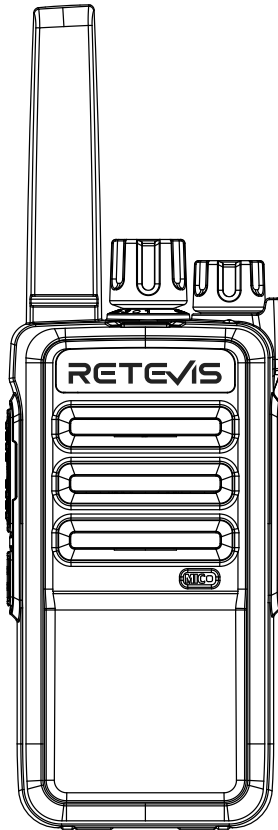


# RETEVIS



**RT68H**  
**Two Way Radio**  
**USER'S MANUAL**

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For downloading further resources:  
Brochures, Software/Firmware, Manual etc, Please contact  
your direct reseller first OR go to website [retevis.com](http://retevis.com) and  
check “support” in the each product link to download it.



## WARNINGS

### **Please read the manual carefully before using the radio.**

- Don't charge the radio in flammable, explosive, and radio communication prohibited areas (gas station, gas station, airport, etc).
- Don't operate the radio without a license in government-prohibited areas.
- Avoid exposing the radio to the sun, and avoid putting the radio near any heating equipment.
- Avoid putting the radio in dust, wet, or splashing water places, and avoid putting the radio near any heating equipment.
- Remove the battery pack from the radio immediately and contact the nearest retailers if the radio smells or smokes.
- The radio is repaired by the technical, self-disassembly is strictly prohibited.

### **Charging Attentions**

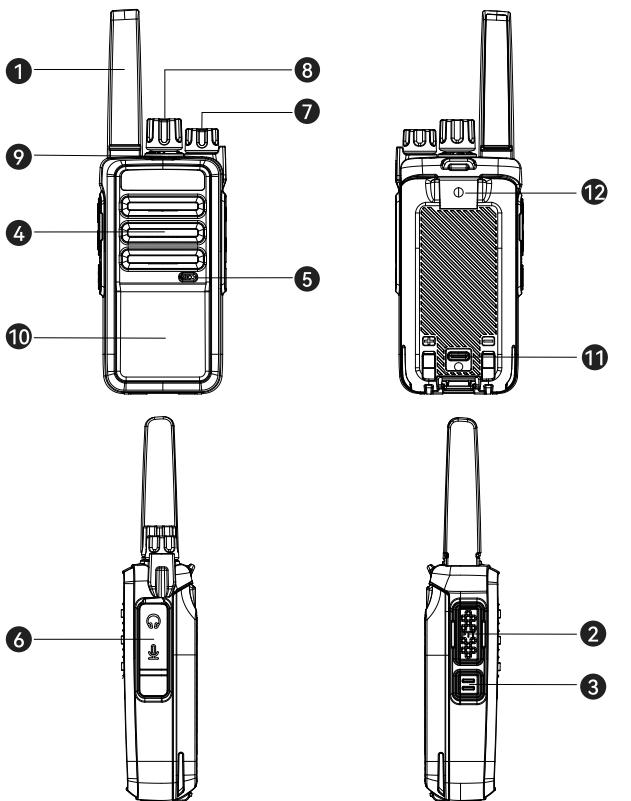
- Please use the matched charger to charge the radio.
- Turn off the radio before charging the radio.
- To get the best battery performance, please charge at least 5 hours the first time.
- Don't charge the battery pack for a long time, otherwise, the service life of the battery will shorten. When fully charged, please stop charging in time.
- The charger only charges the radio. Don't charge other battery packs, otherwise, the charger and the battery will be damaged.
- When fully charged, put the battery pack in cool and dry areas. Don't be near the fire or exposure to the sun. Otherwise, it will exist a safety hazard.
- Don't turn on the radio during charging.
- During charging, it is common that the battery pack is slightly heated.

## Specifications

### RT68H

Frequency Range	FRS
Memory Channels	16CH
Bandwidth	Fixed 12.5KHz
Work Voltage	3.7V
Battery	1200mAh Li-Ion
Work Temperature	-20°C+50°C
Antenna Impedance	50Ω

## Familiar with Radio



- ① Antenna
- ② PTT Switch
- ③ Channel lock/VOX
- ④ Speaker (Sound output)
- ⑤ Microphone (Sound input)
- ⑥ Accessory Port

- ⑦ Volume /Power
- ⑧ Channel
- ⑨ Tx/Rx LED indicator
- ⑩ Screen display
- ⑪ Type-C
- ⑫ Belt Clip

## Package Check

It is recommended that you check the items shown in the list below when opening the package. If it is lost or damaged during transportation, please contact your local logistics service provider.

<b>Package List (two package equipped product)</b>	
<b>Item</b>	<b>Quantity</b>
Radio	2
Li-ion battery	2
Charger (with USB cable)	2
Belt clip	2
Hand strap	2
User manual	1

## Function Operations

### 1.LED Indicator

The indicator lights up red when transmitting. The indicator lights up green when receiving.

### 2.Channel Knob

Clockwise rotate the knob to increase the channel, and anticlockwise rotate the knob to decrease the channel. The total channels are 16.

### 3.Power/Volume Knob

Clockwise rotate the knob to turn on the radio, and anticlockwise rotate the knob to turn off the radio. Rotate the knob to adjust the volume.

### 4.PTT

Press the PTT key and speak towards the microphone to transmit, the indicator lights up red. If this channel has no transmission frequency, the radio will send a toot sound and the indicator will light up red. Release the PTT key to receive. If receives the signal, the indicator will light up green and the radio will turn on the speaker.

### 5.Optional Side Keys Function ( Set on the RT68H CPS)

Clockwise rotate the knob to turn on the radio, and anticlockwise rotate the knob to turn off the radio. Rotate the knob to adjust the volume.

### 6.Squelch Level

By adjusting the squelch level, set how strong a signal the radio will turn off and on when it receives a signal. The lower the squelch level, the larger the noise will be on, and the longer the corresponding call distance, but the weaker the anti-interference ability. This function is set to level 5 default. You can set it through the "Squelch Level" option in the "Optional Function" menu of the CPS. The optional range is 0~9. If the level is 0, the squelch is always on. The higher the level, the less likely to turn on the squelch.

### 7.TOT

TOT aims to prevent the radio from using a channel for too long and damaging due to continuous transmission. If the user continuously transmits to the time set by the TOT (set by the CPS), the radio will stop transmitting and send a TOT prompt sound. To stop the warning sound, release the PTT key, and the radio returns to the receive status.

## **8. Battery Save**

Set to enter the battery save, set by the CPS.

Note: a. Uncheck refers to the radio does not save the battery.

b. Check refers to the radio saving battery.

## **9. Battery Voltage Indicate**

Note: Voltage too low: When the voltage is lower than a certain level, if the voice chooses off, the radio will send a beep sound prompt interval 15s. If the voice chooses on, the radio will prompt "Please charge". If the voice chooses Chinese or English, pressing the PTT or using the VOX function to transmit it is invalid, and the radio will prompt "Please charge".

## **10. Busy Channel Lockout**

If you set the busy channel lockout, press the PTT key to forbid transmitting after receiving the signal. The radio will send a beep sound until you release the PTT key.

## **11. VOX**

VOX function lets you not need to press the PTT key when transmitting. Talk directly to transmit and stop when not speaking. Turn on or off the function through the CPS. When turning on:

a. When your radio enables the VOX function. Speak towards the microphone to transmit voice. Stop speaking to stop transmitting and receive.

b. When you use the head-mounted earpiece with the microphone. Use the VOX function, the VOX gain must be adjusted. Set the VOX gain, the radio can recognize the voice. If the microphone is too sensitive, background noise makes the radio transmit. If the microphone is not sensitive enough, the radio cannot collect your voice. To make smooth communication, the VOX gain level must be adjusted.

Note: when turning on the VOX function and setting the VOX gain level to higher and more sensitive, if connecting the speaker/microphone to the radio, the received signals from the speaker/microphone may make the radio transmit.

## **12. CTCSS/DCS**

The radio supports a total of 260 CTCSS/DCS codes. Set the 50 CTCSS and 105\*2 (N & I) DCS through the CPS.



## Familiar with Radio

FRS			
Channel	Frequency (MHz)	CTCSS/DCS	Max Power Output
1	462.5625	67.0	2W
2	462.5875	118.8	2W
3	462.6125	127.3	2W
4	462.6375	131.8	2W
5	462.6625	136.5	2W
6	462.6250	127.3	2W
7	462.7250	136.5	2W
8	462.6875	141.3	2W
9	462.7125	146.2	2W
10	462.5500	123.0	2W
11	462.5750	D743I	2W
12	462.6000	D332I	2W
13	462.6500	D243I	2W
14	462.6750	D606N	2W
15	462.7000	D731I	2W
16	462.7250	D462I	2W

# Warnings

## 1. Notice

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

Before using this device, please read this guide which contains important operating instructions for safe usage, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards.

User' instructions should accompany the device when transferred to other users.

## 2. 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.

## 3.1 FCC Requirements

3.1.1 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);

3.1.2 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.

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

## 3.2

Note: This equipment has been tested and found to comply with the limits for a Class B digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the

equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### 4. 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.

#### 5. 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).

#### 6. Disposal

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, or accumulators must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws and rules in your area.



#### 7.1 RF Safety

This two-way radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. RF energy, which when used improperly, can cause biological damage. Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits: <http://www.who.int/en/>

Transmit no more than the rated duty factor 50% of the time. Transmitting necessary information or less, is important because the

radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance. For users who wish to further reduce their exposure, some effective measures to reduce RF exposure include:

- Reduce the amount of time spent using your wireless device.
- Use a speakerphone, earpiece, headset, or other hands-free accessory to reduce proximity to the head (and thus head exposure). While wired earpieces may conduct some energy to the head and wireless earpieces also emit a small amount of RF energy, both wired and wireless earpieces remove the greatest source of RF energy (handheld device) from proximity to the head and thus can greatly reduce total exposure to the head.
- Increase the distance between wireless devices and your body.

## 7.2 RF Safety

This radio is designed for and classified as “General population/uncontrolled use”. General population/uncontrolled environments are defined as locations where there is exposure of individuals who have no knowledge or control of RF exposure level.

## 7.3 Hand-held Mode:

To control your exposure and ensure compliance with the controlled environment exposure limits, always adhere to the following procedure:

-To receive calls, release the PTT button.

-To transmit (talk), press the Push-to-Talk (PTT) button in front of the face.

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



## 8.1 Electromagnetic Interference/Compatibility

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility. During transmissions, your radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so, such as hospitals or healthcare facilities.

## 8.2 Electromagnetic Interference/Compatibility

Persons with pacemakers, implantable cardioverter defibrillators (ICDs) or other active implantable medical devices should:

- Consult with their physicians regarding the potential risk of interference from radio frequency transmitters, such as portable radios (poorly shielded medical devices may be more susceptible to interference).
- Consult with their physicians regarding the potential risk of interference from radio frequency transmitters, such as portable radios (poorly shielded medical devices may be more susceptible to interference).
- Do not carry the radio in a chest pocket or near the implantation site, and carry or use the radio on the opposite side of the body from the implantable device to minimize the potential for interference.

Do not carry the radio in a chest pocket or near the implantation site, and carry or use the radio on the opposite side of the body from the implantable device to minimize the potential for interference.

### **9.1 Turn off your radio in the following conditions:**

implantable device to minimize the potential for interference.

- Do not carry the radio in a chest pocket or near the implantation site, and carry or use the radio on the opposite side of the body from the implantable device to minimize the potential for interference.
- Note: the areas with potentially explosive atmosphere referred to above include blasting caps, blasting areas, inflammable gas, dust particles, metallic powders, grain powders, fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles (such as grain, dust or metal powders) and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often – but not always posted.
- Turn off your radio when taking on fuel or parked at gasoline service stations.
  - Turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.
  - Do not use any radio that has a damaged antenna. If a damaged antenna comes into contact with the skin when the radio is in use, a burn can result.
  - Turn off your radio before removing or installing accessories.
  - When the transceiver is used for long transmissions, the radiator and chassis will become hot.



## 9.2 Use of Communication Devices While Driving



- Always check the laws and regulations on the use of radios in the areas where you drive. Use of Communication Devices, for example, mobile radio, may not be allowed.
- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call, if driving conditions or regulations so require.
- Do not place a portable radio in the area over an air bag or in the airbag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the airbag inflates.

## 10. Protect your hearing



- Use the lowest volume necessary to do your job. Turn up the volume only if you are in noisy surroundings.
- Limit the amount of time you use headsets or earpieces at high volume.
- When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear.
- Use carefully with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss. CAUTION: Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the radio's volume, the less time is required before your hearing could be affected. Hearing damage from loud noise is sometimes undetectable at first and can have a cumulative effect.

### 11.1 Batteries Safety

- **WARNING: KEEP NEW OR OLD USED BATTERIES OUT OF REACH OF CHILDREN.**
- In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.
- If a radio or a battery has been submerged in water, please dry and clean it before use. Do not dry the radio or battery with an appliance

or heat source, such as a hair dryer or microwave oven. If the radio has been submersed in a corrosive substance (e.g. saltwater), rinse the radio and battery in fresh water, then dry them.

## 11.2

- Since batteries are sensitive to high temperatures when storing them, keep them in a cool and dry place. The recommended temperature should be between +10 °C and +25 °C and never exceed +30 °C. Batteries should therefore be stored in batteries and packing. Although the storage life of batteries at room temperature is good, storage is improved at lower temperatures provided special precautions are taken. Also, accelerated warming is harmful.

Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;

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

## 11.3



- Turn off your radio before removing or installing a battery. Store spare batteries securely. Dispose of used batteries immediately and safely.
- The battery supply terminals are not to be short-circuited.
- Do not replace the battery in any area labeled “Hazardous Atmosphere”. Any sparks created in a potentially explosive atmosphere can cause explosion or fire.
- When the conductive material such as jewelry, keys or chains touches exposed terminals of the batteries, may complete an electrical circuit (short circuit the battery) and become hot to cause bodily injury such as burns. Exercise care in handling any battery, particularly when placing it inside a pocket, purse or other container with metal objects;
- Dirty battery contacts need to be wiped with clean dry cloth, both on the battery and in the appliance.
- Batteries should be removed from the appliance when not being used for long periods of time (months). The batteries should be enclosed in special protective packaging (such as sealed plastic bags or variants) which should be retained to protect them from condensation during the time they are warming to ambient temperature.
- Exhausted batteries are to be removed from the equipment.
- Do not dismantle, open or shred batteries. Batteries should be dismantled only by trained people.

- Disposal of a battery into fire, or a hot oven, or mechanically crushing or cutting of a battery, that can result in explosion;

#### **11.4**

- Batteries shall be charged at 10°C~40°C environment temperature specified. If the environment temperature is lower than 0°C, the charge shall be prohibited.
- Rechargeable batteries are only to be charged by adults or by children at least 8 years old under adult supervision.
- Do not use the charger outdoors or in moist environments, use only in dry locations/conditions.
- Do not disassemble the charger, which may result in a risk of electrical shock or fire. A charger should be dismantled only by trained people.

**12. WARNING:CHOKING HAZARD**–Small Parts. Not suitable for children under 3 years old.



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

- Contact Retevis for assistance regarding repairs and service.
- For a list of Retevis–approved accessories for your radio model, visit the website: <http://www.Retevis.com>

**WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.**



## 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.
  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.



**Shenzhen Ysair Technology Co.,Ltd.**

Add: Room 403, 4th Floor, Building 4, Yunli intelligent Park, No. 3 Changfa Middle Road, Yangmei Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China

Web:[www.retevis.com](http://www.retevis.com)  
E-mail:[info@retevis.com](mailto:info@retevis.com)  
Facebook:[@retevis.fans](https://www.facebook.com/retevis.fans)



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