



RECYCLED PACKAGING



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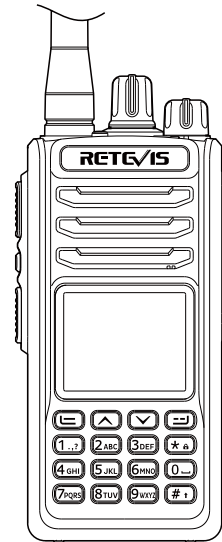
MADE IN CHINA

RETEVIS

RT52

Digital DMR and Analog
UHF/VHF Two way Radio

User's Manual



Brief Introduction

Thank you for buying handheld walkie talkie. We believe this simple, stable, beautiful and widely used in all industries and area of professional wireless communications equipment will give you a great surprise. This product is for professional commercial or amateur frequencies, it is necessary to apply for permission to the wireless administration organization of the provinces and autonomous regions in there local country.

Please read this manual carefully in order to know how to properly operate the radio before use.

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Unpacking and Checking Equipment

Welcome to use handheld radios, before using we suggest you:

- Please check the packing box of this product and see if there are signs of damage.
- Please open the packing box carefully. We recommend that you identify the items listed in the following packing list. If you find that our product and its accessories in handling are lost or damaged during the shipment. Please immediately contact dealers.

Parts List

Item	Quantity
Radio	1
Rubber Antenna	1
Li-ion Battery Pack	1
Desktop Charger	1
Power Adapter	1
Belt Clip	1
Hand-Strap	1
User's Manual	1

Preparation

■ Using the Battery

The battery is not completely charged at the factory, please charge it before using.

To extend the battery life time, please power off the batteries when you don't use two way radio, and save battery in a cool (temperature less than 25°C) and dry place.

■ Precautions of Charging Equipment

1. Do not exposed the charger to rain or snow.
2. Do not operate or disassemble the charger if it has received a sharp blow, or has been dropped or damaged in any way.
3. Never alter the AC cord or plug provider with the unit. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
4. To avoid damaging the power cord or socket, pull the plug out of the socket with a hand plug. Do not pull the plug out by pulling the power cord.
5. To reduce the risk of damage to the cord or plug, pull the plug rather than the cord when disconnecting the charger from the AC receptacle.
6. Use of an attachment not recommended or sold may result in a risk of fire, electric shock, or personal injury.
7. Make sure the cord is located so it will not be stepped on, tripped over, or subjected to damage or stress.
8. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and/or electric shock. If an extension cord must be used, please make sure that:

Preparation

Extension line cord use the same pins.

Use 18AWG wires less than 30 meters in length and use 16AWG wires within 45 meters.

9. Do not replace charger's power cord. If the power cord damages, you must stop using charger immediately.

■ Charging the Battery

Please use the battery charger designated to charge battery. After purchase or extended storage (more than two month), the first time to charger battery cannot make battery reach its normal operating capacity. After repeating charger/discharge it two or three times, the operating capacity will increase to its normal capacity.

■ Please Charge the Radio According to Operation Steps as Follows:

1. Inset power adapter into power supply socket.
2. Inset output terminal of power adapter into DC Jack behind the charging kit, now the charging orange indicator lights about 2 seconds then goes out.
3. Inset the battery or radio equipped with battery into the charging kit.
4. Confirm the battery and charger kit terminal contact reliably, when charging indicator light turns into red and charging starts.
5. After completion of charge(charging time is about 5 hours), light turns to be green.

Preparation

■ **Indicators Display As Following**

Status	Indicator
Power Connected	Orange light is on about 2 seconds then goes out
No battery (Temperature end judges)	All go out
Charge Normally	Red light is on
The battery is fully charged	Green light is on
Fault(over temperature, battery short circuit or over discharge state)	Red light flashes

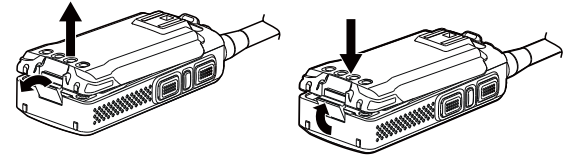
Note: Before charging, please turn off radio power equipped with battery. When charging, using radio will interfere with normal charge of battery and transceiver effect.

Preparation

■ **Installing/Removing the Battery**

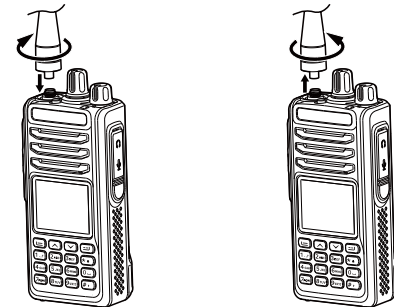
Insert the battery pack into the corresponding slots on the back of radio and push it. Then press the upper end of the battery until you hear a "click".

To remove the battery pack, make sure the radio off, and then unlatch the buckle, the battery from emerge from the radio, and then remove the battery.



■ **Installing/Removing the Antenna**

Align the threaded of the antenna with the radio's antenna connector. Turn the antenna clockwise to fasten it. To remove the antenna, please turn the antenna counter-clockwise until you can remove it.

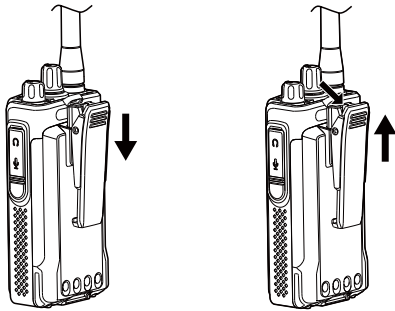


Preparation

■ Installing/Removing the Belt Clip

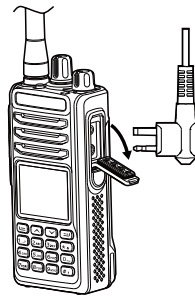
If necessary, the randomly configured belt clip can be inserted into the slot on the back of the battery pack for easy carrying.

To remove the belt clip, simply press the buckle out and push it up.

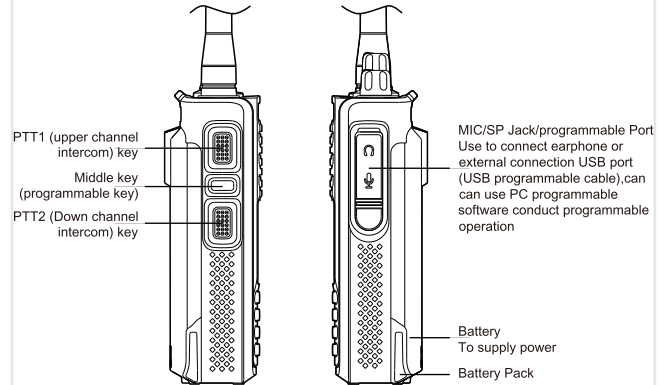
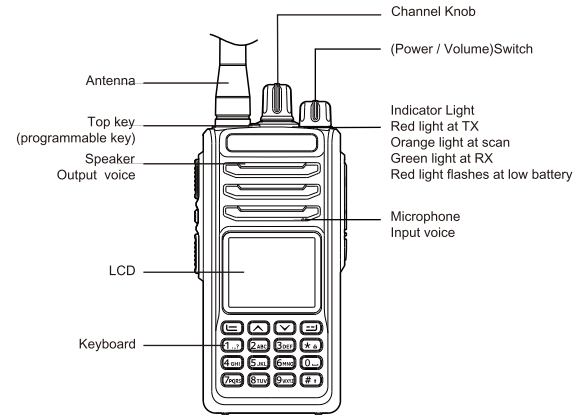


■ Installing Speaker/Microphone

Lift the headphone cover and insert the speaker/microphone headset directly into the speaker/microphone Jack.



Getting Familiar




Getting Familiar

Basic Use of Keyboard:


 Menu key, confirm key, A key.

 Up key, B key.

 Down key, C key.

 Return key, delete key, D key, long press to switch VFO/channel mode.

 Short press to switch main channel, long press to lock keyboard.

 Short press to enter the dial box, long press to enter the scan, and when the standby lights out then short press to display the time.

Note: Under the emergency situation, press the programmable top button can open the emergency call function. Before the machine is activated, it is necessary to run the DMR programming software (upper computer) to set up the walkie-talkie.

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark
Contact	Contact	Contact list, programming software edit, new contact add or call record contact add, store up to 100000 group contacts and ten thousand digital contacts list	Only digital channel
	New Contact	Manually create and save a new contact, enter a number, alias, tone, if the current input number same as the contact list, directly cover the old contact information	
	Manual dialing	Enter the ID number of the other side (up to 8 digits, the full page ID is fixed at 167772 15), then press confirm key, call prompt, inter-phone detection, remote monitor, inter-phone activation, radio remote death, whether the above function is open to the PC Programmable	
message	Inbox	Receive list: received the most recent SMS, maximum storage 16, if continue to receive, loop overwrite storage	Only Digital channel. PC Programmable
		Delete all: delete all received message	

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark
message	Write a text message	Message editing, with a maximum of 144 characters or 72 Chinese characters, can be entered by using the "#" key to switch input mode: abc (lowercase letters)/ABC (Capital letter)/123 (digital)/py (pinyin). Enter the text message and press the confirmation key to do the related operation	Only Digital channel. PC Programmable
	outbox	Save the newest send message, can be store up to 16 pieces of sending messages	
	Draft box	Draft list boxes that can store up to 16 pieces messages	Only Digital channel. PC Programmable
Preset short message	The PC can write directly, and can store up to 50 short messages. Each short message can input 144 characters or 72 Chinese characters		
Call record	Dialed call	List of dialed calls: up to 32 latest dialed call records can be stored, which can be accessed or stored to contacts through operations Delete all: clear list of all records	Only Digital channel. PC Programmable

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark
Call record	Received call	List of incoming calls: recent received call records can be stored up to 32, which can be accessed or stored to a contact by operation Delete all: clear list of all records	Only Digital channel. PC Programmable
	Unanswered call	List of incoming calls: 32 recent received call records can be stored up to 32, which can be accessed or stored to a contact by operation Delete all: clear list of all records	
Setting	Inter-phone setting	infra-acoustic frequency Sub-audio coding and decoding: directly set decoding and encoding; sub-audio decoding: only change decoding, encoding unchanged; sub-audio coding: only set encoding, decoding unchanged; through the "*" key to analog sub-audio CTCSS or digital sub-audio DCS switch, In digital sub-audio mode, "#" key expansion switch between positive phase (N) and inverse phase (I), or keyboard manual input of non-standard sub-audio, confirm by pressing the confirmation key, press the return key to return	Only analog channel

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Inter-phone setting	Squelch	0-9 level can be choose, factory default 5 level	PC Programmable
		transmitting power	High/low optional, high power: U segment 5W.V segment 4W.low power: 1W	
		Talk around	Talk around on/off, only the current channel of the PC click "allow off", this function will only work	
		Wide/narrow band	Wide/narrow band can be optional in analog channel mode wide band: 25KHZ, narrow band: 12.5KHZ	Only analog channel
		Busy Channel Lockout	Off/Carrier/(sub audio/color code optional), off: no busy channel lockout, carrier: matched carrier press PTT: sub audio/color code: matching sub audio/color code lockout	
		Time Out Timer	OFF/15s/.../495s optional, close to the launch time limit of 10 seconds early warning, time to stop launch	
		VOX	Off/on, voice control sensitivity "the PC sets the overall sound control transmission	PC Programmable

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Inter-phone setting	VOX	sensitivity level (1-10 level)" can be set, level 1 is the highest level of sensitivity, and level 10 is the lowest level of sensitivity	PC Programmable
		Dual standby	Dual band dual standby/ dual band signal standby can be chose, dual band dual standby: the primary channel and the secondary channel alternate scan, when the effective reception time locks the call, presses the PTT 1 key or the PTT 2 key to call each other, after 4 seconds may return to the original main channel call Dual band signal standby: the upper and lower channel by keyboard "*" key or press PTT 1 key and PTT 2 key to switch. Machine receive and transmit work only on primary channel	
		Digital Encryption	Turn off/on, turn on the encryption function, right and left to match the key to the normal call	Only Digital channel. PC Programmable



Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Inter-phone setting	Power Save	Off/on, power saving ratio 1: 4	PC Program-mable
		Warning tone	Full tone/call permission/keystroke optional	
		Back-light	Open normally/5 seconds/10 seconds/15 seconds optional	
		Keypad lock	Manual/5 second/10 second/15 second optional, choose manual mode, long press "*" key 2 seconds lock, press "menu" button then immediately press "*" key unlock	
		Indicator Light	Off/on, When turned off, the indicator lights (emitting, receiving, scanning, etc.) does not work	
		Power on password	Enter boot password, boot password (close/boot)/new password (modify password, maximum 6 digits)	
		Mode	Serial number (channel serial number)/name (host computer channel name can be edited/frequency (display received transmission frequency)	

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Inter-phone setting	Boot screen	Picture (can be load the customer's bmp picture of 128*64)/Preset character (two lines, upper computer can be edit)	PC Program-mable
		Language Optional	English/Chinese optional, English and Chinese display switchable including all interface of menu, call indication and call record etc	
	Radio Information	Local Number	Eight bits self-number, maximum 16776415	Only Digital channel
		Equipment Information	Model information, serial number, CPS version, hardware version, firmware version, DSP version, programming time	
	Radio Configuration	Reception Frequency	Manual keyboard to input frequency value	
		Emission Frequency	Manual keyboard to input frequency value	
		Channel Name	Manual keyboard to input name, support Chinese and English	
		Colour Code	Colour code, 0-15 can be select	Only digital channel, analog channel can't be set

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Radio Configuration	Time Slots	Time slot, 1/2 can be select	Only digital channel, analog channel can't be set
		Differential Frequency	000.00000~384.00000 MHz	
		Differential Frequency Direction	Turn off/positive difference frequency/negative difference frequency	
		Step Frequency	2.5k/5.0k/6.25k/10k/12.5k/20k/25k/30k/50k step can be select	
		Channel Type	Analog mode  /digital mode  can be select	
	Keypad Programmable	Short press top key	There have some functions can be choose: 1.no effect/ other 2.Hint on/off 3.Emergency mode on 4.Emergency mode off 5.High/low frequency selection 6.Monitor (support analog, digital can monitor different ID number) 7.Noise channel temporary deletion 8.repeater/talk around 9.Scan on/off 10.Encryption on/off 11.VOX launch on/off 12.Zones switchable 13.Battery power indicator 14.Work alone on/off 15.Exit phone 16.FM radio 17.Record	
		Long press top key		
		Short press middle key		
		Long press middle key		
		Short press PTT2 key		
Long press PTT2 key				

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark																								
Zone	Zone Name	Area list, can be support up to 250 zones(each zone most can be set 16 channels)	Can be add digital channel and analog channel																								
Scan	Switch	On/off, Only when channel PC programmable the scan list can turn on the scanning function, scanning switch also can through the top key or middle key set as "scan on/off" to turn on/off, or long press "#" key to turn on/off	PC Programmable																								
	Scanning list	Display the current scanning list, only can be consult																									
<p>Note: Top key/MID key/PTT2 key can use programming software to define long press and short press function. There are some several functions that can be defined:</p> <table border="0"> <tr> <td>1.None function</td> <td>2.All hint on/off</td> </tr> <tr> <td>3.Emergency motion on</td> <td>4.Emergency motion off</td> </tr> <tr> <td>5.High/low power selection</td> <td>6.Monitor (accept analog, digital can monitoring different ID number)</td> </tr> <tr> <td>7.Noise channel temporary deletion</td> <td>8.One touch to access 1</td> </tr> <tr> <td>9. One touch to access 2</td> <td>10. One touch to access 3</td> </tr> <tr> <td>11. One touch to access 4</td> <td>12. One touch to access 5</td> </tr> <tr> <td>13. One touch to access 6</td> <td>14.Repeater/talk around</td> </tr> <tr> <td>15.scan on/off</td> <td>16.Encryption on/off</td> </tr> <tr> <td>17.VOX on/off</td> <td>18.Zone switchable</td> </tr> <tr> <td>19.Battery power indicator</td> <td>20.Along work on/off</td> </tr> <tr> <td>21.Exit phone</td> <td>22.FM Radio</td> </tr> <tr> <td>23.Record</td> <td>24.PTT2 key</td> </tr> </table>				1.None function	2.All hint on/off	3.Emergency motion on	4.Emergency motion off	5.High/low power selection	6.Monitor (accept analog, digital can monitoring different ID number)	7.Noise channel temporary deletion	8.One touch to access 1	9. One touch to access 2	10. One touch to access 3	11. One touch to access 4	12. One touch to access 5	13. One touch to access 6	14.Repeater/talk around	15.scan on/off	16.Encryption on/off	17.VOX on/off	18.Zone switchable	19.Battery power indicator	20.Along work on/off	21.Exit phone	22.FM Radio	23.Record	24.PTT2 key
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23.Record	24.PTT2 key																										

Safety

Product safety and RF Exposure for hand-held two way radio

Before using this two way radio, please read carefully the attach manual instruction in the random incidental for the safe use of the product and radio-frequency manual.



This radio is limited to professional applications that meet FCC radio-frequency energy requirements. Before using this two way radio, Please read the manual which contains important operating instructions for safe usage, RF Energy/ Awareness, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards. Also read the operational instructions for safe use.

Overview

■ Switch on

Clockwise to turn on the radio volume knob, there will be a “KADA” sound, message sound and the screen will show up “Welcome”, while the LED indicator lights up and becomes Green color if the battery id full charged. Note: if the volume function is forbidden, there will not any sound when power on. Here, need to power off the radio and anticlockwise with knob until a “KADA” sound. Boot custom character content of PC can be set.

■ Adjust Volume

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

■ Dual Band Mode Switching

Short press ***A** key (also can press PTT1 and PTT 2) up and down switch the main channel, this time **MAZN** points to the main channel. Dual band working mode can be selected by menu [process: press menu key to set a radio set a pair of waiting (dual band dual standby/dual band single standby)]. When the machine works in the main channel, the secondary channel does not receive the signal when the double selection [dual band dual standby/dual band single standby] is to be selected, and the icon bar displays the "S" icon when the dual band to be selected [dual band dual standby], and the machine main channel and the secondary channel receive the scan in turn. When a valid received signal is scanned, the working channel displays the **MAZN** pointing to the main channel transmission.


Overview

Note: due to the dual standby mode in the primary and secondary channel scanning state DTMF, automatic scanning, working alone does not play a role in the arts auxiliary function.

■ Launch Calls

Single Call

This radio supports a confirm single call, if the check is confirmed, it is necessary to detect the presence of the target radio before calling the other party.

- 1.Short press  key to enter the digital mode, input single call contact's ID number, press PTT can launch single call.
- 2.When the default communication address of the digital channel is set to single call ID, press PTT key to initiate a single call for the current contact.
- 3.On the contact menu, select the single caller to press the PTT key to call the selected single caller.
- 4.On the contact menu's manual dialing options or side key set as the manual dialing function, entering manual dialing and input the call ID to initiating a call to the specific single contact person.
- 5.Select the single call contact in the caller/received/unconnected number, and press PTT key can launch a single call.
- 6.Single call function is set as single call, also can launch a single call.

Group Call

- 1.When the default communication address of the digital channel is set as group call, can press the PTT key to launch group calling.
- 2.On contact's menu, select group ID then press PTT key to launch a group calling.

Overview

- 3.In the dialed records/received/unanswered number select group call, press PTT key can launch the group call.
- 4.Long press digital key(the single key function should be assigned to the group call) or programmable key(programmable key set one key as group call), press PTT key also can launch group call.

All Call

- 1.When the default communication address of the digital channel is set as all call ID, can press PTT key to launch all calls.
- 2.On the contact menu, select all call ID then press PTT key to launch all call.
- 3.In the dialed records/received/unanswered number select all call ID, then press PTT key can launch all call.

■ Launch and Receive Calls

In the digital mode, received a single call and the interface display a single call, in the single call pending time, press PTT key can respond the current single call. Beyond the pending time is record as unanswered call. Received the group call, the interface displays group call, in the group call pending time, press PTT key can respond the current group call, beyond the pending time is record as unanswered call. Received the all call and the interface display all call, the all call does not have hand up time, so can't respond the all call.

Note: if set the channel free instructions, when transmitter press PTT key, receiver will hear s short hint tone.

Menu Operation

■ Contacts

Contacts can be viewed contact list, new contacts, manual dialing and other functions (up to 100,000 digital contacts can be added).

Note: In programmable option for programmable software can leading up to ten thousand digital contact list and write them again. In the radio contact menu can't check this list information (the contact list information can be read by the programmable software), and the detail information of the other can be displayed only when the list digital contact has the incoming call.

1. Group Call Type

When selected the directory member type as group call, group caller can view group call ID or sent message.

2. Single Call Type

When the selected contact member type as single call, to the single caller contact can view contacts, shortcut configuration, delete, editing name and number, send call prompt, the detection, the remote monitoring, the activation or remote killing operation.

- Call prompt: send a call prompt to assigned single call contact, requesting the other reply when communicating. The interface will display call prompt and prompting bell when the other receive the call prompt.
- Radio detection: radio detection allows user to determine whether the radio is in a state of activity in the system without any instructions to the radio user. If received the respond, the successful radio interface shows that the radio detection is successful. If the respond is not received in a certain time, there is a failure prompt and the interface shows radio detection failed.
- Remote monitor: send the remote monitor request, if received the

Menu Operation

remote monitor confirmation, it has successfully entered the reception interface display. If not confirmation is received in a certain time, prompt the failure hint and the interface displays the remote monitor failed. Only when the device's signaling system "remote monitor decode" is checked, can be allowed to monitored voice activities.

- Radio activated: This function can activated the dead device and make the target radio resume its normal working statue.
- Radio kill: sent radio kill command, if received the respond, the radio interface shows kill successfully and has a successful hint. If the respond is not receive in a certain time, the radio interface shows kill fail and has a failure hint. When the signaling system receiving the radio configuration of device's kill decode is checked, can receive the radio's kill command. After being killed, the device disables all interfaces and only process the received telemetry command.
- Edit: modify single call contact's name or number. Press ***#** key to delete, press **#** key to switch input method when edit name. The input range of ID is 1~16777214, name input no more than 16 characters.
- Delete: The single call contact can be deleted.

3. All Call Type

When selected contact type as all call, can view all call ID: 16777215.

4. New Contact

This radio only allowed to add single call type's contact. After input number(1~16777214), press ***#** key when edit name, **#** key switch input method, the maximum can input sixteen characters. Name input is completed, press the selected tone then press confirmation to save. After successful preservation the interface notice: save succeed. New contact can be found in the contact list.

Menu Operation



5. Manual Dialing

Manual dialing is used for convenient calls without a single call list in the communication list, input ID code then press PTT key can launch a single call, or press confirmation key can enter call prompt, radio detection, remote monitor, radio activation and the operation selection of radio kill.

Note: short press **#** key in the main interface can quickly enter manual dialing box.

■ Message

1. Inbox

The inbox can store up 16 receiving messages, which is displayed on the top of the inbox menu(*/*), the number in front is the number of selected text messages, and the number in back is the total number of messages of the inbox. Enter the pickup list, don't read message indicates , read messages indicated . Inbox messages have the reply, forward, delete options can operate. Delete all will delete all messages, it can save the trouble to delete message one by one.

2. Write Message

You can create a new message and sent it for target user. When editing the message press **#** key can switch input method, press ***** key to delete, and the direction of up and down key can switch cursor position. Under the pinyin or letter modes, 1 key as punctuation key, **0** key as space key. Messages editing can be up to 140 characters. The input number can be selected by the single call ID to sent or select a single call or group call number from the communication contact list. Successful sending has ringtone prompt and

Menu Operation

the interface display send successfully. Send failure also has ringtone prompt and the interface display sent failure.

Note: After save the editing messages, it will saved in the draft box, and can return to the draft box to check the contents.

3. Outbox

You can enter the outbox to check the content of sent message, and you can store up 16 messages. Text message can be resent, forward, edited and delete. Delete all will delete all messages, it can save the trouble to delete message one by one.

4. Draft Box

You can enter the draft box to check the content of message, and you can store up 16 messages. Text message can be resent, forward, edited and delete. Delete all will delete all messages, it can save the trouble to delete message one by one.

5. Preset Short Message

Through programmable software to add present short messages, and you can store up 50 present short messages, each short message can input 144 characters. Present messages can be temporarily edited to sent or sent directly.

Note: 1. Prefabricated messages can be allocated to one touch function call, and then sent prefabricated message quickly through programming keys.

2. After the default message is saved, it will be saved in the draft box, and you can return the draft box to check the contents.

3. Present message can't be deleted, only can through programmable software to delete.

Menu Operation

■ Call Records

1. Dial Call

The radio will record the recently exhaled call, with a dial of up to 32 exhaled call. When the number is full, the earliest record will be delete automatically when have a new record. If the dialed number is an unknown contact, the dialed number can be saved in the contact, it also can be viewed or deleted. Delete all will delete all exhaled call records, it can save the trouble to delete message one by one.

2. Received Call

The radio will record the recently incoming call, the number of which has been received at most 32 incoming calls, when the number is full, the earliest record will be delete automatically when have a new record. If the received number is an unknown contact, the received number can be saved to the contact, and the received calls also can be viewed or deleted. Delete all will delete all received call records, it can save the trouble to delete message one by one.

3. Unanswered Call

The radio will record the recently unanswered call, the unanswered call most can store up 32 unanswered calls, when the unanswered call is full, the earliest record will be delete automatically when have a new record. If unanswered call is unknown contact, the unanswered call can be save in the contact, and the answered call also can be viewed or delete. Delete all will delete all unanswered call records, it can save the trouble to delete one by one.

Function Settings

■ Radio Setting

This function provides some parts of radio's basic setting for user.

- **Infra-acoustic Frequency** (Only support analog channel): The radio analog channel supports the function to ensure the quality of the call, when the channel opens the ARTS function, it must be have the subsonic function (this function can be set in the programmable software). Voice output is allowed when the received subsonic is transmitting. Analog subsonic can be set (press ***A** key to switch digital subsonic, analog subsonic and close), digital subsonic code or inverse code (press ***A** key to switch positive and negative code), selected a subsonic value from the exiting list to encode or decode. (the specific subsonic value is referred to the CTCSS frequency table and CDCSS digital code table).

1. **Decode**: the radio of receiver will decode the sub-tone sent by the transmitter. The subsonic set up here matches the subsonic from the sender can open the loudspeaker and output the voice.

2. **Code**: Before sending the voice, the transmitter terminal sub-codes the subsonic, which is added to the voice and encoded through the carrier. The receiver opens the speaker and outputs the voice when it receives the matching of the sub-tone set here.

Note: Analog channel support setting non-standard analog subsonic function (range 60Hz~259.9Hz) and non-standard digital subsonic (range 001~777), and the coding and decoding of the programmable software also can manually input non-standard subsonic values.

Function Settings

CTCSS (Hz)					
67.0	69.3	71.9	74.4	77.0	79.7
82.5	85.4	88.5	91.5	94.8	97.4
100.0	103.5	107.2	110.9	114.8	118.8
123.0	127.5	131.8	136.5	141.3	146.2
151.4	156.7	159.8	162.2	165.5	167.9
171.3	173.8	177.3	179.9	183.5	186.2
189.9	192.8	196.6	199.5	203.5	206.5
210.7	218.1	225.7	229.1	233.6	241.8
250.3	254.1				

Standard DCS Code									
023	025	026	031	032	036	043	047	051	053
054	065	071	072	073	074	114	115	116	122
125	131	132	134	143	145	152	155	156	162
165	172	174	205	212	223	225	226	243	244
245	246	251	252	255	261	263	265	266	271
274	306	311	315	325	331	332	343	346	351
356	364	365	371	411	412	413	423	431	432
445	446	452	454	455	462	464	465	466	503
506	516	523	526	532	546	565	606	612	624
627	631	632	654	662	664	703	712	723	731
732	734	743	754						

- Squelch: Filtering out the intensity is not enough to generate clear incoming signals to eliminate unwanted noise. The lower the noise level, the easier to receive the signals. And at the same time, it will be affect the interface of the useless calling. The higher the noise

Function Settings

level, the more useless calls will be filleted. However, calls from remote locations will be filleted out. The level of 0-9 can be selected, and the default setting is users can set the suitable squelch level according their needs.

- Transmitting Power: Allow users adjust the radio's transmitting power high/low by menu. High power display: H, low power display: L.
- Talk Around: When the radio works in the repeater mode, but the transfer service is not available, the radio can open the talk around function to enter communicate. When open the talk around function, the screen will display **↔** and enter the talk around mode, the radio use Tx frequency to transmitted, so the two radios can achieve communicate directly.

Note: 1. If want to enable this function, the Rx frequency and the Tx frequency must be different, and the channel must check the talk around function by programmable software.

2.If the side key set as repeater/talk around function, also can open the talk around function.


- Wide/Narrow Band(only support analog channel): Allow users set up the radio's wide/narrow band by menu. Select wide band the main interface is not displayed, and the N is displayed when selected narrow band.
- Busy Channel Lockout: Allow users select a state of lockout by menu, select turn off, busy channel lockout can't work. Select carrier, this channel is not allow transmit when with carrier. Select subsonic/ code, this channel is prohibit launching when the subsonic or code is matched.

Note: If the transmission prohibits fast key over overwrite check of programmable software overall setting, when the channel is busy,


Function Settings

press the launch key twice within one second can launch again.

- **Time Out Timer:** Time out timer function can prevent the current channel occupied too long by single user. For the much busier channel, can set much shorter TOT. If the continuous launching time exceed the set value, the radio has the “beep” warning sound, and automatically terminate the launch. TOT can set by programmable software, 15-495 seconds, default 60 seconds, step 15 seconds.

- **VOX:** Sounds control let you don't press PTT key when launch, when the function is opened, the launch operation can be launch directly through the voice. When the voice stops, the launch is automatically ended. It allows users open the VOX control by menu, and the screen shows . The overall setting in programmable software can be set of 1~10 levels, or set turn on/off in the channel.

- **Dual Standby:** Allow users to select dual band dual standby/dual band single standby. Select dual band dual standby, the main interface shows S logo, main channel and sub channel rotate scanning, when the effective calls lockout the calls, press PTT 1 key or PTT 2 key both can communicate with the other, and the main interface **MAZN** points back to the original channel call after 4 seconds.

- **Dual band single standby:** the upper and the lower channel can switch by keypad  key or press PTT1 and PTT2. The radio receive and launch only works in the **MAZN** main channel, and the secondary channel doesn't receive signals.

Note: DTMF, automatic scan, working alone, ARTS additional functions do not work, because of the main channel and the secondary channel under the dual standby mode.

- **Digital Encryption (Only supports digital channel):** Voice encryption

Function Settings

function can ensure the language communication safety. Allows users select turn on/off or through radio's menu or by software select basic encryption function and set encryption key by radio menu. Open the radio's encryption function, the voice encryption function is same and the encryption key is same can communicate. If your radio receive different encryption key's call, then you will hear confusion.

Note: The voice encryption function only valid in digital mode.


- **Power Save:** Enable this function can make the free radio automatically enter the power save mode, power save mode can extend the battery's life, but will causes the respond time delay. The waking time is 1:4, after the radio enter the power save mode. The main interface shows 1:4 after opened the power save.

Note: 1. The power save is invalid when open the double capacities directly mode.



2. The scan is invalid after open the power save function.

- **Prompt Tone:** Allows users turn on/off prompt tone by menu. Including all tones, call licenses and keypad setting, all tones control all hints, including the voice number, if turn off all hints, the alarm sounds also can still played normal.

- **Backlight:** Allows users to change backlight setting by menu, backlight can both control the screen and keypad light at the same time. That is often open, 5 seconds, 10 seconds, 15 seconds can optional. If the choice is 15 seconds, the radio will not carry out any key operation and the backlight will extinguished within 5 seconds. It choose to open often, the backlight will be bright.

- **Keypad Lockout:** Allows users select automatic lock time and manual lock or long press  key to lock the keypad by menu.

Function Settings

Keypad lock the screen displays  Keypad lock in addition PTT key, side key and channel knob can't carry out other key operation. Press menu key and  key to unlock.

- **Indicator Lights:** Allows users turn on/off the LED indicator lights of the radio by menu, if necessary, set turn off the LED indicator light, it will prohibit the launch and reception of scan and the LED lights are not bright. Users should be careful turn off the LED indicator light, this setting will not effect the screen and keypad backlight.

Power on Password: When the radio set the power on password, the password can be modified here, it is necessary to correctly input the old password, the new password can be set up, input the new password and confirm to saved, password modification set up successfully.

Note: It can write the power on password by programmable software (set a factory time 000000).

- **Mode Selection:** Allows users select serial number, name, frequency channel display mode by menu, the main interface will displayed according to the selected mode.

- **Power on Interface:** Users can selected pictures or preset characters in different power on style according to preference, and can modified the picture by programmable software (can load 128*64 file type to bmp picture) and preset characters.

- **Language Selection:** it can support two languages of Chinese and English.

Radio Information

- **My Number:** Allows users to query this radio's ID number by menu, which can only be accessed not set(Only can modified the settings

Function Settings

by programmable software).

- **Facility information:** Allows users to query radio's facility information by menu, which including type information, serial number, CPS version, hardware version, firmware version, DSP version and the programmable time(also can read through by programmable software).

Radio Configuration

- **Rx Frequency:** Set the current channel Rx frequency (the setting frequency should be within in the limited frequency range in the programmable software).

- **Tx Frequency:** Set the current channel Tx frequency (the setting frequency should be within in the limited frequency range in the programmable software).

- **Channel Name:** Users can modify the channel name according their needs (it also can be modified by programmable software).



- **Colour Code (Only support digital channel):** Users can modify the color code according their needs, there are 0-15 optional (it also can modified by programmable software).

- **Time Slot (Only support digital channel):** Users can modify the time slot according their needs, there have time slot 1, time slot 2 options (it also can modified by programmable software).

- **Differential Frequency:** This function is set in VFO mode to transmit relative receive phase difference frequency (setting range: 000.00000 ~384.00000MHZ).

- **Differential Direction:** This function is set in VFO mode in relative receive phase difference frequency (turn off/positive, negative differential frequency optional).

Function Settings

- Step Frequency: This function is set in VFO mode step frequency (2.5K/5.0K/6.25K/10K/30K/50K step optional).
- Channel Type: This function is set to change VFO mode to digital mode or analog mode (analog mode  /digital mode  optional).

■ Keypad Programmable

Users can set top key, middle key, PTT2 key short press and long press function in the radio programmable menu by their needs. There have several function as follows: 1.No function/other 2.Prompt hint on/off 3.Emergency mode o 4.Emergency mode off 5.High/low frequency selection 6.Monitor (support analog, digital can monitor different ID number) 7.Noise channel temporary delete 8.Repeater/talk around 9.Scan on/of 10.Encryption on/off 11.VOX launch in/off 12.Zone switchable 13.Battery power indicator 14.Work alone on/off 15.Exit call 16.FM radio 17.Record.

Note: 1. When select "emergency mode on" or "emergency mode off", the same button short or long press will be related each other.

Zone





The radio can support 250 zones at most, one zone can add 16 channels most, 250 zones can support 40000 channels at most. Through the menu zone options, you can enter the selected zone in the zone list, or set as zone switchable function in the programmable keypad, and then the enter the zone switchable (it should be set two or more zones can make the zone switchable).

Scan

- Your radio can support 16 scanning list at most and with a maximum of 32 members for per scan list, each scan list supports a mixture of analog and digital channel, you can add/delete channel or set priority

Function Settings

for the channel by editing scanning list. The scanning modes support time scan and carrier scan.

- The current channel scan list add the scan group contains at least 2 channels to open the scan channel function. When scanning, listen to the channels in the scan list and check whether there have the voice activities in each channel. If set the priority level, open the scan, the screen displays the distinction of scan logo, no priority displays , priority 1 displays , priority 2 displays , the LED indicator light flash orange. When scanning is active to a certain channel will stop to receive. If receive the unnecessary call, press programmable key noise channel to temporary delete and it can temporarily removed from the current channel in the scanning list. If you want to close scan, can long press  key quickly enter scan off or enter scan menu to select scan off, switch the channel or press programmable key scan on/off to exit the current scan.

Note: 1.Long press  key can quickly enter scan turn on/off.

2.If channel checks the automatically scanning function, when switched to this channel, the device automatically enter scan.

3.When programmable key function is set to scan turn on/off, it can be opened scan directly by programmable key.

■ Digital Emergency Alarm

Emergency mode is used to express emergency situation. You can launch emergency alarm at any time in any screen to enter emergency mode. This radio supports three alarm types, three kinds of emergency alarm.

Emergency Types:

Routine: When the radio launch the emergency alarm, the screen

Function Settings

displays emergency mode and the alarm tone are continuously played.

Silence: When launch an emergency alarm, there is no prompt on the screen and no alarm bell is played, and no voice calls that match the reception are played.

Silence with Voice: When the radio launch the emergency alarm, there is no prompt on the screen and no alarm bell is played, but any voices calls that match the reception are played.

Emergency Modes:

Emergency Alarm: The radio launch the emergency alarm, when receive the confirmation or trail times then will exit the “emergency” mode.

Emergency Alarm and Calls: Once press “emergency alarm” key, it will sent emergency alarm, then can through press PTT key to launch emergency call.

Emergency Alarm and Voice: Once press “emergency alarm” key, it will sent emergency alarm, then the voice can be sent automatically.

● Sent Emergency Alarm

The current channel adds an emergency system and reply channel set as the channel. Then can sent emergency information at the current channel. Press the set emergency mode to turn on function key, LED indicator light flash red, the upper screen displays “emergency alarm” and alarm group calls contact and group calls.

● Exit Emergency Alarm

In normal+emergency alarm mode, when the number of attempts to send an alarm arrives or press the set emergency mode turn on function key, exit the alarm. Or press PTT key will automatically alarm mode,. In the unconventional alarm mode, press the set emergency mode turn on function key to exit alarm mode.

Function Settings

● Receive Emergency Alarm

If activated, your radio will automatically confirm emergency alarm. When radio receive the emergency alarm, the interface will display emergency alarm, the ID or name of the alarm initiator, and continuously played the prompt. Otherwise there is no hint. Exit emergency alarm, press emergency alarm turn on function key.

DTMF

● Analog Channel, DTMF function allow radio system with interference to operate radio in the radio system.




1. Initiating: Under analog mode, in the main interface press **#** key quickly enter dialing box and input DTMF ID number, short press PTT enable DTMF calling, after confirm the hint played, then press PTT to talk. Or press programmable one touch key to start DTMF calling (programmable key should preset one touch key to connect DTMF calling ID number then can be used). After confirm the hint played, then press PTT to talk.
2. Receiving: Programmable software set the receive signal of current channel is DTMF, when the decode number is DTMF personal ID number, decode succeed and played bells, and can communicate with the other in the reset time. When the reset time comes, it needs to decode again. The decode number as kill code or waken code and the machine will be killed or awakened.

● PTT ID

Initiating: Under analog mode, it can set the line code and down line code of DTMF by programmable software, analog channel enable line and down line code, each time press PTT send line code, release PTT sent down line code.

Note: 1. Enter dial box, **☎** corresponding to A, **📞** corresponding to

Function Settings

B,  corresponding to C,  corresponding to D, long press  key can return main interface.

2. Under dual band dual standby, the optional DTMF signaling can not be solved, remote kill, remote kill code don't work, it need to under the dual band dual standby.

Encryption

You can use digital or analog way to initiate or remote kill in the radio system. For example, you may want to stop using a stolen radio to prevent thieves from using it and enable it when recovering.

Note: The execution or activation of the radio is limited to open (set up on the programmable software) the function of radio.



Work Alone

Work alone can suitable to the individual working in an unexpected situation during work, and can't make keystrokes or voice launch in the preset time, and the radio can automatically enter alarm to get help. By checking the "work alone" option from programmable software digital mode channel, the overall settings set up a work alone response time and reminder time. The response can be selected as keystroke operation and voice launch.

Note: 1. Only support digital mode channel.

2. When an emergency system is not selected, this function is disabled.

Battery Level


Press the pr-programmable key can view the remaining battery voltage, so that users can understand battery usage and charge the battery timely. The main interface battery displays  three grids is sufficient of electricity, two grids is moderate, one grid shows the battery is low, if the icon turn red  and there is a low electric hint that the battery is in sufficient, it should be recharged as soon as

Function Settings

possible.

GPS Positioning System (Optional)

- Support GPS positioning system, this function can query the location positioning information of the radio, it includes time, date, longitude, latitude, speed, altitude and satellite number. After opened the GPS function, the GPS location date can be manually sent to the target radio or as the short message form to save in the draft box for needed sending, the target radio will be stored in the form PF message when it receive the date, and the received GPS date can be viewed in the receive inbox.



- The radio is placed in an open area, after opened this function, the interface will displayed the GPS characters, after receiving valid date, GPS character will become green, so that it can be viewed the information of longitude, latitude, time, date, speed, altitude and satellite, press  key to refreshed the GPS date information.

Set up steps: Menu—Attachment—Location system—Set time zone—Switch on—view.

Note: This function only displayed when it selected.

FM Radio (Optional)

- Support receiving the frequency of 65-128MHz. It can be set to prestored FM channel by programmable software, and up to 20 can be stored. The radio channel also can be prestored in the FM radio menu.

Steps: Menu—Attachment—FM Radio—Power on Channel Selected NULL Channel—Enter—Input FM Radio Frequency (press  key to delete all, press  key to automatically search)—Press Confirmation of storage success.

- Enter the power in channel query select FM radio then press enter

Function Settings

listening. It also can press programmable key quickly enter FM radio statue, then press programmable key or return key to exit FM radio statue.

Note: 1. Under the FM radio statue, when there is a signal call or active press PTT key call, it will be priority call and temporary exit the FM radio statue, then recover the FM statue after finished the call.
2. This function only displayed when it selected.

Time Adjustment

You can view real time or manually calibrate the modification time as required. If GPS function is selected, GPS calibration time can be selected after receiving GPS information.

Note: Under the condition of standby lights out, short press **#** key can display year, month, day, week and time.

Recording (Optional)

If the radio opens the recording function, main interface will display VR characters, the radio will be recorded automatically, whether it is in the analog channel or digital channel when it is launched or received, the recording file is created for how many seconds for the idle interval and can be set by yourself. Entering the recording menu, you can view or play the recording and delete, after selecting the recording content in the list of recording files, you can quickly enter the recording by press **REC** key.

Steps: Menu—Attachment—Recording—Set interval time—Choose to open.

Note: This function only displayed when it selected.

Defaults for Factory Reduction

- In the showdown mode, press top key and number key 1 at the same time then turn on, the radio displays “Memory Reset?” press

Function Settings

ESC key to enter initialization, the radio displays “Memory Reset...” 5 seconds or so to initialize succeed and power on normal.

Power failure is not allowed during initialization, otherwise initialization fails.

Troubleshooting

Symptom	Try This
No power	<ul style="list-style-type: none"> ● Battery power may have run out, please update battery or recharge it. ● Battery may not be properly installed, please take it off and re-install.
Battery lasts a short time after charge	<ul style="list-style-type: none"> ● The battery life is over, please replace new battery.
Can not talk to other members of your group	<ul style="list-style-type: none"> ● Verify transmitting is within effective operating range. ● Verify channel, frequency and code settings are correct.
Hearing other conversation on a channel (not group members')	<ul style="list-style-type: none"> ● Please change code settings, including all two way radio settings of your group.

Specifications

General Specification	
Frequency Range	136-174 MHz / 400-470MHz
Channel Capacity	4000 Channels
Frequency Stability	±1ppm
Working Temperature	-30°C~ +60°C
Working Voltage	7.4V DC
Size(H*W*D)	134x61x40mm (exclude the antenna)
Weight	280g (Include in battery and antenna)


Receiver	
Analog Sensitivity	0.2 μ V@12dB SINAD
Digital Sensitivity	0.25uV(BER:5%)
Adjacent Channel Selectivity	≤-60dB@12.5KHz
Inter-modulation	≥65dB
Spurious Response	≥70dB
Audio Response	+1 ~ -3dB
Audio Distortion	<5%
Modulation Noise	≥45dB@25KHz / ≥40dB @12.5KHz

Specifications

Transmitter	
Output Power	High: ≤5W Low: ≤1W
Transmit Current	Analog≤1.6A Digital≤0.9A
Standby Current	0.15A
FM Modulation Mode	11K0F3E@12.5KHz 14K0F3E@20KHz
4FSK Digital Modulation	16K0F3E@25KHz 12.5KHz Date only: 7K60FXD
Modulation Distortion	12.5KHz date and voice: 7K60FXW <5%
FM Noise	≥45dB@25KHz/≥40dB@ 12.5KHz
Adjacent Power	≤-60dB@12.5KHz
Audio Response	+1~-3dB
Antenna Port Stray	9KHz -1GHz:≤-36dBm 1GHz -12.75GHz:≤-30dBm
Digital Protocol	ETSI-TS102 361-1, -2, -3

Warning

RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE FOR PORTABLE TWO-WAY RADIOS

 ATTENTION!	<p>Before using this radio, read this guide which contains important operating instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulations.</p>
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This two-way radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. It uses radio frequency (RF) energy or radio waves to send and receive calls. RF energy is one form of electromagnetic energy. Other forms include, but are not limited to, sunlight and x-rays. RF energy, however, should not be confused with these other forms of electromagnetic energy, which when used improperly, can cause biological damage. Very high levels of x-rays, for example, can damage tissues and genetic material.

Experts in science, engineering, medicine, health, and industry work with organizations to develop standards for safe exposure to RF energy. These standards provide recommended levels of RF exposure for both workers and the general public. These recommended RF exposure levels include substantial margins of protection.

All Retevis two-way radios are designed, manufactured, and tested to ensure they meet government-established RF exposure levels. In addition, manufacturers also recommend specific operating instructions to users of two-way radios. These instructions are important because they inform users about RF energy exposure and provide simple procedures on how to control it.

Please refer to the following websites for more information on what

Warning

RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits:

<http://www.who.int/en/>

Local Government Regulations

When two-way radios are used as a consequence of employment, the Local Government Regulations requires users to be fully aware of and able to control their exposure to meet occupational requirements. Exposure awareness can be facilitated by the use of a product label directing users to specific user awareness information. Your Retevis two-way radio has a RF Exposure Product Label. Also, your Retevis user manual, or separate safety booklet includes information and operating instructions required to control your RF exposure and to satisfy compliance requirements.

Radio License

Governments keep the radios in classification, most of the classified walkie-talkie need to get local government License, and operation is allowed. The detailed classification and the use of your two radios, please contact the local government radio management departments. For the following specified classification: the USA FRS, Australian CB, the individual license is not required.

Compliance with RF Exposure Standards (If appropriate, Reference to the actual product's Safety Marking)

Your Retevis two-way radio is designed and tested to comply with a number of national and International standards and guidelines (listed below) for human exposure to radio frequency electro-magnetic energy.

Warning

FCC ID The FCCID means: This radio complies with the IEEE (FCC) and ICNIRP exposure limits for occupational/controlled RF exposure environments at operating duty factors of up to 50% talk-50% listen and is approved for occupational use only.

CE The CE marking means: Hereby, Shenzhen Retevis Technology Co., Ltd. declares that the radio equipment type RT52 is in compliance with the RED Directive 2014/53/EU and the ROHS Directive 2011/65/EU and the WEEE Directive 2012/19/EU

The full text of the EU declaration of conformity is available at the following internet address: www.retevis.com

IC ID This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

In terms of measuring RF energy for compliance with these exposure guidelines, your radio generates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

NOTE: The approved batteries, supplied with this radio, are rated for a 5-5-90 duty factor (5% talk-5% listen-90% standby) even though this radio complies with FCC occupational exposure limits and may operate at duty factors of up to 50% talk.

RF energy exposure standards and guidelines (if appropriate)

- Your Retevis two-way radio complies with the following RF energy exposure standards and guidelines:
- United States Federal Communications Commission (FCC), Code of Federal Regulations; 47 CFR part 2 sub-part J.

Warning

- American National Standards Institute (ANSI)/Institute of Electrical & Electronic Engineers (IEEE) C95. 1-2005
- IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- Institute of Electrical and Electronic Engineers (IEEE) C95.3-2002
- International Commission on Non-Ionizing Radiation Protection (ICNIRP)
- Ministry of Health (Canada) Safety Code 6 & Industry Canada RSS-102.
- International Electrotechnical Commission IEC62209-2:2010

RF Exposure Compliance and Control Guidelines and Operating Instructions

To control your exposure and ensure compliance with the occupational/controlled environment exposure limits, always adhere to the following procedures.

Guidelines:

- User awareness instructions should accompany the device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions:

- Transmit no more than the rated duty factor of 50% of the time. To Transmit (Talk), push the Push To Talk (PTT) button. To receive calls (listen), release the PTT button. Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy

Warning

exposure only when transmitting in terms of measuring for standards compliance.

- Transmit only when people outside the vehicle are at least the recommended minimum lateral distance away from a properly installed according to installation instructions, externally mounted antenna.
- When operating in front of the face, worn on the body, always place the radio in a Retevis approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of Non-Retevis approved accessories may result in exposure levels, which exceed the IEEE/ICNIRP occupational/controlled environment RF exposure limits.
- If you are not using a body worn accessory and are not using the radio in the intended use position, in front of the face or at the body in the PTT mode or alongside of the head in the phone mode, then ensure the antenna and the radio are kept 2.5 cm (one inch) from the body when transmitting. Keeping the radio at a proper distance is important because RF exposures decrease with increasing distance from the antenna.

Hand-held Mode

- Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) at least 2.5 cm (one inch) away from the nose or lips. The antenna should be kept away from the eyes. Keeping the radio at a proper distance is important as RF exposure decreases with increasing distance from the antenna.



Warning

Phone Mode

●When placing or receiving a phone call, hold your radio product as you would a wireless telephone. Speak directly into the microphone.

Electromagnetic Interference/Compatibility

NOTE: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility.

Avoid Choking Hazard



Small Parts. Not for children under 3 years.

Turn off your radio power in the following conditions:

- Turn off your radio before removing (installing) a battery or accessory or when charging battery.
- Turn off your radio when you are in a potentially hazardous environments: Near electrical blasting caps, in a blasting area, in explosive atmospheres (flammable gas, dust particles, metallic powders, grain powders, etc.).
- Turn off your radio while taking on fuel or while parked at gasoline service stations.



WARNING

To avoid electromagnetic interference and/or compatibility conflicts

- Turn off your radio in any facility where posted notices instruct you to do so, hospitals or health care facilities (Pacemakers, Hearing Aids and Other Medical Devices) may be using equipment that is

Warning

sensitive to external RF energy.

- Turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

Note:

Pacemakers

Defibrillators or other Implanted Medical Devices Persons with pacemakers, Implantable Cardioverter-Defibrillators (ICDs) or other active implantable medical devices (AIMD) should:

- ALWAYS keep the radio more than 15 cm from their pacemaker when the radio is turned on.
- Consult with their physicians regarding the potential risk of interference from radio frequency transmitters, such as portable radios (poorly shielded medical devices may be more susceptible to interference).
- Turn the radio OFF immediately if they have any reason to suspect that interference is taking place.
- Do not carry the radio in a chest pocket or near the implantation site, and carry or use the radio on the opposite side of their body from the implantable device to minimize the potential for interference.

Hearing Aids

Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF

Warning

energy. Your physician may be able to assist you in obtaining this information.

Turn off your radio power in the following conditions:**Antennas**

● Do not use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with the skin when the radio is in use, a minor burn can result.

Batteries (If appropriate)

● When the conductive material such as jewelry, keys or chains touch exposed terminals of the batteries, may complete an electrical circuit (short circuit the battery) and become hot to cause bodily injury such as burns. Exercise care in handling any battery, particularly when placing it inside a pocket, purse or other container with metal objects.

Long transmission

● When the transceiver is used for long transmissions, the radiator and chassis will become hot.

**WARNING****Safety Operation****Forbid**

- Do not use charger outdoors or in moist environments, use only in dry locations/conditions.
- Do not disassemble the charger, that may result in risk of electrical shock or fire.
- Do not operate the charger if it has been broken

**WARNING****Warning**

or damaged in any way.

● Do not place a portable radio in the area over an air bag or in the air bag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the air bag inflates.

To reduce risk

- Pull by the plug rather than the cord when disconnecting the charger.
- Unplug the charger from the AC outlet before attempting any maintenance or cleaning.
- Contact Retevis for assistance regarding repairs and service.

Use of Communication Devices While Driving

- Always check the laws and regulations on the use of radios in the countries and areas where you drive.
- Give your full attention to driving and to the road.
- If available, use the hands-free facility.
- If driving conditions or regulations require it, pull off the road and park before making or answering a call.

Approved Accessories

● This radio meets the RF exposure guidelines when used with the Retevis accessories supplied or designated for the product. Use of other accessories may not ensure compliance with the RF exposure guidelines and may violate regulations.

**WARNING**

Warning

- For a list of Retevis-approved accessories for your radio model, visit the following website:
<http://www.Retevis.com>

EU Importer:

Importer:Germany Retevis Technology GmbH

Address:Uetzenacker 29,38176 wendeburg

Warranty Card

Contact: _____

Company Name:_____

ADD:_____ Post Code:_____

Tel:_____ Mob: _____

Fax:_____ Email: _____

Purchasing:_____ Model No.:_____

Serial No.: _____ Purchasing Date:_____

S/N: _____ (EAN)_____

Warranty Card No.:_____

Trouble Description:

Terms and Conditions

1)This warranty is provided only for product purchased from authorized dealer of hereinafter called.

2)Warrants this product to be free from manufacturer's defects for a specified period.

3)Within the specified warranty period, will repair or replace non consumable parts (excluding casing, accessories, batteries, cable and consumable) that are damaged under normal use (by judge of) at no additional charge.

- 4)The warranty will not be covered under the following conditions.
- A, Out-of-warranty products.
 - B, The product is modified without approval.
 - C, Obvious attack of appearance whatever it is.
 - D, The product is subjected to unusual physical or electrical stress, including physical damage ,burnt components and broken connectors, and watered radio.
 - E, The serial number label is removed or altered.
- 5)This warranty card must be presented together with dealer's invoice when the defective product is returned for repair. Otherwise, reserve the right of not providing free warranty during the warranty period.
- 6)The customer is responsible for returning the defective product at his own expense.
- 7)Your warrant period is calculated from the date of invoice of this product.