.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings" then press [OK] key
3. Press [▲/▼] key, select "Prompt Tone" then press [OK] key
4. Press [▲/▼] key to select "Profiles"
5. Press [▲/▼] key to select the desired option.

Press [▲/▼] key to select "Standard" and press [OK] key.

The screen shows "Profile Saved" Please press [Back] to return to the previous menu.

OR

Press [▲/▼] key to select "Silent" and press [OK] key.

The screen shows "Profile Saved" Please press [Back] to return to the previous menu.

OR

Press [▲/▼] key to select "Vibrate" and press[OK] key.

The screen shows "Profile Saved" Please press [Back] to return to the previous menu.

OR

Press [▲/▼] key to select "Vibrate on Ring" and press [OK] key.

The screen shows "Profile Saved" Please press [Back] to return to the previous menu.

6. Press [Back] to return to the previous menu.

Note:

You cannot operate or set those profiles that are optional or not available.

Keytone Setting

◆If it is allowed by dealer or system administrator, users can set and check the keytone of the radio through menu display.

◆You can turn on or off the keytone and adjust its volume.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings" then press [OK] key
3. Press [▲/▼] key, select "Prompt Tone" then press [OK] key.
4. Press [▲/▼] key to select "Keytone Setting"
5. Press [▲/▼] key to select the desired sub-menu.

Press [▲/▼] key to select "ON/OFF" and press [OK] key.

Press [▲/▼] key to select "ON" and press [OK] key.

The screen shows "Keytone Saved" and backs to the previous menu.

OR

Press [▲/▼] key to select "ON" and press [OK] key.

The screen shows "Keytone Saved" and backs to the previous menu.

OR

Press [▲/▼] key to select "Keytone Volume" and press [OK] key.

Press [▲/▼] key to select the volume, and press [OK] key.

The screen shows "Volume Saved" and backs to the previous menu.

6. Press [Back] to return to the previous menu.

■ Low Battery Alert

If it is allowed by dealer or system administrator, users can set and check low battery alert through menu display.

Low Battery Alert Setting

You can turn on or off the low battery alert and adjust its volume.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings" and press [OK] key
3. Press [▲/▼] key, select "Prompt Tone" and press [OK] key.
4. Press [▲/▼] key to select "Low Battery Alert" and press[OK] key
5. Press [▲/▼] key to select the desired sub-menu and press [OK] key

Press [▲/▼] key to select "ON/OFF" and press [OK] key.

Press [▲/▼] key to select "ON" and press [OK] key.

The screen shows "Alert Saved" and backs to the previous menu.

OR

Press [▲/▼] key to select "ON" and press [OK] key.

The screen shows "Aert Saved" and backs to the previous menu.

OR

Press [▲/▼] key to select "Volume Control" and press [OK] key.

Press [▲/▼] key to select the volume, and press [OK] key.

The screen shows "Volume saved" and backs to the previous menu.

6. Press [Back] to return to the previous menu.

■ Message Tone

If it is allowed by dealer or system administrator, users can set and check the message tone through menu display.

Message Tone Setting

You can select the desired message tone (tone 1 - 5) showed when there is a message received.

Procedure:

1. Press [Menu] Key to access the menu.
2. Press [▲/▼] key to select "Settings" and press [OK] key.
3. Press [▲/▼] key, select "Prompt Tone" and press [OK] key.
4. Press [▲/▼] key to select "Message Tone" and press [OK] key.
5. There are different message tone options on the display.
6. Press [▲/▼] key to select the desired tone and press [OK] key.
7. The screen shows "Tone Saved" and backs to the previous menu.
8. Press [Back] to return to the previous menu.

■ Private Call Tone

If it is allowed by dealer or system administrator, users can

set and check the private call tone through menu display.

Private Call Tone Setting

You can turn on or off private call tone when the radio transmits or receives the private call, and select the desired tone from tone 1 to tone 5.

You can turn on or off the private call tone in 4 different modes.

- TX Begin Tone — when you press [PTT] key to transmit.
- TX Ended Tone — when you release [PTT] key.
- RX Begin Tone — when the radio is in receiving
- RX Ended Tone — when the radio stops receiving.

Note:

Tick "√" to turn on the tone. Untick "√" to turn off the tone.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings"and press [OK] key
3. Press [▲/▼] key, select "Prompt Tone"and press [OK] key
4. Press [▲/▼] key to select "Private Call Tone" and press [OK] key
5. Press [▲/▼] key to select the desired sub-menu and press [OK] key

Press [▲/▼] key to select "ON/OFF" and press [OK] key

Press [▲/▼] key to select "ON"or "OFF"and press [OK] key.

The screen returns to the previous menu.

OR

Press [▲/▼] key to select "Ring Tones" and press [OK] key

There are different tone options (tone 1-5) on the display.

Press [▲/▼] key to select the desired tone and press [OK] key

The screen shows "Tone Saved"and backs to the previous menu.

6. Press【Back】to return to the previous menu.

■ Group Call Tone

If it is allowed by dealer or system administrator, users can set and check the group call tone through menu display.

Group Call Tone Setting

You can turn on or off group call tone when the radio transmits or receives the group call, and select the desired tone from tone 1 to tone 5.

You can turn on or off the group call tone in 4 different modes.

- TX Begin Tone — when you press [PTT] key to transmit.
- TX Ended Tone — when you release [PTT] key.
- RX Begin Tone — when the radio is receiving.
- RX Ended Tone — when the radio stops receiving.

Note:

Tick "√" to turn on the tone. Untick "√" to turn off the tone.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings"and press [OK] key
3. Press [▲/▼] key, select "Prompt Tone"and press [OK] key
4. Press [▲/▼] key to select "Group Call Tone"and press[OK] key
5. Press [▲/▼] key to select the desired sub-menu and press

[OK] key

Press [▲/▼] key to select "ON / OFF"and press [OK] key

Press [▲/▼] key to select "ON" or "OFF"and press [OK] key.

The display returns to the previous menu.

OR

Press [▲/▼] key to select "Ring Tones" and press [OK] key

There are different tone options (tone 1-5) listed on the display.

Press [▲/▼] key to select the desired tone and press [OK] key

The screen shows "Tone Saved" and backs to the previous menu.

6. Press [Back] to return to the previous menu.

Call Alert Tones

If it is allowed by dealer or system administrator, users can set and check the call alert tone through menu display.

Call Alert Tone

Users can turn on or off call alert tone when the radio transmits or receives the private call, and select the desired tone from tone 1 to tone 5.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings"and press [OK] key
3. Press [▲/▼] key, select "Prompt Tone"and press [OK] key
4. Press [▲/▼] key to select "Call Alert Tone" and press [OK] key
5. There is call alert tone list on the display.
6. Press [▲/▼] key to select the desired tone and press [OK] key
7. The screen shows "Tone Saved" and backs to the previous menu.
8. Press [Back] to return to the previous menu.

Basic Settings

If it is allowed by dealer or system administrator, users can set and check basic settings of your radio through menu display.

You can set or check the following basic functions:

- Language
- Keypad Lock
- Backlight
- Version
- Display Mode
- Encoder Knob
- VOX

Language

If it is allowed by dealer or system administrator, users can set and check language of the radio through menu display.

Language Setting

You can select one language from the preset language list on your radio to be displayed on your radio.

Procedure:

1. Press [Menu] Key to access the menu

2. Press [▲/▼] key to select "Settings" and press [OK] key
3. Press [▲/▼] key, select "Basic Settings" and press [OK] key
4. Press [▲/▼] key to select "Language"and press [OK] key
5. There is different languages listed on the display.
6. Press [▲/▼] key to select the desired language and press [OK] key
7. The screen shows "Language Selected"and backs to the previous menu.
8. Press [Back] to return to the previous menu.

Keypad Lock

If it is allowed by dealer or system administrator, users can set and check the keypad lock through menu display.

Keypad Lock Setting

You can select any mode of keypad lock according to your need, in case that there is unnecessary character input.

You can select one of the following modes of keypad lock.

- Auto— The keypad will be locked when there is no operation for 1 min.
- Manual — Press [OK] key and then press [*] key to unlock the keypad

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings" and press [OK] key
3. Press [▲/▼] key, select "Basic Settings" and press [OK]key
4. Press [▲/▼]key to select "Keypad Lock" and press [OK]key
5. There are different keypad lock modes on the display.
6. Press [▲/▼] key to select the desired mode and press [OK]key

Press [▲/▼] key to select "Auto"and press [OK] key

Press [▲/▼] key to select "ON/OFF"and press [OK] key

The screen shows "Mode Selected" and backs to the previous menu.

OR

Press [▲/▼] key to select "Manual"and press [OK] key

Press [▲/▼] key to select "ON/OFF"and press [OK] key

The screen shows "Mode Selected" and backs to the previous menu.

7. Press [Back] to return to the previous menu.

Note:

Press [OK] key and then press [*] key to unlock the keypad.

Backlight

If it is allowed by dealer or system administrator, users can set and check the backlight through menu display.

LCD Light Mode and Brightness

You can set the LCD light mode and lightness to save the power of battery.

You can select from the following LCD light mode.

- On — the LCD light remains solid on.

• Off — the LCD light is off (there is micro light).
• Auto — the LCD light will be off automatically when there is no operation for more than 1 minute. And it will light when you press the key or there is signal received.

Procedure:

Press the preset [LCD Light ON/OFF] key to switch between LCD ON or OFF.

OR

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings"and press [OK] key
3. Press [▲/▼] key, select "Basic Settings" and press [OK] key
4. Press [▲/▼] key to select "LCD Light" and press [OK] key
5. Press [▲/▼] key to select the desired sub-menu and press [OK] key

Press [▲/▼] key to select "ON/OFF" and press[OK] key
The LCD Light Modes will be listed on the display.
Press [▲/▼] key to select the desired mode and press [OK]key
The screen shows "Mode Selected" and backs to the previous menu.
Press [Back] key to returns to the previous menu

OR

Press [▲/▼] key to select "Brightness" and press [OK] key
Press [▲/▼] key to select the desired brightness and press [OK] key
The screen shows "Saved" and backs to the previous menu.
6. Press [Back] key to returns to the previous menu.

■ Version

If it is allowed by dealer or system administrator, users can set and check the version of the radio through menu display.

View Version Information

You can check the version information of your radio if needed.

Procedure:

1. Press [Menu] Key to access the menu
2. Press [▲/▼] key to select "Settings"and press [OK] key.
3. Press [▲/▼] key, select "Basic Settings"and press [OK]key.
4. Press [▲/▼] key to select "Version?and press [OK] key.
5. The screen shows the version information of the radio.
6. Press [Back] key to returns to the previous menu.

■ Display Mode

If it is permitted by dealers or system administrator, users can set and check display mode of their radio through menu display.

Display mode options:

• Channel No. & Name — Channel number and preset contact name will be displayed on screen.
• Channel No. & Freq — Channel number and frequency will be displayed on screen.
• Channel No. — Channel number to be displayed on screen.

Procedure:

1. Press [Menu] key to access the menu.
2. Press [▲/▼] key to choose "Settings" then press [OK]
3. Press [▲/▼] key to choose "Others" then press [OK]
4. Press [▲/▼] key to choose "DispMode" then press [OK]
5. Display modes list will be displayed on screen.
6. Press [▲/▼] key to choose your desired mode and then press [OK]
7. "Setted" pops up on screen once the operation completed and back to previous menu.

■ Encode switch

If it is permitted by dealers or system administrator, users can set and check encoder switch.

Channel Switch

Users can turn ON or OFF the channel switch or press [keypad lock] key to prevent accidentally press from changing channel.

Procedure:

1. Press [Menu] key to access menu.
2. Press [▲/▼] key to choose "Settings" then press [OK]
3. Press [▲/▼] key to choose "Others" then press [OK]
4. Press [▲/▼] key to choose "Channel Switch" then press [OK]
5. ON or OFF will be displayed on screen.
6. Press [▲/▼] key to choose your desired set and then press [OK]
7. "Setted" pops up on screen once the operation completed and back to previous menu.

■ VOX

If it is permitted by dealers or system administrator, users can set and check VOX feature and sensitivity level through menu display.

VOX Switch

Users can turn ON VOX, so that they can initiate the call without pressing [PTT] key. If the microphone with VOX detects voice, the radio will auto transmitting until the microphone fails to detect voice.

Note:

To turn on or off VOX only be effective against the radio with VOX ON. Please contact your dealer or system administrator for more information.

Procedure:

Press the preset [VOX] key, VOX will be switched between ON and OFF.

Or operate via following instruction:

1. Press [Menu] key to access menu.
2. Press [▲/▼] key to choose "Settings" then press [OK]
3. Press [▲/▼] key to choose "Others" then press [OK]
4. Press [▲/▼] key to choose "VOX" then press [OK]
5. Press [▲/▼] key to your desired sub-menu, and press [OK]

Press [▲/▼] key to choose "VOX Switch" then press [OK];
"Turn On" and "Turn OFF" will be displayed on screen
Press [▲/▼] key to choose desired set, then press [OK] to confirm, and back to previous menu.
OR
Press [▲/▼] key to choose "VOX Level" then press [OK];
"One to Twelfth" will be displayed on screen
Press [▲/▼] key to choose desired level, then press [OK] to confirm, and back to previous menu.
6. Press [Back] to back previous menu.

Note:

◆ The higher level the higher sensitivity for voice detected. User need to program it according the working environment.

Restore Factory

If it is permitted by your dealer or system administrator, users are allowed to set and restore radios to fatory default from menu display.

Restore factory setting

Users can restore some basic settings to factory default, if required.

Procedure:

1. Press [Menu] key to access menu .
2. Press [▲/▼] key to choose "Settings" then press [OK]
3. Press [▲/▼] key to choose "StorFactory" then press [OK]
4. A warning note will pop up on screen for your double check.
5. Press [OK] again to confirm, and back to previous menu.

OR

Press [Cancel] to cancel it and back to previous menu.
6. Press [Back] to back previous menu.

FM Radio

If it is permitted by your dealer or system administrator, users can operate or check FM radio from menu display.

FM radio operation

Users can turn ON or OFF FM radio, and listen to FM program and save it if required.

Procedure:

1. Press [Menu] key to access the menu.
2. Press [▲/▼] key to choose "FM Radio" then press [OK]
3. Screen will display received FM frequency.

Press [▲/▼] key to seek or select FM frequency.
Press [Back] to exit FM radio.

OR

Press [Ok]
Screen will display sub-menu options.
Press [▲/▼] to choose your desired option, then press [OK]

- Press [▲/▼] to choose "Save Ch" and press [OK]
- "FM list saved" will pop up once operation done. And back to previous menu.

- Press [Back] to exit FM radio.

OR

- Press [▲/▼] to choose "Sel Saved CH" and press [OK]
- Screen will display a list of saved FM channels.
- Press [▲/▼] to choose desired channel for further operation.

If Press [▲/▼] to choose "Delete" and press [OK]. A warning note will pop up for your double check.
Press [OK] to confirm, and a note pops up means operation done. Or press [Cancel] to cancel the operation, and back to upper menu.

OR

Press [▲/▼] to choose "PLAY" and press [OK]
Screen will back to FM radio, and play the selected FM channel.

OR

- Press [▲/▼] to select "Seek Mode" and press [OK]
- Press [▲/▼] to choose "Manual" or "Auto" mode, and press [OK].Then a note pops up and means operation succeeded.
- Press [Back] to exit FM radio.

Note:

◆ To choose "Manual" the radio will seek FM radio frequency by step frequency at 100Mhz.

◆ To choose "Auto" the radio will auto seek FM frequency. Once signal received, it will stop seeking and start playing the program.

◆Once you are listening to FM program, if you press PTT key, FM radio will be exited temperately until PTT released.

Scan

If it is permitted by your dealer or system administrator, users can check or operate scan feature through menu display.

Scan ON or OFF

Once scan is enabled, the radio will start scan cyclically to check if there is any activities in the channel under the scan list . Once the scan is ON, the LED will flash RED, and scan icon [◌] will be displayed on the top of screen.
When mixed modes (analogue and digital) channels under scanning, if your radio stays on a digital channel, but radio scans an analogue signal and locked on the channel, then the radio will auto switch to analogue mode from digital mode during the calling duration, vice versa.

Scan mode:

When you activate the scan, radio will start scan preset channels or groups in the scan list. According to your preset, the scan may start from the last active channel or group that being scanned, or from the channel that radio currently stays on.

Note:

◆ "Talkback" or "Scan TX mode" and "Appointed channels" etc scan detail settings can be preset by your dealer or system administrator.

Procedure:

Press defined [Scan] key to turn ON or OFF scan.

OR

to turn on or off scan switch as below:

1. Press [Menu] key to access the menu.
2. Press [▲/▼] to choose "Scan" then press [OK].
3. Screen displays sub-menu options.
4. Press [▲/▼] to choose "Scan" then press [Ok] .
5. Scan list displayed on screen.
6. Press [▲/▼] to choose your desired items and press [OK].
7. "Start scan" and "Disable scan" will be displayed on screen for selection.

To choose "Start scan" and press [OK], a scan icon will be displayed on screen, and radio back tohome screen.

Note:

◆ Once scan activated, LED will flash RED and scan icon [ ]displayed on screen.

OR:

To choose "Disable scan" and press [OK] . A note pops up on screen and then back to previous menu.

Note:

◆ Once Scan is disabled, LED will be off, and scan icon [ ] will disappear from main screen.

Scan mode

If it is permitted by your dealer or system administrator, users can check or operate scan mode through menu display. .

Scan mode setting

You can select the processing modes when the radio detects signal over the air if needed.

◎Options

• CO (carrier) — Once radio receives a scanned signal over the air, it will stay on that channel until signal disappears, and then continue to scanning.

• TO (Time) — Once the radio receives a scanned signal over the air, it will stay on that channel for a preset time. Once time is out, it will continue to scanning.

• SE (Seek) — Once the radio receives a scanned signal over the air, it will stay on that channel and stop scanning until you re-activate to scanning

Procedure:

1. Press [MENU] to access the menu.
2. Press [▲/▼] to choose "scan mode" and press [OK].
3. Sub-menu under scanwill displays on screen.
4. Press [▲/▼] to choose desired scan mode, and press [OK].
5. Once operation is completed, a note will pop up on screen, and then back to previous menu.
6. Press [Back] to back previous menu.

View the setting of menu function and operation

Scan List

Users can preset scan lists and assign them to single channels or groups. Radio will scan cyclically to check if there is voice signal on current channel or group. Your radio supports up to 16 scan lists, and each scan can contain a maximum of 512channels. Each scan list supports both digital and analogue modes.

If it is permitted by your dealer or system administrator, users can edit, add, delete or choose priority channels through menu display.

Check Scan List members

Procedure:

1. Press [Menu] to access the menu.
2. Press [▲/▼] to choose "Scan" and then press [OK].
3. Scan sub-menu options listed on screen.
4. Press[▲/▼]to choose "Scan List" and then press [OK].
5. All Scan lists displayed on screen.
6. Press [▲/▼] to choose desired scan list, and then press[OK].
7. All channels number or name on the scan list will be displayed on the screen.
8. Press[▲/▼] to check the scan list members.
9. Press [Back] to back previous menu.

Add new members to the scan list

Procedure:

1. Press [Menu] to access the menu.
2. Press[▲/▼] to choose "Scan" and then press [OK].
3. Scan sub-menu options listed on screen.
4. Press[▲/▼] to choose "Scan List" and then press [OK].
5. Scan list items displayed on screen.
6. Press[▲/▼] to choose desired scan list, and then press [OK].
7. All channel Numbers or names on the scan list will be displayed on screen.
8. Press[▲/▼] to choose "ADD CH"
9. Press [OK] The screen will display the available channels Numbers or names for adding.
10. Press [▲/▼] to choose desired channel number or name.
11. Press [Ok] to add it to scan list, back to scan member list.

OR

Press [Back] to back to scan list.

12. Press [Back] to back previous menu.

Note:

◆ If you wish to continue to add new members, please repeat the above steps from 8 to 11.

Priority Channel or disable priority channel.

Procedure:

1. Press [MENU] to access the menu.
2. Press [▲/▼] to choose "Scan" and then press [OK].

3. Scan sub-menu options listed on screen.
4. Press [▲/▼] to choose "Scan List" and then press [OK].
5. Scan list items displayed on screen.
6. Press [▲/▼] to choose desired scan list, and then press [OK].
7. All channel Numbers or names on the scan list will be displayed on screen.
8. Press [▲/▼] to choose desired channel number or name, and press 【OK】
9. Press [▲/▼] to choose the desired option.

Press [▲/▼] to choose "Set PriCH" and press [OK].Once operation completed, a note will pop up on screen. And then back to scan member list.

OR

Press [▲/▼] to choose "Disable PriCH" and press [OK]. Once operation completed, a note will pop up on screen. And then back to scan member list.

10. Press [Back] to back to previous menu.

Note:

◆ The Priority icon "P" appears next to the channel in the scan list, to indicate the channel is a priority channel. You can have ONLY one priority channel in a scan list.

◆ If the priority channel is to be disabled, then the icon "P" will be disappear.

Delete scan list member / members

If a channel keeps no activities or no signals (called "Useless"channel) during scan, you can delete it temporarily from the scan list.

Procedure:

1. Press [MENU] to access the menu.
2. Press [▲/▼] to choose "Scan" and then press [OK].
3. Scan sub-menu options listed on screen.
4. Press [▲/▼] to choose "Scan List" and then press [OK].
5. Scan list items displayed on screen.
6. Press [▲/▼] to choose desired scan list, and then press [OK].
7. All channel Numbers or names on the scan list will be displayed on screen.
8. Press [▲/▼] to choose desired channel number or name, and press [OK]
9. Scan sub-menu options listed on screen.
10. Press [▲/▼] to choose "Delete" and press [OK].
11. Once operation completed, a note will pop up on screen.
12. And then back to scan list.
13. Press [Back] to back to previous menu.

Note:

◆ If you wish to continue to delete other "Useless" channel, please repeat the above procedures from 8 to 12.

◆ If channel numbers or names to be deleted, it will exit the scan list. When you start scan, you will not scan them again, unless you add them to the scan list again.

To preset scan via programming software

You, Your dealer or system administrator can program the talkback modes or transmitting types during scanning via programming software.

Talkback and transmitting types

Your radio will stay on an active channel or group talk during scan, the time period when radio stays on the channel or group talk is called "Idle time"

© You can preset the talkback and transmitting types via software.

• Talkback

①. If software presets it ON, when a carrier signal on the scan list is received during scan, and disappear in 3s later. Press [PTT] button to reply the current channel member scanned.

②. If software presets it OFF, you can set the transmitting reply mode through [Scan transmitting mode].

Note:

◆ Options: ON/OFF

◆ Default: ON

• Scan transmitting mode

①. Start channel — To reply call before scan initiated.

②. Last active channel — To reply call on last previous active channel.

③. Appointed channel — To appoint a channel to reply call.

• Appointed channel

If to choose appointed channel for reply, when your radio receives a carrier signal scanned on a scan list during scanning, and when the signal disappears, press [PTT] to reply the call on that appointed channel.

General guide for fault handling

Malfunction	Analysis of causes	Handling method
Fail to turn ON radio	Battery is installed incorrectly	Re-install battery
	Battery power lower than preset value	Please change or charge battery.
	Bad battery contacts or contacts in dirty.	Check and clear the battery. contacts.
The sound get lower or unclear or interrupted during receiving signal	Battery power get lower.	Please change or charge battery.
	Volume control at low value.	Adjust the volume to be higher.
	Antenna gets loose or antenna frequency is incorrect.	Power off radio, and re-install antenna, or change antenna with right frequency.
	Speaker is blocked or damaged.	Try to clear the outer speaker or contact your dealer.
	Using the radio under poor working environment or electromagnetic interference	Change working environment or shift antenna direction.
Fail to talk with group members	The current working channel frequency or signaling setting is different with other group members.	Change channel or reset signaling to be same as other group members
	The setting of Digital or analogue channel is incorrect.	Reprogram the current digital or analogue channel.
	Far away with that group members.	Get closer to that group members.
Pops up other communication or noise on the current channel.	To be interfered by other members.	To change frequency or channel.
	Did not program with relevant signaling	To program signaling for the group member to prevent same frequency interference.
Louder noise during communication	The communication distance is too far between members.	Get closer to other members
	To be blocked by high building, or be onlower landform or basement etc working environment.	Go for open air area, and turn on radio again for a try.

General guide for fault handling

Malfunction	Analysis of causes	Handling method
Louder noise during communication	To be interfered strongly by external environment or others.	Try to keep away with instruments or equipments which may cause interference.
GPS fail to positioning (Optional)	Radio without GPS feature; Or is working under poor working environment that fails to receive GPS signal.	To add GPS features or move to work in the open air.

Note: If the above methods fail to solve your problem, or you confront other different malfunctions, please contact your local dealer or appointed maintenance station for more supports.

Maintenance and Clean

To make sure the radio's best performance and prolong its working life, please be acquainted with the following contents, so that you can do well maintenance and clean for the radio.

Maintenance

◎ Please do not scratch or puncture the device with hard matter.

◎ Please do not place the device under the environment which can corrode electronic circuit or under sun direct radiation.

◎ Please do not carry the device by handing its antenna or headset.

◎ Please make sure the SP-MIC be covered well if it is not in use.

Clean

Please clean your device regularly by using dry laid fabric or soft brush to wipe the dust on surface and charger contacts; The keypads, control knob and housing case of the device are easy get dirty. Please use nonwoven wipes to clean them. Please do not use chemical to clean it such as detergent, alcohol, spray or petroleum products, or the device surface or printing character maybe damaged. Before power on the radio, please make sure the device is dry completely.

Optional accessories