

# **Exhibit E**

# **User's Manual**

**SANGEAN ELECTRONICS INC.**

**FCC ID.: BYG002**

**FM/AM/TV/WEATHER 4 BAND  
RECEIVER**

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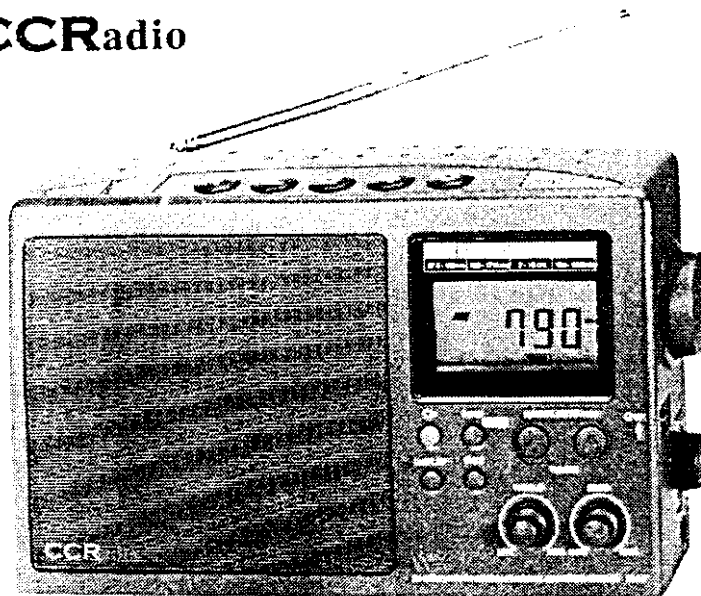
**SANGEAN ELECTRONICS INC.**

**FCC ID.: BYG002**

**FM/AM/TV/WEATHER 4 BAND  
RECEIVER**

# INSTRUCTION MANUAL

**CCR**radio



PLEASE READ ALL THE INSTRUCTIONS COMPLETELY BEFORE USE.

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



THE LIGHTNING  
FLASH AND ARROW-  
HEAD WITHIN THE  
TRIANGLE IS A WARN-  
ING 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 BACK. NO USER SER-  
VICEABLE PARTS INSIDE.  
REFER SERVICING TO  
QUALIFIED SERVICE PER-  
SONNEL.



THE EXCLAMATION  
POINT WITHIN THE  
TRIANGLE IS A WARN-  
ING SIGN ALERTING  
YOU OF IMPORTANT  
INSTRUCTIONS  
ACCOMPANYING THIS  
RADIO.

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## Safety Instructions

### **READ BEFORE OPERATING EQUIPMENT SAVE THESE INSTRUCTIONS**

1. Read and understand all safety and operating instructions before the radio is operated.
2. Retain Instructions: The safety and operating instructions should be retained for future reference.
3. Heed Warnings. All warnings on the appliance and operating instructions should be followed.
4. Follow all operations and use instructions.
5. 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.
6. Unplug the receiver from the AC power outlet before cleaning. Use only a damp cloth for cleaning the exterior of the receiver.
7. 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.
5. Ventilation: This radio should be situated so that its location or position does 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.
6. 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.
7. Power Cords: The power cord should be positioned so it is not walked on, pinched, or 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. The appliance should be serviced by qualified service personnel when:

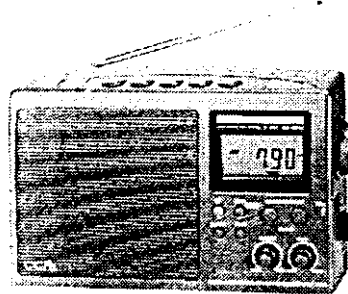
- A. The power supply cord or the plug has been damaged or
- B. Objects have fallen or liquid has been spilled into the radio or
- C. The radio has been exposed to rain or
- D. The radio does not appear to operate normally or exhibits a marked change in performance or
- E. The radio has been dropped, or the enclosure damaged.

14. 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.



## INTRODUCTION

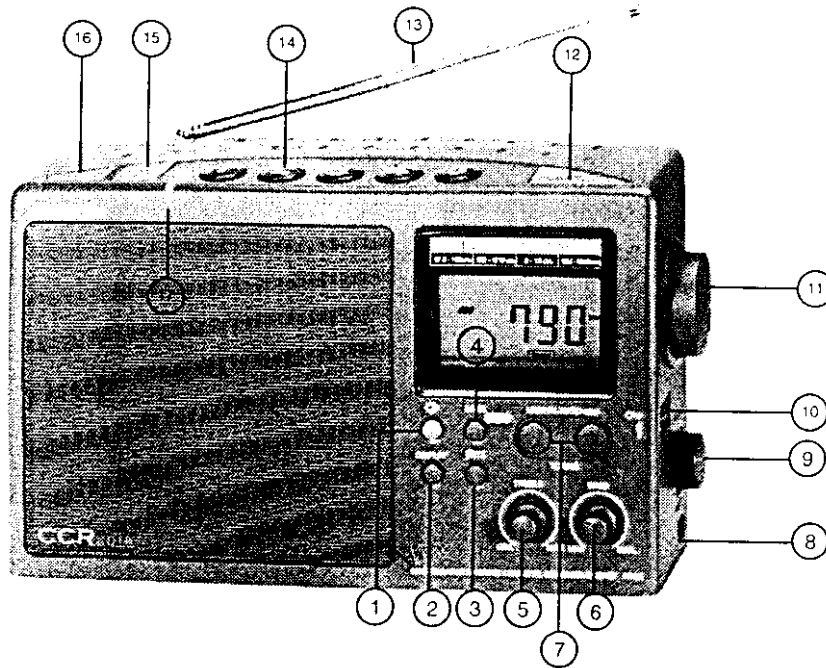
Thank you for purchasing the high performance digital CCRadio. The CCRadio incorporates the highest quality parts and superior engineering to produce the most sensitive AM receiver available. It also covers FM, Weather, and TV audio channels 2-13. The special Weather Alert System will sound an alarm when a signal is broadcast from National Oceanic and Atmospheric Administration, (NOAA) , in the U.S. Canada has a similar system.



## UNPACKING

The box should contain the CCRadio, 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



## BUTTON IDENTIFICATION

|                              |                        |
|------------------------------|------------------------|
| 1) Display Light             | 10) Lock Button        |
| 2) Display Time or Frequency | 11) Tuning Knob        |
| 3) Sleep Button              | 12) Power Button       |
| 4) Band / Time Set           | 13) Telescopic Antenna |
| 5) Treble Control            | 14) Memory Buttons     |
| 6) Bass Control              | 15) Alert Button       |
| 7) Manual/Auto Seek          | 16) Alarm On/Off       |
| 8) Headphone Jack            | 17) WX Alert Light     |
| 9) Volume Control            |                        |

## GETTING STARTED

### POWERING YOUR RADIO

Before powering your radio be sure to read the **Safety Instructions** on page 1.

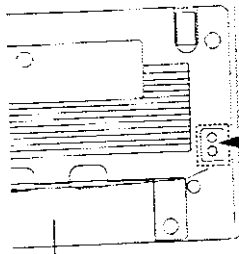


The CCRadio will run on (4) "D" size nicad or alkaline batteries or on 120V AC house current using the included power cord. Batteries are optional. The batteries are necessary to keep the time clock and memories if the power cord is removed from the radio for more than three minutes.

### 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.

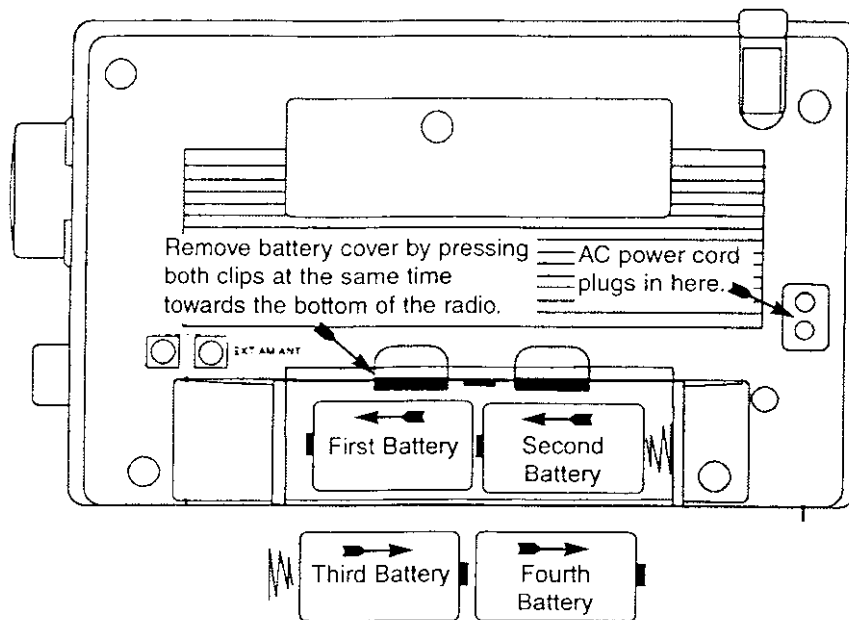
NOTE: If you remove the power cord without turning the radio OFF, the radio will automatically revert to the batteries.



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

## 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 on. After removing dead batteries for replacement you have approximately three minutes to replace the batteries, after which your clock and memory information will be lost (If the radio is not plugged in).



This symbol means the batteries are full.

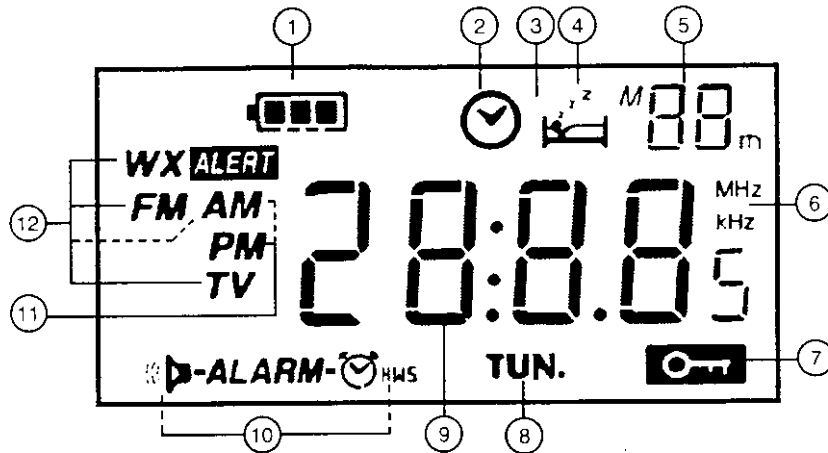


This symbol means batteries are low.



This flashing symbol means the batteries need replacing.

## DISPLAY PANEL



- |                                  |                            |
|----------------------------------|----------------------------|
| 1) Battery Power Level Indicator | 7) Key Lock On/Off         |
| 2) Time Is Displayed             | 8) Tuning Indicator        |
| 3) Sleep Timer                   | 9) Frequency/Clock Display |
| 4) Snooze Status                 | 10) Alarm Status           |
| 5) Memory Location/Sleep Timer   | 11) AM/PM Indicator        |
| Minutes/Clock Seconds            | 12) Indicates Band In Use  |
| 6) Frequency Unit                |                            |

## SETTING THE CLOCK

Please read this entire page carefully before you start. The correct time must be set with the **radio off**. If you do not finish setting the clock or alarm in 15 seconds you will have to start over.

- 1) Press the *Band/Time Set* button. The hour digit will flash.
- 2) Using the Up/Down tuning button, select the appropriate hour digit.
- 3) Press the *Band/Time Set* button again to select the minute digit. Use the Up/Down buttons to adjust the minute to the appropriate time.
- 4) You must press the *Band/Time Set* button again to complete the time setting. This also sets the seconds to "00".

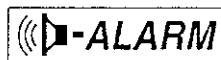


## SETTING THE ALARM

There are two different alarm modes on the CCRadio. 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 the *Alarm* button on top of the radio until you see this symbol on the display to wake with the radio. When the alarm goes off the radio will play the last station selected.



Press the *Alarm* button until you see this symbol to wake with a multi level tone.



Press the *Alarm* button until both symbols disappear to shut off the alarm function.

### To set the time for the alarm to go off:

- 1) Press the *Alarm* button, the hour digit and alarm symbol will flash.
- 2) Using the Up/Down button, select the appropriate hour.
- 3) Press the *Band/Time Set* button. Use the Up/Down buttons to adjust the minute to the appropriate time.
- 4) You must press the *Band/Time Set* button again to complete the alarm setting.



You can also set the alarm time immediately after selecting the radio or buzzer alarm as describe above if you are a whiz.

## NOTES ON THE ALARM:

To stop the alarm from going off every day press the **Alarm** button on top of the radio until both symbols disappear.  **ALARM** 

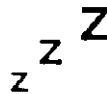
Once the alarm is set, it will automatically go off the next day at the same time. Use the **POWER** button to shut off the alarm until the next day.

If the radio alarm is selected, turn the radio to your favorite station before setting the alarm. 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 will increase in volume every 15 seconds for one minute followed by one minute of silence before repeating the cycle.

The alarm system will sound for one hour unless turned off by pressing the **POWER** button.

## SNOOZE FEATURE:



When the alarm is sounding, if you press any button except the **POWER** button the alarm will temporarily stop for five minutes. The little Z's 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.

## RADIO OPERATION

The CCRadio features four bands: AM / FM / TV 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 button 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 down 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.

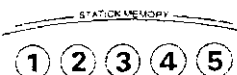


### ROTARY TUNING:

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

### MEMORY TUNING:

You can store up to five memory stations in each of the four bands.



1. Tune to the station or channel you want to memorize.
2. Press and Hold any memory button for two seconds to memorize the station or channel.

The display will show the memory number and beep.

To recall the memory station select the correct band and press the memory number. The radio will instantly tune to the station stored in memory.

## WEATHER ALERT SYSTEM

The unique *WXALERT* mode on the CCRadio will 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 50 miles from transmitting stations.

1. To listen to the standard NOAA weather channels, turn the radio on, press the *BAND* button until *WX* shows up on the display. The telescopic whip antenna may need to be in the up position to receive a station clearly.

2. You will see the channel number of the weather station. 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 *WXALERT* mode. The *WXALERT* 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 two active *WXALERT* modes on the CCRadio:

## SETTING THE WEATHER ALERT

1) To place the radio in *WXALERT* mode, press the *ALERT* button for two seconds: You will hear an audible beep and see the word *ALERT* appear on the display. This is *WXALERT* mode with flashing light only (no Alarm). If there is 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, (*WXALERT* with flashing light and tone) Press the *ALERT* button again for two seconds until the red light near

the top radio comes on continuously: *WXALERT* with Alarm and flashing light will be active. Display shows *ALERT* and a red light near the top of the radio. 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 1 minute. To cancel the *WXALERT*, press any button on the radio.

**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.

3) Press *ALERT* again for two seconds: *WXALERT* goes off and is inactive. *ALERT* will disappear from the display.

In either active *WXALERT* mode, 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 a false alarm on your *WXALERT*. This tone is only a test and will happen periodically 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 *WXALERT* 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:

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.



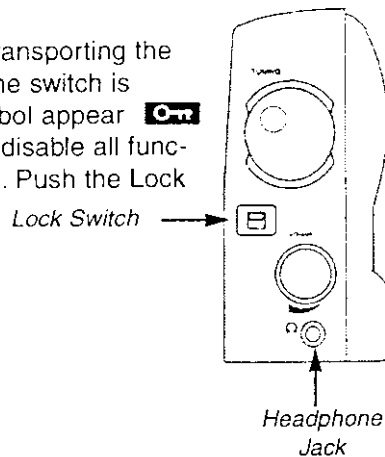
### DISPLAY LIGHT ON BATTERIES:

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 radio operations are completed.



## LOCK SWITCH

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

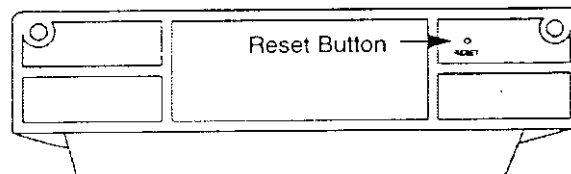


## HEADPHONE JACK

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 will not receive a stereo FM station in stereo through the headphones. This provides clearer FM reception with less noise when compared to stereo reception.

## RESET BUTTON

Once in awhile 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.**

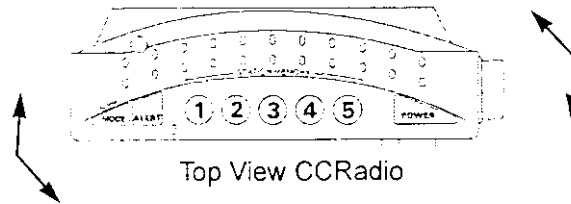


Bottom View of CCRadio



## LISTENING TIPS

Most portable radios including the CCRadio 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.



The CCRadio has two antenna terminals for AM. A good antenna would be 50' of insulated wire attached to one terminal and a ground to the other terminal. **Safety directions and precautions from your antenna supplier should be followed to prevent injury from lightning or any accident.**

The CCRadio is made for long distant or weak AM signal listening. Daytime reception is limited to about 300 miles maximum because you can only receive the signal direct 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://wcoil.com/~gnbc/>.

## RADIO NOISE

### AM RADIO NOISE PROBLEMS AND POSSIBLE SOLUTIONS

Annoying buzzes are many times transmitted through an AM radio. Here is a check-off list of the most likely causes:

- Dimmer switch.
- Fluorescent light.
- “Touch lamp” type light fixture (even when turned off).
- Automatic on and off night lights.
- Outdoor yard lights which come on automatically.
- Electronic bug and pest controllers.
- A light bulb that is about to burn out.
- A faulty electrical switch of any kind.
- A nearby television set.
- A store that has a fluorescent light or a public recreation room that has fluorescent lights located near you.
- Blinking bulbs of all kinds such as Christmas tree lights.
- If you live in an apartment a neighbor's dimmer switch could be the culprit.
- Scanners of all types.
- Dirty insulators on a nearby power pole allowing arcing.
- Electric blanket.
- Smoke detectors that run from AC current (battery operated is OK).

It is best to eliminate the interference at its source. Here's a list of possible solutions:

- The most obvious is to turn off the offending device.
- Try a battery operated radio to see if the interference is coming in from the AC 120v line, through the air, or both.
- Turn off the circuit breakers to see if the noise stops. If it does, then you know it is something in your house. Turn off one circuit at a time to isolate where the noise is coming from.
- Use a battery operated radio as a direction finder. Turn the radio until the loudest noise is heard and the front and back of the radio will point to the noise origin.
- Carry a radio around the neighborhood and see if you can find the origin of the noise. Ask other neighbors if they have the same problem.
- If a power pole is suspected, call the utility company and they will check the area and possibly wash the insulators. Dirty power pole insulators are sometimes a cause of difficult-to-find radio interference.
- If you have a hum in your receiver from AC line noise sometimes grounding the radio can reduce the hum greatly. Finding a good earth ground may be difficult.

[illegible]

Please feel free to copy this page.

Model: CC Radio

FCC ID: BYG 002

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 UNDESIRABLE  
OPERATION.

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