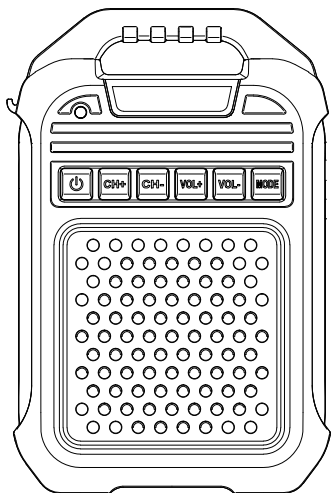


# RETAVIS



## **RB65** **User's manual**

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EU Importer

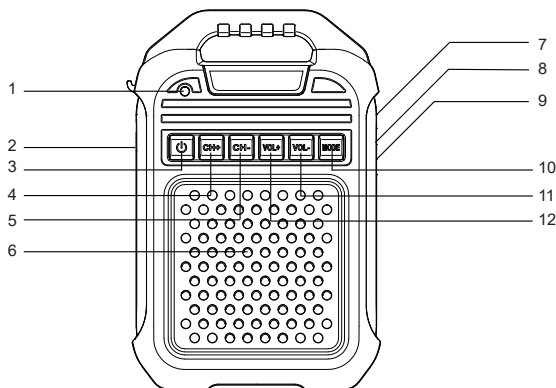
Name: Germany Retevis Technology GmbH

Address: Uetzenacker 29, 38176 Wendeburg

## Functions and Features









1. Operated with analog straight mode of FRS, 22 channels randomly switched, wide and narrow band, capable of CTCSS/DCS signaling.
2. Configured with additional functions such as monitor, scan, busy channel lockout and companding.
3. Equipped with FM radio function, lightly press the channel button to switch radio channels.
4. The radio is able to be connected to Bluetooth, and the wireless transmission distance can reach 10 meters in an ideal state without obstacles. It can achieve phone audio playback and timely payment receipt voice broadcast.
5. Furnished with Type-C interface, in addition to conventional read and write programming, it can also support power by connecting to the power bank through the Type-C interface to boost.
6. Supporting with TF card audio playback and 3 file formats: MP3, WMA, and WAV, and also supports single tune circulation.
7. Equipped with high-performance internal magnetic speaker and a maximum peak power of 10W, the radio has a crystal clear sound quality with loud sound and high reducibility.
8. Set with clear and accurate voice prompts for mode switching.
9. Featured with patented design appearance, rounded structure, comfortable feel, and be easy to carry.

## Buttons and Interfaces Function



- |                             |                                 |
|-----------------------------|---------------------------------|
| 1. Indicator                | 7. TF card slot                 |
| 2. Handmicrophone interface | 8. DC12V DC power supply socket |
| 3. Power ON/OFF button      | 9. Type-C programming jack      |
| 4. Channel + button         | 10. MODE button                 |
| 5. Channel - button         | 11. Volume - button             |
| 6. 4-inch speaker           | 12. Volume + button             |

## Buttons and Interfaces Instruction

	Power button	Long press for 2 seconds to turn on or turn off In Bluetooth/TF card mode, shortly press to pause or play
	Channel+/PREV button	In channel mode, it is the Channel + button In Bluetooth/TF card mode, it is the PREV button
	Channel -/NEXT button	In channel mode, it is the Channel - button In Bluetooth/TF card mode, it is the NEXT button
	Volume + button	Shortly press to increase the volume
	Volume - button	Shortly press to decrease the volume
	MODE button	Shortly press to switch mode in the state of power-on Mode switching sequence: Channel mode → FM Radio mode → Bluetooth/TF card mode → Channel mode (cyclic). Long press for 2 seconds in channel mode to turn on or turn off the monitor
	Amplification Mode	In channel mode, simultaneously press the Power button and the Channel + button to enter the amplification mode, and then press the Power button and the Channel + button again to exit the amplification mode ( the handmicrophone cable is inserted)
	Single Cycle	Single Cycle In TF card mode, simultaneously press the Power button and the Channel - button to enter single cycle, and then press the Power button and the Channel - button again to exit Repeat mode

## Function Operations

### 1. Turn on the Radio

1) After inserting the 12V/1A power adapter into the DC port, long press the Power button for 2 seconds to turn on the radio, or install 6 1.5V (9V) dry batteries into the battery slot to turn on the radio. (Warning: don't support recharging the dry batteries directly)

2) In emergency situations, the external Type-C interface can be used for boosting and turning on the radio.

### 2. Squelch Level

The squelch level is an analog reference level used to set the internal squelch value in the radio CPU. You can preset the squelch level. When in user mode, the squelch level can be adjusted.

0-9 levels with each set step of 1. Default: Level 3

### 3. Battery Save Function

Turn on battery save: if no operation for 10 seconds, the radio will automatically enter a battery save state.

Turn off battery save: the radio does not save power.

### 4. Communication

After the terminal is plugged in with the K-plug handmicrophone cable, press the PTT button to transmitting and release the PTT button to finish.

### 5. Turn on the Scan

There are Carrier and Time scan mode to set in the software. when the "Scan Add" of the channel is set to "Yes", the channel is scannable.

When the standby channel is the 22nd channel, and the "Scan Add" of the 22nd channel is set to "No", the radio will automatically start to scan, and the indicator light will flash green in the scan mode. When there is a signal, the radio will automatically stop on the channel for communication.

a. The radio will stop on the channel with a signal, and after 15 seconds of signal loss, it will continue to scan the next channel.

b. When the scanned channels are less than 2, the radio cannot scan.

#### 6.Chinese and English Switch

The programming software can set three states: Chinese, English, and Off. Default: Chinese

#### 7.Time Out Timer (TOT)

Programming software can limit the transmission time of the channel: 0-300s. Default: 30s

#### 8.CTCSS/ DCS

Programming software can be used to set QT/DQT signaling on the radio channel. When the channel is set with QT/DQT signaling, the squelch can only be turned on when a signal using the same QT or DQT is received. If the same channel uses different QT/DQT for calling, the squelch cannot be turned on and the radio only lights up the green of the indicator.

9.The bandwidth defaults to narrowband at the factory.

### Channel Default Value

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

### CTCSS/DCS Table

CTCSS (50 Numbers)				
67	69.3	71.9	74.4	77
79.7	82.5	85.4	88.5	91.5
94.8	97.4	100	103.5	107.2
110.9	114.8	118.8	123	127.3
131.8	136.5	141.3	146.2	151.4
156.7	159.8	162.2	165.5	167.9
171.3	173.8	177.3	179.9	183.5
186.2	189.9	192.8	196.6	199.5

203.5	206.5	210.7	218.1	225.7
229.1	233.6	241.8	250.3	254.1
DCS (210 Numbers)				
D023N	D025N	D026N	D031N	D032N
D036N	D043N	D047N	D051N	D053N
D054N	D065N	D071N	D072N	D073N
D074N	D114N	D115N	D116N	D122N
D125N	D131N	D132N	D134N	D143N
D145N	D152N	D155N	D156N	D162N
D165N	D172N	D174N	D205N	D212N
D223N	D225N	D226N	D243N	D244N
D245N	D246N	D251N	D252N	D255N
D261N	D263N	D265N	D266N	D271N
D274N	D306N	D311N	D315N	D325N
D331N	D332N	D343N	D346N	D351N
D356N	D364N	D365N	D371N	D411N
D412N	D413N	D423N	D431N	D432N
D445N	D446N	D452N	D454N	D455N
D462N	D464N	D465N	D466N	D503N
D506N	D516N	D523N	D526N	D532N
D546N	D565N	D606N	D612N	D624N
D627N	D631N	D632N	D645N	D654N
D662N	D664N	D703N	D712N	D723N
D731N	D732N	D734N	D743N	D754N
D023I	D025I	D026I	D031I	D032I
D036I	D043I	D047I	D051I	D053I
D054I	D065I	D071I	D072I	D073I
D074I	D114I	D115I	D116I	D122I
D125I	D131I	D132I	D134I	D143I
D145I	D152I	D155I	D156I	D162I
D165I	D172I	D174I	D205I	D212I
D223I	D225I	D226I	D243I	D244I
D245I	D246I	D251I	D252I	D255I
D261I	D263I	D265I	D266I	D271I
D274I	D306I	D311I	D315I	D325I
D331I	D332I	D343I	D346I	D351I
D356I	D364I	D365I	D371I	D411I
D412I	D413I	D423I	D431I	D432I
D445I	D446I	D452I	D454I	D455I
D462I	D464I	D465I	D466I	D503I
D506I	D516I	D523I	D526I	D532I
D546I	D565I	D606I	D612I	D624I
D627I	D631I	D632I	D645I	D654I
D662I	D664I	D703I	D712I	D723I
D731I	D732I	D734I	D743I	D754I



### 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.

### Radio License (only applicable to licensed radio)

Governments keep the radios in classification, business two-way radios operate on radio frequencies that are regulated by the local radio management departments (FCC, ISSED, OFCOM, ANFR, BFTK, Bundesnetzagentur...). Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

### 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 condition that this device does not cause harmful interference. (Licensed radios are applicable);

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (Other devices are applicable)

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

Note: 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](http://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 all electrical and electronic products, batteries, and accumulators 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 Safety

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. 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/>

To control your exposure and ensure compliance with the occupational/controlled environment exposure limits, always adhere to the following procedures. 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. Because all Retevis two-way radios are designed, manufactured, and tested to ensure they meet government-established RF exposure levels.

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 RF exposure limits. Transmit no more than the rated duty factor of 50% of the time. 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.

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.

#### 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, 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.

#### 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.



## 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
  - 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



### 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

- 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



### 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>

## 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.



**Shenzhen Retevis Technology Co., Ltd.**

7/F, 13-C, Zhonghaixin Science&Technology Park, No.12 Ganli  
6th Road, Jihua Street, Longgang District, Shenzhen, China

Web: [www.retevis.com](http://www.retevis.com)

E-mail: [kam@retevis.com](mailto:kam@retevis.com)

Facebook: [facebook.com/retevis](https://facebook.com/retevis)



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