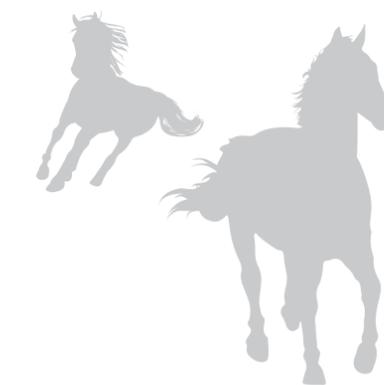# Polar Equine M400

Getting Started Guide

Compatible with

Bluetooth

Manufactured by

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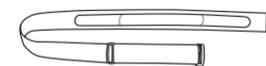www.polar.com

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WELCOME

Thanks for choosing Polar! In this guide, we'll walk you through the basics of using and caring for Polar M400 Equine. You can download the full-length M400 user manual at polar.com/support/M400. For more help, there are some great video tutorials at polar.com/support you may want to check out.

What's included

1. **Polar M400**: With an integrated GPS, the M400 provides you with a variety of useful information during training. M400 accurately tracks speed and distance, and also calculates GPS-based altitude, ascent and descent data.

2. **USB cable:** Use the USB cable to charge the battery and to sync data between your M400 and the Polar Flow web service via FlowSync software.

3. **H7 Heart rate sensor** measures heart rate in real time and sends the information continuously and wirelessly to M400.

4. **Polar Equine Electrode Base** (included in the Polar Equine M400 set) OR **Polar Equine Belt** (included in the Polar Equine M400 Trotting set)

5. With your Polar M400 you receive a new **Polar Soft strap**. The plastic electrode areas on the reverse side of the strap detect your heart rate.

> *You can download the Getting Started Guide in German, French, Italian, Spanish, Finnish and Swedish at www.polar.com/support.*

SET UP YOUR M400

When you get hold of your new M400, it's in storage mode. It wakes up when you plug it to a computer. We recommend that you charge the battery before you start using your M400.

To make sure you get the latest software on your M400, please do the setup in Flow web service.

1. Go to flow.polar.com/start and install the FlowSync software.

2. Plug your M400 to your computer for setup and charging the battery.

3. Create a Polar Flow account for your horse.

4. Set maximum heart rate for your horse in Polar Flow: Account name > Settings > Maximum heart rate: change to 220.

5. Add horse sport profile(s): Account name > Sport profiles > Add sport profile: Riding and/or Trotting.

6. Sync the settings with your M400 in Polar FlowSync.

> *Even though you have the equipment for use by both humans and horses, note that M400 can be set up for one user at a time. If you want to use it yourself, restore it to factory settings in FlowSync and create your own account.*
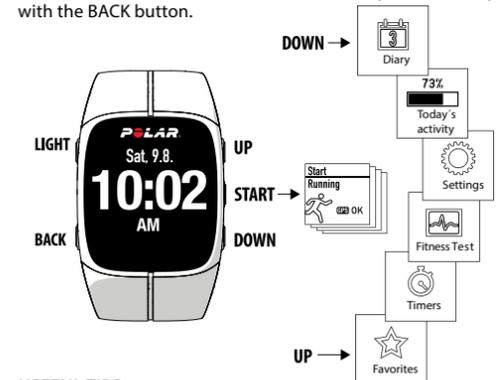
If you're in a hurry for the first training session with M400, let's do a quick setup to get you going:

1. Plug M400 into your computer with a USB cable to charge the battery. If the battery is completely empty, it takes a couple of minutes for the charging animation to appear.

2. When charging is complete, set up your M400. You must enter also physical settings, even though they don't concern the horse.

3. **Ready to go!** is displayed when you're done.

> *You can use your M400 only in English, if you do the quick setup. To use it in other languages, do the setup at flow.polar.com/start.*

GET TO KNOW YOUR M400

Browse through the menu by pressing UP or DOWN. Confirm selections with the START button, and return, pause and stop with the BACK button.
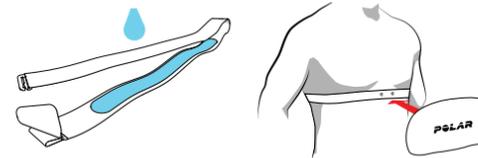

USEFUL TIPS
» Change the watch face by pressing and holding UP
» Lock buttons in time view by pressing and holding LIGHT
» Enter Quick menu in training view by pressing and holding LIGHT

PAIRING HEART RATE SENSOR WITH M400

To start using the H7 heart rate sensor, you need to first pair it with your M400. Wear the heart rate sensor yourself as instructed below, or attach the sensor to your horse with the electrode base or belt, as instructed later in this guide.

1. Moisten the electrode area of the strap.

2. Clip the strap around your chest and adjust the strap to fit snugly.

3. Attach the heart rate sensor to the strap.

4. Press START. Then wait for the sensor pairing request and choose Yes.

You can also pair a new sensor in **Settings** > **General settings> Pair and sync** > **Pair new device**.
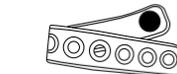
ELECTRODE BASE

The Equine heart rate sensor electrode base set is the new generation of heart rate sensors for horses. The system features plastic sensors made from conductive material which adapt perfectly to the movements of a galloping horse. These sensors include an absorbent cushion to ensure permanent contact with the horse's skin and maximum accuracy.

Parts

1. Equine Electrode Base detects the electrical signal of every heartbeat. It has a pocket for the heart rate sensor and two electrodes. The positive electrode is marked with a plus sign and the negative electrode is marked with a minus sign.
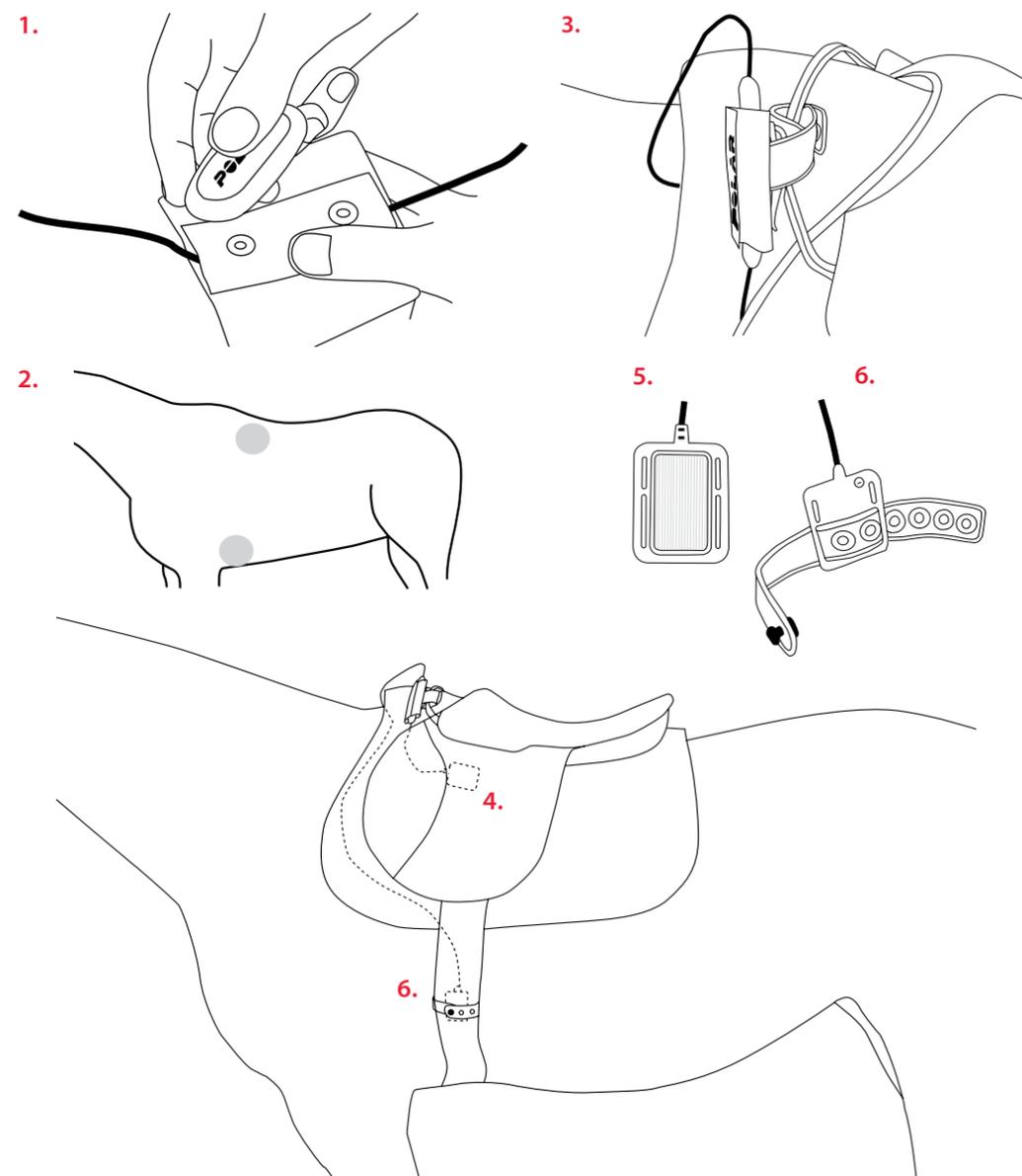

2. Two plastic straps for attaching the electrode base.
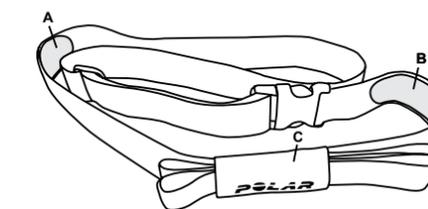

ATTACHING THE ELECTRODE BASE

1. Attach the heart rate sensor to the pocket of the electrode base. Close the pocket firmly.

2. The heart rate sensor picks up very small electrical impulses emitted by the heart. For the heart rate sensor to read the heart rate properly, ensure a good contact between the electrode pads and the horse's skin. Wet the electrode pads and the horse's hair properly from the areas where the electrode pads are placed (see the figure). If your horse has long or thick hair, you can clip those areas. This greatly improves the heart rate signal quality.

3. Attach the pocket to the saddle with one of the plastic straps.

4. Place the positive electrode pad (short cable) under the saddle (4) on the left side of the horse. Ensure that the electrode side of the pad is against the horse's skin (5). The rider's weight will keep the electrode in place.

5. Attach the negative electrode pad (long cable) under the girth using a plastic strap (6) and tighten the girth. If needed, you can place a wet sponge between the negative electrode pad and girth to ensure good contact with the skin.

> *To optimize the contact between the horse's skin and the electrode pads, you can use contact gel on the electrode pads. It ensures a better detection of the horse's heart rate.*

BELT

The plastic electrode areas (A, B) on the reverse side of the belt detect heart rate. The pocket (C) protects the heart rate sensor from shocks and scratches and prevents it from falling off the belt. The heart rate sensor sends the heart rate signal to the M400.
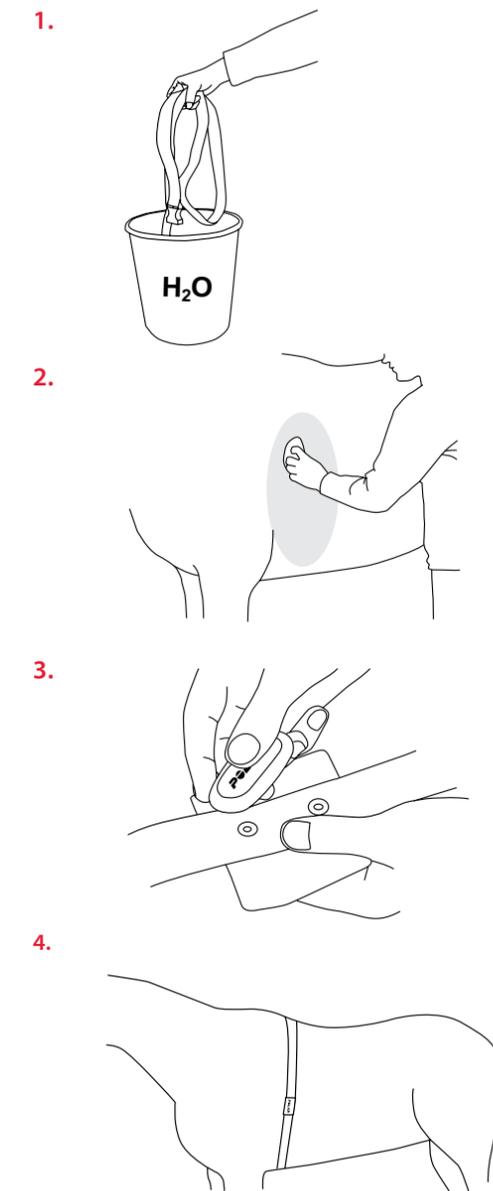

ATTACHING THE BELT

1. For the heart rate sensor to read the heart rate properly, ensure a good contact between the plastic electrode areas and the horse's skin. Wet the belt thoroughly, for example in a bucket of water (1).

2. Also wet the horse's hair from the areas where the electrodes of the belt are placed (2). If your horse has long or thick hair, you can clip those areas. This greatly improves the heart rate signal quality.

3. Attach the heart rate sensor to the pocket (3). Close the pocket firmly.

4. Place the belt as indicated (4), with the heart rate sensor pocket on the left side of the horse. This ensures that the electrode areas of the belt are in the right position.

The range of the heart rate sensor is over 10 m. Therefore, you can monitor your horse's heart rate also when lungeing.

> *To optimize the contact between the horse's skin and the electrodes, contact gel can be used on the electrodes. It ensures a better detection of the horse's heart rate. Apply the gel on the electrode areas on the reverse side of the belt.*

START TRAINING

Press START and choose the sport profile. Go outdoors and away from tall buildings and trees to catch the GPS satellite signals. Stand still with the display facing upwards until the signal is found. When the signal is found, OK is displayed. Press START again when you're ready to go.

ℹ️ *In the Flow web service you can add new sport profiles (e.g. Riding and Trotting) to your sports list, as well as edit them and existing profiles. You can also choose what's shown on the display during training sessions. In the Flow web service: Click the account name/profile photo in the upper right corner and choose Sport Profiles.*

Start a Session with Interval Timer

You can set one repeating or two alternating time and/or distance based timers for guiding your work and recovery phases in interval training.

1. Begin by going to **Timers** > **Interval timer**. Choose **Set timer(s)** to create new timers.

2. Choose **Time-based** or **Distance-based**:
   • Time-based: Define minutes and seconds for the timer and press START.
   • Distance-based: Set the distance for the timer and press START.

3. **Set another timer?** is shown. To set another timer, choose Yes and repeat step 2.

4. When completed, choose **Start X.XX km / XX:XX** and press START to enter the pre-training mode, and then choose the sport profile you want to use.

5. When M400 has found all the signals, press START. **Recording started** is displayed and you can start training.

Start a session with Finish Time Estimator

Set the distance for the session and M400 will estimate the finish time of the session according to the speed.

1. Begin by going to **Timers** > **Finish time estimator**.

2. To set a target distance, go to **Set distance** and choose **5.00 km, 10.00 km, 1/2 marathon, Marathon** or **Set other distance**. Press START. If you choose **Set other distance**, set the distance and press START. **Finish time will be estimated for XX.XX** is shown.

3. Choose **Start XX.XX km / X.XX mi** and press START to enter the pre-training mode, then choose the sport profile you want to use.

4. When M400 has found all the signals, press START. **Recording started** is displayed and you can start training.

DURING TRAINING

Take a lap: Press START during a session.

Lock a heart rate zone: To lock/unlock the zone you are currently in, press and hold START. If your heart rate goes outside the locked zone, you will be notified with audio feedback.

Pause and stop training: Press BACK to pause your training session. To continue training, press START. To stop the session, press and hold BACK for three seconds when paused until **Recording ended** is displayed.

ℹ️ *You can also start the Interval timer/Finish time estimator during the session, for example after warm-up. Press and hold LIGHT to enter Quick menu, and then choose Interval timer/Finish time estimator.*

Polar M400 offers a host of unique features to help you in training. See the training device's full-length user manual to get the most out of your training device. The user manual can be downloaded at www.polar.com/support/M400.

AFTER TRAINING

Get instant analysis and in-depth insights into your training with M400, Flow app and Flow web service.

M400
After each training session, you'll get an instant training summary of the session. To view the training summary later, go to **Diary** and choose the day, and then choose the summary of the session you want to view.

Polar Flow App
Sync your M400 with Flow app to analyze training data at a glance after each session. The Flow app allows you to see a quick overview of the training data offline.

Polar Flow Web Service
The Polar Flow web service allows you to analyze every detail of the training session and learn more about your performance. Follow your progress and also share your best sessions with others.

TROUBLESHOOTING

Abnormal Heart Rate Readings During Exercise
» Make sure the positions of the electrodes are correct and they are right side up. Check also that the girth is tight enough.
» Make sure the horse's hair under the electrodes is thoroughly moistened. If your horse has long or thick hair, clip it from the areas where the electrodes are placed.
» Accumulated sweat and dirt may interfere with the measurement of the signal from the heart to the heart rate sensor. Check if the electrodes need cleaning.
» Make sure that the hear rate sensor is firmly attached to the pocket of the electrode base or belt.
» Keep the training device and the heart rate sensor on the same side of the horse.
» If you have done all of the above-mentioned actions, and the heart rate measurement doesn't work, the battery of your heart rate sensor may be empty.

How can I best catch satellite signals?
Wear the M400 with its face upwards on your wrist. Keep your wrist stationary and raised above the level of your chest during the search. Stand still and hold the position until the M400 has found the satellite signals.

How do I ensure a good GPS signal reception in M400?
The best GPS signal reception can be reached when training in an open area where there are no obstructions for the satellite signals. Due to the nature of the GPS signal, for example hills, tall buildings, and trees may block the satellite signal. Rain, fog, and snow may also affect the signal quality.

The M400 does not find or it takes long time to find the satellite signals
Something in your surroundings may be blocking the GPS satellite signal reception (e.g. underpasses, tall buildings, terrain or forested areas). Go outdoors and away from tall buildings and trees. In good conditions, acquiring satellite signals for the first time typically takes 30-60 seconds. Note that the GPS reception does not work indoors.

The speed or distance readings are incorrect or irregular
Something in your surroundings may be blocking the GPS satellite signal reception (e.g. underpasses, tall buildings, terrain or forested areas). If the M400 cannot locate the satellite signals, it will not be able to calculate its location. Distance is measured between the last location before the shadow area and the first location after the shadow area in a straight line.

What is the measurement accuracy of the M400?
M400 measurement accuracy is +/- 2% for distance and +/- 2km/h for speed. When moving at low speeds (below 3km/h) accuracy of this level can sometimes cause relatively big errors. However, with higher speeds the measurement is more accurate.

CARE AND MAINTENANCE

The following instructions will help you fulfill the guarantee obligations, keep the device in peak condition, ensure reliable measurement and maximize the life span of the electrode base/belt and the heart rate sensor.

M400
Keep the device clean
» You can wash the device with a mild soap and water solution under running water. Do not use alcohol or any abrasive material such as steel wool or cleaning chemicals.
» If you don't wear the device 24/7, wipe off any moisture before storing it. Don't store in non-breathable material or in a damp environment, e.g. plastic bag or damp gym bag.

Keep the device's USB port clean to ensure fluent charging and syncing
» Keep the USB port clean to effectively protect your M400 from oxidation and other possible damage caused by salt water (e.g. sweat or sea water) and dirt.
» **To keep the USB port clean, rinse it with lukewarm tap water after each training session.** The USB port is water resistant and you can rinse it under running water without damaging the electronic components.
» When using the USB port, check that there is no moisture, hair, dust or dirt on the USB port. Gently wipe off any dirt. A toothpick can be used to remove hair, dust or other dirt from the connector cavity. Don't use any sharp tools for cleaning to avoid scratching.

Do not leave the device in extreme cold (below –10 °C/14 °F) and heat (above 50 °C/120 °F) or under direct sunlight.

⚠️ *Don't charge M400 when the USB port is wet or sweaty.*

H7 Heart rate sensor
Detach the heart rate sensor from the pocket after every use and wipe it dry with a soft towel. Clean the heart rate sensor with a mild soap and water solution when needed. Never use alcohol or any abrasive material (e.g. steel wool or cleaning chemicals).

Soft strap: Rinse under running water after every use. Wash regularly. Check the label on your strap for detailed washing instructions.

For more detailed caring instructions, see the full user manual at polar.com/support.

Electrode base
Rinse the electrode base under running water after every use and hang to dry. Clean the electrode pads gently with a mild soap and water solution when needed. Do not use moisturizing soaps, because they can leave residue on the electrodes. Do not soak, iron, dry clean or bleach the electrode base. Do not stretch or bend the electrode areas sharply.

Belt
Rinse the belt under running water after every use and hang to dry. Clean the belt gently with a mild soap and water solution when needed. Do not use moisturizing soaps, because they can leave residue on the belt. Do not soak, iron, dry clean or bleach the belt. Do not stretch the belt or bend the electrode areas sharply.

Storing
Keep your training device in a cool and dry place. Do not keep it in a damp environment, in non-breathable material (a plastic bag or a sports bag) nor with conductive material (a wet towel). Do not expose the training device to direct sunlight for extended periods, such as by leaving it in a car or mounted on the sulky. It is recommended to store the training device partially or fully charged. The battery slowly loses its charge when it is stored. If you are going to store the training device for several months, it is recommended to recharge it after a few months. This will prolong the battery lifetime.

Dry and store the electrode base/belt and the heart rate sensor separately to maximize the heart rate sensor battery lifetime. Keep the heart rate sensor in a cool and dry place. To prevent snap oxidation, do not store the heart rate sensor wet in non-breathing material, such as a sports bag. Do not expose the heart rate sensor to direct sunlight for extended periods.

Service
During the 12-month guarantee/warranty period we recommend that you have service, other than battery replacement, 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.com/support and country specific websites.

TECHNICAL SPECIFICATIONS

M400

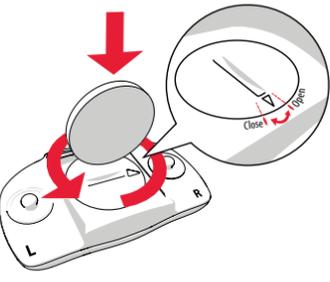|	
Battery type	190 mAh Li-pol battery
Operating time	Up to 8 hours with GPS and heart rate sensor
Operating temperature	-10 °C to +50 °C / -4 °F to 122 °F
Water resistance	30 m
Materials	Stainless steel, Polycarbonate/ acrylonitrile butadiene styrene, Acrylonitrile butadiene styrene, Thermoplastic urethane, Polymethylmetacrylate, Silicona

Bluetooth® Smart Heart rate sensor

Battery type	CR2025
Battery sealing ring	O-ring 20.0 x 1.0 Material FPM
Operating temperature	-10 °C to +50 °C / 14 °F to 122 °F
Water resistance	30 m
Connector	Polyamide
Strap	38% Polyamide, 29% Polyurethane, 20% Elastane, 13% Polyester

To change the heart rate sensor battery:
1. Using a coin, open the battery cover by turning it counterclockwise to OPEN.
2. Insert the battery (CR 2025) inside the cover with the positive (+) side against the cover. Make sure the sealing ring is in the groove to ensure water resistance.
3. Press the cover back into the connector.
4. Use the coin to turn the cover clockwise to CLOSE.

ℹ️ *For more detailed instructions, see the full user manual at polar.com/support.*

⚠️ *For safety reasons, please ensure you use the correct battery.*

PRECAUTIONS

Polar products (training devices, activity trackers and accessories) are designed to indicate the level of physiological strain and recovery during and after exercise session. The Polar training devices and activity trackers measure heart rate and/or tell your activity. The Polar training devices with an integrated GPS show speed, distance and location. With a compatible Polar accessory the Polar training devices show speed and distance, cadence, location and power output. See www.polar.com/en/products/accessories for a complete list of compatible accessories. The Polar training devices with a barometric pressure sensor measure altitude and other variables. No other use is intended or implied. The Polar training device should not be used for obtaining environmental measurements that require professional or industrial precision.

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, drugs, 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.**

Note! If you are using a pacemaker, you can use Polar products. In theory interference to pacemaker caused by Polar products should not be possible. In practice no reports exist to suggest anyone ever having experienced interference. We cannot however issue an official guarantee on our products' suitability with all pacemakers or other implanted devices due to the variety of devices available. If you have any doubts, or if you experience any unusual sensations while using Polar products, please consult your physician or contact the implanted electronic device manufacturer to determine safety in your case.

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. In case of any skin reaction, stop using the product and consult your physician.

ℹ️ *The combined impact of moisture and intense abrasion may cause a black color to come off the heart rate sensor's surface, possibly staining light-colored clothes. It may also cause a darker color to come off clothing, possibly staining lighter-colored training devices. To keep a light-colored training device glowing for years to come, please make sure the clothing you wear while training does not bleed color. If you use perfume or insect repellent on your skin, you must ensure that it does not come into contact with the training device or the heart rate sensor.*

If you train in cold conditions (-20 °C to -10 °C / -4 °F to 14 °F) we recommend that you wear the training device under the sleeve of your jacket, directly on your skin.

Disturbance may occur near electrical devices and WLAN base stations. To avoid erratic reading or misbehaviors, move away from possible sources of disturbance. For further information, see www.polar.com/support.

LIMITED INTERNATIONAL POLAR GUARANTEE FOR EQUINE PRODUCTS

• Polar Equine products are developed and manufactured for the usage in equine sports. Each product endures rigorous testing before it leaves the factory.
• This guarantee does not affect the customer's statutory rights under applicable national or state laws in force, or the customer's rights against the dealer arising from their sales/purchase contract.
• This limited Polar international guarantee is issued by Polar Electro Inc. for customers who have purchased this product in the USA or Canada. This limited Polar international guarantee is issued by Polar Electro Oy for customers who have purchased this product in other countries.
• Polar Electro Oy/Polar Electro Inc. guarantees the original customer/ purchaser of this device that the product will be free from defects in material or workmanship for twelve (12) months from the date of purchase.
• **The receipt of the original purchase is your proof of purchase!**
• The guarantee does not cover wearing parts, like batteries, Equine electrode base, Equine belt and Soft Strap, normal wear and tear of the product, damage due to misuse, abuse, accidents or non-compliance with the precautions; improper maintenance, cracked, broken or scratched cases/ displays, modified or altered products or their parts.
• 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 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.

Regulatory information is available at www.polar.com/support.

Compliance Statement

CANADA
Polar Electro Oy has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

Polar Electro Oy n'a approué aucune modification apportée à l'appareil par l'utilisateur, quelle qu'en soit la nature. Tout changement ou toute modification peuvent annuler le droit d'utilisation de l'appareil par l'utilisateur.

Industry Canada (IC) regulatory information
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Avis de conformité à la réglementation d'Industrie Canada
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3(B)/NMB-3(B)

USA
Polar Electro Oy has not approved any changes or modifications to this device by the user. Any changes or modifi cations could void the user's authority to operate the equipment.

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.

This product emits radio frequency energy, but the radiated output power of this device is far below the FCC radio frequency exposure limits. This equipment complies with FCC RF radiation exposure limits forth for an uncontrolled environment. Nevertheless, the device should be used in such a manner that the potential for human contact with the antenna during normal operation is minimized.

This product is compliant with Directives 1999/5/EC and 2011/65/EU. The relevant Declaration of Conformity is available at www.polar.com/en/ regulatory_information.

This product is compliant with Directives 93/42/EEC, 1999/5/EC and 2011/65/EU. The relevant Declaration of Conformity is available at www.polar.com/en/regulatory_information.

This product is compliant with Directives 2013/56/EC and 2012/19/EU. Separate disposal for battery and electronics.

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

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Disclaimer
Please note that these guarantee terms shall be applied to Polar Equine products instead of any other Polar Electro guarantee terms, even if other terms may appear in some product documentation.