

RT57 Wireless business Calling Device Instruction Manual

Product Overview

Wireless Business Beeper is a kind of communication device that can achieve sample wireless calling service. For example, in an enterprise or public institution, a leader need look for his or her secretary, driver or the manager of another department and things like that. At present, there are plenty of beepers in the market that cannot allow to make a voice call. A superior need page his or her employee to come and tell things face to face. Given the fact that there is a lack of this kind of beeper in the market, our company launch a new model RT57 - Wireless business Calling Device.

Product's Function

- 1. Interconnection between 99 devices
- 2. Two-way communication
- 3. Making Announcement or one-way conference function
- 4. Incoming call display
- 5. Call tone for manual communication
- 6. Call tone for automatic communication
- 7. Backlight LCD
- 8. 5 selectable call tones
- 9. 10 selectable channels
- 10. Calling walkie-talkie

Main Technical Parameters

Name	Wireless business Calling Device	
Weight	365g	
Dimension	160*150*60mm	
Channels	10	
Frequency Range	UHF	
Channel Spacing	25KHz	
Working Mode	Duplex Mode on Two Frequencies	
Modulation	FSK	
Antenna Impedance	50Ω	
Operating Voltage	79V	
Operating temperature	- 20+55 °C	
Operating current	< 600 mA	
Standby current	60mA	
Spurious emission	< -60 dB	
Output Power	0.5 W	
Channel Stability	±5 ppm	
Modulation Sensitivity	220 mA	
Available Sensitivity	-110dBm	
Threshold of Squelch Sensitivity	< 0.2uV	
Deep Quieting Sensitivity	< 3uV	

Technical Features

- 1. There is no need to wire or change current decoration. Reception is stable and performance reliable. With up-to-date digital encoding and decoding technology, every system owns its unique code that ensures there is no error between calling system.
- 2. Two-way communication but ordinary business beepers only establish communication between master station and extended set. Our new model is designed to satisfy prevailing market demand that an extension could not only communicate freely to master station but also to other extensions. A phone set as the terminal could be turned into the master for the group call as well as an extension for the reception of signals from other extension terminal. It is able to be used for one-to-one calling and also one-to-many communications.

- 3. It could be connected to a wakietalkie for voice call.
- With good audio quality and long range, it is ideal for a big occasion. It makes no difference to desk telephone without wires.

Operation Instructions

1 Attaching Battery Pack

Connect the Power Adapter and plug it into an AC outlet and then keep it connected to the main power.

2.1 Setting the Number for the machine.

Before you turn it on, hold **<CALL>** and then connect it to the power. When numbers flashes in the display, press **<**▲**>** or **<**▼**>** to select desired number and start it up again.

2.2 Making phone calls

RT57 allows to talk with any other RT57 regardless of master or auxiliary terminal. That is to say that all RT57 models can be used as master and auxiliary equipment (extension) also.

2.3 Operation to make phone calls

A. Making Calls:

After you select numeric keys presenting phone number of the other party, press <CALL> and the key light twinkles. The light will be out if there is no response from the other party in 10 seconds. When the other party responds, the light for <CALL> goes on and two sides can talk. When the call ends, any side can press <CALL> to stop.

B. Receiving Calls;

When the device is receiving a call from the other party, alert tone sounds and keypad lights up. You can press <CALL> to respond, and the light is on. At the moment, two sides can talk to each other. When the talk ends, either side can press <CALL> to stop calls

C. Broadcasting as Group Calls;

Press < # > to make announcements to each other all users. When you finish talking, press < CALL> to stop calls.

D. Responding to a Group Call;

When a Group Call is received, press <CALL> to make a response if you need answer immediately. The moment light blinks and lasts long, you can respond. When the call ends, press <CALL> to guit but target beeper cannot.

E. Communication with conventional radio equipment:

When an analogue radio equipment is set to a channel that is in the same TX frequency, RX frequency and tone as your beeper, press < * > to talk with the radio equipment on the same channel and listen to incoming calls. (It is limited only to analogue equipment.)

Setting up Channels and Frequencies for Analogue Radio Equipment

RX Frequency (MHz)		
TOT I TOQUETTOY (IVIT IZ)	TX Frequency (MHz)	CTCSS(Hz)
463.01250	409.75000	100
463.03750	409.77500	100
463.06250	409.80000	100
463.08750	409.82500	100
463.11250	409.85000	100
463.13750	409.87500	100
463.16250	409.90000	100
463.18750	409.92500	100
463.21250	409.95000	100
463.23750	409.97500	100
	463.03750 463.06250 463.08750 463.11250 463.13750 463.16250 463.18750 463.21250	463.03750 409.77500 463.06250 409.80000 463.08750 409.82500 463.11250 409.85000 463.13750 409.87500 463.16250 409.90000 463.18750 409.92500 463.21250 409.95000

2.4 Setting the Volume

Press <▲> or <▼> to adjust volume level and it also works during communication.

2.5 Setting Automatic Answer and Ring Tone

Press < M > three times (Pressing M Key once is to make a call, twice to set up channel number, three times to set ring tone) to set up the ring tone; press < ▲ > or < ▼ > to display the figure 1,2,3,4 or 5. Figure 1: To answer a call, no ring; Figure 2: To answer a call after a ring tone; Figure 3/4/5: To press < CALL > to answer a call after a ring tone.

2.6 Setting up the frequency channel

It should be noted that it was only when devices in group are on the same frequency that they can communicate with each other if you are setting up the frequency channel for wireless communication. If you want to change or set up channel number, press < M > twice to show Ch01 in the display and then press < \triangle > or < ∇ > to change the channel number.

Local channel frequency

Channel	TX/RX Frequency (MHz)	RX/TX Frequency (MHz)	CTCSS(Hz)
1	463.01250	409.75000	100
2	463.03750	409.77500	100
3	463.06250	409.80000	100
4	463.08750	409.82500	100
5	463.11250	409.85000	100
6	463.13750	409.87500	100
7	463.16250	409.90000	100
8	463.18750	409.92500	100
9	463.21250	409.95000	100
10	463.23750	409.97500	100

note: The transmitter or receiver frequency of the unit depends on whether it is called or

Warning

- 1. Keep clear of explosive atmosphere (smell, powder and smoke fog and son on).
- 2. Do not install and use in fuel station.
- Do not operate in an area in which operating radio transmitter is prohibited unless authorized.
- Do not dismantle the radio transmitter if you are not a professional personal because it is a precision electronic equipment.

Warnings

RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE FOR PORTABLE WALKIE TALKIE



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.

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The CE marking means: Hereby, Shenzhen Retevis Technology Co., Ltd. declares that the radio equipment type RT30 is in compliance with the 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 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.

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 Com-mission 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
- 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

4

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 2.5 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 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
- (inflammable gas, dust particles, metallic powders, grain powders, etc.). • Turn off your radio while taking on fuel or while parked at gasoline service

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



• 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



- 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
- 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.

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





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5 6