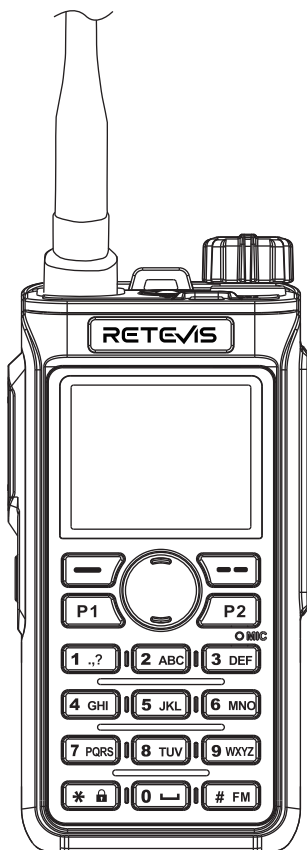


# RETEVIS



## C2 Two-way Radio User Manual



# Contents

<b>To customers -----</b>	<b>01</b>
<b>Out-of-boxCheck-----</b>	<b>01</b>
<b>Battery Information-----</b>	<b>01</b>
<b>Charging Steps -----</b>	<b>01</b>
<b>Maintenance and Cleaning -----</b>	<b>02</b>
<b>Accessories Installment -----</b>	<b>02</b>
<b>Warning -----</b>	<b>20</b>
<b>Guarantee -----</b>	<b>24</b>

For downloading further resources:  
Brochures, Software/Firmware, Manual etc, Please contact  
your direct reseller first OR go to website [retevis.com](http://retevis.com) and  
check “support” in the each product link to download it.



## To Customers

### Out-of-box Check

Open the package box before use. Check the radio and listed accessories carefully. If any item is lost or breaks, contact the delivers or dealers immediately.

### To customers

Welcome to choose the radio produced by our company. We believe that the radio will bring great

### Accessories

Name	Quantity
Radio	1
Antenna	1
Battery	1
Charging base	1
Type-C charging cable	1
Belt clip	1
Hand strap	1
User manual	1

## Battery Information

### Charging Attention

Charge the new or long-term unused lithium battery before use. Charge / run out of the battery twice or three times to ensure that the battery capacity reaches the best status. Charge or replace the battery when battery power is low.

### Applicable Battery

Use the battery pointed by our company. Use other batteries may cause explosions and hurt the body.


Attention:



1. Don't make the battery terminal short-circuit and put the battery into the fire. Don't disassemble the battery pack shell without getting permission.
2. Charging temperature should be 0-40°C. Otherwise, it may affect the correct battery charging.
3. Turn off the radio while charging. Use the radio while charging will affect the correct battery charging.
4. To avoid charging interference, don't plug or unplug the power or battery during charging.
5. Use time decreases even when it is fully charged, the battery is to the end of life, replace it with a new battery.
6. Don't pull out the battery and recharge if it is fully charged. Otherwise, it will shorten or damage the battery life.
7. Don't charge the battery or the radio when it is wet. To avoid the danger, make it dry through the dry cloth before charging.


### Warning

When jewelry, keys, jewelry chains, or other conductive metals touch the electric pole, batteries may damage the item or the body. These conductive metals can also form a short circuit and generate much heat. Be careful when handling any battery, especially when putting it in a pocket, purse, or other metal container.

### Charging Steps

1. Plug the standard 5V  1A adapter into the power socket.
2. Plug the battery or the whole radio into the charging base.

3.Ensure the battery and charging contact tight connection. The charging base indicator lights up red and the radio  displays a red icon, charging starts. Type-C charging: Plug the Type-C charging port on the charging cable into the Type-C port on the radio. The radio  displays a red icon, charging starts. When displaying the green icon, charging is completed.

4.It will take about 5-6 hours to charge. When the charging base indicator lights up green and the radio  displays the green icon, charging is completed. Remove the battery or the whole radio to use. Stop charging if charging over 12 hours but the charging is not completed.

Attention: Don't use the radio during charging. Turn off the radio before charging.

## **Maintenance and Cleaning**

Don't keep the antenna or external microphone directly.

Use a smooth cloth to clean the dust and stains on the radio, avoiding unperformed touch.

Install the earpiece cover if the radio is not in use.

The radio, keys, control knob, and shell will become dirty. Use the neutral detergent (do not use strong corrosive chemicals) and a warm cloth to clean them.

## **Accessories Installment**

### **Install/Uninstall Battery**

When installing the battery, plug the battery top 2 ports into the radio top 2 notches, and push the battery up. When hearing a click sound, the battery is installed.

When uninstalling the battery, turn off the radio first, pull the bottom battery clip down, and pull the battery down to take out the battery.

### **Install/Uninstall Antenna**

Hold the antenna bottom, clockwise rotate the antenna into the radio top antenna port until rotates tightly.

When uninstalling the antenna, anticlockwise rotate to take off the antenna.

### **Install/Uninstall Belt Clip**

If necessary, install the equipped belt clip to the battery back screw pole, and carry the radio conveniently.

When uninstalling, rotate the 2 screws down.

### **Install Radio Hand Strap**

Wear the hand strap into the radio middle hole.

### **Install External Speaker Microphone/Earpiece**

Open the earpiece cover, and plug the mic/earpiece into the port.

### **Main Features**

GMRS analog radio

Group call

DTMF

Single/Dual watch

Emergency alarm

Memory/Channel/Frequency mode

Customized channel name

Frequency measure

Battery save

Scan

Auto power-off

Chinese/English language

VOX

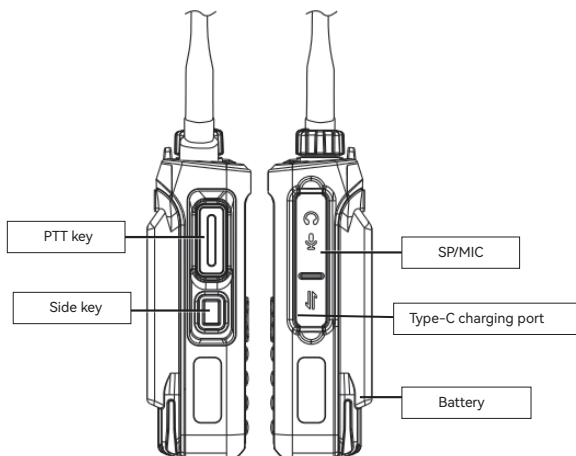
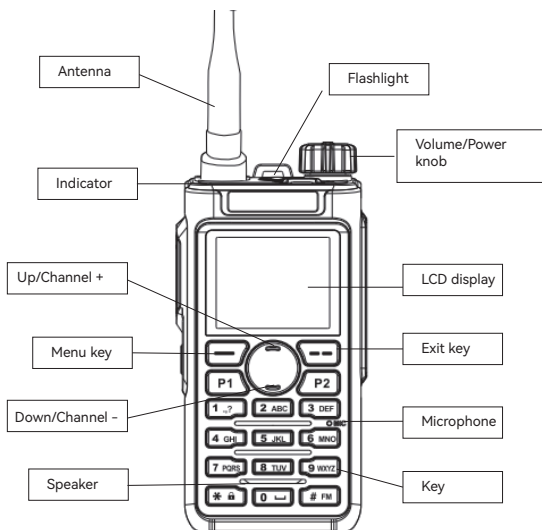
Talk around

Reverse frequency

Noise reduction

Flashlight

Recording playback



## Key Functions

### 1.PTT Key (Transmit key)

Press the key and talk towards the microphone when transmitting. Release the key to receive.

### 2. P1 Key

Short press: OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure.

Long press: OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure.

### 3.P2 Key

Short press: OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure.

Long press: OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure.

### 4.Side Key

Short press: OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure, Group call, SUB-PTT.

Long press: OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure.

### 5.Menu Key

Short press: Menu key in the standby interface, Confirm key in the menu.

Long press: Long press over 2s in the standby interface to enter recording playback and play.

### 6.Exit Key

Short press: A/B band switch in the standby interface, Exit key in the menu.

### 7.UP Key

Shortly press to increase the channel in the standby interface, to choose the function key up in the menu.

### 8.DOWN Key

Shortly press to decrease the channel in the standby interface, to choose the function key down in the menu.

### 9.\* Key

Short press: Memory, channel, and frequency modes switch in the standby interface. FM radio frequency and channel modes switch in the FM radio mode.



Long press: Long press over 2s in the standby interface to lock or unlock keys.

### 10.# Key



Short press: DTMF shortcut key in the standby interface.

Long press: Long press over 2s in the standby interface to turn on/off FM radio.

## Icon Instructions

No	Icon	Instruction
1		Weather warning on
2	NR	Noise reduction
3	L	Low power
4	H	High power
5	VOX	VOX function
6		Key lock



7		Charging: White Charged: Green Not charge: Black
8	main	Main channel
9	W	Wideband
10	N	Narrowband
11	CT	CTCSS
12	DT	DCS
13	CH	Channel number
14	A	A work channel
15	B	B work channel
16	C	Group channel
17	ANALOG	Analog channel
18	DW	Dual watch
19	+	Positive different frequency
20	-	Negative different frequency
21	T	Talk around
22	D	DTMF function
23		Signal strength

#### Icon Instructions

No	Function	Optional Setting	Menu Instruction
1	Reminder Tone	ON/OFF, Default: ON	Broadcast enable
2	Key Tone	ON/OFF, Default: ON	Enable key beep
3	LCD Brightness	Level 1-5, Default: Level 3	Display brightness setting
4	LCD Time	Always/5-20s, Default: 15s	Display backlight time setting
5	Power Save	Consumption/Mid consumption/Moderate/Mid saving /Saving Default: Moderate	Battery save mode setting
6	Auto Lock	OFF/5s, 10s, 15s, 20s, 25s, 30s, Default: OFF	Keypad lock setting
7	Show Bat	ON/OFF, Default: OFF	Voltage enable
8	Dual Watch	ON/OFF, Default: ON	Dual watch enable
9	A/B CH Switch	Auto/ON/OFF, Default: Auto	A/B frequency mode switch setting
10	FM Auto	ON/OFF, Default: ON	FM radio mode enable
11	TX Out Time	OFF/15-600s, Default: 60s	TOT setting

12	Timeout Prompt	OFF/1-10s, Default: OFF	Timeout prompt setting
13	Group Switch	ON/OFF, Default: ON	Group call enable
14	Group Channel	CH001-256 Default: CH002	Group call channel setting
15	Auto Power-off	OFF/10mins/30mins/1-12 hours, Default: OFF	Auto power-off setting
16	Password	OFF/ON, Default: OFF	Password setting
17	Reset	ON/OFF, Default: OFF	Restore factory setting
18	Information	DTMF ID code/Version	Check radio version
19	Weather	ON/OFF 1-11 channels optional	Weather channel setting
20	Weather Warn	ON/OFF	Weather warn enable

## Radio Setting

### 1.REMINDER TONE

Voice broadcast, ON: Broadcast channel number and function prompt; OFF: Not broadcast.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose Reminder Tone, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose the needed ON or OFF.

d.Press the Menu key to confirm and save.

### 2.KEY TONE

Key beep, ON: The radio has a beep sound when pressing keys; OFF: Not prompt when pressing keys.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose Key Tone, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose the needed ON or OFF.

d.Press the Menu key to confirm and save.

### 3.LCD BRIGHTNESS

Backlight brightness has optional 1-5 levels. Level 1 is the darkest, and level 5 is the brightest.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose LCD Brightness, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose the needed 1-5 level.

d.Press the Menu key to confirm and save.

### 4.LCD TIME

ON: Set backlight always on or 5-20s, each level intervals 5s.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose LCD Time, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose the needed Always or 5-20s.

d.Press the Menu key to confirm and save.

### 5.POWER SAVE

Battery save mode: Consumption/Mid consumption/Moderate/Mid saving /Saving optional.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose Power Save, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose the needed consumption, mid consumption, moderate, mid saving, saving.

d.Press the Menu key to confirm and save.

## **6.AUTO LOCK**

OFF: Unlock keypad; ON: 5s, 10s, 15s, 20s, 25s, 30s optional or auto lock keypad

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Auto Lock, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed OFF or 5-30s.
- Press the Menu key to confirm and save.

## **7.SHOW BAT**

ON: Display battery voltage data on the right corner of the radio; OFF: Display battery icon but not display data on the right corner of the radio.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Show Bat, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed ON or OFF.
- Press the Menu key to confirm and save.

## **8.DW**

OFF: Single watch; ON: Dual watch, radio can receive A and B band information.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose DW, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed ON or OFF.
- Press the Menu key to confirm and save.

## **9.A/B CH SWITCH**

A/B band switch:

Auto: When the sub-band receives a carrier signal, the Main will switch to the sub-band to receive. After staying for 5s, it will return to the main band.

ON: When the sub-band receives a carrier signal, the Main turns the sub-band to the main band to work;

OFF: The Main won't change even when the sub-band receives a carrier signal.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose A/B CH Switch, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Auto, ON, or OFF.
- Press the Menu key to confirm and save.

## **10.FM AUTO**

FM radio receive enable: ON: Transmit and receive normally in the FM radio mode; OFF: Can't receive carrier signal in the FM radio mode.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose FM Auto, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed ON or OFF.
- Press the Menu key to confirm and save.

## **11.TX OUT TIME**

OFF: Don't limit transmit time; ON: 15-600s optional, each level intervals 15s.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose TX Out Time, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed ON or OFF.
- Press the Menu key to confirm and save.

## **12.TIMEOUT PROMPT**

OFF: No prompt; ON: Remind transmitter to TX out time, 1-10s optional.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose Timeout Prompt, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose the needed OFF or 1-10s.

d.Press the Menu key to confirm and save.

### **13.GROUP SWITCH**

Optional ON or OFF. Group send enable is only for receive. When turning off the group switch, only can't receive group channel information. Transmit does not affect.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu Key to enter the next-level menu.

b.Press the UP or DOWN key to choose Group Switch, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose the needed ON or OFF.

d.Press the Menu key to confirm and save.

### **14.GROUP CHANNEL**

Set the pointed and current channel watch simultaneously.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose Group Channel, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose CH001-CH256 as the group channel.

d.Press the Menu key to confirm and save.

#### **Group Call:**

Long press the side key defined as the Group PTT to turn on the group call function. Whether which channel radios are, they will be turned into group channel to transmit and receive after turning on the group call. Set the group channel through the Group Channel and Group Call ON/OFF in the radio setting of the menu. Edit the program to set the recovery time and PTT reply (when the group call PTT reply is turned on, press the key to initiate a group call, and after releasing the key, as long as the receiver presses the PTT key to reply, users can directly use the PTT key to talk to each other, and wait until the recovery time is up before exiting the group call). Release the side key to exit the function.

### **15.AUTO POWEROFF**

OFF: Turn off auto power-off function; ON: 10mins, 30mins, 1-12 hours auto power-off, time starts from the power-on.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose Auto Power-off, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose OFF, 10 minutes, 30mins, or 1-12 hours.

d.Press the Menu key to confirm and save.

### **16.PASSWORD**

Input password: The password is set to 6 numbers from 0-9. Input the precious password or turn off the password to cancel the password. (If password is less than 6 bits, need to use 0 as supplement)

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu Key to enter the next-level menu.

b.Press the UP or DOWN key to choose Password, and press the Menu Key to enter the next-level menu.

c.Press the UP or DOWN key to turn off or input the password.

d.Press the Menu key to confirm and save.

### **17.RESET**

ON: Enabling this setting will temporarily cancel the CTCSS ; After closing, restore all CTCSS and display (OFF) in the menu.

a.Press the Menu Key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu Key to enter the next- level menu.

b.Press the UP or DOWN key to choose Reset, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose OFF, 10 minutes, 30 minutes, or 1-12 hours.

d.Press the Menu key to confirm and save.

## 18. INFORMATION

Check the ID code and version of DTMF. If not set, the DTMF ID code displays: ID: .

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose INFORMATION, and press the Menu key to check the DTMF ID code and current version information.

## 19. Weather

Weather function is available for use in the USA and Canada based on needs.

Users can receive weather channels (details in the weather channel and frequency table). When users receive the weather channel, they can't scan or communicate.

NOAA and Canada's environmental sector have transmitters in the USA and Canada. The transmitters broadcast within 24 hours, precast, and other information.

- Press the Menu Key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Reset, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose 1-11 weather channels.
- Press the Menu key to confirm and save.

## 20. Weather Warning

Radio can be set to respond NOAA broadcast emergencies quickly. A special warning tone will send the alarm sound and turn on the weather receiver to offer instant weather and emergency information. If you turn on the function, will display.

- Press the Menu Key to enter the menu, press the UP or DOWN key to choose Radio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Reset, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to ON or OFF.
- Press the Menu key to confirm and save.

## Channel Setting Contents

No	Function	Optional Setting	Menu Instruction
1	SQL	OFF/1-9 level, Default: Level 5	SQL setting
2	TX Power	High power/Low power, Default: High	Power setting
3	COMPAND	ON/OFF, Default: OFF	Compandor enable
4	W/N	Wideband/Narrowband, Default: Wideband	Bandwidth setting
5	BUSY LOCK	OFF/Signaling/Carrier, Default: OFF	BUSY LOCK setting
6	Offset Frequency Direction	OFF/+/-, Default: OFF	Set offset frequency
7	Offset Frequency	00.001-99.999M, Default: 0	Offset frequency setting
8	Step Frequency	2.5K/5K/6.25K/10K/12.5K/ 20K/25K/50K, Default: 25K	Step setting in the frequency mode
9	CSS	OFF/Customize/67-D765I	Radio CTCSS/DCS setting
10	RX CSS	OFF/Customize/67-D765I	RX CTCSS/DCS setting
11	TX CSS	OFF/Customize/67-D765I	TX CTCSS/DCS setting
12	ANI CHECK	ON/OFF, Default: OFF	DTMF function enable
13	CSS Vague	ON/OFF, Default: OFF	CSS vague enable
14	Cancel All CTCSS/DCS	ON/OFF, Default: OFF	Cancel CTCSS/DCS enable

15	Show CH Name	ON/OFF, Default: OFF	Show channel name enable
16	CH Name	0-9/Letter A-Z, a-z/Chinese	Channel name
17	CH Save	CH001-CH256 channel	Choose to set the saved channel
18	CH Deletion	CH001-CH256 channel	Choose the needed delete channel
19	VOX Level	1-9 level, Default: 5	VOX level setting
20	VOX Delay	500ms-3000ms, Default: 2000ms	VOX delay time setting
21	Scan Type	Search/Carrier/Time, Default: Carrier	Scan method setting
22	Priority Scan	OFF/CH001-256, Default: OFF	Priority scan channel setting

## CHANNEL SETTING

### 1.SQL

OFF: Squelch is always on, 1-9 levels are optional. Level 1 is the smallest, and level 9 is the biggest.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose SQL, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose OFF, or 1-9 level.

d.Press the Menu key to confirm and save.

### 2.TX POWER

TX power: High power or low power is optional.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose TX Power, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose high power or low power.

d.Press the Menu key to confirm and save.

### 3.COMPAND

ON: Reduce the environmental noise effectively; OFF: Turn off normal background noise (Contacts or radios need to turn on the function)

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose COMPAND, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose ON or OFF.

d.Press the Menu key to confirm and save.

### 4.W/N

Wideband: 25KHz, Narrowband: 12.5KHz.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose W/N, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose wideband or narrowband.

d.Press the Menu key to confirm and save.

### 5.BUSY LOCK

OFF: Allow transmission; Signaling: Current signaling mode can't transmit; Carrier: Can't transmit when receiving the carrier signal.

a.Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.

b.Press the UP or DOWN key to choose BUSY LOCK, and press the Menu key to enter the next-level menu.

c.Press the UP or DOWN key to choose OFF, Signaling, or Carrier.

d.Press the Menu key to confirm and save.

### 6.Offset Freq Direction

OFF: Frequency value is invalid. ON: + is the increased frequency value; - is the decreased

frequency value. (Valid in the frequency mode)

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Offset Freq Direction, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose OFF, + or -.
- Press the Menu key to confirm and save.

### **7.Offset Freq**

The frequency difference between transmission and reception under different frequency conditions.

100KHz-99.999M can be set. (Valid in the frequency mode)

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Offset Freq, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose from 100KHz-99.999M.
- Press the Menu key to confirm and save.

### **8.Step Freq**

In frequency mode, step frequency refers to the increment or decreasing frequency. 2.5KHz, 5.0KHz, 6.25KHz, 10KHz, 12.5KHz, 20KHz, 25KHz, and 50KHz are optional.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Step Freq, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose from 2.5KHz-50KHz.
- Press the Menu key to confirm and save.

### **9.CSS**

OFF: No CTCSS/DCS; Customized CTCSS/DCS: Non-standard CTCSS/DCS; CTCSS: 67-254.1; DCS +: D023N-754N; \* key to switch; DCS -: D023I-754I; \* key to switch.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose CSS, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose OFF, Non-standard CTCSS/DCS, CTCSS, DCS +, or DCS -.
- Press the Menu key to confirm and save.

### **10.RX CSS**

Set RX CTCSS/DCS. Press the \* key to switch CTCSS and DCS.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose RX CSS, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose RX CTCSS/DCS.
- Press the Menu key to confirm and save.

### **11.TX CSS**

Set TX CTCSS/DCS. Press the \* key to switch CTCSS and DCS.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose TX CSS, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose TX CTCSS/DCS.
- Press the Menu key to confirm and save.

### **12.ANI CHECK**

ON: Receive and recognize the other DTMF ID information. The speaker will send a voice after receiving the correct ANI signaling. OFF: Turn off the ANI identification function.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ANI CHECK, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ON or OFF.
- Press the Menu key to confirm and save.

### 13.CSS VAGUE

ON: DTMF signaling invalid. The function only affect receive. OFF: Signaling valid.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose CSS Vague, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ON or OFF.
- Press the Menu key to confirm and save.

### 14.CANCEL ALL CT/DT

ON: Delete all CTCSS/DCS. It will switch to OFF after deletion. Check it in the menu is OFF. If users need CTCSS/DCS, reset it again.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Cancel All CT/DT, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ON or OFF.
- Press the Menu key to confirm and save.

### 15.SHOW CH NAME

ON: Display the edited channel name.OFF: Don't display the channel name.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Show CH Name, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ON or OFF.
- Press the Menu key to confirm and save.

### 16.CH NAME

The name can be edited: Chinese, with 0-9 numbers, and 26 letters input methods are optional. During editing, press the # key to switch the input method, and the \* key to delete.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the keypad to input the needed channel name.
- Press the Menu key to confirm and save.

### 17.CH SAVE

Channel save function: Choose the needed channel. If the channel behind displays Yes, the channel information exists. The original channel will be covered if users still choose the current one. If display No, the channel is the empty-frequency channel.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose CH Save, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the saved CH001-CH256 channels.
- Press the Menu key to confirm and save.

### 18.CH DELETE

Channel delete function: Delete the unnecessary channel. Delete the pointed channel information, if the channel behind displays DEL, the channel has no information saved, and the operation is invalid.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose CH Delete, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the deleted CH001-CH256 channels.
- Press the Menu key to confirm and save.

### 19.VOX LEVEL

1-9 VOX level is optional. Level 1 is the smallest, and level 9 is the most sensitive. The radio is in noise reduction mode and turns on VOX when recognizing the voice after turning on the VOX function.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.



- b. Press the UP or DOWN key to choose VOX Level, and press the Menu key to enter the next-level menu.
- c. Press the UP or DOWN key to choose the 1-9 VOX level.
- d. Press the Menu key to confirm and save.

## 20.VOX DELAY

Stop talking and keep the transmission time length. 500-3000ms is optional.

- a. Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- b. Press the UP or DOWN key to choose VOX Delay, and press the Menu key to enter the next-level menu.
- c. Press the UP or DOWN key to choose from 500-3000ms.
- d. Press the Menu key to confirm and save.

## 21.SCAN TYPE

Search: Scan the signal and stay on the current channel.

Carrier: If there is no transmission or reception signal for 5s after scanning the signal, scan again.

Time: Stop on the current channel for a while after scanning the signal, and continue scanning.

- a. Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- b. Press the UP or DOWN key to choose Scan Type, and press the Menu key to enter the next-level menu.
- c. Press the UP or DOWN key to choose Search, Carrier, or Time.
- d. Press the Menu key to confirm and save.

## 22.PRIORITY SCAN

Priority scan: Scan the pointed channel priority.

- a. Press the Menu key to enter the menu, press the UP or DOWN key to choose Channel Setting, and press the Menu key to enter the next-level menu.
- b. Press the UP or DOWN key to choose Priority Scan, and press the Menu key to enter the next-level menu.
- c. Press the UP or DOWN key to choose the priority channel from CH001-CH256.
- d. Press the Menu key to confirm and save.

## Audio Setting Contents

No	Function	Optional Setting	Menu Instruction
1	AI DNS	ON/OFF, Default: OFF	AI noise reduction enable
2	AIDNSLEVEL	1-10 level, Default: 10	Noise reduction level choice
3	RECORDER	ON/OFF, Default: OFF	Recording enable
4	TONE Beep	1000Hz/1450Hz/1750Hz/2100Hz, Default: 1750Hz	Tone beep setting
5	ANA Mic Gain	-3 -2 -1 0 1 2 3, Default: 1	Analog mic gain setting
6	ANA TX Start Beep	ON/OFF, Default: OFF	Analog TX start beep enable
7	ANA TX Stop Beep	ON/OFF, Default: OFF	Analog TX stop beep enable
8	Allow TX Beep	ON/OFF, Default: OFF	Allow TX beep enable

## AUDIO

### 1.AI DNS

ON: Two-way noise reduction (transmission and reception noise reduction)

OFF: No noise reduction

- a. Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.
- b. Press the UP or DOWN key to choose AI DNS, and press the Menu key to enter the next-level menu.
- c. Press the UP or DOWN key to choose the needed ON or OFF.
- d. Press the Menu key to confirm and save.

## 2.AI DNS LEVEL

There are 1-10 levels of AI DNS LEVEL to choose from, and the noise reduction effect is gradually enhanced from level 1 to level 10, with level 10 being the best.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose AI DNS LEVEL, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ON or OFF.
- Press the Menu key to confirm and save.

## 3.RECORDER

ON: Turn on recording and transmission and reception have recording records.

OFF: No recording

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose AI DNS, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ON or OFF.
- Press the Menu key to confirm and save.

## 4.TONE BEEP

Press the PTT key and Menu key, the radio will send 4 tones: 1000Hz, 1450Hz, 1750Hz, and 2100Hz optional.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Tone Beep, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed 1000Hz, 1450Hz, 1750Hz, and 2100Hz tone.
- Press the Menu key to confirm and save.

## 5.ANA MIC GAIN

-3: Decrease 3 level sensitivity; -2: Decrease 2 level sensitivity; -1: Decrease 1 level sensitivity; 0: Normal gain; 1: Increase 1 level sensitivity; 2: Increase 2 level sensitivity; 3: Increase 3 level sensitivity.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Ana Mic Gain, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed -3 ~ 3 level mic gain.
- Press the Menu key to confirm and save.

## 6.ANA TX START BEEP

ON: The receiver receives a beep first, then receives the voice when receiving the carrier signal.

OFF: The receiver won't receive the beep sound.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Ana TX Start Beep, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose the needed ON or OFF.
- Press the Menu key to confirm and save.

## 7.ANA TX STOP BEEP

ON: The receiver will receive an end beep when finishing transmission.

OFF: The receiver won't receive the beep when finishing transmission.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose Ana TX Stop Beep, and press the Menu key to enter the next-level menu.
- Press the UP or DOWN key to choose ON or OFF.
- Press the Menu key to confirm and save.

## 8.ALLOW TX BEEP

ON: The transmitter sends a beep first, then sends the voice from the microphone.

OFF: The transmitter won't send a beep.

- Press the Menu key to enter the menu, press the UP or DOWN key to choose Audio Setting, and press the Menu key to enter the next-level menu.

- b.Press the UP or DOWN key to choose Allow TX Beep, and press the Menu key to enter the next-level menu.
- c.Press the UP or DOWN key to choose ON or OFF.
- d.Press the Menu key to confirm and save

#### DTMF Setting Contents

No	Function	Optional Setting	Menu Instruction
1	PTT-ID MODE	ON/OFF, Default: OFF	DTMF show enable
2	DTMF Group	OFF/Press to transmit/Release to transmit/Transmit at a time	DTMF send mode setting
3	DTMF Select	1-16 group	DTMF signaling group setting
4	First Code Time	150-1000ms	DTMF first code time setting

### DTMF

#### 1.DTMF SHOW

ON: Screen displays DTMF code when receiving the audio signal.

OFF: Don't display the DTMF code.

- a.Press the Menu key to enter the menu, press the UP or DOWN key to choose DTMF Setting, and press the Menu key to enter the next-level menu.
- b.Press the UP or DOWN key to choose DTMF Show, and press the Menu key to enter the next-level menu.
- c.Press the UP or DOWN key to choose ON or OFF.
- d.Press the Menu key to confirm and save.

#### 2.PTT-ID MODE

OFF: Don't send code when pressing the PTT key; Press to transmit: Send signaling code when transmitting starts; Release to transmit: Send signaling code when transmitting ends; Transmit at a time: Send signaling code when transmitting starts and ends.

- a.Press the Menu key to enter the menu, press the UP or DOWN key to choose DTMF Setting, and press the Menu key to enter the next-level menu.
- b.Press the UP or DOWN key to choose PTT-ID MODE, and press the Menu key to enter the next-level menu.
- c.Press the UP or DOWN key to choose the needed OFF, Press to transmit, Release to transmit, or Transmit at a time.
- d.Press the Menu key to confirm and save.

#### 3.DTMF GROUP

Select the edited corresponding ID code groups.

- a.Press the Menu key to enter the menu, press the UP or DOWN key to choose DTMF Setting, and press the Menu key to enter the next-level menu.
- b.Press the UP or DOWN key to choose DTMF Group, and press the Menu key to enter the next-level menu.
- c.Press the UP or DOWN key to choose the 1-16 group signaling code.
- d.Press the Exit key to send the signaling code while pressing the PTT key to transmit.

#### 4.First Code Time

Stop time has 150-1000ms optional after sending codes.

- a.Press the Menu key to enter the menu, press the UP or DOWN key to choose DTMF Setting, and press the Menu key to enter the next-level menu.
- b.Press the UP or DOWN key to choose DTMF Delay, and press the Menu key to enter the next-level menu.
- c.Press the UP or DOWN key to choose from 150-1000ms.
- d.Press the Menu key to confirm and save.

## DTMF Procedure Setting

CPS, set like the below

On/Off-line Code No	Code Value	Personal ID Code	2023
1	2024*2023 (Encode)	Remote Stun Code	123
2	2024*123 (Remote Stun)	Remote Kill Code	124
3	2024*124 (Remote Kill)	Activation Code	456
4	2024*456 (Activate)	Interval Symbol	*
5	202B*2023 (Group Call Code)	Group Call Code	B
6		Remote Kill Type	OFF, Stun, Kill, Default: OFF
7		Auto Reset Time (S)	0-30s optional, default is 5s
8		First Code Time (ms)	500ms
9		Side Tone	Have send code tone when checking

Note: 2023 is the radio ID code, and 2024 is the receive code.

### a.DTMF Encode Call

Match the correct DTMF to turn on Interconnection, remote kill, activation, and group call. Two radios need to turn on the DTMF function simultaneously

### b.Remote Stun

When it matches the correct remote stun code, the receiver will display DIZZIED to be stunned and can only receive.

### c.Remote Kill

When it receives the matched remote kill code, the receiver will display KILLED to be killed remotely and can't transmit and receive.

### d.Activation

When receiving the matched activation code, the stunned or killed radio will be activated and used normally

### Group Call Code

Group call code and separator have OFF, A, B, C, D, \*, and # optional. OFF is no group call code. The same group code can receive group information and communicate normally.

For example: The group code is set to B, and the separator is \*. The radio 2023 ID needs the group call, choose the 202B\*2023 to send the signaling code, and group code B can receive the information. If the DTMF send is turned on, users will know the 2023 ID member sent the group call.

## Key Setting Contents

No	Function	Optional Setting	Menu Instruction
1	P1 Key Short Press	OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure	Customized key setting
2	P1 Key Long Press	OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure	Customized key setting
3	P2 Key Short Press	OFF, Local alarm, Remote alarm, Scan, Noise reduction,	Customized key setting

		VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure	
4	P2 Key Long Press	OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure	Customized key setting
5	Side Key Short Press	OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure, Group call PTT, SUB-PTT	Customized key setting
6	Side Key Long Press	OFF, Local alarm, Remote alarm, Scan, Noise reduction, VOX, NOAA, TX power, Monitor, Flashlight, Talk around, Reverse frequency, Frequency measure	Customized key setting

## KEYS Settings

### 1.P1, P2, Side key Long press, and Short press function instructions

1)OFF: No any function

2)LOCAL WARN: Press the key to send the alarm sound. Press the PTT key to cancel.

3)REMOTE WARN: Press the key to send the remote alarm signal, and the receiver receives the alarm signal. Press the PTT key to cancel.

4)SCAN: Press the key to scan the added channels. Press it again to exit the scan.

5)AI DNS: Press the key to turn on the function to filter out environmental noise and enhance sound quality. Press the key again to turn it off.

6)VOX SWITCH: Press the key to turn on the VOX function. Talk directly towards the microphone. Press the key again to turn it off.

7)WEATHER: 11 only receive frequency, the details in the Weather Channel and Frequency. Press the key or the PTT key to exit the weather.

8)TX POWER: Press the key to switch high and low power.

9)MONITOR: Press the key to turn on the monitor function. Press the key again to turn it off. (Permanent Monitor)

10)LAMP: Press the key to turn on the flashlight. Press the key again to turn off.

11)TALK AROUND: Frequency mode: in different frequency, press the key to turn on THE talk around. The transmitting frequency will be the same as the receiving frequency, out of the repeater mode.

12)FREQ REVERSAL: Frequency mode: in different frequency, press the key to turn on reverse frequency. The transmitting frequency is opposite to the receiving frequency.

13)DETECT FREQ: Measure transmitting & receiving frequency and CTCSS/DCS, DCS will display through the code sometimes

a.Set the side key function as the Frequency Measure. Press the key to turn on the frequency measure function and enter the measuring interface in the needed channel. Press the other-party radio to transmit, the radio can receive the target radio frequency and normal CTCSS/DCS (except hopping frequency) and display them on the measuring interface. Use the radio to transmit and the other can receive normally and communicate with the radio, pairing is successful.

b.Shortly press the side key to save the frequency information to the current channel. Shortly press the Exit to cancel saving.

c.Shortly press the side key to save information. Press the Exit key to return to the current information. Switch to the next channel to pair again, and repeat the above operations. (Note: Shortly press the UP and DOWN key to switch U/V frequency in the pairing interface).

14)GROUP PTT: Press the key to turn on the group call. When setting the short press function of the side key to the Group PTT function, the customized long press function is invalid.

15)SUB PTT: SUB-band transmit PTT key. When setting the short press function of the side key to the SUB PTT function, the customized long press function is invalid.

**All Call**

ID is 16777215. It can call all members, regardless of group or single ID.

**Single Call**

0-8388607 is both the single call and radio ID code. When choosing the single call, users call the other's ID code, and the other will receive it.

**Group Call**

8388608-16777214 is the group call code. Choose group call and 8388608-16777214 group call ID code contact. Select the receive lists. When the receive list includes the transmitter group call ID, communication is achieved. 1-8 receive lists are optional. (Edit the contact ID in the receive list, and receive the group ID contact radio signal)

**Weather Channel and Frequency List**

Channel	Frequency	Channel	Frequency
WX1	162.550MHz	WX7	162.525MHz
WX2	162.400MHz	WX8	161.650MHz
WX3	162.475MHz	WX9	161.775MHz
WX4	162.425MHz	WX10	161.750MHz
WX5	162.450MHz	WX11	162.000MHz
WX6	162.500MHz		

**Channel Information**

CH Name	Frequency	CTCSS/DCS	Bandwidth	Power
CH1	462.5625	67.0	Wide	High
CH2	462.5875	118.8	Wide	High
CH3	462.6125	127.3	Wide	High
CH4	462.6375	131.8	Wide	High
CH5	462.6625	136.5	Wide	High
CH6	462.6875	141.3	Wide	High
CH7	462.7125	146.2	Wide	High
CH8	467.5625	D243N	Narrow	Low
CH9	467.5875	D032N		
CH10	467.6125	D047N		
CH11	467.6375	D051N		
CH12	467.6625	D053N		
CH13	467.6875	D065N		
CH14	467.7125	D116N		
CH15	462.5500	123.0	Wide	High
CH16	462.5750	D743I	Wide	High
CH17	462.6000	D332I	Wide	High
CH18	462.6250	127.3	Wide	High
CH19	462.6500	D243I	Wide	High
CH20	462.6750	D606N	Wide	High
CH21	462.7000	D731I	Wide	High
CH22	462.7250	136.5	Wide	High
CH23	TX:467.5500/RX:462.5500	/	Wide	High
CH24	TX:467.5750/RX:462.5750	/	Wide	High
CH25	TX:467.6000/RX:462.6000	/	Wide	High
CH26	TX:467.6250/RX:462.6250	/	Wide	High
CH27	TX:467.6500/RX:462.6500	/	Wide	High
CH28	TX:467.6750/RX:462.6750	/	Wide	High
CH29	TX:467.7000/RX:462.7000	/	Wide	High
CH30	TX:467.7250/RX:462.7250	/	Wide	High

## CTCSS/DCS List

CTCSS CHART (Hz)									
Number	Frequency	Number	Frequency	Number	Frequency	Number	Frequency	Number	Frequency
1	67.0	2	69.3	3	71.9	4	74.4	5	77.0
6	79.7	7	82.5	8	85.4	9	88.5	10	91.5
11	94.8	12	97.4	13	100.0	14	103.5	15	107.2
16	110.9	17	114.8	18	118.8	19	123.0	20	127.3
21	131.8	22	136.5	23	141.3	24	146.2	25	151.4
26	156.7	27	159.8	28	162.2	29	165.5	30	167.9
31	171.3	32	173.8	33	177.3	34	179.9	35	183.5
36	186.2	37	189.9	38	192.8	39	196.6	40	199.5
41	203.5	42	206.5	43	210.7	44	218.1	45	225.7
46	229.1	47	233.6	48	241.8	49	250.3	50	254.1

DCS CODELIST									
Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N
1	D023N	2	D025N	3	D026N	4	D031N	5	D032N
6	D036N	7	D043N	8	D047N	9	D051N	10	D053N
11	D054N	12	D065N	13	D071N	14	D072N	15	D073N
16	D074N	17	D114N	18	D115N	19	D116N	20	D122N
21	D125N	22	D131N	23	D132N	24	D134N	25	D143N
26	D145N	27	D152N	28	D155N	29	D156N	30	D162N
31	D165N	32	D172N	33	D174N	34	D205N	35	D212N
36	D223N	37	D225N	38	D226N	39	D243N	40	D244N
41	D245N	42	D246N	43	D251N	44	D252N	45	D255N
46	D261N	47	D263N	48	D265N	49	D266N	50	D271N
51	D274N	52	D306N	53	D311N	54	D315N	55	D325N
56	D331N	57	D332N	58	D343N	59	D346N	60	D351N
61	D356N	62	D364N	63	D365N	64	D371N	65	D411N
66	D412N	67	D413N	68	D423N	69	D431N	70	D432N
71	D445N	72	D446N	73	D452N	74	D454N	75	D455N
76	D462N	77	D464N	78	D465N	79	D466N	80	D503N
81	D506N	82	D516N	83	D523N	84	D526N	85	D532N
86	D546N	87	D565N	88	D606N	89	D612N	90	D624N
91	D627N	92	D631N	93	D632N	94	D645N	95	D654N
96	D662N	97	D664N	98	D703N	99	D712N	100	D723N
101	D731N	102	D732N	103	D734N	104	D743N	105	D754N

Number	DCS-I	Number	DCS-I	Number	DCS-I	Number	DCS-I	Number	DCS-I
106	D023I	107	D025I	108	D026I	109	D031I	110	D032I
111	D036I	112	D043I	113	D047I	114	D051I	115	D053I
116	D054I	117	D065I	118	D071I	119	D072I	120	D073I
121	D074I	122	D114I	123	D115I	124	D116I	125	D122I
126	D125I	127	D131I	128	D132I	129	D134I	130	D143I
131	D145I	132	D152I	133	D155I	134	D156I	135	D162I
136	D165I	137	D172I	138	D174I	139	D205I	140	D212I
141	D223I	142	D225I	143	D226I	144	D243I	145	D244I
146	D245I	147	D246I	148	D251I	149	D252I	150	D255I
151	D261I	152	D263I	153	D265I	154	D266I	155	D271I
156	D274I	157	D306I	158	D311I	159	D315I	160	D325I
161	D331I	162	D332I	163	D343I	164	D346I	165	D351I
166	D356I	167	D364I	168	D365I	169	D371I	170	D411I
171	D412I	172	D413I	173	D423I	174	D431I	175	D432I
176	D445I	177	D446I	178	D452I	179	D454I	180	D455I
181	D462I	182	D464I	183	D465I	184	D466I	185	D503I
186	D506I	187	D516I	188	D523I	189	D526I	190	D532I
191	D546I	192	D565I	193	D606I	194	D612I	195	D624I
196	D627I	197	D631I	198	D632I	199	D645I	200	D654I
201	D662I	202	D664I	203	D703I	204	D712I	205	D723I
206	D731I	207	D732I	208	D734I	209	D743I	210	D754I

## Specifications

General	
Frequency range	GMRS
Memory channel	256
Step	12.5KHz
Audio distortion	≤5%
Frequency stability	±2.5ppm
Max frequency deviation	≤5KHz/≤2.5KHz
Modulation method	FM
Receive sensitivity	≤0.25uV/≤0.3uV
Squelch sensitivity	≤0.2uV/≤0.25uV
Adjacent channel selectivity	≥65dB
Spurious response suppression	≥55dB
Intermodulation	≥60dB
Transmit current	≤1.6A
Work voltage	7.4V DC

### RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE

Before using this device, please read this guide which contains important operating instructions for safe usage, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards.

User' instructions should accompany the device when transferred to other users.

Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority granted by the local government radio management departments to operate this radio and should not be made. To comply with the corresponding requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the local government radio management departments equipment authorization for this radio could violate the rules.

This two-way radio is a GMRS station. A valid individual license is required to operate a GMRS station. To obtain an individual license, an applicant must be eligible and follow the applicable rules and procedures established by FCC. The applicant must pay the required application and regulatory fees. Each individual license in the GMRS will normally have a term of ten years from the date of grant or renewal, and may be renewed pursuant to the procedures of FCC. To obtain a GMRS operator license, you need FCC Form 605 & 159, we suggest visiting the FCC website at <https://www.fcc.gov/wireless/support/fcc-form-605>, which authorizes necessary instructions. More questions about the license application, please contact the FCC at 1-888-225-5322 or go to the FCC's website: <http://www.fcc.gov>.

Note: According to FCC rules, any individual who holds an individual GMRS license may allow his or her immediate family members to operate his or her GMRS station or stations. Immediate family members are the licensee's spouse, children, grandchildren, stepchildren, parents, grandparents, stepparents, brothers, sisters, aunts, uncles, nieces, nephews, and in-laws.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference. (Licensed radios are applicable);

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (Other devices are applicable)

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.



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

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

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, or accumulators must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws and rules in your area.



This two-way radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. RF energy, which when used improperly, can cause biological damage. Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits: <http://www.who.int/en/>

Transmit no more than the rated duty factor 50% of the time. Transmitting necessary information or less, is important because the radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance. For users who wish to further reduce their exposure, some effective measures to reduce RF exposure include:

Reduce the amount of time spent using your wireless device.

Use a speakerphone, earpiece, headset, or other hands-free accessory to reduce proximity to the head (and thus head exposure). While wired earpieces may conduct some energy to the head and wireless earpieces also emit a small amount of RF energy, both wired and wireless earpieces remove the greatest source of RF energy (handheld device) from proximity to the head and thus can greatly reduce total exposure to the head. Increase the distance between wireless devices and your body.

This radio is designed for and classified as “Occupational/Controlled Use Only”. Occupational/Controlled environments are defined as locations where there is exposure that may be incurred by people who are aware of the potential of exposure, for example, as a result of employment or occupation. It means a radio must be used only by individuals aware of the hazards, and the ways to minimize such hazards; Not intended for use in a General population/uncontrolled environment.

To control your exposure and ensure compliance with the controlled environment exposure limits, always adhere to the following procedure:

- To receive calls, release the PTT key.
- To transmit (talk), press the Push-to-Talk (PTT) key in front of the face.
- Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) at least one inch (2.5 centimeters) away from the nose or lips.



Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility. During transmissions, your 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, such as hospitals or healthcare facilities.

Persons with pacemakers, implantable cardioverter defibrillators (ICDs) or other active implantable medical devices should

- 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 there is 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 the 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 energy. Your physician may be able to assist you in obtaining this information.

• Turn off your radio prior to entering any area with a potentially hazardous or explosive atmosphere. Only radio types that are especially qualified should be used in such areas as "Intrinsically Safe".  
Note: the areas with potentially explosive atmosphere referred to above include blasting caps, blasting areas, inflammable gas, dust particles, metallic powders, grain powders, fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles (such as grain, dust or metal powders) and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often – but not always posted.

- Do not use any radio that has a damaged antenna. If a damaged antenna comes into contact with the skin when the radio is in use, a burn can result.
- Turn off your radio before removing or installing accessories.

• Always check the laws and regulations on the use of radios in the areas where you drive. Use of Communication Devices, for example, mobile radio, may not be allowed.

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call, if driving conditions or regulations so require.
- Do not place a portable radio in the area over an air bag or in the airbag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the airbag inflates.



• Use the lowest volume necessary to do your job. Turn up the volume only if you are in noisy surroundings.

- Limit the amount of time you use headsets or earpieces at high volume.
- When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear.
- Use carefully with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss.



**CAUTION:** Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the radio's volume, the less time is required before your hearing could be affected. Hearing damage from loud noise is sometimes undetectable at first and can have a cumulative effect.

• **WARNING: KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.**

- In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.



• Since batteries are sensitive to high temperatures when storing them, keep them in a cool and dry place. The recommended temperature should be between +10 °C and +25 °C and never exceed +30 °C. Batteries should therefore not be stored next to radiators or boilers nor in direct sunlight. Extremes of humidity (below 35% and above 95% relative humidity for sustained periods should be avoided since they are detrimental to both batteries and packing. Although the storage life of batteries at room temperature is good, storage is improved at lower temperatures provided special precautions are taken. Also, accelerated warming is harmful.

- Batteries should be removed from the appliance when not being used for long periods of time (one months). The batteries should be enclosed in special protective packaging (such as sealed plastic bags or variants) which should be retained to protect them from condensation during the time they are warming to ambient temperature.
- Exhausted batteries are to be removed from the equipment.

WARNING:CHOKING HAZARD–Small Parts. Not suitable for children under 3 years old.



The plug of the adapter is considered a disconnect device. The socket-outlet shall be installed near the equipment and shall be easily accessible.

- Contact Retevis for assistance regarding repairs and service.
- For a list of Retevis-approved accessories for your radio model, visit the website: <http://www.Retevis.com>

## Guarantee

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Purchasing Date: \_\_\_\_\_

Dealer: \_\_\_\_\_ Telephone: \_\_\_\_\_

User's Name: \_\_\_\_\_ Telephone: \_\_\_\_\_

Country: \_\_\_\_\_ Address: \_\_\_\_\_

Post Code: \_\_\_\_\_ Email: \_\_\_\_\_

### Remarks:

1. This guarantee card should be kept by the user, no replacement if lost.
  2. Most new products carry a two-year manufacturer's warranty from the date of purchase.
  3. The user can get warranty and after-sales service as below:
    - Contact the seller where you buy.
    - Products Repaired by Our Local Repair Center
  4. For warranty service, you will need to provide a receipt proof of purchase from the actual seller for verification
- Exclusions from Warranty Coverage:
1. To any product damaged by accident.
  2. In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs.
  3. If the serial number has been altered, defaced, or removed.





**Shenzhen Retevis Technology Co.,Ltd.**

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E-mail: [info@retevis.com](mailto:info@retevis.com)

Facebook: [@retevis.fans](https://www.facebook.com/retevis.fans)



Made in China

## 说明书要求

尺寸:120\*160

印刷: 黑白印刷

装订: 胶黏钉

纸张材质: 双胶纸

样式:装订

印刷:全黑白

纸张:封面封底铜版纸+内容双胶纸

**此页无需印刷**