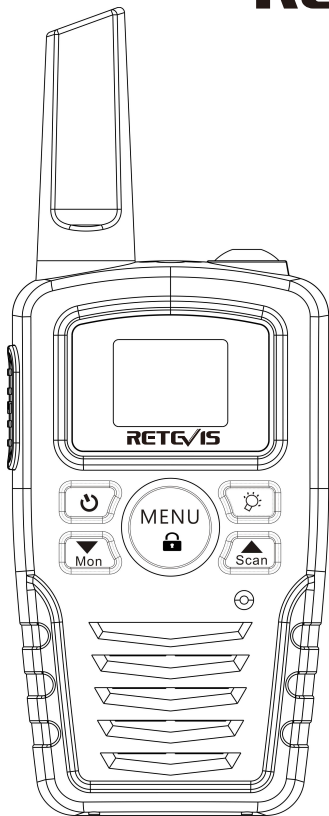


RETAVIS



RA35 User's manual

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

EN- Instruction for use

This set includes 2 walkie-talkie units, these are communication devices which operate on mobile radio frequencies, They come with 22 channels as well as a back-lit LCD screen, enabling you to communicate over several kilometers free-of-charge(up to 2 km in open areas)

Note: Please read these user instructions carefully before using the equipment and retain for future consultation.

Specific Recommendations:

If you carry any kind of personal medical device, consult a doctor before use.

To avoid the risk of burns, do not use the device if the aerial is damaged in any way.

Don't use the device in a potentially explosive setting (e.g. Around petrol pumps, on the lower deck of a boat or around a fuel-storage installation or chemical products)

If travelling in a car or by bike, stop before using the device, Switch off the device if on an airplane or in a hospital.

Never use the device in close proximity to a radio to avoid interference.

Remove the batteries if the device is not use for an extended period of time,

Never mix used with new batteries.

Position the transmitter and antenna at least 5cm from your face. Direct the antenna upwards and speak normally.Clean the device with a damp cloth.

Avoid the use of cleaning agents and solvents.Don't modify the device in any way. In the event of damage occurring, ensuring that the device is checked by a qualified professional.The device cannot be used to contact the emergency services.

PIC 01



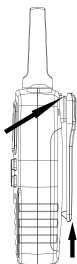
Before Use the device

Remove the belt clip

Before insert batteries into the device, first pull the belt clip latch away from the device(See PIC02)

Installing the batteries

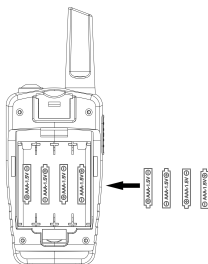
- 1.Slid down the battery compartment cover(See pic03).
- 2.Insert 4*AAA batteries(Not included)
- 3.Position the batteries according to polarity making on the battery compartment.
- 4.After placing batteries into correct positions, replace the battery cover(See PIC04)



PIC 02



PIC 03



PIC 04

Using the device

1. Turning the device on/off:

Switch on the device: press and hold on the on/off button for 3 seconds, then you will hear a beep sound.

Switch of the device: press and hold on the on/off button for 3 seconds, then you will hear a beep sound.


2. Adjusting the volume:


To increase the volume, press the Up ▲ button and press the Down ▼ button to decrease volume.


Note: The volume level is displayed on the screen.

3. Low Battery Indication.

The battery voltage level is indicated by the numbers of squares present inside the battery icon on the LCD Screen.

 Battery Full

 Battery 2/3 charged

 Battery 1/3 charged

 Battery empty

When the battery voltage is low, the battery icon will flash and a beep will be heard to indicate that the batteries need to be replaced or recharged.

4. Receiving / transmitting communications:

The devices are in 'Reception' mode when it is turned ON and no transmitting, when a signal is received on the current channel, the LCD will display in reception.

When you press the PTT(push to talk) button, the devices switches to "Transmission" mode. Hold the device in a vertical position with the Mic(microphone) 5-10cm away from your mouth. While holding the PTT button, speak into the microphone in a normal tone of voice.

Release the PTT button when you have finished transmitting.

For others to receive your transmission, they must be on the same channel with you.

Note:

1. The maximum talking range is 2km, it will depend on your surroundings and environment. It will be affected by obstructions such as hills or buildings.

2. Don't try to use two devices which are less than 1.5m(5 feet) apart, otherwise, you may experience interference.

5. Changing Channels:

Press the MENU button one time, The channel number will flash on the display.

Press the up ▲ / down ▼ button to change the channel,

Press the PTT button to confirm and return to stand-by mode.

Note: If no button is pressed within 15 seconds during setting, the device will return to stand-by mode.

6. CTCSS+DCS

Press the MENU button twice, the current CTCSS(DCS) code will flash on the display, Press the up ▲ / down ▼ button to change the 99 available codes. Press the PTT button to confirm and return to stand-by mode.

License free radio's operating on the FRS MHZ frequency band, the device has 22 available radio channels, If there are many device users near you, there is a chance that some of the users are operating on the same radio channel.

To prevent that you receive signals from other users, sub-channels have been integrated.

When using CTCSS(DCS), a low frequency tone (between 67-250 HZ) will be transmitted alongwith the voice signal, There are 99 available tones to choose from, You are free to choose one of the 99 available sub-channels, Due to filtering, these subchannels will generally not be audible so they will not disturb the communication.

7. VOX (Hands free function)

Press the MENU button three times, the current VOX setting will flash on the display and the VOX icon will display.

Press up ▲ button to set the VOX sensitivity level between 1 and 3 level(level 3 is the high sensitive level).

Press down ▼ button until "OF" appears on the display to turn VOX OFF.

Press the PTT button to confirm and return to stand-by mode.

In VOX mode, the radio will transmit a signal when it is activated by your voice or other sound around you.

VOX operation is not recommended if you plan to use your device in a noisy or windy environment.

Note: VOX mode will be over ride when you press the PTT button

8. Scanning for an active radio channel

Press and hold the UP ▲ button 2 seconds: the "SCAN" function indicator will appear on the display and the channel will scan continuously from 1 to 22. once an active channel is found, the scanning will stop and you can listen to the transmission.

When the transmission is on the found channel stop, the scanning will resume automatically.

Note: If you press PTT button while listening to a found channel, the device will go back to stand-by mode on the found channel.

9. Monitor

Press and hold the DOWN ▼ button about 3 seconds to active monitor.

Release the DOWN ▼ button return to stand by mode.

10. Setting the call Tone

The device has 10 call tones

Press the MENU-button 4 times, "CA" is displayed and on the current call tone.

Press the UP ▲ / Down ▼ button to change another Call Tone.
Press the PTT button to confirm and return to stand-by Mode.

11, Sending a call Tone.

Press the CALL button one time quickly, the call tone will be transmitted on the setting channel.

12. Roger Beep On/Off

After the PTT button is released, the device will send out a roger beep to confirm that have stopped talking.

Press the MENU button 5 times, "Ro" will be displayed.

Press the UP ▲ /Down ▼ button disable the roger beep ON/OFF.

Press the PTT button to confirm your selection and return to the stand-by mode.

13. Backlit Display

Press any button except for the MENU button to activate the back light of the LCD display,

The back light will light on about 5 seconds.

14. Headset connection

The device can be used with headset (If there is headset packed together with the device)The connector is located on the top of the device.

Insert the earpiece plug into the connector (2.5mm jack)

There is a small "PTT" button on the earpiece has the same function as the PTT button on the device.

When you use the PTT button from the earpiece, you must also use the microphone from the earpiece to talk.

Note: Don't connect other headset, it may damage your device.

15. Battery saving function:

When the device has not been used for 6 seconds, the economy mode is automatically activated, This does not affect the reception of transmission and the stand by mode is automatically re-activated as soon as signal is detected.

16. Built-in Flash light

Your device has a built-in flash light that can be used in sending light signals or for our lighting needs.

17. Lock & Unlock the device

Press and hold MENU-button for 3 seconds to lock the device. The button lock icon is displayed on the LCD screen.

Press and hold MENU button for 3 seconds to unlock the device.

18. Technical specifications

Frequency	FRS
Channels	22 channels
Sub-code	CTCSS 38+DCS61
Transmission Power	=<500mW ERP
Range	Up to 2 Km(Open field)
Battery type	4xAAA Alkaline/rechargeable batteries(Not included)
Modulation Type	FM – F3E
Channel spacing	12.5kHz(Narrow band)

US (Frequency table)

CH	Frequency	CH	Frequency
1	462.5625	12	467.6625
2	462.5875	13	467.6875
3	462.6125	14	467.7125
4	462.6375	15	462.5500
5	462.6625	16	462.5750
6	462.6875	17	462.6000
7	462.7125	18	462.6250
8	467.5625	19	462.6500
9	467.5875	20	462.6750
10	467.6125	21	462.7000
11	467.6375	22	462.7250

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, ISD, 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:

•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.

•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.

•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

- 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:

- 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

- 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:



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 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:



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



Forbid

- Do not use charger outdoors or in moist environments, use only in dry locations/conditions.

WARNING •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



- Contact Retevis for assistance regarding repairs and service.
- The adapter shall be installed near the equipment and shall be easily accessible

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>

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.



CE FCC RoHS



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MADE IN CHINA