To users:

Thank you for your favor with our products.

We are dedicated to providing high performance and high stability radio communication products. This two-way radio is no exception. The radio is a DMR dual-slot digital walkie-talkie developed and produced by my team with 1024 memory channels, full-color LCD display and full keyboard hand-tuning function. In order to make you fully understand the various advantages of the radio performance and use and maintenance methods, please read this manual carefully.

主要功能特点　Main Features

- **Broadband walkie talkie**

    Support UV double segment, frequency range UHF400.000-470.000MHz / VHF136.000-174.000MHz

- **DMO True2-Slot dual time slot**

    Direct mode dual-slot communication achieves two groups of calls at a frequency point at the same time, so that the communication efficiency is doubled and frequency resources are saved

- **Digital and analog compatible, smooth over**

    Support DMR digital and analog two communication modes to ensure that the original analog products smooth transition to digital products to meet different communication needs

- **Digital signaling function**

    Rich calling modes that support DMR protocol, including single call, group call and all call; supports remote inhibit function and other applications

- **SMS function**

    Supports SMS, text editing and draft in 250 characters in Chinese and English, so that text messages calls can be sent when voice call is inconvenient

- **High sound quality**

    This digital two-way radio uses advanced AMBE +2TM voice processing technology to achieve high quality

- **Manual writing-frequency**

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一．熟悉本机　Familiar with this Product

1.按键介绍　Description of Buttons

[PTT]Transmit button	Switch between transmission and reception; when transmitting, press this button and speak to the microphone; release the button to receive.
Side button SK1	Short press is the monitor function (only analog channels are supported). Switch to the monitor squelch mode when this button is pressed, and return to the receive squelch mode when the button is pressed again.
	Long press for the power switch, select the high and low power.
Side button SK2	Short press this button to quickly switch between the upper and lower screens and switch between the A screen and the B screen.
	Long press this button to enter the digital contact.
Top button *Default is the alarm button	Short press this button to end the emergency alarm mode.
	Press and hold this button to activate the emergency alarm mode to quickly establish an emergency call.
0-9 number buttons	Default: 0~9
	[0~9] code words in DTMF function
	Select punctuation marks or letters in Pinyin input method.
	If numeric shortcut function is set, you can press and hold this button to jump to the corresponding contact.
[MENU] button	Press it to activate the menu mode, enter the menu and press this button to select menu items.
	Press and hold it to enter the radio settings.
[▲]button	Channel mode, changing the channel backwards.
	Move left in SMS editing interface.
[▼]button	Channel mode, changing the channel forward.
	Move right in SMS editing interface.
[Exit]/[Clear] button	In standby mode, short press to switch between dual-segment single-standby or dual-segment dual-standby mode.
	Clear the entered information in input state.
	Press and hold this button to switch channel mode or frequency mode.
[*]button	Press and hold this button to lock on / off keyboard
	Code word * in DTMF function
[#]button	Switch the input method in input method interface.
	Code word # in DTMF function

2.可编程键　Programmable Buttons

In order to improve the operational convenience, the function shortcut keys provided by this product are 【SK1】 key, 【SK2】 key, 【TK1】 key. For the specific function, please consult the distributor. For the detailed description of each function, please refer to the corresponding contents of "Function and Operation".

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No.	Shortcut name	Purpose
1	None	No function is assigned to the preset button.
2	Power adjustment	Quickly switch between high power and low power.
3	Emergency mode on	Quickly establish an emergency call. This is the recommended option for the orange button.
4	Emergency mode off	Quickly end an emergency call initiated outward.
5	Offline	Press this button to toggle the host between pass-through mode and transit mode.
6	Encryption	Quickly turn on/off encryption for channel (only for digital mode).
7	VOX	Quickly turn on or off the voice control function.
8	Push to talk 1	Call shortcuts, after pressing a one-click call, send the corresponding call, SMS or other application function.
9	Contact	Press this button to enter the digital contact list to initiate a call or call related services.
10	Area up	Press this button to switch to the previous area.
11	Area down	Press this button to switch to the next area.
12	Area switching	Quickly select areas that allow users to switch between the two areas.
13	Keypad lock	Quickly lock the numeric keypad (not including the PTT button).
14	Steady state monitoring	Switch to the monitor squelch mode when this button is pressed, and return to the receive squelch mode when the button is pressed again.
15	Battery power indication	Quickly access to battery power. The user can check the battery status by LED. The battery power is sufficient if the LED is constantly in green, the battery power is still available if the LED is constantly in yellow, and the battery power is low if the LED is in red.
16	Scan on / off	Quickly turn the scan function on or off. Note: double-segment double-waiting scan does not work
17	Scan backup	Press this button
18	Recording switch	(Based on firmware) to quickly turn on/off the recording
19	Previous recording	(Based on firmware) to quickly play back the previous recording.
20	Next recording	(Based on firmware) to quickly play back the next recording.
21	Scheduling　(1750Hz pilot)	Fast launch 1750 pilot signal
22	Temporary deletion of noise channels	When the scan is paused, pressing this button temporarily deletes the temporarily unwanted noise channel. The channel is not detected during the next scan detection. When the host restarts scanning, the channel will be restored in the scan list.
23	Time broadcast	Press this button to broadcast the current time.
24	Flashlight	Press this button to turn on the flashlight and press it again to turn off the flashlight.
25	Up and down screen switch	Quickly switch the upper and lower screen
26	Working alone	Press this button to switch between the individual work functions on and off.

Note:

●The same button short press and long press can achieve different functions, specific by the dealer settings.

二．Security and overview

RF radiation information

This product is intended for professional applications that meet RF radiation requirements. Users must be aware of the hazards of RF radiation and take appropriate measures to meet the requirements of RF radiation limit.

Common sense in RF radiation

RF refers to the electromagnetic frequency that can be radiated into space. It is a technology widely used in the fields of communication, medical treatment and food processing. It will produce some RF radiation during use.

Control and operating instructions of RF radiation

In order to maximize the performance of the product and to ensure compliance with the radiation limits in the relevant occupational or controlled environment of the above criteria, the sending time shall not exceed 50% of the rated factor and shall follow the instructions below:

• RF radiation is generated only during transmission (speech) rather than reception (listening) and standby.

• The distance between the terminal and the body during transmission should be at least 2.5 cm.

三．用前准备　Preparation before use

■充电 Charging

Be sure to ensure that the product is off when charging. Battery into the charger may be charging red flashing constantly flashing, this is the battery power is too low, the charger to protect the battery pre-charge process, is a normal phenomenon, Generally continue for 30 seconds to turn the red light of the normal state of charge.

Please use the charging seat specified by our company to charge the battery, the charging seat indicator shows the charging status.

1. Plug the power adapter into a power outlet;

2. Plug the other end of the power adapter into the socket on the back of the charging cradle;

3. Insert the battery or the battery-equipped product into the charging cradle correctly; the indicator light on the charging cradle shows the charging status. When the indicator light is red, it indicates the start of charging. When the indicator turns green, the charging is completed. The specific table below.

Indicator display	Current charge status
Red light	In charging
Green light	The charging is completed

Note:

For best battery performance, charge for a minimum of 4 hours on first charge.

■电池信息 ■Battery information

● 　The first use of the battery

Since the battery is not fully charged at the factory, please charge the new battery before use. Under normal circumstances, the battery when used for the first time, need to charge 4 hours, lithium-ion battery charging using slow charge or fast charge can be performed when charging. It is recommended that the new battery be operated as above for the first three uses. When you find the battery power is low, you need to charge the battery.

● 　Suitable battery type

Please use the specified battery for charging; use of other batteries may cause explosion, resulting in human injury.

● 　Battery safety attention

1. Do not allow metal contacts (including coins, keys, jewelry, or other conductive metal) to be touched by the battery contacts or pole pieces. Otherwise, the battery may short circuit, discharge, heat or leak, which may result in damage to the item or personal injury. Therefore, be careful when handling any battery.

2. Do not short-circuit the battery terminals or discard the battery in a fire. Do not disassemble the battery pack. When the battery is discarded, please put into a dedicated battery recycling box.

● Battery normal operation instructions

★Please charge the battery indoors, battery charging at room temperature best.

★Under normal circumstances, the charger indicator from red to green when the battery is fully charged, at this time the battery can be removed.

★You can charge when Battery installed in the walkie-talkie, but when charging is best to turn off the walkie talkie, to ensure that the battery is fully charged.

★Please do not charge the battery when the battery power is not used up (after the battery is exhausted, the voice prompt alarm will be given), which will shorten the service life of the battery.

★Do not put a fully charged battery back on the charger to "power up" again, as this operation significantly reduces the cycle life of the battery.

●Extend battery life

★Battery performance will reduce below -20 ℃ temperature conditions. Prepare back-up batteries for use in colder weather. Please do not throw away cold batteries that cannot work. These batteries may be used at room temperature.

★Dusting the battery contacts may affect the battery life. Please wipe the contacts with a clean, dry cloth before inserting the batteries into the walkie-talkie.

● Battery storage needs to know

1.Since the battery will have a self-discharge phenomenon, the battery when not in use for a long time, please fully charge the battery and then stored to avoid over-discharge of its battery to damage the battery.

2. When the battery is in storage, remove the battery to recharge when stored about 6 months. To avoid over-discharge of electrolyte affect battery capacity.

3. Pay attention to the temperature and humidity of the battery storage environment. Store the battery at room temperature in a cool, dry place to minimize self-discharge of the battery.

■**Battery Voltage & Power Indication**

If the dealer has set the 【battery power prompt】 shortcut key for the product, you can press and hold the shortcut key to check the remaining battery power by LED indicator, tone and battery icon. Release the shortcut to cancel viewing the remaining battery power.

The top right of the screen shows the current battery power icon is as follows:

Battery icon	Battery power
	High
	Medium
	Low

▭   Insufficient

■附件安装   Accessories installation

1. Install / remove the antenna

    Turn off the radio and insert the antenna into the mounting hole and turn clockwise. (Figure 1-1)

    When removing the antenna, turn it counterclockwise to remove the antenna. (Figure 1-2)

⚠ Do not shake the top of the antenna by hand, otherwise it will reduce the working performance and service life of the antenna.

2. Install / remove the battery

● Install the battery

    Align the battery with the battery holder on the back of the walkie-talkie. Push the battery firmly into the walkie-talkie and slide the battery up until it locks into place. (Figure 2-1)

● Remove the battery

    To remove the battery, turn off the transceiver. Slide the battery latch into the unlocked position and hold, and then slide the battery downward and out of the battery mount.(Figure 2-2)

3. Install / remove the belt clip

● Unscrew the two screws on the battery. Align the two screw holes in the belt clip with the screw holes in the top of the battery, and then tighten the screws (Figure 3)

● Loosen and remove the screw from the belt clip (it is recommended that you screw the screw to the battery for the next time you are installing and using the belt clip).

4. Install external headphones / microphone (optional separately)

    Open the headset cover, the headset plug into the headset hole will be ok. When you do not need to use the headset, unplug the headset plug from the earphone jack and cover the earphone cap. When not using the universal interface, please cover the dust cover. (Figure 4)

■状态指示   Status indication

LCD 图标说明   Description of LCD Icons

Icon name	Icon	Description of product status
Signal strength icon	📶	The more signal bars, the stronger the signal is
Transmission power icon	**H**	The current channel transmits at high power
	L	The current channel transmits at low power
Dumb audio icon	CT	Current ctcss is analog ctcss.
	DCS	Current ctcss is digital ctcss.
Speaker icon	🔊	Speaker is enabled, and reception is effective
Relay mode icon	**+**	The current transmission frequency is the reception frequency plus a frequency bias (positive bias)
	−	The current transmission frequency is the reception frequency minus a frequency bias (negative bias)

	⊩⊩⊩	Currently in offline state
Scan icon	↻	The scan is on and is in normal mode
Non-priority channel	↻	Scan stays on non-priority channel
Priority channel 1	P₁	Scan stays on priority channel 1
Priority channel 2	P₂	Scan stays on priority channel 2
Battery power icon	▭	The more bars, the more battery power
VOX icon	Ⓥ	Voice control is turned on
Pointer icon	**D**	Currently pointing to the main digital mode; press A/B button to switch the main channel up and down. When double-waiting is turned on and works in digital sub-channel, the icon is ⊪⇒ᴰ
	A	Currently pointing to the main analog mode; press A/B button to switch the main channel up and down. When double-waiting is turned on and works in analog sub-channel, the icon is ⊪⇒ᴬ

LED指示灯 LED Indicators

This product has LED indicators so you can easily grasp the current operating state.

Indicator status	Product status
Red on	Transmitting
Green on	Receiving
Orange flash	Scanning

四、基本操作 Basic operation

■ Power on and off

To turn on the power, turn the [Power Switch / Volume Control] knob clockwise until you hear a "click" sound and a short beep sounds. To turn off the radio, turn the knob counterclockwise until you hear a click. In English language, if voice announcement is enabled, the channel is broadcast when the terminal is powered on or when switching channels.

⚠(CAUTION) If you disable the tone function of this product, there will be no boot tone.

If all LED's are disabled, the transmit / receive light does not come on during turning on. A short beep sounds to indicate successful boot detection.

■ Volume adjustment

Turn on the power, turn the [Power Switch / Volume Control] knob clockwise to increase the volume of voice reception, and turn counterclockwise to reduce the volume of voice reception. When adjusting the volume, the product LCD displays the corresponding length of the volume bar.

★Selecting Region

Region is a channel group in which you can include channels with the same attributes (such as call type, digital mode and analog mode) in a region, which makes it easy for you to manage existing channels.
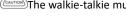
The unit supports up to 250 regions, and each region contains up to 64 channels.

You can select a region in two ways:

• Select by programming button:

If the dealer has set the [Zone Up] and [Zone Down] shortcuts for you, press this shortcut to switch to the desired area.

• Select through the menu:

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

2. Press the 【▲】/【▼】 key to enter the area, and then press the [MENU] key to select the entry area list.

3. The current area is displayed on the screen and displayed as the area name.

4. Press the 【▲】/【▼】 key to enter the desired area, and then press the [MENU] key to select.

5. The screen immediately displays the selected area and returns to the selected area screen.

The walkie-talkie must retain at least one area, and each area retains at least one channel.

★Digital and analog channel switch

Each channel in this product can be configured by the dealer as either an analog channel or a digital channel. If the current region contains digital channels and analog channels, you can switch channels to analog channels or digital channels.

★Single / dual band mode switch

If the dealer has set the [up and down screen switching] shortcut key (Namely【A/B】 key) for you, press this shortcut key to switch the upper screen or the lower screen.

When the radio is standby, press 【A/B】 key to switch the primary and secondary channels.

1. The black pointer $\boldsymbol{D}$ points to the primary channel and is the digital channel; the other channel is the secondary channel.

• If the black pointer $\boldsymbol{A}$ points to the primary channel and indicates that the channel is an analog channel; the other channel is the secondary channel.

2. Press 【BACK】 to switch to dual band single standby or dual band dual standby

If the front of the sub-channel is displayed, it indicates that the product is working in the mode of "dual band single standby ", and the sub-channel does not receive the signal at this time.

Note: The ARTS Auxiliary function does not work because the dual keep mode is in the primary and secondary channel scanning status, DTMF, auto-scan and work alone.

★Select channel, user ID, group call ID

Power on and in channel mode, if you have more than one region in the radio, select the desired region and press 【▲】/【▼】 key to select the desired channel, user alias or ID, or the group alias or ID.
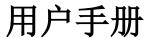
★Receive and reply group calls

To receive a call from a user group, the transceiver must be configured to belong to the talk group.

When receiving a group call:

1. LED indicator light is green.

2. The top line of the screen displays status icons such as RSSI. In the display area below the top line: the first line shows the group alias, the group call icon is displayed in the middle and the received target band (ie CH A or CH B) is indicated, and the caller ID is displayed at the bottom (digital mode only).

3. Hold the walkie talkie in its upright position and at a distance of 1 to 2 inches (2.5 to 5.0 cm) from the mouth. If the "Channel Free

Tone" function is enabled, when the transmitting radio releases the 【PTT】 button, you will hear a short beep indicating that the channel is idle and waiting for your answer.

4. Press the 【PTT】 key during the call hold time to reply to the call and the LED indicator lights up in red.

5. Release the 【PTT】key to answer.

6. If there is no voice activity for the scheduled time period, the call is terminated.

If the walkie talkie receives a group call and is not at home at this time, it remains on the current screen until the call is answered.

★Receive and reply single call

A single call is an individual walkie-talkie call to another individual walkie-talkie. There are two types of single call types: the first type, the walkie talkie presence test is performed before the call is ready, and the other type is ready for the call immediately.

When receiving a single call:

1. LED indicator light is green.

2. The top line of the screen shows the status icons such as RSSI. In the display area below the top line, The first line shows a single call, the single call icon is displayed in the middle and the received target band (ie CH A or CH B) is indicated, and the user alias or ID is displayed at the bottom (digital mode only).

3. Hold the walkie talkie in a vertical position and keep it 1 to 2 inches (2.5 to 5.0 cm) from the mouth. If the "Channel Idle Tone" feature is enabled, when the transceiver intercepts the PTT key, you will hear a short beep indicating that the channel is free for you to answer.

4. Press the 【PTT】 key during the call hold time to reply to the call and the LED indicator lights up in red.

5. Release the [PTT] key to answer.

6. If there is no voice activity for the scheduled time period, the call is terminated.

★Receive all call

All call is an individual walkie-talkie call to all walkie-talkies on the channel. It is used to publish important notices that require special attention from users.

When receiving all call:

1. LED indicator light is green.

2. The top line of the screen shows the status icons such as RSSI. In the display area below the top line: The first line displays the full call, the full call icon is displayed in the middle and the received target band (ie CH A or CH B) is indicated, and the user alias or ID is displayed at the bottom (digital mode only).

3. After the termination of all calls, the walkie-talkie will return to the screen before receiving the call. If "channel idle tone" is enabled, you will hear a short tone when the walkie talkie releases the [PTT] key, indicating that the channel is ready for use and you cannot reply to all calls.

When you receive an all call, if you switch to another channel, the transceiver stops receiving the full call. During a full call, you will not be able to use any of the preprogrammed keys until the call is ended.

★Start a walkie-talkie call

You can choose a channel, user ID or talk group in the following ways:

· Channel mode Press 【▲】/【▼】 to select the channel

· Pre-programmed one-touch call button

• Address book list

★Select channel to initiate a call

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★Initiate group call

To initiate a call to a user group, the transceiver must be configured to belong to the talk group.

1. Channel mode Press 【▲】/【▼】 to select the channel using the activated talkgroup alias or ID.

2. Hold the walkie talkie in its upright position and keep it at a distance of 1 to 2 inches (2.5 to 5.0 cm) from the mouth.

3. Press 【PTT】 key to initiate a call, LED indicator light is red. The screen displays the talk group alias or ID, as well as the group call icon.

4. Release the [PTT] key to answer. When the target radio replies, the LED indicator will light green. The group call icon, call group alias or ID, and walkie talkie alias or ID is displayed on the screen.

5. If the Channel Idle Tone feature is enabled, when the target radio releases the PTT button, you will hear a short beep indicating that the channel is free for you to answer. Press the PTT key to answer, or if there is no voice activity for a predetermined period of time, the call is terminated.

6. The walkie talkie returns to the screen before receiving the call. You can also initiate a group call from your address book.

★Start a single call

1.Channel mode Press 【▲】/【▼】 to select the channel using the activated talkgroup alias or ID.

2. Hold the walkie talkie in its upright position and keep it at a distance of 1 to 2 inches (2.5 to 5.0 cm) from the mouth.

3. Press 【PTT】 key to initiate a call, LED indicator light is red. The top line of the screen shows status icons such as RSSI. In the display area below the top line, the first line shows a single call, the single call icon is displayed in the middle, and the user alias or ID is displayed at the bottom (digital mode only).

4. Release the [PTT] key to answer. When the target radio replies, the LED indicator will light green.

5. If the "Channel Idle Tone" feature is enabled, when the target radio releases the [PTT] key, you will hear a short beep indicating that the channel is free for you to answer. Press the PTT key to answer, or if there is no voice activity for a predetermined period of time, the call is terminated.

6. You will hear a short tone, the screen shows the call ended.

You can also initiate a single call via digital contacts and manual dialing in your contacts, or make quick contact access via a keyboard entry to find the desired target walkie-talkie.

★Initiate all call

This feature lets you signal all users on the channel. The walkie-talkie must be programmed to allow you to use this feature.

1. Channel mode Press 【▲】/【▼】 to select the channel using the activated all-call group alias or ID.

2. Hold the walkie talkie in its upright position and keep it at a distance of 1 to 2 inches (2.5 to 5.0 cm) from the mouth.

3. Press 【PTT】 key to initiate a call, LED indicator light is red. The screen displays the all-call group alias or ID, as well as the all-call icon.

Channel users cannot reply to all calls.
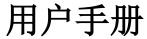
★Use the one-touch call button to initiate a group call or a single call

One-touch calling features make it easy to group calls or single calls to predefined aliases or IDs. This function can be assigned to short programming or long programming keys.

You can assign only one alias or ID to a one-touch call key, and the walkie talkie can have multiple programmed one-touch call keys.

1. Press the preprogrammed one-touch call button to initiate a group or single call to a predefined alias or ID.

2. Hold the walkie talkie in its upright position and keep it at a distance of 1 to 2 inches (2.5 to 5.0 cm) from the mouth.

3. Press 【PTT】 key to initiate a call, LED indicator light is red. The screen displays the talk group / user alias or ID, as well as the group call / callout icon.

4. Release the [PTT] key to answer. When the target radio replies, the LED indicator will light green.

5. If the "Channel Idle Tone" feature is enabled, when the target radio releases the [PTT] key, you will hear a short beep indicating that the channel is free for you to answer. Press the PTT key to answer, or if there is no voice activity for a predetermined period of time, the call is terminated.

6. The walkie talkie returns to the screen before receiving the call.

★Analog channel call

On the analog channel, hold down the [PTT] key and speak into the microphone, to transmit. Please release 【PTT】 key to receive.

★ DTMF call

•Make a call:

•under the analog channel, press and hold the [PTT] key and press the keypad number key.

•Under analog channel, long press 【#】 key to switch to manual dialing mode, enter the desired number, short press 【PTT】 key to start DTMF call.

•Receive calls:

When the host computer has configured DTMF as the receiving signaling system of the current channel, when decoding the code word is DTMF personal ID code, the decoding is successful. During the resetting time, it can talk to the other party. The reset time needs to be re-decoded.

★PTT ID call

•Make a call

In analog mode, you can program the radio to configure the DTMF on-line code and off-line code; and enable the up-down-line code on the analog channel. When enabled, the code will be sent each time the [PTT] key is pressed, and the code will be released when the [PTT] key is released.

五．紧急报警功能 Emergency alarm function

紧急报警 Emergency alarm

In the event of an emergency, you can use this feature to ask your fellow or control center for help. Emergency alarm has the highest priority, you can alarm whether the walkie talkie is transmitting or receiving.

Alarm initiator to exit the alarm mode, there are two cases:

● Turn off the radio to exit the whole machine alarm.

● Press the pre-programmed [emergency mode off] shortcut to exit the alarm

● In other ways, when exiting alarm mode, the alarm on the current channel can only be temporarily exited. When reselecting the channel, the alarm will continue;

The alarm function is enabled for you by the dealer (program path: "Edit -> Alarm -> Digital Emergency Alarm System ->DMR System").

Alarm Type

The radio prompts in different modes for different alarm types, as shown in the following table.

Alarm type	Description
Disable	Turn off alarm function (alarm disabled),
Only whistle	The terminal emits a sharp alarm tone and the control center does not receive an alarm signal.
Conventional	When alarms, the radio gives an audible and visual prompt.
Alarm whistle	After sending an emergency alert signal to the control center, a local alarm tone is sounded. In the alarm state, there are indications of sound and visualization.
Silent	When alarms, the radio will not give any audible or visual prompt. At the same time, no sound is

	made on any received audio.
Silence with voice	When alarms, the radio will not give any audible or visual prompt. However, the radio sounds when you press and hold the PTT button to initiate a call or respond to a call.

Alarm Mode

Except the alarm type "Disable,Only whistle, alarm whistle", other alarm types support the following alarm modes. You can ask the dealer to select one of them (Note: The following methods use "Conventional" alarm type as an example).

| Alarm mode	Description
Emergency alarm	In this mode, you can press and hold the [Emergency mode on] button to send an alarm tone to your partners or control center but can't talk to the other party.
Emergency alarm and call (alarm call)	In this mode, you can press and hold the [Emergency mode on] button to send an alarm tone to your partners or control center, and then press and hold the [PTT] button to speak to the microphone, and your voice and surrounding background sound will be sent to the receiver.
Emergency alarm and voice (emergency call)	In this mode, you can press and hold the [Emergency mode on] button to enter the alarm transmission channel. The product automatically activates the "emergency microphone" (without holding down the PTT button). You can speak to the microphone, and your voice and the surrounding background sound will be sent to receiver.

★ **Send emergency alert**
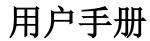
This feature allows you to send an emergency alert, which belongs to a non-voice signal and will trigger a prompt on another transceiver.

1. Press the preprogrammed【Alarm On】 button.

2. The screen displays Send Alert, alternating with walkie talkie ID. The LED is lit red and the emergency call icon appears on the home screen.

3. When an emergency alert confirmation is received, an emergency call tone sounds and the LED flashes green. The screen shows that the emergency alert was successful.

• Or if the walkie talkie does not receive any emergency alert confirmation and a beep sounds after all retries are exhausted, the screen displays failed emergency alert.

4. The walkie-talkie exits the emergency alert mode and returns to the home screen. If your walkie talkie is set to "silent," it will not show any voice or visual cues in emergency call mode.

★ **Receive emergency alert**

1. The number of alerts received when an emergency alert was received, along with the alert that was received, alternating with the sender's alias or ID.

2. A beep sounds and the LED flashes orange.

3. If enabled, your transceiver will automatically acknowledge the emergency alert. When the walkie talkie receives an emergency alert, the screen displays a prompt that an emergency alert has been received, until an acknowledgment is sent and the emergency mode exits. You will not be able to receive any other prompts or show any other calls until you exit the screen for receiving an emergency alert.

When an alarm sounds, the LED indicator flashes orange, and any key can be pressed to stop the alarm tone. The current

emergency mode is released by switching channels or turning off the radio.

★ Send an emergency alert with voice follow

This feature allows you to send an emergency alert to another transceiver. After confirmation, your walkie talkie microphone is activated automatically, allowing you to communicate with other radios without pressing the [PTT] key. This activated microphone status is called "Emergency Microphone". If the [PTT] key is pressed during the preprogrammed emergency microphone launch, the transceiver ignores [PTT] press and remains in emergency mode.

1. Press the preprogrammed 　[Alarm On]　 button.

2. The screen displays send an alert, the LED is lit red and the emergency call icon is displayed.

3. When the alarm confirmation of another intercom is received, the message "send successfully" is displayed, the LED indicator lights up in red, the radio of the intercom automatically activates and emits a signal, and speaks clearly to the microphone until the end of the thermal mic.

· If the emergency alert request fails (such as the target radio that received the alert is not turned on or is not on the pre-programmed alert jump channel), the screen briefly displays "No Reply" and the walkie-talkie will continue to send emergency calls.

4. The hot mic duration ends and stops transmitting. The screen displays "Emergency Call" and the contact and intercom ID alternate. The LED indicator lights up in orange and is accompanied by a local alarm tone until the end of the reception duration.

5. After the number of emergency calls of the walkie-talkie is completed, it will automatically stay on the emergency call alarm interface.
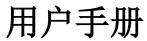
Press the pre-programmed [Emergency Mode Off] button, the screen displays "Cancel Alarm" and exits the emergency mode. Or cancel the current emergency mode by switching channels.

★ Receive an alert call

The walkie-talkie that receives the emergency call must be selected to the pre-programmed alarm-jump channel and the jump channel must be a group call.

1. Upon receiving an urgent alert request, the screen displays "Alarm Received" and is displayed alternately with the sender's alias or ID.

2. An alarm tone sounds and the LED indicator flashes orange.

3. The alarm tone stops, the LED indicator lights up in green, enters the receiving state, and listens to the other party's speech until the end of the hot microphone.

4. When an alarm tone sounds, the LED indicator flashes orange. Hold the intercom in a vertical position and keep it 1 to 2 inches (2.5 to 5.0 cm) from the mouth.

5. Press the [PTT] key to initiate the call, the LED indicator lights up in red, and the talk group icon appears on the screen.

6. Release the [PTT] button to answer.

When an alarm sounds, the LED indicator flashes orange, and any key can be pressed to stop the alarm tone. The current emergency mode is released by switching channels or turning off the intercom.

★ Initiate an emergency call

After the alarm is activated, the alarm code is not required to be sent for an impolite number and politeness, and the host immediately initiates an emergency call. Once confirmed, your walkie-talkie microphone is automatically activated, allowing you to communicate with other walkie talkies on the pre-programmed alarm jump channel without pressing the [PTT] key. This activated microphone state is called a "hot mic". During the pre-programmed hot mic duration, in addition to pressing the pre-programmed [emergency mode off] key to cancel the alarm, pressing any other button will remain in emergency mode. Until the end of the thermal mic.

1. Press the pre-programmed [Emergency Mode On] button.

2. The LED indicator lights up in red and the emergency call icon appears on the main screen.

3. The radio of the walkie-talkie automatically activates and emits a signal, speaking clearly to the microphone until the end of the thermal mic.

4. The hot mic duration ends and stops transmitting signals. The screen displays "Emergency Call" and the contact and intercom ID alternate, and the LED indicator lights up in orange until the end of the reception duration.

5. During the duration of the reception, you can answer the other party's call.

Press the pre-programmed [Emergency Mode Off] button, the screen displays "Cancel Alarm" and exits the emergency mode.

★ Receiving an emergency call

The walkie-talkie that receives the emergency call must be selected to the pre-programmed alarm-jump channel and the jump channel must be a group call.

1. Upon receiving an emergency alert, the screen displays the talk group icon and the sender's alias or ID alternately displayed.

2. The LED indicator lights up in green and listens to the other party until the transmitter's thermal mic duration ends.

3. With the LED off, hold the intercom away from the vertical position and keep it at a distance of 1 to 2 inches (2.5 to 5.0 cm).

4. Press the [PTT] key to initiate the call, the LED indicator lights up in red, and the talk group icon appears on the screen.

★ Restart emergency mode
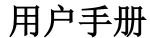
It can happened in two situations:

· When the transceiver is in emergency mode and changes channel, it will exit emergency mode. If an emergency alert is activated on the new channel, the transceiver resumes the emergency call.

· Press the preprogrammed [Alarm On] key in the emergency call start / transmit state. This way the walkie talkie will exit the status and restart the emergency call.

★ Exit emergency mode

The transceiver exits emergency mode when one of the following happened:

• Receive emergency alert confirmation (emergency alerts only), or

• The number of major attempts to send an alert has been reached, or

• Press Preprogrammed [Alarm Off], or

• Press the [PTT] key.

If the radio is turn off, it will exist the emergency mode. When you turn on again, the radio won't start resume emergency mode

★ Individual Operation

This feature is ideal for people who work alone. If you encounter unexpected situations during individual operation, you can't operate the radio in preset time. The radio will automatically send alarm to your partner or control center for help.

1.Turn on individual operation

- Press the preset [Individual Operation] shortcut to enable this function.

2. If you do not operate the radio in the preset response time, the radio will prompt before the response time is up (depending on the dealer settings). At this point, you can end the prompt with a valid physical operation (knob or button operation). When the response time is up, the radio will automatically turn on the alarm system of the current channel.

3. Turn off individual operation

- Press the preset [Individual Operation] shortcut again to turn off this function.

Note: If you do not turn off the individual operation function before shutting down, the function is still active the next time you turn on the radio.

六．菜单功能操作 Menu operation

■菜单导航 Menu navigation

Press 【MENU】 key in digital mode or digital channel to enter the digital main menu; press 【MENU】 key in analog modem or analog channel to enter the analog main menu. The menu structure is shown as below, including all the menu items of the product. You can configure whether to display each menu item through the dealer. You need to first press 【MENU】 key to enter the main menu, then use 【▲】/【▼】 key to navigate the desired submenu or option and press 【MENU】 key to confirm and complete the setting . This document only describes the order of menu items when the menu operation is introduced.. For example, the path to the contact list is "Contacts" -> "Contacts List". This product menu will auto reset if you do not operate on the menu during the preprogrammed time (configured by the dealer), the product automatically returns to the standby screen. You can ask dealer to modify the auto reset time and cancel auto reset.

■ Input Method

You can enter user aliases, numbers and text messages via the keypad. This product supports the English input method, Simplified Chinese Pinyin input method, and number input method.

When inputting user alias, ID or SMS, if there is no content in the editing area, press 【BACK】 to return to the last menu, Or if there is content in the editing area, press 【BACK】will delete a character in front of the cursor until Press [BACK] to return to last menu when no editing area exists.

★ English Input Method

1. Press [#] to switch to uppercase (LCD shows ABC) or lower case (LCD shows abc) English input method.

2. Press the number buttons repeatedly until the desired letter appears. Repeat the above steps to complete the input.

★ Simplified Chinese Pinyin Input Method

1. Press [#] to switch to Pinyin input method (LCD shows PY).

2. Press number buttons to enter the pinyin, and the LCD shows the alternate pinyin and corresponding candidate Chinese characters.

3. Press [▲]/ [▼] to select the desired pinyin.

4. Press the [MENU] button to move the highlight to the Chinese character area, and press [▲]/ [▼] to select the desired Chinese character.

5. Press the [MENU] button to enter the selected Chinese character. Repeat the above steps to complete the input.

★ Number Input Method

1. Press [#] to switch to number input method (LCD shows 123).

2. Press the number buttons 0~9 to enter the corresponding number.

★ Input Special Characters

Press number button [1] to enter commonly used punctuation and special characters. To enter a space, press the [0] button.

Note: In the input text display area, press [▲]/ [▼] to move the cursor left / right.

★ How to use the menu

1. Press 【MENU】 to enter the menu mode, then press 【▲】 / 【▼】 on left or right to access the menu function;

2. Press 【MENU】 key to select a function or enter a sub-menu;

3.Press 【BACK】 to return to last menu.

■ Contact list settings

Contact list provides "Address Book" for radios . Each entry corresponds to an alias or ID used to initiate the call. In addition, each entry is related to one of three types of call depending on the setting: group call, single call, all call. Your walkie talkie supports digital contacts.

The entry in the contact list shows the following information:

• Call name

• Call property

• Call ID

You can add, delete, or edit contacts to your digital contact list.

★ Group call from the contact lists

1. Press 【MENU】 key to enter the menu mode.

OWNER'S MANUAL

用户手册 *DIGITAL PORTABLE RADIO*

2. Press 【▲】/【▼】 key to contact list, then press 【MENU】 key to select, the items will be arranged in alphabetical order.

3. Press 【▲】/【▼】 key to digital contact list, then press 【MENU】 key to select, the items will be arranged in alphabetical order.

4. Press 【▲】/【▼】 to the desired group name or ID.

5. Hold the walkie talkie in its upright position and keep it at a distance of 1 to 2 inches (2.5 to 5.0 cm) from the mouth.

6. Press 【PTT】 key to initiate a call, LED indicator light is red. The screen displays the talk group alias or ID, as well as the group call icon.

7. Release the [PTT] key to receive. When any user in the group responds, the LED will light green. You will see the group call icon user ID on the screen.

8. If the "Channel Idle Tone" feature is enabled, when the target radio releases the [PTT] key, you will hear a short beep indicating that the channel is free for you to answer. Press the call key (PTT) to answer. If there is no voice activity during the preprogrammed group call hang-up time, the call is terminated.

★ Single call from your contact list

1. Press 【MENU】 key to enter the menu mode.

2. Press 【▲】/【▼】 key to contact list, then press 【MENU】 key to select, the items are arranged in alphabetical order.

3. Press 【▲】/【▼】 key to digital contact list, then press 【MENU】 key to select, the items will be arranged in alphabetical order.

4. Press 【▲】/【▼】 to the desired user alias or ID.

Or press 【▲】/【▼】 key to dial manually, then press 【MENU】 key to select. If there is a user alias or ID dialed previously, the ID is displayed with the blinking cursor and the keyboard is used to edit this ID.

Or press 【▲】/【▼】 key to dial manually, then press 【MENU】 key to select, use keyboard to input a new ID.

5. Hold the walkie talkie in its upright position and keep it at a distance of 1 to 2 inches (2.5 to 5.0 cm) from the mouth.

6. Press 【PTT】 key to initiate a call, LED indicator light is red. The first line shows the user's alias or ID, the second line shows the single and single call icons.

7. Release the [PTT] key to answer. When the radio responds, the radio LED lights up green and the screen displays the ID of the transmitting user.

8. If the "Channel Idle Tone" feature is enabled, when the target radio releases the [PTT] key, you will hear a short beep indicating that the channel is free for you to answer. Press the call key (PTT) to answer. If there is no voice activity during the preprogrammed single call hang-up time, the call is terminated.

9. You will hear a short tone; the screen shows the termination of the call.

If you release the PTT key while the walkie talkie is setting up a call, it exits without any hint and returns to the previous screen.

walkie talkies can be preprogrammed to perform walkie-talkie presence detection prior to setting up a single call. If the target walkie talkie does not answer, you will hear a short beep, and the other party does not answer on the screen. The walkie-talkie returns to the menu before starting the walkie talkie presence test.

★ Radio detection

In digital mode, you can initiate radio detection to a contact without interfering with each other to confirm whether the other party has turned on the unit or uses in the current channel.

Initiate radio detection

1.Press 【MENU】 key to enter the menu mode

2. Press 【▲】/【▼】 key to contact list, then press 【MENU】 key to select

3.Press 【▲】/【▼】 key to the desired user alias or ID, then press 【MENU】 key to select.

　　- Or press 【▲】/【▼】 key to manually dial, then press 【MENU】 key to select, flashing cursor appears, input the user ID you want to call, then press 【MENU】 key.

4. Press【▲】/【▼】 key to "Radio Check", the screen displays the radio check <User alias or ID>, and then press the [MENU] key to indicate that the call has been sent.

5.When the walkie talkie send radio detection, the LED indicator light is red.

6.If the target walkie talkie is active in the system, a prompt is emitted and the screen briefly shows "Radio check success".

★ Call prompt

In digital mode, you can send call prompt to a contact, and the other party can call back directly.

Initiate a call prompt

1.Press 【MENU】 key to enter the menu mode.

2. Press 【▲】/【▼】 key to contact list, then press 【MENU】 key to select

3.Press 【▲】/【▼】 key to the desired user alias or ID, then press 【MENU】 key to select.

　　-Or press 【▲】/【▼】 key to manually dial, then press 【MENU】 key to select, flashing cursor appears, input the user ID you want to call, then press 【MENU】 key.

4. Press【▲】/【▼】 key to "call alert", the screen displays the call prompt: <User alias or ID>, and then press the [MENU] key to indicate that the call has been sent.

5.When the walkie talkie send a call prompt, the LED indicator light is red.

6.If you receive a call confirmation, a tone sounds and a call alert appears,and the LED indicator light is green.

　　- Or if no call alert confirmation is received, a beep sounds and the screen displays a call alert failure.

Receive call prompt

　　When you receive a call alert, the screen displays a call alert, alternating with the alias or ID of the calling walkie-talkie. Press the [BACK] key to exit.

★ Remote monitor

Initiate remote monitor

1. Press 【MENU】 key to enter the menu mode.

2. Press 【▲】/【▼】 key to contact list, then press 【MENU】 key to select.

3. Press 【▲】/【▼】 key to the desired user alias or ID, then press 【MENU】 key to select.

　　- Or press 【▲】/【▼】 key to manually dial, then press 【MENU】 key to select, flashing cursor appears, input the user ID you want to call, then press 【MENU】 key.

4. Press【▲】/【▼】 key to "Remote monitor", the screen displays the remote monitor <User alias or ID>, and then press the [MENU] key to indicate that the call has been sent.

5. When the walkie talkie send remote monitor, the LED indicator light is red.

6. "Remote moni success" displays if it is successful, and "Remote moni fail" displays if fails..

Receive remote monitor

After receiving the remote monitor command, it automatically starts transmitting voice and surrounding environment background sound, and exits automatically when the transmission time is up.

Radio remote kill

In digital mode, you can send a remote inhibit command to a contact, so that the radio can't be used normally.User menu function：

Initiate remote kill

1. Press 【MENU】 key to enter the menu mode

2. Press 【▲】/【▼】 key to enter contact list, then press 【MENU】 key to select

3. Press 【▲】/【▼】 key to enter digital contact list, then press 【MENU】 key to select

4. Press 【▲】/【▼】 key to the desired user alias or ID（Call attribute is single number）

5. Press 【▲】/【▼】 key to enter application function,then press 【MENU】 key to select

6. Press 【▲】/【▼】 key to remote kill, then press 【MENU】 key to select, the screen displays "Remote kill"

7. When the radio sends a remote kill Command, the LED indicator lights up as a red light.

8. If you receive the confirmation of the remote kill, the prompt tone will be issued and the "radio will be remote killed successfully".

• Or if you do not receive the confirmation of the remote kill, a prompt is issued, and the screen shows that remote kill fails.

接收遥毙 Receive remote kill

After receiving the command of the remote kill, the LCD screen is displayed as a white screen, and shows "Remote kill". When the radio is remote killed, it will not be effective by pressing any key, and the radio will still be dead after turn on again.
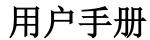
Radio activation

In digital mode, you can send an activation command to a contact to resume normal use of the two-way radio.

Initiate radio activation

1. Press 【MENU】 key to enter the menu mode

2. Press 【▲】/【▼】 key to enter contact list, then press 【MENU】 key to select

3. Press 【▲】/【▼】 key to enter digital contact list, then press 【MENU】 key to select

4. Press 【▲】/【▼】 key to the desired user alias or ID（Call attribute is single number）

5. Press 【▲】/【▼】 key to enter application function,then press 【MENU】 key to select

6. Press 【▲】/【▼】key to radio activation, then press 【MENU】 key to select, the screen displays "Radio Activation"

7. When the radio sends a radio activation command, the LED indicator lights up as a red light.

8. If you receive the confirmation of radio activation, the prompt tone will be issued and the "radio will be activated

successfully".

• Or if you do not receive the confirmation of the radio activation, a prompt is issued, and the screen shows that radio activation fails.

Receive radio activation

> After receiving the command of the remote kill, activate the prompt tone and turn off and turn on the radio again.

Call recording function

> Your walkie talkie can record all recent incoming, answered and unanswered calls. Use the call record function to view and
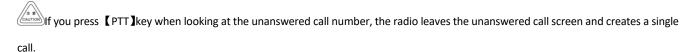
manage recent calls.

Check the latest call number

> Select "call records" in the main menu, enter the Dialed call/answered call/ unanswered call list, and select contacts,then

press 【PTT】 key to initiate a single call.

1. Press 【MENU】 key to enter the menu mode

2. Press【▲】/【▼】key to Call record, then press【MENU】key to select

3. The screen displays the "missed call/answered call/dialed call/deleted record" option,press【▲】/【▼】key to enter the required call list, then press【MENU】key to select.

4. The screen displays the most recent entries at the top of the list

5. Press 【▲】/【▼】key to view the list,then press the 【PTT】 key to start the single call for the currently selected alias or ID.
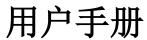
Unanswered call screen

Whenever a call is missed, the radio screen displays the number of unanswered calls and unanswered callers, press【MENU】key to check or

【BACK】key check later.

If you press 【PTT】key when looking at the unanswered call number, the radio leaves the unanswered call screen and creates a single

call.

1. The screen displays "missed calls" and the number of missed calls.

2. Press【MENU】key to enter the missed call list. The latest missed call entries are displayed at the top of the screen.

3. Press【MENU】to select to view, send information, or delete the entry.

Delete the call in the call list

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to Call record, then press【MENU】key to select

3. Press【▲】/【▼】key to Delete record, then press【MENU】key to select

4. The screen displays the "missed call/answered call/dialed call/deleted record" option, press【▲】/【▼】key to enter

the deleted record,then press【MENU】key to select.

5. The screen displays the "missed call /answered call / dialed call" option, press 【▲】/【▼】 key to select the call that to be deleted, then press【MENU】key to choose.

6. The screen displays "clear the call record" and returns to the previous level menu.

Message function

The radio supports DMR data function, and can send and receive messages. It can store up to 100 incoming messages and 100 sent messages. The maximum length of each message is 220 characters, and the number of SMS lines can not exceed 50 lines.

Edit and send messages

User menu function：

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to message, then press【MENU】key to select

3. Press【▲】/【▼】key to writing message, then press【MENU】key to select

4. There is a scintillation cursor, input SMS with the keyboard, move one bit to the left by pressing【▲】, move one to the right by【▼】, delete any useless character when the editing area has content, or return to the previous menu when the editing area has no content.

5. After writing the text message, press 【MENU】key to return to the previous menu quickly and find contacts，then press【MENU】key to select.

6. Press【▲】/【▼】key to the desired user alias or ID, then press【MENU】key to select

Or press【▲】/【▼】key to enter the manual dialing and input the target radio ID, then press 【MENU】key to select

7. Screen display "SMS sending..."，make sure that a message is being sent.

8. If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".

- Or if the message is not sent successfully, a high pitched tone will be issued, and the screen will display "SMS failure".

Send shortcut text

The radio supports at most 20 fast text messages programmed by agents. When you predefine SMS, you can edit it before sending every message.

User menu function：

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to message, then press【MENU】key to select

3. Press【▲】/【▼】key to shortcut message, then press【MENU】key to select

4. Press【▲】/【▼】key to the needed shortcut message, then press【MENU】key to select

5. Press【▲】/【▼】key to display text content with a scintillation cursor, input SMS with the keyboard, move one bit to the left by pressing【▲】, move one to the right by【▼】, delete any useless character when the editing area has content, or return to the previous menu when the editing area has no content.

6. After writing the text message, press 【MENU】key to confirm the contents and select send and save.

7．After sending message, press【▲】/【▼】key to enter contacts, and press 【▲】/【▼】 key to the desired user alias or ID, then press【MENU】key to select

• Or press【▲】/【▼】key to enter the manual dialing and input the target radio ID, then press 【MENU】key to select

8．Screen display "SMS sending...",make sure that a message is being sent.

9．If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".

　　Or if the message is not sent successfully, a high pitched tone will be issued,radio will return to resend selection screen.

Using one-calling key to send shortcut text

1.Press the preset 【one-calling key】 shortcut key to send a shortcut text to a predefined alias or ID.

2.Screen display "Message is sending...",make sure that a message is being sent.

3.If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".

　· Or if the message is not sent successfully, a high pitched tone will be issued, and the screen will display "SMS failure".

Manage unsuccessfully sending short messages

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

• Resend

• Forward

• Edit

• Delete

Resend message

1. Press 【MENU】key to send the same message to the same user/call group alias or ID.

2. If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".

　• Or if the message is not sent successfully, a high pitched tone will be issued, and the screen will display "SMS failure".

Forward message

Select and forward message to another user/call group alias or ID.

1. Press【▲】/【▼】key to reply, then press【MENU】key to select and find contacts.

2. Press【▲】/【▼】key to the desired user alias or ID, then press【MENU】key to select

　• Or press【▲】/【▼】key to enter the manual dialing and input the target radio ID, then press 【MENU】key to select

3. Screen display "Message is sending...",make sure that a message is being sent.

4. If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".

　• Or if the message is not sent successfully, a high pitched tone will be issued, and the screen will display "SMS failure".

Manage outgoing sent

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

At any time, press【BACK】key to return to the previous screen.

View the sent message

User menu function：

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to message, then press【MENU】key to select

3. Press【▲】/【▼】key to outbox, then press【MENU】key to select

4. Press【▲】/【▼】key to browse the SMS list of the inbox. If text messages come from e-mail programs,then a topic line will appear.

5. Press【MENU】key to select and read the current message, then press【MENU】key to resend, forward, edit or delete the message.

Resend the sent message

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

· Resend

· Forward

· Edit

· Delete

1.When you look at a short message, press【MENU】key again

2.Press【▲】/【▼】key to resend, then press【MENU】key to select

3.Screen display "Message is sending...", confirm send the same message to the same target radio

4.If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".

· Or if the message is not sent successfully, a high pitched tone will be issued, and the screen will display "SMS failure".

5.Press【MENU】to resend SMS to the same user/call group alias or ID.

In addition to pressing【MENU】and【BACK】key, if you change the volume and press any other key, you will return to this message. When you press【PTT】to initiate a single call or group call, or to respond to a group call, the radio will exit the resend selection screen. If you receive SMS or remote sensing information, emergency call or alarm, or receive a call prompt, the radio will also exit the resend screen. If you respond to a single call by【PTT】key(except when radio is showing the uncalled screen), or at the end of the full call, the screen display will return to the resend selection. Press 【▲】/【▼】key enter to reply, edit, or delete the selection screen.

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

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

· Select delete, delete selected SMS.

Delete all the sent SMS in the "outbox"

User menu function：

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to **message**, then press【MENU】key to select

3. Press【▲】/【▼】key to delete message, then press【MENU】key to select

4. Press【▲】/【▼】key to outbox, then press【MENU】key to select

5. Press【MENU】key when prompted"Delete the outbox?", and the screen display"SMS has been deleted".

• When you select the "outbox" but there is no SMS, the screen will display "empty box".。

Receive the message

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

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

查看短信 View the message

1. Radio send short message alert when receive short message, the screen display"receive SMS".

2. Read short messages by pressing【MENU】key to confirm

3. Press【MENU】key to return to the inbox

• Or press【MENU】key to reply, forward,edit and delete message.

Manage incoming message

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

The radio supports the following short message options：

• Reply

• Forward

• Edit

• Delete

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

At any time, press【BACK】key to return to the previous screen.

查看收件箱中的短信 View the message in the inbox

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to message, then press【MENU】key to select

3. Press【▲】/【▼】key to inbox, then press【MENU】key to select

4. Press【▲】/【▼】key to browse the SMS list of the inbox. If text messages come from e-mail program, a topic line will appear.

5. Press【MENU】to select and read the current message, then press the【MENU】key to reply, forward, edit or delete the message.

• Unread message with a sign   ,read message with a sign   .

Reply short message in the inbox

User menu function：

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to **message**, then press【MENU】key to select

3. Press【▲】/【▼】key to inbox, then press【MENU】key to select

4. Press【▲】/【▼】key to **the required message, press 【MENU】key to select and** browse the **current** SMS. If text messages come from e-mail programs, **then** a topic line will appear.

5. Press【MENU】**key again to** enter the submenu. Press【▲】/【▼】**key** to enter the reply, then press【MENU】key **with** the flashing cursor, enter the SMS editing state, and edit the short message with the keyboard.

- Or **press**【MENU】key and【▲】/【▼】key **to** insert shortcut text, and **press**【MENU】key and【▲】/【▼】key to select the required shortcut text, and then press【MENU】key **with** flickering cursor, if need, edit your message with the keyboard.

6. After writing SMS, press【MENU】key and【▲】/【▼】key to send, **screen display"short message is sending",m**ake sure that a message is being sent.

7. If the message is sent successfully, a prompt will be issued, and the screen will display "SMS is sent successfully".

- Or if cannot send SMS, the screen will display "SMS failure". If the message fails, the **radio** will return to the re**send** selection screen.

Delete messages from the inbox

User menu function：

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to message, then press【MENU】key to select

3.Press【▲】/【▼】key to inbox, then press【MENU】key to select

4. Press【▲】/【▼】key to the required message, and press【MENU】key to select and browse the current SMS. If text messages come from e-mail programs,then a topic line will appear.

5. Press【MENU】key again to enter the submenu.

6. Press【▲】/【▼】key enter to delete, then press【MENU】key to select

7. When display"confirm to delete?", press【MENU】key and the screen display"SMS has been deleted".

8. The screen returns to the inbox.

删除收件箱中的所有短信 Delete all message in the inbox

User menu function：

1. Press【MENU】key to enter the menu mode

2. Press【▲】/【▼】key to **message**, then press【MENU】key to select

3. Press【▲】/【▼】key to **delete message**, then press【MENU】key to select

4.. Press【▲】/【▼】key to inbox, then press【MENU】key to select

5. **When screen display"delete inbox**?", press【MENU】key and the screen **display"**SMS has been deleted".

- When you select "inbox" but there is no SMS, the screen displays "empty inbox".

Encryption

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

prevent eavesdropping or stolen.

用户手册

Basic encryption

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

If your radio receives an encrypted call from a different encryption key or a different key value and a key ID, you will hear the sound of a messy transmission (basic type encryption).

Press preset【encryption】key to turn on or off the encryption function..

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

ANI Identity code display

Scanning list

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

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

Start and stop scanning

Press the **preset**【scan switch】key or enter the scan menu function. The menu **operation** is as follows:

1. Select a pre programmed scan list channel by pressing【▲】/【▼】key.

2. Press【MENU】key to enter the menu mode

3. Press【▲】/【▼】key to **scan**, then press【MENU】key to select

4. Press【▲】/【▼】key to **scan switch**, then press【MENU】key to select

5. The screen displays the "**open**" and "**close**" options, press【▲】/【▼】key to open, and then press【MENU】key to confirm and activat**e** scan. The LED indicator slowly flashes to orange and displays the scan icon ↻；

• If you press【▲】/【▼】key to close, then press【MENU】to confirm **and** close scan. When the scan is turned off the LED indicator lights off and the scan icon is not displayed.

查看/添加扫描列表 View/add a scan list

1. Select a pre programmed scan list channel by pressing【▲】/【▼】.

2. Press【MENU】key to enter the menu mode

3. Press【▲】/【▼】key to **scan**, then press【MENU】key to select

4. Press【▲】/【▼】key to **scan list**, then press【MENU】key to select

5. Press【▲】/【▼】key to select the **operated** scan list, and press【MENU】key to select

• If you select "no", no scanning list is added.

6. Press 【▲】/【▼】 key to enter "edit/view" menu，then press【MENU】key to select

7. Press 【▲】/【▼】 key to view the channel in the scan list and press【MENU】key to set or delete the priority channel in the scan list.

• Or select the "add channel" in the current scan list, then add a new channel by pressing【MENU】key.

8. Select a channel in the current scan list：

• If do not need to scan, you can choose to"delete the channel" to delete a channel in the current scan list, but you cannot delete the first channel in the scan list.

If need to listen the activities of a channel first, you can choose the "priority channel" as the priority channel 1 or the priority channel 2.

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

Scanning instructions and methods

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

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

There are two kinds of scanning methods：

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

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

Scanning reply

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

Scanning reply process：

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

2. Press【PTT】 key during the hanging time, and the LED indicator is red.

3. Release【PTT】key to listen.

4. If you do not respond within the hanging time, the radio will continue to scan.

七. 设置菜单 Menu setting

The setting menu includes the following:

• Radio Set

• Radio Info

• Radio Cfg

■ Radio set

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

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

Talk around

In case of the repeater failure or beyond the coverage of the repeater station, but both terminals are in the other's communication range, at this time, you can press the【Off】 shortcut button to switch to the direct mode, further to achieve directly communication between two terminals.

Press the pre-programmed 【Repeater / Off】 shortcut button to open the offline function; press this button again to turn off this function：

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

2.Press the【▲】/【▼】button to setting, then press the【MENU】button to select.

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

4.Press the【▲】/【▼】button to off line, then press the【MENU】button to select.

5. If the radio is in the repeater station mode, the screen indicates "turn off", or if the radio is under off-line mode, the screen indicates "turn off".

6. Press the【MENU】button to select.

7. The screen indicates the off-line is turn on, the icon flash, or the screen indicates off-line is turn off.

8. The screen back to the upper menu automatically.

• Even when the radio is turn off, the radio is kept off-line situation.

Tones/Alerts

Contains the following options:

· Silence

· Keypad Tone

· Low power tone

· SMS alert tone

· Single call tone

· Group call tone

· Channel Notify

Silence

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

The menu function operates as follows:

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to "Tones/Alerts", then press【MENU】to select.

5. Press【▲】/【▼】to Silence, then press【MENU】to select.

6. Press【MENU】to "On",the Mute function will be enabled, the screen displays "Setting successful".

   • or Press【MENU】to "off",the Mute function will be off, the screen displays "Setting successful".

After Radio silence turn on, the first line of the screen will show ，all key tones and channel announcements will be turned off.

Turn on or off Keypad Tone

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

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to "Tones/Alerts", then press【MENU】to select.

5. Press【▲】/【▼】to Keypad Tone, then press【MENU】to select.

6. Press【MENU】to "On",then press the [MENU] key to confirm that the key Beep is enabled. The display shows "Key Beep

On".

   • or Press【MENU】to "off",then press the [MENU] key to confirm turning off the keyboard sound. The screen displays "Key

Beep Off"

Turn on/off channel Notify

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

The menu function operates as follows:

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to "Tones/Alerts", then press【MENU】to select.

5. Press【▲】/【▼】to "Channel Notify", then press【MENU】to select.

6. Press【MENU】to "On",then press the [MENU] key to confirm that the Channel Notify is enabled. The display shows "Channel Notify On".

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

After the channel Notify is turned on, when the walkie-talkie is switched on or the channel is switched, the current

channel number will be broadcasted.

TX Power

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

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

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to "TX power", then press【MENU】to select.

5. Follow the screen prompt to change the current Settings.

6. Press【MENU】to select new power level.

• Return to the previous menu.Press【BACK】return to the home screen, and screen displays the power level icon.

An " H " above the screen indicates the current high power; " L " indicates the current low power.

Set backlight

You can turn on or off the screen backlight of the walkie-talkie if needed. This setting will also affect the back light of the menu and numeric keyboard. According to the pre-programmed backlight automatic on-off key, switches backlight Settings. The menu functions as follows:：

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to backlight, then press【MENU】to select.

5. The screen indicates normally open, normally off,5S, 10S, 15S options, press【MENU】to select normally open, then screen backlight is always open and light.

• Or if select 5S, 10S, 15S, the screen will turn off the screen backlight without any operation after the corresponding time.

背光延时时间设置 Backlight delay time setting

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

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to "Backlight", then press【MENU】to select.

5. The screen displays "Backlight" and "Backlight Delay" options. Press the 【▲】/【▼】to select "Backlight Delay" and press the [MENU] key to select.

6.The screen shows "Backlight Delay XX(s)", press【▲】/【▼】to select more appropriate delay time (05 to 15 seconds optional), then press [MENU] to confirm backlight delay setting, indicated "backlight 5 sec/10sec/15sec" is displayed and back to the upper menu.

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

Squelch

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

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

The menu functions as follows:

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to "squelch", then press【MENU】to select.

5. Choose "strict" or "norma"l, then press【MENU】to select. Press【BACK】return to the home screen

Screen

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

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to the screen, then press【MENU】to select.

5. Press【▲】/【▼】to select "images" or "default character", then press【MENU】to enable the corresponding boot screen.
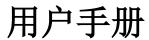
Keypad lock

You can lock the radio keyboard to prevent accidental keystrokes. Methods include manual keyboard locking and automatic keyboard locking; among them the automatic keyboard locking includes 5S, 10S, 15S three time options. The menu functions as follows:

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to the keypad lock, then press【MENU】to select.

5. Press【▲】/【▼】to " on/off " , then press【MENU】to select.

Keypad lock delay time

Keypad lock delay time setting applies only to the automatic lock keyboard. The menu function operates as follows:

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to "KeyPad Lock", then press【MENU】to select.

5. The screen displays "key lock select" and "key lock delay time" option. Press 【▲】/【▼】 to select "Keypad delay time", then press [MENU] to select.

6. The screen displays "Keypad delay XX(s)", press【▲】/【▼】to select the appropriate delay time (5 to 15 seconds optional), then press [MENU] key to confirm the lock delay time Settings, the screen shows "Setting successful" and back to the upper menu.

If setting lock/unlock the keypad by pressing the pre-programmed [KeyPad Lock] shortcut . If automatically lock the keypad, the keyboard will automatically lock when the user does not operate within the corresponding time. Unlock the keypad by pressing the preprogrammed keypad lock shortcut.

Language

This radio supports both Chinese and English language. The menu functions as follows:
1. Press【MENU】to enter menu mode.
2. Press【▲】/【▼】to set, then press【MENU】to select.
3. Press【▲】/【▼】to the radio setting, then press【MENU】to select.
4. Press【▲】/【▼】to language selection, then press【MENU】to select.
5. Press【▲】/【▼】to select the corresponding language, then press【MENU】to select. The screen shows the language selected and returns to the main screen.

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

Turn LED on or off

If needed, you can enable and disable the LED indicator light. The menu functions as follows:
1. Press【MENU】to enter menu mode.
2. Press【▲】/【▼】to set, then press【MENU】to select.
3. Press【▲】/【▼】to the radio setting, then press【MENU】to select.
4. Press【▲】/【▼】to the LED indicator light, then press【MENU】to select.
5. The screen displays "open", press【MENU】to enable the LED indicator light, and the screen displays it is open.
　• Or the screen shows "off" and press【MENU】to turn off the LED indicator light, the screen displays it is close.

If the LED indicator is turned off, The transmitting and receiving indicators will be turned off。

Vox

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

• Perform the following procedure

⚠ Enabling or disabling this function that is limited to radio of activating these functions.。

The menu functions as follows:

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

Gain level

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

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

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

Clock

The real-time clock is used by the terminal to display local time in real time, view time details and set time format. The clock settings are divided into:

•time
•date

Time

The menu functions as follows:

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

Date

The menu functions as follows:

1. Press【MENU】to enter menu mode.

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

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

4. Press【▲】/【▼】to the clock, then press【MENU】.

5. Press【▲】/【▼】to the date, then press【MENU】to select, which indicates the current date.

6. Press【MENU】to enter time setting mode.

7. Press【▲】/【▼】to move and choose the number that needs to be changed, the selected number will be displayed in reverse, then type the corresponding number to change date through numeric keypad.

8. Press【MENU】to save, screen display date saved.

Match single call

The menu functions as follows:

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

2. Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3. Press【▲】/【▼】to enter into Radio Setting,then press【MENU】to select.

4. Press【▲】/【▼】to enter into Single call,then press【MENU】to select.

5. The LCD indicate"ON/OFF" options, press【▲】/【▼】to select ,then press【MENU】to save, and select the matched type.

• Select"ON" to start the match of single call.

• Select"OFF"to over the match of single call. After turn off the single call match function, it will not need to match all the single call ID,and can communicate directly.

Match group call

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio Setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into Group call,then press【MENU】to select.

5.The LCD screen indicate"ON/OFF" options, press【▲】/【▼】to select ,then press【MENU】to save, and select the matched type.

• Select"ON" to start the match of group call.

• Select"OFF"to over the match of group call.After turn off the group call match function, it will not need to match all the group call ID,and can communicate directly.

■ Voice Recorder(optional)

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

Voice recorder ON-OFF

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio Setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into Recording,then press【MENU】to select.

5.Press【▲】/【▼】to enter into setting,then press【MENU】to select.

6.Press【▲】/【▼】to enter into option of "ON/OFF",then press【MENU】to select.

• After start the voice recorder function, the radio will record for every call, and save into the record menu.

• If necessary, can ask dealer to pre-programmed the【Recording switch】key to turn on or turn off the function.

录音选择 Voice recorder selection

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

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio Setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into Recording,then press【MENU】to select.

5.Press【▲】/【▼】to enter into setting,then press【MENU】to select.

6.Press【▲】/【▼】to enter into the record selection,then press【MENU】to select.

7.The LCD screen will indicate choice of "Receive record、Transmit record、Receive/transmit record", press【▲】/【▼】to select, and then press【MENU】to confirm.

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

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

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

录音列表查询与回放 Voice recording list check and playback

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

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio Setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into Recording,then press【MENU】to select.

5.Press【▲】/【▼】to enter into list,then press【MENU】to select.

6.The LCD screen will indicate   the catalog of recorders, press【▲】/【▼】to select the record file,and then press【MENU】to select.

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

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

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

Voice recorder deletion

菜单功能操作如下：

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio Setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into Recording,then press【MENU】to select.

5.Press【▲】/【▼】to enter into Delete all,then press【MENU】to select.

6.The LCD screen will indicate "Confirm to delete??",then   press【▲】/【▼】to select the record file,and will delete all the record files.

■   Radio information search

Search the radio information, including: radio number(the name of the owner and serial number for the radio)and the radio

version(firmware version, CPS version)etc.

Press【BACK】to return to the previous screen at anytime.

检查对讲机 ID Check the Radio ID

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio information,then press【MENU】to select.

4.Press【▲】/【▼】to enter into Radio number,then press【MENU】to select.

5.The LCD screen will indicate the owner's name and radio ID.

检查对讲机版本 Check the Radio version

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

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio information,then press【MENU】to select.

4.Press【▲】/【▼】to enter into Radio version,then press【MENU】to select.

5.The LCD screen will indicate the current firmware version and CPS version.

■   Radio configuration

The radio configuration is mainly to edit the channel content.

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

接收频率 Receiving frequency

菜单功能操作如下：

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into receiving frequency ,then press【MENU】to select.

5.The LCD screen will indicate the receiving frequency of current channel, then press【MENU】to select.

6.Press 【BACK】to delete the previous number bit by bit,and input the corresponding receive frquency by pressing the number keys.

7. After the change is completed, press the 【MENU】 key and the LCD screen indicate the setting is successful.

Transmitting   frequency

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into transmitting frequency,then press【MENU】to select.

5.The LCD screen will indicate the transmitting frequency of current channel, then press【MENU】to select.

6.Press 【BACK】to delete the previous number bit by bit,and input the corresponding transmitting frquency by pressing the number keys.

7.After the change is completed, press the 【MENU】 key and the LCD screen indicate the setting is successful.

Transmit time-out timer

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

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into transmit time-out timer,then press【MENU】to select.

5.The LCD screen indicates "TOT":XXX,press【▲】/【▼】 to the corresponding option(additive increase in the range of 5S), then press 【MENU】to select.

In the emergency alarm mode, this function is invalid.

Transmitting contacts

Transmitting contactor only can be modified under the digital channels.

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into transmitting contacts,then press【MENU】to select.

5.Press【▲】/【▼】to select the transmitting contacts in the list, then press【MENU】to select. The LCD screen will indicate"Set successfully" and return to the previous menu.

Color code

Color code refers to a system. The same color code is necessary for the terminals communicating with each other. The frequency is the integer within 0~15. The color code only can be set in the digital model. The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into color code,then press【MENU】to select.

5.Press【▲】/【▼】to selcet the the color code, then press【MENU】to select. The LCD screen will indicate"Set successfully" and return to the previous menu.

Time slot

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

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into time slot,then press【MENU】to select.

5.Press【▲】/【▼】to selcet the time slot,then press【MENU】to select. The LCD screen will indicate"bs time slot has been set" and return to the previous menu.

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

CTCSS

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

• CTCSS encode
• CTCSS decode

Trasmitting CTCSS/DCS

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into CTCSS,then press【MENU】to select.

5.Press【▲】/【▼】to enter into transmitting CTCSS,then press【MENU】to select.

6.The LCD screen indicates options of "None/CTCSS/DCS_N/DCS_I", press【▲】/【▼】enter into None, and press【MENU】to select,then will be no CTCSS trasmitting, the LCD indicates "setting successfully";

- Or press【▲】/【▼】enter into CTCSS , and press【MENU】to select CTCSS, press 【▲】/【▼】to select the corresponding data, and press【MENU】to confirm the setting,the LCD indicates "setting successfully";
- Or press 【▲】/【▼】enter into DCS_N , and press【MENU】to select positive DCS, press 【▲】/【▼】to select the corresponding data, and press【MENU】to confirm the setting,the LCD indicates "setting successfully";
- Or press【▲】/【▼】enter into DCS_I , and press【MENU】to select reverse DCS,press 【▲】/【▼】to select the corresponding data, and press【MENU】to confirm the setting,the LCD indicates "setting successfully".

Receiving CTCSS/DCS

The menu functions as follows:

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

2.Press【▲】/【▼】to enter into Setting, then press【MENU】to select.

3.Press【▲】/【▼】to enter into Radio setting,then press【MENU】to select.

4.Press【▲】/【▼】to enter into CTCSS,then press【MENU】to select.

5.Press【▲】/【▼】to enter into receiving CTCSS,then press【MENU】to select.

6.The LCD screen indicates options of "None/CTCSS/DCS_N/DCS_I", press【▲】/【▼】enter into None, and press【MENU】to select,then will be no CTCSS receiving, the LCD indicates "setting successfully";

- Or press【▲】/【▼】enter into CTCSS , and press【MENU】to select CTCSS, press 【▲】/【▼】to select the corresponding data, and press【MENU】to confirm the setting,the LCD indicates "setting successfully";
- Or press 【▲】/【▼】enter into DCS_N , and press【MENU】to select positive DCS, press 【▲】/【▼】to select the corresponding data, and press【MENU】to confirm the setting,the LCD indicates "setting successfully";
- Or press【▲】/【▼】enter into DCS_I , and press【MENU】to select reverse DCS,press 【▲】/【▼】to select the corresponding data, and press【MENU】to confirm the setting,the LCD indicates "setting successfully".

Main technological specification

整体部分

Frequency range	VHF：136-174MHz /UHF:400-470MHz (Dual Band)
Memory Channel	1024
Frequency Stability	±1.0ppm

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Operating Temperature	-30℃—+60℃
Operating Voltage	DC7.4
Demission（H×W×D）	133×62×36mm
Weight	

Transmission

Output power	High:5W Low:1W
Output Consumption	Analog≤1.6A Digital≤0.9A
Consumption	≤0.18A
FM modulation	11K¢F3E@12.5KHz
4FSK digital modulation	12.5KHz for data:7K60FXD 12.5KHz for data and voice :7K60FXE
Modulation Distortion	<5%
Signal-to-noise	≥40dB@12.5KHz
Adjacent Channel power	≤-65dB ≤-60dB
Audio Response	+1～-3dB
Antenna Port Spurious	9KHz-1GHz: ≤-36dBm 1GHz-12.75GHz: ≤-30dBm
Digital Protocol	ETSI-TS102 361-1,-2,-3
Vocoder type	AMBE+2 ™

Reception

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

All specifications may be modified without prior notice or liability.

用户手册

DIGITAL PORTABLE RADIO

■Troubleshooting

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

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

■ Maintenance and clean

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

■ Maintenance

◆Do not store the radio in an environment containing a corrosive electronic circuit material.

◆Do not directly lift an antenna or an external microphone in the course of carrying or using a radio.

◆Cover the appendage interface cover, when attachments are not used.
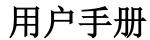
■ Clean

◆Please use clean, dry cloth or brush to wipe off the surface of the walkie talkie and the dust attached to the charging pole on a regular basis.

◆Wipe the radio on dirt with dust, lint free cloth, to prevent poor contact.

◆After long term use of radio, walkie talkie buttons, control knobs and chassis are easy to dirty. You can use neutral detergent (do not use strong corrosive chemicals) and wet cloth to clean. After cleaning, make sure the radio is completely dry; otherwise please do not use it.

◆When the walkie talkie does not in use, please attach the cover on the socket.

⚠ 注 意 CAUTION Please turn off the radio and remove the battery before clearing.

Disclaimer

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

The third party products and contents involved in this manual belong to the third party. Our company does not guarantee its accuracy, effectiveness, timeliness, legality or integrity. If you need more information or have any suggestions for this manual, welcome to our website: http://www.volthink.com, or call our service hotline 400-0123-353.

Our PO FUNG ELECTRONIC(HK) INTERNATIOANL GROUP COMPANY radio generators RF electromagnetic energy during transmit mode.This radio is designed for and classified as "Occupational Use Only" ,meaning it must be used only during the course of employment by individuals aware of the hazards,and the ways To Minimize Such hazards.

This radio is NOT intended for use by the "General Population" in an uncontrolled environment. This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use Only". Inaddition, our PO FUNG ELECTRONIC(HK) INTERNATIOANL GROUP COMPANY radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:
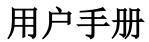
---IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

---American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

---American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields-RF and Microwave.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio. Electromagnetic Interference/Compatibility

During transmissions, PO FUNG ELECTRONIC(HK) INTERNATIOANL GROUP COMPANY radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use
The radio transmitter is used in situations in which persons are exposed as consequence of their employment
provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

Attention:

This radio complieswith IEEE and ICNIRP exposure limits for occupational/controlled RF exposure emvironment at operating duty factors of up to 50% and is authorized by the FCC for occupational use only. An appropriate warning lable is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 2.5cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original acessories (belt clip)a minimum distance of 0 cm. Do not use this device when antenna shows obvious damages.

This product is compliance to FCC RF Exposure requirements and refers to FCC website https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm search for FCC ID: 2AJGMDM-1706 to gain further information include SAR Values.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.