

Polar CS500™

Getting Started Guide

POLAR®
LISTEN TO YOUR BODY

Contents

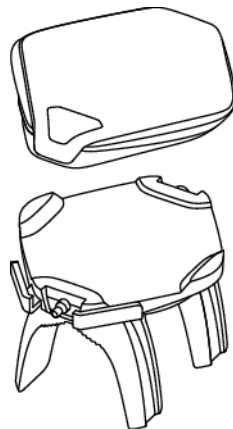
1. GET TO KNOW YOUR CS500 CYCLING COMPUTER	3	5. AFTER TRAINING	17
Button Functions and Menu Structure	6	6. IMPORTANT INFORMATION	18
2. SET UP YOUR CYCLING COMPUTER	9	Caring of Your Product.....	18
Enter Basic Settings	9	Precautions	20
Measure Wheel Size	10	Technical Specifications	22
Using an Accessory with Your CS500 Cycling Computer	12	Limited International Polar Guarantee	25
3. INSTALL THE BIKE MOUNT	13		
Attach the Cycling Computer to the Bike Mount.....	14		
4. TRAINING	15		
Wear the Transmitter	15		
Start Training.....	16		

1. GET TO KNOW YOUR CS500 CYCLING COMPUTER

This guide will help you get started with your new cycling computer. The full user manual and the latest version of this getting started guide can be downloaded at www.polar.fi/support.

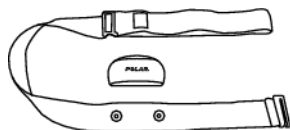
Polar CS500 cycling computer provides you with all the data you need to enhance your cycling performance and also saves the data for later analysis. The new large display guarantees clear visibility of training information in all conditions. Innovative button technology allows easy and safe operation even in high speeds.

The cycling computer can be easily attached to the stem or handlebars of your bike with new **Polar Dual Lock Bike Mount**. Bike mount's newly designed metal parts guarantee firm attachment for the cycling computer.

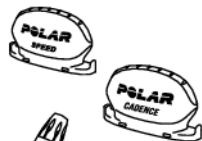


ENGLISH

Comfortable **Polar WearLink®+ transmitter W.I.N.D.** sends the heart rate signal to the cycling computer ecg-accurately. The transmitter consists of a strap and a connector.

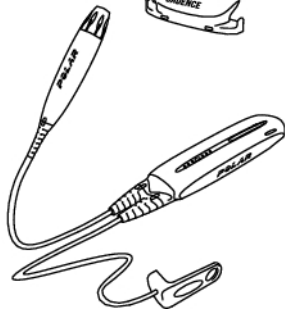


Polar CS speed sensor™ W.I.N.D. wirelessly measures distance and your real-time, average and maximum speeds.



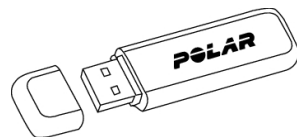
Optional **Polar CS cadence sensor™ W.I.N.D.** wirelessly measures your real-time and average cadence, also known as pedaling rate, as revolutions per minute.

Optional **Polar Power Output Sensor™ W.I.N.D.** wirelessly measures power output expressed in watts and cadence.



 *Data from all compatible sensors and WearLink transmitter is sent wirelessly to the cycling computer over Polar's 2.4GHz W.I.N.D. technology. This eliminates interference during training.*

Transfer data between the cycling computer and polarpersonaltrainer.com with Polar's new data communication device, **Polar DataLink**. Just plug your DataLink into the USB port of your computer, and it detects your cycling computer with W.I.N.D. technology.

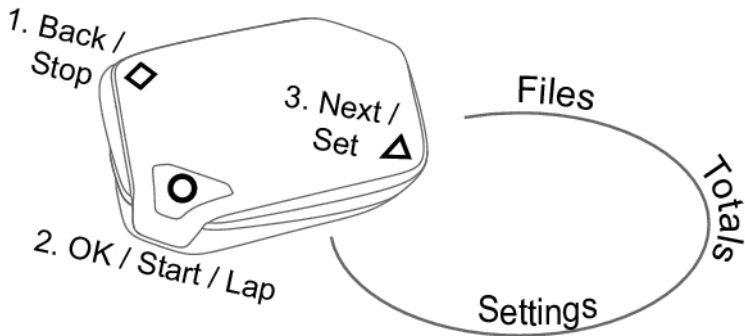


The **polarpersonaltrainer.com** web service is tailored to support your training goals. There you can:

- store your training files for a long-term follow-up.
- analyze and follow your progress to the finest detail.
- analyze training intensity and needed recovery time using the training load feature.
- optimize the way you train by using the Polar training programs.
- challenge your friends to a virtual sports competition and interact with other sports enthusiasts.

Button Functions and Menu Structure

The cycling computer has three easy-to-use buttons that have different functionalities depending on the situation of use.

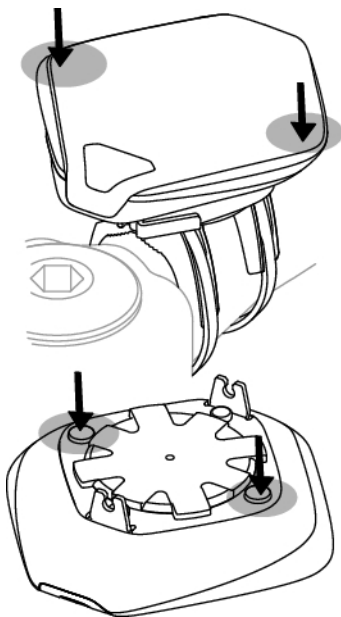


1. □ BACK / STOP	2. ○ OK / START / LAP / RESET	3. ▷ NEXT / SET
<ul style="list-style-type: none">• Exit the menu• Return to the previous level• Leave settings unchanged• With a long press, return to time mode from any mode• With a long press in time mode, go to the power save mode• With a long press in the power save mode, activate the cycling computer• Cancel selections	<ul style="list-style-type: none">• Confirm selections• Start a training session• Take a lap• Reset total values	<ul style="list-style-type: none">• Move to the next mode or menu level• Change the bike with a long press in time mode• Adjust a selected value

ENGLISH

You can use ◻ and ▷ buttons in two ways:

1. When the cycling computer is mounted on a stem or handlebar, gently press the left or right side of the cycling computer.
2. When you hold the cycling computer in your hand, use the trigger buttons on the backside of the cycling computer.




2. SET UP YOUR CYCLING COMPUTER

Enter Basic Settings

Before using your cycling computer for the first time, customize the basic settings. Enter as accurate data as possible to ensure correct feedback based on your performance.

To adjust data, use SET and accept with OK. The values scroll faster if you press and hold SET.

Activate your cycling computer with a three-second  button press. **Basic SET** is displayed. Press START and adjust the following data:

1. **Time set:** Select **12h** or **24h**. With **12h**, select **AM** or **PM**. Enter time.
2. **Date set:** Enter date.
3. **Unit:** Select metric (**kg/cm**) or imperial (**lb/ft**) units.
4. **Weight:** Enter your weight.
5. **Height:** Enter your height. In LB/FT format, first enter feet then inches.
6. **Birthday:** Enter your date of birth.
7. **Sex:** Select **Male** or **Female**.
8. **Settings DONE** is displayed. To change the settings, press BACK until you return to the desired setting. To accept the settings, press OK and the cycling computer goes to time mode.



For detailed information on the settings of your cycling computer, consult the full user manual at www.polar.fi/support.

Measure Wheel Size

Wheel size settings are a prerequisite for accurate cycling information.

To set the wheel size, go to **Settings > Bike SET**.
Select **Bike 1 / 2 / 3 > Wheel SET**.

There are two ways to determine the wheel size of your bike:

Method 1

Measure the wheel manually for the most accurate result.

Use the valve to mark the point where the wheel touches the ground. Draw a line on the ground to mark the point. Move your bike forward on a flat surface for one complete rotation. The tire should be perpendicular to the ground. Draw another line on the ground when the valve is at the starting point to mark a full rotation. Measure the distance between the two lines.

Subtract 4 mm from the distance to account for your weight on the bike to get your wheel circumference. Enter this value in the cycling computer.

Method 2

Look for the diameter in inches or in ETRTO printed on the wheel. Match it to the wheel size in millimeters in the right column of the ETRTO chart on the following page. Wheel sizes on the chart are advisory as wheel size depends on the wheel type and air pressure. Due to the variation of the measurements, Polar cannot be held responsible for their validity.



You can also check the wheel size from the manufacturer.

ETRTO	Wheel size diameter (inches)	Wheel size setting (mm)
25-559	26 x 1.0	1884
23-571	650 x 23C	1909
35-559	26 x 1.50	1947
37-622	700 x 35C	1958
47-559	26 x 1.95	2022
20-622	700 x 20C	2051
52-559	26 x 2.0	2054
23-622	700 x 23C	2070
25-622	700 x 25C	2080
28-622	700 x 28	2101
32-622	700 x 32C	2126
42-622	700 x 40C	2189
47-622	700 x 47C	2220

Using an Accessory with Your CS500 Cycling Computer

Polar CS500 cycling computer is compatible with the following Polar W.I.N.D sensors:

The **Polar CS speed sensor W.I.N.D**, **Polar CS cadence sensor W.I.N.D** and the **Polar Power Output Sensor W.I.N.D**.

If you purchase a new sensor, it has to be activated in the cycling computer and introduced to it. This is called teaching and takes only a few seconds. Teaching ensures that your cycling computer receives signals from your transmitter and sensor only, enabling disturbance-free exercise in a group. For more information, see *Using a New Accessory* in the user manual.



Before entering an event, make sure to perform the teaching process at home to prevent interference due to the long-range data transmission.

If you purchased the sensor and cycling computer as a set, the sensor has already been taught to work together with the cycling computer. In this case, you will only need to activate the sensor in your cycling computer. For more information see *Bike Settings* in the user manual.

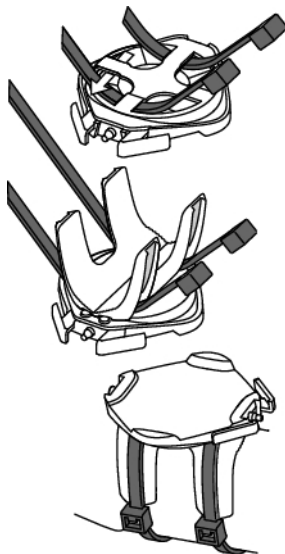
3. INSTALL THE BIKE MOUNT

You can install the bike mount on the stem or left- or right-hand side of the handlebar.

1. Thread two cable ties through the passages of the bike mount. If you install the bike mount on the handlebar, thread the cable ties to the opposite direction.
2. Insert the rubber part into the bike mount. Make sure that it is firmly in its nest.
3. Place the rubber part and the bike mount on the stem/handlebar and adjust the cable ties around the stem/handlebar. Secure the bike mount firmly. Cut off excess cable ties.

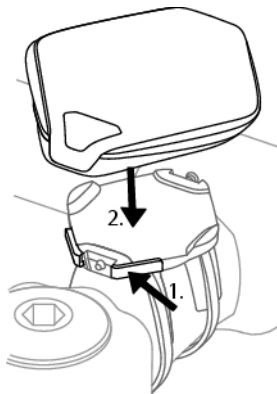


For a video tutorial, go to http://www.polar.fi/en/support/video_tutorials.



Attach the Cycling Computer to the Bike Mount

1. Push the button and position the cycling computer onto the bike mount.
2. Release the button to fasten the cycling computer to the bike mount. Check that the cycling computer is fastened properly before you start cycling.



To detach the cycling computer from the bike mount, push the button and lift the cycling computer off the bike mount.

 For a video tutorial, go to http://www.polar.fi/en/support/video_tutorials.

4. TRAINING

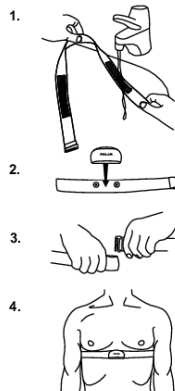
Wear the Transmitter

Wear the transmitter to measure heart rate.


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

Detach the transmitter connector from the strap after every use, to maximize the transmitter battery lifetime. Rinse the strap under running water.

See detailed washing instructions in Care and Maintenance.



Start Training

1. Attach the cycling computer to the bike mount and activate it with a long  button press.
2. In time mode, the cycling computer automatically starts detecting your heart rate. Within 15 seconds, your heart rate appears on the display.
3. The number on the upper left-hand corner indicates the bike that is in use. To change the bike, long-press NEXT in time mode.



4. Press START to start the recording.

You can view three lines of training information simultaneously on eight display alternatives. You can change the display by pressing NEXT. For further information on training information, consult the full user manual at www.polar.fi/support.



5. To pause your training session, press STOP. To stop recording completely, press STOP again.

5. AFTER TRAINING

Detach the connector from the strap after use.

Keep the transmitter dry and clean. For further information, see Care and Maintenance.

- You can view detailed information on your 14 latest training sessions in **FILES**.
- **TOTALS** include cumulative values recorded during training sessions.

For a long-term follow-up, you can store all your training files at polarpersonaltrainer.com. There you can see graphs and more of your training data and get better understanding of your training.

For further information on how to review training information, consult the full user manual at www.polar.fi/support.

6. IMPORTANT INFORMATION

Caring of Your Product

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

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

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

Dry and store the strap and connector separately, to maximize the transmitter battery lifetime. Wash the strap in a washing machine before long-term storage and always after use in pool water with high chlorine content.

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

Keep your cycling computer and sensors clean. Clean the cycling computer and sensors with a mild soap and water solution and rinse them with clean water. Do not immerse them in water. Dry them carefully with a soft towel. Never use alcohol or any abrasive material such as steel wool or cleaning chemicals.

Avoid hard hits to the cycling computer, speed and cadence sensors, as these may damage the sensor units.

Service

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

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

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



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

Changing Batteries

The CS500 cycling computer and the WearLink transmitter W.I.N.D. both have a user changeable battery. To change the battery yourself, consult the full user manual at www.polar.fi/support.

The batteries for the speed and cadence sensors cannot be replaced. Polar has designed speed and cadence sensors to be sealed in order to maximize mechanical longevity and reliability. The sensors have long-life batteries inside. To purchase a new sensor contact your authorized Polar Service Center or retailer.

For instructions on how to change the battery for the **Power Output Sensor W.I.N.D.**, consult the Power Output Sensor user manual.

Precautions

The Polar cycling computer shows your performance indicators. It indicates the level of physiological strain and intensity during your exercise. It also measures speed and distance when cycling with a Polar CS speed sensor W.I.N.D. The Polar CS cadence sensor W.I.N.D. is designed to measure cadence when cycling. The Polar Power Output Sensor W.I.N.D. is designed to measure power output when cycling. No other use is intended or implied.

The Polar cycling computer should not be used for obtaining environmental measurements that require professional or industrial precision. Furthermore, the device should not be used to obtain measurements when engaged in airborne or underwater activities.

Interference During Exercise

Disturbance may occur near microwave ovens and computers. Also WLAN base stations may cause interference when exercising with CS500. To avoid erratic reading or misbehaviors, move away from possible sources of disturbance.

Minimizing Risks When Exercising

Exercise may include some risk. Before beginning a regular exercise program, it is recommended that you answer the following questions concerning your health status. If you answer yes to any of these questions, we recommend that you consult a doctor before starting any training program.

- Have you been physically inactive for the past 5 years?
- Do you have high blood pressure or high blood cholesterol?
- Are you taking any blood pressure or heart medication?
- Do you have a history of breathing problems?
- Do you have symptoms of any disease?
- Are you recovering from a serious illness or medical treatment?
- Do you use a pacemaker or other implanted electronic device?
- Do you smoke?
- Are you pregnant?

In addition to exercise intensity, medications for heart conditions, blood pressure, psychological conditions, asthma, breathing, etc., as well as some energy drinks, alcohol, and nicotine may also affect heart rate.

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

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

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



The combined impact of moisture and intense abrasion may cause a black color to come off the transmitter's surface, possibly staining light-colored clothes.

Technical Specifications

Cycling computer

Battery life:	Average 3 years (if you train on avg. 1h/day, 7 days/week)
Battery type:	CR 2354
Battery sealing ring:	Silicone D-ring 28.0 x 0.8mm (no need to change during battery replacement if sealing ring is not damaged)
Operating temperature:	-10 °C to +50 °C / 14 °F to 122 °F
Cycling Computer Materials:	PMMA lens with hard coating in top surface, cycling computer body ABS+GF/PA+GF, metal parts stainless steel (nickel free)
Watch accuracy:	Better than ± 0.5 seconds / day at 25 °C / 77 °F temperature.
Accuracy of heart rate monitor:	$\pm 1\%$ or 1 bpm, whichever larger.
Heart rate measuring range:	Definition applies to stable conditions. 15-240

Current speed display range:	0-127 km/h or 0-75 mph
Altitude display range:	-550 m ... +9000 m / -1800 ft ... +29500 ft
Ascent resolution:	5 m / 20 ft

Cycling computer limit values

Maximum number of files:	14
Maximum time recorded to file:	
Hear rate	71 h 40 min
Hear rate + speed	27 h 00 min
Hear rate + speed + cadence	24 h 15 min
Hear rate + speed + power	23 h 05 min
Hear rate + speed + cadence + power	21 h 05 min
Hear rate + cadence	55 h 05 min
Hear rate + power	49 h 25 min
Hear rate + cadence + power	40 h 55 min
Maximum number of laps:	99
Total distance:	999 999 km / 621370 mi
Total duration:	9999h 59min 59s
Total calories:	999 999 kcal
Total exercise count:	9999
Total ascent:	304795 m / 999980 ft

Dual Lock Bike Mount

Materials: Rubber Part TPE, Bike Mount body PA+GF,
metal parts stainless steel (nickel free)

Transmitter

Battery life of WearLink transmitter W.I.N.D.: 2000 hours of use
Battery type: CR2025
Battery sealing ring: O-ring 20.0 x 1.0, material silicone
Operating temperature: -10 °C to +40 °C / 14 °F to 104 °F
Connector material: Polyamide
Strap material: Polyurethane/ Polyamide/ Polyester/
Elastane/ Nylon

Polar DataLink and Polar WebSync 2.1 (or newer)

System Requirements: PC MS Windows (2000/XP/Vista/7), 32 bit,
Microsoft .NET Framework Version 2.0
Intel Mac OS X 10.5 or newer

The Polar CS500 cycling computer applies the following patented technologies, among others:

- OwnZone® assessment for determining personal target heart rate limits for the day
- Wearlink® technology for heart rate measurement

ENGLISH

Water resistance of Polar products is tested according to International IEC 60529 IPx7 (1m, 30min, 20°C). Products are divided into four different categories according to water resistance. Check the back of your Polar product for the water resistance category and compare it to the chart below. Please note that these definitions do not necessarily apply to products of other manufacturers.

Marking on case back	Water resistant characteristics
Water proof IPX7	Not suitable for bathing or swimming. Protected against wash splashes and raindrops. Do not wash with a pressure washer.
Water resistant*	Not suitable for swimming. Protected against wash splashes, sweat, raindrops etc. Do not wash with a pressure washer.
Water resistant 30 m/50 m	Suitable for bathing and swimming
Water resistant 100 m	Suitable for swimming and snorkeling (without air tanks)

*These characteristics also apply to Polar WearLink transmitter W.I.N.D. , CS speed and cadence sensors W.I.N.D. and Power Output Sensor W.I.N.D. marked water resistant.

Limited International Polar Guarantee

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

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

ENGLISH

Polar Electro Oy is a ISO 9001:2000 certified company.

Copyright © 2011 Polar Electro Oy, FIN-90440 KEMPELE, Finland. All rights reserved. No part of this manual may be used or reproduced in any form or by any means without prior written permission of Polar Electro Oy. The names and logos marked with a ™ symbol in this user manual or in the package of this product are trademarks of Polar Electro Oy. The names and logos marked with a © symbol in this user manual or in the package of this product are registered trademarks of Polar Electro Oy, except Windows which is a registered trademark of Microsoft Corporation.

CE 0537

This product is compliant with Directives 93/42/EEC and 1999/5/EC. The relevant Declaration of Conformity is available at www.support.polar.fi/declaration_of_conformity.html.

FCC regulatory information

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Caution! Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



This crossed out wheeled bin marking shows that Polar products are electronic devices and are in the scope of Directive 2002/96/EC of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) and batteries and accumulators used in products are in the scope of Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators. These products and batteries/accumulators inside Polar products should thus be disposed of separately in EU countries. Polar encourages you to minimize possible effects of waste on the environment and human health also outside the European Union by following local waste disposal regulations and, where possible, utilize separate collection of electronic devices for products, and battery and accumulator collection for batteries and accumulators.

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.
- Polar Electro Inc./Polar Electro Oy makes no representations or warranties with respect to this manual or with respect to the products described herein.

- Polar Electro Inc./Polar Electro Oy shall not be liable for any damages, losses, costs or expenses, direct, indirect or incidental, consequential or special, arising out of, or related to the use of this material or the products described herein.

This product is covered by the following patent documents:

FI 110303 B, EP 0748185, JP3831410, US6104947, DE 69532803.4-08, FI 6815, EP 1245184, US 7076291, HK10484, US6199021, US6356838, EP0909940, FI110915, US7324841, EP1361819, FI23471, US D492999SS, EU0046107-002, EU0046107-003

Manufactured by Polar Electro Oy, Professorintie 5, FIN-90440 KEMPELE.

Tel +358 8 5202 100, Fax +358 8 5202 300, www.polar.fi.

Manufactured by

Polar Electro Oy
Professorintie 5
FIN-90440 KEMPELE
Tel +358 8 5202 100
Fax +358 8 5202 300
www.polar.fi

POLAR[®]
LISTEN TO YOUR BODY