

## Programming Guide

*S.A.M.E Digital Weather/ All Hazards Alert Radio  
With AM/FM Digital Radio*

**CEA-2009-A Certified Alert Receiver**

**Model: R-1650D**

*Public Alert Certified*



**Reecom Electronics Inc.**



<http://www.reecominc.com>

### **Features:**

**More Than 185 Hours Battery Back-up Operation  
When A/C Power Failure During Emergency Period.  
This unique feature is very important to all users !!**

#### **S.A.M.E. (Specific Area Message Encoding) Operation**

- Receives and decodes alert signal and displays alert messages on the LCD
- capable to filter out alerts which is not declared in your area

#### **7 Weather Channels** - digital PLL tuning to NOAA channels

#### **LCD** with wide viewing angle

- displays **Alert Messages** and
- displays **Effective Time** with accurate **auto-count-down Function** up to 25 active alerts simultaneously.

#### **LCD Back Light** - continuous back light selectable

#### **LED** - indicates Warning, Watch and Advisory alert levels

#### **Voice Alert** - automatically activates voice announcement

#### **End Of Message (EOM) Detection** - Automatically switches back to the previous state. A unique feature for streaming NOAA weather radio to Weather Underground

#### **Siren Volume Control** - 24 siren loudness levels

#### **Digital Volume Control** - 24 voice loudness levels

#### **Event Memory** - stores up to 25 alert messages with date/time

#### **County Code Memory** - stores / monitors up to 26 counties

#### **Selectable Defeat Siren** - sets siren On/ Off for 48 events

#### **Built-in AM/FM Band Radio**

- AM radio: 520KHz - 1710KHz
- FM radio: 87.5 - 108.5MHz
- 24 preset memory stations (12 for AM and 12 for FM band)
- Intro-Scan function, up to 10 seconds play in tuned station
- SLEEP function, radio timer up to 120 minutes cycle time in one minute resolution
- Automatically switch to respond Weather/ All Hazard alerts

#### **Automatically switches from AM/FM radio to All Hazards / Weather Alert**

#### **Time Function** - real time clock and Auto-Calendar on display

#### **Dual Alarm Clocks** - buzzer alarms and Auto alarms (wake to radio) with SNOOZE function

#### **Battery Low Detection** - detects backup battery voltage level

#### **External Antenna Jack** - allows to connect external antenna

#### **Alarm Out Socket** - allows to connect external control system

#### **Audio Out Socket** - provides audio source to external system

## Setting Up the Radio

**Info** The radio offers you an extensive range of functions which are grouped in program menu pages as shown below. To access the program menu page, press **PROG** key for two seconds. Scroll with **▶** or **◀** key through the menu pages and select the menu page by pressing **ENTER** key. Select submenu pages and settings of your choice in the same way. Press **PROG** key to return to the previous menu level, and keep pressing **PROG** key to exit the program menu page. If no key are pressed for about 5 minutes, the radio will exit program menu page automatically. Two-beep sound indicates wrong key is pressed.

Menu Page	Menu Page Description
<b>P1</b>	SET DATE TIME
<b>P2</b>	CHANNEL SELECT
<b>P3</b>	ENTER COUNTY
<b>P4</b>	ALERT MODE
<b>P5</b>	SIREN VOLUME
<b>P6</b>	SET EVENT BLOCKING
<b>P7</b>	ALARM SOCKET
<b>P8</b>	SIREN TEST
<b>P9</b>	SET ALARM 1
<b>P10</b>	SET ALARM 2
<b>P11</b>	SLEEP TIMER

## Setting Date / Time

**Note** The date and time must be set correctly since they will be logged into the event memory upon the alert message reception.

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Press **ENTER** key to select menu page **P1**.
3. Press **+** or **-** key to set **Month**.
4. Press **▶** key to select **Day**.
5. Press **+** or **-** key to set **Day**.
6. Repeat steps 4 & 5 to set **Year**, **Hour** and **Minute** respectively.
7. Press **ENTER** key to save.

**Tips** Press and hold **+** or **-** key will change the number continuously. Release the key to stop.

## Obtaining Weather Channel/County Codes From NOAA

**Info** In order to receive alerts, the radio must be set to the correct weather channel and county code(s) (FIPS code). To get these information for your area, call the NWS toll free number: **1-888-NWS-SAME (1-888-697-7263)**, or visit the NOAA web site:  
**<http://www.nws.noaa.gov/nwr/indexnw.htm>**  
 In the above web site, search the state and county for your area and then write down the **Channel (Frequency)** and **county code(s)**. You may want to obtain the codes for other local areas that you travel through to work. The radio memory can store up to **26** county codes (FIPS codes) to monitor alerts.

## Setting Weather Channel

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Press **▶** key to menu page **P2**.
3. Press **ENTER** key to select.
  - Hint** Press **+** or **-** key to adjust the volume.
4. Press **▶** key to set the weather channel as you desired.
5. Press **ENTER** key to confirm and complete this section.

## Storing County Code

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to menu page **P3**.
3. Press **ENTER** key to select.
4. Press **◀** or **▶** key to select county option.

**Hint** Press **PROG** key will leave this section without update.

**Info** There are three (3) county options available for your selection. They are:  
 1. **ALL COUNTY CODES**,  
 2. **MULTIPLE COUNTY** and  
 3. **SINGLE COUNTY**.

**Info** The radio initially sets to the **ALL COUNTY CODES** by default. With this option, the radio will respond to all alerts regardless of the affected areas as long as the channel is correctly set.

If you want to monitor alerts in more than one county (area), the **MULTIPLE COUNTY** option would be the choice. You can store up to **26** county codes in the radio memory. The more the county codes you store in, the broader the area coverage the radio will monitor and vice versa.

If the **SINGLE COUNTY** option is selected, the radio will monitor alerts only affecting your local county / area. You must store the county code in the first memory location which is **COUNTY 01**.

5. Press **ENTER** key to confirm.

**Hint** If the **ALL COUNTY CODES** option is selected, this section is completed.

6. Press **◀** or **▶** key to scroll memory locations for county code entry / edit.

**Hint** If there is no county codes stored in the memory, go to next step.

7. Press **ENTER** key to select.

8. Press **⊕** or **⊖** key to input the desired code number.

**Tips** Press and hold **⊕** or **⊖** key will continuously change the number. Release the key to stop.

9. Press **▶** key to the next digit.

10. Repeat steps 8 & 9 to input the 2nd to 6th digit.

11. Press **ENTER** key to save.

**Hint** If any one of the code digit is blank ( \_ ), the input will not be updated.

Repeat steps 6 to 10 to enter the next county code, if any.

Press **PROG** key to leave this section.

**Note** If there is no county codes stored in the memory, the radio will re-set to **ALL COUNTY CODES** option automatically.

### Setting Alert Mode

The Alert Option Table below describes how the radio will respond visually and audibly upon receiving alerts.

**Info** **Alert Enable** and **VOICE** options are preset by default. If you are satisfied with this setting, skip this section.

#### Alert Option Table:

Alert Option:		You Hear:	ALARM OUT Socket:	You See:
Alert Enable	<b>VOICE</b>	8 seconds siren, then, voice broadcast the message (maximum 15 minutes) or until you press <b>STOP</b> key.	Activates for 8 seconds	LCD displays event alert message and Effective Time.
	<b>SIREN</b>	5 minutes siren or until you press <b>STOP</b> key.	Activates for 5 minutes or until you press <b>STOP</b> key.	
Alert Disable		No siren and voice broadcast	Not activate	

**Hint** For the **VOICE** option, after voice broadcast, the radio will return to the previous state upon EOM (End Of Message) detection.

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to the menu page **P4**.
3. Press **ENTER** key to select.
4. Press **▶** key to select the alert option either **Alert Enable** or **Alert Disable**.

**Note** Press **PROG** key will exit this section without setting change.

5. Press **ENTER** key to confirm.

**Hint** If **Alert Disable** is selected, this section is completed.

6. Press **▶** key to select either **VOICE** or **SIREN** option.

7. Press **ENTER** key to confirm settings and go back to the main menu.

## Setting Siren Volume

**Info** The radio provides 24 siren volume level adjustment for different noise environment and hearing impaired use. Siren mute option is available for non-critical events.

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to menu page **P5**.
3. Press **ENTER** key to select. The siren volume is displayed.
4. Press **+** or **-** key to adjust siren volume.
5. Press **ENTER** key to save and complete this section.

**Tips** 1. Press **STOP** key to stop and save the siren volume.  
2. The **ALARM OUT** socket becomes active during siren.

**Note** If the radio receives the below alert messages and the siren volume has been set to **00** or **SIREN MUTE**, it will still be siren at the volume level the same as to what you have previously set the volume to hear radio broadcast.

1. BIOLOGICAL HAZARD WARNING
2. CIVIL DANGER WARNING
3. CIVIL EMERGENCY MESSAGE
4. CHEMICAL HAZARD WARNING
5. DAM BREAK WARNING
6. CONTAGIOUS DISEASE WARNING
7. CONTAMINATED WATER WARNING
8. EMERGENCY ACTION NOTIFICATION
9. EMERGENCY ACTION TERMINATION
10. EARTHQUAKE WARNING
11. IMMEDIATE EVACUATION
12. FOOD CONTAMINATION WARNING
13. HAZARDOUS MATERIALS WARNING
14. HURRICANE WARNING
15. INDUSTRIAL FIRE WARNING
16. LOCAL AREA EMERGENCY
17. LAW ENFORCEMENT WARNING
18. LAND SLIDE WARNING
19. NUCLEAR POWER PLANT WARNING
20. RADIOLOGICAL HAZARD WARNING
21. SHELTER IN-PLACE WARNING
22. TORNADO WARNING
23. TROPICAL STORM WARNING
24. TSUNAMI WATCH
25. TSUNAMI WARNING
26. VOLCANO WARNING
27. WILD FIRE WARNING

## Receiving Alert Message

**Info** When the radio receives an alert message, it will display the **Effective Time** (with **auto-count-down function**) and respond according to the alert option set in program menu page **P4** (refer to **Alert Option Table**). The flashing LED indicates the alert level. The radio's real time clock / date, together with the alert message will be logged and saved into the event memory.

**Tips** For the scrolling message, press and hold **STOP** key will stop scrolling. Release the key will resume scrolling.

**Info** When the radio receives **Non-Alert Messages** (refer to page 6), it will not give audio and visual response but save the message to the event memory. If a new message is received, the **Non-Alert Message** will be cleared from the event memory right away.

## National Weather Service (NWS) Test Signals

**Info** Periodic test signals (Required Weekly Test or Required Monthly Test) are sent out by NWS transmitter stations. Such test signals are used to let the users to confirm their alert radios functioning properly. Upon receiving the test signal, the radio will display the test message on the LCD. The beep tone (for test signals) is disabled by default. You can enable the beep tone in program menu page **P6**.

**Note** If the radio has not received any messages (e.g. Test, Alert or Non-Alert messages) for consecutive 10 days, the LCD will display: **RE-CHECK SET UP**.

In such occasion, you have to

1. check if the weather channel is set correctly,
2. check if the county codes stored are right for your local area,
3. check if the radio is in weak signal reception (statics),
4. contact your local NOAA to see if they transmit test signals periodically.

The **RE-CHECK SET UP** message will disappear in about 5 minutes after any key is pressed. After that, You can review it in the event memory (by pressing **MEMORY** key). It will be cleared from the memory as soon as the radio receives the next alert message or test message.

**Alert / Test Message Table**

Event NO.	Alert Message on Display	Audio Alert Tone
1.	REQUIRED WEEKLY TEST	Beep (disabled by default)
2.	REQUIRED MONTHLY TEST	Beep (disabled by default)
3.	ADMINISTRATIVE MESSAGE	Beep (disabled by default)
4.	AVALANCHE WATCH	Watch Siren
5.	AVALANCHE WARNING	Warning Siren
6.	BOIL WATER WARNING	Warning Siren
7.	BLIZZARD WARNING	Warning Siren
8.	CHILD ABDUCTION EMERGENCY	Advisory Siren
9.	COASTAL FLOOD WATCH	Watch Siren
10.	COASTAL FLOOD WARNING	Warning Siren
11.	DAM WATCH	Watch Siren
12.	DUST STORM WARNING	Warning Siren
13.	EVACUATION WATCH	Watch Siren
14.	FLASH FLOOD STATEMENT	Advisory Siren
15.	FLASH FLOOD WATCH	Watch Siren
16.	FLASH FLOOD WARNING	Warning Siren
17.	FLOOD STATEMENT	Advisory Siren
18.	FLOOD WATCH	Watch Siren
19.	FLOOD WARNING	Warning Siren
20.	FIRE WARNING	Warning Siren
21.	FLASH FREEZE WARNING	Warning Siren
22.	FREEZE WARNING	Warning Siren
23.	HIGH WIND WATCH	Watch Siren
24.	HIGH WIND WARNING	Warning Siren
25.	HURRICANE STATEMENT	Advisory Siren
26.	HURRICANE WATCH	Watch Siren
27.	ICEBERG WARNING	Warning Siren
28.	NATIONAL INFORMATION CENTER	Beep (disabled by default)
29.	NATIONAL PERIODIC TEST	Beep (disabled by default)
30.	NATIONAL AUDIBLE TEST	Beep (disabled by default)
31.	NATIONAL SILENT TEST	Beep (disabled by default)
32.	NETWORK NOTIFICATION MESSAGE	Beep (disabled by default)
33.	PRACTICE / DEMO	Beep (disabled by default)
34.	POWER OUTAGE ADVISORY	Advisory Siren
35.	SPECIAL MARINE WARNING	Warning Siren

**Alert Test Message Table (continue)**

Event No.	Alert Message on Display	Audio Alert Tone
36.	SPECIAL WEATHER STATEMENT	Advisory Siren
37.	SEVERE WEATHER STATEMENT	Advisory Siren
38.	SEVERE THUNDERSTORM WATCH	Watch Siren
39.	SEVERE THUNDERSTORM WARNING	Warning Siren
40.	TORNADO WATCH	Watch Siren
41.	911 TELEPHONE OUTAGE EMERGENCY	Advisory Siren
42.	TROPICAL STORM WATCH	Watch Siren
43.	WINTER STORM WATCH	Watch Siren
44.	WINTER STORM WARNING	Warning Siren
45.	WILD FIRE WATCH	Watch Siren
46.	UNRECOGNIZED STATEMENT	Advisory Siren
47.	UNRECOGNIZED WATCH	Watch Siren
48.	UNRECOGNIZED EMERGENCY	Advisory Siren
49.	BIOLOGICAL HAZARD WARNING	Warning Siren
50.	CIVIL DANGER WARNING	Warning Siren
51.	CIVIL EMERGENCY MESSAGE	Warning Siren
52.	CHEMICAL HAZARD WARNING	Warning Siren
53.	CONTAMINATED WATER WARNING	Warning Siren
54.	DAM BREAK WARNING	Warning Siren
55.	CONTAGIOUS DISEASE WARNING	Warning Siren
56.	EMERGENCY ACTION NOTIFICATION	Warning Siren
57.	EMERGENCY ACTION TERMINATION	Advisory Siren
58.	EARTHQUAKE WARNING	Warning Siren
59.	IMMEDIATE EVACUATION	Warning Siren
60.	FOOD CONTAMINATION WARNING	Warning Siren
61.	HAZARDOUS MATERIALS WARNING	Warning Siren
62.	HURRICANE WARNING	Warning Siren
63.	INDUSTRIAL FIRE WARNING	Warning Siren
64.	LOCAL AREA EMERGENCY	Advisory Siren
65.	LAW ENFORCEMENT WARNING	Warning Siren
66.	LAND SLIDE WARNING	Warning Siren
67.	NUCLEAR POWER PLANT WARNING	Warning Siren
68.	RADIOLOGICAL HAZARD WARNING	Warning Siren

**Alert Message Table (continue)**

Event No.	Alert Message on Display	Audio Alert Tone
69.	SHELTER IN-PLACE WARNING	Warning Siren
70.	TORNADO WARNING	Warning Siren
71.	TROPICAL STORM WARNING	Warning Siren
72.	TSUNAMI WATCH	Watch Siren
73.	TSUNAMI WARNING	Warning Siren
74.	VOLCANO WARNING	Warning Siren
75.	WILD FIRE WARNING	Warning Siren
76.	UNRECOGNIZED WARNING	Warning Siren

- Note**
1. The audio alert tone can be tested in menu page **P8, SIREN TEST**.
  2. The alert messages from **Event No. 1 to 48** in the **Alert / Test Message Table** can be individually set to block or unblock. See next section for details.
  3. The alert messages from **Event No. 49 to 76** in the **Alert / Test Message Table** are always preset to unblock at the factory (by default). Defeat siren options for these alert messages are not available in **Editing Event Blocking** section.

**Non - Alert Messages**

- Note** When the radio receiving Non-Alert Messages described in the table below, it will not generate audio tone nor display the message on the LCD but the message will be saved to the event memory. A new received message will over-write the Non-Alert message in the event memory.

**Non - Alert Message Table**

No.	Non-Alert Messages	Audio Alert Tone
1.	TRANSMITTER BACKUP ON	None
2.	TRANSMITTER CARRIER OFF	
3.	TRANSMITTER CARRIER ON	
4.	TRANSMITTER PRIMARY ON	

**Setting Event Blocking (defeat siren / voice)**

- Info** Some alert messages can be set to no audio alert (**SIREN** and **VOICE**) but display the messages on the LCD in order not to annoy you frequently. These messages are grouped from **Event No. 1 to 48** in the **Alert Message Table**. When the radio receives such a message e.g. **REQUIRED WEEKLY TEST**, and you have already set it blocked, there will be no siren nor voice alert but display the message on the LCD.

- Note** The messages below are initially set to block at the factory (by default).
1. REQUIRED WEEKLY TEST
  2. REQUIRED MONTHLY TEST
  3. ADMINISTRATIVE MESSAGE
  4. NATIONAL INFORMATION CENTER
  5. NATIONAL PERIODIC TEST
  6. NATIONAL AUDIBLE TEST
  7. NATIONAL SILENT TEST
  8. NETWORK NOTIFICATION MESSAGE
  9. PRACTICE / DEMO

**Editing Event Blocking**

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to menu page **P6**.
3. Press **ENTER** key to select.
4. Press **▶** key to scroll through the alert messages to edit.

- Hint** The **Event No.**, corresponding to the **Alert Message Table**, is displayed on the LCD.

5. Press **ENTER** key to select the message to be edited.
6. Press **▶** key to set it to block or not.

- Hint** **Alert Disable** (flashing) = Event Blocked  
**Alert Enable** (flashing) = Event Not Blocked

7. Press **ENTER** key to confirm.
8. Repeat steps 4 to 7 to edit others if you desire.

Press **PROG** key to end this section.

- Note** The **ALARM OUT** socket will not be activated if the blocked event is received.

### ALARM OUT Socket

**Info** The **ALARM OUT** socket is provided on the back of the radio. The socket's output is compatible with home automation devices from suppliers such as Plug'n Power, X-10 or others. Connect a 3.5mm (1/8 inch) phone jack with polarity as indicated underneath the socket.

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to menu page **P7**.
3. Press **ENTER** key to select.
4. Press **▶** key to select **DC OUT** or **SWITCH** option.
5. Press **ENTER** key to confirm.

To exit the program menu, press **PROG** key.

**Info** If the socket is set to **DC OUT**, then, when the radio receives alerts, the socket will output 6 Volts DC (the voltage will be less when the radio is only powered with back-up batteries) to the external connected device. (the output polarity is shown underneath the socket) If the socket is set to **SWITCH** (as internal **POWER SWITCH**), then, when the radio receives alerts, the internal power switch will be 'closed' to turn on the power of the external connected device / accessory. Press **STOP** key to 'open' the internal switch.

Refer to program menu page **P8 (SIREN TEST)** to test this function, if necessary.

For this function, the socket's electrical maximum rating is: DC voltage: 12 Volt.

DC current: 350mA.

### AUDIO OUT Socket

**Info** The socket outputs siren and voice broadcast signal to the external audio systems such as Public Address system, external speakers system and etc.

When it is necessary to use this socket, connect the 3.5mm (1/8 inch) phone jack to the socket with polarity as indicated underneath the socket; the speaker voice is muted. The volume keys **⊕** or **⊖**, controls the audio output level.

### Siren Test

**Info** The **SIREN TEST** menu page **P8** lets you to pre-hear and be familiar with the actual siren / beep tone generated by the radio when actual alerts / tests are received.

In addition, the **ALARM OUT** socket function can be tested here. If desired, connect the external device to the socket before proceeding to the steps below.

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to menu page **P8**.
3. Press **ENTER** key to activate siren / beep tone.

- Hint**
1. The warning siren, watch siren, advisory siren and beep tone will be generated respectively each time you press **▶** or **ENTER** key.
  2. The siren / beep tone will last for about 15 seconds.
  3. Press **STOP** key will stop the siren / beep tone.
  4. During the speaker siren, the **ALARM OUT** socket will output control signal to trigger the external device.
  5. When the siren / beep tone stops, press **PROG** key to exit program menu page.

### Deleting County Code

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
  2. Keep pressing **▶** key to menu page **P3**.
  3. Press **ENTER** key to select.
  4. Select the **MULTIPLE COUNTY** option.
  5. Press **ENTER** key.
  6. Press **◀** or **▶** key to select the county code you want to delete.
  7. Press **⊕** or **⊖** key to set all 6 digits to \_\_\_\_\_ (blank) and press **ENTER** key to delete.
- To delete other county codes, repeat steps 6 & 7.

**(Tips)** A beep tone confirms the county code was deleted.

Press **PROG** key to end this section.

### Operation

#### LCD Back Light

If the radio is powered up by AC adapter, press **ENTER** key to turn on / off LCD back light (toggle key function).

If the radio is powered up by back up battery, press any key once will turn on the LCD back light for 10 seconds.

**(Info)** **Standby Mode** : When the radio is ready for use, no voice on the speaker, and you have not pressed any key, the radio is in standby mode.

#### Access to Program Menu Page

- Press and hold **PROG** key for 2 seconds. (in standby mode)

#### Review Stored County Codes

- Press **◀** or **▶** key (in standby mode) to see the county code(s).

#### Review Alert Message

- Press **MEMORY** key (in standby mode) to enter event memory mode.

**(Info)** If the radio has not received any alert message ever since the radio powered up, the LCD will display: **'NO EVENT MESSAGES'**.

If alerts have been received before, you will see the alert message and the message number on the display. The highest message number is for the latest alert message. The effective time will be shown if the alert event is still in effect. The **'Effective Time OFF'**, if shown, indicates the event effective time count down has expired but the emergency event may still continue. The radio's memory can store up to **25** alert messages. If the memory is full and if a new message receives, the oldest message will be cleared and the new message will be saved to the memory.

**(Tips)** Press **MEMORY** key again, you will see the date / time stamp for the alert message at the time received. The message number is shown on the bottom right at this time.

**(Note)** You **must** set the real time clock and date correctly to ensure the message receiving time in event memory is properly displayed.



- Press ◀ or ▶ key to scroll through other alert messages if any.
- Press **PROG** key to exit event memory mode, if desired.

**Hint** If no key pressed for 2 minutes, the event memory mode will be exit automatically.

### Turn On the Radio

- Press **RADIO** key to turn on the radio.

**Tips** Press **RADIO** key again, the weather channel frequency will be displayed for a short while if the radio is in weather band.

- Press ⊕ or ⊖ key to adjust the speaker volume if desired.

**Tips** Press and hold the key will adjust the volume continuously.

- Press **BAND** key to switch band (AM/FM/WX).

- Press ◀◀ or ▶▶ key to tune stations in AM/FM band.

**Tips** Press the key and hold briefly, then release it, the radio will auto-search the next station. If you desire to tune to a weak station, press the key briefly and repeatedly until you find optimal reception.

To improve radio reception, for FM band, pull out the telescopic antenna, incline or rotate it to get better signal reception. For AM band, the antenna is built inside the radio, orient the radio to find the direction for optimal reception.

### Turn Off the Radio

- Press **STOP** key will turn off the radio voice and the radio will be in standby mode.

### AM/FM Station Memory

**Info** In the radio memory, you can store up to **24** radio stations of which 12 station memories for AM band and 12 for FM band.

#### Station Memory Save

1. Press **RADIO** key to turn on the radio.
2. Press ◀◀ or ▶▶ key to tune to your desired station.
3. Press **MEMORY** key to enter the radio memory menu.
4. Press ◀ or ▶ key to select the memory location.
5. Press **ENTER** key to save the radio station.

**Hint** Press **MEMORY** or **PROG** key to exit radio memory menu.

#### Station Memory Recall

1. Press **RADIO** key to turn on the radio.
2. Press ◀ or ▶ key to select the preset radio station.

#### Intro-Scan Function

**Info** This function allows you to scan the AM/FM radio station automatically by turning on the radio and press **INTRO-SCAN** key. In the scanning mode, the radio will stop on the tuned station for 10 seconds to play. During this time, if you want the radio stay tuned, press Intro-Scan key to exit intro-scan mode. Otherwise, the scanning process will be continued.

Press **INTRO-SCAN** key to exit scan mode.

### Sleep Function (Radio Timer)

**Info** The radio provides sleep function with sleep cycle time from 1 minute to 1 hour 59 minutes (in one (1) minute resolution). After turning on the radio, press **SLEEP** key to start this function. When the sleep timer has counted down to expire, the radio will turn off automatically. The sleep function is only available in AM/FM band.

#### Set Sleep Timer

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to menu page **P11**.
3. Press **ENTER** key to select.
4. Press **+** or **-** key to set the timer.

**Hint** Press and hold the **+** or **-** key, the sleep timer value will change continuously. Release the key to stop.

5. Press **ENTER** key to save.  
To exit program menu, press **PROG** key.

#### Using Sleep Timer Function

1. Turn on the radio in AM/FM band.
2. Press **SLEEP** key to activate sleep function, the sleep timer will shown on the display.

**Tips** Subsequent presses on **SLEEP** key will show the remaining time.

If you decide to turn off the radio sooner, press **SNOOZE** or **STOP** key and this will stop the sleep cycle.

### Alarm Clocks

**Info** The radio offers two (2) alarm clocks with two (2) alarm modes, **BUZZ** and **AUTO**, for each. The default alarm times are 7:00 AM and 7:30 AM for alarm clock 1 and 2 respectively.

#### Set Alarm Clock 1:

1. Press and hold **PROG** key for 2 seconds to enter program menu page. Skip this step if it is now in program menu.
2. Keep pressing **▶** key to menu page **P9**.
3. Press **ENTER** key to select.
4. Press **+** or **-** key to set hour.
5. Press **▶** key to select minute digits.
6. Press **+** or **-** key to set minute.
7. Press **ENTER** key to save.  
To exit program menu, press **PROG** key.

#### Set Alarm Clock 2:



Follow steps 1 to 7 as above but in program menu page **P10**.

#### Activate Alarm Clocks

Press **ALARM 1** or **ALARM 2** key to activate alarm 1 or 2.

You can activate either one or both of them.

The alarm clock time will be shown for 5 seconds.

The icon  or  indicates buzzer alarm 1 or 2 has activated.

The icon  or  indicates **AUTO** alarm 1 or 2 has activated.

The **AUTO** alarm will turn on the radio at the last receiving station.

#### Stop Alarm

Press **STOP** key to turn off the alarm or radio.

Press **SNOOZE** key will turn off the alarm or radio for about 7 minutes. After that it will re-activate. The **SNOOZE** function can repeat for up to 1 hour.

**Note** If uninterrupted, the clock alarm will stop in 1 hour.

#### De-activate Alarm Clocks

Keep pressing **ALARM 1** or **ALARM 2** key until the alarm clock icons disappeared.