POLAR.

POLAR.

Polar F4™
Fitness Herzfrequenz-Messgerät
Fitness Heart Rate Monitor
Cardiofréquencemètre
Cardiofrequenzimetro per il Fitness
Fitness Hartslagmeter

Congratulations on your purchase of a new Polar F4™ Fitness Heart Rate Monitor!

The Polar F4 heart rate monitor is easy to use and an ideal training buddy for many reasons.

- It shows you the date, exercise duration, time spent in target heart rate zone, your average and maximum heart rates and your calorie expenditure after each exercise session.
- It reminds you to exercise at least every three days.
- It has an easy to use, two-button functionality.
- It has a large easy to read display.

Why should you use a heart rate monitor?
- A heart rate monitor helps you to train at your ideal pace.
- A heart rate monitor maximizes the benefits of exercise in a limited amount of time.
- A heart rate monitor provides you with objective information. Are you on the right track with your training? Are you improving?
- A heart rate monitor provides you with immediate feedback; this is why it is an ideal training partner for you!

The Polar F4 heart rate monitor provides you a reliable and convenient way to measure your heart rate wirelessly. It measures the electrocardiogram (ECG). You can use the wrist unit to conveniently view your heart rate and other information while walking, cycling, cross-country skiing, or performing any other exercise without disturbing your exercise rhythm. Professional athletes and amateurs alike have relied on the information provided by their Polar heart rate monitor for decades, so why shouldn't you?

Read on to find out how to get the most out of your new training buddy!

POLAR F4 QUICK GUIDE

OK → ← SET

Switch the unit on by pressing any of the buttons. Press OK to start the Basic Settings (SETTINGS is displayed). Enter the Basic Settings information (time mode, time of day, date, units for weight and height, your weight, height, age, and gender). Adjust the values with the SET button and accept your selection with the OK button. *For further information, see chapter 2. Basic Settings, page 37.*

| **1. SETTINGS** |
| Press OK |

▼

| **2. TIME MODE?**
Select 12h or 24h time mode with SET |
| Press OK |

| If you chose 12h time mode select AM or PM with SET |
| Press OK |

▼

| **3. TIME OF DAY**
Select the hours with SET |
| Press OK |

| Select the minutes with SET |
| Press OK |

▼

| **4. SET DATE**
Select MONTH/DATE with SET |
| Press OK |

| Select DATE/MONTH with SET |
| Press OK |

▼

| Select YEAR with SET |
| Press OK |

▼

| **5. UNIT**
Select POUNDS (lb/ft)/ KILOGRAMS (kg/cm) with SET |
| Press OK |

▼

| **6. USER SETTINGS**
Select your WEIGHT with SET |
| Press OK |

| Select your HEIGHT with SET |
| Press OK |

| Select your AGE with SET |
| Press OK |

▼

| Select FEMALE/MALE with SET |
| Press OK |

▼

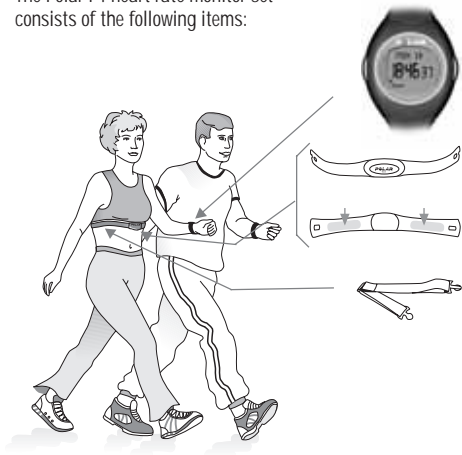| **7. SETTINGS OK**
You have now completed the Basic Settings and the unit is ready to be taken into use. |

CONTENTS

1.1 F4 PRODUCT SET

The Polar F4 heart rate monitor set
consists of the following items:

The wrist unit displays your heart rate, calories expended, and exercise time. You can also wear it as a watch.

Wear **the transmitter** while exercising. The electrode areas are on the back of the transmitter. The electrodes detect your heart rate continuously and transmit it to the wrist unit.

The elastic strap holds the transmitter around your chest.

This **user manual** contains necessary information on using your Polar F4 heart rate monitor.

Polar Web Services

Polar Fitness Trainer (www.PolarFitnessTrainer.com)
is a complete web service tailored to support your exercise.
Free registration gives you access to the exercise diary,
tests & calculators, reports and useful articles. Moreover,
you can get latest product tips and support online at
www.polar.fi/fitness.

1.2 WRIST UNIT BUTTONS AND SYMBOLS

OK button
- Starts and stops the heart rate measurement
- Enters the displayed menu and setting
- Moves back to the main mode in the Summary and Totals menu
- Accepts the settings
- Switches the alarm and snooze off

Note: By pressing and holding the OK button, you can return to the Time of Day display from any menu except while you are recording your exercise.

SET button
- Moves to the following mode or display
- Increases the selected value
- Snoozes the alarm for 10 minutes

By pressing and holding the SET button
- In the Time of Day display the 🔒 key lock can be switched ON/OFF
- In the Totals menu an individual value can be reset
- In the Exercise mode the target zone alarm can be switched ON/OFF
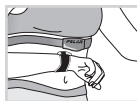
Heart Touch
In the Exercise mode, you can see the time of day by bringing the wrist unit close to the Polar logo on the transmitter.
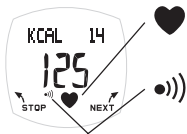
The blinking **heart symbol** indicates that your heart rate is being measured.

The **sound symbol** indicates that
- the Target Heart Rate Alarm is on (Exercise mode).
- the Alarm is on (Time of Day mode). Pressing the SET button snoozes the alarm for ten minutes. Press the OK button to stop the alarm.
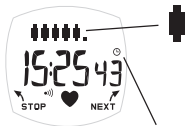
The **fitness bullets** indicate the time you have spent on the target heart rate zone. *For further information, see the section Functions during exercise on page 39.*

The **watch symbol** indicates the time of day in the Exercise mode.
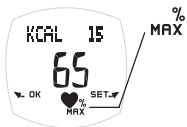
Your heart rate is displayed as a percentage of your maximum heart rate (**HR$_{MAX}$**).
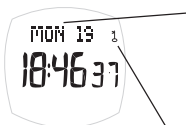
Weekday indicators
MON = Monday, TUE = Tuesday, WED = Wednesday, THU = Thursday, FRI = Friday, SAT = Saturday, SUN = Sunday

The **key lock symbol** indicates that the buttons are locked in the Time of Day display. By pressing and holding the SET button, you can lock the buttons. The following text will scroll on the display: HOLD TO LOCK, LOCKED. Unlock by pressing and holding the SET button again. HOLD TO UNLOCK, UNLOCKED scrolls on the display.
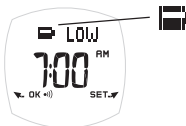
The **battery symbol** indicates that the wrist unit battery is low. *For further information, see the section Care and Maintenance on page 48.*

Automatic **exercise reminder text** appears when three days have passed since your most recent exercise. This reminder appears every full hour on the display when the time of day is displayed.

1.3 FUNCTIONS

Basic Settings

• When using the wrist unit for the first time or after resetting it, press any button to go to the Basic Settings mode.

Exercise

← OK

• Measures and records exercise information
• Shows exercise information during the exercise session
• Exercise Summary is automatically shown after stopping the exercise recording

• Starting point for all functions
• Shows date and time

SET

Summary

• Shows the data recorded during the exercise session (date, duration, time in target zone, average heart rate, maximum heart rate and calorie expenditure)

SET

Totals

• Accumulates time, calories, exercise counts and average exercise frequency per week

SET

Settings

• Target heart rate limits settings
• Sound setting
• Watch settings: alarm, time, date
• User settings: weight, height, age, gender
• Unit setting: lb/ft or kg/cm

2. BASIC SETTINGS

You only need to activate the blank wrist unit once or after resetting it. Once activated, the wrist unit cannot be switched off.

It is important that you be precise with the Basic Settings, especially when setting your weight, height, age and gender, as they have an impact on the accuracy of the measuring values, such as the target heart rate limits and calorie expenditure.

Alternatively you can transfer your Basic Settings to the wrist unit from the PC. For further information, see the section Transferring Settings From Your Computer on page 45.

1. Activate the wrist unit by pressing any button.
2. **SETTINGS** is displayed. Press OK to go to Basic Settings.
3. **TIME MODE?:** Select **12 h** or **24 h** time mode by pressing SET. Press OK to accept your selection. **TIME OF DAY** is displayed.
   12 h: the time is displayed from 1 to 12 AM or PM.
   • Press SET to select **AM** or **PM**. Press OK.
   • Press SET to select the **HOURS**. Press OK.
   • Press SET to select the **MINUTES**. Press OK.
   24 h: the time is displayed from 0 to 23 hours. In the date setting the day is set first and then the month.
   • Press SET to select the **HOURS**. Press OK.
   • Press SET to select the **MINUTES**. Press OK.

4. **SET DATE:** Press SET to select the **MONTH** or **DAY**. Press OK.
   • Press SET to select the **DAY** or **MONTH**. Press OK.
   • Press SET to select the **YEAR**. Press OK.
5. **UNITS** for weight and height: Press SET to select pounds and feet (lb/ft) or kilograms and centimeters (kg/cm). Press OK.
6. **WEIGHT:** Press SET to select your weight. Press OK.
7. **HEIGHT:** Press SET to select your height. Press OK.
   Note: If you selected lb/ft as your units, you first set feet and then inches.
8. **AGE:** Press SET to select your age. Press OK.
9. **SEX:** Press SET to select **FEMALE** or **MALE**. Press OK. The wrist unit displays **SETTINGS OK** and goes to the Time of Day Display after 3 seconds.

If you prefer to change some of your settings after accepting the Basic Settings, you can do it in Settings mode. For further information, see the section How to Change Settings on page 43.

3. EXERCISING

To measure your heart rate, you need to wear the transmitter. The wrist unit records the exercise information (date, duration, time spent in target heart rate zone, average heart rate, maximum heart rate and expended calories) during your exercise session.

Note: *The default settings of the target heart rate limits are calculated according to your Basic Settings. You can learn more about target heart rate zones in the section Target Heart Rate Zone on page 46. This information will help you to exercise at the right level. For further information on how to set the target heart rate limits, see the section How to Change Settings on page 43.*

3.1   HOW TO PUT YOUR TRANSMITTER ON AND START RECORDING YOUR EXERCISE DATA

Keep the wrist unit within 3 feet/1 meter of your transmitter. Check that you are not near other people wearing heart rate monitors or any source of electromagnetic disturbance. *For further information on interference, see the section Precautions on page 49.*

1. Attach one end of the transmitter to the elastic strap.

2. Adjust the transmitter's strap length to fit snugly and comfortably. Secure the strap around your chest, just below the chest muscles, and buckle the strap to the transmitter.

3. Lift the transmitter off your chest and moisten the two grooved electrode areas on the back. Check that the wet electrode areas are firmly against your skin and that the Polar logo is in a central, upright position.

4. Wear the wrist unit as a watch and press OK to start recording your exercise data. Your heart rate and the heart symbol ♥ appear in a few seconds.
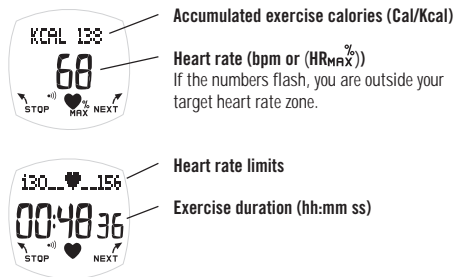
3.2 FUNCTIONS DURING EXERCISE

Checking the Time of Day
Bring the wrist unit near the Polar logo on the transmitter. The time of day is displayed for three seconds. Or you can press the SET button until you see the Time of Day display.

Checking Exercise Duration, Heart Rate Limits and Calories
Press the SET button to browse the following information:

Accumulated exercise calories (Cal/Kcal)

Heart rate (bpm or ($HR_{MAX}^{\%}$))
If the numbers flash, you are outside your target heart rate zone.

Heart rate limits

Exercise duration (hh:mm ss)

Heart rate limits
Providing that you have set your age in the Basic Settings mode, the unit gives you your personal target heart rate limits. These are the limits you can see on the upper row of the display. If you have not set your age, you can do it in the Settings mode. *For further information on determining your personal target heart rate limits, see the section Target Heart Rate Zone on page 46.*
The heart symbol in the line moves according to your heart rate. If there is no heart symbol in the line, your heart rate is either below or above your limits. An alarm sounds when you are outside the limits, if the heart rate zone alarm is on.

Turning the Heart Rate Zone Alarm •)) On or Off
Press and hold the SET button until the alarm is turned on or off. The alarm symbol •)) is displayed when the alarm is on.

Fitness bullets

Time of day

Fitness bullets
There are six fitness bullets. Each represents 10 minutes in the target heart rate zone, equaling one hour in total if all the bullets appear. When you are in the target heart rate zone, the 1st bullet starts to blink. When 10 minutes is up, the next bullet starts to blink and so on. When you are not in the target zone, the blinking bullet disappears.

3.3 HOW TO STOP AND REVIEW THE EXERCISE SUMMARY

Note: The following information is only available if you have used the transmitter belt during your exercise session.

Press the OK button to stop the recording of the exercise data. The SUMMARY view is automatically displayed. Each result is displayed for 3 seconds.

The following information is shown in the Exercise Summary.

DURATION   Exercise duration (hh:mm ss)

IN ZONE   Exercise time in the target heart rate zone (hh:mm ss)

AVG. HR   Average heart rate of the exercise session (bpm)

MAX HR   Maximum heart rate of the exercise session (bpm)

CALORIES   Calories expended during the exercise session (Cal/Kcal)

After the Exercise Summary review, the wrist unit returns to the Time of Day display. You can skip the Exercise Summary by pressing OK button and check the information later. *For further information on checking saved information, see chapter Checking Saved Exercise Information on page 41.*

Note: If your display reads 00, your heart rate is not being received. Bring the wrist unit up to your chest near the transmitter's Polar logo. The wrist unit starts looking for the heart rate signal again. The display refreshes in about 5 seconds.

Note: Your exercise information is saved in the Summary and Totals files only if the exercise session has lasted more than one minute.

4.1 SUMMARY FILE

You can review your latest exercise information in the Summary file.

1. In the Time of Day display, press SET.
   SUMMARY is displayed.
2. Press OK to start reviewing the data.
   DATE is displayed.
3. Scroll with the SET to see the following exercise information:

DATE	Exercise session date
DURATION	Exercise session duration
IN ZONE	Exercise time in target zone
AVG. HR	Average heart rate of the exercise session
MAX HR	Maximum heart rate of the exercise session
CALORIES	Calories expended during the exercise session

4. Press OK. **SUMMARY** is displayed.

You can proceed to the Totals menu by pressing SET (**TOTALS** is displayed). *For further information on Totals, see the section Totals File in the next chapter.* Alternatively, return to the Time of Day display by pressing and holding OK.

4.2 TOTALS FILE

You can review cumulative exercise information in the Totals file.

1. If you start from the Time of Day display, press SET twice.
   TOTALS is displayed.
2. Press OK to start reviewing the data.
   TOT. TIME is displayed.
3. Scroll with SET to see the following exercise information:

TOT. TIME	Total accumulation of exercise time and the date the accumulation started.
TOT. KCAL	Total calorie expenditure and the date the accumulation started.
COUNT	Total number of all exercise sessions and the date the accumulation started.
PER WEEK	Average frequency of exercise sessions per week (starting from Monday 00:00.00).
RESET ALL	Resets all information in the Totals mode to zero.

If you wish to reset all the information, press OK.
RESET flashes on the display. Select **RESET** or **NO RESET**
with SET.
Confirm your choice with the OK button. **RESET ALL** is
displayed.

4. Press and hold the OK button until the wrist unit returns
to the Time of Day display.

Press and hold OK

Press SET twice

Totals

OK

Tot. Time		Tot. Kcal		Count		Per Week		Reset All
	SET		SET		SET		SET	
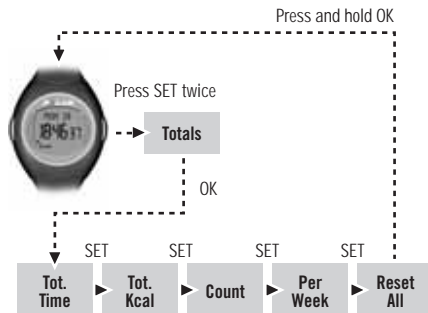
*Note:* *You can also reset an individual Total value in the Totals menu.*
Press the SET button to review the *TOTALS* *menu and find the value you*
want to reset. Press and hold the SET button until the wrist unit asks if
you want to reset the value (RESET?). Continue pressing and holding the
SET button until the value is reset to zero. The accumulation date is set
to the current date.

In the Settings menu, you can view or change the information you have set earlier, such as heart rate limits, your personal information and watch settings. You can also prepare your settings and transfer them to your wrist unit from your PC. *For further information, see the section Transferring Settings from Your Computer on page 45.*

1. In the Time of Day display, press SET until **SETTINGS** is displayed.
2. Press OK. **LIMIT SET** is displayed.
3. Press SET to browse **LIMIT SET**, **SOUND SET**, **WATCH SET**, **USER SET** or **UNIT SET**.
4. Press OK to enter the desired setting.

Note: You can return to the Time of Day display at any stage by pressing and holding the OK button.
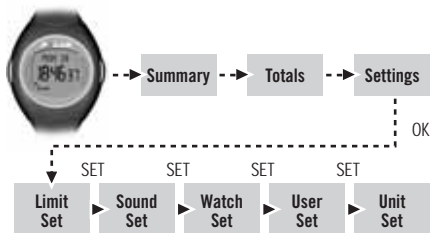
5.1 HEART RATE LIMITS SETTINGS

These are the heart rate limits that are used during your exercise session. The wrist unit calculates your personal target heart rate limits based on your age. You can also set the target heart rate limits yourself. *For further information on determining your personal target heart rate limits, see the section Target Heart Rate Zone on page 46.*
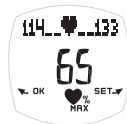
If you start from the Time of Day display, repeat steps 1-4.

5. **LIMITS** is displayed. Press SET to select heart rate limits as beats per minute (**HR**) or as a percentage of your maximum heart rate (**HR$_{MAX}^{\%}$**). Press OK.
6. **HIGH LIMIT** is displayed. Select the higher limit value with SET. Press OK.
7. **LOW LIMIT** is displayed. Select the lower limit value with SET. Press OK.
8. **LIMIT SET** is displayed. Press SET to proceed to SOUND SET. Press OK.

5.2 SOUND SETTING

If you start from the Time of Day display, repeat steps 1-4.
5. **SOUND SET** is displayed. Select sound **ON** or **OFF** with SET. Press OK.
6. Press SET to proceed to Watch Settings. Press OK.

5.3 WATCH SETTINGS

Note: *The time and date are presented in two ways. Select the presentation mode by choosing 12h (date: month, day, year) or 24h (date: day, month, year) mode.*

Alarm •)) Setting

If you start from the Time of Day display, repeat steps 1-4.
5. **ALARM** is displayed. Select **ALARM ON** or **OFF** with SET. Press OK.
   ALARM OFF: Proceed to Time Setting step 6.
   ALARM ON (24 h mode): Select the hours with SET. Press OK. Select the minutes with SET. Press OK to proceed to Time Setting step 6.
   ALARM ON (12 h mode): Select **AM** or **PM** with SET. Press OK. Select the hours for the alarm with SET. Press OK. Select the minutes with SET. Press OK to proceed to Time Setting step 6.

Time Setting

If you start from the Time of Day display, repeat steps 1-4.
5. **ALARM** is displayed. Press OK until **TIME** is displayed.
6. Select 12 h or 24 h mode with SET. Press OK.
7. Only when 12 h mode is in use: Select **AM** or **PM** with SET. Press OK.
8. Select the hours with SET. Press OK.
9. Select the minutes with SET. Press OK to proceed to Date Setting step 6.

Date Setting

If you start from the Time of Day display, repeat steps 1-4.
5. **ALARM** is displayed. Press OK until **MONTH** or **DAY** is displayed.
6. Select **MONTH** or **DAY** with SET. Press OK.
7. Select **DAY** or **MONTH** with SET. Press OK.
8. Select **YEAR** with SET. Press OK.
9. Press SET to proceed to User Information Settings. Press OK.

5.4 USER INFORMATION SETTINGS

If you start from the Time of Day display, repeat steps 1-4.

5. **WEIGHT (LBS/KG)** is displayed. Adjust your weight with SET. Press OK to proceed to height setting.
6. **HEIGHT:** Adjust your height with SET. Press OK to proceed to age setting.
   Note: *If you use lb/ft, you need to set feet first and then inches.*
7. **AGE:** Adjust your age with SET. Press OK to proceed to gender setting.
8. **SEX:** Select FEMALE or MALE with SET. Press OK.
9. Press SET to proceed to Unit Setting. Press OK.

5.5 UNIT SETTING

If you start from the Time of Day display, repeat steps 1-4.

5. **UNIT** is displayed. Select **LB/FT** or **KG/CM** with SET. Press OK.
6. Return to the Time of Day display by pressing and holding OK.

5.6 TRANSFERRING SETTINGS FROM YOUR COMPUTER

Your Polar F4 heart rate monitor offers you the option of transferring all the settings easily from your PC to your wrist unit via Polar UpLink feature.
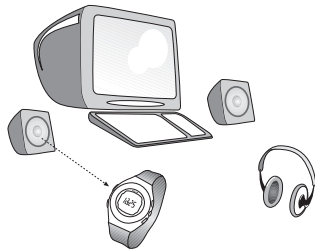
In order to to be able to use the UpLink feature, you need a computer with a sound card and dynamic loudspeakers or headphones.

For further instructions see www.polar.fi/fitness.

6. TARGET HEART RATE ZONE

Your target heart rate zone is a range between the lower and upper heart rate limits expressed as percentages of your maximum heart rate (HR_{max}) or as beats per minute (bpm). HR_{max} is the highest number of heartbeats per minute during maximum physical exertion. The wrist unit calculates your HR_{max} according to your age: Maximum heart rate = 220–age. For more accurate measurement of your HR_{max} visit your doctor or exercise physiologist for an exercise stress test.

In exercise, different heart rate zones produce different results. The heart rate zones that suit you depend on your goal and your basic physical condition.

Target Heart Rate Intensity Zones
The table below contains target heart rate intensity zones in beats per minute (bpm) estimated by age in 5-year intervals. Calculate your own HR_{max}, write down your own target heart rate zones and select the ones suitable for your exercise.

Age	HR_{max} (220–age)	Light Intensity 60-70% of HR_{max}	Moderate Intensity 70-80% of HR_{max}	Hard Intensity 80-90% of HR_{max}
20	200	120-140	140-160	160-180
25	195	117-137	137-156	156-176
30	190	114-133	133-152	152-171
35	185	111-130	130-148	148-167
40	180	108-126	126-144	144-162
45	175	105-123	123-140	140-158
50	170	102-119	119-136	136-153
55	165	99-116	116-132	132-149
60	160	96-112	112-128	128-144
65	155	93-109	109-124	124-140

When your heart beats at 60-70% of your HR_{max} ($HR_{max}\%$), you are in the **Light Intensity Zone**. Whether you have just started working out or you exercise fairly regularly, much of your workout will be in this zone. Fat is the body's main source of energy at this level of intensity; therefore this zone is also good for weight control. This intensity still feels fairly easy for most people and provides, for example, the following benefits:

- Helps in weight control
- Improves endurance
- Improves cardiovascular (aerobic) fitness

Push on to 70-80% of your HR_{max}, and you are in the **Moderate Intensity Zone**. This is especially good for people who are exercising regularly. For most people, this is often the fastest pace they can maintain and still remain comfortable and free of pain. Exercising in this zone is particularly effective for improving cardiovascular fitness. If you are out of shape, your muscles will use carbohydrates for fuel when you are exercising in this zone. As you get fitter, your body starts using a higher and higher percentage of fat for fuel, thus preserving its limited stores of muscle carbohydrate. Exercising in the moderate intensity zone results in some additional benefits:

- Improves cardiovascular fitness
- Improves endurance
- Helps in weight control
- Accustoms your body to exercising at a faster pace
- Helps to increase the speed you can maintain without building up lactic acid (your anaerobic threshold)

At 80-90% of your HR_{max}, you have moved into the **Hard Intensity Zone**. Exercise in the hard intensity zone definitely feels "hard". You will find yourself breathing heavily, having tired muscles and feeling fatigued. This intensity is recommended occasionally for fit people. Exercising in this zone is intensive, so it provides some unique benefits.

- Increases muscles' tolerance to lactic acid
- Improves hard, short effort ability

When you exercise in the right intensity zones, it guarantees your enjoyment in your favourite sports. Alternate between intensity zones to improve your fitness and get variation in your exercise. Remember that the lower the intensity the longer you can comfortably exercise in it. Exercise in higher intensity for shorter periods.

Note: *Polar target heart rate intensity definition is modified from international exercise science authorities' recommendations in which light intensity can reach lower than 60% of HR_{max}.*

7. CARE AND MAINTENANCE

Your Polar heart rate monitor is a high-tech instrument and should be treated with care. The suggestions below will help you fulfill the guarantee obligations and enjoy the product for many years to come.

Taking Care of Your Polar Heart Rate Monitor
- Clean the transmitter regularly after use with a mild soap and water solution. Dry it carefully with a soft towel. Keep the wrist unit clean and wipe off any moisture. Never use alcohol or any abrasive material such as steel wool or cleaning chemicals.
- Do not dry the transmitter in any other way than with a towel. Mishandling may damage the electrodes.
- Never store the transmitter wet. Sweat and moisture can keep its electrodes wet and the transmitter activated, which shortens the battery life span.
- Store your 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 transmitter. This may damage the electrodes.
- Keep your heart rate monitor out of extreme cold and heat. The operating temperature is 14 °F to 122 °F/ -10 °C to +50 °C.
- Do not expose the heart rate monitor to direct sunlight for extended periods, such as by leaving it in a car.

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

Transmitter Batteries
The estimated average battery life span of the transmitter is 2500 hours of use. If you suspect that the transmitter battery has run out, contact your authorized Polar Service Center for a replacement transmitter. Polar recycles used transmitters.

Wrist Unit Batteries
The estimated average battery life span of the wrist unit is two years in normal use (including 1h/day, 7 days a week of exercising). Please note that excessive use of the alarm signals drain the battery more rapidly. The battery symbol ▭ indicates that the battery should be replaced.

Note:
- *If you have set the alarm before the symbol is displayed, the alarm will still activate until the battery runs out.*
  If you try to reset the alarm the wrist unit displays Battery Low. You cannot reset the alarm until the battery is changed.
- *In cold conditions the low battery indicator may appear, but the indicator is deactivated when you return to a normal temperature.*
- *Do not open the wrist unit yourself. To ensure the water resistance properties and the use of authorized components, the wrist unit battery should be replaced by an authorized Polar Service Center only. At the same time a full periodic check of the Polar heart rate monitor will be done.*

8.1 INTERFERENCE DURING EXERCISE

Electromagnetic Interference
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 exercise equipment, cellular phones, or when you walk through electric security gates.

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 wrist unit as follows:

1. Remove the transmitter from your chest and use the exercise equipment as you would normally.
2. Relocate the wrist unit until you find an area in, which it displays no stray reading and 00 is displayed. 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 far as it is possible.
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.

Crosstalk
Polar F4 wrist unit picks up transmitter signals within 3 feet/1 meter. Other signals, picked up simultaneously from more than one transmitter, can cause incorrect readouts.

Using The Polar F4 Heart Rate Monitor in a Water Environment
Your Polar heart rate monitor is water resistant to 100 feet/30 meters. To maintain the water resistance, do not press the buttons of the wrist unit under water.

Users measuring their heart rate in water may experience interference for the following reasons:

- Pool water with high chlorine content and seawater are very conductive. The electrodes of a transmitter may short-circuit, which prevents ECG signals from being detected by the transmitter.
- Jumping into 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 ECG signals.
- The ECG signal strength depends on the individual and also varies depending on an individual's tissue composition. The percentage of people who have problems in heart rate measuring is considerably higher in water than in other environments.

8.2   MINIMIZING POSSIBLE RISKS WHEN EXERCISING

Exercise may include some risk, especially for those who have been sedentary. Before starting a regular exercise program, it is recommended that you answer the following questions about your health status. If the answer is yes to any of these questions, we recommend that you consult a doctor before starting an exercise program.

- Have you been physically inactive for the past 5 years?
- Do you have high blood pressure?
- Do you have 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 another implanted electronic device?
- Do you smoke?
- Are you pregnant?

Note that in addition to exercise intensity, medications for heart problems, blood pressure, psychical conditions, asthma and breathing, as well as some energy drinks, alcohol, and nicotine, can affect heart rate.

It is important to be sensitive to your body's reactions 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 persons with pacemakers, defibrillators, or other implanted electronic devices. Individuals who have a pacemaker use the Polar heart rate monitor at their own risk. Before use, we always recommend an exercise test under a doctor's supervision. The test is to ensure the safety and reliability of the simultaneous use of the pacemaker and the heart rate monitor.

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 the *Technical Specifications chapter on page 52*. To avoid any skin reaction risk with the transmitter, wear it over a shirt. However, moisten the shirt well under the electrodes to ensure flawless operation.

Note: The combined impact of moisture and intense abrasion may cause black color to come off the transmitter's surface, which might stain light-colored clothes especially.

What should I do if...

...I don't know where I am in the menu?
Press and hold the OK button until the time of day is displayed.

...there is no heart rate reading (00)?
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.
3. Check that there are no sources of electromagnetic radiation in close vicinity to the Polar wrist unit, such as TV sets, cellular phones, CRT monitors etc.
4. Have you had a cardiac event that may have altered your ECG waveform? In this case, consult your physician.

...heart symbol ♥ flashes irregularly?
1. Check that your wrist unit is inside the transmission range and not further that 3 feet/1 meter from the Polar 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. Make sure that there is no other heart rate transmitter within the reception range (3 feet/1 meter).
5. Cardiac arrhythmia may cause irregular readings. In this case, consult your physician.

...heart rate reading becomes erratic or extremely high?
You may have come within range of strong electromagnetic signals, which can cause erratic readings on the wrist unit display. Check your surroundings and move further away from the source of the disturbance.

...the display is blank?
The Polar F4 heart rate monitor is in battery saving mode when it is dispatched from the factory. To activate it, press any of the buttons. The Basic Settings starts. See the section, *Basic Settings* on page 37.

...the display is fading?
The first sign of an expired battery is the low battery ▭ symbol. Have the batteries checked. After battery replacement, you only need to set the time of day and date in the Basic Settings. After setting these values you can get to the Time of Day display by pressing and holding the OK button.

...the buttons do not react?
Reset the wrist unit by pressing and holding both buttons. The display is filled with digits. By pressing any button the unit goes to the Basic Settings mode (**SETTINGS** is displayed). When you have completed the Basic Settings, the unit returns automatically to the Time of Day display. If this does not work, have the batteries checked.

...the wrist unit battery needs changing?
We recommend that all service should be done by an authorized Polar Service Center. The two-year International Guarantee/Warranty does not cover damage or consequential damage caused by service not authorized by Polar Electro. Polar Service Center will test your wrist unit for water resistance after battery replacement and makes a full periodic check of your complete Polar heart rate monitor.

The Polar F4 heart rate monitor is designed to
- help users to achieve their personal fitness goals.
- indicate the level of physiological strain and intensity during an exercise session.

No other use is intended or implied.

Wrist Unit

Battery type:	CR 1632
Battery life:	Average 2 years (Exercise 1h/day, 7 days/week)
Operating temperature:	14 °F to 122 °F/-10 °C to +50 °C
Water resistance:	100 feet/30 meters
Accuracy of heart rate measurement:	± 1% or ± 1 bpm, whichever is larger, definition applies to steady state conditions
Watch accuracy error:	better than ± 0.5 seconds/day at 77 °F/ 25 °C
Wrist Strap Material:	Thermoplastic Polyurethane (TPU)
Wrist Strap Buckle and Strap Tongue Material:	Polyoxymethylene (POM)
Back cover material:	Stainless steel complying with the nickel release regulations of the EU (EU Directive 94/27/EU and its amendment 1999/C 205/05).

Heart rate is displayed as the number of heartbeats per minute (bpm) or as a percentage of your maximum heart rate ($HR_{max}\%$).

Transmitter

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

Elastic Strap

Buckle material:	Polyurethane
Fabric material:	Nylon, polyester, and natural rubber including a small amount of latex

Limit Values

Chronometer	23 h 59 min 59 s
Heart rate limits	30–199 bpm
Total time	0–9999 h 59 min 59 s
Total calories	0–999999 (Cal/Kcal)
Total exercise count	65 535

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- Polar Electro Inc. / Polar Electro Oy guarantees to the original consumer/purchaser of this product that the product will be free from defects in material or workmanship for two years from the date of purchase.
- **Please keep the receipt or International Guarantee Card, which is your proof of purchase!**
- Guarantee does not cover battery, damage due to misuse, abuse, accidents or non-compliance with the precautions; improper maintenance, commercial use, cracked or broken cases and elastic strap.
- 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. During the guarantee period the product will be either repaired or replaced at an authorized service center free of charge.
- 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.

$C\epsilon$ 0537 This CE marking shows compliance of this product with Directive 93/42/EEC.

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Other patents pending.