

Zone Trainer 1.0
Heart Rate Monitor
Model: SE331

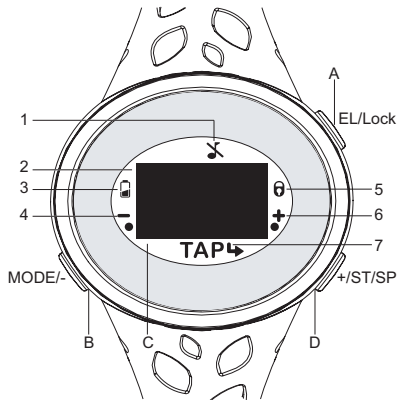
USER MANUAL

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CONTROL BUTTONS / LCD DISPLAY



1. : key tone deactivated
2. Time; heart rate measurements; mode banners; exercise time / data
3. : low battery indicator
4. : key press prompt (press **MODE/-**)
5. : keypad locked
6. : key press prompt (press **+/ST/SP**)
7. Key press prompt (Tap on lens): **TAP** enter sub setting mode; **TAP** confirm setting

- A. **EL/LOCK**: Activate backlight; lock / unlock keypad
B. **MODE/-**: toggle between / modes; exit current display and

return to previous screen; initiate search for HR signal; decrease value of the setting; toggle setting options

- C. **Tap on lens**: enter setting mode; confirm setting; toggle through displays
D. **+/ST/SP**: start / stop stopwatch; increase value of the setting; toggle setting options

STARTING YOUR WATCH (FIRST TIME)

Press all 3 buttons to activate watch for the first time. The watch will prompt you to set your user profile. (Go directly to 'Set user profile' section, step 4).

IMPORTANT

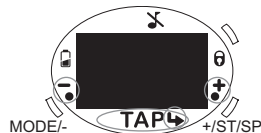
- To ensure accurate calculations with your exercise, you are strongly encouraged to set the watch and user profiles before exercising.
- Remember to set the profiles after every battery replacement or reset.

NOTE When the watch is left idle for 30 seconds during set up, it will automatically exit the setting mode and display the time.

NAVIGATING THROUGH THE OPTIONS

KEY PRESS PROMPTS

The watch has been designed with prompts to guide you through the settings and displays.











TAP ON LENS

The tap on lens feature allows you to toggle through real time fitness data while you are exercising; review stored data of an entire work-out session (memory mode) as well as navigate through the settings (setting mode).

To use the tap on lens: Simply tap on the lens.

MODES

There are 4 modes. Press **MODE/-** to toggle through the different modes.

MODE	BANNER	MAIN DISPLAY
Time (Default display)		
Exercise		
Memory		
Set up		

SET USER PROFILE

When prompted to set user profile after starting the watch for the first time, the screen below will be shown. Go directly to step 4.



For normal setting procedure:

1. Press **MODE/-** repeatedly to select "SET", "TIME" will be displayed shortly after.
2. Press **+/ST/SP** repeatedly to navigate to "USER".
3. **Tap on lens** to enter user profile setting options.
4. Set user profile according to the following order: gender, age, weight unit, weight, height unit, height, fitness level, by pressing the following buttons:
 - **+/ST/SP** to increase value or toggle options
 - **MODE/-** to decrease value or toggle options
 - **Tap on lens** to confirm

"DONE" indicates user profile setting has been completed. This is only shown when setting the watch for the first time or after battery reset.

FITNESS LEVEL

The fitness level is based on your own self-assessment of how fit you are (depending on the amount of exercise you regularly perform).

FITNESS LEVEL	DESCRIPTION
BEG	Beginner – You do not usually participate in programmed recreation sports or exercise.
INT	Intermediate – You are engaged in modest physical activity (such as golfing, horseback riding, table tennis, calisthenics, bowling, weight lifting or gymnastics) 2-3 times a week, totaling 1 hour per week.
ATH	Athlete – You actively and regularly participate in heavy physical exercise (such as running, jogging, swimming, cycling, or skipping rope) or engage in vigorous aerobic exercise (such as tennis, basketball or handball).

NOTE You must enter the fitness level to calculate the calories burnt.

TIP The watch generates calculations based on the inputted data to show the calories / fat burnt and the period exercised at the chosen intensity (target HR zone range) to help you track your progress over time. As you progress, update weight and fitness level to help the watch give you an up-to-date reflection of your physical condition.

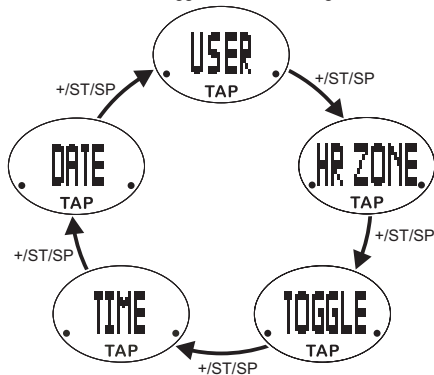
SETTING MODE

After setting your user profile, the "USER" screen below will be shown. You can continue with the other settings by pressing **+ / ST / SP** repeatedly (see step 2 below).

However, if the user profile was set for the first time or after

battery reset, the watch will automatically return to the default time display. Start with step 1.

1. Press **MODE/-** repeatedly to select "SET", "TIME" will be displayed shortly after.
2. Press **+ / ST / SP** to toggle between settings.



3. **Tap on lens** to enter into individual setting.
4. Start setting the selected option by pressing the following buttons:
 - **+ / ST / SP** to increase value or toggle options
 - **MODE/-** to decrease value or toggle options
 - **Tap on lens** to confirm
5. Repeat steps 2-4 for all settings.

Settings	Setting options (Press +/ST/SP or MODE/- and Tap to confirm)
TIME	Hour format Hour / minute
DATE	Display format (day-month or month-day) Year Month Day
USER	Gender Age Weight unit Weight Height unit Height Activity level
HR ZONE	On / Off HR Zone range*
TOGGLE	On/Off (Enable display to auto toggle during exercise)

* For further details please refer to the “Understanding Heart Rate” section in this manual.

WEARING THE CHEST BELT

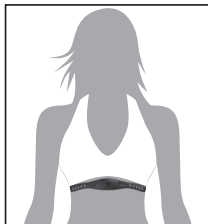
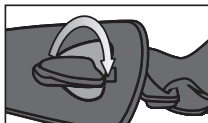
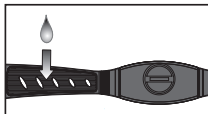
If you only wish to use the stopwatch function (and not record any fitness data), skip to ‘Start exercising’ section.

Chest belt

The chest belt counts your heartbeat and transmits this data to the watch.

1. Wet the conductive pads on the underside of the chest belt with a few drops of water or conductive gel to ensure solid contact.
2. Holding the elastic strap, thread the plastic tab through the eyelet of the chest belt unit. Turn it slightly and snap into place.
3. Place the heart rate chest belt slightly below your chest and wrap the strap around your chest. Pass the other tab through the remaining eyelet and snap into place.

To ensure an accurate heart rate signal, adjust the strap until the belt sits snugly below your pectoral muscles.



TIPS

- The position of the chest belt affects its performance.
- In dry, cold climates, it may take several minutes for the chest belt to function steadily. This is normal and should improve with several minutes of exercise.

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.

TRANSMISSION SIGNAL

The heart rate chest belt and watch have a maximum transmission range of about 62.5 centimeters. They are equipped with the latest digital coding system to reduce signal interference from the environment, as well as analog technology.

Search for heart rate signal:

- Press **MODE/-** to select “EXE”, “HR BELT” will be displayed shortly after to indicate system is searching for chest belt signal.

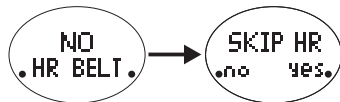
NOTE Whenever the watch is searching for the chest belt signal (manual or automatic search), make sure that the chest belt is no further than 10 cm from the watch.

Your watch will advise you which system it is using and the signal status by displaying the following icons:

Icon	Description	
	Searching for a signal (Press +/ST/SP to skip search and only use stopwatch function)	
		A signal has been found and the digital system is being used
		A signal has been found and the analog system is being used
		No signal has been found

Signal unsuccessful?

The signal search will take approximately 30 seconds. If after 30 seconds the “NO HR BELT” is displayed, then your signal search has been unsuccessful. You can either:



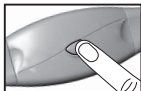
1. Press **+ST/SP** and proceed to use the watch as a stopwatch (without exercise recording function); or
2. Press **MODE/-** to force another signal search.

Analog or Digital?

The digital signal is less susceptible to signal interference and is suitable in crowded areas or where there are other monitors / equipment. You should only switch to the analog transmission signal if the situation in point 2 occurs (see 'Encountering difficulties?' below).


To switch from digital to analog or analog to digital system:


1. Press the chest belt button for more than 6 seconds.
2. Press and hold **MODE/-** on the watch to force a signal search.



Encountering difficulties?

In the event that you experience a weak signal or your signal is disrupted by interference in the environment, follow the instructions below to identify and resolve the situation.

1. The signal is weak - the watch may only show "--":
 - Shorten the distance between the heart rate chest belt and watch.
 - Re-adjust the position of the heart rate chest belt.
 - Check the conductive pads are moist enough to ensure solid contact.
 - Check the batteries. If they are low or exhausted, the transmission range may be shortened.
 - Press and hold **MODE/-** to force a signal search.
2. The gym equipment does not seem to work with your chest belt and the digital icon  is displayed:

- Most gym equipment is compatible with the analog system . Press and hold the chest belt button for more than 6 seconds to change from digital to analog. Then press and hold **MODE/-** to force a signal search.
3. Interference from another person's heart rate monitor - their heart rate readings appear on your watch, or the readings may fluctuate:
 - Force another signal search by pressing the chest belt button then press and hold **MODE/-** on the watch. Do not press and hold the chest belt button, as it will change the transmission signal from digital to analog.
 4. The signal is jammed - "NO HR BELT" appears on the display after several tries:
 - There is too much interference in the environment for your heart rate monitor to function. Move to an area where the watch can register your heart rate reading.

WARNING Signal interference in the environment can be caused by electromagnetic disturbances. These may occur near high voltage power lines, traffic lights, overhead lines of electric railways, electric bus lines or trams, televisions, car motors, bike computers, some motor driven exercise equipment, cellular phones or when you walk through electric security gates. Under interference, the heart rate reading may become unstable and inaccurate.

START EXERCISING

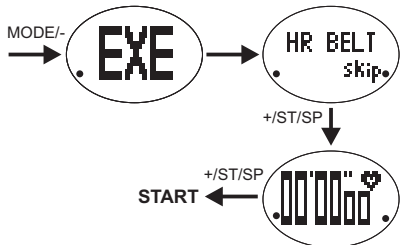
If you wish to receive comprehensive calculations (such as your heart rate and the calories / fat burnt) for an exercise session, before you start, allow the watch a few seconds to search for chest belt first. For detailed information or

if encountering difficulties, refer to “Transmission signal” section above.

START TAKING MEASUREMENTS

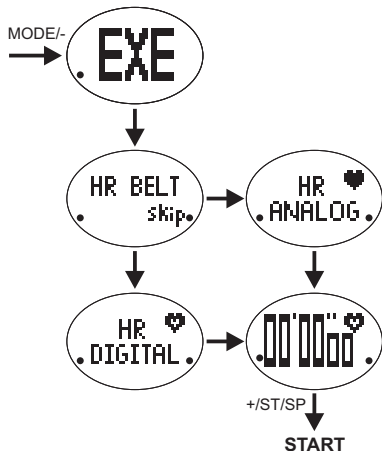
If using only the stopwatch function:

1. Press **MODE/-** to select “EXE”, “HR BELT” will be displayed shortly after to indicate system is searching for chest belt signal.
2. Press **+ /ST/SP** twice to skip heart rate signal search and start stopwatch.



If using chest belt to receive and record fitness data:

1. Press **MODE/-** to select “EXE”, “HR BELT” will be displayed shortly after to indicate system is searching for chest belt signal. Watch will display system used (analog / digital), then the stopwatch screen.
2. Press **+ /ST/SP** to start stopwatch.



TIP You can view the time while exercising. Press **MODE/-** to view time. To return, press **MODE/-** again.

PAUSE, RESUME / STOP

If you need to take a break during exercise, press **+ /ST/SP**.

When ready, press **+ /ST/SP** to resume exercise.

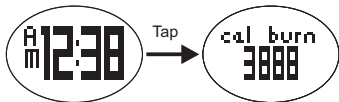
To stop exercise and save data: Press **+ /ST/SP** to pause, then press **MODE/-**.

After a long pause, the watch will time out and automatically save the data.

UNDERSTANDING THE DISPLAYS

NORMAL CONDITIONS

To view total calories burnt since last reset: tap on lens when screen shows default time display.



DURING EXERCISE

To toggle between displays during exercise: tap on lens.

TIP If 'Toggle' function has been enabled (refer to "Setting mode" section), the below 4 screens will automatically toggle.

	Exercise time
	Current heart rate

	Calories burnt (kcal)
	Fat burnt (g)

ALERTS

This watch enables you to select a target HR zone according to your fitness goals. By setting the target HR zone and personal data, the watch can monitor how well you do. The watch will send out visual and audible alerts if you are pushing yourself too hard or need to put more effort in.



For details of HR zones, refer to "Understanding heart rate" section in this manual.

If alert has been enabled and heart rate zone has been set:

ICON	BEEP(S)	DESCRIPTION
/ ABOVE ZONE!	2	You have gone above your upper HR limit
/ BELOW ZONE!	1	You have gone below your lower HR limit

Remember, these alerts are based on a calculation of your maximum heart rate and the HR zone you selected. As such, it is an estimation and is only for guidance. If you feel you are working too hard, most likely you are. Adjust the HR zone to one that works for you.

UNDERSTANDING HEART RATE

HEART RATE ZONES AND EXERCISE

Heart rate is an indicator of the intensity of the exercise on your body. It is a useful tool for determining how effective a work-out is.

This watch uses an estimation of your maximum heart rate ($220 - \text{age} = \text{MHR}$) to arrive at 5 HR zone settings specific to you.

HR Zone	Corresponding watch setting	Description / benefit derived	Examples
Fat burning	50% - 60%	For beginners and those with health problems. Gets body used to exercise and improves health.	Brisk walking
	61% - 70%	Improves heart's ability to deliver oxygen. Calories burnt mostly from stored body fat.	Jogging, easy cycling.

Aerobic	71% - 80%	Increases endurance and muscle strength. Breathing is faster and deeper promoting proper circulation of oxygenated blood.	Running, aerobic dance, jumping rope.
Anaerobic	81% - 90%	Builds muscle and enhances speed, power and performance levels. Body requires more oxygen than it can provide.	Weight-lifting, resistance machine.
	91% - 100%	For athletes. Vigorous training, usually done in short bursts to enhance power and performance. May increase chance of injury and soreness.	Sprinting

*The upper and lower heart rate limits are calculated by multiplying your maximum heart rate (MHR) by the percentages.

It is important to pace yourself, especially if you haven't exercised for a while. Start off slow, aiming for the lowest range (50%-60%). As you become more comfortable, challenge yourself by increasing in speed and duration.

To benefit most from your work-out, determine your fitness goal and exercise at a proper intensity. The most common zone range is from 50% to 80% of your maximum heart rate. This is where you achieve cardiovascular benefits, burn fat and become more fit.







Remember, if you rush in too quickly and push your body too hard before it's ready, it can be counterproductive. You can hurt your muscles / tendons and may even result in injury and be a real step back from your goal.

IMPORTANT Always warm up before exercise and select the HR zone setting that best suits your physique. Exercise regularly, 20 to 30 minutes per session, three to four times a week for a healthier cardiovascular system.

WARNING Determining a suitable exercise intensity 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 exercise frequency and duration appropriate for your age, condition and specific goals.

MEMORY

1. Press **MODE/-** repeatedly to select "MEM". After 2 seconds, display will show the time and date of the most recent exercise session recorded or "NO RECORD" if there is no data.
2. Press **+ / ST / SP** to navigate to desired record.
3. **Tap on lens** to toggle through the displays related to selected exercise session.

	Total time taken for entire exercise
	Effectiveness of training: Amount of time when heart rate was within selected HR zone (achieved intended goal)
	Maximum heart rate
	Average heart rate
	Total calories burnt (kcal)
	Total fat burnt (g)

To return to previous screen at any time: Press **MODE/-**.

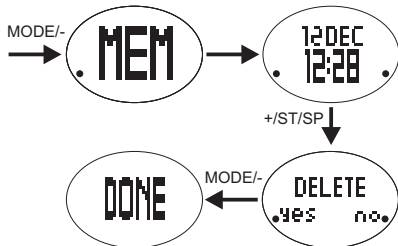
CLEAR RECORDS

This watch can contain data for up to 99 exercise sessions. Individual memory cannot be selected and deleted. The watch only allows for all data to be deleted.

To delete memory:

1. Press **MODE/-** repeatedly to select "MEM".
2. Press **+/ST/SP** repeatedly until "DELETE" will be displayed.
3. Press **MODE/-** to confirm.

DONE indicates the record has been cleared.



When starting an exercise and memory is full, "FULL" will be displayed, followed by "DELETE".

- Press **MODE/-** to delete all records
- OR
- Press **+/ST/SP** to ignore and start an exercise without recording data for it.

OTHER OPERATIONS AND SETTINGS

ACTIVATE BACKLIGHT

Press **EL/LOCK**. (Press any key to extend backlight for another 5 seconds).

NOTE The backlight function will not operate if is displayed.

BEEP TONE ON / OFF

When time is displayed, press **+/ST/SP** to activate / deactivate beep tone.

indicates beep tone is deactivated.

REPLACE BATTERY

If the battery power of your watch or chest belt is low, the watch will display:

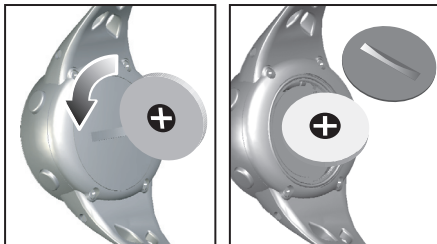
Watch



Chest belt

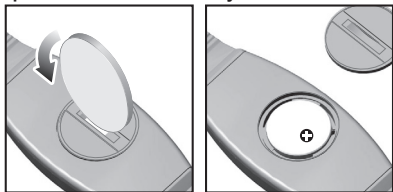
"HR BELT LOW BATT"

To replace watch battery:



1. Use a coin to open the battery compartment lid by turning it anticlockwise.
2. Remove the old battery and insert a new CR2032, 3V lithium battery.
3. Secure the lid by turning the coin clockwise.

To replace the chest belt battery:



1. Use a coin to open the battery compartment lid by turning it anticlockwise.
2. Remove the old battery and insert a new CR2032, 3V lithium battery.
3. Secure the lid by turning the coin clockwise.

IMPORTANT Remember to set the profiles after every battery replacement or reset.






KEYPAD LOCK

Press and hold **EL/LOCK** to lock or unlock keypad.

 indicates keypad is locked.

WATER RESISTANCE

The SE331 is water-resistant up to 50 meters (164 feet)

					
	RAIN SPLASHES ETC	SHOWER- ING (WARM/ COOL WATER ONLY)	LIGHT SWIM- MING/ SHALLOW WATER	SHALLOW DIVING / SURFING/ WATER SPORTS	SNORKEL- ING/ DEEP WATER DIVING
50M / 164 FT	OK	OK	OK	OK	NO

- Ensure the buttons and battery compartment are secured and intact before exposing the watch to excessive water.
- Avoid pressing the buttons while in the water or during heavy rainstorms, as this may cause water to enter the watch, leading to malfunction.

NOTE Even if both the watch and the chest belt are water resistant, as radio signals do not carry in water, signal transmission between the watch and chest belt will still be impossible in water.

SPECIFICATIONS

CLOCK

Time format	12/24 hour format with hour / minute
Date format	DD.MM.YY or MM.DD.YY
Year range	2010 - 2059

TRAINING

Target heart rate zone	50-60%; 61-70%; 71-80%; 81-90%; 91-100%
Maximum memory	99 records
Calorie range	0 to 9,999 kcal

POWER

Watch	1 x CR2032 3V lithium battery
Chest belt	1 x CR2032 3V lithium battery

OPERATING ENVIRONMENT

Operating temperature	For watch: 0°C to 40°C For chest belt: 5°C to 40°C
Storage temperature	For watch and chest belt: -20°C to 60°C

PRECAUTIONS

To ensure you use your product correctly and safely, read these warnings and the entire user manual before using the product:

- Should the unit experience an electrostatic discharge, it may trigger the watch to change modes or displays.

Simply press **MODE/-** to exit or to toggle back to previous display. This is normal.

- Use a soft, slightly moistened cloth. Do not use abrasive or corrosive cleaning agents, as these may cause damage. Use luke warm water and mild soap to clean the watch and chest belt thoroughly after each training session. Never use the products in hot water or store them when wet.
- Do not bend or stretch the transmitter part of the chest belt.
- Do not subject the product to excessive force, shock, dust, temperature changes, or humidity. Never expose the product to direct sunlight for extended periods. Such treatment may result in malfunction.
- Do not tamper with the internal components. Doing so will terminate the product warranty and may cause damage. The main unit contains no user-serviceable parts.
- Do not scratch hard objects against the LCD display as this may cause damage.
- Take precautions when handling all battery types.
- Remove the batteries whenever you are planning to store the product for a long period of time.
- When replacing batteries, use new batteries as specified in this user manual.
- The product is a precision instrument. Never attempt to take this device apart. Contact the retailer or our customer service department if the product requires servicing.
- Do not touch the exposed electronic circuitry, as there is a danger of electric shock.
- Check all major functions if the device has not been used for a long time. Maintain regular internal testing

and cleaning of your device. Have your watch serviced by an approved service center annually.

- When disposing of this product, ensure it is collected separately for special treatment and not as normal household waste.
- Due to printing limitations, 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.

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.

ABOUT OREGON SCIENTIFIC

Visit our website (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

For international inquiries, please visit:
www2.oregonscientific.com/about/international.asp

EU-DECLARATION OF CONFORMITY

Hereby, Oregon Scientific, declares that this Zone Trainer 1.0 Heart Rate Monitor (Model: SE331) 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.

