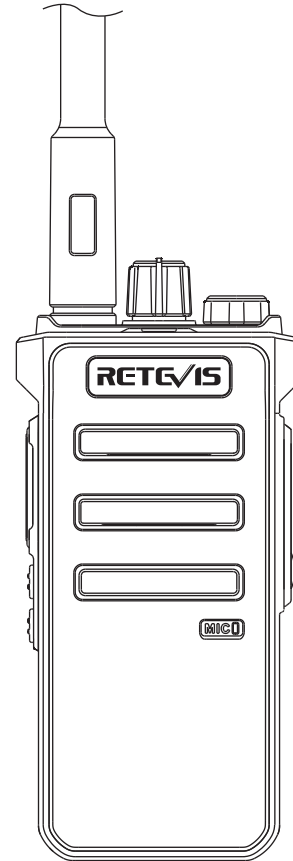
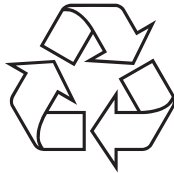


# RETEVIS



## Shenzhen Ysair Technology Co.,LTD

Add: 6/F, building 6, Yunli intelligent park, No. 3, Changfa Middle Road,  
Yangmei community, Bantian street, Longgang District, Shenzhen, China  
Web: [www.retevis.com](http://www.retevis.com)  
E-mail: [kam@retevis.com](mailto:kam@retevis.com)  
Facebook: [facebook.com/retevis](https://www.facebook.com/retevis)



MADE IN CHINA

## RB25 Two Way Radio User's Manual

EN DE FR IT ES RU

# Contents

## **EN** (P01 to P10)

Specification .....	01
Main features .....	01
Unpacking and product inspection .....	01
Main accessories .....	01
Charging mode .....	01
Battery usage information .....	02
Install/remove accessories .....	02
Acquainted the radio .....	03
Basic operation .....	04
Function introduction .....	05
Encryption function .....	05
Set up .....	05
Troubleshooting Guide .....	06
Warning .....	07

## **DE** (P11 to P22)

## **FR** (P23 to P33)

## **IT** (P34 to P44)

## **ES** (P45 to P55)

## **RU** (P56 to P67)

General Specification	
Frequency range	UHF: 400-480MHz
Channel Capacity	32 channels
Wide/narrow band	Wide,25KHZ Narrow,12.5KHZ
Antenna impedance	50Ω
Operating temperature	-20°C ~ +60°C
Working voltage	DC 7.4V
Battery capacity	2500mAh(Li-ion)
Output Power	4W
Transmitter	
Modulation mode	≤ -45dB
Clutter and harmonics(dB)	-65dB
Free slot	≤ -57dB
Audio distortion	≤ 5%
Modulation SER	≤ 3%
Receiver	
Sensitivity	≤ -123dBm@25K
Adjacent Channel Selectivity	≤ -65dB
Intermodulation	≤ -55dB
Blocking	≤ -84dB
Spurious Response Rejection	≤ -70dB
S/N	45dB
Audio Output	≥ 500mw
Audio distortion	≤ 5%

## Main features

High/Low output power  
32 channels  
TOT

English/Chinese announce  
VOX function  
Scrambler

Monitor  
Editable side key  
Wide/Narrow band

## Unpacking and product inspection

**Welcome to use our company's radio. Before use, it is recommended that you:**

- Please check the product packaging box for signs of damage;
- Please open the packing box carefully and confirm whether there are any items listed in the table below. If you find any loss or damage to the product and its accessories during transportation, please contact your dealer immediately.

## Main accessories

Items	Number	Items	Number
Radio	1	Belt clip	1
Antenna	1	Hand Strap	1
Battery	1	warranty card	1
Charging Base	1	User Manual	1

## Charging mode:

Insert the walkie-talkie into the charging base. At this time, the charger lights up in red to indicate the start of charging, and in green to indicate that the battery is fully charged.

## Battery usage information

The battery is not fully charged before leave the factory, please charge it before use.

When the battery is charged for the first time after purchase or long-term storage (more than two months), it cannot reach its normal use capacity. The battery needs to be charged/discharged repeatedly two or three times before the battery capacity can reach the normal state.



When the battery is fully charged, please do not recharge it. Please remove it from the battery charger, otherwise the battery life will be shortened or damaged due to overcharging.

Note:

- The ambient temperature during charging should be between 5°C and 40°C. If you charge outside this temperature, the battery cannot be fully charged. Therefore, in colder weather, please prepare spare batteries. Please do not discard batteries that cannot be used at this time. They may still be used at room temperature.
- When the battery contacts are covered with dust or stains, it may affect the normal use or charging of the battery. Please wipe it clean before charging.
- Before charging, please turn off the power of the walkie-talkie with the battery, otherwise it will affect the normal charging of the battery.
- When the battery or walkie-talkie is wet, please do not charge it, dry it before charging electricity.
- When the battery capacity cannot be restored to the normal capacity after charging the battery correctly, it means that the battery life is over, please replace the battery.

### Applicable battery type

Please use the battery specified by our company for charging. Using other batteries may explode and cause personal injury.

### Safety Precautions

- Do not dispose of the battery in fire.
- Do not disassemble the outer casing of the battery pack without authorization.

### Battery storage

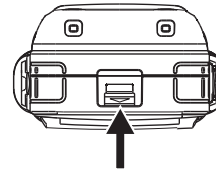
1. The battery will self-discharge, so when the battery is not used for a long time, please fully charge it and store it to avoid damage due to excessive self-discharge.
2. The battery should be charged after being stored for a period of time to avoid reducing the battery capacity due to excessive self-discharge of the battery. It is recommended to charge the battery after 6 months of storage.
3. Please pay attention to the temperature and humidity of the battery storage environment. Please store the battery in a cool, dry condition at room temperature to reduce battery self-discharge.

## Install/remove accessories

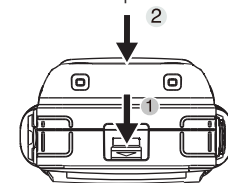
### Install/remove battery pack

Note:

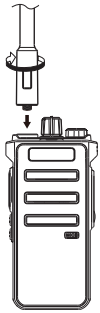
- Do not short-circuit the battery terminals and do not throw the battery into fire.
- Do not try to remove the outer casing of the battery pack.
- Do not install the battery pack in a hazardous environment, sparks will cause an explosion.



If you want to install the battery pack, push the battery up along the walkie-talkie aluminum shell, and then you will hear a "click" sound. The battery assembly is complete.

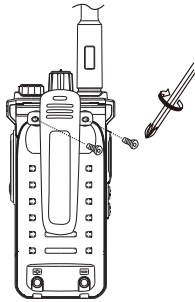


To remove the battery pack, please make sure that the radio is turned off, then press and hold. Push the "Zhuo" button down while holding down the battery, and then release the button after pushing it down.



#### Install the antenna

Hold the antenna base, and screw the antenna clockwise into the port on the top of the walkie-talkie until it is tight.



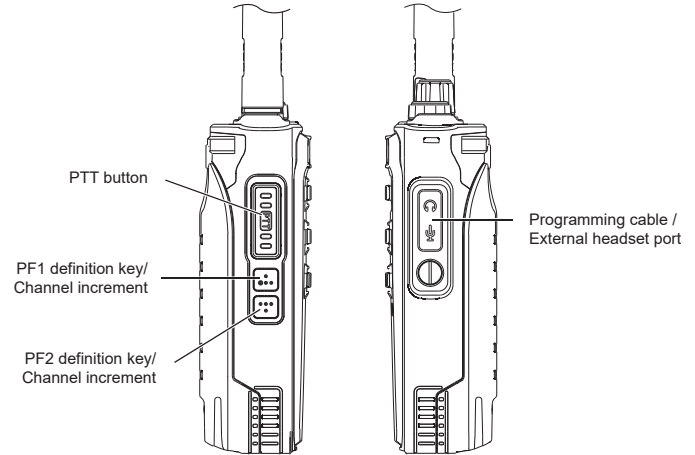
#### Install/remove belt clip

If necessary, you can lock the supplied belt clip into the screw hole on the back of the battery pack for easy carrying. To remove the belt clip, just unscrew the two screws.



#### Install the walkie-talkie sling

Put the walkie-talkie strap on the ring in the middle of the walkie-talkie



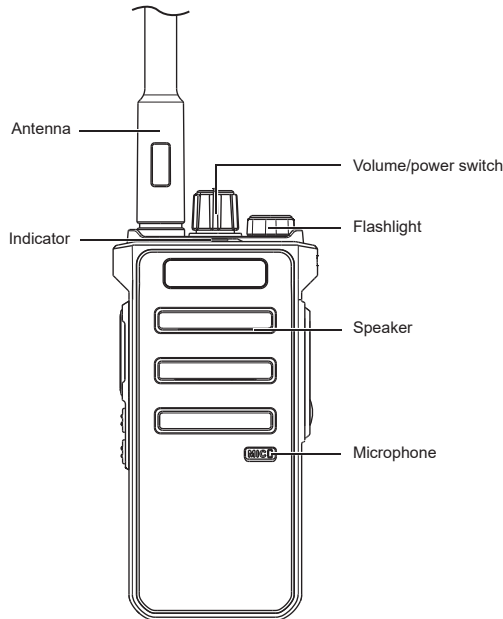
PTT button

PF1 definition key/  
Channel increment

PF2 definition key/  
Channel increment

Programming cable /  
External headset port

### Acquainted the radio



Antenna

Volume/power switch

Indicator

Flashlight

Speaker

Microphone

Note: The side button 1/side button 2 can be programmed with software to define the long press or short press function, with the following Several functions can be defined:

Side keys: 1. None 2. Monitor 3. Instant monitor 4. High and low power 5. Scan  
6. Flashlight 7. Channel plus 8. Channel minus

### Basic operation

#### Power on/off

Turn the power switch/volume adjuster clockwise, Until you hear a "click" sound. Make a sound a short tone indicates that the boot test is successful.

Note:

If your walkie-talkie does not turn on, please check the battery. Make sure the battery is charged and installed correctly. If your walkie-talkie does not turn on, please contact your agent.

To turn off the radio, turn the power switch/volume adjuster counterclockwise until you hear a "click" sound.

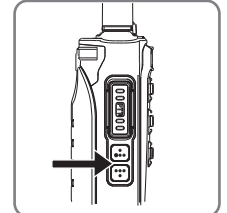
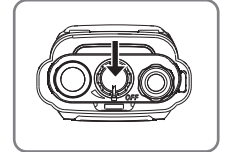
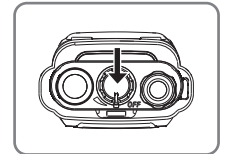
#### Adjust volume

When the two-way radio is turned on, turn the power switch/volume adjuster to adjust the volume. Rotate clockwise to increase the volume; rotate counterclockwise to decrease the volume. You can press the button programmed to monitor the current volume level.

Note: The monitor button is set to the programming 1 or 2 button according to the software programming.

#### Adjust channel

Select the channel to be used by the channel side key, this walkie-talkie has a total of 32 channels

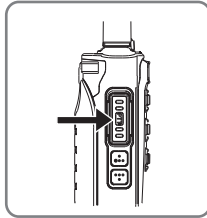


## Transmit

To make a call, hold down the [PTT] key and speak into the microphone in a normal tone. Please keep the microphone 3-4cm away from your lips.

## Receive

Release the [PTT] key to receive, please adjust the appropriate volume to get the best listening effect.



## Function introduction

### LED indicator

The LED indicator shows the working status of the walkie-talkie. The pair of walkie-talkie is emitting a signal when the light is red. With a green light, the two-way radio is turning on or receiving unencrypted calls or data, or is detecting air activity.

### Talk (PTT) button

Each channel in the walkie-talkie can be configured as a digital channel.

- When a call is in progress, the PTT button allows the walkie-talkie to transmit signals to other walkie-talkie in the call. Press and hold the PTT button to make a call. Release the PTT button to answer. When the PTT button is pressed, the microphone is activated.

### Receive and reply

To receive calls from users

- The LED indicator lights up green.
- Hold the walkie-talkie in a vertical position and keep a distance of 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- Press the PTT button to answer the call. The LED indicator lights up red.
- Release the PTT button to answer.

### Initiate a group call

To initiate a call to a user group, the walkie-talkie must be configured to belong to the talk group.

- The L side key switches channels, and the active talk group ID is used to select the channel.
- Hold the walkie-talkie in a vertical position and keep a distance of 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
  - Press the PTT button to initiate a call, the LED indicator lights up in red.
  - Release the PTT button to answer. When the target radio responds, the LED indicator lights up green.

### Initiate a single call

- Side key to switch channels, use the active user ID to select the channel.
- Hold the walkie-talkie in a vertical position and keep a distance of 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
- Press the PTT button to initiate a call, the LED indicator lights up in red.
- Release the PTT button to answer. When the target radio responds, the LED indicator lights up green.

### Initiate an all call

This function allows you to transmit signals to all users on the channel. The radio must be programmed to allow you to use this feature.

- The side key switches the channel, and the active all-call group ID is used to select the channel.
- Hold the walkie-talkie in a vertical position and keep it 1 to 2 inches (2.5 to 5.0 cm) from your mouth
- Press the PTT button to initiate a call, the LED indicator lights up red

## Encryption function

### Encryption setting (this function is only valid in digital mode)

Set by programming software, enable/disable encryption function by programming.

## Set up

### Set the squelch level

You can adjust the squelch level of the walkie-talkie to filter useless calls with low signal strength or channels with higher background noise than normal.

Setting: 1-10 level, the larger the setting level, the deeper the squelch, and the deep squelch filter (useless) call or

background noise. However, calls from remote locations may also be filtered out.

### Set power level

You can set the radio power level of each channel to high or low.

Setting: high power to achieve communication with walkie-talkie that are relatively far away. The low power realizes the communication with the nearby walkie-talkie.

Press the preprogramme "High/Low Power Selection" button.

## Troubleshooting Guide

Questions	Answers
No power	<ul style="list-style-type: none"> <li>The battery may be exhausted. Please update the battery or recharge it.</li> <li>The battery may not be installed correctly. Please remove the battery and install it again.</li> </ul>
The battery power will not last long after being charged.	<ul style="list-style-type: none"> <li>The battery life has expired. Please update the battery.</li> </ul>
Cannot talk to other members of the group	<ul style="list-style-type: none"> <li>Confirm that the frequency and CTCSS/DCS settings you are using are the same as the other members of the group.</li> <li>It may be too far away. Confirm whether you are within the effective range of other walkie-talkie.</li> </ul>
Other (non-member) sounds appear in the channel.	Please change the settings of all walkie-talkie in the unit CTCSS/DCS settings

CH	Freq.(MHz)	Standard	Power	CTCSS/DCS	CH	Freq.(MHz)	Standard	Power	CTCSS/DCS
1	410.3250	Digital	High	/	17	410.3250	Digital	High	/
2	415.3250	Digital	High	/	18	415.3250	Digital	High	/
3	400.0250	Digital	High	/	19	400.0250	Digital	High	/
4	440.4250	Simulation	High	/	20	440.4250	Simulation	High	/
5	469.9750	Simulation	High	/	21	469.9750	Simulation	High	/
6	400.1250	Simulation	High	67.0	22	400.1250	Simulation	High	67.0
7	469.1250	Simulation	High	D023N	23	469.1250	Simulation	High	D023N
8	400.0250	Digital	High	/	24	400.0250	Digital	High	/
9	440.4250	Digital	High	/	25	440.4250	Digital	High	/
10	469.9750	Digital	High	/	26	469.9750	Digital	High	/
11	425.3250	Digital	High	/	27	425.3250	Digital	High	/
12	435.2250	Digital	High	/	28	435.2250	Digital	High	/
13	440.5250	Digital	High	/	29	440.5250	Digital	High	/
14	445.6250	Digital	High	/	30	445.6250	Digital	High	/
15	450.0525	Digital	High	/	31	450.0525	Digital	High	/
16	455.6250	Digital	High	/	32	455.6250	Digital	High	/

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



ATTENTION!

Before using this radio, read this guide which contains important operating instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulations.

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.

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

Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits: <http://www.who.int/en/>

### Local Government Regulations

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

### Radio License

Governments keep the radios in classification, business two-way radios operate on radio frequencies that are regulated by the local radio management departments (FCC, ISED, OFCOM, ANFR, BFTK, Bundesnetzagentur...). To transmit on these frequencies, you are required to have a license issued by them. The detailed classification and the use of your two 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.

### 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.

### FCC Requirements:

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

NOTE:

• (If applicable) This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

• (If applicable) This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. 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.

### CE Requirements:

• (Simple EU declaration of conformity) Shenzhen Retevis Technology Co., Ltd. declares that the radio equipment type is in compliance with the essential requirements and other relevant provisions of RED Directive 2014/53/EU and the ROHS Directive 2011/65/EU and the WEEE Directive 2012/19/EU; the full text of the EU declaration of conformity is available at the following internet address: [www.retevis.com](http://www.retevis.com).

• Restriction Information

This product can be used in EU countries and regions, including: Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and United Kingdom (UK).

For the warning information of the frequency restriction, please refer to the package or manual section.

• Disposal

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) 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 in your area.



### IC Requirements:

Licence-exempt radio apparatus

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage;
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### RF Exposure Information(if applicable)

- DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio, and the antenna gain shall not exceed the specified gain by the manufacturer declared.
- DO NOT transmit for more than 50% of total radio use time, more than 50% of the time can cause RF exposure compliance requirements to be exceeded.
- 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.
- DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.
- Portable Device, this transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. RF exposure compliance is limited to the specific belt-clip and accessory configurations as documented in this filing and the separation distance between user and the device or its antenna shall be at least 2.5 cm.

- Mobile Device, during operation, the separation distance between user and the antenna subjects to actual regulations, this separation distance will ensure that there is sufficient distance from a properly installed externally-mounted antenna to satisfy the RF exposure requirements.
- Occupational/Controlled Radio, this radio is designed for and classified as "Occupational/Controlled Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards; NOT intended for use in a General population/uncontrolled environment.
- General population/uncontrolled Radio, this radio is designed for and classified as "General population/uncontrolled Use".

## RF Exposure Compliance and Control Guidelines and Operating Instructions

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

### Guidelines:

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

### Operating Instructions (if applicable):

- Transmit no more than the rated duty factor of 50% of the time. To Transmit (Talk), push the Push to Talk (PTT) button. To receive calls (listen), release the PTT button. Transmitting 50% of the time, or less, is important because the radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance.
- Transmit only when people outside the vehicle are at least the recommended minimum lateral distance away from a properly installed according to installation instructions, externally mounted antenna.
- When operating in front of the face, worn on the body, always place the radio in a Retevis approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of Non-Retevis approved accessories may result in exposure levels, which exceed the IEEE/ICNIRP RF exposure limits.

### Hand-held Mode(if applicable)

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



### Phone Mode(if applicable)

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

### Electromagnetic Interference/Compatibility

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

### Avoid Choking Hazard



Small Parts. Not for children under 3 years.

### Turn off your radio power in the following conditions:



WARNING

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

To avoid electromagnetic interference and/or compatibility conflicts

- 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.

### Protect your hearing:



WARNING

- Use the lowest volume necessary to do your job.
- Turn up the volume only if you are in noisy surroundings.
- Turn down the volume before adding headset or earpiece.
- 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 careful with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss



Note: 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.

### Avoid Burns



WARNING

#### Antennas

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

#### Batteries (If appropriate)

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

#### Long transmission

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

### Safety Operation



WARNING

#### Forbid

- Do not use charger outdoors or in moist environments, use only in dry locations/conditions.
- Do not disassemble the charger, that may result in risk of electrical shock or fire.
- Do not operate the charger if it has been broken or damaged in any way.
- Do not place a portable radio in the area over an air bag or in the air bag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the air bag inflates.

#### To reduce risk

- Pull by the plug rather than the cord when disconnecting the charger.
- Unplug the charger from the AC outlet before attempting any maintenance or cleaning.
- Contact Retevis for assistance regarding repairs and service.
- The adapter shall be installed near the equipment and shall be easily accessible

### Approved Accessories



WARNING

- This radio meets the RF exposure guidelines when used with the Retevis accessories supplied or designated for the product. Use of other accessories may not ensure compliance with the RF exposure guidelines and may violate regulations.
- For a list of Retevis-approved accessories for your radio model, visit the following website: <http://www.Retevis.com>