

C. CRANE

CC Witness

**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 33 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 on back of CC Witness)

Date of purchase _____

Name & address of dealer _____

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Preface

Thank you for purchasing the CC Witness. Please read important Safety Instructions on page 33 before use. It is important to read and understand all instructions. Keep these precautions and instructions where all who

use the CC Witness will read them. If you misplace this manual you can always download another copy from www.ccrane.com/instruction-manuals/CCWitness

Introduction

The CC Witness combines the latest digital audio engineering with AM/FM radio. With this device you can record almost anything that makes noise into a digital audio file. Schedule up to 20 timer recordings or record

manually by pressing one button. CC Witness recordings are selectable in six levels of recording quality. The CC Witness can also play and record from its built-in AM/FM radio.

Unpacking

The box should contain the CC Witness, 24-pin USB computer cable, stereo earbuds, FM wire antenna, 1/8" stereo line-in cable, lanyard, and this manual. If any-

thing is missing or damaged, please contact your dealer immediately. We recommend you keep the box in the unlikely event your product needs to be serviced.

- Stylish design and sturdy exterior with a wide LCD screen to maximize the display
- Receives all available AM and FM radio stations, and can also be programmed to record any AM or FM broadcast in advance (20 timers for recording)
- Various programmed recording modes and time settings (specified Date/Week/Weekly)
- MP3/WMA Player
- Good AM/FM radio reception
- Voice recording with adjustable recording quality (32Kbps-256Kbps/MP3 format)
- Internal storage (2GB)
- External memory expandability (up to 16GB)
- Files can be copied to SD card or internal memory
- File dividing: From one file into several
- Internal Stereo Speakers (0.6W Stereo)
- Long lasting Li-ion polymer rechargeable battery (5V 900mA)
- 20 Timers for recording or playback at specified time & date settings
- 10 presets available in AM & 10 in FM
- USB 2.0 interface for easy data transfer to and from a computer
- 24-pin USB connection for faster data transfer
- Highly sensitive, built-in microphone. External microphone can be attached through “Mic/Line-In” Jack
- Key lock function to prevent unintentional operation
- Sleep mode in 15, 30, 45, 60, 75, 90, 100, and 120 minutes
- Digital volume control (30 steps)
- Equalizer modes: Normal, Classic, Live, Pop, Rock, Jazz, Voice (low cut), and Filter-High
- Playback Modes: Play All, Play Once, Repeat All, Random Play, Repeat
- Fast forward/rewind: Search at 3 seconds/7 seconds/ 1 minute/2.5 minutes

Quick Start Guide

Fully charge the Battery before use. See page 13.

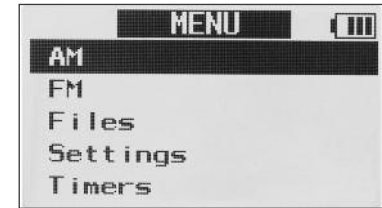
Press and hold the **PLAY ►|| 6** button for 2 seconds to turn the power on. See page 10.

Note: The “MENU” screen is the starting point for all functions. You can access the “MENU” screen at any time by pressing the MENU Button **10**.

To Highlight an item = Use the UP ▲ **2** and DOWN ▼ **7** Buttons.

To Select an item = Highlight the item, then press and release the PLAY Button ►|| **6**.

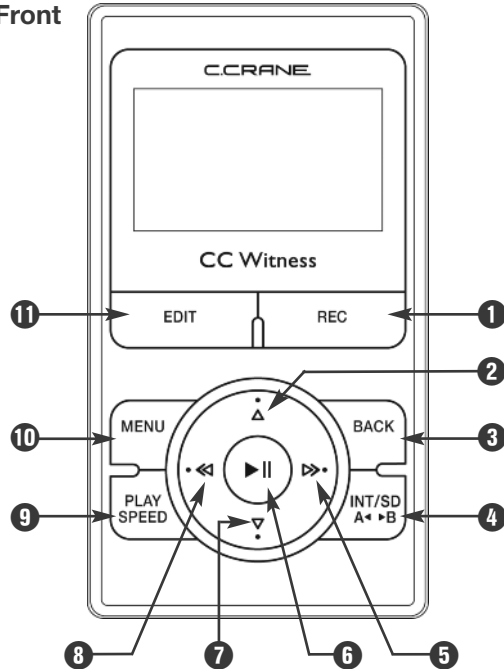
To Return to “MENU” = Use the MENU Button **10**.



- 1. To Set Time and Date** — Highlight and then select “Settings”. Highlight and then select “System Settings”. Highlight and then select “Time and Date”. Use the RIGHT ► **5** and LEFT ◀ **8** buttons to move between hours, minutes, months, days, and years. Use the UP ▲ **2** and DOWN ▼ **7** buttons to modify the highlighted item. Use the PLAY Button ►|| **6** to save changes. See page 23 for more information.
- 2. To Play AM Radio** — Highlight and then select “AM”. Use the RIGHT Button ► **5** and LEFT Button ◀ **8** to scroll through the radio frequencies. See page 16 for more information.
- 3. To Play FM Radio** — Highlight and then select “FM”. Use the RIGHT Button ► **5** and LEFT Button ◀ **8** to scroll through the radio frequencies. Earbuds, or the included wire antenna, function to improve the FM radio reception. See page 16 for more information.
- 4. To View and Play Files or Recordings** — Highlight and then select “Files”. Highlight and then select a folder to view the files within. Highlight and then select the file you wish to play. See page 17 for more information.
- 5. To Set or Review Timers** — Highlight and then select “Timers”. Highlight and then select “Set Timers”. Use the RIGHT ► **5** and LEFT ◀ **8** buttons to change to the Timer you wish to set or review. Use the UP ▲ **2** and DOWN ▼ **7** buttons to move between highlighted items. Use the RIGHT ► **5** and LEFT ◀ **8** buttons to modify a highlighted item. When finished, press the PLAY Button ►|| **6** to save your timer. See page 24 for more information.
- 6. To Record from the Internal Microphone or LINE/MIC Jack** — Press and release the REC Button **1** to start or stop recording. For more information about recording, see pages 9 & 28.

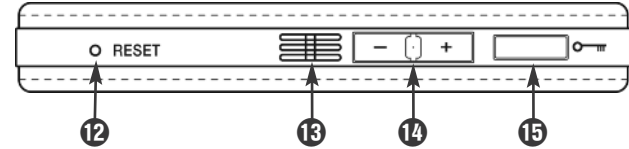
Button and Component Identification

Front

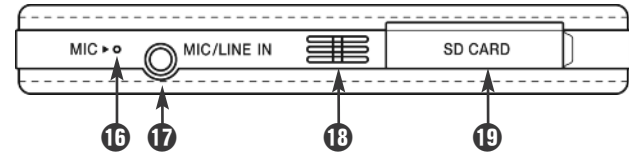


- 1 REC (Record) Button, see page 9
- 2 UP Button, see page 9
- 3 BACK Button, see page 9
- 4 INT/SD A < > B Button, see page 9
- 5 RIGHT Button, see page 9

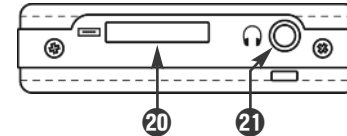
Right Side



Left Side



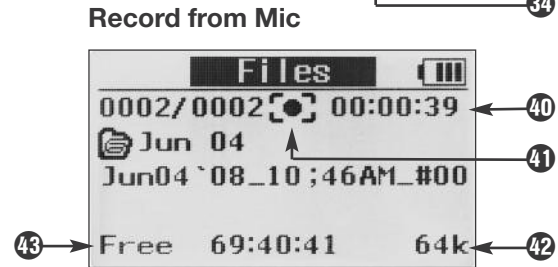
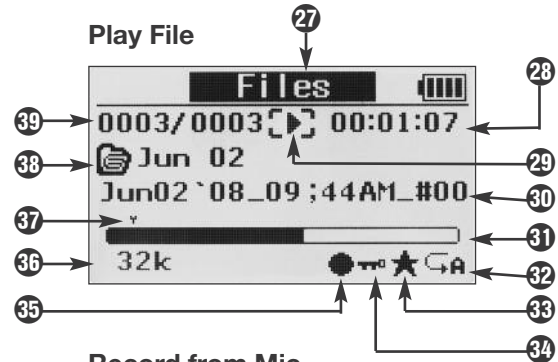
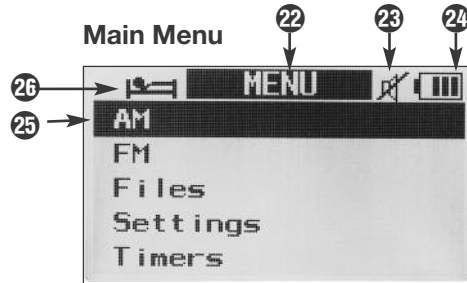
Bottom



- 6 PLAY Button, see page 10
- 7 DOWN Button, see page 10
- 8 LEFT Button, see page 10
- 9 PLAY SPEED Button, see page 10
- 10 MENU Button, see page 10
- 11 EDIT Button, see page 10
- 12 RESET Button, see page 11
- 13 RIGHT SPEAKER

- 14 VOLUME + - Button, see page 11
- 15 LOCK SWITCH, see page 11
- 16 MIC, see page 11
- 17 MIC/LINE IN Jack, see page 11
- 18 LEFT SPEAKER
- 19 SD CARD SLOT, see page 12
- 20 24-PIN USB CONNECTION, page 12
- 21 HEADPHONE Jack, see page 12

Display Identification and Icons



- | | | |
|--|---|---------------------------------------|
| 22 Main Menu, see page 15 | 30 Name of File being played | 38 Folder Name |
| 23 Speakers Off, see page 22 | 31 Progress Bar | 39 Number of Files in Folder |
| 24 Battery Strength Indicator, see page 14 | 32 Playback Mode, see page 20 | 40 Time elapsed in Recording |
| 25 AM RADIO (highlighted for selection) | 33 Favorite File symbol, see page 18 | 41 RECORD Symbol |
| 26 Sleep Timer On, see page 23 | 34 File Locked symbol, see page 18 | 42 RECORD QUALITY, see page 19 |
| 27 FILES menu title, see page 27 | 35 Marked File symbol, see page 26 | 43 Amount of Recording Time Available |
| 28 Time elapsed in Playback | 36 Recording Quality see page 20 | 44 Time elapsed in Recording |
| 29 PLAY Speed Symbol, see page 27 | 37 Marked Spot in File, see page 26, 28 | 45 SD Card selected, see page 9 |

1 REC (Record) BUTTON and LIGHT

The REC Button has 6 functions:

- a. It records AM or FM radio.
- b. It will record from the internal microphone or an external microphone plugged into the Line/Mic input.
- c. Stops a recording.
- d. Stops play of a timer activated file or recording.
- e. Flashes when powering off when a timer is set.
- f. The red light comes on when a timer activates.

2 UP BUTTON ▲

The UP Button has 6 functions:

- a. Highlights items for selection.
- b. Toggles through preset radio stations
- c. Toggles through files while playing.
- d. Creates a new track when recording.
- e. Stops a paused file and highlights file.
- f. Increments selected items in the “Time and Date” setup.

3 BACK BUTTON



The BACK Button has 4 functions:

- a. Exits current folder, function, or menu to previous location.

- b. Activates option to delete saved preset while playing AM or FM radio.
- c. Marks spot in a file, while playing a file.
- d. Stops a paused file and highlights it.

4 INT/SD A<>B BUTTON

The INT/SD A<>B Button has 2 functions:

- a. Toggles between the internal memory and  SD card  memory while in AM, FM radio, or Files.
- b. Marks a section of a file to be repeated. Any section of the currently playing file can be repeated by pressing and releasing at the desired section (A) and then again at the end of the desired section (B). Play will repeat between (A) and (B) until INT/SD A<>B is pressed again.

5 RIGHT BUTTON ►►

The RIGHT Button has 8 functions:

- a. Toggles through the AM or FM radio frequencies. Hold down to auto scan to next AM or FM station.
- b. Opens a highlighted “File” folder.
- c. Fast forwards a playing file up to 4 speeds.
- d. Highlights items.
- e. Increments slider bars in “Settings”.
- f. Resets scrolling of highlighted file names.

Buttons and Components

- g. Modifies or toggles through selected timer-setup options.
- h. Locks highlighted file so it cannot be modified.

6 PLAY BUTTON ▶||

The PLAY Button has 7 functions:

- a. Power On/Off by holding down.
- b. Opens highlighted “File” folder.
- c. Plays a highlighted file.
- d. Pauses a playing file.
- e. Selects highlighted item.
- f. Saves Timer Settings.
- g. Saves an AM or FM radio station to a memory preset.

7 DOWN BUTTON ▼

The DOWN Button has 5 functions:

- a. Highlights items for selection.
- b. Toggles through preset radio stations.
- c. Toggles to next file while playing.
- d. Marks or unmarks select days or time of the week in Timer Settings for recording or file playing.
- e. Increments selected items in the “Time and Date” setup.

8 LEFT BUTTON ◀◀

The LEFT Button has 7 functions:

- a. Toggles through the AM or FM radio frequencies.
- b. Exits current file folder.
- c. Rewinds a playing file up to 4 speeds.
- d. Highlights items.
- e. Increments slider bars in “Settings”.
- f. Modifies or toggles through selected timer-setup options.
- g. Unlocks a highlighted file.

9 PLAY SPEED BUTTON

The PLAY SPEED Button has 2 functions:

- a. Toggles a playing file through 5 play speeds.
- b. Marks or unmarks a file as “Favorite” when highlighted.

10 MENU BUTTON

The MENU Button has 1 function:

Toggles between “Previous Selection” and MENU.

11 EDIT BUTTON

The EDIT Button has 1 function:

Opens and closes the file EDIT menu.

12 RESET BUTTON

The RESET Button has 2 functions:

- a. Soft Reset – This function is useful in the unlikely case that the CC Witness malfunctions or “freezes”. Previous settings will not be erased.
 - i. Press the reset button one time quickly.
 - ii. The CC Witness will cycle to power-off, and then cycle to power-on again.
- b. Hard Reset – This function is useful to solve malfunctions that the “Soft Reset” is unable to repair. Except for time and date, all previous settings will be reset to factory defaults. All files on the internal memory will be erased.
 - i. With the LOCK switch in the “up” position, press and hold the BACK button.
 - ii. While continuing to hold in the BACK button, press and release the RESET button.
 - iii. Continue to hold the BACK button until “Format Please Wait ... ” is displayed, then release. Formatting takes about one minute to complete.
 - iv. When formatting is finished, position the LOCK switch to the “down” position before using.

13 RIGHT SPEAKER

14 VOLUME + – BUTTON

The VOLUME + – Button has 30 levels of loudness. Press and release or press and hold “+” to increase or “–” to decrease the volume.

15 LOCK SWITCH

The LOCK SWITCH has two positions: If moved to the “up” position, then the CC Witness will be locked and all buttons will be disabled. This feature is used to prevent buttons from being accidentally pressed during travel or storage. If a button is pressed while locked, the time and date will be displayed, along with the “Lock Switch ON” message. See page 14.

16 MIC

The internal microphone is used to make voice recordings.

17 MIC/LINE IN JACK

This jack is used to record from an external source such as a CD player, radio, or external microphone. Choose between using a MIC or LINE IN source. See page 21.

18 LEFT SPEAKER

19 SD CARD SLOT

Add up to 16GB of memory storage to the CC Witness by inserting an optional SD card.

20 24-PIN USB CONNECTION

The USB Connection has 2 functions:

- While connected to a computer, it is possible to transfer files to and from the CC Witness.
- When connected, the computer will charge the CC Witness.

Note: While connected to a computer, it is possible to play the CC Witness, but you must de-activate the data transfer between the CC Witness and your computer. See page 29 for more information.

21 HEADPHONE JACK

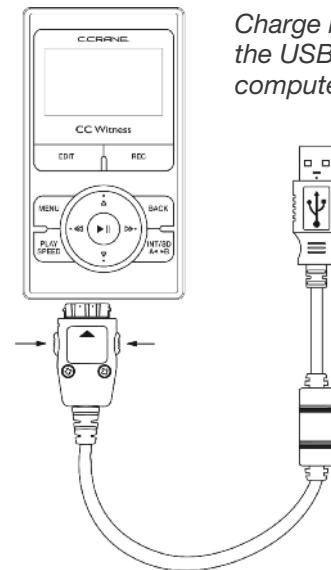
The Headphone Jack has 2 purposes:

- To connect headphones or earphones.
- To connect the FM Antenna Wire, for improved FM reception, when using the built-in speakers.

CHARGING THE BATTERY

You can charge your CC Witness by connecting the USB cable to a computer or by using the (optional) AC Adapter. The total charging time takes about 5 hours. Charge the battery before use.

The AC Adapter and a drop-in cradle are available in the (optional) CC Witness Accessory Kit. They combine for easy drop-in charging.

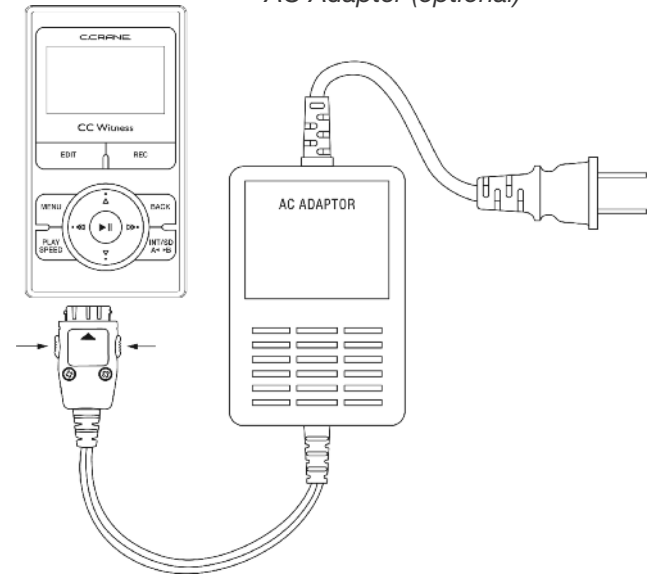


Computer Charging: Using the supplied USB cable, see illustration on page 12, connect the 24-pin USB connector end (with the buttons) to your CC Witness at the **24-Pin USB Connection 20**. Connect the opposite end (with the regular USB plug) to your computer. When connected, the screen will display “USB Connected”. While connected to a computer, it is possible to play the CC Witness, but you must de-activate the data transfer between the CC Witness and your computer. See page 29.

AC Adapter Charging (optional): : Using the AC Adapter, connect the power plug to 120V AC power. Connect opposite end (24-pin USB connector) to the bottom of the CC Witness at the **24-Pin USB Connection 20**.

Note: The 24-pin USB connector will only insert one way. Do not force the plug “in”. While connected to the AC power adapter, you will be able to play and use the CC Witness as normal.

*Charging using the
AC Adapter (optional)*

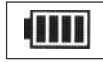


Note: In some cases you will get better AM reception with the AC Adapter disconnected.

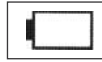
Disconnect from Charging: You can stop charging at any time. To remove the 24-pin USB Connector, push both buttons in at the same time, and then gently pull.

Getting Started

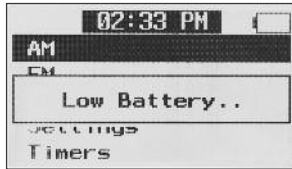
Battery Level Icon:



Full Battery



Low Battery



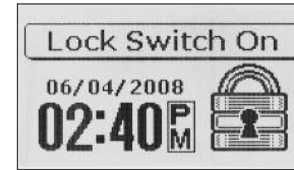
Recharge Battery

Battery Life: On a fully charged battery, the CC Witness will record for about 8 hours or play for 14 hours. The internal Li-ion polymer battery should last many years with regular use. In the unlikely case that the battery fails, we recommend sending the product to C. Crane Company, as disassembly and battery replacement is difficult. See page 33.

LOCK SWITCH

To turn the CC Witness LOCK Switch “On”, slide the LOCK Switch **15** “up”.

Before using the CC Witness, check the LOCK switch to be sure it is off. While the LOCK switch is on, all buttons will be disabled.



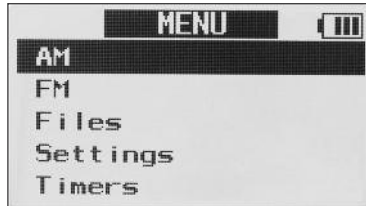
To turn the CC Witness LOCK function “Off”, slide the LOCK Switch **15** “down”.

Note: You can turn the LOCK function “On” while the CC Witness is in operation. If a button is pressed while the LOCK function is “On”, the “Lock Switch On” displays for two seconds, along with the time and date.

“MENU” SCREEN

PLAY ►|| 6 (page 10)— Press and hold the PLAY Button for 2 seconds to turn the power on.

Note: Charge the Battery before use. See page 12.



The “MENU” screen is the first screen that is displayed upon startup and is the starting point for all functions. You can access the “MENU” screen at any time by pressing the MENU button. The “MENU” screen has 5 functions: AM, FM, Files, Settings, and Timer.

Use the UP ▲ 2 and DOWN ▼ 7 Buttons to highlight one of the menu items.

Use the PLAY Button ►|| 6 to select the menu item.

1. **To Play AM Radio** — Highlight “AM”. Then press and release the PLAY Button ►|| 6 Button. Then use the RIGHT Button ► 5 and LEFT Button ◀ 8 to scroll through the radio frequencies.
2. **To Play FM Radio** — Highlight “FM”. Then press and release the PLAY Button ►|| 6 Button. Then

use the RIGHT Button ► 5 and LEFT Button ◀ 8 to scroll through the radio frequencies.

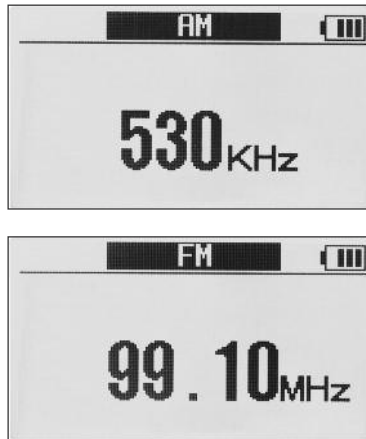
3. **To View and Play Files or Recordings** — Highlight “Files”. Then press and release the PLAY Button ►|| 6 Button. Use the UP ▲ 2 and DOWN ▼ 7 Buttons to highlight a folder. Then press and release the PLAY Button ►|| 6 to select the highlighted folder and view the files within. Highlight a file you wish to play using the UP ▲ 2 and DOWN ▼ 7 Buttons and then press and release the PLAY Button ►|| 6 to play it. See page 17 for more information.
4. **To View and Configure Settings** — Highlight “Settings”. Then press and release the PLAY Button ►|| 6 Button. Use the UP ▲ 2 and DOWN ▼ 7 Buttons to highlight a Setting. Then press and release the PLAY Button ►|| 6 to select the highlighted setting and view the Settings options. Highlight the Setting you wish to configure using the UP ▲ 2 and DOWN ▼ 7 Buttons and then press and release the PLAY Button ►|| 6. See page 19 for more information.
5. **To Set or Review Timers** — Highlight “Timers”, then press and release the PLAY Button ►|| 6 Button. Use the UP ▲ 2 and DOWN ▼ 7 Buttons to highlight “Set Timers”. Then press and release the PLAY Button ►|| 6 to select the highlighted item. Use the RIGHT ► 5 and LEFT ◀ 8 buttons to change to the Timer you wish to set or review. Use the UP ▲ 2

Display Screens and Functions

and DOWN ▼ 7 buttons to move between highlighted items. Use the RIGHT ►► 5 and LEFT ◀◀ 8 buttons to modify a highlighted item. When finished, press the PLAY Button ►|| 6 to save your timer. See page 24 for more information.

6. **To Record** — Press and release the REC Button 1 to record from the internal microphone or LINE/MIC jack. See pages 9, 20, & 28.

“AM” AND “FM” RADIO



The “AM” & “FM” radio screens have 6 functions:

1. **Playing AM or FM Radio** — Select “AM” or “FM”

from the “MENU” screen, then press and release the PLAY Button ►|| 6. The radio will play automatically. To exit, press the MENU or BACK button.

2. **Tuning Stations** — Press the RIGHT Button ►► 5 to tune to a higher frequency. Press the LEFT Button ◀◀ 8 to tune to a lower frequency.
3. **Preset a Station to Memory** —
 - a. While playing a radio station, press and release the PLAY Button ►|| 6.
 - b. Select the desired preset memory number by pressing UP ▲ 2 or DOWN ▼ 7.
 - c. When the desired preset memory number is blinking, press the PLAY Button ►|| 6 to confirm.

Note: There are 10 memory presets available on each band.

4. **To recall a Station from Memory Preset** — Press the UP ▲ 2 or DOWN ▼ 7 to recall memory presets.
5. **Delete a Station from Memory Preset** — While playing a station that is preset, press the BACK Button 3. A message will ask you to confirm the deletion of the preset. Highlight “Yes” then press the PLAY Button ►|| 6 to confirm.
6. **Record a Radio Station** — Press and release the REC Button 1 to start and stop a recording. See pages 9, 20, & 28 for more about recording.

RADIO RECEPTION TIPS

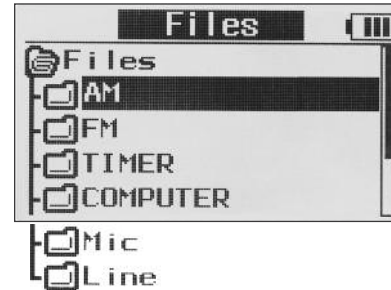
AM RECEPTION TIPS:

- a. AM radio reception can be further improved by turning “OFF” the AM display while listening. See page 22.
- b. Using the CC Witness on the internal battery will improve the AM reception.
- c. The C. Crane Twin Coil AM Antenna will give the CC Witness a large boost in AM reception (www.ccrane.com).

FM RECEPTION TIPS:

- a. When listening using the internal speakers, improve the FM reception by using the supplied FM wire antenna.
- b. When listening using headphones, your FM reception will be automatically improved because the headphones become the FM antenna.

“FILES” SCREEN



The CC Witness comes with 6 built-in file folders located on internal memory. When recording, the files are automatically saved in subfolders within these folders. The default files display screen is “View By Folders”. The “Files” screen has 6 folders where files are stored.

1. **AM radio files** are stored in the “AM” folder.
2. **FM radio files** are stored in the “FM” folder.
3. **Timer files** are stored in the “TIMER” folder.
4. **Computer files** — This folder is reserved for computer file storage.
5. **Microphone files** are stored in the “MIC” folder.
6. **Line-in files** are stored in the “LINE” folder.

Note 1: All “Timer” recorded files are stored in the “Timer” folder without consideration to “AM”, “FM”,

Display Screens and Functions

“MIC”, and “LINE” source.

Note 2: Recordings made on the same day and from the same source (“AM”, “FM”, “LINE”, or “MIC”) will be automatically stored in a subfolder representing the day it was recorded. Timer recordings will be stored in a subfolder that represents the timer number used.

Note 3: Recorded files are automatically named by date, time, and a sequential number that is used to uniquely identify each file.

“Files” Menu Controls

Open Folder — Press the PLAY Button ►|| 6.

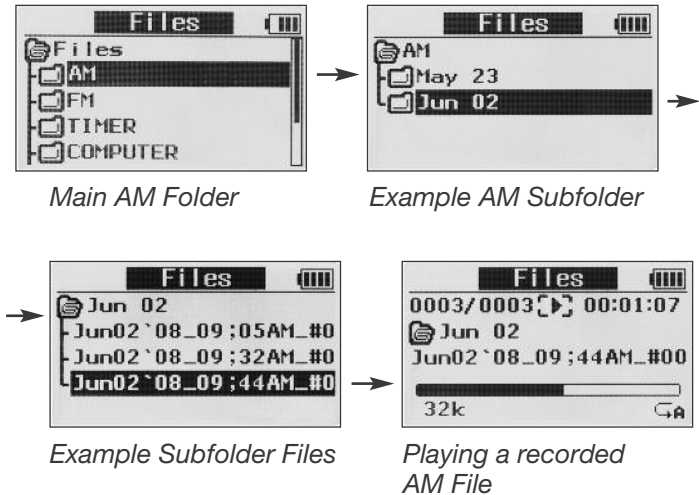
Close Folder — Press the BACK Button ◀ 3.

Mark a File as “Favorite” — Press the Press the PLAY SPEED Button 9 when the file name is highlighted. Repeat this process to remove a “Favorite” mark from a file. It is possible to view only files that are marked as “Favorites”. See Settings>Play Settings>Folder Views from the MENU 10 on page 19 for more about viewing “Favorites”.

Lock File — Press and hold the RIGHT Button ►▶ 5 to “Lock” a file. While a file is “Locked”, it cannot be erased or divided.

Unlock File — Press and hold the the LEFT Button ◀◀ 8 to “Unlock” a file.

Play File — When a file is highlighted, press the PLAY Button ►|| 6. See page 27 for more information about Playing a File.



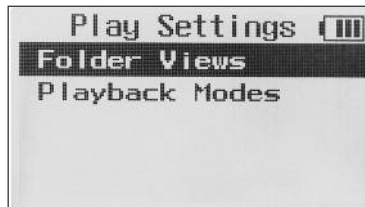
Note: When a new recording is finished and “Files” is selected from the main “MENU”, the CC Witness will jump to the newly recorded file and highlight it. To go back to the beginning of the “Files” menu, press the BACK Button ◀ 3 several times.

“SETTINGS” SCREEN

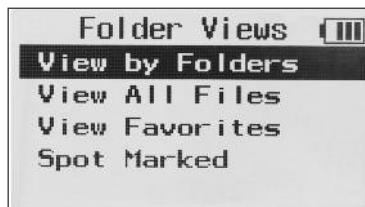
The “Settings” screen is categorized into 5 main groups:



1. “Play Settings”



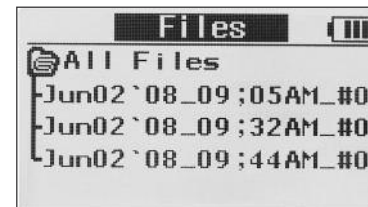
- a. “Folder Views” — Choose how your files are displayed when viewed.



- i. “View by Folders” — This setting groups your files into folders that are categorized by recording source.



- ii. “View all Files” — This setting groups all your files into one area. Your computer files show first on the top of this list, followed by AM radio files, then FM radio files, then Timer files, then Mic files, then Line files.




Note: Long file names will scroll after 2 seconds when the name is highlighted.

Display Screens and Functions


- iii. “View Favorites” — This setting will group and only display files marked as a “Favorite” ★ 33. All other files will not be displayed.
- iv. “Spot Marked” — This setting will group and only display files that have been “Marked” ● 35. All other files will not be displayed.


See page 26 for more information about View Favorites and Spot Marked.

- b. “Playback Modes” — Choose from 5 methods of file playback:

 “Play 1 File 1 Time” — This setting plays the selected file one time and then stops play.

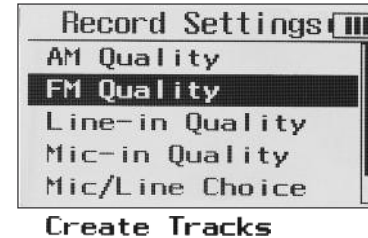
 “Playback All 1 Time” — This setting plays all the files in a folder one time in order then stops play.

 “Repeat 1 File” — This setting plays the selected file repeatedly.

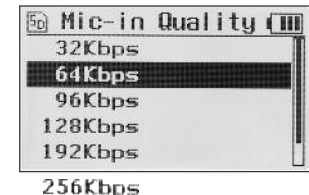
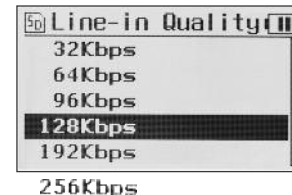
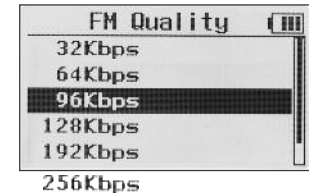
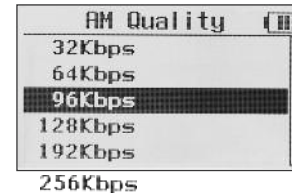
 “Repeat All” — This setting plays all files in a folder and then continues to repeat playing the files.

 “Random Play” — This setting plays all files in a folder at random endlessly.

2. “Record Settings”



- a. Record Qualities — Individually adjust the recording qualities for AM, FM, Line-in, and Microphone.



Recording time is based on record quality using

the internal memory (2 Gigabytes):

32Kbps = 140 hours

64Kbps = 70 hours

96Kbps = 52 hours

128Kbps = 35 hours

256Kbps = 17 hours

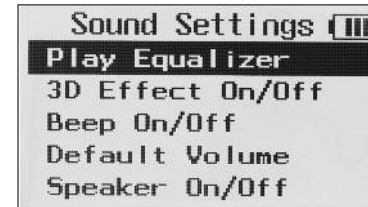
Note: Available recording time is calculated on the available free space where the file will be recorded.

- b. **“Mic/Line Choice”** — Choose from 3 input options for recording:
 1. MIC (Mono)
 2. MIC (Stereo)
 3. LINE-IN (Stereo)
- c. **“Create Tracks”** — This setting is used when recording from a CD player, tape player, record player, or other external source. When this setting is activated, the CC Witness will detect the amount of silent space between audio tracks. When the set amount of time without sound expires, the CC Witness will automatically create a new recording track. When “Create Tracks” is activated, some clipping of the first part of the next audio track may occur (usually about a half second). To manually create your own tracks press the UP Button ▲ **2** while recording.

Use the slide bar to adjust and set the desired amount of time without sound before creating a

new track.



3. “Sound Settings”



- a. **“Play Equalizer”** — The Play Equalizer has 8 settings: Normal (None), Jazz, Classic, Pop, Rock, Live, Voice (Low Cut), and Filter-High. These settings will change the sound of file in playback only. These settings are also helpful for filtering out high-pitched electronic noise or to improve voice on playback of AM files.
- b. **“3D Effect On/Off”** — When this setting is turned “On”, the CC Witness will adjust file playback to sound three-dimensional.
- c. **“Beep On/Off”** — When this setting is turned “On”, the CC Witness will make a beep sound with every button press.
- d. **“Default Volume”** — When the CC Witness is powered-on, the volume will automatically lower to the “Default Volume” setting. If the volume was

Display Screens and Functions

manually set lower than the “Default Volume” setting, it will not change at power-up.

- e. **“Speaker On/Off”**  — This setting is used with the (optional) cradle accessory only. When set to “OFF”, the  icon will display. When the CC Witness is placed in the cradle, the speaker will turn off. This setting is useful when listening to the CC Witness using the cradle’s headphone jack, as the speaker is not automatically disabled when the cradle’s headphone jack is in use.

4. “Display Settings”



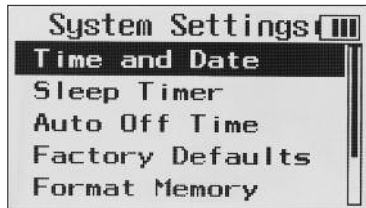
- a. **“AM Display”** — This setting is used to improve the AM radio reception by turning the display screen “OFF”. If any button is pressed, the display screen will turn “ON” for three seconds, then turn “OFF” again.
- b. **“Backlight Time”** — Use the slider bar to set the amount of time that the display backlight is to re-

main “ON” between button presses. If set to “Continue”, the backlight will remain “ON”. Adjusting the Backlight Time setting is useful for conserving battery power, as more power is used when the backlight is “ON”.


- c. **“Contrast Control”** — Use the slider bar to adjust the contrast of the display. When set too low, the display will not be as visible. The default setting of “05” is usually best.
- d. **“ID3 Tag”** — This setting is used to display added information that may be attached to computer audio files. When set to “ON” and an audio file with ID3 tags is selected, the title of the file may also contain the Artist, Album, track time, and more. When set to “OFF” only the title of the audio file will be displayed. Most ID3 tags can be viewed and edited with a Windows computer by selecting the file’s “Properties”, then selecting the “Summary” tab.

Note: When a long filename has been highlighted, it will scroll after two seconds.

5. “System Settings”



10 or 9 KHZ
Memory Info

- a. “Time and Date” — Use the RIGHT ► (5) and LEFT ◀ (8) buttons to move between hours, minutes, months, days, and years. Use the UP ▲ (2) and DOWN ▼ (7) buttons to modify the highlighted item. Use the PLAY Button ►|| (6) to save changes. Use the MENU (10) or BACK (2) to exit without saving.
- b. “Sleep Timer” — The Sleep Timer can be set to play for 15, 30, 45, 60, 75, 90, 100 or 120 minutes. When that time expires, the CC Witness will power off automatically. A  (26) icon will appear at the top of the display to let you know that the “Sleep Timer” has been enabled. The Sleep Timer will be disabled if the CC Witness is powered off and then on again. The Sleep Timer can also be useful when recording radio shows up to

two hours in length, because it will stop recording at the set time and then power off.

- c. “Auto Off Time” — This setting is used to conserve power. There are 4 settings for “Auto Off Time”: Off, 1, 3, and 5 Minutes. If the CC Witness is not playing or recording and no buttons are pressed for the preset amount of time, it will power off.
- d. “Factory Defaults” — This is used to reset the CC Witness back to the default factory settings. This setting will not affect the Time, Date, Files, or Timer schedules.
- e. “Format Memory” — Choose to format the internal or (optional) SD card memory. When memory is formatted, all files on the selected memory are permanently erased. It is best to format a new or previously used SD card before recording files to it. *Use caution when formatting memory, as it permanently erases your files!*
- f. “10 or 9 KHZ” — If using the CC Witness to listen to AM radio in Europe, use this setting to switch AM Radio to 9kHz AM tuning steps.

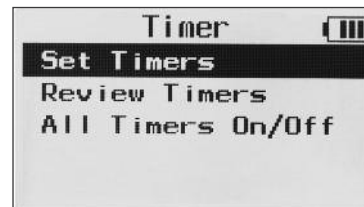
Note: All timer schedules and radio station memory presets will be erased when switching between 10kHz for North America and 9kHz tuning steps for Europe. You may want to write down your presets before using this function.

Display Screens and Functions

- g. “Memory Info” — This screen will display the total and free amount of memory remaining for the Internal and (optional) SD card memories. Also, the firmware version will be displayed at the bottom of this screen.

“TIMERS” SCREEN

The “Timers” screen has three main functions:



1. “Set Timers”



Use the RIGHT ► **5** and LEFT ◀ **8** buttons to modify timer settings. Use the UP ▲ **2** and DOWN ▼ **1** buttons to navigate the menu.

▼ **7** buttons to move to the next or previous timer setting. When all settings are set, save the timer setup by pressing the PLAY Button ► **6**.

Timer Settings explained:

“**Timer**” — Select which timer, by number, to setup. There are 20 timers available in the CC Witness.

“**Status**” — Choose whether the timer will “Record” or “Play” when activated. Set to “OFF” to reset timer back to default settings.

“**Memory**” — Choose to record or play using the “Internal” or the (optional) “SD Card” memory.

“**Source**” — If the timer “Status” is set to record, then select which source (“AM”, “FM”, “MIC”, or “LINE”) to record from. If the timer “status” is set to play, then select which source (“AM” radio, “FM” radio, or a saved “File”) to play from.

“**Preset**” — If you have set radio stations to memory presets, then you can select them in this setting.

“**Freq**” — Manually tune to the desired radio station.

“**Day(s)**” — Choose to play or record on a specific “Date” or “Weekday”. If “Weekday” is selected, then by default every day will be selected to activate the timer. To choose specific days,

highlight “Daily” and press the RIGHT ► **5** or LEFT ◀ **8** button to bring up a weekday selection screen. Mark or unmark weekdays by pressing the DOWN ▼ **7** button. When finished, press the PLAY Button ► **6** to continue.

“**Start**” — Sets the time when the timer will “Start”.

“**End**” — Sets the time when the timer will “End”.

When finished and all settings are set, press the PLAY Button ► **6** to save the setup. Confirm by selecting “YES”. To exit the timer setup without saving, press the BACK button, then confirm by selecting “NO”.

2. “Review Timers”

Review Timers			
01:R	06:-	11:-	16:-
02:-	07:-	12:-	17:-
03:-	08:-	13:-	18:-
04:-	09:-	14:-	19:-
05:-	10:-	15:-	20:-

This screen displays the status of all 20 timers. Timers set to record are marked with an “R” next to the timer number. Timers set to play are marked with a “P” next to the timer number. It is possible to review and modify a timer’s settings by pressing the

Display Screens and Functions

PLAY Button ►|| 6 when the timer is highlighted.

3. “All Timers ON/OFF” — This setting is useful for turning “Off” or disabling all your timers without erasing the settings. When set from “OFF” to “On” all timers will retain their previous setups.

“EDIT” SCREEN

The “EDIT” screen has 5 functions:

Note: The “EDIT” screen can only be accessed with the EDIT Button 1 when a file is highlighted, playing or paused.

1. “Erase File(s)” — Erase unwanted files to free up memory space and reduce clutter.
 - a. To erase a file, you must have the file’s title highlighted or be playing the file.
 - b. Select “Just This File” to erase only the file that is selected. Select “All in Folder” to erase all files in the currently selected folder.
 - c. To cancel the operation, press the BACK 3, or the MENU 10 buttons.
2. “Copy File(s)” — Copy one file or all files in a folder from the internal memory to the (optional) SD card or from the SD card to the internal memory.
 - a. To copy a file, you must have the file’s title highlighted or be playing the file.

- b. Select “Just This File” to copy only the file that is selected. Select “All in Folder” to copy all files in the currently selected folder.
- c. Select a location on the other memory source to copy the file to. Use the RIGHT ► 5 and LEFT ◀ 8 buttons to open or close folders, and the UP ▲ 2 and DOWN ▼ 7 buttons to view folder contents. Press the PLAY ►|| 6 button to select the location.

3. “Divide File” — Divide a file in half or at the point where the file is paused.
 - a. To divide a file you must have the file’s title highlighted or be playing the file.
 - b. Select “Divide in half” to divide the file into two even halves. If file play is paused, select “Divide at Pause” to divide the file at the pause point.

Note: When a file is divided, two additional files are created and the original file remains intact. The first additional file will retain the original file name but with “_A” added to the end. The second additional file will also retain the original file name but with “_B” added to the end. If either of the additional files is divided again then this process will repeat.

4. “Mark File” — Mark a file as “Favorite File” or “Mark Spot” to bookmark a play location in a file for later reference.
 - a. “Mark Spot” — While playing a file select “Mark

Spot” to a reference point above the play bar.

Note: It is also possible to mark a spot by pressing the BACK Button **3** while playing. After 30 seconds, another spot can be marked. A maximum of four spots can be marked in a file.

- b. **“Favorite File”** — While playing a file, select “Favorite File” to mark it as a favorite.

Note 1: “Favorite File” can also be marked while play is stopped, by pressing the PLAY SPEED Button **9** when the file name is highlighted. Repeat this process to remove a favorite mark from a file.

Note 2: It is possible to view only files that are marked as “Favorite File” or “Spot Marked”. See “Folder Views” on page 19 for more about viewing options.

5. **“Clear Marks”** — Remove “Favorite File” mark or “Marked Spot” (bookmarks) from a file.
 - a. **“Clear Spot”** — While a file is playing or highlighted, select “Clear Spot” to remove all previously marked spots from a file.
 - b. **“Clear Favorite”** — While a file is playing or highlighted, select “Clear Favorite” to remove the “Favorite File” status.

FILE PLAY

To locate and view files to play, select “Files” from the MENU and then press and release the PLAY Button **▶** **6**. Select the folder and press and release the PLAY Button **▶** **6** to open the folder to view files. Select the file, then press and release the PLAY Button **▶** **6** to play the file.

Pause — Press the PLAY Button **▶** **6** to pause a playing file. Press again to resume play.

Stop — Press the BACK Button **3** to stop a paused file.

Fast-Forward — Press the RIGHT Button **▶▶** **5**. Press again for faster speeds.






Rewind — Press the LEFT Button **◀◀** **8**. Press again for faster speeds.

NOTE: There are 4 speed levels for “Fast Forward” and “Rewind”: 3, 7, 60, and 150 time normal play speed. See page 31.

Play Next File — Press the DOWN Button **▼** **7**.

Play Previous File — Press the UP Button **▲** **2**.

Change Play Speed — Press the PLAY SPEED Button **9**. Press again to cycle through five play speeds.

NOTE: There are 5 play speeds: , , , , and  normal **29**.

Repeat a Section — Press the INT/SD A<>B Button **4** to mark a section of a file to be repeated. Any section of the currently playing file can be repeated by pressing and releasing at the desired section (A) and then again at the end of the desired section (B). Play will repeat between (A) and (B) until INT/SD A<>B is pressed again.

Note: This function is great for learning a new language; you can repeat a section of the lesson over and over again.

Mark “Spot” — Press the BACK Button **3** while playing in order to bookmark your spot for later use. For more about marking spots see the “Edit” Screen on page 26.

Edit — It is possible to copy files, divide files, mark a file as favorite, or bookmark a spot in a file as you play a file. See page 26 for more information about the “Edit” screen.

Note: While playing a file, the main menu can be accessed by pressing the MENU Button **10**. The file will continue to play unless “AM” or “FM” radio is selected from the main menu. To return to the playing file, press the MENU Button **10** again.

RECORDING

There are two ways to make recordings:

Manual Recordings — Press REC button while in a mode like AM or FM. If you are in the Menu or File screen, and you press REC, it will record from internal mic or external line-in mic. For more on Manual Recordings, see pages 9 and 16.

Timed Recordings are made with timers and scheduled for specific times on a day, week or date. For more information on setting and using Timers, see page 24

To stop a recording, you must wait until you have recorded for five seconds then press the REC **1** or MENU **10** button. To create a new recording track while recording, press the UP Button **▲ 2**. To pause or un-pause a recording, press the PLAY Button **▶|| 6**. When the recording is completed, it will be stored in “Files” in the “AM”, “FM”, “Timers”, “Mic”, or “Line” folder.

Note: The save location for a recorded file depends on what source you were recording from. See page 17 for more information.

TRANSFERRING FILES TO AND FROM A COMPUTER

Using a PC:

1. Connect the CC Witness to a PC using the supplied USB cable at the **24-Pin USB Connection 20**.
2. Click on the 'My Computer' icon on the PC. Look for a removable disk icon, usually displayed as Drive E or F.
3. Double click on the disk icon belonging to the CC Witness.
4. Files from the PC can now be downloaded onto the CC Witness via dragging and dropping, copying and pasting, etc. Likewise, files can be uploaded to the PC from the CC Witness using these methods.

Using a Mac:

1. See PC instructions for item 1.
2. The CC Witness will be displayed on the Mac desktop as an external drive icon.

Proceed with Items 3 and 4 from PC instructions.

Note 1: If transferring files to the CC Witness, we recommend storing them to the "Computer" folder on the CC Witness for organizational purposes. See page 17.

Note 2: You can also transfer files from the internal memory of the CC Witness to an SD card. See page 26.

DISCONNECTING THE CC WITNESS FROM A COMPUTER

Before unplugging the CC Witness, it is necessary to deactivate the link between them. While de-activated, the CC Witness will continue to charge and can be used normally to play or record. You will not be able to transfer files while the CC Witness is de-activated unless the USB cable is removed and re-inserted.

De-activate from a PC: Left click the "Safely Remove Hardware" icon that is found in the bottom-right toolbar. Click "Safely Remove USB Mass Storage Device — Drives".



De-activate from a Mac: Drag the external drive icons that were added when you connected your CC Witness to the trash can (usually found in the Dock). Another method is to Control-Click and select "Eject" from the drop-down menu (as shown at right).



FAQs and Troubleshooting

1. Does the CC Witness record in Stereo?

Yes, on the FM band, or the Mic/Line Input.

2. Does the tuner receive FM Stereo?

Yes, the CC Witness receives FM Stereo.

3. Can I clear one “Spot Mark” at a time?

Yes, when the progress bar reaches the Spot marked, press the BACK **2** button to clear that Mark.

4. How is the firmware upgraded on the CC Witness?

When CC Witness firmware upgrades are available, they will be posted for download at ccrane.com/CCWitness

5. Why does the CC Witness keep shutting off?

The CC Witness shuts off automatically if it remains idle for 3 minutes. This is the factory default setting. You can adjust the amount of time that passes before auto shut-off occurs by configuring the “Auto Off Time” function in the “System Settings” menu options (see page 23).

6. When I record from a CD player using “Create Tracks”, how do I keep the first part of the next

track from being clipped?

Because the processor takes a few seconds to create a new recording, you may have to manually create a new track while recording. See page 28.

7. The CC Witness is stuck. What do I do now?

Press the “RESET” Button **12** on the side. All files and settings will be retained.

8. The CC Witness will not turn on.















Press the “RESET” Button **12** on the side. Then press and hold the PLAY Button **6** for five seconds. If this does not work, then try charging the CC Witness for a few hours.

9. The CC Witness will not record. An error message displays “File index full”.




The CC Witness can view a maximum of 2000 files, or 500 folders on a memory source. When the file or folder limit is reached, it will not be possible to record on the selected memory source. Remove files, folders or change memory source with the INT/SD **4** button to restore recording capabilities.







For more troubleshooting information see: ccrane.com/CCWitness or email us at: customerservice@ccrane.com
Let us know what you’ve learned.

PLAY ICONS


-  Play file at normal speed.
-  Play file at half speed.
-  Play file at near three-quarter speed.
-  Play file at one-third faster than normal speed.
-  Play file at one-half times faster than normal.
-  Fast forward at 3 times normal play speed.
-  Fast forward at 7 times normal play speed.
-  Fast forward at 60 times normal play speed.
-  Fast forward at 150 times normal play speed.
-  Pause the file that is currently playing.
-  Rewind file at 3 times normal play speed.
-  Rewind file at 7 times normal play speed.
-  Rewind file at 60 times normal play speed.
-  Rewind file at 150 times play speed.
File Play, see page 27.

PLAYBACK MODE ICONS







-  Play all files in folder one time.
-  Play selected file one time.
-  Play all files in folder at random continually.

-  Repeat selected file until stopped.
-  Repeat all files in folder until stopped.
-  Mark beginning of section to be repeated.
-  Mark end of section to be repeated.
-  Bookmark a file (“Mark Spot”).
-  File is marked as “Favorite File”.
Play Modes, see pages 9, 20, 26, & 28.

RECORD MODE ICON

-  Recording in progress.
Recording, see page 28.

SYSTEM SETTINGS ICONS

-  Optional SD card has been selected.
See page 9.
-  Built-in speakers have been turned off.
See page 22.
-  Sleep Timer function has been turned on.
See page 23.
-  Battery is fully charged.
See page 14.
-  Battery is low. Battery must be recharged.
See page 14.
-  File is locked.
See page 18.

Specifications and Compatibility

POWER

5V 900mA Rechargeable Lithium-Polymer Battery

RECHARGING TIME

~ 4 Hours

FREQUENCY COVERAGE

NORTH AMERICA (10kHz Steps):

AM Band: 530 - 1710 kHz

FM Band: 87.5 - 108.0 MHz

EUROPE (9kHz Steps):

AM Band: 522 - 1629 kHz

FM Band: 76.0 - 108.0 MHz

AM ANTENNA

Internal Ferrite

FM ANTENNA

Earphones or FM Antenna wire
(plugged into earphone jack)

S/N RATIO

AM: 35dB

FM: 45dB at 1mV 98.1MHz

MP3: 85dB up (1kHz Input 0dB)

SENSITIVITY

AM: 68dBuV at 1kHz

FM: 5uVAT S/N=26dB

PRESETS

10 AM and 10 FM

TIMERS

20 Timer Play or Recording Schedules

Note: Specifications are subject to change without notice.

SLEEP TIMER

15, 30, 45, 60, 75, 90, 100, and 120 minutes

MEMORY

2GB Internal Memory

plus SD/MMC Expansion Slot (SD up to 16GB)

INPUTS/OUTPUTS

Line/Mic-In (Mono or Stereo)

Stereo Headphone Jack (16 Ω)

Built-In Internal Microphone

Stereo Speakers (8 Ω 0.6W)

DIMENSIONS AND WEIGHT

2.2" W x 4" H x 0.6" D Display 1.85" diagonal

3.6 oz

INCLUDED ACCESSORIES

41" USB Cable (24 Pin Male x Type A Male)

41" 3.5mm stereo male x male cable

Stereo Earbuds

Lanyard

COMPUTER COMMUNICATION

USB 2.0

COMPUTER SYSTEM REQUIREMENTS

CPU 200MHz, 64MB RAM, 20MB of free space

COMPUTER OS

Windows 2000, Windows ME, Windows XP, Vista

MAC OS10 and above

COMPUTER SOUND CARD

Sound Blaster 16 compatible

COMPUTER DISPLAY

640 x 480 or better



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 CC Witness, and any accessories regularly. Do not use the CC Witness 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.

2) BATTERY CHARGING

See CHARGING THE BATTERY (page 12) for proper charging methods.

3) DISCONNECT IN CASE OF MALFUNCTION

If you smell or notice smoke, disconnect the USB Cable or any accessories 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 adapter available with the CC Witness Accessory Kit and replace it if wires become frayed or exposed.

5) KEEP OUT OF REACH OF CHILDREN

Dropping the CC Witness can cause damage or injury. Keep the AC Adapter cord in a position so someone

cannot trip and cause the CC Witness to fall.

6) KEEP AWAY FROM WATER AND MOISTURE

To prevent fire or electric shock hazard, do not expose this product to rain or moisture.

7) KEEP AWAY FROM EXTREME TEMPERATURES

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

8) DO NOT ATTEMPT TO SERVICE THE CC WITNESS

Refer all service work to a qualified service shop if the CC Witness does not appear to operate normally, exhibits a change in performance or it has received damage. Do not open the CC Witness cover, as this may expose you to dangerous voltages and this will void all warranties.

9) OUTSIDE ANTENNAS OR CABLES

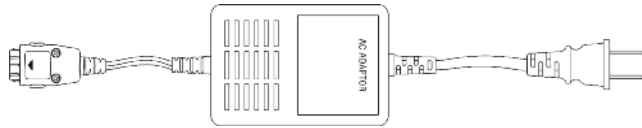
Outside antennas or cables should not be used with the CC Witness unless installed by qualified personnel.

Optional Accessory Kit

OPTIONAL ACCESSORY KIT

To get the most out of your CC Witness, be sure to pick up the CC Witness Accessory Kit. The kit includes a convenient Charging Cradle, an AC Adaptor, and a Silicone Cover to give your new digital recorder an extra layer of protection.

AC ADAPTOR



A special high power, low noise AC adaptor is required for the best AM recordings from the AM/FM radio.

SILICONE CASE

Protect the fit and finish of your CC Witness with this custom silicone case. Also available separately for \$9.95



CHARGING CRADLE

A Precision Cradle built for the CC Witness. It accepts power from either the included 24 pin USB cable or AC adaptor with 24 pin connector. It has both a built-in Stereo Headphone and 1/8" mono type FM Antenna jack. The cradle back has a semi-circular clip to hold an optional Ferrite Stick from an optional custom Twin Coil Ferrite antenna available from C. Crane.



Model: CC Witness

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 user's authority to operate the equipment.

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