### C.CRANE



# **INSTRUCTION** MANUAL

Please read all the instructions completely before use and save this manual for future reference. This page left blank intentionally.

#### **Owners Record**

Thank you for purchasing a CCRadio-EP PRO.

It is a radio built specifically for "ease of use" that addresses the desires of some of our customers. Inside, it has the technology we have developed over the years to help tune in a station more clearly and provide excellent audio. Built-in is the patented Twin Coil Ferrite<sup>®</sup> AM Antenna. There is also a large high-quality speaker along with bass and treble controls so that the audio is accurate and rich. We hope the CCRadio-EP PRO will give you many years of learning, news and entertainment. If you have questions about your radio, please give us a call or email: *customerservice@ccrane.com* 

#### FOR YOUR FUTURE REFERENCE:

Serial No. (Found inside battery compartment): \_\_\_

Date of purchase/Name & address of dealer: \_

#### UNPACKING

The box should contain the CCRadio-EP PRO, an AC Power Adapter, this manual and a warranty card. If anything is missing or damaged, please contact C. Crane immediately. We recommend that you keep the box in the unlikely event that your radio needs servicing.

Please read **IMPORTANT SAFETY INSTRUCTIONS** before use. It is important to read and understand all instructions. Keep these precautions and instructions where all who will use this radio will read them.

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**

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



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.

# READ BEFORE OPERATING EQUIPMENT. SAVE THESE INSTRUCTIONS.

To prevent damage to your radio or possible injury to you or others, read these safety precautions and instructions entirely before applying power to your radio.

#### 1) COMMON CARE 🖄

Check the radio, AC adapter, batteries and any accessories regularly. Do not use the radio if there is any sign of damage. Only operate in accordance with the instructions in this manual.

#### 2) PROPER BATTERY HANDLING $\triangle$

Never mix different type of batteries or use old batteries with new. This may cause the batteries to leak or explode. Dead batteries are also prone to leakage. Remove the batteries when no charge remains. Orientate the batteries correctly in the unit according to the diagram. Do not store batteries with metal objects like paper clips. We recommend you remove batteries from the radio if you are not going to use the radio for one month or more.

#### 3) DISCONNECT THE RADIO IN CASE OF MALFUNCTION ${\rm I}{ m A}$

If you smell or notice smoke, disconnect the AC adapter and remove the batteries immediately to avoid burns. Contact C. Crane for inspection and service before any future operation. Only use the AC adapter supplied with the unit and replace it if wires become frayed or exposed.

#### 4) KEEP OUT OF REACH OF CHILDREN $\triangle$

The radio is heavy when batteries are installed. Use only on a stable, level surface. Dropping the radio can cause damage or injury. Keep the AC Adapter cord in a position so someone cannot trip and cause the radio to fall.

#### 5) KEEP AWAY FROM WATER AND MOISTURE $ilde{ extsf{M}}$

Keep the radio dry. Liquids and moisture can damage the radio. If a liquid leaks into the radio do not operate and seek a qualified service shop. To clean, remove the power adapter and use a damp cloth on the exterior only.

#### 6) KEEP AWAY FROM EXTREME TEMPERATURES $ilde{\Lambda}$

Extreme temperatures can damage the radio. Do not leave or use the radio where it can be subjected to high or very cold temperatures.

#### 7) DO NOT ATTEMPT TO SERVICE RADIO $ilde{ extsf{M}}$

Refer all service work to a qualified service shop when the radio does not appear to operate normally, exhibits a change in performance or the radio has received damage. Never open the radio as this may expose you to dangerous voltages and this will void all warranties.

#### 8) OUTSIDE ANTENNAS OR CABLES $\triangle$

Outside antennas or cables should not be used with this radio unless installed by qualified personnel.

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#### **Getting Started**

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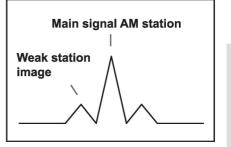
#### **Quick Start Guide**

- 1. Plug in the supplied AC Power Adapter or 4 "D" batteries (see "Powering Your Radio" on Page 10).
- 2. Turn the radio on by pressing the red POWER button on the top of the radio (see "Radio Controls and Functions on Page 8 for location).
- 3. Adjust the VOLUME knob to your preferred listening level.
- 4. Select the BAND switch to either AM, FM or FM Stereo.
- 5. For best FM reception, lift, extend and rotate the FM WHIP ANTENNA.
- **6.** Adjust the TUNING knob until your desired radio station frequency is indicated on the dial or until your station has best reception.
- 7. For best AM reception please tune slowly to find your AM station so you can hear the audio. If you tune too fast it may appear to skip over your station. Typically, you will find a weak station image right before the station you want. If you tune a little further, you will find the main signal of the station comes in much clearer.



You can often enhance AM reception by tuning the small "AM FINE TUNING" knob (on the right side of the radio) by "ear", for maximum clarity. The radio comes with this knob locked in position, so you must remove the sticker first.

Finally, rotate the entire radio until station reception is best. Adjust the WIDE-NARROW knob for your sound preference along with the Bass and Treble.



#### **Radio Controls and Functions**



- 3) TUNING LIGHT Lights when tuned to a station.
- 4) AM/FM TUNING DIAL Sliding pointer indicates the station frequency being received on AM or FM.
- 5) AM/FM TUNING KNOB Rotate to tune in a radio station to AM or FM.
- 6) AM FINE TUNING KNOB Rotate for fine tuning once your station has been selected.

(AM only) Adjust for optimal audio clarity when listening to music or voice.

#### 9) TREBLE KNOB

Adjust high pitch tones to your preferred listening level.

#### 10) BASS KNOB

Adjust low pitch tones to your preferred listening level.

- 11) BAND SELECTION SWITCH Select between AM, FM and FM Stereo.
- 12) FLIP UP HANDLE For easy portability.

#### **13) HEADPHONE JACK**

Use for private listening with **optional** headphones or earbuds. Can also be used as an audio output for an optional recording device or to connect amplified speakers.

#### **14) LINE INPUT JACK**

For connecting a portable music player or other device which would use the radio as the speaker.



#### **15) POWER JACK**

Use to connect the AC Power Adapter for continuous power to radio.



#### **16) ANTENNA SELECTION SWITCH**

Normally keep it set to 'INT' (Internal) except when an external antenna is used.

#### 17) 9K-10K AM TUNING STEP SWITCH

Set this switch to '10K' for use in the United States. '9K' steps are used in Europe and many other countries.

- **18) EXTERNAL AM ANTENNA CONNECTION and GROUND** To connect and ground an external AM antenna.
- **19) EXTERNAL FM ANTENNA CONNECTION** Connect an external FM antenna.
- 20) BATTERY COMPARTMENT Insert four "D" cell batteries.

#### 21) FM WHIP ANTENNA

Lift and fully extend: rotate for best FM radio reception.

#### **POWERING YOUR RADIO**

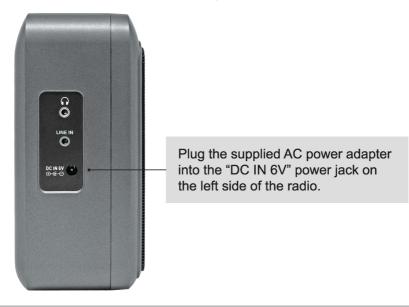
Before powering your radio be sure to read the Safety Instructions on page 4.  $\triangle$ 

The CCRadio-EP PRO will run on four "D" size alkaline batteries or on 120V AC house current using the included AC power adapter. Batteries are optional.

#### AC OPERATION

Before you plug the AC power adapter into the radio, be sure the AC voltage is 120 Volts/60 Hz.

**NOTE**: If you have batteries in the radio and you use the AC power adapter the batteries will automatically be disconnected.

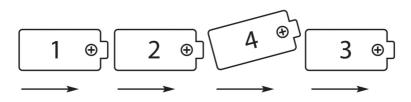


#### **INSTALLING THE BATTERIES**

- **1)** Position the radio face down on a soft surface, with the bottom of the radio facing you.
- 2) On the battery compartment see the arrow marked "OPEN". Use two fingers on the arrow to press the cover down and toward you until the cover slides off.



3) Insert four "D" batteries as shown in the diagram inside the battery compartment. Notice that the fourth battery is inserted between the second and third batteries for easiest insertion. Be sure that the "+" polarity mark on the batteries point to the right.



**4)** Replace the battery compartment door by sliding it towards the top of the radio.

**NOTE:** When the batteries are very low you may notice a decrease in volume or that radio operation has become irregular. Test the radio by using the AC power adapter to confirm that low batteries are the problem.

**IMPORTANT:** Since batteries have been known to sometimes leak, we recommend removing the batteries when not in use for more than 30 days or if the radio is primarily used with the AC power adapter.

#### Specifications

#### DIMENSIONS:

11.4" W X 7.3" H X 2.75" D

#### WEIGHT:

3.1 pounds without batteries

#### **INPUT POWER:**

4 "D" size batteries 6V DC 800 mA tip negative

#### AUDIO OUTPUT:

2 Watt RMS

#### SPEAKER:

5 Watts 8 Ohms

#### **HEADPHONE JACK:**

3.5mm 32 Ohms

#### FREQUENCY COVERAGE:

FM Band: 87.50 - 108 MHz AM (MW) Band: 520 - 1710 kHz

#### SENSITIVITY:

FM > 5uv AM (MW) > 0.2 mV/m

#### **BANDWIDTH:**

Wide > 6 kHz Narrow > 2.5 kHz

#### WARRANTY:

1 Year Limited Warranty

**NOTE:** Specifications are subject to change without notice.

#### THE CCRADIO-EP PRO WILL NOT TURN ON:

- 1. Be sure that the batteries are installed correctly.
- 2. Make sure all the batteries are good.
- **3.** If using the AC Power Adapter, make sure that it is plugged fully into the power jack.

#### THE CCRADIO-EP PRO HAS POOR RECEPTION ON FM:

- **1.** Fully extend and rotate the FM whip antenna.
- **2.** Adjust the band switch to "FM" instead of "FM ST" which requires a better signal.
- **3.** Check the "INT/EXT ANTENNA" switch on the back of the radio for the proper setting.
- 4. Consider trying a more powerful external FM antenna.

## THE CCRADIO-EP PRO HAS POOR RECEPTION ON AM, OR IS RECEIVING MULTIPLE STATIONS:

- 1. Rotate the radio for the best reception.
- **2.** Try positioning the TWIN COIL FERRITE<sup>®</sup> AM FINE TUNING Knob to the "Normal" position. If the reception still needs improvement, adjust the knob for the best station tuning accuracy.
- **3.** Adjust the WIDE/NARROW switch to NARROW for best AM audio clarity.
- Move the radio away from electronic devices like computers and TV sets.
- **5.** Use the radio on batteries. Sometimes the interference can be transmitted to the radio over the AC power lines.
- **6.** Concrete, stucco, brick and metal buildings can greatly reduce radio reception. Try the radio outdoors; if the reception is improved, try an external antenna.
- 7. Check the 9/10 kHz switch (10 kHz for the U.S.).

### MODEL: CCRADIO-EP PRO ANSI C63.4: 2003

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 users authority to operate the equipment.



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