

GMR 2-way radios
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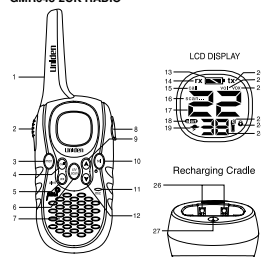
GMR648-2CK

- 15 GMRS / 7 FRS Channels
- 38 CTCSS Codes
- Up to 6 Mile Range*
- Internal VOX Circuitry
- 5 Selectable Call Tone Alerts
- Backlit LCD Display
- Optional Headset Accessories
- Headset Jack
- Roger Beep
- Battery Charger
- Battery Level Meter
- Channel Monitor
- Channel Scan
- Keypad Lock
- NOAA Emergency / Weather Channels
- Emergency Weather Alert



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

GMR648-2CK RADIO



- | | |
|-----------------------------|-----------------------------|
| 1 Antenna | 15 Call Indicator |
| 2 PTT (Push-To-Talk) Button | 16 Scan Indicator |
| 3 Monitor Key | 17 Channel Indicator |
| 4 Call Key | 18 Alert Indicator |
| 5 WX/Alert Key | 19 Weather Indicator |
| 6 Channel/Scan Key | 20 Transmit Indicator |
| 7 Speaker | 21 Volume Setting Indicator |
| 8 Headset Jack | 22 VOX Indicator |
| 9 Up Key | 23 GMRS/FRS Indicator |
| 10 On/Off/Select Key | 24 Keypad Lock Indicator |
| 11 Microphone | 25 CTCSS Indicator |
| 12 Down Key | 26 Charging Contacts |
| 13 Battery Level Meter | 27 Charging LED |
| 14 Receive Indicator | |

Congratulations on your purchase of the Uniden GMR648-2CK (General Mobile Radio Service) radio. This product is a lightweight, palm-sized radio. Use it at sporting events to stay in contact with family and friends, hiking, skiing, outdoors, or in a neighborhood watch for vital communication. This compact, state-of-the-art device is equipped with many features.

PACKAGE CONTENTS

Your package contains two GMR648-2CK radios, two rechargeable NiMH battery packs (#BP38), two AC adapters (#AD-0001), two recharging cradles (#RC6488), two belt clips and this reference guide. You may operate the unit using the rechargeable NiMH battery pack or 4 AAA alkaline batteries (not included). The following optional accessories may be purchased by calling the Customer Hotline at 1-800-297-1023 (Mon-Fri 7 am to 7 pm, Sat/Sun/holidays - except Thanksgiving and Christmas - 9 am to 5 pm, CST). **Use only Uniden accessories.**

- NiMH Battery Pack - #BP38
- Recharging Cradle - #RC6488
- Headset - #HS2467

FCC GMRS LICENSE

The GMR648-2CK radio operates on the General Mobile Radio Service (GMRS) frequencies when using channels 1-7 and channels 15-22. You must have a GMRS license issued by the Federal Communications Commission to legally use these channels. For licensing information and application forms, visit the FCC online at: www.fcc.gov/wtb/us or call the FCC hotline at 1-800-418-3676. If you have any questions, you can contact the FCC direct at 1-888-225-5322.

INSTALL THE BATTERY

Your GMR648-2CK radio uses the NiMH battery pack or 4 AAA alkaline batteries (not included).

To install the NiMH battery pack:

- Make sure your radio is OFF.
- Remove the battery compartment door by pressing the tab at the bottom of the compartment door allowing the door to be removed.
- Insert the NiMH battery pack into the battery compartment. Be certain to follow the instruction written on the label on the battery pack. Installing the battery pack incorrectly will prevent the unit from operating.
- Replace the battery compartment door.

BATTERY LEVEL AND LOW BATTERY ALERT

This unit has a battery level meter on the display to indicate the status of the batteries. When the battery in the unit is low, the battery level meter icon () will flash. Recharge the NiMH battery pack immediately or if you are using the alkaline batteries, you must replace the alkaline batteries in order to continue using the radio.

Warning! To avoid the risk of personal injury or property damage from fire or electrical shock, only use the Uniden accessories specifically designated for this product.

USING THE CHARGING CRADLE

If you use the rechargeable NiMH battery pack, two GMR648-2CK radios can be charged by using the charging cradle.

Make sure to turn the radio OFF before placing the radio in the charging cradle. Otherwise the battery level meter icon won't indicate properly.

- Connect the AC adapter (# AD-0001) to DC IN 9V jack and to a standard 120V AC wall outlet.
- Set the charging cradle on the desk or tabletop, and place the radio in the charging cradle with the keypad facing forward.
- Make sure that the LED illuminates. Charge the battery pack for 16 hours and remove the radio from the charging cradle after charge.

Note: The charge indicator LED will remain on as long as the radios are left in the charger.

USING THE RADIO

In order to get the most out of your new radio, read this reference guide completely before attempting to operate the unit.

Turning the Radio On and Adjusting the Volume

- Press and hold the **sel/O** key to turn the radio ON, and increase the speaker volume by pressing the **▲** key. To decrease the volume, press the **▼** key.
- Press and hold the **sel/O** key again to turn the radio OFF.

Adjusting the Sound (Key Beeps)

Your radio emits a beep each time one of the buttons or keys (except for the **PTT** button and **call** key) is pressed. To turn this sound OFF, press and hold the **call** key while turning ON the radio. Repeat this step to turn the sound ON.

Navigating through the Menu

To access the advanced features of the GMR648-2CK, your radio has a Menu function.



- To enter the Menu, press the **sel/O** key.
- Additional presses of the **sel/O** key will advance you through the Menu until exiting to "Normal" operating mode.
- Other methods of exiting the Menu function are:
 - Press and hold the **sel/O** key again.
 - Press the **PTT**, **mon**, **call**, **wx/alert**, or **ch/scan** key
 - Wait 10 seconds until the unit automatically returns to "Normal" mode.

Choosing a Channel

Your radio has 22 channels and 38 CTCSS codes you can use to talk to others. In order to speak to someone, each of you must set to the same channel and CTCSS code.

To choose a channel:

With the radio in "Normal" operating mode press the **ch/scan** key and press the **▲** or **▼** key to increase or decrease the channel number displayed.

Note: Channels 1-7 have an expectancy range of up to 6 miles. Channels 8-14 have an expectancy range of up to 2 miles. Channels 15-22 have an expectancy range of up to 6 miles.

Choosing a CTCSS Code

Each of the channels 1-22 may have any one of the codes, OFF or 1-38 selected. Code **OFF** (OFF) indicates no CTCSS code selected and your radio can receive a signal regardless of the code settings of the transmitting radio.

- Enter the Menu. The CTCSS code on the LCD display will appear.
- Press the **▲** or **▼** key to increase or decrease the code number displayed. You can also select **OFF** (OFF) at this stage.
- Exit the Menu.

Talking on Your Radio

To talk to others using the radio:

- Press and hold the **PTT** button and speak in a clear, normal voice about 2-3 inches away from the microphone. While you are transmitting, the **TX** icon will appear on the display. To avoid cutting off the first part of your transmission, pause slightly after pressing the **PTT** button before you start talking.
- When you have finished speaking, release the **PTT** button. You can now receive incoming calls. While receiving, the **rx** icon will appear on the display.

Voice Operated Transmission

Your GMR648-2CK radio is equipped with a user selectable Voice Operated Transmitter (VOX) that can be used for automatic voice transmissions. The VOX feature is designed to be used with a headset with a microphone. Transmission is initiated by speaking into the remote microphone instead of

pushing the **PTT** button.

To select the VOX level:

- Enter the Menu. Advance through the Menu until the **vox** icon appears on the display. The current level (OFF, 1-3) will be indicated. Level **OFF** (OFF) disables VOX, while levels 1-3 set the sensitivity of the VOX circuit.
- Press either the **▲** or **▼** key to the desired VOX sensitivity level. Use level 1 for increased sensitivity to voice in normally quiet environments, and use a higher level to reduce undesired activation in very noisy environments.
- Exit the Menu.

Transmitting a Call Tone

Your GMR648-2CK radio is equipped with 5 selectable call tones that will be transmitted when the **call** key is pressed.

To select a call tone:

- Enter the Menu. Advance through the Menu until the **call** icon is shown on the display. The current call tone number (1-5) will be indicated.
- Press the **▲** or **▼** key to increase or decrease the number to the desired call tone. Each tone will be heard through the speaker.
- Exit the Menu.

To transmit the selected call tone, press the **call** key. The selected tone will automatically be transmitted for a fixed length of time. Call Tone will be cancelled when the **PTT** button is pressed.

Channel Scan Feature

Your GMR648-2CK radio has a channel Scan feature that allows you to easily Scan all 22 channels. When an active channel is detected, the radio will pause on that channel until the channel is clear. Then after a 2-second delay, the radio will continue scanning. Pressing the **PTT** button while the Scan is paused on a channel will allow you to transmit on that channel.

To turn ON channel Scan:

Press and hold the **ch/scan** key until the **scan** icon is displayed. The channel number on the display will change as the radio rapidly cycles through the channels. You can know which GMRS or FRS channel is active by the icon. The **rx** icon indicates scanning GMRS channel, and the **f** icon indicates scanning FRS channel.

To turn OFF channel Scan:

Press the **sel/O**, **call**, **PTT**, or **wx/alert** key, or press and hold the **ch/scan** key for 2 seconds.

Key Lock

To lock the keypad:

- Enter the Menu. Advance through the Menu until the **key lock** icon appears on the display. The current Key Lock status **OFF** (OFF) blinks on the display.

Please do not send products or other correspondence to this address.

039 Q

Uniden
 PRODUCT REGISTRATION DEPARTMENT
 PO BOX 44486
 DENVER CO 80201-4486
 USA



Uniden

PRODUCT REGISTRATION CARD

Complete the attached registration card and return today to receive these 3 important benefits:

- ▶ **CONFIRM YOUR WARRANTY:**
Your prompt product registration confirms your right to the protection available under the terms and conditions of your Uniden warranty.
- ▶ **PROTECT YOUR PRODUCT:**
We will keep the model number and date of purchase of your new Uniden product on file to help you refer to this information when necessary.
- ▶ **HELP US DEVELOP NEW PRODUCTS:**
We value your input! Your responses will help us bring you new products specifically designed to meet your needs.

PLEASE FOLD AND SEAL WITH TAPE BEFORE MAILING. DO NOT STAPLE.

PLACE
FIRST-CLASS
STAMP
HERE

Please fill-out and return this card within 10 days!



1 First name: _____ Initial: _____ Last name: _____
Address: (number and street) _____ Apt number: _____
City: _____ State: _____ Zip code: _____

2 E-mail address: (Example: yourname@yournet.com) _____
1. Yes I want to receive offers or communications from Uniden via e-mail.
2. Yes I want to receive offers or communications that may interest me from other companies via e-mail.

3 Date of purchase: _____ 16 Date of birth of children in your household 18 years of age and younger: _____

4 Purchase Price: \$ _____ .00 (excluding tax)
5 Serial Number: (Located on the back of each unit) _____

6 Model Number: (Example: GMR5540-2, WX500) _____
7 Which Uniden product did you purchase?
1. FRS/GMRS Radio 2. Weather Radio

8 Store Name: _____
9 Check the two (2) most important reasons influencing your purchase of this Uniden Product:

10 Check the two (2) most important features to you on this Uniden product:
1. Range 2. Low battery alert 3. Clarity 4. Number of channels 5. Auto squelch 6. Color 7. Design 8. Channel scan 9. LCD backlight 10. Other

11 How did you first become aware of this product?
1. Previous Use 2. Comparison Shopping 3. In-Store Display 4. Newspaper Ad 5. Magazine Ad 6. TV Ad 7. Recommendation of Salesperson 8. Recommendation of Friend/Family 9. Direct Mail 10. Other

12 Your gender: 1. Male 2. Female
13 Your marital status: 1. Married 2. Single
14 Date of your birth: _____

15 Including yourself, how many people live in your household?
(Examples: 01, 02, etc.) Children (18 and younger) _____ Adults _____

16 Education: (Please check which category applies to you)
1. Some high school 2. College degree 3. Completed high school 4. Graduate degree

17 For your primary residence, do you:
1. Own 2. Rent
18 Education: (Please check which category applies to you)
1. Some high school 2. College degree 3. Completed high school 4. Graduate degree

19 I've bought these things through the mail, over the Internet, or from television:
A. Mail B. Internet C. TV
1. Books/magazines 2. Checks (not from a bank) 3. Children's products 4. Clothing 5. Computer products 6. Cosmetics/jewelry 7. Crafts/hobbies 8. Gardening supplies 9. Gifts 10. Housewares/furnishings 11. Insurance/financial products 12. Music/videos/DVD 13. Sports equipment 14. Travel 15. Other

20 I've had these credit cards:
1. American Express/Diners Club 4. Visa/MasterCard 2. Discover 5. Other 3. Retail/gas 6. None

21 Someone in my home enjoys:
1. Astrology 2. Gourmet food/cooking 3. Auto racing 4. Grandchildren 5. Automobile work 23. Home decorating 4. Books 24. Hunting/shooting 5. Camping/hiking 25. Investing 6. Casino gambling 26. Lottery/sweepstakes 7. Cigars 27. Pets-cats 8. Collecting 28. Pets-dogs 9. Computers/Internet 29. Pets-other 10. Cooking/recipes 30. Photography 11. Crafts/needlework 31. Play sports 12. Cultural art/reviews 32. Self improvement 13. Darning 33. Skiing/snowboarding 14. Dieting/weight control 34. Travel-Foreign 15. Do-it-yourself 35. Travel-USA 16. Donating to charity 36. Vacation cruises 17. Fishing 37. Vitamins/natural foods 18. Fitness/exercise 38. Wine 19. Gardening 39. Woodworking 20. Golf 40. Worship/Bible

USING THE WEATHER RADIO

Your GMR648-2CK radio can receive weather broadcasts from the NOAA National Weather Service. When in the Weather Radio Alert mode, the system functions as it does in GMRS mode but also monitors the selected weather channel for alerts when not communicating.

- 1) To turn ON the Weather Radio Broadcast mode, press the wx/alert key. The icon appears on the display.
2) Press the ch/cscan key, and press the up/down key to increase or decrease the number to the desired Weather Channel.
3) To exit the Weather Radio Broadcast mode, press the wx/alert key. The icon disappears from the display.

• To change the channel continuously, press and hold the up/down key for more than 1 second.

• When in the Weather Radio Broadcast mode, you can only set the Key Lock from the Menu mode.

Choosing an Emergency/Weather Channel

There are 7 NOAA channel frequencies available and these frequencies are common between the US and Canada. You will need to know what frequency is being transmitted in your location.

- 1) Press and hold the wx/alert key. The icon appears on the display.
2) When the unit receives a warning signal, it beeps for 5 seconds. The icon, the icon and channel indicator blinks.
3) To turn OFF Weather Alert, press and hold the wx/alert key. The icon disappears from the display.

• When Weather Alert is activated, the highest priority is given to this function. It checks the weather alert signals every 7 seconds and switches to the warning receive mode automatically.

• Weather Alert is activated even if key beep is turned off.

NOAA Weather Radio Frequency List
Channel 1 162.550 MHz Channel 5 162.450 MHz
Channel 2 162.400 MHz Channel 6 162.500 MHz
Channel 3 162.475 MHz Channel 7 162.525 MHz
Channel 4 162.425 MHz

SPECIFICATIONS

Channels 15 GMRS/7 FRS/7 Weather
CTCSS Codes 38 Sub-Audible Tones
Operating Frequency GMRS/FRS: 462.550 - 467.7125 MHz
WX: 162.4000 - 162.5500 MHz
Power Source NiMH Battery Pack (BP38) or 4 AAA Alkaline Batteries
Range Channel 1-7 up to 6 miles
Channel 8-14 up to 2 miles
Channel 15-22 up to 6 miles
30 Hours typ. - Alkaline Batteries (5/5/90 duty cycle)
18 Hours typ. - NiMH Battery Pack

Frequency Chart

Ch. Freq. Cross Ref. Ch. Freq. Cross Ref.
1 462.5625 FRS & GMRS 1 12 467.6875 FRS 12
2 462.5875 FRS & GMRS 2 13 467.6875 FRS 13
3 462.6125 FRS & GMRS 3 14 467.7125 FRS 14
4 462.6375 FRS & GMRS 4 15 462.5500 GMRS 11
5 462.6625 FRS & GMRS 5 16 462.5750 GMRS 8
6 462.6875 FRS & GMRS 6 17 462.6000 GMRS 12
7 462.7125 FRS & GMRS 7 18 462.6250 GMRS 9
8 467.5625 FRS 8 19 462.5500 GMRS 13
9 467.5875 FRS 9 20 462.5750 GMRS 10
10 467.6125 FRS 10 21 462.7000 GMRS 14
11 467.6375 FRS 11 22 462.7250 GMRS 15

CTCSS Chart (Hz)

Code Freq. Code Freq.
0F OFF 20 131.8
1 67.0 21 136.5
2 71.9 22 141.3
3 74.4 23 146.2
4 77.0 24 151.4
5 79.7 25 156.7
6 82.5 26 162.2
7 85.4 27 167.9
8 88.5 28 173.8
9 91.5 29 179.9
10 94.8 30 186.2
11 97.4 31 192.8
12 100.0 32 203.5
13 103.5 33 210.7
14 107.2 34 218.1
15 110.9 35 225.7
16 114.8 36 233.6
17 118.8 37 241.8
18 123.0 38 250.3
19 127.3

FCC INFORMATION

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.
(2) This device must accept any interference received, including interference that may cause undesired operation.

Important: Changes or modifications to this unit not expressly approved by Uniden could void your authority to operate this unit. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the radio to exceed those limitations.

• Never open your radio's case.
• Never change or replace anything in your radio except the batteries.

Your radio might cause TV or radio interference even when it is operating properly. To determine whether your radio is causing the interference, turn it off. If the interference goes away, your radio is causing it. Try to eliminate the interference by moving your radio away from the receiver. If you cannot eliminate the interference, the FCC requires that you stop using the radio.

Hazardous Environments: Do not operate the radio in hazardous environments. Explosion or fire may result. Do not operate the radio near unshielded electrical blasting caps.

Under certain conditions, radios can interfere with blasting operations and may cause an explosion. Turn your radio OFF to prevent accidental transmission when in a blasting area or in areas posted: "Turn off two-way control." Construction crews often use remote control RF devices to set off explosives.

Care and Safety: To clean the radio, use a soft cloth dampened with water. Do not use cleaners or solvents because they can harm the body of the unit and leak inside, causing permanent damage.

Use a dry, lint-free cloth to clean the battery contacts. Do not submerge the unit in water. If the unit gets wet, turn it off and remove the batteries immediately. Dry the battery compartment with a soft cloth to minimize potential water damage. Leave the battery compartment cover off overnight to ensure complete drying. Do not use the radio until the unit is completely dry.

FCC RF EXPOSURE INFORMATION

WARNING! Read this information before using the radio. In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters.

Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of the radio complies with the FCC guidelines and these international standards.

Never allow children to operate the radio without adult supervision and the knowledge of the following guidelines:

WARNING! It is up to you to properly operate the radio transmitter to insure safe operation. Please adhere to the following:

Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage the radio, or result in violation of FCC regulations.

Do not use the radio with a damaged antenna. If a damaged antenna comes into contact with the skin, a minor burn may result. Please contact your local dealer for a replacement antenna.

Body-worn Operation This device was tested for typical body-worn operations using the supplied belt-clip. To maintain compliance with FCC RF exposure requirements, Body-worn operations are restricted to the supplied belt-clip.

For hand-held operation, the radio should be held 1 inch from the user's face. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements and should be avoided.

For more information about RF exposure, please visit the FCC web site at www.fcc.gov.

ONE YEAR LIMITED WARRANTY

Important: Evidence of original purchase is required for warranty service.

WARRANTOR: UNIDEN AMERICA CORPORATION ("Uniden")
ELEMENTS OF WARRANTY: Uniden warrants, for one year, to the original retail owner, this Uniden Product to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty to the original user shall terminate and be of no further effect 12 months after the date of original retail sale. The warranty is invalid if the Product is:

- (A) damaged or not maintained as reasonable or necessary, (B) modified, altered, or used as part of any conversion kits, sub-assemblies, or any configurations not sold by Uniden, (C) improperly installed, (D) serviced or repaired by someone other than an authorized Uniden service center for a defect or malfunction covered by this warranty, (E) used in any conjunction with equipment or parts or as part of any system not manufactured by Uniden, or (F) installed or programmed by anyone other than as detailed by the owner's manual for this product.

STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this warranty is in effect, warrantor will either, at its option, repair or replace the defective unit and return it to you without charge for parts, service, or any other cost (except shipping and handling) incurred by warrantor or its representatives in connection with the performance of this warranty. Warrantor, at its option, may replace the unit with a new or refurbished unit.

THE LIMITED WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT/ OVERPAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This warranty is void outside the United States of America and Canada.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: If, after following the instructions in the owner's manual you are certain that the Product is defective, pack the Product carefully (preferably in its original packaging). Disconnect the battery from the Product and separately secure the battery in its own separate packaging within the shipping carton. The Product should include all parts and accessories originally packaged with the Product. Include evidence of original purchase and a note describing the defect that has caused you to return it. The Product should be shipped freight prepaid, by traceable means, to warrantor at:

Uniden America Service
4700 Amon Carter Blvd. Fort Worth, TX 76155
(800) 297-1023, 7:00 a.m. to 7:00 p.m. CST, Monday through Friday; 9:00 a.m. to 5:00 p.m. CST, Saturday, Sunday and Holidays (except Thanksgiving and Christmas).

Covered under one or more of the following U.S. patents:

- 4,684,870 4,734,049 5,203,015 5,214,789
5,491,745 5,497,508 5,517,677 5,557,606
5,574,994 5,610,946 5,613,201 5,625,870
5,627,876 5,628,059 5,634,196 5,634,205
5,678,176 5,697,096 5,717,312 5,722,070
5,787,345 5,901,341 6,021,326 6,084,861
6,163,691 6,195,415 6,353,730

