# User Manual

# Installation the battery

- 1. Make sure your radio is turned OFF.
- 2. Remove the battery compartment door.
- 3. Install the 3 NiMH rechargeable battery or 3 AAA Alkaline batteries into the battery compartment.
- 4. Replace the battery compartment door.

# Basic radio operations

- 1. Press  $\odot$  to turn on.
- 2. Press **MENU** to enter the channel settings, the channel display pattern starts flashing,with 

  ▲/▼ to select. Press PTT to confirm and exit.
- 3. Press **MENU** twice to enter the setting. OFF for no code, 01~38 for CTCSS code,39-99 for DCS code
- 4. Press **MENU** for 3 times to enter the Vox function selection. there are OFF,1,2.3 these 3 gear sensitivity optional.
- 5. Press MENU for 4 times to enter the CALL tone selection function. They are 01 to 10 sounds available.
- 6. Press **MENU** for 5 times to enter the key tone selection function, select the button when the ON button will beep a tone, select the OFF button when there is no tone.
- 7. Press **MENU** for 6 times to enter the launch end of the tone selection function, with to select. select ON to release the **PTT** will have a tone, the opposite choice of OFF there is no tone.
- 8. Press MENU for 7 times and exit can also press PTT to confirm the exit menu.

#### Note:

It doesn't has charging function, it can't be charged directly through charger base and so on , it only can be charged by a NiMH vrechargeable battery.

When installing the battery, please pay attention to the corresponding positive and negative placement!

### Voice Operated Transmission (Vox)

Transmisson is initiated by speaking into the microphone of the radio instead of the pushing the PTT button

**Note**: Note Level "N"(OFF)disables VOX Levels 1-3 set thesensitivity of the VOX circuit Use level 1 in quiet environments, and use level 3 in very noisy environments. You can find the appropriate sensitivity level by speaking into the microphone.

### Scanning Channels

Eatures your radio to scan for active channels .when activity is detected, your radio lands (stays) on that channel for 5 seconds. To transmit on that channel ends, your radio continues scannig to other channels.

# To turn the channel scan ON:

- 1.Press and hold et to enter Scan mode.
- 2.press as or PTT to turn off Scan mode.

#### Note:

# During scanning , press the ▲/▼ key to change the direction of the scan.Safety and General Information

- 1.If you carry any kind of personal medical device, consult a doctor before use.
- 2.To avoid the risk of burns, do not use the device if the aerial is damaged in any way.
- 3. Never use the device in close proximity to a radio to avoid interference.
- 4. Position the transmitter and antenna at least 5 cm from your mouth.
- 5. The device cannot be used to contact the emergency services.

# **Techincal specifications**

Channels	US:1
Sub-code	CTCSS: 38 + DCS : 61
Battery	3xAAA(Not include)
Frequency	FRS:462.5625MHz
Range	Up to 2 Km(Open field )
Transmission Power	=< 500 mW
Modulation Type	FM-F3E
Channel spacing	12.5 KHZ
Operating temperature range	-30℃~+50℃

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



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 ad-dition, 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 general requirements. Exposure awareness can be facilitated by the use of a product labeldirecting 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 dist-ributed is subject to government regulations and may be prohibited.

#### Unauthorized modification and adjustment

Changes or modifications not expressly approved by the party resp-onsible for compliance may void the user's authority granted by the ocal 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 dep-artments 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 interfer-ence that may cause undesired operation.

NOTE: 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 Dire-ctive 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.
 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 (rech-argeable 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 aws 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 Cana-da'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 radioélectriq-ue subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### RF Exposure Information

- 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 requirem-ents 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 elect-romagnetic 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 configurat-ions. 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 classi-fied 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 uncontrolled exposure environment exposure limits, always adhere to the following procedures.

#### Guidelines:

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

# Operating Instructions:

- Transmit no more than the rated duty factor of 50% of the time. To Transmit (Talk), push the
  Push to Talk (PTT) button. To receive calls(listen), release the PTT button. Transmitting 50% of
  the time, or less, is important because the radio generates measurable RFenergy exposure only
  when transmitting in terms of measuring for standards combliance.
- Transmit only when people outside the vehicle are at least the reco-mmended minimum lateral distance away from a properly installed according to installation instructions, externally mounted appends.
- 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 RFexposure limits.

#### Hand-held Mode

• Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) at least 2.5 cm (one inch) away from the nose or lips.

The antenna should be kept away from the eyes. Keeping the radio at a proper distance is important as RF exposure decreases with increasing distance from the antenna



#### Phone Mode

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

# Electromagnetic Interference/Compatibility

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

# **Avoid Choking Hazard**



Small Parts. Not for children under 3 years.

Turn off your radio power in the following conditions:



- Turn off your radio before removing (installing) a battery or accessory or when charging battery.
- Turn off your radio when you are in a potentially hazardous environments: Near electrical blasting caps, in a blasting area, in explosive atmospheres (inflammable 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 in any facility where posted notices instruct you to do so, hospitals or health care facilities (Pacemakers, Hearing Aids and Other Medical Devices) may be using equipment that is sensitive to external RF energy.
- Turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

# Protect your hearing:



- 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 requi-ried before your hearing could be affected.

  Hearing damage from loud noise is sometimes undetectable at first and can have a