



**User manual**  
for the  
*motion sprint 600 SE/SL med*  
and the  
*motion sprint 600*



**Sprintex Trainingsgeräte GmbH**  
Bei der Säge 23a  
79692 Kleines Wiesental



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## 1 General



Read the instruction manual with its security advices and warnings **prior to the initial use** of the units, to secure a safe and conventional use. Keep this document for future reference and pass it with the unit in case of resale.

Grey shaded text marks features, which solely refer to the fitness versions of the ergometer.

## 2 Classification of the unit

- The units of the cardio line med are medical products according to guideline 93/42 EEC, categorized in class IIa.
- With the items of the cardio line the standard DIN EN ISO 20957-1 and DIN EN ISO 957-6 usage class S (commercial usage/ gyms) of the accuracy class A +/- 10 % were applied and designed to suit the needs of fitness gyms and preventive fitness.

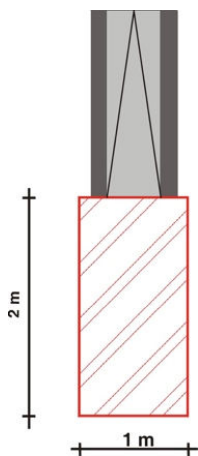
Only one person at a time can use the unit; the maximum usage weight has to be less than 150 kg. Units with the optional boosted version can be burdened up to 250 kg, see type label and additional instructions.

## 3 Safety warnings

### 3.1 Safe assembly of the unit



Fig.1: View of machine with indication of relevant elements



- Place the unit on a solid, flat and non-sliding ground. Please make sure that the floor is level and that the treadmill doesn't move.
- The clearance behind the unit has to be at least 1 m x 2 m to ensure a safe access, also in emergencies (see picture).
- The usage may only take place in dry rooms (< 65% humidity, > 0 < 45°C room temperature).
- Pay attention that there is no electromagnetic radiation, which could be caused by devices like mobile phones or fluorescent tubes, because they may affect the measurement of the heart rate.
- Don't locate the units on thick rubber mats. Ensure that the unit gets airing from all sides.
- **Attention:** Please consider the standards for care, maintenance and servicing in chapter 5 of this manual.

### 3.2 Power supply of the sprint

The treadmill gets connected with the grid (230V) by a power cable. Use only sockets with appropriate voltage. The socket has to be equipped with a 16A T fuse. Please make sure that there are no cables, plugs or sockets beneath the unit.

### 3.3 Initial operation

After transportation, the unit has to acclimate for some hours. Walk in the unit slowly if it hasn't been used in a long time. At the right back end of the treadmill you find the ON button. Its only purpose is to turn on the unit. When turning on the unit no one is allowed to be standing on the treadmill. On the monitor there is the overlay with the buttons for operating the machine. Please operate by moderate push of the buttons without any violence.

### 3.4 Turning on/ off



Turn on the unit by pressing the green button at the rear end of the treadmill.

Shut-off: Press the button for a longer time.

### 3.5 Secure Training

- Before starting to exercise the fitness of the user has to be ensured by an authorised specialist or a doctor. Please note topic 3.6 "contra indications".
- Excessive exercise can be dangerous.
- When nausea or dizziness occurs, the work-out has to be stopped right away and a doctor needs to be allocated.
- The training on the units is allowed with unbruised skin only.
- During exercising light, tight fitting clothing, which cannot be caught in parts of the unit is recommended. Always wear sports shoes to ensure a good balance on the running surface.
- Please check the unit before exercising for a good level, faulty parts or other manipulations. In case of a defect or if you are in doubt, ask a supervisor.
- Before the beginning of the workout it must be assured that no one is close to moving parts, to avoid a danger for a third person. Above all, hold unattended children off the units.
- **Safety:** Pay attention that the user walks in the middle of the running surface. Adjust your speed to the treadmills speed.
- **Warning:** Systems for the heart rate surveillance can be faulty. Excessive workouts can lead to serious physical damage or death. Abort the workout immediately when dizziness or nausea occurs.

### 3.6 Indications and contraindications

#### Indications

- Mobility of the locomotors apparatus
- Strengthening of the muscles
- Strengthening of the cardiovascular system

#### Contraindications

- Cardiovascular affections
- Pains of the locomotors apparatus
- During workout:
  - Pains in the thoracic region
  - Nausea
  - Dizziness
  - Pain in the joints involved in the motion

When taking medication ask for a doctor's training advice.

## 4 Operating the display

Depending on the program version chosen with the sprint med, three or eleven training programs allow for an individual and diversified training.

Depending on the program version chosen with the sprint of the fitness line, three/nine training programs allow an individual and diversified training.

### 4.1 Polar – pulse system

Every piece of equipment of the cardio line includes the original Polar Pulse System, which receives signals from a breast belt by the exerciser (the breast belt is not included in the delivery of the equipment). The wireless transmission to the electric display is coded. The Polar® technology is based on a magnetic field, which transfers the signals. This magnetic field can be interfered by several sources. The most common reason is the use of breast belts that are not 100% compatible with the Polar®-System and commonly have a longer range. Cell phones, speakers, TVs, power lines, fluorescent tubes, and motors with high power can also interfere with the Polar® Pulse System.

The measuring of the pulse frequency is ECG precise. Only when using coded breast belts, like T31C, the heart rate gets transferred coded. When using an uncoded breast belt, like T31, the transfer is uncoded.

#### Safety advice according to DIN EN ISO 20957

Warning! Systems for the heart rate surveillance can be faulty. Excessive workouts can lead to serious physical damage or death. Abort the workout immediately when dizziness or nausea occurs.

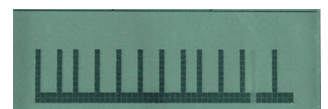
#### Hand pulse (optional – solely for units of the fitness line)

As an option, all units of the cardio line (fitness), excluding the body, can be equipped with a Polar® hand pulse system combined with a coded wireless signal transmitter. With this technology, two advanced measuring systems work together. The hand pulse measurement has priority over the wireless signal. When all 4 sensors are touched, a hand symbol becomes displayed on the monitor. Approximately 10 seconds later, the digital frequency display appears.

Please note, that cold dry hands, but also hands with lotion influence the measurement negatively. Because of those reasons the hand pulse only works for about 95% of the users. In general, the hand pulse is not advisable for tests and pulse controlled training. Machines with medical certification cannot be offered with this feature.

#### Ear pulse (optional)

The ear-pulse-system with the optical measuring at the earlobe is available as an option. If an ear-pulse cable is connected it has priority over Polar® pulse measurement, which will get disconnected. Attention: Rub earlobe thoroughly before applying the ear sensor. To check proper operation of the sensor, switch to the pulse display for surveillance. Therefore press the Scan-button three times while exercising. The indication for the pulse signals has to be high and at regular intervals.



#### Multicolour-backlight

All ergometers are equipped with a multicolour backlight for the LCD-Display. The electricity gets provided by the brake. The brightness depends on the current load. Lighting is not possible with really low load because the required power can't get provided safely. The backlight of the ergometer turns on after some seconds in use. Due to the backlight it's easier to read the display, even if lighting conditions are bad.

## 4.2 Overview Display / Button Functions



Fig. 2: Monitor view for explanation of button functions

Clockwise explanation of the buttons, starting with the Stop button.

- The **STOP** button stops the workout immediately. Results are not being stored.
- The **PROG** button must be pressed to start the selection of programs available.
- The **Cool** button stops the workout before the end of the chosen program, begins with the cool down mode and finishes the workout with a low intensity. The workout data is shown and saved on the storage media, if the workout has been started using a storage media.
- The **Scan** button changes the display mode, parameters, or graphical displays within the Dot Matrix on the monitor.
- The **Smart Key** buttons function as shown in the Dot Matrix area of the monitor according to the situational need.
- **Reset button** – Initially, the **Reset** button is not visible for the user. It is hidden in the extension of the smart key buttons at the upper edge of the LCD-display.
- The + button increases value of the parameters
- By using the **Enter** button, values of parameters or display modes are selected.
- The - button decreases the value of the parameters.

### Emergency Stop Push Button

The norm DIN EN ISO 957-6 for treadmills that is being applied, asks for a suitable system for a safety shutdown in case of a drop or any other incident. Here the manufacturer is free to choose either a pull cord with safety magnet or a Push Button. This treadmill is standardly equipped with an emergency stop button. The experience is that this is the easier system in daily handling and sometimes even safer. If the button is being pushed, the machine will be held completely free of electric power. Only after the risk for any person has been eliminated, the push button should be released again. This can be done by a slight clockwise rotation of the button. Once the button has been released, the machine can be put into operation by the main power switch at the rear end of the treadmill again. Alternatively, with the order of a new treadmill a safety system using a pull cord with safety magnet can be ordered at separate cost. With this system the operator has to make sure, that the clip is correctly connected to the trainees' clothes. The length for the pull cord has to be adjusted that the magnet releases by 70% of the running surface. A loss of the magnet equals a shutdown of the complete machine.

### 4.3 Display

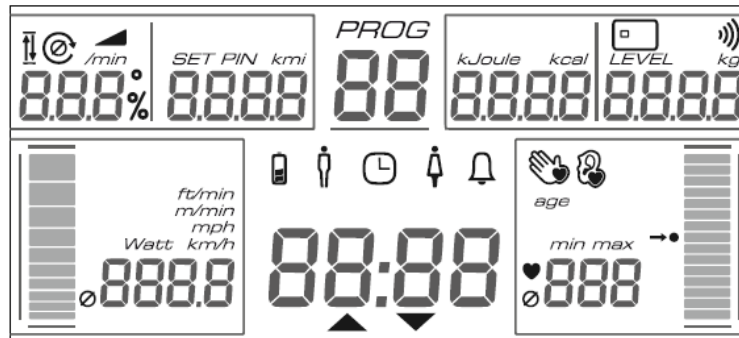


Fig.3: In this image all segments of the LCD display can be seen. In usage only the relevant information is shown.

Depending on the program, the following parameters are shown:

- Program: Number of the program
- Time: Actual accumulated time of workout or remaining, effective workout time. An arrow indicates the counting direction.
- Pulse: Display of heart frequency, if a breast belt is worn or the hand pulse sensors are touched. As an indicator that the heart frequency is being measured using the hand pulse system, a symbolized hand is shown. The pulse indicator display makes the pulse area of the trainee visible. At a pulse of 130, the indicator bar is filled to the middle, indicating reasonable intensity. When training in a pulse controlled program, the centre of the bar indicates the target heart frequency.
- Km/h: The performance is being shown in km/h. Corresponding to the digital figure, the speed is displayed with a graphical bar indicator.
- Inclination: Current inclination (only for SL, SE version does not have the feature “inclination”).
- Km: Depending on the program, either the accumulated or the remaining distance is displayed.
- K-Cal: Depending on the program, the accumulated calories burned or the remaining calories to be burned are shown.
- Level: Display of the actual intensity level, ranging from 1-21.
- Storage media: The symbol for the storage media appears whenever a member card is inserted into the slot.
- $\emptyset$ : If any of the digital figures are shown in combination with this symbol, the figures shown are average figures of the workout session.

### 4.4 Quickstart

When turning on the machine, the quick start program is automatically activated and does not need any menu programming. The speed can be chosen by pressing the +/- buttons, the optional speed by pressing the Smart Key buttons.

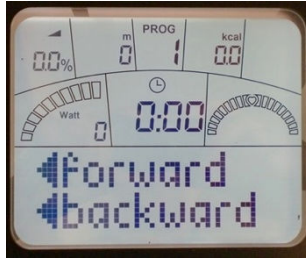
### 4.5 Programming the monitor

When the button **Prog** is pressed, the programming function becomes activated. By pressing +/-, the desired program can be selected. The name and number of optional programs are displayed.

Press **ENTER** to confirm the program. Via the menu control, information can be requested to ensure a correct control of the program. The figures displayed can be adjusted by pressing +/- . Every selection must be confirmed with **ENTER**. After all required information has been entered, the program starts automatically and **GO** is being displayed.

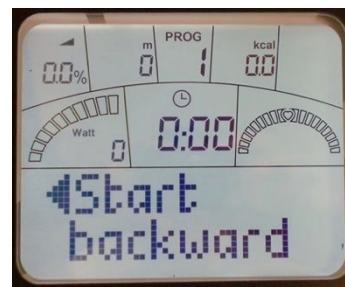
## 4.6 Reverse-Mode-Option

When the modus “reversal of the direction” is activated, you will be asked for the desired direction after pressing the STOP-Button, while the belt is not moving. With the Smart Key-buttons (to the left of the LCD) the direction gets chosen.



Is the reversal mode active, a different starting screen appears with forwards and backwards. After choosing you go on as usual by pressing start with the smart key button indicated.

**The speed of the reverse mode is limited (5km/h).**



**Warning!**  
Reverse mode only  
with assistance

## 4.7 DOT Matrix

In the lower half of the LCD display a text guides through the programming menu in the local language in order to ease the programming. Additionally, the intensity and pulse paths are visualized during workouts. The curve for the intensity is displayed constantly whereas the pulse-curve blinks. The display depends on the program, but pressing the scan button can alter the display.

List of graphical display options:

- Standard – shows a time frame of the last 5 minutes of the workout.
- Overview – shows the complete workout up to 50 minutes.
- Figures – super size display of wattage and pulse.
- Profile – shows the impact profiles.
- Zone – Display especially designed for the pulse-dominated programs. Here the target heart rate range is shown together with the actual heart rate.
- Test – This option visualizes the pulse movements during the test and shows the heart rate actually reached at the end of the test.
- Pulse – here the actual signals are shown like an oscillograph.

## 4.8 Biofeedback

The Biofeedback function enables the user to get information through a colour indication he is training according to the specifications. The background colour blue informs that one isn't training in the optimal range. It's possible that one is still warming up or training with a lower heart rate than set.

The background colour green shows that the user is training in the optimal training range.

Red informs that target values are undershot or exceeded. In the pulse controlled workouts the load will get reduced if the target heart rate gets exceeded. For our treadmill, biofeedback only works for Pulse and K-cal programs.



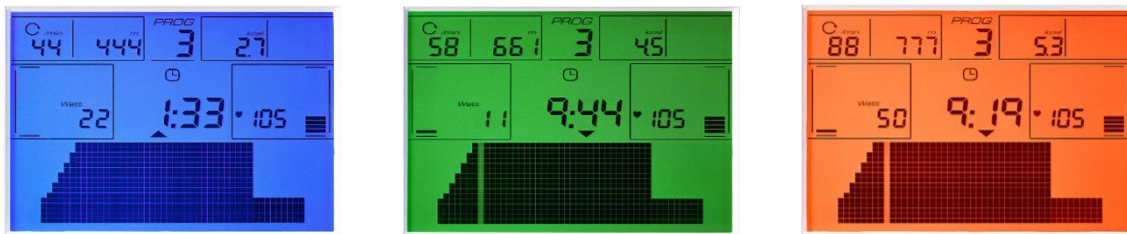


Fig.4: Multicolor backlight function for a visual indication of workout target.

#### 4.9 Training Control via the storage media

The storage media has a standard fitting in all units of the cardio line. Workout control via the storage media is a means of easing the handling of the unit. The storage media system supports the user in all aspects of training activities.

The system consists of a monitor unit with the storage media reader. The slot used to enter the media is located on the right side of the monitor casing. An acoustical signal proves the acceptance of the storage media. The storage media system makes training with all units of the cardio line easier and more efficient. The programming of the media can be done directly on the ergometer. The results will then only be shown in the unit display.

The planning of training can alternatively be done with PC Software. If the software is used, the individual training programs are transferred to the storage media. All results are saved on the storage media and can be analysed on the PC after the results have been transferred.

Optionally the usage of the unit can get restricted to storage media use only. This function can get chosen in the secret menu with the following alternatives: Usage solely with storage media; if not using a storage media solely the Quick Start program is possible; usage with and without storage media possible. The default value is using the machine with and without storage media. Please contact your dealer for necessary settings in case you want to restrict the usage of the machines.

##### Programming training schedules manually onto the member media

- The individual data for the desired program has to be entered manually on the monitor. The program then starts.
- The trainer media is entered into the slot until an acoustical signal indicates that the media has been recognized.
- The member media gets inserted. Now the maximum number of workouts (1-255) can get chosen. Confirm with ENTER. After the acoustic signal the data is saved and the member card is functioning. Selecting 255 workouts equals no limitation of training sessions.
- Reinsert the member card. The training can start now. If the maximum number of workouts is fulfilled a new program has to get stored on the card.

The member card should be used by one training person only. After the desired program has been saved, the card simply has to be entered to start the workout. The workout is controlled automatically and no further programming is necessary. All workout results are saved automatically as average or accumulated values on the storage media after each workout.

##### Special functions of the trainer card: Deleting the data on member media

If you want to delete all data of a medium, then you have to insert the trainer medium twice. Afterwards you insert the member card. Then the monitor will indicate "delete card". If you insert the member card afterwards the display will show "card expired." If the member card is inserted in the monitor the results can get deleted without deleting the training program. The "Results total" can be deleted by pushing the buttons + and - (3 seconds) at the same time. Solely the results will get deleted, not the training plan.

##### Functioning of the member medium

The storage media has to be entered into the slot. The accumulated results of previous workouts on all types of ergometers and for the type used at the moment are shown for four seconds each.

After that, the personal workout that was previously saved on the storage media is being started automatically and the workout session can begin. The storage media can be removed **after** the workout is over or interrupted by pressing the **COOL** button.

The results of the actual session are displayed on the monitor and saved onto the storage media immediately after the end of the workout. Do only remove the card after the message "write results" has disappeared on the display, in order to make sure, that the results have been stored on the media successfully.

#### 4.10 Online-Training with RFID

As an option the units can get equipped with a RFID reader (Mifare, Hitag, Legic – Attention: Please take care of the proper specifications when ordering. Solely with the right reader the compatibility will be given). The online-version gets controlled with a compatible PC-Software.

To start the training there are different alternatives depending on the RFID-media.

Working with a RFID-card one has to insert the card into the reader for user identification and call of the current workout. The training can start. Go is shown in the display.

Using a wristband one has to press the RFID-button. Then the wristband has to get hold over the RFID-button. The training can start. Go is shown in the display.

Using a media other than a RFID-card has to be announced before production of the units as special settings will be needed.



Fig. 5: RFID-button for RFID identification, in case the medium cannot be read via the slot

If the message “insert again” is shown several times in a row, press the SCAN-button to display a more specific error message.

#### 4.11 Results

After the end of each workout or after pressing the **COOL** button, all workout results will be shown on the display. According to the program selected, the relevant results are shown. When there is no reaction the workout will be stopped after showing the results. By pushing the COOL button, the workout can be stopped at any time.

The results are shown in the parameter area as well as in the dot matrix section. Some figures are average values (wattage, km/h, pulse), some are accumulated values (km, k-cal, time). Average values are marked with the  $\emptyset$  symbol. This enables the control of personal fitness-development and thereby motivates a frequent user.

If the training has been conducted using a storage media, the training results from every type of ergometer are saved separately onto the storage media. The analysis of the results saved can be done at the ergometer directly or on a PC if the training manager software is available.

## 4.12 Programs of the cardio line

Programs	sprint med			
	Manual selection	Storage media	Controlling via PC	Biofeedback general (except for treadmill)
1 Quick	x	x	x	-
2 Watt	x	x	x	-
3 Watt sensitive*	x	x	x	x
4 Pulse	x	x	x	x (also for treadmill)
5 Isokinetik*	x	x	x	X
6 Therapy*	x	x	x	X
7 Interval*	x	x	-	-
8 K-cal*	x	x	x	x (also for treadmill)
9 Hill*	x	x	x	-
10 Random*	x	-	-	-
11 Distance*	x	x	x	-

**Tab.1: Programs of the cardio line med separated by units, usage and biofeedback (programs which are part of an optional program package are indicated by a\*).**

### Program specifications

#### Quick/Quick Start

The quick start program allows an immediate workout start. No programming is required.

Using the +/- buttons, the speed can be varied at all times.

Using the **Scan** button, the figures and the graphical displays vary.

Pressing the **COOL** button will initiate a display of the results as well as concludes the program.

#### Watt/Time Training

The program exclusively manages the endurance of the workout.

After activating the display, one gets to the program choice with the **Prog**-button. If one chooses the program **Watt**, one can choose the initial speed starting with 2,5 km/h. The endurance in minutes gets selected with +/- and confirmed with **ENTER**. Within the program the speed can be adjusted at any time with +/- in 0,5 km/h steps. The remaining time is permanently shown in the display. After the end of the workout or after the cancelling with the **COOL** button the relevant results are shown in the display.

#### Pulse/Pulse Training

The pulse training option is an intelligent training program that ensures a workout intensity that is optimal for reaching training goals without the need of manual interference. The desired target heart rate (depending on the desired training aim) must be entered at the beginning of the workout. The ergometer then adjusts the resistance to the actual heart rate in a manner that allows the target heart rate zone to be reached, but not exceeded. Additionally, the program can evaluate the development of the heart rate and use the determined fitness level to adjust the speed (or incline), which allows for an optimal warm-up.

If the initial resistance is set above a certain speed (with the SL optionally the incline), no warm-up will be done and the speed is immediately being adjusted to the desired heart frequency (see motion pulse manager brochure).

The pulse program requires three figures to work properly:

- Desired heart frequency during the workout
- Initial intensity in km/h (or with the SL the speed or incline);
- Training time in the effective heart rate range

Everything else is managed by the program control. The time entered is the time of workout in the effective heart rate range, which means that the time of the warm-up will not be counted.

The +/- buttons are always active during the workout. If the initial intensity is increased to more than 8,0km/h during the first two minutes of the workout, the program control will increase the intensity immediately to reach the target heart rate as quickly as possible. By doing so, the user can perform a so called cross training, whereby the speed adjusts to the expected target speed during the workout and the ergometer will simply make fine tunings to the resistance.

In this program the biofeedback function is active to give the trainer and the user a visual feedback when undercutting or over-exceeding the target heart rate.

Once the target heart rate has been reached, the +/- buttons can be used to change the target heart rate. At the conclusion of the training, the results are shown on the display.

### **K-cal/Calorie Training**

The K-cal training has been designed to meet the needs of gyms and gym members who are interested in stamina workouts to reduce body weight. To ensure that the workout stresses the desired metabolism, the program controls the speed according to the pre-adjusted heart frequency. Personal performance influences the workout time needed to burn a certain amount of calories at a constant heart rate.

At the end of the training, the results are shown on the display. The displayed k-cal value is a calculated factor, which is based on average factors.

### **Hill/Hill Training**

The hill training program adapts speed (or incline on the sprint fit/med SL) according to the hill profile. The desired workout time and the level of intensity must be set during programming. During the entire workout, the +/- buttons remain active to allow for a change in speed.

The graphical profile indicates the hill profile remaining and the actual position during the workout. The intensity will be shown permanently.

If the heart frequency is being measured by one of the available systems, it will be shown, but serves as a personal control and does not have an influence on the program itself.

After completing the program, the cool down starts automatically and a display of the results is initiated.

### **Random/Random Training**

The random training offers various training profiles. The desired workout time and the level of intensity must be set during programming. During the entire workout, the +/- remain active to allow for a change in speed.

The graphical profile indicates the hill profile remaining and the actual position during the workout. The intensity will be shown as speed.

If the heart frequency is being measured by one of the available systems, it will be shown, but serves as a personal control and does not have an influence on the program itself.

After completing the program, the cool down starts automatically and a display of the results is initiated. This program cannot be controlled via the storage media.

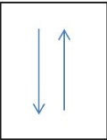
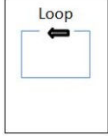


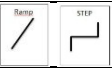


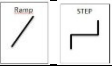
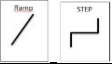



## Interval/Intervall Training

Programming with a PC-software is not possible at this point. The training can be divided into 22 parts, which can get set individually regarding intensity, time and other parameters. To use this individually set training program easily, it can get saved on a storage media. In general intensity steps are put in a row. If a different intensity is to follow the previous step, the speed/incline gets adapted slowly. It's also possible to increase the wattage like a ramp. In this case the increasing of the load gets adapted constantly over the full time period of that step.

To simplify the process of programming you can repeat a speed/incline and pulse sequence as often as you want – e.g. “Loop” x 5 – (max. 22 x).

In the top right corner of the display the remaining number of steps possible is being indicated. It gets counted backwards from 22. A side effect is a reduced amount of data on the storage media on which other training programs from other types of units can be stored.

The following symbols are shown in the display and are relevant for the programming.

			
Loop indicator shows that you want to multiply an interval sequence.	With this symbol you start and end the programming of an interval sequence.	Stepless speed increase through the time of the sequence.	Increasing by steps
<b>Symbol</b>	<b>request of setting</b>	<b>range of values</b>	<b>action of setting</b>
			Activate monitor by pedalling or pressing a button
	Press Prog. Button		
	Choose program with +/-	Interval	→ ENTER
Programming of a sequence			
	Choose step or ramp mode		Choose with scan
	Speed	0-17 km/h	Choose with +/-, → ENTER
	Inclination	0 – 15%;-3 – 12%	Choose with +/-, → ENTER
	Duration	10sec.– 20min	Choose with +/-, → ENTER
Choose step or ramp mode Or You want to multiply the sequence			
	Choose with Scan, Symbol  appears,		
	Step or ramp mode		choose with Scan
	Speed	0-17 km/h	Choose with +/-, → ENTER
	Inclination	0 – 15%;-3 – 12%	Choose with +/-, → ENTER
	Duration	10sec.– 20min	Choose with +/-, → ENTER
Step is defined, next step follows			
	Choose step or ramp mode		Choose with Scan
	Speed	0-17 km/h	Choose with +/-, → ENTER
	Inclination	-3 – 12%;	Choose with +/-, → ENTER
	Duration	10sec.– 20min	Choose with +/-, → ENTER
	If you want to repeat the last two steps, choose LOOP and enter the amount of repeatings.		
	The  Symbol disappears		
A sequence with two steps was programmed. Now single steps or sequences can get programmed.			
	If you want to finish programming, activate the Stop symbol with the scan button and confirm with Enter, otherwise you can program the next step, etc.		
	Are you sure?		Confirm with ENTER

Entering of personal parameters to calculate the maximum heart rate  
Formula:  $220 - \text{age} = \text{max. heart rate}$

	Age	15 - 90	Choose with +/-, → ENTER
	Max. pulse	90 - 220	Choose with +/-, → ENTER
The programming of the intervals is completed. The display says GO.			

To store the program on the storage media do the following steps			
Insert trainer card and take it out again			
Insert member card			
	Amount of trainings	1 - 255	Choose with +/-, → ENTER
Entering 255 trainings means that it is unlimited; the stored program can get used as often as wanted. You usually use this when the card doesn't get used by an individual. In this case you can ignore the results.			
The display shows ....writing Program.... for some seconds. The program is now stored on the media.			
The storage media can now be used. After inserting the results are displayed and the interval program starts.			
With +/- the intensity of every step can get adapted			
With the SCAN button different display views can get chosen. Profile speed Pulse Diagram speed-pulse			
By pressing COOL you can stop the training and the results will be stored.			

### **Distance/ Distance Training**

For this program, the parameters distance, speed and for SL inclination must be pre-selected. At any time during the workout, the speed can be adjusted with +/- . The chosen distance will countdown and the intensity is determined from among the 21 intensity levels. The workload is shown in km/h in the display. The time that is needed to complete the distance can be used as an indicator of performance.

After completing the program, a display of the results is initiated.

### **Isokinetic/Power Training**

This program is not available for the treadmill.

### **Watt sensitive/ not available with fitness program packages**

Speed constant training programs are likely to be used in the field of training controlling and therapy, because the intensity controlling can occur very accurate.

However, speed constant controlling can lead to overstress. To eliminate these negative aspects, a too high stress gets avoided in the watt sensitive program with an intelligent program controlling. The overshoot of the limited heart rate gets controlled. When it gets overshoot for a longer time a speed reduction of 10% every 30 seconds follows.

The target speed/inclination will be reached via a ramp during the first 2 minutes. That way the trainee gets used to the power and an adequate warm-up is assured.

### **Therapy/ not available with fitness program packages**

Also in rehabilitation the total intensity of the training gets controlled with the intensity steering factors amount as well as intensity, alongside the recovery progress. As a general rule intensity changes occur by increasing the intensity. At the therapy training the intensity gets varied several times within the program. After a two minute warm-up in ramp shape, 6 intervals of one minute each, with one minute active rest (50% of the impact intensity) per interval follow.

Also the overshooting of the pre-entered heart rate gets controlled. When overshooting for a longer time a reduction of the speed of 10% every 30 seconds follows.

A Cool Down function over 3 minutes rounds up the training. Overall the program lasts 17 minutes.

## **4.13 Pulse controlled programs**

Concerning the working of pulse controlled programs such as Pulse program/Pulse, Watt sensitive and Therapy, please refer to the brochure "motion pulse manager".

## **4.14 Interface PC**

All ergometers are equipped standardly with an RS232 interface. This interface is not equipped with a galvanic isolation or external power supply. By this the ergometer can be controlled via a PC, an ECG, spiroergometry device, also, if both devices are using the same interface protocol. Please note, that with medical use, the rules for electric safety must be obeyed. Optionally, a RS232 interface with galvanic isolation can be ordered (when the machine is being build), in order to limit the risk resulting from any malfunction of the connected device. Please contact your dealer, when you have more questions about this issue.

## **5 Maintenance and Servicing**

All cardio machines from emotion fitness are characterized by excellent quality. The units are durable and only need little maintenance, to function over a long period of time. The required maintenance has to be conducted conscientiously.

You can only keep the safety level by checking the unit regularly for damage and attrition. Damaged parts need to be replaced right away and the unit needs to be decommissioned until its repair.

### **5.1 Failure/ Elimination of failures by trained personnel**

Pull the power plug before working on the machine!

First, always check the power supply of the grid.

Leave the unit without power and check the plug connections of the unit.

Reconnect the treadmill to electricity.

If the unit still doesn't work, contact your distributor.

### **5.2 Instructions for the error condition detection (failure)**

In case failure occurs at a machine that you cannot classify, please contact emotion fitness GmbH & Co. KG. For every error report please hold ready the serial number and model type of the faulty machine. It is important to diagnose properly and to provide the correct spare parts!

### **5.3 Instructions for preventive maintenance by the operator**

Check the unit visually before every usage but at least daily particularly for damaged parts, loose connections and atypical noises.

Despite an excellent quality management system the unit has to be inspected intensely every six months. Document the inspection for medical machines in the medical booklet:

- Check all connections and welding seams.
- Clean the unit well.
- Check all screws for tightness.

In general:

- Clean the devices with mild purifier and a wet cloth to get off aggressive sweat. Dry the device afterwards.
- The usage of spray bottles is not allowed; it has shown that the unit never dries at spots that can't be reached. Rust may occur.
- Pay attention that no liquids run into the monitor as it could destroy parts of the electronic.
- If disinfection is required only use acryl-des® disinfection cloths (see <http://www.schuelke.com/>).
- Beware to not put the machines on thick rubber mats. The running belt has to be free to sway.
- Check the casing for tightness.
- When using the machine regularly please check the unit parts visually, especially screws, bolts, welding seams and other fixtures.
- Only use original spare parts, therefore please contact us.

### **5.4 Maintenance for an authorised professional.**

If you have problems with the unit that you can't solve yourself, or for which you have to open the casing inform the service from emotion fitness GmbH & Co. KG. The authorised service will help you fast and competently or will give you proper instructions to do so yourself.

### **5.5 Performance to the safety control (STK) according to the Medical Devices Operator Ordinance**

The sprint SL/ SE med is a medical product and thereby has to undergo a technical measurement check every 12 months. The responsibility for the conduction is at the operator. The date of the next control is shown on the control badge, which you find next to the type plate.

Contact your dealer in case you need a reference.



## 6 Service advices for Sprintex Lamella-treadmills

**Warning: Unplug before working on the machine!**

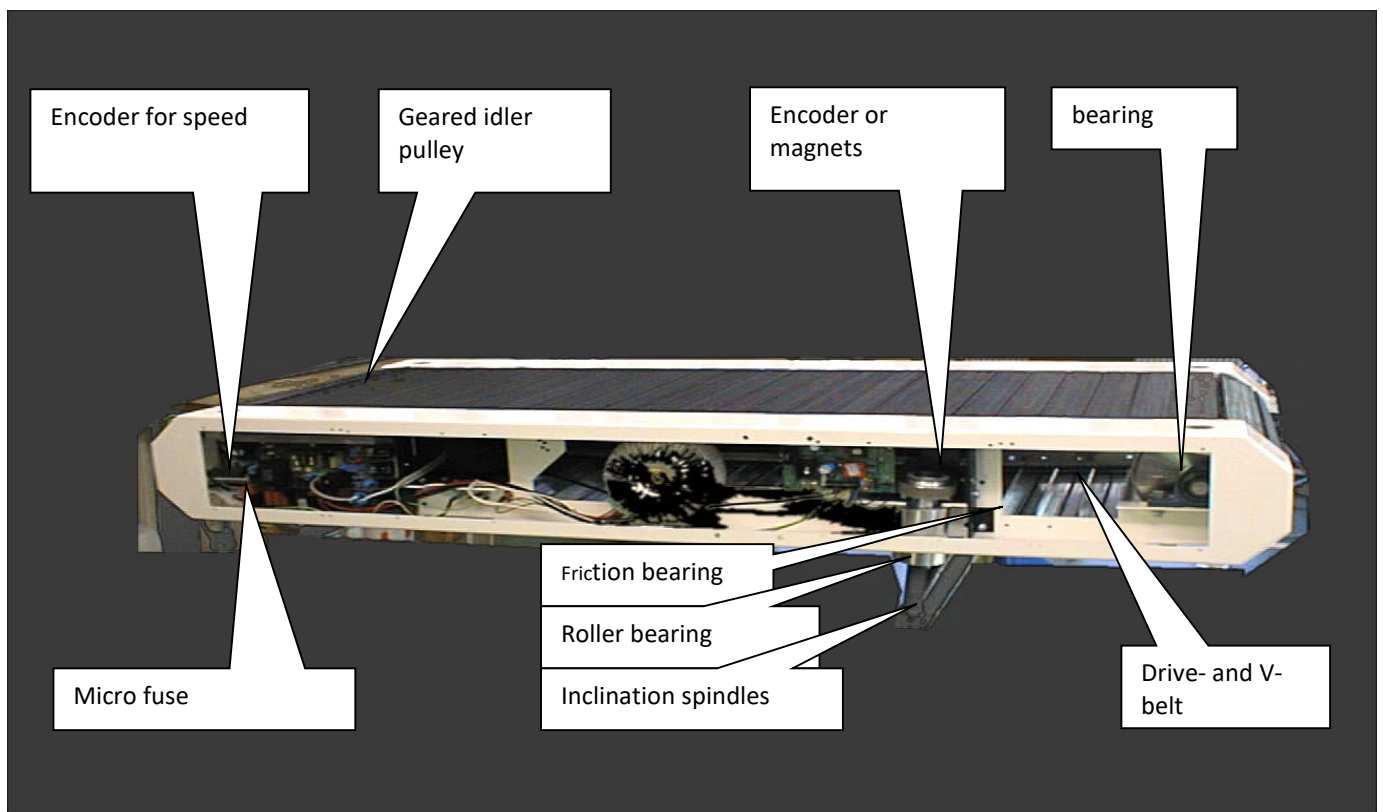
### Every 12 months:

- Take off the screens on the left and right
- Check the magnets near the inclination-spindle for a safe fit (eventually fix)
- Clean drive belt and use Mylokote grease
- Clean conical roller bearing and use Mylokote grease
- Clean inclination-spindle and use Mylokote grease

### Every 36 months :

- Clean geared idler pulley (residue at the teeth)
- Retorque the screws of the bearings on both sides (50 Nm)
- Retorque all screws

**Attention: Don't grease motor belt for the running surface and inclination!**



**STK Checklist**

(to accomplish of expert personnel)

System :

Treadmill type:

--	--

Serial Number:

Purchase date :

--	--

Type of examination	part which can be examined	OK	not OK
Visual check on damages; deformations or correct seat  <b>Electric/Electronic</b>	Main connection line		
	Other cables and ropes (damages)		
	Stop brake (Function and acoustically examine)		
Visual check on damages; deformations or correct seat  <b>Mechanic</b>	Frame examine for tears and sharp edges		
	Railing examine for tears and sharp edges		
	Terminal examine for tears and sharp edges		
	<b>Attachments</b> examine for tears and sharp edges		
	<b>Lauffläche</b>		
	Bearing examine optically and acoustically		
	Encoderscheibe (Cleanliness and fit)		
	Lichtschränke (Cleanliness and fit)		
	Magnet for Emergency Stop		
	Engine belt (tension) <b>do not grease</b>		
	Tooth and drive belt (cleanliness and grease)		
	Sticker available and correct seat		
	upward gradient		
	Resounding sensor / light barrier (Cleanliness and fit)		
	Magnets / Encoderdisk (Cleanliness and fit)		
Toothbelt (Damages and tension) <b>do not grease</b>			
Spindle (cleanliness and grease)			
mechanical switch(available and firmly)			
Lower limit switch			
<b>Function examination</b>	All grope		
	All programs (if available)		
	Lights all segments/diodes		
	Pulse measurer		
	On switch (Function and examine mechanically)		
	Emergency stop (Function and examine mechanically)		
	Highspeed		
	Upward gradient of per cent (if available)		
Electrical measurement	According to DIN EN 62353 VDE 0751-1:2012-07		

Inspection result:		<b>OK</b>	
Signature of the tester:	name in block letters	Signature	
Next examination:			

SPRINTEX Trainingsgeräte GmbH  
 Bei der Säge 23a  
 D-79692 Kleines Wiesental  
 Tel: 07629 / 1744 FAX: 07629 /  
 1745  
 E-Mail: [info@spintex.de](mailto:info@spintex.de)  
[http:// www.sprintex.de](http://www.sprintex.de)

## 7 Technical data (standard version)

The information about measurements and weight can vary because of technical changes and optional features.

measurements	Weight	Max. user weight
173 cm x 76 cm x 145 cm (L/W/H)	170 kg (SL) 149 kg (SE)	150 kg; boosted: 250 kg

Steered drive belt drive from aluminium-lamellas with rubber layer. No slack, no heating of the walking surface, low steady power usage

Step height:	28 cm
Walking surface:	lamella system, LW 155cm x 50 cm; (max. speed 17km/h = 150kg)
weight:	190 kg with inclination
Max. user weight:	150 kg
Drive:	brushless direct current motor 1,3 KW
Voltage:	230V 50/60Hz
Power:	5 Ampere
Fuse:	2 x 6,3 A anti-surge, 2 x 10 A with inclination
humidity:	< 80%
noise generation:	< 75 dBa
range of temperature:	+10 to 45 ° C.
temperature of storage:	0 to 45° C.
discharge current: < 0,5 mA	
degree of protection:	IP 44
speed:	0-17 km/h
inclination:	0-15 % on medical machines, -3 to 12% on fitness machines (only for sprint 800 SL)
System of pulse measuring:	breast strap with wireless transmission (not included in the delivery content)
The following standards are to be applied:	DIN EN ISO 20957-1 SA DIN EN ISO 957-6 SA DIN EN 60601-1 93/42/EWG medical device guideline

## **8 Warranty conditions**

The following is based on the legal warranty.

As a distributor, EMOTION FITNESS GmbH & Co. KG provides cost free service for professional users such as fitness gyms for up to two years on parts and one year for working hours. This offer applies only if proper use and maintenance as described in this manual can be proven.

The warranty is terminated as soon as the product is serviced or repaired by an unauthorised person. If a warranty case occurs, emotion fitness GmbH & Co. KG must be informed immediately in written form or e-mail. The owner must provide information including the serial number, detailed error report, the date of purchase, and the name of the original supplier.

emotion fitness GmbH & Co. KG will initiate service, but reserves the right to decide about the mode of service.

The following procedures are possible:

1. The service is conducted on-site by our service employees.
2. The required spare part(s) are shipped.
3. An exchange unit is arranged and sent to the user.

The defective parts must be sent to emotion fitness within 48 hours. Otherwise the cost for spare parts that have been delivered will be charged.

If causes for repairs lie outside of the warranty conditions, emotion fitness GmbH & Co. KG reserves the right to require payment for all costs of the repair.

Some consumable parts are excluded from the warranty. These include the overlay, footsteps and the foam covering for the handrails. The Polar® pulse systems are covered by the legal guarantee.

These warranty conditions do not in any way interfere with general legal claims.

Our General Conditions of Export can be seen and downloaded in the latest version on our webpage [www.emotion-fitness.de/en/agb](http://www.emotion-fitness.de/en/agb).

## **Manufacturer according to the medical device guideline**

Sprintex Traininggeräte GmbH  
Bei der Säge 23a  
79692 Kleines Wiesental  
Telefon: (+49) 07629-1744  
Telefax: (+49) 07629-1745  
[info@sprintex.de](mailto:info@sprintex.de)  
[www.sprintex.de](http://www.sprintex.de)

**Thank you for your trust!**



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