

# RETEVIS



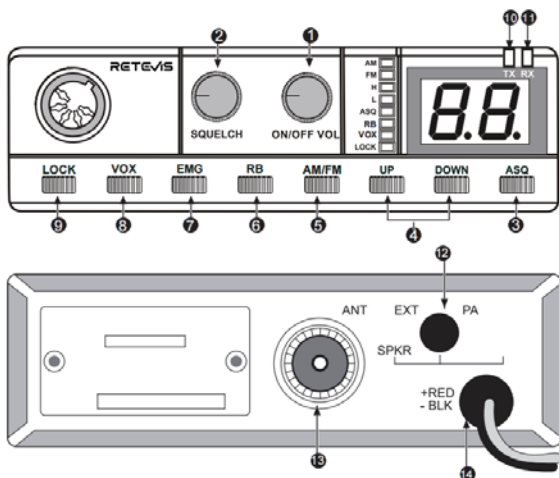
## **MB2** CB Radio USER'S MANUAL



# Contents

|                             |    |
|-----------------------------|----|
| KNOW ABOUT THIS RADIO ----- | 01 |
| HOW TO USE THIS RADIO ----- | 02 |
| SPECIFICATION -----         | 03 |
| COUTION -----               | 06 |
| Guarantee -----             | 09 |

## KNOW ABOUT THIS RADIO



|    |                                                                |
|----|----------------------------------------------------------------|
| 1  | Power On/Off Volume control                                    |
| 2  | Squelch control                                                |
| 3  | Short press: ASQ control, long press: Start scan.              |
| 4  | Short press: Channel selector, long press: fast change channel |
| 5  | AM/FM mode control                                             |
| 6  | RB control                                                     |
| 7  | Emergency channel 9/19                                         |
| 8  | VOX control                                                    |
| 9  | Key lock                                                       |
| 10 | TX indicator                                                   |
| 11 | RX indicator                                                   |
| 12 | External speaker Jack                                          |
| 13 | Antenna Jack                                                   |
| 14 | Power cable                                                    |

# HOW TO USE THIS RADIO

## 1. ON/OFF-Volume

- a) To turn the set on, turn the knob (1) clockwise.
- b) To increase the sound level, turn the same knob further clockwise.

## 2. Squelch

Turn the SQUELCH knob (2) clockwise to the exact point where all background noise disappears. Please note that this control is fine regulation, if you set this SQ control to the maximum (fully clockwise), the radio can only receive the strongest signal.

## 3. A. ASQ

The automatic squelch (ASQ) uses a preset average value. It can be turned on by short press key (3) [ASQ]

## B. Scan function

Long press key (3) [ASQ] to start scan, long press again to stop scan.

## 4. Channel selection

All channels can be selected by short press channel selector keys (4) [UP] or [DOWN]. Long press keys (4) [UP] or [DOWN] fast change channel. The selected channel is displayed on the LED.

## 5. AM/FM modulation

The key (5) [AM/FM] allows selecting the AM or FM modulation.

## 6. RB setting

Press the key (6) [RB] to select RB off or 1-6 group.

## 7. Priority Channel 9 /19

Press the key (7) [EMG] to switch among CH9,CH19 and normal channel .

## 8. VOX setting

Short press (8) [VOX] to switch VOX on , and then long press to enter VOX level setting, the LED display the level like L3, press UP or DOWN to change VOX level. and then long press VOX key again to enter VOX setting, LED display current level like D4, press UP or DOWN to change delay level, and then long press to return to VOX level setting, press PTT to store and quit.

## 9. Key lock

Short press(9) LOCK Key to lock all keys. press it again to unlock keys.

## 10.Transmitting

To transmit, press and hold the microphone PTT key and the (10) TX indicator will light on.

## 11.Receiving

During receiving, the RX indicator (11) will light on.

## 12.External speaker jack

The radio is equipped with a 3.5 mm jack socket (D) at the rear panel to connect an external speaker of 4 - 8 ohm impedance. When the external speaker is connected, the internal speaker will switched off.

## SPECIFICATION

| GENERAL                     |                                      |                                       |
|-----------------------------|--------------------------------------|---------------------------------------|
| Modulation Mode             |                                      | AM/FM                                 |
| Frequency Range             |                                      | 26.965-27.405MHz                      |
| Frequency Tolerance         |                                      | ±5.0ppm                               |
| Input Voltage               |                                      | 13.8V                                 |
| Dimensions                  |                                      | 185x124x38mm                          |
| Weight                      |                                      | 620g                                  |
| Operating Temperature Range |                                      | -20°C to +50°C                        |
| Current Drain               | Transmit                             | 3A MAX                                |
|                             | Receive                              | Squelched 0.3A                        |
|                             | VOL Max                              | 0.7A                                  |
| Antenna Connector           |                                      | UHF, SO-239                           |
| TRANSMITTER                 |                                      |                                       |
| Power Output                |                                      | AM /FM 4W                             |
| Transmission interference   |                                      | inferior to 4nW                       |
| Frequency Response          |                                      | 300-3000Hz                            |
| Modulated signal distortion |                                      | inferior to 5%                        |
| Output Impedance            |                                      | 50 ohms                               |
| RECEIVER                    |                                      |                                       |
| Sensitivity                 |                                      | Less than 1uV for 10dB(S+N)/N         |
| Image Rejection             |                                      | 70dB                                  |
| Adjacent Channel Rejection  |                                      | 60dB                                  |
| IF Frequencies              | 1st 10.695MHz                        |                                       |
|                             | 2nd 455KHz                           |                                       |
| Automatic Gain Control(AGC) | Less than 10dB change in audio       |                                       |
|                             | Output for inputs from 10 to 50000uV |                                       |
| Squelch                     |                                      | less than 1uV                         |
| Audio Output Power          |                                      | 2Watts at 8Ω less than 10% distortion |
| Frequency Response          |                                      | 300-3000Hz                            |

| FREQUENCY LIST |            |       |            |
|----------------|------------|-------|------------|
| CH.NO          | Freq.(MHz) | CH.NO | Freq.(MHz) |
| 1              | 26.965     | 21    | 27.215     |
| 2              | 26.975     | 22    | 27.225     |
| 3              | 26.985     | 23    | 27.255     |
| 4              | 27.005     | 24    | 27.235     |
| 5              | 27.015     | 25    | 27.245     |
| 6              | 27.025     | 26    | 27.265     |
| 7              | 27.035     | 27    | 27.275     |
| 8              | 27.055     | 28    | 27.285     |
| 9              | 27.065     | 29    | 27.295     |
| 10             | 27.075     | 30    | 27.305     |
| 11             | 27.085     | 31    | 27.315     |
| 12             | 27.105     | 32    | 27.325     |
| 13             | 27.115     | 33    | 27.335     |
| 14             | 27.125     | 34    | 27.345     |
| 15             | 27.135     | 35    | 27.355     |
| 16             | 27.155     | 36    | 27.365     |
| 17             | 27.165     | 37    | 27.375     |
| 18             | 27.175     | 38    | 27.385     |
| 19             | 27.185     | 39    | 27.395     |
| 20             | 27.205     | 40    | 27.405     |

| CTCSS code |               |     |               |     |               |     |               |
|------------|---------------|-----|---------------|-----|---------------|-----|---------------|
| No.        | Freq.<br>(Hz) | No. | Freq.<br>(Hz) | No. | Freq.<br>(Hz) | No. | Freq.<br>(Hz) |
| 1          | 67            | 11  | 97.4          | 21  | 136.5         | 31  | 192.8         |
| 2          | 71.9          | 12  | 100           | 22  | 141.3         | 32  | 203.5         |
| 3          | 74.4          | 13  | 103.5         | 23  | 146.2         | 33  | 210.7         |
| 4          | 77            | 14  | 107.2         | 24  | 151.4         | 34  | 218.1         |
| 5          | 79.7          | 15  | 110.9         | 25  | 156.7         | 35  | 225.7         |
| 6          | 82.5          | 16  | 114.8         | 26  | 162.2         | 36  | 233.6         |
| 7          | 85.4          | 17  | 118.8         | 27  | 167.9         | 37  | 241.8         |
| 8          | 88.5          | 18  | 123           | 28  | 173.8         | 38  | 250.3         |
| 9          | 91.5          | 19  | 127.3         | 29  | 179.9         |     |               |
| 10         | 94.8          | 20  | 131.8         | 30  | 186.2         |     |               |

| DCS CODE LIST |             |          |             |          |             |          |             |
|---------------|-------------|----------|-------------|----------|-------------|----------|-------------|
| Code No.      | DSC (Octal) | Code No. | DSC (Octal) | Code No. | DSC (Octal) | Code No. | DSC (Octal) |
| 1             | 23          | 27       | 152         | 53       | 311         | 79       | 466         |
| 2             | 25          | 28       | 155         | 54       | 315         | 80       | 503         |
| 3             | 26          | 29       | 156         | 55       | 325         | 81       | 506         |
| 4             | 31          | 30       | 162         | 56       | 331         | 82       | 516         |
| 5             | 32          | 31       | 165         | 57       | 332         | 83       | 523         |
| 6             | 36          | 32       | 172         | 58       | 343         | 84       | 526         |
| 7             | 43          | 33       | 174         | 59       | 346         | 85       | 532         |
| 8             | 47          | 34       | 205         | 60       | 351         | 86       | 546         |
| 9             | 51          | 35       | 212         | 61       | 356         | 87       | 565         |
| 10            | 53          | 36       | 223         | 62       | 364         | 88       | 606         |
| 11            | 54          | 37       | 225         | 63       | 365         | 89       | 612         |
| 12            | 65          | 38       | 226         | 64       | 371         | 90       | 624         |
| 13            | 71          | 39       | 243         | 65       | 411         | 91       | 627         |
| 14            | 72          | 40       | 244         | 66       | 412         | 92       | 631         |
| 15            | 73          | 41       | 245         | 67       | 413         | 93       | 632         |
| 16            | 74          | 42       | 246         | 68       | 423         | 94       | 654         |
| 17            | 114         | 43       | 251         | 69       | 431         | 95       | 662         |
| 18            | 115         | 44       | 252         | 70       | 432         | 96       | 664         |
| 19            | 116         | 45       | 255         | 71       | 445         | 97       | 703         |
| 20            | 122         | 46       | 261         | 72       | 446         | 98       | 712         |
| 21            | 125         | 47       | 263         | 73       | 452         | 99       | 723         |
| 22            | 131         | 48       | 265         | 74       | 454         | 100      | 731         |
| 23            | 132         | 49       | 266         | 75       | 455         | 101      | 732         |
| 24            | 134         | 50       | 271         | 76       | 462         | 102      | 734         |
| 25            | 143         | 51       | 274         | 77       | 464         | 103      | 743         |
| 26            | 145         | 52       | 306         | 78       | 465         | 104      | 754         |

| BAND LIST  |          |                                       |
|------------|----------|---------------------------------------|
| BAND       | Channels | Frequency                             |
| EU         | 40CH     | 26.965 - 27.405MHz [AM/FM modulation] |
| CE         | 40CH     | 26.965 - 27.405MHz [FM modulation]    |
| UK         | 40CH     | 27.60125 - 27.99125MHz                |
| PL         | 40CH     | 26.960 - 27.400MHz                    |
| I2 [IT]    | 36CH     | 26.865 - 26.965MHz                    |
| DE         | 80CH     | 40CH: 26.65 - 27.405MHz               |
|            |          | 80CH: 26.565 - 26.955MHz              |
| IN [India] | 27CH     | 26.965 - 27.275MHz                    |

## CAUTION

### 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.

### Radio License

Governments keep the radios in classification. Two-way radios are only operated on authorized radio frequencies that are regulated by the local radio management departments (such as FCC, ISSED, OFCOM, ANFR, BFTK, Bundesnetzagentur, and so on.). The detailed classification and the use of your two-way radios, please contact the local government radio management departments. Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

### GMRS

This two-way radio is a GMRS station. A valid individual license is required to operate a GMRS station. To obtain an individual license, an applicant must be eligible and follow the applicable rules and procedures established by FCC. The applicant must pay the required application and regulatory fees. Each individual license in the GMRS will normally have a term of ten years from the date of grant or renewal, and may be renewed pursuant to the procedures of FCC. To obtain a GMRS operator license, you need FCC Form 605 & 159, we suggest visiting the FCC website at <https://www.fcc.gov/wireless/support/fcc-form-605>, which includes necessary instructions. More questions about the license application, please contact the FCC at 1-888-225-5322 or go to the FCC's website: <http://www.fcc.gov>.

Note: According to FCC rules, any individual who holds an individual GMRS license may allow his or her immediate family members to operate his or her GMRS station or stations. Immediate family members are the licensee's spouse, children, grandchildren, stepchildren, parents, grandparents, stepparents, brothers, sisters, aunts, uncles, nieces, nephews, and in-laws.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### 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.

(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. 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.

### Restriction on putting into service

This product may be used in following 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 intended country of use, please refer to the package.

This radio equipment contains frequency bands that are subject to licensing procedures before it is allowed to be operated. Please make sure you have a valid radio license or radio operator permit before use.

### Disposal

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, or 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 and rules in your area.



### 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/>

Keeping the radio at a proper distance is important as RF exposure decreases with increasing distance from the proper antenna. A proper antenna is an antenna supplied with this radio by the manufacturer or specifically authorized by the local authority for use with this radio. This radio can only be operated by use of an antenna of a type and maximum (or lesser) gain approved for the transmitter under regulations and rules. This transmitter must operate with the antenna(s) documented and in Push-to-Talk and body-worn configurations as documented. Using authorized accessories is important because the use of Non-Reteviz accessories may result in exposure levels, which exceed the IEEE/ICNIRP RF exposure limits.

Transmit no more than the rated duty factor 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. For users who wish to further reduce their exposure, some effective measures to reduce RF exposure include:

- Reduce the amount of time spent using your wireless device.
- Increase the distance between wireless devices and your body.

This radio is designed for and classified as "General population/uncontrolled use". General population/uncontrolled environments are defined as locations where there is exposure of individuals who have no knowledge or control of RF exposure level.

### RF Safety distance

Speak directly into the microphone. During operation, the separation distance (1.2 m, Safe distance) between the user and the antenna subject to actual regulations. This separation distance will ensure that there is sufficient distance from a properly installed externally-mounted antenna to satisfy the RF exposure requirements. Transmit only when people are the recommended minimum lateral distance away from a properly installed externally mounted antenna according to installation instructions.

### Electromagnetic Interference/Compatibility

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, such as hospitals or healthcare facilities.

Persons with pacemakers, implantable cardioverter defibrillators (ICDs) or other active implantable medical devices 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 the 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.

**WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.**

Turn off your radio in the following conditions:

- Turn off your radio prior to entering any area with a potentially hazardous or explosive atmosphere. Only radio types that are especially qualified should be used in such areas as "Intrinsically Safe".

Note: The areas with potentially explosive atmosphere referred to above include blasting caps, blasting areas, inflammable gas, dust particles, metallic powders, grain powders, 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.

- Turn off your radio when taking on fuel or parked at gasoline service stations.
- 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.
- Do not use any radio that has a damaged antenna. If a damaged antenna comes into contact with the skin when the radio is in use, a burn can result.
- Turn off your radio before removing or installing accessories.
- When the transceiver is used for long transmissions, the radiator and chassis will become hot.

**Use of Communication Devices While Driving**

- Always check the laws and regulations on the use of radios in the areas where you drive.
- Use of Communication Devices, for example, mobile radio, may not be allowed.
- 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.
- Do not place a portable radio in the area over an air bag or in the airbag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the airbag inflates.

**Protect your hearing**

- Use the lowest volume necessary to do your job. Turn up the volume only if you are in noisy surroundings.
- 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 carefully with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss.

**CAUTION:** 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.

**WARNING: CHOKING HAZARD—Small Parts. Not suitable for children under 3 years old.**





## 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: [info@retevis.com](mailto:info@retevis.com)

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



MADE IN CHINA

**说明书要求：**

**尺寸： 120\*160**

**样式： 装订**

**印刷： 全黑白**

**纸张： 全双胶纸**

**此页无需印刷**