Congratulations on purchasing the Polar Favor Heart Rate Monitor. We are proud to assist you in achieving your personal fitness goals.

This guide will provide you with the basic information on how to exercise with your Polar Heart Rate Monitor and how to get the best benefit of its functions.

Wirelessly and continuously yours,

**POLAR FAVOR PARTS**

Your Polar Favor consists of three parts:

1. **Polar T31™ Transmitter**
   - Grooved electrode areas

2. **Elastic strap**

3. **Polar Favor Wrist Receiver**

**VISUAL CUES TO READ THIS GUIDE**

- Indicates a tip to do things faster.
- Indicates important issues. Please, pay attention!
- Indicates a useful tip. It is good to know these things.
- See also

**IMPORTANT TO REMEMBER!**

- Adjust the strap length snug enough and wet the transmitter electrodes to ensure flawless heart rate measurement.
- Do not bend or stretch the transmitter.
- Do not operate the buttons of the wrist receiver under water.
- Wash and dry your transmitter regularly after use.
- Do not store your Polar Heart Rate Monitor wet.
  Store it in a dry and cool place.
- Keep the Polar Heart Rate Monitor out of extreme cold and heat.
GETTING GOING

How to Start Heart Rate Measurement

1. Wear the Transmitter and the Wrist Receiver as described previously.
2. Press the left button of the Receiver for 1 second. Heart rate measurement commences and heart symbol starts flashing. Your heart rate (in beats per minute) appears in the display in approximately 5 seconds. The Target Zone sound symbol is on.
3. You can now start exercising with your Polar Favor.

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

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 exercise. After exercising to preserve the electrodes and battery life:
1. Wash the Transmitter carefully with a mild soap water solution.
2. Rinse it with pure water.
3. Dry the Transmitter carefully.

If you wish to wear a watch at the same time when exercising with Polar Favor, it is recommended that you wear the Polar Wrist Receiver and your watch on different wrists to avoid interference.

Attachments:

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

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How to Set Your Target Zone

1. When you start from the OFF display, press the left button once and you come to the heart rate measuring mode.

2. In the heart rate measuring mode, press the left button. The Upper Limit value and an arrow (↑) in the upper left corner of the display will appear.

3. Keep pressing and hold the button to set the Upper Limit of your personal Target Zone. The numbers will descend in units of 5.

4. Release the button, when the desired Upper Limit is reached. The Lower Limit value and an arrow (↓) in the lower left corner of the display will appear.

Functions During Heart Rate Measurement

SEE YOUR HEART RATE

You can see your heart rate in beats per minute. A flashing heart symbol indicates an ongoing heart rate measurement. The heart symbol flashes at the pace of your heart.

TURN THE TARGET ZONE SOUND SIGNAL ON/OFF

When the Target Zone sound symbol appears in the display, you will hear an alarm sound with each heart beat if you go above the Upper Limit or below the Lower Limit of your Target Zone.

Press the right button to turn the Target Zone sound signal on or off.

 avalia sound signal is on

STOP HEART RATE MEASUREMENT

Remove the Transmitter. Heart rate measurement stops.

The Polar Favor Wrist Receiver will automatically return to the battery saving mode if no transmission signals are received within 10 minutes. OFF appears in the display.
Exercising with Your Polar Heart Rate Monitor

Regular exercise helps you to sustain and improve your health and fitness, as well as feel better. Exercising has also other great benefits, you can reduce stress, learn to know your body’s reactions and optimise your training time. Whether you are about to start a regular exercise program or you already do sports training, a Polar Heart Rate Monitor will help you to achieve your personal fitness goals in less time, with greater safety.

The effect of your exercise program depends on four factors:
• Intensity of exercise
• Duration of exercise
• Frequency of exercise
• Mode of activity

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 35 years of age
• if you 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.

5. Press and hold the left button to set the Lower Limit of your personal Target Zone. The numbers will ascend in units of 5.

6. Release the button, when the desired Lower Limit is reached. Polar Favor automatically enters the heart rate monitoring mode.

The Upper Limit cannot be set below the Lower Limit. The Upper Limit value will automatically return to 240, the highest possible setting, when it drops to the Lower Limit value previously set. When the Lower Limit value reaches the Upper Limit value, the Lower Limit will be reset to 10, the lowest possible setting.

It may be necessary to reduce the Lower Limit value first and then return to set the Upper Limit.
If you aim for improved fitness or exercise for competitive reasons your exercise intensity is moderate or heavy paced, and it causes clear breathlessness and sweating.

However, when planning your personal exercise dose, you can vary the workout intensity e.g. if there is a change in your physical condition or feelings.

Target zones are calculated using the person’s maximum heart rate as a reference. The most reliable way to determine your individual Target Zone is to have your maximum heart rate measured at an exercise stress test. For more information on an exercise stress test, consult your physiologist or doctor.

According to ACSM most people can estimate their maximum heart rate by the formula:

\[ 220 - \text{Age} = \text{Maximum Heart Rate} \]

For example a 35-year old person’s Maximum Heart Rate would be: \( 220 - 35 = 185 \) beats per minute

The following Target Range Chart helps you find the right Target Zone for your needs. The percentages for the Target Zones are counted from the maximum heart rate (measured or predicted).
Example 2

Example 1

Bpm

Age

Measured HRmax

Upper Limit

Lower Limit

Upper Limit

Lower Limit

See the examples above:

1. A person, whose maximum heart rate has been measured at an exercise stress test. His HRmax is 170 bpm and his goal is to exercise for health at Light to Moderate Intensity. The Target Zone limits are 102-119 bpm.

2. A person, who does not know his HRmax. He is 35 years old and his goal is to improve fitness at Moderate Intensity. The Target Zone limits are 130 - 157 bpm.

FREQUENCY OF TRAINING

It is recommended that you exercise 3-5 times a week.

You can improve your performance by increasing the frequency of training. Remember to let your body recover properly between the training sessions.

MODE OF ACTIVITY

Select activities that you enjoy and vary your exercise modes.

To build a solid base for your aerobic conditioning, choose continuous activities such as jogging, running, walking, swimming, bicycling, rowing and cross-country skiing.

To improve your muscular endurance and strength as well as flexibility choose intermittent activities such as tennis, badminton, football, ice hockey, resistance training and gymnastics.
Quick guide for exercising

Before beginning, you should ask yourself two key questions:
• What is the amount of my physical activity at the moment?
• What are my goals?

The following steps help you answer the two questions, get the most out of your Polar Heart Rate Monitor, and achieve your personal exercise goals.

**1. DEFINE THE AMOUNT OF YOUR PHYSICAL ACTIVITY**

You may have a clear understanding of your present physical condition. In this case you can move to the next step to specify your goals. You can also define the amount of your physical activity by answering the questionnaire which is modified from the “Code for Physical Activity” developed by NASA/Johnson Space Center (Jackson et al. 1990).

The questionnaire is an easy and quick way to define whether you are a beginner, a moderate exerciser, an active exerciser or a serious exerciser. It is recommended to review the questionnaire every 1-2 months and revise if the amount of your physical activity has changed.

**STRUCTURE OF AN EXERCISE SESSION**

Begin each workout slowly and give your body a chance to warm up for at least for 5 minutes so that your heart rate is below the selected Target Zone. Gradually increase the intensity of your exercise until you are in your Target Zone.

Remain in your Target Zone for the desired time. After that, gradually reduce the intensity of your exercise and let your heart rate fall below the Target Zone with a 5 minute cool-down period.

For an example of an exercise session for a 35-year-old person with ‘Improved Fitness’ as a target, please see the following chart.

<table>
<thead>
<tr>
<th>Heart Rate Beats Per Minute</th>
<th>Target Zone</th>
<th>Cool down</th>
<th>Resting</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>130</td>
<td>5-10 min</td>
<td>5-10 min</td>
</tr>
<tr>
<td>30-60 min</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-30 min</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REFERENCES**


2. DETERMINE YOUR EXERCISE GOALS

It is easier to stay motivated when you determine your reason for exercising and establish a goal. That is why you should determine your personal goal very clearly. Your exercise goal may be one of these:

- Get used to regular physical exercise
- Lose weight
- Maintain or improve health
- Maintain or improve fitness
- Compete with yourself
- Achieve competitive results

3. EXAMPLES OF EXERCISE RECOMMENDATIONS

**Recommendation for a beginner:**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Duration in Target Zone</th>
<th>Times a week</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve fitness and well-being</td>
<td>15-40 min. at a time</td>
<td>2-4</td>
<td>Light</td>
</tr>
<tr>
<td>Maintenance of fitness and well-being</td>
<td>20-40 min. at a time</td>
<td>2-4</td>
<td>Light to moderate</td>
</tr>
<tr>
<td>Improve fitness and lose weight</td>
<td>30-60 min. at a time</td>
<td>2-4</td>
<td>Light to moderate</td>
</tr>
</tbody>
</table>

**Recommendation for a moderate exerciser:**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Duration in Target Zone</th>
<th>Times a week</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve fitness and well-being</td>
<td>15-40 min. at a time</td>
<td>2-4</td>
<td>Light</td>
</tr>
<tr>
<td>Maintenance of fitness and well-being</td>
<td>20-40 min. at a time</td>
<td>2-4</td>
<td>Light to moderate</td>
</tr>
<tr>
<td>Improve fitness and lose weight</td>
<td>30-60 min. at a time</td>
<td>2-4</td>
<td>Light to moderate</td>
</tr>
</tbody>
</table>

Which alternative best describes your general activity level for the previous month?

- **A beginner** who does not participate regularly in programmed recreational sports or heavy physical activity.
  - Avoid walking or exertion whenever possible.
  - Walk for pleasure, routinely use stairs, occasionally exercise sufficiently to cause heavy breathing or perspiration.

- **A moderate exerciser** who participates regularly in recreation or work requiring modest physical activity, such as golf, gymnastics or yard work.
  - 10 to 60 min. a week
  - Over one hour a week

- **An active exerciser** who participates regularly in heavy physical exercise such as jogging, swimming, cycling or engages in vigorous aerobic activity type exercise such as tennis.
  - Run less than 1 mile a week or spend less than 30 min. a week in comparable physical activity.
  - Run 1 to 5 miles a week or spend 30 to 60 min. a week in comparable physical activity.

- **A serious exerciser** who participates in a regimented workout program consisting of heavy physical exercise.
  - Run 5 to 10 miles a week or spend 1 to 3 hours a week in comparable physical activity.
  - Run over 10 miles a week or spend over 3 hours a week in comparable physical activity.
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. Rinse with pure water. Dry carefully after washing.
- Never store the Polar Transmitter wet. Sweat and moisture can keep its electrodes wet and the Polar Transmitter activated, which shortens the battery life.
- Store your Polar Heart Rate Monitor in a cool and dry place.
- 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.

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### Recommendation for an active exerciser:

<table>
<thead>
<tr>
<th>Goal</th>
<th>Duration in Target Zone</th>
<th>Times a week</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain fitness and well-being</td>
<td>30-60 min. at a time</td>
<td>2-4</td>
<td>Moderate</td>
</tr>
<tr>
<td>Improve fitness</td>
<td>60-90 min. at a time</td>
<td>2</td>
<td>Heavy</td>
</tr>
</tbody>
</table>

### Recommendation for a serious exerciser:

Have your maximum heart rate measured and find your personal Target Zone to get the best benefit of your training sessions. For more information on heart rate monitoring see Polar products/Polar books and booklets.
USING A POLAR HEART RATE MONITOR IN A WATER ENVIRONMENT

Polar Favor is water resistant to 20 meters. To maintain the water resistance, do not operate the buttons of the Polar Wrist Receiver under water. The pressure may cause the Receiver to leak.

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 therefore short circuit the ECG signal so that it 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 ECG signal.
- The ECG signal strength varies depending on the individual’s tissue composition and the percentage of people who have problems in heart rate measuring is considerably higher in a water environment than in other use.

BATTERIES

POLAR TRANSMITTER
The estimated average battery life of the Polar Transmitter is 2500 hours of use. Contact your distributor/dealer for a Transmitter replacement. See Service for detailed instructions.

POLAR WRIST RECEIVER
The estimated average battery life of the Polar Wrist Receiver is 1 year in normal use (2h/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.

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. See Service for detailed instructions.

Polar recycles used Transmitters.
Frequently Asked Questions

WHAT SHOULD I DO IF...

...THERE IS NO HEART RATE READING?
1. Check that the elastic strap is snug enough.
2. Check that the electrodes of the Polar Transmitter are moistened and that you are wearing it as instructed.
3. Check that you have kept the Polar Transmitter clean.
4. 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.
5. You can reset the Wrist Receiver by pressing both buttons down at the same time. The target zone limits enter the default settings.
6. 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 1 metre/ 3 feet 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 (1 metre/ 3 feet). Precautions/ Crosstalk.
5. Cardiac arrhythmia may cause irregular readings. In this case consult your physician.

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.

CROSSTALK
The non-coded Polar Wrist Receiver picks up transmitter signals within 1 metre/ 3 feet. Therefore, when you are using your Polar Heart Rate Monitor make sure no other transmitter is within that range. Signals from more than one transmitter picked up simultaneously can cause an incorrect readout.

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 Polar 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 keep the 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 too noisy electrically for wireless heart rate measurement.

Notice for persons with pacemakers
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.

Precautions.
4. 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.
5. You can reset the Wrist Receiver by pressing both buttons down at the same time. The target zone limits enter the default settings.
6. Have you had a cardiac event which may have altered your ECG waveform? In this case consult your physician.
Technical Specifications

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. Heart rate is displayed as number of heart beats per minute (bpm).

**POLAR 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

**POLAR WRIST RECEIVER**

- **Battery type:** CR 2032
- **Battery life:** Average 1 year (2h/day, 7 days/week)
- **Operating temperature:** 14 °F to 122 °F / -10 °C to +50 °C
- **Water resistancy:** to 20 metres
- **Accuracy of heart rate measurement:** ±1% or ±1 beats per minute, whichever larger, definition applies to steady state conditions

**DEFAULT SETTINGS**

- **Upper Limit:** 150
- **Lower Limit:** 120

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...HEART RATE READING BECOMES ERRATIC OR EXTREMELY HIGH (OVER 200 BPM)?

You may have come within range of strong electromagnetic signals which cause erratic readings on the Receiver display. Check your surroundings and move further away from the source of disturbance. ► **Precautions.**

...THE DISPLAY IS BLANK OR FADING?

Have the batteries checked. ► **Service.**

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

We recommend having all service done by authorised Polar Service. Especially during the warranty period this is necessary to keep the warranty of the whole Polar Heart Rate Monitor valid. 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.**
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:

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?
Precautions/Polar Heart Rate Monitor and interference for more details.
Limited Polar Warranty

Polar Electro Oy warrants to 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 authorized by Polar Electro.
• 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 the consumer’s rights against the dealer arising from their sales/purchase contract.

POLAR’S SERVICE PROCEDURE

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

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.
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.
Disclaimer


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

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