RETEVIS

RB39P

USER'S MANUAL

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

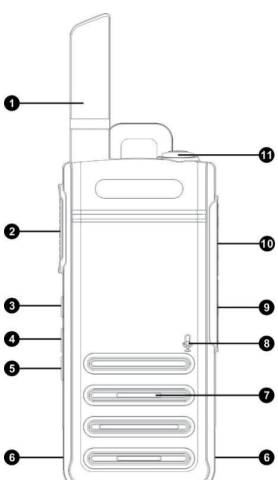
Warranty

Before using the radio, please read the manual carefully.
·Don’t charge the radio in inflammable, explosive and radio-communication-banned areas (such as gas station, petrol station and airport, etc).
·Don’t operate the radio without license in the areas that government bans.
·Ensure the radio to avoid being placed under the sun and near any heat equipment.
·Ensure the radio to avoid any dusty, humid and splashy place, and avoid being placed near any heat equipment.
·If the scent is smelled or smog is seen, please take down the battery pack from the radio, then contact with the nearest retailer.
·The repairing of the radio is in the charge of professionals and the self-dismantling is strictly prohibited.

Charging Attentions
·Please use the matching charger to charge. The charging interface is Type-C USB.
·Suggest turning off the radio before charging.
·To get the best battery performance, please charge the radio for at least 5 hours for the first charging.
·Don’t charge the battery pack for a long time, or it will shorten the service life of the battery pack. When fully charged, stop charging in time.
·The charger is only responsible for the battery pack of this radio, and don’t charge other battery packs. Otherwise, the charger and the battery pack will be damaged.
·When fully charged, the battery pack should be placed in cool and dry areas, but near to fire or exposed to the sun, or there will exist potential safety hazard.
·During charging, it is suggested not proceeding transmission operation.
·During charging, slight heat of the battery pack is normal.

Radio Function

1. Antenna
2. Transmit button (PTT)
3. Menu/Programmable key
4. + key: Channel + /Bluetooth
5. - key: Channel - /Emergency alarm
6. Charging port
7. Speaker
8. Microphone
9. Type-C USB charging interface
10. Audio/Data Port
11. Power/LED indicator key



LED Indicator

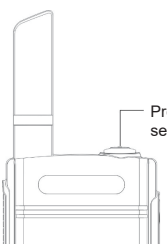
LED indicator	Radio Working Status
Green indicator flashes slowly (ON: 20ms/OFF: 5sec)	Standby state
Green indicator flashes slowly (ON: 200ms / OFF: 200ms)	Scan state
Red indicator is on	Transmitting
Green indicator is on	Receiving
Red indicator flashes quickly	Read data from the radio through operating the programming software
Green indicator flashes quickly	Write data to the radio through operating the programming software.
Blue indicator flashes quickly	Bluetooth is pairing
Blue indicator is on	Bluetooth pairs successfully
Red and Green indicator flashes	Delete Bluetooth pairing
Red and green lights flash alternately	Charging
Green indicator double flash	Fully charged
Red indicator double flash	Low battery

Function Operation

1. Turn ON/OFF

1.1 In the off state, press the power key for 3s to turn on the radio. The current channel number and the battery power are broadcast at the same time.

1.2 In the on state, press the power key for 3s to turn off the radio and the radio makes a off prompt.



2. Volume adjustment

In the standby or receiving state, shortly press the power key to adjust the radio volume and the current volume level is broadcast. 0-5 volume levels are adjustable circularly.

Note: when the volume level is 0, the receiving of the radio is silent mode.

3. Transmitting/receiving

3.1 In the standby state, press PTT key to transmit signal of the current channel number and LED red indicator lights up.

3.2 Release PTT key to receive the signal of the same channel number, speaker makes a communication voice and LED green indicator lights up.

Attentions:

• When the radio is transmitting, keep the radio in the vertical position and the microphone 2.5-5cm away from the mouth. When transmitting, the radio is at least 2.5cm away from the head or body.

• Set the receiver frequency the same as the transmitter's before communicating.

• Set the channel number, CTCSS/DCS codes of the transmitter and the the receiver are the same.

4. Channel selection

In the standby state, shortly press + or - key to choose the channel and the current channel number is broadcast.

5. CTCSS/DCS

This radio supports a total of 258 CTCSS/DCS. It can be set 50 CTCSS and 104*2 DCS (N and I phases) in the programming software (CPS).

6. High/Low Power Setting

The user can set the power level of each channel to high or low. High power achieves the communication with the radios over long distance and low power achieves the communication with radios in the short distance.

6.1 Power level of the channel can be set as high or low through CPS.

6.2 Power level of the channel also can be set as high or low through the menu key.

• Firstly, shortly press the menu key to choose power.

• Shortly press + or - key to switch RF power: high (2W) or low (0.5W).

• Shortly press PTT key to exit settings and the radio enters standby state.

Note: channel 8-14 is set as low power and the setting can't be changed.

7. Bluetooth Function

7.1 Turn on Bluetooth Function

• Shortly press the menu key to choose Bluetooth menu and BLUETOOTH prompt is broadcast.• Shortly press + key to turn on Bluetooth with voice prompts BLUETOOTH ON. If the Bluetooth function has turned on, the radio makes a wrong prompt when shortly pressing + key.

• Shortly press PTT key to exit setting and the radio enters standby state.

7.2 Bluetooth Headset Pairing

• In the standby state, long press + key of the radio for 3s to enter pairing mode, and the indicator flashes red and blue light alternatively.

• Long press Bluetooth headset power key for 5s to enter pairing mode, and the indicator flashes red and blue light alternatively.

• After pairing successfully, the radio returns to standby mode and blue indicator flashes on.

7.3 Turn off Bluetooth Function

• Shortly press the menu key to choose Bluetooth and BLUETOOTH prompt is broadcast.

• Shortly press - key to turn off Bluetooth with voice prompts BLUETOOTH OFF. If the Bluetooth function has turned off, the radio makes a wrong prompt when shortly pressing - key.

• Shortly press PTT key to exit settings and the radio enters standby state.

7.4 Bluetooth Headset Pair Deletion

In the state mode, long press + key for 5s to enter pair deletion mode and the blue indicator of the radio lights up for 5s. After deleting pair, the radio returns to standby mode.

8. VOX Setting

The voice control level can be set to: 0-5, with level 5 being the most sensitive.

8.1VOX level can be set through CPS.

8.2 Menu key can be used to set VOX level.

• Shortly press the menu key to choose VOX level.

• Shortly press + or - key to set VOX level.

• Shortly press PTT key to exit settings and the radio returns to standby state.

9. Call Tone

The radio supports Call Tone function. In the standby state, double press PTT key to transmit call tone. During transmitting, the radio can receive call tone. In addition, other radios on the same channel also can receive call tone.

• Shortly press the menu key to choose Call Tone.

• Shortly press + or - key to choose Call Tone and 1-5 kinds are selectable.

• Shortly press PTT key to exit settings and the radio returns to standby state.

10. Roger Beep

The radio supports Roger Beep function, which can send a voice to remind the receiver of completing transmission. When the function is turned on , the speaker of the transmitter also can hear Roger Beep after transmitting.

• Shortly press the menu key to choose Roger Beep menu.

• Shortly press + or - key to set Roger Beep ON or OFF.

• Shortly press PTT key to exit settings and the radio returns to standby state.

11. Key Beep

The radio supports Key Beep function. When the function is turned on, the radio will make the key beep to remind the user whether operation is effective.

• Shortly press the menu key to choose Key Beep.

• Shortly press + or - key to set Key Beep ON or OFF.

• Shortly press PTT key to exit settings and the radio returns to standby state.

• Shortly press + or - key to set Key Beep ON or OFF.

• Shortly press PTT key to exit settings and the radio returns to standby state.

12. Channel Lock
12.1 Press + and - key simultaneously and the speaker makes two beeps. The channel lock is turned on and the channel is not adjusted.
12.2 Press + and - key simultaneously and the speaker makes a beep. The channel lock is turned off and the channel is adjusted.

13. Lock Function
13.1 Press the menu key and - key simultaneously, the speaker makes a lock prompt and the lock function is turned on. In addition to PTT key, other keys can't be operated. The radio makes a toot failure prompt when pressing keys.
13.2 Press the menu key and - key simultaneously, the speaker makes an unlock prompt and the lock function is turned off. All keys can be operated normally.
Note: prompts are effective when the key beep is turned on.

14. Channel Scan
14.1 In the standby state, press the menu key and + key for over 3s to turn on the channel scan function. When scanning the effective signal, the radio stops to receive. Press + key again to continue scanning.14.2 Press the menu key and + key again for over 3s to turn off the channel scan function.

15. Companding Function
15.1 Companding function on/off can be set through CPS (Checked is on, checked by default).
15.2 The programmable key can be preset as companding function through CPS. Long press the programmable key to turn on or off the companding function.

16. Monitor Function
16.1 Monitor function on/off can be set through CPS (Checked is on, not checked by default).
16.2 The programmable key can be preset as monitor function through CPS.
• In the standby state, long press the programmable key to turn on the monitor function.
• In the monitored mode, long press the programmable key to turn off the monitor function.

17.TOT
To prevent some users from occupying the same channel for a long time, the user can turn on the TOT function. When the user continuously transmits on the current channel to the set time, the radio will stop transmitting and speaker makes a TOT prompt.
TOT time can be set through CPS. Selectable time: 60-180s (default: 60s).

18. Busy Channel Lockout
18.1 Busy channel lockout ON or OFF can be set through CPS.
18.2 When choosing ON and receiving the channel signal of other radios, transmission can't be proceed by pressing PTT key and the radio makes a beep prompt.
18.3 When choosing OFF, the above situations don't appear.

19. Battery Save
To extend battery use time, the user can turn on the save mode. After the function is turned on, if no effective signals are received and no keys is operated in 10s, the radio will automatically enter save mode. In the save mode, the radio can transmit by pressing PTT key or receive the detected signal.

20. Low Battery Alert
20.1 When the battery power is lower than 25%, the radio will make low battery alert prompt and the prompt will ring once every 30s. Please recharge the battery. The transmission operation is banned and the radio is in the standby and receiving mode. Please replace the new battery or recharge the battery.
20.2 When the battery power is lower than 5%, the radio will automatically turn off.

21. Restore Default Setting
In the off state, press the menu key and power key simultaneously for 5s, the radio will be turned on and the default setting is restored.

22. Alarm
Press and hold - key for 3s and the alert tone begins to sound. There is no need to continue to hold the - key or use PTT key to transmit.The other radios that set the same channel and CTCSS/DCS will receive a steady tone for 8s followed by the voice transmission for 22s.

SPECIFICATIONS (RB39P-FCC)

GENERAL	Frequency Range	FRS
	Rated Voltage	3.7V DC
	Memory Channel	22
	Frequency Sensitivity	±0.5ppm
	Antenna Impendance	50Ω
	Operation Temperature Range	-20℃~+55℃
TRANSMITTER	RF power	≤2W/≤0.5W
	Modulation type	FM
	Modulation distortion	<5%
	Adjacent channel power	≥60dB
	Audio response	-18 ~+10.5 dB
	Max FR. Deviation	≤±5KHz
	Spurious Radiation	≤-20dBm
	Current	≤1300mA
	Modulation Noise	＜-40dB
	Intermediation sensitivity	4-11mv
RECEIVER	Receiving sensitivity	≤0.282μV
	Adjacent channel selectivity	≥60dB
	Occupied Bandwidth	≥6KHz
	Current	Standby 70mA, working 220mA
	Reference Frequency	26.000MHz
	Inter-modulation	≥60dB
	Conducted Emissions	≤-20dBm
	Audio response	-17～+11.5dB
	Audio distortion	<5%
	Audio power	500mW

Default Setting (FCC-RB39P)

CH NO.	Frequency（MHz）	Code(Hz)	Power
1	462.5625	67.0	High
2	462.5875	118.8	High
3	462.6125	127.3	High
4	462.6375	131.8	High
5	462.6625	136.5	High
6	462.6875	141.3	High
7	462.7125	146.2	High
8	467.5625	D243N	Low
9	467.5875	D032N	Low
10	467.6125	D047N	Low
11	467.6375	D051N	Low
12	467.6625	D053N	Low
13	467.6875	D065N	Low
14	467.7125	D116N	Low
15	462.5500	123.0	High
16	462.5750	D743I	High
17	462.6000	D332I	High
18	462.6250	127.3	High
19	462.6500	D243I	High
20	462.6750	D606N	High
21	462.7000	D731I	High
22	462.7250	136.5	High

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

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.

•User instructions should accompany the device when transferred to other users.
•Do not use this device if the operational requirements described herein are not met.
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 of 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/
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.

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.

FCC Requirements:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

•(Only applicable to home)This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. 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.

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.

•Restriction Information

This product can be used in EU countries and regions, including: Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and United Kingdom (UK).

For the warning information of the frequency restriction, please refer to the package.

•Disposal

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) 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 in your area.

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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage;

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure Compliance and Control Guidelines and 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 necessary information or less, is important because the radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance.

•DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio, and the antenna gain shall not exceed the specified gain by the manufacturer declared.

•DO NOT transmit for more than 50% of total radio use time, more than 50% of the time can cause RF exposure compliance requirements to be exceeded.

•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.

•DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

•Portable Device, this transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. RF exposure compliance is limited to the specific belt-clip and accessory configurations as documented in this filing and the separation distance between head and the device or its antenna shall be at least 2.5 cm.

When worn on the body, always place the radio in approved clip, holder, holster, case, or body harness for this product. Use of non-approved accessories may result in exposure levels, which exceed the RF exposure limits.

Hand-held Mode(if applicable)

• Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) at least 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(if applicable)

•When placing or receiving a phone call, hold your radio product as you would a wireless telephone. Speak directly into the microphone. Do not use the equipment when you are driving

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 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 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.

Protect your hearing:

WARNING

• 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
• Use careful with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss
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

WARNING

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
••BATTERY WARNING: KEEP OUT OF REACH OF CHILDREN
•Store spare batteries securely
•If the battery compartment (if applicable) does not close securely, stop using the product and keep it away from children
•If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention
•Dispose of used batteries immediately and safely
Long transmission
•When the transceiver is used for long transmissions, the radiator and chassis will become hot.

Safety Operation

WARNING

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

WARNING

•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

Cut along this line

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. 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.

Web:www.retevis.com
E-mail:kam@retevis.com
Facebook:facebook.com/retevis

MADE IN CHINA