C.CRANE

CCRadioplus



INSTRUCTION MANUAL

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

C. Crane Company's Mission

Our mission is simple: to find, develop, and test products that enhance the lives of our customers.

Guidelines

As a hometown company, the C. Crane Company insists on a friendly way of doing business. For our customers, that means an unwavering commitment to offering you high quality radios and lifestyle products complemented with exceptional customer service. To that end, our knowledgeable staff is trained to listen to you, help answer your questions, and, most importantly, to help you find the items that truly meet your needs.

As we have done for nearly 30 years, the C. Crane Company offers the following pledge to our customers:

- To offer honest, courteous advice that assists you in making a wise purchase.
- To provide a full refund, except for return shipping, if your order is returned to us within 30 days of your receipt. Please return the items in "as new" condition.
- · Never to sell a used item as new.
- Never to sell your name or information to anyone.
- To include only those items in our catalog that meet our high standards, and pass our quality checks. We never let manufacturers buy their way into our catalog.
- Finally, to take care of you to the best of our ability.

No matter what you order from us, from a radio to a toy to a kitchen knife, our goal is to make you happy.

If you would like to continue to receive our future catalogs, please let us know. The only way to get your name on our mail list is for you to request it, or for us to make a mistake. So, if you or a friend would like to receive our new catalog, please email *ccraneco@aol.com* or give us a call at 800-522-8863. You can also visit us on the Web at *www.ccrane.com*.

The C. Crane Company — Discover Something New Today.

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Before Use



Please read IMPORTANT SAFETY INSTRUCTIONS on pages 27 - 28 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.



THE LIGHTNING
FLASH AND ARROWHEAD WITHIN THE
TRIANGLE IS A WARNING SIGN ALERTING
YOU OF "DANGEROUS VOLTAGE"
INSIDE THE RADIO.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

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.

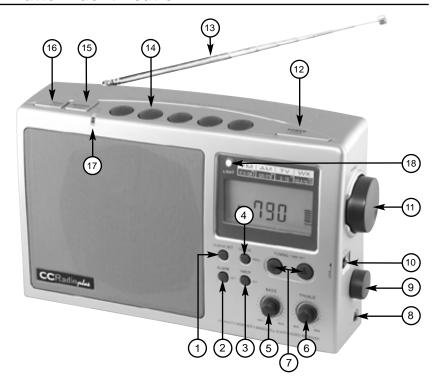
For your future reference:

Serial No.	(found inside battery compartment)	Date of purchase	_
Name & ac	dress of dealer		-

Unpacking

The box should contain the CCRadio*plus*, 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



- Clock Set
- Alarm Set
- 3) Timer Set
- 4) Display Clock or Frequency
- 5) Bass Control
- 6) Treble Control
- 7) Tuning / Time Set (Up/Down) 16) Band or AUXILIARY
- 8) Headphone Jack
- Volume Control

- 10) Lock Switch
- 11) Tuning Knob
- 12) Power or Sleep Timer
- 13) Telescopic Antenna
- 14) Memory (1-5)
- 15) Weather Alert (3 Modes)
- 17) Weather Alert Light
- 18) Display 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". To deactivate the function, press and hold the button until it beeps again and the symbol disappears from the display. (Please see Display Panel symbols on page 8.)

POWERING YOUR RADIO

Before powering your radio be sure to read the Safety Instructions on pages 27 and 28.

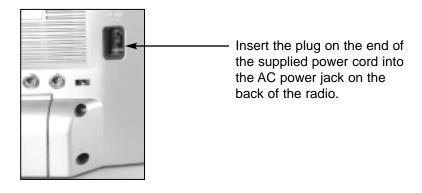


The CCRadioplus will run on (4) "D" size NiMH or alkaline batteries or on 120V AC house current using the included power cord. Batteries are optional. The batteries are necessary to retain the timer, clock, and memory settings if the power cord is removed from the radio for more than three minutes.

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.

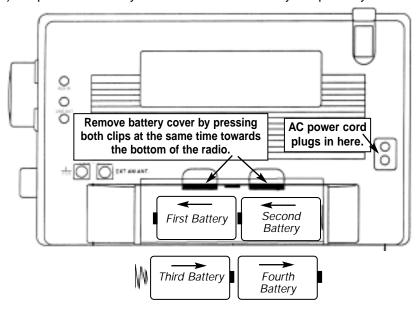
NOTE: If you remove the power cord without turning the radio OFF, the radio will automatically revert to the batteries.



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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 seven seconds after 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).

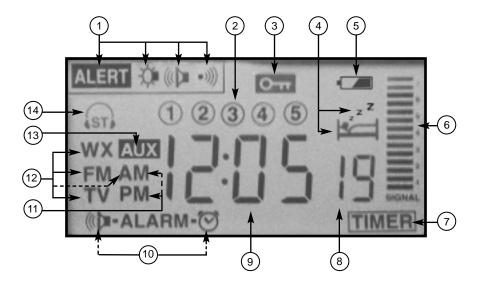


This symbol means the batteries are full.

This symbol means batteries are dead.

This flashing symbol means the batteries need replacing.

DISPLAY PANEL



- 1) Weather Alert Modes
- 2) Memory Location (1 5)
- 3) Key Lock On/Off
- 4) Sleep Timer/Snooze Status
- 5) Battery Symbol
- Battery Power Level Indicator and Signal Strength Meter
- 7) Timer Active Indicator

- 8) Clock Seconds
- 9) Frequency/Clock Display
- 10) Alarm Status and Type
- 11) AM/PM Indicator
- 12) Indicates Band In Use
- 13) AUX IN Indicator
- 14) Stereo Reception

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SETTING THE CLOCK

Please read this entire section carefully before you start. Set the time with the radio off. You will need to 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.)

- Press the Clock Set Button. 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 to select the minutes digits, 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 to complete the time setting. This also sets the seconds to "00".

SETTING THE ALARM

There are two different alarm modes on the CCRadioplus. You can choose to wake up to the radio or to a tone. You can set the alarm with the radio on or off.

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.

To wake with the radio: While Alarm is flashing on -ALARM the display, press the Clock Set Button until you see the symbol shown to the right. 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 the Clock Set Button until you see the symbol shown to the right.



*-ALARM

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

To set the alarm time:

- 1) Press and hold the Alarm Button, the hour digit and Alarm symbol will flash.
- 2) Using the Up/Down Tuning Button, select the appropriate



- 3) Press the Alarm Button again. Use the Up/Down Tuning Buttons to adjust the minute to the appropriate time.
- 4) Press the Alarm Button again to complete the alarm setting.

Getting Started

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.

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 ZZZZ

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 while the radio is in snooze mode. To shut off the alarm and snooze feature press the Power Button.

SLEEP TIMER FEATURE

Your CCRadio*plus* 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, 30 and 15 minutes.

Press and hold the Power / Sleep Button until the picograph 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, 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 picograph 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.

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TUNING

The CCRadio*plus* features four bands: AM / FM / TV Audio 2-13 and Weather.

Manual Tuning

- 1) Press the Power Button to turn on the radio.
- 2) Select the band by pressing the Band Button.
- 3) A single press of the Up or Down Tuning Buttons will change the frequency up or down for AM and FM bands, and channel up or down for Weather and TV bands.



Each press of tuning Up and Down buttons will change the frequency by 10 KHz in AM mode and 100 KHz in FM mode.

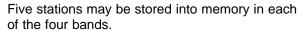
Scan Tuning

Same as above except press and hold the Tuning Up or Down Button for more than .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.

Rotary Tuning

Rotating the tuning knob will change AM/FM by frequency and the weather/TV bands by channel.

Memory Tuning





- 1) Tune to the station or channel you want to memorize.
- 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 press and release the Memory Button. The radio will instantly tune to the station stored in memory. If the button is held down, the station you are tuned to will now be stored in that memory position.

WEATHER ALERT SYSTEM

The WEATHER ALERT modes on the CCRadio*plus* 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 Band button until *WX* shows on the display. The telescopic whip antenna may need to be fully extended and in the "up" 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 CCRadioplus.

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

 To place the radio in WEATHER ALERT mode, press and hold the Weather Alert Button for two seconds: You will hear a short beep and see the alert symbol, shown on page 13 (top right), on the display.

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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 WEATHER ALERT 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. To cancel the WEATHER ALERT, press the Band Button on the radio.
- 3) To access the third mode, (WEATHER ALERT with flashing light and siren). Press and hold the WEATHER ALERT 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 radio comes on continuously. In this mode, if the NOAA alert tone is issued, the red light on 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 turns 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 WEATHER ALERT 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 CCRadioplus. 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.

DISPLAY LIGHT

Display Light on AC Power

When the radio is plugged into AC power, the display light will always be on unless you turn it off. The special green LED bulbs last about 100,000 hours and use very little electrical energy. If you want to turn off the display light, press the Light button. Refer to page 5 for button identification.



Display Light on Batteries

When batteries are used the display light can be turned on by pressing the light button. The display light automatically goes off two minutes after the last time you press any button.



LOCK SWITCH

The Lock switch can be used when transporting the radio to prevent accidentally turning it on. When the switch is pushed up you will see the Lock symbol appear on the display. It can also be used to disable all functions of the radio when it is turned on.

Push the switch down to release the lock for normal operation.



Right Side View

HEADPHONE JACK

You can use a stereo or mono headphone with a 3.5 mm plug. When you insert the headphone plug, the speaker is disconnected. This radio delivers FM in stereo through the headphones.

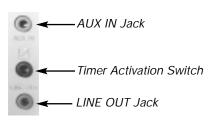
RESET BUTTON

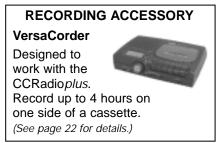
Once in a while glitches may occur on any portable digital radio. This can be caused by static electricity, unusual key strokes or a power disruption. If this happens, use the end of a paper clip or ball point pen and push it into the hole briefly to reset the radio. You will lose the clock time and all the stations stored in memory when the radio is reset.



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AUDIO & RECORDING JACKS





AUX IN Jack

The green jack, labeled AUX IN, is used to connect an external audio source such as a CD Player or recorder, so you can listen through your CCRadio*plus*' speaker. To do this, you will need the appropriate patch cord. (Refer to page 22 for patch cord specifications).

Warning: If a "LINE OUT" is not available on your external audio source, you can use the headphone jack. However, the volume must be kept low or damage to the CCRadio plus may result.

- Plug your patch cord into the LINE OUT or Headphone Jack of your external audio source.
- 2) Plug the other end into the AUX IN jack on the CCRadioplus.
- 3) With the power on, press and hold the Band/AUX Button until you hear a short beep and AUX appears on the display.
- 4) Turn on your external audio source to hear the audio played through the CCRadio*plus*.
- 5) To turn the AUX off, press the Band/AUX Button again and the AUX will disappear from the display.

NOTE: Volume can be controlled from the CCRadioplus.

LINE OUT Jack

The red jack, labeled LINE OUT, is used to output the audio from the CCRadio*plus* to another device such as a recorder, your home stereo, or some other unit. To do this, you will need an 1/8" stereo patch cord.

Note: The LINE OUT jack differs from a headphone jack because the volume level of a headphone jack varies depending on the volume of the radio. The LINE OUT jack has a set line level so the volume is consistent no matter what the position of the volume knob.

- 1) Plug your patch cord into the LINE OUT jack on the CCRadioplus.
- 2) Plug the other end of the patch cord into the LINE IN or AUDIO IN of the device you want to send the audio to and you will hear the radio through the other source. You can still listen to the CCRadioplus while using the LINE OUT jack.

Timer Activation Switch

The black jack labeled with this symbol is for use with a recorder that has a timer activated switch. You would use this switch if you wanted to do a timed recording. It is used in conjunction with the LINE OUT jack. See your recorder for specific instructions.

SETTING THE TIMER

Please read this entire section carefully before you start. You will need to go through the 3 steps listed below without stopping. If you stop for more than 15 seconds, you will need to press and hold the Timer Button until you hear a single beep. Then start at step one again.

Before you begin, program the stations that you will want to record into memory. Refer to page 11 for instructions on programming memory presets. The timer has an ON TIME and an OFF TIME. You must set both in order for the timer to work correctly.

STEP 1: TO SET THE ON TIME

- 1) Press and hold the Timer/Set Button until you hear a double beep and the word *ON*, the hour digit and *TIMER* flash on the display.
- 2) Use the Tuning Up/Down Buttons to set the hour, verifying that the time is set correctly for AM or PM as shown on the display.
- 3) Press the Timer/Set Button again so the minutes and the word *ON* and *TIMER* flash on the display.
- 4) Use the Tuning Up/Down Buttons to set the minutes.

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STEP 2: TO SET THE OFF TIME

- 1) Press the Timer/Set Button again until the word *OFF*, the hour digit and *TIMER* flash on the display.
- 2) Use the Tuning Up/Down Buttons to set the hour. Again, verify that the time is set correctly for AM or PM.
- 3) Press the Timer/Set Button again so the word *OFF* and *TIMER* and the minutes, flash on the display.
- 4) Use the Tuning Up/Down Buttons to set the minutes.

STEP 3: TO SET THE FREQUENCY

- Press the Timer/Set Button again to select your desired frequency.
 The word TIMER and the memory preset will flash on the display.
 Using the Band Button, select the appropriate band (AM, FM, TV or WX). Press the memory button 1-5 that corresponds with your desired station.
- 2) You must Press the Timer/Set Button again to complete the setup.

The timer will go ON and OFF at the same time and same station every day until you turn the timer off or reprogram it.

To Turn Off The Timer

If *TIMER* is showing on the display then the Timer is set. Press and hold the Timer/Set Button until you hear a short beep and the word *TIMER* disappears from the display.

NOTES ON THE TIMER

The timer can be used to play your favorite program every day.

To stop the timer from going off every day press and hold the Timer/Set Button until you hear a short beep the word *TIMER* disappears.

Once the timer is programmed, you may use your radio as normal. If you are using the radio during a "timed" operation, the radio will automatically switch to the programmed station, and turn off at the programmed OFF TIME.

The word TIMER flashes while the radio is playing in Timer Mode.

Instructions For The Light & Solar Options

SOLAR & LIGHT KIT



The optional **Solar & Light Kit** (shown left) can be ordered separately. Kit includes:

- 2.5 Watt Solar Panel
- 4 Heavy Duty "D" NiMH Batteries
- 6V DC Charging Adapter (not shown)
- White LED lamp

Item #CPP \$99.95

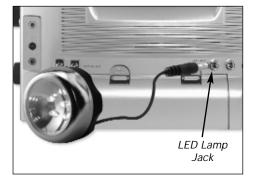


You may use alkaline batteries for operation of the CCRadio *plus* and the Light, but they are not rechargeable. **Never connect the 6V DC charging adapter or solar panel to the radio while alkaline batteries are installed.**



To use the CCRadioplus with the Light only: Plug the light into the jack labeled "LED Lamp". The light will come on when plugged in, as long as the radio has battery power.

The white LED bulb is very energy efficient, lasts for thousands of hours and is virtually unbreakable. The cord

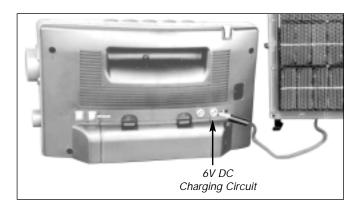


on the light will extend up to 6 ft. Just pull on the connector and unreel it to the desired length. To rewind the cord, hold the black base in one hand and twist the light top with the other hand. The base is also a magnet, so you can mount it to any metal surface like the front speaker grill on the radio, a refrigerator, or a car.

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Instructions For The Light & Solar Options

OPTIONAL NIMH BATTERY CHARGING SYSTEM





WARNING:



NEVER CHARGE ALKALINE BATTERIES WITH 6V DC CHARGING ADAPTER OR SOLAR PANEL

Please note: All NiMH batteries come slightly charged. First, charge the (4) "D" NiMH batteries. You can do this in the CCRadio *plus* via the 6V Adapter or with the 2.5 Watt Solar Panel. To install the batteries, please refer to page 7.

Please read the NiMH Information on page 20 to ensure you get the best service from your NiMH batteries.

To charge the batteries via the adapter, plug the 6V Adapter into the jack labeled "6V DC Charging Circuit" on the back of the CCRadio*plus*. Once the batteries are charged you may use the radio.

To charge the batteries via the Solar Panel, plug the panel into the jack labeled "6V DC Charging Circuit". The NiMHs will charge via the Solar Panel every time it is in full or partial sunlight. The Solar Panel can be mounted outside. There is a voltage blocking device in the radio that prevents loss of a charge when the Panel is not in the sun. Generally, the Solar Panel puts out power equal to what is required to run the radio. If you charge the batteries for eight hours in the full sun you may get nearly eight hours of play time. The CCRadioplus can be operated while the batteries are being charged, but will increase the required charge time. The Solar Panel will run the radio in full sunlight without the NiMH batteries installed.

Instructions For The Light & Solar Options

NIMH BATTERY INFORMATION

Approx. Run Times And Charge Times For NiMH Batteries

CCRadioplus with heavy duty NiMH batteries Approx. 100 Hrs.

Approx. time to charge dead NiMH batteries with AC Adapter 40 Hrs. Approx. time to charge NiMH batteries with Solar Panel 60 Hrs.

Operating the radio during charging will increase the charge times. Please read previous page for more radio/light operational tips.

Nickel Metal Hydride (NiMH) batteries are a great financial and ecological investment if you know how to use them.

- New NiMH batteries may require a few charging and discharging cycles to come up to full power. First, charge the batteries. Next, allow them to drain by running them in the CCRadio plus until it shuts off and no sound is heard. Then recharge the batteries fully. This procedure should be repeated two more times if you want to get the full output of your NiMHs as soon as possible.
- Do not overcharge NiMH batteries. Excessive charging heat can reduce their life span. If you use the 6 volt adapter to charge the batteries, it should be disconnected after about 40 hours.
- NiMHs slowly lose their charge even without use. It is best to charge them up for a few hours once a month if you are keeping them for emergency use. Uncharged NiMHs can be stored indefinitely, but may need to be reconditioned before use.

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Specifications

FREQUENCY COVERAGE

FM Band: 87.5 - 108 MHz Stereo

AM Band: 520 - 1710 kHz

TV Band: Channels 2-13 Audio Only

WEATHER BAND

Channel 1: 162.400 MHz Channel 5: 162.500 MHz Channel 2: 162.425 MHz Channel 3: 162.450 MHz Channel 7: 162.550 MHz

Channel 4: 162,475 MHz

ROTARY TUNING KNOB RESOLUTION

AM - 1 kHz TV - 1 Channel FM - 50 kHz WX - 1 Channel

POWER SOURCE

AC 120 Volts 60Hz Batteries: (4) "D" size

POWER CONSUMPTION

AC Power: 8 Watts

Battery Power: 40-50 mA DC

AUDIO

10% THD at output power @ 1.8 Watt AC typical

@ .9 Watt Battery

Speaker: 5", 4 Ohm, 6 Watts

ANTENNA

FM, TV and Weather Band: Telescopic whip antenna

AM Band: 1) Built-in Ferrite Bar - 7/16" dia x 8" long (200 mm)

External AM antenna directly wired through filter network into RF front end.

DIMENSIONS

11" W x 6-1/2" H x 4" D (at the base)

WEIGHT

Approximately 3.8 pounds without batteries

Note: Specifications are subject to change without notice.

Specifications

6V DC CHARGING JACK

Center tipped negative. 6V DC @ 300mA input for directly charging NiMH batteries. Can also power your radio and charge NiMH batteries using a 2.5 Watt Solar Panel. Do not charge alkaline batteries.

LED LAMP JACK

4 Volt output for use with external LED lamp.

Item #CWL ... CCRadioplus LED Light\$19.95

LINE IN JACK

300 - 1000mV RMS (line level) input from external audio source. **Do not overload.**

LINE OUT JACK

300 - 1000mV RMS (line output)

TIMER ACTIVATION SWITCH

Low impedance, transistor driven switch. Used for operation of external recording devices.

PATCH CORDS

Can be purchased directly from C. Crane Company Inc. at 1-800-522-8863 or you can obtain a comparable patch cord from your local electronics store.

Item #VPC ... 3 x 1/8" Stereo Patch Cord, 40" L ... \$14.95

VERSACORDER

Dual speed tape recorder. Designed to work with CCRadio plus. Record up to 4 hours on one side of a cassette tape. Can be purchased directly from C. Crane Company Inc.at 1-800-522-8863 or on the web at ccrane.com.

Item #VC VersaCorder \$109.95

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Troubleshooting Guide

The CCRadioplus will not turn on and none of the buttons work:

The Lock Switch, located on the right side of the radio between the tuning and the volume knobs, is in the up position. Push the switch down to release the lock and resume normal operation of the radio. (Please see Lock Switch on page 14.)

The CCRadio plus comes on by itself or changes to a different station while I'm listening:

The Timer has been set. The word TIMER will appear in the display if the Timer is set. To cancel the Timer setting, press and hold the Timer/Set button until you hear a short beep and the word TIMER disappears from the display.

My radio shuts off after just a few seconds:

Low batteries can cause this situation. Replace them with a new set of batteries. If the radio is operating on the power cord, check for solid connections at the wall outlet and the back of the radio. Also make sure there is power at the wall outlet.

Stations won't hold in memory:

The memory button settings are being overwritten. When recalling a station from memory, if you hold the memory button down too long it will program the current station over your previously stored station. To recall a station that has been stored in memory, always press and release the button quickly. To program a new station into memory, tune to the desired station and then press and hold the memory button for two seconds until you hear a beep. Also, please see the section on Memory Tuning on page 11.

Troubleshooting Guide

The AM reception is poor inside of my building:

Many building materials have adverse effects on AM band listening. Brick, concrete, stucco, and aluminum siding all have a tendency to absorb or reflect the AM signal. Spanish tiles or metal roofs are also culprits. To test your AM reception, put batteries in your radio and take it outside of the building, especially at night. If your reception is notably stronger outside than inside the building, an external AM antenna may be necessary to bring the signal into the building. See the AM Tuning and Listening Tips section on page 26 for a quick and easy antenna. The best AM antenna made today for these buildings is the Twin Coil Ferrite™ AM Antenna by C. Crane.

Item #TCA Twin Coil Ferrite AM Antenna \$99.95

Poor reception on FM, TV Audio, or Weather bands:

The CCRadio*plus* uses its telescopic, or "whip" antenna for FM, TV audio, and the weather bands. To improve reception of these bands, fully extend the telescopic antenna. Reception of FM and weather broadcasts is normally improved with the antenna extended straight up. TV audio reception usually requires the antenna to be rotated at an angle. Note: the antenna must be fully extended to allow it to rotate. For areas that have poor reception, we recommend the FM Reflect Antenna by C. Crane.

Item #FMW ... FM Reflect Antenna (white) \$24.95
Item #FMB FM Reflect Antenna (black) \$24.95

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Radio Noise Troubleshooting

AM RADIO NOISE PROBLEMS AND POSSIBLE SOLUTIONS

If you hear an annoying buzz when listening to AM radio, it's most likely radio noise. Here are some of the usual culprits:

- · Dimmer switch (even in an adjacent room).
- Lights: fluorescent light, "touch lamp" type fixtures, automatic night lights, motion-activated outdoor lights, dying bulbs, blinking bulbs.
- · Nearby television or computer.
- · Electronic bug and pest controllers.
- Faulty electrical switch.
- Radios scanners.
- Dirty insulators on a nearby power pole.
- Electric blanket.
- Smoke detectors that run from an AC current (battery operated units are OK).

Now what can you do about it?

- Turn off the circuit breakers to see if the noise stops, and if the source comes from inside your house. Turn off one circuit at a time to isolate the source of the noise.
- Using a battery-operated radio, check if the interference comes from the AC 120V line, through the air, or both. To locate the direction of the noise, turn the radio until you hear the loudest noise. The front and the back of the radio will point to the noise origin.
- If the noise comes from outside, carry the radio around the neighborhood to check for the origin of the noise. Ask your neighbors if they hear the same noise.
- If you suspect a power pole, call the utility company. Dirty power pole insulators are sometimes a cause of hard-to-find radio interference.
- Sometimes grounding can greatly reduce the hum from AC line noise. Unfortunately, most radios do not have a ground connection. Finding a good earth ground may also be difficult.

For more detailed information, please visit www.ccrane.com/radionoise

AM Tuning & Listening Tips

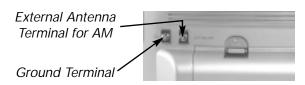
Most portable radios including the CCRadio *plus* have an internal AM antenna. Best performance is achieved when the radio is swiveled on its base for maximum signal pickup from the transmitting tower. This same technique can be used to help nullify unwanted signals or radio noise. Experimentation is the best way to see how it works for you.

Top View CCRadioplus



The CCRadio*plus* has an external antenna terminal for AM. If your reception is better outside, try this quick and easy antenna: Use 50' of insulated wire attached to the AM antenna terminal. Also try a ground wire attached to the ground terminal. Run the antenna wire inside around a window or along a baseboard, or if possible, the wire should be mounted outside at least three feet away from the face of the building or it may not work. Where an outdoor antenna is not possible, try the Twin Coil Ferrite AM Antenna by C. Crane. The antenna element can be placed on a window sill or mounted where a better signal is available. SAFETY DIRECTIONS AND PRECAUTIONS FROM YOUR ANTENNA SUPPLIER SHOULD BE FOLLOWED TO PREVENT INJURY FROM LIGHTNING OR ANY ACCIDENT with all antennas.

Left Side Rear View



The CCRadio*plus* is made for distant or weak AM signal listening. Daytime reception is limited to about 300 miles maximum because you can only receive the signal directly from the transmitter site. You may receive AM stations thousands of miles away at dawn, dusk and at night, depending on the time of year and atmospheric conditions. The ionosphere is a layer of ions above the earth. At night it slows and congeals into a giant mirror and can reflect radio waves back to the earth, allowing you to receive signals much farther away than during the day.

Distant listening is called DXing. One club that is devoted to DXing is National Radio Club at: PO Box 164, Mannsville, NY 13661-0164. They maintain a website at: http://www.nrcdxas.org

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Safety Instructions

READ BEFORE OPERATING EQUIPMENT SAVE THESE INSTRUCTIONS

- Read and understand all safety and operating instructions before the radio is operated.
- Retain Instructions: The safety and operating instructions should be retained for future reference.
- Heed Warnings: All warnings on the appliance and in the operating instructions should be followed.
- 4) Water and Moisture: The appliance should not be used near water. Do not use near a bathtub, washbowl, laundry tub, kitchen sink, wet basement, swimming pool, etc.
- 5) Cleaning: Unplug the receiver from the AC power outlet before cleaning. Use only a damp cloth for cleaning the exterior of the receiver.
- 6) Placement: Do not place the radio on an unstable cart, stand, bracket or table. The radio may fall, causing serious personal injury and damage to the receiver.
- 7) Ventilation: This radio should be situated so that its location or position do not interfere with its proper ventilation. For example, the radio should not be used on a bed, sofa, rug or other soft surfaces that may block the ventilation openings. It should not be placed in a built-in situation like a cabinet that may reduce air flow through the ventilation openings.
- 8) Heat: Never put the radio in direct sunlight in an unventilated area or behind glass like a car's interior. The appliance should be away from heat sources such as radiators, heat registers, stoves, or other appliances that produce heat.
- 9) Power Cords: The power cord should be positioned so it is not walked on, pinched, or have items placed on top of it. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit. Unplug the power cord by gripping the power plug, not the cord. Operate the radio using only the correct type of power source indicated. If you are not sure of the type of power supply to your home, consult your dealer or local power company.

Safety Instructions

- 10) Do not overload wall outlets or extension cords. This can result in a risk of fire or electrical shock. Never insert objects of any kind into the receiver through openings. The objects may touch dangerous voltage points or short out parts. This could cause a fire or electrical shock.
- 11) If the radio is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage caused by lightning or power line surges.
- 12) If the radio is left unattended and unused for long periods of time, remove the batteries. The batteries may leak and damage furniture or your radio.
- 13) Do not attempt to service the receiver yourself. Removing the cover may expose you to dangerous voltage, and will void the warranty. Refer all servicing to authorized service personnel.
- 14) The receiver is equipped with a polarized type plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact an electrician to replace the obsolete outlet. Do not defeat the safety purpose of this plug.
- 15) The appliance should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged, or
 - B. Objects have fallen or liquid has been spilled into the radio, or
 - C. The radio has been exposed to rain, or
 - D. The radio does not appear to operate normally or exhibits a marked change in performance, or
 - E. The radio has been dropped or the enclosure damaged.
- 16) The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel. This symbol is to alert you to important operation or servicing instructions that may appear in the owner's manual.

17) Do not charge alkaline batteries. See warnings on pages 18 and 19.

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PERSONAL STATION LOG								
City	Station Call Letters	Frequency	Date	Time				

Please feel free to copy this page.

PERSONAL STATION LOG							
City	Station Call Letters	Frequency	Date	Time			

Please feel free to copy this page.

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About C. Crane Company Inc.

The C. Crane Company began soon after Bob and Sue Crane moved from the San Francisco Bay Area to the beautiful and remote Redwood Country of Northern California. As they settled into Fortuna, in the heart of the Redwoods, and tried to tune in their favorite AM stations, Bob and Sue were shocked. They either heard a lot of static or nothing at all. Trying to find a solution, they soon discovered there were few products available to enhance poor AM radio.

Bob, being an all-around clever guy, found his own solution to weak AM reception: the Select-A-Tenna! The Cranes were so impressed with this simple antenna that they knew they had to get the word out. So, they decided to create a company to market this wonderful antenna: the C. Crane Company was born. As for the mysterious letter "C", well, Bob and Sue's middle names both begin with the letter "C", thus the name C. Crane. They decided to advertise the antenna on the radio, and before they knew it, the C. Crane Company was up and running.

That was over 25 years ago, and it all started on a kitchen table that Bob built himself. This simple cherry wood table acted as the shipping and receiving station, showroom table, and Bob's office desk. Bob and Sue were the first phone operators. This made them realize that their customers expected to hear a real live person who is willing to listen to their questions, and more importantly, able to respond to their inquiries with knowledge and respect.

From the beginning, Bob and Sue Crane had a powerful idea about what they expected from the company that carried their name. They would only sell items they tested themselves and found to be of outstanding quality. They would always offer a 30-day money back satisfaction guarantee and be ready with the best customer service in the industry. Even though the company has grown a lot during the last quarter century, these family-based ethics still guide the company in everything they do.

Since the first Select-A-Tenna, the C. Crane Company has become one of the premier electronics companies in the nation. Exclusive items such as the CCRadio, the best radio for long range AM reception, and the Freeplay Plus Wind-up radio, continue to fulfill customer needs with top quality items found nowhere else. The C. Crane Catalog, published only three times a year, has expanded to include over three hundred high quality, unique, and outstanding items. Customers can be assured that the items included in the C. Crane Catalog are truly the best of the breed. Even today, all of C. Crane's products must pass exhaustive testing in the quality control lab, at home, at work, and in people's lives before they are included in the C. Crane Catalog.

Model: CCRadio*plus* FCC ID: BYG 003

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.

Notice: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.