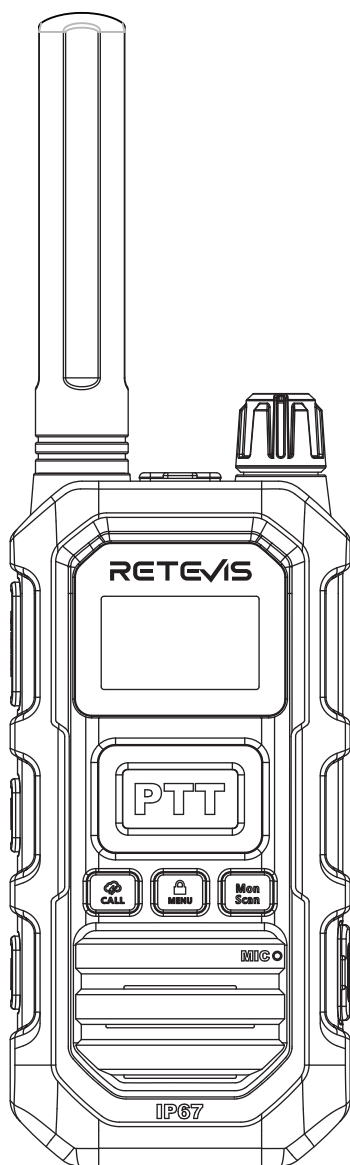


RETEVIS



RB48 Plus Two Way Radio USER'S MANUAL



CONTENT

- Warning ----- 01
- Charging Attentions ----- 01
- Main Features----- 01
- Familiar with Radio ----- 02
- Display ----- 02
- Key Instructions----- 03
- Function Operations ----- 03
- Factory Frequency ----- 06
- CTCSS/DCS Codes ----- 07
- Specifications ----- 07
- Fault Emission ----- 08
- Guarantee ----- 12

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



Warning:

Please read the manual carefully before using the radio.

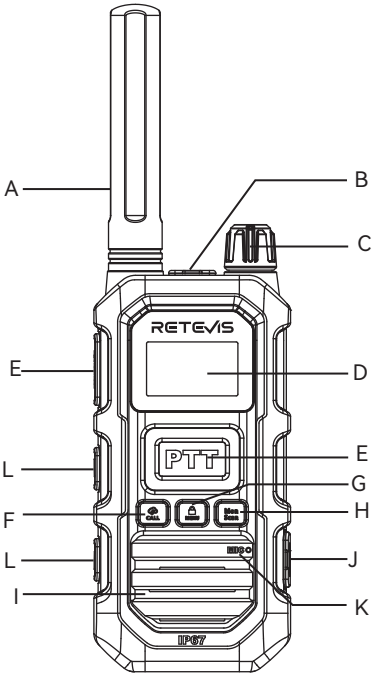
- Don't charge the radio in flammable, explosive, and radio communication prohibited areas (gas station, airport, etc).
- Don't operate the radio without a license in government-prohibited areas.
- Avoid exposing the radio to the sun, and avoid putting the radio near any heating equipment.
- Avoid putting the radio in dust, wet, or splashing water places, and avoid putting the radio near any heating equipment.
- Remove the battery pack from the radio immediately and contact the nearest retailers if the radio smells or smokes.
- The radio is repaired by the technical, self-disassembly is strictly prohibited.

Charging Attentions:

- Please use the matched charger to charge the radio.
- Turn off the radio before charging the radio.
- To get the best battery performance, please charge at least 5 hours the first time.
- Don't charge the battery pack for a long time, otherwise, the service life of the battery will shorten. When fully charged, please stop charging in time.
- The charger only charges the radio. Don't charge other battery packs, otherwise, the charger and the battery will be damaged.
- When fully charged, put the battery pack in cool and dry areas. Don't be near the fire or exposure to the sun. Otherwise, it will exist a safety hazard.
- Don't turn on the radio during charging.
- During charging, it is common that the battery pack is slightly heated.
- Obey the local regulations when using the radio.

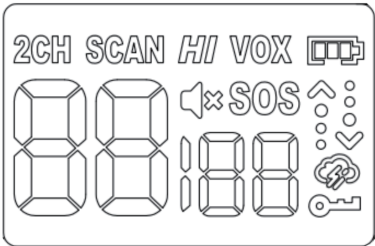
Main Features

- IP67 Waterproof
- LCD Backlight Display
- 30 Channels
- 159 CTCSS/DCS Codes (50 CTCSS, 109 DCS)
- Channel Busy Lock
- Earpiece Jack
- 10 Call Tones
- VOX
- High/Low Power Selection
- Call End Tone
- One-key Cancel CTCSS/DCS
- Scan/Priority Channel Scan
- Keypad Lock
- Channel Hidden
- English Voice Broadcast
- Battery Save
- Low Battery Alert
- Local and Remote Alarm
- TOT
- Call Vibration
- Talk Around
- Easy Pairing (Pair one channel and Pair all channels)
- One-key Group Call
- PTT ID (only transmit)
- Double PTT
- Allow Transmission Prompt
- NOAA
- Monitor
- Roger Beep
- Squelch
- Restore Factory Mode
- Mic Gain



- A. Antenna
- B. Earpiece jack
- C. Power/Volume knob
- D. LCD display
- E. PTT
- F. NOAA/Call tone key
- G. Menu/Key lock key
- H. Monitor/Scan key
- I. Speaker
- J. Type-C charging port
- K. Mic port
- L. ▲ & ▼ Button

Display



No	Icon	Instruction
1	2CH	Group call
2	SCAN	Scan
3	HI	High power
4	VOX	VOX
5	Battery indicate	Battery indicate
6	Transmit	Transmit
7	Receive	Receive
8	NOAA/NOAA alert	NOAA/NOAA alert
9	Keypad lock	Keypad lock
10	CTCSS/DCS codes, 00 stands for non CTCSS/DCS	CTCSS/DCS codes, 00 stands for non CTCSS/DCS
11	Channel number	Channel number

Key Instructions

● [PTT] Key

Use double PTT to transmit. One is the small PTT key on the side, and the other is the big PTT key in the front. In menu mode, press the PTT key to save settings and exit the menu.

● [▲] Key

Shortly press: Switch options up in the menu

Long press: Customized side key, OFF, Werther, Alarm, Call, Monitor, and Group call. Factory default: Monitor

● [▼] Key

Shortly press: Switch options down in the menu

Long press: Customized side key, OFF, Werther, Alarm, Call, Monitor, and Group call. Factory default: Alarm

● [📞/CALL] Key

Shortly press: Send Call Tone

Long press: Two-way radio and Weather switch

● [MENU]

Shortly press: Enter or switch the menu

Long press: Lock or unlock

● [Mon/Scan]

Shortly press: Turn on or off the scan

Long press: Turn on the monitor

Function Operations

1. Turn on/off the Radio



Clockwise rotate the power knob to turn on the radio. Anticlockwise rotate the power knob and hear a click sound to turn off the radio. When turning on the radio, it will have a power-on prompt and display all icons. After turning on the radio, it will stay in two-way radio mode and display the current channel number, CTCSS/DCS codes, etc.


2. Volume Adjustment

Clockwise rotate the knob to increase the volume. Anticlockwise rotate the knob to decrease the volume.

Note: don't put the radio speaker too close to the ear when the volume does not adjust to a proper state. Otherwise, a loud voice will hurt the ears.


3. Transmit & Receive


1. Press the PTT key and away the microphone from 3-5cm. Speak in a normal voice. When the radio displays the transmit icon  , the radio is transmitting. To avoid stopping your talk, press the PTT key and pause, then start to talk .

When finishing talk, release the PTT key to receive. When receiving, the radio displays the receive icon .

4. Key Lock

Key lock function aims to prevent changing radio settings from accidental operations.

1. Long press the Menu key, hear a beep sound, and the radio displays  icon, the radio enters key lock status.

2. Long press the menu key, hear two beep sounds, and the radio displays  icon, the radio exits key lock status.

Note: In key lock status, press any key except the PTT key, the radio will send failure sound.

5. Menu Setting

● Channel Selection

1. In standby status, press the Menu key once. The current channel number flashes.

2. Press the ▲ or ▼ key to select the wanted channel number.

3. Press the PTT key to save the current setting and exit the menu, or press the Menu key to the next menu setting.

4. The radios can communicate when they are set as the same channel.

● CTCSS/DCS Codes Selection

CTCSS/DCS codes can reduce the interference between radios. The radios with different CTCSS/DCS codes can't communicate. The radio has a total of 159 CTCSS/DCS codes. The 1-50 are CTCSS codes, and the 51-159 are DCS codes. 0 is to turn off the CTCSS/DCS codes.

1. In standby status, press the Menu key twice. The current CTCSS/DCS codes setting flashes.

2. Press the ▲ or ▼ key to choose the wanted CTCSS/DCS codes. Press the ▲ or ▼ key to switch CTCSS/DCS codes quickly.

3. Press the PTT key to save the current setting and exit the menu, or press the Menu key to the next menu setting.

Note: when canceling CTCSS/DCS, the CTCSS/DCS codes display OF.

● Call Tone Selection

1. In the standby status, press the Menu key three times. The call tone setting displays CA and the call tone number flashes.

2. Press the ▲ or ▼ key to choose the wanted call tone. The speaker will send the corresponding call tone.

3. Press the PTT key to save the current setting and exit the menu, or press the Menu key to the next menu setting.

Note: when call tone setting chooses 0, long press the Call key, call function is invalid.

● VOX/VOX Level Setting

When turning on the VOX function, speak towards the microphone directly. The radio will transmit automatically without pressing the PTT key.

1. In the standby status, press the Menu key four times. The VOX appears on the display. Program to set the VOX level.

2. Press the ▲ or ▼ key to select the level from 0-9:

9: High sensitivity level

5: Medium sensitivity level

1: Low sensitivity level

0: OFF

3. Press the PTT key to save the current setting and exit the menu, or press the Menu key to the next menu setting.

●High/Low Power Setting

1. In the standby status, press the Menu key five times. The radio displays Pr.

2. Press the ▲ or ▼ key to choose LO or HI. (LO: Low power/HI: High power)

3. Press the PTT key to save the current setting and exit the menu.

Note: CH8-CH14 only has low power.

●Turn on/off Scan Function

1. In the standby status, press the Menu key six times. The radio displays SC.

2. Press the ▲ or ▼ key to choose ON or OFF.

ON: Shortly press the Mon/Scan key to turn on the scan.

OFF: Shortly press the Mon/Scan key is invalid. The scan can't turn on.

3. Press the PTT key to save the current setting and exit the menu, or press the Menu key to the next menu setting.

●Turn on/off Roger Beep

1. In the standby status, press the Menu key seven times. The radio displays bE.

2. Press the ▲ or ▼ key to choose ON or OFF.

3. Press the PTT key to save the current setting and exit the menu, or press the Menu key to the next menu setting.

4. After turning on the function, the radio will send the prompt when finishing transmitting.

●Turn on/off Call Vibration

1. In the standby status, press the Menu key eight times. The radio displays U1.

2. Press the ▲ or ▼ key to choose ON or OFF.

3. Press the PTT key to save the current setting and exit the menu, or press the Menu key to the next menu setting.

4. After turning on the function, the radio vibrates when receiving the first call in the standby status.

●Turn on/off Talk Around

1. In the standby status, press the Menu key nine times. The radio displays tA.

2. Press the ▲ or ▼ key to choose ON or OFF.

3. Press the PTT key to save the current setting and exit the menu to turn on the function.

Note: after turning on the function, the transmitting frequency is the same as the receiving frequency. The radios connect directly without the repeater. When turning it off, the frequencies are different.

6. Scan Function

In the standby status, shortly press the Mon/Scan key. The radio sends a beep sound and enters the scan mode. The channel number increases and the LCD displays SCAN icon. When detecting a signal, the radio will pause on this channel to receive the signal until it disappears. The radio will continue to scan when the signal disappears for 5s.

During scanning, press the PTT key, the radio will transmit on the starting scanning channel. When detecting the effective signal, pressing the PTT key, and the radio will transmit on the current channel. Release the PTT key and wait for 5s, the radio will continue to scan.

Shortly press the Mon/Scan key, the radio prompts two beep sounds, exits the scan mode, and returns to the standby status.

●Priority Channel

Set the priority channel through the CPS. CH1-CH30 is optional. When choosing the priority channel, in the scan mode, the radio will scan once priority channel interval a channel.

●Scan Channel Add/Delete

Set the scan list through the CPS. Set the current channel as Del or Add. When setting as the Add, the current channel enters the scan list. When setting as the Del, the current channel is not in the scan list.

7. Monitor Function

In the two-way radio mode, long press the Mon/Scan to turn on the function and monitor whether the selected channel has audio transmission or not. If it has no signal, the radio will send a rustle sound. Release the key to turn off the function.

8. Emergency Alarm

The long press of the ▼ key is the alarm. Press the defined alarm key to turn on the emergency alarm.

1)Local Alarm

Set the alarm mode as the local alarm. Press the alarm key, the radio will continuously send the emergency alarm sound. Press the PTT key to exit the alarm.

2)Remote Alarm

Set the alarm mode as the local alarm. Press the alarm key, the radio will continuously send an emergency alarm sound and send an alarm signal to others. When other radios are the same frequency and in receive range, they will send an emergency alarm sound. Press the PTT key to exit the alarm.

9. One-key Cancel CTCSS/DCS

In the shutdown status, press the ▲ key and turn on the radio. The radio sends a beep sound to turn off all the CTCSS/DCS codes. When it sends two beep sounds, restore all the channel CTCSS/DCS codes.

10. Battery Save Function

The battery save function saves the battery consumption and extends the use time. If there are no calls or other operations in 10s, the radio will automatically enter the battery save mode. In this mode, the radio still receives the information.

11. NOAA Receive


The NOAA function is available in the USA and Canada based on the needs.

You can receive the NOAA channel (the detailed information see the NOAA channel and frequency list). When receiving the NOAA channel, the radio can't receive the radio channel signal.


● Enter NOAA Mode

In the two-way radio mode, long press the /CALL key to turn on the NOAA mode.

● Set NOAA Channel

1. In the NOAA mode, shortly press the Menu key, and the NOAA channel number flashes.
2. Press the ▲ or ▼ key to choose to receive the proper channel in your areas.
3. Long press the /CALL key to exit the menu.

● NOAA Weather Alert

When turning on the NOAA weather alert function, in the two-way radio mode, the radio monitors the standby NOAA channel, responds to the NOAA weather broadcast, sends the alert and turns on the NOAA receiver to provide instant weather and emergency information. In two-way radio mode, turn on the NOAA, and the  icon will display.

1. In NOAA mode, press the Menu key twice, and ON or OFF flashes.
2. Press the ▲ or ▼ key to choose ON or OFF NOAA alert.
3. Press the Menu key to exit the NOAA menu setting.

12. Allow Transmission Prompt

Program to turn on the function. Press the PTT key and hear a beep sound, then speak.

13. Backlight Time

If there are no operations, the backlight will turn off automatically to reduce battery power consumption.

Backlight delay time can be set as 5s, 10s, 20s, 30s or 60s. When setting is to the time, the backlight will turn off automatically

14. TOT

When you press the PTT key to communicate over 15-600s, the radio will send a continuous warning sound and stop transmitting automatically.

15. Companding

Program to turn on the function. It reduces the environmental background noise and improves the receiver's voice quality. It makes the receiver's voice fidelity and performance higher.

Note: The radios need to turn on simultaneously.

16. One-key Group Call

After turning on the group call function, the radio waits for the group call channel in two-way radio mode. Set the group call channel through the CPS. In two-way radio mode, the radio can receive the current channel or the group call channel. When the group call channel is set to OFF, the group call function is turned off.

Set the long press function of the [▲] or [▼] key to group call through the CPS. Press the group call key and the radio will make a call on the group call channel. Set the restore time and PTT reply through the CPS. When the radio receives the signal from the group call channel, directly press the [PTT] key to reply to the group call channel within the restore time.

17. Easy Pairing

(1) Pair One Channel

Copy the receiving frequency and transmitting frequency on the current channel to the received RF frequency. (Note: Only for the receiving and transmitting frequencies, CTCSS and DCS are replaced by frequency hopping codes)

Set the receiver to the copied channel and turn it off. In the shutdown status, press the small [PTT] key on the side and turn on the radio. Wait for 3S and hear the three beep sound, release the [PTT] key and the radio enters pairing mode. Turn on the transmitter and adjust it to the target channel. Press the PTT key to transmit and stay for a while. When the receiver hears a "beep" prompt sound and starts to receive the voice of the transmitter, the channel has been paired successfully and saved automatically. If you need to repeat the operation on other channels, adjust the tester to the next channel and repeat this operation to pair the frequency of each channel one by one. After finishing, restart the radio and talk.

Note: when pairing one channel, the receiver enters the pairing mode, and the transmitter does not need. Only pair one channel once. The receiver needs to check pair one channel through the CPS to use this function.

(2) Pair All Channels

1. Transmitter: In shutdown status, press the big PTT key on the front and the Call key for 3s, and turn on the radio. The radio sends three beep sounds continuously twice and enters transmitting mode.

2. Receiver: In shutdown status, press the big PTT key on the front and Mon/Scan key for 3s, and turn on the radio. The radio sends three beep sounds continuously twice and enters receiving mode.

Press the PTT key of the transmitter and the LED indicator lights up red, the radio transmits data. Restart the radio to exit the mode. The LED indicator of the receiver turns purple to blue, the radio receives the data. After receiving the data, the radio will turn on automatically.

18.Channel Hidden

If customers only want to communicate on Channel 1, they can hide other channels through the CPS.

19.Restore Factory Setting

In shutdown status, press the PTT key on the side and ▼ key, and turn on the radio. The radio will prompt two beep sounds. Release the keys and restart the radio to restore factory setting.

Factory Frequency

Channel NO.	RX Frequency	TX Frequency	Max Power Output	CTCSS/DCS
1	462.5625	462.5625	5W	67.0
2	462.5875	462.5875	5W	118.8
3	462.6125	462.6125	5W	127.3
4	462.6375	462.6375	5W	131.8
5	462.6625	462.6625	5W	136.5
6	462.6875	462.6875	5W	141.3
7	462.7125	462.7125	5W	146.2
8	467.5625	467.5625	0.5W	D243N
9	467.5875	467.5875	0.5W	D032N
10	467.6125	467.6125	0.5W	D047N
11	467.6375	467.6375	0.5W	D051N
12	467.6625	467.6625	0.5W	D053N
13	467.6875	467.6875	0.5W	D065N
14	467.7125	467.7125	0.5W	D116N
15	462.5500	462.5500	5W	123.0
16	462.5750	462.5750	5W	D743I
17	462.6000	462.6000	5W	D332I
18	462.6250	462.6250	5W	127.3
19	462.6500	462.6500	5W	D243I
20	462.6750	462.6750	5W	D606N
21	462.7000	462.7000	5W	D731I
22	462.7250	462.7250	5W	136.5
23	467.5500	462.5500	5W	/
24	467.5750	462.5750	5W	/
25	467.6000	462.6000	5W	/
26	467.6250	462.6250	5W	/
27	467.6500	462.6500	5W	/
28	467.6750	462.6750	5W	/
29	467.7000	462.7000	5W	/
30	467.7250	462.7250	5W	/

●RB48 Plus(GMRS)NOAA Channels

Channel NO.	Frequency
1	162.550
2	162.400
3	162.475
4	162.425
5	162.450
6	162.500
7	162.525
8	161.650
9	161.775
10	161.750
11	162.000

CTCSS/DCS Codes

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
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
51	D023N	52	D025N	53	D026N	54	D031N	55	D032N
56	D036N	57	D043N	58	D047N	59	D051N	60	D053N
61	D054N	62	D065N	63	D071N	64	D072N	65	D073N
66	D074N	67	D114N	68	D155N	69	D116N	70	D122N
71	D125N	72	D131N	73	D132N	74	D134N	75	D143N
76	D145N	77	D152N	78	D155N	79	D156N	80	D162N
81	D165N	82	D172N	83	D174N	84	D205N	85	D212N
86	D223N	87	D225N	88	D226N	89	D243N	90	D244N
91	D245N	92	D246N	93	D251N	94	D252N	95	D255N
96	D261N	97	D263N	98	D265N	99	D266N	100	D271N
101	D274N	102	D306N	103	D311N	104	D315N	105	D325N
106	D331N	107	D332N	108	D343N	109	D346N	110	D351N
111	D356N	112	D364N	113	D365N	114	D371N	115	D411N
116	D412N	117	D413N	118	D423N	119	D431N	120	D432N
121	D445N	122	D446N	123	D452N	124	D454N	125	D455N
126	D462N	127	D464N	128	D465N	129	D466N	130	D503N
131	D506N	132	D516N	133	D523N	134	D526N	135	D532N
136	D546N	137	D565N	138	D606N	139	D612N	140	D624N
141	D627N	142	D631N	143	D632N	144	D645N	145	D654N
146	D662N	147	D664N	148	D703N	149	D712N	150	D723N
151	D731N	152	D732N	153	D734N	154	D743N	155	D754N
156	D243I	157	D332I	158	D731I	159	D743I		

Specifications

General	
Frequency Range	GMRS:462-467MHz
Memory Channel	30
Bandwidth	25kHz/12.5kHz
Work Voltage	DC 7.4V
Battery	2000mAh Built-in Li-ion
Work Temperature	-20°C+60°C
Antenna Impedance	50Ω
Dimension	206*61*33mm (Antenna included)
Transmitter	
RF Power	High power: 5W; Low power: 0.5W
Frequency Stability	±2.5ppm
Adjacent Power	≤60dBm@12.5KHz
Modulation Method	FM
Transmit Current	≤1700mA
Receiver	
Receive Sensitivity	≤-119dBm(12dB SINDA)
Audio Power	> 1W
Audio Distortion	≤3%
Receive Current	≤410mA

Fault Emission

Compatible Accessories	J9164F/J9109A/C9034A
Which radios that can talk	It can talk to the 1-22 channels of all Retevis FRS radios in factory default setting, such as RB47, and so on.
Can't charge the radio	1.The radio features Type-C charging and a desktop charger two charging methods, one can't use, choose the other 2.If both of them can't be used, change to use the spare Type-C charging cable to try. 3.If it isn't cable trouble, maybe the battery or radio is abnormal, please contact customer service.
Don't press the PTT key, why does the radio transmit automatically?	Turn on the VOX, you can turn off the function on the radios
Can't turn on the radio	Maybe the battery is too low, please charge the radio.

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.

Unauthorized modification and adjustment

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.

Radio License

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 includes 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.

FCC

This product may be used in following countries and regions, including: Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (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.

Disposal



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.

RF Safety

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 "General population/uncontrolled use". General population/uncontrolled environments are defined as locations where there is exposure of individuals who have no knowledge or control of RF exposure level.

Hand-held Mode

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 button.
- To transmit (talk), press the Push-to-Talk (PTT) button 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.



Electromagnetic Interference/Compatibility

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.

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

Turn off your radio in the following conditions

- 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.
- Turn off your Radiocommunication device when taking on fuel or parked at gasoline service stations.
- 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.
- 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.
- When the transceiver is used for long transmissions, the radiator and chassis will become hot.

Use of Communication Devices While Driving



- 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.

Protect your hearing

- 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.



Batteries Safety

• **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.

Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;



- Turn off your radio before removing or installing a battery. Store spare batteries securely. Dispose of used batteries immediately and safely.
- The battery supply terminals are not to be short-circuit
- Do not replace the battery in any area labeled "Hazardous Atmosphere". Any sparks created in a potentially explosive atmosphere can cause explosion or fire.
- Batteries should be removed from the appliance when not being used for long periods of time (one month). 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. • Do not dismantle, open or shred batteries. Batteries should be dismantled only by trained people. • Disposal of a battery into fire, or a hot oven, or mechanically crushing or cutting of a battery, that can result in explosion;
- Turn off your radio before charging
- Rechargeable batteries are only to be charged by adults or by children at least 8 years old under adult supervision.
- Do not use the charger outdoors or in moist environments, use only in dry locations/conditions.

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.

Authorized Accessories List

- 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: _____

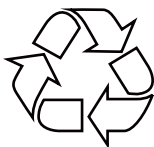
User's Name: _____ Telephone: _____

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.



CE FCC RoHS



Shenzhen Ysair Technology Co.,Ltd.

Add: Room 403, 4th Floor, Building 4, Yunli intelligent Park, No. 3 Changfa Middle Road,
Yangmei Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China

Web:www.retevis.com
E-mail:info@retevis.com
Facebook:[@retevis.fans](https://www.facebook.com/retevis.fans)



MADE IN CHINA