

# GMRS480 – User Instruction Guide – Content Draft

## FCC LICENSING INFORMATION

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The GMRS480 radio operates on the General Mobile Radio Service (GMRS) frequencies which require a Federal Communication Commission license to operate.

For licensing information and applications forms, visit the FCC online at [www.fcc.gov/wtb/uls](http://www.fcc.gov/wtb/uls) or call the FCC Hotline at: 1-800-418-FORM. If you have any questions regarding the license application you can contact the FCC direct at 1-888-CALL-FCC.

## BUTTONS AND CONTROLS

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- 1) **On/Off/Volume** Control
- 2) **PTT** Button
- 3) **Monitor** Button
- 4) **Up** Key
- 5) **Down** Key
- 6) **Select** Key
- 7) **Call** Key
- 8) **WX** Key (Keypad lock secondary function)
- 9) **Accessory** jack

## LCD DISPLAY

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- 1) Channel Indicator
- 2) CTCSS Code Indicator
- 3) SCAN Indicator
- 4) CALL Indicator
- 5) SAVED (Memory Location)
- 6) Vibrate Indicator
- 7) Weather Radio Indicator
- 8) Temperature Indicator
- 9) Battery Level Meter
- 10) Tx/Rx Indicator

## INTRODUCTION

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Congratulations on your purchase of the Uniden GMRS480 General Mobile Radio Service radio. *[add marketing description of product – note that the Channels 1-7 share the same channels as FRS]*. This state-of-the-art device is equipped with the following features:

- o 15 GMRS Channels
- o 38 CTCSS Codes
- o Up to 5 mile range\*
- o 7 NOAA Weather Radio Channels
- o Water Resistant
- o LCD Display with Holographic Effect
- o 5 Selectable Call Tone Alerts
- o 10 Memory Locations

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- o Vibrate Alert for incoming calls
- o Channel Scan
- o Channel Monitor
- o Keypad Lock
- o Battery Level Meter
- o Ambient Temperature Display
- o NiMH Battery Pack Included
- o AC Charger Included
- o Earset Mic w/PTT Included
- o Optional Headset Accessories

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

## OPTIONAL ACCESSORIES

Your package contains the GMRS480 radio, NiMH Battery Pack, AC Wall Charger, this reference guide, and a product registration card. You can also operate the unit using 4 AA Alkaline batteries (not included). The following optional accessories may be purchased from your Uniden dealer or call 1-800-554-3988 or visit us on the web at [www.uniden.com](http://www.uniden.com)

- o Earset Mic w/ PTT – #HS2468
- o Vox Headset Mic – #HSV2469
- o NiMH Battery Pack w/ AC Charger and DC Car Charger – #BPCC240

## INSTALL THE BATTERY

Your GMRS480 radio uses the NiMH Battery Pack or 4 AA Alkaline batteries. If Alkaline batteries are used, we recommend using Duracell Ultra.

To install the NiMH Battery Pack:

- 1) Make sure your radio is OFF.
- 2) Remove the battery compartment door by firmly moving the clip away from the door allowing the door to be removed.

- 3) Place the pack in the compartment, paying close attention to the round alignment key. If the pack is installed incorrectly, the unit will not operate and the compartment door will not close properly.
- 4) Replace the battery compartment and secure the clip back in place.
- 5) The battery pack must be charged before using for the first time. Insert the charger adapter into the accessory jack and allow 12-14 hours charging time to fully charge the battery pack. NOTE: Always make sure your battery pack is fully discharged before recharging to prolong the life of the battery pack.

To install Alkaline batteries:

- 1) Make sure your radio is OFF.
- 2) Remove the battery compartment door by firmly moving the clip away from the door allowing the door to be removed
- 3) Install 4 AA Alkaline batteries (not included) into the battery compartment. Be certain to follow the + and – symbols in the compartment. Installing the batteries incorrectly will prevent the unit from operating.
- 4) Replace the battery compartment and secure the clip back in place.

## BATTERY LEVEL AND LOW BATTERY ALERT



The unit has a battery level meter on the display to indicate the status of the batteries. When the batteries in the unit are low, the battery meter will “flash” and the unit will emit a “low battery” tone indication. Replace the Alkaline batteries immediately or if you are using the optional NiMH battery pack, you must recharge the batteries in order to continue using your radio.

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## 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.

Your unit has (2) modes of operation.

- 1) GMRS Radio Mode
- 2) Weather Radio Mode

Refer to the Weather Radio Mode section for detailed operation.

### Turning the Radio On and Adjusting Volume

- 1) Rotate the **on/off/volume** control clockwise to turn the unit ON and increase the speaker volume
- 2) Rotate the **on/off/volume** control counterclockwise to decrease the speaker volume and turn the unit OFF.

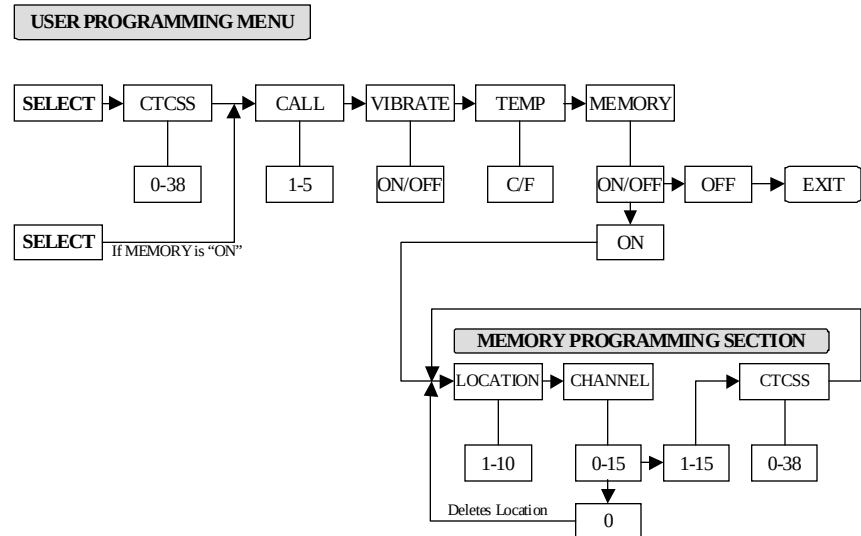
### Adjusting the Sound (Key Beeps)

Your radio emits a beep each time one of the buttons is pressed. To turn the key beeps OFF, press the **select** button while turning on the radio. Repeat this step to turn the key beeps ON.

### Navigating through the Menu

To access advanced features, your radio has a Menu function.

- 1) To enter the Menu, press and hold the **select** button for 1 second.
- 2) Additional presses of the **select** button will advance through the menu until exiting to “normal” operating mode.
- 3) Other methods of exiting the menu function are:
  - a. Press and hold the **select** button for 1 second again.
  - b. Press **PTT**.
  - c. Wait 10 seconds until the unit automatically returns to “normal” mode.



### Choosing a Channel

15

Your radio has 15 channels and 38 CTCSS codes you can use to talk to others. In order to speak to someone, each of you must be set to the same channel and CTCSS code.

To choose a channel:

Press the **Up** or **Down** button to increment or decrement the channel number displayed.

### Choosing a CTCSS Code

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Each of the GMRS channels 1-15 may have any one of the codes 0-38 selected. Code “0” indicates no CTCSS code selected and your radio can receive a signal regardless of the code settings of the transmitting radio.

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- 1) Enter the Menu. Advance through the menu until the CTCSS code on the display is flashing.
- 2) Press the **Up** or **Down** button to increment or decrement the code number displayed.
- 3) Exit the Menu to return to “normal” mode.

## **Talking on Your Radio**

To talk to others using the radio:

- 1) 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 transmit icon  will be shown on the display. To avoid cutting off the first part of your transmission, pause slightly after pressing the **PTT** button before you start talking.
- 2) When you are finished speaking, release the **PTT** button. You can now receive incoming calls. While receiving, the receive icon  will be shown on the display.

## **CALL** *Transmitting a Call Alert Tone:*

Your GMRS480 radio is equipped with 5 selectable call tones that will be transmitted when the **call** button is pressed.

To select a call tone:

- 1) Enter the Menu. Advance through the menu until the CALL Icon on the display is shown. The current call tone number (1-5) will be indicated.
- 2) Press the **Up** or **Down** button to desired call tone number. Each tone will be heard through the speaker.
- 3) Exit the Menu.

To transmit the selected call alert tone, press the **call** button. The selected tone will automatically be transmitted for a fixed length of time.



## **Vibrate Alert for Incoming Calls**

Your GMRS480 radio is equipped with a vibrator that can be used for notification of an incoming call alert from other Uniden radios equipped with the same feature.

To select the vibrate alert:

- 1) Enter the Menu. Advance through the menu until the VIBRATE icon on the display is shown. The letters “ON” or “OF” will be blinking indicating the vibrate alert feature status.
- 2) Press either the **Up** or **Down** button to toggle between “ON or “OF”.
- 3) Exit the Menu.

## **SCAN** *Channel Scan Feature*

Your GMRS480 radio has a channel scan feature that allows you to easily scan all 15 channels. When an active channel is detected, the unit will pause on that channel until the channel is clear. Then after a 4 second delay, the unit will continue scanning. Pressing **PTT** while the scan is paused on a channel will allow you to transmit on that channel.

To turn on channel scanning:

Press and hold either the **Up** or **Down** button until the SCAN icon on the display is shown. The channel number on the display will be rapidly cycling through the channels.

To turn off channel scanning:

Press and release either the **Up** or **Down** button.

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## **SAVED** *Using the Memory Feature*

The Memory Feature allows you to store up to 10 frequently used channels. Each channel can have a unique CTCSS code assigned to it. When the Memory Feature is turned on, the Menu is automatically expanded to enable memory programming [refer to the User Programming Menu].

To select the Memory Feature:

- 1) Enter the Menu. Advance through the menu until the SAVED icon on the display is shown. The letters “ON” or “OF” will be blinking indicating the memory feature status.
- 2) Press either the **Up** or **Down** button to toggle between ON or OF.
- 3) If ON is selected, press **select** to advance to the Memory Programming Menu.
- 4) The current memory LOCATION 1-10 will be flashing on the display. Pressing the **Up** or **Down** button will scroll through the locations.
- 5) Press **select** to advance to the CHANNEL selection. The channel saved in the selected location will be flashing on the display.
- 6) Press the **Up** or **Down** button to choose the desired channel for memory. To erase a location, simply choose “0” for the channel.
- 7) Press **select** to advance to the CTCSS selection. The current CTCSS assigned to the channel will be flashing on the display.
- 8) Press the **Up** or **Down** button to choose the desired CTCSS code.
- 9) Press **select** to program another memory location or press and hold the **select** button to exit the menu. If no key is pressed after 10 seconds, the radio will return to normal mode.

When the Memory Feature is ON, only those stored channels will be available after exiting the Menu. You can now select any of the memory channels to be used by the radio by pressing the **Up** or **Down** button. In addition, entering the Scan mode will scan only the memory channels. The memory will remain in use until you enter the Menu and turn the Memory Feature OFF.



## **Keypad Lock**

To lock the keypad, press and hold the **WX** button until the LOCK icon is displayed. To remove the keypad lock, press and hold the **WX** button until the LOCK icon disappears.



## **Ambient Temperature Display**

Your radio will periodically display the ambient temperature either in degrees “F” or degrees “C”.

To change this setting:

- 1) Enter the Menu. Advance through the menu until the TEMPERATURE icon on the display is shown. The letters “F” or “C” will be blinking indicating the selection.
- 2) Press either the **Up** or **Down** button to toggle between “F” or “C”.
- 3) Exit the Menu.

Note: Once the radio is turned on, please allow time for an accurate temperature reading to be collected.

## **Auto Squelch Feature**

The radio is equipped with an automatic squelch system which shuts off weak transmissions and unwanted noise due to terrain conditions or if you have reached your range limit.

To temporarily disable the Auto Squelch and Monitor the selected channel, press and hold the **Monitor** button. When the button is released, the Auto Squelch will be re-engaged.

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## ***Automatic Power Save Feature***

Your radio has a unique circuit designed to dramatically extend the life of the batteries. If there is no transmission within 5 seconds, your radio switches to the Power Save mode. The radio is still able to receive transmissions in this mode.

## ***LCD Backlight***

The LCD back light will automatically be turned on with any key press. The LCD display will be illuminated for 5 seconds before turning off.

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## USING THE WEATHER RADIO



Your GMRS480 radio can receive weather broadcasts from the NOAA National Weather Service. While using the Weather Radio, you are not able to receive GMRS communications unless you press the PTT or Call buttons which will immediately exit and return to GMRS Radio Mode.

To turn on the Weather Radio, press the **WX** button.

### *Choosing a 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.

Press the **Up** or **Down** button to increment or decrement the channel number displayed. The Auto Squelch feature is never active in Weather Radio Mode.

To exit the Weather Radio and return to the GMRS Radio, press the **WX** button.

### *NOAA Weather Radio Frequency List*

|           |             |
|-----------|-------------|
| Channel 1 | 162.550 Mhz |
| Channel 2 | 162.400 Mhz |
| Channel 3 | 162.475 Mhz |
| Channel 4 | 162.425 Mhz |
| Channel 5 | 162.450 Mhz |
| Channel 6 | 162.500 Mhz |
| Channel 7 | 162.525 Mhz |

## SPECIFICATIONS

### **Description**

|                     |                                                                                   |
|---------------------|-----------------------------------------------------------------------------------|
| Channels            | 15 GMRS, 7 Weather                                                                |
| CTCSS Codes         | 38 Sub-Audible Tones                                                              |
| Operating Frequency | UHF 462.550-462.725 MHz<br>VHF 162.400-162.550 MHz                                |
| Power Source        | 6V NiMH Battery Pack<br>or 4 AA Alkaline Batteries                                |
| Output Power        | 2W ERP maximum                                                                    |
| Battery Life        | 10 Hours - NiMH Battery Pack<br>(5/5/90 duty cycle) 35 Hours – Alkaline Batteries |

### **Channel Frequency Chart (Mhz)**

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 1       | 462.5625  | 8       | 462.5750  |
| 2       | 462.5875  | 9       | 462.6250  |
| 3       | 462.6125  | 10      | 462.6750  |
| 4       | 462.6375  | 11      | 462.5500  |
| 5       | 462.6625  | 12      | 462.6000  |
| 6       | 462.6875  | 13      | 462.6500  |
| 7       | 462.7125  | 14      | 462.7000  |
|         |           | 15      | 462.7250  |

### **CTCSS Chart (Hz)**

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

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## FCC INFORMATION

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- 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.
- 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 the settings inside the radio to exceed those limitations. Any adjustments to your radio must be made by qualified technicians.
- To be safe and sure:
  - 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.

## SAFETY GUIDELINES

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- Audio Accessories: Do not operate the radio with audio accessories at high volume levels. Hearing experts advise against continuous high volume operation. If you experience a ringing in your ears, reduce the volume level or discontinue use. Always make sure the radio is turned off before plugging audio accessories into the accessory jack.
  - 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 radios." 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.