

# RETEVIS

## RT42 Walkie Talkie (US)



CE FC RoHS



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MADE IN CHINA



## EN:

### User notes:

This walkie-talkie is a product with excellent design and advanced technology. The following suggestions will help you fulfill your obligations under the warranty, and understand the safety of your walkie-talkie.

1. Keep the walkie-talkie and all parts and accessories out of reach of children.
2. Please don't try to open the walkie talkies. The handling of the walkie-talkie by non-professionals may cause damage.
3. This unit can use the universal mobile phone charger (5V)
4. Please do not expose the walkie talkies to prolonged exposure to the sun or place it in an overheated place.
5. Please do not place the walkie talkies in a dusty or humid place.
6. Do not use harsh chemicals, detergents or strong detergents to clean the walkie-talkie.
7. If you find that the walkie-talkie emits odor or smoke, immediately place the walkie-talkie on the open space to avoid injury, and contact the dealer in time.
8. Do not use the unit in a location that is flammable, explosive, or other places prohibited to use the transceiver.
9. In order to get the best call performance, it is recommended that the communicate distance should not be less than 2 meters before the walkie-talkie.

### Product testing:

Open the box carefully and make sure it contains the items listed in the following table. If you find any loss or damage to this product and its accessories during handling, please contact your dealer immediately.

Number	Item name	Quantity
1	Wakie talkie	1
2	Dedicated charger	1
3	Charger cable	1
4	Special earphone	1
5	strap	1
6	manual	1

## Walkie-talkie function introduction:

Function	Description	Note
Channel	Up to 22 channels selectable	
Mute code	50 group of CTCSS 105 group of CDCSS	
Radio (FM)	87MHZ-108MHZ audio segment selectable	
Programming	Connect PC to programme	
Power saving function	Extend the standby time of the walkie-talkie	

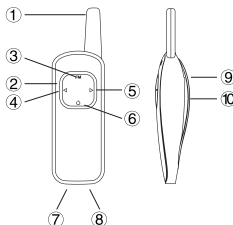
## LED icon introduction:



LED

Indicator	Name	Content
	Channel programming /Volume level	During standby, short press "V" to display channel and long press "V" to display the volume level.
	Battery level display	The more the number of cells, the more electricity.
	Walkie-talkie function indication	It lit when the unit is in the intercom mode.
	FM radio indication	It lit when FM radio receives.
	Key lock	It indicates when the unit is locked.

## Walkie talkies parts description:



No.	Name	Note
1	Antenna	
2	Decorative frame	
3	FM/ LOCK button	In standby mode, short press to enter/exit the radio mode, long press to enter the button to lock/open
4	UP BUTTON	In standby mode, short press to enter channel adjustment mode, long press to enter volume adjustment mode
5	DOWN BUTTON	In standby mode, short press to enter channel adjustment mode, long press to enter volume adjustment mode
6	POWER BUTTON	Long press to turn on/off the walkie talkie
7	USB PORT	Charging port/ PC programming
8	EARPICES JACK	Jack for earpiece/outside PTT button
9	Strap buckle	

## Quick guide to function:

Function introduction	Quick guide
Mute code	Long press "◊" button, the earpiece prompt "Di" sound and the display light, entering the intercom mode. In standby state, the cursor will flash, indicating the power saving state. Long press "◊" again to turn off the walkie talkie.
Communication	Press the "PTT" button when you speak to the speaker. Listen when you release the button
	The same group of walkie talkies must be set with the same channel and CTCSS for intercom. 1. Short press "</>" button, the channel number flashes, then press "</>" button to adjust channels. 2. Press "PTT" button to confirm the channel. 3. Long press "</>" button, the "V" shows on the screen and the volume flashes. Short press "</>" button to adjust volume
	Short press "FM" button, the icon "📶" flashes and the unit enter the radio mode 1. Short press the "</>" button to enter the search station, the radio icon flashes to indicate that the station is in the searching, and the radio icon flashes to stop when it receives the station. 2. Long press "</>" button, the volume number flashes, and short press "</>" button to adjust volume.
Lock keyboard function	Long press "FM" button, "🔒" icon light up into the keypad lock. Press "FM" button again to exit the keypad lock. When keypad is locked, only the power button and the PTT button could be work normally.

## About the battery:

### ● Charging precautions:

Please charge new or unused batteries for a long time before use.  
When the battery is found to be low, the radio indicator is empty and a "beep" sound is heard in the headset. The battery must be charged at this time.

When charging, the battery indicator will scroll to indicate the battery level. If fully charged, the grid stops scrolling.

### ● Note:

It is recommended to use the original charger of this machine, or you can use the regular brand mobile phone charger on the market. If the inferior charger is used to damage the unit, the company is exempt from liability.

The battery can be charged on the intercom, it is recommended to fill it once, so as not to reduce the battery performance.

## Technical specifications:

Transmitter	
Frequency stability	≤ ±2.5ppm
Output power	≤ 2W
Modulation	F3E
Residual frequency modulation	≤ -35dB
Audio distortion	<3%
Receiver	
Sensitivity	≤ -122dBm
Adjacent channel selectivity	≥ 70dB
Intermodulation immunity	≥ 70dB
Signal to noise ratio	≥ 48dB
Audio distortion	<3%

Overall part	
Channel number	22
Range of working temperature	-20 C ~60 C
Rated voltage	DC3.7V
Battery capacitance	670mAh
Channel spacing	12.5KHz
Shape size (antenna not included)	77x30x16mm
Weight	35g
Antenna impedance	50Ω

**CTCSS Frequency table (unit: Hz):**

Mute code	Frequency	Mute code	Frequency	Mute code	Frequency
1	67	18	116.8	35	183.5
2	69.3	19	123	36	186.2
3	71.9	20	127.3	37	189.9
4	74.4	21	131.8	38	192.8
5	77	22	136.5	39	196.6
6	79.7	23	141.3	40	199.5
7	82.5	24	146.2	41	203.5
8	85.4	25	151.4	42	206.5
9	88.5	26	156.7	43	210.7
10	91.5	27	159.8	44	218.1
11	94.8	28	162.2	45	225.7
12	97.4	29	165.5	46	229.1
13	100	30	167.9	47	233.6
14	103.5	31	171.3	48	241.8
15	107.2	32	173.8	49	250.3
16	110.9	33	177.3	50	254.1
17	114.8	34	179.9		

**DCS coding table (unit: Hz):**

Mute code	DCS code	Mute code	DCS code	Mute code	DCS code
51	023D	86	223D	121	445D
52	025D	87	225D	122	446D
53	026D	88	226D	123	452D
54	031D	89	243D	124	454D
55	032D	90	244D	125	455D
56	036D	91	245D	126	462D
57	043D	92	246D	127	464D
58	047D	93	251D	128	465D
59	051D	94	252D	129	466D
60	053D	95	255D	130	503D
61	054D	96	261D	131	506D
62	065D	97	263D	132	516D
63	071D	98	265D	133	523D
64	072D	99	266D	134	526D
65	073D	100	271D	135	532D
66	074D	101	274D	136	546D
67	114D	102	306D	137	565D
68	115D	103	311D	138	606D
69	116D	104	315D	139	612D
70	122D	105	325D	140	624D
71	125D	106	331D	141	627D
72	131D	107	332D	142	631D
73	132D	108	343D	143	632D
74	134D	109	346D	144	645D
75	143D	110	351D	145	654D
76	145D	111	356D	146	662D
77	152D	112	364D	147	664D
78	155D	113	365D	148	703D
79	156D	114	371D	149	712D
80	162D	115	411D	150	723D
81	165D	116	412D	151	731D
82	172D	117	413D	152	732D
83	174D	118	423D	153	734D
84	205D	119	431D	154	743D
85	212D	120	432D	155	754D

## Common troubleshooting:

Trouble	Solution
Not turning on	The battery is low and needs to be charged before use.
Not transmitting	Confirm that the ptt button is fully pressed or the battery is low when transmitting, limiting the emission
Not receiving	Confirm that the channels on both sides are the same Confirm that the ptt button on the headset is completely released when receiving Obstacle, indoor or in-car use may interfere with the call, please change your location
Hearing other during the call (Call or noise)	External interference is too large, please increase the squelch level
Limited call range	1. Building groups, wood, etc. will narrow the call range and check if the line of sight is wide. Please change your location. 2. The walkie-talkie is worn on the body, such as a pocket or upstairs to reduce the range of calls, please change the position of the walkie-talkie
Smaller or louder voice	Please pay attention to the volume adjustment

## 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: 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.

### 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

- 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/CNIRP 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:



- 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:



- 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



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.

- 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



- 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>

## Warranty Card

Product model: \_\_\_\_\_ Date of purchase: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Seller: \_\_\_\_\_ contact number: \_\_\_\_\_

Username: \_\_\_\_\_ contact number: \_\_\_\_\_

Address: \_\_\_\_\_

Zip code: \_\_\_\_\_

### 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.

Cut along this line