RADIO CONTROLLED
PROJECTION CLOCK
WITH DIGITAL THERMOMETER

MODEL: RM328PA

Instruction Manual

INTRODUCTION

Congratulations on your purchase of the RF Projection Clock with Temperature Display RM328PA.

The RM328PA is a multifunction (RF) controlled clock. It can automatically synchronize its current time and date when brought within the radio signal WWVB generated from the US.

To facilitate nighttime reading, the unit comes with a projector that can cast large, clear clock-time figures onto flat surfaces in dark. It also has a back light for easy reading of the display.

Other features of the RM328PA include: displaying the current indoor temperature, a current date display, daily crescendo alarm with eight-minute snooze function and extra-large display.
A Two-line LCD  
Displays the time, date, alarm status and temperature

B [  ] Battery-Low icon  
Lights up when batteries are running dry

C [  ] Radio-Reception Signal  
Indicates the condition of radio reception

D [  ] Alarm-on icon  
Appears when the alarm is activated

E [  ] Alarm icon  
Appears when the alarm time is displayed

F CLOCK button  
Toggles the calendar clock display modes or activates the calendar clock setting mode

G UP [ ] and DOWN [ ] buttons  
Increases or decreases the value of a setting

H ALARM button  
Displays the alarm time or sets the alarm status

I ZONE button  
Toggles among the 4 US time-zones: Pacific, Mountain, Central or Eastern

J [ ] (SNOoze) button  
Activates the snooze function when an alarm activates or turn on the back light for five seconds

K Projection Lens  
Lens from which image light emits

L Adjustable Projector  
For projecting the current time on the wall or ceiling

M [ ] IMAGE ROTATION knob  
90° (left or right) image rotation

N FOCUS Knob  
Adjusts the focus of the projection

O 180° ROTATION button  
Horizontal flip rotation of image

P PROJECTION LIGHT ON - switch  
Used with the power adapter to enable continuous projection

Q Battery compartment  
Accommodates two UM-3 or “AA” size alkaline batteries

R RESET button  
Resets the unit by returning all settings to their default values

BATTERY INSTALLATION

The unit uses two (2) UM-3 or “AA” size 1.5V alkaline batteries.

To insert batteries:
1. Press the door tab and click open the door.
2. Insert the batteries strictly according to the polarities shown therein.
3. Replace the battery compartment door.

Replace the unit with new batteries when the low battery indicator [ ] light up.
**Note:** Under normal circumstances, the batteries are good for 1 year. However, the battery life can be reduced vastly by frequent use of the back light, projector or snooze function.

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

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**HOW TO USE THE PROJECTOR**

The projector projects the current time onto a wall or ceiling.

To project the time onto a flat surface:

In a darkened room, press [ ☯ (SnOoze) ] the wall projection will activate for approximately 5-seconds.

This unit has several features to enhance the clarity of the projected image.

<table>
<thead>
<tr>
<th>Projector Features</th>
<th>Effect</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjustable Projector</strong></td>
<td>Rotates 180° to cast an image onto any wall</td>
<td>Adjust by turning forwards or backwards, the projector so that the projection lens is pointed in the appropriate direction</td>
</tr>
<tr>
<td><strong>FOCUS Knob</strong></td>
<td>Focuses image</td>
<td>Rotate knob forwards or backwards until the image clarity is optimized</td>
</tr>
<tr>
<td><strong>[ ☯ ]  IMAGE ROTATION knob</strong></td>
<td>Rotates image on a given surface to maintain an upright position</td>
<td>Turns an image to maintain an upright position</td>
</tr>
<tr>
<td><strong>180°  ROTATION button</strong></td>
<td>Horizontally flips an image on a given surface to maintain an upright position</td>
<td>Flips an image to maintain an upright position</td>
</tr>
</tbody>
</table>

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**HOW TO USE THE PROJECTOR POWER ADAPTER**

Your unit comes with a power adapter so you can use the projector for extended periods of time.
To install the adapter:
1. Insert adapter into jack at the bottom of the unit.
2. Plug the adapter into the adapter socket.

Note: Making sure the voltage is correct, plug the other end of the power adapter into a free wall socket.

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

Note that this switch can only be used with the power adapter installed. For momentary projection, use the [SNOOZE] switch.

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**HOW TO USE THE BACKLIGHT**

Press [SNOOZE] once. The back light will activate for five seconds. The projection will also be on for five seconds.

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**ABOUT RADIO RECEPTION**

The RM328PA is a radio frequency (RF) controlled clock. The clock time will automatically synchronize with WWVB-60 time-signal transmission from the US when put within range. The benefit of a RF controlled clock is that highly-accurate time is maintained and manual adjustments to the time and date are not required.

When the batteries are first installed, the RM328PA will automatically search for a radio signal.

When in search mode, the antenna icon will blink. This process takes between two (2) and ten (10) minutes. After initial search, short periodic reception-signal scans will commence several times a day.

The antenna icon indicates the quality of reception.

<table>
<thead>
<tr>
<th>Antenna Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Unit has received radio signal.</td>
<td></td>
</tr>
<tr>
<td>- Clock is searching for radio signal but not yet received. It is recommended that you reposition or rotate the antenna.</td>
<td></td>
</tr>
<tr>
<td>- The display time has been manually set and is not synchronized to the RF signal.</td>
<td></td>
</tr>
<tr>
<td>- When the antenna symbol blinks, a reception is going on. A full reception takes approx. 2 to 10 minutes, depending on the quality of the signal received. The hourly scanning may take a few seconds only.</td>
<td></td>
</tr>
</tbody>
</table>
When the reception is complete, the radio-reception signal will stop blinking.

**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 TV sets can affect the signal. If, after batteries have been inserted for ten minutes, the signal is not received, then set the time manually (see section: How To Set The Calendar Clock Manually).

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### “SECONDS” AND “WEEKDAY” DISPLAY

The “seconds” and the “weekday” share the same section of the display.

<table>
<thead>
<tr>
<th>Language</th>
<th>Day-of-the-week</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>E Mo Tu We Th Fr Sa Su</td>
</tr>
<tr>
<td>Spanish</td>
<td>S Lu Ma Mi Ju Vi Sa Do</td>
</tr>
<tr>
<td>French</td>
<td>F Lu Ma Me Je Ve Sa Di</td>
</tr>
</tbody>
</table>

To change the “seconds” display to the “weekday” display:
- When the “seconds” are displayed, press **CLOCK** once.

To change the “weekday” display to the “seconds” display:
- When the weekday is displayed, press **CLOCK** once.

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### CALENDAR AND ALARM TIME DISPLAY

The calendar and the alarm-time share the same section of the display.

The calendar is displayed in a month-day format.
To change the calendar display to the alarm-time display:
- When the calendar is displayed, press ALARM once.

To change the alarm-time display to the calendar display:
- When the alarm time is displayed, press CLOCK once.

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**HOW TO SET THE CALENDAR CLOCK MANUALLY**

If the RM328PA is taken outside of the range of US WWVB radio signal it will need to be manually set.

To manually set the clock:
1. When the calendar is displayed, press CLOCK for two seconds. The hour value will start to blink.
2. Enter the month using the [ ▲ ] and [ ▼ ] buttons. Hold down either button to rapidly increase or decrease the value.
3. Press CLOCK to confirm and proceed to set the minute, year, month, day and display language.
4. For the display language, you can choose between (E) for English, (F) for French and (S) for Spanish (see language chart above).
5. When finished, press CLOCK to return to normal display. If changes are made during the process, the seconds will reset and start from zero.

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**HOW TO SET AND ACTIVATE THE ALARM**

To set the alarm time:
1. Press and hold ALARM for two seconds when the alarm time is displayed.
2. Enter the value for the hour digits. Press ALARM to confirm and go to the minute digits. Enter the value and press ALARM to confirm.
3. The alarm is automatically activated. To deactivate it, press ALARM once.

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**ALARM AND SNOOZE FUNCTION**

When the alarm is set, it will activate at the set time. The back light will go on for five seconds with the alarm-on icon [ ] flashing. The crescendo function allows the alarm to start gently and step up its intensity in three steps. Without interruption, the alarm will activate for a minute.
To stop the alarm, press any key. If the [ Snooze ] button is pressed, the snooze function will be triggered. The alarm will stop for eight minutes before activating again.

**INDOOR TEMPERATURE**

The temperature is shown in Fahrenheit (°F). The RM328PA is capable of measuring temperatures within the 23°F and 122°F range. If the temperature goes above or below that, the display will show “HHH” or “LLL”.

**HOW TO RESET THE UNIT**

The **RESET** button allows you to return all settings to its factory values.

The button is required only when the unit is not operating in a favorable way, such as in the rare case of a malfunction.

**MAINTENANCE**

When handled properly, this unit is engineered to give you years of satisfactory service. Here are a few product care instructions:

1. Do not immerse the unit in water. If the unit comes in contact with water, dry it immediately with a soft lint-free cloth.
2. Do not clean the unit with abrasive or corrosive materials. Abrasive cleaning agents may scratch the plastic parts and corrode the electronic circuit.
3. Do not subject the unit to excessive: force, shock, dust, temperature, or humidity. Such treatment may result in malfunction, a shorter electronic life span, damaged batteries, or distorted parts.
4. Do not tamper with the unit’s internal components. Doing so will terminate the unit’s warranty and may cause damage. The unit contains no user-serviceable parts.
5. Only use new batteries as specified in this instruction manual. Do not mix new and old batteries as the old batteries may leak.
6. Read this instruction manual thoroughly before operating the unit.

**SPECIFICATIONS**

- **Operating Temperature**: 41°F to 122°F
- **Clock Functions**
  - **Radio Control**: Auto synchronize current time and date by Radio signal generated from WWVB for US
  - **Calendar**: Weekday in English / French / Spanish
  - **Current month / date format**
  - **Clock Time**: 12-hour format
  - **Alarm Duration**: 1 minute crescendo
  - **Snooze**: 8 minutes
  - **Accuracy**: +/-0.5 second/day (when RF is disabled)
Temperature Measurement
Indoor Measurement : 23°F to 122°F
Temperature Resolution : 0.1°F

General Specification
Battery Type : Two (2) UM-3 or “AA” size
               Alkaline 1.5V battery
Unit Dimension : 116 x 150 x 42 mm (H x W x D)
Unit Weight : 240g (without battery)

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.