

## ***Operating Instructions***



CE

## 1. Introduction

Congratulations! You have got a **PULSE** heart rate monitor. With this instrument you can monitor your heart rate.

Your **PULSE** consists of a chest strap which registers the heart beat, and a watch which receives these signals and monitors them on an LCD display. Furthermore, **PULSE** offers other useful features to optimize your training.

**Note:** Read this manual thoroughly before using the heart rate monitor.

## 2. Functions

- Heart rate
- Maximum pulse
- Average pulse
- Programmable training zone (upper and lower limit) with alarm
- Calorie consumption
- Stopwatch
- Time
- Alarm
- Date with weekday
- EL-Backlight
- Incl. 2 lithium batteries CR 2032 3 V
- Equipment: chest strap

## 3. Getting started

- The heart rate monitor **PULSE** is supplied with inserted batteries. To activate the watch, press any button.
- The energy saving feature switches off the clock automatically at 12.00 when not used (no functions are active).
- If the unit was activated for the first time, the basic setting and personal data have to be set.

### 3.1 Basic setting

#### 3.1.1 How to adjust the date and the time format

- Press and hold **SET/REST** button for 3 seconds in clock mode to enter setting mode. The year digits start flashing.

## Heart rate monitor



- Press **SET/REST** button (reverse) or **START/STOP** button (forward) to adjust the year. Press and hold the buttons for fast setting.
- Press **MODE** button. The month digits start flashing.
- Press **SET/REST** (reverse) or **START/STOP** (forward) button to adjust the data (flashing).
- Press **MODE** button to select the next digits. The sequence is shown as follows:

**YEAR → MONTH → DAY → HOUR → MINUTE → 12/24HR**

- When setting 12/24Hr, press **SET/REST** button to select 12-hour or 24-hour display format. If 12-hour display format is selected, there will be a sun for daytime and a moon for nighttime.
- The actual weekday will be automatically marked in the lower display.

### 3.1.2 Backlight

- Press **EL** button.
- The backlight will light for 3 seconds.

### 3.1.3 Personal settings

- **Setting the Age**
  - Press **MODE** button to select to view "Age".
  - Press **START/STOP** button to set the age.
  - Hold the button, you will enter fast mode.
  - Please note that the numbers only run upwards.
  - The setting range is between 5 and 99 years (Default: 16 years).
- **Setting the weight (KG)**
  - After setting the age press **SET/REST** button.
  - "KG" appears on the display.
  - Set your weight with **START/STOP** button.
  - Please note that the numbers only run upwards.
  - The setting range is between 20 - 199 KG (Default: 50 KG).
- **Setting the maximum oxygen uptake (VO<sub>2</sub> = VO<sub>2</sub> max.)**
  - After setting the weight press **SET/REST** button again.
  - "VO<sub>2</sub>" appears on the display.

- Set your maximum oxygen uptake with **START/STOP** button.
  - Please note that the numbers only run upwards.
  - At the age of 20-30, the average value is between 35-40 ml/min/kg. Top athletes can peak values of 80-90 ml/min/kg.
  - The setting range is between 10 - 94 ml/min/kg (Default: 40).
- **Indication of maximum heart rate (MHR)**
    - After setting the maximum oxygen uptake press **SET/REST** button again.
    - "MHR" appears on the display.
    - The maximum heart rate (MHR) is calculated by using the below formula:  $MHR = 220 - \text{age of user}$ .
  - **Indication of relative heart rate (%)**
    - After calling up the maximum heart rate, press **SET/REST** button again.
    - "%" appears on the display.
    - In addition to absolute heart rate reading the watch also includes a relative heart rate reading to the user. The relative heart rate is the percentage that compares the acquired heart rate with the maximum heart rate.
  - After all adjustments are completed, press **MODE** button to exit the setting mode. If there is no button operation for about 1 minute in setting mode, the watch will return back to normal mode automatically.

## 4. Operation

### 4.1 4.2 Equipping the chest strap

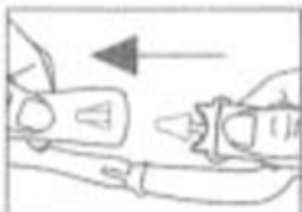
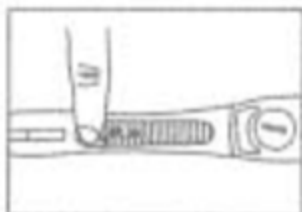
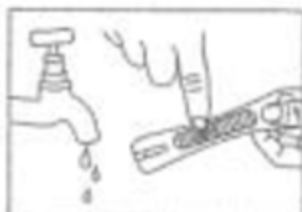
- Attach the transmitter to the elastic strap provided. Put the round fastener at the elastic strap vertically from the bottom up within the cut-out at the end of the transmitter part. Pull the elastic strap outwards and push the round fastener firmly into the cut-out until it snaps in.



## Heart rate monitor

GB

- On the inside of the chest strap you will find grooved surfaces. These are the sensors that detect your heart beat later. Wet the grooved electrode areas (grooved surfaces) of the transmitter with water.
- Secure the transmitter on your chest below the chest muscle. The sensor should be placed directly on your skin above your heart.
- To close the chest strap, put the pin into the opening provided. Move the chest strap until there is an optimal contact. It can last some time to get a stable contact.



### 4.2 Queries of the data

- Press **MODE** button to enter the respective display area. The sequence is shown as follows:

**DATE/TIME → DATE/TIME/HEART RATE →**

**DATE/TIME/MAX. HEART RATE → DATE/TIME/∅ HEART RATE →**

**ALARM HEART RATE UPPER LIMIT →**

**ALARM HEART RATE LOWER LIMIT → STOP WATCH/HEART RATE →**

**ALARM → PERSONAL DATA**

#### 4.2.1 Heart rate measurement

- Press **MODE** button to enter pulse mode. The "heart symbol" will be displayed.
- When the heart rate signal is received from the transmitter, the heart rate is shown on the display. It can last some time to get the correct value.



#### 4.2.2 Maximum heart rate

- Press **MODE** button to get the maximum heart rate. "MAX" will be displayed next to the heart symbol. This value is the highest measured heart rate and is stored until it is exceeded.



#### 4.2.3 Average heart rate

- Press **MODE** button to get the average heart rate.
- "AVG" will be displayed next to the heart symbol.
- The average heart rate is calculated from all measured heart rate values.

*Note: The measuring range for the heart rate ranges from 35-250!*

#### 4.2.4 Programmable training zone

- You can set a heart rate zone to avoid exceeding or falling below a target heart rate. When measured during the training, you get a beep as an indication that you are outside the set heart rate zone and can enhance your workout or slow down accordingly. This helps to achieve defined training goals.

##### Desirable heart rate range

- The desirable heart rate range is the realm that is defined by the upper and lower limits.
  1. Get the limits by consulting a doctor or trainer.
  2. Let yourself be guided by the maximum heart rate (MHR), calculated from your personal settings.

**TRAINING TIPS:**

There are 3 training zones:

**1. The Health Zone (50 to 70% of maximum heart rate)**

*This zone is for beginners and people who haven't been practicing for a long time. When exercising in the Health Zone the intensity should be low and relaxed.*

**2. The Fitness Zone (70 to 80% of maximum heart rate)**

*Workout in this zone improves your fitness, when you already have been exercising for a while and feel fit. If you have regular Zone Two intensity exercise, the heart is made stronger as well as it helps to convert food into energy.*

**3. The High Performance Zone (80 to 100% of maximum heart rate)**

*Exercising in this zone is to get your maximum fitness. It is generally only to be recommended for those who can exercise in the Fitness Zone for 30-45 minutes without problems. The intensity should be increased step by step.*

**Setting of upper heart rate**

- Press **MODE** button to enter the upper limit.
- You can confirm the default value with **MODE** button.
- To access the setting mode, press and hold **SET/REST** button. The value is flashing. Press **START/STOP** or **SET/REST** button to adjust the desired value. Hold the buttons, you will enter fast mode.
- Confirm with **MODE** button.
- To activate (H flashes)/turn off the alarm function, press **SET/REST** button.

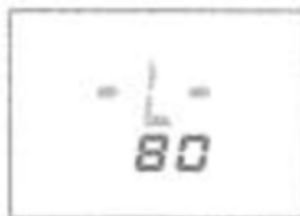


## Heart rate monitor

GB

### Setting of lower heart rate

- Press **MODE** button to enter the lower limit. Set the lower limit in the same way.
- Confirm with **MODE** button.
- To activate (L flashes)/turn off the alarm function, press **SET/REST** button.



### 4.2.5 Stopwatch and indication of calories

#### Stopwatch

- Press **MODE** button to enter stop watch mode.
- Minutes, seconds and 1/100-seconds as well as the indication of pulse with heart symbol are shown on the display.
- Press **START/STOP** button to start the stop watch.
- Press **START/STOP** button again to stop the stop watch. The display stops, but time is running in the background. This feature allows you to record lap times.
- PRESS **SET/REST** button to stop the stop watch completely.
- Press **START/STOP** button to start the stop watch again.
- Press and hold **SET/REST** button to reset the stop watch to 0:00.00.



**Note:** Resoluton: 1/100 Sec., measuring range: 23 hr 59 m 59 s

#### Calorie consumption

- Press **START/STOP** or **SET/REST** button to stop the stop watch.
- Press **SET/REST** button to show the calorie consumption.
- Press **START/STOP** button to return to the time display. The clock will still continue to run (if you stopped it with **START/STOP** button) in the background. This function makes it possible to call up the calorie consumption per round.



**Note:**

Resoluton: 1 Kcal., measuring range: 19999.99 Kcal



#### 4.2.6 Alarm clock function

- Press **MODE** button to enter Alarm mode.
- Press and hold **SET/REST** for 3 seconds to enter setting mode. The hour digits start flashing.
- Press **SET/REST** (reverse) or **START/STOP** (forward) to adjust the flashing digits. Press and hold the buttons for fast setting.
- Press **MODE** button. The minute digits start flashing.
- Press **SET/REST** (reverse) or **START/STOP** (forward) to adjust the minutes.
- Confirm it with **MODE** button.
- Press **SET/REST** button to toggle the alarm function on or off. If the alarm function is "on", the alarm icon will be shown.
- After all adjustments are completed, press **MODE** button to exit the setting mode.
- Press any button to stop the alarm sound.

#### 5. Battery replacement

- Batteries: Watch 1 x CR 2032, transmitter 1 x CR 2032
- Please contact a specialized dealer for battery change of the watch.
- The battery of the chest strap you can change by yourself. Open the battery compartment with a coin in the direction indicated by the arrow.
- Insert the battery, "+"-pole upwards. Close the battery door.
- Observe correct polarity. Low batteries should be changed soon to avoid the damage resulting from a leaking battery. Batteries contain harmful acids. Wear protective glasses and gloves when handling with leaked batteries.

##### Caution:

Please do not dispose of old electronic devices and empty batteries in household waste. To protect the environment, take them to your retail store or to appropriate collection sites according to national or local regulations.

## **6. Maintenance**

- *Keep it in a dry place.*
- *Do not expose the instrument to extreme temperatures, vibration or shock.*
- *Clean it with a soft damp cloth. Do not use solvents or scouring agents.*
- *If the unit does not work properly, change the batteries.*

## **7. Liability disclaimer**

- *The product is not a toy. Keep it out of reach of children.*
- *The product is not to be used for medical purpose or for public information, but is determined for home use only.*
- *The specifications of this product may change without prior notice.*
- *No part of this manual may be reproduced without written consent of TFA Dostmann.*
- *Please do not try to repair the unit. Contact the original point of purchase. Please change the battery before complaining. No guarantee if the instrument is handled or opened improperly.*