KETTLER

FB600

Trainings- und Bedienungsanleitung	deutsch
Training and Operating Instructions	english
Mode d'emploi et instructions d'entraînement	française
Trainings- en bedieningshandleiding	nederlands
Instrucciones de entrenamiento y manejo	español
Istruzioni per l'allenamento e per l'uso	italiano
Instrukcja treningowa i instrukcja obsługi	polski
Návod na trénink a obsluhu	čeština
Trænings – og brugervejledning	dansk

KETTLER

13:45

CARDIO FITNESS | ELECTRONIC CONTROL

RECOVERY   MEM   START

REC   —   DISP   +

SETTINGS   RESET   PRESETS
TIME

MADE IN GERMANY

KETTLER

Training and Operating Instructions

Safety instructions

Please observe the following instructions for your own safety:

• The training device must be set up on an appropriate and firm surface.

• Inspect the connections for firm fitting before initial operation and additionally after approximately six operation days.

• In order to prevent injuries caused by wrong stress or overstress, the training device may only be used in accordance with the instructions.

• It is not recommended to permanently set up the device in humid rooms due to the resulting corrosion development.

• Assure yourself regularly that the training device functions properly and that it is in duly condition.

• The operator is responsible for the safety controls, which have to be carried out on a regular and proper basis.

• Defective or damaged parts must be exchanged immediately. Only use original KETTLER spare parts.

• The device may not be used until after repairs are completed.

• The safety level of the device can only be maintained provided that it is regularly inspected for damage and wear and tear.

For your safety:

• **Please clarify with your general practitioner before you start with the training, whether or not your health condition allows you to train with this device. The diagnostic findings should be the basis for the determination of your training programme. Wrong or excessive training can cause damage to your health.**

Short description

The electronics assembly has the following functions:
• Total kilometres are saved
• Last training is saved
• Presetting is saved
• Pulse display without training possible
• Switch between kilometres and miles

Function range

The four buttons will be described in short below.

DISP (press shortly)

• Switches from time display to ready for training
• Stops or starts display change.
• Switches to next input range.
Settings or values will be accepted.

DISP (press longer) RESET

• Deletes display for a reset.
Only possible in standstill..

Minus – / Plus +

With these function buttons, you can change the values in the different input data before the start of the training
• Press longer > fast run through the values
• Press "Plus" and "Minus" together: input data will be reset)

Minus – (press shortly when time is displayed)

• Display of last training data (MEM) and total kilometres (ODO))

Minus – (press longer when time is displayed)

• Set time (TIME)
• Switch from ME to IM (SETTINGS)
ME = [24h], [KJoule], [kilometres] -display
IM = [12h], [Kcal], [miles] -

Plus + (press longer)

• Recall of training presetting

REC (recovery pulse with fitness mark)

By pressing this function button, the recovery pulse function is started and a fitness grade is calculated.

Measuring the pulse

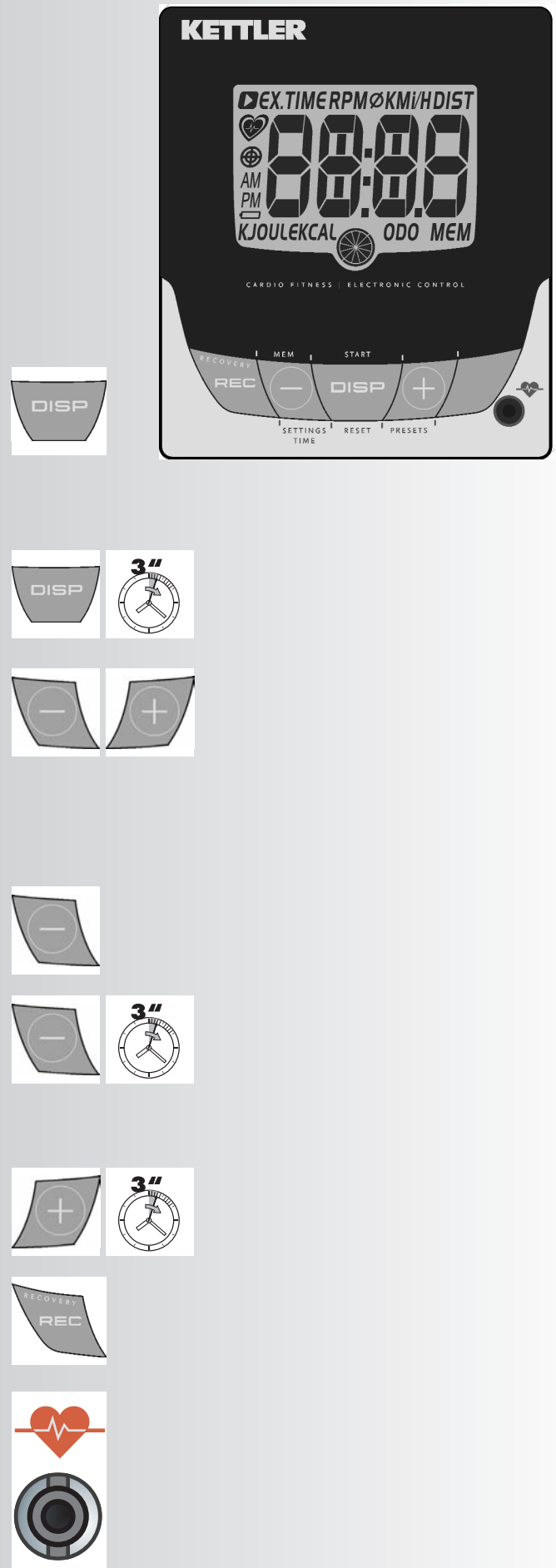The measurement of the pulse can be carried out by means of 3 sources:
1. Ear clip -
The plug is put into the socket.
2. Hand pulse
The connection is situated at the back of the display;
3 Breast belt with plug recipient (available as accessory)
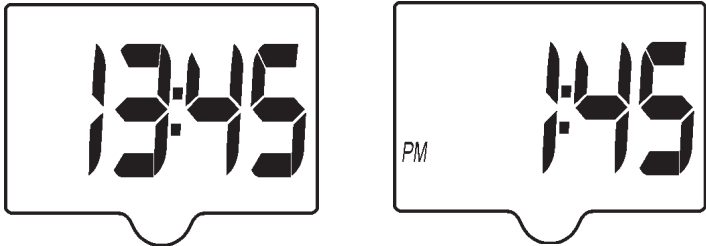Please observe the respective instructions.

Training and Operating Instructions
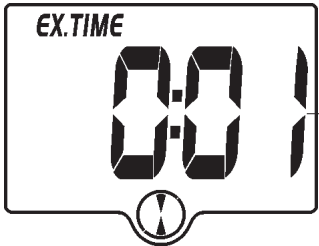
Indicating range / Display

The display informs you about the different functions.
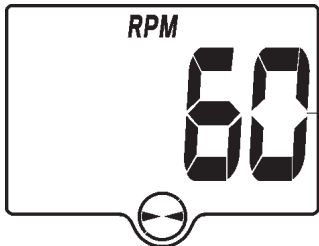

**Time
24 hours or 12
hours AM/PM**
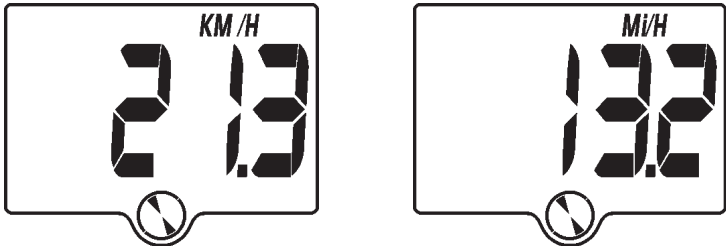

**Training time
(EX.TIME)**

Display from 0:00 – 99:59

**Pedalling frequency
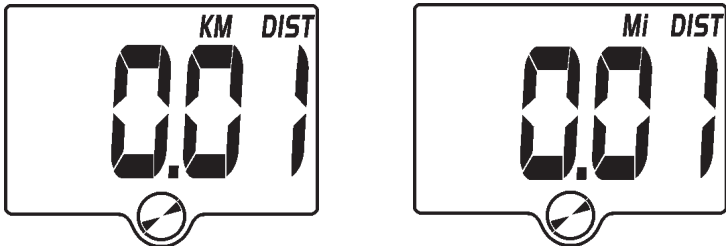(RPM)**

Display from
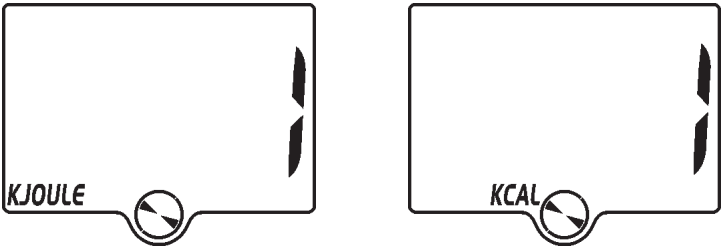11 – 199

**Speed (KM/H) or
(Mi/H)**

Display from
3,9 – 70,6 km/h
2,4 – 43,9 m/h
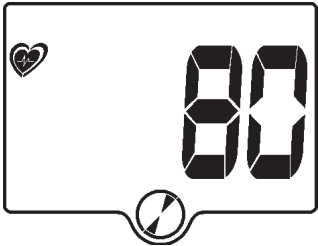

**Distance (DIST) KM
or Mi**

Display from
0,00 – 99,99

Energiever-brauch Energy consumption (KJOULE) or (KCAL)

KJOULE

KCAL

Display from
0 – 9999

Pulse

♡

Heart symbol (flashes), if signal recognised
Display from
40 – 220

Symbols

Meaning

Change of display active
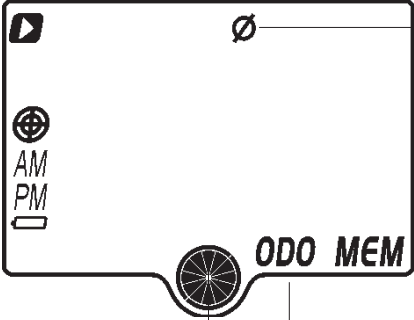
Training goals available
Input training goals
IM setting
[12h], [Kcal], [miles]
Battery charge low
Change battery

AM
PM

ODO MEM

Last training values will be displayed

MEM
last trainings values are displayed

Odo
Total k(m) will be displayed
Display from 0 – 9999

Animation wheel
Training mode
Pedal rotation will be identified

Settings

Time
and
ME = [24h], [KJoule], [kilometres] -display

or

IM = [12h], [Kcal], [miles] –display

• Minus – (press longer when time is displayed)
Hours flash
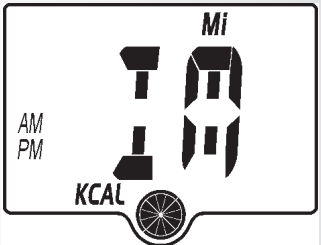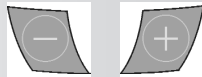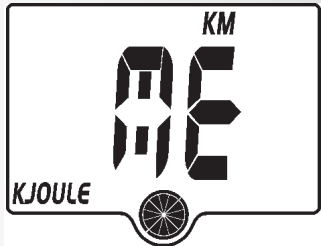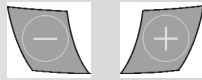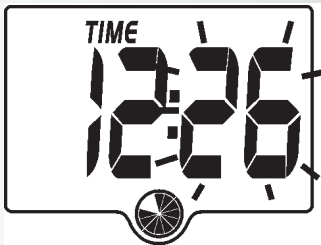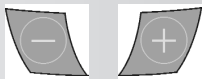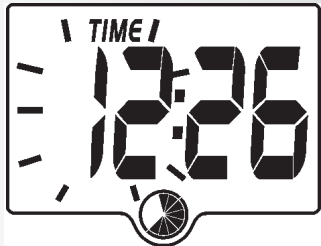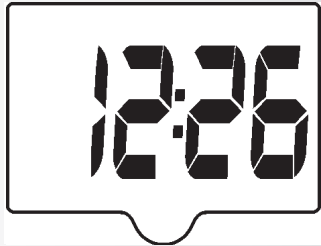
• press **Minus – / Plus +**
Set hour

• press **DISP**
Minutes flash

• press **Minus – / Plus +**
set minutes

• press **DISP**

• **Minus – / Plus +**
Set to IM or ME

• press **DISP**
Time will be displayed

Training

1. 1. Training without presetting / Pulse measurement

- press **DISP**
  Training time "EX.TIME" will be displayed.
  or

Pulse value will be displayed if a pulse signal is identified via ear clip, hand pulse or plug recipient.

and / or

- **Start pedalling**
  Training time "EX.TIME" and the following displays will be increasingly displayed.

Change of display is active

Animation wheel is active

2. Training with presetting

Presetting values can be entered for time, distance and energy. With start of training, such entered values will count down. If zero is reached, the display will flash and a signal will sound. Then, the presetting value will continue to count up. When switch display mode is active, the range will be displayed which will reach zero first. A value can be entered for pulse which will sound an alarm signal as soon as reached.

- Press longer **Plus**

Display: "TIME" presetting

Time setting (EX.TIME)
- Enter values using "Plus" or "Minus" (e.g. 30:00)
- Confirm with "DISP".

Display: next setting "DISTANCE"

Distance setting (DIST)
- Enter values using "Plus" or "Minus" (e.g. 780)
- Confirm with "DISP".

Display: next setting "ENERGY"

Energy setting (KJOULE or KCAL)
- Enter values using "Plus" or "Minus" (e.g. 780)
- Confirm with "DISP".

Display: next setting "age input"

Pulse monitoring with alarm signal
- Enter value using "Plus" or "Minus" (e.g. 131)
- Confirm with "DISP" (presetting mode completed)

Display: ready for training with time setting

- **Pedalling** ill start the training

Presetting values displayed
  will count down.
Change of display is active
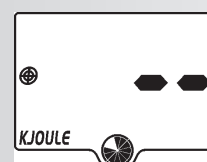Animation wheel is active

Note:

- Pressing "DISP" will stop and start change of display.
- The presetting symbol will be hidden if all presetting is counted down to zero.
- The presetting will be saved and will be re-displayed with the next training.
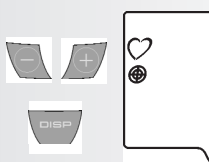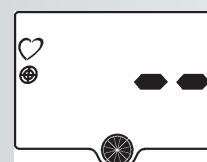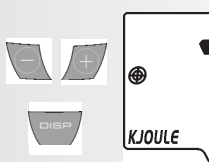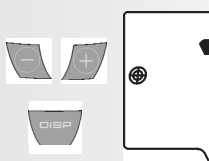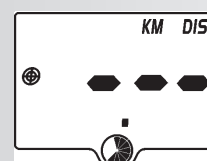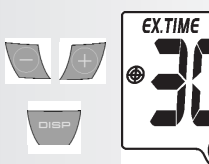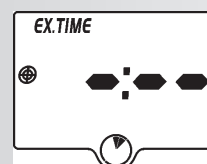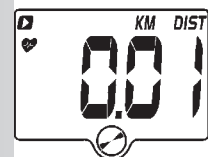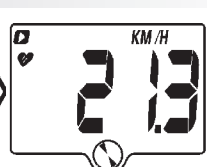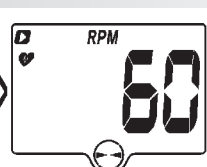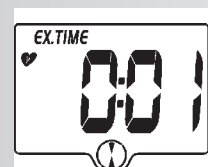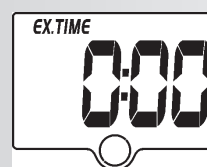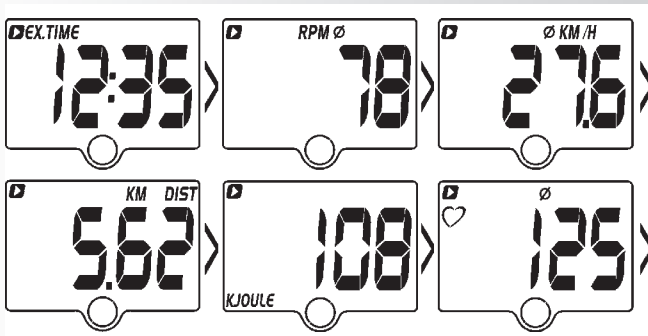
Training interruption/end of training

With less than 10 pedal rotations per minute, the electronics assembly of the training device identifies a training interruption. The animation wheel is displayed empty. The achieved training data are displayed. Rotations, speed and pulse level are displayed as average values with the symbol Ø.

• Pressing "DISP" will stop and start change of display.

The training data are displayed for 4 minutes. If you do not press any button nor train during this period of time, time electronics assembly of the training device switches to standy-by mode and displays the time.

Comment:

Training interruption is identified with a delay of a few seconds.

Resumption of training

If you resume training within 4 minutes, the last values continue to be counted up or down.

RECOVERY – Function

Recovery pulse measurement

Press "RECOVERY" at the end of training.

The electronics assembly of the training device measures your pulse 60 seconds in reverse.

The difference between start pulse and end pulse helps to determine a fitness grade (see example F 1.6). The display will be stopped after 20 seconds.

"RECOVERY" interrupts the recovery pulse function or the fitness mark display.

If no pulse is measured in the beginning or at the end of the reverse counting, the error message "Err" is displayed.
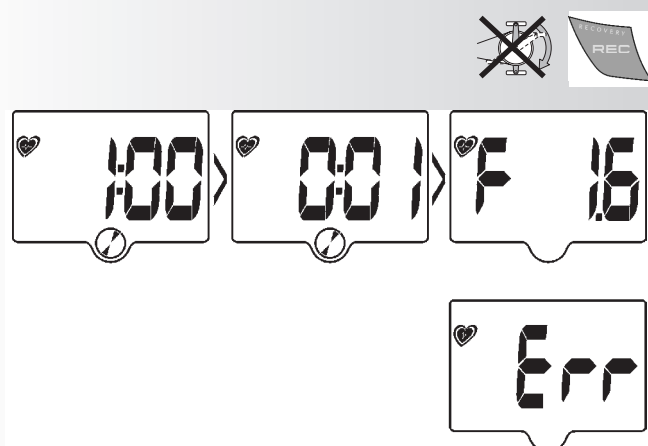
Recall last training (MEM) with total kilometres (ODO)

When pressing RESET or switching off the display (standby), the last training values are saved automatically.

Recall of last training data

• **Minus –** (press shortly when time is displayed)

All segments are shortly displayed

The last training time is displayed

• Press **DISP**

The display skips to the next range.

Stopping last display of training data

• Press **Minus**
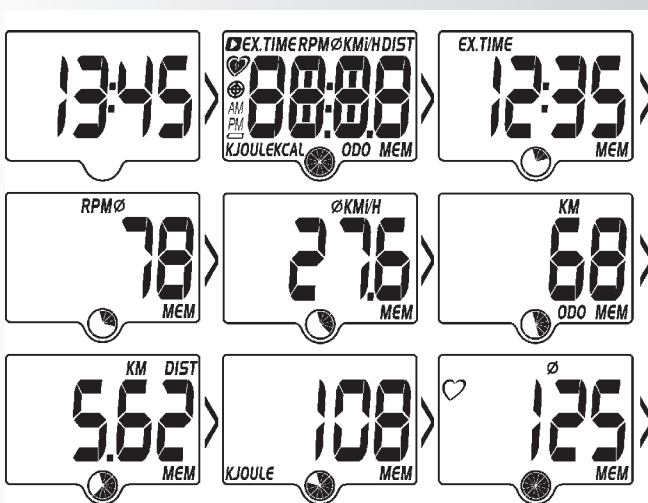
General instructions
System signals

Activation of the device
If you activate the device, a signal is emitted during the segment test.

Presetting
A short signal is emitted, if you reach a presetting such as time, distance and KJoule/ kcal.

Pulse monitoring
If the entered pulse value is reached, 2 short signals are emitted.

Recovery
Calculation of the fitness mark (F):

$$\text{mark (F)} = 6.0 - \left(\frac{10 \times (P1-P2)}{P1} \right)^2$$

P1 = stress pulse   P2 = recovery pulse

Grade 1 = very good   Grade 6 = insufficient

Calculation of average value
The calculations of the average values refer to training units in the past until a reset or the stand-by mode.

Instructions for pulse measurement
The pulse measurement starts as soon as the heart in the display blinks in time with your pulse beat.

With ear clip
The pulse sensor works with infrared light and measures the variations in translucence in your skin, which are produced by your pulse beat. Rub your ear ten times strongly to activate the blood circulation before attaching the pulse sensor to your earlobe.

Avoid disturbing pulses.

• Attach the ear clip properly to your earlobe and look for the best point for the measurement (heart symbol blinks without interruption).

• Do not train directly under strong incidence of light, e.g. neon light, halogen light, spotlights, sun light.

• Completely eliminate any shocks or bounces of the ear sensor and the cable. Always attach the cable with a clip at your clothing or, even better, at your headband.

With breast belt
Please observe the corresponding instructions.

With hand pulse
An extra-low voltage caused by the contractions of your heart is registered by the hand sensors and evaluated by the electronics assembly of the device

• Always grab the contact faces with both hands

• Avoid jerky grasping

• Hold your hands calmly and avoid contractions and rubbing on the contact faces.

Comment:
Only one way of pulse measurement is possible: either with ear clip or with hand pulse or with breast belt. If no ear clip or plug recipient is located in the pulse plug, hand pulse measurement is activated. If you insert an ear clip or a plug recipient in the pulse plug, hand pulse measurement is automatically deactivated. It is not necessary to disconnect the plug of the hand pulse measurement.

Failures with the training computer
Press the reset button

Battery change
If the empty battery symbol appears in the display, the batteries should be replaced. The total kilometres, presetting and last training values get lost. Time must be reset.

Training instructions
Sports medicine and training science use cycle ergometry, among other things, for the examination of the functional capability of heart, circulation and respiratory system.

You can find out whether or not you have achieved the desired effect from your training after several weeks using the following method:

1. You manage a particular endurance performance with less heart / circulation performance than previously

2. You sustain a particular endurance performance with the same heart / circulation performance over a longer period.

3. You recover more quickly than previously after a particular heart / circulation performance.

Guide values for the endurance training
Maximalpulse: maximum strain means the reaching of the individual maximum pulse. The maximum achievable heart rate is dependant on age.

Here the following empirical formula applies: the maximum heart rate per minute corresponds to 220 heart beats minus age in years.

Example: age 50 years -> 220 – 50 = 170 pulse/min.

Load intensity
Load pulse: the optimum intensity of load is reached at 65–75 % (see also diagram) of the maximum pulse. This value changes depending on age.

Pulsediagramm
Fitness and Fat Burner

Pulse

Maximalpulse (220 minus Age)

Fitnesspulse (75% of Max.Pulse)

Fat combustion pulse (65% of Max.Pulse)

20 25 30 35 40 45 50 55 60 65 70 75 80 90 Age
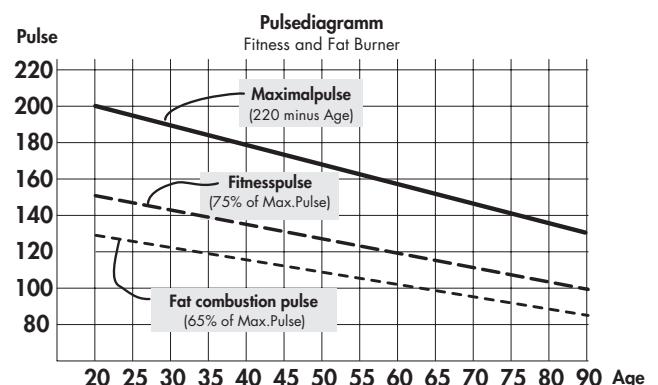
Extent of load
Duration of a training unit and its frequency per week:

Training frequency	Duration of training
daily	10 minutes
2-3 times a week	20-30 minutes
1-2 times a week	30-60 minutes

Training and Operating Instructions

The optimum extent of load is attained, if 65–75 % of the individual heart / circulation performance is achieved over a longer period.

Beginners should not begin with training units of 30-60 minutes.

The beginner's training can be planned as follows in the first 4 weeks:

Training frequency	Extent of training session
1st week	
3 times a week	2 minutes of training Break of 1 minute for physical exercises 2 minutes of training Break of 1 minute for physical exercises 2 minutes of training
2nd week	
3 times a week	3 minutes of training Break of 1 minute for physical exercises 3 minutes of training Break of 1 minute for physical exercises 2 minutes of training
3rd week	
3 times a week	4 minutes of training Break of 1 minute for physical exercises 4 minutes of training Break of 1 minute for physical exercises 3 minutes of training
4th week	
3 times a week	5 minutes of training Break of 1 minute for physical exercises 4 minutes of training Break of 1 minute for physical exercises 4 minutes of training

It is recommended that you perform approx. 5 minutes of exercises before and after every training unit, in order to warm up and cool down. There should be a training-free day between each two consecutive training units, if you prefer training sessions of 20-30 minutes 3 times a week later on in your training. Otherwise, there is no reason why you should not train daily.

Performance table

Date	Restpulse	Stress pulse	Recovery pulse	Slope	Time (min)	Distance (km)	Energy consumption (Kcal)	Fitness	Mark
Date	Restpulse	Stress pulse	Recovery pulse	Slope	Time (min)	Distance (km)	Energy consumption (Kcal)	Fitness	Mark