

USER GUIDE FOR PORTABLE TWO-WAY RADIOS

PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe place for future reference.



CAUTION:

Risk of fire or explosion if the battery is replaced by an incorrect type.

Not to disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery.



These symbols on the products, packaging, and/or accompanying documents means that used electrical and electronic products and batteries should not be mixed general household waste.



For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation.

By disposing of these products and batteries correctly, you will help to save valuable resource and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items. If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

- Do not attempt to disassemble the internal parts or modify them in any way.
- Do not place this product and battery near the fire.
- Do not place this product and battery in extremely low air pressure or low temperature.
- Only use batteries provided by the manufacturer
- Do not hold the antenna when the radio is transmitting.
- Do not use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with skin, a minor burn can result.

Compliance with RF Exposure Standards

National and international regulations require manufacturers to comply with the RF energy exposure limits for portable two-way radios before they can be marketed. The two-way radio is designed, manufactured, and tested to comply with all applicable national and international regulations for human exposure to radio frequency electromagnetic energy.

RF Energy Exposure Awareness and Control Information and Operational Instructions for

General Population and Uncontrolled Environment Use

NOTE: This device is intended for use in general population conditions where radio-frequency (RF) exposure meets the requirements in national and international regulations.

Notice to Users (FCC)

This device complies with Part 15 of the FCC rules.

For body-worn operation, this radio has been tested and meets the FCC RF exposure guidelines when used with accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Hold the transmitter approximately 25 mm from your face and speak in a normal voice, with the antenna pointed up and away.

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, release the PTT button. Transmitting 50 % of the time, or less, is important because this radio generates measurable RF energy exposure only when transmitting (in terms of measuring for standards compliance).

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Class B Digital Device

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE:

limits under Part 15 of the FCC Rules, which help protect against harmful interference in residential environments. It may generate, use, and radiate radio frequency energy; improper installation or use could cause interference to radio or TV reception. If interference occurs, try the following:

- Reorient or relocate the receiving antenna.
- Increase the distance between equipment and receiver.
- Connect to an outlet on a different circuit.
- Consult the dealer or an experienced radio/TV technician.

Package Contents

In box	QTY
Radio (VTR-3320)	2
Belt clip	2
Belt clip cover	2
Rechargeable Lithium-ion battery pack	2
User manual	1

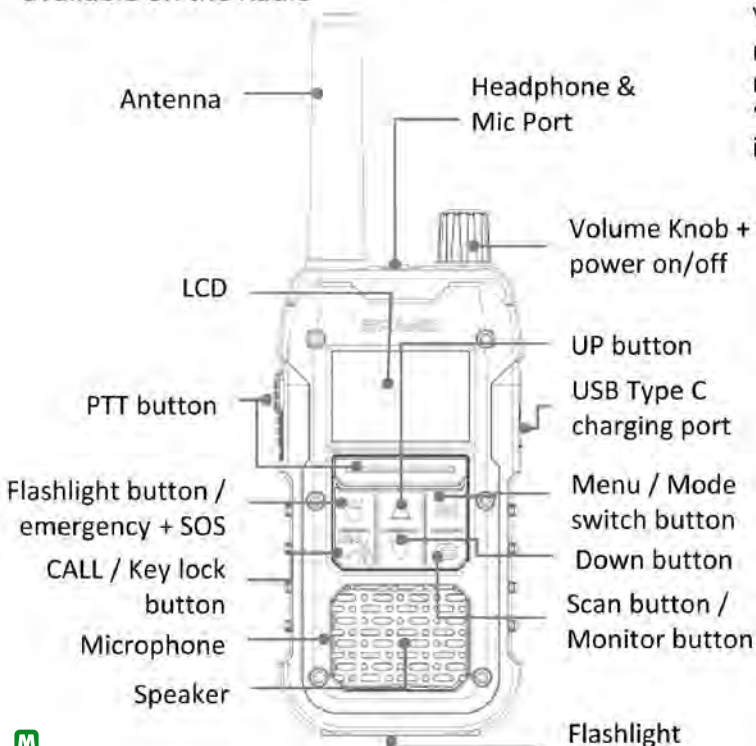
Features and Specifications

- 22 Channels + 8 Repeater Channels
- NOAA Weather Radio
- NOAA Weather Alert
- 121 Privacy-Codes (38 CTCSS Codes & 83 DCS codes)
- Up to 40 miles Range*
- iVOX
- 5 Selectable Call Tone
- Backlite LCD Display
- USB-C Connector for charging
- Battery Level Meter / Battery Save Indicator
- Channel Monitor
- Keypad Lock
- Scan Function
- Auto Squelch Control
- Vibration Alert
- Volume Knob (On/Off)
- Headset (Speaker with Microphone) Jacks
- LED Flashlight
- Power Source: Lithium-ion battery Pack 2000mAh
- Battery Life: Up to 14 hours (The rated battery life is measured under the industrial standard 5-5-90 duty cycle under lab condition. 5% of the time transmitting, 5% receiving with speaker on, and 90% waiting for incoming call. Risk of explosion if battery is replaced by an incorrect type.)

NOTE: *Range may vary depending on environmental and/or topographical conditions.

Radio Control Buttons and Display

This section describes the buttons and functions available on the Radio



GMRS Channels and Frequencies:

Channel	Frequency (MHz)	Power	Channel	Frequency (MHz)	Power (W)
1	462.5625	High	16	462.5750	High
2	462.5875	High	17	462.6000	High
3	462.6125	High	18	462.6250	High
4	462.6375	High	19	462.6500	High
5	462.6625	High	20	462.6750	High
6	462.6875	High	21	462.7000	High
7	462.7125	High	22	462.7250	High
8	467.5625	Low	23	TX 467.5500 / RX 462.5500	High
9	467.5875	Low	24	TX 467.5750 / RX 462.5750	High
10	467.6125	Low	25	TX 467.6000 / RX 462.6000	High
11	467.6375	Low	26	TX 467.6250 / RX 462.6250	High
12	467.6625	Low	27	TX 467.6500 / RX 462.6500	High
13	467.6875	Low	28	TX 467.6750 / RX 462.6750	High
14	467.7125	Low	29	TX 467.7000 / RX 462.7000	High
15	462.5500	High	30	TX 467.7250 / RX 462.7250	High

Weather Channels and Frequencies:

Weather Channel	Frequency (MHz)	Weather Channel	Frequency (MHz)
WX1	162.550	WX6	162.500
WX2	162.400	WX7	162.525
WX3	162.475	WX8	161.650
WX4	162.425	WX9	161.775
WX5	162.450	WX10	163.275

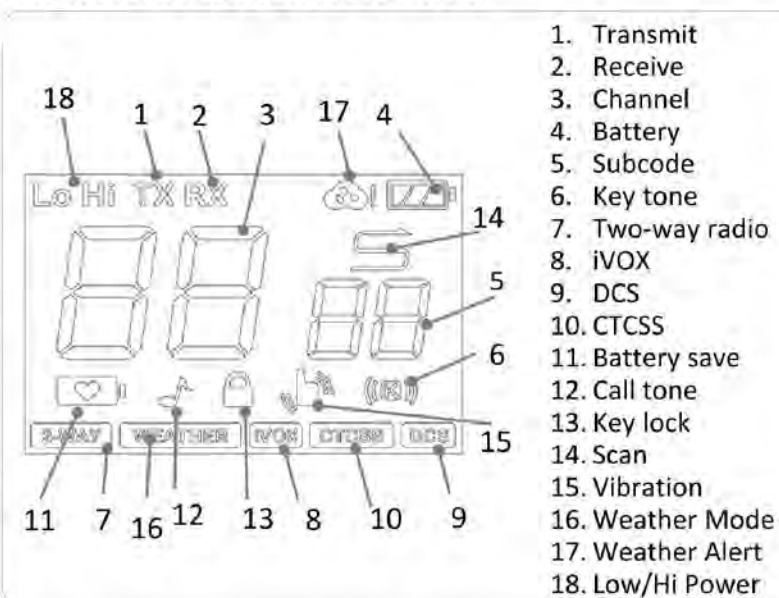
Weather Mode

Your radio has a NOAA WEATHER RADIO function to enable the user to receive weather reports from designated NOAA stations. In this mode, you can listen to weather broadcast from NOAA. , Press and hold the **MENU button** for 3 seconds to enter the **Weather mode** from the **2-Way mode**

- Change the weather channel setting by pressing the ▲ or ▼ button after selection from **MENU button**.
- Adjust the volume setting by Volume Knob.
- To switch to **2-Way mode**, press and hold the **MENU button** for 3 second or press the **PTT button**.

NOAA Weather Alert

Your radio can automatically respond to NOAA emergency messages. When enabled, an alarm sounds and the weather receiver turns on to provide immediate alerts. To toggle this '**Weather Alert**' feature, turn on by pressing the ▲ or ▼ button in the **Weather Alert** of **Weather mode**.

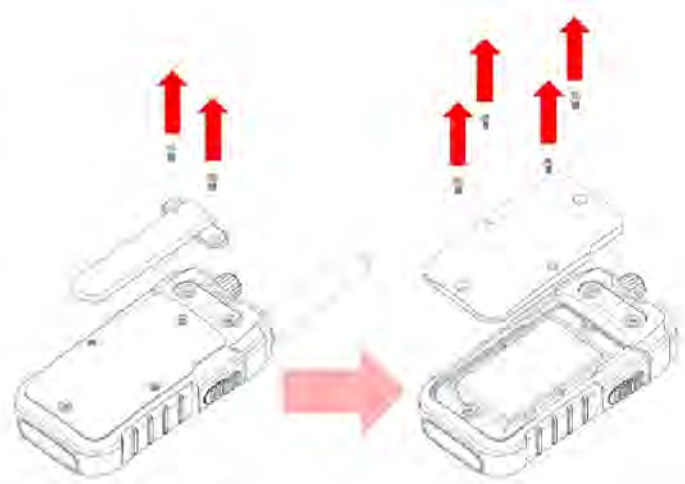


1. Transmit
2. Receive
3. Channel
4. Battery
5. Subcode
6. Key tone
7. Two-way radio
8. iVOX
9. DCS
10. CTCSS
11. Battery save
12. Call tone
13. Key lock
14. Scan
15. Vibration
16. Weather Mode
17. Weather Alert
18. Low/Hi Power

Installing and Charging the Batteries

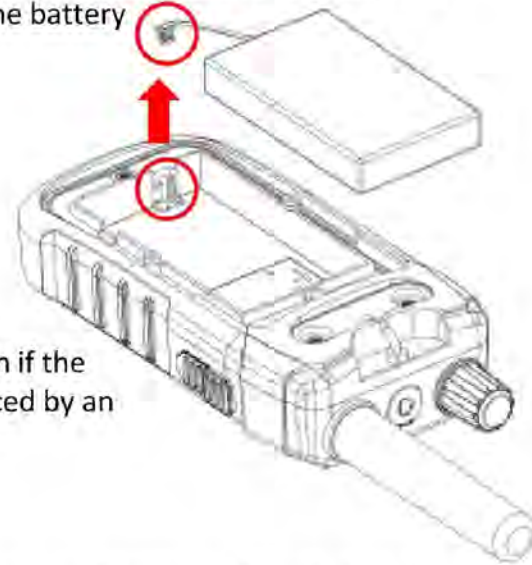
Each radio uses a Li-ion rechargeable battery pack, and beeps when the batteries are low.

1. Make sure the radio is turned off.
2. Remove the two screws on the belt clip or the belt clip cover (The unit comes with a belt clip cover pre-installed which you can keep or swap with the belt clip for use).
3. Remove the four screws on the battery compartment door and take off the door.
4. Firmly insert the battery connector into the socket until it's fully seated.
5. Place the Li-ion battery pack into the compartment.
6. Reattach the battery door and tighten the screws, ensuring the silicone washers are correctly positioned with the screws to prevent water leakage
7. Reattach the Belt clip and tighten the screws.
8. Charge the battery using a USB Type-C cable.



Remove battery



Remove the battery connector where is in the circle before remove the battery



CAUTION

Risk of explosion if the battery is replaced by an incorrect type.

Radio Battery Indicator

The icon of radio battery indicator shows the battery capacity level from full  to empty .

Battery maintenance


1. Charge the batteries once every three months when not in use.
2. Remove the battery from the radio when for storage.
3. Store the battery in 15C to 35C with low humidity to avoid the moisture and corrosive materials.

Battery charging

1. Plug the USB type C cable to the USB charger.
2. Connect the USB charger to wall power outlet.
3. Connect the other end of USB type C cable to the radio unit.
4. The battery indicator will be flashing when charging.

Turning ON and OFF your radio by the Volume Knob

Turn the **Volume Knob** clockwise to switch ON the radio. Turn it anti-clockwise to switch OFF.

1. When powered ON, the LCD screen shows all the feature icons available on the radio.
2. The LCD screen then shows the current channel and code and all features that are enabled.
3. The Battery Save function automatically activates, and show  once the transceiver does not receive a signal for 10 seconds.


Listening or Receiving

The radio will receive signals automatically when set to the same channel and code as the transmitting radio. Check the speaker volume to ensure messages are heard clearly.

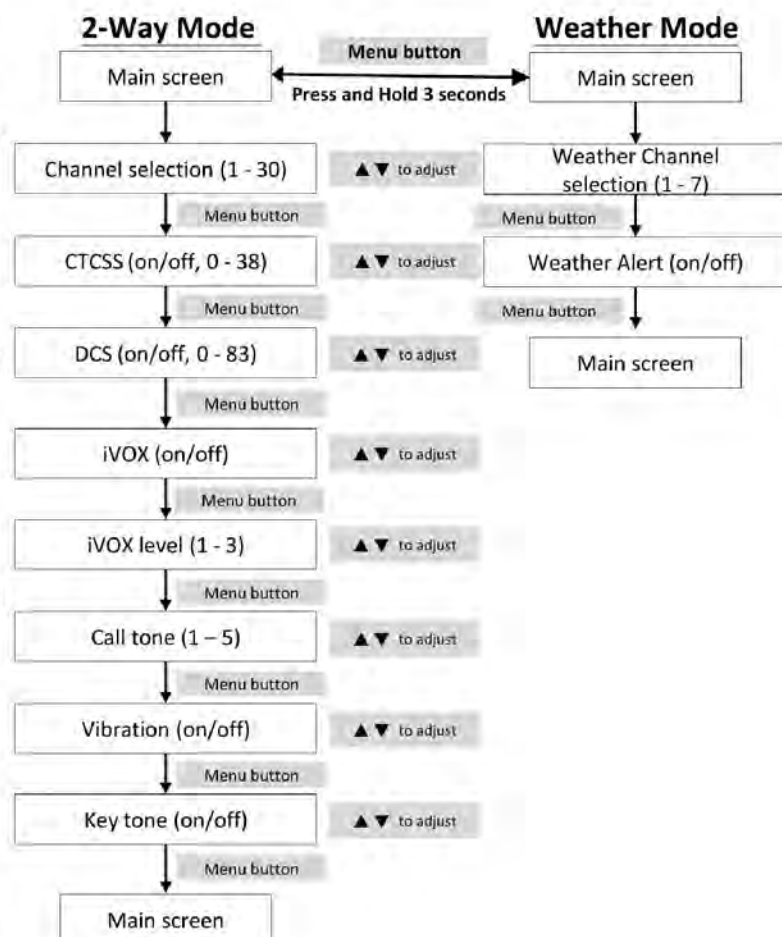
Adjusting the Volume

Spin clockwise or anti-clockwise to adjust the speaker volume.

Talk Range

To get the best audio quality and range, avoid interference and ensures clearer communication. keep  at least 5 feet of distance between radios when in use.

Menu Options (Press and Hold the **Menu button** 3 seconds to switch between **2-Way Mode** and **Weather Mode**. Then Press **Menu button** and **▲** or **▼** can proceed for below settings)



Selecting Channel

Your radio has 22 channels. The channel is the frequency the radio uses to transmit.

1. When the radio is powered ON, press ▲ or ▼ to start to select channels. The channel number shows on the LCD screen.
2. Press Menu button and then ▲ or ▼ to modify the selected channel details (selection of CTCSS/DCS)
3. Press Menu button again for other Menu options or to exit the menu.

Talking and Listening

Make sure that all radios are in your group with the same channel and CTCSS or DCS code when start to communicate.

1. Hold your radio 5-8 cm from your mouth.
2. The **PTT button** is divided into 2 parts, the upper part represent 'High' and the lower part represent 'Low'.
3. **PTT Low** always transmit at 1 W. **PTT High** transmits at a higher power when you select a high power channel (channel 1–7 and channel 15–22).
4. Press and hold the **PTT button** while speaking. The transmit icon appears on the LCD screen.
5. When releasing the **PTT button**, you can receive incoming calls, the receive icon appears on the LCD.

Push-to-Talk Time-out Timer

The continuous warning tone and stops transmitting if you are pressing the **PTT Button** for 60 seconds, it prevents accidental transmissions and save battery life purposes.

iVOX Sensitivity Levels

When iVOX is turned on, the iVOX is displayed, the microphone detects if you are talking, the radio triggers the transmission automatically and the radio uses the built in microphone to detect your voice.

Level	Description
OFF	Turn off the iVOX settings.
1	Low Sensitivity for noisy environments
2	Balanced sensitivity for general use.
3	High Sensitivity for quiet environments

Setting and Transmitting Call Tones

Your radio has 5 Call tones for selection, you can transmit different call tones to other radios in your group.

Vibrate Alert Setting

When the Vibrate Alert is set to 'on', the radio vibrates when call is received. After the last transmission, vibration will pause for 30 seconds before it can activate again.

Key Tone Setting

5 Key tones for selection for a key or a button is pressed.

CALL/Keypad Lock button

This button supports two functions:

1. Short Press: Sends a **Call tone** to alert other users.
2. Long Press (Hold for 3 seconds): Locks or unlocks the keypad to prevent accidental operation.

NOTE : When the keypad is locked, the **PTT, Call Tone,**

Flash Light, Emergency, Key Lock buttons remain functional.

Monitor Button

This feature allows you to monitor a channel for weak signals and check the radio's volume level when no transmission is being received.

To activate: press and hold the **SCAN button** for 3 seconds. The volume can be adjusted if needed.

To cancel: Press and hold the **SCAN button** again for 3 seconds.

Scanning Channel

Use scan to search the channels for transmissions from unknown parties, to find someone in your group who has accidentally changed channels or to quickly find unused channels for your own use. To start scanning:

1. Briefly press the SCAN button. The scan icon will appear in the display, and the radio will begin to scroll through the channel and code combinations.
2. When the radio detects channel activity matching the channel and code combination, it stops scrolling and you can hear the transmission.
3. To respond and talk to the person transmitting, press the **PTT button** within five seconds after the end of the transmission.
4. The radio will resume scrolling through the channels five seconds after the end of any received activity.
5. To stop scanning, briefly press the SCAN button.

Built-in Flashlight

Press the **Flashlight button** to turn ON and OFF the White LED light.

Headset Usage

When a headset is connected to the radio, the radio speaker and microphone are disabled. The connected headset to monitor and receive messages.

You can use the PTT button to make a transmission with the microphone on the headset.

Emergency Alert Mode

When you press Emergency Alert on the radio, all radios in your group will automatically play a warbling alert tone for 8 seconds. After that, your voice or any sounds near your radio will be broadcast to the group for 22 seconds hands-free. During this 30-second alert, all radio buttons are locked to make sure the emergency message is heard clearly by everyone.

1. Press and hold Flashlight button for 3 seconds.
2. Release the buttons and the alert tone begin to sound. There is no need to continue to hold the Emergency Alert buttons or use **PTT Button** for your message to be transmitted.
3. SOS flashlight pattern turns ON
4. Emergency Alert will be OFF after 30 seconds; SOS flashlight keeps ON until press and hold the Flashlight button again for 3 seconds.

WARNING: Only use the Emergency Alert feature if there is a real emergency. Manufacturer is not responsible if the receiving party does not respond to an emergency alert.

Warranty Information

1. Where to Claim Warranty

- Take your manufacturer two-way radio (or original accessories) to the **authorized dealer or retailer** where you bought it.
- **Do not** return it directly to manufacturer.

2. Required for Warranty Service

- Provide your **original receipt or proof of purchase** (showing the purchase date).
- The radio must **clearly display its serial number**.

3. Warranty Void Conditions

- The warranty **does not apply** if:
 - The serial number has been **removed, altered, or made unreadable**.
 - The product type has been **modified or tampered with**.

Licensing Information

USA (FCC)

This radio operates under the FCC rules for GMRS. A GMRS license is required to transmit on GMRS frequencies. The license must be obtained from the FCC and is issued to individuals, not businesses. The license covers the licensee and their immediate family members.

How to Obtain a GMRS License

Apply Online: Visit the FCC Universal Licensing System (ULS) at <https://www.fcc.gov/wireless/universal-licensing-system>.

License Term: 10 years.

Fee: Refer to the FCC website for current fee information.

Eligibility: You must be at least 18 years old and not a representative of a foreign government.

Important FCC Requirements

Changes or modifications not expressly approved by the manufacturer may void your authority to operate this radio under FCC rules.

Transmitter adjustments should only be made 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.

Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

Repeater Use

GMRS radios may be used with repeaters on channels 23–30. Repeater input frequencies are 5 MHz higher than the output frequencies. Ensure proper programming and compliance with FCC rules when using repeaters.

NOTE: Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited

The Warranty does not cover:

• Improper Use

- Using the product in ways not intended or against the user manual instructions.
- Accidental damage, misuse, or neglect.
- Damage from improper testing, maintenance, adjustments, or unauthorized modifications.

• Physical Damage

- Broken or damaged antennas (unless due to manufacturing defects).
- Scratches or wear on plastic/external parts from normal use.
- Liquid damage, moisture, or spills.
- Defects of damage from improper testing, operation, maintenance, adjustment, or any alteration or modification of any kind.
- Breakage or damage to aerials unless caused directly by defects in material or workmanship.

• Unauthorized Repairs

- Products disassembled or repaired in a way that affects performance or prevents proper inspection.

• Other Exclusions

- Range-related issues (e.g., weak signal due to distance).
- Products rented on a temporary basis.
- Normal wear and tear, including routine maintenance or part replacement.
- Periodic maintenance and repair or replacement of parts