Heart Rate Monitor
MODEL: SE122

USER MANUAL

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INTRODUCTION

Thank you for selecting the Oregon Scientific™ Heart Rate Monitor (SE122). The SE122 is a very useful sports & fitness product that can help you achieve and maintain your optimum exercise zone by monitoring your heart rate while exercising. The SE122 bundles a heart rate transmitter and receiver watch complete with real-time clock, stopwatch, and backlight functions.

KNOW YOUR DATA

To help achieve the maximum health benefits from your workout program, it is important to know your:

- Maximum heart rate (MHR) training zone
- Upper heart rate limit
- Lower heart rate limit

MHR is expressed in beats per minute. You can get your MHR from a MHR test, or you can estimate it using the following formula:

\[ 220 - \text{age} = \text{MHR} \]

There are several training zones that are relevant to a fitness program. The most popular zone range is from 50% to 80% of your maximum heart rate. This is where you achieve cardiovascular benefits, burn fat, and become fitter. When programming your watch, the lower % of the zone you choose becomes your lower heart rate limit and the higher % becomes the upper heart rate limit.

<table>
<thead>
<tr>
<th>%</th>
<th>Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Moderate Activity</td>
</tr>
<tr>
<td>60</td>
<td>Weight Management</td>
</tr>
<tr>
<td>70</td>
<td>Aerobic Zone</td>
</tr>
<tr>
<td>80</td>
<td>Anaerobic Threshold Zone</td>
</tr>
<tr>
<td>90</td>
<td>Red Line Zone (max capacity)</td>
</tr>
<tr>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The upper and lower heart rate limits are calculated by multiplying your MHR by the percentages of the selected training zone.

For example:

A 40-year-old user training for basic health maintenance:

- His Upper Heart Rate Limit \([220 - 40(\text{age})]\) x 78%
- His Lower Heart Rate Limit \([220 - 40(\text{age})]\) x 65%

TRAINING ZONES

Always warm up before exercising and select the training zone that best suits your physique. Exercise regularly, 20 to 30 minutes per session, three to four times a week for a healthier cardiovascular system.
There are three training zones, as described below:

<table>
<thead>
<tr>
<th>TRAINING ZONE</th>
<th>MHR%</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Maintenance</td>
<td>65-78%</td>
<td>This is the lowest training intensity level. It is good for beginners and those who want to strengthen their cardiovascular systems.</td>
</tr>
<tr>
<td>Aerobic Exercise</td>
<td>65-85%</td>
<td>Increases strength and endurance. It works within the body’s oxygen intake capability, burns more calories and can be maintained for a long period of time.</td>
</tr>
<tr>
<td>Anaerobic Exercise</td>
<td>78-90%</td>
<td>Generates speed and power. It works at or above the body’s oxygen intake capability, builds muscle, and cannot be maintained for a long period of time.</td>
</tr>
</tbody>
</table>

**WARNING** Determining your individual training zone is a critical step in the process towards an efficient and safe training program. Please consult your doctor or health professional to help you determine your maximum heart rate, upper and lower limits, exercise frequency and duration appropriate for your age, condition and specific goals.

**RECEIVER / WRIST WATCH CONTROL BUTTONS**

1. **SET**: Change values in settings mode; turns the alarm ON/OFF in Alarm mode; reset stopwatch
2. **PM**: 12 hour clock
3. **kg lb**: Weight unit
4. Displays stopwatch / alarm / clock / heart rate / weight
and mode banners
5. 🌡️: Indicates battery power is low
6. 🔔: Indicates alarm in On
7. MODE: Toggle between modes; enter settings mode
8. ST/SP: Start / stop stopwatch
9. kcal: Calorie unit
10. 🕒: indicates a heart rate reading is detected
11. 🔴: Upper / Lower heart rate limits reached
12. 🔒: Indicates keypad is locked
13. ⏰: Indicates stopwatch is running
14. 🔌: Activate backlight; lock / unlock keypad
15. 🌡️ kcal: Display heart rate; activate high/low heart rate alert

THE TRANSMITTER

The transmitter is used to count your heartbeat and transmit the data to the receiver. To put it on:

1. Wet the conductive pads on the underside of the transmitter with water or a conductive gel to help establish a solid contact.

2. Strap the transmitter across the chest. Adjust the strap until the transmitter sits snugly below the pectoral muscles for an accurate heart rate signal.

HINTS
- The position of the transmitter affects its performance. Move the transmitter along the strap for the best transmission. Avoid areas with dense chest hair.
- In dry, cold climates, it takes the transmitter a while to function steadily. This is normal, as the conductive pads need a film of sweat to improve contact with the skin.

NOTE
To maintain the best performance of your chest belt, please handle it with care according to the following:
- Do not wrap the chest belt in a wet towel nor with other wet materials.
- Do not store the chest belt in a hot (about 50°C) and humid (about 90%) environment.
- Do not place or wash the chest belt under running water, instead clean it with a wet cloth.
- Do not place the conductive rubber face down on a metal table or surface.
- Properly dry the chest belt immediately after use.
THE RECEIVER

The receiver comes in the format of a wristwatch.

EFFECTIVE RANGE

The transmitter and receiver will start transmitting and receiving signals after the batteries are in place. When the battery is full, both units can be worn or mounted up to 76 cm (30 inches) apart.

If signals become unsteady:
- Shorten the distance between the transmitter and receiver.
- Re-adjust the position of the transmitter.
- Check the batteries. Replace them when necessary.

USE IN THE WATER

The SE122 wristwatch is water-resistant up to 50 meters (164 feet).

**OPERATION**

**THE BACKLIGHT**

Press ☀️ to turn backlight ON for 5 seconds.

**ACTIVATING KEYPAD LOCK**

To toggle keypad lock ON / OFF:

Press and hold ☐️ for 2 seconds. ⏰ indicates keypad is locked.

### TABLE

<table>
<thead>
<tr>
<th>RAIN SPLASHES ETC</th>
<th>SHOWERING (WARM/COOL WATER ONLY)</th>
<th>LIGHT SWIMMING/SURFING/SWALLOW WATER SPORTS</th>
<th>SNORKELING/DEEP WATER DIVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>NO</td>
</tr>
</tbody>
</table>

**NOTE** Set the unit before exposing it to excessive water. Pressing the keys while in the water or during heavy rainstorms may cause water to enter the unit.
OPERATING MODES

TIME

13:26:48

CHRONO (Stopwatch) ALARM

00:00:00 6:00:00

Press **MODE** to switch between:
- Time mode
- Alarm mode
- Chrono (Stopwatch) mode

HR / KCAL MODE

Press **❤ / KCAL** to enter HR Measurement mode. Press **MODE** to return to previous mode.

**NOTE** When no signals are received or the measurement is out of range for five minutes, the receiver will automatically return to the previous operating mode.

HEART RATE LIMITS

The heart rate limits help you determine if you are exercising within your training zone.
- If you go above your limits ▲ will flash
- If you go below your limits ▼ will flash

To set the heart rate limits:
1. Press **❤ / KCAL** to navigate to HR Measurement mode.
2. Press and hold **MODE** until ▼ appears.
3. Press **SET** to choose the lower limit, then press **MODE** to confirm.
4. Press **SET** to choose the upper limit ▲, then press **MODE** to confirm.

**NOTE** The upper limit must exceed the lower limit. The transmitter will adjust the ranges automatically according to the data entered. You can also activate the heart rate limit alert function, so the transmitter will emit a beeping sound when the limits are exceeded.
To activate the heart rate limits alarm:
1. Press ❤ / KCAL to Navigate to HR Measurement Mode.
2. Press and hold ❤ / KCAL.

<table>
<thead>
<tr>
<th>ICON</th>
<th>HIGH / LOW ALARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>❤ / KCAL</td>
<td>On</td>
</tr>
<tr>
<td>No Icon</td>
<td>Off</td>
</tr>
</tbody>
</table>

TIME AND DATE

To set the time and date:
1. Press MODE to navigate to Time mode.
2. Press and hold MODE to enter settings.
3. Press SET to increase / change values of the setting.
4. Press MODE to confirm.

The setting sequence is as follows: 12 / 24-hour time; hour; minute; day-month / month-day; month; day; day of the week.

**TIP** Press and hold SET to rapidly scroll through value settings.

To display the date:

Press SET in Time mode.

**NOTE** If no key is pressed for ten seconds, the display will return to Time mode.

To set the alarm:
1. Press MODE to navigate to Alarm mode.
2. Press and hold MODE to enter settings.
3. Press SET to increase / change values of the setting.
4. Press MODE to confirm.

The setting sequence is as follows: hour; minute.

To activate or deactivate the alarm:
1. Press MODE to navigate to Alarm mode.
2. Press SET to turn the alarm on or off. A 🕒 will indicate that the alarm has been activated.
NOTE: When the alarm clock is activated, it will sound at the set time every day. Press any button to stop the alarm for that day. The alarm clock is still active and will set off again the following day.

STOPWATCH

To use the stopwatch:
1. Press MODE to Navigate to Chrono (stopwatch) mode.
2. Press ST/SP to start the stopwatch.
3. Press ST/SP to stop the stopwatch.
4. Press and hold SET to reset.

NOTE: Unless you stop the stopwatch, will blink in all modes to remind you that the stopwatch is still timing.

USER DATA

To access the full benefits of this product, set up your user data before you exercise. This will automatically enable the watch to calculate the level of calories burned when exercising. This information helps you track your progress over time.

To set user data:
1. Press ❤ / KCAL to navigate to HR measurement mode.
2. Press and hold MODE to enter User Data mode.
3. Press SET to change values of the setting.
4. Press MODE to confirm.

The setting sequence is as follows: set Lower limit; set Upper limit; set Age; set Weight unit; set Weight.

NOTE: You must enter your user data to enable the calorie count function.

To view the amount of calories burnt:
• Press ❤ / KCAL to navigate to HR mode.
• Press ❤ / KCAL to view calories burnt.

NOTE: The calorie display will only appear for approximately 3 seconds.

ADDITIONAL INFORMATION

BATTERY

The SE122 uses a CR2032 lithium battery for the transmitter and a CR2032 for the receiver. Both are included with the unit. When the receiver battery is running low, the low battery indicator will light up on the watch display.
If the heart rate readings become erratic or stop, your transmitter battery may need replacing.

**To change the battery:**
1. Open the transmitter battery lid with a coin by turning it counterclockwise.
2. Insert a new CR2032, 3V lithium battery.
3. Replace the battery compartment door.

**NOTE** Take care not to touch the two contacts otherwise the battery can discharge. If you are unsure about the procedure consult your dealer.

**ENERGY SAVING FEATURE**
If the watch receives no transmitter signal after 5 minutes, the SE122 will switch back to the previous display mode.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real time clock</td>
<td>12/24 hour with hour / minute / second</td>
</tr>
<tr>
<td>Stopwatch</td>
<td>00:00:00 to 29:59:59 (hrs: min: sec)</td>
</tr>
<tr>
<td>Heart rate</td>
<td>30 - 240 bpm</td>
</tr>
<tr>
<td>Upper limit</td>
<td>80 - 240 bpm</td>
</tr>
<tr>
<td>Lower limit</td>
<td>30 - 220 bpm</td>
</tr>
<tr>
<td>Calorie range</td>
<td>0 - 9999 kcal</td>
</tr>
</tbody>
</table>
| Power              | Watch 1 x CR2032 3V battery
                  | Chest belt 1 x CR2032 3V battery            |
| Operating temp     | -10°C to +50°C (14°F to 122°F)              |
| Storage temp       | -20°C to +60°C (-4°F to 140°F)              |
| Water resistant    | Up to 50 meters (164 feet) without pressing keys |

**PRECAUTIONS**
- Do not subject the unit to excessive force, shock, dust, temperature or humidity.
- Do not cover the ventilation holes with any items such as newspapers, curtains etc.
- Do not immerse the unit in water. If you spill liquid over it, dry it immediately with a soft, lint-free cloth.
- Do not clean the unit with abrasive or corrosive materials.
- Do not tamper with the unit’s internal components. This invalidates the warranty.
- Only use fresh batteries. Do not mix new and old batteries.
- Images shown in this manual may differ from the actual display.
• When disposing of this product, ensure it is collected separately for special treatment and not as normal household waste.
• Placement of this product on certain types of wood may result in damage to its finish for which Oregon Scientific will not be responsible. Consult the furniture manufacturer’s care instructions for information.
• The contents of this manual may not be reproduced without the permission of the manufacturer.
• Do not dispose old batteries as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
• Please note that some units are equipped with a battery safety strip. Remove the strip from the battery compartment before first use.

**NOTE** The technical specifications for this product and the contents of the user manual are subject to change without notice.

**NOTE** Features and accessories will not be available in all countries. For more information, please contact your local retailer.

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ABOUT OREGON SCIENTIFIC

Visit our website ([www.oregonscientific.com](http://www.oregonscientific.com)) to learn more about Oregon Scientific products.

If you’re in the US and would like to contact our Customer Care department directly, please visit:

[www2.oregonscientific.com/service/support.asp](http://www2.oregonscientific.com/service/support.asp)

For international inquiries, please visit:

[www2.oregonscientific.com/about/international.asp](http://www2.oregonscientific.com/about/international.asp)

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EU-DECLARATION OF CONFORMITY

Hereby, Oregon Scientific, declares that this Heart Rate Monitor (model: SE122) is in compliance with EMC directive 2004/108/EC. A copy of the signed and dated Declaration of Conformity is available on request via our Oregon Scientific Customer Service.