

POLAR®

POLAR M430



USER MANUAL

CONTENTS

Contents	2
Polar M430 User Manual	6
Introduction	6
Take full advantage of your M430	6
Get started	7
Setting up your M430	7
Choose one option for setup	7
Option A: Set up with a mobile device and Polar Flow app	7
Option B: Set up with your computer	8
Option C: Set Up from the device	9
Button functions	9
Time view and menu	9
Pre-training mode	10
During training	10
Menu structure	10
My day	10
Diary	11
Settings	11
Fitness Test	11
Timers	11
Favorites	11
My heart rate	12
Wearing your M430	12
When measuring heart rate from your wrist	12
When not measuring heart rate from your wrist	12
Pairing	12
Pair a mobile device with your M430	12
Pair a heart rate sensor with your M430	13
Pair a stride sensor with your M430	13
Pair Polar Balance Scale with your M430	13
Delete a pairing	14
Settings	15
Sport profile settings	15
Settings	16
Physical settings	16
Weight	16
Height	16
Date of birth	17
Sex	17
Training background	17
Maximum heart rate	17
General settings	17
Continuous HR tracking	18
Pair and sync	18
Flight mode	18
Button lock	18
Smart notifications	18
Inactivity alert	18
Units	18

Language	19
Training view color	19
About your product	19
Watch settings	19
Alarm	20
Time	20
Date	20
Week's starting day	20
Watch face	20
Quick menu	21
Quick menu in pre-training mode	21
Quick menu in training view	22
Quick menu in pause mode	22
Updating the firmware	23
With mobile device or tablet	23
With computer	23
Training	24
Training with wrist-based heart rate	24
Heart rate training	24
Measuring heart rate with your M430	24
Start a training session	25
Start a planned training session	26
Start a session with Interval Timer	26
Start a session with Finish Time Estimator	26
During training	27
Browse the training views	27
Mark a lap	27
Lock a Heart Rate or Speed Zone	27
Change phase during a phased session	27
Change Settings in quick menu	27
Notifications	27
Pausing/Stopping a training session	27
Training summary	28
After training	28
Training history in M430	30
Training data in Polar Flow App	30
Training data in Polar Flow Web Service	30
Features	31
Assisted GPS (A-GPS)	31
A-GPS expiry date	31
GPS features	32
Back to start	32
Smart Coaching	32
Activity Guide	33
Activity Benefit	33
24/7 Activity tracking	33
Activity Goal	34
Activity data on your M430	34
Inactivity alert	35
Activity data in Flow App and Flow web service	35
Polar Sleep Plus™	35
Sleep data on your M430	36
Sleep data in the Flow app and web service	37

Continuous Heart Rate	37
Fitness Test with wrist-based heart rate	37
Before the test	38
Performing the test	38
Test results	38
Fitness level classes	39
Men	39
Women	39
Vo2max	40
Polar Running Program	40
Create a Polar Running Program	40
Start a running target	41
Follow your progress	41
Running Index	41
Short-term analysis	41
Men	41
Women	42
Long-term analysis	42
Smart Calories	43
Training Benefit	44
Training Load and Recovery	45
Sport Profiles	45
Heart Rate Zones	46
Speed Zones	46
Speed zones settings	46
Training target with speed zones	46
During training	47
After training	47
Cadence from the wrist	47
Speed and distance from the wrist	47
Smart Notifications	47
Polar Flow	48
Polar Flow App	48
Training data	48
Activity data	48
Sleep data	48
Sport profiles	48
Image sharing	48
Start using the Flow app	48
Polar Flow Web Service	49
Diary	49
Reports	49
Programs	49
Favorites	49
Add a Training Target to Favorites:	50
Edit a Favorite	50
Remove a favorite	50
Planning your training	50
Create a training plan with the Season Planner	50
Create a training target in the Polar Flow web service	51
Create a target based on a favorite training target	53
Sync the targets to your watch	54
Create a training target in the Polar Flow app	54

Sport profiles in Polar Flow	56
Add a sport profile	56
Edit a sport profile	57
Syncing	58
Sync with Flow mobile App	58
Sync With Flow Web Service Via FlowSync	59
Important information	60
Battery	60
Charging M430 battery	60
Battery operating time	61
Low battery notifications	61
Caring for your M430	61
Keep your M430 clean	61
Take good care of the optical heart rate sensor	62
Storing	62
Service	62
Precautions	62
Interference During Training	62
Health and training	63
Warning - Keep batteries out of reach of children	64
Technical specification	64
M430	64
Polar FlowSync Software	65
Polar Flow mobile application compatibility	65
Water resistance of Polar products	65
Limited International Polar Guarantee	66
Regulatory information	67
Disclaimer	67

POLAR M430 USER MANUAL

This user manual helps you get started with your new M430. To see M430 video tutorials and FAQs, go to support.polar.com/en/M430.

INTRODUCTION

Congratulations on your new Polar M430!

The Polar M430 is a GPS running watch with wrist-based heart rate, Polar's advanced training features and 24/7 activity tracking. The M430 gives you personalized guidance and feedback for training and daily activity to help you reach your goals. You will be able to track your running pace, distance, altitude and route with the compactly packed integrated GPS. When GPS is not available, your M430 tracks speed and distance from your wrist movements.

You don't need to wear a separate heart rate sensor; just enjoy running with the wrist-based heart rate measurement that's always ready when you are.

With the 24/7 Activity tracking you can track the activities of your everyday life. See how they benefit your health, and get tips on how to reach your daily activity goal. And stay connected with smart notifications; get alerts to your M430 for incoming calls, messages and app activity on your phone.

TAKE FULL ADVANTAGE OF YOUR M430

Get connected to the Polar ecosystem and get the most out of your M430.

Get the [Polar Flow app](#) from the App Store® or Google Play™. Sync your M430 with the Flow app after training, and get an instant overview and feedback of your training results and performance. In Flow app you can also check how you've slept and how active you've been during the day.

Sync your training data to the [Polar Flow web service](#) with the FlowSync software on your computer or via Flow app. In the web service you can plan your training, track your achievements, get guidance and see detailed analysis of your training results, activity and sleep. Let all your friends know about your achievements, find fellow exercisers and get motivation from your social training communities. Find all this at flow.polar.com.

GET STARTED

Setting up your M430	7
Option A: Set up with a mobile device and Polar Flow app	7
Option B: Set up with your computer	8
Option C: Set Up from the device	9
Button functions	9
Menu structure	10
My day	10
Diary	11
Settings	11
Fitness Test	11
Timers	11
Favorites	11
My heart rate	12
Wearing your M430	12
When measuring heart rate from your wrist	12
When not measuring heart rate from your wrist	12
Pairing	12
Pair a mobile device with your M430	12
Pair a heart rate sensor with your M430	13
Pair a stride sensor with your M430	13
Pair Polar Balance Scale with your M430	13
Delete a pairing	14

SETTING UP YOUR M430

Your new M430 is in storage mode, and it wakes up when you plug it into a USB charger for charging or a computer for setup. We recommend that you charge the battery before you start using your M430. If the battery is completely empty, it takes a couple of minutes for the charging to start.

See [Batteries](#) for detailed information on charging the battery, battery operating times and low battery notifications.

CHOOSE ONE OPTION FOR SETUP

A. Mobile setup is convenient if you don't have access to a computer with a USB port, but it might take longer. This method requires an Internet connection.

B. Wired computer setup is quicker and you can charge your M430 at the same time, but you need a computer available. This method requires an Internet connection.

 *The A and B options are recommended. You can fill in all the physical details required for accurate training data at once. You can also choose language and get the latest firmware for your M430.*

C. If you don't have a compatible mobile device and can't get to a computer with an Internet connection right away, you can start from the device. **Please note that the device contains only part of the settings.** To make sure you get to enjoy your M430 and the unique Polar smart coaching features at their best, it's important that you do the setup in the Polar Flow web service later by following the steps in option A or B.

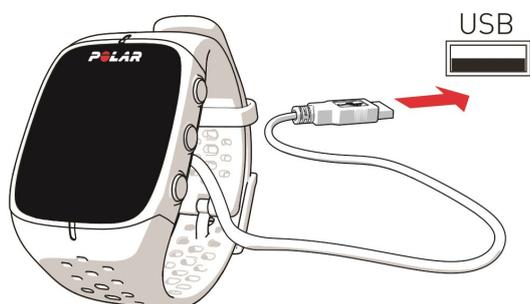
OPTION A: SET UP WITH A MOBILE DEVICE AND POLAR FLOW APP

Polar M430 connects to the Polar Flow mobile app wirelessly via Bluetooth, so remember to have Bluetooth turned on in your mobile device.

Check the Polar Flow app compatibility at support.polar.com.

1. To make sure there's enough charge on your M430 during the mobile setup, plug your M430 in a powered USB port or a USB power adapter. Make sure that the adapter is marked with "output 5Vdc" and that it provides a minimum of 500mA. It may take a few minutes for your M430 to wake up before the charging animation starts.

i Before charging, please make sure there's no moisture, hair, dust or dirt on the M430's USB connector. Gently wipe off any dirt or moisture. Do not charge the M430 when the USB connector is wet.



2. Go to the App Store or Google Play on your mobile device and search and download the Polar Flow app.
3. Open the Flow app on your mobile device. It recognizes your new M430 nearby and prompts you to start pairing it. Accept the pairing request, and **enter the Bluetooth pairing code shown on the M430 display to the Flow app.**
4. Then create a Polar account, or sign in if you already have one. The app will walk you through the sign-up and setup.

i To get the most accurate and personal activity and training data, it's important that you're precise with the settings. When signing up, you can choose which language you want to use on your M430. If there is a firmware update available for your M430, we recommend that you install it during the setup. It may take up to 20 minutes to complete.

5. Tap **Save and sync** when you've defined all the settings. Your personalized settings will now be synced to your M430.
6. The M430 display will open to the time view once the synchronization is done.

After the setup is done, you're ready to go. Have fun!

OPTION B: SET UP WITH YOUR COMPUTER

1. Go to flow.polar.com/start and install the FlowSync software to set up your M430.
2. Plug your M430 in to your computer using the provided USB cable to charge it during the setup. It may take a few minutes for your M430 to wake up. Let your computer install any suggested USB drivers.

i Before charging, please make sure there's no moisture, hair, dust or dirt on the M430's USB connector. Gently wipe off any dirt or moisture. Do not charge the M430 when the USB connector is wet.

3. Sign in with your Polar account, or create a new one. The web service will walk you through the sign-up and setup.

i To get the most accurate and personal activity and training data, it's important that you're precise with the settings. When signing up, you can choose which language you want to use on your M430. If there is a firmware update available for your M430, we recommend that you install it during the setup. It may take up to 10 minutes to complete.

After the setup is done, you're ready to go. Have fun!

OPTION C: SET UP FROM THE DEVICE

Plug M430 into your computer's USB port or a USB charger with the cable that came in the box. **Choose language** is displayed. Press **START** to choose **English**. Your M430 is delivered with English only, but you can add other languages when doing the setup in the Polar Flow web service or with the Polar Flow app.

Set the following data, and confirm each selection with the **START** button. If you want to return and change a setting at any point, press **Back** until you reach the setting you want to change.

1. **Time format** : Choose **12 h** or **24 h**. With **12 h**, select **AM** or **PM**. Then set the local time.
2. **Date** : Enter the current date.
3. **Units** : Choose metric (**kg, cm**) or imperial (**lb, ft**) units.
4. **Weight** : Enter your weight.
5. **Height** : Enter your height.
6. **Date of birth** : Enter your date of birth.
7. **Sex** : Choose **Male** or **Female**.
8. **Training background** : **Occasional (0-1 h/week)**, **Regular (1-3 h/week)**, **Frequent (3-5 h/week)**, **Heavy (5-8 h/week)**, **Semi-Pro (8-12 h/week)**, **Pro (12+ h/week)**. For more information on training background, see [Physical Settings](#).
9. **Ready to go!** is displayed when you're done with the settings, and M430 goes to time view.

 When you do the setup from the device, your M430 is not yet connected with the Polar Flow web service. To make sure you get to enjoy your M430 and the unique Polar smart coaching features at their best, it's important that you do the setup later in the Polar Flow web service or with the Flow mobile app by following the steps in option A or B.

BUTTON FUNCTIONS

M430 has five buttons that have different functionalities depending on the situation of use. See the tables below to find out what functionalities the buttons have in different modes.



TIME VIEW AND MENU

LIGHT	BACK	START	UP/DOWN
Illuminate the display	Exit the menu	Confirm selections	Move through selection lists
Press and hold to lock buttons	Return to the previous level	Enter pre-training mode	Adjust a selected value
	Leave settings unchanged	Confirm the selection shown on the display	Press and hold UP to change the watch face
	Cancel selections		

LIGHT	BACK	START	UP/DOWN
	Press and hold to return to time view from menu		
	Press and hold to start pairing and syncing		

PRE-TRAINING MODE

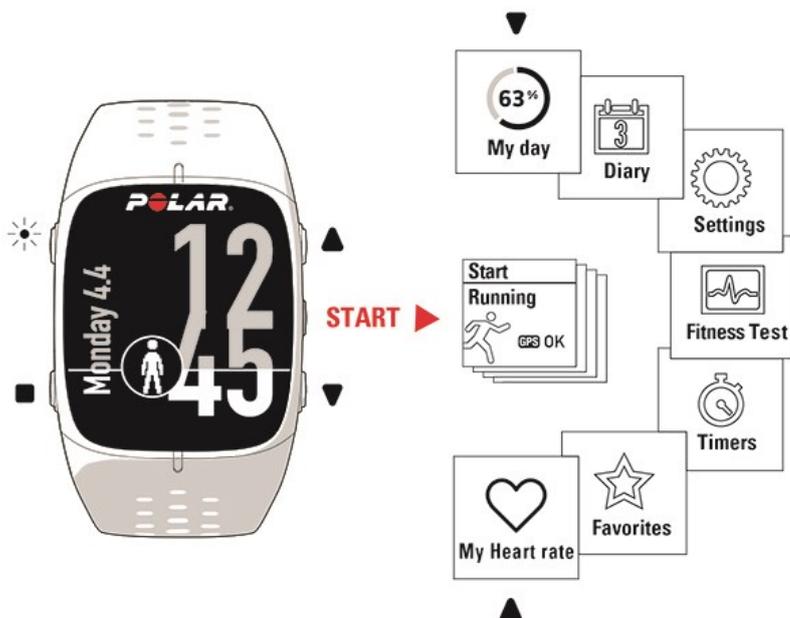
LIGHT	BACK	START	UP/DOWN
Illuminate the display	Return to time view	Start a training session	Move through sports list
Press and hold to enter sport profile settings			

DURING TRAINING

LIGHT	BACK	START	UP/DOWN
Illuminate the display	Pause training by pressing once	Mark a lap	Change training view
Press and hold to enter Quick Menu	Press and hold for 3 seconds to stop training recording	Press and hold to set zone lock on/off	
		Continue training recording when paused	

MENU STRUCTURE

Enter and browse through the menu by pressing UP or DOWN. Confirm selections with the START button, and return with the BACK button.



MY DAY

Your daily activity goal is visualized with a circle that fills up as you are active. In the **My day** menu you can find:

- Your sleep time and actual sleep. The M430 tracks your sleep if you wear it at night. It detects when you fall asleep and when you wake up and collects data for deeper analysis in the Polar Flow app and web service. For more information, see [Polar Sleep Plus](#).
- Your day's accumulated activity in more detail and guidance on how to reach your daily activity goal. For more information, see [24/7 Activity Tracking](#).
- The training sessions you've done during the day. You can open the session summary by pressing START.
- Any [planned training sessions](#) you've created for the day in the Polar Flow web service or in the Polar Flow app. You can start a planned training session and open past sessions to view them in more detail by pressing START.
- If you perform a [Fitness test](#) during the day, your result will be shown in **My Day**.
- Any events of the day. You can create and join events in the Polar Flow Community at flow.polar.com.

DIARY

In **Diary** you'll see the current week, past four weeks and next four weeks. Select a day to see your activity and training sessions of that day, the training summary of each session and the tests you have done. You can also see your planned training sessions.

SETTINGS

In **Settings** you can edit:

- **Sport profiles**
- **Physical settings**
- **General settings**
- **Watch settings**

For more information, see [Settings](#).

FITNESS TEST

Measure your fitness level easily with wrist-based heart rate while you lie down and relax.

For more information, see [Fitness Test with wrist-based heart rate](#).

TIMERS

In **Timers** you'll find:

- **Stopwatch:** You can use your M430 as a stopwatch. Start the stopwatch by pressing START. To add a lap, press START again. To pause the stopwatch, press BACK. To reset the stopwatch, press and hold LIGHT.
- **Interval timer:** Set time and/or distance based interval timers to precisely time work and recovery phases in your interval training sessions. For more information, see [Start a Training Session](#).
- **Finish time estimator:** Achieve your target time for a set distance. Set the distance for your session and M430 will estimate the finish time of the session according to your speed. For more information, see [Start a Training Session](#).

FAVORITES

In **Favorites** you'll find training targets that you have saved as favorites in the Flow web service.

For more information, see [Favorites](#).

MY HEART RATE

In **My heart rate** you can quickly check your current heart rate without starting a training session. Just tighten your wristband, press START and you'll see your current heart rate in a moment. Press the BACK button to exit.

WEARING YOUR M430

WHEN MEASURING HEART RATE FROM YOUR WRIST

To measure wrist-based heart rate accurately, you need to wear the M430 snugly on top of your wrist, just behind the wrist bone. The sensor must be in firm skin contact, but not too tight to prevent blood flow. For most accurate heart rate measurement, we advise you to wear your M430 for a few minutes prior to starting the heart rate measurement. For more information see [Training with wrist-based heart rate](#).

 *After a sweaty training session, we recommend that you wash the M430 under running water with a mild soap and water solution. Then wipe it dry with a soft towel. Let it fully dry before charging.*

WHEN NOT MEASURING HEART RATE FROM YOUR WRIST

Loosen the wristband a bit for a more comfortable fit and to let your skin breathe. Wear the M430 just as you would wear a normal watch.

 *Every once in a while it's a good idea to let your wrist have a breather, especially if you have sensitive skin. Take off your M430 and recharge it. This way both your skin and your device can have a rest, and be ready for your next training event.*

PAIRING

Before taking a new mobile device (smartphone, tablet), heart rate sensor, stride sensor or Polar Balance scale into use, it has to be paired with your M430. Pairing only takes a few seconds, and ensures that your M430 receives signals from your sensors and devices only, and allows disturbance-free training in a group. Before entering an event or race, make sure that you do the pairing at home to prevent interference due to data transmission.

PAIR A MOBILE DEVICE WITH YOUR M430

If you've done the setup for your M430 with a mobile device as described in chapter [Set up your M430](#), your M430 has already been paired. If you did the setup with a computer and would like to use your M430 with Polar Flow app, please pair your M430 and mobile as follows:

Before pairing a mobile device

- download Flow app from the App Store or Google Play
- make sure your mobile device has Bluetooth turned on, and airplane mode/flight mode is not turned on.

To pair a mobile device:

1. On your mobile device, open Flow app and sign in with your Polar account, which you have created when setting up your M430.
2. Wait for the **Connect product** view to appear on your mobile device (**Waiting for M430** is displayed).
3. In M430 time mode, press and hold BACK.
4. **Connecting to device** is displayed, followed by **Connecting to app**.
5. Accept the Bluetooth pairing request on your mobile device and type in the pin code shown on your M430.
6. **Pairing completed** is displayed when you are done.

or

1. On your mobile device, open Flow app and sign in with your Polar account.
2. Wait for the **Connect product** view to appear on your mobile device (**Waiting for M430**) is displayed.
3. On M430, go to **Settings > General settings > Pair and sync > Pair and sync mobile device** and press START
4. **Confirm from other device pin xxxxxx** is displayed on your M430. Enter the pin code from the M430 on the mobile device. The pairing starts.
5. **Pairing completed** is displayed when you are done.

PAIR A HEART RATE SENSOR WITH YOUR M430

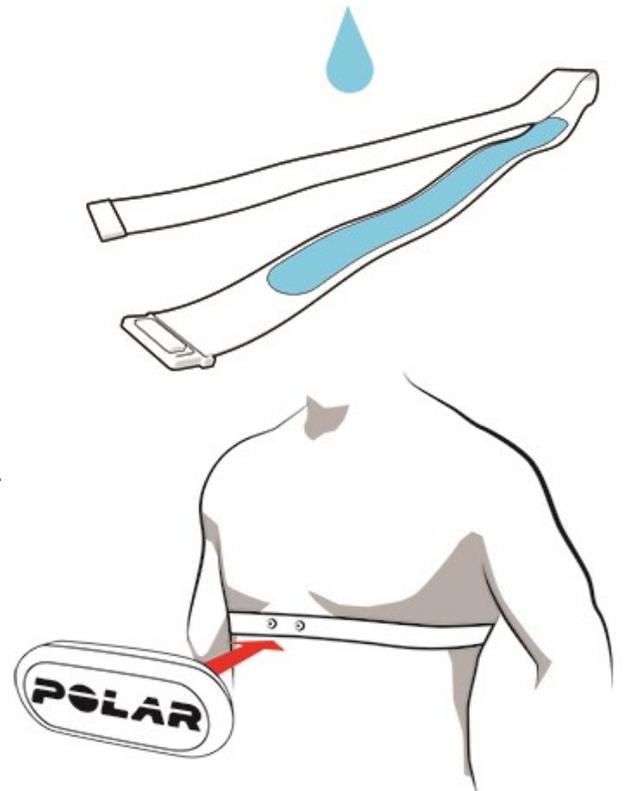
 *When you're wearing a Polar heart rate sensor that's paired with your M430, the M430 does not measure heart rate from the wrist.*

There are two ways to pair a heart rate sensor with your M430:

1. Wear the moistened heart rate sensor.
2. On M430, go to **General Settings > Pair and sync > Pair other device** and press START.
3. M430 starts searching for your heart rate sensor.
4. Once the heart rate sensor is found, the device ID **Polar H10 xxxxxxxx** is displayed.
5. Press START, **Pairing** is displayed.
6. **Pairing completed** is displayed when you are done.

OR

1. Wear the moistened heart rate sensor.
2. On M430, press START in time view to enter pre-training mode.
3. Touch your heart rate sensor with M430, and wait for it to be found.
4. The device ID **Pair Polar H10 xxxxxxxx** is displayed. Choose **Yes**.
5. **Pairing completed** is shown when you are done.



PAIR A STRIDE SENSOR WITH YOUR M430

See this [support document](#) for instructions on how to pair and calibrate a stride sensor.

PAIR POLAR BALANCE SCALE WITH YOUR M430

There are two ways to pair a Polar Balance scale with your M430:

1. Step on the scale. The display shows your weight.
2. After a beep sound, the Bluetooth icon on the scale display starts flashing, which means that the connection is now on. The scale is ready to be paired with your M430.
3. Press and hold the BACK button for 2 seconds on your M430 and wait until the display indicates the pairing is complete.

or

1. Go to **General Settings > Pair and sync > Pair other device** and press START.
2. M430 starts searching for your scale.
3. Step on the scale. The display shows your weight.
4. Once the scale is found, the device ID **Polar scale xxxxxxxx** is displayed on your M430.

5. Press START, **Pairing** is displayed.
6. **Pairing completed** is shown when you are done.

 *The scale can be paired with 7 different Polar devices. When the number of paired devices exceeds 7, the first pairing will be removed and replaced.*

DELETE A PAIRING

To delete a pairing with a sensor or mobile device:

1. Go to **Settings > General settings > Pair and sync > Paired devices** and press START.
2. Choose the device you want to remove from the list and press START.
3. **Delete pairing?** is displayed, choose **Yes** and press START.
4. **Pairing deleted** is displayed when you are done.

SETTINGS

Sport profile settings	15
Settings	16
Physical settings	16
Weight	16
Height	16
Date of birth	17
Sex	17
Training background	17
Maximum heart rate	17
General settings	17
Continuous HR tracking	18
Pair and sync	18
Flight mode	18
Button lock	18
Smart notifications	18
Inactivity alert	18
Units	18
Language	19
Training view color	19
About your product	19
Watch settings	19
Alarm	20
Time	20
Date	20
Week's starting day	20
Watch face	20
Quick menu	21
Quick menu in pre-training mode	21
Quick menu in training view	22
Quick menu in pause mode	22
Updating the firmware	23
With mobile device or tablet	23
With computer	23

SPORT PROFILE SETTINGS

You can edit certain sport profiles settings on your M430. You can, for example, set the GPS on or off in different sports. A wider range of customization options is available in the Polar Flow app and web service. For more information, see [Sport Profiles in Flow](#).

There are four default sport profiles on your M430: **Running**, **Cycling**, **Other outdoor** and **Other indoor**. You can add new sport profiles to your sports list and edit their settings in the Polar Flow app or web service. Your M430 can contain a maximum of 20 sport profiles. If you have over 20 sport profiles in the Polar Flow app and web service, the first 20 in the list are transferred to your M430 when syncing.

 *If you have edited your sport profiles in the Flow web service before your first training session, and synced them to your M430, the sport profile list will contain the edited sport profiles.*

SETTINGS

To view or modify sport profile settings, go to **Settings > Sport profiles** and choose the profile you want to edit. You can also access the settings of the currently selected profile from pre-training mode by pressing and holding LIGHT.

- **Heart rate settings: Heart rate view:** Choose **Beats per minute (bpm)** or **% of maximum**. **Check HR zone limits:** Check the limits for each heart rate zone. **HR visible to other device:** Choose **On** or **Off**. If you choose **On**, other compatible devices using Bluetooth Smart wireless technology, e.g. gym equipment, can detect your heart rate. You can also use your M430 during Polar Club classes to broadcast your heart rate to the Polar Club system.
- **GPS recording:** Choose **High accuracy**, **Medium accuracy**, **Power save, long session** or **Off**.
- **Stride sensor:** This setting is shown only if you have paired a Polar Stride sensor with your M430. Choose **Calibration** or **Choose sensor for speed**. In **Calibration**, choose **Automatic** or **Manual**. In **Choose sensor for speed**, set the source for speed data: **Stride sensor** or **GPS**. For more information on Stride sensor calibration, see this [support document](#).
- **Speed settings: Speed View:** Choose **km/h** (kilometers per hour) or **min/km** (minutes per kilometer). If you have chosen imperial units, choose **mph** (miles per hour) or **min/mi** (minutes per mile). **Check speed zone limits:** You can check the speed/pace zone limits here.
- **Automatic pause sett.: Automatic pause:** Choose **On** or **Off**. If you set the **Automatic pause On**, your session is automatically paused when you stop moving. **Activation speed:** Set the speed at which recording is paused.

 *To use **Automatic pause** during training, you need to have GPS set to **High Accuracy** or a Polar stride sensor in use.*

- **Automatic lap:** Choose **Off**, **Lap distance** or **Lap duration**. If you choose **Lap distance**, set the distance after which each lap is taken. If you choose **Lap duration**, set the duration after which each lap is taken.

 *To use distance-based automatic lap, you need to have GPS recording on or a Polar stride sensor in use.*

PHYSICAL SETTINGS

To view and edit your physical settings, go to **Settings > Physical settings**. It is important that you are precise with the physical settings, especially when setting your weight, height, date of birth and sex, as they have an impact on the accuracy of the measuring values, such as the heart rate zone limits and calorie expenditure.

In **Physical settings** you'll find:

- **Weight**
- **Height**
- **Date of birth**
- **Sex**
- **Training background**
- **Maximum heart rate**

WEIGHT

Set your weight in kilograms (kg) or pounds (lbs).

HEIGHT

Set your height in centimeters (metric) or in feet and inches (imperial).

DATE OF BIRTH

Set your birthday. The order in which the date settings are depends on which time and date format you have chosen (24h: day - month - year / 12h: month - day - year).

SEX

Select **Male** or **Female**.

TRAINING BACKGROUND

Training background is an assessment of your long-term physical activity level. Select the alternative that best describes the overall amount and intensity of your physical activity during the past three months.

- **Occasional (0-1h/week):** You do not participate regularly in programmed recreational sport or heavy physical activity, e.g. you walk only for pleasure or exercise hard enough to cause heavy breathing or perspiration only occasionally.
- **Regular (1-3h/week):** You participate regularly in recreational sports, e.g. you run 5-10 km or 3-6 miles per week or spend 1-3 hours per week in comparable physical activity, or your work requires modest physical activity.
- **Frequent (3-5h/week):** You participate at least 3 times a week in heavy physical exercise, e.g. you run 20-50 km/12-31 miles per week or spend 3-5 hours per week in comparable physical activity.
- **Heavy (5-8h/week):** You participate in heavy physical exercise at least 5 times a week, and you may sometimes take part in mass sports events.
- **Semi-pro (8-12h/week):** You participate in heavy physical exercise almost daily, and you exercise to improve performance for competitive purposes.
- **Pro (>12h/week):** You are an endurance athlete. You participate in heavy physical exercise to improve your performance for competitive purposes.

MAXIMUM HEART RATE

Set your maximum heart rate, if you know your current maximum heart rate value. Your age-predicted maximum heart rate value ($220 - \text{age}$) is displayed as a default setting when you set this value for the first time.

HR_{\max} is used to estimate energy expenditure. HR_{\max} is the highest number of heartbeats per minute during maximum physical exertion. The most accurate method for determining your individual HR_{\max} is to perform a maximal exercise stress test in a laboratory. HR_{\max} is also crucial when determining training intensity. It is individual and depends on age and hereditary factors.

GENERAL SETTINGS

To view and edit your general settings, go to **Settings > General settings**

In **General settings** you'll find:

- **Continuous HR tracking**
- **Pair and sync**
- **Flight mode**
- **Button lock**
- **Smart notifications**
- **Inactivity alert**
- **Units**

- **Language**
- **Training view color**
- **About your product**

CONTINUOUS HR TRACKING

Turn the Continuous Heart Rate feature **On** or **Off**. For more information, see [Continuous Heart Rate](#).

PAIR AND SYNC

- **Pair and sync mobile device / Pair other device:** Pair sensors or mobile devices with your M430. Sync data with Flow app.
- **Paired devices:** View all the devices you have paired with your M430. These can include heart rate sensors, running sensors and mobile devices.

FLIGHT MODE

Choose **On** or **Off**.

Flight mode cuts off all wireless communication from your M430. You can still use it, but you can't sync your data with the Polar Flow mobile app or use it with any wireless accessories.

BUTTON LOCK

Choose **Manual lock** or **Automatic lock**. In **Manual lock** you can lock the buttons by manually from the **Quick menu**. In **Automatic Lock** the button lock automatically goes on after 60 seconds if there is no user interactions with the device.

SMART NOTIFICATIONS

To be able to receive notifications and alerts from your phone to your M430 you need to set smart notifications on in **Menu > Settings > General settings > Smart notifications**.

In **Smart notifications** settings, you'll find:

- **Notifications:** Set the notifications **On**, **On (no preview)** or **Off**.

On: the contents of the notification is shown on the M430 display. **On (no preview):** the contents of the notification is not shown on the M430 display. **Off (default):** you will not get any notifications on your M430.

 *In the Polar Flow App, you can choose the apps from which you want notifications.*

- **Vibration feedback:** Set the vibration feedback **On** or **Off**.
- **Notif. do not disturb:** If you want to disable notifications and call alerts for a certain period of time, choose **Do not disturb** on. Then set the time period when **Do not disturb** is on. When **Do not disturb** is on, you will not receive any notifications or call alerts during the time period you have set.

 *By default, **Do not disturb** is on between 10 pm - 7 am.*

INACTIVITY ALERT

Set the inactivity alert **On** or **Off**.

UNITS

Choose metric (**kg**, **cm**) or imperial (**lb**, **ft**). Set the units used to measure weight, height, distance and speed.

LANGUAGE

You can choose which language you use on your M430 during set up. Your M430 supports the following languages: **Bahasa Indonesia, Čeština, Dansk, Deutsch, English, Español, Français, Italiano, 日本語, Nederlands, Norsk, Polski, Português, 简体中文, Pyccкyy, Suomi, Svenska** or **Türkçe**.

If you want to change the language on your M430, you can do it either in the Polar Flow web service or in the Polar Flow app.

Changing the language setting in the Polar Flow web service:

1. In the Flow web service, click your name/profile photo in the upper right corner.
2. Choose **Products**.
3. Click **Settings** next to Polar M430.
4. Find the **Device language** you prefer to use on your M430 from the drop down list.
5. Click **Save**.
6. Remember to sync the changed language setting to your M430.

Changing the language setting in the Polar Flow app:

1. On your mobile device, open the Flow app and sign in with the Polar account that you created when you set up your M430.
2. Go to **Devices**.
3. Tap **Device language** under the Polar M430 to open the list of supported languages.
4. Tap to choose the language you prefer, and then tap **Done**.
5. Sync the changed settings to your M430 by pressing and holding the BACK button of your M430.

TRAINING VIEW COLOR

Choose **Dark** or **Light**. Change the display color of your training view. When **Light** is chosen, the training view has a light background with dark numbers and letters. When **Dark** is chosen, the training view has a dark background with light numbers and letters.

ABOUT YOUR PRODUCT

Check the device ID of your M430, as well as the firmware version, HW model, A-GPS expiry date and the M430-specific regulatory labels.

Restart device: If you experience problems with your M430, you can try restarting it. Restarting the M430 will not delete any of the settings or your personal data from the M430. Press the START button and then choose **Yes** to confirm the restart.

WATCH SETTINGS

To view and edit your watch settings, go to **Settings > Watch settings**

In **Watch settings** you'll find:

- **Alarm**
- **Time**
- **Date**
- **Week's starting day**
- **Watch face**

ALARM

Set alarm repetition: **Off**, **Once**, **Monday to Friday** or **Every day**. If you choose **Once**, **Monday to Friday** or **Every day**, also set the time for the alarm.

 *When the alarm is set on, a clock icon is displayed in the time view.*

TIME

Set the time format: **24 h** or **12 h**. Then set the time of day.

 *When syncing with the Flow app and web service, the time of day is automatically updated from the service.*

DATE

Set the date. Also set the **Date format**, you can choose **mm/dd/yyyy**, **dd/mm/yyyy**, **yyyy/mm/dd**, **dd-mm-yyyy**, **yyyy-mm-dd**, **dd.mm.yyyy** or **yyyy.mm.dd**.

 *When syncing with the Flow app and web service, the date is automatically updated from the service.*

WEEK'S STARTING DAY

Choose the starting day of each week. Choose **Monday**, **Saturday** or **Sunday**.

 *When syncing with the Flow app and web service, the week's starting day is automatically updated from the service.*

WATCH FACE

Choose the watch face:

- **Jumbo**



- **Activity**



- **Oversized**



- **Analog**



- **Big digits**



 By choosing the "Jumbo" (the default watch face) or the "Activity" as your watch face, you'll be able to see the progress of your daily activity in the time view.

 The watch faces with seconds displayed update every second and thus will consume a bit more battery.

QUICK MENU

QUICK MENU IN PRE-TRAINING MODE

In pre-training mode, press and hold LIGHT to access the settings of the currently chosen sport profile:

- **Heart rate settings: Heart rate view:** Choose **Beats per minute (bpm)** or **% of maximum**. **Check HR zone limits:** Check the limits for each heart rate zone. **HR visible to other device:** Choose **On** or **Off**. If you choose **On**, other compatible devices using Bluetooth Smart wireless technology, e.g. gym equipment, can detect your heart rate. You can also use your M430 during Polar Club classes to broadcast your heart rate to the Polar Club system.
- **GPS recording:** Choose **High accuracy**, **Medium accuracy**, **Power save, long session** or **Off**.
- **Stride sensor:** This setting is shown only if you have paired a Polar Stride sensor with your M430. Choose **Calibration** or **Choose sensor for speed**. In **Calibration**, choose **Automatic** or **Manual**. In **Choose sensor for**

speed, set the source for speed data: **Stride sensor** or **GPS**. For more information on Stride sensor calibration, see this [support document](#).

- **Speed settings: Speed View:** Choose **km/h** (kilometers per hour) or **min/km**(minutes per kilometer). If you have chosen imperial units, choose **mph** (miles per hour) or **min/mi** (minutes per mile). **Check speed zone limits:** You can check the speed/pace zone limits here.
- **Automatic pause sett.: Automatic pause:** Choose **On** or **Off**. If you set the **Automatic pause On**, your session is automatically paused when you stop moving. **Activation speed:** Set the speed at which recording is paused.

 To use **Automatic pause** during training, you need to have GPS set to **High Accuracy** or a Polar stride sensor in use.

- **Automatic lap:** Choose **Off**, **Lap distance** or **Lap duration**. If you choose **Lap distance**, set the distance after which each lap is taken. If you choose **Lap duration**, set the duration after which each lap is taken.

 To use distance-based automatic lap, you need to have GPS recording on or a Polar stride sensor in use.

QUICK MENU IN TRAINING VIEW

In training view, press and hold LIGHT to enter **Quick menu**. In the training view **Quick menu**, you'll find:

- **Lock buttons:** Press START to lock buttons. To unlock, press and hold LIGHT.
- **Set backlight:** Set constant backlight **On** or **Off**. When enabled, the backlight stays on continuously. You can turn the constant backlight off and on again by pressing LIGHT. Please note that using this function shortens battery life.
- **Search Sensor:** This setting is shown only if you have paired a heart rate sensor or stride sensor with your M430.
- **Stride sensor:** This setting is shown only if you have paired a Polar Stride sensor with your M430. Choose **Calibration** or **Choose sensor for speed**. In **Calibration**, choose **Automatic** or **Manual**. In **Choose sensor for speed**, set the source for speed data: **Stride sensor** or **GPS**. For more information on Stride sensor calibration, see this [support document](#).
- **Interval timer:** Create time and/or distance based interval timers to precisely time work and recovery phases in your interval training sessions. Choose **Start X.XX km / XX:XX** to use a previously set timer or create a new timer in **Set Timer**.
- **Finish time estimator** : Set the distance for your session and M430 will estimate the finish time of the session according to your speed. Choose **Start XX.XX km / X.XX mi** to use a previously set target distance or set new target in **Set distance**.
- **Current location info:** This selection is only available if GPS is set on for the sport profile.
- **Set Location Guide On:** The back to start feature guides you back to the starting point of your session. Choose **Set location guide on**, and press START. **Location guide arrow view set on** is displayed, and M430 goes to **Back to Start** view. For more information, see [Back to start](#).

QUICK MENU IN PAUSE MODE

In pause mode, press and hold LIGHT to enter **Quick menu**. In the pause mode **Quick menu**, you'll find:

- **Lock buttons:** Press START to lock buttons. To unlock, press and hold LIGHT.
- **Heart rate settings: Heart rate view:** Choose **Beats per minute (bpm)** or **% of maximum**. **Check HR zone limits:** Check the limits for each heart rate zone. **HR visible to other device:** Choose **On** or **Off**. If you choose **On**, other compatible devices using Bluetooth Smart wireless technology, e.g. gym equipment, can detect your heart rate. You can also use your M430 during Polar Club classes to broadcast your heart rate to the Polar Club system.

- **GPS recording:** Choose **High accuracy**, **Medium accuracy**, **Power save, long session** or **Off**.
- **Stride sensor:** This setting is shown only if you have paired a Polar Stride sensor with your M430. Choose **Calibration** or **Choose sensor for speed**. In **Calibration**, choose **Automatic** or **Manual**. In **Choose sensor for speed**, set the source for speed data: **Stride sensor** or **GPS**. For more information on Stride sensor calibration, see this [support document](#).
- **Speed settings: Speed View:** Choose **km/h** (kilometers per hour) or **min/km**(minutes per kilometer). If you have chosen imperial units, choose **mph** (miles per hour) or **min/mi** (minutes per mile). **Check speed zone limits:** You can check the speed/pace zone limits here.
- **Automatic pause sett.: Automatic pause:** Choose **On** or **Off**. If you set the **Automatic pause On**, your session is automatically paused when you stop moving. **Activation speed:** Set the speed at which recording is paused.

 *To use **Automatic pause** during training, you need to have GPS set to **High Accuracy** or a Polar stride sensor in use.*

- **Automatic lap:** Choose **Off**, **Lap distance** or **Lap duration**. If you choose **Lap distance**, set the distance after which each lap is taken. If you choose **Lap duration**, set the duration after which each lap is taken.

 *To use distance-based automatic lap, you need to have GPS recording on or a Polar stride sensor in use.*

UPDATING THE FIRMWARE

You can update the firmware of your M430 yourself to keep it up to date. Firmware updates are performed to improve the functionality of your M430. They can include improvements to existing features, completely new features or bug fixes. We recommend that you update the firmware of your M430 every time a new version is available.

 *You won't lose any data due to the firmware update. Before the update begins, the data from your M430 is synced to the Flow web service.*

WITH MOBILE DEVICE OR TABLET

You can update the firmware with your mobile device if you're using Polar Flow mobile app to sync your training and activity data. The app will let you know if there's an update available and will guide you through it. We recommend that you plug in the M430 to a power source before starting the update to ensure flawless update operation.

 *The wireless firmware update may take up to 20 minutes, depending on your connection.*

WITH COMPUTER

Whenever a new firmware version is available, FlowSync will notify you when you connect the M430 to your computer. The firmware updates are downloaded via FlowSync.

To update the firmware:

1. Plug your M430 to your computer.
2. FlowSync starts syncing your data.
3. After syncing, you are asked to update the firmware.
4. Choose **Yes**. New firmware is installed (this may take up to 10 minutes), and M430 restarts. Please wait until the firmware update has been finalized before you detach the M430 from your computer.

TRAINING

Training with wrist-based heart rate	24
Heart rate training	24
Measuring heart rate with your M430	24
Start a training session	25
Start a planned training session	26
Start a session with Interval Timer	26
Start a session with Finish Time Estimator	26
During training	27
Browse the training views	27
Mark a lap	27
Lock a Heart Rate or Speed Zone	27
Change phase during a phased session	27
Change Settings in quick menu	27
Notifications	27
Pausing/Stopping a training session	27
Training summary	28
After training	28
Training history in M430	30
Training data in Polar Flow App	30
Training data in Polar Flow Web Service	30

TRAINING WITH WRIST-BASED HEART RATE

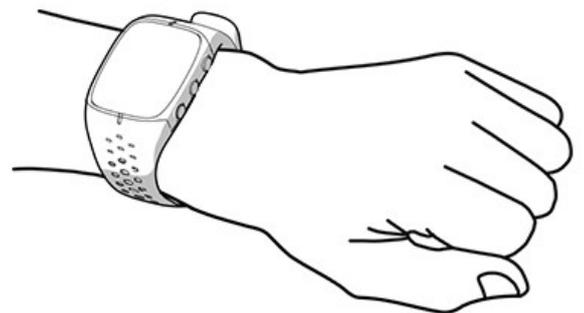
HEART RATE TRAINING

Although there are many subjective clues as to how your body is doing during exercise (perceived exertion, breathing rate, physical sensations), none of them are as reliable as measuring heart rate. It is objective and affected by both internal and external factors—meaning that you will have a dependable measure of your physical state.

MEASURING HEART RATE WITH YOUR M430

Your Polar M430 has a built-in heart rate sensor that measures heart rate from the wrist. Follow your heart rate zones directly from your device, and get guidance for the training sessions you've planned in the Flow app or web service.

To measure wrist-based heart rate accurately you need to wear your M430 snugly on top of your wrist, just behind the wrist bone (see the picture on the right). The sensor on the back must be in constant touch with your skin, but the wristband should not be too tight to prevent blood flow. For most accurate heart rate measurement, we advise you to wear your M430 for a few minutes prior to starting the heart rate measurement.



If you have tattoos on the skin of your wrist, avoid placing the sensor right on it as it may prevent accurate readings.

Also it's a good idea to warm up the skin if your hands and skin get cold easily. Get the blood going before starting your session!

In sports where it's more challenging to keep the sensor stationary on your wrist or where you have pressure or movement in muscles or tendons near the sensor, we recommend using a Polar heart rate sensor with a chest strap to get a better measurement of your heart rate.

When you're recording a swimming session with your M430, water may prevent the wrist-based heart rate measurement from working optimally. But the M430 will still collect your activity data from your wrist movements when swimming. Note that you can't use a Polar heart rate sensor with a chest strap with the M430 when swimming because Bluetooth doesn't work in water.

START A TRAINING SESSION

1. [Wear your M430](#), and tighten the wristband.
2. In time view, press START to enter pre-training mode.



 *To change the sport profile settings before starting your session (in pre-training mode), press and hold LIGHT to enter the **Quick Menu**. To return to the pre-training mode, press BACK.*

3. Browse through the sport profiles with UP/DOWN. You can add more sport profiles to your M430 in the Polar Flow mobile app or in the Flow web service. You can also define specific settings for each sport profile, such as create tailored training views.
4. **To make sure your training data is accurate, stay in the pre-training mode until M430 has found your heart rate and GPS satellite signals.**



Heart rate: M430 has found your heart rate sensor signal, when your heart rate is shown.

 *When you're wearing a Polar heart rate sensor that's paired with your M430, the M430 automatically uses the connected sensor to measure your heart rate during training sessions. The Bluetooth icon on the heart rate symbol indicates that your M430 uses the connected sensor to measure your heart rate.*

GPS: The percentage value shown next to the GPS icon indicates when the GPS is ready. When it reaches 100 %, OK is displayed, and you are ready to go.

To catch the GPS satellite signals, go outdoors and away from tall buildings and trees. For best GPS performance, wear M430 on your wrist with the display facing up. Keep it in a horizontal position in front of you and away from your chest. Keep your arm stationary and raised above the level of your chest during the search. Stand still and hold the position until M430 has found the satellite signals.

GPS acquisition is fast with the help of assisted GPS (A-GPS). The A-GPS data file is automatically updated to your M430 when you sync your M430 with the Flow web service via FlowSync software or with the Flow app. If the A-GPS data file has expired or you haven't synced your M430 yet, more time may be required for acquiring the current position. For more information, see [Assisted GPS \(A-GPS\)](#).

 Due to the location of the GPS antenna on the M430, it is not recommended to wear it with the display on the underside of your wrist. When wearing it on the handlebars of a bike, make sure the display is facing up.

5. When M430 has found all the signals, press START. **Recording started** is displayed and you can start training.

See [During Training](#) for more information on what you can do with your M430 during training.

START A PLANNED TRAINING SESSION

You can plan your training and [create detailed training targets](#) in the Polar Flow app or the Polar Flow web service and sync them to your M430.

To start a planned training session scheduled for the current day:

1. In time view, press START to enter pre-training mode. Your planned training sessions appear at the top of the list
2. Choose the target and press **START**. Any notes you have added to the target are displayed.
3. Press START to return to pre-training mode, and choose the sport profile you want to use.
4. When M430 has found all the signals, press START. **Recording started** is displayed and you can start training.

Your M430 will guide you towards completing your target during training. See [During Training](#) for more information.

 You can also start a planned training session scheduled for the current day from **My day** and **Diary**. If you want to do a target scheduled for another day, you can – just choose a day from your **Diary**, and start the session scheduled for that day. If you have added the training target to your [Favorites](#), you can also start the session from **Favorites**.

START A SESSION WITH INTERVAL TIMER

You can set one repeating or two alternating time and/or distance based timers to guide 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 M430 has found all the signals, press START. **Recording started** is displayed and you can start training.

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

START A SESSION WITH FINISH TIME ESTIMATOR

Set the distance for your session and M430 will estimate the finish time of the session according to your 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 M430 has found all the signals, press START. **Recording started** is displayed and you can start training.

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

DURING TRAINING

BROWSE THE TRAINING VIEWS

During training you can browse through the training views with UP/DOWN. Note that the available training views and data shown depend on the sport you've chosen. You can define specific settings for each sport profile in the Polar Flow app and web service, such as create tailored training views. For more information, see [Sport profiles in Flow](#).

MARK A LAP

Press START to mark a lap. Laps can also be taken automatically. In sport profile settings, set **Automatic lap** to **Lap distance** or **Lap duration**. If you choose **Lap distance**, set the distance after which each lap is taken. If you choose **Lap duration**, set the duration after each lap is taken.

LOCK A HEART RATE OR SPEED ZONE

Press and hold START to lock the heart rate or speed zone you are currently in. Select **HR zone** or **Speed zone**. To lock/unlock the zone, press and hold START. If your heart rate or speed goes outside the locked zone, your M430 notifies you with a vibration.

CHANGE PHASE DURING A PHASED SESSION

If you chose manual phase change when you created the phased target:

1. Press and hold LIGHT.
2. **Quick menu** is displayed.
3. Choose **Start next phase** from the list, and press START to continue to the next phase.

If you chose automatic phase change, the phase will change automatically when you have finished a phase. M430 notifies you with a vibration.

CHANGE SETTINGS IN QUICK MENU

Press and hold LIGHT. **Quick menu** is displayed. You can change certain settings without pausing your training session. For detailed information, see [Quick Menu](#).

NOTIFICATIONS

If you are training outside the planned heart rate zones or speed/pace zones, your M430 notifies you with a vibration.

PAUSING/STOPPING A TRAINING SESSION

1. To pause a training session, press the BACK button. **Recording paused** is displayed and the M430 goes to pause mode. To continue your training session, press START.
2. To stop a training session, press and hold the BACK button for three seconds during training recording or in pause mode until **Recording ended** is displayed.

 If you stop your session after pausing, the time elapsed after pausing is not included in the total training time.

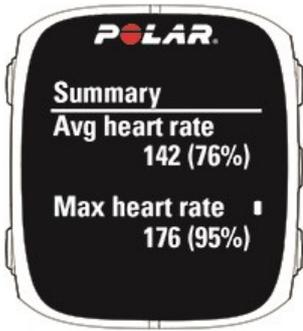
TRAINING SUMMARY

AFTER TRAINING

You'll get a summary of your training session on your M430 right after you've stopped training. Get a more detailed and illustrated analysis in the Polar Flow app or in the Polar Flow web service.

On your M430, you'll see the following data from your session:

	<p>M430 rewards you every time you reach your Personal best result in average speed/pace, distance or calories. The Personal best results are separate for each sport profile.</p>
	<p>Time when you started the session, duration of the session and distance covered during the session.</p>
	<p>Textual feedback on the effect of each training session. The feedback is based on training time distribution between heart rate zones, calorie expenditure and duration of the session.</p> <p>Press START for more details.</p> <p> Training benefit is shown if you used a heart rate sensor and trained for at least a total of 10 minutes in the heart rate zones.</p>
	<p>Time you spent on each heart rate zone.</p>



Your average and maximum heart rate are shown in beats per minute and percentage of maximum heart rate.



Calories burned during the session and fat burn % of calories



Average and maximum speed/pace of the session.



Your Running Index is calculated during every training session in which heart rate and the GPS function is on / Stride Sensor is in use, and when the following requirements apply:

- Sport profile used is a running type sport (Running, Road Running, Trail running etc.)
- Pace should be 6 km/h / 3.7 mph or faster and duration 12 minutes minimum.

 You can follow your progress and see race time estimations in the [Polar Flow web service](#).

For further information, see [Running Index](#).



Maximum altitude, ascended meters/feet and descended meters/feet.

 Visible if you trained outdoors and the GPS function was on.



The number of manual laps and the best and average duration of a lap.

Press START for more details.



The number of automatic laps and the best and average duration of an automatic lap.

Press START for more details.

TRAINING HISTORY IN M430

In **Diary** you can find the summaries of your training sessions for past four weeks. Go to **Diary**, and browse to the training session you want to view with UP/DOWN. Press START to view the data.

M430 can store up to 60 hours of training with GPS and heart rate. If your M430 is running out of memory to store your training history, it will tell you to sync your past training sessions to the Flow app or web service.

TRAINING DATA IN POLAR FLOW APP

Your M430 syncs with the Polar Flow app automatically after you finish a training session if your phone is within the Bluetooth range. You can also sync your training data manually from the M430 to the Flow app by pressing and holding the BACK button of your M430 when you're signed in to the Flow app and your phone is within the Bluetooth range. In the app you can analyze your data at a glance after each session. The app allows you to see a quick overview of your training data.

For more information, see [Polar Flow App](#).

TRAINING DATA IN POLAR FLOW WEB SERVICE

Analyze every detail of your training and learn more about your performance. Follow your progress and also share your best sessions with others.

To see a video, click on the following link:

[Polar Flow web service | Training analysis](#)

For more information, see [Polar Flow Web Service](#).

FEATURES

Assisted GPS (A-GPS)	31
GPS features	32
Back to start	32
Smart Coaching	32
Activity Guide	33
Activity Benefit	33
24/7 Activity tracking	33
Polar Sleep Plus™	35
Continuous Heart Rate	37
Fitness Test with wrist-based heart rate	37
Polar Running Program	40
Running Index	41
Smart Calories	43
Training Benefit	44
Training Load and Recovery	45
Sport Profiles	45
Heart Rate Zones	46
Speed Zones	46
Speed zones settings	46
Training target with speed zones	46
During training	47
After training	47
Cadence from the wrist	47
Speed and distance from the wrist	47
Smart Notifications	47

ASSISTED GPS (A-GPS)

The M430 has built-in GPS that provides accurate speed, distance and altitude measurement for a range of outdoor sports, and allows you to see your route on map in the Flow app and web service after your session.

M430 uses Assisted GPS (A-GPS) to acquire a fast satellite fix. The A-GPS data tells your M430 the predicted positions of the GPS satellites. This way the M430 knows where to search for the satellites and thus is able to acquire signals from them within seconds, even under difficult signal conditions.

The A-GPS data updates once a day. The latest A-GPS data file is automatically updated to your M430 each time you sync it with the Flow web service via FlowSync software. If you sync your M430 with the Flow web service via Flow app, the A-GPS data file update takes place once a week.

A-GPS EXPIRY DATE

The A-GPS data file is valid for up to 13 days. Positioning accuracy is relatively high during the first three days, and progressively decreases during the remaining days. Regular updates help to ensure a high level of positioning accuracy.

You can check the expiry date for the current A-GPS data file from your M430. In M430, go to **Settings > General settings > About your product > A-GPS exp. date**. If the data file has expired, sync your M430 with the Flow web service via FlowSync software or with the Flow app to update A-GPS data.

Once the A-GPS data file has expired, more time may be required for acquiring the current position.

GPS FEATURES

M430 includes the following GPS features:

- **Altitude, ascent and descent:** Real-time altitude measurement, as well as ascended and descended meters/feet.
- **Distance:** Accurate distance during and after your session.
- **Speed/Pace:** Accurate speed/pace information during and after your session.
- **Running index:** In M430, Running Index is based on heart rate and speed data measured during the run. It gives information about your performance level, both aerobic fitness and running economy.
- **Back to start:** Directs you to your starting point in the shortest distance possible, as well as shows the distance to your starting point. Now you can check out more adventurous routes and explore them safely, knowing that you're only a touch of a button away from seeing the direction to where you started.
- **Power save mode:** Allows you to save the battery life of your M430 during long training sessions. Your GPS data is stored at intervals of 60 seconds. A longer interval gives you more recording time. When power save mode is on, automatic pause cannot be used. In addition, Running Index cannot be used unless you have a stride sensor.

 *For best GPS performance, wear M430 on your wrist with the display facing up. Due to the location of the GPS antenna on the M430, it is not recommended to wear it with the display on the underside of your wrist. When wearing it on the handlebars of a bike, make sure the display is facing up.*

BACK TO START

The back to start feature guides you back to the starting point of your session.

To use the back to start feature:

1. Press and hold LIGHT. **Quick menu** is displayed.
2. Choose **Set location guide on, Location guide arrow view set on** is displayed, and M430 goes to **Back to Start** view.

To return to your starting point:

- Keep M430 in a horizontal position in front of you.
- Keep moving in order for M430 to determine which direction you are going. An arrow will point in the direction of your starting point.
- To get back to the starting point, always turn in the direction of the arrow.
- The M430 also shows the bearing and the direct distance (beeline) between you and the starting point.

 *When in unfamiliar surroundings, always keep a map at hand in case the M430 loses the satellite signal or the battery runs out.*

SMART COACHING

Whether it's assessing your day-to-day fitness levels, creating individual training plans, working out at the right intensity or receiving instant feedback, Smart Coaching offers a choice of unique, easy-to-use features, personalized to your needs and designed for maximum enjoyment and motivation when training.

M430 includes the following Polar Smart Coaching features:

- [Activity Guide](#)
- [Activity Benefit](#)

- [Fitness Test](#)
- [Heart rate zones](#)
- [Running Program](#)
- [Running Index](#)
- [Smart calories](#)
- [Training Benefit](#)
- [Training Load](#)

ACTIVITY GUIDE

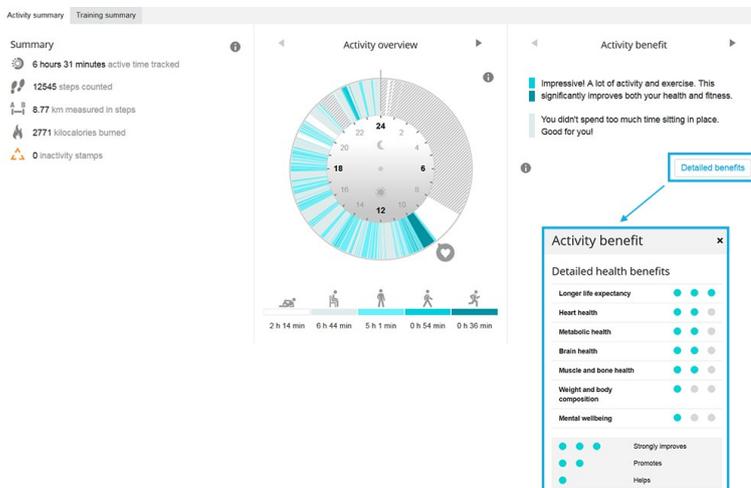
The Activity Guide feature shows how active you've been during the day, and tells you how much you need to still do to reach the recommendations for physical activity per day. You can check how you're doing in reaching your activity goal for the day either from your M430, from the Polar Flow app or web service.

For more information, see [24/7 Activity Tracking](#).

ACTIVITY BENEFIT

Activity benefit gives you feedback on the health benefits that being active has given you, and also on what kind of unwanted effects sitting for too long has caused to your health. The feedback is based on international guidelines and research on the health effects of physical activity and sitting behavior. The core idea is: the more active you are, the more benefits you get!

Both the Flow app and Flow web service show the activity benefit of your daily activity. You can view the activity benefit on daily, weekly and monthly basis. In the Flow web service, you can also view the detailed information on health benefits.



For more information, see [24/7 Activity Tracking](#).

24/7 ACTIVITY TRACKING

M430 tracks your activity with an internal 3D accelerometer that records your wrist movements. It analyzes the frequency, intensity and regularity of your movements together with your physical information, allowing you to see how active you really are in your everyday life, on top of your regular training. You should wear your M430 on your non-dominant hand to ensure you get the most accurate activity tracking.

Activity Goal

You'll get your personal activity goal when you set up your M430, and your M430 guides you in reaching the goal each day. The activity goal is based on your personal data and activity level setting, which you can find in the Polar Flow app or in the [Polar Flow web service](#).

If you want to change your goal, open your Flow app, tap your name/profile photo in the menu view, and swipe down to see **Activity goal**. Or go to flow.polar.com and sign in to your Polar account. Then click your name > **Settings** > **Activity goal**. Choose one of the three activity levels that best describes your typical day and activity. Below the selection area, you can see how active you need to be to reach your daily activity goal on the chosen level. For example, if you're an office worker and spend most of your day sitting, you would be expected to reach about four hours of low intensity activity during an ordinary day. For people who stand and walk a lot during their working hours, the expectations are higher.

The time you need to be active during the day to reach your activity goal depends on the level you have chosen and the intensity of your activities. Meet your goal faster with more intense activities or stay active at a slightly more moderate pace throughout the day. Age and gender also affect the intensity you need to reach your activity goal. The younger you are, the more intense your activity needs to be.

Activity data on your M430

You can check your activity progress from the **My day** view.



Your daily activity goal is visualized with a circle that fills up as you are active.

To view your day's accumulated activity in more detail, open the **My day** menu by pressing START. Your M430 will show you the following information:



- **Daily activity:** The percentage of your daily activity goal you've reached so far.
- **Calories:** Shows how many calories you've burned through training, activity and BMR (Basal metabolic rate: the minimum metabolic activity required to maintain life).
- **Steps:** Steps you've taken so far. The amount and type of body movements are registered and turned into an estimation of steps

Press START again to view more details and browse with UP/DOWN to get guidance on how to reach your daily activity goal:



- **Active time:** Active time tells you the cumulative time of body movements that benefit your health.
- **Calories:** Shows how many calories you've burned through training, activity and BMR (Basal metabolic rate: the minimum metabolic activity required to maintain life).
- **Steps:** Steps you've taken so far. The amount and type of body movements are registered and turned into an estimation of steps
- **To go:** Your M430 gives you options for reaching your daily activity goal. It tells you how much longer you need to be active if you choose low, medium or high intensity activities. You have one goal, but a number of ways to achieve it. The daily activity goal can be reached at low, medium or high intensities. In the M430, 'up' means low intensity, 'walking' means medium intensity, and 'jogging' means high intensity. You can find more examples for low, medium and high intensity activities at the Flow web service and mobile app and choose the best way of reaching your goal.

 You'll be able to see the progress of your daily activity goal in the time view if you choose "**Jumbo**" (the default watch face) or "**Activity**" as your watch face. In the **Jumbo** watch face, the watch face fills up as you move towards reaching your daily activity goal. In the **Activity** watch face, the circle around the date and time shows your progress towards your daily activity goal. The circle fills up as you are active. You can change the watch face by pressing and holding UP.

Inactivity alert

It's widely known that physical activity is a major factor in maintaining health. In addition to being physically active, it's important to avoid prolonged sitting. Sitting for long periods of time is bad for your health, even on those days when you train and gain enough daily activity. Your M430 spots if you're being inactive for too long during your day and this way helps you to break up your sitting to avoid the negative effects it has on your health.

If you've been still for 55 minutes, you'll get an inactivity alert: **It's time to move** is shown along with a small vibration. Stand up and find your own way to be active. Take a short walk, stretch, or do some other light activity. The message goes away when you start moving or press either of the buttons. If you don't get active in five minutes, you'll get an inactivity stamp, which you can see on the Flow app and Flow web service after syncing. The Flow app and Flow web service show you the whole history of how many inactivity stamps you have received. This way you can check back on your daily routine and make changes towards a more active life.

Activity data in Flow App and Flow web service

With Flow app you can follow and analyze your activity data on the go and sync it wirelessly from your M430 to the Flow web service. The Flow web service gives you the most detailed insight into your activity information. With the help of the activity reports (under the **PROGRESS** tab), you can follow the long-term trend of your daily activity. You can choose to view either daily, weekly or monthly reports.

POLAR SLEEP PLUS™

The M430 tracks your sleep if you wear it at night. It detects when you fall asleep and when you wake up and collects the data for deeper analysis in the Polar Flow app and web service. The M430 observes your hand movement during the night to track all interruptions over the entire sleep span, and tells you how much time you actually spent asleep.

Sleep data on your M430

You can check your sleep data from **My day**.



- **Sleep time** tells you the total duration between when you fell asleep and when you woke up.
- **Actual sleep** tells the time spent asleep between the time you fell asleep and when you woke up. More specifically, it is your sleep time minus the interruptions. Only the time you actually spend asleep is included in actual sleep.

To view your sleep data in more detail, open the sleep summary by pressing START. Your M430 will show your **Sleep time** and **Actual sleep** at the top of the summary. Browse with UP/ DOWN to view the following information:



Continuity: Sleep continuity is a rating of how continuous your sleep time was. Sleep continuity is evaluated on a scale from one to five: fragmented – fairly fragmented – fairly continuous – continuous – very continuous.



The times you **Fell asleep** and **Woke up**.



Feedback: You'll get feedback on the duration and quality of your sleep. Feedback on duration is based on comparing your sleep time to your preferred sleep time.



How did you sleep?: You can rate how well you've slept last night with a five-step scale: very poorly - poorly - okay - well - very well. By rating your sleep, you get a longer version of textual feedback in the Flow app and web service. The feedback in the Flow app and web service takes into account your own subjective rating of your sleep and modifies the feedback based on it.

Sleep data in the Flow app and web service

Your sleep data is shown in the Flow app and web service after your M430 is synced. You can view the timing, amount, and quality of your sleep. You can set **Your preferred sleep time** to define how long you aim to sleep every night. You can also rate your sleep in the Flow app and web service. You will receive feedback on how you slept based on your sleep data, your preferred sleep time and your sleep rating.

In the Flow web service, you can view your sleep under the **Sleep** tab in your **Diary**. You can also include your sleep data to **Activity reports** under the **Progress** tab.

By following your sleep patterns you can see if they're affected by any changes in your daily life and find the right balance between rest, daily activity and training.

Learn more about the Polar Sleep Plus in this [in-depth guide](#).

CONTINUOUS HEART RATE

The Continuous Heart Rate feature measures your heart rate around the clock. It enables a more accurate measurement of daily calorie consumption and your overall activity because also physical activities with very little wrist movement, such as cycling, can now be tracked.

Polar's Continuous Heart Rate tracking starts every few minutes or based on your wrist movements.

The timed measurement checks your heart rate every few minutes and if your heart rate is elevated during the check, the Continuous Heart Rate feature starts to track your heart rate. Continuous Heart Rate tracking can also start based on your wrist movements, for example, when you're walking with a fast enough pace for at least one minute.

The continuous tracking of your heart rate stops automatically when your activity level drops low enough. When your Polar device detects that you've been sitting for a long time, the Continuous Heart Rate tracking starts in order to find the lowest heart rate reading of your day.

You can turn the Continuous Heart Rate feature on and off on your M430 in **Settings > General settings > Continuous HR tracking**.

Under **My day** you'll be able to follow what will be the highest and lowest heart rate readings of your day and you can check what your lowest heart rate reading was during the previous night. You can follow the readings in more detail and in longer periods in Polar Flow, either in web or in the mobile app.

 *Please note that keeping the Continuous Heart Rate feature on in your M430 will drain the battery quicker.*

Learn more about the Continuous Heart Rate feature in this [in-depth guide](#).

FITNESS TEST WITH WRIST-BASED HEART RATE

The Polar Fitness Test with wrist-based heart rate is an easy, safe and quick way to estimate your aerobic (cardiovascular) fitness at rest. The result, Polar OwnIndex, is comparable to maximal oxygen uptake (VO_{2max}), which is commonly used to evaluate aerobic fitness. Your long-term training background, heart rate, heart rate variability at rest, gender, age, height, and body weight all influence OwnIndex. The Polar Fitness Test is developed for use by healthy adults.

Aerobic fitness relates to how well your cardiovascular system works to transport oxygen to your body. The better your aerobic fitness, the stronger and more efficient your heart is. Good aerobic fitness has many health benefits. For example, it helps in decreasing the risk of high blood pressure and your risk of cardiovascular diseases and stroke. If you want to improve your aerobic fitness it takes, on average, six weeks of regular training to see a noticeable change in your OwnIndex. Less fit individuals see progress even more rapidly. The better your aerobic fitness, the smaller the improvements in your OwnIndex.

Aerobic fitness is best improved by training types that use large muscle groups. Such activities include running, cycling, walking, rowing, swimming, skating, and cross-country skiing. To monitor your progress, start by measuring your OwnIndex a couple of times during the first two weeks in order to get a baseline value, and then repeat the test approximately once a month.

To make sure the test results are reliable, the following basic requirements apply:

- You can perform the test anywhere - at home, at the office, at a health club - provided the testing environment is peaceful. There should be no disturbing noises (e.g. television, radio, or telephone) and no other people talking to you.
- Always take the test in the same environment and at the same hour.
- Avoid eating a heavy meal or smoking 2-3 hours prior to testing.
- Avoid heavy physical exertion, alcohol, and pharmaceutical stimulants on the test day and the previous day.
- You should be relaxed and calm. Lie down and relax for 1-3 minutes before starting the test.

BEFORE THE TEST

Before starting the test, make sure your physical settings including training background are accurate in **Settings > Physical settings**.

Wear your M430 snugly on top of your wrist, just behind the wrist bone. The heart rate sensor on the back of the M430 must be in constant touch with your skin, but the wristband should not be too tight to prevent blood flow.

 *You can also perform the Fitness test by measuring your heart rate with a compatible Polar heart rate sensor. When you're wearing a Polar heart rate sensor that's paired with your M430, the M430 automatically uses the connected sensor to measure your heart rate during the test.*

PERFORMING THE TEST

To perform the fitness test, go to **Tests > Fitness Test > Relax and start the test**.

- **Searching for heart rate** is displayed. When heart rate is found, a heart rate graph, your current heart rate and **Lie down & relax** is shown on the display. Stay relaxed and limit body movements and communication with other people.
- You can interrupt the test in any phase by pressing BACK. **Test canceled** is shown.

If M430 cannot receive your heart rate signal, the message **Test failed** is shown. In which case, you should check that the heart rate sensor on the back of the M430 is in constant touch with your skin. See [Training with wrist based heart rate](#) for detailed instructions on wearing your M430 when measuring heart rate from your wrist.

TEST RESULTS

When the test is over, your M430 notifies you with a vibration and shows a description of your fitness test result and your estimated VO_{2max} .

Update to VO2max to physical settings? is shown.

- Select **Yes** to save the value to your **Physical settings**.
- Select **No** only if you know your recently measured VO_{2max} value, and if it differs more than one fitness level class from the result.

Your latest test result is shown in **Tests > Fitness test > Latest result**. Only your most recently performed test result is shown.

For a visual analysis of your Fitness test results, go to the Flow web service and select the test from your Diary to view details from it.

 Your M430 syncs with the Flow app automatically after the test if your phone is within the Bluetooth range.

Fitness level classes

Men

Age / Years	Very low	Low	Fair	Moderate	Good	Very good	Elite
20-24	< 32	32-37	38-43	44-50	51-56	57-62	> 62
25-29	< 31	31-35	36-42	43-48	49-53	54-59	> 59
30-34	< 29	29-34	35-40	41-45	46-51	52-56	> 56
35-39	< 28	28-32	33-38	39-43	44-48	49-54	> 54
40-44	< 26	26-31	32-35	36-41	42-46	47-51	> 51
45-49	< 25	25-29	30-34	35-39	40-43	44-48	> 48
50-54	< 24	24-27	28-32	33-36	37-41	42-46	> 46
55-59	< 22	22-26	27-30	31-34	35-39	40-43	> 43
60-65	< 21	21-24	25-28	29-32	33-36	37-40	> 40

Women

Age / Years	Very low	Low	Fair	Moderate	Good	Very good	Elite
20-24	< 27	27-31	32-36	37-41	42-46	47-51	> 51
25-29	< 26	26-30	31-35	36-40	41-44	45-49	> 49
30-34	< 25	25-29	30-33	34-37	38-42	43-46	> 46
35-39	< 24	24-27	28-31	32-35	36-40	41-44	> 44
40-44	< 22	22-25	26-29	30-33	34-37	38-41	> 41
45-49	< 21	21-23	24-27	28-31	32-35	36-38	> 38
50-54	< 19	19-22	23-25	26-29	30-32	33-36	> 36
55-59	< 18	18-20	21-23	24-27	28-30	31-33	> 33
60-65	< 16	16-18	19-21	22-24	25-27	28-30	> 30

The classification is based on a literature review of 62 studies where VO_{2max} was measured directly in healthy adult subjects in the USA, Canada and 7 European countries. Reference: Shvartz E, Reibold RC. Aerobic fitness norms for males and females aged 6 to 75 years: a review. Aviat Space Environ Med; 61:3-11, 1990.

VO₂MAX

A clear link exists between maximal oxygen consumption (VO_{2max}) of the body and cardiorespiratory fitness because oxygen delivery to tissues is dependent on lung and heart function. VO_{2max} (maximal oxygen uptake, maximal aerobic power) is the maximal rate at which oxygen can be used by the body during maximal exercise; it is related directly to the maximal capacity of the heart to deliver blood to the muscles. VO_{2max} can be measured or predicted by fitness tests (e.g. maximal exercise tests, submaximal exercise tests, Polar Fitness Test). VO_{2max} is a good index of cardiorespiratory fitness and a good predictor of performance capability in endurance events such as distance running, cycling, cross-country skiing, and swimming.

VO_{2max} can be expressed either as milliliters per minute (ml/min = ml ■ min⁻¹) or this value can be divided by the person's body weight in kilograms (ml/kg/min = ml ■ kg⁻¹ ■ min⁻¹).

POLAR RUNNING PROGRAM

Polar Running program is a personalized program based on your fitness level, designed to make sure that you train right and avoid overreaching. It's intelligent, and adapts based on your development, and lets you know when it might be a good idea to cut back a little and when to step it up a notch. Each program is tailored for your event, taking your personal attributes, training background and preparation time into account. The program is free, and available in the Polar Flow web service at www.polar.com/flow.

Programs are available for 5k, 10k, half marathon and marathon events. Each program has three phases: Base building, Build-up and Tapering. These phases are designed to gradually develop your performance, and make sure you're ready on race day. Running training sessions are divided into five types: easy jog, medium run, long run, tempo run and interval. All sessions include warm-up, work, and cool-down phases for optimal results. In addition, you can choose to do strength, core, and mobility exercises to support your development. Each training week consists of two to five running sessions, and the total running training session duration per week varies from one to seven hours depending on your fitness level. The minimum duration for a program is 9 weeks, and the maximum is 20 months.

Learn more about the Polar Running Program in this [in-depth guide](#). Or read more about how to [get started with the Running Program](#).

To see a video, click on one of the following links:

[Get Started](#)

[How to use](#)

CREATE A POLAR RUNNING PROGRAM

1. Log into the Flow web service at www.polar.com/flow.
2. Choose **Programs** from the Tab.
3. Choose your event, name it, set the event date, and when you wish to start the program.
4. Fill in the physical activity level questions.*
5. Choose if you want to include supporting exercises in the program.
6. Read and fill in the physical activity readiness questionnaire.
7. Review your program, and adjust any settings if necessary.
8. When you're done, choose **Start program**.

*If four weeks of training history is available, these will be pre-filled.

START A RUNNING TARGET

Before starting a session, make sure you've synced your training session target to your device. The sessions are synced to your device as training targets.

The training targets scheduled for the current day appear at the top of the list in pre-training mode:

1. In time view, press START to enter pre-training mode.
2. Choose the target, and then choose the sport profile.
3. When M430 has found all the signals, press START, and follow the guidance on your device throughout your session.

 You can also start a running target scheduled for the current day from **My day** and **Diary**. If you want to do a target scheduled for another day, you can – just choose a day from your **Diary**, and start the session scheduled for that day.

FOLLOW YOUR PROGRESS

Sync your training results from your device to the Flow web service via the USB cable or Flow app. Follow your progress from the **Programs** tab. You'll see an overview of your current program, and how you've progressed.

RUNNING INDEX

Running Index offers an easy way to monitor running performance changes. A running index value is an estimate of maximal aerobic running performance, which is influenced by aerobic fitness and running economy. By recording your Running Index over time, you can monitor progress. Improvement means that running at a given pace requires less of an effort, or that your pace is faster at a given level of exertion.

To receive the most accurate information on your performance, make sure you have set your HR_{max} value.

Running Index is calculated during every training session when heart rate is measured and the GPS function is on / Stride Sensor is in use, and when the following requirements apply:

- Sport profile used is a running type sport (Running, Road Running, Trail running etc.)
- Speed should be 6 km/h / 3,75 mi/h or faster and duration 12 minutes minimum
- If you use GPS for speed measurement, you must have GPS set to **High Accuracy**
- If you use a stride sensor for speed measurement, the stride sensor must be calibrated. For calibration instructions, see this [support document](#).

Calculation begins when you start recording the session. During a session, you may stop twice, for example, at traffic lights without interrupting the calculation.

 You can view your Running Index in the summary of your training session on your M430. Follow your progress and see race time estimations in the [Polar Flow web service](#).

Compare your result to the table below.

SHORT-TERM ANALYSIS

Men

Age / Years	Very low	Low	Fair	Moderate	Good	Very good	Elite
20-24	< 32	32-37	38-43	44-50	51-56	57-62	> 62
25-29	< 31	31-35	36-42	43-48	49-53	54-59	> 59
30-34	< 29	29-34	35-40	41-45	46-51	52-56	> 56

Age / Years	Very low	Low	Fair	Moderate	Good	Very good	Elite
35-39	< 28	28-32	33-38	39-43	44-48	49-54	> 54
40-44	< 26	26-31	32-35	36-41	42-46	47-51	> 51
45-49	< 25	25-29	30-34	35-39	40-43	44-48	> 48
50-54	< 24	24-27	28-32	33-36	37-41	42-46	> 46
55-59	< 22	22-26	27-30	31-34	35-39	40-43	> 43
60-65	< 21	21-24	25-28	29-32	33-36	37-40	> 40

Women

Age / Years	Very low	Low	Fair	Moderate	Good	Very good	Elite
20-24	< 27	27-31	32-36	37-41	42-46	47-51	> 51
25-29	< 26	26-30	31-35	36-40	41-44	45-49	> 49
30-34	< 25	25-29	30-33	34-37	38-42	43-46	> 46
35-39	< 24	24-27	28-31	32-35	36-40	41-44	> 44
40-44	< 22	22-25	26-29	30-33	34-37	38-41	> 41
45-49	< 21	21-23	24-27	28-31	32-35	36-38	> 38
50-54	< 19	19-22	23-25	26-29	30-32	33-36	> 36
55-59	< 18	18-20	21-23	24-27	28-30	31-33	> 33
60-65	< 16	16-18	19-21	22-24	25-27	28-30	> 30

The classification is based on a literature review of 62 studies where VO_{2max} was measured directly in healthy adult subjects in the USA, Canada and 7 European countries. Reference: Shvartz E, Reibold RC. Aerobic fitness norms for males and females aged 6 to 75 years: a review. *Aviat Space Environ Med*; 61:3-11, 1990.

There may be some daily variation in the Running Indexes. Many factors influence Running Index. The value you receive on a given day is affected by changes in running circumstances, for example different surface, wind or temperature, in addition to other factors.

LONG-TERM ANALYSIS

The single Running Index values form a trend that predicts your success in running certain distances. You can find your Running Index report in the Polar Flow web service under the **PROGRESS** tab. The report shows you how your running performance has improved over a longer time period. If you're using the [Polar Running program](#) to train for a running event, you can follow your Running Index progress to see how your running is improving towards the goal.

The following chart estimates the duration that a runner can achieve in certain distances when performing maximally. Use your long-term Running Index average in the interpretation of the chart. The prediction is best for those Running Index values that have been received at speed and running circumstances similar to the target performance.

Running Index	Cooper test (m)	5 km (h:mm:ss)	10 km (h:m-m:ss)	21.098 km (h:m-m:ss)	42.195 km (h:m-m:ss)
36	1800	0:36:20	1:15:10	2:48:00	5:43:00
38	1900	0:34:20	1:10:50	2:38:00	5:24:00

Running Index	Cooper test (m)	5 km (h:mm:ss)	10 km (h:m-m:ss)	21.098 km (h:m-m:ss)	42.195 km (h:m-m:ss)
40	2000	0:32:20	1:07:00	2:29:30	5:06:00
42	2100	0:30:40	1:03:30	2:21:30	4:51:00
44	2200	0:29:10	1:00:20	2:14:30	4:37:00
46	2300	0:27:50	0:57:30	2:08:00	4:24:00
48	2400	0:26:30	0:55:00	2:02:00	4:12:00
50	2500	0:25:20	0:52:40	1:57:00	4:02:00
52	2600	0:24:20	0:50:30	1:52:00	3:52:00
54	2700	0:23:20	0:48:30	1:47:30	3:43:00
56	2800	0:22:30	0:46:40	1:43:30	3:35:00
58	2900	0:21:40	0:45:00	1:39:30	3:27:00
60	3000	0:20:50	0:43:20	1:36:00	3:20:00
62	3100	0:20:10	0:41:50	1:32:30	3:13:00
64	3200	0:19:30	0:40:30	1:29:30	3:07:00
66	3300	0:18:50	0:39:10	1:26:30	3:01:00
68	3350	0:18:20	0:38:00	1:24:00	2:55:00
70	3450	0:17:50	0:36:50	1:21:30	2:50:00
72	3550	0:17:10	0:35:50	1:19:00	2:45:00
74	3650	0:16:40	0:34:50	1:17:00	2:40:00
76	3750	0:16:20	0:33:50	1:14:30	2:36:00
78	3850	0:15:50	0:33:00	1:12:30	2:32:00

SMART CALORIES

The most accurate calorie counter on the market calculates the number of calories burned based on your individual data:

- Body weight, height, age, gender
- Individual maximum heart rate (HR_{max})
- The intensity of your training or activity
- Individual maximal oxygen uptake ($VO2_{max}$)

The calorie calculation is based on an intelligent combination of acceleration and heart rate data. The calorie calculation measures your training calories accurately.

You can see your cumulative energy expenditure (in kilocalories, kcal) during training sessions, and your total kilocalories of the session afterwards. You can also follow your total daily calories.

TRAINING BENEFIT

Training Benefit gives you textual feedback on the effect of each training session helping you to better understand the effectiveness of your training. **You can see the feedback in Flow app and Flow web service.** To get the feedback, you need to have trained at least a total of 10 minutes in the [heart rate zones](#).

Training Benefit feedback is based on heart rate zones. It reads into how much time you spend and how many calories you burn in each zone.

The descriptions of different training benefit options are listed in the table below

Feedback	Benefit
Maximum training+	What a session! You improved your sprint speed and the nervous system of your muscles, which make you more efficient. This session also increased your resistance to fatigue.
Maximum training	What a session! You improved your sprint speed and the nervous system of your muscles, which make you more efficient.
Maximum & Tempo training	What a session! You improved your speed and efficiency. This session also significantly developed your aerobic fitness and your ability to sustain high intensity effort for longer.
Tempo & Maximum training	What a session! You significantly improved your aerobic fitness and your ability to sustain high intensity effort for longer. This session also developed your speed and efficiency.
Tempo training+	Great pace in a long session! You improved your aerobic fitness, speed, and ability to sustain high intensity effort for longer. This session also increased your resistance to fatigue.
Tempo training	Great pace! You improved your aerobic fitness, speed, and ability to sustain high intensity effort for longer.
Tempo & Steady state training	Good pace! You improved your ability to sustain high intensity effort for longer. This session also developed your aerobic fitness and the endurance of your muscles.
Steady state & Tempo training	Good pace! You improved your aerobic fitness and the endurance of your muscles. This session also developed your ability to sustain high intensity effort for longer.
Steady state training +	Excellent! This long session improved the endurance of your muscles and your aerobic fitness. It also increased your resistance to fatigue.
Steady state training	Excellent! You improved the endurance of your muscles and your aerobic fitness.
Steady state & Basic training, long	Excellent! This long session improved the endurance of your muscles and your aerobic fitness. It also developed your basic endurance and your body's ability to burn fat during exercise.
Steady state & Basic training	Excellent! You improved the endurance of your muscles and your aerobic fitness. This session also developed your basic endurance and your body's ability to burn fat during exercise.
Basic & Steady state training, long	Great! This long session improved your basic endurance and your body's ability to burn fat during exercise. It also developed the endurance of your muscles and your aerobic fitness.
Basic & Steady state training	Great! You improved your basic endurance and your body's ability to burn fat during

Feedback	Benefit
ing	exercise. This session also developed the endurance of your muscles and your aerobic fitness.
Basic training, long	Great! This long, low intensity session improved your basic endurance and your body's ability to burn fat during exercise.
Basic training	Well done! This low intensity session improved your basic endurance and your body's ability to burn fat during exercise.
Recovery training	Very nice session for your recovery. Light exercise like this allows your body to adapt to your training.

TRAINING LOAD AND RECOVERY

Training load is textual feedback on the strenuousness of a single training session. The training load calculation is based on the consumption of critical energy sources (carbohydrates and proteins) during exercise.

The Training Load feature makes the loads of different types of training sessions comparable with each other. For example, you can compare the load of a long low intensity cycling session to that of a short high intensity running session. To enable a more accurate comparison between sessions, we have converted your training load into approximate recovery need estimation.

You'll see a description of your Training Load after each session in the training summary in the Polar Flow app. You can see the estimated recovery need for the different levels of Training load here:

- Mild 0-6 hours
- Reasonable 7-12 hours
- Demanding 13-24 hours
- Very demanding 25-48 hours
- Extreme Over 48 hours

Go to the Polar Flow web service to see a detailed training analysis including a more precise numeric load value for each session.

Your **recovery status** is based on your cumulative training load, daily activity and resting from the past 8 days. The most recent training sessions and activity are weighted more than earlier ones, therefore they have the biggest effect on your recovery status. Your activity outside training sessions is tracked with an internal 3D accelerometer that records your wrist movements. It analyzes the frequency, intensity and irregularity of your movements together with your physical information, allowing you to see how active you are outside your training sessions. By combining your daily activity with your training load you get a true picture of your required recovery status. Continuous monitoring of your recovery status will help you recognize personal limits, avoid over or under training, and adjust training intensity and duration according to your daily and weekly targets. You can check your recovery status in the Flow web service (**Diary > Recovery status**).

Read more info from the [M430 support pages](#).

SPORT PROFILES

Sport profiles are the sport choices you have on your M430. We have created four default sport profiles to your M430, but you can add new sport profiles to your use in the Polar Flow app or web service and sync them to your M430, and this way create a list of all your favorite sports.

You can also define specific settings for each sport profile. For example, you can create tailored **training views** for each sport you do and choose what data you want to see when you train: just your heart rate or just speed and distance—whatever suits you and your training needs and requirements best.

You can have a maximum of 20 sport profiles on your M430 at a time. The number of sport profiles in Polar Flow mobile app and Polar Flow web service is not limited.

For more information, see [Sport Profiles in Flow](#).

Using the sport profiles makes it possible for you to keep up with what you've done and to see the progress you've made in different sports. See your training history and follow your progress in the [Flow web service](#).



Please note that in a number of indoor sports, group sports and team sports profiles the **HR visible to other devices** setting is enabled by default. This means that compatible devices using Bluetooth Smart wireless technology, e.g. gym equipment, can detect your heart rate. You can check which sport profiles have Bluetooth broadcasting enabled by default from the [Polar Sport profiles list](#). You can enable or disable Bluetooth broadcasting from [sport profile settings](#).

HEART RATE ZONES

The range between 50% and 100% of your maximum heart rate is divided into five heart rate zones. By keeping your heart rate within a certain heart rate zone you can easily control the intensity level of your workout. Each heart rate zone carries its own main benefits, and understanding these benefits will help you achieve the effect you want from your workout.

Learn more about the Heart Rate Zones: [What are Heart Rate Zones?](#)

SPEED ZONES

With the speed/pace zones you can easily monitor speed or pace during your session, and adjust your speed/pace to achieve the targeted training effect. The zones can be used to guide the efficiency of your training during sessions, and help you mix up your training with different training intensities for optimal effects.

SPEED ZONES SETTINGS

The speed zone settings can be adjusted in the Flow web service. They can be turned on or off in the sport profiles they are available in. There are five different zones, and zone limits can be manually adjusted or you can use the default ones. They are sport specific, allowing you to adjust the zones to best suit each sport. The zones are available in running sports (including team sports that involve running), cycling sports as well as rowing and canoeing.

Default

If you choose **Default**, you cannot change the limits. The default zones are an example of speed/pace zones for a person with a relatively high fitness level.

Free

If you choose **Free**, all limits can be changed. For example, if you have tested your actual thresholds, such as anaerobic and aerobic thresholds, or upper and lower lactate thresholds, you can train with zones based on your individual threshold speed or pace. We recommend that you set your anaerobic threshold speed and pace as the minimum for zone 5. If you also use aerobic threshold, set that as the minimum of zone 3.

TRAINING TARGET WITH SPEED ZONES

You can create training targets based on speed/pace zones. After synchronizing the targets via FlowSync, you'll receive guidance from your training device during training.

DURING TRAINING

During your training you can view which zone you are currently training in and the time spent in each zone.

AFTER TRAINING

In the training summary on M430, you'll see an overview of the time spent in each speed zone. After syncing, detailed visual speed zone information can be viewed in the Flow web service.

CADENCE FROM THE WRIST

Cadence from the wrist gives you the option to get your running cadence without a separate stride sensor. Your cadence is measured with a built-in accelerometer from your wrist movements. Please note that when using a stride sensor cadence will always be measured with it.

Cadence from the wrist is available in the following running type sports: Walking, Running, Jogging, Road running, Trail running, Treadmill running, Track and field running and Ultra running

To see your cadence during a training session, add cadence to the training view of the sport profile you use when running. This can be done in **Sport Profiles** in the Polar Flow mobile app or in the Flow web service.

Read more about [monitoring running cadence](#) and [how to utilize running cadence in your training](#).

SPEED AND DISTANCE FROM THE WRIST

Your M430 measures speed and distance from your wrist movements with a built-in accelerometer. This feature comes in handy when running indoors or in places with limited GPS signals. For maximum accuracy make sure you've set your handedness and height correctly. Speed and distance from the wrist works best when running at a pace that is natural and feels comfortable for you.

Wear your M430 snugly on your wrist to avoid any shaking. To get consistent readings it should always be worn on the same position on your wrist. Avoid wearing any other devices like watches, activity trackers or phone armbands on the same arm. In addition, do not hold anything in the same hand like a map or a phone.

Speed and distance from the wrist is available in the following running type sports: Walking, Running, Jogging, Road running, Trail running, Treadmill running, Track and field running and Ultra running. To see speed and distance during a training session, add speed and distance to the training view of the sport profile you use when running. This can be done in **Sport Profiles** in the Polar Flow mobile app or in the Flow web service.

SMART NOTIFICATIONS

The Smart Notifications feature allows you to get notifications from your phone to your Polar device. Your Polar device notifies you if you get an incoming call or receive a message (for example an SMS or a WhatsApp message). It also notifies you about the calendar events you have on your phone's calendar. To use the Smart Notifications feature, you need to have the Polar Flow mobile app for iOS or Android, and your Polar device needs to be paired with the app.

For detailed instructions on using Smart notifications, see the support document [Smart Notifications \(Android\)](#) or [Smart Notifications \(iOS\)](#).

POLAR FLOW

POLAR FLOW APP

In the Polar Flow mobile app, you can see an instant visual interpretation of your training and activity data. You can also plan your training in the app.

TRAINING DATA

With the Polar Flow app, you can easily access the information of your past and planned training sessions and create new training targets. You can choose to create a quick target or a phased target.

Get a quick overview of your training, and analyze every detail of your performance right away. See weekly summaries of your training in the training diary. You can also share the highlights of you training with your friends with the [Image sharing](#) function.

ACTIVITY DATA

See details of your 24/7 activity. Find out how much you're missing from your daily activity goal and how to reach it. See steps, covered distance based on steps and burned calories.

SLEEP DATA

Follow your sleeping patterns to see if they're affected by any changes in your daily life and find the right balance between rest, daily activity and training. With the Polar Flow app, you can view the timing, amount, and quality of your sleep.

You can set your preferred sleep time to define how long you aim to sleep every night. You can also rate your sleep. You'll receive feedback on how you slept based on your sleep data, your preferred sleep time and your sleep rating.

SPORT PROFILES

You can add, edit, remove and reorganize sport profiles easily in the Flow app. You can have up to 20 sport profiles active in Flow app and in your watch.

For more information, see [Sport profiles in Polar Flow](#).

IMAGE SHARING

With Flow app's image sharing function you can share images with your training data on them to most common social media channels, like Facebook and Instagram. You can either share an existing photo or take a new one and customize it with your training data. If you had GPS recording on during your training session, you can also share a snapshot of your training route.

To see a video, click on the following link:

[Polar Flow app | Sharing training results with a photo](#)

START USING THE FLOW APP

You can [set up your watch](#) using a mobile device and the Flow app.

To start using the Flow app, download it from the App Store or Google Play onto your mobile device. For support and more information about using the Polar Flow app, go to support.polar.com/en/support/Flow_app.

Before taking a new mobile device (smartphone, tablet) into use, it has to be paired with your watch. See [Pairing](#) for more details.

Your watch syncs your training data to the Flow app automatically after your session. If your phone has an internet connection, your activity and training data are also synced automatically to the Flow web service. Using the Flow app is the easiest way to sync your training data from your watch with the web service. For information on syncing, see [Syncing](#).

For more information and instructions on Flow app features, visit [Polar Flow app product support page](#).

POLAR FLOW WEB SERVICE

In the Polar Flow web service, you can plan and analyze your training in detail and learn more about your performance. Set up and customize your watch to perfectly fit your training needs by adding sport profiles and editing their settings. You can also share the highlights of your training with your friends in the Flow community, sign up for your club's classes and get a personalized training program for a running event.

The Polar Flow web service also shows your daily activity goal completion percentage and the details of your activity, and helps you understand how your daily habits and choices affect your well-being.

You can [set up your watch](#) with your computer at flow.polar.com/start. There you are guided to download and install the FlowSync software for syncing data between your watch and the web service, and to create a user account for the web service. If you did the setup using a mobile device and the Flow app, you can log into the Flow web service with the credentials you created in the setup.

DIARY

In **Diary** you can see your daily activity, sleep, planned training sessions (training targets), as well as review past training results.

REPORTS

In **Reports** you can follow your development.

Training reports are a handy way to follow your progress in training over longer periods. In week, month and year reports you can choose the sport for the report. In custom period, you can choose both the period and the sport. Choose the time period and sport for report from the drop-down lists, and press the wheel icon to choose what data you want to view in the report graph.

With the help of the activity reports, you can follow the long-term trend of your daily activity. You can choose to view either daily, weekly or monthly reports. In the activity report you can also see your best days regarding daily activity, steps, calories and sleep from your chosen time period.

PROGRAMS

The Polar Running Program is tailored for your goal, based on Polar heart rate zones, taking your personal attributes and training background into account. The program is intelligent, it adapts along the way based on your development. The Polar Running Programs are available for 5k, 10k, half marathon and marathon events, and consist of two to five running exercises per week depending on the program. It's super simple!

For support and more information about using the Flow web service, go to, support.polar.com/en/support/flow.

FAVORITES

In **Favorites**, you can store and manage your favorite training targets in the Flow web service and the Flow mobile app. You can use your favorites as scheduled targets on your watch. For more information, see [Plan your training in the Flow web service](#).

You can see the maximum number of your watch. The number of favorites in the Flow web service is not limited. If you have over 20 favorites in the Flow web service, the first 20 in the list are transferred to your watch when syncing. You can

change the order of your favorites by dragging and dropping them. Choose the favorite you want to move and drag it into the place you want to put it in the list.

ADD A TRAINING TARGET TO FAVORITES:

1. [Create a training target](#).
2. Click the favorites icon  on the lower right corner of the page.
3. The target is added to your favorites.

or

1. Open an existing target you've created from your **Diary**.
2. Click the favorites icon  on the lower right corner of the page.
3. The target is added to your favorites.

EDIT A FAVORITE

1. Click the favorites icon  on the upper right corner next to your name. All your favorite training targets are shown.
2. Click the favorite you want to edit, then click **Edit**.
3. You can change the sport, the target name, and you can add notes. You can alter the training details of the target under **Quick** or **Phased**. (For more information, see the chapter on [planning your training](#).) After you've done all the needed changes, click **Update changes**.

REMOVE A FAVORITE

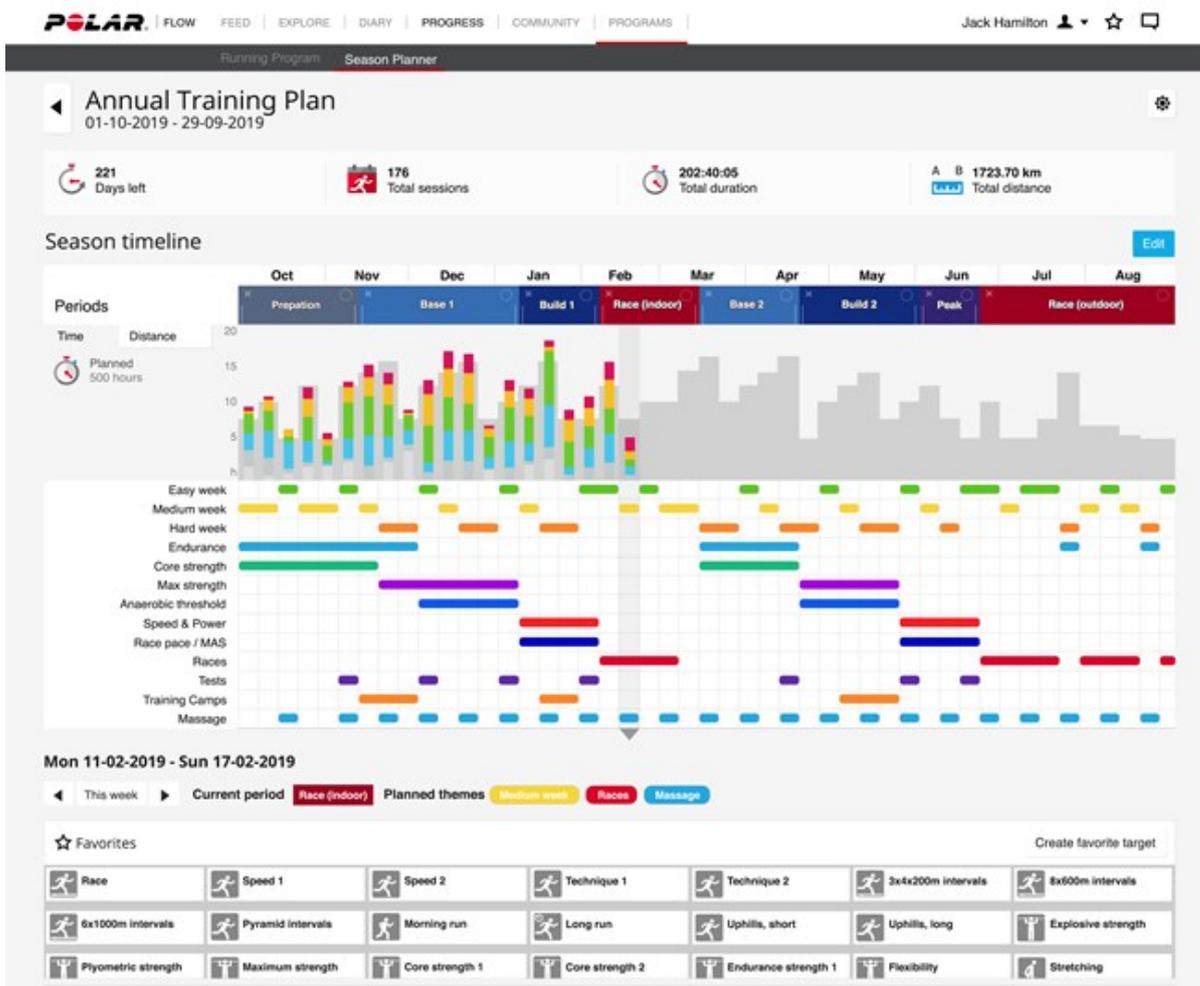
1. Click the favorites icon  on the upper right corner next to your name. All your favorite training targets are shown.
2. Click the delete icon in upper right corner of the training target to remove it from the favorites list.

PLANNING YOUR TRAINING

You can plan your training and create personal training targets for yourself in the Polar Flow web service or in the Polar Flow app.

CREATE A TRAINING PLAN WITH THE SEASON PLANNER

The [Season Planner](#) in the Flow web service is a great tool for creating a tailored annual training plan. No matter what your training goal is, Polar Flow helps you create a comprehensive plan to reach it. You can find the Season Planner tool from the **Programs** tab in the Polar Flow web service.



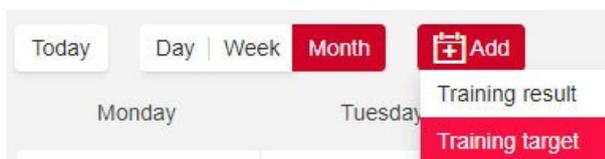
[Polar Flow for Coach](#) is a free remote coaching platform that allows your coach plan every detail of your training from full season plans to individual workouts.

CREATE A TRAINING TARGET IN THE POLAR FLOW WEB SERVICE

Note that the training targets need to be synced to your watch with FlowSync or via Flow app before you can use them. Your watch will guide you towards completing your target during training.

To create a training target in the Polar Flow web service:

1. Go to **Diary**, and click **Add > Training target**.



2. In the **Add training target**, choose **Sport**, enter **Target name** (maximum 45 digits), **Date** and **Start time** and any **Notes** (optional) you want to add.

Then choose the type of your training target from the following:

Duration target

1. Choose **Duration**.
2. Enter the duration.

3. Click **Add to favorites** ☆ to add the target to your list of favorites, if you want.
4. Click **Add to Diary** to add the target to your **Diary**.

Distance target

1. Choose **Distance**.
2. Enter the distance.
3. Click **Add to favorites** ☆ to add the target to your list of favorites, if you want.
4. Click **Add to Diary** to add the target to your **Diary**.

Calories target

1. Choose **Calorie**.
2. Enter the amount of calories.
3. Click **Add to favorites** ☆ to add the target to your list of favorites, if you want.
4. Click **Add to Diary** to add the target to your **Diary**.

Race Pace target

1. Choose **Race Pace**.
2. Fill in two of the following values: **Duration**, **Distance** or **Race Pace**. You get the third one automatically.
3. Click **Add to favorites** ☆ to add the target to your list of favorites, if you want.
4. Click **Add to Diary** to add the target to your **Diary**.

Please note that Race Pace can only be synced with Grit X, V800, Vantage M, Vantage M2, Vantage V and Vantage V2 (not with A300, A360, A370, Ignite, M200, M400, M430, M460, M600).

Phased target

1. Choose **Phased**.
2. Add phases to your target. Click **Duration** to add a phase based on duration or click **Distance** to add a phase based on distance. Choose **Name** and **Duration/Distance** for each phase.
3. Tick the box **Start next phase automatically** for automatic change of phases. If left unchecked, you will have to change phases manually.
4. Choose **the intensity of the phase** based on **heart rate**, **speed** or **power**.

The screenshot displays the target configuration screen. At the top, there are three buttons: '+ Distance', '+ Duration', and '+ Repeat phases'. On the right, it says '1 phases : 1 km'. Below this, there is a list of phases. The first phase is 'Warmup' with a duration of '1 km'. A dropdown menu is open over the '1 km' value, showing three options: 'Heart rate' (highlighted in red), 'Speed', and 'Power'. To the left of the phase list, there is a checkbox labeled 'Start next phase automatically' which is checked. To the right of the phase list, there is a progress bar with five segments, the third of which is highlighted in green. There are also icons for 'A B' and a timer.



Power-based phased training targets are currently supported only by Vantage V2.

5. If you wish to repeat a phase, choose **+ Repeat phases** and drag phases you want to repeat to the Repeat section.



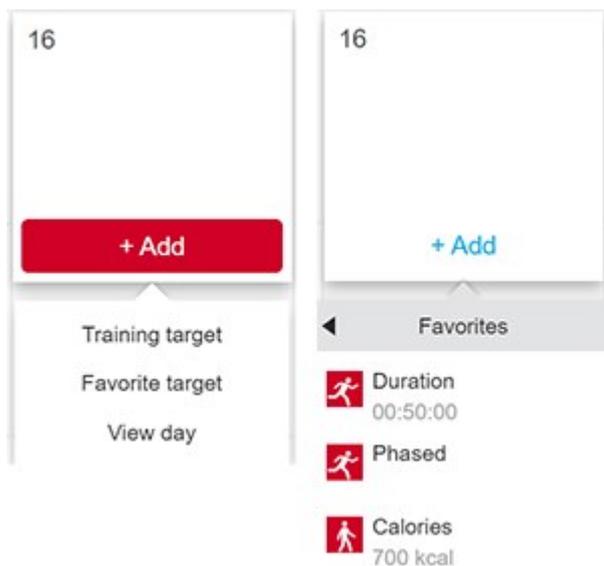
6. Click Add to favorites  to add the target to your list of favorites.
7. Click **Add to Diary** to add the target to your **Diary**.

CREATE A TARGET BASED ON A FAVORITE TRAINING TARGET

If you have created a target and added it to your favorites, you can use it as a template for similar targets. This makes training target creation easier. You don't need to create, for example, a complicated phased training target every time from the scratch.

To use an existing Favorite as a template for a training target, follow these steps:

1. Hover your mouse over a date on the **Diary**.
2. Click **+Add > Favorite target** and then choose a target from the **Favorites** list.



3. The Favorite is added to your diary as a scheduled target for the day. The default scheduled time for the training target is at 18.00/6pm.
4. Click the target in your Diary and modify it to your liking. Editing the target in this view won't change the original Favorite target.
5. Click Save to update the changes.



You can edit your favorite training targets and create new ones also via Favorites page. Click  in top menu to access the Favorites page.

SYNC THE TARGETS TO YOUR WATCH

Remember to sync the training targets to your watch from the Flow web service via FlowSync or Flow App.

If you don't sync them, they are only visible in your Flow web service Diary or Favorites list.

For information on starting a training target session, see [Start a training session](#).

CREATE A TRAINING TARGET IN THE POLAR FLOW APP

To create a training target in the Polar Flow app:

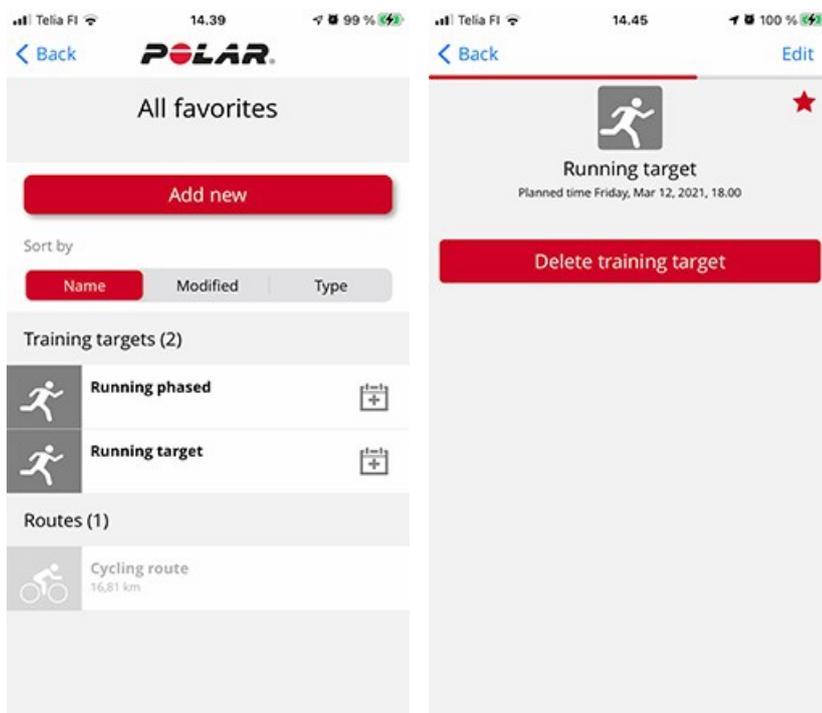
1. Go to **Training**, and click  on top of the page.
2. Then choose the type of your training target from the following:

Favorite target

1. Choose **Favorite target**.
2. Choose one the existing favorite training targets or **Add new** favorite target.
3. Tap on  next to the existing target to add it to your Diary.
4. The training target you chose is added to your training calendar for today. Open the training target from the diary to edit the time for the training target.
5. If you choose Add new you can create a new favorite **Quick target, Phased target, Strava Live Segment** or **Komoot route**.



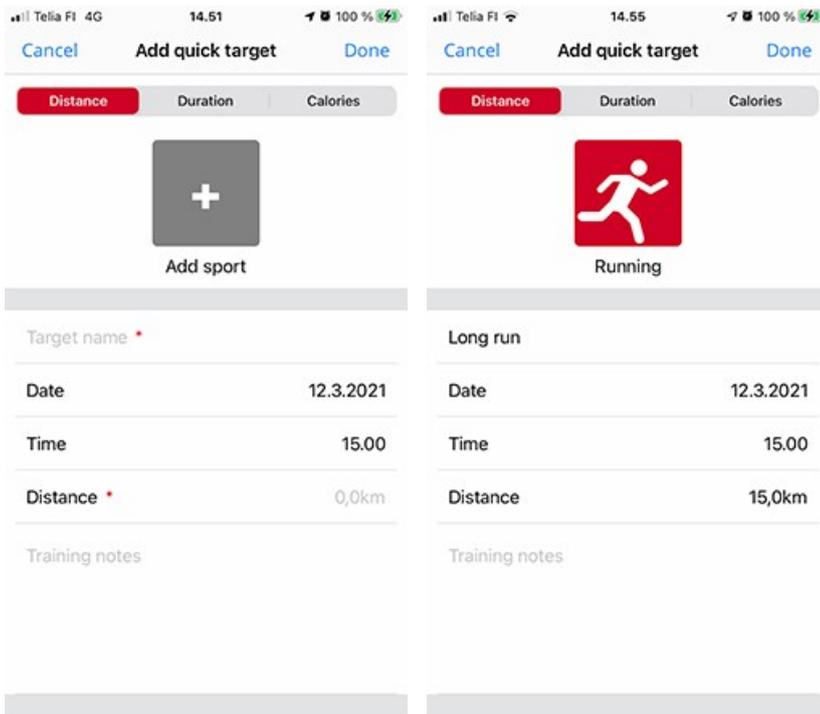
Komoot route is available only in Grit X and Vantage V2. Strava Live Segment is available in Grit X, M460, V650, V800, Vantage V and Vantage V2.



Quick target

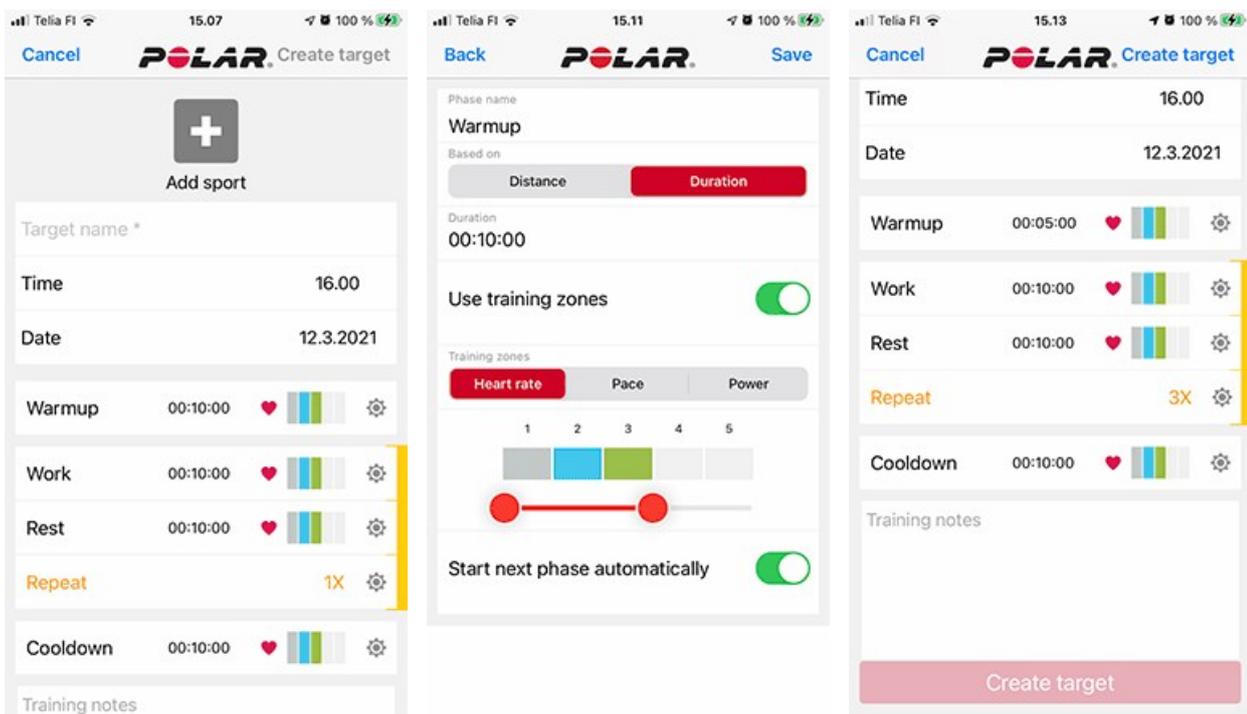
1. Choose **Quick target**.
2. Choose if the quick target is based on distance, duration or calories.
3. Add sport.
4. Give a name to the target.

- Set the target distance, duration or amount of calories.
- Tap **Done** to add the target to your Training diary



Phased target

- Choose **Phased target**.
- Add sport.
- Give a name to the target.
- Set the Time and Date for the target.
- Tap the  icon next to phase to edit phase settings.
- Tap **Create target** to add the target to your Training diary.



Sync your watch with Flow app to move the training targets to your watch.

SPORT PROFILES IN POLAR FLOW

There are four default sport profiles on your M430. In the Polar Flow app or web service, you can add new sport profiles to your sports list and edit their settings. Your M430 can contain a maximum of 20 sport profiles. If you have over 20 sport profiles in the Polar Flow app and web service, the first 20 in the list are transferred to your M430 when syncing.

You can change the order of your sport profiles by dragging and dropping them. Choose the sport you want to move and drag it into the place you want to put it in the list.

To see a video, click on one of the following links:

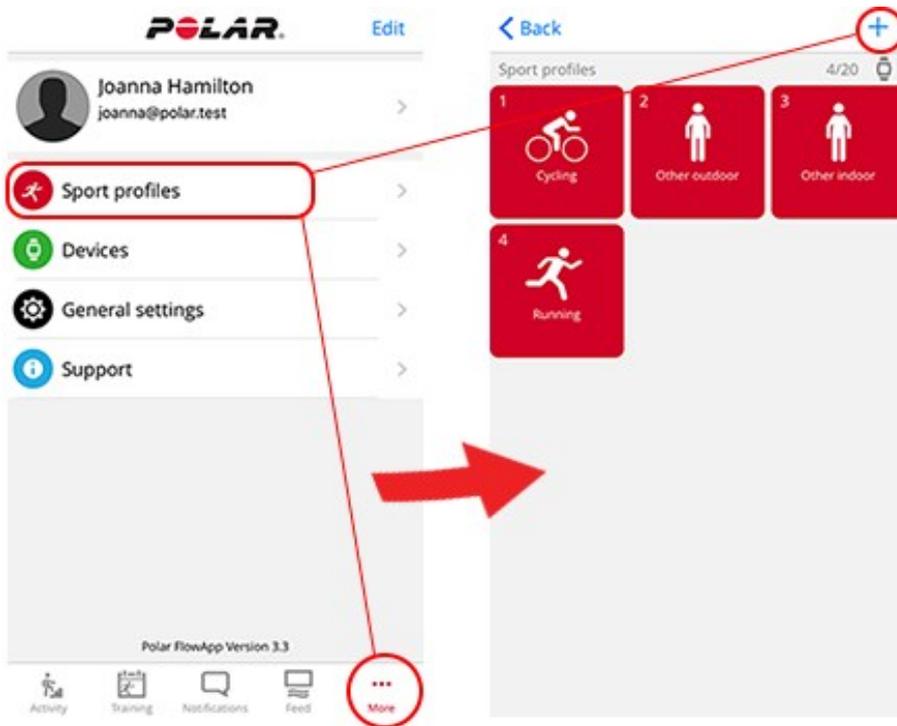
[Polar Flow app | Sport profile editing](#)

[Polar Flow web service | Sport Profiles](#)

ADD A SPORT PROFILE

In the Polar Flow mobile app:

1. Go to **Sport profiles**.
2. Tap the plus sign in the upper right corner.
3. Choose a sport from the list. Tap Done on Android app. The sport is added to your sport profiles list.



In the Polar Flow web service:

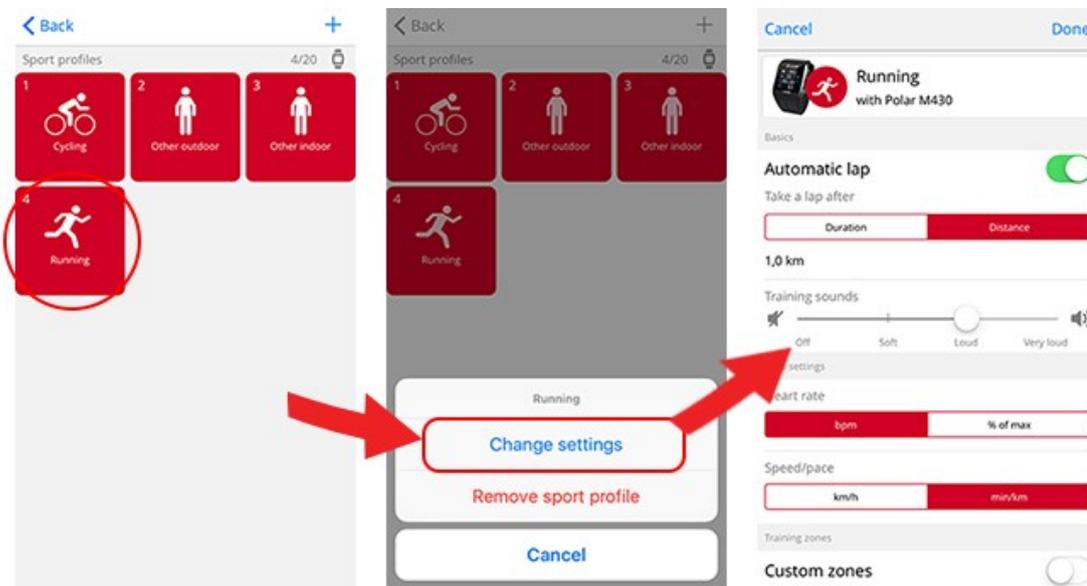
1. Click your name/profile photo in the upper right corner.
2. Choose **Sport Profiles**.
3. Click **Add sport profile**, and choose the sport from the list.
4. The sport is added to your sport list.

i You can't create new sports yourself. The sports list is controlled by Polar, because each sport has certain default settings and values, which affect, for example, the calorie calculation and the training load and recovery feature.

EDIT A SPORT PROFILE

In the Polar Flow mobile app:

1. Go to **Sport profiles**.
2. Choose a sport and tap **Change settings**.
3. When you're ready, tap Done. Remember to sync the settings to your M430.



In the Flow web service:

1. Click your name/profile photo in the upper right corner.
2. Choose **Sport Profiles**.
3. Click **Edit** under the sport you want to edit.

In each sport profile, you can edit the following information:

Basics

- Automatic lap (Can be set to duration or distance-based or turned off)

Heart Rate

- Heart rate view (Beats per minute or % of maximum)
- Heart rate visible to other devices (This means that compatible devices using Bluetooth Smart wireless technology, e.g. gym equipment, can detect your heart rate. You can also use your M430 during Polar Club classes to broadcast your heart rate to the Polar Club system.)
- Zonelock
- Heart rate zone settings (With the heart rate zones you can easily select and monitor training intensities. If you choose Default, you cannot change heart rate limits. If you choose Free, all limits can be changed. Default heart rate zone limits are calculated from your maximum heart rate.)

Speed/Pace settings

- Speed/Pace view (Choose speed km/h / mph or pace min/km / min/mi)
- Zonelock available (Choose zone lock for speed/pace zone On or Off)

- Speed/pace zone settings (With the speed/pace zones you can easily select and monitor your speed or pace, depending on your selection. Default zones are an example of speed/pace zones for a person with a relatively high fitness level. If you choose Default, you can't change the limits. If you choose Free, all limits can be changed.)

Training views

Choose what information you see on your training views during your sessions. You can have a total of eight different training views for each sport profile. Each training view can have a maximum of four different data fields.

Click the pencil icon on an existing view to edit it, or click **Add new view**.

Gestures and feedback

- Automatic pause: To use **Automatic pause** during training, you need to have GPS set to **High Accuracy** or a Polar stride sensor in use. Your sessions pause automatically when you stop, and continue automatically when you start.
- Vibration feedback (You can choose to have vibration on or off)

GPS and altitude

- Choose the GPS recording rate.

When you're done with the sport profile settings, click **Save**. Remember to sync the settings to your M430.



Please note that in a number of indoor sports, group sports and team sports profiles the **HR visible to other devices** setting is enabled by default. This means that compatible devices using Bluetooth Smart wireless technology, e.g. gym equipment, can detect your heart rate. You can check which sport profiles have Bluetooth broadcasting enabled by default from the [Polar Sport profiles list](#). You can enable or disable Bluetooth broadcasting from sport profile settings.

SYNCING

You can transfer data from your M430 to the Polar Flow app wirelessly via Bluetooth connection. Or, you can sync your M430 with the Polar Flow web service by using a USB port and the FlowSync software. To be able to sync data between your M430 and the Flow app you need to have a Polar account. If you want to sync data from your M430 directly to the web service, in addition to a Polar account, you need the FlowSync software. If you've set up your M430, you have created a Polar account. If you set up your M430 using a computer, you have the FlowSync software on your computer.

Remember to sync and keep your data up-to-date between your M430, the web service and the mobile app wherever you are.

SYNC WITH FLOW MOBILE APP

Before syncing make sure:

- You have a Polar account and Flow app.
- Your mobile device has Bluetooth turned on, and airplane mode/flight mode is not turned on.
- You have paired your M430 with your mobile. For more information, see [Pairing](#).

Sync your data:

1. Sign in to the Flow app, and press and hold the BACK button on your M430.
2. **Connecting to device** is displayed, followed by **Connecting to app**.
3. **Syncing completed** is displayed when you are done.

 Your M430 syncs with the Flow app automatically after you finish a training session if your phone is within the Bluetooth range. When your M430 syncs with the Flow app, your activity and training data are also synced automatically via an internet connection to the Flow web service.

For support and more information about using the Polar Flow app, go to support.polar.com/en/support/Flow_app.

SYNC WITH FLOW WEB SERVICE VIA FLOWSYNC

To sync data with the Flow web service you need the FlowSync software. Go to flow.polar.com/start, and download and install it before trying to sync.

1. Plug your M430 to your computer. Make sure FlowSync software is running.
2. The FlowSync window opens on your computer, and the syncing starts.
3. Completed is displayed when you are done.

Every time you plug in your M430 to your computer, the Polar FlowSync software will transfer your data to the Polar Flow web service and sync any settings you may have changed. If the syncing does not automatically start, start FlowSync from the desktop icon (Windows) or from the applications folder (Mac OS X). Every time a firmware update is available, FlowSync will notify you, and request you to install it.

 If you change settings in the Flow web service while your M430 is plugged into your computer, press the synchronize button on FlowSync to transfer to the settings to your M430.

For support and more information about using the Flow web service, go to support.polar.com/en/support/flow.

For support and more information about using FlowSync software, go to support.polar.com/en/support/FlowSync.

IMPORTANT INFORMATION

Battery	60
Charging M430 battery	60
Battery operating time	61
Low battery notifications	61
Caring for your M430	61
Keep your M430 clean	61
Storing	62
Service	62
Precautions	62
Interference During Training	62
Health and training	63
Warning - Keep batteries out of reach of children	64
Technical specification	64
M430	64
Polar FlowSync Software	65
Polar Flow mobile application compatibility	65
Water resistance of Polar products	65
Limited International Polar Guarantee	66
Regulatory information	67
Disclaimer	67

BATTERY

At the end of the working life of the product Polar encourages you to minimize possible effects of waste on the environment and human health by following local waste disposal regulations and, where possible, utilizing separate collection of electronic devices. Do not dispose of this product as unsorted municipal waste.

CHARGING M430 BATTERY

The M430 has an internal, rechargeable battery. Rechargeable batteries have a limited number of charge cycles. You can charge and discharge the battery over 300 times before a notable decrease in its capacity. The number of charge cycles also varies according to use and operating conditions.

 *Do not charge the battery in temperatures under 0 °C/ +32 °F or over +40 °C/ +104 °F or when the USB port is wet.*

Use the USB cable included in the product set to charge it via the USB port on your computer.

You can charge the battery via a wall outlet. When charging via a wall outlet, use a USB power adapter (not included in the product set). If you use a USB power adapter, make sure that the adapter is marked with "output 5Vdc" and that it provides a minimum of 500mA. Only use an adequately safety approved USB power adapter (marked with "LPS", "Limited Power Supply", "UL listed" or "CE").



 Do not charge Polar products with a 9 volt charger. Using a 9 volt charger can damage your Polar product.

 Before charging, make sure there's no moisture, hair, dust or dirt on the M430's USB port or charging cable. Gently wipe off any dirt and blow out the dust. You can use a toothpick if needed. Do not use any sharp tools for cleaning to avoid scratching.

To charge with your computer, just plug your M430 to your computer, and at the same time, you can have it synced it with FlowSync.

1. Plug the USB connector into the USB port in the M430, and plug the other end of the cable into your PC.
2. **Charging** appears on the display.
3. When the battery icon is full, the M430 is fully charged.

 Don't leave the battery fully discharged for a long period of time or keep it fully charged all the time, because it may affect the battery life time.

BATTERY OPERATING TIME

The battery operating time is:

- up to 8 hours of continuous training with GPS and optical heart rate, or
- up to 30 hours of continuous training with GPS power save mode and optical heart rate, or
- up to 50 hours of continuous training with GPS power save mode and Bluetooth Smart heart rate sensor, or
- when used only in time mode with daily activity monitoring, the operating time is approximately 20 days.

The operating time depends on many factors, such as the temperature of the environment in which you use your M430, the features and sensors you use, and battery aging. Smart notifications and frequent syncing with Flow app will also decrease the battery life. The operating time is significantly reduced in temperatures well below freezing. Wearing the M430 under your overcoat helps to keep it warmer and to increase the operating time.

LOW BATTERY NOTIFICATIONS

Battery low. Charge: The battery charge is low. It is recommended to charge M430.

Charge before training: The charge is too low for recording a training session. A new training session cannot be started before charging M430.

Low battery notifications during training:

- M430 notifies you when there is enough battery life left for one hour in the training session.
- If **Battery low** is shown during training, the heart rate measurement and GPS are switched off.
- When the battery is critically low, **Recording ended** is shown. M430 stops the training recording and saves the training data.

When the display is blank, the battery is empty and M430 has gone to sleep mode. Charge your M430. If the battery is totally drained, it may take a while for the charging animation to appear on the display.

CARING FOR YOUR M430

Like any electronic device, the Polar M430 should be kept clean and treated with care. The instructions below will help you fulfill the guarantee obligations, keep the device in peak condition and avoid any issues in charging or syncing.

KEEP YOUR M430 CLEAN

Wash the M430 under running water with a mild soap and water solution after each training session. Wipe it dry with a soft towel.

Keep the M430's USB port and charging cable clean to ensure smooth charging and syncing.

Before charging, make sure there's no moisture, hair, dust or dirt on the M430's USB port or charging cable. Gently wipe off any dirt and blow off any dust. You can use a toothpick if needed. Do not use any sharp tools for cleaning to avoid scratching.

Keep the USB port clean to effectively protect your M430 from oxidation and other possible damage caused by dirt and salt water (e.g. sweat or sea water). The best way to keep the USB port clean is to rinse it after each training session with lukewarm tap water. The USB port is water resistant and you can rinse it under running water without damaging the electronic components. **Do not charge the M430 when the USB port is wet or sweaty.**

TAKE GOOD CARE OF THE OPTICAL HEART RATE SENSOR

Keep the optical sensor area on the back cover scratch-free. Scratches and dirt will reduce the performance of the wrist-based heart rate measurement.

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 bike mount. 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.

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

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 further information, see Limited International Polar Guarantee.

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

PRECAUTIONS

The Polar M430 is designed to tell your activity and measure heart rate, speed, distance and running cadence. No other use is intended or implied.

The training device should not be used for obtaining environmental measurements that require professional or industrial precision.

INTERFERENCE DURING TRAINING

Electromagnetic Interference and Training Equipment

Disturbance may occur near electrical devices. Also WLAN base stations may cause interference when training with the training device. To avoid erratic reading or misbehavior, move away from possible sources of disturbance.

Training equipment with electronic or electrical components such as LED displays, motors and electrical brakes may cause interfering stray signals. To solve these problems, try the following:

1. Remove the heart rate sensor strap from your chest and use the training equipment as you would normally.

2. Move the training device around until you find an area in which it displays no stray reading or does not flash the heart symbol. Interference is often worst directly 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 heart rate sensor strap back on your chest and keep the training device in this interference-free area as much as possible.

If the training device still does not work with the training equipment, it may be electrically too noisy for wireless heart rate measurement.

HEALTH AND TRAINING

Training may include some risk. Before beginning a regular training 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?

Note that in addition to training 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 training. **If you feel unexpected pain or excessive fatigue when training, it is recommended that you stop the training or continue at a lighter intensity.**

Note! If you are using a pacemaker or other implanted electronic device, 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](#). If you experience any skin reaction, stop using the product and consult your physician. Also inform Polar Customer Care about your skin reaction. To avoid any skin reaction to the heart rate sensor, 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 color to come off the heart rate sensor's or wristband'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, lotion, suntan/sunscreen 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.

WARNING - KEEP BATTERIES OUT OF REACH OF CHILDREN

Polar heart rate sensors (for example H10 and H9) contain a button cell battery. If the button cell battery is swallowed, it can cause severe internal burns in as little as 2 hours and can lead to death. **Keep new and used batteries away from children.** If the battery compartment does not close securely, stop using the product and keep it away from children. **If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.**

Your safety is important to us. The shape of the Polar stride sensor Bluetooth® Smart is designed to minimize the possibility of getting caught in something. In any case, be careful when running with the stride sensor in brushwood, for example.

TECHNICAL SPECIFICATION

M430

Battery type:	240 mAh Li-pol rechargeable battery
Operating time:	In continuous use: Up to 8 hours continuous training with GPS and optical heart rate Up to 30 hours continuous training with GPS power save mode and optical heart rate
Operating temperature:	-10 °C to +50 °C / 14 °F to 122 °F
Training device materials:	Silicon, Thermoplastic polyurethane, Stainless steel, Acrylonitrile butadiene styrene, Glass fiber, Polycarbonate, Polymethyl methacrylate, Liquid crystal polymer
Watch accuracy:	Better than ± 0.5 seconds / day at 25 °C / 77 °F temperature
GPS accuracy:	Distance ±2% These are values that are achieved in open area satellite conditions when there are no apartment buildings or trees blocking the satellite view. In urban or forest areas these values are achievable but may sometimes vary.
Altitude resolution:	1 m
Ascent/Descent resolution:	5 m
Maximum altitude:	9000 m / 29525 ft

Sample rate:	1 s in high accuracy GPS recording, 30 s in medium accuracy GPS recording, 60 s in GPS power save mode
Heart rate measuring range:	15-240 bpm
Current speed display range:	0-399 km/h 247.9 mph (0-36 km/h or 0-22.5 mph (when measuring speed with Polar stride sensor))
Water resistance:	30 m (suitable for bathing and swimming)
Memory capacity:	60 h training with GPS and heart rate depending on your language settings
Display resolution:	128 x 128

Uses wireless Bluetooth® technology.

POLAR FLOWSYNC SOFTWARE

To use FlowSync software you need a computer with Microsoft Windows or Mac operating system with an internet connection and a free USB port.

Check the latest compatibility information from support.polar.com.

POLAR FLOW MOBILE APPLICATION COMPATIBILITY

Check the latest compatibility information from support.polar.com.

WATER RESISTANCE OF POLAR PRODUCTS

Most Polar products can be worn when swimming. They are not, however, diving instruments. To maintain water resistance, do not press the buttons of the device under water.

Polar devices with wrist-based heart rate measurement are suitable for swimming and bathing. They will collect your activity data from your wrist movements also when swimming. In our tests, however, we found that the wrist-based heart rate measurement doesn't work optimally in water, so we cannot recommend wrist-based heart rate measurement for swimming.

In the watch industry, water resistance is generally indicated as meters, which means the static water pressure of that depth. Polar uses this same indication system. Water resistance of Polar products is tested according to International Standard **ISO 22810** or **IEC60529**. Every Polar device that has water resistance indication is tested before the delivery to stand water pressure.

Polar products are divided into four different categories according to their 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.

When performing any underwater activity, the dynamic pressure generated by moving in water is greater than the static pressure. This means that moving the product under water subjects it to a greater pressure than if the product were stationary.

Marking on the back	Wash	Bathing and	Skin diving	SCUBA	Water resistant char-
---------------------	------	-------------	-------------	-------	-----------------------

of the product	splashes, sweat, rain-drops etc.	swimming	with snorkel (no air tanks)	diving (with air tanks)	acteristics
Water resistant IPX7	OK	-	-	-	Do not wash with a pressure washer. Protected against splashes, raindrops etc. Reference standard: IEC60529.
Water resistant IPX8	OK	OK	-	-	Minimum for bathing and swimming. Reference standard: IEC60529.
Water resistant Water resistant 20/30/50 meters Suitable for swimming	OK	OK	-	-	Minimum for bathing and swimming. Reference standard: ISO22810.
Water resistant 100 meters	OK	OK	OK	-	For frequent use in water but not SCUBA diving. Reference standard: ISO22810.

LIMITED INTERNATIONAL POLAR GUARANTEE

- Polar Electro Oy issues a limited international guarantee for Polar products. For products which have been sold in the USA or Canada, guarantee is issued by Polar Electro, Inc.
- Polar Electro Oy/Polar Electro Inc. guarantees the original consumer/purchaser of the Polar product that the product will be free from defects in material or workmanship for two (2) years from the date of purchase, with the exception of wristbands made of silicone or plastic, which are subject to a guarantee period of one (1) year from the date of purchase.
- The guarantee does not cover normal wear and tear of the battery, or other 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, textile armband or textile or leather wristband, elastic strap (e.g. heart rate sensor chest strap) and Polar apparel.
- The guarantee does also not cover any damage/s, losses, costs or expenses, direct, indirect or incidental, consequential or special, arising out of, or related to the product.
- Guarantee does not cover products which have been purchased second hand.
- During the guarantee period, the product will be either repaired or replaced at any authorized Polar Central Service regardless of the country of purchase.
- Guarantee issued by Polar Electro Oy/Inc. 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.
- You should keep the receipt as a proof of purchase!
- Guarantee with respect to any product will be limited to countries where the product has been initially marketed by Polar Electro Oy/Inc.

Manufactured by Polar Electro Oy, Professorintie 5, 90440 KEMPELE, Finland www.polar.com.

Polar Electro Oy is a ISO 9001:2015 certified company.

© 2021 Polar Electro Oy, 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 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. Windows is a registered trademark of Microsoft Corporation and Mac OS is a registered trademark of Apple Inc. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Polar Electro Oy is under license.

REGULATORY INFORMATION



This product is compliant with Directives 2014/53/EU, 2011/65/EU and 2015/863/EU. The relevant Declaration of Conformity and other regulatory information for each product are available at www.polar.com/en/regulatory_information.



This crossed out wheeled bin marking shows that Polar products are electronic devices and are in the scope of Directive 2012/19/EU 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.

2.2 EN 06/2021