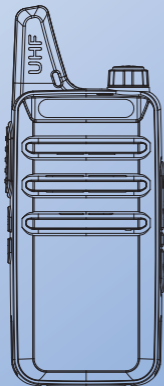


RETEVIS

Two Way Radio

RT22

USER'S MANUAL



- 16 channel
- Super receive
- Strong anti-interference
- The cable copy
- signal prompt
- Scanning
- Sound
- Dustproof

WARNINGS

Product safety and RF Exposure for two way radio:

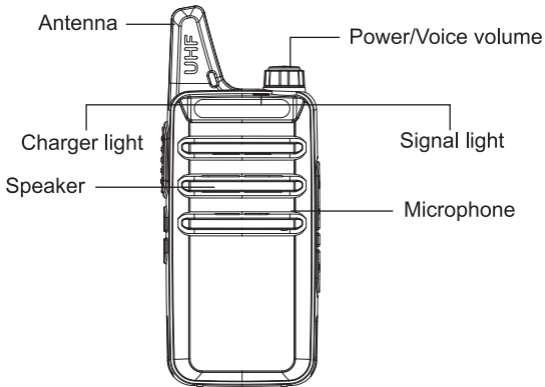


Before using this two way radio, please read the manual which contains important operating instructions for safe usage, RF Energy Awareness, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards, and also read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

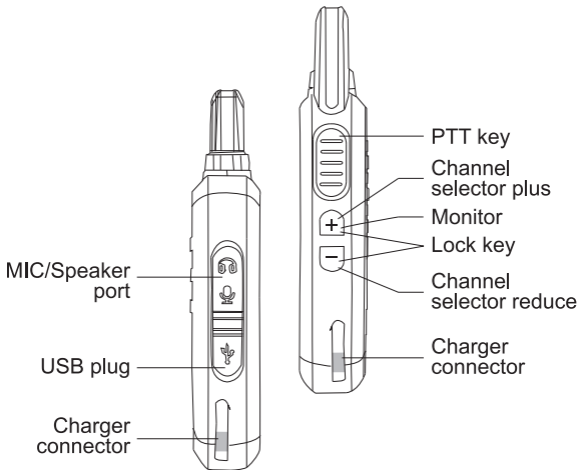
◆◆ Contents

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◇◇ Function Operations



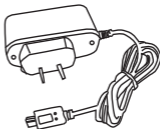
◇◇ Function Operations



◆◆ Standard Accessories



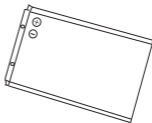
Radio body



Charger

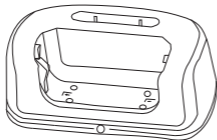


Belt clip



Battery

◆◆ Optional Accessories



Charger

MORE OPTIONAL ACCESSORIES OF RETEVIS



Acoustic tube headset



Programming cable



Speaker microphone



Throat mic

Note:

For more information, Please visit our website: www.retevis.com

◇◇ Get Acquainted

- The battery is not charged in a factory. Please charge the battery before initial use or after long time storage.
- Repeat charging and discharging the battery 2 or 3 times and the battery would reach its maximum capacity, please replace or charge the battery when it is in low power.
- The quick consume of the power after normal charge shows exhaustion of the battery. Please contact your dealer and buy new approved battery.

◆◆ Optional Functions

- **Time-out-timer**

The purpose of the Time-out-timer is to prevent any signal person from using a channel for an extended period of time. If the transmission continues beyond 10 seconds, the transceiver will stop transmission and give out alarms. To stop the alarms, please release the PTT switch and the transceiver will resume the state of standby.

- **Battery Saving**

The radio would reduce its power consumption. If there is no signal or operation over 10 seconds, the battery saving function would be on automatically. When signal is received or with operation, the radio would switch to normal mode.

- **Low Battery Warning**

When the voltage fall down to lowest level, the tone of "Please Charge" will sound, required to replace battery or recharge the battery.

◇◇ Optional Functions

- **Monitor**

This function can be realized by the long press of the default key.

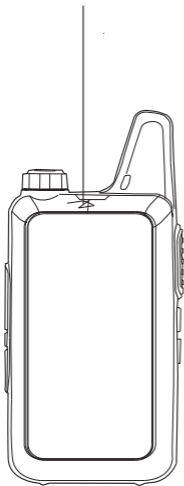
Press the monitor key, the Signal Indicate will change to Green.

- **QT and DQT**

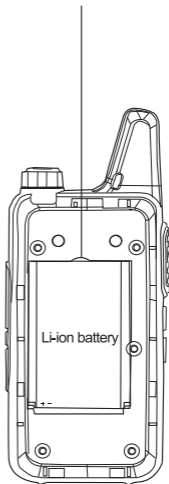
This function mainly uses to avoid irrelative calling in certain channel. With this function, users can receive calling in corresponding channels only with the same QT/DQT.

◇◇ Attaching & Removing

Case Port



Battery port



◇◇ Technical Parameters


General	
Operating Frequency	EU:400-480MHZ
Output Power	≤2W
Channels	16
Modulation Type	FM(F3E)
Antenna	Integrated Antenna
Antenna Gain	1.8dB
Bandwidth	12.5KHz/25KHz
Power Source	DC3. 7V
Dimension	96*55*22mm
transmit	
The maximum deviation	≤±5KHz
Residual radiation	<60dB
Current	≤1000mA
Receiver	
Sensitivity	<0.16μV(12dB SINAD)
Squelch Sensitivity	<0.2μV
Intermodulation	50dB
Audio Power	≥300mW
current	≤100mA
Squelch current	20mA

◇◇ Warnings

Working temperature and height

- Use the Two Way Radio in the environment with the temperature between -10°C and 40°C otherwise, it may damage your Two Way Radio. It can be operating under 2000m.

Summary statement

- For the following equipment:  two way radio
- Is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.
- EU Declaration of Conformity:
Refer to article 10(9), shall be provided as follows:
- Hereby, Shenzhen Retevis Technology Co., Ltd declares that the radio equipment type RT 22 is in compliance with Directive 2014/53/EU.
- The full text of the EU declaration of conformity is available at the following internet address:
www.retevis.com.

◇◇ Warnings

SAR Test method description

- Test position and configuration Head SAR was performed with the device configured in the positions according to IEEE1528, and face up SAR was performed with the device 25mm from the phantom, Body SAR was performed with the belt clip on the device 0 mm from the phantom. Body SAR was also performed with the headset attached and without.



- Use only RETEVIS's approved supplied or replacement belt clip, batteries, charger, antennas and accessories. Use of non-manufacturer-name approved batteries, and accessories may exceed the RF exposure guidelines.

◇◇ Warnings



- The antenna in the packing is unique, please do not optional change .
- For safe operation, the antenna for the product shall be least 25mm away from your face, when speaking.
- DO NOT use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result .



CAUTION

- For adapter: Shall be installed near the equipment and shall be easily accessible.
- For battery: Risk of explosion battery is replaced by an incorrect type, dispose of used batteries according to the instructions.

◇◇ Warnings



CAUTION

Batteries and chargers safety information

- This document contains important safety and operating instructions. Read these instructions carefully and save them for future reference.
- before using the battery charger, read all the instructions and cautionary markings on
The charger
The battery, and
The radio using the battery
- To reduce risk of injury, charge only the rechargeable Retevis-authorized batteries. Other batteries may explode, causing personal injury and damage.

◆◆ Warnings

- Use of accessories not recommended by Retevis may result in risk of fire, electric shock, or injury.
- To reduce risk of damage to the electric plug and cordpull by the plug rather than the cord when disconnecting the charger.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in risk of fire and electric shock, If an extension cord must be used, make sure that the cord size is 18AWG for lengths up to 6.5 feet(2.0m), and 16AWG for lengths up to 9.8 feet(3.0m).
- To reduce risk of fire, electric shock, or injury, do not operate the charger if it has been broken or damaged in any way.
- Take it to a qualified Retevis service representative.

◆◆ Warnings

- Do not disassemble the charger: it is not repairable and replacement parts are not available. Disassembly of the charger may result in risk of electrical shock or fire.

- To reduce risk of electric shock, unplug the
- charger from the AC outlet before attempting any maintenance or cleaning.

Operational safety guidelines:

- Turn the radio OFF when charging battery.
- The charger is not suitable for outdoor use. Use only in dry locations/conditions.
- Connect charger only to an appropriately fused and wired supply of the correct voltage (as specified on the product).
- Disconnect charger from line voltage by removing main plug.
- The outlet to which this equipment is connected should be nearby and easily accessible.
- Maximum ambient temperature around the power supply equipment must not exceed 40°C (104°F).

◇◇ Warnings

- Make sure that the cord is located where it will not be stepped on, tripped over, or subjected to water, damage or stress.



DANGER

- When the conductive metals such as jewellery key or decorative chains touch the battery terminals, all the batteries are likely to cause damage to the items or personal injury. These conductive metals may form a short circuit and generates much heat. Do deal with any battery carefully, especially when put it into pocket, wallet or other metallic containers.



WARNING

Please read the following brief instructions, non-compliance with these rules may cause danger or violate the law.

- Obey the local government regulation before using this radio, improper use may violate the law and the punished.

◆◆ Warnings

Do not charge the transceiver and battery pack when they are wet.

- Ensure that there are no metallic items located between the transceiver and the battery pack.
- Don not use the options not specified by Retevis
- If the die-cast chassis or other transceiver part is damaged, do not touch the damaged parts.

If the headset or headphone is connected to the transceiver, reduce the transceiver volume. Pay attention to the volume level when turning the squelch off.

Do not place the microphone cable around your neck while near machinery that may catch the cable.

Do not please the transceiver on unstable surfaces.

Ensure that the end of the antenna does not touch your eyes.

◆◆ Warnings

- When the transceiver is used for long transmissions, the radiator and chassis will become hot.
- Don not touch these locations when replacing the battery pack.
- Do not immerse the transceiver in water.
- Always switch the transceiver power off before installing optional accessories.
- The charger is the Device that disconnects the units from the AC mains line, the AC plug should be readily accessible.
- Do not transmit too long, for the radio may heat and hurt the user



WARNING

- **TURN THE TRANSCEIVER POWER OFF IN THE FOLLOWING LOCATIONS:**
In explosive atmospheres (flammable gas, dust particles, metallic powders, grain powders, etc.)

◆◆ Warnings

- While taking on fuel or while parked at gasoline service stations.
- Near explosives or blasting sites.
- In aircraft. (Any use of the transceiver must follow the instructions and regulations provided by the airline crew.)
- Where restrictions or warnings are posted regarding the use of the radio devices, including but not limited to medical facilities.
- Near persons using pacemakers.

◇◇ Warnings

SAR Test method description

- Test position and configuration Head SAR was performed with the device configured in the positions according to IEEE1528, and face up SAR was performed with the device 25mm from the phantom , Body SAR was performed with the belt clip on the device 0 mm from the phantom. Body SAR was also performed with the headset attached and without.



WARNING

Antennas

- The antenna in the packing is unique, please do not optional change.
- For safe operation, the antenna for the product shall be least 25mm away from your face, when speaking.
- Switching to other antennas is prohibited and will affect the radio performance.
- DO NOT use any portable radio that has a damaged antenna If a damaged antenna comes into contact with your skin, a minor burn can result.

◇◇ Warnings



WARNING

Batteries

- All batteries can cause property damage and/or bodily injury such as burns if a conductive material touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become hot.
- Exercise care when removing NiMH or AA batteries. Do not use sharp or conductive tools to remove these batteries.
- Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse or other container with metal objects.
- Do not discard your battery in a fire.
- Do not replace the battery in any area labeled “Hazardous Atmosphere”. Any sparks created in a potentially explosive atmosphere can cause explosion or fire.

◆◆ Warnings

- Do not disassemble, crush, puncture, shred or otherwise attempt to change the form of your battery.
- Do not dry a wet battery or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.
- If the radio battery contact area has been submerged in water, dry and clean the battery contacts before attaching the battery to the radio.



CAUTION

Battery Charger Safety Instructions:

- Turn the radio off when charging the battery.
- Do not expose the charger to outside environment. Chargers should only be used indoors.
- Do not operate or disassemble the charger. Do not use a charger that has been dropped or damaged in any way.

◆◆ Warnings

- Never alter the AC cord or plug provided with the unit. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
- To reduce the risk of damage to the cord or plug, pull the plug rather than the cord when disconnecting the charger from the AC receptacle.
- To reduce the risk of electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning.
- Use of an attachment not recommended or sold by Retevis Solutions may result in a risk of fire, electric shock or personal injury.
- Make sure the cord is located so it will not be stepped on/tripped over or subjected to damage or stress.

◇◇ Warnings

- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of a fire and/or electric shock. If an extension cord must be used, make sure that:
 - The pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.
 - The extension cord is properly wired and in good condition.
- The supply cord of the AC adaptor cannot be replaced. If the cord is damaged, call customer service.



WARNING

- The information listed below provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates with the FCC RF exposure limits of this radio.

◆◆ Warnings

Electromagnetic Interference/Compatibility Note:

- Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.
- During transmissions, RETEVIS, INC. radio generates RF energy that can possibly cause interference with other devices or systems.

Facilities

- 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 may be using equipment that is sensitive to external RF energy.
-

Aircraft

- When instructed to do so, turn off your radio when onboard an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

◆◆ Warnings

Medical Devices

- Pacemakers, Defibrillators or other Implanted Medical Devices

Persons with pacemakers, Implantable cardioverter defibrillators (ICDs) or other active implantable medical devices (AIMD) 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).
- Turn the radio OFF immediately if there is 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.

◆◆ Warnings

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.

Use of Communication Devices While Driving

- Always check the laws and regulations on the use of radios in the areas where you drive.
 - 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.

◆◆ Warnings

For Vehicle with Air Bags

- Refer to the vehicle manufacturer's manual prior to installation of electronic equipment to avoid interference with air bag wiring. Do not place a portable radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmosphere

- Turn off your radio prior to entering any area with a potentially explosive atmosphere. Only radio types that are especially qualified should be used in such areas as "Intrinsically Safe". Do not remove, install or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

◇◇ Warnings

Note:

- The areas with potentially explosive atmosphere referred to above include 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.

Blasting Caps and Areas

- To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted “Turn off two-way radios”. Obey all signs and instructions.



Guarantee Card

Model Number:

Serial Number:

Purchasing Date:

Dealer: 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.
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.



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MADE IN CHINA