Congratulations on your purchase of the first auto-setting always-accurate alarm clock! We want you to be very happy with this product, but please remember this is a radio wave device and not an perfect science. There are certain areas of the Eastern United States (see map) where urban interference or signals from United Kingdom's radio control tower may distort or delay the time setting signal. Even though those areas may have more difficultly receiving a signal, the Radio Controlled Clock contains a very accurate quartz movement and will maintain a precise time even if the radio signal is missed on occasion.

**MODEL: RM116E**

**RADIO CONTROLLED CLOCK**

**WITH HiGlo BACKLIGHT**

Please also don't hesitate to call for email helpme@oregonscientific.com if you have any question about setting up and/or using your new Radio Controlled Clock. In the meantime, all of us at Oregon Scientific hope you enjoy this revolutionary advance in time keeping technology.

### Features

- Automatic setting of clock by radio signal from the US atomic clock
- Time display with Hour, Minutes, Seconds and Date
- Day of the week displayed in one of three languages (English, French or Spanish)
- Blue HiGlo™ electroluminescent backlight
- Alarm with eight-minute snooze
- Crescendo Alarm increases in volume and intensity
- Signal Reception Strength indicator
- U.S. Map icon shows your selected time zone
- Automatic adjustment for Daylight Savings time
- Low Battery indicator

### Description of Function keys (Figure A)

**Snooze/Light** (Figure A)

Pressing the button on the top of The RM116E activates the HiGlo™ electroluminescent backlight for 5 seconds. When the alarm sounds, pressing this Snooze/Light but also activates the eight-minute snooze function.

**D - Up Arrow keys (Figure A.2)**

This key is used for manually setting the time, alarm time or calendar functions. Please refer to the Manual Setting instructions in these instructions for further information.

**NOTE:** Pressing once advance the setting by increments of 1: holding the ▲ button down for more the three seconds will accelerate the setting to rapid advance mode.

**WARNING:** The ▲ key also is used to reactivate the signal reception process should it become disabled. Please use the Troubleshooting section for further information.

**ZONE** (Figure A.3)

**CAUTION:** Do not press and hold the Zone button for more than three seconds.

Press and release the ZONE button to advance the time zone one step. If you press and hold the ZONE button, it will deactivate the automatic time signal reception. (The tower icon will disappear.) To reactivate the time search, press and hold the + button for three seconds.

Press the ZONE button located on the back of the unit until the correct US time zone is indicated on the LCD panel by a darkened section of the US map in the lower right corner of the LCD panel.

To see the time in a different time zone

Press ZONE button located on the back of the unit move one zone at a time unit until the desired zone is indicated on the display panel. The correct time for that zone will automatically be displayed.

**ON / OFF** (Figure A.4)

This button turns the alarm function on and off. Touching the ON / OFF button one time will either turn on the alarm or off. Please refer to the Alarm Setting instructions for further information.

**NOTE:** When setting the alarm time, the alarm is automatically turned on. If the bell icon [ ] is visible, the alarm is “on”.

Touching the ON/OFF button one time will either turn on the Alarm function on or off.

If you want to stop the daily alarm while leaving the pre-set time for the following days ‘wake-up, press the ALARM button. Pressing the ON/OFF button to stop the wake up alarm deactivate the alarm function.

**MODE** (Figure A.5)

Press the MODE key once to switch between the display of either the Day of the Week or Seconds on the clock. RM116E will continue to display the selected function (Day or Seconds) until the MODE button is pressed again.

**IMPORTANT:** Holding the MODE key for more than three seconds turns on the manual mode for setting the time, date, year and language (English/French/Spanish). Please refer to this section for specific setting instructions.

### Signal Strength Indicator – Figure A.7

<table>
<thead>
<tr>
<th>Indicators on the Display</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Signal Strength Indicator" /></td>
<td>Your last signal reception was excellent and time synchronization with the US Atomic Clock has taken place.</td>
</tr>
<tr>
<td><img src="image" alt="Signal Strength Indicator" /></td>
<td>Your last signal reception was insufficient and it is recommended that you reposision or rotate the Antenna.</td>
</tr>
<tr>
<td><img src="image" alt="Signal Strength Indicator" /></td>
<td>The displayed time has been manually set and is not synchronized by the RF signal.</td>
</tr>
<tr>
<td>No indicator</td>
<td>Your radio reception is disabled and no signal reception will be initiated unless it is enabled again</td>
</tr>
</tbody>
</table>

### Time Display (Figure A.8)

The top line of the display shows the hours, minutes and seconds (AM/PM) of the clock. Pressing the MODE button once will switch the “Seconds” display to the Day of the Week. RM116E will continue to display the selected function (Day or Seconds) until the MODE button is pressed again.

### US MAP (Figure A.9)

This map represents the four optional time-zone setting. The darkened of filled zone block indicates the user selected time zone. NOTE: When RM116E is receiving a signal from the US Atomic Clock, outline of this map will flash.

### Month/Date (Figure A.10)

The second line of the display shows the Month and Date. Pressing the ALARM button once will switch the “month and date” to show the “alarm time.” The Alarm time is displayed in hours and minutes (AM/PM). NOTE: The RM116E will continue to display the selected function (Month/Date or Alarm Time) until the ALARM button is pressed again.

### Alarm

This ![ Alarm “ON’” Indicator (Figure A.11) ] icon indicates the second line of the display line of the display is showing Alarm Time.

### Battery Installation

Your RM116E is shipped with two AAA batteries. These batteries should last for approximately one year depending on the amount of your use of the HiGlo™ backlight. With convenience and practicality of this dramatic backlighting system comes somewhat shorter battery life.

To activate the unit you must FIRST REMOVE THE PROTECTIVE BATTERY TABS which keep the batteries fresh and ready for use during shipment. Simply slide the battery compartment door up and remove this cover to expose the batteries. Remove the two small plastic tabs and The RM116E is ready to receive a timekeeping signal.

Please do not become alarmed if the unit does not receive signal directly from the box. The unit will receive most dependable and interference free signal automatically between Midnight and 4 a.m. If you have any questions please give us a call at 800/855-8003 or reach us by email to helpme@oceanscientific.com.

### Radio Controlled Clock:

The RM116E 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 new and just out of the box, synchronization with the U.S. atomic clock can take up to 72 hours. The unit will receive the most dependable and interference free signal automatically between Midnight and 4 AM.

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 RM116E 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.

You may need to reposition the clock for maximum reception.

Radio Frequency appliances and radios, such as the Radio Controlled Alarm Clock, perform best when placed near a window.

After receiving the initial signal, updates are accomplished with greater ease. Even though there are areas that may have more difficulty in receiving a signal, the RM116E Alarm Clock contains very accurate quartz movement and will retain precise time even if a signal is missed on a rare occasion.

**SETTING THE ALARM**

1) Press and hold the ALARM button for at least three seconds. The "Hour" Segment of the alarm time will begin flashing.
2) While the "Hour" segment is flashing press the [D] button to set the desired hour time (please note the AM/PM designation).
3) When the desired hour time is reached, press the ALARM button again.
4) The "Minute" segment of the alarm time will begin flashing.
5) While the "Minute" segment is flashing press the [D] button to set the desired minute time.
6) When the desired minute time is reached press the ALARM button again to exit the alarm time set mode.

**NOTE:** As soon as any change in the alarm time is made the alarm icon ( ) will automatically appear indicating that the alarm is activated.

**IMPORTANT:** RM116E will continue to display the "ALARM" time until the alarm button is pressed once to return to the "Month/Date" display.

**TURNING THE ALARM ON or OFF**

To turn the alarm on or off simply press the ON/OFF key in any mode. When the ON/OFF button is pressed once the alarm is activated (the bell icon ( ) will appear on the display). The alarm is deactivated when the SNOOZE/LIGHT key is pressed once and the bell icon ( ) disappears from the display.

When the crescendo alarm sounds, it may be turned off using one of the following methods.

- If the SNOOZE / LIGHT key is pressed within two minutes the Snooze is activated and the alarm will sound again in 8 minutes.
- If the ALARM key is pressed, the alarm will not sound again until the next day.
- If the ON/OFF key is pressed, the alarm is deactivated and will not sound again until it is activated.

**IMPORTANT:** If none of the above actions are taken, the alarm will automatically snooze once, sound again in 8 minutes, and will not sound again until the next day.

**MANUALLY SETTING THE TIME AND DATE**

**IMPORTANT:** It is highly unlikely that you should ever need or want to set these features manually; however, in the event that you should travel outside the United States and want this capability, we include these instructions. As soon as any manual setting changes are made, the display will indicate a loss of signal strength (see SIGNAL STRENGTH INDICATOR) to indicate that the clock is now running on manual settings instead of signals received from the Atomic Clock.

- Press and hold MODE button until the date segment of the time display flashes (E for English, F for French and S for Spanish).
- Press MODE button one more time to exit the set mode and resume normal time keeping.

**NOTE:** As soon as any change in the alarm time is made the alarm icon ( ) will automatically appear indicating that the alarm is activated.

**IMPORTANT:** RM116E will continue to display the "ALARM" time until the alarm button is pressed once to return to the "Month/Date" display.

**SETTING THE DATE**

Press and hold MODE button until the hour segment of the time display flashes.

- Press MODE button four more times until you see the date flash on the display.
- Press D button until the desired date appears on the display.
- Press MODE button two more times to exit the set mode and resume normal time keeping.

**NOTE:** As soon as any change in the alarm time is made the alarm icon ( ) will automatically appear indicating that the alarm is activated.

**TROUBLESHOOTING**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Display</td>
<td>• Check battery compartment.</td>
</tr>
<tr>
<td></td>
<td>• Confirm that batteries are</td>
</tr>
<tr>
<td></td>
<td>of good quality, and are</td>
</tr>
<tr>
<td></td>
<td>installed correctly.</td>
</tr>
<tr>
<td>Did not receive A time signal</td>
<td>• If the units are new and</td>
</tr>
<tr>
<td></td>
<td>just out of the box, allow</td>
</tr>
<tr>
<td></td>
<td>60-72 hours cycle for the</td>
</tr>
<tr>
<td></td>
<td>clock to automatically seek</td>
</tr>
<tr>
<td></td>
<td>a signal between midnight</td>
</tr>
<tr>
<td></td>
<td>and 4 a.m.</td>
</tr>
<tr>
<td></td>
<td>• May be caused by too much</td>
</tr>
<tr>
<td></td>
<td>interference.</td>
</tr>
<tr>
<td></td>
<td>• Relocate the clock or</td>
</tr>
<tr>
<td></td>
<td>antenna to position near a</td>
</tr>
<tr>
<td></td>
<td>window.</td>
</tr>
<tr>
<td></td>
<td>• Be certain the antenna is</td>
</tr>
<tr>
<td></td>
<td>fully extended and look for</td>
</tr>
<tr>
<td></td>
<td>low battery indicator.</td>
</tr>
<tr>
<td>Loss of Signal</td>
<td>• May be caused by interference.</td>
</tr>
<tr>
<td></td>
<td>• If the problem persists, do</td>
</tr>
<tr>
<td></td>
<td>not move the clock or</td>
</tr>
<tr>
<td></td>
<td>antenna to a new location.</td>
</tr>
<tr>
<td></td>
<td>The RM116E is equipped with</td>
</tr>
<tr>
<td></td>
<td>a high quality clock</td>
</tr>
<tr>
<td></td>
<td>mechanism, which measures</td>
</tr>
<tr>
<td></td>
<td>accuracy between signals.</td>
</tr>
<tr>
<td>Other Problems</td>
<td>• Call Oregon Scientific at</td>
</tr>
<tr>
<td></td>
<td>541-886-8205 or through the</td>
</tr>
<tr>
<td></td>
<td>Internet at <a href="mailto:helpme@oscientific.com">helpme@oscientific.com</a>.</td>
</tr>
</tbody>
</table>

**TECHNICAL DATA**

- Integrated radio receiver for reception of time signal 20kW transmitter WWVB at 60kHz
- Operating temperature: 55-120 °F
- Typical operating time on one battery set is up to one year, subject to back-light usage
- Setting time with interference-free reception: 3-7 minutes
- Automatic signal reception activation: six times every 24 hours
- 160x92x16mm (6.3×3.6×0.6 inches) backlighting source: Electroluminescence
- Battery type: 2AA(Included)

**CUSTOMER ASSISTANCE**

Should you require assistance regarding this product and its operation, please contact our customer care department at 541-886-8205 or via email at 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 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.