

DIGITAL RF CLOCK RADIO

MODEL NO.: RRM-112A

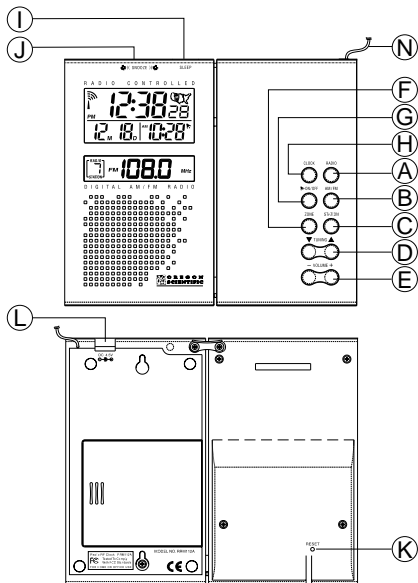
USER'S MANUAL

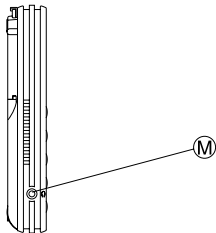
SECTION 1 INTRODUCTION

Congratulations on purchasing the RRM-112A Digital RF Clock Radio, the RRM-112A is a product with multiple features and functions including an ExactSet™ clock that automatically sets the time and date from signals broadcast by the US Atomic Clock, one of the world's most accurate timekeepers.

The RRM-112A also comes with a built-in radio with digital PLL(Phase Lock Loop) tuning, 4 U.S. zone-times selection, daily alarm with snooze function and *High* backlight.

CONTROL BUTTONS AND CONNECTORS





- A RADIO BUTTON**
Press to turn radio on and/or off.
- B AM/FM BUTTON**
Press to switch between AM and FM radio frequencies.
- C STATION BUTTON**
Press to switch among user programmed selected radio stations.
- D TUNING [▲] / [▼] BUTTONS**
Press [▲] or [▼] to scroll through radio station choices.
- E VOLUME [+] / [-] BUTTONS**
Adjusts the volume of the radio or change the value of a setting.
- F ZONE BUTTON**
Press to sequence through the 4 US time zones: Pacific, Mountain, Central and Eastern.
- G ON/OFF BUTTON**
Press to select Beep Alarm-On, Radio Alarm-On and Alarm-Off modes.
- H CLOCK BUTTON**
Press to switch between Clock with Seconds and Clock with Day of the Week display modes.

I SLEEP BUTTON

Press to select the radio auto-off feature for 15, 30, 46, 60, 90 or 120 minutes. Activates the sleep function of the radio.

J SNOOZE / LIGHT BUTTON

Activates the snooze function or turns on the backlight.

K PRESS BUTTON

Clears all user selected settings and returns to factory set defaults.

L POWER ADAPTER CONNECTOR

Connection jack for optional AC Power Adapter. AC Power Adapter is included.

M HEADSET CONNECTOR

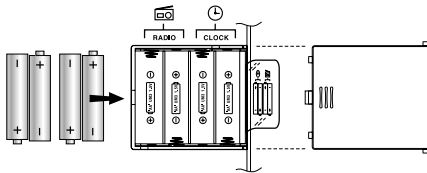
Connection jack for optional headset. Headset not included.

N ANTENNA

External antenna for radio.

POWER REQUIREMENTS

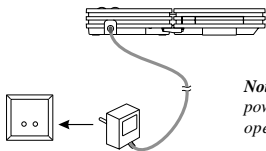
The RRM-112A operates on four AA-sized (UM3) batteries—two for clock operation and two for radio. To insert the batteries, follow the polarities shown inside the battery compartment and press [RESET].



The clock and radio have separate low-battery indicators. Change the batteries accordingly when the respective indicator lights up.



An AC Power Adapter is included. To connect it, plug it into the power adapter connector and a wall socket.



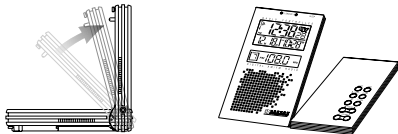
Note: The power adaptor supplies power only to the radio. The clock operates on batteries.

BEFORE YOU BEGIN

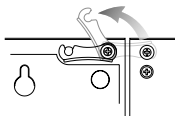
The RRM-112A is designed for table stand or wall mount.

Table Stand

Place the RRM-112A on a flat, sturdy surface. You can adjust the display angle of the LCD by lifting up the LCD panel.

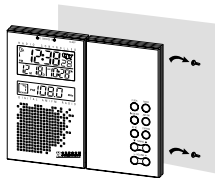


Note: Unlock the latch on the back of the unit before lifting up the LCD panel.

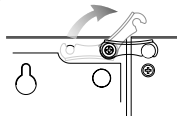


Wall Mount

A wall mounting guide is included. Place the mounting guide on the wall where the RRM-112A is to be hung. After making appropriate markings install two mounting screws onto the wall. Hang the RRM-112A on the mounting screws.



Note: For wall mounting the unit should be kept flat by locking the latch on the back of the unit.



THE BACKLIGHT

Press [SNOOZE/LIGHT] button to activate the backlight. The backlight will automatically turn itself off after 5 seconds.

SECTION 2 THE CALENDAR CLOCK

DISPLAY MODES

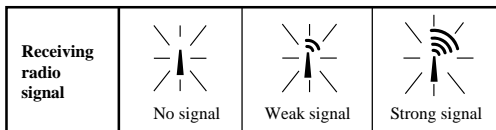
In normal display mode, Clock with Seconds will be displayed on the top line of the LCD. Press the [CLOCK] button to switch between the clock with seconds display and the day-of-the-week display.

Press the [▶ ON / OFF] button to sequence through Beep Alarm-On, Radio Alarm-On or to disengage the alarms.

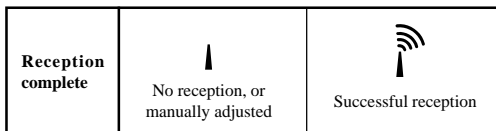
ABOUT RADIO RECEPTION

The ExactSet (TM) feature of the RRM-112A will automatically synchronize current time and date with the signal broadcast by the US Atomic Clock when the product is in reception range of the signal.

When the unit is receiving radio signal, the reception icon will start to blink. The reception icon will show either strong, weak or no signal depending on the strength of the radio signal. A complete reception generally takes about 2 to 5 minutes.




When the reception is completed the reception icon will stop blinking. The reception icon will show "▲" for no Reception or "▲" for successful reception.




For best signal reception, place the RRM-112A away from other equipment that emit RF or microwave signals such as TV's, radios, PCs or microwave ovens. Other causes for signal interference include electrical power transmission towers, steel reinforced concrete construction, and/or metal siding. Due to the density of other signal broadcasts, the strongest signals are received between midnight and 4 AM.

HOW TO ENABLE OR DISABLE AUTO-RECEPTION

To disable the automatic signal reception feature, hold down **[ZONE]** for 2 seconds. The [] will disappear and the RRM-112A will not receive signal from the US Atomic Clock.

Note: The radio needs to be off before disengaging the signal reception feature.

To activate the signal reception feature again, hold down the **[VOLUME +]** button for two seconds. The [] signal will start blinking to initiate reception automatically.

When the automatic reception feature is active, manual settings will be over-riden by next signal reception.

AND SELECT DAY-OF-THE-WEEK DISPLAY LANGUAGE

the automatic signal reception feaure is disengaged, the RRM-112A can be manually set and will operate as quartz clock. To manually set the RRM-112, the clock needs to be in normal time display mode.







1. Press **[CLOCK]** for two seconds and the hours digits will start flashing.
2. Enter the hours using the **VOLUME [+]** and **VOLUME [-]** buttons. Hold down either button to rapidly increase or decrease the value.
3. Press **[CLOCK]**. Minutes digits will flash.
4. Enter the minutes using the **VOLUME [+]** and **VOLUME [-]** button.
5. Press **[CLOCK]**.

6. Follow the same procedure to set the year, month, day and the display language (English, French and Spanish).

Press **[CLOCK]** to save the changes and exit. If changes are made after the minute adjustment, the seconds will reset and start from zero.



The unit will also save all changes and return to normal display automatically after the unit has been left idle for 1 minute.

HOW TO SET THE ALARM


1. Select between Beep-Alarm-On, Radio-Alarm-On and Alarm-Off mode by pressing the **[ ON / OFF]** button.
2. Press and hold **[ ON / OFF]** for two seconds. Hours digits will flash.
3. Use **VOLUME [+] / [-]** to enter the hours.
4. Press **[ ON / OFF]**. Minutes digits will flash.
5. Use **VOLUME [+] / [-]** to enter the minutes.
6. Press **[ ON / OFF]**.
7. If the Radio Alarm-On mode has been selected, press **[AM/FM]** to select the correct frequency and then **[STATION]** to select the radio station.
8. Press **[ ON / OFF]**.
9. Use **VOLUME [+] / [-]** to set the volume. Of the wake up radio.
10. Press **[ ON / OFF]** to exit.
11. In Beep Alarm-On mode, a 2-minute crescendo alarm will sound when alarm is active. In Radio Alarm-On mode, the radio will remain on for 2-hours before turning off automatically if not manually deactivate.

Note: Steps 7-10 will not operate if there is no battery for the radio.

HOW TO USE THE ALARM

Press the [ ON/OFF]. To activate or deactivate an alarm, when the alarm is not active the [] will not be displayed.

SNOOZE FUNCTION

When the snooze function is activated, the alarm will be muted temporarily and set off again after eight minutes. To disable the snooze function, press [ ON/OFF].



Note: The snooze function will only operate in Beep-Alarm mode. The snooze function will not operate in the Radio-Alarm mode.

SECTION 3 THE RADIO

HOW TO USE THE RADIO

To turn on the radio, press [**RADIO**]. The last selected radio frequency will be shown.

To change the frequency,

1. Press [**AM/FM**] to select AM or FM.
2. Use **TUNING** [] / [] to locate the desired frequency. Press once to advance 1 step, press and hold to auto search the next channel.

To change the volume, use **VOLUME** [+] / [-] .



To select a programmed channel, press [**STATION**]

To turn off the radio, press [**RADIO**].

AUTO SEARCH FUNCTION

The RRM112A is equipped with the Auto Search function; the unit will automatically search for the next clear channel.



To use the auto search function,

1. Press and hold **TUNING** [] / [] to activate the auto search function,
2. The frequency increases or decreases until a clear channel is found.

Note: User may release the key during the tuning process

HOW TO PROGRAM A CHANNEL

The unit allows you to program up to 8 FM and 8 AM radio stations. To do so,

1. Turn on the radio.
2. Press [**AM/FM**] to select AM or FM.
3. Select the desired station number using [**STATION**].
4. Use **TUNING** [] / [] to locate the desired frequency.
5. Press and hold [**STATION**] for two seconds to confirm.


HOW TO USE THE SLEEP (AUTO-OFF) FUNCTION


1. Turn on the radio.
2. Press [**SLEEP**] to activate the sleep function. "0 min" will be displayed when the function is deactivated.
3. Press [**SLEEP**] again to select the sleep time for the radio to switch off automatically. You can select 120, 90, 60, 30 or 15 minutes.

NOTE ON RADIO ALARM

When the radio alarm is set off, it will keep playing for two hours before turning itself off. You can intervene by resetting the time for the sleep function or simply turn off the radio at any time.

BATTERY INDICATION FOR RADIO

The [] icon indicates the battery level is low. The radio and radio alarm can still be activated for a while. However it is recommended to change the batteries for the radio.

The [] flashing icon indicates the battery has no power, neither the radio nor the radio alarm can be activated.

The user selected radio station will be stored in the memory as long as there are batteries in the unit (either for the clock or the radio).

SECTION 4 **ADDITIONAL INFORMATION**

THE RESET BUTTON

The [**RESET**] button is used to enhance synchronization of signals after battery replacement or if the unit is malfunctioning. Use a blunt stylus to hold down the button. All settings will return to their default values.

PRECAUTIONS

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

1. Do not immerse the unit in 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 performance

- Particularly, do not keep the unit near bathrooms, heaters, and areas exposed to direct sunlight (e.g. inside a parked car).-
- Keep cassette tapes, magnetic cards and other magnetic recorded materials away from the speaker as the recorded information may be erased or noise may occur on cassette tapes.

Note on listening with the headphones

- Listen at moderate volumes to avoid hearing damage.
- Do not wear headphones while driving or cycling, doing so may prevent you from hearing important information or traffic sounds.
- You should use extreme caution or temporarily discontinue use in potentially hazardous situations, such as walking, jogging, etc.
- Wear them properly; L is left, R is right.
- The headphones should be worn with the longer cord behind your neck.

SPECIFICATIONS

Clock

24-hr / 12-hr	: 12-hr hh : mm : ss
Calendar	: Month / Day day-of-week in one of 3 languages (E, F, Sp)
Alarm	: 2 minutes crescendo
Snooze	: 8 minutes

Radio

AM band frequency	: 530 ~ 1710 kHz
AM step frequency	: 10 kHz
FM band frequency	: 87.5 ~ 108 MHz
FM step frequency	: 0.1 MHz

Memory station	: 8 selections for AM 8 selections for FM
Battery type	: 2 UM-3 or “AA” 1.5V for Clock 2 UM-3 or “AA” 1.5V for Radio
Weight	: 286.8 gm 10.03 ounces
Dimension	: 132 x 158 x 23 mm (H x W x D) 5.28" x 6.32" x 0.92"

NOTE ON COMPLIANCE

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 needed.
- Consult the dealer of an experienced radio/TV technician for help.

CAUTION

- The content of this manual is subject to change without further notice.
- Due to printing limitation, the displays shown in this manual may differ from the actual display.
- The contents of this manual may not be reproduced without the permission of the manufacturer.

CUSTOMER ASSISTANCE

Should you require assistance regarding this product and its operation, please contact our customer care department at 800-853-8883 or via email at helpme@oscientific.com. Our customer care department is available 24-7-365.

WARRANTY

This product is warranted to be free of manufacturing defects for a period of 90-days from date of retail purchase. Defective product should be directed to the place of retail purchase for exchange. Should this not be possible, please contact our customer care department for assistance and a return material authorization. No returns may be made without a return material authorization. Please retain your retail receipt as you may be asked to provide a copy of the receipt for proof of purchase date.

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