

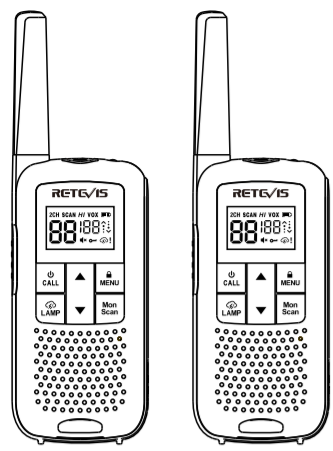
**Thank you!**

We are grateful that you chose our two way radio. We believe this Two Way Radio will provide dependable and reliable communication to personal operating at peak efficiency. The transceivers incorporate the latest in advanced technology. As a result, We feel strongly that you will be pleased with the quality and features of this product!

Product safety and RF Exposure for Two Way Radio:



Before using this Two way radio, please read the manual which contains important operating instructions for safe usage, RF Energy Awareness, control information and operational instructions for compliance with RF Energy Exposure limits in applicational and international standards, and also read the operational instructions for safe use.



**RT49**

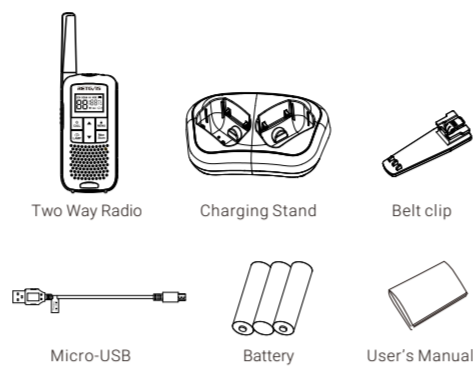
Two Way Radio  
User's Manual

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**SUPPLIED ACCESSORIES**

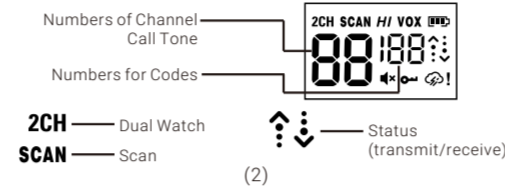
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**CONTROL BUTTONS**



**DISPLAY SCREEN GUIDE**



- HI** — High Power
- VOX** — VOX
- Battery Meter
- Volume Mute
- Lock
- Weather Alert

**GETTING STARTED**

**Installing the Three AA NiMH Rechargeable Battery**

1. Take the belt clip off.
2. With the back of the radio facing you, lift the battery cover latch up and remove the cover.
3. Insert the three AA NiMH battery with + and - polarity as shown inside.
4. Close the battery cover firmly.

**Radio Battery Meter**

The number of bars ( ) on the radio battery icon shown indicates the charge remaining in the battery. When the radio battery meter shows one segments, the radio chirps periodically (Low Battery Alert). In battery low status, the radio will sound the alert every 10 minutes or after releasing the PTT button.

**Note:** Remove the battery from radio for storage purposes.

**Removing the Three AA NiMH Rechargeable Battery**

1. Turn the radio off.
2. With the back of the radio facing you, lift the battery cover latch up and remove the cover.
3. Remove each of the three AA NiMH rechargeable battery by pulling the ribbon attached to the radio.
4. Close the battery cover firmly.

**Note:**

- Be careful when removing NiMH batteries. Do not use sharp or

- conductive tools to remove either of these batteries.
- Remove the batteries before storing your radio for extended periods of time. Batteries corrode over time and may cause permanent damage to your radio.
- Do not mix old and new batteries and Do not mix alkaline, standard (carbon-zinc) or rechargeable (ni-cad, ni-mh, etc.) batteries.

**Battery Capacity Maintenance**

1. Charge the NiMH batteries once every 3 months when not in use.
2. Before placing the radio in storage, remove the battery.
3. Store the NiMH batteries in temperature between -20 °C to 35 °C and in low humidity. Avoid damp conditions and corrosive materials.

**Using the Micro-USB Charger**

The micro-USB charger is a handy port that allows you to conveniently charge your NiMH battery. Use certified adaptor(5V, ≥1A). Do not attempt to charge alkaline batteries.

1. Make sure your radio is turned OFF.
2. Plug the micro-USB cable into the micro-USB charging port on your radio. Connect the other end of the micro-USB charger to wall power outlet.
3. The battery meter on LCD will move to indicate the battery is charging.

**Note:**

- It is recommended to power OFF your radio while charging
- When moving between hot and cold temperatures, do not charge the NiMH batteries until the battery temperature acclimates (usually about 20 minutes).
- For optimal battery life, remove the radio from the charger within 16 hours. Do not store the radio while connected to the charger.

**Turning your Radio On and Off**

1. Press and hold on the button to turn your radio ON/OFF. In the ON position, the radio chirps and briefly shows all feature icons available
2. Press or button to select On/Off.
3. Press the **PTT** button or button to exit the weather menu set up. If you activate Weather Alert and return to two-way mode the icon will display.

2. Press or button to select On/Off.
3. Press the **PTT** button or button to exit the weather menu set up. If you activate Weather Alert and return to two-way mode the icon will display.

**Note:** When the weather channel is activated, either manually or after receiving an alert, and no buttons are pressed for 5 minutes, the weather mode will automatically revert back to two-way mode. As with two-way radio reception, weather channel reception depends on how close you are to a transmitter and whether you are indoors or outdoors. Because weather channels are transmitted without codes, they may contain static or noise. Weather Alert will not function while actively transmitting or receiving in two-way mode.

**WEATHER CHANNELS AND FREQUENCIES**

Weather Channel	Frequency (MHZ)	Weather Channel	Frequency (MHZ)
WX1	162.550	WX7	162.525
WX2	162.400	WX8	161.650
WX3	162.475	WX9	161.775
WX4	162.425	WX10	161.750
WX5	162.450	WX11	162.000
WX6	162.500		

**WEATHER RECEIVE**

**WEATHER RECEIVE**

Weather feature is available designed for use in USA and Canada. Your radio can tune in to broadcasts by the United States National Oceanic and Atmospheric Administration (NOAA) Weather Radio and Environment Canada Weather Radio. You can listen to a weather channel (see "Weather Channels and Frequencies" table for details). When you listen to a weather channel, you cannot use your radio in scan mode or for two-way communications. Both NOAA and Environment Canada have transmitters located throughout the United States and Canada, respectively. These transmitters broadcast watches, forecasts and other information 24 hours a day.

**Entering Weather Mode**

From two-way mode, press and hold button for 3 seconds to enter weather mode.

**Setting the Weather Channel**

Your radio receives weather frequencies:  
1. In weather mode, press the button until weather channel number flashes.  
2. Press or button to select the appropriate channel with good reception in your area.  
3. Press the **PTT** button to set and exit menu.

**Setting the Weather Alert**

Your radio can be set to respond to NOAA Weather Radio emergency messages. A special alarm tone sounds an alert and turns on the weather receiver to give you immediate weather and emergency information.  
1. In weather mode press the button twice until icon displays.

**CHANNEL AND FREQUENCIES**

**Model RT49**  
**This FR5 device is approved for USA and Canada**

Channel	Frequency (MHZ)	Max Power Output	Channel	Frequency (MHZ)	Max Power Output
1	462.5625	2W	12	467.6625	0.5W
2	462.5875	2W	13	467.6875	0.5W
3	462.6125	2W	14	467.7125	0.5W
4	462.6375	2W	15	462.5500	2W
5	462.6625	2W	16	462.5750	2W
6	462.6875	2W	17	462.6000	2W
7	462.7125	2W	18	462.6250	2W
8	467.5625	0.5W	19	462.6500	2W
9	467.5875	0.5W	20	462.6750	2W
10	467.6125	0.5W	21	462.7000	2W
11	467.6375	0.5W	22	462.7250	2W

**WARNING**

**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 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

adjust the volume, if necessary. You can also press button to check for activity on the current channel before you talk.

**Push-to-Talk Timeout Timer**

To prevent accidental transmissions and save battery life, radio will stop transmitting if you press **PTT** button for 60 seconds continuously.

**Mode Button**

Press and hold button for 3 seconds, the user will be seamlessly switching between two-way and weather mode.

**MENU OPTIONS**

**Selecting the Channel**

1. The channel is the frequency of the radio uses to transmit.
1. Press the button until the channel number starts to flash.
2. Press button to change the channel number.
3. Press the **PTT** button to exit menu or button to continue setup.

**Selecting the Interference Eliminator Code**

Sub-Codes help minimize interference by blocking transmission from unknown sources. Your radio has 121 Sub-Codes.

- To set the code for a channel:
1. Press the button until the code number starts to flash.
  2. Press button to select code number.
  3. Press the **PTT** button to exit menu or button to continue setup.

**Setting and Transmitting Call Tones**

Your radio can transmit different call tones to other radios in your group when you pressed button. The radio has 20 call tones.

- To set a call tone:
1. Press button until call tone 'CA' appears. The current call tone setting flash.
  2. Press button to change and listen to the call tone.

3. Press the **PTT** button to exit menu or button to continue setup.

**Voice Operated Transmission (VOX)**

Transmission is initiated by speaking into the microphone of the radio instead of pushing the **PTT** button.

1. To activate VOX, press button until 'VOX' appears on the display. The current setting (0, 1-5) will flash.
2. Press or button to select the sensitivity level.
3. Press the **PTT** button to exit menu.

L3=High Sensitivity for quiet environments
L2=Medium Sensitivity for most environments
L1=Low Sensitivity for noisy environments
L0=Turn Off VOX function

**Dual Channel Monitor**

Enable you to scan current channel and another channel alternately. To set another channel and start Dual Watch.

1. Press button until 'ZCH' appears on the display. The current setting (0F, 1-22) will flash.
2. Press or to select channels.
3. Press the **PTT** button to exit menu or button to continue setup.
4. Press the **PTT** button or wait until the time out menu to activate Dual Watch. The screen will alternate between Home Channel and Dual Watch Channel.

To end Dual Watch mode, re-enter Dual Watch menu to select the OFF setting.

**Note:** If you set the same channel and code as current channel, Dual Watch does not work.

**Setting High Low Power**

1. Press button until 'Pr' appears on the display.
2. Press or button to select HI or LO. (HI- High Power, LO- Low Power)
3. Press the **PTT** button to set and exit menu.

**SPECIAL FEATURES**

**Keypad Tones**

Your radio emits a beep each time one of the buttons is pressed (except the **PTT** and button). Press and hold the button while turning the radio ON to switch the keypad tone ON/OFF.

**Roger Tone**

You can set your radio to transmit a unique tone when you finish transmitting. Press and hold the button until the key lock indicator on display appear.

1. To lock the radio, press and hold until key lock indicator on display disappear.
2. To unlock the radio, press and hold until key lock indicator on display disappear.

**Keypad Lock**

To avoid accidentally changing your radio settings:

1. To lock the radio, press and hold until the key lock indicator on display appear.
2. To unlock the radio, press and hold until key lock indicator on display disappear.

**Scanning Channels**

Use scan to search all channels for transmissions from unknown parties, to find someone in your group who has accidentally changed channels or to quickly find unused channels for your own use.

**To Start Scanning:**

1. Briefly press the button, the **SCAN** icon will appear in the display and

the radio will begin to scroll through the channel and code combinations.

2. When the radio detects channel activity matching the channel and code combination, it stops scrolling and you can hear the transmission.
3. To respond and talk to the person transmitting, press the **PTT** button within 5 seconds after the end of the transmission.
4. The radio will resume scrolling through the channels five seconds after the end of any received activity.
5. To stop scanning, briefly press the button.

**Scanning Notes:**

1. If you press the **PTT** button while the radio is scrolling through inactive channels, the transmission will be on the "home channel". Scanning will resume 5 seconds after the end of your transmission. You may press the button to stop scanning at any time.
2. If the radio stops on an undesired transmission, you may immediately resume the scan by briefly pressing or button.
3. If the radio repeatedly stops on an undesired transmission, you may temporarily remove that channel from the scan list by pressing and holding or for 3 seconds. You may remove more than one channel in this way.
4. To restore the removed channel(s) to the scan list, turn the radio off and then turn back on, or exit and re-enter the scanning mode by pressing button.
5. You cannot remove the home channel from the scan list.

**LED Lamp**

Your radio has a built-in-LED Lamp. Briefly press the button once to ON the lamp, press again to OFF the lamp.

**Automatic Power Save**

For better battery life, your radio is designed to switch to Power Save mode when it has been no transmissions after 5 seconds. The radio can receive transmissions in this mode.

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 12 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.

**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: \_\_\_\_\_

**Warranty description:**

1. The warranty card is saved by the customer as the warranty certificate, and the loss is not compensated.
2. This card must be stamped and dated for sale to take effect.
3. This card must not be altered. Please confirm that the warranty card serial number matches the purchase machine number, otherwise it will be invalid.
4. The warranty period is one year. Chargers, batteries, headpieces, antennas and feeders are consumables, not covered by warranty.
5. Users can choose the following ways to get repair service:
  - a. At the original purchase office.
  - b. Our company is in the local special maintenance point.

**Shenzhen Retevis Technology Co., Ltd**

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