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**POLAR**<sup>®</sup>

178201 GBR E

Recyclable material. Graphic Design O/S, Finland

# Polar Protrainer XT<sup>™</sup>

HEART RATE MONITOR • USER'S MANUAL



GBR

## QUICK REFERENCE GUIDE

FUNCTION	BUTTON
<i>Illuminate the display</i>	SIGNAL/LIGHT
<i>Turn the Target Zone sound signal off/on</i>	SIGNAL/LIGHT (press and hold)
<i>Stop/start the stopwatch</i>	SET/START/STOP
<i>Check the secondary measurement mode</i>	Bring the receiver close to the Polar logo of the transmitter
<i>Swap the heart rate limits</i>	SELECT (when the stopwatch is running)
<i>Check split and lap times</i>	STORE/LAP/RECOVERY
<i>Start recovery calculation</i>	SET/START/STOP (to stop the stopwatch) -> STORE/LAP/RECOVERY
<i>Start the timers</i>	automatic
<i>Reset the stopwatch</i>	SET/START/STOP (to stop the stopwatch) -> SET/START/STOP (press and hold)
<i>Stop the heart rate measurement and enter the Time of day display</i>	SET/START/STOP (to stop the stopwatch) -> SELECT -> SELECT -> SELECT



POLAR PROTRAINER XT HEART RATE MONITOR .....	5
<i>Features</i> .....	6
<i>Important to remember</i> .....	7
<i>Parts</i> .....	7
<i>Getting going</i> .....	8
SETTING THE WATCH .....	9
<i>Setting the alarm</i> .....	10
<i>Setting the time</i> .....	11
<i>Setting the date</i> .....	12
SETTING THE HEART RATE MEASUREMENT FEATURES .....	13
<i>Setting the timers 1 &amp; 2</i> .....	14
<i>Setting the heart rate limits 1, 2 &amp; 3</i> .....	15
<i>Setting the time for recovery heart rate</i> .....	16
<i>Setting the primary measurement display</i> .....	17
FUNCTIONS DURING HEART RATE MEASUREMENT .....	18
<i>Start the heart rate measurement</i> .....	18
<i>See your heart rate</i> .....	19
<i>Turn the target zone sound signal off/on</i> .....	19
<i>Start/stop the stopwatch</i> .....	19
<i>Illuminate the display</i> .....	19
<i>Check the secondary measurement displays</i> .....	19
<i>Swap the heart rate limits</i> .....	21
<i>Store split time and lap time</i> .....	21
<i>Start recovery calculation</i> .....	22
<i>Start the timers</i> .....	22
<i>Reset the stopwatch</i> .....	23
<i>Stop the heart rate measurement</i> .....	23
RECALLING THE TRAINING INFORMATION .....	24
SETTING THE CYCLING MODE FEATURES .....	27
<i>Calibrating the wheel size</i> .....	28
<i>Setting the odometer</i> .....	30
<i>Setting the total riding time</i> .....	31





FUNCTIONS DURING THE MEASUREMENT	
IN THE CYCLING MODE .....	32
<i>Start the cycling measurement</i> .....	32
<i>Swap the wheel size</i> .....	33
<i>See your heart rate and speed</i> .....	34
<i>Check cycling information</i> .....	34
<i>Start/stop the stopwatch</i> .....	35
<i>Illuminate the display</i> .....	35
<i>Swap the heart rate limits</i> .....	35
<i>Store split time and lap time</i> .....	35
<i>Start recovery calculation</i> .....	36
<i>Start the timers</i> .....	36
<i>Reset the stopwatch</i> .....	37
<i>Reset the cycling information</i> .....	37
<i>Swap between cycling mode and heart rate mode</i> .....	37
<i>Stop the cycling mode</i> .....	37
CARE AND MAINTENANCE .....	38
<i>Taking care of your Polar Heart Rate Monitor</i> .....	38
<i>Batteries</i> .....	38
PRECAUTIONS .....	40
<i>Polar Heart Rate Monitor in a water environment</i> .....	40
<i>Polar Heart Rate Monitor and interference</i> .....	40
FREQUENTLY ASKED QUESTIONS .....	42
POLAR GLOSSARY .....	45
TECHNICAL SPECIFICATIONS .....	48
POLAR BOOKS AND ACCESSORIES .....	49
SERVICE .....	50
<i>Check list</i> .....	50
<i>Sending instructions</i> .....	51
<i>Polar service procedure</i> .....	51
LIMITED POLAR WARRANTY .....	52
DISCLAIMER .....	53
INDEX .....	54

# POLAR PROTRAINER XT HEART RATE MONITOR

**Congratulations on purchasing the Polar Protrainer XT Heart Rate Monitor. We are proud to offer you the most advanced features and assist you in achieving your personal fitness and performance goals.**

**Wirelessly and continuously yours,**

**POLAR®**





## FEATURES

Your Polar Protrainer XT offers you the following features:

### Watch functions

- Time
- Alarm
- Date
- 12/24 h mode

### Basic functions

- wireless, continuous and ECG accurate heart rate
- coded transmission of heart rate to avoid crosstalk caused by other users of heart rate monitors
- stopwatch with split and lap indicator
- three adjustable target zone limits with blinking and sound alarm
- 48 split and lap times with average and maximum heart rates of each lap
- two adjustable, alternating timers
- time based recovery calculation
- display alternative during the heart rate mode: time of day, total exercising time or lap time
- wireless button for activating the backlight and checking the secondary measurement display during the exercise
- electroluminescent backlight
- water resistant to 20 metres

### Cycling functions (requires a separate Polar Speed Sensor)

- two adjustable wheel sizes (mm)
- continuous display of heart rate and speed
- alternating display of one of the following variables
  - stopwatch
  - time of day
  - average speed
  - maximum speed
  - lap number
  - trip distance
- total riding time (in the time of day display)
- odometer (in the time of day display)

### Recording functions

- maximum and average heart rate for the total exercise session
- time spent above, within and below each target zone
- last recovery heart rate
- lap and split times with average and current heart rates



- average and maximum speed of the exercise
- trip distance of the exercise

6



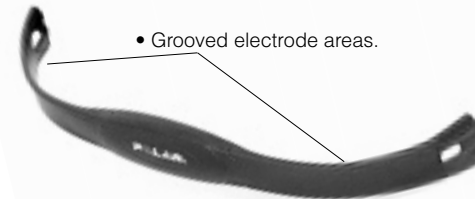
## IMPORTANT TO REMEMBER!

- Adjust the strap length snug enough and wet the Polar Coded Transmitter electrodes to ensure flawless heart rate measurement.
- Do not stretch or bend the transmitter.
- Do not operate the buttons of the wrist receiver under water.
- Wash and dry the transmitter regularly after use; never store it wet.
- Keep the Polar Heart Rate Monitor out of extreme cold or heat.

## PARTS

The Polar Protrainer XT consists of three parts:

### 1. Polar T61™ Transmitter



### 2. Elastic strap



### 3. Polar Protrainer XT wrist receiver



7





## GETTING GOING

1. Attach the Polar Coded Transmitter to the elastic strap.
2. Adjust the strap length to fit snugly and comfortably. Secure the strap around your chest, below the chest muscles. Lock the buckle.
3. Pull the transmitter off your chest and **wet the grooved electrode areas** on the back of it.
4. Check that the wet electrode areas are firmly against your skin and the Polar logo is in a central upright position.
5. Wear the wrist receiver as you would wear an ordinary watch.



Alternatively, if you go biking, you may attach the Wrist Receiver to a Polar Bike Mount ► **Polar Books and Accessories**. Keep the Wrist Receiver within the transmission range (3 feet / 1 metre).

**!** *It is recommended that you wear the transmitter against your bare skin to ensure flawless operation. However, if you wish to wear the transmitter over a shirt, moisten the shirt well under the electrodes.*

It is important that the electrodes are wet during the exercise. However, after exercising, take good care of the transmitter to save the electrodes and battery life:




1. Wash the transmitter carefully with mild soap water solution.
2. Rinse it with pure water.
3. Dry the transmitter carefully.

8



## SETTING THE WATCH

Start here to set:


- Alarm 
- Time of day 
- Date 

In the display each function is represented by a block in the graphic bar in the above order. A flashing block means that you are setting the corresponding function.

### Set the 12/24 h display

1. In the Time of day display, press and hold SET/START/STOP. Release.  
*12 h mode with AM/PM indicator is activated.*
2. Press and hold again. Release.  
*24 h mode is activated.*
3. The chosen time mode is now used in all watch and alarm functions.

### Starting the settings

1. In the Time of day display press SET/START/STOP.
  - SET is flashing in the upper right corner of the display.
  - The uppermost block of the graphic bar on the right, representing the setting of Alarm, is flashing.
  - ALM is displayed.
  - Alarm symbol  is flashing.
2. Go through setting of alarm, time and date step by step by following the instructions. If you chose the 24 h mode you can skip those parts in the following instructions, which advise you to set AM or PM. Note also that changing the Time mode effects several other units as well. For details, see **Polar Glossary, Units of measure**.



*You can also go directly to set just one particular function by pressing SET/START/STOP briefly as many times as needed until you see the corresponding text symbol in the display. Then follow the instructions for setting that particular function.*

9



## SETTING THE ALARM

In the Time of day display, press SET/START/STOP.  
Alarm symbol ●))) is flashing.

1. Press SIGNAL/LIGHT to set the alarm on or off.  
●))) = alarm is on  
● = alarm is off
2. Press STORE/LAP/RECOVERY to lock your selection.  
AM/PM is flashing.
3. Press SIGNAL/LIGHT to select AM or PM.
4. Press STORE/LAP/RECOVERY to lock your selection.  
The hour is flashing.
5. Press SIGNAL/LIGHT to select the desired hour.
6. Press STORE/LAP/RECOVERY to lock your selection.  
The minutes start flashing.
7. Press SIGNAL/LIGHT to select the desired minutes.
8. Press STORE/LAP/RECOVERY to lock your selection.  
SET starts flashing.  
Alarm symbol ●))) starts flashing.



The digits run faster if you press and hold SIGNAL/LIGHT. Release the button when the desired value is approaching.

### You have the following two alternatives to continue:

1. To enter the Time of day setting mode, press SET/START/STOP.  
TIME is displayed.  
AM (alternatively the hour) is flashing.
- ▶ Continue from **Setting the time of day**.
2. To stop the watch settings and to return to the Time of day display, press SELECT.



When the alarm comes on it will sound for one minute or you can turn it off by pressing STORE/LAP/RECOVERY.



## SETTING THE TIME

AM/PM (alternatively the hours) is/are flashing.

1. Press SIGNAL/LIGHT to select AM or PM.
2. Press STORE/LAP/RECOVERY to lock your selection.  
The hours are flashing.
3. Press SIGNAL/LIGHT to select the desired hour.
4. Press STORE/LAP/RECOVERY to lock your selection.  
The minutes start flashing.  
The seconds go to zero.
5. Press SIGNAL/LIGHT to select the desired minutes.
6. Press STORE/LAP/RECOVERY to lock your selection.  
The seconds start running.  
AM/PM or the hours start flashing.

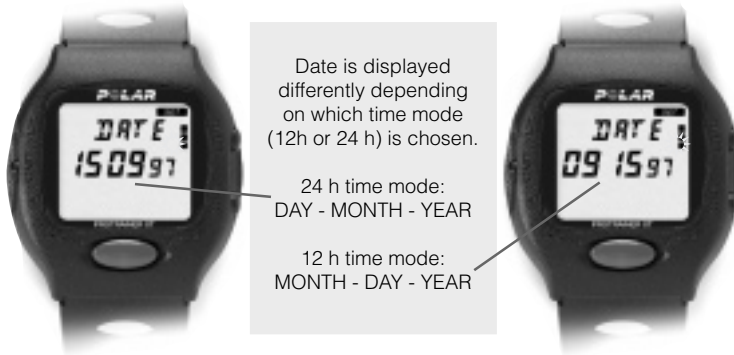


### You have the following two alternatives to continue:

1. To enter the date setting mode, press SET/START/STOP.  
DATE is displayed.  
The day/month is flashing.
- ▶ Continue from **Setting the date**.
2. To stop the watch settings and to return to Time of day display, press SELECT twice.



## SETTING THE DATE



The first digits are flashing.

1. Press SIGNAL/LIGHT to adjust:  
**The day** if you have chosen **24 h** time mode.  
**The month** if you have chosen **12 h** time mode.
2. Press STORE/ LAP/RECOVERY to lock your selection.  
*The middle digits start flashing.*
3. Press SIGNAL/LIGHT to adjust the setting.  
**The month** if you have chosen **24 h** time mode.  
**The day** if you have chosen **12 h** time mode.
4. Press STORE/LAP/RECOVERY to lock your selection.  
*The year starts flashing.*
5. Press SIGNAL/LIGHT to select the desired year.
6. Press STORE/LAP/RECOVERY to lock your selection.

### You have the following two alternatives to continue:

1. To enter the alarm setting mode, press SET/START/STOP.  
*ALM is displayed.*  
*The alarm symbol ● is flashing.*
  - ▶ Continue from **Setting the alarm.**
2. To stop the watch settings and to return to the Time of day display, press SELECT twice.



## SETTING THE HEART RATE MEASUREMENT FEATURES

Start here to set:

- Timers 1 & 2
- Heart rate limits 1, 2 & 3
- Recovery heart rate
- Primary measurement display



In the display each function is represented by a block in the graphic bar in the above order. A flashing block means that you are setting the corresponding function.

### Starting the settings

1. In the Time of day display press SELECT three times.
  - SET is flashing in the upper right corner of the display.
  - The uppermost block of the graphic bar representing the setting of Timers 1 & 2 is flashing.
  - TIM 1 is displayed.
2. Go through the settings of Timers, Heart rate limits, Recovery function and Primary measurement display by following the instructions.



You can also go directly to set just one particular function by pressing SET/START/STOP briefly as many times as needed until you see the corresponding text symbol in the display. Then follow the instructions for setting that particular function.



During the settings the digits run faster if you press and hold SIGNAL/LIGHT. Release the button when the desired value is approaching.





## SETTING THE TIMERS 1 & 2

### Timers

This function helps you to divide your exercise session into separate phases (e.g. warm-up, exercise phase, cool down). Timers can be used individually or sequentially.

The minutes of Timer 1 are flashing.



*If you don't want to use the timers, set the values for Timer 1 to zero. If you want to use only the Timer 1, set the value for Timer 2 to zero.*



*If you pass the digit you wanted to set by accident, press and hold SET/START/STOP to restart from 00.*

1. Press SIGNAL/LIGHT to select the desired minutes.
2. Press STORE/LAP/RECOVERY to lock your selection.  
*The seconds of the Timer 1 start flashing.*
3. Press SIGNAL/LIGHT to select the desired seconds.
4. Press STORE/LAP/RECOVERY to lock your selection.
5. Press SET/START/STOP to start setting of Timer 2.  
*The minutes of Timer 2 are flashing.*
6. Repeat the steps from 1 to 4 to set the Timer 2.



*Timer 1 starts running when you start the stopwatch. You will hear one beep when the time of Timer 1 is up. Timer 2 will start automatically after the beep. You will hear two beeps when the time of Timer 2 is up. If you set only Timer 1, it will not repeat itself after its time is up.*

### You have the following two alternatives to continue:

1. To start setting the Heart rate limits 1, 2 & 3 press SET/START/STOP.  
*The second block of the graphic bar representing the setting of the Heart rate limits is flashing.  
LIM1 is displayed.  
The reading representing the Upper Limit 1 is flashing.*
- ▶ Continue from **Setting the Heart rate limits 1, 2 & 3.**
2. To return to the Time of day display press SELECT twice.



## SETTING THE HEART RATE LIMITS 1, 2 & 3

### Heart rate limits


Heart rate limits can be set in one beat per minute increment which allows you to monitor your workouts securing the correct exercise intensity.

LIM 1 is displayed.

*The upper reading representing the upper limit 1 is flashing.*



*If you pass the digit you wanted to set by accident, press and hold SET/START/STOP to restart from the default settings (80-160).*

1. Press SIGNAL/LIGHT to select the desired value for the upper limit 1.
-  *You cannot set the upper limit below the lower limit. The range for the target heart rate zone is 10 - 240.*
2. Press STORE/LAP/RECOVERY to lock your selection.  
*The lower reading, representing the lower limit 1, starts flashing.*
  3. Press SIGNAL/LIGHT to select the desired lower limit 1.
  4. Press STORE/LAP/RECOVERY to lock your selection.  
*The upper reading starts flashing.*
  5. Press SET/START/STOP to start setting the heart rate limits 2.  
*LIM 2 is displayed.  
The upper reading representing the upper limit 2 start flashing.*
  6. Repeat the steps 1 to 4 to set the heart rate limits 2.
  7. Press SET/START/STOP to start setting the heart rate limits 3  
*The upper reading representing the upper limit 3 starts to flash.*
  8. Repeat the steps 1 to 4 to set the heart rate limits 3.



*If you want to use only the Limits 1, set the value for Limits 2 and Limits 3 to zero.*







#### You have the following two alternatives to continue:

- To start setting Recovery time press SET/START/STOP.
  - RECO is displayed.
  - The third block of the graphic bar representing the setting of the Recovery function is flashing.
- Continue from **Setting the time for recovery heart rate.**
- To return to the Time of day display press SELECT twice.

### SETTING THE TIME FOR RECOVERY HEART RATE

#### Recovery heart rate

This function measures how much heart rate decreases during the pre-set period of time. You define the period of time in minutes and seconds.

RECO is displayed.

The digits representing the minutes are flashing.

- Press SIGNAL/LIGHT to select the desired value for minutes.

**!** If you pass the digit you wanted to set by accident, press and hold SET/START/STOP to restart from 00.

- Press STORE/LAP/RECOVERY to lock your selection.
 

The digits representing the seconds start flashing.
- Press SIGNAL/LIGHT to select the desired value for the seconds.
- Press STORE/LAP/RECOVERY to lock your selection.

#### You have the following two alternatives to continue:

- To start setting the Primary measurement display press SET/START/STOP.
  - The fourth block of the graphic bar representing the setting of the Primary measurement display is flashing.
  - CHRONO (alternatively TIME or LAP) is flashing.
- Continue from **Setting the primary measurement display.**
- To return to the Time of day display press SELECT twice.



### SETTING THE PRIMARY MEASUREMENT DISPLAY

Chrono (alternatively Time or Lap) is flashing.  
00:00 0 (alternatively time of day) is displayed.

- Press SIGNAL/LIGHT to select the desired primary measurement display. **The alternative you choose will be displayed in the middle row during the heart rate measurement.**

CHOOSE FROM THESE ALTERNATIVES:

**CHRONO 00:00 0** displays total exercising time. You can see lap time in the upper row of the display during the measurement.

#### TIME

displays time of day (for example 1:52 PM/13:52). You can see lap time in the upper row of the display during the measurement.

**LAP 00:00 0** displays lap times. Lap times can be taken by pressing STORE/LAP/RECOVERY. You can see the number of the lap in the upper row of the display during the measurement.

According to the display alternative you choose for the primary measurement display you can see the secondary measurement display during the heart rate measurement by using the wireless button. For more details see **Functions during the heart rate measurement/Check the secondary measurement displays.**

#### You have the following three alternatives to continue:

- To start setting the Timers 1 & 2 press SET/START/STOP.
  - The first block of the graphic bar representing the setting of the Timers 1 & 2 is flashing.
- Continue from **Setting the Timers 1 & 2.**
- To return to the Time of day display, press SELECT twice.
- To start setting the Cycling features (Wheel size, Odometer and Total riding time), press simultaneously SET/START/STOP and SIGNAL/LIGHT. **To be able to use the cycling features the optional Polar Speed Sensor is required!**





# FUNCTIONS DURING HEART RATE MEASUREMENT

## 1. START THE HEART RATE MEASUREMENT

1. Wear the transmitter and receiver as described in **Getting going**.
2. Check that there are no disturbances near you as you are about to start the code search for coded transmission.



*Make sure that the code search will be successful:*

- Keep the receiver within 3 feet/1 metre from your Polar Coded Transmitter, which you are wearing.
- Check that you are not near to other people with heart rate monitors, high voltage power lines, televisions, mobile phones, cars, exercise equipment etc.

3. Start the code search in the Time of day display by pressing SELECT.  
*The receiver starts searching for coded transmission for max. 20 seconds.  
The coded heart rate information appears in the bottom line of the display.*

If the code search was not successful, 00 appears in the display. Restart the measurement from the Time of day display and follow the above mentioned precautions during the code search.




*Polar Protrainer XT is compatible only with Polar Coded Transmitter.*

4. Start the stopwatch by pressing SET/START/STOP.  
*Stopwatch starts running and you hear a long beep.  
Display is illuminated for a few seconds.*
5. You can now start exercising with your heart rate monitor.






**Quick start** for heart rate measurement from the display showing Time of day: wear the transmitter and receiver as described in *Getting going* and press and hold STORE/LAP/RECOVERY. Release.



*If there is a bike symbol  in the lower right corner of the display, the most recent exercise was done in the Cycling mode. To switch to the heart rate mode press SET/START/STOP and SIGNAL/LIGHT simultaneously .*

## 2. SEE YOUR HEART RATE

You can see your heart rate in the bottom line of the display. The target zone information is displayed as follows:

-  You are exercising within the preset Target Zone.
-  You are exercising above the preset Target Zone.
-  You are exercising below the preset Target Zone.

Exercising within, above and below the Target Zone is indicated only when the stopwatch is running.

## 3. TURN THE TARGET ZONE SOUND SIGNAL OFF/ON

Press and hold SIGNAL/LIGHT for 1 second to toggle between ON/OFF.

## 4. STOP/START THE STOPWATCH

Press SET/START/STOP to stop/start the stopwatch.

Average heart rate, maximum heart rate and time below, within and above the Target Zone are calculated only when the stopwatch is running.

## 5. ILLUMINATE THE DISPLAY

Press SIGNAL/LIGHT.

## 6. CHECK THE SECONDARY MEASUREMENT DISPLAYS

The secondary measurement displays will be seen for a few seconds **by bringing the wrist receiver next to the Polar logo of the Polar Coded Transmitter for a moment (wireless button).**



The secondary measurement displays depend on which of the three alternatives was chosen for the primary measurement display:



20



## 7. SWAP THE HEART RATE LIMITS

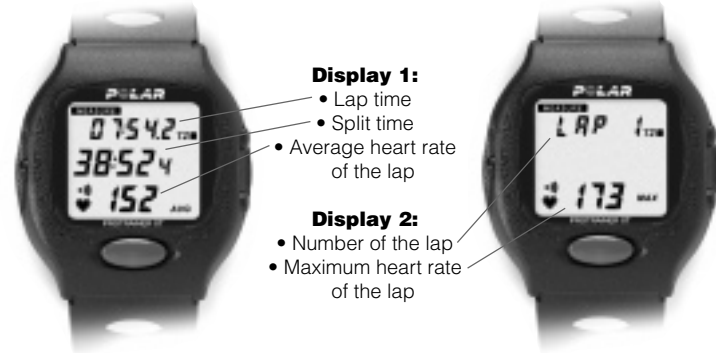
When the stopwatch is running, press SELECT to activate the alternative Heart rate limits. Release and you see the new limits in the display for a few seconds.

You can swap limits only if you have set at least the limits 2.

### ▶ Setting the Limits 1, 2 & 3.

## 8. STORE SPLIT TIME AND LAP TIME

Press STORE/LAP/RECOVERY to record the lap and split times. The following information will be displayed successively for a few seconds:



The lap timer starts again from zero.

**!** Polar Protrainer XT allows you to record 48 lap times. After taking 48 lap times FULL appears in the display. You can continue taking the lap times but they won't be recorded into the Protrainer XT's memory.

**😊** You can see the stored lap and split times with current and average heart rates later when recalling the training information.

21



## 9. START RECOVERY CALCULATION

- At the end of the exercise press SET/START/STOP to stop the stopwatch.  
*Heart rate measurement continues.  
Display is illuminated for a few seconds.*

- Press STORE/LAP/RECOVERY to start the recovery calculation.  
*RECO appears in the upper row of the display.  
The previously set time for recovery starts the countdown.*

*You will hear two beeps when the time for the Recovery calculation is up.*

The following display will appear for a few seconds:

*RECO  
Drop in your heart rate during the preset time.*



**Quick way** to start the recovery calculation:

*When the stopwatch is running press and hold STORE/LAP/RECOVERY until you hear a beep signal. Release the button.*

To be able to start the Recovery calculation you need to set it first.

► **Setting the time for Recovery heart rate.**



## 10. START THE TIMERS

Timers start running automatically once you start the stopwatch. Timers alternate in the following order: Timer 1, Timer 2, Timer 1, Timer 2 etc. Timers stop running as you stop the stopwatch.

If you have set only Timer 1, it will **not** repeat itself after its time is up. You will hear six beeps as the time of Timer 1 has run out. This count down feature is helpful in knowing when exactly a preset exercise time has come to an end and it is time to stretch and cool down.

To set the timers ► **Setting the Timers 1 & 2.**



## 11. RESET THE STOPWATCH

First press SET/START/STOP to stop the stopwatch. Then press and hold SET/START/STOP until all stopwatch digits are back to zero. Release the button. The current file is deleted and you can start the stopwatch and recording again.

## 12. STOP THE HEART RATE MEASUREMENT

**You have the following two alternatives to continue:**

- To stop the heart rate measurement and enter the Time of day display: Press SET/START/STOP to stop the stopwatch. Press SELECT 3 times. You are now in the Time of day display and you can recall the recorded information later.
- To stop the heart rate measurement and continue directly by recalling the recorded training information, ► **Recalling the training information.**

# RECALLING THE TRAINING INFORMATION

Polar Protrainer XT saves one training file at a time. Your latest training information is in the memory of the Polar Protrainer XT until the next time you start the stopwatch. You can recall your exercise in the FILE mode.

Choose from the following two alternatives to enter the FILE mode:

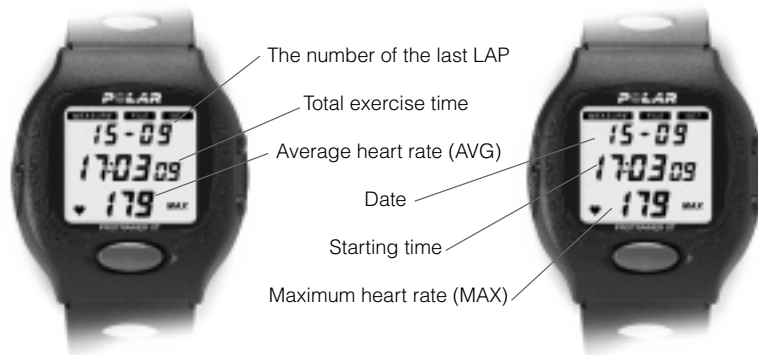
From the measurement mode:

1. Stop the stopwatch by pressing SET/START/STOP.
2. Press SELECT.

From the Time of day display:

1. Press SELECT twice.

*FILE* is flashing in the uppermost row of the display.  
The front pages of the recorded file alternate on the display.



By pressing STORE/LAP/RECOVERY you can see the following training information on the display:

- LIM 1 Settings for Target Zone 1
- LIM 2 Settings for Target Zone 2
- LIM 3 Settings for Target Zone 3

- LIM 1 Exercising time above the Target Zone 1
- LIM 1 Exercising time within the Target Zone 1
- LIM 1 Exercising time below the Target Zone 1

You will see the same information for LIM 2 and LIM 3.

*RECO*, the preset time for the recovery and the drop in your heart rate during the preset time.





The displays change faster if you press and hold STORE/LAP/RECOVERY. Release the button when you want to see a certain display for a longer time.



To view the file backwards, press SIGNAL/LIGHT instead of STORE/LAP/RECOVERY.

**You have the following two alternatives to continue:**

- To recall the same file again, press STORE/LAP/RECOVERY. The front pages of the file alternate on the display.
- Continue from **Recalling the training information**.
- To return to the Time of day display, press SELECT three times.



## SETTING THE CYCLING MODE FEATURES



**To be able to use the Cycling mode features, you need an optional Polar Speed Sensor.**



You can set the following features in the cycling mode:

- Wheel size calibration
- Odometer
- Total riding time



You can see the total cycling distance and the total riding time **in the uppermost row of the Time of day display**:

- Press and hold SIGNAL/LIGHT and you can see the odometer reading.
- Press and hold SIGNAL/LIGHT again and you can see the hours for total riding time.
- To return to the normal Time of day display with a day indicator press and hold SIGNAL/LIGHT a third time.

**To get in to the Cycling feature setting mode:**

- In the Time of day display press SELECT three times.  
*SET is flashing in the upper right corner of the display.  
The uppermost block of the graphic bar representing the setting of Timers 1 & 2 is flashing.  
TIM 1 is displayed.*
- Press SET/START/STOP and SIGNAL/LIGHT simultaneously.  
*SET, the uppermost block of the graphic bar and the number of the Wheel size (1 or 2) are flashing.  
WHL, the value for wheel size and the bike symbol are displayed.*
- Go through the Cycling feature settings (wheel size, odometer and total riding time).

## 1. CALIBRATING THE WHEEL SIZE

**!** You must calibrate the wheel size of your bike before you can use your Polar Protrainer XT Heart Rate Monitor to measure distance and speed. The wheel size must be set **in millimetres**.

**😊** Polar Protrainer XT allows you to set in two wheel sizes (WHL1 / WHL2). Use this function if you have two bikes. The wheel size which is displayed when you leave the wheel size setting mode, will be used next time you start exercising.

### TO FIND OUT THE WHEEL SIZE OF YOUR BIKE YOU HAVE THE FOLLOWING ALTERNATIVES:

#### METHOD 1. The quick way.

Check the wheel diameter (in inches) which is printed on the front bike wheel. On the chart below, find your wheel diameter in inches on the left and match it with the wheel size in millimetres on the right.

WHEEL DIAMETER (inches)	WHEEL SIZE SETTING (mm)
26.0	2080
27.0 (700*32C)	2155
28.0 (700B)	2237

#### METHOD 2.

Measure the circumference of the wheel by stretching a tape measure around the outside of the wheel. If you measure in inches, convert the value to millimetres by multiplying the number of inches by 25.4 mm.

Subtract 4 mm to account for your weight on the bike. \_\_\_\_\_ mm

The four digit value for the wheel size is \_\_\_\_\_ mm

#### METHOD 3. The most accurate way.

For this method ask your friend to assist you. First, mark the tread of your front tire with a line. Match this line with a line drawn on the ground. Sit on your bike and have your friend walk you forward for one complete wheel rotation. Draw another line on the ground exactly where the mark on the tire touches the ground. Measure the distance between the two lines on the ground to get your wheel circumference. If you measure in inches, convert to millimetres by multiplying the number of inches by 25.4 mm.

\_\_\_\_\_ mm

WHL 1 2000 is displayed.  
1 (alternatively 2) is flashing.

- Press SIGNAL/LIGHT to select the wheel 1 or wheel 2 according to your bike.
- Press STORE/LAP/RECOVERY to lock your selection.  
*Thousands of millimetres is flashing.*
- Press SIGNAL/LIGHT to set the thousands of millimetres of the wheel size.
- Press STORE/LAP/RECOVERY to lock your selection.  
*The hundreds of millimetres start flashing.*
- Press SIGNAL/LIGHT to set the hundreds of millimetres.
- Press STORE/LAP/RECOVERY to lock your selection.  
*The tens of millimetres start flashing.*
- Press SIGNAL/LIGHT to set the tens of millimetres.
- Press STORE/LAP/RECOVERY to lock your selection.  
*The millimetres start flashing.*
- Press SIGNAL/LIGHT to set the millimetres.
- Press STORE/LAP/RECOVERY to lock your selection.



**😊** You can swap the wheelsizes (WHL 1 / WHL 2) at the beginning of the measurement in the cycling mode by pressing and holding the SELECT button until the wheelsize is swapped. Please note that you can swap the wheelsize only before starting the stopwatch.

#### You have the following two alternatives to continue:

- To start setting the odometer press SET/START/STOP.  
*The second block of the graphic bar is flashing.  
ODO is displayed.  
The first digit of the odometer reading is flashing.*
- To return to the Time of day display, press SELECT twice.

▶ Continue from **Setting the odometer**.



## 2. SETTING THE ODOMETER

*ODO is displayed.  
The first digit of the ODO reading is flashing.*

You may want to set the odometer value e.g. after battery replacement which resets all values to default settings.

1. Press SIGNAL/LIGHT to set the first digit of the odometer reading (tens of thousands of kilometres/miles).
2. Press STORE/LAP/RECOVERY to lock your selection.  
*The second digit starts to flash.*
3. Repeat steps 1 and 2 until all values are set.



### Resetting the odometer:

You may want to reset the odometer, for example if you place the Polar Protrainer XT on a new bike or if you are about to start a new training season.

To reset the odometer digit by digit, press and hold SET/START/STOP when the digit is flashing. Release when the reading has dropped to zero.

### You have the following two alternatives to continue:

1. To start setting the total riding time press SET/START/STOP.  
*The lowest block of the graphic bar starts to flash.  
RTIME is displayed.  
The first digit of the total riding time reading is flashing.*

▶ Continue from **Setting the total riding time.**

2. To return to the Time of day display, press SELECT twice.

## 3. SETTING THE TOTAL RIDING TIME

*RTIME is displayed.  
The first digit of the total riding time is flashing.*

You may want to set the total riding time value e.g. after battery replacement which resets all values to the default settings.

1. Press SIGNAL/LIGHT to set the first digit of the total riding time reading (thousands of hours).
2. Press STORE/LAP/RECOVERY to lock your selection.  
*The second digit starts to flash.*
3. Repeat steps 1 and 2 until all values are set.



### Resetting the total riding time:

You may want to reset the total riding time, for example if you are about to start a new training season. To reset the riding time digit by digit, press and hold SET/START/STOP when the digit is flashing. Release when the reading has dropped to zero.

### You have the following two alternatives to continue:

1. To start setting the Wheel size, press SET/START/STOP.
2. To return to the **Time of day display**, press SELECT twice.



# FUNCTIONS DURING THE MEASUREMENT IN THE CYCLING MODE


## 1. START THE CYCLING MEASUREMENT

1. Wear the Transmitter as described in Getting going.
2. Attach the Polar Protrainer XT receiver on the Polar Bike Mount.
3. Install the Polar Speed Sensor on the front fork of your bike as instructed in the Polar Speed Sensor manual.
4. Check that there are no disturbances near you as you are about to start the code search for coded transmission.




Make sure that the code search will be successful:

- Keep the bike still. **Do not ride or move your bike before the code has been picked up.**
  - Keep the receiver within 3 feet/1 metre from your Polar Coded Transmitter.
  - Check that you are not near to other people with heart rate monitors, high voltage power lines, televisions, mobile phones, cars, exercise equipment etc.
5. There are two different ways to start the cycling measurement. Check whether you have the cycling symbol in the Time of day display or not and, according to that, start the code search and heart rate measurement as follows:

There is **no** bike symbol  in the time of day display if your most recent exercise was done in the Heart rate mode.

1. Press SET/START/STOP and SIGNAL/LIGHT simultaneously in the Time of day display to start the Cycling measurement.



There is a bike symbol  in the time of day display if your most recent exercise was done in the Cycling mode.

1. Press SELECT to start the Cycling mode.

The receiver starts searching for coded transmission for max. 20 seconds.  
The coded heart rate information appears in the bottom line of the display.



If the code search was not successful, 00 appears in the display. Restart the measurement from the Time of day display and follow the above mentioned precautions during the code search.



### Swap the wheel size

If you have two bikes with different wheel sizes you should set values for both the WHL 1 and WHL 2.

#### ▶ Calibrating the wheel size.

Swap the wheel size according to your bike as follows:

1. Start the cycling measurement but don't start the stopwatch yet.
2. Press and hold the SELECT button until the WHL 1 / WHL 2 is displayed for a few seconds.

Display will return to the cycling measurement mode.

6. Start the stopwatch by pressing SET/START/STOP.  
Stopwatch starts running and you hear a long beep.  
Display is illuminated for a few seconds.
7. You can now start your cycling exercise.



Your safety is important to us. While riding your bike, please keep your eyes on the road to prevent possible accidents and injury.




### Display in the Cycling mode

- cycling info loop  
Cycling info loop includes: trip, stopwatch, time of day, average speed, maximum speed and lap number. Select the cycling info display by pressing SIGNAL/LIGHT.
- Target Zone indication
- speed
- cycling mode indicator
- heart rate




## 2. SEE YOUR HEART RATE AND SPEED

You can see your heart rate in the bottom line and the speed in the middle line of the display. The Target Zone information is displayed as follows:

-  You are exercising within the preset Target Zone.
-  You are exercising above the preset Target Zone.
-  You are exercising below the preset Target Zone.

Exercising below, within and above the Target Zone is indicated only when stopwatch is running.

 *Target Zone sound signal is not available in the cycling mode. Being outside of Target Zone is indicated by a flashing heart rate reading.*

## 3. CHECK CYCLING INFORMATION

The following information is available by pressing SIGNAL/LIGHT during the measurement in the Cycling mode:



\* Trip, average speed and maximum speed are recorded cumulatively. These values can be reset in the beginning of an exercise.

► **Reset the cycling information.**

Next time you start the measurement in the Cycling mode, on the top line you will see the feature you used last in your previous workout before stopping the stopwatch.

 TZ symbol in the display indicates that the stopwatch is running.

34

When starting the recording, the stopwatch will always show up for a few seconds regardless which out of the six available displays was used last.

## 4. START/STOP THE STOPWATCH

Press SET/START/STOP to stop and restart the stopwatch.

## 5. ILLUMINATE THE DISPLAY

Press and hold SIGNAL/LIGHT to illuminate the display.

## 6. SWAP THE HEART RATE LIMITS

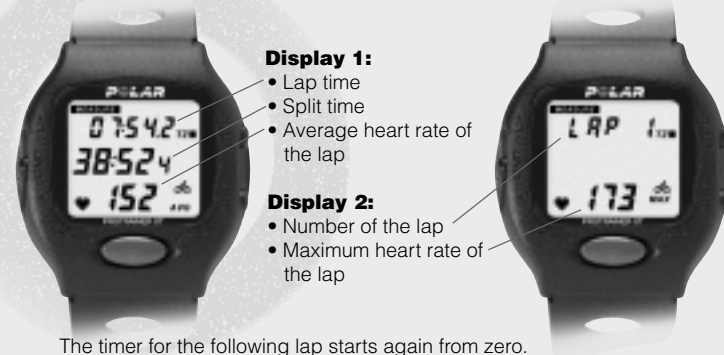
When the stopwatch is running press SELECT to activate new limits. Release. The new activated limits are displayed for 5 seconds.

You can swap the limits only if you have set them.


► **Setting the limits 1,2 & 3.**

## 7. STORE SPLIT TIME AND LAP TIME

Press STORE/LAP/RECOVERY to record the lap and split times. The following information will be displayed successively for a few seconds:



The timer for the following lap starts again from zero.

 You can see the stored lap and split times with current and average heart rates later when recalling the training information.

35

## 8. START RECOVERY CALCULATION

1. At the end of the exercise press SET/START/STOP to stop the stopwatch.  
*Heart rate measurement continues.  
Display is illuminated for a few seconds.*
2. Press STORE/LAP/RECOVERY to start the recovery calculation.  
*RECO appears in the upper row of the display.  
The previously set time for recovery starts the countdown.*

*You will hear two beeps when the time for the Recovery calculation is up.*

The following display will appear for a few seconds:

*RECO  
Drop in your heart rate during the preset time.*

**Quick way**  
*to start the recovery calculation:  
When the stopwatch is running press and hold STORE/LAP/RECOVERY until you hear a beep signal. Release the button.*



To be able to start the Recovery calculation you need to set it first.

### ▶ Setting the time for recovery heart rate.

## 9. START THE TIMERS

Timers start running automatically once you start the stopwatch. Timers alternate in the following order: Timer 1, Timer 2, Timer 1, Timer 2 etc. Timers stop running when you stop the stopwatch.

## 10. RESET THE STOPWATCH

First press SIGNAL/LIGHT until you see the stopwatch displayed in the upper row. Press SET/START/STOP to stop the stopwatch. Then press and hold SET/START/STOP until all stopwatch digits are back to zero. Release the button. The current file is deleted and you can start the stopwatch and begin recording again.

## 11. RESET THE CYCLING INFORMATION

The following cycling information is cumulative exercise by exercise:  
- trip  
- average speed  
- maximum speed

**!** *If you like to measure cycling information for some particular exercise, you must reset these values before starting the stopwatch.*

Select the value, which you want to reset by pressing SIGNAL/LIGHT. Then press and hold SET/START/STOP until the digits are back to zero.

## 12. SWAP BETWEEN CYCLING MODE AND HEART RATE MODE

Press SET/START/STOP and SIGNAL/LIGHT simultaneously to enter the Heart rate mode within the same file. The total exercising time continues running uninterrupted.

## 13. STOP THE CYCLING MODE

YOU HAVE THE FOLLOWING TWO ALTERNATIVES TO STOP:

1. To stop the Cycling mode and continue directly by recalling the recorded training information:  
*Press SET/START/STOP to stop the stopwatch.  
Press SELECT.  
FILE is flashing in the uppermost row of the display.  
The front pages of the recorded file alternate on the display.*
- ▶ **Recalling the training information.**
2. To stop the Cycling mode and enter the Time of day display:  
Press SELECT three times.



# CARE AND MAINTENANCE

Your Polar Heart Rate Monitor is a high-tech instrument of superior design and workmanship and should be treated with care. The suggestions below will help you fulfill the warranty obligations and enjoy this product for many years to come.

## TAKING CARE OF YOUR POLAR HEART RATE MONITOR

- Wash the Polar transmitter regularly after use with a mild soap and water solution. Dry it carefully after washing.
- Never store the Polar transmitter wet. Sweat and moisture can keep its electrodes wet and the transmitter activated, which shortens the battery life.
- Store your Polar Heart Rate Monitor in a cool and dry place. Do not store it in any kind of non-breathing material, such as a plastic bag or a sports bag if it is wet.
- Do not bend or stretch the Polar transmitter. This may damage the electrodes.
- Keep your Polar Heart Rate Monitor out of extreme cold (below -10 °C/ 14 °F) and heat (above 50 °C/122 °F).
- Do not expose the Polar Heart Rate Monitor to direct sunlight for extended periods, such as by leaving it in a car.

## BATTERIES

### POLAR T61 TRANSMITTER

The estimated average battery life of the Polar T61 Transmitter is 2500 hours of use. Contact your distributor or dealer for a transmitter replacement. ► **Service** for detailed instructions.



*Polar recycles used transmitters.*

38

### POLAR PROTRAINER XT RECEIVER

The estimated average battery life of the Polar Protrainer XT receiver is 1 year in normal use (1h/day, 7 days a week). However, because the battery is inserted at the factory, the actual life of your first battery once in your possession may be less than the estimated battery life. Note also that excessive use of the backlight and the alarm signals will use the battery more rapidly.

Do not open the Polar wrist receiver yourself. To ensure the water resistance properties and the use of qualified components, the wrist receiver battery should be replaced only by a person authorised by Polar Electro Oy. At the same time a full periodic check of the Polar Heart Rate Monitor will be done. ► **Service** for detailed instructions.

39



### POLAR HEART RATE MONITOR IN A WATER ENVIRONMENT

Polar Protrainer XT receiver is water resistant to 20 metres. To maintain the water resistance, do not operate the buttons of the Polar wrist receiver under water.

Heart rate measurement in a water environment is technically demanding for the following reasons:

- Pool water with a high chlorine content and seawater may be very conductive and the electrodes of a transmitter may get short circuited and ECG signals cannot be detected by the transmitter unit.
- Jumping into the water or strenuous muscle movement during competitive swimming may cause water resistance that shifts the transmitter on the body to a location where it is not possible to pick up the ECG signal.
- The ECG signal strength varies depending on the individual's tissue composition. The percentage of people who have problems in heart rate measuring is considerably higher in a water environment than in other use.

### POLAR HEART RATE MONITOR AND INTERFERENCE

#### ELECTROMAGNETIC INTERFERENCE

Disturbances may occur near high voltage power lines, televisions, cars, bike computers, some exercise equipment or cellular phones.

#### EXERCISE EQUIPMENT

Several pieces of exercise equipment with electronic or electrical components such as LED displays, motors and electrical brakes may cause interfering stray signals. To try to tackle these problems, relocate the Polar wrist receiver as follows:

1. Remove the transmitter from your chest and use the exercise equipment as you would normally.

2. Move the Receiver around until you find an area in which it displays no stray reading or flashing of 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 the chest and try to keep the wrist receiver in this interference free area.
4. If the Polar Heart Rate Monitor still does not work with the exercise equipment, this piece of equipment may be electrically too noisy for wireless heart rate measurement.

### Minimising possible risks in exercising with a heart rate monitor

Exercise may include some risk, especially for those who have been sedentary. To minimise possible risks consider the following advice:

#### Before beginning a regular exercise program consult your doctor

- if you are over 40 years of age and have not been following a regular exercise program during the past 5 years
- if you smoke
- if you have high blood pressure
- if you have high blood cholesterol
- if you have any signs or symptoms of any disease
- if you are recovering from a serious illness or a medical treatment e.g. surgery
- if you use a pacemaker or another implanted electronic device.

Note also that in addition to exercise intensity the heart rate can be affected by, amongst others, heart, circulation (particularly high blood pressure) and asthma and other breathing medications, as well as some energy drinks, alcohol and nicotine.

**It is important to be sensitive to your body's reactions during the exercise.** If you feel unexpected pain or tiredness regarding your exercise intensity level, it is recommended to stop the exercise or continue at a lighter intensity.

**If you are allergic to any substance that comes into contact with the skin,** check the Polar heart rate monitor materials from the "Technical specifications" chapter. It is recommended that you wear the transmitter against your bare skin to ensure flawless operation. However, if you wish to wear the transmitter over a shirt, moisten the shirt well under the electrodes.

**Notice to persons with pacemakers, defibrillator or other implanted electronic device.** Persons who have a pacemaker use the Polar heart rate monitor at their own risk. Before starting use, we always recommend an exercise test under doctor's supervision. The test is to ensure the safety and reliability of the simultaneous use of the pacemaker and the heart rate monitor.



# FREQUENTLY ASKED QUESTIONS

## WHAT SHOULD I DO IF...

### ... I DON'T KNOW WHERE I AM IN THE SETTING CYCLE?

Press SELECT several times until you are back in the Time of day display.

### ... THERE IS NO HEART RATE READING?

1. Check that the electrodes of the transmitter are moistened and that you are wearing it as instructed.
2. Check that you have kept the transmitter clean. ► **Care and maintenance**
3. Check that there are no sources of electromagnetic radiation in the close vicinity of the Polar wrist receiver, such as TV sets, cellular phones, CRT monitors etc. ► **Precautions**
4. Have you had a cardiac event which may have altered your ECG waveform? In this case consult your physician.

### ...HEART SYMBOL FLASHES IRREGULARLY?

1. Check that your Polar wrist receiver is inside the transmission range and not further than 3 feet / 1 metre from the Polar Coded Transmitter you are wearing.
2. Check that the elastic strap has not become loose during exercise.
3. Make sure that the electrodes of the transmitter are moistened.
4. Cardiac arrhythmia may cause irregular readings. In this case consult your physician.

### ... OTHER PERSON WITH HEART RATE MONITOR OR EXERCISE EQUIPMENT IS CAUSING INTERFERENCE?

Make sure there are no disturbances such as high voltage power lines, televisions, cars, cycle computers, exercise equipment or other people with heart rate monitors near you during the code search. The benefit of the coding is that you will not normally pick up other people's heart rate transmission and certain kinds of disturbances are more efficiently filtered.



However your training partner may have coincidentally activated exactly the same code. In this case you have the following alternatives:

1. Keep a distance from your training partner and continue your training session normally  
or
2. Stop the heart rate measurement ( ► **Stop the heart rate measurement**), pull the transmitter off your chest for 15 seconds (code will be changed) and restart from the beginning ( ► **Start the heart rate measurement**).

In some cases you may need to dry the transmitter electrodes to ensure that the transmitter is turned off again, as the sweat may keep it active even when it is off the chest.

### ... THERE ARE NO REACTIONS TO ANY BUTTONS?

Reset the Polar Heart Rate Monitor. Resetting clears all memory values and settings will return to the default settings.

1. Press the reset button with a pen tip.  
*Display becomes full of digits.*
2. Press any of the four buttons once.  
The Polar Protrainer XT enters the Time of day display.

### ... THE DISPLAY IS BLANK OR FADING?

Usually the first sign of a discharged battery is the disappearance of the digits when using the backlight. Have the batteries checked.

#### ► **Service**

### ... IF THE BATTERY OF THE WRIST RECEIVER MUST BE REPLACED?

We recommend having all service done by an authorised Polar Service. This is especially necessary to ensure the warranty remains valid and is not affected by incorrect repair procedures done by an unauthorised agent. Polar Service will test your wrist receiver for water resistance after battery replacement and make a full periodic check of the complete Polar Heart Rate Monitor. ► **Care and Maintenance/Batteries and Service**



### ... IF THERE IS 00000 MILES/ KM OR 0000 h IN THE UPPERMOST ROW OF THE TIME OF DAY DISPLAY?

Press and hold SIGNAL/LIGHT and the uppermost row of the time of day display will change. You may see 00000 MILES / KM which indicates total cycling distance, 0000 h which indicates total riding time or the current day (e.g.05). Press and hold for a few seconds as many times as needed until you can see the current day in the uppermost row.

### ... THE SPEED READING IS 00 OR THERE IS NO SPEED READING IN THE DISPLAY DURING THE RIDE?

1. If the 00 readings appear only occasionally, they may be caused by high voltage power lines in your surroundings.
2. If the 00 readings come more often, you probably have ridden more than 2500 hours with the speed sensor, and it's time for battery replacement.
3. If you just have started the measurement, you should wait until the code search is finished and then start riding the bike to successfully get the speed signal.
4. In any case, check the correct positioning of the Polar Speed Sensor. Also check that the distance between the Polar Speed Sensor and the bike mounted wrist receiver is between 1'4" - 1'8" / 40-50 cm.
5. Check that the spoke magnet is installed correctly and the distance between the spoke magnet and the sensor is not more than 0.2"/5 mm. Adjust the spoke magnet by rotating it around the spoke before putting the metal cover on the magnet.


### ... ANOTHER CYCLIST IS CAUSING INTERFERENCE?


To avoid crosstalk from another cyclist with a Polar Speed Sensor, keep the distance of at least 2'4" / 70 cm between your Polar Protrainer XT receiver mounted on your Polar Bike Mount and the Polar Speed Sensor of the other cyclist.


### ... I AM CAUSING INTERFERENCE TO OTHER CYCLISTS?


You may cause crosstalk to other cycle computers or heart rate monitors. To avoid this, keep a distance of at least 2'4" / 70 cm between your Polar Speed Sensor and other person's cycle computers and a distance of at least 3 feet / 1 metre between your Polar Coded Transmitter and other cycle computers.



 Indicates coded transmission of heart rate. The inner heart flashes to the beat of your heart.

 In the Time of day display indicates that the alarm is on. In the Measure mode indicates that the sound signal will alarm if you are exercising outside your target heart rate zone.

 When starting the heart rate measurement, these flashing lines indicate the search for coded transmission.

 Indicates that you are setting the Cycling mode functions or you are exercising in Cycling mode. In the Time of day display it indicates that your most recent exercise was done in Cycling mode.

**ALM:** Indicates the alarm in watch settings.

**AM/PM:** 12 hour mode of time.

**Chrono:** Displays the total exercising time during the heart rate measurement.

**DATE:** Indicates the date in watch settings.

**Electrodes:** The grooved areas of the transmitter, against the skin. Pick up the heart's electrical impulses.

**FILE:** Indicates the File mode.

**FILE End:** Indicates the end of the file you are reviewing.

**FULL:** After taking 48 lap times FULL appears in the display. You can continue taking the lap times but they won't be recorded into the Protrainer XT's memory.

**Graphic bar:** The graphic bar consists of four blocks and indicates the settings of watch, heart rate or cycling functions. A flashing block means that the setting of that particular function is possible.



**Heart rate:** The number of heart beats per minute (bpm).

**KM/H:** Kilometres per hour.

**LAP:** In Measure and File modes, together with a number, indicates how many lap times are used.

**Lap and split times:** Time needed to move once around a closed course or track.

**LIM 1 / LIM 2 / LIM 3:** Heart Rate Limits for Target Zones 1, 2 and 3.

**Lower Limit:** The lower heart rate limit of the target zone

**MAX:** Together with a reading indicates either maximum heart rate or maximum speed.

**MEASURE:** Measure mode

**MPH:** Miles per hour

**ODO, odometer:** Measures cumulative total distance in Cycling mode.

**Polar Coded Transmitter:** Automatically locks in a code to transmit your heart rate to your wrist receiver. In coded transmission the receiver accepts heart rate data from your Polar Coded Transmitter only. Coding significantly reduces crosstalk caused by other users of heart rate monitors. However, it does not necessarily reduce all environmental interference.

**Primary measurement display:** In the Heart rate mode the middle row of the display indicates either total exercising time, time of day or lap time according to your settings.

**RECO, Recovery heart rate:** Decrease in heart rate during the pre-set period of time.

**RTIME, total riding time:** measures cumulative riding time.

**Secondary measurement displays:** The secondary measurement displays will be seen for a few seconds by bringing the wrist receiver next to the Polar logo of the Polar Coded Transmitter for a moment. The secondary measurement display depend on which of the three alternatives was chosen for the primary measurement display.

**SET:** Set mode.

**Target Zone limits:** Target Zone limits are determined as percentages of maximum heart rate. The percentages are converted into heart rate in beats per minute.



**TIM1 / TIM2:** Timers 1 and 2 help you to divide your exercise session into separate phases (e.g. warm-up, exercise phase, cool down). Timers can be used individually (only Timer 1) or sequentially.

**TIME:** Indicates the time of day in watch settings.

**TZ, Target Zone:** The area between upper and lower target zone limits. Target Zone selection is based on personal fitness goals.

**tz** ■ During heart rate measurement the TZ symbol with a block next to it indicates that you are exercising within the Target Zone. In File mode this indicates the time spent within the Target Zone.

**tz** ■ During heart rate measurement the TZ symbol with a upper block flashing indicates that the heart rate is above the Target Zone. In File mode this indicates the time spent above the Target Zone.

**tz** ■ During heart rate measurement indicates that the heart rate is below the Target Zone. In File mode this indicates the time spent below the Target Zone.

**Units of measure:** By changing the Time mode from 12 h display to 24 h display you also change the other units used by the monitor. In the table below you will find the units which are in use in each alternative.

	24h mode	12h mode
TIME OF DAY	24 h	AM/PM
ALARM	24 h	AM/PM
SPEED	km/h	mph
DISTANCE	km	miles
WHEEL DIAMETER	mm	<b>mm</b> (NOTE!)

**Upper limit:** The upper heart rate limit for the target zone.

**WHL 1 / WHL 2, wheel:** wheel size in millimetres.

**Wireless button:** During the measurement in the Heart rate mode bring the wrist receiver next to the Polar logo of the Polar Coded Transmitter for a moment.





# TECHNICAL SPECIFICATIONS

The Polar Heart Rate Monitor is designed to indicate the level of physiological strain and intensity in sports and exercise. No other use is intended or implied. The heart rate is displayed as number of heart beats per minute (bpm).

## POLAR CODED TRANSMITTER

Battery type:	Built-in Lithium Cell
Battery life:	Average 2500 hours of use
Operating temperature:	-10 °C to +50 °C / 14 °F to 122 °F

## POLAR WRIST RECEIVER

Battery type:	CR 2032
Battery life:	Average 1 year (1h/day, 7 days/week)
Operating temperature:	-10 °C to +50 °C / 14 °F to 122 °F
Water resistancy:	to 20 metres
Accuracy of heart rate measurement:	±1% or ±1 bpm, whichever is larger, definition applies to steady conditions.

## DEFAULT SETTINGS

Timer 1:	00 00 (off)
Timer 2:	00 00 (off)
Limits 1:	80 - 160
Limits 2:	00 - 00
Limits 3:	00 - 00
Recovery function:	off
Primary measurement display:	Chrono
Wheel size 1:	2000 mm
Wheel size 2:	2100 mm



# POLAR BOOKS AND ACCESSORIES

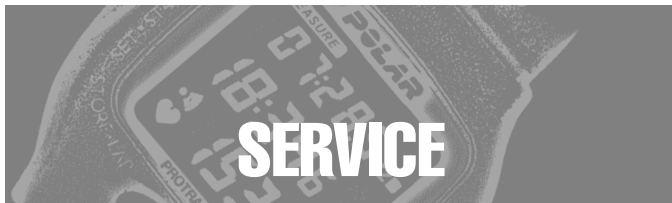
## POLAR BOOKS AND BOOKLETS

Roy Benson, MPE	Precision Running
Dr. Matthew Brick	Precision Multi-Sport
Edmund R. Burke, Ph.D.	Precision Cycling
Neil Craig	Scientific Heart Rate Training
Sally Edwards	The Heart Rate Monitor Book
Mark Fenton and Dave McGovern	Precision Walking
Ute Haas, M.Sc., Tarja Suomi, M.Sc. and Dr. Raija Laukkanen, Ph.D.	Precision Aerobics Training, Lactate, Pulse Rate
Dr. Peter J.G.M. Janssen	Precision Weight Management
Dr. Katriina Kukkonen-Harjula, MD and Dr. Raija Laukkanen, Ph.D.	Research Index
Dr. Raija Laukkanen, Ph.D.	Precision Sports Aerobics
Yvonne Lin	Target Your Fitness and Weight Management Goals
Dr. James M. Rippe	The Polar Fat Free and Fit Forever Program
Dr. James M. Rippe	

## POLAR ACCESSORIES

- Polar Bike Mount for all bikes and Polar Heart Rate Monitors
- Polar Speed Sensor Kit
- Polar Sensor Assembly Kit
- Extra Transmitter for other family members
- Polar Heart Bra for women
- Test handle for groups and trainers

Contact your local dealer or distributor for more details.



Polar Service will help you get the most out of your Polar Heart Rate Monitor. Should your Polar Heart Rate Monitor need service, please follow the instructions below :

### CHECK LIST

Before you return your Polar Heart Rate Monitor for service, please check the following:

#### 1. Is the transmitter being worn correctly ?

The Polar logo should be right side up and the transmitter flat against the skin. The elastic strap should be adjusted for a snug and comfortable fit.

#### 2. Are the electrodes moist on the transmitter ?

It is important that the electrodes are wet during the heart rate measurement.

#### 3. Is the transmitter clean ?

Regular washing with mild soap and water solution and thorough dry afterwards will ensure that good conductivity remains.

#### 4. Are you having disturbances caused by other people with heart rate monitors or exercise equipment?

Check that the code search in the beginning of the measurement has been successful. See **Start the heart rate measurement** and **Frequently asked questions** for details.

### SENDING INSTRUCTIONS

1. Pack the product carefully to avoid further damage.
2. Include all the parts of the Polar Heart Rate Monitor. A full periodic check will be done on the whole product.
3. Include proof of purchase (a receipt or its photocopy) if the product is under warranty.
4. Include a detailed description of the problem. Use the return sheet of the Customer Care Charter.
5. Include your name, return address and daytime telephone number.
6. Ship postage prepaid to your dealer or distributor. For contact details see the Customer Care Charter.

### POLAR SERVICE PROCEDURE

Any service is recommended to be done by an authorised Polar service personnel. Our standard test and check procedure will be performed on all Polar Heart Rate Monitors. The test includes the following elements:

#### POLAR TRANSMITTER

1. Visual inspection
2. Check of the transmission range
3. Check of electrode conductivity
4. Wash and clean if necessary

#### POLAR WRIST RECEIVER

1. Visual inspection
2. Check of battery voltage
3. Check and cleaning of case contacts
4. Re-assembly, including seal renewal if necessary
5. Water resistance test
6. Operational test



*Water resistance cannot be guaranteed after unauthorised service.*



## LIMITED POLAR WARRANTY

- Polar Electro Oy warrants the original consumer/purchaser of this heart rate monitor that the product will be free from defects in material or workmanship for one year from the date of purchase. **Please keep the receipt which is your proof of purchase!**
- Warranty does not cover receiver battery, damage due to misuse, abuse, accidents or negligence of the precautions; improper maintenance, commercial use, cracked or broken cases.
- Warranty does not cover damage or consequential damage caused by service not authorised by Polar Electro Oy.
- During the warranty period the product will be either repaired or replaced at an authorised service centre free of charge.
- This warranty does not affect the consumer's statutory rights under applicable national or state laws in force, or consumer's rights against the dealer arising from their sales / purchase contract.

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Polar logotype is a registered trademark and Polar Protrainer XT is a trademark of Polar Electro Oy.



This CE marking shows compliance of this product with Directive 93/42/EEC.

## DISCLAIMER

- This product is protected by one or several of the following patents: FI 88223, DE 4215549, FR 92.06120, GB 2257523, HK 113/1996, SG 9591671-4, US 5491474, FI 88972, FR 92.09150, GB 2258587, HK 306/1996, SG 9592117-7, US 5486818, FI 96380, US 5611346, EP 665947, DE 69414362, FI 68734, DE 3439238, GB 2149514, HK 812/1989, US 4625733, FI 100924, FI 100452, US 5840039, FI 4150, FI 4069, DE 29910633, FI 104463. Other patents pending.
- The material in this manual is for informational purposes only. The products it describes are subject to change without prior notice, due to manufacturer's continuous development program.
- Polar Electro Oy makes no representations or warranties with respect to this manual or with respect to the products described herein. Polar Electro Oy shall not be liable for any damages, direct or incidental, consequential or special, arising out of, or related to, the use of this material or the products described herein.

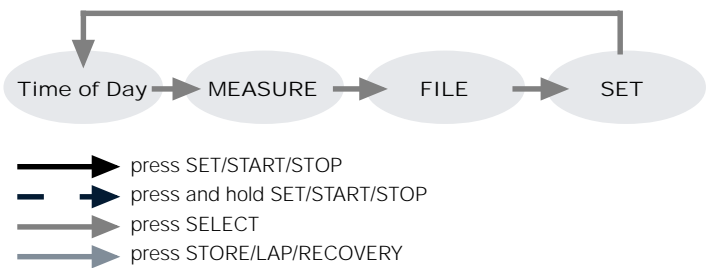



# INDEX

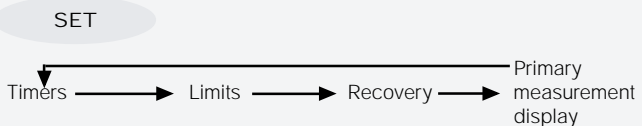
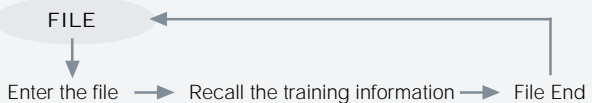
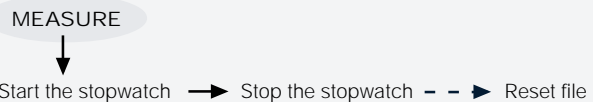
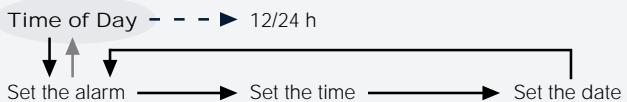
Calibrating the wheel size .....	28
Care and maintenance .....	38
Checking the transmission code .....	19
Disclaimer .....	53
Features .....	6
Frequently asked questions .....	42
Functions during heart rate measurement .....	18
Checking the secondary measurement display .....	19
Illuminating the display .....	19
Resetting the stopwatch .....	23
Seeing your heart rate .....	19
Starting/stopping the stopwatch .....	19
Starting the recovery calculation .....	22
Starting the timers .....	22
Stopping the heart rate measurement .....	23
Storing the split/lap time .....	21
Swapping the heart rate limits .....	21
Turning off/on the target zone sound signal .....	19
Functions during the measurement in the cycling mode .....	32
Checking the cycling information .....	34
Illuminating the display .....	35
Resetting the cycling information .....	37
Resetting the stopwatch .....	37
Seeing your heart rate and speed .....	34
Starting/stopping the stopwatch .....	35
Starting the recovery calculation .....	36
Starting the timers .....	36
Stopping the Cycling mode .....	37
Storing the split/lap time .....	35
Swapping between heart rate mode and Cycling mode .....	37
Swapping the heart rate limits .....	35
Swapping the wheel size .....	33
Getting going .....	8
Glossary .....	45
Parts .....	7
Polar books and accessories .....	49
Precautions .....	40
Questions ? .....	42
Recalling the training information .....	24
Service .....	50
Setting the alarm .....	9,10
Setting the date .....	9,11
Setting the heart rate limits 1, 2 & 3 .....	13,15
Setting the heart rate measurement features .....	13
Setting the odometer .....	30
Setting the Primary measurement display .....	13,17
Setting the recovery heart rate .....	13,16
Setting the time .....	9,11
Setting the timers 1 & 2 .....	13,14
Setting the total riding time .....	31
Setting the watch .....	9
Starting the heart rate measurement .....	18
Technical specifications .....	48
Warranty .....	52



# ROAD MAP



## Setting the watch:



# HOW TO READ THIS GUIDE

## Visual cues

- ⚡ Indicates a tip to do things faster.
- ! Indicates important issue. Please pay attention!
- 😊 Indicates a useful tip. It's good to know these things.
- ▶ See also / Continue from.
- 🚲 You need an optional Polar Speed Sensor.

## Monitor symbols

- ❤️ A flashing heart rate indicates heart rate measurement.
- 🔊 Target Zone sound signal / Alarm symbol.
- 🚲 Indicates you are or you have been in the cycling mode during the measurement.
- TZ** Target Zone indicator.
- MEASURE** Indicates you are in the Measure mode.
- FILE** Indicates you are in the File mode.
- SET** Indicates you are in the Set mode.

## Monitor buttons



# NOTES

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