

ENGLISH

ENGLISH

Contents

1. GET STARTED	4	Start Training with OwnZone	19
Get to Know Your Polar FT80	4	During Training	20
Wrist Unit Buttons and Menu Structure	5	Stop Training	22
Display Symbols	6	Using Stopwatch	22
Start with Basic Settings	7		
2. BEFORE TRAINING	8	4. AFTER TRAINING	23
Activate Your Polar STAR Training		Training Feedback	23
Program	8	Weekly Follow-up	25
Change/End Your Training Program.....	11	Review Training Data	28
Test Your Fitness Level.....	12	Following Fitness Test Results	29
		Remember to Relax	30
		Following OwnRelax Results.....	31
3. TRAINING	15	Transfer Data	32
Wear the Transmitter	15		
Start Training	16	5. SETTINGS	33
Optimize Your Strength Training with Heart		Watch Settings	33
Rate Guidance	16	Training Settings	33

User Information	34
General Settings	35
Accessory Settings	36
Foot pod Calibration*	36
6. CUSTOMER SERVICE INFORMATION	37
Caring for Your Polar FT80	37
Service	37
Changing Batteries.....	38
Precautions	40
Troubleshooting	42
Technical Specifications	43
Guarantee and Disclaimer	44

ENGLISH

1. GET STARTED

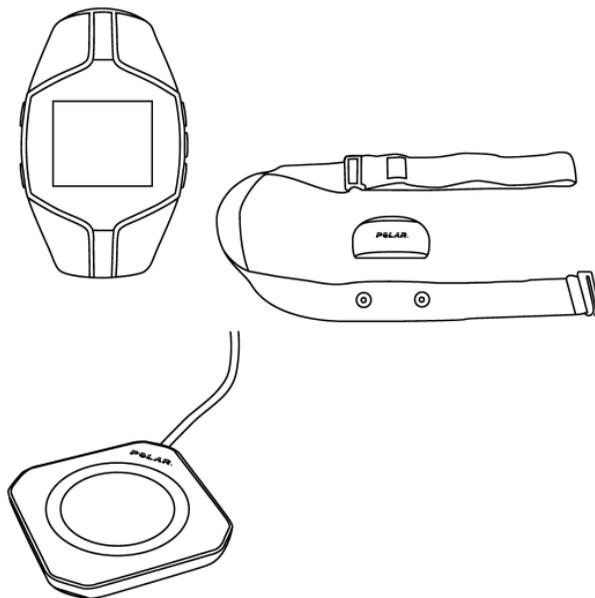
Get to Know Your Polar FT80

Wrist Unit records and displays your heart rate and other data during training.

WearLink transmits the heart rate signal to the wrist unit. The transmitter consists of a connector and strap.

You can transfer data easily between your FT80 and polarpersonaltrainer.com web service with Polar FlowLink™ and WebSync software.

Register your Polar product at <http://register.polar.fi/> to help us improve our products and services, to better fulfill your needs.



Wrist Unit Buttons and Menu Structure

▲ UP

- Adjust values
- Scroll through the menu
- Scroll through selection lists

● OK

- Select training type or training settings
- Confirm selection

▼ DOWN

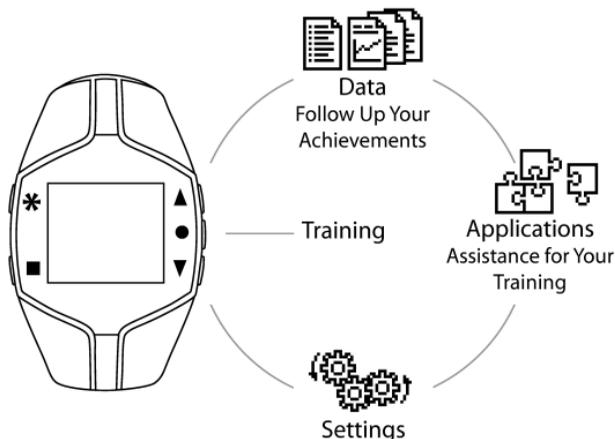
- Adjust values
- Scroll through the menu
- Scroll through selection lists

■ BACK

- Exit the menu
- Return to the previous level
- Cancel selection
- Leave settings unchanged
- With a long press, return to Time view

* LIGHT

- Illuminate the display
- With a long press, enter quick menu in Time view (to lock buttons, set alarm or select time zone), or during training (to adjust training sounds or lock buttons)



Display Symbols

Symbol	Description
	The wrist unit battery level is low.
	The alarm is active.
	Sounds are off.
	Time 2 is in use.
	You have one or more new messages.
	The key lock is active.
	The Polar S1 foot pod™ is in use. If the symbol is blinking, FT80 is trying to establish a connection with the foot pod.
	The Polar G1 GPS sensor is in use. If the symbol is blinking, FT80 is trying to establish a connection with the GPS sensor, or the GPS sensor is trying to establish a connection with the satellites.
	Heart rate is detected.

Start with Basic Settings

To activate your FT80, press and hold any button for one second. Once activated, it cannot be switched off.

1. Select **Language** with UP button and confirm with OK button.
2. **Please enter basic settings** is displayed. Press OK.
3. Select **Time format**.
4. Enter **Time**.
5. Enter **Date**.
6. Select **Units**. Select metric (kilograms, centimeters, KCAL) or imperial (pounds, feet, CAL).
7. Enter **Weight**.
8. Enter **Height**.
9. Enter **Date of birth**.
10. Select **Sex**.
11. **Settings OK?** is displayed. Select **Yes** to accept and save settings. **Basic settings complete** is displayed and the FT80 enters time view. Select **No** to change settings. **Please enter basic settings** is displayed. Re-enter your basic settings.

To modify your personal settings later, see Settings.

2. BEFORE TRAINING

Activate Your Polar STAR Training Program

The adaptive, personalized, and in-built Polar STAR Training Program provides you with the optimum intensity and time targets. The FT80 gives you feedback on your performance after each training session and once a week.

The FT80 creates a training program based on your personal information (weight, height, age, sex), fitness level, activity level, and training goal.

By analyzing your weekly training results and fitness level, the FT80 gives you training guidance for the following week. The training program adapts to your training habits and to your changing fitness level.

1. In Time view, select **Menu > Applications > Training program > Create new program** and **Yes**.
2. If you have not performed the Polar Fitness Test or a new test result is needed, the FT80 asks you to perform the test. For more information, see Test Your Fitness Level.
3. Select your training target:
 - **Improve fitness** to improve your current cardiovascular (involving the heart and blood vessels) fitness level and if you are able to train regularly.
 - **Maximize fitness** to maximize your current cardiovascular fitness level, and if you have been training regularly for at least 10-12 weeks and training nearly every day is not a problem for you.
4. **Training program created!** is displayed.

5. Next, **View week targets?** is displayed. Select **Yes** to view time and calorie targets for your first training week. If you select **No. Training program active!** is displayed and the FT80 returns to Time view.

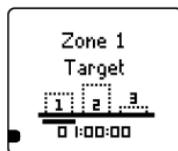
**Time target**

Target training time for the week

Calorie target

Target calorie expenditure for the week

6. Press DOWN and OK to view your target training time for three different target intensity zones. Press DOWN to change the view. See the following page for more information on the zones.

**Time target for zone 1**

The bars indicate the target times in different intensities. The bars fill up as you train. The target time for intensity zone 1 for the week is displayed in the lowest row.

7. You have now activated your training program. Press and hold BACK to return to Time view.

ENGLISH

To view your weekly targets later, select **Menu > Applications > Training Program > View week targets** .

Target Zone	Intensity % of HR _{max}	Training benefit
Zone 3	HARD: 80-90%	<ul style="list-style-type: none">• Benefits: increases maximum performance capacity• Feels like: tiredness in muscles and heavy breathing• Recommended for: fit users for short training sessions
Zone 2	MODERATE: 70-80%	<ul style="list-style-type: none">• Benefits: improves aerobic fitness• Feels like: good, easy breathing, moderate sweating• Recommended for: everybody for typical training sessions with moderate length
Zone 1	LIGHT: 60-70%	<ul style="list-style-type: none">• Benefits: improves basic endurance and helps recovery• Feels like: comfortable, easy breathing, low loading for muscles, light sweating• Recommended for: everybody

Troubleshooting

- **User information missing** is displayed > Enter the missing user information.
- **Fitness test result required** is displayed > You need to perform the Fitness Test.



Read more about training under Training Articles at <http://articles.polar.fi>.

10 Before Training

Change/End Your Training Program

- To change your fitness goal (from **Improve Fitness** to **Maximize Fitness**):
Select **Menu > Applications > Training program > Change program** to create a new program.
- To end your active training program:
Select **Menu > Applications > Training program > End program > End Program?** and **Yes**.
The results of your program are displayed:
 - **Start date/Duration**: The start date and the duration of the training program.
 - **Excel. weeks/Calories**: The number of excellent training weeks vs. total number of training weeks and the calories expended during the program.
 - **Before/After**: Your Fitness Test result (OwnIndex) before and after the program.

To view the results of your previous program at a later date, select **Menu > Applications > Training program > Results of past prog..**

ENGLISH

Test Your Fitness Level

To train right and to monitor your progress, it is important to know your current fitness level. The Polar Fitness Test™ is an easy and quick way to measure your cardiovascular fitness and aerobic capacity. The test is performed at rest.

The test result is a value called OwnIndex. OwnIndex is comparable to maximal oxygen uptake (VO_{2max}), which is commonly used aerobic capacity measure. For more information, see Interpret your fitness test results.

The OwnIndex value affects the accuracy of the training program and calorie calculation during training.

The test is developed for healthy adults. To ensure the test results are reliable, make sure to:

- avoid distractions. The more relaxed you are and the more peaceful the testing environment is, the more accurate the test result will be (for instance, no television, telephone or talking).
- avoid heavy physical exertion, alcohol and unprescribed pharmacological stimulants on the test day and the day before.
- avoid eating a heavy meal or smoking 2-3 hours prior to the test.
- always perform the test in similar conditions and same time of day.
- enter accurate user information.

Perform Polar Fitness Test

1. Wear the transmitter, lie down and relax for 1-3 minutes.
2. In Time view, select **Menu > Applications > Fitness test > Start test**. The fitness test begins as soon as the FT80 locates your heart rate.
3. Approximately 5 minutes later, a beep indicates the end of the test, and your test result is displayed.
4. Press OK. **UPDATE VO_{2max} ?** is displayed.
5. Select **Yes** to save the test result in your user settings and OwnIndex results. Select **No** only if you know your VO_{2max} value, and if it differs more than one fitness level (see the table on the next page) from the OwnIndex result. Your OwnIndex value will only be saved in OwnIndex results.

Troubleshooting

- **Set activity level of past three months** is displayed > Set your activity level (see Settings for more information). **Activity level set** is displayed and the test begins.
- **Fitness Test Failed** is displayed or no heart rate shown > Test fails. Check that the transmitter electrodes are moist enough and that the elastic strap is snug enough around your chest. If the fitness test fails, your previous OwnIndex value is not replaced.

ENGLISH

Interpret your fitness test results

Interpret the OwnIndex values by comparing your individual values and changes in them over time. OwnIndex can also be interpreted based on gender and age. Locate your OwnIndex in the table to the right, and see how they compare to others of the same gender and age.

This 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 seven 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.

Age	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
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

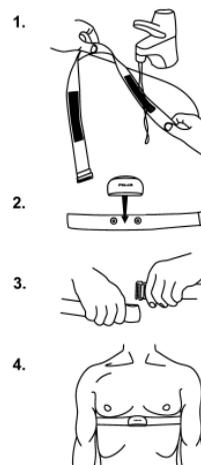
3. TRAINING

Wear the Transmitter

Before recording a training session, wear the transmitter first.

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

Detach the connector from the strap when not in use to maximize the transmitter lifetime. See Customer Service Information for more detailed maintenance instructions.



ENGLISH

Start Training

1. Wear the transmitter and the wrist unit.
2. Press OK and select **Start training**, or long-press OK when you want to start recording your training session.

To modify sounds, heart rate view or other training settings before starting the training session, select **Training Settings**. See section Settings for more information.

Troubleshooting

- Your training session is saved only when the recording has been on for more than one minute.

Optimize Your Strength Training with Heart Rate Guidance

Strength training with Polar FT80 helps you effectively improve your muscle strength and power by guiding your recovery heart rate between exercise sets during workout.

1. Create up to three workouts in **polarpersonaltrainer.com** and download the workout(s) to your FT80. See Transfer Data for more information.
2. When you have downloaded workouts onto your FT80, press ok and press down to select **Start strength training**. Press OK and **Start workout?** is displayed. Select **Yes**, and select the exercise you want to perform from the exercise list. Press ok to start your exercise with the first set.



Heart rate graph

Name of the exercise
Heart rate as a number and graph
Number of sets, repetitions,
and weights

3. When you have completed a set, the FT80 tells you the optimal recovery time. Sit down to wait and see when your heart rate graph hits the dotted line on the display and you hear a beep. You have now recovered enough. **Start next set!** is displayed.
4. When you have completed all sets of an exercise press **OK**, and **Exercise completed?** is displayed. Select **Yes** to save the exercise data. The exercise set is now removed from your exercise list in this session.
5. Select the exercise you want to perform next and finish your workout.
6. After workout, transfer data to **polarpersonaltrainer.com** for easy follow-up of your fitness level development. See Transfer Data for more information.

ENGLISH

If you have not yet downloaded workouts from polarpersonaltraining.com, FT80 still guides your strength training informing you how long to rest between each set.

1. Press OK and select **Start strength training**.
-



Heart rate graph

Heart rate as a number and graph

2. When you have completed a set, the FT80 tells you the optimal recovery time. Sit down to wait and see when your heart rate graph hits the dotted line on the display and you hear a beep. You have now recovered enough. **Start next set!** is displayed. Perform the exercises and finish your workout.
3. After workout, transfer data to polarpersonaltrainer.com for easy follow-up of your fitness level development. See Transfer Data for more information.

If you have activated the STAR Training Program, the performed strength trainings are automatically accumulated to the weekly training results.

Start Training with OwnZone

Starting every session with OwnZone determination guarantees safe, effective and individual heart rate zones.

Check your OwnZone at least:

- when you change training environment or sport.
- when you train after more than a week's break.
- if you have not recovered from previous session/you are not feeling well/are stressed.
- after changing your user information.

OwnZone determination takes only five minutes, and can be performed as a warm-up in any sport.

If training program is activated and you actively use this determination, FT80 incorporates your long-term results when updating program targets.

1. Wear the transmitter and the wrist unit.
2. Press OK and select **Start with OwnZone**. Follow the instructions on the display. Start slowly keeping your heart rate below 100 bpm/ 50% HR_{max}. After each minute, increase your speed gradually about 10 bpm/ 5% HR_{max}.

- **Walk slowly** for 1 min.
 - **Walk** at a normal pace for 1 min.
 - **Walk fast** for 1 min.
 - **Jog** for 1 min.
 - **Run** for 1 min.
 - **Speed up**.
3. When the individual OwnZone limits are determined at some point during the determination, **New limits in use** is displayed. Proceed normally with training.

Troubleshooting

- If OwnZone determination fails, and you have determined your OwnZone limits earlier, **Previous limits in use** is displayed. If you have not determined your OwnZone limits, **Age-based limits in use** is displayed. The OwnZone determination fails if the heart rate rises too fast during the OwnZone determination/if the heart rate is too high at the beginning of the test.

ENGLISH

During Training

The following information is displayed during a training session. Press UP/DOWN to change views. Your training duration is displayed in every view.



In zone 1, 2 or 3 (displayed during cardio training)

Training time in the indicated zone

Heart rate

Heart symbol indicates the zone you are in



Heart rate

Heart rate during training



Time of day

Time of day

Calories

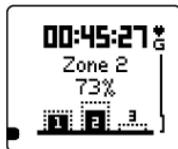
Expended calories during training

**Distance**

Distance of training (optional GPS sensor or foot pod required to view distance data)

Speed

Speed of training (optional GPS sensor or foot pod required to view speed data)

**Week target** (displayed during cardio training if the training program is active)

Weekly target intensity zones and the actual training time in each zone



To access Quick menu during training, press and hold LIGHT. The quick menu is a shortcut to locking buttons, adjusting training sounds, and if foot pod is in use, calibrating it.

Lock a zone: When you are in a desired zone during a training session, lock it by pressing OK for one second. For instance, when you have achieved your week target for zones 1 and 3, you can lock zone 2. The zone alarm helps keep you inside the locked zone.

HeartTouch: Check the time during training recording by bringing the wrist unit near the transmitter. Set the HeartTouch function **On/Off** in **Menu > Settings > Training Settings > HeartTouch**.

ENGLISH

Stop Training

1. Press BACK to pause training recording.
2. Press BACK again to stop recording altogether.
3. You will receive instant feedback on your training session. See After Training for more information.

Detach the transmitter connector from the strap and rinse the strap under running water after every use. Wash the strap regularly in a washing machine at 40°C/104°F after every fifth use.

Using Stopwatch

Use the stopwatch for timing (for instance, for recording lap times).

1. Select **Menu > Applications > Stopwatch.**
2. Start timing by pressing OK.
3. During timing, press OK to start recording a new lap.
4. Press BACK to stop the stopwatch.

Your timing results remain in the memory of your FT80 until you reset the stopwatch. Scroll the timing results with UP/DOWN, and reset the stopwatch by pressing and holding LIGHT.

4. AFTER TRAINING

Training Feedback

The following training feedback is displayed when you stop recording a training session.

Effect	Training effect feedback. See the following page for more information.
Intensity	Time spent in zones 1, 2, and 3.
Zone limits	OwnZone limits (displayed if OwnZone was in use).
Calories/Calories fat	Expended calories during the session, and fat percentage.
Average/Maximum	Average and maximum heart rate during session.
Duration	Duration of your training session.
Average/Maximum	Average and maximum speed during session (displayed only if optional GPS sensor/foot pod was in use).
Distance/Duration	Distance and duration of session (displayed only if optional GPS sensor/foot pod was in use).
This week	Your targets for the current training week and the results you have achieved so far (displayed if the training program is active).

ENGLISH

One of the following training effect feedbacks is displayed:

Fat burn improving

Training at low intensity improves your body's capability to burn fat.

Fitness improving

Training at least at moderate intensity improves your cardiovascular fitness.

**Maximal perform.
improving**

Training at hard intensity improves your maximal performance.

Strength training

Strength training increases body strength and tone, and improves health.

If you train enough at more than one intensity level, your session will also have several effects.

**Fat burn and fitness
improving**

Training improves primarily your body's capability to burn fat, but also cardiovascular fitness.

**Fitness and fat burn
improving**

Training improves primarily your cardiovascular fitness, but also your body's capability to burn fat.

**Max. perf. and fitness
improving**

Training improves primarily your maximal performance, but also fitness.

Weekly Follow-up

The FT80 automatically reviews your progress. An envelope reminds you to check the previous week's training results. Press UP to open the envelope and to view a summary of your training week.

Week targets achieved

You have achieved your weekly targets.

Results

Excellent! / Well done! / Nice! / Fitness maintained / Good training week / Incomplete training week / Good recovery week / Excellent recovery week



If your result is Excellent, the FT80 rewards you with a trophy, which appears in Time view.

Achieved/Week target

Achieved training duration vs. week target duration.

Achieved/Week target

Expended calories vs. week target.

Sessions

Number of training sessions this week (displayed also when the training program is not active).

Achieved time per zone

Time spent in zones 3, 2, and 1.

This week

Training guidance displayed only when accessed from the envelope. See the following page for more information.

ENGLISH

Train a lot more

You need to train a lot more to get effects.

Train more

You do not train enough for improvement.

Train more in zone x

You need to train more at hard/moderate/light intensity this week.

Train like last week

You did a good job last week. Keep it up!

Train less in zone x

You should decrease training at hard/moderate/light intensity this week.

Train a lot less in zone 3

You should decrease training at hard intensity this week.

Take recovery week

You have not recovered from last week, it was too hard.

Recovery week still needed

You have not recovered yet; last week was still too hard.



If you have activated your training program between Wed-Sun, the first complete feedback will only be provided after the first complete training week.

Fitness Test

The FT80 reminds you to take the fitness test by posting an envelope. The result will be incorporated in the next program update.

1. An envelope is displayed. Press UP to open the envelope. **Time to test fitness** is displayed.
2. **Test fitness?** Select **Yes** or **No**.
3. If you select **Yes** to perform a new fitness test, see Test Your Fitness Level.

Polar STAR Training Program Update

The FT80 continuously analyzes your progress and adjusts by increasing or decreasing the weekly training targets. An envelope appears on the display to notify you when the program has been updated. Press UP to open the envelope.

- **Program has been updated** is displayed. The FT80 has analyzed your progress and adapted your program training targets accordingly.
- **Time for a recovery week** is displayed. To optimize your training, the balance between training and recovery have to be ideal. A recovery week allows your body to recover and adapt to the stimulus that training has provided.

After your program is updated, **View week targets?** is displayed. Select **Yes** to view the updated training targets.

Review Training Data

- Select **Menu > Data > Training files** to view information on your 100 most recent training sessions. Select the training you want to view with UP/DOWN.

To delete a training file, select **Menu > Data > Delete files > Training file**. Select the training file you want to delete. **Delete file?** is displayed. Select **Yes**. **Remove from total?** is displayed. To remove the file from totals, as well, select **Yes**.

To delete all training files, select **Menu > Data > Delete files > All files**. **Delete all files?** is displayed. Select **Yes**.

- Select **Menu > Data > Week summaries** to view information on your 16 most recent training weeks. Select the week you want to view with UP/DOWN.

To reset week summaries, select **Menu > Data > Reset week summaries**.

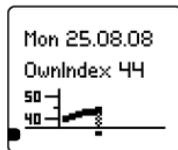
- View your total cumulative number of training sessions, duration, burned calories and, if GPS sensor/foot pod is in use, distance in several trainings, starting from the previous reset in **Menu > Data > Totals since xx.xx.xxxx**.

To reset totals, select **Menu > Data > Reset totals**.

Following Fitness Test Results

Follow your long-term test results in OwnIndex results containing 47 of your latest OwnIndex values and the dates of the tests. On average, it takes six weeks of regular training to improve your aerobic fitness noticeably. To improve your aerobic fitness most efficiently, you need to train large muscle groups.

1. Select **Menu > Applications > Fitness test > OwnIndex results**.
2. Your OwnIndex result graph, result, and date of the latest test are displayed. Press UP/DOWN to view the previous OwnIndex results.



OwnIndex graph

Date of the test

Result of the test (OwnIndex)

You OwnIndex result graph

To delete an OwnIndex value, select the value you want to delete with UP/DOWN. When the value is displayed, press and hold the LIGHT until **Delete this value?** appears. Select **Yes**.

ENGLISH

Remember to Relax

The Polar OwnRelax® test measures your heart rate and heart rate variability during a five-minute resting period. The result is your resting heart rate (bpm) and OwnRelax value (in milliseconds), corresponding to your body's state of relaxation.

You can take the test anywhere, as long as the test environment is peaceful. There should be no disturbing noises. You should not read or talk. You should be lying down, relaxed and calm. Always repeat the test in similar conditions. Have a relaxation session:

- in the morning for a general relaxation check.
- before training to check readiness for a planned workout.
- after training for recovery detection.
- whenever you feel a need to check your relaxation.

1. Wear the transmitter.
2. Select **Menu > Applications > Relaxation test**.
3. Select **Start test**. The wrist unit starts the session by searching for your heart rate.
4. When the heart rate is found, **Testing... Lie down and relax** is displayed.
5. Once done, a beep will sound and **Test completed** is displayed.
6. Feedback on your relaxation rate, your resting heart rate (bpm) and OwnRelax value (ms) are displayed.

Following OwnRelax Results

Interpret your OwnRelax values by comparing them over time, or to average values for your gender and age groups.

1. Locate your relaxation heart rate level in the top line of the table and choose the corresponding column.
2. Find your gender and age in the left column.
3. Compare to average values for your gender and age groups.

HR (bpm)	45-55	56-65	66-75	76-85	86-95
Age	OwnRelax (ms)				
25-34	39-60	32-42	23-32	15-32	11-15
35-44	34-49	23-32	16-23	12-16	8-11
45-54	23-34	16-24	13-18	10-14	6-8
55-64	20-30	15-21	10-15	7-12	4-7
65-74	18-30	13-20	10-12	5-9	4-5
25-34	45-69	37-52	24-34	18-24	14-18
35-44	42-52	28-39	20-28	14-20	11-14
45-54	30-37	21-30	15-21	10-15	7-12
55-64	23-36	15-21	11-16	7-10	5-9
65-74	21-35	14-20	9-13	7-9	6-7

To follow your long-term OwnRelax results, select **Menu > Applications > Relaxation test > OwnRelax results**. Your OwnRelax result graph, result, date of the last test, and feedback are displayed. Press UP/DOWN to view the previous results.

To delete an OwnRelax value, select the value with UP/DOWN. Press and hold LIGHT until **Delete this value?** appears. Select **Yes**.

Transfer Data

Use ready-made strength training exercises or add your own strength training exercises in **polarpersonaltrainer.com** and transfer those to your FT80 to guide your strength training session. After training session(s), follow-up easily your fitness level development by transferring training data from FT80 to **polarpersonaltrainer.com**. The first time follow carefully instructions:

1. Transfer strength training workouts to your FT80:

1. Register in **polarpersonaltrainer.com**.
2. Follow the instructions on your computer screen to download and install the WebSync data transfer software onto your computer. If you have already registered, but not downloaded WebSync, download it in **polarpersonaltrainer.com -> downloads** and follow the installation wizard.
3. Plug in the FlowLink cable to the USB port on your computer.
4. Place your FT80 on the FlowLink facing down.
5. Follow the data transfer process from the WebSync software on your computer screen.

See **polarpersonaltrainer.com "Help"** for further instructions on data transfer.

2. Transfer training data from FT80 to your diary in **polarpersonaltrainer.com**

1. Open the Web Sync data transfer software onto your computer.
2. Plug in the FlowLink cable onto the USB port onto your computer.
3. Place your FT80 on the FlowLink facing down.
4. Follow the data transfer from your FT80 onto **polarpersonaltrainer.com** on your computer screen. See **polarpersonaltrainer.com "Help"** for further instructions.

5. SETTINGS

Watch Settings

Select **Menu** > **Settings** > **Watch, time and date**.

- **Alarm:** Set the alarm to go on **Once**, from **Monday to Friday, Every day**, or turn it **Off**. Press **BACK** to stop the alarm or **OK** to snooze for 10 minutes. The alarm cannot be used during training.
- **Time:** Set two different time of day settings: the local time and time difference to it. You can also adjust which time indicates time zone 1 and 2. In Time view, quickly change from Time1 to Time2 by pressing and holding **DOWN**.
- **Date:** Set the date.
- **Watch face:** Select **Time only** or **Time and logo** to be displayed in the Time view.

Training Settings

Select **Menu** > **Settings** > **Training settings**.

- **Training sounds:** Select **Soft**, **Loud**, **Very loud**, or **Off**.
- **Speed sensor:** If you have a GPS sensor/footpod in use, activate/deactivate it by selecting **GPS sensor**, **foot pod** or **Off**.
- **Heart rate view:** Select **Beats per minute** or **Percent of maximum**.
- **Speed view:** If you have metric units in use, select **Minutes per kilometer (min/km)** or **Kilometers per hour (km/h)**. If you have imperial units in use, select **Miles per hour (mph)** or **Minutes per mile (min/mi)**.
- **HeartTouch:** Select **On** or **Off**. When the HeartTouch function is on, you can check the time during training by bringing the wrist unit near the transmitter.

ENGLISH

- **Zone lock:** Select **Zone 1 / 2 / 3** to train in a specific heart rate zone or set the zone lock **Off**. You can also lock a zone during training.
- **Zone 1 limits:** Adjust your zone 1 limits manually. When setting the upper limit, the lower limit of zone 2 is set automatically.
- **Zone 2 limits:** Adjust your zone 2 limits manually. When setting the lower limit, the upper limit of zone 1 is set automatically. When setting the upper limit, the lower limit of zone 3 is set automatically.
- **Zone 3 limits:** Adjust your zone 3 limits manually. When setting the lower limit, the upper limit of zone 2 is set automatically.



*To access training settings before training, press OK in Time view and select **Training settings**.*

User Information

Select **Menu** > **Settings** > **User information**.

- **Weight:** Enter your weight.
- **Height:** Enter your height.
- **Date of birth:** Enter your date of birth.
- **Sex:** Select **Male** or **Female**.
- **Maximum heart rate:** Adjust the default value only if you know your laboratory-measured value.
- **Activity:** Select the alternative that best describes the overall amount and intensity of your physical activity during the past three months.
 1. **Low (0-1 hours per week):** You do not participate regularly in programmed recreational sport or heavy physical activity. For instance, you walk only for pleasure, or train hard enough to cause heavy breathing or perspiration only occasionally.

2. **Moderate (1-3 hours per week)**: You participate regularly in recreational sports. For instance, 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.
 3. **High (3-5 hours per week)**: You participate at least 3 times a week in heavy physical training. For instance, you run 20-50 km or 12-31 miles per week or spend 3-5 hours per week in comparable physical activity.
 4. **Top (5+ hours a week)**: You participate in heavy physical training at least 5 times a week, or you are training to improve performance for competitive purposes.
- **OwnIndex (VO_{2max})**: Your age-based value is shown as a default. If you perform the Polar Fitness Test™, your OwnIndex value replaces this value. If you know your laboratory-measured VO_{2max} value, you can replace your OwnIndex value with it.

General Settings

Select **Menu** > **Settings** > **General settings** .

- **Button sounds**: Select **Off**, **Loud**, **Very loud**, or **Soft**.
- **Button lock**: Select **Manual lock** or **Automatic lock**.
Automatic lock: The wrist unit locks all the buttons except LIGHT during training. Switch the button lock off by pressing and holding LIGHT until **Buttons unlocked** is displayed.
Manual lock: Press and hold LIGHT, confirm with OK. To unlock press LIGHT until **Buttons unlocked** is displayed.
- **Units**: Select **Metric units (kilograms, centimeters)** or **Imperial units (pounds, feet)** .
- **Week's starting day**: Select **Monday**, **Saturday** or **Sunday**.
- **Language**: Select **Deutsch**, **English**, **Español**, **Français**, **Italiano**, **Português**, or **Suomi**.

Accessory Settings

Foot pod Calibration*

Calibrate foot pod during training (on-the-fly calibration)

1. To make sure that the foot pod function is on, select **Menu > Settings > Training settings > Speed sensor > Footpod** and press OK.
2. You have two options for calibrating the foot pod:
 - Stop running, stand still, and press and hold LIGHT to go to **Quick menu**.
OR
 - Stop running, stand still, and press BACK once.
3. Select **Calibrate footpod**. Fix the displayed distance with the actual distance you just run, and press OK. **Calibration factor set!** is displayed. The foot pod is now calibrated and ready for action.

Set calibration factor manually

Choose either of the following:

- Before training: Select **Menu > Settings > Training settings > Footpod calib. factor**. Set the calibration factor and press OK. The foot pod is now calibrated.
OR
- After starting heart rate measurement but before training recording: In Time view, press DOWN and select **Training settings > Footpod calib. factor**. Set the calibration factor and press OK. The foot pod is now calibrated. To start training recording press BACK once, scroll with UP to select Start, and press **OK**.

*Optional S1 footpod required.

6. CUSTOMER SERVICE INFORMATION

Caring for Your Polar FT80

Wrist Unit: Clean with a mild soap and water solution, dry with towel. Never use alcohol or any abrasive material (steel wool or cleaning chemicals). Keep in a cool and dry place. Do not store 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 to direct sunlight for extended periods.

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

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

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

Service

Your Polar FT80 is designed to help you achieve personal fitness goals and indicate the level of physiological strain and intensity during training sessions. No other use is intended or implied. 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. Please see the separate Polar Customer Service Card for details.

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

ENGLISH

Changing Batteries

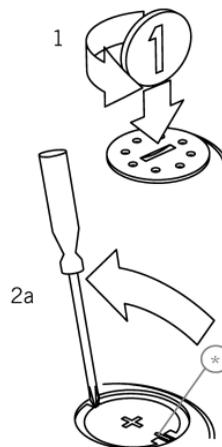
Avoid opening the sealed battery cover during the guarantee period. We recommend that you have the battery replaced by an authorized Polar Service Center. Here, your training computer will be tested for water resistance after battery replacement, and given a full periodic check. However, if you decide to change the battery yourself, please note the following:

- The low battery indicator is displayed when 10-15% of the battery capacity is left.
- Excessive use of the backlight drains the battery more rapidly.
- In cold conditions, the low battery indicator may appear, but will disappear when the temperature rises.
- The backlight and sound are automatically turned off when the low battery indicator is displayed. Any alarms set prior to the appearance of the low battery indicator will remain active.
- Changing the battery may have an effect on water resistance.

Change the sealing ring of the battery cover every time you change the battery. You can purchase the sealing ring/battery kits at well-equipped Polar retailers and authorized Polar Services. In the USA and Canada, the additional sealing rings are available at authorized Polar Service Centers only. Keep the batteries away from children. If swallowed, contact a doctor immediately. Batteries should be properly disposed of according to local regulations.

When handling a new, fully charged battery, avoid clasp-like contact, i.e. simultaneous from both sides, with metal or electrically conducting tools, like tweezers. This may short-circuit the battery causing it to discharge more rapidly. Typically, short circuiting does not damage the battery, but it may decrease the capacity and lifetime of the battery.

1. Open the battery cover with a coin by turning it from CLOSE to OPEN.
2.
 - When changing wrist unit battery (2a), remove the battery cover and lift the battery out carefully with a suitable sized small rigid stick or bar, such as a toothpick or small screwdriver. A non-metal tool is preferable. Be careful not to damage the metal sound element (*) or the grooves. Insert a new battery with the positive (+) side outwards.
 - When changing transmitter battery (2b), place the battery inside the cover with the positive (+) side facing the cover.
3. Replace the old sealing ring with a new one, fitting it snugly in the cover groove to ensure water resistance.
4. Put the cover back on and turn clockwise to CLOSE.
5. Re-enter the basic settings if you changed the wrist unit batteries.



ENGLISH

Precautions

Minimizing Possible Risks: Training may include some risk. Before beginning a regular training program, answer the following questions concerning your health status. If you answer yes to any of these questions, consult a physician 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?
- Do you have symptoms of any disease?
- Are you taking any blood pressure or heart medication?
- Do you have a history of breathing problems?
- Are you recovering from a serious illness or medical treatment?
- Do you use a pacemaker or 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, stop the exercise or continue at a lighter intensity.

If you have a pacemaker, defibrillator or other implanted electronic device, you use the Polar heart rate monitor at your own risk. Before starting use, take a maximal training stress test under the supervision of a physician. The test is to ensure the safety and reliability of the simultaneous use of the pacemaker and the Polar FT80.

If you are allergic to any substance that comes into contact with your skin or if you suspect an allergic reaction due to using the product, check the listed materials in Technical Specifications. To avoid any skin reaction to the transmitter, wear it over a shirt. Moisten the shirt well under the electrodes to ensure flawless operation. If you use insect repellent on your skin, make sure that it does not come into contact with the transmitter.

Exercise equipment with electronic components may cause interfering stray signals. To tackle these problems, try the following:

1. Remove the transmitter from your chest and use the exercise equipment as you would normally.
2. Move the wrist unit around until you find an area in which it displays no stray reading or does not flash the heart symbol. Interference is often worst right in front of the display panel of the equipment, while the left or right side of the display is relatively free of disturbance.
3. Put the transmitter back on your chest and keep the wrist unit in this interference-free area as much as possible.

If the FT80 still does not work, the piece of equipment may be electrically too noisy for wireless heart rate measurement.

Polar FT80 may be worn when swimming. To maintain water resistance, **do not press buttons under water.** For more information, visit <http://support.polar.fi>. Water resistance of Polar products is tested according to International Standard ISO 2281. Products are divided into three 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.

Marking on the case back	Water resistant characteristics
Water resistant	Protected against wash splashes, sweat, raindrops etc. Not suitable for swimming.
Water resistant 30 m/50 m	Suitable for bathing and swimming.
Water resistant 100 m	Suitable for swimming and snorkeling (without air tanks).

ENGLISH

Troubleshooting

If you don't know where you are in the menu, press and hold BACK until time is displayed.

If there are no reactions to any buttons or the wrist unit displays unusual readings, reset the wrist unit by pressing four buttons (UP, DOWN, BACK and LIGHT) simultaneously for four seconds. All other settings but time and date are saved.

If the heart rate reading becomes erratic, extremely high or shows nil (00), make sure that there are no other heart rate transmitters within 1 m/3 ft and that the transmitter strap/the textile electrodes fit snugly and are wet, clean and undamaged.

If the heart rate measurement does not work with the sports apparel, try using the strap. If it works, the problem is most probably in the apparel. Please contact the apparel retailer/manufacturer.

Strong electromagnetic signals can cause erratic readings. Electromagnetic disturbances may occur near high-voltage power lines, traffic lights, overhead lines of electric railways, electric bus lines or trams, televisions, car motors, bike computers, some motor-driven training equipment, cellular phones, or at electric security gates. To avoid erratic readings, move away from possible sources of disturbance.

If the abnormal reading continues despite moving away from the source of disturbance, slow down and check your pulse manually. If you feel it corresponds to the high reading on the display, you may be experiencing cardiac arrhythmia. Most cases of arrhythmia are not serious, but consult your doctor nevertheless.

A cardiac event may have altered your ECG waveform. In this case, consult your physician.

If heart rate measurement fails despite the actions mentioned previously, the battery of your transmitter may be empty.

Technical Specifications

Wrist Unit

Battery type	CR 2025
Battery lifetime	Average 1 year (1 h/day, 7 days/week exercise)
Battery cap sealing ring	O-ring 23.0 x 0,6 Material EPDM
Operating temperature	-10 °C to +50 °C / 14 °F to 122 °F
Wrist strap material	Polyurethane
Front cover, back cover, battery cap and wrist strap buckle	Stainless steel complying with the EU Directive 94/27/EU and amendment 1999/C 205/05 on the release of nickel from products intended to come into direct and prolonged contact with the skin.
Watch accuracy	Better than ± 0.5 seconds/day at 25 °C / 77 °F temperature.
Accuracy of heart rate measurement	$\pm 1\%$ or ± 1 bpm, whichever larger, definition applies to steady state conditions.

Transmitter

Battery type	CR 2025
Battery life	Average 2 years (1 h/day, 7 days/week)
Battery cap sealing ring	O-ring 20.0 x 1.0 Material FPM
Operating temperature	-10 °C to +50 °C / 14 °F to 122 °F
Connector material	Polyamide
Strap material	35% Polyester, 35% Polyamide, 30% Polyurethane

Limit values

Chronometer	23 h 59 min 59 s
Heart rate	15-240 bpm
Total time	0 - 9999 h 59 min 59 s
Total calories	0 - 999999 kcal/Cal
Total exercise count	65 535
Year of birth	1921 - 2020
Maximum speed with a GPS sensor	199.9 km/h
Maximum speed with footpod	29.5 km/h

Data Transfer System Requirements

Polar WebSync data transfer software and Polar FlowLink data transfer unit:	PC MS Windows (2000/XP/Vista) 64/32 bit
---	---

ENGLISH

Guarantee and Disclaimer

Limited Polar International Guarantee

This limited Polar international guarantee is issued by Polar Electro Inc. for the consumers who have purchased this product in the USA or Canada. This limited Polar international guarantee is issued by Polar Electro Oy for the consumers who have purchased this product in other countries.

Polar Electro Inc. / Polar Electro Oy guarantees to the original consumer/ purchaser of this product that the product will be free from defects in material or workmanship for two years from the date of purchase.

Please keep the receipt or stamped Polar Customer Service Card as a proof of purchase!

The guarantee does not cover the battery, damage due to misuse, abuse, accidents or non-compliance with the precautions; improper maintenance, commercial use, cracked or broken cases.

The guarantee does not cover any damage/s, losses, costs or expenses, direct, indirect or incidental, consequential or special, arising out of, or related to the product. During the guarantee period the product will be either repaired or replaced at an authorized service center free of charge.

This guarantee does not affect the consumer's statutory rights under applicable national or state laws in force, or the consumer's rights against the dealer arising from their sales/ purchase contract.

© 2008 Polar Electro Oy, FIN-90440 KEMPELE, Finland.

Polar Electro Oy is a ISO 9001:2000 certified company. All rights reserved. No part of this manual may be used or reproduced in any form or by any means without prior written permission of Polar Electro Oy. The names and logos marked with a TM symbol in this user manual or in the package of this product are trademarks of Polar Electro Oy. The names and logos marked with a ® symbol in this user manual or in the package of this product are registered trademarks of Polar Electro Oy, except that Windows is a trademark of Microsoft Corporation.

Disclaimer

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

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

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

This product is protected by one or several of the following patents: FI 88972, DE4223657.6 A, FI 9219139.8, FR 92.09150, GB 2258587, HK 306/1996, SG 9592117-7, US 5486818, FI 110303 B, EP 0748185, JP3831410, US6104947, DE 69532803.4-08, FI 100452, EP 0804120, DE 69532249.4-08, US 5840039, FI 111514 B, DE 19781642T1, GB 2326240, HK 1016857, US 6277080, FI 114202, US 6537227, EP 1147790, HK1040065, EP 1245184, US 7076291, HK1048426. Other patents pending.

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

CE 0537

This product is compliant with Directive 93/42/EEC. The relevant Declaration of Conformity is available at www.support.polar.fi/declaration_of_conformity.



Polar products are electronic devices and are in the scope of Directive 2002/96/EC of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE). These 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.