# Polar RS300X™

User Manual



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# **1. GET STARTED**

# Get to Know Your Polar RS300X

The **Polar RS300X training computer** displays and records your heart rate and other data during training.

The **Polar WearLink®+ transmitter** transmits the heart rate signal to the training computer. The transmitter consists of a connector and strap.

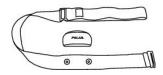
#### **Optional Accessories**

The **Polar S1 foot pod™** transmits the running speed and distance data to your training computer.

The **Polar G1 GPS sensor** transmits the speed and distance data to your training computer. Can be used for various sports, in addition to running.

The latest version of this user manual can be downloaded at http://www.polar.fi/support.





# Wrist Unit Buttons and Menu Structure

▲ UP: Enter the menu and move through selection lists, adjust values

▼ DOWN: Enter the menu and move through selection lists, adjust values

RED button: Confirm selections, access exercise menu, start training (with a long press)

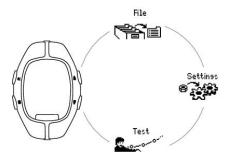
### BACK:

- Return to the previous level
- Cancel selection
- Leave settings unchanged
- · With a long press, return to Time view

### € LIGHT:

- Illuminate the display
- With a long press, enter **Quick menu** in Time view (to, e.g., lock buttons or set alarm), or during training (to, e.g., adjust training sounds or lock buttons)

**Touch**: To view information during training without pressing buttons, bring the training computer near the Polar logo on the transmitter. See Feature Settings for more information.



# **Start With Basic Settings**

To activate your Polar RS300X, press any button for one second. Once RS300X is activated, it cannot be switched off.

- Press the RED button to access the Language menu. Select English, Deutsch, Español or Français with UP/DOWN and confirm with the RED button.
- 2. Start with basic settings is displayed.
- 3. Press the RED button and continue with basic settings.
- 4. Select Time format.
- 5. Enter Time (hours and minutes).
- 6. Enter Date.

- Select Units. Select metric (kilograms, centimeters, KCAL) or imperial (pounds, feet, CAL). Calories are always measured as kilocalories.
- 8. Enter Weight.
- 9. Enter Height.
- 10. Enter Date of birth.
- 11. Select Sex.
- Settings 0K? is displayed. Select **Yes** to accept and save settings. RS300X enters Time view. Select No to change settings. Press BACK until you return to the setting you want to change.

To modify your personal settings later, see User Settings.

# Symbols on the Display

Symbol	Description
	The training computer battery level is low.
¢	The alarm is active.
5	Time 2 is in use.
<b>~-</b>	The key lock is active.
• *	Current speed/pace.
G	The G1 GPS sensor is in use. If the symbol is blinking, RS300X is trying to establish a connection to the GPS sensor, or the GPS sensor is trying to establish a connection to the satellites.
۲	Heart rate is detected when the heart symbol is blinking.
£	The foot pod is in use. If the symbol is blinking, RS300X is trying to establish a connection to the foot pod.
REC	The training computer is recording the training session.
Ö	Total duration of training session.
LAP 28	Lap time.
	Burned calories.
0	Time of day.

# 2. BEFORE TRAINING

# **Polar Fitness Test**

To train right and to monitor your progress, it is important to know your current fitness level. The Polar Fitness Test<sup>™</sup> is an easy and quick way to measure your cardiovascular fitness and aerobic capacity. The test is performed at rest.

The test result is a value called Polar OwnIndex<sup>®</sup>. OwnIndex is comparable to maximum oxygen uptake (VO<sub>2max</sub>), a commonly used aerobic capacity measure. For more information, see Interpret Your Fitness Test Results.

The OwnIndex value affects the accuracy of calorie calculation during training.

The test is developed for healthy adults. To make sure the test results are reliable:

- avoid distractions. The more relaxed you are and the more peaceful the testing environment is, the more accurate the test result will be (for instance, no television, telephone or talking).
- avoid heavy physical exertion, alcohol and unprescribed pharmacological stimulants on the test day and the day before.
- avoid eating a heavy meal or smoking 2-3 hours prior to the test.
- always perform the test in similar conditions and at the same time during the day.
- enter accurate user information.

### Perform Polar Fitness Test

- 1. Wear the transmitter, lie down and relax for 1-3 minutes.
- In Time view, select UP/DOWN > Test > Start. The fitness test begins as soon as the RS300X locates your heart rate. So, make sure you are relaxed and ready to take the test when you press Start.
- 3. Approximately 5 minutes later, a beep will indicate the end of the test, and the test result is displayed. Press the RED button.
- 4. Update to VO<sub>2max</sub>? is displayed.
- Select **Yes** to update your user settings and OwnIndex with the new result. Select **No** only if you know your VO<sub>2max</sub> value, and if it differs more than one fitness level (see the table on the next page) from the OwnIndex result. Your OwnIndex value will only be saved in the OwnIndex results.

#### Troubleshooting

- Set your personal activity level is displayed
  > Set your activity level. See User Settings for further information.
- Fitness Test Failed is displayed or no heart rate is shown. Check that the transmitter electrodes are moist enough and the elastic strap is snug enough around your chest. If the fitness test fails, your previous OwnIndex value will not be replaced.
- No heart rate shown > Test fails. Check that the transmitter electrodes are moist enough and that the strap is snug enough around your chest.

#### **Interpret Your Fitness Test Results**

Interpret the OwnIndex values by comparing your individual values and changes in them over time. OwnIndex can also be interpreted based on gender and age. Locate your OwnIndex in the table on the right, and see how it compares to others of the same gender and age.

This classification is based on a literature review of 62 studies where  $VO_{2max}$  was measured directly in healthy adult subjects in the USA, Canada and seven European countries. Reference: Shvartz E, Reibold RC: Aerobic Fitness Norms for Males and Females Aged 6 to 75 years: A review. Aviat Space Environ Med; 61:3-11, 1990.

Age	VERY LOW	LOW	FAIR	MODERATE	GOOD	VERY GOOD	ELITE
20-24	10-32	32-37	38-43	44-50	51-56	57-62	>62
25-29	10-31	31-35	36-42	43-48	49-53	54-59	>59
30-34	10-29	29-34	35-40	41-45	46-51	52-56	>56
35-39	10-28	28-32	33-38	39-43	44-48	49-54	>54
40-44	10-26	26-31	32-35	36-41	42-46	47-51	>51
45-49	10-25	25-29	30-34	35-39	40-43	44-48	>48
50-54	10-24	24-27	28-32	33-36	37-41	42-46	>46
55-59	10-22	22-26	27-30	31-34	35-39	40-43	>43
60-65	10-21	21-24	25-28	29-32	33-36	37-40	>40
20-24	10-27	27-31	32-36	37-41	42-46	47-51	>51
25-29	10-26	26-30	31-35	36-40	41-44	45-49	>49
30-34	10-25	25-29	30-33	34-37	38-42	43-46	>46
35-39	10-24	24-27	28-31	32-35	36-40	41-44	>44
40-44	10-22	22-25	26-29	30-33	34-37	38-41	>41
45-49	10-21	21-23	24-27	28-31	32-35	36-38	>38
50-54	10-19	19-22	23-25	26-29	30-32	33-36	>36
55-59	10-18	18-20	21-23	24-27	28-30	31-33	>33
60-65	10-16	16-18	19-21	22-24	25-27	28-30	>30

#### **Follow Fitness Test Results**

Fitness test results contain 16 of your latest OwnIndex values, including the dates. On average, it takes six weeks of regular training to improve your aerobic fitness noticeably. To improve your aerobic fitness most efficiently, you need to train large muscle groups.

- 1. Select UP/DOWN > Test > Trend.
- 2. Your OwnIndex result bars and date of the latest test are displayed. Press UP/DOWN to view the previous OwnIndex results.

### **Delete OwnIndex Values**

- 1. Select the value you wish to delete.
- 2. Press and hold the LIGHT button.
- 3. **Delete value? No/Yes** is displayed. Confirm your selection with the RED button.

# **OwnZone Limits**

Your training computer can determine your individual aerobic heart rate zone automatically. This feature is called Polar OwnZone<sup>®</sup> (OZ). Starting every training session with the OwnZone guarantees safe and effective heart rate zones for your daily condition. It is recommended you determine your OwnZone when you change training environment or sport/user information, if you have not yet fully recovered from a previous training session, or are training for the first time after a break of one week or more.

OwnZone limits are determined in 1-5 minutes during a warm-up period by walking, jogging, or doing some other sport. Start slowly, keeping your heart rate below 100 bpm / 50 % HR<sub>max</sub>. After each minute, increase your speed gradually about 10 bpm / 5% HR<sub>max</sub>. Before you start, make sure:

- you entered your user information correctly.
- you selected the OwnZone exercise (UP/DOWN > Settings > Exercise > OwnZone > Select). When OwnZone is selected as training session type, every training session starts with OwnZone determination.
- 1. Wear the transmitter and the training computer.
- 2. In the Time view, press the RED button and select **Start** to begin OwnZone determination.
- At some point during the determination, **OwnZone updated** and the OwnZone limits are displayed. Proceed normally with training session.

# **3. TRAINING**

# Wear the Transmitter

Before recording a training session, wear the transmitter.

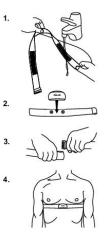
- 1. Wet the electrode areas of the strap well under running water.
- Attach the connector to the strap. Adjust the strap length to fit it tightly but comfortably.
- 3. Tie the strap around your chest, just below the chest muscles, and attach the hook to the other end of the strap.
- Check that the wet electrode areas are firmly against your skin and that the Polar logo of the connector is in a central and upright position.

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Detach the connector from the strap after every use, to maximize the transmitter battery lifetime. Sweat and moisture may keep the electrodes wet and the transmitter activated. This will reduce the transmitter battery life.

# See detailed washing instructions in Important Information chapter.

For video tutorials, go to http://www.polar.fi/en/support/video\_tutorials.



# Wear the Polar S1 foot pod\*

- The S1 foot pod has to be activated from the training computer before it can be used: UP/DOWN > Settings > Features > S sensor > Footpod.
- Install a battery before using the foot pod for the first time. For instructions, see the Polar S1 foot pod user manual.
- To improve the accuracy of speed/pace and distance measurements, calibrate the foot pod. See Feature Settings and the Polar S1 foot pod user manual.

### **During Training**

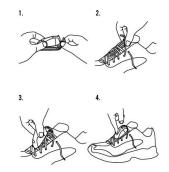
- If you have turned on the Help function, Footpod signal found and a symbol X are displayed after turning the foot pod on.
  - If **Check Footpod!** is displayed, the training computer is unable to receive a signal from the foot pod.
  - Change the battery if the green light on the foot pod turns red.

\*Optional S1 foot pod required.

#### Attaching the S1 Foot Pod to Your Shoe

To measure speed/pace and distance accurately, make sure the foot pod is correctly positioned.

- 1. Detach the foot pod from the fork.
- 2. Loosen your shoelaces and place the fork underneath them, on top of the tongue of your shoe. Tighten the laces.
- 3. Fit the front part of the foot pod (closest to the RED button) to the fork and press from the rear. Fasten the flap. Make sure the foot pod does not move and is aligned with your foot.
- Once your heart rate appears on your wrist unit, turn the foot pod on by pressing and holding the RED button on the foot pod until the green light starts to flash.



# Wear the Polar G1 GPS Sensor\*

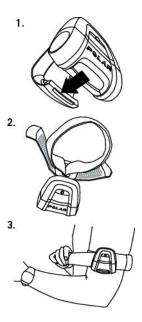
- The GPS sensor has to be activated from the training computer before it can be used: UP/DOWN > Settings > Features > S sensor > 6PS.
- Install a battery before using the GPS sensor for the first time. See the Polar G1 GPS sensor user manual.

\*Optional G1 GPS sensor required.

#### Wearing the GPS Sensor

- 1. Push to open the clip.
- 2. Thread the armband loosely through the loops on the clip and fasten.
- Position the armband round your upper arm and fasten. Place the sensor and the training computer on the same arm. Make sure that the "POLAR" logo is in an upright position.
- 4. Turn the GPS sensor on only after your heart rate appears on your training computer. See the Polar G1 GPS Sensor user manual for further instructions on turning the sensor on.

You can fasten the sensor on a belt or on the top of a backpack without the armband.



# **Start Training**

- 1. Wear the training computer, the transmitter, and additionally either foot pod or GPS sensor.
- In Time view, press the RED button and select Start to start recording your training session or select Settings to modify sounds, heart rate view or other exercise settings before starting. Recording can also be started by long-pressing the RED button once.

To modify exercise settings during the training session, press BACK and select **Settings**.



Your training session is saved only when recording for more than one minute.

# **During Training**

The following information is displayed during training. Press UP/DOWN to change the view. You can adjust the display options by selecting BACK > **Settings** > **Display**. The name of the display appears for a few seconds. The name indicates the lower row information.



#### Heart rate

Lap time / Speed / Pace Stopwatch Heart rate

- 147	-
1458.6	
×47.7C	
	,

# Stopwatch

Heart rate Lap time Stopwatch



### Lap time

Sport zones / Target heart rate zone / Target speed/pace zone Heart rate Lap time



Pace/Speed (available only with foot pod or GPS sensor) Stopwatch Distance Speed/pace (depending on the selected speed view)



Distance (available only with foot pod or GPS sensor) Zone number and countdown timer or distance / Lap time (lap time will be displayed if you have not set any timers or distances that prompt you to change zones) Sport zones / Target heart rate zone / target speed/pace zone Distance

**Quick menu:** To access the quick menu during training, press and hold LIGHT. The quick menu is a short cut to locking buttons, adjusting training sounds and other settings.

Touch: Check selected information during training by bringing the training computer close to the transmitter connector. Set up the **Touch** function: UP/DOWN > Settings > Features > **P**-Touch.

**Lap**: Take a lap during training session by short-pressing the RED button. The display returns to normal after the lap details are shown for a couple of seconds.

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You can zoom the middle/upper row information during training by pressing and holding the DOWN/UP button. Return to the normal display by pressing and holding the buttons again.

# **Stop Training**

- 1. Press BACK to pause training recording.
- 2. Press BACK again or select **Exit** from the **Stop menu** to stop recording altogether.

Detach the transmitter connector from the strap and rinse the strap under running water after every use. Wash the strap regularly in a washing machine at  $40^{\circ}$ C/104°F after every fifth use.

### **Continue Training:**

Continue recording the paused training session by selecting **Continue** from the **Stop menu**.

#### Summary:

View the summary information by selecting **Summary** from the **Stop menu**. For more information, see After Training.

# 4. AFTER TRAINING

# Summary

After training session is paused, a summary of training information can be viewed by selecting **Summary** from the **Stop menu**. More detailed training information can be found under UP/DOWN > **File**. See Review Training Data.

Scroll UP/DOWN for the following information.

Max HR	Maximum heart rate during training session.
Avg HR	Average heart rate during training session.
Duration	Duration of training session.
Max pace∕Max speed*	Maximum pace / maximum speed during training session.
Avg pace / Avg speed*      Average pace / average speed during training session.	
Distance*	Total number of kilometers/miles.

\*Optional GPS sensor or foot pod required to view speed and distance data.

# **Review Training Data**

Select UP/DOWN > File to review training information in Exercise Log, Weekly and Totals.

#### **Exercise Log**



#### Exercise log

16 of your latest training sessions are shown as bars on the display. You can compare the duration of your training sessions and see overall trends. You can toggle between the training sessions with UP/DOWN. The training session type and the date of the selected training session are shown on the display.

When **Exercise Log** becomes full, the oldest training file is replaced with the most recent one. If you want to save the file for a longer period, transfer it to the Polar web service on www.polarpersonaltrainer.com. For further information, see Transfer Data.

To review detailed training information, select a bar and press the RED button. Your training computer displays the following training information (depending which information is available).

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If **OK** appears above the RED button, even more detailed information is available.



### **Basic information**

Training session type Date Time Duration



**Sport zones** Relative durations in sport zones

2 laps Av9 00:29:21 00:28:37

#### Lap information Number of laps Average duration of a lap Best lap and duration

#### Weekly

In the **Weekly** log you can view accumulated data of your training sessions for previous weeks. You can toggle between the weeks with UP/DOWN. The bar on the right is entitled **This Week** and shows training summary for the current week. The other bars (named after the Sunday of the week in question) display the summaries for the past 15 weeks. View more detailed weekly information by selecting a week and pressing the RED button. The following information is shown:

- The week title, burned calories, total distance and total duration.
- Relative durations in sport zones. You can also zoom into more detailed sport zone information by pressing the RED button. Durations individually for each sport zone are displayed.

Note that weekly information summaries cannot be deleted.

### Totals

**Totals** includes cumulative values of information recorded during your training sessions. Total values can be used as a seasonal (or monthly) counter of your training values. The values are automatically updated after each training session. **Totals** provides the following information, including the date of last reset:

- **Total distance** (total distance if the information is available)
- Total duration (total training duration)
- Total calories (total number of burned calories)
- Total exerc. count (total training session count)

The total values can be reset or deleted. To reset, select **Reset totals** from the **Totals** menu. Select the value (**All**, **Distance**, **Duration**, **Calories** or **Exerc. count**) you wish to reset.

### Delete

To delete training files, select **Delete** from the **File** menu. From the **Delete** menu:

- select Exercise if you want to delete a training file. Next, select the training file you wish to delete.
- select All exerc. if you want to delete all training files.
- select Totals if you want to reset total statistics. Next, select what you wish to delete. Options are All (all total statistics), Distance, Duration, Calories or Exerc. count (training session count).

# **Transfer Data**

You can transfer your training data from RS300X to your diary in **polarpersonaltrainer.com** once you register for the service. A Polar FlowLink<sup>™</sup> (can be purchased separately) and WebSync software are required for data transfer.

Download the WebSync software from polarpersonaltrainer.com and install it onto your PC following the instructions on the screen.

### **Transfer Training Data**

- 1. Open the WebSync data transfer software on your PC.
- 2. Plug the FlowLink into a USB port.
- 3. Place your RS300X on the FlowLink display facing down.
- Follow the instructions on your computer screen for transferring data from your training computer to polarpersonaltrainer.com. For further instructions, see the help section in polarpersonaltrainer.com.

# **5. SETTINGS**

# Watch Settings

Select the value you want to change and press the RED button. Adjust the values with UP/DOWN and accept with the RED button.

Access watch settings by selecting UP/DOWN > **Settings** > **Watch**.

#### Time and Date Settings

Set the local time (Time 1) and a time difference to it (Time 2). With Time zone, you can select which time zone is used. In Time view, you can easily change the time zone from Time 1 to Time 2 by pressing and holding DOWN.

Set the date with Date setting.

#### Event

You can create an event in the training computer's memory. The computer will display the number of days till the event when you press and hold UP in Time view.

- 1. Select Event from the Watch settings menu.
- 2. Set the **Date** of the event.
- 3. Select a name for the event.

# To change event details, access the Event settings.

- View: View the name and the date of the current event.
- Date: Change the date of the event.
- Rename: Rename the current event.
- Delete : Delete the current event.

### Alarm

Select Alarm from the Watch settings menu. Set the alarm to go on Once, from Monday to Friday, Daily, or turn it Off.

Press BACK to stop the alarm or the RED button to snooze for 10 minutes. The alarm cannot be used during training.

# **Exercise Settings**

Access exercise settings by selecting UP/DOWN > **Settings** > **Exercise**. In the **Exercise** menu there are 5 exercise options which all have their own settings.

- Free: No predetermined settings for the training session.
- Basic: Train with moderate intensity.
- Interval: Train with intervals.
- **OwnZone**: Train in your OwnZone.
- Add new: Add new training session.

All options, excluding **Free**, have the following settings:

- **Select** : Select the option as your exercise setting.
- View: View the details of the exercise setting.
- Edit: Edit the details of the exercise setting. Select the Number of zones, Zone type (either Heart rate or Speed/Pace), limits for the zone(s) and Zone guide (either Timers, Distances or Off).
  - See Adjusting heart rate zones manually.
  - Zone guide changes the zone automatically during training session according to the settings (either set time or distance) and alerts you. When **OwnZone** is selected as training session type, only the **Zone guide** can be set manually.
- Rename: Rename the exercise setting.
- **Default** : Restore default settings.

### Adjusting heart rate zones manually:

- **HR zone 1** limits: Adjust your zone 1 limits. When setting the upper limit, the lower limit of zone 2 is set automatically.
- **HR zone 2** limits: Adjust your zone 2 limits. When setting the lower limit, the upper limit of zone 1 is set automatically. When setting the upper limit, the lower limit of zone 3 is set automatically.
- **HR zone 3** limits: Adjust your zone 3 limits. When setting the lower limit, the upper limit of zone 2 is set automatically.

# **Feature Settings**

Access feature settings by selecting UP/DOWN >  ${\mbox{Settings}}$  >  ${\mbox{Features}}$  .

- **S sensor**: Select which speed sensor you wish to use. Options are **Footpod**, **GPS** and **Off**.
- Footp.calibr.:
  - Run: Calibrate the foot pod by running. Turn the foot pod on. Set the Calibration Distance (preferably more than 1000 meters), i.e. the distance how far you want to run, in kilometers.

**Press START and run ...km** > Press the RED button on the training computer. Start the run by making the first step with the sensor foot onto the starting line and run the preset distance at a steady pace.

**Press OK after ...km** > Stop exactly on the stop line of the preset distance and press the RED button.

Stand still. Receiving data > Stand still with your arms down and wait until your training computer has received the data. Calibration complete and Factor are displayed. The new calibration factor is used.  Manual: When you know the calibration factor (i.e. you have calibrated the foot pod previously) you can set the factor manually.
 Calibration Factor 0.000 > Adjust the value. Calibration complete and Factor are displayed.

See the foot pod calibration instructions in the Polar S1 foot pod user manual for further information.



As the most universal calibration location is a 400 m track, even in countries using the imperial units, the calibration is done in metric units.

- Speed view: Select km/h or min/km.
- A.Lap: Set the automatic lap On or Off. When set On, enter the Distance of a lap.
- Touch: Set which information is connected to the **P-Touch** function. Options are Show limits, Take lap, Change view, Light and Off.

- HR view: Set how the heart rate is displayed. Options are HR and HR% (percentage of maximum heart rate).
- **Sport zones**: Set the lower limits for 5 sport zones.

# **User Settings**

Access user settings by selecting UP/DOWN > Settings > User .

- Weight: Enter your weight.
- Height: Enter your height.
- Birthday: Enter your date of birth.
- Sex: Select Male or Female.
- Activity: Select the alternative that best describes the overall amount and intensity of your physical activity during the past three months.
  - Low: 0-1 hours a week. You do not participate regularly in programmed recreational sport or heavy physical activity. For instance, you walk only for pleasure, or train hard enough to cause heavy breathing or perspiration only occasionally.

- Moderate: 1-3 hours a week. You participate regularly in recreational sports. For instance, you run 5-10 km or 3-6 miles per week or spend 1-3 hours per week in comparable physical activity, or your work requires modest physical activity.
- **High**: 3-5 hours a week. You participate at least 3 times a week in heavy physical training. For instance, you run 20-50 km or 12-31 miles per week or spend 3-5 hours per week in comparable physical activity.
- **Top**: 5+ hours a week. You participate in heavy physical training at least 5 times a week, or you are training to improve performance for competitive purposes.

- Heart rate : HR max (maximum heart rate): Your age-predicted HR<sub>max</sub> value (220 - age) is used as a default. Set your HR<sub>max</sub> manually if your maximum heart rate has been determined in a lab, or if you have tested your maximum heart rate in the field yourself. You can also set your HR sit (heart rate in a sitting position).
- **V02 max**: Age-based value is shown as default. If you perform the Polar Fitness Test, your OwnIndex value replaces this value. If you know your laboratory-measured VO<sub>2max</sub> value, you can replace your OwnIndex value with it.

# **General Settings**

Access general settings by selecting UP/DOWN > Settings > General.

- Sound: Set the Volume level (Vol 2, Vol 1 or Off) and TZ Alarm (target zone alarm: On or Off).
- Keylock: Select Manual or Automatic. For Automatic, the keylock activates when you have not pressed the buttons in one minute.
- Help: Select On or Off. This is a function that displays short help messages when using the training computer.
- **Units**. Select metric (kilograms, kilometers, centimeters, KCAL) or imperial (pounds, miles, feet, CAL). *Calories are always measured as kilocalories.*

- Language: Select English, Deutsch, Español or Français as the user interface language.
- Sleep: Select on or off. Activating the sleep mode will help save the battery when the training computer is out of use for a long period of time. The watch alarm will still function in sleep mode. Awaken the training computer: Press any button > Turn display on? > Yes / No.

# **6. IMPORTANT INFORMATION**

# **Caring for Your Polar RS300X**

Like any electronic device, the Polar training computer should be treated with care. The suggestions below will help you fulfill guarantee obligations and enjoy this product for many years to come.

Detach the transmitter connector from the strap and rinse the strap under running water after every use. Dry the connector with a soft towel. Never use alcohol or any abrasive material (steel wool or cleaning chemicals).

Wash the strap regularly in a washing machine at 40°C/104°F or at least after every fifth use. This ensures reliable measurement and maximizes the life span of the transmitter. Use a washing pouch. Do not soak, spin-dry, iron, dry clean or bleach the strap. Do not use detergent with bleach or fabric softener. Never put the transmitter connector in the washing machine or drier!

# Dry and store the strap and the transmitter connector separately to maximize the transmitter battery lifetime.

Wash the strap in a washing machine before long-term storage and always after use in pool water with high chlorine content.

Keep your training computer and transmitter in a cool and dry place. Do not keep them in a damp environment, in non-breathable material (a plastic bag or a sports bag) nor with conductive material (a wet towel). The training computer and transmitter are water resistant, and can be used in water activities. Other compatible sensors are water resistant, and can be used in rainy weather. Do not expose the training computer to direct sunlight for extended periods, such as by leaving it in a car or mounted on the bike mount.

Keep your training computer clean. To maintain the water resistance, do not wash the training computer with a pressure washer. Clean the training computer with a mild soap and water solution and rinse it with clean water. Do not immerse it in water. Dry it carefully with a soft towel. Never use alcohol or any abrasive material such as steel wool or cleaning chemicals.

Avoid hard hits to the training computer, as these may damage the sensor units.

#### Service

During the two-year guarantee/warranty period we recommend that you have service done by an authorized Polar Service Center only. The warranty does not cover damage or consequential damage caused by service not authorized by Polar Electro.

For contact information and all Polar Service Center addresses, visit www.polar.fi/support and country specific websites.

Register your Polar product at http://register.polar.fi/ to ensure we can keep improving our products and services to better meet your needs.



The username for your Polar Account is always your email address. The same username and password are valid for Polar product registration, polarpersonaltrainer.com, Polar discussion forum and Newsletter registration.

### **Changing Batteries**

#### Training Computer

We recommend that you have the training computer battery replaced by an authorized Polar Service Center. They test your Polar training computer for water resistance after battery replacement.

- The low battery indicator is displayed when 10–15% of the battery capacity is left.
- Excessive use of the backlight drains the battery more rapidly.
- In cold conditions, the low battery indicator may appear, but will disappear when the temperature rises.
- The backlight and sound are automatically turned off when the low battery indicator is displayed. Any alarms set prior to the appearance of the low battery indicator will remain active.

### Transmitter Connector

The WearLink+ transmitter has a user changeable battery. To change the battery yourself, please follow the instructions carefully.

When changing the battery, make sure the sealing ring is not damaged, in which case you should replace it with a new one. You can purchase the sealing ring/battery kits at well-equipped Polar retailers and authorized Polar Services. In the USA and Canada, the additional sealing rings are available at authorized Polar Service Centers. In USA the sealing ring/battery kits are also available at www.shoppolar.com.

Keep the batteries away from children. If swallowed, contact a doctor immediately.

Batteries should be properly disposed of according to local regulations.

When handling a new, fully charged battery, avoid clasp-like contact, i.e. simultaneous from both sides, with metal or electrically conducting tools, like tweezers. This may short-circuit the battery causing it to discharge more rapidly. Typically, short circuiting does not damage the battery, but it may decrease the capacity and lifetime of the battery.

- 1. Using a coin, open the battery cover by turning it counterclockwise to OPEN.
- Insert the battery (CR2025) inside the cover with the positive (+) side against the cover. Make sure the sealing ring is in the groove to ensure water resistance.
- 3. Press the cover back into the connector.
- 4. Use the coin to turn the cover clockwise to CLOSE.

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Danger of explosion if the battery is replaced with wrong type.

### S1 foot pod

See the instructions in the S1 foot pod user manual.

### G1 GPS sensor

See the instructions in the G1 GPS sensor user manual.



# Precautions

The Polar training computer shows your performance indicators. It indicates the level of physiological strain and intensity during your training session. No other use is intended or implied.

#### Minimizing Risks When Training

Training may include some risk. Before beginning a regular training program, answer the following questions concerning your health status. If you answer yes to any of these questions, consult a physician before starting any training program.

- · Have you been physically inactive for the past five years?
- Do you have high blood pressure or high blood cholesterol?
- Do you have symptoms of any disease?
- · Are you taking any blood pressure or heart medication?
- Do you have a history of breathing problems?
- Are you recovering from a serious illness or medical treatment?
- Do you use a pacemaker or other implanted electronic device?
- · Do you smoke?
- Are you pregnant?

In addition to exercise intensity, medications for heart conditions, blood pressure, psychological conditions,

asthma, breathing, etc., as well as some energy drinks, alcohol, and nicotine may also affect heart rate.

It is important to be sensitive to your body's responses during exercise. If you feel unexpected pain or excessive fatigue when exercising, it is recommended that you stop the exercise or continue at a lighter intensity.

Notice to individuals with pacemakers, defibrillators or other implanted electronic devices. Individuals who have a pacemaker use the Polar training computer at their own risk. Before starting use, we always recommend a maximal exercise stress test under a doctor's supervision. The test is to ensure the safety and reliability of the simultaneous use of the pacemaker and the Polar training computer.

If you are allergic to any substance that comes into contact with your skin or if you suspect an allergic reaction due to using the product, check the listed materials in Technical Specifications. To avoid any skin reaction to the transmitter, wear it over a shirt, but moisten the shirt well under the electrodes to ensure flawless operation.



The combined impact of moisture and intense abrasion may cause a black color to come off the transmitter's surface, possibly staining light-colored clothes. If you use perfume or insect repellent on your skin, you must ensure that it does not come into contact with the training computer or the transmitter.

Training equipment with electronic components may cause interfering stray signals. To tackle these problems, try the following:

- 1. Remove the transmitter from your chest and use the training equipment as you would normally.
- Move the wrist unit around until you find an area in which it displays no stray reading or does not flash the heart symbol. Interference is often worst right in front of the display panel of the equipment, while the left or right side of the display is relatively free of disturbance.
- 3. Put the transmitter back on your chest and keep the wrist unit in this interference-free area as much as possible.

If the RS300X still does not work, the piece of equipment may be electrically too noisy for wireless heart rate measurement.

**RS300X may be worn when swimming**. To maintain water resistance, **do not press buttons under water**. For more information, visit http://support.polar.fi. Water resistance of Polar products is tested according to International Standard ISO 2281. Products are divided into three categories according to their water resistance. Check the back of your Polar product for the water resistance category, and compare it to the chart below. Please note that these definitions do not necessarily apply to products of other manufacturers.

Marking on the case back	Water resistant characteristics
Water resistant	Protected against wash splashes, sweat, raindrops etc. Not suitable for swimming.
Water resistant 30 m/50 m	Suitable for bathing and swimming.
Water resistant 100 m	Suitable for swimming and snorkeling (without air tanks).

# Troubleshooting

If you don't know where you are in the menu, press and hold BACK until time is displayed.

If there are no reactions to any buttons or the training computer displays unusual readings, reset the training computer by pressing four buttons (UP, DOWN, BACK and LIGHT) simultaneously for four seconds. All other settings but time and date are saved.

If the heart rate reading becomes erratic, extremely high or shows nil (00), make sure that there are no other heart rate transmitters within 1 m/3 ft and that the transmitter strap/the textile electrodes fit snugly and are wet, clean and undamaged.

If the heart rate measurement does not work with the sports apparel, try using the strap. If it works, the problem is most probably in the apparel. Please contact the apparel retailer/manufacturer. Strong electromagnetic signals can cause erratic readings. Electromagnetic disturbances 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 training equipment, cellular phones, or at electric security gates. To avoid erratic readings, move away from possible sources of disturbance.

If the abnormal reading continues despite moving away from the source of disturbance, slow down and check your pulse manually. If you feel it corresponds to the high reading on the display, you may be experiencing cardiac arrhythmia. Most cases of arrhythmia are not serious, but consult your physician nevertheless.

A cardiac event may have altered your ECG waveform. In this case, consult your physician.

If heart rate measurement fails despite the actions mentioned previously, the battery of your transmitter may be empty.

# Technical Specifications Training Computer

#### CR 2032 Battery type Battery life Average 1 year (1 h/day, 7 days/week training) Operating temperature -10 °C to +50 °C / 14 °F to 122 °F Wrist strap material Polyurethane Back cover and wrist strap Stainless steel complying with the EU buckle Directive 94/27/FII and amendment 1999/C 205/05 on the release of nickel from products intended to come into direct and prolonged contact with the skin. Watch accuracy Better than $\pm$ 0.5 seconds/day at 25 °C / 77 °F temperature. Accuracy of heart rate ± 1% or ± 1 bpm, whichever larger, measurement definition applies to steady state conditions

## Transmitter

Battery type Battery life Battery cap sealing ring Operating temperature Connector material Strap material

#### CR 2025 Average 700 hours of use 0-ring 20.0 x 1.0 Material FPM -10 °C to +50 °C / 14 °F to 122 °F Polyamide 35% Polyester, 35% Polyamide, 30% Polyurethane

### Limit values

Chronometer	23 h 59 min 59 s
Heart rate	15-240 bpm
Total time	0 - 9999 h 59 min 59 s
Total calories	0 - 999999 kcal/Cal
Total exercise count	65 535
Year of birth	1921 - 2020
Maximum speed with a GPS	199.9 km/h
sensor	
Maximum speed with	29.5 km/h
footpod	
Maximum files	16
Maximum laps	99
Maximum training session	99:59:59
duration	
Maximum training session	655.3 km
distance	
Maximum trip distance	9999.9 km/mi

### Polar FlowLink and Polar WebSync 2.1 (or newer)

System Requirements:	PC MS Windows (7/XP/Vista), 32 bit, Microsoft .NET Framework Version 2.0		
	Intel Mac OS X 10.5 or newer		

The Polar RS300X training computer applies the following patented technologies, among others:

- OwnZone<sup>®</sup> assessment for determining personal target heart rate limits for the day
- OwnCode<sup>®</sup> coded transmission
- OwnIndex<sup>®</sup> technology for fitness test
- OwnCal<sup>®</sup> personal calorie calculation
- · WearLink® technology for heart rate measurement
- FlowLink® data transfer

# **Guarantee and Disclaimer**

#### Limited International Polar Guarantee

- This guarantee does not affect the consumer's statutory rights under applicable national or state laws in force, or the consumer's rights against the dealer arising from their sales/purchase contract.
- This limited Polar international guarantee is issued by Polar Electro Inc. for consumers who have purchased this product in the USA or Canada. This limited Polar international guarantee is issued by Polar Electro Oy for consumers who have purchased this product in other countries.
- Polar Electro Oy/Polar Electro Inc. guarantees the original consumer/purchaser of this device that the product will be free from defects in material or workmanship for two (2) years from the date of purchase.
- The receipt of the original purchase is your proof of purchase!
- The guarantee does not cover the battery, normal wear and tear, damage due to misuse, abuse, accidents or non-compliance with the precautions; improper maintenance, commercial use, cracked ,broken or scratched cases/displays, elastic strap and Polar apparel.
- The guarantee does not cover any damage/s, losses, costs or expenses, direct, indirect or incidental, consequential or special, arising out of, or related to the product.

- Items purchased second hand are not covered by the two (2) year warranty, unless otherwise stipulated by local law.
- During the guarantee period, the product will be either repaired or replaced at any of the authorized Polar Service Centers regardless of the country of purchase.

Guarantee with respect to any product will be limited to countries where the product has been initially marketed.

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Polar Electro Oy is a ISO 9001:2008 certified company.

# C€0537

This product is compliant with Directive 93/42/EEC. The relevant Declaration of Conformity is available at www.polar.fi/support.



This crossed out wheeled bin marking shows that Polar products are electronic devices and are in the scope of Directive 2002/96/EC of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) and batteries and accumulators used in products are in the scope of Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators. These products and batteries/accumulators inside Polar products should thus be disposed of separately in EU countries.



This marking shows that the product is protected against electric shocks.

#### Disclaimer

- The material in this manual is for informational purposes only. The products it describes are subject to change without prior notice, due to the manufacturer's continuous development program.
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