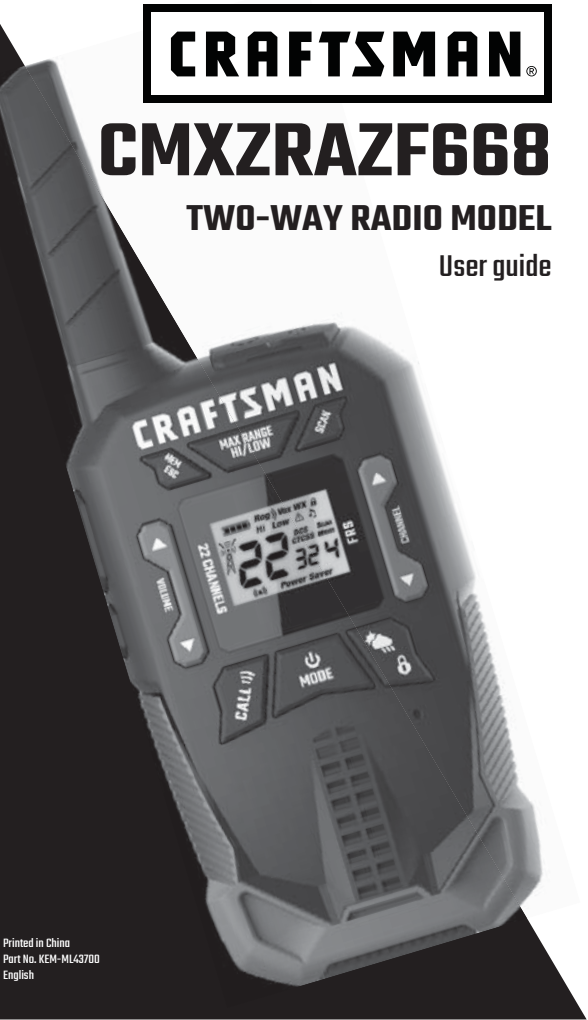
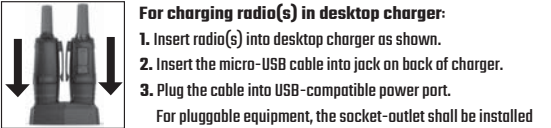




Operation

Using Your Radio



For charging radio(s) in desktop charger:

1. Insert radio(s) into desktop charger as shown.
2. Insert the micro-USB cable into jack on back of charger.
3. Plug the cable into USB-compatible power part.

For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

If charging light is not on, check position of radio. Radio should be upright. The charge indicator light will stay on as long as the radio is in the charging well, and the light will go off when the charging is complete.

Note: To charge a single radio, you can bypass the desktop charger and simply insert the micro-USB's connector directly into the charge jack located on the top of the radio. The radio will display flashing battery icon while charging. Craftsman recommends your radio be turned off while being charged. Non-rechargeable alkaline batteries can also be used in your radio.



Quick Start

1. Press and hold the **Mode/Power** button to turn **on** your radio.
2. Press the **Channel Up** or **Channel Down** button to select a channel.

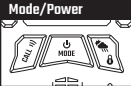


Both radios must be tuned to the same channel/privacy code to communicate.

3. Press and hold the **Talk** button while speaking into the microphone.
4. When finished talking, release the **Talk** button and listen for a response.



Turning on Your Radio

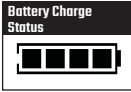


Press and hold the **Mode/Power** button until you hear a series of audible tones indicating the radio is on.

Your radio is now in **Standby** mode, ready to receive transmissions. The radio is always in **Standby** mode except when the **Talk**, **Call** or **Mode/Power** buttons are pressed.



Battery Status Indicator



The battery charge status is shown on the display. Four bars indicates fully charged.

Before operating the radio, please read all safety and operating instructions. Save all instructions in a safe place for future reference.



Definitions: Safety Alert Symbols and Words

This instruction manual uses the following safety alert symbols and words to alert you to hazardous situations and your risk of personal injury or property damage.



DANGER: Indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.



WARNING: Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.



CAUTION: Indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury.



(Used without word) Indicates a safety related message.



NOTICE: Indicates a practice **not related to personal injury** which, if not avoided, **may** result in property damage.



WARNING: Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.



WARNING: Never modify the product or any part of it. Damage or personal injury could result.



WARNING: To reduce the risk of injury, read the user guide. If you have any questions or comments about this or any product, call CRAFTSMAN® toll free at: 1-888-331-4569.

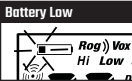


WARNING: Important Safety Instructions

1. Only accessories included in this package or specified by the manufacturer should be used with the radio. The 5V micro-USB charging input is compatible with most high quality micro-USB chargers that fully conform to the USB standards.
2. Do not use cleaners or solvents to clean the exterior of the radio. Use only a damp or dry cloth.
3. Do not expose this product to splashing or dripping water.
4. Do not attempt to service the receiver yourself. Removing the cover will void the warranty. Changes or modifications not expressly approved by Craftsman may void the user's authority granted by the FCC to operate this device and should not be made.



Battery Low



When battery power is low, the final bar in the **Battery Low** icon will blink and an audible tone will sound twice before the radio shuts off. Your batteries should be replaced or recharged, if using rechargeable batteries.



The radio will display flashing battery icon while charging if the radio is on.



Auto Battery Save



If there are no transmissions within 10 seconds, the radio will automatically switch to **Battery Save** mode and the **Power Saver** icon will flash in the display. This will not affect the radio's ability to receive incoming transmissions.



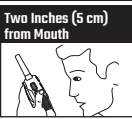
Communicating with Another Person



1. Press and hold the **Talk** button.

2. With the microphone about two inches (5 cm) from your mouth, speak in a normal voice.

3. Release the **Talk** button when you are finished talking and listen for a response.



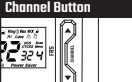
You cannot receive incoming calls while pressing the **Talk** button.



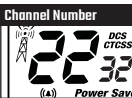
Both radios must be tuned to the same channel / privacy code to communicate.



To Select a Channel



With the radio on, select any of the 22 channels by pressing the **Channel Up** or **Channel Down** button.



Both radios must be tuned to the same channel to communicate.



See **page 17** for frequency allocations charts.



Listening for a Response



Release the **Talk** button to receive incoming transmissions. Your radio is always in **Standby** mode while the **Talk** or **Call** buttons are not pressed.



WARNING: Important Safety Instructions for Battery

Read All Instructions

- Do not incinerate the battery even if it is severely damaged or is completely worn out. The battery pack can explode in a fire.
- A small leakage of liquid from the battery cells may occur under extreme usage or temperature conditions. This does not indicate a failure. However, if the outer seal is broken and this leakage gets on your skin:
 - a. Wash quickly with soap and water.
 - b. Neutralize with a mild acid such as lemon juice or vinegar.
 - c. If battery liquid gets into your eyes, flush them with clean water for a minimum of 10 minutes and seek immediate medical attention. (Medical note: The liquid is 15-40% solution of Nickel hydroxide.)

Recycle Battery

This product uses Nickel Metal Hydride batteries.

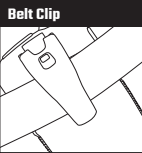
Local, state or federal laws may prohibit disposal of batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

Introduction

Making Life Easier

Staying in touch with your family and friends is convenient and easy when using your radio. Some of the many uses you will discover include:

Communicating with others while hiking, biking, and working; keeping track of family and friends at a crowded public event; checking with travel companions in another car; talking with neighbors; arranging meeting spots with others while shopping at the mall.



Belt Clip

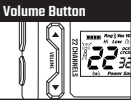
Secure your radio while on the go.

Carrying your radio with you is easy when using the belt clip or optional wrist strap.

The belt clip easily attaches to your belt, purse, or backpack.



To Adjust Volume



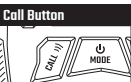
Press the **Volume Up** or **Volume Down** button.

A double beep sound is used to indicate the minimum and maximum volume levels (1 through 8).





Call Button



Press and release the **Call** button.

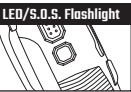
The other person will hear a three second call tone. This tone is used only to establish voice communications.



See page 12 on how to select between ten call tone settings.



LED/S.O.S. Flashlight



Press and release the **LED flashlight** button below the **Talk** button to use the LED flashlight located at the bottom of the radio.

To activate S.O.S. function, press and hold the **LED flashlight** button to turn on. Press and release to turn off the flashlight or S.O.S. function.



Auto Squelch/Maximum Range

Your radio will automatically shut off weak transmissions and unwanted noise due to terrain, conditions or if you've reached your **Maximum Range** limit.

You can temporarily turn off auto squelch or turn on maximum range extender, allowing all signals to be received and extending the maximum range of your radio.



Max Range Button

To temporarily turn off auto squelch/ To turn maximum range extender on:

– Press and hold the **Max Range Hi/La** button.

To turn maximum range extender off:

– Press and hold the **Max Range Hi/La** button or change channel.

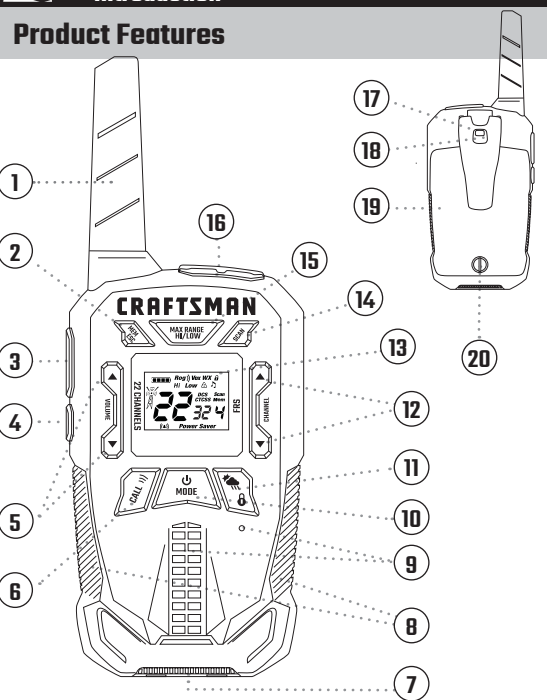


Maximum range may vary and is based on unobstructed line-of-sight communication under ideal conditions.



Introduction

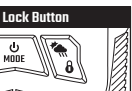
Product Features



1. Antenna
2. Memory/Escape Button
3. Talk Button
4. LED Flashlight Button
5. Volume Up/Down Buttons
6. Call Button
7. LED Flashlight
8. Rubberized Grips
9. Speaker/Microphone
10. Mode/Power Button
11. Weather/Lock Button
12. Channel Up/Down Buttons
13. Backlit LCD Display
14. Scan Button
15. Max Range Hi/La Button
16. External Speaker/ Microphone/ USB Charge Jack
17. Belt Clip
18. Wrist Strap Connection
19. Battery Compartment
20. Battery Door Screw



Lock Function



The **Lock** function locks the **Channel Up**, **Channel Down**, **Volume Up**, **Volume Down** and **Mode/Power** buttons to prevent accidental operation.

To turn the lock on or off:

– Press and hold the **Weather/Lock** button for two seconds.

A double beep sound is used to confirm your lock on or off request. When in **Lock** mode, the **Lock** icon will be displayed.





Range



Your range will vary depending on terrain and conditions.

In flat, open country your radio will operate at maximum range. Buildings and foliage in the path of the signal can reduce the range of the radio.



Dense foliage and hilly terrain will further reduce the range of the radio.

On Channels 8 through 14, your radio automatically switches to low power, which will limit the range the radio can communicate.

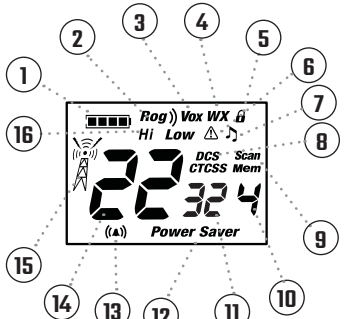


Remember, you can achieve maximum range by using maximum range extender. See page 5 for details.



Features

- 22 Channels
- 10 Channel Weather Radio
- Weather Alert
- 121 Privacy Codes (38 CTCSS codes/ 83 DCS codes)
- IP54 Dustproof and Waterproof
- Hands-Free Operation (VOX)
- Scan Channels, privacy codes
- Backlit LCD Display
- LED Flashlight
- Call Alert Ten selectable tones
- Button Lock
- Speaker/Microphone/ Charge Jack
- Roger Beep Selectable On/Off
- Battery/Power Saver
- Keystroke Tones
- Battery Level Indicator
- Low Battery Audible Alert
- Auto Squelch
- Maximum Range Extender
- Belt Clip



Backlit LCD Display

1. Battery Level Indicator
2. Roger Beep Icon
3. VOX Icon
4. Weather Icon
5. Lock Icon
6. Weather Alert Icon
7. Key Tone Icon
8. DCS/CTCSS Icons
9. Scan/Memory Icon
10. Memory Channel Number
11. DCS/CTCSS Privacy Code Numbers
12. Power Saver Icon
13. Vibra Alert/ Call Alert Icon
14. Channel Numbers
15. Receive/Transmit Icon
16. Hi/Low Power Icon

Operation

Mode Functions

Scrolling Through the Mode Function

By scrolling through the **Mode** function, you will be able to select or turn on preferred features of your radio. When scrolling through the **Mode** function, your radio features will be displayed in the same predetermined order:



Mode/Power

- Set CTCSS Privacy Codes
- Set DCS Privacy Codes
- Set Vox On/Off
- Set Vox Sensitivity
- Set Call Tones 1-10
- Set Vibra Alert On/Off
- Set Roger Beep On/Off
- Set Key Tones On/Off



Privacy Codes

Your radio incorporates two advanced coded squelch systems that can help to reduce interference from other users on any given channel. CTCSS (Continuous Tone Coded Squelch System) provides 38 privacy codes and DCS (Digitally Coded Squelch) provides 83 privacy codes. This provides a total of 121 **Privacy Codes**. Either system can be used on all channels, but both systems cannot be used on the same channel at the same time.



To successfully communicate using a privacy code, both the sending and receiving radios must be tuned to the same channel and to the same privacy code system (CTCSS or DCS) and privacy code number. Each channel will remember the last privacy code system and number you select.



The privacy code 00 is not a privacy code, but allows all signals to be heard on a channel that is set to 00 on both the CTCSS and DCS systems.

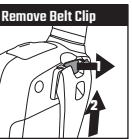


Caring for Your Radio

Your radio will give you years of trouble-free service if cared for properly. Handle the radio gently. Keep the radio away from dust. Never put the radio in water or in a damp place. Avoid exposure to extreme temperatures.



Installing Batteries



Remove Belt Clip

1. Remove belt clip by releasing belt clip latch and sliding clip up.



Remove Screw

2. Using a flat head screw driver or edge of a coin (a quarter may be used), remove the screw securing the back battery compartment cover.



Insert Batteries

3. Insert the supplied three AA rechargeable batteries or non-rechargeable alkaline batteries. Position batteries according to polarity markings.

4. Replace battery compartment cover screw and belt clip.



WARNING

- Do not attempt to charge alkaline batteries.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (Ni-Cd, Ni-MH, etc.) batteries.



Radio Charger Jack

1. Check to see that the batteries have been inserted properly.

2. Insert the cable into the charge jack located at the top of the radio.

3. Plug the cable into USB-compatible power port.

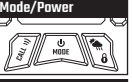
Use only the supplied rechargeable batteries and charger for recharging your Craftsman radio.

Craftsman recommends your radio is turned off while being charged.

Non-rechargeable alkaline batteries can also be used in your radio.



Set CTCSS Privacy Codes



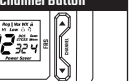
Mode/Power

To select a CTCSS privacy code:

1. After selecting a channel, press the **Mode/Power** button until the **CTCSS** icon appears and the small numbers next to the channel number flash on the display.



If DCS is turned on at the channel selected, the display will flash the CTCSS icon and "OFF." To switch from DCS to CTCSS, press the **Channel Up** or **Channel Down** button while the display is flashing "OFF." The display will then show the small numbers flashing and you will then be able to proceed to step 2.



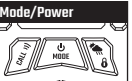
2. Press using the **Channel Up** or **Channel Down** button to select a privacy code. You can hold the **Up** or **Down** button for fast advance.

3. When your desired CTCSS privacy code is displayed, choose one of the following:

- a. Press the **Mode/Power** button to enter the new setting and proceed to other functions.
- b. Press the **Talk** or **Call** button to return to **Standby** mode.
- c. Do not press any buttons for 6 seconds to return to **Standby** mode.



Set DCS Privacy Codes



Mode/Power

To select a DCS privacy code:

1. After selecting a channel, press the **Mode/Power** button until the **DCS** icon appears and the small numbers flash on the display (00 through 83).



If CTCSS is turned on at the channel selected, the display will flash the DCS icon and "OFF." To switch from CTCSS to DCS, press the **Channel Up** or **Channel Down** button while the display is flashing "OFF." The display will then show the small numbers flashing and you will then be able to proceed to step 2.



2. Press using the **Channel Up** or **Channel Down** button to select a DCS privacy code. You can hold the **Up** or **Down** button for fast advance.

3. When DCS privacy code is displayed, choose one of the following:

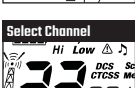
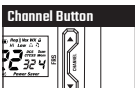
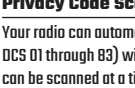
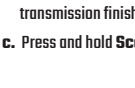
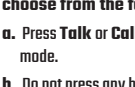
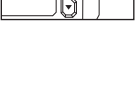
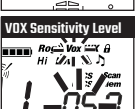
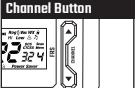
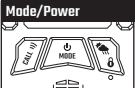
- a. Press the **Mode/Power** button to enter the new setting and proceed to other functions.
- b. Press the **Talk** or **Call** button to return to **Standby** mode.
- c. Do not press any buttons for 6 seconds to return to **Standby** mode.

Operation

Mode Functions (continued)

Voice Activated Transmit (VOX)

In **VOX** mode, your radio can be used “hands-free,” automatically transmitting when you speak. You can set the **VOX** sensitivity level to fit the volume of your voice and avoid transmissions triggered by background noise.

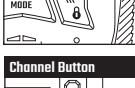
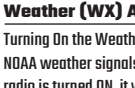
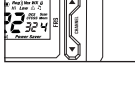
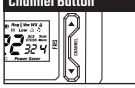
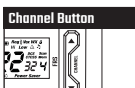


10 Memory Location

Your radio has **10 Memory Locations** for storing your most frequently used channels and channel/privacy code combinations.

These **Memory Locations** can be selected individually or can be scanned.

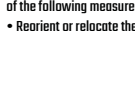
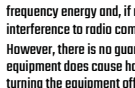
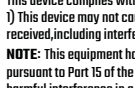
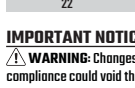
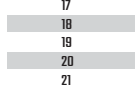
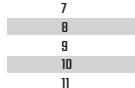
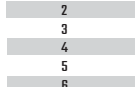
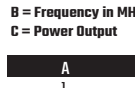
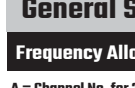
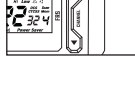
(See page 14 for memory location scan.)



If “CF” flashes in place of the privacy code numbers, a privacy code is already set in the opposite (CTCSS or DCS) system. Press the **Channel Up** or **Channel Down** button to cancel the opposite code and select a privacy code from the active system for the selected channel.

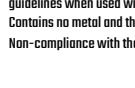
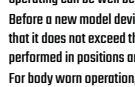
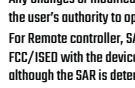
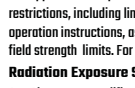
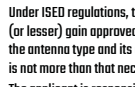
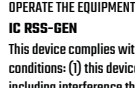
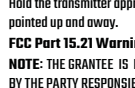
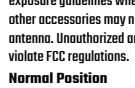
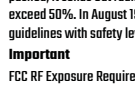
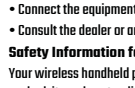
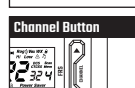
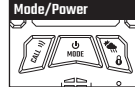
9. Choose one of the following:

- Press the **MEM/ESC** button to enter the channel/privacy code in the selected memory location. Radio then proceeds to next memory location, which will blink.
- Press the **Channel Up** or **Channel Down** button to select the memory location (0 through 9).



Ten Call Tone Settings

You can choose between ten different **Call Tone Settings** to transmit a call alert.

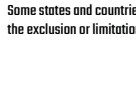
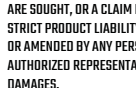
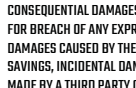
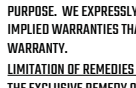
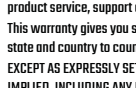
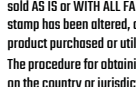
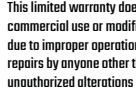
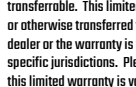
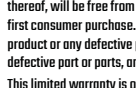
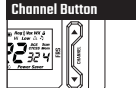
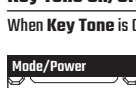


Roger Beep Confirmation Tone

Your listener will hear an audible tone when you release the **Talk** button. This alerts the other party that you have finished talking and it is OK for them to speak.

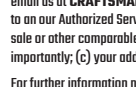
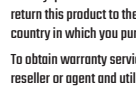
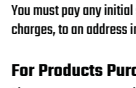
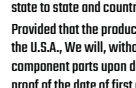
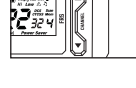
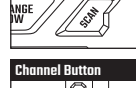
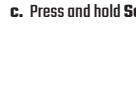
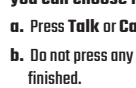
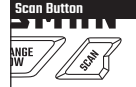
To turn roger beep on or off:

- Press the **Mode/Power** button until the **Roger Beep** icon flashes. The current on or off setting is displayed.
- Press the **Channel Up** or **Channel Down** button to select roger beep on or off.
- Choose one of the following:
 - Press the **Mode/Power** button to enter the new setting and proceed to other functions.
 - Press **Talk** or **Call** button to return to **Standby** mode.
 - Do not press any buttons for 6 seconds to return to **Standby** mode.



Channel Scan

Your radio can automatically scan channels.



The radio ignores specific privacy codes while scanning channels.

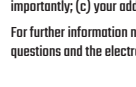
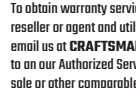
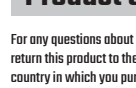
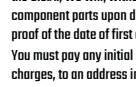
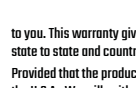
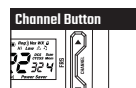
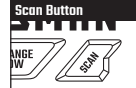
The **Scan** icon will continue to be displayed when scan is on. Your radio will continue to scan all channels and stop if an incoming transmission is detected. Your radio will remain on that channel for 5 seconds.

During scanning (while receiving an incoming transmission), you can choose from the following:

- Press **Talk** or **Call** button to enter the new setting and return to **Standby** mode.
- Do not press any buttons and return to **Scan** mode after an incoming transmission finished.
- Press and hold **Scan** button to return to **Standby** mode.

Memory Scan

Your radio can automatically scan memory channels.



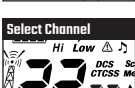
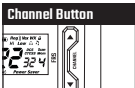
Memory Scan continued

During scanning (while receiving an incoming transmission), you can choose from the following:

- Press **Talk** or **Call** button to enter the new setting and return to **Memory Standby** mode.
- Do not press any buttons and return to **Memory Scan** mode after an incoming transmission finished.
- Press and hold **Scan** button to return to **Memory Standby** mode.

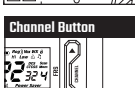
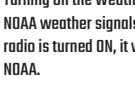
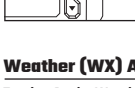
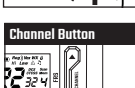
Privacy Code Scan

Your radio can automatically scan the **Privacy Codes** (either CTCSS 01 through 38 or DCS 01 through 83) within one channel. Only one set of privacy codes (CTCSS or DCS) can be scanned at a time.



NOAA* All Hazards Radio Channels

You can use your radio to listen to **NOAA All Hazards Radio** channels transmitting in your area.



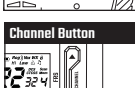
To listen to All Hazards Radio channels:

- Press the **Weather** button once until the **All Hazards Radio** icon and the currently selected All Hazards Radio channel are displayed.
- Use the **Channel Up** or **Channel Down** button to change **All Hazards Radio** channels.
- The **All Hazards Radio** icon will continue to be displayed when **All Hazards Radio** is on.
- To exit **All Hazards Radio**, press and hold the **Weather** button until On or Off is displayed.

*National Oceanographic and Atmospheric Administration

Weather (WX) Alert Mode

Turning On the Weather Alert function will allow your radio to automatically receive NOAA weather signals and warnings from designated weather broadcast stations. If the radio is turned ON, it will alert to Weather and other emergency alerts broadcast by NOAA.



This feature is set to OFF by default.

Make sure the strongest Weather channel is selected for your area using the NOAA All Hazards Radio Channels selection in the previous menu.

To turn Weather Alert On or Off:

- Press the **Weather** button twice until the **Weather Alert** icon flashes on the display. The current On or Off setting is displayed.
- Press the **Channel Up** and **Channel Down** button to turn Weather Alert On or Off.
- Press and hold the **Weather** button again to save the new setting and exit the **Weather Alert** Mode and return to **Standby** mode.

Operation

General Specifications

Frequency Allocation

A = Channel No. for 22 Channel
B = Frequency in MHz
C = Power Output

A	B	C
1	462.5625	High
2	462.5675	High
3	462.5725	High
4	462.5375	High
5	462.5625	High
6	462.5675	High
7	462.5725	High
8	467.5625	Low
9	467.5675	Low
10	467.5725	Low
11	467.5375	Low
12	467.5625	Low
13	467.5675	Low
14	467.5725	Low
15	462.5500	High
16	462.5750	High
17	462.6000	High
18	462.6250	High
19	462.6500	High
20	462.6750	High
21	462.7000	High
22	462.7250	High

IMPORTANT NOTICE:

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

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: 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.

Safety Information for Radios

Your wireless handheld portable transmitter contains a low power transmitter. When the talk button is pushed, it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless devices

Important

FCC RF Exposure Requirements: For body-worn operation, this radio has been tested and meets the FCC RF exposure guidelines when used with Craftsman accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. Use only the supplied antenna. Unauthorized antennas, modifications or attachments could damage the transmitter and may violate FCC regulations.

Normal Position

Hold the transmitter approximately 2 inches from your face and speak in a normal voice, with the antenna pointed up and away.