RADIO-CONTROLLED PROJECTION CLOCK
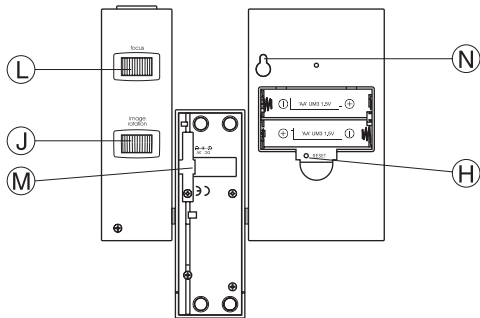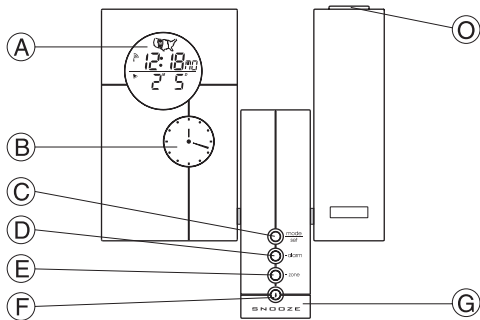
MODEL NO.: RM868PA

USER'S MANUAL

SECTION 1 INTRODUCTION

Congratulations on your purchasing the RM868PA Radio-controlled Projection Clock.

The Projection Clock is a compact, easy-to-handle device. It is designed to automatically synchronize its current time and date when brought within range of the U.S. Atomic Clock.

The Projection Clock also comes with features such as clock projection, multilingual day-of-the-week display, back-light, dual analog and digital displays of time and daily alarm with 8-minute snooze function.

1

DISPLAY BUTTONS

A DIGITAL CLOCK DISPLAY

B ANALOG CLOCK DISPLAY

CONTROL BUTTONS

C [MODE/SET] BUTTON

Changes the display mode or holds to enter the setting routine

D [ALARM] BUTTON

Sets the daily alarm function

E [ZONE] BUTTON

Selects among the 4 U.S. time-zones: Pacific, Mountains, Central or Eastern

F [▲] BUTTONS

Change the value of a setting

G [SNOOZE] BUTTON

Activates the snooze function or turns on the back-light and clock projection
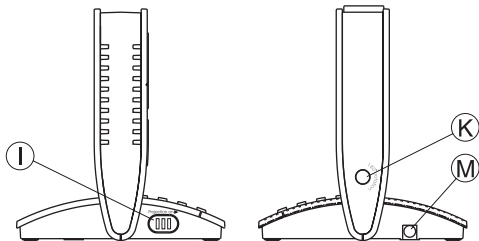
H [RESET] BUTTON

Returns all settings to default values

I [PROJECTION ON] BUTTON

Used with power adapter to enable continuous projection

J [○] [IMAGE ROTATION] KNOB

90º (left or right) image rotation

K [180º ROTATION] BUTTON

Flips the projected image horizontally

L [FOCUS] KNOB

Adjusts the focus of clock projection

M 3 V DC JACK

For AC power adapter installation

N WALL-MOUNT HOLE

O PROJECTOR

POWER
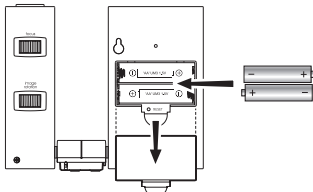
This unit can be operated by batteries or AC power alone as well as both together.
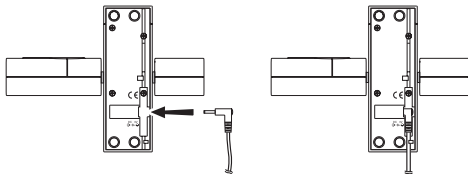
Battery Installation:

The unit uses two AA-sized (UM-3) 1.5V batteries which is installed in the factory for you. Please remove the plastic cover before usage. Should you need to change the battery,

2

1. Remove the battery compartment door.

2. Insert two AA-sized (UM-3) 1.5V batteries as shown.

3. Press **[RESET]** .

4. Replace the battery compartment door.

To install the adapter:

1. Insert adapter into jack at the bottom of the unit.

2. Plug the adapter into an electrical wall outlet.

Note: Make sure the voltage is correct.

When the power level of the installed batteries is low or when only AC adapter is connected, the low battery indicator [▱] will light up. In this case, replace or install with new batteries .

HOW TO ACTIVATE THE BACK-LIGHT

Press **[SNOOZE]** to turn on the back-light for 5 seconds.

HOW TO USE THE CLOCK PROJECTION

The clock projection makes it easier for you to read the Current time or Alarm time with alarm-on/off status at night. To use the feature,

1. Press **[SNOOZE]** to turn on the projection for 5 seconds. The current time with alarm-on/off status (**[▶]** on or off) will be projected onto the surface the lens is facing.

2. To change to view the preset alarm time with its on/off status, press **[SNOOZE]** when projection is already on.

Current Time &
Alarm-on/off Status

Alarm Time &
Alarm-on/off Status

3. Adjust the projected image as below.

Projector Features		
Feature	**Effect**	**Instructions**
Projector	Rotates the projection 180°	Tilt swivel projector to alter the direction of projection
FOCUS Knob	Focuses projection	Rotate to focus projection
[◇] IMAGE ROTATION knob	Rotates projection	Rotation of projection allows user to place clock in convenient position
180° ROTATION button	Horizontally flips the projection 180°	Flips an image to maintain an upright position

Note: Make sure the **[◀ PROJECTION ON]** *switch is switched to the back.*

HOW TO USE THE PROJECTOR WITH POWER ADAPTER

RM868PA comes with an AC power adapter. Use of the AC power adapter is required for continuous projection.

Once the power adapter is in place, you can select to turn on the projector for longer time (such as throughout the night) by sliding the **[◀ PROJECTION ON]** switch on. To turn off the projector, slide the switch back.

If you have press **[SNOOZE]** to change the projected image to Alarm time with its on/off status when projection is on, please note that the projected image will automatically after 10 seconds return to Current time with Alarm-on/off status.

Note that this switch can only be used with the power adapter installed. For momentary projection, use the **[SNOOZE]**.
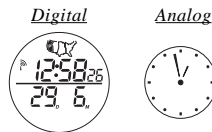
SECTION 2 THE CALENDAR CLOCK

DIGITAL & ANALOG DISPLAY MODES

Press **[MODE/SET]** to display the following in sequence:
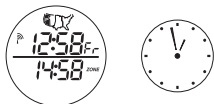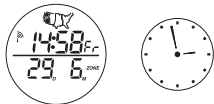
1) Current Time with Second

   Calendar

Digital   *Analog*

4

2) Current Time with Weekday

Calendar

3) Current Time with Weekday

2nd zone-time

4) 2nd zone-time with Weekday

2nd zone-time Calendar

To display the alarm clock and details, press **[ALARM]**. The daily alarm time will appear in the lower line of the digital display as well as the analog display.

ABOUT RADIO RECEPTION

When the unit is within range of its respective radio signals, its radio-control mechanism will override all manual settings unless radio reception is deactivated.

After battery installation, the unit will start to search for radio signal automatically. Auto-synchronization with the U.S. Atomic Clock can take up to 72 hours . When it is receiving radio signal, the radio-reception icon will start to blink. A complete reception generally takes about 2 to 10 minutes, depending on the strength of the radio signal. After that, the periodical scanning will only take a few seconds.

The antenna icon indicates the quality of reception.

🔊	STRONG
📶	WEAK
▌	NO RECEPTION
⟩▌⟨	RECEIVING

When the reception is complete, the radio-reception icon will appear as [⟩▌⟨] and the received radio-controlled time will be displayed accordingly.

Interference

Reception can be affected by a number of factors. For best reception, place the device away from metal objects and electrical appliances.

Note: Interference from sources such as television sets can affect the signal. It is unlikely that you will want or need to manually set the Projection Alarm Clock. Should the need or desire to manually set the clock arise, please see section: How To Set The Clock & Calendar Manually .
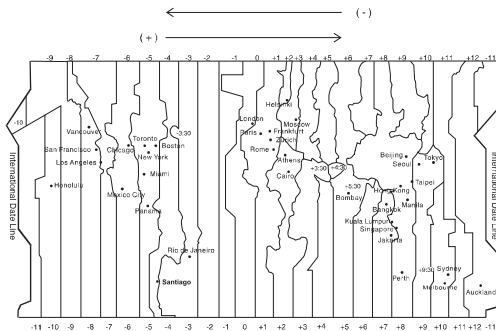
5

HOW TO ENABLE OR DISABLE AUTO-RECEPTION

If you wish to disable the auto-reception of radio signal feature while the unit is within range, press and hold **[ZONE]** button for 2 seconds. The radio-reception icon on the display screen will disappear and the unit will NOT respond to radio signals.

To enable the feature again, press and hold **[▲]** for 2 seconds. The radio-reception icon will be shown again and it will start blinking to initiate reception automatically.

HOW TO SET THE CLOCK & CALENDAR MANUALLY

1. Press and hold **[MODE/SET]** for 2 seconds.

2. Enter the 2nd time-zone offset hour using **[▲]** . You can select between + 23 and - 23 hours. Hold down the button to rapidly increase or decrease the value. Press **[MODE/SET]** .

3. Enter the clock format using **[▲]** . You can select 12-hour or 24-hour display.

4. Press **[MODE/SET]** .

5. Enter the hours using **[▲]** . The hand of hour on the analog display will be adjusted simultaneously.

6. Press **[MODE/SET]** .

7. Enter the minutes using **[▲]** . The hand of minutes on the analog display will be adjusted simultaneously.

8. Press **[MODE/SET]** .

9. Follow the same pattern to set the year, date format (month-day or day-month), month, day, and display language (English [E], German [D], French [F], Italian [I] or Spanish [S]) for day-of-the-week.

Language	Day-of-the-week						
	Monday	Tuesday	Wed.	Thursday	Friday	Saturday	Sunday
English E	Mo	Tu	WE	TH	Fr	SA	Su
German TU	Mo	Tu	Mi	Do	Fr	SA	So
French F	Lu	MA	ME	JE	VE	SA	TU
Italian I	Lu	MA	ME	Ci	VE	SA	Do
Spanish S	Lu	MA	Mi	Ju	VI	SA	Do

10. Press **[MODE/SET]** to save the changes and exit. If changes are made during the process, 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 a minute.

To display the 4 U.S. zone-times: Pacific (P), Mountain (M), Central (C) or Eastern (E), press the **[ZONE]** button.

ABOUT THE ALARM

This unit is equipped with a daily alarm function.

To set the alarm,

1. Press **[ALARM]** to change both the digital and analog display to the alarm-time display mode.

2. Press and hold **[ALARM]** for 2 seconds.

3. Use **[▲]** to enter the hours. The hand of hour on the analog display will be adjusted simultaneously.

4. Press **[ALARM]**.

5. Use **[▲]** to enter the minutes. The hand of minutes on the analog display will be adjusted simultaneously.

6. Press **[ALARM]**.

The alarm will be automatically activated. The **[▶]** icon will appear. To activate or deactivate the alarm, press **[▲]** when the alarm time is displayed.

HOW TO USE THE DAILY ALARM

An alarm will go off for 2 minutes in two-step crescendo patterns if undisturbed. The **[▶]** icon will flash, the back-light and the clock projection will be activated for 5 seconds. To mute the alarm, press any key. Pressing **[SNOOZE]** will activate the snooze function.

SNOOZE FUNCTION

When the snooze function is activated, the alarm will be muted temporarily and set off again after 8 minutes. To disable the snooze function, press **[ALARM]**.

SECTION 3
ADDITIONAL INFORMATION

THE RESET BUTTON

The **[RESET]** button is used to enhance synchronization of signals after battery replacement or when the unit is operating in an unfavorable way or malfunctioning. Use a blunt stylus to hold down the button. All settings will return to their default values.
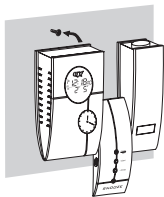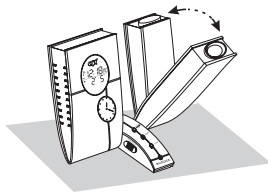
WALL-MOUNT OR TABLE-STANDING

This unit is designed specially so that you can adjust the angles of the different parts to facilitate table-standing or wall-mounting.

Wall-Mount   **Table-Stand**

NOTES ON BACKLIGHT

- The EL panel that provides illumination will lose power after extensive usage.

- The unit may emit an audible sound whenever the display is illuminated by the EL or HiGlo backlight. This is due to vibration of the EL panel used for illumination and does not indicate malfunction of the unit.

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.

SPECIFICATIONS

Radio Control	:	Auto Synchronization of current time and date
Calendar	:	Day-of-Week in English / German / Franch / Italian / Spanish
		Month / Day or Day / Month format
Clock Time	:	12 / 24-hour format
Accuracy	:	+/- 0.5 second / day (when RF is disabled)
Alarm	:	2-minute crescendo alarm with 8-minute snooze function
Power	:	2 pcs of UM-3 or AA-size batteries
Power Adapter	:	3V DC
Weight	:	200 g (7.05 ounces) (without battery)
Dimensions (mm)	:	135 x 152 x 26 mm
		(5.31 x 5.98 x 1.02 inches) (H x W x D)

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.

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, contact our customer care department for assistance and a return material authorization. No returns may be made without a return authorization. Please retain your retail receipt as you may be asked to provide a copy of it for proof of date purchased.

This warranty does not cover product subjected to abuse, misuse, accidental damage or tampering. Upon return of the defective product, Oregon Scientific will at its discretion, replace the product with either a new or a tested reconditioned product. Should the product be out of warranty, the consumer may purchase directly from Oregon Scientific a replacement at reasonable cost plus shipping and handling.