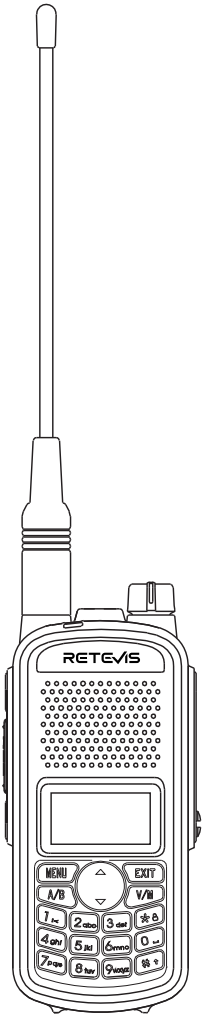
RETEVIS



A1
USER'S MANUAL

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Main Features

1. 1.33 inch screen, full keyboard front panel programming.
2. Built-in input method supports editing radio alias and channel names.
3. ID code editing alias display, quickly decode the transmitting ID.
4. Dual watch and dual standby.
5. Three power levels: High/Medium/Low.
6. GPS positioning system to obtain position information, coordinate, and distance sharing.
7. Fast frequency matching.
8. Automatic or manual keyboard lock, LCD backlight, and screen brightness adjustable.
9. Power saving, low voltage indication and alarm, and battery voltage checking function.
10. 999 memory channels, CTCSS/DCS encoding and decoding, side key customization function.
11. Channel storage and delete, channel scanning adds and delete, priority scanning channel settings.
12. Relay function settings: offset, frequency shift direction, talk around, relay activation audio settings.
13. The radio can automatically switch to receive incoming calls when listening to FM (65~108Mhz)
14. Weather alarm supports NOAA weather forecast reception in the United States.
15. VOX hands-free calls, with VOX levels 1-9 optional.
16. VFO frequency range scanning setting, three scan modes. grouping channel scanning, CTCSS/DCS scanning, and priority channel scanning.

Using Tips

Please read the brief instructions below, non-compliance with these rules may cause danger or violate the law.
Obey the local government regulations before using the radio, and improper use may violate the law and be punished.
Turn off the radio before entering flammable or explosive areas.
Do not charge or change the battery in flammable or explosive areas.
Turn off the radio before getting close to the blasting zone or detonator areas. Do not use a radio whose antenna is damaged, touching the damaged antenna will cause heat injury.
To avoid troubles caused by electromagnetic interference or electromagnetic compatibility, please turn off the radio in places that have the banner "Do not use wireless equipment", such as hospitals and other healthcare places. In a car with an airbag, do not put the radio within the scope of the airbag deployment.
Do not store the radio under direct sunshine or in hot areas.
When you transmit with the radio, keep at least 2.5cm away from its antenna. If the radio appears to smell or smoke, turn it off immediately and contact your local dealer. Do not transmit too long, as the radio may heat and hurt the user.

Unpacking and Checking Equipment

Please check if there is any damage to the package when you receive it. Carefully unpack the transceiver. When recommend that you check the items listed in the following table. If any items are missing or damaged during shipment, please contact your local dealer immediately.

Supplied Items

Radio Body	Antenna
Li-on Battery	Desktop Charger
Belt Clip	User's Manual
USB Charger Cable	

Before use, it is recommended that you first check the packaging box of this product for signs of damage and carefully open the packaging box to confirm whether there are items listed in the table below inside; If you find any loss or damage to this product and its accessories during transportation, please contact the seller or distributor immediately.

Preparation Before Use

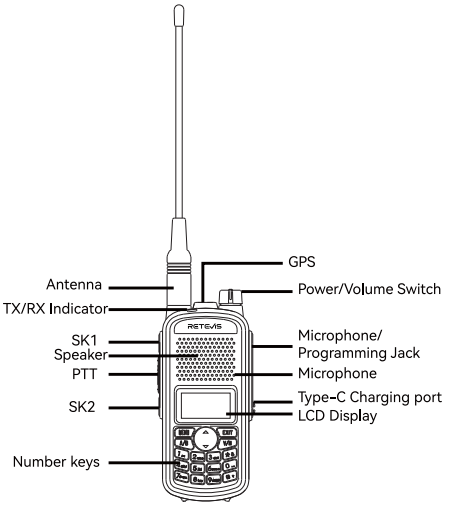
Installing Antenna
Rotate the antenna clockwise until it is tightened. To remove the antenna, rotate it counterclockwise.
△Attention: do not shake this product by holding the top of the antenna, as this will reduce the working performance and service life of the antenna of this product.
Installing Belt Clip
Install the belt clip onto the back of the radio using the screwdriver.
Installing the Battery Pack
Before installing or removing the battery, make sure to completely turn off the radio by turning the power/volume knob counterclockwise.
To Install the Battery Pack:
1. Place the back of the walkie talkie towards you and align the tail of the lithium-ion battery pack tightly with the bottom of the walkie talkie.
2. Push the battery head upwards until it is securely locked by the battery.
To Remove the Battery Pack:

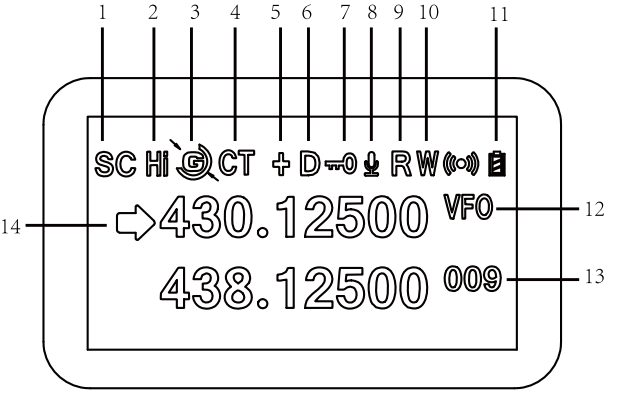
1. Turn the back of the walkie talkie towards you and press the battery lock down until the front end of the battery pops up and separates from the body.
2. Lift the battery and slide it forward until it disengages from the machine.

Battery Pack Charging

Attention: please ensure that this product is turned off when charging.
Please use the charging stand designated by our company to charge the battery, and the indicator light of the charging stand shows the charging status.
1. Insert the plug of the power adapter into the power socket;
2. Insert the other end of the power adapter into the socket on the back of the charging stand;
3. Insert the battery or the product with the battery correctly into the charging stand;
The indicator light on the charging stand displays the charging status. When the indicator light turns red, it indicates the start of charging. When the indicator light turns green, it indicates that charging is completed.
Battery level indicator will allow you to understand the remaining battery level.
Attention: when the voice broadcast indicates that the battery is low, it means that the battery has been depleted. Please charge the battery pack safely in a timely manner!

RADIO ILLUSTRATION





Icon Description					
1	Scramble	6	Dual standby	11	Battery level
2	High power	7	Keyboard lock	12	VFO mode
3	GPS	8	VOX	13	Channel mode
4	CTCSS/DCS	9	Reverse	14	Main channel
5	Frequency shift direction	10	Wide/Narrow		

KEYPAD FUNCTIONS	
A/B	Switch Band A and Band B.
V/M	Switch between VFO and Memory Channel.
Exit	Shortly press to check GPS information. Long press to enter NOAA channel, then press [▲▼] key to select a channel.
🔒	Long press to lock or unlock the radio. Shortly press to switch Reverse and Talk Around function.
#	Long press # button to active scan function.

Basic Operations

Power on radio
To turn on the radio, turn the [Power/Volume] switch knob clockwise until you hear a "click" sound and a brief prompt sound is emitted. To turn off the radio, turn [Power/Volume] switch knob counterclockwise until you hear a "click" sound. If the voice prompt function is enabled, it will be accompanied by a voice prompt indicating the current working mode (frequency mode or channel mode) when turning on the radio.
Voice prompt setting path: Press the [M] key to enter the Menu>>Settings>>Option 7: Voice prompt Switch.
Adjusting the Volume
Turn the [Power/Volume] switch knob clockwise to increase the voice volume, and turn it counterclockwise to decrease the voice volume.
Switching Main Band and Sub-band
In standby mode, shortly press the [ ] button to switch Band A and Band B.
Note: [→]means it stays in the main band, and the other band is the sub-band.
Switching Channel and Frequency Mode
- In standby mode, shortly press the [ ] button to switch between channel mode and frequency mode.
- In channel mode, the channel number will be displayed on the right side.
- In frequency mode, VFO will be displayed on the right side.

Frequency Input
In VFO mode, there are two ways to input frequency:
1: Manually input the precise frequency through the number keys.
2: Press the [▲/▼] key to select the frequency according to the preset step frequency.
Frequency step setting: In standby mode, press the [ ] key to enter the Menu>>Settings>>2. Step >>Set Step Frequency.
Channel Selection
In channel mode, select the channel by:
1: Press the [▲/▼] key directly to select the channel. Long press and hold the [▲/▼] key to quickly switch channels.
2: Manually enter the channel number to directly access the channel.
Transmit/Receive Calls
To ensure optimal reception volume, please maintain a distance of 2.5-5cm between the microphone and the mouth during transmission.
- Transmit a call without signaling: Non signaling call refers to a call initiated on a normal channel, targeting all users on that channel. After selecting the channel, press and hold PTT, the indicator light is red when transmitting.
- Transmit a call with signaling: A signaling call refers to a call made to a target contact on a signaling channel. The signaling type is DTMF signaling, which implements calls through encoding and decoding. (To be pre-set in the CPS). On channels suitable for DTMF calls, press and hold the [PTT] button to initiate a signaling call. When the receiving terminal receives the matching signaling, it can decode without performing any operations.
- Receive a call: after releasing the [PTT] button, the radio is in standing by mode. The indicator is green when receiving a call.

Power Level Switching
In standby mode, shortly press [#] button to switch high, middle, and low power. It will display Hi, Mi or Lo on top of the screen.
Reverse Function Setting
When using the frequency reversal function, the transmit and receive frequency will be interchanged, and the transmit or receive CTCSS/DCS will also be interchanged.
In standby mode, shortly press the [*] key to reverse the transmit and receive frequency, and 'R' will be displayed at the top of the screen. Shortly press the [*] key twice will go back to the main screen.
Talk Around Function Setting
When using the Talk Around function, the transmit frequency and CTCSS/DCS signaling will be converted to be the same with the receive frequency and CTCSS/DCS signaling.
In standby mode, shortly press the [*] key twice, and 'T' will be displayed at the top of the screen. shortly press the [*] key once again back to the main screen.
Keyboard lock
Long press the [*] key to lock and unlock the keyboard. When the keyboard is locked, the [ ] icon will display on the top of the screen.

Menu Settings

NO.	Menu	Available Value	Description
1	Squelch	Off, …, 9	SQL level setting.
2	Frequency Step	2.5KHz, 5.0KHz, 6.25KHz, 10KHz, 12.5KHz, 20KHz, 25KHz, 50Khz; In frequency mode, adjust the working frequency according to the choosing frequency step.	
3	VOX	Off, Level 1....9	VOX level setting; The lower the level, the higher the sensitivity.
4	VOX Delay	Off, 0.5---2.0 (S)	Enable VOX delay time;
5	TOT	Off, 15-600S;	Transmitter Timer-out timer
6	Beep	ON/OFF	Keyboard beep setting
7	Voice	ON/OFF	Voice broadcast setting
8	Roger	OFF/TONE/MDC1200	Transmission end tone
9	Power Save	OFF, 1:1, 1:2, 1:3, 1:4;	

10	Key Auto Lock	ON/OFF Turn on Auto Lock will lock the keyboard automatically; If you choose off, you need to manually lock the keyboard. Default time 10s.	
11	PTT Lock	ON/OFF You can choose Lock PTT when there is no transmission for a long time.	
12	Dual Standby	ON/OFF Turn on dual standby means Band A and B waiting for receiving, turn off means Band A or B waiting for receiving.	
13	Brightness	Brightness level 1-5 The larger the value, the higher the brightness.	
14	Light Time	Bright, 01-60S Screen bright time setting	
15	Menu Exit Time	OFF, 01-30S; Exit menu time setting	
16	MDF-A	Channel display mode: Frequency, CH, CH+Frequency, Name;	
17	MDF-B	Channel display mode: Frequency, CH, CH+Frequency, Name;	
18	DTMF-ST	OFF: when transmitting with DTMF, will not send the DTMF side tone. DT-ST: DT-ST is DTMF side tone, a prompt tone will sound when DTMF transmitting. ANI-ST: when transmitting ANI ID, whether a prompt tone will sound. DT+ANI: when transmitting, it will sound the DTMF Side tone and PTT ID.	
19	ID Edit	Edit the PTT ID;	ID character limit is 6 digits
20	ID Delay	100ms, ..., 1000ms;	PTT ID transmit delay time setting
21	Language	Chinese/English	Language choosing
22	Alarm Mode	Site: Local Alarm; Tone: Remote + local alarm; Code: DTMF code + remote alarm;	
23	Tail	ON/OFF If turned on, it will receive a Tail tone when finishing the transmit, if turned off, the tone will be eliminated.	
24	Tone Burst	1000Hz,1450Hz, 1750Hz, 2100Hz;	
25	RP-Tail Revert	Choose the repeater tail elimination time.	
26	RP-Tail Delay	Choose the repeater tail elimination delay time.	
27	FM Interrupt	ON/OFF Choose if you receive radio signaling when listening to FM Radio.	
28	SK1 Short Option	Off, Monitor, Quick Search, Scan, Volt, Alarm, Scramble, Radio, Compand, SUB PTT; Default is Scan function.	
29	SK1 Long Option	Off, Monitor, Quick Search, Scan, Volt, Alarm, Scramble, Radio, Compand, SUB PTT; Default is FM Radio.	
30	SK2 Short Option	Off, Monitor, Quick Search, Scan, Volt, Alarm, Scramble, Radio, Compand, SUB PTT; Default is SUB PTT;	
31	SK2 Long Option	Off, Monitor, Quick Search, Scan, Volt, Alarm, Scramble, Radio, Compand, SUB PTT; Default is Monitor;	
32	Power on Display	Preset Logo; Preset Message; Voltage; Upload the preset logo and message in the CPS;	
33	Identity Code	ON/OFF	
34	Radio Identity	1-80 identity code	Set the identity code via CPS.
35	Factory Reset	VFO/ALL If choose VFO, only reset the VFO channel settings. If choose All, it will reset all the settings to factory default setting.	

Program Setting

In [Program] menu, you can set the current MR channel or VFO channel detailed settings.
1.CH-Name
Named current channel name. Shortly press [#] to switch ABC, abc, 123. Press [EXIT] button to delete the character.
Note: there is no Ch-name menu if the current channel is VFO channel.
2.RX Frequency
Edit the receive frequency via keyboard.
3.TX Frequency
Edit the transmit frequency via keyboard.
4.RX CTC/DCS
Separate set RX CTCSS/DCS N/DCS I for the current channel.
5.TX CTC/DCS
Separate set RX CTCSS/DCS N/DCS I for the current channel.
6.Bandwidth
Choose the bandwidth Narrow, Middle, or Wide for the current channel.
7.TX Power
Choose Low, Middle, High-power level for the current channel.
8.Busy Lock
Busy Channel Lockout prevents you from breaking in on a channel already in use. When BCL is activated, the radio will not transmit.
9.DTMF System
Set the DTFM encode system via CPS, and choose one of the DTMF systems for the destination channel.
10.PTT-ID
Choose the ID encoding method. If you choose Off, there is no ID encoding when transmitting. If you choose BOT, radio will transmit the preset encode PTT ID in the begin of the transmission. If you choose EOT, radio will transmit the preset encode PTT ID at the end of the transmission. If you choose BOTH, radio will transmit the preset encode PTT ID in the beginning and at the end of the transmission.
11.Compander
Turn on Compander function will reduce the static hiss between words when receiving on current channel.
12.Scan Add
Turn on the function will add the current channel to the scan list.
13.Scramble
Choose the scramble list for the current channel.
14.Offset
Edit the repeater channel frequency and difference frequency. Frequency difference range 0-99.99MHz.
15.Direction
When the transmitting frequency is higher than the receiving frequency, it is a positive difference direction (Plus); when the transmission frequency is lower than the reception frequency, it is a negative difference direction (Minus).
16.CH-memory
In channel mode, the current channel can be copied and saved as a new channel. Press the [▲▼] button to choose save on that channel, if display CH-001 means it is a memory channel already, if save at this channel, it will cover the previous channel and save it as a new channel.
For example, if display 002, means it is an empty channel waiting to save for a new channel.
17.CH-Delete
In delete channel list, if choose CH-001 means will delete the channel 01.
18.Special DCS (Only effective when the channel sets a CTCSS/DCS)
This is a special mute code; two radios will communicate without other interference when turn on Special DCS function at the same time and keep the same CTCSS/DCS.
19.Radio Alias
Set your unique Call Sign here. Turn on the [Identity Code] in setting menu 32 and choose Alias in the setting menu 33 [Radio Identity]. If the radio transmits the Alias data, it will display the call sign when receiving.

Scan Settings

Under channel mode, long press [#] button or enable the customized side key scan function, it will scan the channels which are added in the scan channel.
When receive a scanning signal, it will stop at this channel until the signal disappears, and continue scan after 5 seconds.
In frequency mode, long press [#] to scan according to the scan frequency range and frequency step.
1.Scan CTCSS
When entering this menu, it will begin to scan the CTCSS until it gets an effective signal.
2.Scan DCS
When entering this menu, it will begin to scan the DCS until it gets an effective signal.
3.Scan Mode
Three scan modes: Time, Carrier, Search.
Time (TO). radio will suspend the scan for 5 seconds whenever a signal is detected, and then will continue to scan even if the signal is still present.
Carrier (CO). radio will stop scanning whenever a signal is detected, and will resume to scan once the signal will disappear.
Search (SO). scan will be stopped and exit the Scan mode once detected a signal.
4.Scan DET QT
If turn on this mean, need to detect CTCSS/DCS tone conditions during scanning.
5.Hang Time
Stay time on scanning activity: 0.5-10.0 (S), in steps of 0.5S, default: 2.0 (s).
6.VFO Scan Range
In frequency mode, you can set the VFO scan beginning and ending frequency range.
Use the numeric keypad to input 1-4-4-1-4-6 in sequence, and then press the MENU key to confirm saving and return. It means the scanning frequency range is from 144 to 146Mhz. Similarly, you can edit the scanning range of the UHF as described above.
7.Scan Priority Channel
Choose one channel as a priority scan channel, and it will be priority scanned.

8.Scan Group A
Users can set the scan group channels via CPS as shown below: every scan group support set 100 channels, for example, scan A group from channel 1 to 99.
You can choose the scan group on the radio.
9.Scan Group B
Same operation as above.

Radio Info

Here will display the ANI ID and current firmware version.

GNSS

Turn on the GPS function, you can share the GPS location and rang with your team members.
After turning on the GPS, it will get this radio GPS info with the information below: Latitude, Longitude, Speed, Altitude, Number of satellites, Time, Date. Also, you can choose the time zone.

Obtain the other party's coordinate information and distance

① When standing by, shortly press [Exit] button to get your own GPS information.
② Press [▲▼] button to choose the selective call group GPS information.
③ When transmitting, if it successfully matches the other radio's ID, the screen will show the coordinates and ranging information of the other radio after a few seconds: longitude, latitude, distance, speed, orientation, and time. As shown in the picture:

Note: the selective calling codes of both parties must be preset by the programming software. The selective calling codes consist of 1-6 digits, with a total of 20 groups.
When obtaining the coordinate information of the other party, the other party's identity ID must be consistent with the selective calling code.

Feature Functions Operation

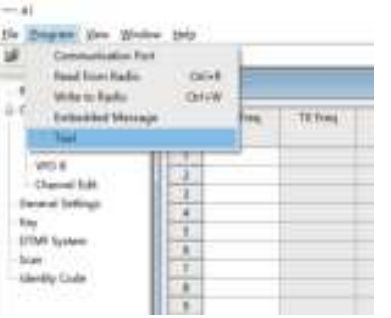
1. Fast Pair One Channel
When standing by, long press [ ] button enter the fast pair menu, press [▲▼] to choose UHF or VHF seeking, when getting a signal, it will display the frequency on the screen, if it has a CTCSS/DCS tone, it will also display on the screen.
Or set a side key to "Quick Search" function, operation as above explanation.
2. Aviation Band Receiving
Reception (limited transmission) and scanning can be performed on the aviation frequency band (AM) 108-136MHz.
3. Weather Alarm function
Weather forecast.
Turn on the weather forecast and then go back to the main screen.
a)Press and hold the [Exit] button for 2 seconds to activate the weather forecast mode. The main interface displays the default weather forecast channel in white font: WX-01.
b)Use the [▲▼] keys to select the desired weather channel for reception (10 channels: WX-01~WX-10) .
c)Press and hold the [#] button for 2 seconds to activate weather channel scanning.
d)Press the PTT key or the [Exit] key to end and return to the regular channel on the standby main interface.
Weather Alarm.
Turn on the weather alarm and then go back to the main screen.
a)Press and hold the [Exit] button for 2 seconds to activate the weather alarm mode. The WX-01 channel will be displayed on the sub band in white font.
b)In standby mode, the main band will receive the normal radio signal, and sub band will be waiting for the forecast alarm.
c)After receiving an alarm signal command, the radio starts entering alarm mode: the indicator light lights up, an alarm sounds, and receives weather forecasts.
d)Press the PTT key or the [Exit] key to end and return to the regular channel on the standby main interface.

Specifications

General	Frequency Range		Receive frequency: 136-520MHz
	Channel Numbers		999
	Channel Space		25 kHz /12.5kHz/20 kHz
	Input Voltage		7.4 VDC±10%
	Battery Capacity		2200mAh
	Current	Standby	≤85mA
		Receiving	≤350mA
		Transmit	≤1.8A @high power, 650 mA @ low power;
	Frequency Stability		±2.5ppm
	Operation Temperature		-10℃ to +40℃
	Antenna Impedance		50Ω
Transmit	Transmit Frequency		UHF: USA 144-148/EU 144-146Mhz, VHF:USA 420-450Mhz/EU 430-440Mhz;
	RF TX Power		High/Middle/Low
	Modulation Mode		16K0F3E@25KHz, 11K0F3E@12.5KHz
	Spurious Emission		-36dBm < 1GHz, -30dBm > 1GHz
	Signal Noise Ratio		45dB@25KHz, 40dB @12.5KHz
	Audio Distortion		≤5%
	Modulation Limited		±5.0 KHz@25 KHz, ±2.5 KHz@12.5 KHz
	Adjacent Channel Power		70dB @ 25KHz, 60dB @ 12.5KHz
	Audio Response (300-3000Hz)		+1~3dB
Receive	Receive Frequency		Full band receive: 136-520Mhz; AM:108-136MHz (only receiving) FM:65-108 MHz
	Receiver Sensitivity		0.25μV (12dB SINAD)
	Adjacent Channel Selectivity		≥60dB@25KHz, ≥55dB@12.5KHz
	Intermodulation Rejection		≥60dB@25KHz, ≥55dB@12.5KHz
	Conducted Spurious Emission		≤-57dB@25KHz, ≤-57dB @12.5KHz
	FM Signal Noise Ratio		≥45dB@25KHz, ≥40dB @12.5KHz
	Audio Output Power		1W @16ohms
	Audio Distortion		≤5%
	Audio Response (300-3000Hz)		+1 ~ -3dB

Firmware upgrade steps

The firmware can fix bugs found when used, and new features can be added.
Steps to upgrade this radio:
1)Get the CPS from your seller or distributor.
2)Install the CPS on your computer.
3)Open the CPS, and find the “Tool”
4)Upload the firmware file as below:



5)Get the radio to enter DFU mode: Press PTT and SK2 together and then power on the radio. Then the indicator will turn green.

6)Then Click Upgrade will begin the upgrade operation. The upgrade will be finished within several seconds.

WARNING

CAUTION
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 safety standards 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
Governments keep the radios in classification. Two-way radios are only operated on authorized radio frequencies that are regulated by the local radio management departments (such as FCC, ISED, OFCOM, ANFR, BFTK, Bundesnetzagentur, and so on.). The detailed classification and the use of your two-way radios, please contact the local government radio management departments. Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

FCC
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, and (2) this device must accept any interference including received 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/
Keeping the radio at a proper distance is important as RF exposure decreases with increasing distance from the proper antenna. A proper antenna is an antenna supplied with this radio by the manufacturer or specifically authorized by the local authority for use with this radio. This radio can only be operated by use of an antenna of a type and maximum (or lesser) gain approved for the transmitter under regulations and rules. This transmitter must operate with the antenna(s) documented and in Push-to-Talk and body-worn configurations as documented. Using authorized accessories is important because the use of Non-Retevis accessories may result in exposure levels, which exceed the IEEE/ICNIRP RF exposure limits.
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.

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.
• A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

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.
• If a radio or a battery has been submerged in water, please dry and clean it before use. Do not dry the radio or battery with an appliance or heat source, such as a hair dryer or microwave oven. If the radio has been submersed in a corrosive substance (e.g. saltwater), rinse the radio and battery in fresh water, then dry them.

• 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 ℃and +25℃and never exceed +30℃. 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;
A battery subjected to extremely low air pressure may 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.

• When the conductive material such as jewelry, keys or chains touches exposed terminals of the batteries, may complete an electrical circuit (short circuit the battery) and become hot to cause bodily injury such as burns. Exercise care in handling any battery, particularly when placing it inside a pocket, purse or other container with metal objects;
• Dirty battery contacts need to be wiped with clean dry cloth, both on the battery and in the appliance.
• Batteries should be removed from the appliance when not being used for long periods of time (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.
• 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.
• Batteries shall be charged at 10℃~40℃ environment temperature specified. If the environment temperature is lower than 0℃, the charge shall be prohibited.
• Rechargeable batteries need to be charged with a dedicated charger provided for each piece of equipment before you first use them.
• Pull by the plug rather than the cord when disconnecting the charger.
• Unplug the charger from the AC outlet before attempting any maintenance or cleaning.
• Do not use the charger outdoors or in moist environments, use only in dry locations/conditions.
• Do not disassemble the charger, which may result in a risk of electrical shock or fire. A charger should be dismantled only by trained people.
• Do not operate the charger if it has been broken or damaged in any way.

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

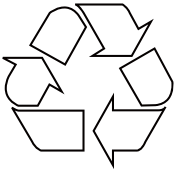
Guarantee

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. Further details, pls read http://www.retevis.com/after-sale/
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.



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