

# Multi digital clock radio with soothing sounds

## MODEL: BARM123A

### USER'S MANUAL

## INTRODUCTION

BARM123A is a multi-functional device with:

- Digital-tuning AM/FM Radio
- Auto-synchronizing Radio Controlled Clock by radio signal from the U.S. Atomic Clock
- Indoor and Remote Thermometer with memories for Maximum and Minimum readings
- Weather Forecaster with Pressure Trend Indicator
- Soothing Sounds with a choice of 6 natural sounds

## PACKAGE

In the package you will find the following items:

- 1 x Main Unit (BARM123A)
- 1 x Remote Thermo Sensor (THR268) with wall mount bracket & table stand
- 1 x Detachable Vibrating Alarm
- 1 x 8 V AC/DC Adapter

## KEYS CONFIGURATION & FEATURES

### MAIN UNIT (BARM123A)

#### TOP KEY PANEL

##### T1. [SNOOZE/LIGHT] button

- Press to activate the EL back-light of the LCD Display for 5 seconds
- Press to stop the alarm sound and activate the 8-minute Snooze function

##### T2. [SLEEP] button

- Press to turn on the Radio and activate the Sleep Timer function
- Press to select the sleep-timer (auto-off) feature for 15, 30, 60, 90 or 120 minutes

##### T3. [ALARM ON/OFF] button

- Press to select between Alarm-On and Alarm-Off status in the corresponding Alarm-time display mode

##### T4. [POWER] button

- Press to turn on and off the Radio/Soothing Sounds Function

##### T5. [RADIO/SOUND] button

- Press to toggle between Radio or Soothing Sounds Function when Power is On

##### T6. [STATION] button

- Press to switch among the 8 preset radio stations in the respective AM/FM Radio band when the Radio is On
- Press and hold for 2 seconds to enter the preset radio station setting mode when Radio is On

##### T7. [AM/FM] button

- Press to toggle between AM or FM radio band

##### T8. [TUNING ▲] button

- Press to increase the frequency setting when Radio is On
- Press and hold for 2 seconds to trigger radio auto-search function when Radio is On

##### T9. [TUNING ▼] button

- Press to decrease the frequency setting when Radio is On
- Press and hold for 2 seconds to trigger radio auto-search function when Radio is On

## FRONT KEY PANEL

##### F1. [ALARM] button

- Press to change to Alarm-time display mode from other display modes
- Press to toggle between Alarm 1 and Alarm 2 in the Alarm-time display mode
- Press and hold for more than 2 seconds to enter the setting modes of alarm time and alarm-sound mode

##### F2. [CLOCK] button

- Press to toggle between the calendar clock display modes
- Press to change back to Calendar display mode in the Alarm-time display mode
- Press and hold for more than 2 seconds to enter setting modes for 12-/24-hour display format, Hour, Minute, display language of week-of-day, calendar display format (mm:dd:yy or dd:mm:yy), year, month and day

##### F3. [VOLUME ▲] button

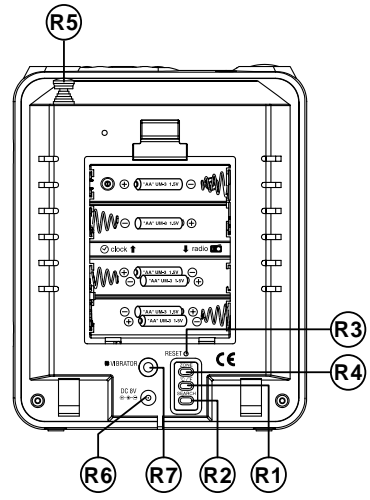
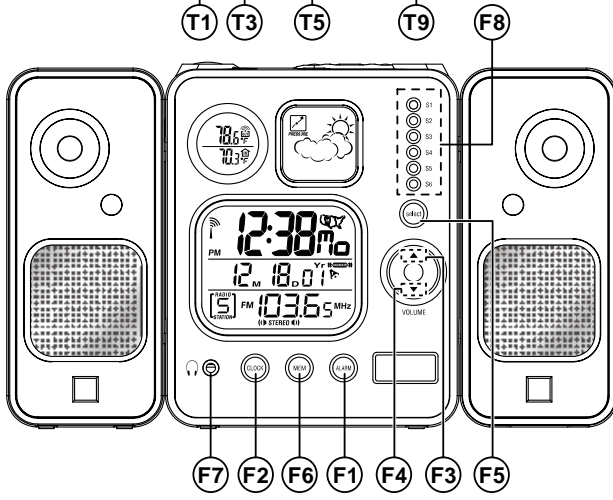
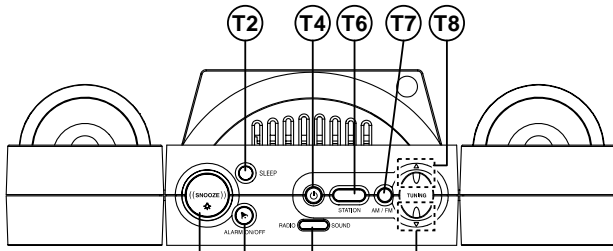
- Press to increase the volume when Radio or Soothing Sounds is On (8-step volume settings)
- Press to increase the values in the setting modes
- Press to toggle between “Beep Alarm” or “Radio Alarm” mode in the corresponding alarm-time setting mode
- Press and hold for 2 seconds to activate the auto-reception of radio signal for RF clock manually when Radio or Soothing Sounds is off

##### F4. [VOLUME ▼] button

- Press to decrease the volume when Radio or Soothing Sounds is On (8-step volume settings)
- Press to decrease the values in the setting modes
- Press to toggle between “Beep Alarm” or “Radio Alarm” mode in the corresponding alarm-time setting mode
- Press and hold for 2 seconds to deactivate the auto-reception of radio signal for RF clock manually when Radio or Soothing Sounds is off

##### F5. [SELECT] button

- Press to toggle among the 6 natural Sounds modes when Soothing Sounds is On



**F6. [MEM] button**

- Press to toggle among the current, maximum and minimum indoor and remote temperature records
- Press and hold for 2 seconds to clear the maximum or minimum temperature records

**F7. Headset Jack**

- Connection Jack for optional headset (not included)

**F8. LED**

**REAR KEY PANEL**

**R1. [°C / °F]**

- Press to select °C or °F temperature display unit

**R2. [SEARCH] button**

- Press and hold for 2 seconds to activate search for remote thermo signal from sensor

**R3. [RESET] button**

- Press to reset all values to their default settings

**R4. [ZONE]**

- Press to toggle among the 4 US time-zones: Pacific (P), Mountain (M), Central (C) or Eastern (E)

**R5. Extendable Antenna**

- External Antenna for FM Radio

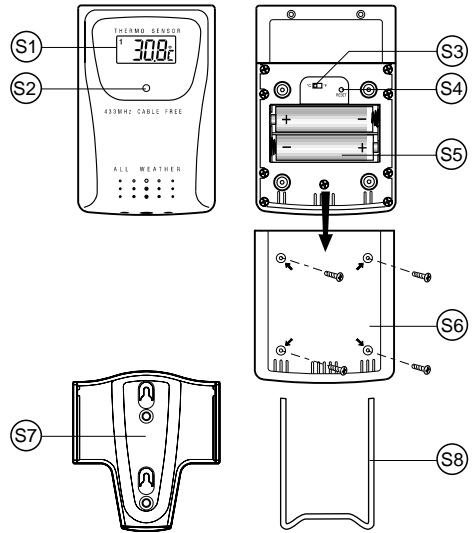
**R6. Power Adapter Connector**

- Connection Jack for AC power adapter

**R7. Vibrator Jack**

- Connection jack for Wake-Up Vibrator

**REMOTE THERMO UNIT (THR268)**



**S1. LCD**

Displays the current temperature monitored by the remote unit

**S2. LED INDICATOR**

Flashes when the remote unit transmits a reading

**S3. °C/°F SLIDE SWITCH**

Selects between Centigrade (°C) and Fahrenheit (°F)

**S4. RESET BUTTON**

Returns all settings to default values

**S5. BATTERY COMPARTMENT**

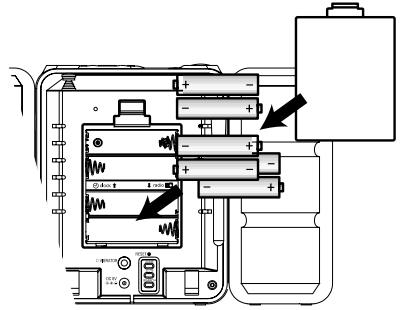
Accommodates two UM-3 or AA size batteries

**S6. BATTERY DOOR****S7. WALL-MOUNT HOLDER**

Supports the remote unit in wall-mounting

**S8. REMOVABLE TABLE STAND**

For standing the remote unit on a flat surface



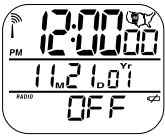
## POWER REQUIREMENTS

The main unit operates on six (6) pieces of AA-sized or UM-3 1.5V batteries (alkaline batteries recommended). The clock, radio and remote thermometer have separate low battery indicators. Change the batteries accordingly when the respective indicator lights up.

### Low Battery Indicator for Clock



### For Radio



### For Remote Sensor



An 8V AC Power Adapter is included. To connect, plug it into the power adapter connector and the other end to a wall socket. If you wish to turn on the radio for a long period, please use the adapter for power supply.

For the Remote Thermo Sensor THR268, it operates on two (2) pieces of AA-sized or UM-3 1.5V batteries. When its power level is low, the low battery indicator will be shown. In that case, change the batteries accordingly.

If not properly disposed of batteries can be harmful. Protect the environment by taking exhausted batteries to authorized disposal stations.

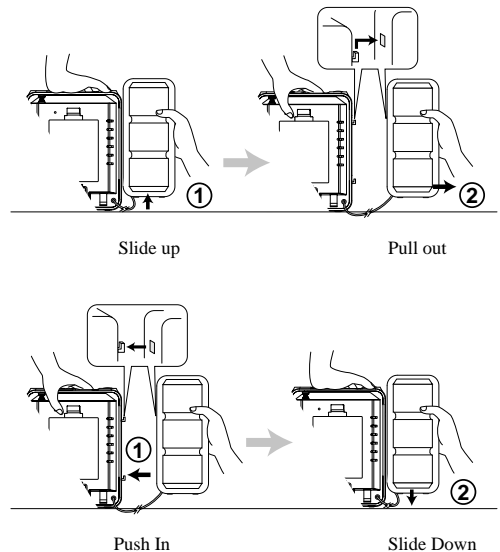
Note: Two (2) pieces of batteries should be installed in the upper battery compartment while the other four (4) pieces in the lower one. *Please note that when adapter is connected, there is no need to insert batteries into the lower battery compartment but two (2) pieces of batteries are still required to be installed in the upper compartment for clock operations.*

## MAIN UNIT: BATTERY INSTALLATION

To install batteries into the main unit:

1. Press the door tab and click open the battery door at the back of the main unit.
2. Install six (6) pieces of AA-sized or UM-3 1.5V batteries by following the polarities shown inside the battery compartment. For proper functioning it is advised to install batteries first into the lower compartment and then into the upper one (Please note that if batteries are already installed into the unit, first pull out and remove the insulation tape in the remote sensor [marked 1]. After that pull out and remove the insulation tapes in the lower compartment [marked 2] and then the one in the upper one [marked 3] as well).
3. Replace the battery door and press [RESET].

## NOTE ON DETACHABLE SPEAKER



## FEATURES

### Section I — Radio-Controlled Digital Calendar Clock

#### ABOUT RADIO RECEPTION

After battery installation, the main unit will automatically synchronize its time and date with the radio signal from the U.S. Atomic Clock when it is within reception range of the signal.

When the main unit is receiving radio signal, the reception icon will start to blink. The reception icon will show either strong or weak reception depending on the strength of the radio signal. A complete reception generally takes about two to ten minutes.

When the reception is complete the reception icon will stop blinking.

The reception icon will show as “” for no reception or “” for successful reception.

For best reception, place the unit away from other equipment that emit radio frequency or microwave signals such as TVs, radios, PCs or microwave ovens. Other causes for signal interference include electrical power transmission tower and/or steel reinforced concrete construction.

#### HOW TO ENABLE OR DISABLE AUTO-RECEPTION

To disable the automatic reception of radio signal, press and hold [VOLUME ▼] for 2 seconds. The reception icon will disappear and the unit will stop receiving the radio signal.

To activate the signal reception again, press and hold [VOLUME ▲] for 2 seconds. The reception icon will appear again and start blinking to indicate auto reception of radio signal.

#### DISPLAY MODES SELECTION

Press [CLOCK] in the normal display mode to scroll through the 2 calendar clock display modes:

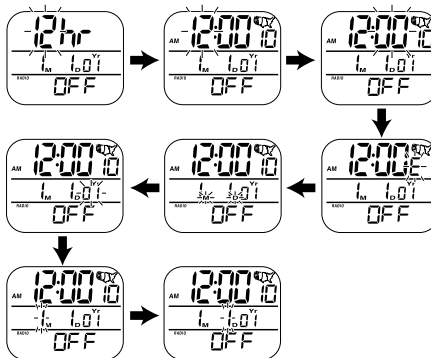


1. Hour – Minute – Second  
Month – Date – Year



2. Hour – Minute – Weekday  
Month – Date – Year

#### SETTING THE CLOCK AND CALENDAR MANUALLY

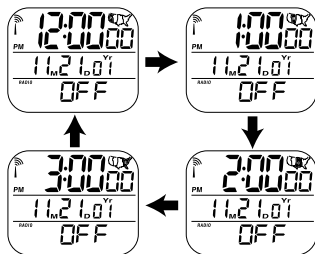


When the automatic radio reception is disabled, the main unit can be set manually. Set the Clock and Calendar by following the procedures below:

1. Press and hold [CLOCK] for 2 seconds. The “12-hr” or “24-hr” display will start flashing.
2. Select the display format by using [VOLUME ▲] or [VOLUME ▼]. Press [CLOCK] to confirm the entry.
3. The Hour digits will start flashing. Enter the hour by using [VOLUME ▲] or [VOLUME ▼]. Press [CLOCK] to confirm the entry.
4. Follow the same procedures to set the minutes, display languages for day-of-week, “mm:dd” or “dd:mm” calendar display format, year, month and day.
5. Press [CLOCK] to save the changes and exit the setting mode. If changes are made after the minute adjustment, the value of seconds will be reset and start from zero.
6. For the day-of-week you can select among 5 languages —English (E), French (F), German (D), Italian (I) and Spanish (S).

Language Langues	Day-of-the-week Giorno della settimana	Affichage du jour Día de la semana	Wochentaganzeige Dia de Semana				
<b>Sprache</b>	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>Lingue</b>	Lundi	Mardi	Mercredi	Jeudi	Vendredi	Samedi	Dimanche
<b>Idiomas</b>	Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
<b>Lingua</b>	Lunes	Martes	Miércoles	Jueves	Viernes	Sábado	Domingo
	Segunda	Terça	Quarta	Quinta	Sexta	Sábado	Domingo
English Anglais Englisch Inglese Inglés Inglês	E	Mo	Tu	We	Th	Fr	Sa Su
French Français Französisch Francese Francés Francês	F	Lu	Ma	Me	Je	Ve	Sa Di
German Allemand Deutsch Tedesco Alemana Alemão	D	Mo	Di	Mi	Do	Fr	Sa So
Italian Italian Italienisch Italiano Italiano	I	Lu	Ma	Me	Gi	Ve	Sa Do
Spanish Español Spanisch Spagnolo Español Espanhol	S	Lu	Ma	Mi	Ju	Vi	Sa Do

Press [ZONE] to toggle among the 4 US time-zones: Pacific, Mountain, Central or Eastern.



## DISPLAYING AND SETTING THE ALARM



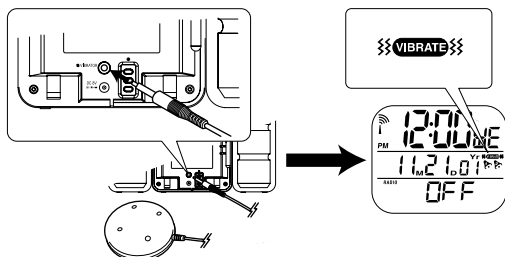
This unit is equipped with 2 daily alarms. To view the preset alarm time(s), press [ALARM] to toggle between ALARM 1 and ALARM 2 display modes.

To set the corresponding alarm time(s), follow the instructions below:

1. Press and hold [ALARM] for 2 seconds in ALARM 1 or ALARM 2 display mode. The display will enter the corresponding alarm setting mode and the hours will blink.
2. Enter the hour by using [VOLUME ▲] or [VOLUME ▼]. Press [ALARM] to confirm the entry.
3. The Minutes will then blink.
4. Enter the minutes by using [VOLUME ▲] or [VOLUME ▼]. Press [ALARM] to confirm the entry.
5. The beep alarm or radio alarm icon will blink.
6. Select the alarm-sounding mode by using [VOLUME ▲] or [VOLUME ▼].

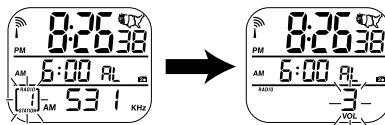
In Beep alarm mode, a 2-minute crescendo alarm will be turned on when the alarm time is up. In Radio alarm mode, when alarm time is up, the radio will be turned on and remained on for 2 hours until it is manually deactivated. In Vibrating Alarm mode, the Vibrating alarm will be turned on for 2 minutes when the alarm time is up. Press [ALARM] to confirm the entry.

Note: When the Vibrating alarm is connected to the unit, the Vibrating alarm mode will be automatically selected and the Vibration icon will light up.



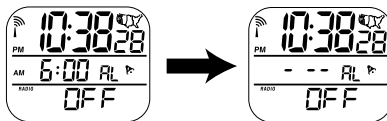
7. If Radio alarm mode is being chosen, the radio will be auto-

matically turned on and the Radio Station Number will flash. Select the radio station by using [STATION]. Please note that in this Radio Alarm mode, manual tuning cannot be used to set the station. Press [ALARM] to confirm the entry.



8. The Volume will then flash. Again, select the radio volume by using [VOLUME ▲] or [VOLUME ▼]. Press [ALARM] to confirm the entry and exit the setting mode. Press [POWER] to turn off the radio.
9. The respective Alarm settings will be updated once any value is changed in the above setting modes.

To enable/disable the alarm, press [ALARM ON/OFF] when the main unit is in such Alarm display mode



(ON)

(OFF)

When [SNOOZE] is pressed to stop the alarm sound (only when Beep Alarm or Vibration Alarm mode is selected), the unit will re-alarm again after 8 minutes. To disable the snooze function, press [ALARM] or [ALARM ON/OFF].

Please note that when Radio or Soothing Sounds is on while Beep Alarm goes off at the same time, the Radio/Soothing Sounds will be temporarily stopped until the Beep Alarm has been turned off.

## Section II — Digitally-tuned AM/FM Radio

### HOW TO USE THE RADIO

Before you start — All radio functions can only be operated when Radio is powered on.

To turn on the radio/ soothing sounds, press [POWER]. Press [RADIO/SOUND] to select Radio or Soothing Sounds function. If Radio is selected, the radio will be turned on at the last preset radio station and volume.



To change the radio frequency, press [AM/FM] to select the radio band. Then use [TUNING ▲] or [TUNING ▼] to locate the desired radio frequency. Press once and the value will advance by 1 step. Press and hold to enter the Radio Channel auto-search function.

To change the volume, use [VOLUME ▲] or [VOLUME ▼] to increase or decrease the volume.

To toggle among the programmed stations, press [STATION].

To turn off the radio, press [POWER] to do so or [RADIO/SOUND] to switch to Soothing Sounds function.

## AUTO-SEARCH FUNCTION

The unit is equipped with an Auto-Search function and can automatically search for the next clear channel. To activate this function, press and hold [TUNING ▲] or [TUNING ▼] for 2 seconds and automatically the value of the frequency will keep increasing or decreasing until a clear channel is found. Once this function is activated, you can release and stop pressing the button.

## HOW TO PROGRAM A PRESET STATION

This unit allows you to program up to 8 FM and 8 AM radio stations in the memory. To do so:

1. First press [AM/FM] to select the AM or FM frequency.
2. Select a station number by pressing [STATION].
3. Locate the desired radio frequency by using [TUNING ▲] or [TUNING ▼].
4. Press and hold [STATION] for 2 seconds to confirm and exit the setting mode.

## HOW TO USE THE SLEEP (AUTO-OFF) FUNCTION

With this Sleep function, the radio or the Soothing Sounds will be automatically switched off after a pre-set period of time.

1. To set the sleep function, press [SLEEP]. "120 MIN" will be displayed when the function is activated and SLEEP icon will flash.



2. Press [RADIO/SOUND] to choose radio or Soothing Sounds Function.
3. Press [SLEEP] again to select the period of time (15, 30, 60, 90 or 120 minutes).
4. Wait for about 5 seconds and the sleep function will be activated automatically.

## NOTE ON RADIO ALARM

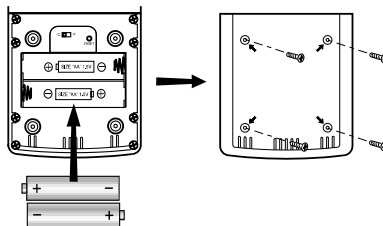
When the Radio Alarm is turned on, the Radio will be turned on for 2 hours. You can intervene by setting the time period for the Sleep function by pressing [SLEEP] or simply turn off the radio at any time.

## Section III — Indoor-Remote Thermometer with Weather Forecast

### DISPLAY OF INDOOR TEMPERATURE

Once batteries are installed into the main unit, it will start to detect the indoor temperature and the data will be displayed in the Indoor Temperature Window.

## REMOTE UNIT — BATTERY INSTALLATION AND SETTING UP



1. Place both units as close as possible to each other.
2. Remove the screws on the battery door of the remote unit.
3. Select the units of measurement for the temperature display on the °C/°F slide switch.
4. Install 2 batteries (UM-3 or "AA" size 1.5V) strictly according to the polarities shown.
5. Insert batteries or press the reset button of the main unit.
6. Replace the battery compartment door and secure its screws.
7. Position the remote sensor and main unit within effective transmission range, which in usual circumstances, is 80 meters or 240feet.

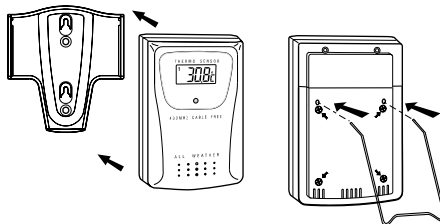
Though the sensor is weather resistant, and is meant for use outside, it should be placed away from direct sunlight, rain, or snow.

**Note:** The effective range may be limited by building materials and the position of either the main unit or remote sensors. Try various set-up arrangements for best result.

## WALL-MOUNTING OR TABLE STANDING

Wall-mount

Table Stand



## HOW TO CHECK REMOTE TEMPERATURE

Once batteries are installed into the remote Thermo Sensor, it will start to transmit temperature data at an approximately 40-second intervals. Such data transmission is indicated by the blinking LED on the remote Thermo Sensor. Upon successful reception of the remote thermo signals the data received will be automatically displayed and updated at a 40-second intervals on the Outdoor Temperature Window.

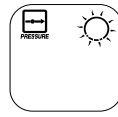


If no signals are received, blank “—” will be displayed. Press and hold **[SEARCH]** for 2 seconds to activate search for the remote thermo signal from the sensor.

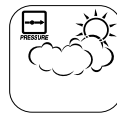
If that fails, check if the remote thermo sensor is still in place. Try repositioning the units as they may be having temperature transmission block as a result of interference.

Note: Failure of reception of remote signals may be due to the following reasons:

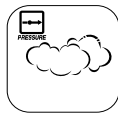
1. Battery power of the units is too low.  
Suggested Solution: Replace with fresh batteries if necessary.
2. Batteries may freeze when the temperature falls below the freezing point. Frozen batteries will have a lower voltage and therefore result in a shorter transmission range.  
Suggested Solution: Shorten the transmission range by repositioning the units.
3. Transmission path is blocked with obstacles and interference from the surroundings.  
Suggested Solution: Shorten the distance (e.g., move the main unit closer to the window) or relocate the units when necessary.



sunny



partly cloudy



cloudy



rainy



snow

## Section IV — Soothing Sounds

This unit is also featured with a Soothing Sounds function which can give out relaxing sounds continuously to mask the noise in the surroundings. There are 6 nature-simulating sounds which you can choose from: (1) Bird sounds, (2) Wind sounds, (3) River sounds, (4) Rain Drop sounds (5) Waterfall sounds and (6) Ocean Wave sounds.

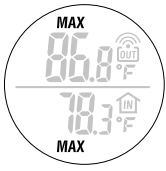
To turn on the Soothing Sounds, press **[POWER]**. Press **[RADIO/SOUND]** to select Soothing Sounds function. Press **[SELECT]** to toggle among the 6 different sounds. The respective LED will also light up to indicate the selected sound.

To adjust the volume, use **[VOLUME ▲]** or **[VOLUME ▼]** to increase or decrease the volume.

To turn off the Soothing Sounds, press **[POWER]** to do so or **[RADIO/SOUND]** to switch to Radio function.

## MAXIMUM AND MINIMUM TEMPERATURE

The maximum and minimum indoor-remote temperatures recorded will be automatically stored in memory. Press **[MEM]** to toggle among the current, maximum and minimum indoor and remote temperature records. The respective “MAX” or “MIN” indicator will be shown.



To clear the memory, press and hold **[MEM]** for 2 seconds when the maximum or minimum record is being displayed. The memory will be erased and replaced with current temperature until a new maximum or minimum reading has been recorded.

If the temperature readings recorded are lower or higher the measuring range, “LLL” or “HHH” will be displayed respectively.

## PRESSURE TREND

This unit gives a barometric pressure trend for the last hour.

Arrow Indicator			
Pressure Trend	Rising	Steady	Falling

## WEATHER FORECAST

BARM123A detects barometric pressure changes and displays weather symbols including sunny, partly cloudy, cloudy, rainy and snow that indicate weather forecasts for the next 12 to 24 hours. The radius of the forecast is approximately 30 – 50 km or 18-30 miles.

## Section VI — Others

### BACKLIGHT

To turn on the EL backlight of the LCD Display, press **[SNOOZE/LIGHT]** to turn it on for 5 seconds.

### HOW TO RESET THE UNIT

Press **[RESET]** only in the following circumstances:

1. To enhance synchronization of signals after battery replacement
2. To reset the settings when the unit is malfunctioning

When **[RESET]** is pressed, all settings will return to the default values and memory records will be erased.

### PRECAUTIONS

This unit is engineered to give you years of satisfactory service if handled with care.

1. Do not immerse the unit into water.
2. Do not clean the unit with abrasive or corrosive materials.
3. Do not subject the unit to snow or excessive force, shock, dust, temperature or humidity.
4. Do not tamper with the unit’s internal components.
5. Do not mix new and old batteries or batteries of different specifications.

To maintain good performances, do not use the units in places which are extremely hot, cold, dusty or humid. In particular, keep the units away from:

- High Humidity areas (e.g., bathroom)
- Extreme hot areas (e.g., near a heater)
- Areas exposed to direct sunlight

#### Note on Listening with the headphones

A headphone jack is provided so that you can listen to the radio or sound soother by plugging a headphone into the jack. Remember to listen at a moderate volume to avoid hearing damage.

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## SPECIFICATIONS

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### RADIO-CONTROLLED CALENDAR CLOCK

- Display format : 12- or 24-hour
- Calendar : Month/Date/Year or Date/Month/Year  
Day of Week in 5 languages:  
English/ French/ German/ Italian and Spanish
- Alarm : Dual daily alarm in the following modes:
- (i) Crescendo Beep Alarm with 8-minute Snooze function; or
  - (ii) Radio Alarm; or
  - (iii) Vibrating Alarm with 8-minute Snooze function

### DIGITAL RADIO

- AM band Frequency : 540 – 1710 kHz
- FM band Frequency : 88 – 108.0 MHz
- Station : 8 memories for AM/ 8 memories for FM

### TEMPERATURE MEASUREMENT

#### Main Unit

- Indoor Temperature Measuring Range : -5°C to +50°C  
(+23°F to +122°F)
- Temperature Resolution : 0.1°C (0.2°F)

#### Remote Unit

- Remote Temperature Measuring Range : -20°C to + 60°C  
(-4°F to +140°F)
- Temperature Resolution : 0.1°C (0.2°F)
- RF Transmission Frequency : 433 MHz
- Temperature Sensing Cycle : Approx. 40 seconds

### POWER

- Main Unit : 6 pcs of AA-sized or “UM-3”  
1.5 V batteries  
8 V AC Adapter
- Remote Thermo Unit : 2 pcs of AA-sized or “UM-3”  
1.5 V batteries

### WEIGHT

- Main Unit : 80.5 gm or 2.8 ounces  
(without battery)
- Remote Thermo Unit : 66 gm or 2.3 ounces  
(without battery)
- Vibrating Alarm : 122.5 gm or 4.3 ounces

### DIMENSIONS

- Main Unit : 235 x 68 x 140mm  
or 9.25"x2.67"x5.5"  
(LxWxT)
- Remote Thermo Unit : 70 x 21 x 105mm  
or 2.7"x.82"x4.1"  
(LxWxT)
- Vibrating Alarm : 88 x 92 mm or 3.46"x3.62"  
(Dia x T)

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## NOTE ON COMPLIANCE

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### FCC:

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Company Name: Oregon Scientific, Inc.  
Address: 19861 SW 95th Place, Tualatin, Oregon 97062, USA  
Telephone Number: (503)-639-8883  
Website address: [www.oregonscientific.com](http://www.oregonscientific.com)  
Name and model number of the product:  
Digital Clock Radio BARM123A

### CUSTOMER ASSISTANCE

Should you require assistance regarding this product and its operation, please contact our customer care department at 1-800-853-8883 or via email at [helpme@oscientific.com](mailto:helpme@oscientific.com).

### WARRANTY

This product is warranted to be free of manufacturing defects for a period of 3 months from date of retail purchase. Defective product should be directed to the place of retail purchase for exchange. Should this not be possible, contact our customer care department for assistance and a return material authorization. No returns may be made without a return authorization. Warranty exchanges require proof of date of purchase (purchase receipt showing date, place and product purchased).

This warranty does not cover product subjected to abuse, misuse, accidental damage or tampering.



**CAUTION**

- The content of this manual is subject to change without further notices
- Due to printing limitation the displays shown in the manual may differ from the actual display
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