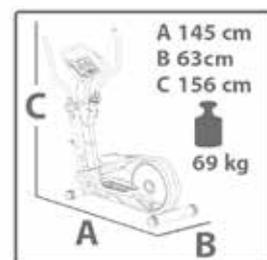




Assembly and Operating Instructions



Art. No. CST-EX40-BG

Elliptical cross trainer **EX40**

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 or www.cardiostrong.de.



SAFETY INSTRUCTIONS

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.

CONTENTS

1	GENERAL INFORMATION	6
1.1	Technical data	6
1.2	Personal safety	7
1.3	Electrical safety	8
1.4	Set-up place	8
2	ASSEMBLY INSTRUCTIONS, MAINTENANCE AND CARE	9
2.1	General instructions	9
2.2	Faults and Troubleshooting	10
2.3	Maintenance and service calendar	11
3	ASSEMBLY	12
3.1	Package contents	12
3.2	Assembly instructions	13
4	OPERATING INSTRUCTIONS	19
4.1	Console display	19
4.2	Button functions	21
4.3	User memory	22
4.4	Programs	23
4.4.1	MAN. – Manual program	23
4.4.2	Pre-set programs	24
4.4.3	Watt-based program	25
4.4.4	User-defined program	25
4.4.5	H.R.C. – Heart-rate controlled programs	26
5	WORKOUT INSTRUCTIONS	27
5.1	Heart-rate monitoring	27
5.2	10 tips for effective elliptical cross training	30
5.3	Designing a workout	31
5.4	Stretching exercises for leg and chest muscles	33
5.5	Workout journal	35
6	WARRANTY INFORMATION	36

7	DISPOSAL	38
8	ORDERING ACCESSORIES	39
9	ORDERING SPARE PARTS	40
9.1	Service hotline	40
9.2	Serial number and model name	40
9.3	Parts list	41
9.4	Exploded drawing	43

1.1 Technical data

LED display

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

Resistance system: electro-magnetic braking system
Resistance levels: 16
Power output in Watt: 10-350 Watt (adjustable in 5-Watt increments)

User memory: 5
Total number of workout programs: 19
Manual programs: 1
Preset programs: 12
Watt-based programs: 1
Heart-rate controlled programs: 4
User-defined program: 1

Balance mass: 28 kg
Gear ratio: 1:8.75
Stride length: 40 cm
Step width: 17 cm
Step-up height: 31 cm
Adjustable pedal positions: 3
Stride-length options: 4

Weight and dimensions:

Item weight (gross, incl. packaging): 75 kg
Item weight (net, without packaging): 69 kg
Packaging dimensions (L x W x H): approx. 1270 mm x 420 mm x 620 mm
Set-up dimensions (L x W x H): approx. 1450 mm x 630 mm x 1560 mm
Maximum user weight: 150 kg/330 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 whole body workouts 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

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 six most common errors and how to repair them. If the equipment still does not work properly, please contact your contract partner.

Problem	Cause	Solution
Drive discs wobble or make noises	Drive pulley is loose	Tighten nuts
Display does not work	No plug connection, power supply not plugged in	Check all plug connections and see if the power supply is plugged in
Footplates are creaking	Footplates are loose	Tighten up the footplate screws
Creaking noises	Screws are loose	Check screws are properly tightened
Guide rails are squeaking	Guide rails or rollers are dirty or the guide rails are dry	Clean the guide rails, then lubricate with a non greasy silicone
No pulse reading	<ul style="list-style-type: none"> • Interference in the room • Using a chest strap: <ul style="list-style-type: none"> - unsuitable chest strap - chest strap is incorrectly positioned - batteries are empty 	<ul style="list-style-type: none"> • Eliminate sources of interference (e. g. mobile phone, loudspeaker, etc.) • Use a suitable chest strap (see recommended accessories) • Reposition the chest strap and/or moisten the electrodes • Change the batteries

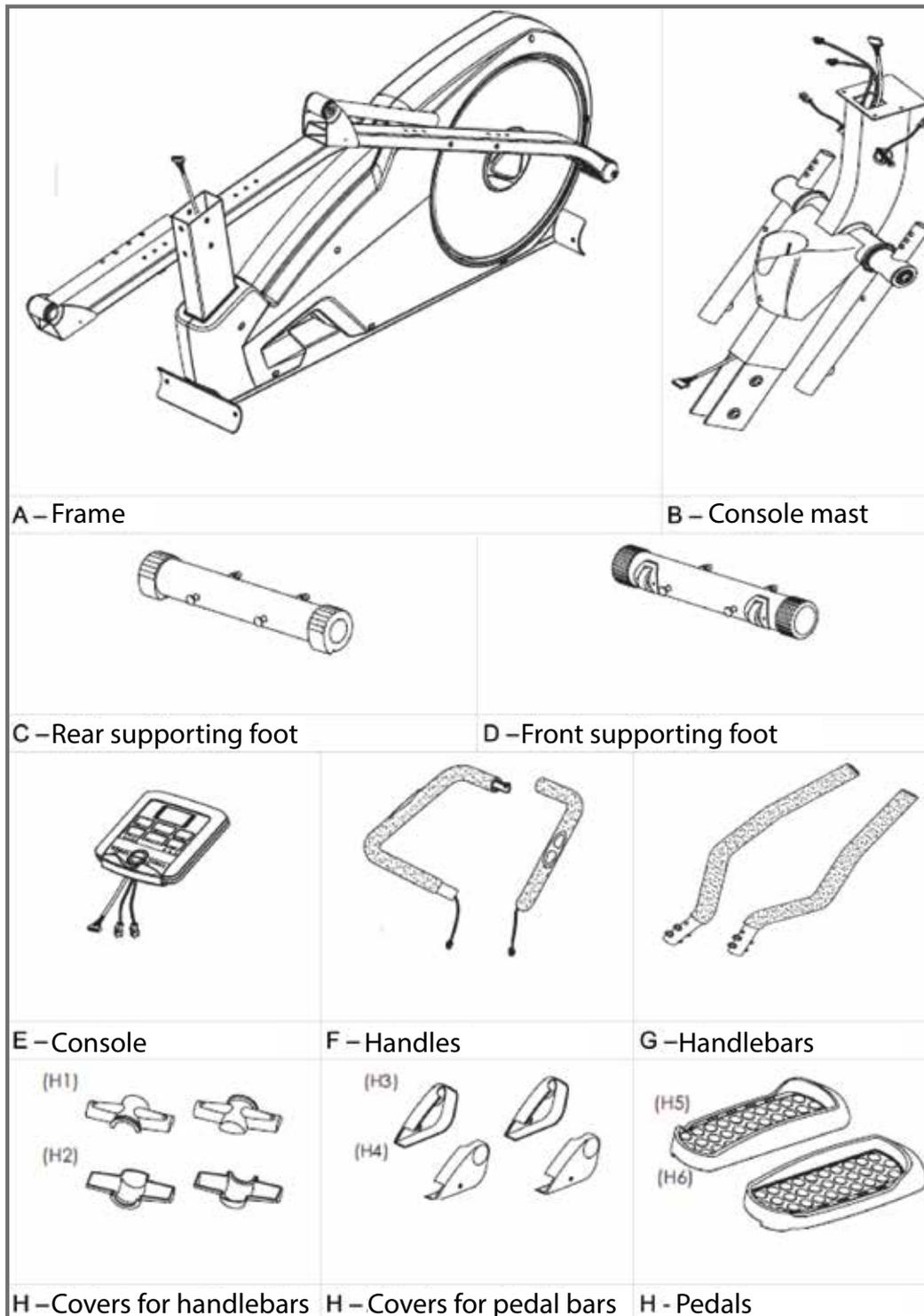
2.3 Maintenance and service calendar

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

Part	Weekly	Monthly	2x annually	Annually
Display console	C	I		
Lubricate the moving parts			I	
Plastic cover	C	I		
Screws and cable connections		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.



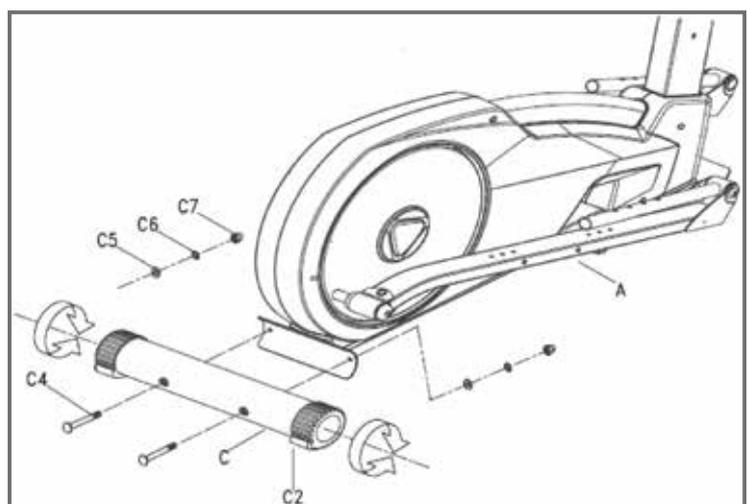
 x 2pcs		
J1 – Turning knobs	J2 – Screws M5*8L	J3 – Screws M4*12L
		
J4 – Washers M6	J5 – Spring washers M6	J6 – Turning knobs
		
J10 - Holders	Tools	

3.2 Assembly instructions

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

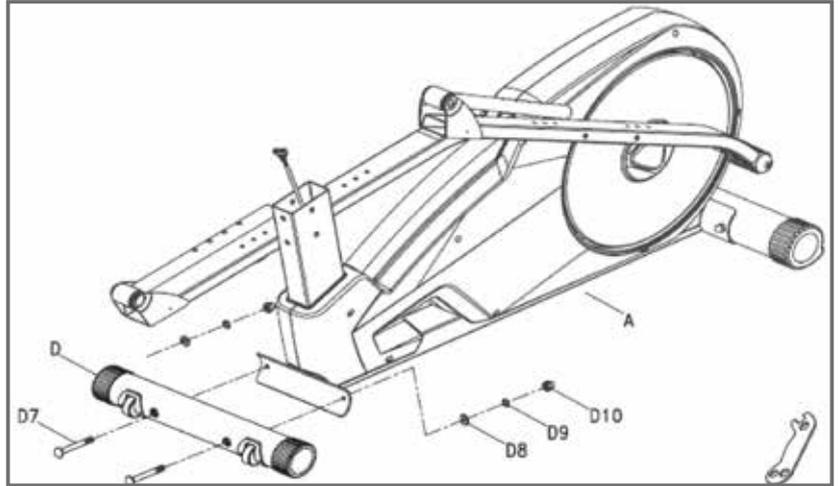
Step 1: Assembly of the rear supporting foot

First remove the screws (C4), washers (C5), spring washers (C6) and nuts (C7) from the rear supporting foot (C). Next, put the screws (C4) through the rear supporting foot (C) and the bracket on the frame (A). Then secure the supporting foot with two washers (C5), two spring washers (C6) and two nuts (C7).



Step 2: Assembly of the front supporting foot

First remove the screws (D7), washers (D8), spring washers (D9) and nuts (D10) from the rear supporting foot (D). Put the screws (D7) through the front supporting foot (D) and the bracket on the frame (A). Then secure the supporting foot with two washers (D8), two spring washers (D9) and two nuts (D10).



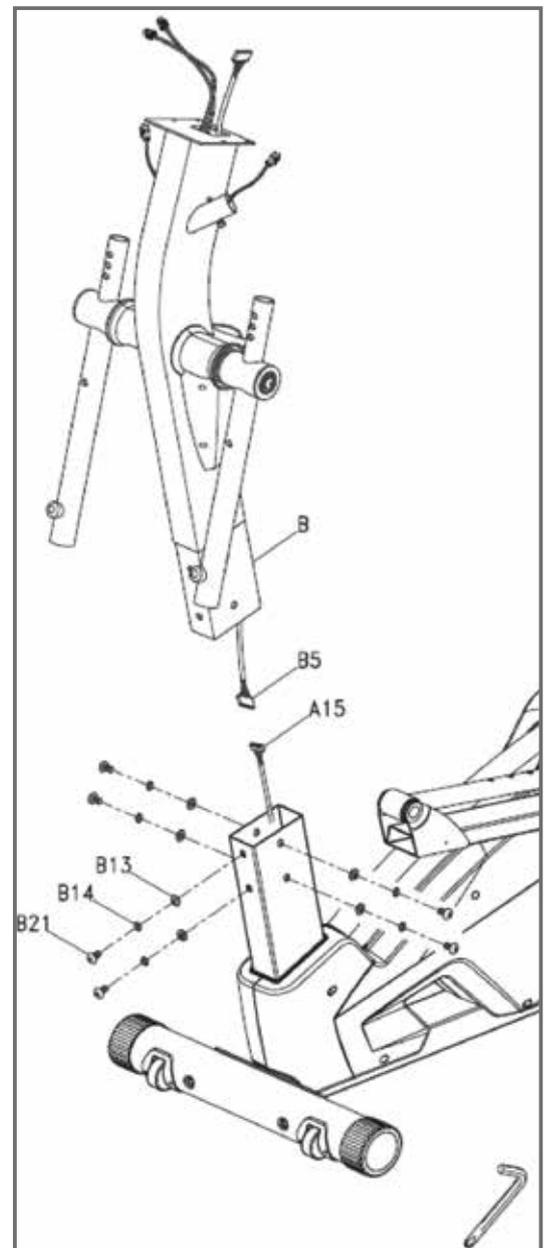
Stabilize the equipment:

If the equipment is not stable after assembly (after Step 2), make adjustments to the adjusting screws underneath the supporting foot (C2) accordingly.

Step 3: Assembly of the console mast

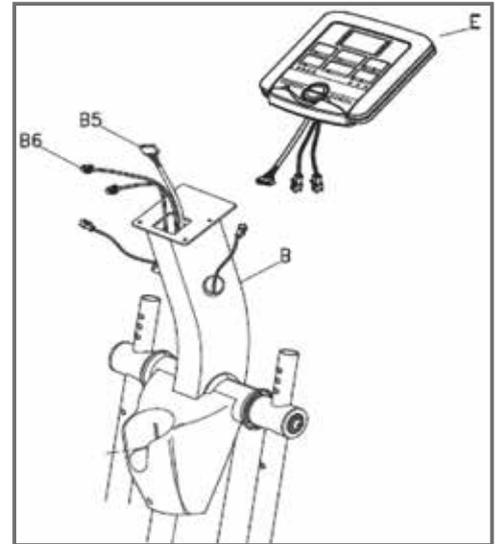
- (1) With the assistance of a second person, lift the frame (A) and remove the foam packaging (4).
- (2) Fix the connection masts (D and E) to the frame (A) with seven respective screws (J1), spring washers (J16) and washers (J2).
- (3) Tighten all of the screws.

Warning: Take care that the cable does not get pinched when you push the parts together.



Step 4: Assembly of the console

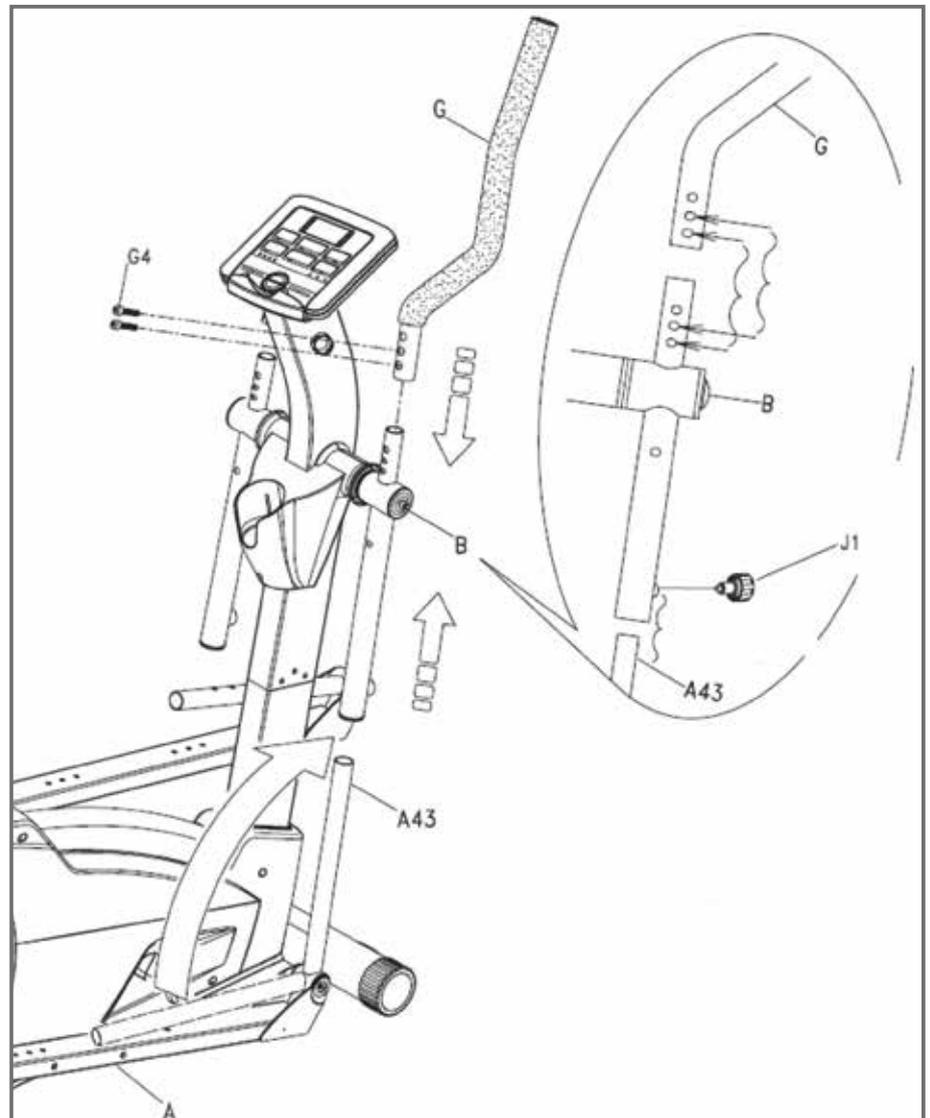
Connect the sensor cables (B5 and B6) to the console cables and mount the console on the console mast plate.



Step 5: Assembly of the handlebars

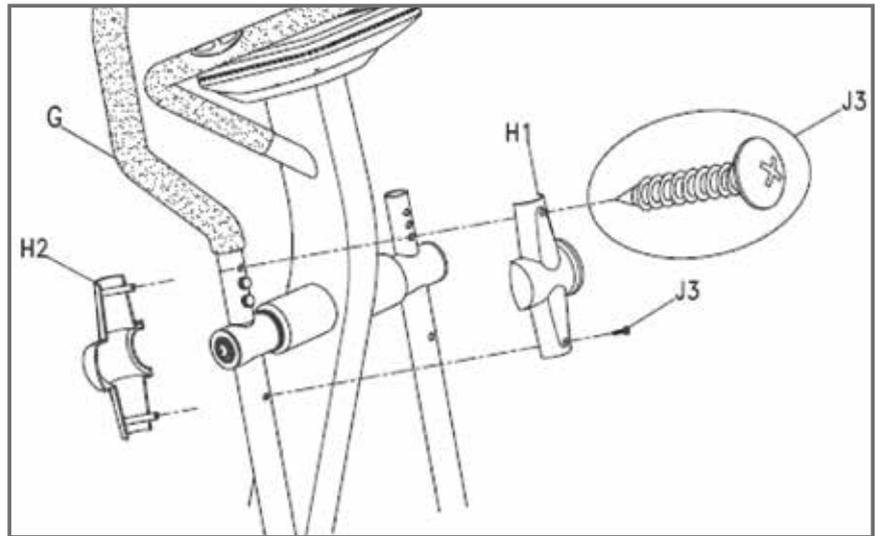
Lift the right pedal bar (A43) and fix it in the desired position on the connection tube (B) using the adjusting screw. Remove the screws (G4) from the handlebar (G). Push the handlebar (G) onto the connection tube and secure it with the screws (G4). Repeat this process for the left side.

** When assembling the handlebars, it is important to use the holes as per the illustration.



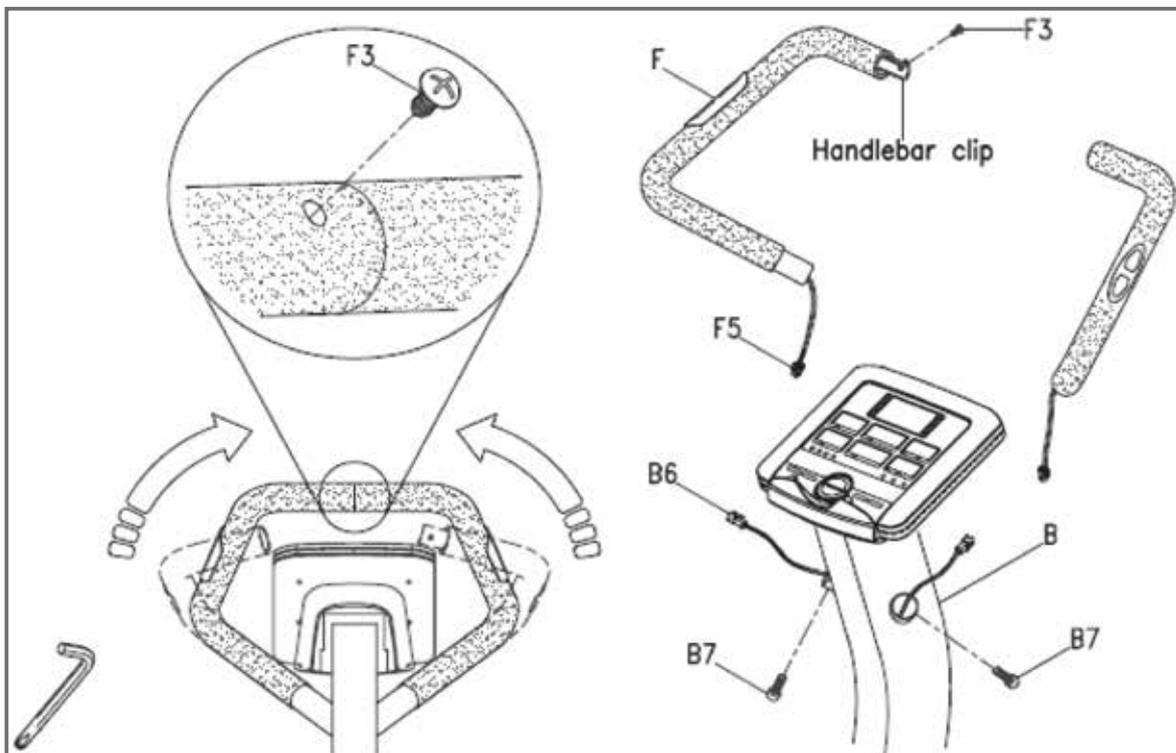
Step 6: Assembly of the handlebar covers

Secure the covers (H1 and H2) to the handlebar (G) with two screws (J3). Repeat this process for the other side.



Step 7: Assembly of the hand grips

Remove the screws (B7) from the console mast (B) and the screw (F3) from the hand grip (F). Connect the cable from the hand grip (F5) to the sensor cable (B6). Insert the hand grips (F) into the console mast (B) and twist the grips together. Secure the hand grips with two screws (B7) and one screw (F3).

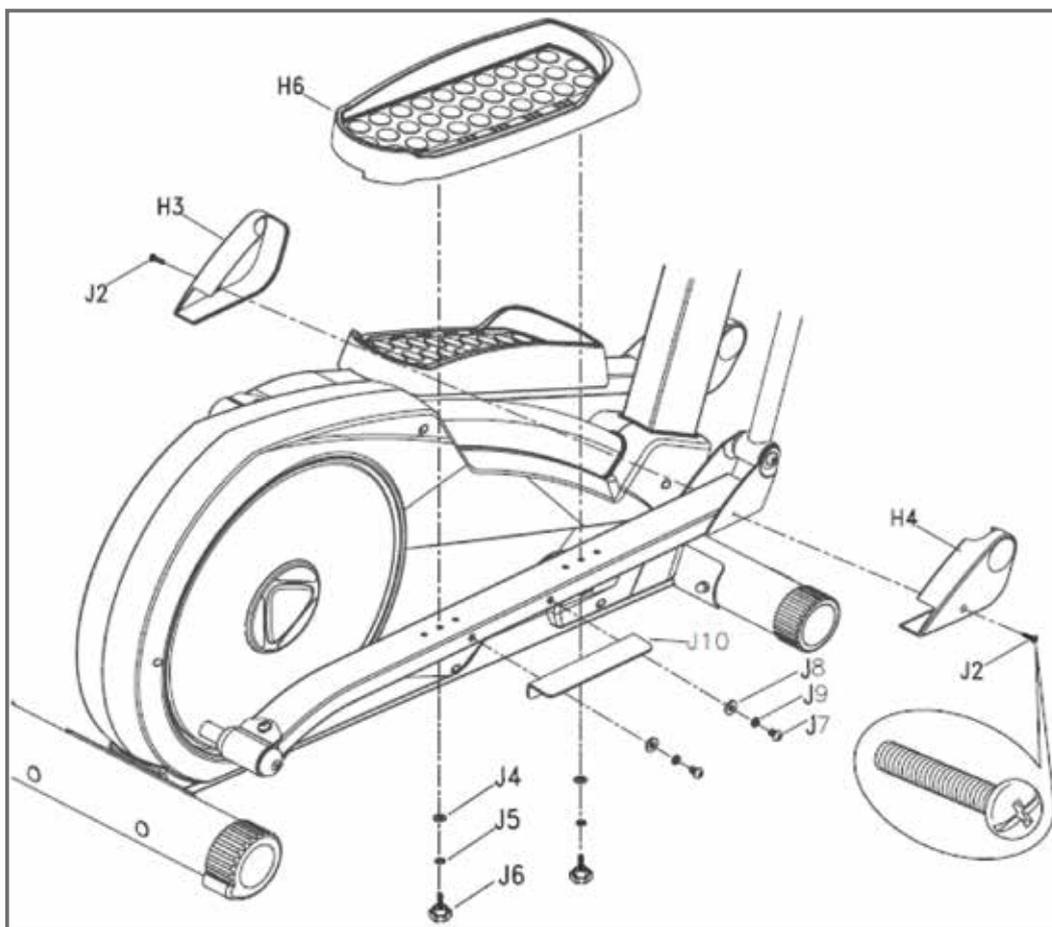


Step 8: Assembly of the pedal-arm covers

Mount the covers (H3 and H4) on the pedal arms using screw (J2). Repeat this process for the other side.

Step 9: Assembly of the pedals

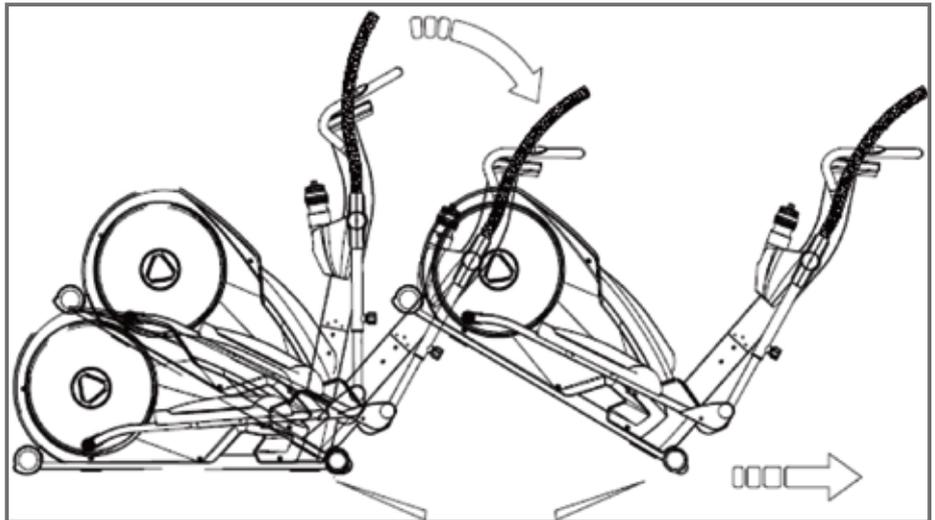
Fix the bracket (J10) to the pedal rod using screw (J7), spring washer (J9) and washers (J8). Repeat the process on the other side. Install the right pedal (H6) using washers (J4), spring washers (J5) and adjusting knobs (J6). The pedals can be mounted in any of the three positions. Repeat this process for the left pedal (H5).



After assembly carry out a further check to ensure that all of the screws are tightly done up!

Step 10: Moving the equipment

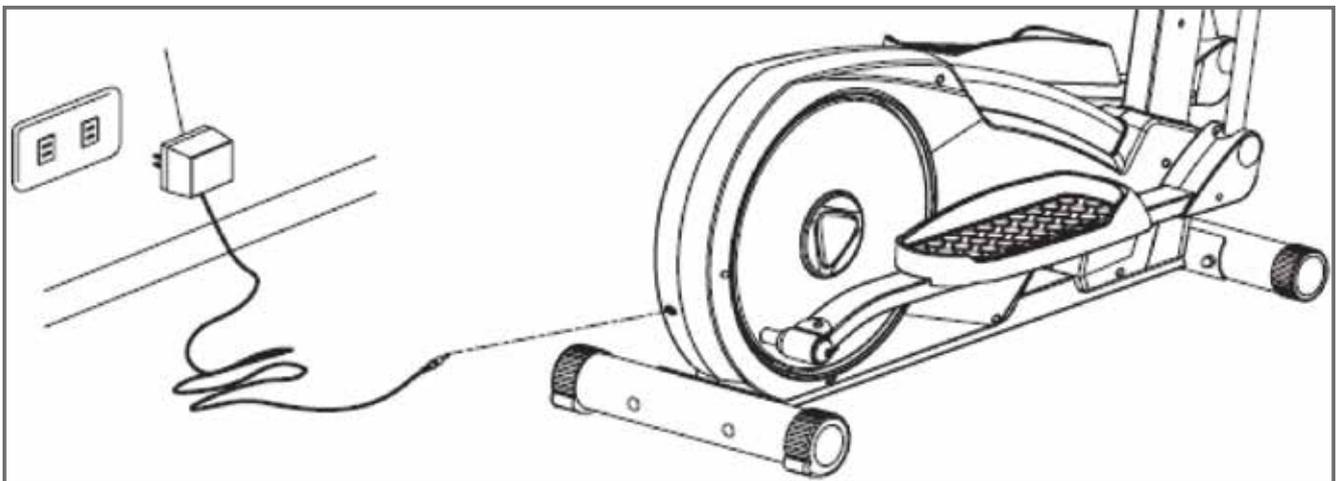
The front supporting foot has transport wheels. Stand in front of the equipment and lift it carefully until its weight rests on the transport wheels. You can then easily push the equipment to a new position.



Step 11: Power cable

To supply the equipment with power, insert the power cable plug into the plug socket, and the adapter into the equipment.

Warning: The equipment should only be used with the originally supplied power cable. Otherwise there is a risk of damage.



The equipment can now be used.

4.1 Console display



Time	0:00-99:59 minutes
Speed	0.0-99.9 km/h
RPM (cadence; rotations per minute)	0-999 RPM
Distance	0.0-99.99 km
Calories (calorie consumption)	0-9999 Cal
Sex	Male (m)/Female (f)
Pulse (heart rate; beats per minute)	30-240 BPM
Heart-rate symbol	Flashing on and off
Programs	P1-P12
User data	U0-U4
Watt/Load (output/resistance)	0-999 Watt; Watt control: 10-350 Watt
Level (resistance)	1-16
H.R.C. (heart-rate control)	55 / 75 / 90% of the maximum heart rate; manual target pulse (TAG)
Age	1-99 years
Height	100-200 cm (default: 160 cm)
Weight	220-150 kg (default: 50 kg)/44-330 lbs (default: 110 lbs)
Temperature (displayed in rest mode)	0-60°C

4.2 Button functions



- + **START/STOP:** Press this button to start, pause or end the workout.
- + **RECOVERY:** After your workout, you can measure your recovery heart rate using this button. When you have completed your workout, press the Recovery button and grasp the hand pulse sensors, if you are not wearing a chest strap. A one-minute countdown then begins. Only the countdown and the heart rate are displayed during this time. When the minute is up, the console calculates a fitness level from F1-F6, based on your heart rate.

Result	Fitness level	Heart rate per minute
F1	Very good	75-84
F2	Good	85-94
F3	Average	95-119
F4	Satisfactory	120-129
F5	Poor	130-135
F6	Very poor	135

- + **ARROW BUTTONS (+ & -):**
 - Select the user (U0-U4)
 - Enter personal details (sex, age, height, weight)
 - Select the program
 - After selecting the program, the resistance level can be set (1-16)
 - Enter time, distance, calories, level and pulse
 - Using HRC programs: select and enter the target heart rate (55%, 75%, 90% or target pulse)
 - Using user-defined programs: select the user-defined program and set the workout profile.

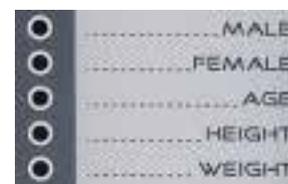
- + **RESET:** If you press the RESET button, the console returns to program selection. If you press and hold this button for two seconds, the console returns to the start screen where you can select the user.
- + **ENTER:** Your various settings are confirmed using this button.
- + **QUICK KEYS:** The QUICK KEYS can be used to jump directly to the programs displayed on the console. Underneath you will find the H.R.C. programs and 11 further preset workout programs. Simply press the relevant image with your finger to select one of the programs.



4.3 User memory

After switching on the equipment, you will be directed as standard to user memory U1. There are four user accounts in the console (U0-U4). You can now choose the desired user account using the ARROW BUTTONS. After making your selection, press the ENTER button to confirm.

Next, you can enter your sex (male/female), age, height and weight. This data allows the equipment to make a more accurate calculation of your calorie consumption.

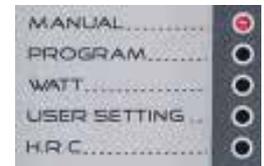


When the equipment is turned off or the RESET button is pressed, the data in U0 is deleted. The data in U1 to U4 are saved. Likewise, the last figures entered in U1 to U4 for time, distance, calories, pulse and level are saved. If you would like to change the user, press and hold the RESET button for two seconds and the equipment will automatically switch back to the user memory selection.

4.4 Program selection

After entering all of the user values, you can select one of the following program categories using the ARROW BUTTONS:

- Manual (manual workout program): 1
- Program (pre-set workout programs): 12
- Watt (Watt-based workout program): 1
- User setting (user-defined workout program): 1
- H.R.C. (heart-rate controlled workout programs): 4



4.4.1 MAN. - Manual program

After selecting the manual program and confirming using ENTER, you can adjust the resistance level (Level) for your workout using the ARROW BUTTONS. The resistance level can be adjusted upwards or downwards at any time during the workout, irrespective of your original choice. The program will not be interrupted during this process. There are also further adjustment options for time, distance, calories and pulse. The values will also be displayed in this order. The value currently selected will flash on the display. To confirm, press the ENTER button after each setting. For high-speed mode, press and hold the ARROW BUTTONS. After you have entered all of the values, press the START/STOP button to start your workout. If you have entered a target value for time, distance, calories and pulse, the workout will end automatically when one of these target values is achieved. If you would like to work out taking only one of these values into account (time, distance, calories or pulse), only enter the desired target value. You do not need to enter the other values. The workout then ends automatically when the given value for time, distance, calories, target pulse is achieved. At the end of the workout, the display shows all of the data recorded (time, distance, calories). If you are wearing a chest strap or if you grasp the pulse sensors, your pulse will also be displayed.



4.4.2 Preset programs

Select one of the workout programs (P1-P12) using the ARROW BUTTONS.

The workout programs will be shown in the Watt/Level display.



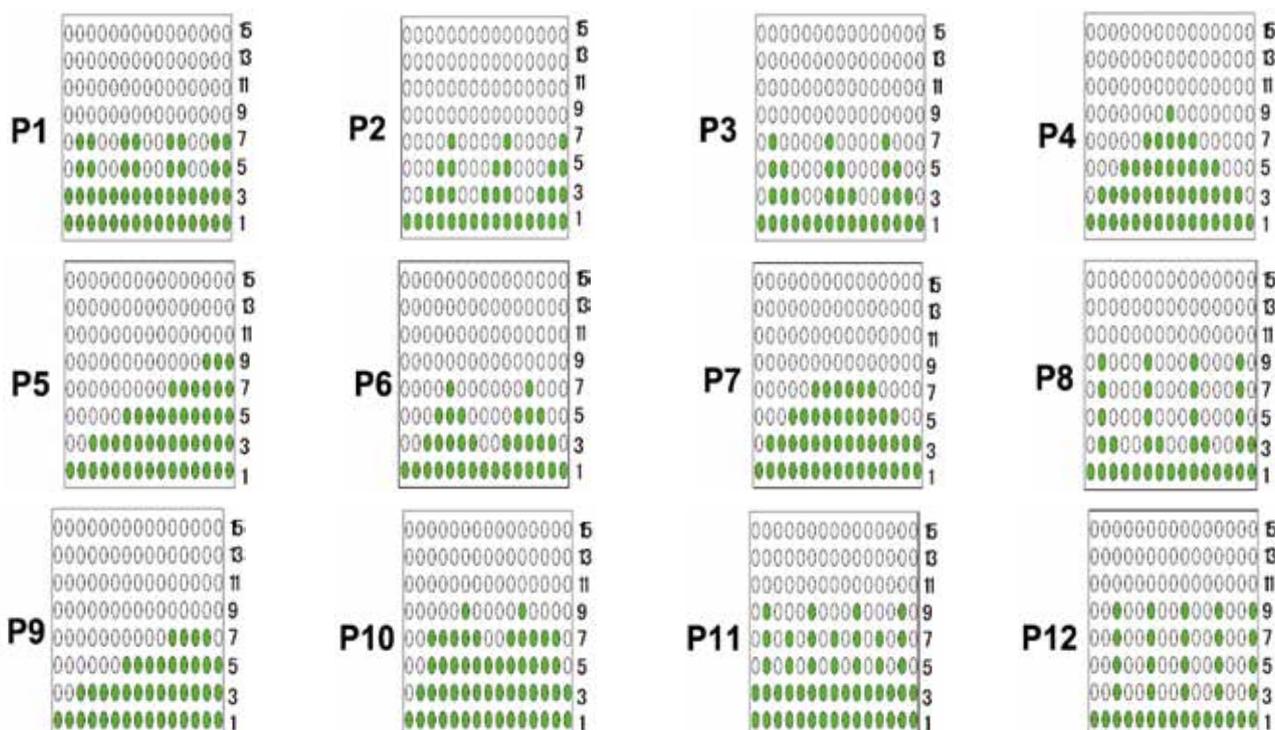
You can then use the ARROW BUTTONS to enter the values for resistance level, time, distance, calories and pulse, one after another. After each setting, press ENTER to confirm and to move on to the next value. The workout program will be adjusted according to the data entered. After you have entered all of the values, press the START/STOP button to start your workout.

The profile of the selected workout program will be shown using the green dots in the upper display. Confirm your workout program selection with the ENTER button.



The resistance level (Level) can be adjusted upwards or downwards at any time during the workout, irrespective of your previous choice. The program will not be interrupted during this process. A workout program always consists of 15 segments. The higher the number of an individual segment, the higher the resistance level. The individual resistance profiles of the twelve workout programs are shown below.

Profiles of the preset workout programs:



4.4.3 Watt-based program

When you have selected the Watt-based program, use the ARROW BUTTONS to enter the desired watt value at which you would like to work out.

The Watt value will be shown in the Watt/Level display. Confirm your selection with the ENTER button.



You can then use the ARROW BUTTONS to enter the values for time, distance, calories and pulse. Confirm each selection with the ENTER button. As soon as you have entered all of the values, press the START/STOP button to start your workout. The Watt value can be adjusted upwards or downwards during the workout using the ARROW BUTTONS.

4.4.4 User-defined program

When you have selected the user-defined program, you can set each of the 15 segments of the profile using the ARROW BUTTONS. For each segment select a resistance level (Level 1-16). After you have entered a resistance level for the first segment, confirm the setting by pressing the ENTER button. You will then be automatically moved on to the next segment. Use the same procedure for the remaining 14 segments. The segment currently selected will flash so that you can see which segment you are in. When you have set each of the 15 segments, press and hold ENTER for two seconds in order to move on to enter the resistance level, time, distance, calories and pulse. As soon as you have entered all of the values, press the START/STOP button to start your workout. The resistance level can be adjusted upwards or downwards at any time during the workout, irrespective of your previous choice. The program will not be interrupted during this process. The user-defined program will be saved in the selected user account after it has been entered.

4.4.5 Heart-rate controlled programs

After you have selected the H.R.C. program you can enter the desired target heart rate.

Either choose one of the three preset target heart rates (55%, 75% or 90% of your maximum heart rate) or select „TAG“ and enter a target heart rate manually. Your maximum heart rate is determined by the console based on the age that you have entered.



If you select one of the preset target heart rate values, the equipment calculates your target heart rate using the data previously entered in your user profile. The resulting target heart rate is shown in the „pulse“ display.



Confirm your target heart rate selection with the ENTER button. Next, you can use the ARROW BUTTONS to enter the values for time, distance and calories. Confirm each selection with the ENTER button. You do not need to enter a value for the resistance level because the resistance (Level) is automatically set by the equipment so as not to exceed the selected heart rate. As soon as you have entered all of the values, press the START/STOP button to start your workout.

5.1 Heart-rate measuring

Pulse measuring via hand sensors

The hand sensors integrated in the handles 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 elliptical cross trainer 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.

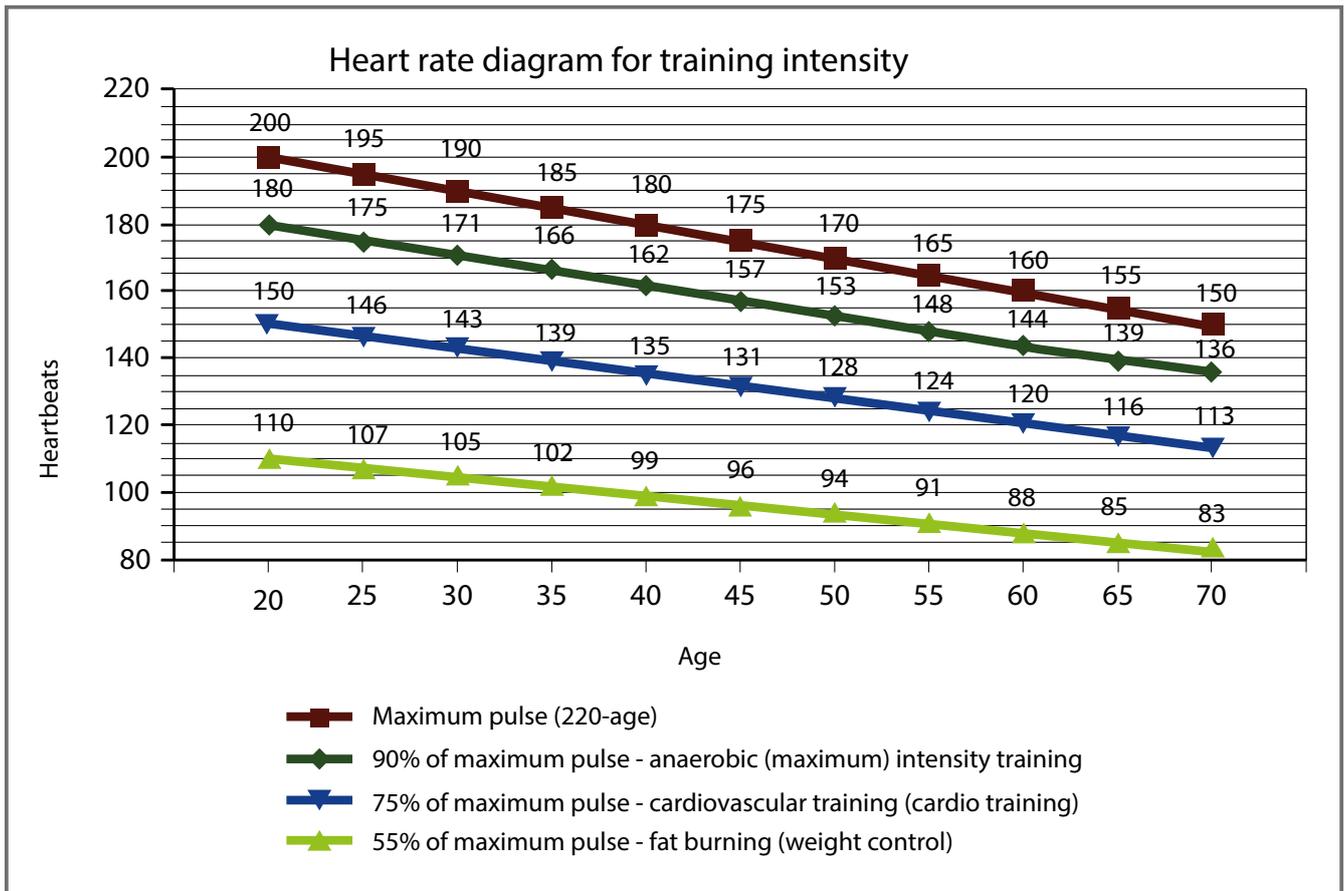
Cardiovascular training (cardio training): The primary goal is to increase stamina and fitness through an improved provision of oxygen through the cardiovascular system. In order to achieve this training goal, medium intensity (approximately 75% of the maximum heart rate) with a medium training period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

Switch your focus between different muscle groups and different levels of intensity during your workout.

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 or three workouts per week. Warm up for about five minutes before starting each workout. Finish the workout with a cool-down and targeted stretching.

Warm-up approx. five minutes Dynamic movement of large muscle groups at a low intensity. Core body temperature increases and the metabolic process is speeded up.

WEEK 1 + 2				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	20 min.	Slow speed, no resistance	30 min.	Moderate speed, keep resistance low
Wed	20 min.	Slow speed, no resistance	30 min.	Moderate speed, keep resistance low
Fri	20 min.	Slow speed, no resistance	30 min.	Moderate speed, keep resistance low
In the first week, increase the speed in between for two-minutes. Maintain heart rate.			In the second week, increase the speed for brief periods.	

WEEK 3 + 4				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	25 min.	Slow speed, no resistance	35 min.	Vary speed, keep resistance low
Wed	25 min.	Slow speed, no resistance	35 min.	Vary speed, keep resistance low

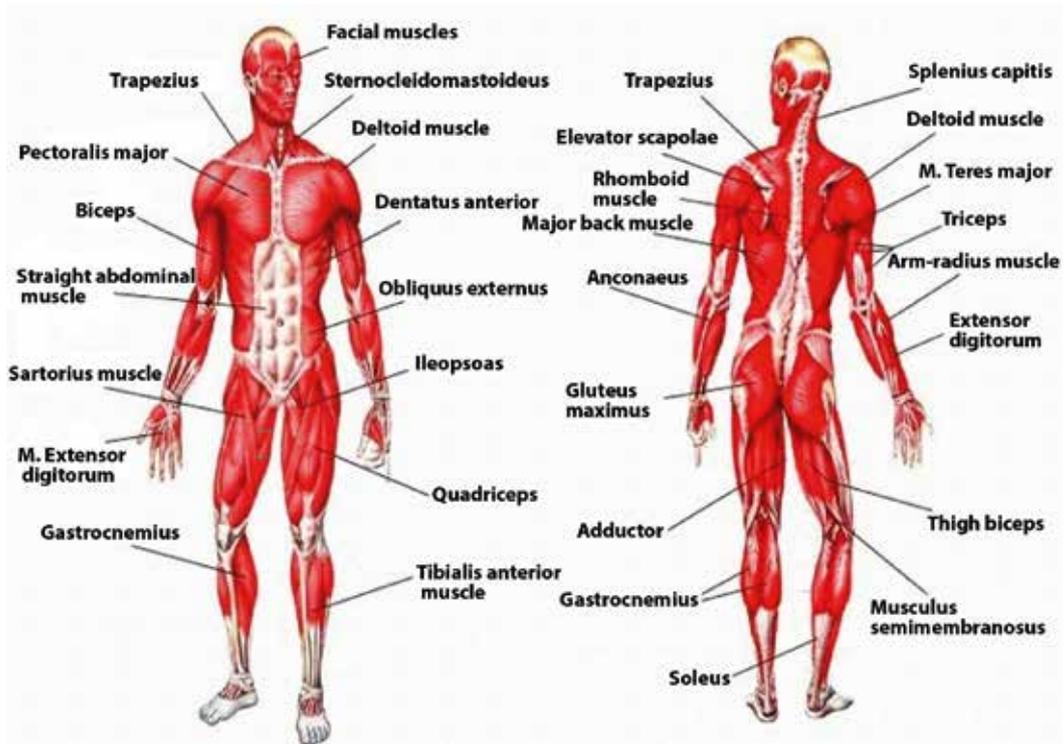
Fri	25 min.	Slow speed, no resistance	35 min.	Vary speed, keep resistance low
In the third week, increase the resistance slightly.			In the fourth week, combine forwards and backwards movements.	

WEEK 5 + 6				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	30 min.	Moderate speed, keep resistance low	40 min.	Vary speed, keep resistance low
Wed	30 min.	Moderate speed, keep resistance low	40 min.	Vary speed, keep resistance low
Fri	30 min.	Moderate speed, keep resistance low	40 min.	Vary speed, keep resistance low
In the fifth week, increase the resistance slightly at moderate speed.			In the sixth week, alternate between forwards and backwards movements.	

WEEK 7 + 8				
	Beginner		Advanced	
Days	Duration	Intensity	Duration	Intensity
Mon	35 min.	Vary speed, keep resistance low	45 min.	Vary speed, increase resistance
Wed	35 min.	Vary speed, keep resistance low	45 min.	Vary speed, increase resistance
Fri	35 min.	Vary speed, keep resistance low	45 min.	Vary speed, increase resistance
In the seventh week, include short sprints.			In the eighth week, alternate between forwards and backwards movements.	

Cool-down approximately five minutes Finish your training at low resistance and at slow speed. Allow your body to gently slow back down.

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.

Model	Use	Full warranty	Frame
EX40	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



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



Sport-Tiedje floor mat, size XL

Art. no. ST-FM-XL



Sport-Tiedje 122 kHz chest strap

Art. no. ST1030



Sport-Tiedje silicone spray

Art. no. ST-1003



Chest-strap contact gel 250ml

Art. no. BK-250



Fitness equipment care kit

Art. no. HF-500

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	NL	UK
<p>+49 4621 4210-0 +49 4621 4210-699 service@sport-tiedje.de Mon - Fri 8:00 am - 6:00 pm Sat 9:00 am - 6:00 pm</p>	<p>+31 172 619961 info@fitshop.nl Mon - Thu 9 am - 5 pm Fri 9 am - 9 pm Sat 10 am - 5 pm</p>	<p>+44 141 876 3972 orders@powerhousefitness.co.uk Mon - Fri 9 am - 5 pm</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
N1	1	Main Frame
N2	1	Magnetic Flywheel
N3	2	Flat Washer
N4	2	Nut
N5	1	Tension Pulley
N6	3	Pipe
N7	3	Flat Washer
N8	3	Screw
N9	4	Bearing
N10	3	E Clip
N11	1	Magnetic Housing
N12	1	Nut
N13	1	Screw
N14	1	Spring
N15	1	Motor
N16	2	Spring Washer
N17	1	Spring Fixing Housing
N18	1	Screw
N19	1	Fixing Housing
N20	2	Screw
N21	1	Spring
N22	1	Belt
N23	1	Belt Pulley
N24	1	Pulley Axle
N25	4	Screw
N26	1	Plane
N27	4	Nut
N28	1	Magnet
N29	2	Turning Plate
N30	2	Nut
N31	2	Decoration Cover
N32	2	Pipe
N33	2	Bearing

No.	Qty.	Description
N34	2	Bearing
N35	2	E Clip
N36	2	Screw Cover
N37	1	Pedal Tube (Right)
N38	2	Pedal Tube (Left)
N39	2	Screw
N40	2	Flat Washer
N41	2	Flat Washer
N42	2	Screw
N43	2	Connect Pipe
N44	1	Screw
N45	1	Sensor Wire
N46	1	Fixing Housing
N47	1	Right Cover
N48	1	Wave Washer
N49	1	Left Cover
N50	2	Bearing
N51	1	E Clip
N52	1	Flat Washer
N53	3	Screw
N54	6	Tapping Screw
N55	1	Power Cord Sensor
N56	4	Screw
N57	1	Tension Cable
N58	1	Clip
N59	2	Screw
N60	2	Screw
N61	2	Spring Washer
N62	2	Flat Washer
N63	1	End Cap
N64	1	Flat Washer
N65	1	Wave Washer
N66	1	Flat Washer

No.	Qty.	Description
N67	2	Screw
N68	2	Screw
N69	1	Nut
N70	1	Iron Bracket
N71	1	Screw
N72	4	Flat Washer
N73	4	Nut
N74	4	Spring Washer
O1	1	Central Support Tube
O4	2	Wave Washer
O5	1	Sensor Wire
O6	2	Hand Pulse Sensor Wire
O7	2	Bolt
O8	2	Bushing
O9	1	Shaft
O10	4	Bearing
O11	4	Bushing
O12	2	Connect Tube
O13	6	Flat Washer
O14	8	Spring Washer
O15	2	Screw
O16	1	Bottle Housing
O17	1	Screw
O18 & O19	4	Decoration Bottle Housing
O20	2	Screw
O21	6	Screw
O22	2	Flat Washer
O23	2	Plastic Insert
P1	1	Rear Stabilizer
P2	1	End cap (L)
P3	1	End cap (R)
P4 & Q7	4	Bolt
P5 & Q8	4	Flat Washer
P6 & Q9	4	Spring Washer
P7 & Q10	4	Nut

No.	Qty.	Description
Q1	1	Front Stabilizer
Q2	2	End Cap
Q4	2	Transmit Wheel Housing
Q5	4	Screw
Q6	2	Transport Wheel
R1	1	Monitor
R2	4	Screw
R3	1	Adaptor
S1	1	Front Handle Bar (L)
S2	1	Handlebar Clip
S3	2	Screw
S4	2	Foam Grip
S5	2	Sensor
S6	2	Srew
S7	2	Handle Pulse
S8	1	Front Handle Bar (R)
T1	1	Side Handle Bar (L)
T2	2	Foam Grip
T3	2	End Cap
T4	4	Screw
T5	1	Side Handle Bar (R)
U1 & U2	4	Decoration Cover
U3 & U4	4	Pedal Joint Cover
U5 & U6	1	Pedal (L & R)
U7 & U8	1	Cushion Pad (L & R)
W1	2	Knob
W2	4	Screw
W3	4	Screw
W4	4	Flat Washer
W5	4	Spring Washer
W6	4	Knob
W7	4	Screw
W8	4	Washer
W9	4	Spring Washer
W10	2	Iron Bracket

CONTACT

Company head office

Sport-Tiedje GmbH
Flensburger Str. 55
24837 Schleswig
Germany

GENERAL INFORMATION:

DE ☎ +49 4621 4210 0
✉ info@sport-tiedje.com

NL ☎ +31 172 619961
✉ info@fitshop.nl

UK ☎ +44 141 876 3972
✉ orders@powerhousefitness.co.uk

Hotline for Technical Information

DE ☎ +49 4621 4210 0
☎ +49 4621 4210 699
✉ service@sport-tiedje.de

NL ☎ +31 172 619961
✉ info@fitshop.nl

UK ☎ +44 141 876 3986
✉ support@powerhousefitness.co.uk

www.sport-tiedje.com
www.cardiostrong.de

DISCLAIMER



©2010 cardiostrong is a registered brand of the company Sport-Tiedje GmbH. All rights reserved. Any use of this trademark without the explicit written permission of Sport-Tiedje is prohibited.

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

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

Note

Note

