OWNER'S MANUAL



This OWNER MANUAL is to provide users' knowledge of how to use Razor two-way radio. SURE-REPONSE strives to provide accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the specifications and design in this manual are subject to change without notice due to continuous development effort.

To Customer

Thanks for purchasing Razor radio. It's reliable quality, clear sound and highly effective for you to use. In order for you to adequately experience all the features of this product, we strongly recommend you to review the User Manual carefully prior to operating.

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Safety information for User

In order for you to use Razor effectively, please read carefully below:

- Only Trained Technicians have the right to repair radio, do not attempt to repair yourself.
- To avoid problems occurred by electromagnetic interference and electromagnetic compatibility, turn off radio around some hospital and other Hearth Care sensitive equipment for example.
- The Advanced Medical Technology Association recommends that a minimum separation of 6 inches (15 cm) be maintained between a handheld wireless radio and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of the U.S. Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the radio more than six inches (15 cm) from their pacemaker when the radio is turned ON.
- Not carry the radio in the breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- Turn the radio OFF immediately if you have any reason to suspect that interference is taking place.
- If your automobile is supplied with an airbag, do not place radio in the range which the airbag deploys.
- When in flammable and explosive environments, turn off radio.
- When in flammable and explosive environments, do not replace or charge battery.
- Do not place radio in the sun or near heating devices for a prolonged

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amount of time.

- When the radio is working, keep a distance with 5 - 8cm between the microphone and your mouth.
- When the radio is working and the radio is located on your person, make sure the antenna is at least 2.5cm from your body.

Check product

Before using, we suggest you check whether the packaging is in good condition. Open packaging carefully and make sure it includes all products on list below. If you find the radio and accessories are damaged or lost during shipping, please contact your dealer immediately.

Accessories with radio:

| Name | Quantity | Part Number |
|-----------------|----------|-------------|
| Belt clip | 1 | |
| Belt clip screw | 2 | |
| Battery | 1 | |
| Power Supply | 1 | |
| USB Cable | 1 | |

Function and Features

- 1. 50 CTCSS Codes
- 2. 104 DCS Codes
- 3. Companding Capability
- 4. Keylock
- 5. Scan
- 6. DW Double Frequency Monitor
- 7. User Clone
- 8. Dealer Programmable Capability

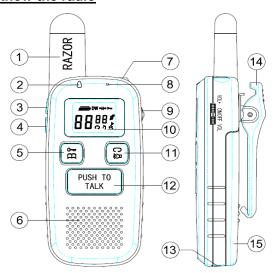
Technical Specification

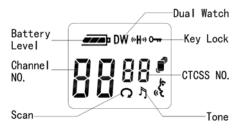
- 1. Working Voltage: 3.7V
- 2. Working Current: 1W transmission <

800MA

- 3. Standby Current: <70MA
- 4. Working Frequency: 450~470MHZ
- 5. Transmission Power: 1W6. Audio Output: >0.3W7. Sensitivity: ≤119dbm
- 8. Modulation/Demodulation: FM

Know the radio





Screen displays contents

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- 1. Antenna
- 2. Transmission Indicator
- 3. Channel up
- 4. Channel down
- 5. Menu/Key Lock (hold)
- 6. Speaker
- 7. Headphone/Adapter Hole
- 8. Microphone
- Switch ON/OFF (press in) / Volume Up and Down
- 10. LCD Screen
- 11. Scan / Monitor
- 12. Push-To-Talk
- 13. Desktop Charger/ Programming Connection
- 14. Belt Clip
- 15. Battery Cover

Operation Guide

Switch ON/OFF Razor radio

Press "ON/OFF" button in for 3 seconds to turn on radio until beep is heard. LCD will display channels and battery level. If you want to turn off radio, press "ON/OFF" button in 3 seconds until beep is heard.

Communication

The radio has 8 channels. You can communicate with anyone who is using the same Channel, CTCSS or DCS codes

Transmission

- Press and hold the "Push To Talk" button, the transmission indicator should turn on.
- Hold the radio with the antenna upright, and begin talking with a distance of 5-8cm between microphone and your mouth

Receiving

- 1. You can't receive a signal when you are pressing "Push To Talk" button.
- 2. Adjust the volume you need.
- 3. Only receive the same channel's signal

Adjust Volume (10 levels) 10 Loudest – 0 Quietest)

Push up "VOL+" button to increase volume; push down "VOL-" button to decrease volume

Exceed Time Capability

Excess Time Capabiltiy avoids transmitting carelessly and extends battery's life. The radio will quit transmitting and sound a warning if you press "Push To Talk" button in excess of the set time. You must then release the button if you need to transmit again.

Communication Restrictions

- 1. Areas with no obstructions or open air will give the best range to communicate. The quality of communication depends on different environment conditions.
- 2. Generally--- the quality of communication will be reduced with obstructions such as concrete, trees, metal, etc.
- 3. Limitations--- the quality of communication will be worse in dense forests, high mountains, and high dense construction.
- 4. Caution--- due to interfering, please don't talk to others in a distance within 5ft.

Menu flow chart

- 1. If enabled- the available menu function to choose main channel, then press "menu" to enter next function choice---Main Channel---DW---Key Tone.
- If disabled -- you can only set key tone, and main channel by pressing "CH+", "CH-" to choose)

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- 3. Press "menu" twice to enter DW (double frequency monitor) setting
- 4. Press "menu" three times to enter key tone setting.
- 5. Press "Push To Talk" button to confirm and exit.

Notice: When you use inhibitive menu function to press menu button lightly, it means you can only set key tone, and set main channel by pressing "CH+", "CH-" directly to choose.

Set main channel

- 1. Press "menu" button, the screen displays lights.
- 2. Press "CH+" "CH-" buttons to choose main channel.
- 3. Press "Push To Talk" to confirm you have chosen channel

CTCSS or DCS Code Function

- 1. It can help minimize interference by providing code combinations that filter out static, noise, and unwanted messages. Users can only receive and communicate mutually with the same CTCSS or DCS code, but all users can receive signals with the same frequency.
- 2. The CTCSS or DCS code is setup by your dealer programming.

Scan Channel

- 1. Press " ≱ □ "button lightly, the radio will scan channels automatically
- 2. The radio scans all channels one by one, and will stop on a channel that is being used. If the radio does not receive a signal for a few seconds, the radio will go back into scan mode.
- 3. Pressing " D" button again will exit the scan mode and return to the last selected channel.

Monitor
1. Press " ⇒□ " button in 3 seconds and the radio can receive all signals for that frequency no matter the CTCSS or DCS code.

DW double frequency

- Set main channel first (For example Channel 2)
- 2. Press " " button twice, screen displays "DW" icon,and the chann elnumber will flashing
- 3. Press "CH+" or "CH—" button to choose double channel (For example, Channel 6)



- 4. Press "Push To Talk" button to confirm, and the radio will monitor Channel 2 & Channel 6.
- 5. To disable Repeat Step 2 and Step 3, choose "0" to quit this function.

This function can be used as using two channels, to enhance communication for

third radio member. While the radio will shift between main channel and DW channel automatically after receiving signal radio will only transmit on Main channel.

Key Tone

1. You can set key tone by pressing "menu" button three times, then there will be a ""icon on the right bottom side of screen, and N/Y is flashing.

2. Press "CH+" or "CH-" button to choose to turn on/off key tone and the radio sounds to remind you.





3. Press " CH+ " or "CH-" button to save.

Key Lock

- 1. Press" " for 3 seconds, there will be an icon on the right top side of screen. (You can select functions by dealer programming such as "All keys lock except PTT", "All keys lock except PTT+VOL", "All keys lock except PTT+VOL+CH", or "All keys lock except PTT+CH"). Press " " button for 3 seconds to exit key lock function.
- 2. Press " " button for 3 seconds to quit lock state.

Battery Information

- 1. The battery is not charged in the factory; charge the new battery or any battery that has not been used for a long time before you use radio to ensure lengthy operation.
- 2. Do not create a short circuit on the battery or throw it away into fire and do not remove the crust of battery by yourself.
- 3. It is best to charge battery in range of temperature 41 to 104 degrees Fahrenheit.

The battery will not charge safely beyond those ranges of temperatures.

- 4. Switch off radio when it is charging.
- 5. Discharge battery fully on first use and charge battery at least 12 hours.
- 6. If the operating time is shortened even though you charged the battery correctly please replace the battery.

Charging

When you put a battery onto radio and if the screen displays a _____ icon, and sounds a beep every 30 seconds, then charge battery.

- 1. Connect adapter with supplied USB port and connect to radio's charging port.
- 2. Plug the charger into 110V AC jack. The charger's indicator will be red and there will be a battery icon on the radio.
- 3. It will finish charging in approximately 3 hours and when the battery icon is full the transmission indicator remain lit. Note: If the battery icon does not flash when it is charging, check whether the connections are good.

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Troubleshooting

| <u>rroubleshooting</u> | | | | |
|--|--|--|--|--|
| Malfunctions | Solution | | | |
| No power | ·Battery may be in need of charging. Try a different charged battery or recharge. ·Battery may be installed incorrectly. Remove and reinstall it. | | | |
| Battery life doesn't last long after charging | ·Battery life is nearing end of life, please replace with new one. | | | |
| Can not communicate with other members of group | ·Please confirm if used frequency and CTCSS/DCS code is the same as other members of group. ·You may be too far away from other members of group. Confirm you are in the range of other radio's signal | | | |
| Interference | ·Please contact Dealer and recommend changing CTCSS/DCS code or Freq. | | | |

Cautions for Operation

- •Do not hold external microphone directly on mouth.
- Brush dust and grime using soft damp cloth
- •Remove battery when radio is not in use or charging.

Warranty Information

Warranty

Sure-Response L.L.C makes a promise to all customers who buy the Razor a warranty that will allow maintenance from the date of purchase:

Radio 12 months

• How to make a Warranty Claim

You must provide purchase invoice to Razor's Customer Service Center or authorized service station and pack the product with attachments that relates to the malfunctions. Documentation of failure is greatly appreciated. Attention to Service Department. You can dial Sure-Response LLC's toll free number: -18-

1-888-530-5668 for assistance.

•Warranty Limitations as follows:

You will pay for repair services below during warranty period if one or more occurs:

- 1. If it is defective or damaged when you don't use this product as designed.
- 2. If it is defective or damaged by carelessness.
- 3. If it is defective or damaged by testing, repairing, assembling, refitting or debugging incorrectly and without authorization.
- 4. If it is defective or damaged by repair from an unauthorized Service Depot.
- 5. If the Serial Number of product is removed or unidentifiable.
- 6. If the date of purchase is unidentified.
- 7. Below situations for battery:
- (1) If there are any damage on the airproof battery.
- (2) If it is defective or damaged due to abuse.

Information for ROHS

Name and content of toxic substances or elements in product



| Part Name | Toxic substances or elements | | | | | |
|------------|------------------------------|----|----|------------|-----|------|
| | Pb | Hg | Cd | Cr (VT) | PBB | PBDE |
| Radio | 0 | 0 | 0 | 0 | 0 | 0 |
| Accessoies | 0 | 0 | 0 | 0 | 0 | 0 |

o:indicates that the toxic substances' content is in all homogeneous materials is below SJ/T11363-2006 standard limit requirement

×:indicates that the toxic substances' content is at least one of the homogeneous materials is beyond SJ/T11363-2006 standard limit requirement.

| Memo | | | | |
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This manual has been written carefully during the weave process, but there may be some oversights; Sure-Response L.L.C will not burden any responsibility.

Sure-Response L.L.C has a right to keep changing design and specification.

Sure-Response L.L.C

Tel: 612-568-2168 Fax:952-242-4113

Toll Free Line: 1-888-530-5668

Address: 27063 Meadow Ridge Drive Elko,

MN 55020 U.S.A.

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.

NOTE: manufacturer The is not responsible radio TV for any or interference caused by unauthorized changes and modifications this equipment. Such changes and modifications could void the user's authority to operate the equipment.

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.