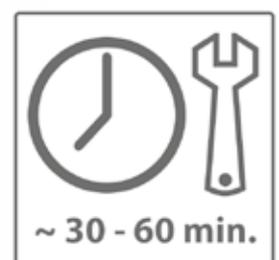
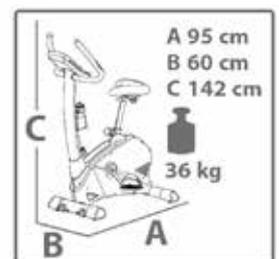




## Assembly and Operating Instructions



CSTBX40.01.01

Art. No. CST-BX40

Ergometer **BX40**



**Dear Customer,**

Thank you for deciding for a high-quality training equipment of the brand cardiostrong®, the brand that makes athlete's hearts beat faster. cardiostrong® offers a wide range of home fitness equipment like elliptical cross trainers, ergometers, treadmills and rowing machines. cardiostrong® equipment is the optimal equipment for all those who want to train at home independent of goals and fitness level. For further information please visit [www.sport-tiedje.com](http://www.sport-tiedje.com) or [www.cardiostrong.de](http://www.cardiostrong.de).



### **SAFETY NOTICE**

Please read all of the instructions carefully before assembly and first use. These instructions are intended to ensure speedy assembly and explain safe usage. Make sure that all people exercising with the equipment (in particular children and persons with limited physical, sensory, mental or motor capabilities) are informed about these instructions and its content in advance. In case of doubt, a responsible person must supervise the use of the equipment.

This equipment has been manufactured according to the latest safety knowledge. As far as possible, potential safety hazards which could cause injury have been eliminated. Make sure to follow the instructions carefully and that all parts are securely in place. If required, read through the instructions again to correct any mistakes.

Please pay close attention to the safety and maintenance instructions given here. The contract partner cannot be held liable for damage to health, accidents or damage to the equipment when it is not used in accordance with these instructions.

The equipment is only suitable for use at home. The equipment is not suitable for semi-professional (e. g., hospitals, clubs, hotels, schools, etc.) and commercial or professional use (e. g., health clubs).

Retain these instructions in a safe place for future reference, maintenance or when ordering replacement parts.

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## 1.1 Technical data

### LED display of

- + speed in km/h
- + training time in min
- + training distance in km
- + cadence (rotations per minute)
- + calories burnt in kcal
- + heart rate (when using the hand sensors or a chest strap)
- + Watt
- + resistance level

Resistance system: electronic magnetic brake system  
Resistance level: 16  
Watt: 10 - 350 Watt

Training programmes in all: 24  
Manual programmes: 1  
Pre-set programmes: 12  
Watt-controlled programmes: 1  
Heart rate controlled programmes: 5  
User-defined programmes: 4  
Body fat programmes: 1

Flywheel: 10 kg  
Transmission ratio: 1:8  
Length of the pedal arms: 17 cm

### Weight and dimensions:

Product weight (gross, incl. packaging): 38,6 kg  
Product weight (net, without packaging): 36 kg

Packaging dimensions (L x W x H): approx. 970 mm x 270 mm x 640 mm  
Set-up dimensions (L x W x H): approx. 950 mm x 600 mm x 1420 mm  
Maximum user weight: 130 kg/286 lbs

## 1.2 Personal safety

- + Before you start using the equipment, you should consult your physician that this type of exercise is suitable for you from a health perspective. Particularly affected are persons who: have a hereditary disposition to high blood pressure or heart disease, are over the age of 45, smoke, have high cholesterol values, are overweight and/or have not exercised regularly in the past year.
- + Please note that working out excessively can seriously damage your health. Please also be aware that heart rate monitoring systems might be imprecise.
- + The equipment may only be used for its intended purpose; that means for cycle training for adults.
- + Any other usage is prohibited and potentially dangerous. The contract partner cannot be held liable for damage resulting from improper use.
- + The equipment is strictly for use by one person at a time.
- + Children should not be allowed unsupervised access to the equipment.
- + Before starting your training, make yourself familiar with all of the equipment's functions and setting options. Have an expert explain the correct usage of the product to you.
- + Make sure that nobody is in the range of motion of the equipment while exercising.
- + Keep your hands, feet and other body parts, hair, clothing, jewelry and other objects well clear of moving parts.
- + During use, wear suitable sports clothing rather than loose or baggy clothing. When selecting sports shoes, think about the suitability of the sole – preferably this should be made of rubber or other non-slip materials. Shoes with heels, leather soles, studs or spikes are not suitable. Never work out in bare feet.
- + It is also important to take note of the information given in the workout instructions for creating a workout plan.
- + At the first signs of weakness, nausea, dizziness, pain, difficulty in breathing or other abnormal symptoms, stop your workout immediately and, if necessary, consult your physician.
- + Without prior agreement from your authorized contract partner, opening the equipment is prohibited.

## 1.3 Electrical safety

- + The equipment requires a 220 - 230V / 50 Hertz mains power supply.
- + The equipment should be connected directly to a grounded plug socket only by means of the power cable supplied. The use of multi-socket adapters or similar is not recommended. Extension leads must comply with local electrical safety guidelines. Always fully unwind the power cable.
- + The outlet should be secured with a fuse with a minimum value of „16 amperes, slow“.
- + In order to reduce the risk of an electric shock, always unplug the equipment from the mains socket immediately after your workout, before assembly or dismantling, and before maintenance or cleaning. Do not pull on the cable.
- + When plugged in, do not leave the equipment unattended at any time. To avoid use by anyone unfamiliar with the operating instructions, the power cable should be removed when the equipment is not in use.
- + Keep the power cable away from heat, oil and sharp edges. Do not route the power cable underneath the equipment or under a carpet or rug, and do not place any objects on top of it.
- + Make no modifications to either the power cable or the mains plug.
- + If the power cable or the plug are damaged or defective, contact your authorized contract partner. Do not use the equipment in the meantime.
- + Do not keep electrical devices (e. g., mobile phones) in close proximity to the console or the control electronics, otherwise display values (e. g., pulse measuring) could be inaccurate.

## 1.4 Set-up place

- + The equipment should only be used indoors, in a sufficiently heated and dry area (ambient temperature between 10°C and 35°C). The equipment should not be used outdoors or in rooms with high humidity (over 70%) like swimming pools. The equipment should only be stored in surroundings with an ambient temperature between 5°C and 45°C.
- + The training room should be well ventilated during training and not be exposed to any draughts.
- + Choose a location in which to place the equipment such that there is enough free space/clearance to the front, the rear and to the sides of the equipment (at least 1.50 m). Furthermore, the equipment should not be set up in main entrances or on escape routes.
- + Always keep the power cable away from hot surfaces and grounds and make sure that the cable is not stuck somewhere or becomes a „trip hazard“.
- + No objects of any type should be inserted into the openings of the equipment.

- + The equipment should be placed on a level and solid surface, any unevenness in the floor should be leveled out.
- + A floor protective mat / equipment underlay can help to protect high-quality floor coverings (parquet, laminate, cork, carpets) from dents and sweat and can help to level out slight unevenness.

## 2 ASSEMBLY INSTRUCTIONS, MAINTENANCE AND CARE

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### 2.1 General instructions

- + Please check if all parts and tools belonging to the equipment are included in the delivery and if there is any transport damage. If there are any complaints, please contact your contract partner directly.
- + Some of the nuts and bolts to be used in assembly are already pre-mounted in order to make set-up as easy as possible.
- + The equipment must be assembled by adults. In case of doubt, ask for assistance from another person with technical skills.
- + Keep children away from the equipment during assembly, because small parts are included in the delivery and may be swallowed.
- + Make sure that you have enough space (at least 1.50 m) in every direction during assembly.
- + Do not leave any tools and packaging materials like plastic sheeting laying around to avoid danger of suffocation for children.
- + Assemble the equipment on an underlay mat or on the cardboard packaging in order to avoid damage to the equipment and to the floor (scratches).
- + Before starting assembly, all individual parts should be placed on the floor next to each other.
- + Read the assembly instructions carefully and assemble the equipment according to the illustrations. Proceed carefully and cautiously.
- + First loosen all parts and check for their correct fitting. Then tighten the screws using a tool.
- + Modifications to the design or improper repairs may pose a hazard to the user and should not be carried out. The product warranty may be void as a result.
- + Only authorized service technicians are permitted to carry out all servicing and/or repairs – it excludes maintenance and care.
- + Damaged or worn components may impair your safety and the lifespan of the equipment. You should therefore immediately replace damaged or worn components. Please contact your contract partner in such a case. The equipment should no longer be used until it has been repaired. When needed, only use original cardiostrong® spare parts.

- + Check the tightness of all screw connections once a month.
- + In order to be able to guarantee the constructively defined safety level of this equipment, we recommend having the equipment regularly maintained (at least once a year) by specialists (service technicians of your contract partner).
- + The equipment may be cleaned of dust, dirt and sweat using a damp cloth. The use of solvents should be strictly avoided. Also, make sure that no liquids (e. g. sweat) get into the openings of the equipment (e. g. console).

## 2.2 Faults and Troubleshooting

The equipment runs through regular quality controls during production. Nevertheless, errors or malfunctions on the equipment may occur. Individual parts are often the cause of faults and replacement is usually sufficient. Please use the following overview to see the five most common errors and how to repair them. If the equipment still does not work properly, please contact your contract partner.

Error	Cause	Repair
Crackling noise in pedal area	Loose pedals	Tighten the pedals
Equipment wobbles	Equipment is not level	Adjust the supporting feet
Handlebar/saddle wobbles	Screws are loose	Tighten screws
Display doesn't turn on	Power is disconnected	Check all screw connections and see if the plug is plugged in
No pulse reading	<ul style="list-style-type: none"> <li>• Interference in the room</li> <li>• Using a chest strap:               <ul style="list-style-type: none"> <li>- unsuitable chest strap</li> <li>- chest strap is incorrectly positioned</li> <li>- batteries are empty</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate sources of interference (e. g. mobile phone, loudspeaker, etc.)</li> <li>• Use a suitable chest strap (see recommended accessories)</li> <li>• Reposition the chest strap and/or moisten the electrodes</li> <li>• Change the batteries</li> </ul>

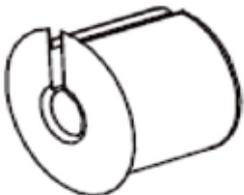
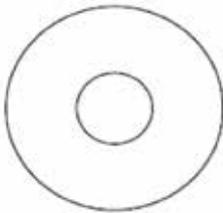
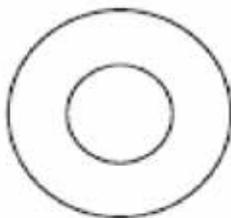
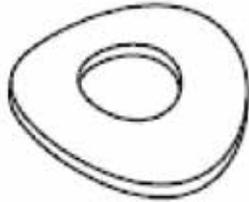
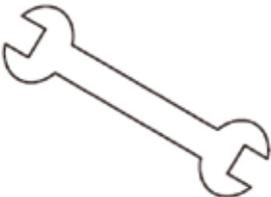
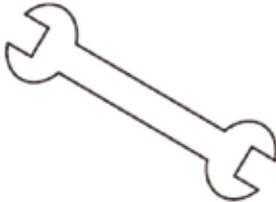
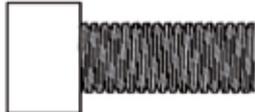
## 2.3 Maintenance and service calendar

The following routine work must be done in the specified time intervals:

<b>Part</b>	<b>Weekly</b>	<b>Monthly</b>	<b>2x annually</b>	<b>Annually</b>
Display console	C	I		
Tighten the pedals			I	
Plastic covers	C	I		
Seat rail		I		
Legends: C = cleaning; I = inspect				

### 3.1 Package contents

The package contains the parts represented in the illustration, including a power cable with mains plug. If one of the illustrated parts is missing, please contact your contract partner.

		
(35) 5/16" x 1.5T Spring washer (9x)	(88) cable supporter (1x)	(72) 3/8 Washer (1x)
		
(71) 3/8" x 1-1/2" Screw (1x)	(41) M5 x 12mm Cross-headed screw (4x)	(33) 5/16" Washer (8x)
		
(43) M5 Allen wrench + Phillips screwdriver	(87) 6mm Allen wrench (1x)	(34) 5/16" Spring ring (1x)
		
(79) 14/15mm wrench	(96) 13/14 mm wrench	(32) 5/16 x 3/4" Screw (9x)

## 3.2 Assembly instructions

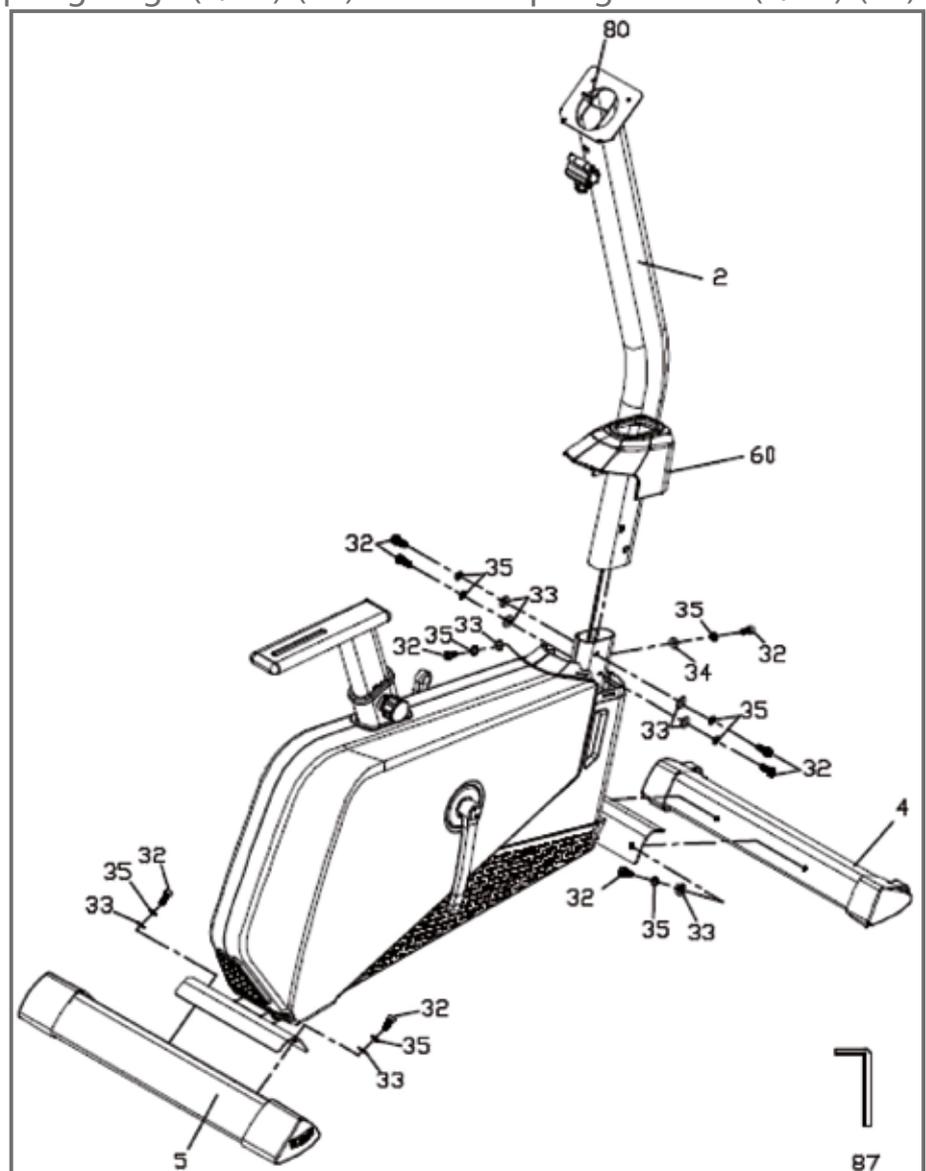
Before starting assembly, look carefully through the individual assembly steps shown and assemble the equipment in the order indicated.

### Step 1: Assembly of the console mast and the front and rear base foot

(1) Slide the console mast cover (60) on the console mast (2). Make sure that the cover points in the correct direction; see image. Slide the cable harness (80) from below up through the console mast. During assembly of the console mast on the frame, make sure that the cable harness does not get stuck or damaged.

(2) Mount the console mast on the frame with five screws (5/16" x 3/4") (32), four washers (5/16) (33), five spring rings (5/16) (35) and one spring washer (5/16) (34). Allow the console mast cover (60) to lock on the frame.

(3) Mount the front (4) and rear base foot (5) with four screws (5/16" x 3/4") (32), four spring rings (5/16) (35) and four washers (5/16)(33).  
Required tool: 6mm Allen wrench (87).



## Step 2: Assembly of handle, console and saddle

(1) Place the handle (3) on the console mast (2) and mount it with the quick release lever (19). Insert the hand pulse sensor cable (82) from the handle through the cable sleeve (88) and pull it up through the opening in the console mast (2).

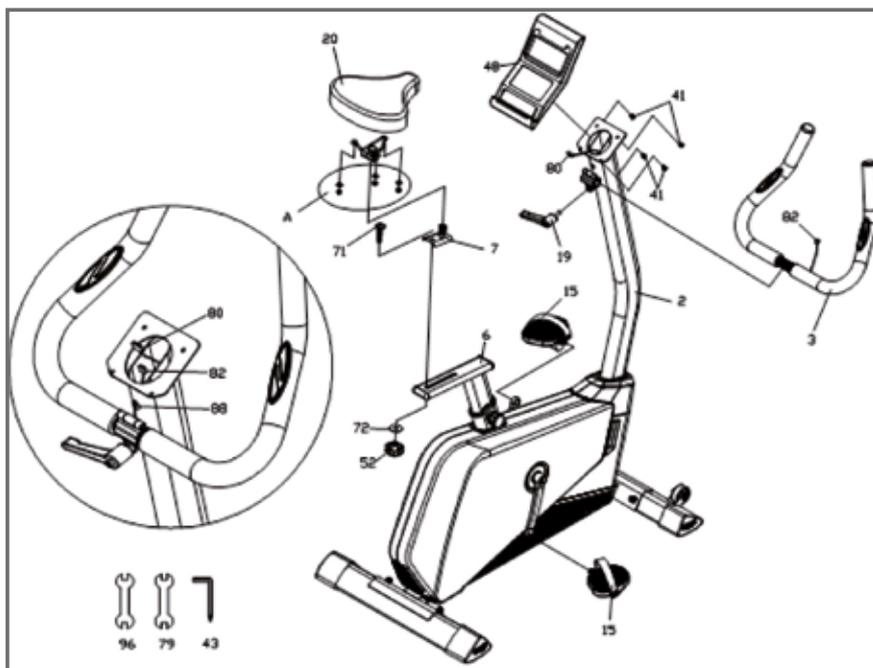
(2) Connect the console cable (80) and the hand pulse sensor cable (82) with the console (48). Mount the console (48) on the console mast (2) with four M5x12L cross-headed screws (41) and the Phillips screwdriver (43).

(3) Use the 13mm/15mm Allen wrench (79) to mount the pedals (15 L+R) on the pedal crank. The right pedal must be screwed tight clockwise and the left one counterclockwise.

(4) Loosen the pre-mounted screws and washers under the seat (20). Place the mounting bracket under the seat and mount the parts with the previously loosened nuts and washers (three M8x7T nuts and three 8x20x1.5T washers) and a 13/14 mm wrench.

(5) Move the seat (20) on to the seat bracket (7) and use the 14/15 mm wrench (79) in order to mount the seat with the nuts.

(6) Insert a screw (71) through the seat (20) and the seat rail (6) and mount it with one 3/8"x30x2T washer and 1x resistance knob (52).



### 4.1 Console display



<p><b>Time</b></p>	<p>Display of the training time in minutes and seconds. The console automatically counts up in 1 seconds intervals from 0:00 to 99:59. You can also program a countdown with the arrow buttons. If you continue to train after the countdown has expired, a signal will sound to let you know that the training is complete.</p>
<p><b>Distance (Strecke)</b></p>	<p>Indicates the covered distance in kilometers.</p>

<b>RPM (cadence; rotations per minute)</b>	Indicates the cadence speed.
<b>Watt</b>	Indicates the wattage.
<b>Speed</b>	Indicates the training speed in km/h or mph.
<b>Calories (calories burned)</b>	Indicates the estimated number of burnt calories.
<b>Pulse (heart rate; heart beats per minute)</b>	Indicates your heart rate in beats per minute (BPM).
<b>Age</b>	You can set your age between 10 and 99 years.
<b>Target Heart Rate</b>	Indicates your pre-set target heart rate.
<b>Pulse Recovery</b>	<p>Continue to hold on the hand pulse sensors after training (if you are not wearing a chest strap) and press the "Pulse Recovery" button. As soon as the following countdown has reached zero, your recovery heart rate will be evaluated with a grade between F1.0 and F6.0.</p> <p>1.0      Excellent  1.0-1.9   Very good  2.0-2.9   Good  3.0-3.9   Average  4.0-5.9   Below average  6.0      Poor</p> <p><b>Note:</b> If a heart rate is not received, the console will display "P". If the console shows "Err", press "Pulse Recovery" again and make sure that you are correctly grabbing the hand pulse sensors or the chest strap is placed properly.</p>
<b>Temperature</b>	Indicates the current temperature.

## 4.2 Button functions

<b>START/ STOP</b>	<p>a) Quick Start: Start training in the manual mode without selecting a training program.</p> <p>b) Press the button during training in order to stop the training.</p> <p>c) Press the button again to continue training.</p>
<b>Up arrow</b>	<p>a) During the settings, press this button in order to set values for time, distance, calories, age and sex or to select a program.</p> <p>b) Press the button during training to increase the resistance.</p>
<b>Down arrow</b>	<p>a) During the settings, press this button in order to set values for time, distance, calories, age and sex or to select a program.</p> <p>b) Press the button during training to decrease the resistance.</p>
<b>ENTER</b>	<p>a) Press this button to confirm the settings.</p> <p>b) Hold this button for two seconds in order to reset all values to zero.</p>
<b>BODYFAT</b>	<p>Press this button to measure your body fat percentage. To do this, you need to enter your height, weight, sex and age.</p>
<b>PULSE RECOVERY</b>	<p>Press this button to determine your recovery heart rate.</p>
<b>Standby mode</b>	<p>If none of the buttons are pressed for four minutes and no signal is received, the console will change to the standby mode and the screen turns off. Simply touch the screen to turn it back on.</p>

## 4.3 Turning on the equipment

If you connect the power plug, a sound will be emitted and the console turns on.

## 4.4 Programs

You can select one of the following program categories with the ARROW BUTTONS:

- Manual program: P1
- Different profiles for pre-set training programs: P2 - P13
- User-defined training program: P14 - P17
- Heart rate controlled programs: P18 - P22
- Watt-controlled training program: P23
- Body fat program: P24

### 4.4.1 Manual program

P1 is a manual program. Press START/STOP in order to immediately begin training. The standard resistance is five and can be adjusted during training with the arrow buttons.

1. Use the arrow buttons to select the manual program and press ENTER to confirm.
2. Use the arrow buttons in order to set a training time and press ENTER to confirm.
3. Use the arrow buttons in order to set a training distance and press ENTER to confirm.
4. Use the arrow buttons in order to set a calorie number and press ENTER to confirm.
5. Use the arrow buttons in order to set a training heart rate and press ENTER to confirm.
6. Press START/STOP in order to begin training.

If you enter a target value for time, distance and calories, the training will stop automatically once you have achieved one of these target values. If you would just like to train according to one of these values, you simply have to enter the desired target value - you do not have to enter all other values. If you enter a target pulse, an alarm will sound once this pulse has been exceeded. The acoustic signal first stops once your pulse is no longer higher than the target pulse.

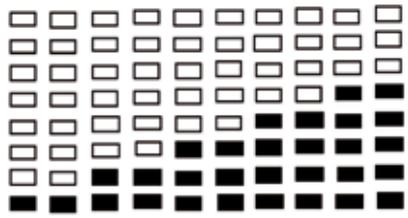
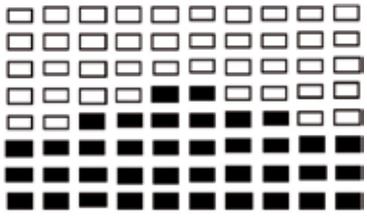
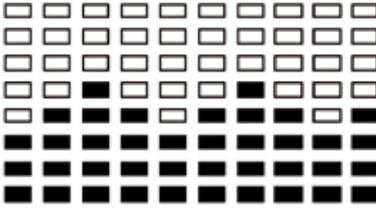
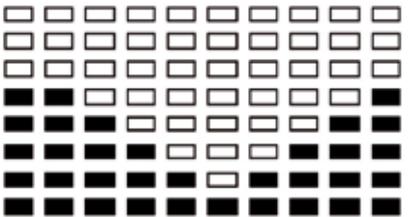
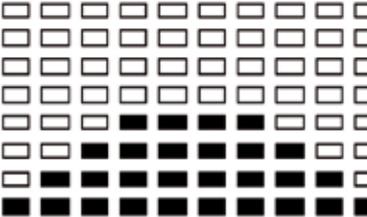
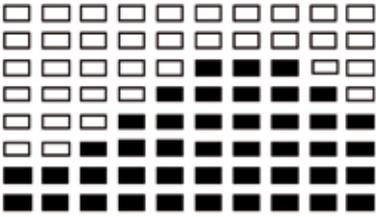
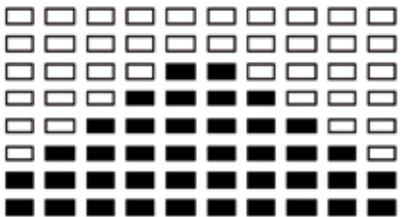
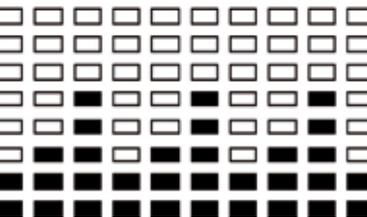
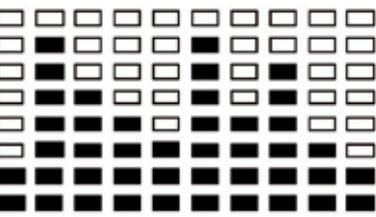
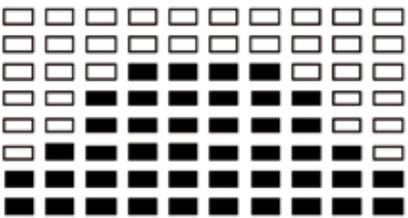
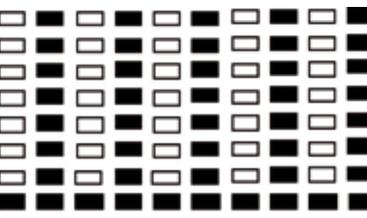
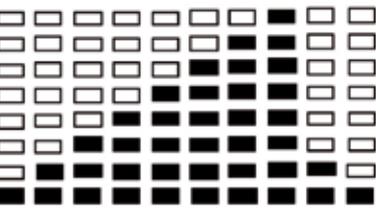
#### **4.4.2 Training programs: Steps, hill, rolling, valley, fat burn, ramp, mountain, intervals, random, plateau, Fartlek, Precipice.**

P2-P13 are pre-set training programs. Press START/STOP in order to immediately begin training. The resistance can be adjusted during training with the arrow buttons.

1. Select a training program P2-P13 with the arrow buttons and press ENTER to confirm.
2. Use the arrow buttons in order to set a training time and press ENTER to confirm.
3. Use the arrow buttons in order to set a training distance and press ENTER to confirm.
4. Use the arrow buttons in order to set a calorie number and press ENTER to confirm.
5. Use the arrow buttons in order to set a training heart rate and press ENTER to confirm.
6. Press START/STOP in order to begin training.

If you enter a target value for time, distance and calories, the training will stop automatically once you have achieved one of these target values. If you would just like to train according to one of these values, you simply have to enter the desired target value - you do not have to enter all other values. If you enter a target pulse, an alarm will sound once this pulse has been exceeded. The acoustic signal first stops once your pulse is no longer higher than the target pulse.

**Profiles of pre-set training programs P2-P13:**

Program 2: Steps	Program 3: Hill	Program 4: Rolling
		
Program 5: Valley	Program 6: Fat burn	Program 7: Ramp
		
Program 8: Mountain	Program 9: Intervals	Program 10: Random
		
Program 11: Plateau	Program 12: Fartlek	Program 13: Precipice
		

### 4.4.3 User-defined programs: User 1, User 2, User 3, User 4

P14-P17 are user programs. The user can determine the resistance for each of the 10 training sections. Then the time, distance, calories and heart rate can be defined.

1. Select a user program P14-P17 with the arrow buttons and press ENTER to confirm.
2. Use the arrow buttons in order to set the resistance for the first section and press ENTER to confirm.
3. Repeat step 2 for the remaining nine training steps.
4. After you set the resistance for all training sections, use the arrow buttons to set a training time and press ENTER to confirm.
5. Use the arrow buttons in order to set a training distance and press ENTER to confirm.
6. Use the arrow buttons in order to set a calorie number and press ENTER to confirm.
7. Use the arrow buttons in order to set a heart rate and press ENTER to confirm.
8. Press START/STOP in order to immediately begin training.

If you enter a target value for time, distance and calories, the training will stop automatically once you have achieved one of these target values. If you would just like to train according to one of these values, you simply have to enter the desired target value - you do not have to enter all other values. If you enter a target pulse, an alarm will sound once this pulse has been exceeded. The acoustic signal first stops once your pulse is no longer higher than the target pulse.

### 4.4.4 Heart rate controlled programs: 55%, 65%, 75%, 85%, target heart rate

P18-P22 are heart rate controlled programs. The console adjusts the resistance according to your current heart rate. If your heart rate is below the target heart rate, the console will increase the resistance every 20 seconds. If your heart rate is above the target heart rate, the console will decrease the resistance every 20 seconds.

P18: 55% of the maximum heart rate. Target heart rate =  $(220 - \text{age}) \times 55\%$

P19: 65% of the maximum heart rate. Target heart rate =  $(220 - \text{age}) \times 65\%$

P20: 75% of the maximum heart rate. Target heart rate =  $(220 - \text{age}) \times 75\%$

P21: 85% of the maximum heart rate. Target heart rate =  $(220 - \text{age}) \times 85\%$

P22: User-defined target heart rate

1. Select a heart rate controlled program P18-P22 with the arrow buttons and press ENTER to confirm.
2. Use the arrow buttons to set your age.
3. In program 22, use the arrow buttons to enter your target heart rate between 80 and 180.
4. Use the arrow buttons in order to set a training time and press ENTER to confirm.
5. Use the arrow buttons in order to set a training distance and press ENTER to confirm.
6. Use the arrow buttons in order to set a calorie number and press ENTER to confirm.
7. Press START/STOP in order to immediately begin training.

If you enter a target value for time, distance and calories, the training will stop automatically once you have achieved one of these target values. If you would just like to train according to one of these values, you simply have to enter the desired target value - you do not have to enter all other values.

#### **4.4.5 Watt-controlled program**

P23 is a watt-controlled program. During training, the resistance can be held constant and not be adjusted. If you pedal too slow, the resistance increases; if you pedal too fast, the resistance decreases.

1. Use the arrow buttons to select the watt-controlled program and press ENTER to confirm.
2. Use the arrow buttons in order to set a training time and press ENTER to confirm.
3. Use the arrow buttons in order to set a training time and press ENTER to confirm.
4. Use the arrow buttons in order to set a watt number and press ENTER to confirm. You can increase or decrease the watt number at all times during training.
5. Use the arrow buttons in order to set a calorie number and press ENTER to confirm.
6. Use the arrow buttons in order to set a heart rate and press ENTER to confirm.
7. Press START/STOP in order to immediately begin training.

If you enter a target value for time, distance and calories, the training will stop automatically once you have achieved one of these target values. If you would just like to train according to one of these values, you simply have to enter the desired target value - you do not have to enter all other values. If you enter a target pulse, an alarm will sound once this pulse has been exceeded.

## 4.4.6 Body fat program

P24 is a special program to determine the body fat percentage of the user. The results are divided into three body types:

Type 1: Body fat percentage  $> 27\%$

Type 2:  $27\% \geq$  body fat percentage  $\geq 20\%$

Type 3: Body fat percentage  $< 20\%$

The console indicates the body fat percentage, BMI and BMR (basal metabolic rate).

1. Use the arrow buttons to select the body fat program P24 and press ENTER to confirm.
2. Use the arrow buttons in order to set your height and press ENTER to confirm.
3. Use the arrow buttons in order to set your weight and press ENTER to confirm.
4. Use the arrow buttons in order to set your sex and press ENTER to confirm.
5. Use the arrow buttons in order to set your age and press ENTER to confirm.
6. Press START/STOP to start the body fat measuring. If the console displays "E", make sure that you have correctly grasped the hand pulse sensors or the chest strap is being worn correctly. Then press the START/STOP button again.
7. Once the measuring is completed, the console will display BMR, BMI and the body fat percentage. Furthermore, the console shows a training profile for your body type.
8. Press START/STOP to start the training.

**BMI (Body Mass Index):** BMI evaluates your body fat percentage based on your height and your weight.

**BMR (Basal Metabolic Rate):** Your BMR indicates the calorie number that your body uses at rest.

## 5.1 Heart-rate measuring

### Pulse measuring via hand sensors

The hand sensors integrated in the handles beside the seat allow you to determine your heart rate. You can measure your heart rate by lightly grasping the sensors with both hands at the same time. Blood pressure changes occur due to the heartbeat. The sensors measure the changes to the electric skin resistance caused by it. These values are then used to create an average and are displayed on the screen of the console as a heart rate.

#### Note:

For some people, the skin resistance change caused by the heart rate is so minimal that the measurements do not allow for usable values. Strong callus or sweat on the hands may also impair a correct measurement. In such cases, the heart rate will not be shown at all or only incorrectly.

If the measurement is incorrect or not taken at all, please check if it happens to only one person or to several people. If the pulse display only does not work in a single case, the equipment is not defective. In this case, we recommend using a chest strap to achieve a permanently correct heart rate display.

**CAUTION: Your training equipment is not a medical device. Different factors may influence the accuracy of the heart rate display. The heart rate display only serves as a training aid.**

### Telemetric heart rate measuring

This ergometer is already equipped with a heart rate receiver as standard. Using a chest strap makes it possible for you to have a wireless heart rate measuring. This optimal and ECG-precise type of measuring reads the heart rate directly from the skin through a transmitting chest strap. The chest strap then sends the impulse to the receiver integrated in the console.

#### Positioning the chest strap and moistening the electrodes:

Place the belt directly below the chest, while the transmitter should be placed on the middle of the chest. The chest strap should sit comfortably, but not too loose. If the belt is too loose, the contact to the electrodes may be disrupted or the belt may slip

while exercising. The transmitter turns on automatically once it is put on. In order to allow for a precise measuring, you should moisten the rubber electrodes. This is best done with a special chest strap contact gel, which is also used for ultrasound scans.

**Note:**

If you have not been active in doing sports for a longer period of time, you should first go to your physician in order to discuss your training with them. You should also contact your physician in advance in the event of heart problems, high/low blood pressure and obesity.

**Training with heart rate orientation**

Heart rate orientation guarantees an extremely effective and healthy training. Through your age and the following table, you can quickly and easily read and determine the optimal pulse for your training. An acoustic alarm will sound if your heart rate exceeds the set target heart rate. Which target heart rate is important for which training goal can be found out in the following.

**Fat burning (weight management):** The main goal here is to burn deposits of fat. In order to achieve this training goal, a low training intensity (approximately 55% of the maximum heart rate) and a longer training period are required.

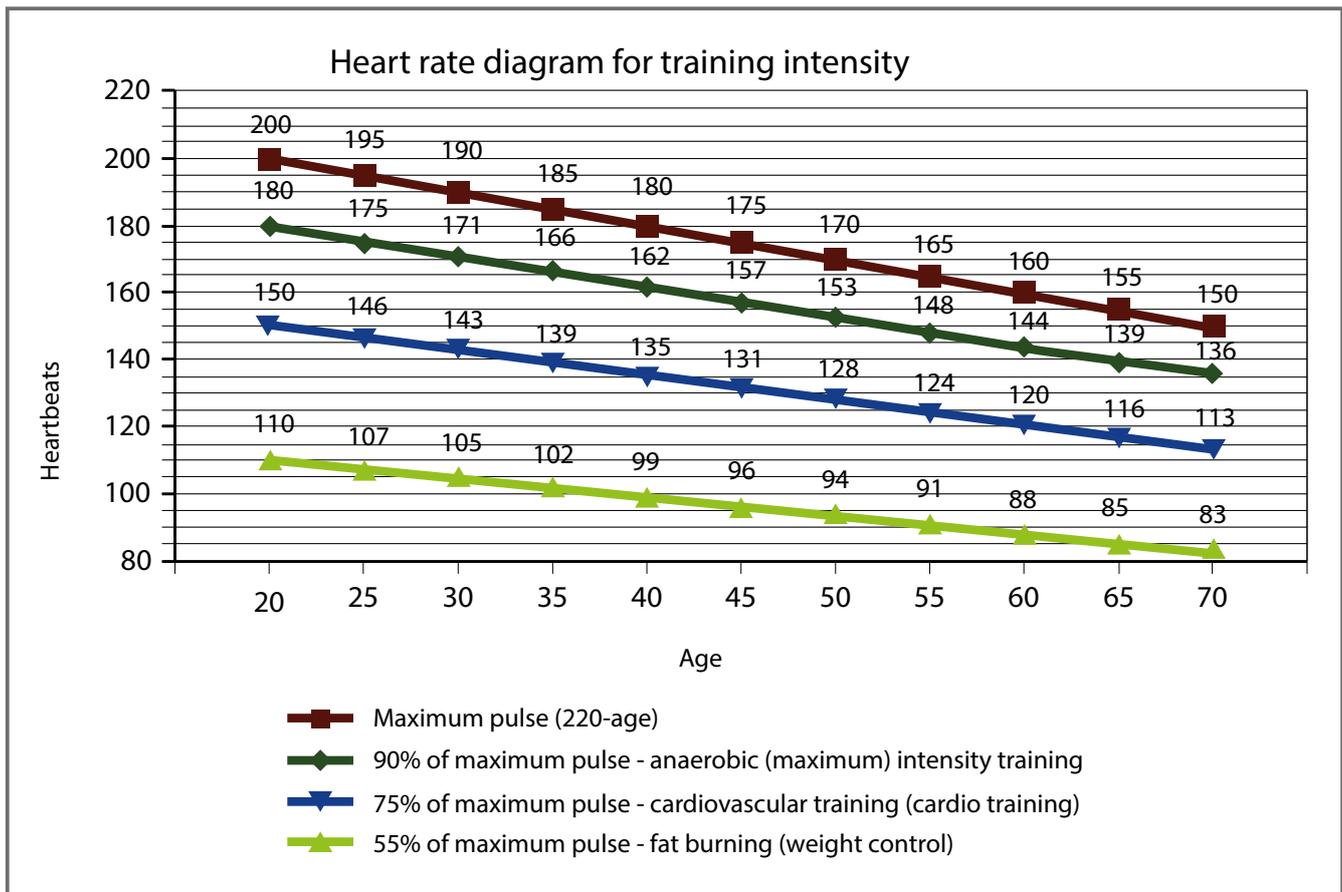
**Cardiovascular training (cardio training):** The primary goal is to increase stamina and fitness through an improved provision of oxygen through the cardiovascular system. In order to achieve this training goal, medium intensity (approximately 75% of the maximum heart rate) with a medium training period is required.

**Anaerobic (maximum) load training:** The main goal of maximum load training is to improve recovery after short, intense loads in order to be able to quickly return to the aerobic zone. In order to achieve this training goal, a high intensity (approximately 90% of the maximum heart rate) with short, intense load is required, which is followed by a recovery phase in order to prevent muscle fatigue.

### Example:

For a 45-year-old man or woman, the maximum heart rate is 175 ( $220 - 45 = 175$ ).

- The fat burning target zone (55%) is at approximately 96 beats/min.  
 $= (220 - \text{age}) \times 0.55$ .
- The cardio target zone (75%) is at approximately 131 beats/min.  
 $= (220 - \text{age}) \times 0.75$ .
- The maximum heart rate for an anaerobic load training (90%) is at approximately 157 beats/min.  $= (220 - \text{age}) \times 0.9$ .



## 5.2 10 tips for effective ergometer training

### 1. Set goals

What would you like to achieve with your training? Weight regulation, improved stamina, prevent risk of disease, more mobility, cardiovascular training, etc. In order to achieve your long-term training goal, set individual partial goals, e. g., weekly or monthly goals.

### 2. Concentration on training

Try to only dedicate yourself to your training unit and do not be distracted.

### 3. Position yourself correctly while exercising

As you pedal, your upper body should be shifted slightly forward and your back held straight. Avoid side-to-side motion in the hips and back.

### 4. Correct breathing / appropriate resistance level

Do not overexert yourself physically and mentally by starting with resistance levels that are too high. Start slowly and increase the resistance steadily. Aim for regular and calm breathing.

### 5. Keep yourself properly hydrated

Drink, drink, drink! Have a drinking bottle close by during your workout.

### 6. Sufficient recovery periods

Allow your body and your muscles enough time to recover after your workout. Only a relaxed muscle will be fully operational again.

### 7. Choose a diversified program

Different program functions of your training console support you in doing this. For example, you can complete an interval, incline or step counting training session.

### 8. Creating the right workout

Every training session should have a warm-up phase, a cool-down phase and a targeted stretching. It increases physical and mental performance and prevents injuries and sore muscles.

## 9. Workout journal

Keep a record of your training sessions. Note the date, resting pulse, active pulse, recovery pulse, resistance level, time, distance, calories burnt and fitness level.

## 10. Reward yourself

Do something good for you and your body after training or after achieving a partial goal. Go to the sauna or a swimming pool. Mix a protein shake or enjoy a delicious salad.

## 5.3 Designing a workout

We recommend two to three training sessions a week. There should be a five-minute warm-up phase before every training. The training ends with a cool-down and targeted stretching.

**Warm-Up** approx. five min. Dynamic movement of larger muscle groups at low intensity. The body core temperature rises and the metabolism process starts quicker.

WEEK 1 + 2				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	20 min.	Slow speed without resistance	30 min.	Moderate speed, low resistance
Wed	20 min.	Slow speed without resistance	30 min.	Moderate speed, low resistance
Fri	20 min.	Slow speed without resistance	30 min.	Moderate speed, low resistance

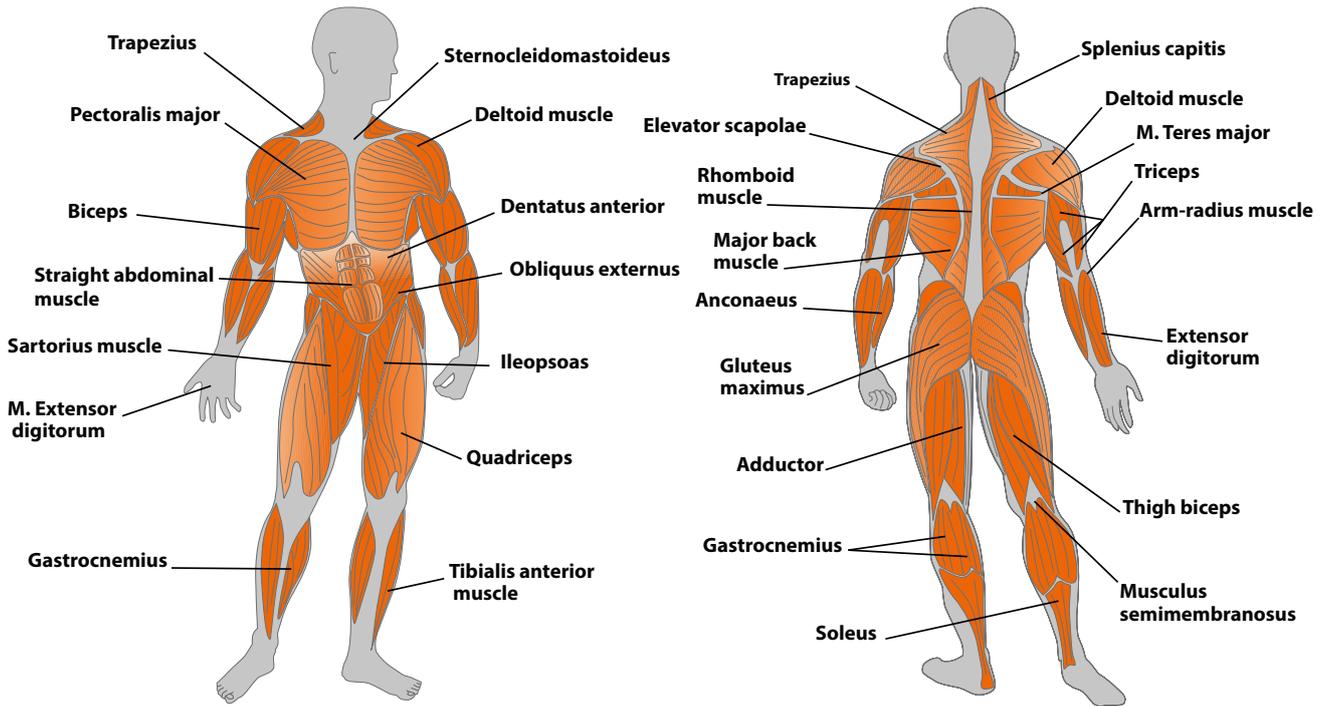
WEEK 3 + 4				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	25 min.	Slow speed without resistance	35 min.	Vary speed, low resistance
Wed	25 min.	Slow speed without resistance	35 min.	Vary speed, low resistance
Fri	25 min.	Slow speed without resistance	35 min.	Vary speed, low resistance

WEEK 5 + 6				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	30 min.	Moderate speed, low resistance	40 min.	Vary speed, low resistance
Wed	30 min.	Moderate speed, low resistance	40 min.	Vary speed, low resistance
Fri	30 min.	Moderate speed, low resistance	40 min.	Vary speed, low resistance

WEEK 7 + 8				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	35 min.	Vary speed, low resistance	45 min.	Vary speed, increase resistance
Wed	35 min.	Vary speed, low resistance	45 min.	Vary speed, increase resistance
Fri	35 min.	Vary speed, low resistance	45 min.	Vary speed, increase resistance

**Cool-down** approximately five minutes Wind down training with low resistance and a calm speed. Softly calm down the organism.

## 5.4 Stretching exercises for leg & chest muscles



### 1. Exercise: Stretching of front thigh / leg extension (quadriceps)

- Stable position, grab arches of feet
- Pull heel towards buttocks, knee points downwards (no abduction)
- Straight upper body, avoid tilting the pelvic forward (hollow back) by tensing the abdominal muscles
- Change legs



### 2. Exercise: Stretching the back thigh / leg curl (hamstring)

- Pull thigh towards upper body with both hands
- Stretch through increased stretching in the knee joint
- The lower leg maintains contact with the floor, keep hips bent
- Change legs



### 3. Exercise: Stretching the calf muscles (gastrocnemius)

- Place feet parallel to each other pointing forward, the heels touch the floor
- Support yourself on a chair coming from a lunge
- Move your body weight to the front leg, press your heel from the rear leg towards the floor and hold the contact
- Slowly stretch your knee of the rear leg until you feel the stretch in your calves
- Change legs



### 4. Exercise: Stretching the chest muscles (pectoralis major)

- Stand parallel to a wall
- Place your forearm at 90° to the wall with the elbow just above shoulder height
- Turn your head and upper body gradually to the opposite sides until you feel a stretch in the front chest, of the shoulder being leaned on
- Pay attention to tension in your abdominal and gluteal muscles
- Your weight is on your front leg
- Change legs



**All recommendations of these instructions apply solely to healthy persons and are not suitable for those with heart or cardiovascular problems. All of the tips are intended only as a guide to help you create a workout. Your physician can offer appropriate advice for particular, personal requirements.**

**We hope you enjoy your workout and have a lot of success!**



cardiostrong's fitness equipment is subject to strict quality controls. However, if a fitness equipment purchased from us does not work perfectly, we take it very seriously and ask you to contact our customer service as indicated. We are happy to help you by phone via our service hotline.

### **Error descriptions**

Your fitness equipment is developed for long-term, high-quality training. However, should a problem arise, please first read the operating instructions. For further assistance, please contact your contract partner or call our service hotline. To ensure your problem is solved as quickly as possible, please describe the defect as exactly as possible.

In addition to the statutory warranty, we provide a warranty for every fitness equipment purchased from us according to the following provisions.

### **Your statutory rights are not affected.**

#### **Warranty**

The warranty is the first/original buyer and/or any person who received a newly purchased product as a gift from the original buyer.

#### **Warranty periods**

The following warranty periods begin on delivery of the fitness equipment.

<b>Model</b>	<b>Usage</b>	<b>Full warranty</b>	<b>Frame</b>
BX40	Home use	24 months	30 years

#### **Repair costs**

According to our choice, there will either be a repair, a replacement of individual damaged parts or a complete replacement. Spare parts, that have to be mounted while assembling the equipment, have to be replaced by the warranty person personally and are not a part of repair. After the expiration of the warranty period for repair costs, a pure parts warranty applies, which does not include the repair, installation and delivery costs.

## **The terms of use are defined as follows:**

- Home use: solely for private use in private households up to 3 hours per day
- Semi-professional use: up to 6 hours per day (e. g. rehabilitation centers, hotels, clubs, company gyms)
- Professional use: more than 6 hours per day (e. g. commercial gyms)

## **Warranty service**

Within the warranty period, equipment which develops faults as a result of material or manufacturing defects, will be repaired or replaced at our discretion. Ownership of equipment or parts of equipment which have been replaced is transferred to us. The warranty period is not extended nor does a new warranty period begin following repair or replacement under the warranty.

## **Warranty conditions**

For the warranty to be valid, the following steps must be taken:

Please contact our customer service by email or phone. If the product under warranty has to be sent in for repair, the seller bears costs. After expiry of the warranty, the buyer bears the costs of transport and insurance. If the fault is covered by our warranty, you will receive a new or repaired equipment in return.

## **Warranty claims are invalid in case of damage resulting from:**

- misuse or improper handling
- environmental influences (moisture, heat, electrical surge, dust, etc.)
- failure to follow the current safety measures for the equipment
- failure to follow the operating instructions
- use of force (e. g. hitting, kicking, falling)
- interventions which were not carried out by one of our authorized service centers
- unauthorized repair attempts

## **Proof of purchase and serial number**

Please make sure that you are able to provide the appropriate receipt when claiming on your warranty. So that we can clearly identify the model of your equipment, and for the purposes of our quality control, you will need to give the serial number of your equipment, when contacting the service team. Where possible please have your serial number and your customer number ready when you call our service hotline. It will help us to deal with your request swiftly.

If you cannot find the serial number on your fitness equipment, our service team is at your disposal to offer further information.

### Service outside of the warranty period

We are also happy to issue an individual cost estimate if there is a problem with your fitness equipment after the warranty has expired, or in cases which do not fall under the terms of the warranty, e. g. normal wear and tear. Please contact our customer service team to find a quick and cost-effective solution to your problem. In such a case you will be responsible for the delivery costs.

### Communication

Many problems can be solved just by speaking to us as your contract partner. We know how important it is to you as a user of the fitness equipment to have problems solved quickly and simply, so you can enjoy working out with minimal interruption. For that reason, we also want to resolve your queries quickly and in a straightforward manner. Thus, please always keep your customer number and the serial number of the faulty equipment handy.

## 7 DISPOSAL

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At the end of its operational life, this equipment cannot be disposed of in normal household waste. Instead, it must be disposed of via an electricals recycling centre. Further information can be obtained from your local authority's recycling service.

The materials can be recycled as per their symbols. Through the reuse, recycling of materials or other forms of recovery of old equipment, you make an important contribution to the protection of the environment.

## 8 ORDERING ACCESSORIES

	<p>Sport-Tiedje floor mat size L</p> <p>Art.No. ST-FM-L</p>
	<p>Sport-Tiedje transmitter chest strap</p> <p>Art. No. ST1000</p>
	<p>Sport-Tiedje comfort chest strap premium</p> <p>Art. No. ST1050</p>
	<p>Chest strap contact gel 250ml</p> <p>Art. No. BK-250</p>
	<p>Fitness equipment care set</p> <p>Art. No. HF-500</p>

## 9.1 Service hotline

So that we can give you the best possible service, please have your **model name, part number, serial number, exploded drawing and parts list** ready.

### SERVICE-HOTLINE

DE	DK	FR
<p>☎ +49 4621 4210-0</p> <p>📠 +49 4621 4210-699</p> <p>✉ service@sport-tiedje.de</p> <p>Mo. - Fr. 8:00 - 18:00</p> <p>Sa. 9:00 - 18:00</p>	<p>☎ 80 90 16 50</p> <p>☎ +49 4621 4210-945</p> <p>✉ info@t-fitness.dk</p> <p>Ma. - Fr. 8:00 - 18:00</p> <p>Lø. 9:00 - 18:00</p>	<p>☎ +33 (0) 172 770033</p> <p>☎ +49 4621 4210-933</p> <p>✉ service-france@sport-tiedje.fr</p> <p>Lun. - Ven. 8:00 - 18:00</p> <p>Sam. 9:00 - 18:00</p>
NL	UK	INT
<p>☎ +31 172 619961</p> <p>✉ info@fitshop.nl</p> <p>Ma. - Do. 9:00 - 17:00</p> <p>Vr. 9:00 - 21:00</p> <p>Za. 10:00 - 17:00</p>	<p>☎ +44 141 876 3972</p> <p>✉ orders@powerhousefitness.co.uk</p> <p>Mon. - Fri. 9:00 - 17:00</p>	<p>☎ +49 4621 4210-0</p> <p>✉ service-int@sport-tiedje.de</p> <p>Mon - Fri 8:00 - 18:00</p> <p>Sat 9:00 - 18:00</p>

## 9.2 Serial number and model name

Before assembling your equipment, find the serial number on the white sticker and enter it in the appropriate space.

Serial number:

Brand / category:

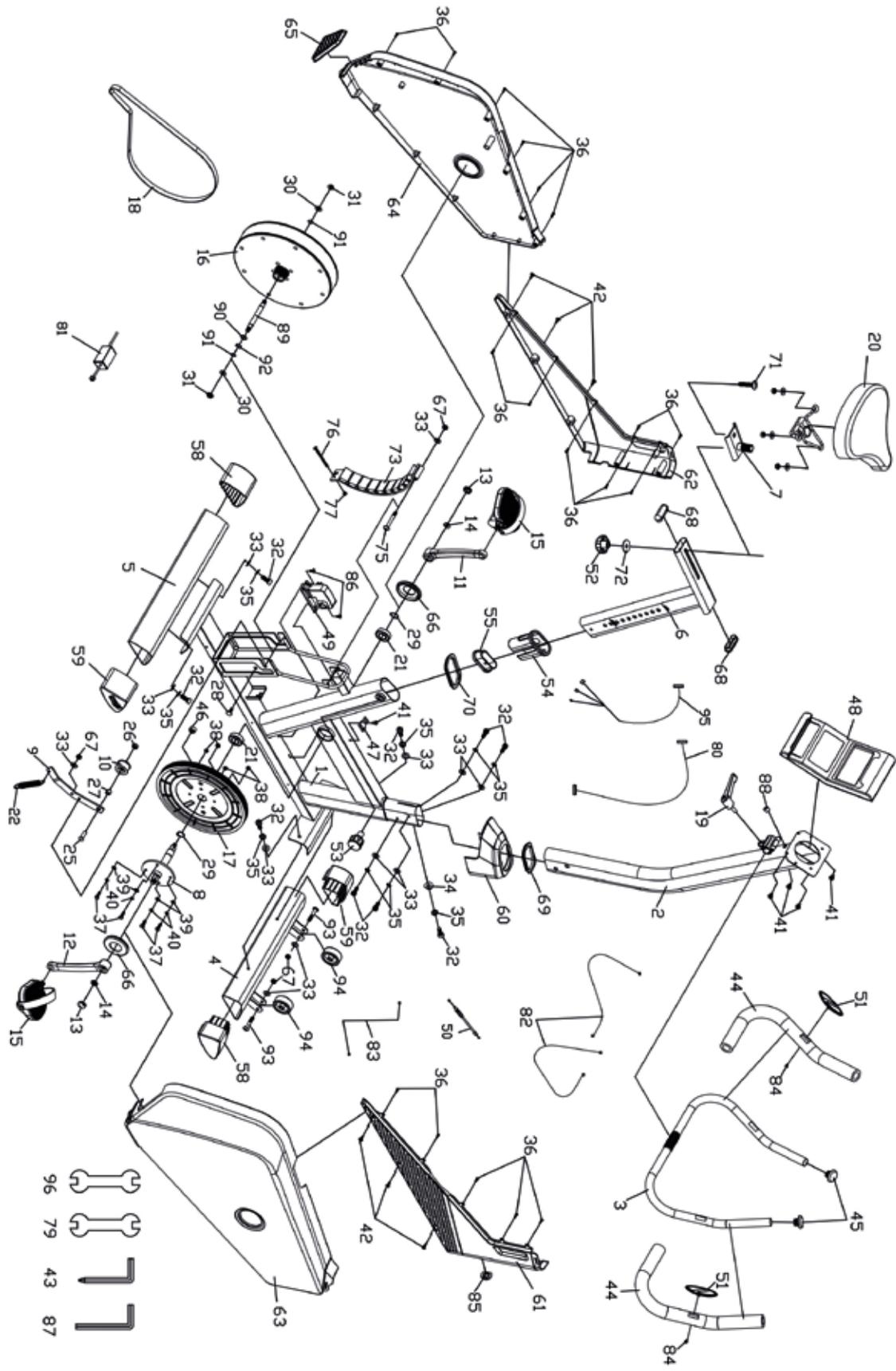
Model name:

## 9.3 Parts list

No.	Qty.	Description	No.	Qty.	Description
1	1	Main Frame	32	9	5/16" × 3/4" _Socket Head Cap Bolt
2	1	Console Mast	33	12	5/16" × 18 × 1.5T _Flat Washer
3	1	Handle Bar	34	1	5/16" × 19 × 1.5T _Curved Washer
4	1	Front Stabilizer	35	9	5/16" × 1.5T _Split Washer
5	1	Rear Stabilizer	36	18	4 × 12L _Sheet Metal Screw
6	1	Inner Slide	37	4	1/4" × 5/8" _Hex Head Bolt
7	1	Sliding Seat Mount	38	4	1/4" × 5.5L _Nyloc Nut
8	1	Crank Axle	39	4	1/4" × 13 × 1T _Flat Washer
9	1	Idler Bracket	40	4	1/4" _Split Washer
10	1	Idler Wheel	41	1	M5 × 12L _Phillips Head Screw
11	1	Crank Arm (L)	42	6	5 × 16L _Tapping Screw
12	1	Crank Arm (R)	43	1	Combination M5 Allen Wrench & Phillips Head Screw Driver
13	2	Crank Arm End Cap	44	2	Handgrip Foam
14	2	M10 × 1.25m/m _Nut	45	2	Button Head Plug
15	1	Pedal	46	1	Magnet
16	1	Flywheel	47	1	300m/m _Sensor W/Cable
17	1	Drive Pulley	48	1	Console
18	1	Belt	49	1	Gear Motor
19	1	Seat/Handlebar Adj. Locking Lever	50	1	Steel Cable
20	1	Seat	51	2	Handpulse Sensor (w/o wire)
21	2	6004 _Bearing	52	1	Brake Tension Knob
22	1	Spring	53	1	Locking Knob
25	1	3/8" × 27L _Carriage Bolt	54	1	Center spatial wrap
26	1	3/8" × 7T _Nyloc Nut	55	1	Slide Spacer
27	1	Sleeve	58	2	Rear Adjustment Base (L)
28	1	5/16" × 20L _Carriage Bolt	59	2	Rear Adjustment Base (R)
29	2	20m/m _C Ring	60	1	Console Mast Cover
30	2	3/8" × Ø19 × 1.5T _Flat Washer	61	1	Front Shroud (R)
31	2	3/8"-26UNF × 7T _Nut	62	1	Front Shroud (L)

No.	Qty.	Description	No.	Qty.	Description
63	1	Rear Shroud (R)	81	1	Adaptor
64	1	Rear Shroud (L)	82	2	Handpulse Wire
65	1	Bottom Cover	83	1	300m/m_DC Power Cord
66	1	Crank Arm Cover	84	2	4 × 20L_Sheet Metal Screw
67	4	5/16" × 6T_Nyloc Nut	85	1	Power Bracket
68	2	End Cap	86	2	M5 × 12L_Phillips Head Screw
69	1	Console Mast End Cap	87	1	L Allen Wrench
70	1	Seat Post Cover	88	1	HGP Wire Grommet
71	1	3/8" × 1-1/2"_Carriage Bolt	89	1	Axle
72	1	Ø3/8" × Ø30 × 2T_Flat Washer	90	1	Ø12.4 × Ø19 × 0.5T_Flat Washer
73	1	Flywheel Magnets Mounting Plate	91	2	Ø12_C Ring (Blackfast)
75	1	5/16" × 2-1/2"_Button Head Socket Bolt	92	1	Ø12_Wave Washer (Blackfast)
76	1	M5-75L_Phillips Head Screw	93	2	5/16" × 1-3/4"_Button Head Socket Bolt
77	1	M5-5T_Nyloc Nut	94	2	Action Roller
79	1	14/15m/m_Wrench	95	1	900m/m_Computer Cable (Lower)
80	1	1150m/m_Computer Cable(Up- per/Lower)	96	1	13/14m/m_Wrench

## 9.4 Exploded drawing



## CONTACT

### Company head office

Sport-Tiedje GmbH  
Flensburger Str. 55  
24837 Schleswig

### Hotline for Technical Information

#### DE

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✉ info@t-fitness.dk

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☎ +49 4621 4210-933  
✉ service-france@sport-tiedje.fr

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✉ info@fitshop.nl

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✉ support@powerhousefitness.co.uk

#### INT

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✉ service-int@sport-tiedje.de

[www.sport-tiedje.com](http://www.sport-tiedje.com)  
[www.cardiostrong.de](http://www.cardiostrong.de)

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Product and manual are subject to change. Technical data can be changed without advance notice.

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Please find a detailed overview including address and opening hours for all specialist fitness stores of the Sport-Tiedje Group in Germany and abroad on the following website.

[www.sport-tiedje.com/en/stores](http://www.sport-tiedje.com/en/stores)

Note



