# Instructions for use for



# Stair climber of the motion cardio line 900 & motion cardio line 900 med



motion stair 900 motion stair 900 med

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## 1. General information



Read these instructions for use, including all safety instructions and warnings, carefully **before using** the training equipment for the **first time** to ensure that it is used safely and as intended. Keep this document for future reference and pass it on if you pass on the device.

The purpose of the devices is cardiopulmonary training and reproducible stress on the body, e.g. for diagnostic and therapeutic measures. The equipment is mainly used by users in cardiology, physiotherapy, sports medicine and at home. They are also used to build up and strengthen skeletal muscles and to increase mobility in the joints affected during training.

The equipment enables reproducible physical stress on the human body and the cardiovascular system for the purposes of prevention, rehabilitation and diagnosis.

Text with a grey background indicates text sections that deal exclusively with equipment features of the fitness line appliances.

#### 2. Classification of the devices

- The cardio line med devices are medical products in accordance with Directive EU 2017/745, categorised in Class IIa. In the control range of the brake, the display accuracy is +/- 5%.
- The cardio line devices comply with the DIN EN ISO 20957-1 and DIN EN ISO 20957-5 standards; application class S (commercial use/studio) and H (home use) of accuracy class A +/- 10 % and are designed exclusively for the fitness and sports sector.

Only one person can train on the equipment at a time; the maximum user weight stated on the rating plate must not be exceeded.

# 3. Safety instructions

# Safe installation of the devices

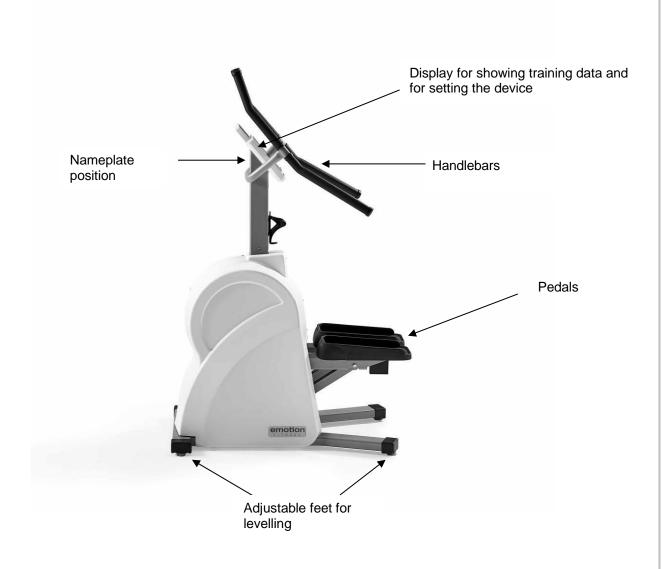
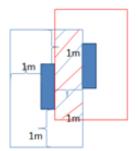


Fig.1: Side view of the device with labelling of the main elements



- Place the appliance on a firm, horizontal, level and non-slip surface and level the appliance with the adjusting screws so that it does not wobble.
- The free area around the appliance must be at least 1 metre larger than the movement area of the appliance to ensure safe access and egress from the appliance, even in emergencies. However, the safety clearances may overlap (see illustration).
  - ns at , e<sup>ee</sup>
- Only place the appliance in dry rooms at , and
- Make sure that there is no electromagnetic radiation, e.g. from radio antennas, radiating fluorescent lamps, etc., as these can affect the pulse measurement.
- The underside of the frame must always be clear to ensure adequate ventilation.
- All the devices listed here are mains-independent. They generate their own power during operation or are supplied
  with power during programming by the capacitor installed as standard. The capacitor is charged during training and
  has a service life of > 20000 cycles.
- Attention: Please always observe the care, maintenance and servicing instructions in chapter 5 of this manual.

# Safe training

- Before starting training, the fitness for training should be checked by an authorised person, e.g. a doctor. Please refer to the section "Indications and contraindications".
- Please note that excessive training can be harmful.
- If you experience nausea or dizziness, stop training immediately and consult a doctor.
- Training on the equipment is only permitted with undamaged skin.
- When training, it is advisable to wear tight-fitting, lightweight sports clothing that cannot get caught in parts of the device during training. Always wear suitable sports shoes to ensure a secure footing on the pedals.
- Before starting training, check the device for stability, defective parts or possible manipulation. If you have discovered any defects or are unsure, ask the supervisor before you start training.
- Before starting training, it must be ensured that nobody is in the vicinity of the moving parts in order to avoid endangering third parties. In particular, unsupervised children must be kept away from the equipment.
- Caution: The treads on which the user stands during training are raised to the upper starting position by sufficiently strong springs. To ensure that rebounding feet do not cause injuries, the following steps must be taken when climbing onto the device
  - Stand in front of the device and hold on to the handlebars with your hands.
  - First place one foot on the pedal and press it down to the floor.
  - You shift your body weight completely onto this pedal
  - Now press the other pedal to the floor with the other foot.
  - Both pedals are now down
  - Now start pedalling with both legs and enter the functional area of the stair movement. If performed correctly, you will not hit the upper or lower end point with the pedal.
  - If you want to stop training again, let yourself slide down with both pedals until you touch the ground.
  - Now slowly raise a pedal by exerting sufficient counter-pressure.
  - If the pedal is at the top stop, you can put your foot down on the floor in front of the device and let the other pedal move upwards in the same way.
  - If the second pedal is also at the top stop, take your foot off the pedal.
  - Practise getting on and off the device several times so that you can use it safely even if you have reached a certain level of fatigue after training.

- Warning: The heart rate monitoring system is prone to malfunctions. Excessive training can lead to dangerous injuries or death. If you feel unwell, stop training immediately and consult your doctor or therapist.
- Warning: The appliance may only be operated with the housing and in dry rooms.
- Warning for optional power connection: Only use approved power supply units that have been tested in accordance with IEC 60601-1 and approved by the appliance manufacturer. Ensure that the plug is installed in such a way that it is difficult to disconnect it (e.g. through floor boxes, installation under the appliance or cable ducts, position of the power supply unit in areas that are difficult to access).
- Warning: If the medical device is modified, suitable tests and inspections must be carried out to ensure continued safe use. The device must not be modified without the manufacturer's authorisation.

#### Indications and contraindications

Before starting training, please consult a doctor or therapist to ensure suitability for training.

# **Exemplary indications**

- Mobility of the musculoskeletal system
- Strengthening the muscles
- Strengthening the cardiovascular system

## **Examples of contraindications**

- Cardiovascular diseases
- Pain of the musculoskeletal system
- During training:
  - o Pain in the chest area
  - Discomfort
  - Nausea
  - Dizziness
  - Shortness of breath

Ask your doctor if you are taking medication.

# 4. Operating the display

Three or nine training programmes enable individual and varied training with the motion stair 900 and motion stair 900 med.

	stair 900 / 900 med
Basic equipment	Quickstart, time training, pulse
	training
incl. programme package	Quickstart
	Qualifying
	Pulse training
	+ 6 further programmes

## Overview of display/button functions





Fig. 2: Monitor view, to explain the button functions, actual view may vary in colour, button assignment is the same.

#### Explanation of the buttons:

- The **home button is** a physical button below the display glass. It is pressed to access the main menu. A long press (at least 6 seconds) on the HOME button resets the monitor electronics.
- Press the **PAUSE** button ([[[]]) to pause the training session.
- Training can be started or resumed by pressing the PLAY button (>).
- The **COOL** button (\*\*) ends the training session immediately. A summary of the training results is immediately created, displayed and, if necessary, sent to compatible training control software.
- Use the "+" button or "-" button to increase or decrease the parameters or power values to be set.
- Use the arrow buttons to navigate through the corresponding menus and confirm values or settings.
- You can navigate through the programme selection by swiping/swiping gestures.

Depending on the programme, some of the following parameters are displayed:

- Programme name.
- Time: Training time completed or remaining.
- Heart rate: Heart rate display when using a compatible heart rate transmitter belt. The heart rate indicator shows
  the current heart rate range for programmes with a target or maximum heart rate. The profile indicator in the
  display shows the progression of the intensity range during training.
- Watt: Power is displayed in watts. At the same time, the intensity is shown graphically in the profile.
- km/h: Fictitious speed is displayed in km/h.
- Speed: Pedal revolutions per minute.
- L/R (not for body 900/900 med): The force ratio of the left and right leg is displayed here in %.
- HRV: Heart rate variability is displayed via the RMSSD value (requires POLAR H10 sensor).
- resp: Respiratory rate (requires POLAR H10 sensor)
- km: Added or remaining distance. The display is in metres; from 1000 m in 10 m increments (1.00 km).
- K-Cal: Added or remaining calorie consumption.
- Level: Intensity level 1 21.

• ØIf the parameters are supplemented with this symbol, these are average values.

#### Results

After completing a training programme or by prematurely cancelling it via COOL (\*), the results are displayed in the monitor and a 3-minute cool-down is performed. This can be cancelled using the HOME button.

Some of the values are averaged (watts, km/h, speed, heart rate, altitude metres/min), others are cumulated (km, K-Cal, time, altitude metres). The average values are marked with the symbol Ø.

These results make it possible to monitor personal performance development and thus serve as motivation.

# Programme selection

The desired training programme can be selected in the main menu by tapping the corresponding icon. You will then be taken to the configuration page where you can set the relevant training parameters. Press the **PLAY** button ( $\triangleright$ ) to confirm your entry and start the training programme. You can return to the main menu via the home icon or the home button.





Fig. 3: Programme selection and configuration for manual training.

# **Pulse systems**

The motion cardio line 900 and motion cardio line 900 med devices are equipped with the original pulse system, which uses a chest strap to record signals as standard. This enables individual training in various programmes. The wireless data transmission to the display electronics is coded (either via 5kHz or Bluetooth). The new pulse. "autopairing" technology is based on secure and interference-free data transmission via Bluetooth. This technology requires the use of the H10 or H9 transmitters. Other parameters, such as HRV and respiratory rate, are also transmitted to the monitor via the Bluetooth connection.

If the old transmitters, e.g. T31coded, are used, there is downward compatibility. However, it should be noted that there may be interference during signal transmission via 5 kHz technology.

The colour of the flashing heart symbol indicates the technology used. light blue=Bluetooth green=5kHz

# ANT+

The motion cardio line 900 and motion cardio line 900 med devices enable optional data transmission via in addition to heart rate transmission via 5kHz/§ Bluetooth . The performance package is required for this. The motion cardio line 900 and motion cardio line 900 med devices automatically recognise a

Polar 5kHz/8 Bluetooth signal or signal. To pair a sensor, the user must already be in the desired training programme and the corresponding sensor must be presented near the integrated radio antenna in the monitor.

A dark blue flashing heart symbol confirms the heart rate transmission via



Fig. 11: Pairing an ANT+ sensor for heart rate transmission

Safety instructions in accordance with DIN EN ISO Warning! Heart rate monitoring systems can be inaccurate. Excessive training can lead to serious damage to health or death. Stop exercising immediately if you feel dizzy or faint.

# **Inductive charging (optional)**

An optional inductive charging module can be activated on all motion cardio line 900 and motion cardio line 900 med devices via the "connect package". This enables contactless charging of mobile devices that fulfil the Qi standard ( $^{\circ}$ ). Wearers of pacemakers or implanted defibrillators (ICDs) are recommended to keep a minimum distance of 10 cm from the charging coil.

# 5. Care, maintenance and servicing

All cardio equipment from emotion fitness is durable and requires little maintenance to function as training equipment for a long time. However, the necessary care must be carried out conscientiously.



Warning: The device may only be opened by an authorised specialist

#### Symbols and meaning

Safety sign	Reference	Title
	ISO 7010-P017	Pushing prohibited
ACHTUNG HOCHSPANNUNG max. 350V Service-Arbeiten an Bremse und Elektronik errit 45 Sekunden nach Stillstand der Bremse durchführen!	ISO 7010-W012	Warning, electricity
i	ISO 7000-1641	Instructions for use
Sicherheitshinweis gemäß DIN EN ISO 20957	DIN EN ISO 20957	Safety instructions for heart rate monitoring
Warnung! Systeme der Herzfrequenzüberwachung können ungenau sein. Übermäßiges Trainieren kann zu ernsthaftem gesundheitlichem Schaden oder zum Tod führen. Bei Schwindel- Schwächegefühl sofort das Training beenden.		

[F 7	ISO 7000-3082	Manufacturer
	100 7000 3002	Manaracturer
	ISO 7000-2497	Date of manufacture
45°C	ISO 7000-0632	Temperature limitation
65%	ISO 7000-2620	Humidity, limitation
	ISO 7010-W001	General warning sign
	ISO 7010-M002	Follow the instructions for use
<b>^</b>	IEC 60417-5840	Type B application part (applies to saddle, pedals and handlebars)
MD	ISO 15233	Medical device

The safety level of the appliances can only be maintained if the appliances are regularly checked for damage and wear. Defective parts must be replaced immediately and the appliance must be shut down until it has been repaired.

# Fault diagnosis

The following error messages may occur. If the error is displayed repeatedly, the measures listed below can provide a remedy. If these do not lead to success, the manufacturer and, if necessary, the software manufacturer should be contacted.

Error message	Measure/s	Device types affected
"check heart	The monitor wants to start a programme that requires a	All motion cardio line
sensor?"	heart rate sensor to be worn. If no sensor is found, this	900 devices
	message is displayed.	
	→ Check the pulse sensor.	
"FBB:Incomplete	FBB (Fly-By-Bluetooth®) error; when the end of a message	All motion cardio line
frame"	to be transmitted is reached but it is not yet complete.	900 devices
Traine	→ Contact the software manufacturer or device	→ only occurs with
	manufacturer.	system integration
"FBB:Bad packet	FBB error; unknown message type was sent by the PC	All motion cardio line
type"	software.	900 devices
71	→ Contact the software manufacturer or device	→ only occurs with
	manufacturer.	system integration
"FBB:Bad block	FBB error; block check (generated checksum) does not	All motion cardio line
check"	match the expected block check.	900 devices
	→ Contact the software manufacturer or device	→ only occurs with
	manufacturer.	system integration
"FFB:Missing ETX"	FBB error; the end of the message does not correspond to	All motion cardio line
11 5.1411331116 2 17	the "End of message" character.	900 devices
	→Contact the software manufacturer or device	→ only occurs with
	manufacturer.	system integration
"FBB:Parser failed"	FBB error; message from PC does not correspond to a	All motion cardio line
i bb.i ai sei Tailea	defined message format.	900 devices
	→ Contact the software manufacturer or device	→ only occurs with
	manufacturer.	system integration
"FBB:UID	FBB error; the user ID sent in the login message does not	All motion cardio line
mismatch"	match the user ID from the programme message.	900 devices
IIIISIIIattii	→ Contact the software manufacturer or device	→ only occurs with
	manufacturer.	
"Program not		system integration All motion cardio line
allowed"	FBB error; the software has sent a programme that is not enabled in the device.	900 devices
allowed		
	→ Select a different programmein the PC or	→ only occurs with
UEDD Mississe is seek	Contact the device manufacturer to purchase this.	system integration
"FBB:Missing input:	FBB error, parameter ## is missing in the programme	All motion cardio line
##"	message, but is required (programme is not started).	900 devices
	Contact the software manufacturer or device	→ only occurs with
	manufacturer.	system integration
"Par ## out of	A required setting parameter was sent to the device by the	All motion cardio line
range:	PC software outside the permissible range.	900 devices
###<###<"	→ Contact the software manufacturer.	→ only occurs with
llo (1 50 : "		system integration
"Profile> 50 steps"	Error message if a profile with too many steps is to be	All motion cardio line
	played.	900 devices
	→ Reduce the number of interval steps in the PC	→ Only occurs with
	programme (only for interval programme)	system integration and
	or contact the software manufacturer or device	selected interval
	manufacturer.	programme
"Infocode: ###	Error number of the MCU6 motor control unit is displayed.	h/p/Cosmos treadmill
(sometimes with	→ Contact the device manufacturer.	
additional text)		
"Sprintex Err:	Error number of the Sprintex controller is displayed.	Sprintex treadmill
A##:###"	→ Contact the device manufacturer.	
"Sprintex Err: \$-\$"	Error number of the Sprintex controller is displayed.	Sprintex treadmill

	→ Contact the device manufacturer.	
"Sprintex Err: no	The monitor receives no response from the Sprintex	Sprintex treadmill
reply"	controller.	
	→ Contact the device manufacturer.	

#### Instructions for fault status detection (fault)

If errors occur on the devices that you cannot categorise, please contact emotion fitness GmbH & Co KG. For each error message, you should have the serial number and model type of the defective device ready, as this could be important in order to be able to make the correct diagnosis and, above all, to provide you with the right spare parts!

# Maintenance instructions for the operator

Ideally, visually inspect the appliance before each use, but at least daily, and pay particular attention to defective parts, loose connections and atypical noises.

The following checks must be carried out at least every 6 months:

- Visually check all visible connections and weld seams.
- Clean the appliance thoroughly.
- · Check all screw connections for tightness.
- Check the integrity and strength of the pedals.

#### In general:

- Clean the plastic panelling and frame parts regularly as required with a damp cloth and mild soap, then wipe dry again.
- The use of spray bottles with cleaning agents is not permitted; it has been shown that the appliances never become dry in inaccessible places. Rust infestation cannot be ruled out with this procedure.
- Make sure that no liquid gets into the monitor housing
- Only clean the monitor display with recommended display cleaners (https://www.schupp.shop/therapie-praxisbedarf/praxisbedarf/reinigung-hygiene/displayreiniger?number=3912)
- Please only use mikrozid® sensitive wipes disinfectant wipes (http://www.schuelke.com/) for any necessary disinfection of the devices.
- The monitor display may indicate that the capacitor voltage is too low, at which point it cannot be guaranteed that the device will function without braking current. You can recharge the capacitor by pedalling with a higher load or by using a power supply unit approved by the device manufacturer.
- Check that the housing fastenings are tight.
- We recommend a regular visual inspection of all appliance parts, especially screws, weld seams and other fastenings.
- Check that the appliance feet are firmly seated.
- Only use original spare parts please contact us for this.

# Maintenance by authorised specialist

In the event of device problems that you cannot easily solve yourself, always contact the emotion fitness service centre. The authorised service team will help you quickly and competently or provide you with instructions.

# Calibration/maintenance

No MTK is prescribed by law for the operator of elliptical and stair climbing equipment (cross and stair). This is due to the fact that the body weight of these devices influences the resulting power. emotion fitness GmbH & Co. KG offers to calibrate the braking power on request.

In addition, we recommend that the safety-relevant components are **serviced** and checked by authorised employees/partners **every 12 months**.

This section refers to the legal situation in Germany. Please check the applicable laws on the operation of medical devices in your country.

Devices with the suffix "med" are in accordance with the Medical Devices Directive EU 2017/745. They are therefore labelled with the CE mark and the number of the notified body.

The distributor/operator is responsible for carrying out maintenance, servicing and calibration, as well as possible inspections in accordance with applicable regional laws and regulations at the location of the devices! Further information can also be obtained from your local authorised dealer.

#### 6. Technical data\*

Device type	Dimensions (L/W/H)	Weight	max. user weight	Safe workload
motion stair 900 motion stair 900 med	102 cm x 73 cm x 160 cm	79 kg	150 kg	229kg

Resistance system: Mains-independent braking system

Power range: 4-27m/min. Sink rate

Freewheel: available

The following EU directives are fulfilled:

2001/95/EC General Product Safety Directive

EU2017/745 Art. 120 Medical Devices Directive Class IIa (only fulfilled for devices with the suffix med)

2014/30EU EMC Directive

The following standards were used:

DIN EN ISO 20957-1 Accuracy class A, utilisation class S; DIN EN ISO 20957-5;

DIN EN 60601-1:2013; DIN EN 60601-1-2

Subject to technical and visual changes and printing errors.

# 7. Waste disposal

With the conclusion of the purchase contract, it is agreed that business customers are responsible for the disposal of the WEEE Directive 2012/19/EU on waste electrical and electronic equipment themselves.

 $<sup>\</sup>ensuremath{^{\star}}$  The values may vary due to device modifications and options.

#### 8. Guarantee

This is based on the statutory warranty.

As the distributor of this product, emotion fitness GmbH & Co. KG provides free service for 12 months on parts and labour for professional users if the proper use and care specified in this user manual can be proven. For a further 12 months, emotion fitness GmbH & Co. KG will replace spare parts free of charge.

The warranty claim expires if the product has been serviced or repaired by unauthorised persons. As soon as a warranty claim occurs, you should inform emotion fitness GmbH & Co KG immediately in writing or by e-mail. Information about the serial number of the device, the time of purchase, a detailed description of the fault and the source of supply must be provided by the owner of the device.

emotion fitness GmbH & Co. KG will arrange a service, but reserves the right to decide on the type of service.

The following procedures are conceivable:

- 1. the service is carried out on site by our service department.
- 2 We will send you the required spare part.
- 3. we will send a replacement device.

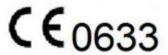
The defective parts shall be returned to us immediately by the customer. Otherwise the delivered spare parts will be invoiced.

If the causes lie outside the scope of the warranty, emotion fitness GmbH & Co. KG reserves the right to charge all repair costs.

Some wearing parts are not covered by the warranty. These are in particular the saddle, cranks and crank attachment, pedals, pedal loops, upholstery materials and the rubber grip on the handlebars. The Police Systems are covered by the statutory warranty.

These warranty provisions shall in no way affect general statutory claims.

The current version of our General Terms and Conditions of Delivery can be viewed and downloaded from our website at www.emotion-fitness.de.



Thank you for your trust!



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