

C. CRANE

CCRadio3



INSTRUCTION MANUAL

**PLEASE READ ALL THE INSTRUCTIONS COMPLETELY BEFORE USE
AND SAVE THIS MANUAL FOR FUTURE REFERENCE**

Ver. 1.0

About the CCRadio 3

Thank you for purchasing the CCRadio 3. Please read through these instructions thoroughly before using the product.

The CCRadio 3 has many of the refinements and improvements requested by customers who have used previous versions of our CCRadios. This radio is built for the highest performance ever on AM. Traditional FM reception is amazing in its ability to bring in a weak station clearly. The CCRadio 3 also has Bluetooth®, the NOAA Weather band and alert along with the 2-Meter Ham band.

The CCRadio 3 has enhanced audio that can be accurately tuned for realistic human voices. It can also be adjusted for good musical performance. Five memory buttons on top of the radio make it easier to change stations than front mounted buttons.

For many radio listeners, the addition of the 2-Meter VHF Ham band will be their first experience with amateur (ham) radio. I hope you have the time to explore this band. What you'll hear is a lot of dedicated radio people using a communication device with pride. You will especially want to tune in to 2-Meter VHF during a local, area-wide emergency when communications will be very different. When the power in an area is down and cell phones and other modes of communication are unavailable, many hams use portable equipment that lets them work as beacons of information. They have direct communication with federal agencies and the Red Cross. We recommend that you find out which local 2-Meter frequencies are used during an emergency in your area and have them installed into the five memory locations.

The CCRadio 3 has been designed to be long lasting. We hope it will give you many years of learning, news, and entertainment. If you have any questions about your radio, please give us a call or check out ccrane.com.

Also, if you have a problem and you purchased the CCRadio 3 from another company, call us and C. Crane may be able to help you faster.

Thanks! From all of us at C. Crane

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Before Use



Please read **IMPORTANT SAFETY INSTRUCTIONS** on pages 28 - 29 before use. It is important to read and understand all instructions.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
THE LIGHTNING FLASH AND ARROW-HEAD WITHIN THE TRIANGLE IS A WARNING SIGN ALERTING YOU OF "DANGEROUS VOLTAGE" INSIDE THE RADIO.	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE RADIO BACK. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	THE EXCLAMATION POINT WITHIN THE TRIANGLE IS A WARNING SIGN ALERTING YOU OF IMPORTANT INSTRUCTIONS ACCOMPANYING THIS RADIO.

CAUTION

- Before turning the unit on, set your volume control to a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly without distortion.
- Long-term exposure to loud sounds may cause hearing damage. It is best to avoid high volume levels when using headphones/earbuds, especially for extended periods.

For your future reference:

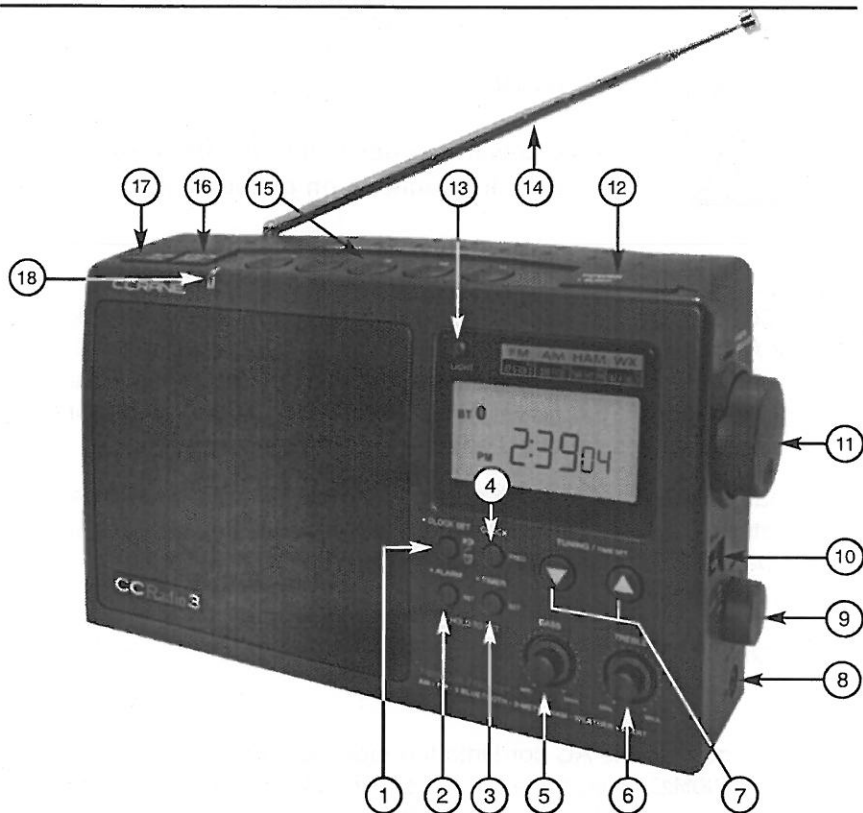
Serial No. _____ Date of purchase _____
(found inside battery compartment)

Name & address of dealer _____

UNPACKING

The box should contain the CCRadio 3, the power cord and this manual. If anything is missing or damaged, please contact your dealer immediately. We recommend you keep the box in the unlikely event your radio will need servicing.

Button Identification



- | | |
|--------------------------------|---|
| 1) • Clock Set | 10) Lock Switch |
| 2) • Alarm Set | 11) Tuning Knob / • Squelch Set |
| 3) • Timer Set | 12) Power or • Sleep Timer |
| 4) Display Clock or Frequency | 13) Display Light |
| 5) Bass Control | 14) Telescopic Antenna |
| 6) Treble Control | 15) Memory (1-5) / Bluetooth Controls |
| 7) Tuning / Time Set (Up/Down) | 16) Bluetooth / 2-Meter / Weather • Alert |
| 8) Headphone Jack | 17) AM / FM / • AUXILARY |
| 9) Volume Control | 18) • Weather Alert Light |

Note: When you see a “•” next to a button on the radio, it means you must press and hold the button down for two seconds to activate the function. The appropriate symbol will then appear on the display along with sounding a “beep”. If the radio is turned off, the beep volume is significantly reduced. **To deactivate the Alarm and Timer functions, press and hold the button until it beeps again and the symbol disappears from the display.** (Please see Display Panel symbols on page 8.)

Getting Started

POWERING YOUR RADIO



Before powering your radio be sure to read the Safety Instructions on pages 28 and 29.

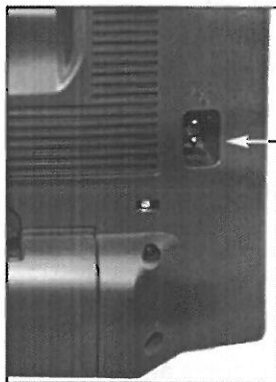
The CCRadio 3 will run on (4) "D" size NiMH or alkaline batteries or on 120V AC house current using the included power cord. Batteries are optional. The batteries are necessary to retain the timer, clock, and memory settings if the power cord is removed from the radio for more than three minutes. Lithium batteries are not recommended.

Rechargeable batteries work well in this radio. The Battery Power Level Indicator will be lower because the total voltage is lower for rechargeable batteries.

AC OPERATION

Before you plug the AC cord into the radio be sure the AC voltage is 120Volts/60Hz. If you have batteries in the radio and you use the AC power cord, the batteries will automatically be disconnected.

NOTE: If you remove the power cord without turning the radio OFF, the radio will automatically revert to the batteries.



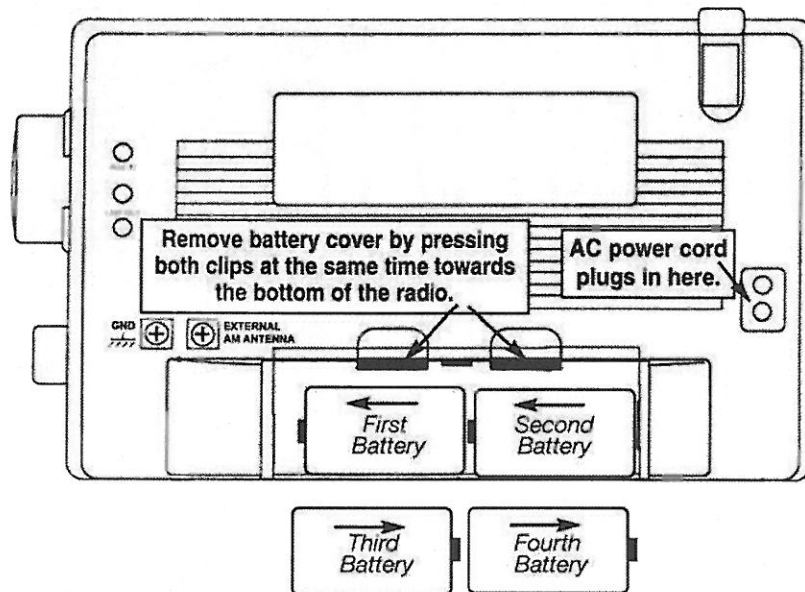
Rear View

Insert the plug on the end of the supplied power cord into the AC power jack on the back of the radio.

Getting Started

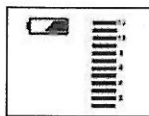
INSTALLING THE BATTERIES

- 1) Position the radio face down on a soft surface to protect it.
- 2) Remove the battery compartment cover.
- 3) Insert the (4) "D" cell batteries into the compartment as indicated in the drawing below. Be sure the negative (-) end is against the spring. Refer to the drawing below to insure correct installation of your batteries.
- 4) Replace the battery cover. You are now ready to operate your radio.

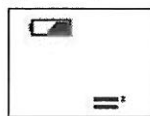


BATTERY REPLACEMENT

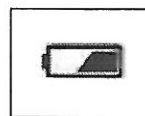
The battery indicator will display the battery level for approximately one second when the radio is switched off. After removing dead batteries for replacement, you have approximately three minutes to replace the batteries before your clock and memory information will be lost (if the radio is not plugged in).



This symbol means the batteries are full.



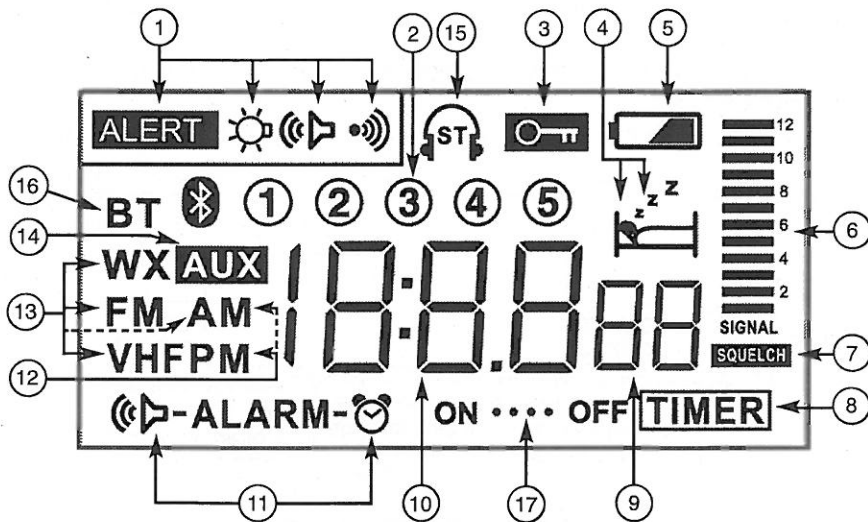
This symbol means batteries are low.



This flashing symbol means the batteries need replacing.

Getting Started

DISPLAY PANEL




- | | |
|--|-----------------------------|
| 1) Weather Alert Modes | 9) Clock Seconds |
| 2) Memory Location (1 - 5) | 10) Frequency/Clock Display |
| 3) Key Lock On/Off | 11) Alarm Status and Type |
| 4) Sleep Timer/Snooze Status | 12) AM/PM Indicator |
| 5) Battery Symbol | 13) Indicates Band In Use |
| 6) Battery Power Level Indicator and Signal Strength Meter | 14) AUX IN Indicator |
| 7) Squelch Indicator | 15) Stereo Reception |
| 8) Timer Active Indicator | 16) Bluetooth |
| | 17) Timer On/Off |

Getting Started

SETTING THE CLOCK


Please read this entire section carefully before you start. Set the time with the **radio off**. You must go through the steps listed below without stopping for more than 15 seconds at any given time or you will have to start over. (Refer to page 5 for Button Identification.)

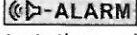
- 1) Press the Clock Set Button and hold for two seconds then release. The hour digit will flash.
- 2) Using the Up/Down Tuning Button, select the appropriate hour digit and AM or PM. 
- 3) Press the Clock Set Button again, then release. The minutes digits will flash. Use the Up/Down buttons to adjust the minutes to the appropriate time.
- 4) You must press the Clock Set Button again then release to complete the time setting. This also sets the seconds to "00".


SETTING THE ALARM

There are two different alarm modes on the CCRadio 3. You can choose to wake up to the radio or to a tone. You can set the alarm with the radio on or off. If the radio is off, the beep volume is significantly reduced.

To set the type of alarm:


Press and hold the Alarm Button until you hear a beep and see one of these symbols flashing on the display  then release.

To wake with the radio: While *Alarm* is flashing on the display, press and release the Clock Set Button until you see the  symbol. When the alarm goes off the radio will play the last station selected at the same volume level last set.

To wake with a multi level tone: While *Alarm* is flashing, press and release the Clock Set Button until you see the  symbol.

To shut off the alarm function: Press and hold the Alarm Button until you hear a short beep and the alarm symbol disappears then release.

To set the alarm time:

- 1) Press and hold the Alarm Button for two seconds then release. The hour digit and Alarm symbol will flash.
- 2) Using the Up/Down Tuning Button, select the appropriate hour digit and AM or PM. 
- 3) Press the Alarm Button again then release. Use the Up/Down Tuning Buttons to adjust the minute to the appropriate time.
- 4) Press the Alarm Button again then release to complete the alarm setting.

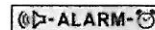
Getting Started

Although very high quality parts were used in the manufacturing of your radio, buttons, knobs, and dials should be operated with a light touch for best longevity.

Notes on the Alarm

You can also set the alarm time immediately after selecting the radio or buzzer alarm as described on page 9.

To stop the alarm from going off every day, press and hold the Alarm Button until *ALARM* disappears from the display.



Once the alarm is set, it will automatically go off the next day at the same time. Use the Power Button to shut off the alarm until the next day.

If the radio alarm is selected, tune the radio to your favorite station and set the volume before turning your radio off for the day. When the alarm activates, the radio will play the last station listened to. Note: There will be no audio if the AUX IN is set.

The tone alarm is called HWS or Humane Wake (if that is possible) System. The alarm tone beep will increase in volume every 15 seconds for one minute followed by one minute of silence before repeating the cycle.

The alarm system will sound for one hour unless turned off by pressing the Power Button.

SNOOZE FEATURE

When the buzzer alarm is sounding, if you press any button except the Power Button, the alarm will temporarily stop for five minutes. The little Zs and *Alarm* symbol will flash on the display (above the little bed) while the radio is in snooze mode. To shut off the alarm and snooze feature press the Power Button.

SLEEP TIMER FEATURE

Your CCRadio 3 is equipped with a Sleep Timer that enables the radio to continue playing for up to 120 minutes after activation, then shuts the radio off. Selectable times are 120, 90, 60, 45, 30 and 15 minutes.

Press and hold the Power / Sleep Button until the pictograph of a person in bed and the numbers 120 are displayed.



Holding the Power / Sleep Button down will reduce the time in steps, showing times of 120, 90, 60, 45, 30 and 15 minutes. If you miss the time you want, simply continue holding the button until the desired time shows on the display. Release the button. Now the pictograph of the person in bed will appear on the display. The radio will then shut off after the set amount of time. To deactivate the Sleep Timer, simply shut the radio off using the Power Button.

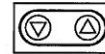
Radio Operation

TUNING

The CCRadio 3 features four bands: AM / FM / 2-Meter Ham (VHF) and Weather (WX).

Manual Tuning

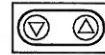
- 1) Press the Power Button to turn on the radio.
- 2) Select the band by pressing the AM/FM button or the **Bluetooth/2-Meter/Weather** button on the top panel.
- 3) A single press of the Up or Down Tuning Buttons will change the frequency up or down for AM, FM and Ham (VHF) bands, and channel up or down for Weather.



Each press of Up and Down Tuning Buttons will change the frequency by 10 kHz in AM mode, 100 kHz in FM mode, and 5 kHz in Ham (VHF).

Scan Tuning

Same as above except press and hold the Tuning Up or Down Button for more than 0.5 second. The radio will scan and stop automatically when it finds an active station. The Scan Tuning will not work on the weather band. It may also stop scanning on strong interference or noise. Press and hold again to resume. For 2-Meter Ham scanning, please see page 14 for more advanced information.

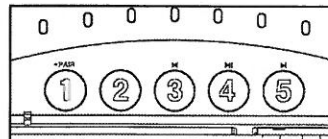


Rotary Tuning

Rotating the tuning knob will change AM/FM/Ham (VHF) by frequency and the weather band by channel.

Memory Tuning

Five stations may be stored into memory in each of the four bands.



- 1) Tune to the station or channel you want to memorize.
- 2) Press and Hold the desired Memory Button for two seconds or until you hear a beep. The station or channel is then memorized.

The display will show the memory number.

To recall the memorized station, select the correct band and briefly press and release the Memory Button. The radio will instantly tune to the station stored in memory.

Note: The large buttons on top of the radio make it easy to locate your favorite station. Very high quality switches are used in manufacturing, so a light touch is all you need to save and restore your favorite stations. The control symbols above the buttons are only used while in the Bluetooth mode.

Radio Operation

WEATHER ALERT SYSTEM

The WEATHER ALERT modes on the CCRadio 3 can alert you to special weather related emergencies. During an emergency or weather-related hazard, NOAA issues an emergency tone that will set off an audible and/or visual alarm on the radio.

NOTE: Hazard warnings are not available in all areas.

There are seven standard NOAA weather channels used in the US and Canada. This radio receives broadcasts up to 40 miles from transmitting stations.

- 1) To listen to the standard NOAA weather channels, turn the radio on, press the **Bluetooth/2-Meter/Weather** button until WX shows on the display. The telescopic whip antenna may need to be fully extended and in a vertical position to receive a station clearly.
- 2) The channel number of the weather station is shown on the display. Pressing the Tuning Up or Down Buttons will toggle you through the seven programmed channels. There should be one or more weather service stations broadcasting in your local area. You will hear a report that is updated usually once or more per day for your area. If there is a severe weather or weather-related emergency, NOAA will update the weather broadcast more frequently. If there is a weather emergency, the NOAA will issue an alert tone.

After locating and tuning in your weather station the radio can now be placed into WEATHER ALERT mode. The WEATHER ALERT mode enables you to listen to your favorite AM or FM station or turn the radio off, and still receive an alert signal warning you of a special emergency. There are three active WEATHER ALERT modes on the CCRadio 2E.

NOTE:

- 1) When activated, the WEATHER ALERT consumes power even when the radio is turned off.
- 2) **Be aware that if you are not using AC power the WEATHER ALERT will completely drain your batteries. If your batteries are dead and AC power is off, the WX Alert Alarm will not work.**

Setting the Weather Alert

- 1) To place the radio in WEATHER ALERT mode, press and hold the **Bluetooth/2-Meter/Weather** button for two seconds: You will hear a short beep and see the alert symbol, shown on page 13 (top right) on the display. When the radio is off, the beep volume is significantly reduced.

Radio Operation

This is WEATHER ALERT mode with flashing light only (no Alarm). If NOAA issues a weather related emergency, the radio will automatically alert you with a small flashing light near the top of the radio. The Alert light continues to flash until any button is pushed.



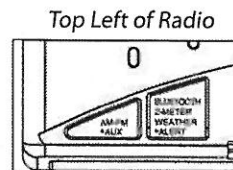
- 2) To access the second mode, (WEATHER ALERT with NOAA Audio). Press and hold the **Bluetooth/2-Meter/Weather** Button again for two seconds until you hear a long beep. The symbol shown at right will be displayed in this mode. In this mode, if the NOAA alert tone is issued, the red light flashes and the radio switches to Weather Audio automatically.
- 3) To access the third mode, (WEATHER ALERT with flashing light and siren). Press and hold the **Bluetooth/2-Meter/Weather** button again for two seconds until you hear a double-beep. The symbol shown at right will appear and the red light near the top of the radio lights up continuously. In this mode, if the NOAA alert tone is issued, the red light near the top of the radio flashes and a siren turns on for up to 1 minute. In this mode, when the siren is active, pressing any button on the radio instantly tunes the radio to the Weather Audio and cancels the siren.



SPECIAL NOTE: If you have the headphones plugged in and a weather alert is issued, the audio to the headphones will be cut-off and the siren will sound through the radio's speaker.

Turning Off the Weather Alert

Press the **Bluetooth/2-Meter/Weather** button again for two seconds: The alarm goes off and is inactive. The ALERT symbol will disappear from the display.



In any of the active WEATHER ALERT modes, the weather receiver stays on and listens for an emergency tone issued from NOAA in case of emergency.

You may get a periodic test tone from the NOAA that will cause an unexpected alarm on your CCRadio 3. This tone is only a test and will happen periodically, usually every Wednesday at noon, or whenever the agency decides to test their emergency alert system. Simply pressing any button on the receiver will shut the alert tone off. After an alert has been issued, the WEATHER ALERT light and/or siren will stay on for one minute or until you turn it off by pressing any button.

Radio Operation

2-METER HAM (VHF) BAND (144 TO 148 MHZ)

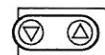
The 2-Meter Ham Band is a popular radio band used by amateur radio operators for civil defense. After a hurricane, earthquake or other calamity, 90% of emergency coordination at the local level takes place on this band. Listening to this band during an emergency can be extremely valuable and even life saving. For most people, the CCRadio 3 will probably be their first experience with Ham radio.

We have preprogrammed some of the most popular frequencies into the five memories of the CCRadio 3. Different frequencies may be active at your location, other than those preprogrammed into the memories. The following are the frequencies and memory locations as they were originally preprogrammed:

- 1) 146.520
- 2) 146.760
- 3) 146.880
- 4) 146.940
- 5) 147.000

You can program your frequencies of interest into a memory location at any time.

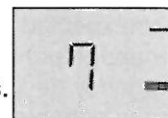
To scan the five memory channels when in 2-Meter Ham, momentarily press both of the Up and Down Tuning Buttons at once, the radio will scan the memories and automatically stop when it detects a voice transmission. Raise the telescopic antenna up fully in a vertical position. It is best to set the squelch level prior to scanning the memory stations. See "Setting the Squelch" below.



SETTING THE SQUELCH

Background noise or static is present to some degree at every location and on every frequency of the 2-Meter Ham Band. This is a normal condition. If you set the squelch above the background noise level, the radio will remain silent until a voice transmission is detected. It is best to set the squelch as low as possible (to just before static is constant). This way you can hear signals that may be weak. If you set the squelch too high, you may miss some weak voice transmissions.

To adjust the squelch level, press and hold the main Tuning Knob in for three seconds until the display changes. Turn the Tuning Knob slowly clockwise from OFF through 12 (increasing squelch) until the radio just becomes silent.



NOTE: Squelch operates on the 2-Meter Ham Band only.

Radio Operation

SEARCHING FOR A NEW ACTIVE FREQUENCY

At times, more frequencies will become active than have been preprogrammed into the radio. You can search the 2-Meter Ham band by pressing the Up or Down Tuning Button and holding it momentarily. You can also start scanning by pressing and releasing the main Tuning Knob. The radio will begin searching the entire 2-Meter Ham band until it finds an active frequency and then it will stop. You may want to write down this frequency to keep track of which frequencies are active. With time you may find a frequency of interest.



During non-emergency times, you can listen and learn more about the Ham radio operators that live around you. After listening to them for a time, you may find you would like to be a Ham, too. Joining requires passing an entry level multiple choice test and purchasing reasonably priced Ham radio equipment. The 2-Meter band is the most popular place to start for a Ham. You can contact the American Radio Relay League (ARRL) toll free at 888-277-5289 or at arrl.org to find out what you need to learn and the nearest testing location.

C. Crane salutes every Ham who has volunteered to be a part of emergency radio operations.

DEFAULT CLOCK/ FREQUENCY SETTING

When listening to AM and FM bands the default setting is for the Frequency to be displayed for approximately 5 seconds and then return to the Clock Display. This can be changed to show just the Frequency unless the Clock/ Freq button is pushed and then the clock will display for approximately 5 seconds and then show the Frequency.


To change the display to show Frequency (AM or FM); Turn on the power, then press and hold the Clock/Freq button and then quickly press the Memory 1 button. (You should hear a beep). You should now see the frequency displayed unless you push the Clock/Freq button, in which case you will see the clock for approximately 5 seconds.

Reverse the process to return to the default of showing the clock.

Bluetooth Operation

Bluetooth is a convenient way to play audio from your phone, tablet, computer, or voice controlled device using the speaker from the CCRadio 3. Bluetooth will work wirelessly up to about 50 feet (depending on obstructions) between your device and the CCRadio 3.

Setup

You will only need to do the follow setup once per bluetooth device. Settings are remembered thereafter. On the radio, go to Bluetooth mode by pressing the **Bluetooth/2-Meter/Weather** button until "BT" is displayed on the LCD screen. Hold the #1 memory button with *PAIR written above it for about 3-4 seconds or until the BT  icon flashes on the LCD screen. On your Cell Phone, Tablet, or Computer go to the Bluetooth list and look for "CCRadio-3". If you do not see "CCRadio-3" listed then scan the list again. Select "CCRadio-3" from the list. Your device should say "Connected..."

Operation

While your device is connected with Bluetooth to the CCRadio 3, any audio that should normally be playing on your device will instead come out of the CCRadio 3's speaker. Adjust the volume on the radio and your device for best sound.

From the CCRadio 3, you can pause, play, or skip backwards or forwards using the memory preset buttons on top of the radio;

#3 button = Skip to Previous.

#4 button = Play/Pause.

#5 button = Skip to Next

NOTE: Button functionality will vary depending on the app or device linked to.