

# C.CRANE

## CC SOLAR OBSERVER



## INSTRUCTION MANUAL

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



## ***Before Use***

Please read **IMPORTANT SAFETY INSTRUCTIONS** on page 10 before use. It is important to read and understand all instructions. Keep these precautions and instructions where all who 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.

### **For your future reference:**

Serial No. \_\_\_\_\_ Date of Purchase \_\_\_\_\_  
(found inside the battery compartment)

Name & Address of Dealer \_\_\_\_\_

Copyright © 2013 by  
C. Crane Company, Inc.  
1001 Main St, Fortuna, CA 95540  
Phone: 1-800-522-8863      Web: [ccrane.com](http://ccrane.com)

All rights reserved. No part of this booklet may be reproduced, in any form or means whatsoever, without permission in writing from C. Crane Company, Inc.

## Table of Contents

---

Unpacking .....	3
Location of Controls .....	4-5
Getting Started	
Display Panel .....	6
Powering Your Radio .....	6
Installing the Batteries .....	7
Radio Operation .....	8
Specifications & Troubleshooting.....	9
Safety Instructions .....	10
Personal Station Log .....	11

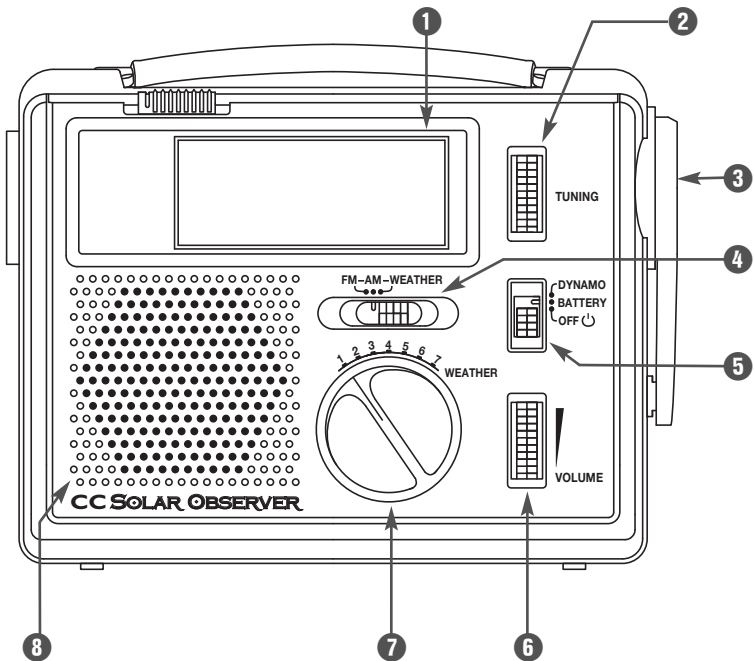
## Unpacking

---

The box should contain the CC Solar Observer Radio, a Radio-to-USB Cell Phone Adapter, 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 needs to be serviced.

## Location of Controls — Front of Radio

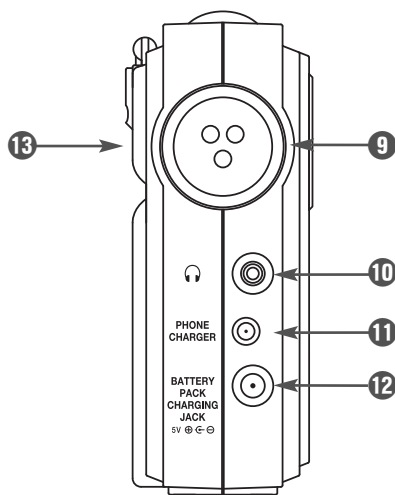
---



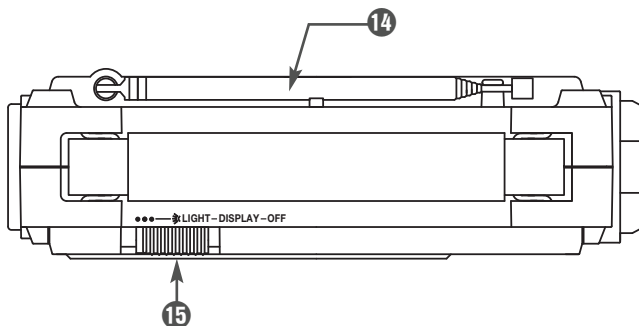
- |   |               |   |                        |
|---|---------------|---|------------------------|
| ① | Display Panel | ⑤ | Power Selection Switch |
| ② | Tuning Dial   | ⑥ | Volume Control         |
| ③ | Dynamo Crank  | ⑦ | Weather Dial           |
| ④ | Band Switch   | ⑧ | Speaker                |

## Location of Controls — Side and Top of Radio

---



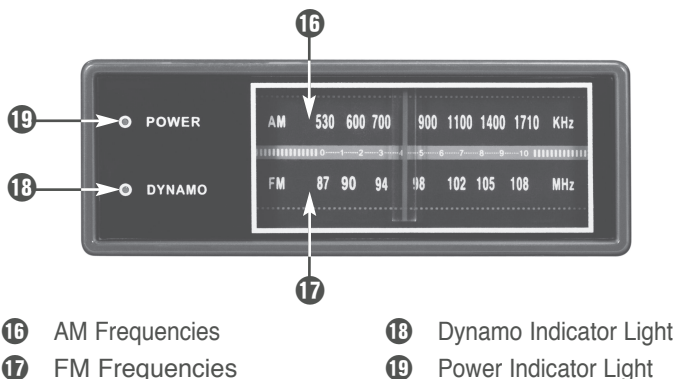
- |                        |                               |
|------------------------|-------------------------------|
| 9 LED Light            | 12 Battery Pack Charging Jack |
| 10 Headphone Jack      | 13 Fold Out Solar Panel       |
| 11 Phone Charging Jack |                               |



- |                       |  |
|-----------------------|--|
| 14 Telescopic Antenna | 15 Display Light and Flashlight Switch |
|-----------------------|--|

## Getting Started – Display Panel

---



## Getting Started – Powering Your Radio

---

**Before powering your radio, be sure to read the Safety Instructions on page 10.**

**The CC Solar Observer can be powered in four different ways:**

**Power using the Solar Panel** — Place the solar panel in direct sunlight. It is best to angle the solar panel so that it is pointed directly at the sun. The solar panel is hinged to allow for better positioning. Do not charge the radio in a hot area like a car. To charge the internal battery pack with the solar panel, it is best to leave the radio turned off. Eight hours of direct sunlight should provide about 4 to 6 hours of playtime at medium volume, depending on sun intensity. Set the “Power Switch” to “Dynamo” to play.

**Power by Winding** — Unfold the handle from the side of the radio and rotate in either direction. The green “DYNAMO” light on the front of the radio will glow indicating proper winding speed. After 90 seconds of winding, the radio will play for about 15 to 30 minutes. This varies depending on the winding speed, volume level, and band selection.

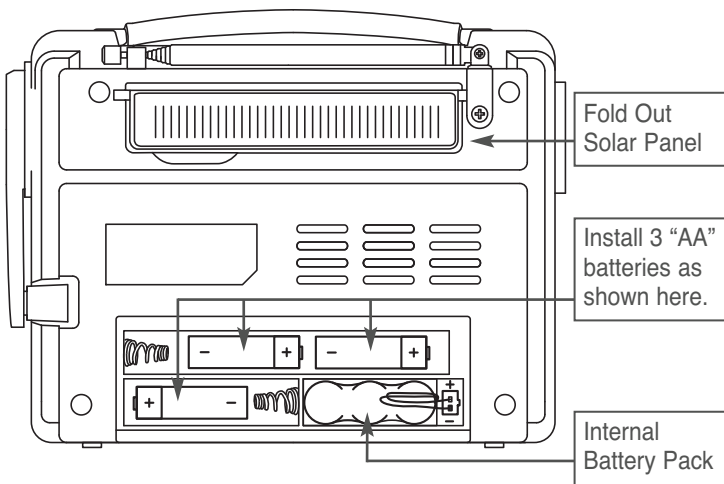
**Power using AA Batteries** — When using AA alkaline batteries, the radio should play at normal volume for about 60 hours. When using nickel metal hydride rechargeable AA batteries, about 55 hours of play can be expected. This radio will not charge user-installed batteries.

## Getting Started –Powering Your Radio

---

Inserting Batteries:

1. Position the radio face down on a soft surface to protect it.
2. Remove the battery compartment cover.
3. Insert the 3 “AA” cell batteries into the compartment, as indicated in the picture below. Be sure the negative (-) end is against the spring. Refer to the picture below to insure correct installation of your batteries.
4. Replace the battery cover. On the front of the radio, slide the “Power Switch” to “Battery” to turn the radio on.



**Power by Charging Adapter** (optional accessory not included) — Connect the AC charging adapter between a 120Volts/60Hz wall outlet and the “BATTERY PACK CHARGING JACK” on the side of radio (see location of jack on page 5). To fully charge the battery pack, keep the charging adapter plugged in overnight. When the battery pack is fully charged, the radio should play for over 15 hours.

**Note:** The AC charging adapter should only be used to charge the battery pack and should not be used to power the radio on a constant basis. Leaving the charging adapter plugged into the radio for long periods of time will shorten the life of the internal battery pack.

## TUNING

The CC Solar Observer features three bands: AM, FM and WEATHER.

1. Position the power switch to BATTERY or DYNAMO.
2. Select band by positioning the “BAND SWITCH”.
3. Adjust TUNING dial to desired frequency. For tuning weather, position the WEATHER dial to the desired channel.
4. Adjust volume by rotating the “VOLUME CONTROL”.

## DISPLAY LIGHT

To turn the display light on, move the light switch to the “DISPLAY” position (see Top of Radio diagram on page 5). The display light will remain on unless you turn it off.

## FLASHLIGHT

Located on the left side of the CC Solar Observer is a flashlight consisting of three bright LEDs (see Side of Radio diagram on page 5). To turn the flashlight on move the light switch to the “LIGHT” position. The special LED bulbs last more than 10,000 hours and use very little electrical energy.

## 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.

## PHONE CHARGER JACK

In an emergency, you may need to power your cell phone to make an important call. Cranking the radio for just 90 seconds should give you enough time to make a few quick calls. This, of course, will depend on the make and model of your cell phone. Attach the included Radio-to-USB Adapter to your cell phone's USB charging cable (not included), then plug it into the jack on the radio labeled PHONE CHARGER. If you do not have a USB charging cable for your cell phone, you can usually purchase one from your cell phone provider.



Your phone will start charging as soon as you plug it in to your radio. If the Observer is fully charged, it will charge your cell phone battery for about 20-40 minutes. If the Observer's batteries are low or dead, a message may appear on your phone and may say the charger is incompatible.

### FREQUENCY COVERAGE

FM Band: 87.5 - 108 MHz Stereo

AM Band: 520 - 1710 kHz

WX Band: 162.40 - 162.55 MHz

### POWER SOURCE

Batteries: 3 "AA" size

Internal Battery Pack: NiMH 2/3 AA 650 mAh

Battery Pack Charging Jack: Internal Battery Pack can be charged with optional AC Adapter - 5V 300mA DC

Winding Generator: 300-500 mA (DC depending on RPM.)

Solar Panel: 20-40 mA DC (Depending on sunlight intensity.)

### POWER CONSUMPTION AT MODERATE VOLUME

AM: 38mA

FM: 45mA

Weather: 45mA

Flashlight: 23mA

Display light: 5mA

### AUDIO

Speaker: 2.5"

### ANTENNA

FM and Weather Band: Telescopic whip antenna

AM Band: Built-in Ferrite Bar

### WEIGHT AND DIMENSIONS

Weight: 1 lb.

Dimensions: 7.25" W x 5.5" H x 2" D

### HEADPHONE JACK

1/8" (3.5mm) – Will accept stereo or mono jacks.

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



### 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. Keep these precautions and instructions where all who use this radio will read them.

#### 1) **COMMON CARE** ⚠

Check the radio 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. Only use attachments or accessories specified by the manufacturer.

**NOTE:** If radio is unused for more than 6 months, we recommend winding the crank for at least 30 seconds to help keep the battery healthy. Thereafter we recommend charging the battery fully before returning to storage.

#### 2) **DISCONNECT THE RADIO IN CASE OF MALFUNCTION** ⚠

If you smell or notice smoke, disconnect the optional AC Adapter immediately, taking care to avoid burns. Contact C. Crane Company or their representative for inspection and service before any future operation. Only use the AC-DC Adapter recommended with the unit and replace it if wires become frayed or exposed. It should have an output of 5 Volts 300mA DC. Use only the recommended adapter. Otherwise it may damage the radio or cause a fire or electric shock.

#### 3) **KEEP OUT OF REACH OF CHILDREN** ⚠

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.

#### 4) **KEEP AWAY FROM WATER AND MOISTURE** ⚠

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 the radio, remove the power and use a damp cloth on the exterior only.

#### 5) **KEEP AWAY FROM EXTREME TEMPERATURES** ⚠

Extreme temperatures can damage the radio. Do not leave or use the radio where it can be subjected to high temperatures like inside a car.

**Caution:** Some windows may intensify the sun's effect on your radio, causing melting or a potential fire hazard.

#### 6) **DO NOT ATTEMPT TO SERVICE RADIO** ⚠

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.

#### 7) **OUTSIDE ANTENNAS OR CABLES** ⚠

Outside antennas or cables that create a potential hazard should not be used with this radio unless installed by qualified personnel.

## PERSONAL STATION LOG

[illegible]

Please feel free to copy this page.

Model: CC Solar Observer

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 UNDESIRE 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.**