



US

RT33

Walkie Talkie

Operating Instruction



CAUTION

Before using this product, read the operating instructions for safe use contained in the Product Safety and RF Exposure booklet provided with your radio.

Radio Parts and Controls



	Channel Number
	Subaudible tone(CTCSS/DCS)
	Battery Level
TX	Transmitting
RX	Receiving
DCM	Dual Channel Monitoring
VOX	Voice-operated exchange
	Key tone

Packing List	Quantity
Walkie-talkie	2
Belt Clip	2
Manual	1

Specification

TECHNICAL PARAMETERS	
Product number	RT33
Frequency range	462~467MHz
Channel number	22
Channel spacing	12.5KHz
Working voltage	3.6-4.5V
Frequency stability	±2.5ppm
Operating temperature range	-20℃~50℃
The antenna impedance	50Ω
Overall dimensions	125*46*26mm
Weight	67.5g

TRANSMITER	
Rf power	0.5W
Modulation method	11k Φ F3E
Noise and harmonic	<-40dB
Residual Radiation	$\leq$ -35dB
Modulation distortion	$\leq$ 7%
Maximum deviation	$\leq$ $\pm$ 5KHz

RECEIVER	
The sensitivity	$\leq$ 0.2 μ V
Modulation receiver bandwidth	$\pm$ 5KHz
Adjacent selective	$\geq$ 40dB
Intermodulation interference resistance	$\geq$ 35dB
Spurious response inhibition	$\geq$ 70dB
Audio output power	$\geq$ 300mW
Audio distortion	$\leq$ 8%

Frequency Range(USA)

Channel	Frequency	Channel	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

1. POWER ON/OFF

Press and hold POWER key for three seconds to turn on your radio. The radio will bleep at the moment that the screen is light.

To turn it off , Press and hold POWER key for three seconds.

2. Setting volume

To set volume, adjusting UP/DOWN button in standby mode(Level 1 is minimum sound level while Level 8 maximum).

3. Automatic scan

Pressing and holding UP button for three seconds allows to activate automatic scan. To cancel, simply press Menu/Power button once again.

4. Monitoring

Monitor button can be pressed for three seconds to activate the function of monitoring. To stop monitoring, simply press Menu/Power button once again.

5. Changing channel

Every device contains its corresponding legitimate channels in a country. Please make sure that two radios operate on the same channel in order to talk with each other.

To change a channel, press Menu/Power button to choose a desired channel and then press PTT button to confirm it.

This product provides one-way communication. In other word, it cannot receive messages when transmitting.

This equipment operates on public frequencies.
Note: Please check that current channel is available before any transmission.

6. CTCSS/DCS

Pressing MENU key twice and then UP or DOWN key allows to choose a desired CTCSS/DCS code, which reduces the chance of using the same channel.

7. VOX

VOX allows user to make transmission without pressing PTT button. Your radios will send out the voice when you are speaking into the microphone. There are three levels of VOX. Press Menu button three times until the VOX icon shows on the screen and OF icon blinks. Press UP/DOWN key to set up sensitivity level(Level 1-3) and then press PTT to confirm your change. The default is the setting that VOX function is off.

8. Call tone

The option diversifies users' call tones. Press Menu button four times until CALL icon appears on the display and current number flickers. To set, press UP/DOWN button to select one desired from 10 kinds of call tones and then press PTT to confirm the change. Call tone is set to 01 by default. In order not to inconvenience each other, a user and his/her companion can choose one from 10 tones contained in the radio. Quickly press PTT to send out the call tone so that receiver get the call from the sender only when two sides are on the same channel.

9. Timeout timer (TOT)

When the radio is set TOT to 30/60 seconds, the radio will cease to make transmission after 30/60 seconds. Press Menu button five times until 60 TO appears on the display. Then press UP/DOWN button to select 60 seconds, 30 seconds or OF. Press PTT to confirm the change of setting.

10. Roger beep

Roger beep means the end of transmission, which means the transmitter finishes talking. The radio sends out the tone when PTT is released. Press Menu button six times until ON RO appears on screen. Press UP/DOWN button to select the setting ON or OFF.

11. Keypad tone

Pressing Menu button six times is an option for key tone. Pressing UP or DOWN button enables or disables current keypad tone.

12. Dual Channel Monitoring(DCM)

The function of DCM allows a user to monitor two channels. With the radio on, two channel blink in the display. DCM OF appears in the display after Menu button is pressed for eight times. Press UP or DOWN button to select ON or OF and then press PTT to confirm the setting.

13. Memory function

Due to memory function, there is no need to reset channel when radio or power is off.

14. Factory Reset

When holding Menu/Power button, remove a battery and then release the button.

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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, please read at <http://www.retevis.com/after-sale/>
- 3.The user can get warranty and after-sales service as below:
 - Contact the seller where you buy the product.
 - Products Repaired by Our Local Repair Center
- 4.For warranty service, you will need to provide receipt from the actual seller for verification removed.

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.

Guarantee	
Model Number:	
Serial Number:	
Purchasing Date:	
Dealer:	
Telephone:	
User's Name:	
Telephone:	
Country:	
Address:	
Post Code:	
Email:	

Warnings

RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE FOR PORTABLE WALKIE TALKIE



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 walkie talkie uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. It uses radio frequency (RF) energy or radio waves to send and receive calls. RF energy is one form of electromagnetic energy. Other forms include, but are not limited to, sunlight and x-rays. RF energy, however, should not be confused with these other forms of electromagnetic energy, which when used improperly, can cause biological damage. Very high levels of x-rays, for example, can damage tissues and genetic material.

Experts in science, engineering, medicine, health, and industry work with organizations to develop standards for safe exposure to RF energy. These standards provide recommended levels of RF exposure for both workers and the general public. These recommended RF exposure levels include substantial margins of protection.

All Retevis walkie talkie 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 walkie talkie. 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 walkie talkie 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 walkie talkie 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, most of the classified walkie-talkie need to get local government License, and operation is allowed. The detailed classification and the use of your two radios, please contact the local government radio management departments. For the following specified classification: the USA FRS, Australian CB, the individual license is not required.

Compliance with RF Exposure Standards (If appropriate, Reference to the actual product's Safety Marking)

Your Retevis walkie talkie is designed and tested to comply with a number of national and International standards and guidelines (listed below) for human exposure to radio frequency electro-magnetic energy.

FCC ID

The FCCID means: This radio complies with the IEEE (FCC) and ICNIRP exposure limits for occupational /controlled RF exposure environments at operating duty factors of up to 50% talk-50% listen and is approved for occupational use only.

IC ID

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

In terms of measuring RF energy for compliance with these exposure guidelines, your radio generates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

Note: The approved batteries, supplied with this radio, are rated for a 5-5-90 duty factor (5% talk-5% listen-90% standby) even though this radio complies with FCC occupational exposure limits and may operate at duty factors of up to 50% talk.

RF energy exposure standards and guidelines (if appropriate)

Your Retevis walkie talkie complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission (FCC), Code of Federal Regulations; 47 CFR part 2 sub-part J.
- American National Standards Institute (ANSI) / Institute of Electrical & Electronic Engineers (IEEE) C95. 1-2005
- IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- Institute of Electrical and Electronic Engineers (IEEE) C95.3-2002
- International Commission on Non-Ionizing Radiation Protection (ICNIRP)
- Ministry of Health (Canada) Safety Code 6 & Industry Canada RSS-102.
- International Electrotechnical Commission IEC62209-2:2010]

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 occupational/controlled environment RF exposure limits.
- If you are not using a body worn accessory and are not using the radio in the intended use position, in front of the face or at the body in the PTT mode or alongside of the head in the phone mode, then ensure the antenna and the radio are kept 2.5 cm (one inch) from the body when transmitting. Keeping the radio at a proper distance is important because RF exposures decrease with increasing distance from the antenna.

Hand-held Mode

- Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) atleast 2.5cm



(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 Burns

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.

Note:

- Pacemakers

Defibrillators or other Implanted Medical Devices Persons with pacemakers, Implantable Cardioverter-Defibrillators (ICDs) or other active implantable medical devices (AIMD) should:

- ALWAYS keep the radio more than 15cm from their pacemaker when the radio is turned on.
- 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).
- Turn the radio OFF immediately if they have any reason to suspect that interference is taking place.
- 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 their body from the implantable device to minimize the potential for interference.

- Hearing Aids

Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

- Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.



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.

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.

Safe 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.

- Use of Communication Devices While Driving

- Always check the laws and regulations on the use of radios in the countries and areas where you drive.
- Give your full attention to driving and to the road.
- If available, use the hands-free facility.
- If driving conditions or regulations require it, pull off the road and park before making or answering a call.

