For The Long Run®

WOODWAY®

Treadmill Ergometer
PPS Medical Series

PPS 43 Plus
PPS 55 Plus
PPS 70 Plus

PPS 43 Med
PPS 55 Med
PPS 70 Med

PPS 43 Med-i
PPS 55 Med-i
PPS 70 Med-i

PPS 43 Ortho
PPS 55 Ortho
PPS 70 Ortho

Translation of the original German Operating Manual

Edition: 12/2021-v1.9en

EC REP

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CE 1434

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2 Introduction

2.1 Operating Instructions Information

This manual provides information on the safe operation of the WOODWAY slat-belt treadmill.

One condition for safe operation is compliance with all safety and operating instructions.

⚠ CAUTION

Improper operation can cause accidents!

Not using the slat-belt treadmill as intended according to the manufacturer's instructions can cause accidents and equipment damage.

- ► These operating instructions must be completely read and understood before using the treadmill.
- ► Keep these instructions close at hand for all users of the device.

Read and observe the operating instructions!

Read these instructions carefully before beginning any work on the treadmill! It is a part of the device and must be kept accessible at all times and in the immediate vicinity of the treadmill for operating and maintenance personnel.

Observe the instructions!

WOODWAY GmbH accepts no liability for accidents, equipment damage and consequences of equipment failure that are a result of failure to follow the operating instructions. In addition, the local accident prevention regulations and general safety conditions for intended use of the treadmill apply.

The manufacturer reserves the right to make technical changes in the context of improving the performance properties and further development without prior notice. Illustrations are for basic understanding and may differ from the actual design of the device.

Accessories from other suppliers have further safety regulations and guidelines. These must also be observed.

2.2 Limitation of Liability

All information and instructions in this manual have been compiled in accordance with applicable standards and regulations, the current state of technology and our knowledge and experience.

WOODWAY GmbH accepts no responsibility for damages resulting from:

- disregarding the operating instructions
- improper use
- use by non-authorized persons
- use of replacement parts which were not approved by WOODWAY GmbH.
- unauthorized modifications to the device or accessories.

The WOODWAY GmbH general terms and conditions and delivery conditions apply, as well as the legal regulations valid at the time of contract conclusion.

2.3 Copyright

The release of the operating instructions to third parties without the written permission of WOODWAY GmbH is prohibited.

NOTE

All contents, text, drawings, images or other illustrations are copyright protected and are subject to intellectual property rights.
Any misuse is punishable by law!

Duplication in any manner and form - including excerpts - as well as use and/or communication of the content are not permitted without written permission from WOODWAY GmbH.

2.4 Replacement Parts

WOODWAY GmbH recommends the use original replacement parts. Original replacement parts have particular qualities and ensure reliable and safe operation;

- development for specific use with the device,
- manufacture in high quality and excellence,
- ensuring the legal warranty period
  (excluding wear parts) or other reached agreements.

NOTE

The use of NON-original replacement parts may change the characteristics of the device and interfere with the safe use!
WOODWAY GmbH does not accept liability for damages resulting from this.

Disposal! Wear parts are considered hazardous waste!

After being replaced wear parts must be disposed of according to country-specific waste laws.

For further information on disposal, see section 12 page 79.

2.5 Customer Service

For service questions, please contact as follows:

WOODWAY GmbH
Steinackerstr. 20
79576 Weil am Rhein
GERMANY

Contact: Tel. +49 (0) 7621 - 940 999 - 14
Fax. +49 (0) 7621 - 940 999 - 40
Email: service@woodway.de

For faster processing of your request please have the following data and information available:

- Information on the nameplate (specific model/serial number)
- An accurate description of the circumstances
- What action has already been taken

Servicing: When servicing on site the device must be disconnected from the power supply by a qualified electrician so that the device cannot switch on accidentally.

The address of your local service center can be obtained from the manufacturer. After repair or re-commissioning, the actions listed under "Installation" and "Commissioning" are to be performed as during commissioning.

2.6 EC Declaration of Conformity

WOODWAY
For The Long Run®

EC Declaration of Conformity
EG Konformitätserklärung

Manufacturer: ***Hersteller:*** WOODWAY USA Inc. W234 N700 Busse Rd. Waukesha, Wisconsin 53188 USA Phone: +1 262-548-6235 E-Mail: info@woodway.com Web: http://www.woodway.com	**European Representative:** ***Europäischer Repräsentant:*** WOODWAY GmbH Steinackerstr. 20 79576 Weil am Rhein Germany Phone: +49 (0) 7621-940999-0 E-Mail: info@woodway.de Web: http://www.woodway.de
Notified Body: ***Benannte Stelle:***	**Polish Centre for Testing and Certification** 23A Klobucka Street 02-699 Warsaw Poland

Hereby the manufacturer declares in sole responsibility that the product in the form as delivered and described below is in conformity with the following European Directives:
Hiermit erklärt der Hersteller in eigener Verantwortung die Übereinstimmung der nachfolgend aufgeführten Produkte in der gelieferten Ausführung mit den anwendbaren EG-Richtlinienanforderungen:

Directive 93/42/EEC / 2007/47/EC (Medical Devices)	*Richtlinie 93/42/EWG / 2007/47/EG (Medizinprodukte)*
Directive 2006/42/EC (Machinery)	*Richtlinie 2006/42/EC (Maschinenrichtlinie)*
Directive 2011/65/EU (RoHS)	*Richtlinie 2011/65/EU (RoHS)*
Directive 2014/30/EU (EMC)	*Richtlinie 2014/30/EU (EMC)*

Product designation: *Produktbezeichnung:*	WOODWAY PPS SERIES Treadmill-Ergometer *WOODWAY PPS SERIE Laufbandergometer*
Product type: *Typenbezeichnung:*	PPS 43 / PPS 55 / PPS 70 / Continuum
Models: *Ausführungen:*	Ortho / Med / Plus
Classification: *Klassifizierung:*	IIa (per Annex IX Directive 93/42/EEC) *IIa (gemäß Anhang IX der Richtlinie 93/42/EWG)*
Conformity Assessment Process: *Konformitätsbewertungsprozess:*	Annex II of Directive 93/42/EEC *Anhang II der Richtlinie 93/42/EWG*

The CE **1434** mark gets affixed to the product.
Das CE **1434** *Kennzeichen wird auf den Produkten angebracht.*

Used standards: *Angewandte Normen:*	IEC 60601-1:2005 + Cor. :2006 + Cor. :2007 + A1:2012	
	IEC 60601-1-2:2014	EN ISO 10993-1: 2009
	EN 957-6:2010+A1:2014 (Class A, S)	EN ISO 13485: 2016
	EN 60601-1-6: 2010	EN ISO 14971:2012
	EN 62366-1:2015	EN ISO 20957-1:2013

The declaration of conformity is valid for all the models listed above, which were produced on after 29 August 2019 by WOODWAY USA Inc. The validity of this declaration of conformity ends with the publication of a new declaration of conformity if this becomes necessary due to technical modifications or changes in the standards.
Die Konformitätserklärung gilt für alle oben gelisteten Modelle, die ab dem 29 August 2019 durch WOODWAY USA Inc. hergestellt worden sind. Die Gültigkeit dieser Konformitätserklärung endet mit der Veröffentlichung einer Konformitätserklärung neueren Datums, falls dies durch technische Änderungen oder durch gesetzliche Änderungen der Normen und Standards erfolgen muss.

Waukesha, USA
August 29th 2019

Douglas Bayerlein
Präsident / President WOODWAY USA, Inc.

Fig. 1 CE Declaration of Conformity

3 Safety

3.1 General

PPS series treadmills have been reliably designed, manufactured and tested according to the latest state of technology and are in a safe and technically perfect condition. Nevertheless, the device can cause risk to persons and property if it is operated improperly.

For this reason the operating instructions should be read completely and safety instructions must be observed.

Warnings attached directly to the device must be observed and kept in a legible condition.

Inappropriate use will result in the rejection of any liability or guarantee by WOODWAY GmbH.

3.2 Description of Warning Notices

Warning notices indicate potential hazards or safety risks. They are indicated in this manual by a color-coded signal word panel (symbol with the appropriate signal word).

All warning notices have the same design and the same standardized content design.

Sample of a Warning Notice:

⚠ SIGNAL WORD
Warning Text, Type and Source of Danger Description of the consequences of ignoring the danger. ► Measures, instructions and forbidden actions to avoid the hazard.

Classification:

NOTE	NOTE or WARNING (no danger symbol) No risk of injury, pertinent information and warning against material damage.
⚠ CAUTION	CAUTION (with danger symbol) Slight possibility of injury.
⚠ WARNING	WARNING (with danger symbol) In a dangerous situation a serious accident is possible with the possibility of injury or death.
⚠ DANGER	DANGER (with danger symbol) In the event of an accident immediate danger of death or serious injury.

3.3 Markings on Device

Safety relevant information is identified on the device using the following symbols:

	**Refer to instruction manual**
CE 1434	**CE label according to Directive 93/42/EEC of the Council for Medical Products**
	**Manufacturer** WOODWAY USA, Inc.
EC REP	**European Representative** WOODWAY GmbH
	**Year of construction**
SN	**Serial number**
	**Used part of type B**
O I	**Mains switch (OFF/ON)**
	**Protective Ground Wire Connection** PPS series devices are electrical devices with protection class I.
	**Danger Due to Electric Voltage** This symbol warns the user of dangerous voltage inside the device.
	**Danger of Being Crushed** This symbol warns the user of potentially being crushed.

	**CAUTION!** - To reduce the risk of fire, replace only with same type and rating of fuse. Disconnect power before replacing fuse. **WARNING!** - Disconnect from supply circuit before opening. **WARNING!** - Remove E-STOP lanyard when not in use and store out of reach of children. **CAUTION!** - Risk of injuries to persons. To avoid injury, stand on side rails before starting treadmill. Read instructions before using.
	**Emergency stop** Indicates emergency stop button (mushroom type)
	**Grounding** Indicates operational ground connections inside the device.
	**Potential Equalization** For the connection of a potential equalization cable
	This symbol is used to label electrical and electronic devices that must not be disposed of together with normal, unseparated household waste but must be treated separately. The disposal must aim to avoid problems caused by heavy metals, flame retardants and with the respective waste management. Please contact an authorised representative of the manufacturer for information about the disposal of your device.

3.4 Personnel Qualifications and Responsibilities

⚠ WARNING

Danger Due to Improper Use!

Improper handling of the device can lead to serious personal injury and property damage.

- ► The device may only be operated by persons who have received instructions from qualified service personnel.
- ► WOODWAY GmbH recommends the use of a training record (see appendix) for proof of instructions.

Representative: *The representative is the person or company that is responsible for setting up, use and maintenance of the device.*

The representative of the treadmill is responsible for the regular maintenance and testing as required by law. They are also obligated to provide adequate training/instruction to the operating personnel. WOODWAY GmbH recommends the training be carried out by trained and authorized WOODWAY dealer or service partner.

Operator: *Operators of treadmills for medical applications are persons who use the device and have the "power of control" over the device. This can be e.g. therapists, sports physicians or any other supervisor. The operator of a medical device is any person who - regardless of their qualifications - independently uses a medical product in the commercial sector.*

The operator is personally responsible for the safety of the user (e.g. patient, test subject, athlete). Due to the high degree of responsibility these persons have a special obligation to provide information on all aspects of safety of the device and its intended use is required.

3.5 Intended Use

⚠ WARNING

Danger from Improper Use!

Any improper use and/or other use of the device can lead to dangerous situations with significant personal injury and/or property damage.

- ► Only use treadmill for its intended use.
- ► Read and strictly adhere to all information in the operating instructions.

PPS series treadmills for use in medicine are approved for the following applications:

- Endurance Training
- Diagnostics and Performance Testing of Patients in the Laboratory (e.g. Ergospirometry)
- Performance Diagnostics of Endurance
- Stress Testing (e.g. Exercise ECG)
- Gait Training and Gait Analysis
- Exercise Therapy/Rehabilitation Training in Rehabilitation (Locomotion Therapy)

In all fields of use the treatment of patients with a variety of physical and/or mental limitations is carried out (for example, gait impairments, limited reflexes, etc.).

Special User Groups!

Special attention must apply to these user groups. Compared to treadmill exercise with healthy people the risk of injury is considerably higher with these users. Strict adherence to and compliance with all safety instructions and operating information is the highest priority.

The patient may only use the treadmill under the supervision of a physician and/or therapist! The training program must be medically prescribed and monitored.

Body Weight Support!

For patients with an increased risk of falling, partial or complete body weight support through a weight support system is to be considered.

⚠ WARNING

Risk of Injury Through Increased Risk of Falling!

Because of their illness or their physical/mental condition, certain people have of an increased risk of falling.

- ► Use of a fall protection system, support belt, body weight support system (partial or complete).
- ► The manufacturer is not liable for personal injury and/or property damage, which could have been prevented through the use of a fall protection system, support belt or body weight support system.

Locomotion Therapy:

In rehabilitation, exercise therapy must be medically prescribed. The attending physician and/or physiotherapist must have a sufficient knowledge of the indications and contraindications.

The indications for treadmill therapy are to be reevaluated prior to each use. The physician/physical therapist responsible for the patient must always perform a benefit/risk assessment, thus ensuring that the chosen form of treatment is medically appropriate and reasonable considering the possible risks.

Contraindications!

There are a number of contraindications in the context of the relevant fields of the treadmill use. In rehabilitation only the medical staff can determine the form and extent of therapy. Medications can have an influence on the rehabilitation (e.g. neuroleptics, benzodiazepines, barbiturates, antiepileptics, etc.).

For applications in "endurance training", "diagnostics and performance testing of patients", "performance diagnostics" and "stress tests" the same contraindications apply (among others) as with all physical stress. If there is doubt, it is important that a physician be consulted before using the treadmill.

Possible contraindications are: acute myocardial infarction or unstable angina pectoris (stress test), cardiovascular diseases such as severe high blood pressure at rest, carditis, congestive heart failure, severe valvular heart disease, dangerous heart arrhythmias at rest or aortic aneurysm

Acute illnesses, febrile conditions and newly occurring pain represent an absolute contraindication for physical stress. The feasibility of a training program for patients with chronic illnesses cannot be decided a priori and requires an accurate assessment of the risks and potential benefits.

In some situations (especially in patients with coronary heart disease or lung disease) overstraining can lead to an acute intensification of the patient's symptoms, so that an exercise ECG is essential and training is only possible under medical supervision.

In the following cases treadmill training may only be carried out after consultation with a doctor: Pregnancy, acute thrombosis, fresh wounds (e.g. after surgery), artificial joints or prosthetics, bone fractures, spinal disc damage, traumatic injury to the spine, diabetes, epilepsy, inflammation, acute migraine headache, and cancer.

The use of the automated operation (pulse automatic, preset programs, external control via computer or other device) is prohibited, unless the strain was authorized by a physician in accordance with the patient's capacity/health.

NOTE
Claims to the manufacturer of any kind due to damage from improper use are excluded. The representative alone is liable for all damages resulting from improper use!

3.6 Unauthorized Modes of Operation

PPS series treadmills may only be used for the aforementioned purpose. Any additional uses may result in serious personal injury and/or property damage.

The following restrictions and prohibitions must be strictly adhered to:

- The treadmill may not be used without prior instruction by qualified personnel.
- Animals and children may not use or be in the vicinity of the device (exception: see "Application Options for Children").
- The use of the treadmill under the influence of alcohol or drugs and/or narcotics is prohibited.
- The transportation of objects on the treadmill is not allowed.
- The walking surface is not suited for the use of running shoes with spikes or studs.
- It is forbidden to use the treadmill without its side rails or with walking poles.
- The operation of WOODWAY slat-belt treadmills outside of the named ambient conditions in the section "Commissioning" (temperature, humidity, air pressure) as well as outdoors, i.e. outside of closed rooms is not allowed.
- For people with health limitations or contraindications (see previous section) the use of a treadmill without prior consultation by a health care professional is prohibited.
- When stepping onto the treadmill, during walking exercises and when stepping off of the treadmill the safety instructions in this manual must be observed. Here, the following restrictions apply:

  - Never jump on the moving belt!
  - Never jump off while the device is moving!
  - Never jump off of the front!
  - Never stop walking when the belt is moving!
  - Never turn around when the belt is moving!
  - Never walk sideways or backwards (even if authorized by a physician)!
  - Never set the stress level (speed) too high!

3.7 Electromagnetic Compatibility (EMC)

It is expressly noted that ELECTRICAL MEDICAL EQUIPMENT is subject to special precautions regarding electromagnetic compatibility (EMC). They must be installed and operated accordingly.

The PPS series treadmills meet the requirements of EN 60601-1-2:2001 (Group 1, CISPR 11 Class A), EN 61000-3-2 and EN 61000-3-3.

It should be noted that portable and mobile RF communications equipment and other devices with interference beyond the permissible values can affect the electronics of the treadmill. This can influence the measurement functions and the displays cause treadmill malfunctions.

ATTENTION

The device is intended solely for use by medical professionals. The treadmill is a Class A device according to CISPR 11.

When located in living areas, the device can cause radio interference or disrupt the operation of equipment in the vicinity. It may be necessary to take appropriate remedial measures, such as changing the direction, realigning or shielding the treadmill or filtering the connection to the location.

Detailed information and proof relating to electromagnetic compatibility can be viewed at the manufacturer on request.

4 Technical Data

4.1 Name Plate

The nameplate contains the device's main technical details.

Keep handy for questions! For service questions, the technical information on the nameplate must be kept handy.

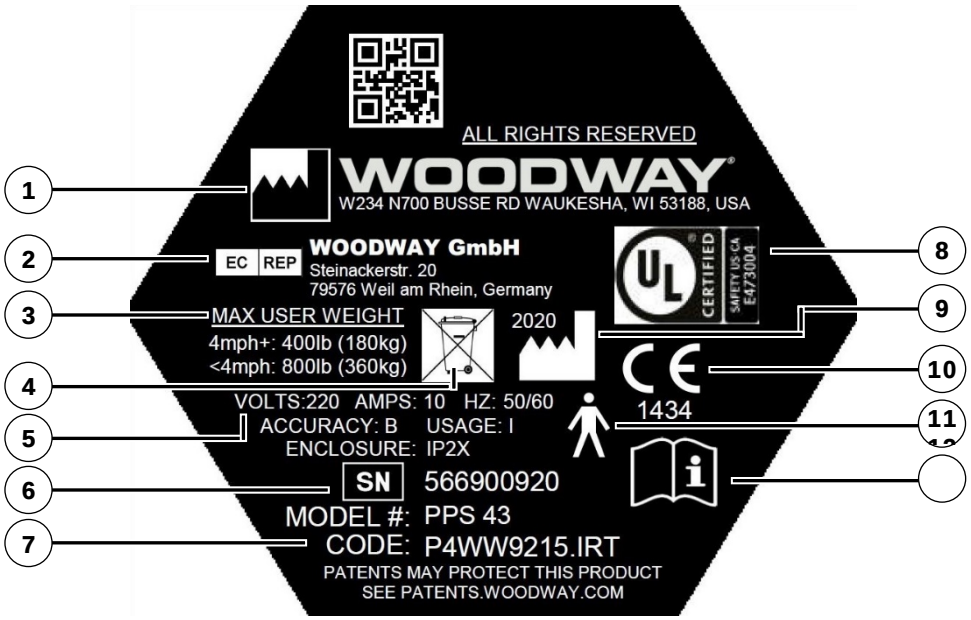

Fig. 2 Nameplate, sample

1. Manufacturer name and address
2. European Representative
3. Indication of the maximum person weight load
4. This symbol is used to label electrical and electronic devices that must not be disposed of together with normal, unseparated household waste.
5. Information on the electrical connection
6. Treadmill serial number; for WOODWAY Customer Service inquiries keep the device serial number handy.
7. Model no. and product code
8. UL marking of the device
9. Year manufactured
10. CE marking of the device (with number of the named position)
11. Electric device with type B application part, degree of protection against electric shock
12. Note to read and observe the operating instructions!

4.2 RS-232 Interface

The treadmill's RS-232 interface may only be used for approved medical devices!

4.3 Technical Specifications

Device designation:	Model: PPS 43	Model: PPS 55	Model: PPS 70
Walking surface (L x W):	172 x 43 cm	172 x 55 cm	172 x 70 cm
Usable walking surface (L x W):	157 x 43 cm	157 x 55 cm	157 x 70 cm
Walking surface / Technology: Walking surface hardness / Lateral play:	60 slats (replaceable) / Rubber on aluminum T-sections 43-47 Shore A / +/- 2 mm		
Dimensions PPS frames (L x W x H):	172 x 78 x 31 cm	172 x 90 x 31 cm	172 x 105 x 31 cm
Overall dimensions (L x W x H):	184 x 94 x 150 cm	184 x 106 x 150 cm	184 x 121 x 150 cm
Weight *:	210 kg	230 kg	260 kg
Max. user weight (at max. 5 km/h):	180 kg (360 kg)	180 kg (360 kg)	180 kg (360 kg)
Walking surface above floor:	32 cm	32 cm	32 cm
Ambient conditions for storage and transport:	Temperature: -30°C to +70°C Relative humidity: 20 - 95% (not condensed) Air pressure: 700 - 1060hPa		
Ambient conditions for operation:	Temperature: +10°C to +40°C Relative humidity: 15 - 85% (not condensed) Air pressure: 700 - 1060hPa		
RS-232-interface:	Yes, standard	Yes, standard	Yes, standard
Interface cable:	Shielded null modem cable, maximum length 5m		
Pulse measurement:	1-channel ECG accurate, chest strap Polar T34 included in scope of delivery		
PC-Software:	WOODWAY treadmill control software Vers. 3.0 in scope of delivery		
Fall protection with emergency stop **:	optional		
Modifications for pit/platform installation:	on request		
Power connection:	Earthed plug in accordance with CEE 7/7 ("Schuko plug" Type E + F) with earth (PE conductor), rated voltage 220 V AC, Rated current 10 A, 50/60 Hz Cord length: 2m		
Fuse:	Supply: 16A type C (“slow”), Device: T10A, 250V~, 20 x 5 mm, type C (“slow”)		
Classification***:	Safety class I device, type B application part Degree of protection against ingress of water: IP2X		
Mode of operation:	This device is designed for continuous operation.		
Product life:	7 years		
Drive motor:	brushless DC motor, power 1500 W (maximum 4000 W)		
Lift motor:	DC motor, power 150 W		
Power consumption:	1.1kVA	1.1kVA	1.1kVA
Speed ****: Accuracy/ Resolution:	-10 ..+ 24 km/h +/- 0.1 km/h	-10 ..+ 24 km/h +/- 0.1 km/h	-10 .. +24 km/h +/- 0.1 km/h
Tolerance:	less than +/- 1%		
Lift ****: Accuracy/ Resolution: reverse direction:	0 .. 25 % +/- 0.1 % 0 .. 10 %	0 .. 25 % +/- 0.1 % 0 .. 10 %	0 .. 25 % +/- 0.1 % 0 .. 10 %

* *The total equipment weight can increase by adding more options (e.g. fall protection, railing variations depending on model etc.).*

** *For performance tests, intense intervals or sprint training the runner's additional safety measures must be provided. In this case WOODWAY strongly recommends the use of the all protection option with chest strap and emergency stop function to minimize the risk of injury.*

*** *Classification according to EN 60601-1.*

**** *Up to 20 km/h and 20% available depending on the model. We reserve the right to make technical changes.*

5 Transportation and Storage

5.1 Safety Notices for Transportation

Check the treadmill for damage upon arrival. Also check and compare supplied accessories with the corresponding delivery note.

The manufacturer is not liable for damages and missing parts if this information was not recorded in writing on the delivery note upon delivery of the unit. Damage or defects must be reported to the carrier and to the responsible WOODWAY dealer immediately.

⚠ WARNING

Risk of Injury by Machine Falling Over!

Improper transportation of the device may lead to it falling over and causing injury or equipment damage.

- ► Only transport in compliance with the safety regulations.
- ► Carry the device with at least four persons.
- ► Ensure stable center of gravity and steadiness in all described modes of transportation.

WOODWAY Service: If necessary, treadmill transport or relocation can be carried out by authorized WOODWAY service partners.

For further information please contact WOODWAY customer service.

5.2 Flat Transportation

The treadmill can be easily transported on a flat surface using of **four** flat transport dollies (commercial transport dollies with 4 steerable wheels). In this situation the high PPS series device weight must be considered.

It is important to ensure that the device frame near the treadmill feet rests on the dollies. Otherwise there is a risk of damage to the walking surface or the lifting system.

5.3 Upright Transportation

For narrow transport routes it is possible to transport the treadmill vertically (for example, narrow door width or for climbing stairs).

For this handrails and side panels must be removed beforehand. If a transport dolly is used, the device must not rest on the electronics side! The electronics are located in the right side when facing in the walking direction!

When transporting in an upright position, the device must be additionally secured against accidental tipping or rolling since the center gravity is not in the middle of the device.

5.4 Transportation with Carrying Poles

Four carrying poles (square steel pipes) are included as treadmill accessories. The carrying poles can be inserted into the front and back openings provided in the treadmill frame (Fig. 3 and Fig. 4).

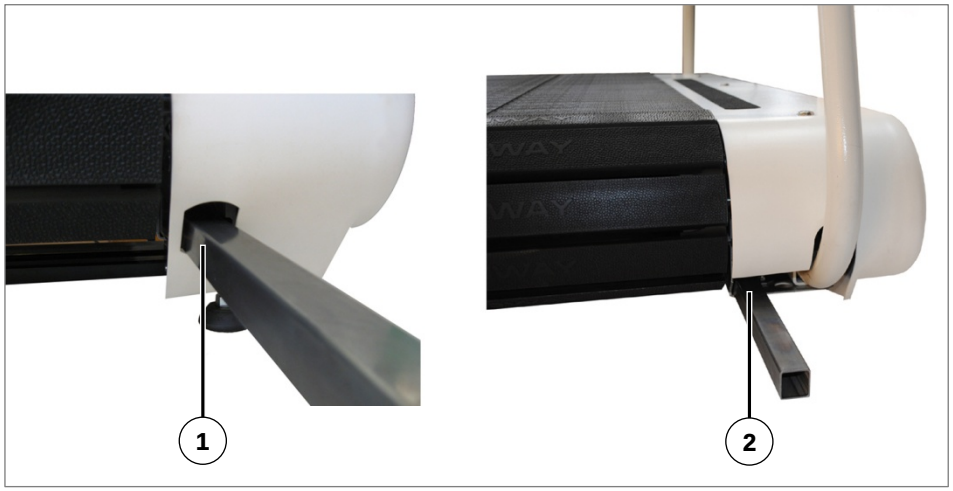

Fig. 3 Carrying poles

1. Use of carrying poles, PPS Plus model
2. Use of carrying poles, PPS Med / PPS Ortho

The treadmill may only are lifted at the indicated points.

Fig. 4 Treadmill transportation with carrying poles

The side panels and railings can be removed to facilitate transport, see Sec. 5.5 Page 20.

5.5 Removing / Mounting Side Handrails

In most cases the WOODWAY is delivered completely assembled. In some cases the conditions at the intended location do not allow for assembly free delivery (doors, stairs, elevators, etc.) and the treadmill needs to be partially disassembled.

DANGER

Danger of Death by Electric Shock!

Fatal electrical shock may occur if the unit is not disconnected from the power supply before assembly or disassembly.

- ► The device must be stopped, switched off and unplugged before being worked on.
- ► Ensure the device cannot be switched back on.
- ► After the power is disconnected wait 10 minutes to ensure that live electrical components (e.g. capacitors) have discharged.

Remove handrail:

Side panels: Loosen the screws on both side panels (3 per side) with a Phillips screwdriver, Fig. 5.

On "plus" models the cutout for the railing is covered with an additional panel. Loosen the fixing screws on the panels (2 per side).

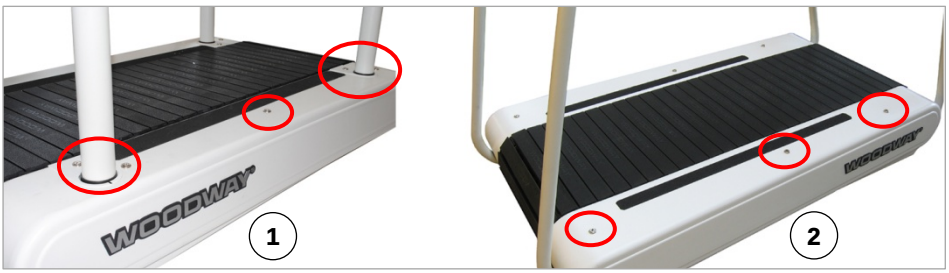

Fig. 5 Side panel fixing screws (markings for only one side)

1. PPS Plus side panel fixing screws
2. PPS Med / Ortho side panel fixing screws

Electronics covering: The drive and control electronics are located on the right side of the device as seen from walking direction, Fig. 6.

To remove the metal cover (shield) loosen the four fixing screws.

Fig. 6 Remove electronics shielding panel

Disconnect cables: Disconnect cables from display cable, emergency stop cable and the earth. First remove the cable ties that secure the wiring harness to the frame, Fig. 7.

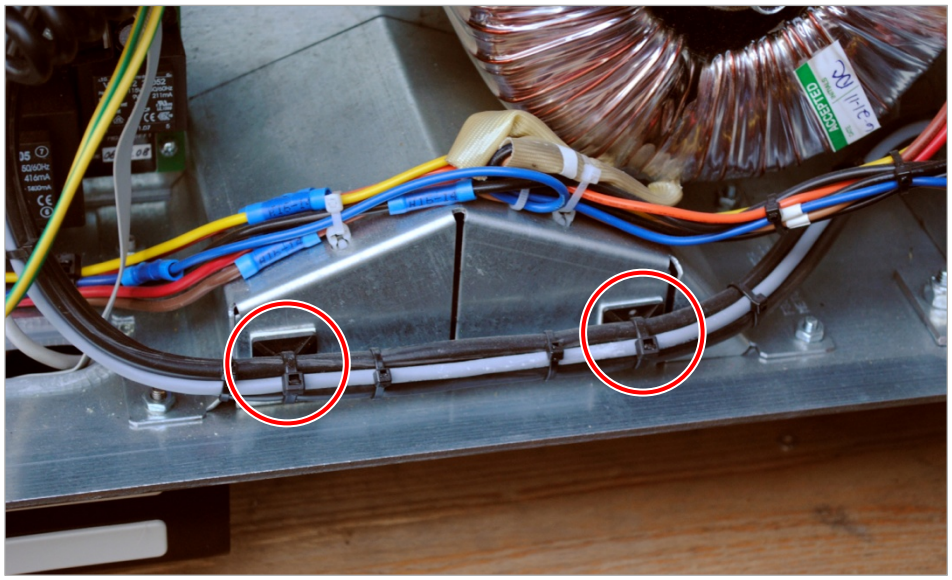

Fig. 7 Fixing of the wiring harness to the frame

Ensure that the wires are not damaged!

Then loosen the nut of the grounded star point, and then remove the two 25-pin D-SUB plugs, each fixed with two small Phillips screws, Fig. 8.

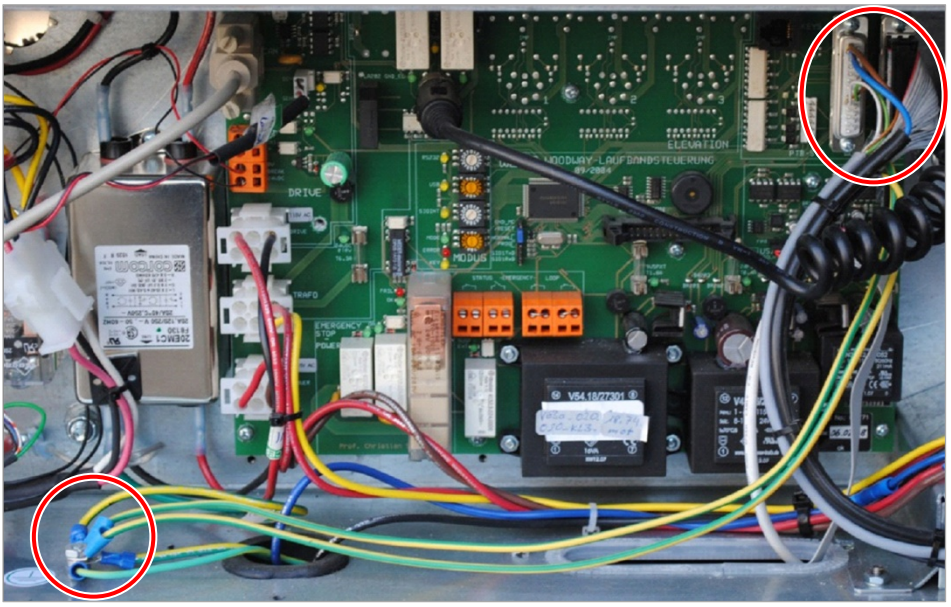

Fig. 8 Treadmill controls (WLS)

Now carefully pull the harness through the hole below the toroidal transformer, Fig. 9.

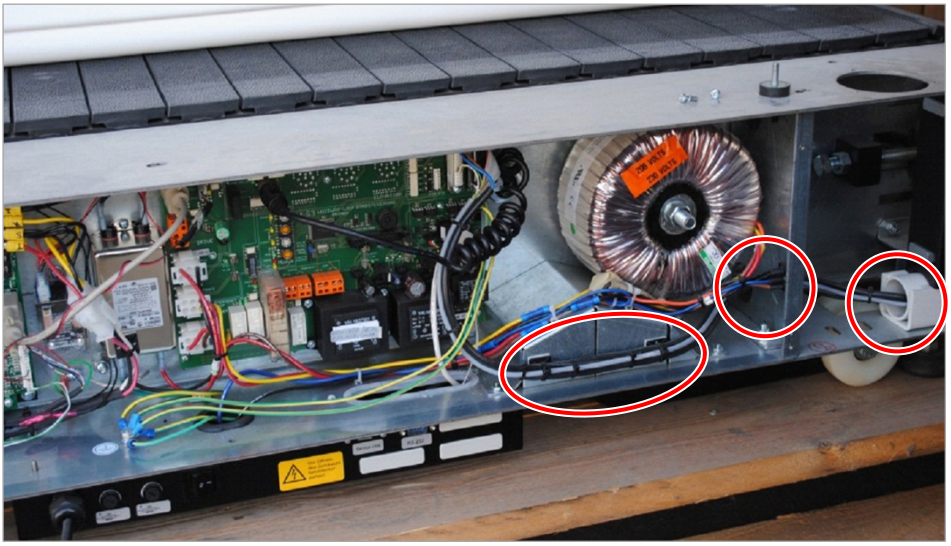

Fig. 9 Wiring harness layout

Removing the railing mount:

Remove the railing mount and the railing.

PPS Med or PPS Ortho: Loosen the upper fixing screw (M18) in the front and rear with a 5 mm Allen wrench, Fig. 10.

Remove the (M18) fixing screw at the bottom with a 13 mm box wrench. The screws engage small metal plates which are inserted into the railing stabilizer. After the mounts are released on both sides of the railing, it can be removed from the treadmill by spreading the railing slightly.

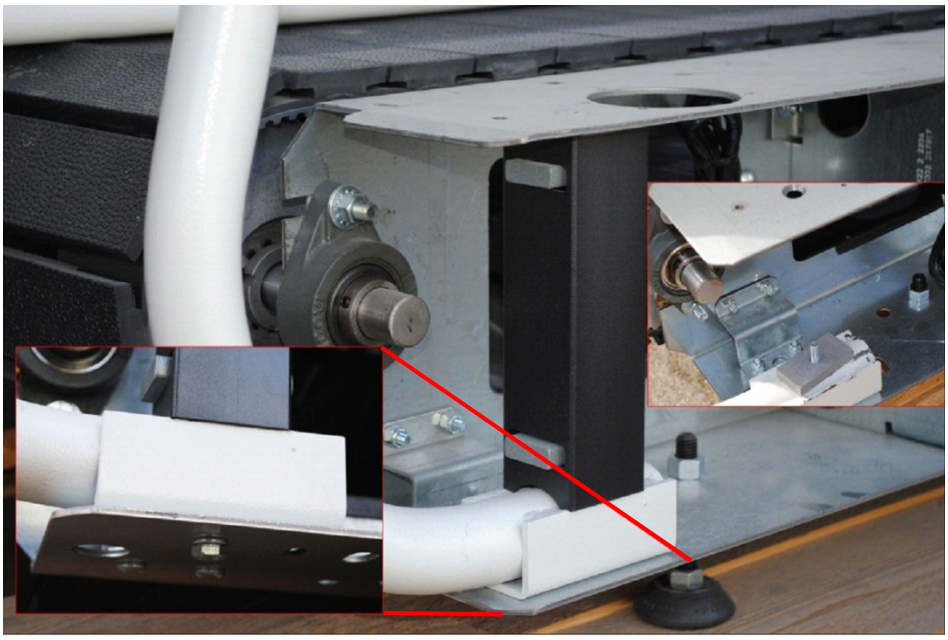

Fig. 10 Fixing bolts in railing mount PPS Ortho / PPS Med

PPS Plus: Loosen the base frame mount using a 17 mm box wrench (one bolt per rail). The inner nut is secured by an additional counter nut. Pull the bar railings vertically out of the guide, Fig. 11.

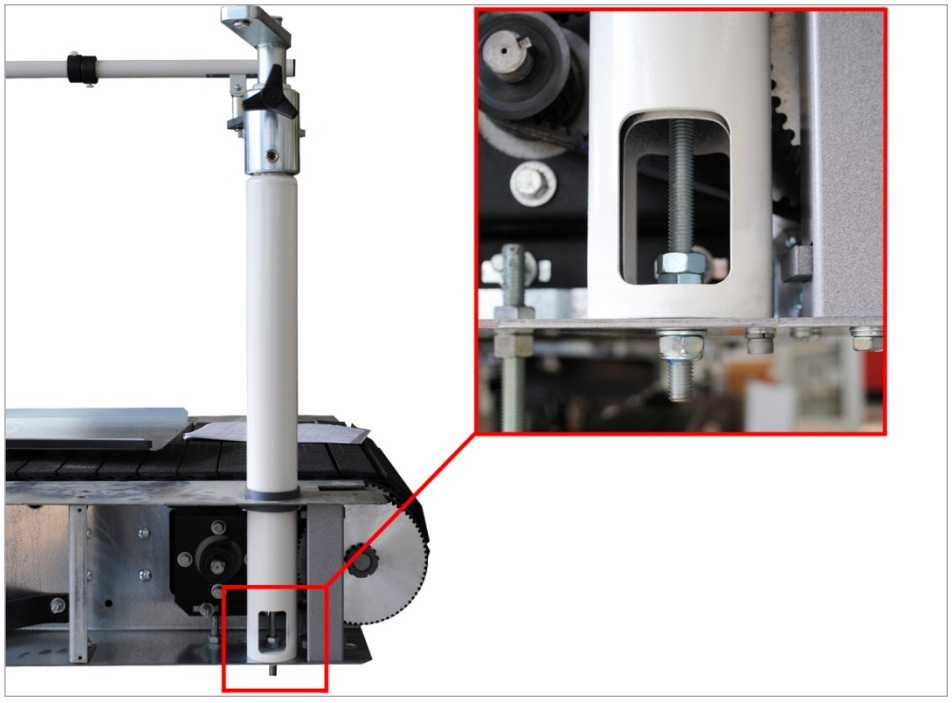

Fig. 11 Fixing bolts in railing mount PPS Plus

Mounting the railing

1. Mounting of the railing is carried in the opposite order.
2. The following points must be checked during mounting:
    - o Are all cables in good condition?
    - o Are all bolts tight?
    - o No other plugs have been accidentally pulled out.
    - o Are all plugs properly inserted and screwed tight?
    - o Are the wires fixed to the treadmill frame with wire ties?
3. Mount the side panels. Check the distance (gap) between the panel and the walking surface belt. The panel must not come into contact with the walking surface. Permissible gap size is 3 to 5 mm. Sizes > 5 mm are not allowed for safety reasons. Let the treadmill run at about 0.5 km/h and check the clearances for at least one full revolution.
   The walking surface belt play must not exceed 2mm.
4. Perform a function test. Special attention must be paid to the safety equipment.

Transportation notes:

The railing can be further disassembled using an Allen wrench. For this loosen the individual railing mounting brackets. Ensure that the wires inside the device are not damaged when working!

When transporting the railings the cables must be adequately protected!

Now the treadmill can be transported vertically. Always follow the safety instructions in the "Transportation and delivery!" section exactly.

5.6 Storing

The device may only be stored in closed, dry rooms. Direct contact with moisture (rain, fog, etc.) can cause serious damage to the electronics of the treadmill and must be strictly avoided.

The following environmental conditions are prescribed for transportation and storage:

- Temperature: -30°C to +70°C
- Relative humidity: 20 - 95% (not condensed)
- Air pressure: 700 - 1060hPa

6 Product Description

6.1 Overview of Models

WOODWAY slat-belt treadmills are available in the following walking surface widths:

- 43 cm
- 55 cm
- 70 cm

Due to the fact that several options are available the devices can be individually adapted.

Figure	Description of models
	The **WOODWAY PPS Med / PPS Med-i** series is the first choice for use in hospitals around the world due to their long-standing and proven use in the fields of medical diagnostics and therapy, therapy clinics and rehabilitation centers. Continuous development and optimization of product features, such as continuous medical railings, offer the patient maximum support and maximum safety in every situation.
	The **WOODWAY PPS Plus** treadmill is the ideal device for patients who require a higher level of assistance during therapy. The height- and width-adjustable wooden parallel rails are variably adjustable to meet the individual needs of your patients. By reversing the direction of travel and the using associated possibility of therapy at an incline, the treadmill is suited for many specific training methods. With your extensive functionality, PPS Plus range provides maximum comfort and flexibility for use in therapy and diagnostics
	The **WOODWAY** treadmill **PPS Ortho** was specifically developed for the application of video-based analysis in orthopedics and rehabilitation. Due to its open railing version, it offers ideal conditions for gait and running analysis. By reversing the direction it is possible to use two cameras to capture views from four perspectives without having to change the position of the cameras. The absence of a display (optionally available as an external option) allows the patient to focus on the essentials and helps to reduce external distractions during therapy or diagnosis to a minimum. The control system functions via a serial interface and PC connection or magnetic keyboard.

6.2 Equipment and Options

WOODWAY slat-belt treadmills are available in the following walking surface widths:

- 43 cm
- 55 cm
- 70 cm

Due to the fact that several options are available the devices can be individually adapted.



Options:	PPS 43/55/70 Med *)	PPS 43/55/70 Ortho	PPS 43/55/70 Plus
Speed 0-20 km/h	■	■	□
Speed 0-24 km/h	□	□	■
Incline 0-20%	■	□	**X**
Incline 0-25%	□	□	■
Display data monitor	■	□	**X**
Display WUS	□	□	■
Display as ext. version	□	□	□
Both sides. Standard railing	■	**X**	**X**
Ortho railing	**X**	■	**X**
Parallel gas-assist bars	□	□	■
Reverse**)	□	■	■
Special color	□	□	□
Special design	□	□	□
Polar chest strap set	□	□	□
Protective floor mat	□	□	□

■ standard / □ option / **X** not available

*) The **PPS Med** model is structurally identical to the **PPS Med-i** model (The PPS Med-i comes standard with WUS)

) Reverse option for **PPS Med and **PPS Med-i** is only available in connection with a conversion of railing (PPS Ortho or railing bars), for which the WUS display or software control of the treadmill is required, or in combination with the Fall Protection System.

6.3 Main Components

The main components are shown using the **PPS Plus** model:

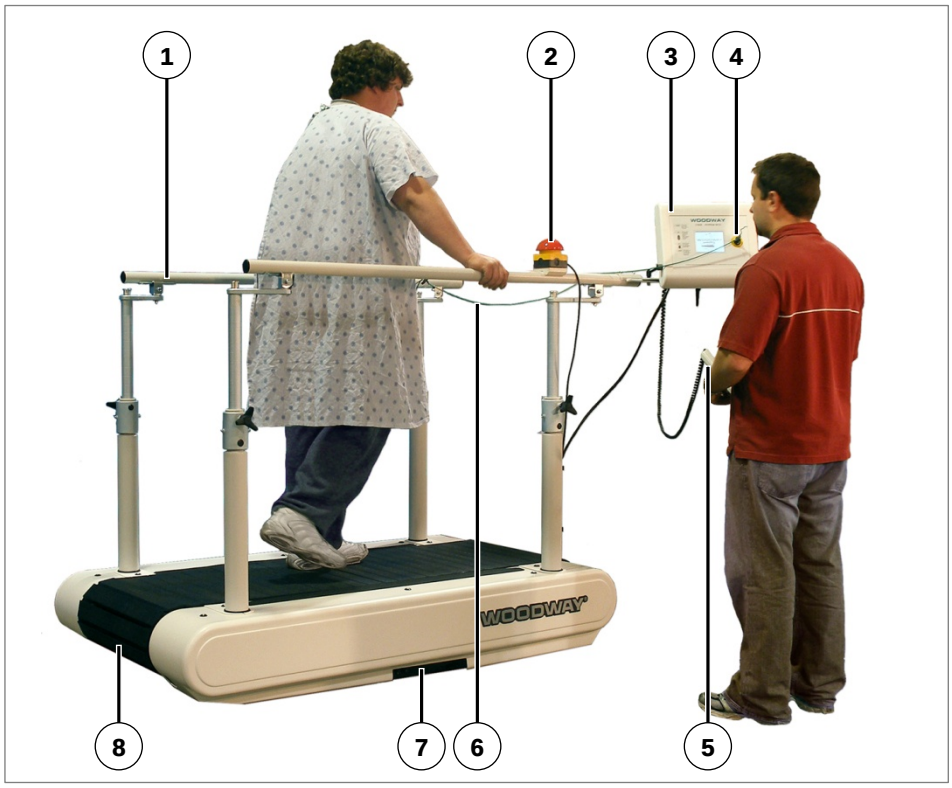

Fig. 12 Device components, PPS Plus model

1. Parallel gas-assist bars, adjustable
2. Emergency stop button with magnetic mount (PPS Med, mounted to railing)
3. Display (WUS or DaMo)
4. Emergency stop magnet
5. Remote control (keypad with magnetic mount)
6. Lanyard (cord) with clip
7. Mains connection box: Fuses, power switch, RS-232 interface (depending on model)
8. Walking surface belt

6.4 Description of Components

Walking surface belt:

The patented walking surface consists of 60 slats which are mounted on a set of endless combination wedged-toothed belts. These are connected with the drive via a gear wheel. The teeth prevent slippage and allow for exact reproduction of the distance.

The individual slats consist of two components. The base is a solid aluminum profile and the tread rubber comprises a rubber-caoutchouc compound. The combination provides for an exceptionally pleasant feel when walking.

The rubber surface significantly reduces the impact energy. Thus WOODWAY treadmills are much easier on the joints than conventional treadmills.

Support system

The support system consists of two supporting rails (secondary carrier), which are equipped with high-performance bearings. Six V-belt guides on each carrier ensure lateral stability.

The system which consists of a total of 112 ball bearings supports the running surface and distributes the load evenly over the entire treadmill. The running surface belt (slats and steel wire reinforced toothed V-belt) is guided by a form-fitted drive pulley on the front and back. The combination of running surface / secondary carrier / drive pulleys makes this slat system unique:

- Low friction (energy saving) and low wear (approx. 240,000 km functional service life)
- 100% power transfer through the form-fitted toothed V-belt system (Reproducible measurements)
- High service life (one running surface belt for one treadmill life)

Lifting system: (incline)

The PPS series treadmills have lifting scissors with casters. This makes a maximum incline of 25% possible (depends on model). The lifting system is driven by a linear DC motor, which changes the angle of the scissors. This changes the incline of the running belt.

The incline system is characterized by a very quiet operation. The system accuracy is 0.1% and +/- 0.4 degrees.

Power console:

The main power switch (power), the fuses and the terminals for optional controls (manual keyboard and display) are located on the power console.

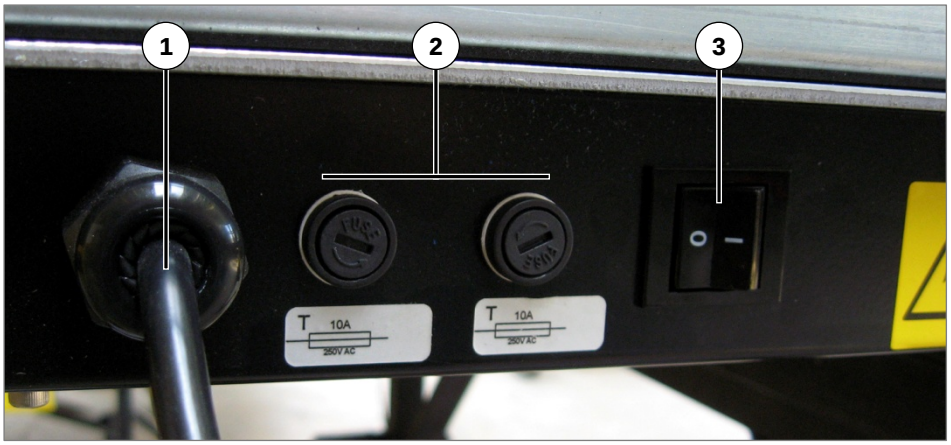

Fig. 13 Power console

1. Power cord
2. 2 x fuses, change see section 10.5 Page 75
3. Power switch

6.5 Control and Display Elements

WOODWAY User-System

The **WOODWAY** user system (WUS) is equipped with an LCD touch panel, which provides convenient operation of all treadmill and program functions.

Creating your own training programs is also possible.

The 5'' Screen (diagonal 125mm) provides a clear display of current training information.

Fig. 14 WOODWAY User-System (WUS)

WOODWAY Data monitor

The **WOODWAY** data monitor (DaMo) display offers an alternative with reduced functionality.

The following information is displayed with LEDs:

- current speed (in m/s or km/h) and the training time
- current incline in %
- pulse rate (heart rate)
- Distance (distance run since the last time the treadmill was switched on)
- Runner's energy consumption in calories
- Control mode (Remote control / manual control / stop mode)

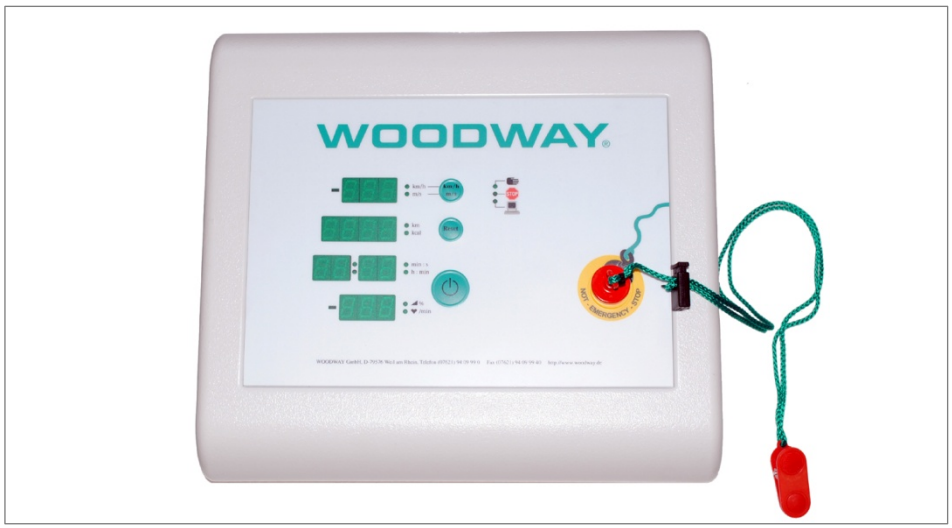

Fig. 15 WOODWAY Data monitor (DaMo)

WOODWAY User system, external

The external **WOODWAY** user system (WUS), with emergency stop switch, is an optional WUS display as a desktop unit for the supervisor (therapists, sports physicians, or other supervisor).

The external **WOODWAY** user system is also available as a supplement to the PPS Ortho.

Fig. 16 WOODWAY User-System (WUS) external with emergency stop switch

Keypad

Keypad for PPS Ortho, or with spiral wire for PPS or PPS Med Plus.

The hand keyboard enables use of the treadmill's elementary functions:

- speed (**+** / **-**)
- incline (↑ or ↓)
- stop the treadmill

Fig. 17 WOODWAY keypad

6.6 Safety Equipment

The medical PPC series treadmills are equipped with different safety equipment depending on model and design. When needed, they serve to prevent dangerous situations and to reduce the risk of injury to a minimum. The following safety equipment is available:

- Emergency stop button(s) on the railing, or emergency stop button on display
- Emergency stop pull cord with magnetic switch (emergency stop rip cord with magnetic switch) on the display or on the emergency stop button on the railing
- Fall protection (safety bow with fall-stop, optional)
- Non-slip coating on the side panels
  (allows emergency dismount by "straddling")

⚠ WARNING

Dangerous Situations During Operation Which Can Cause Injury!

Conditions during use of the device that do not correspond to the normal function and require an immediate stop. Each actuation of the Emergency stop switch causes a power disconnection to the drive system which in turn causes the running surface to emergency stop, which presents an additional risk of falling!

- ► Immediate stopping of the device/drive caused by an installed safety device.
- ► Switching off the device (Power button) and the pulling the power cord from the socket.
- ► Clarification and elimination of causes of the dangerous situations only by the WOODWAY Customer Service.
- ► Only restart the device after approval by WOODWAY customer service.

Emergency stop switch

The emergency stop button (mushroom type) is mounted on the right hand railing of all PPS series devices. Activating the emergency stop system causes immediate power disconnection to the drive system. The running surface is stopped so that it comes to a stop in a reasonably short time, but without causing further danger to the runner by braking too suddenly (emergency stop). It is recommended that one familiarize themselves with the treadmill's braking performance (emergency stop) at various speeds.

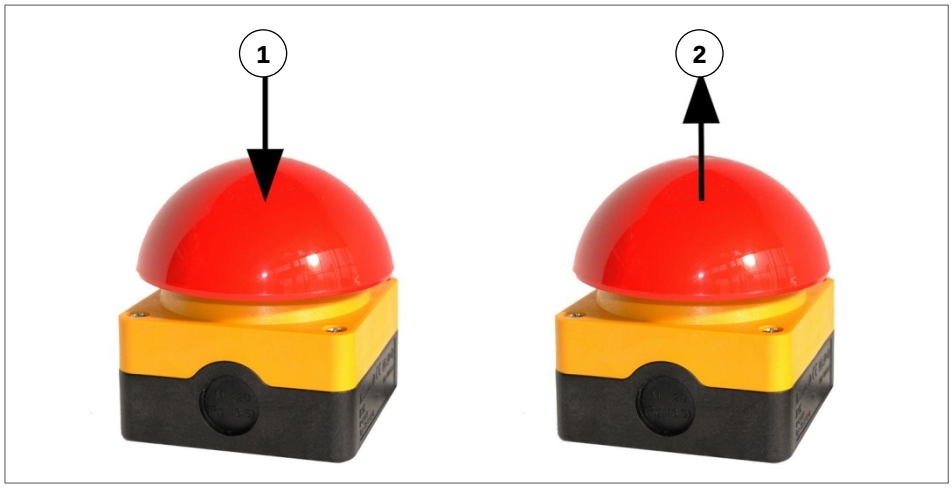

Fig. 18 Emergency stop button, functions

1. Triggering the emergency stop function by **pressing down** the red mushroom
2. Releasing by firmly **pulling** the red mushroom **up**

On treadmills with a reverse direction function, the emergency stop button has a magnetic mount and can be freely positioned on the railing. Before starting a workout ensure that the emergency stop button can always be reached by the runner or the treadmill operator.

Device users must always be positioned so that they can reach the emergency stop switch in any situation.

Releasing:

After pressing the emergency stop button it initially remains locked. For further use of the treadmill the button or mushroom must be released again. For this, pull the red mushroom sharply upwards until the release can be heard and felt.

NOTE

Emergency stop release functions!

After releasing the emergency stop, the electronics are locked and the treadmill cannot be used for 10 to 15 seconds.

It is only possible to restart after this time.

Pull cord with Emergency stop

The emergency stop switch is a magnetic contact switch (open), which is attached in the running direction on the display (WUS or DaMo) or on the railing ("Ortho" model).

⚠ WARNING

Danger of Injury due to Improperly Installed Pull Cord!

If the pull cord is not installed properly before a workout, the emergency stop magnetic switch will not be triggered and there is a risk of injury in the event of a dangerous situation.

- ► The use of the pull cord is mandatory!
- ► Securely attached clip to tight clothing before starting the workout.
- ► Adjust the length of the pull cord with rope stopper to the shortest possible setting, so that movement is still unrestricted.

It is attached by a magnet, and triggers at the release of the magnet. The magnet is secured to the runner's clothing by a clip on a "rip line" or "pull cord". It should be fixed to a piece of clothing with as little play as possible (e.g. waistband).

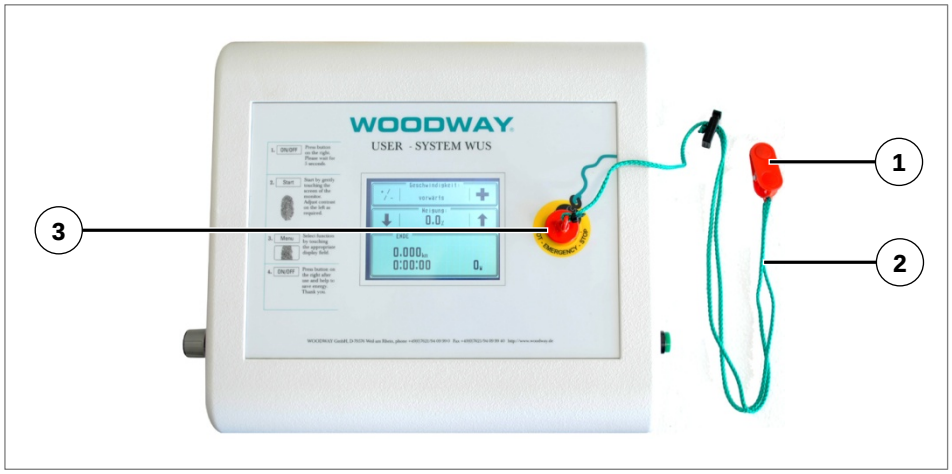

Fig. 19 Emergency stop magnetic switch on the display

1. Clothing clip
2. Pull cord, adjustable length
3. Magnet

Fig. 20 Emergency stop magnetic switch on emergency stop button on railing

Depending on the model, the magnetic is either fixed in the position indicated on the display (red box with yellow ring, see Fig. 19), or on the emergency stop button on the railing (see Fig. 20).

⚠ WARNING

Danger of Injury due to Incorrectly Placed Emergency Stop Button!

For treadmills with reversible direction the position of the emergency stop button should always be in running direction. Otherwise the magnet cannot release correctly and the function of the safety device is only limited.

- ► Always position the emergency stop button in the patient's running direction.
- ► If the running direction is reversed, the emergency stop button must be repositioned (in front of the patient).

The pull cord is no fall protection and cannot prevent a person from falling on the treadmill. It only serves as an emergency stop in dangerous situations. When the magnet is released, the drive system is disconnection from the power and an emergency stop is initiated.

Chest harness or waist strap

Provided the device is equipped with fall protection with emergency stop and the runner is secured by chest harness or waist strap, the clip must not be connected to the runner. The magnet must still be attached to the indicated point so that the treadmill is operational.

Fall protection with emergency stop

The optional fall protection system for the treadmill serves to prevent accidents. It must be used if:

- there is an increased risk of falling
- falls are associated with a potentially increased risk of injury.

It also increases safety when running on the wide running surface (≥ 70 cm). For most users a controlled dismount by a straddling and standing securely on the side panels is not possible on these running surfaces.

There is an increased risk of falling for example during performance diagnostics as well as intense sprinting and long runs. There is an increased risk of injury from falling, especially in rehabilitation where patients with various physical limitations use the treadmill.

Dismounting in emergency situations

WOODWAY PPS Series treadmills have slip-resistant surface alongside the running surface. This offers additional grip when dismounting and prevents the feet from slipping off of the side panels.

The slip resistant surface should be checked periodically for wear or lack of grip and replaced if necessary.

In emergencies dismount the treadmill as follows:

- jump and straddle the onto the side panels,
- now the running surface can run between the legs,
- then stop the treadmill using the normal stop button or the emergency stop button.

When a safety waist strap/chest harness is worn, the user can also drop in an emergency, if it is not possible to straddle the running surface.

An alternative is to stand on the side panel with both feet on one side of the running surface, right or left and to hold on to the railing. This will trigger the emergency stop mechanism via the pull cord and the running surface will come to a controlled stop.

7 Commissioning

7.1 General

Commissioning is the initial intended use of the device, see sec. 3.5 Page 12. Ensure that the conditions applicable to basic safety and health requirements are met.

Read these operating instructions completely before commissioning.

Before commissioning the device, operating and functional safety is to be tested. This includes correct installation, electrical connection, and operator training.

ATTENTION

Commissioning after Storage or Transport

The formation of condensation on the cooled electronic parts may cause the treadmill to malfunction and damage the electronics.

► Before commissioning after storage or transport the treadmill must stand at room temperature for approx. 3 hours to become acclimatized.

7.2 Installation

It is recommended that transport, installation and assembly of the treadmill to be carried out by WOODWAY or by an authorized dealer or service provider. Otherwise shipping damage or improper installation and assembly of the treadmill could cause a hazard when using the device.

ATTENTION

Prepare a Stable Surface

Before the device is installed the surface must be prepared. The total weight of the device with all the accessories and options is to be considered.

► Prepare a stable and sturdy surface.
► Only install the device on a level, stable and sufficiently sturdy surface.
► If necessary install a stable surface / floor plate under the adjustable feet.

The following further instructions for installation are to be observed:

- When installed on upper floors, the device must be placed as far as possible in a corner of the room so that sufficient stability is guaranteed, even at max. speed. The structure of the building must be checked in advance.
- The treadmill should not be installed close to a radiator or other heat source. This could cause technical defects.
- Due to the moving parts on the underside, the device must not be placed directly on thick carpeting. A mat must be placed under the device. This will prevent lint from entering into the treadmill and at the same time reduce carpet wear. A floor protection mat can be obtained from your WOODWAY dealer (see "Options and accessories)
- With larger PPS series devices particular attention must be paid to the ceiling/floor load capacity at the installation site. This must be higher than the total weight (weight of the device plus the dynamic weight of a running person) and approved by an authorized authority with the treadmill representative. The total weight is calculated as follows (for example the PPS 70 Med):
  Frame 172 x 121 cm = 2.081 m^2 floor space. Treadmill net weight: 260 kg, weight of runner (static): 150 kg, weight of runner when running (dynamic): 600 kg (up to four times the body weight) Total weight on the floor space: 860 kg .The required capacity of the floor space in this case is 413.26 kilograms (approx. 415 kg) per m2.

Planning the safe fall area:

When using the treadmill, especially fast movements (fast running, etc.) there is an increased risk of falling. For this reason an area behind the treadmill, a "safe fall area" of at least 2.00 x 1.00 m must be kept free, see Fig. 21 Page 36.

No obstacles may be located in this area! Objects, such as Furniture, plants, training materials, ladders or other objects may not be placed in this area.

Pay attention to the full room height in the safety area, sloping ceilings may not extend into the safety area.

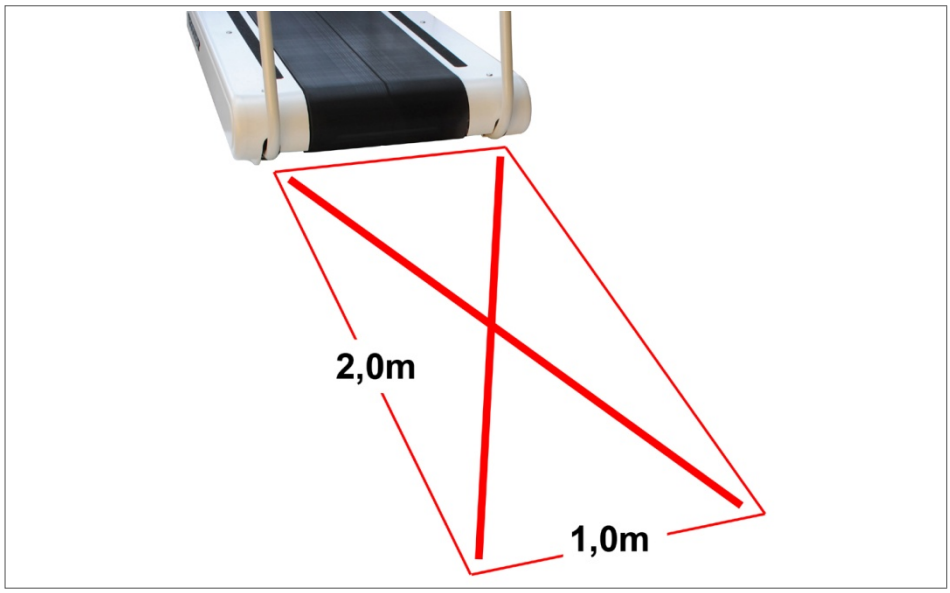

Fig. 21 Safety area (safe fall area) behind the treadmill

⚠ WARNING

For treadmills with the direction reversed and not equipped with the Fall Protection System, the safety area must also be provided IN FRONT of the treadmill!

Failure to follow this basic safety rule may result in serious accidents!

Adjust leveling feet:

After positioning the device at the installation site, adjust the horizontal height using a level. The height of the four leveling feet can be adjusted.

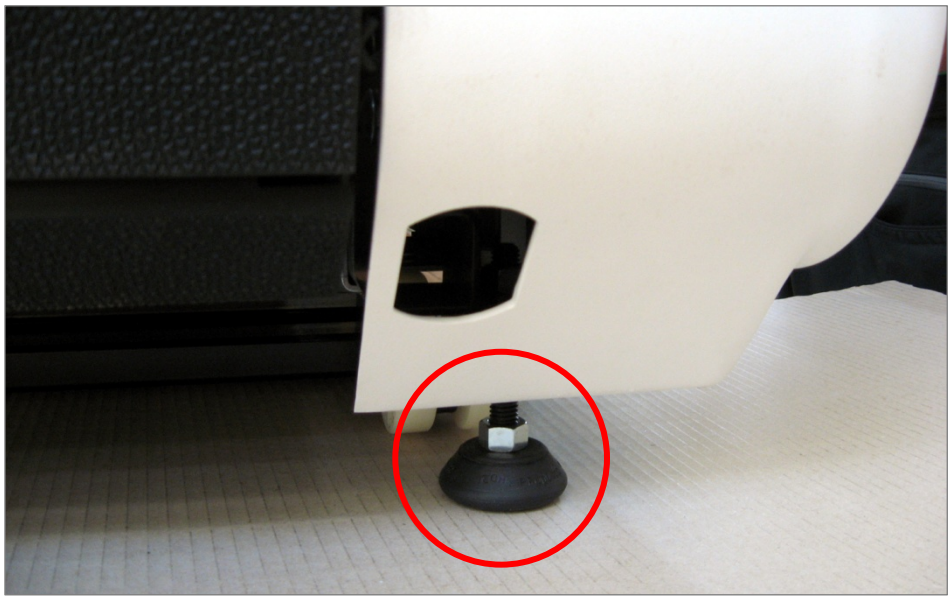

Fig. 22 Adjusting leveling feet

- Loosen the counter nut with a 19 mm open-end wrench
- Turn the foot up or down until the desired height has been reached
- Retighten the counter nut

When making these adjustments it is important to ensure that the frame of the treadmill does not twist. Lift frame of the treadmill to check for approximate equal weight load.

The treadmill frame can deform slightly during transportation. This can be seen on an even and level surface when the treadmill rocks slightly, or when one of the leveling feet does not touch the floor completely. In this case the treadmill can be realigned by applying the proper pressure on the railing.

7.3 Electrical Connection

7.3.1 Potential Equalization

Potential equalization acts as a preventive measure to avoid the development of potentials between the metal parts of the treadmill, which might injured the user and / or damaged the electrical functionality of the treadmill.

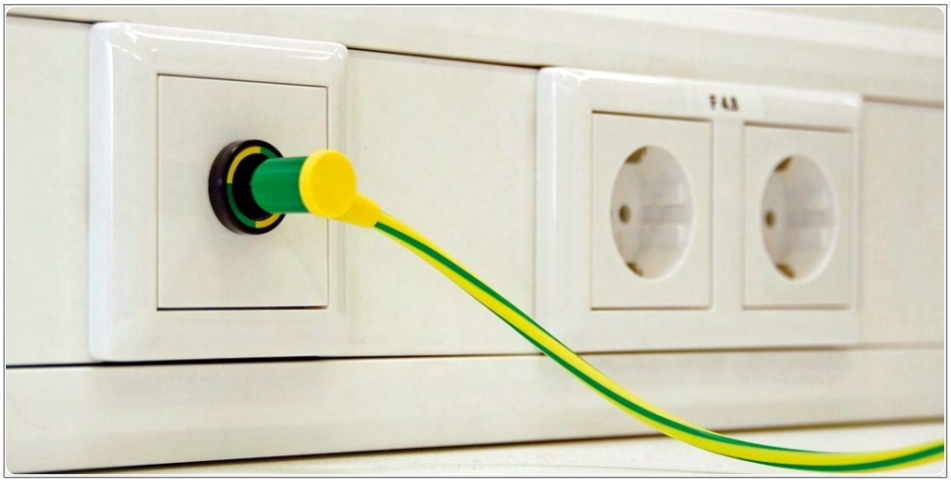

Fig. 23 Potential equalization cable and socket

⚠ CAUTION

Improper connection might cause damage to the treadmill!

The potential equalization cable must be connected to the pin on the handrails of the treadmill and to the potential compensation bar within the facilities.

- ► **<u>The potential equalization must be connected first</u>**; afterwards the main power supply can be plugged.
- ► During electrical safety measurements the potential equalization cable has to be disconnected.

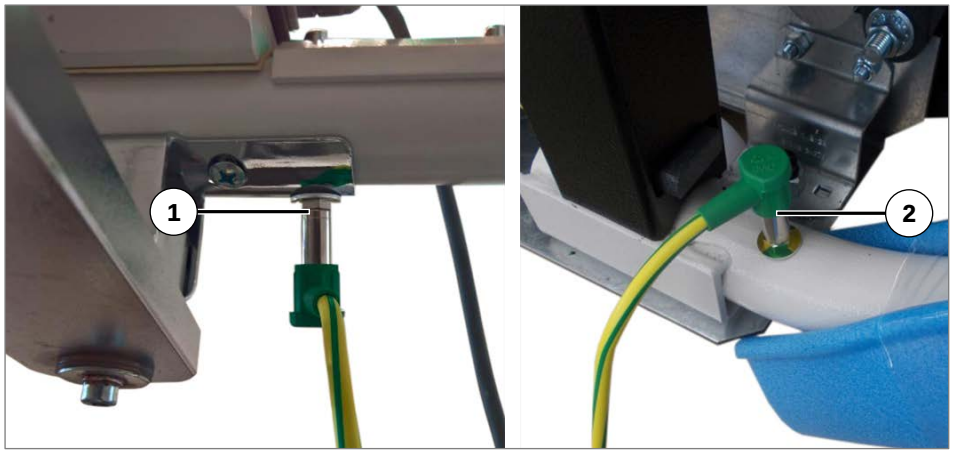

Fig. 24 Potential equalization pins on treadmill handrails

1. Potential equalization pin connection on adjustable handrails
2. Potential equalization pin connection on standard handrails

7.3.2 Power Connection

DANGER

Danger of Death by Electric Shock!

Improper handling of electrical equipment by unqualified persons can cause fatal electrical shock.

- ► If necessary, allow only qualified personnel to perform electrical installation.
- ► The power cord must not come into contact with hot surfaces or sharp edges.
- ► Electrical parts such as motor, power cord and power switch must not come in contact with water.

The WOODWAY treadmill comes standard with a grounded plug in accordance with CEE 7/7 (grounded "Schuko" plug). An appropriate "Schuko" socket is to be used on site.

Fig. 25 Power connection

1. Safety plug in accordance with CEE 7/7
2. „Schuko“ socket on site

A 16 amp safeguard (circuit breaker) with tripping characteristic C (slow) is to be installed on site. No other devices may be connected to this supply line. Each treadmill must be operated on its own circuit breaker. The treadmill must be grounded.

Before connecting the treadmill to the power supply, the information on mains voltage and frequency on the nameplate are to be compared with the on-site connection values. Only connect the device if the values coincide! Power surges or voltage drops can cause malfunctions or defects in the device!

WARNING

Danger of Injury by Falling when Switching the Device Off!

A complete shutdown of the unit caused by power surges or voltage dips can cause abrupt deceleration of the running surface belt.

- ► In order to avoid malfunctions, all data on the nameplate must correspond with the actual terminal values!

Ungrounded outlets may NOT be used! The use of power strips is not permitted!

⚠ WARNING

Danger of Injury by Tripping Over Wires!

Improperly installed wires represent a tripping hazard and danger of injury.

► Safe laying of power cords, interface cable, etc. outside of walking areas.
► The use of wiring channels.

7.4 Completion of Commissioning

Prior to starting operation, commissioning is to be completed with a trial run. During the trial run all device functions are to be carried out and checked.

ATTENTION

Check Device!

After the trial run has been carried out, all bolted connections, couplings and other connections are to be checked for tightness

Checklist for before starting operation:

- Check the sturdiness of the device,
- Check electrical connections,
- Protect all live components against touch,
- Safety equipment is intact and functional,
- Check emergency stop switch function,
- Check all control functions,
- Trial run without malfunctions
- Instructed operators.

8 Operation

⚠ WARNING

Danger Through Uncontrolled Running Surface Movement!

By stepping on the rear most part of the running surface where it is rounded, the force of gravity can set the running surface in motion. There is a danger of falling!

► The user must not step on the rounded part of the running surface when mounting and dismounting!

8.1 Area of Application for Endurance Training

Medical PPS series slat-belt treadmills allow speeds of up to 24 km/h. It allows users to reach their personal limits.

Using fall protection!

For intense sprints of about 20 km/h and prolonged high stress runs where the runner is subject to increased fatigue/exhaustion, WOODWAY strongly recommends the use of fall protection with fall stop.

For these and similar applications the risk of injury is very high without the use of fall protection. The treadmill is used at one's own risk. The manufacturer is not liable for personal injury and/or property damage, which could have been prevented through the use of a fall protection system.

The following points must be observed before starting a training program:

Consult a doctor!

Approval from a medical professional is required before starting an intensive training program. This applies especially if heart disease or overweight exists or the user has not been active for some time. Excessive exercise and overload are to be avoided!

Warm-up and cool-down

Warm up sufficiently before each training session to avoid injury. Carry out stretching exercises for the legs as necessary before and after exercise. Personal injury or soreness can be prevented through moderate stretching after training.

Determine heart rate

For selecting the individual training intensity, it is important to determine one's own heart or pulse rate. For this the use of a heart rate monitor is recommended. The pulse can also be determined by placing the middle and index fingers together on one side of the neck (a few centimeters outward from the larynx). Count the number of beats within a 15 second period and multiply by four to determine the beats per Minute (BPM).

Maximum heart rate

The maximum heart rate depends on internal and external factors. The rate can be determined mathematically. To determine your maximum heart rate subtract your age from the number 220.
[Approximate value, formula from the American Heart Association (AHA) and the American College of Sports Medicine (ACSM)]

The actual maximum heart rate is exactly determined by medical personnel carrying out stress test.

During training it is recommended not to exceed a value of 85% of maximum heart rate. The preinstalled training programs are designed so that the heart rate remains within a desired range. The target heart rate should be between 60 and 75% of maximum heart rate.

8.2 Application Possibilities for Children

Due to their design and operation, PPS series slat-belt treadmills are only for limited use by children.

⚠ WARNING

Special Hazards Associated with Treadmill use by Children!

There is an increased risk of accidents through the use of treadmills by children. The following special instructions apply for children:

- ► Children may only be near the treadmill under supervision.
- ► The treadmill must be equipped with the "child railing".
- ► Children should only mount and dismount the treadmill under supervision. The tread may not be running then.
- ► Children are forbidden from operating the treadmill! Adults are responsible for supervising children!
- ► The treadmill should only be used with an appropriate fall protection system (chest strap or waist belt) or an appropriate body weight support system.
- ► The running workout must be conducted under the supervision of a physician or a qualified therapist.

An exception can be made using special accessories and in compliance with strict safety regulations, especially within the scope of "movement therapy in rehabilitation."

8.3 Before Each Use

Before the unit is put into operation, the following checks are to be done:

- Visual inspection of the running surface belt, check for dirt and damage to slats
- Visual inspection and check of the mechanical function of the bar railing, clamping screw must be hand tight.
- Visually inspect of the emergency stop magnet with pull cord and clip attachment for damage
- Visual inspection of fall protection equipment (ropes, carabiners, waist belt, etc., as applicable) for wear and functionality

⚠ WARNING

Danger of Being Pulled into Moving Parts!

In the event of a fall, people with long hair, loose clothing or jewelry can be pulled into running surface entry points.

- ► Remove jewelry before using the device.
- ► Tie up long hair.

8.4 Switching Device On/Off

NOTE

Ensure that NO emergency stop button or emergency stop mushroom is engaged. The emergency stop magnet with pull cord must be attached to the field marked for this purpose.

The device cannot be operated without releasing the emergency stop function and attaching the magnet to the magnetic switch!

⚠ WARNING

Danger of Device Moving Down when Switched On!

If the treadmill was in the inclined position prior to being switched off during previous use, the device will automatically move back to the neutral position (incline = 0%). There is a danger of injury!

- ► No one may be located in the area in front of the treadmill.
- ► No objects may be located under the treadmill.
- ► Check the position of the treadmill before switching it on!

1. To turn on, switch the power switch on the side of device frame (on the right) from position "0" to "I". The treadmill is in "Stand-By" mode.
   a. Switching the data monitor (DaMo) on:
      Press the green on (Symbol: ⏻) switch, after 5-6 seconds the display will switch on.
   b. Switching the WOODWAY User System (WUS) on:
      Press the green on button on the right side of the WUS housing, after 5-6 seconds the display will switch on.
   c. Switching PPS Ortho on:
      Press the green on button on the emergence stop mushroom
2. After this the treadmill will run through a short initializing phase. As soon as the display indicator lights green (DaMo) or the „START“ button appears in the display (WUS), the treadmill is ready to be used.
3. Training can begin.
4. When training is finished switch the treadmill off again via the switch on the display or via the switch on the emergency stop mushroom on PPS Ortho. The device is in Stand-By mode again.

⚠ WARNING

Danger Through Speeding Up of the Running Surface!

If the drive motor is stopped when set at an incline, the weight of the user (gravity) may cause the running surface to accelerate (e.g. by pressing the stop button, emergency stop, or by power failure)!

- ► Use special caution when stopping the drive motor when set at an incline!
- ► Users must be made aware of dangers before use!

5. Switch the device off via the main switch on the power supply console when it will not be used for a long time.

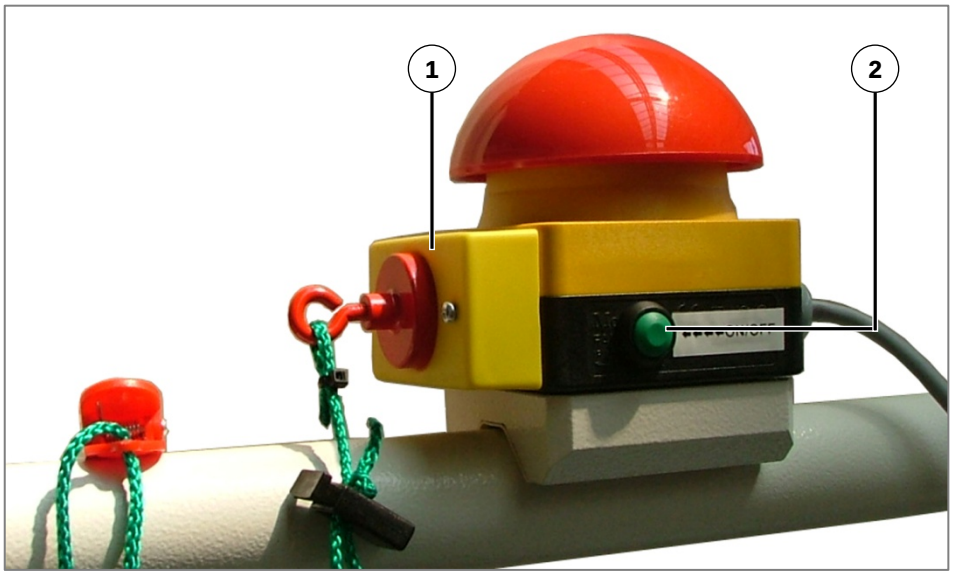

Fig. 26 On switch PPS Ortho

1. Emergency stop switch with magnet and pull line in place
2. On switch

ATTENTION

Do not move the running surface belt during th4e initialization phase (approx. 3-4 seconds)! The movement can be interpreted as a device malfunction by the control electronics and switch off the device.

- ► Never step on the running surface during the initialization phase!
- ► Do not leave the running surface until it switches back into stand-by mode.
- ► Never leave the treadmill unattended while it is switched on!

8.5 Using the Keypad

The keypad can be attached to a suitable point on the handrail so that the controls are easily accessible to the runner.

The magnetic mount makes it possible to remove the keypad from the railing. In this way the runner's supervisor can use the keypad as a remote control.

Fig. 27 Keypad with magnetic mount

Switch device on as Page 43 as described in sec. Make sure that the emergency stop magnet is mounted on the magnetic switch with its pull cord, the clip is fixed to the runner's clothes and that all emergency stop buttons are released.

Button functions: The buttons on the keypad are used for setting the speed and incline. The corresponding speed or incline indicators are used for control. When the desired speed or incline has been reached, release the button.

[+] and [-] BUTTONS: With these buttons the user can raise or lower the running surface speed. The running speed increases or decreases continually as long as the button is pressed. Watch the speed indicator on the display during the adjustment. Release the button at the desired speed.

[↑] and [↓] BUTTON: With these buttons the user can adjust the incline of the device. The incline increases or decreases continually as long as the button is pressed. Watch the incline indicator on the display. Release the button at the desired incline.

„STOP“BUTTON: The treadmill can be stopped with the stop button. The delay in braking the running surface speed is comfortable, so the user still travels a few meters before the unit stops depending on the previous speed. If the running surface belt is stopped, the treadmill goes to the stop mode (indicated by the second mode LED from the top). The set incline is maintained.

Pressing the stop button a second time causes the treadmill - should it still be at an incline - to move back to its starting position (0% incline). The treadmill remains in stop mode.

8.6 Operating the Data Monitor (DaMo)

The data monitor has 4 multi-digit displays to indicate the current training parameters as well as several LEDs to indicate the control mode.

On the data panel the following values are shown:

- Treadmill speed in meters per second (m/s) or kilometers per hour (km/h)
- Set incline of the treadmill in percent (%)
- Distance run in meters since the last start of the treadmill
- Energy consumption in calories
- Training time
- Current pulse
  (only when using a measuring device with compatible transmitter unit)
- Treadmill control mode (remote control / manual mode / stop mode)

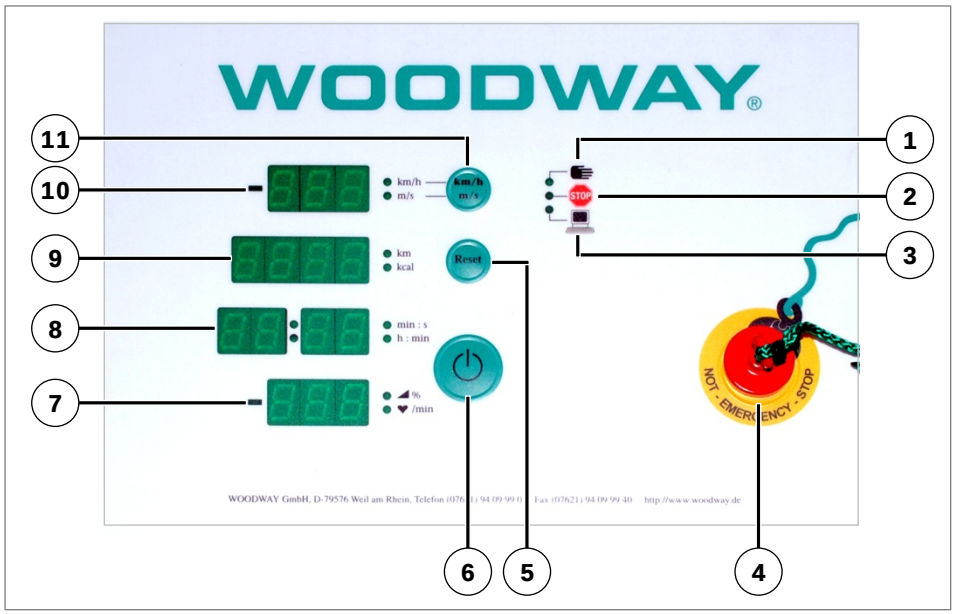

Fig. 28 Data monitor (DaMo) control panel

1. Indicator light "manual control via railing keypad"
2. Indicator light "treadmill in stop mode"
3. Indicator light "external operation active"
4. Emergency stop pull cord magnetic switch
5. Reset button
6. Stand-by button
7. Display incline/pulse (alternating)
8. Display training time
9. Display distance/calories (alternating)
10. Display speed
11. Button to change the unit of measurement

With the LEDs to the right of the screen displays (Pos. 7 to 10), the unit of the displayed value is marked. It is also possible to choose between parameters that are displayed on the same screen. The data monitor is a display device with no possibility of controlling the treadmill.

Speed: The three-digit display (item 10), displays the current speed of the treadmill. The displayed speed in kilometers per hour (km/h) is adjusted using a button next to the display.

Distance and calorie consumption: In the display (Pos. 9) the distance in kilometers and calorie consumption of the runner since the last time the treadmill was switched on are alternately shown at intervals of 10 seconds. The upper value shows the distance and the lower value the calorie consumption. The distance and calorie values are maintained after the treadmill is stopped. They are deleted after restarting the treadmill using the keypad on the railing or the remote control.

Training duration: The training duration (Pos. 8) is reset with each restart of the treadmill. The display shows the time elapsed since the start of the treadmill in minutes and seconds. The two values are separated by two dots that blink to indicate the seconds. The display changes to indicate the hours and minutes, when the training takes longer than an hour. Then the upper LED switches off and the lower starts flashing in its place to show the new status.

Incline and pulse: These two values (Pos. 7) are also indicated with the same display. A symbol indicates the incline value as well as the speed value. A minus sign can only be displayed if the treadmill features such a function. The direction of the incline can only be changed via PC with a remote control or the keypad on the railing. After a change the incline the new value will appear in the display for 5 seconds. The upper of the two LEDs next to the display is active for this purpose. The current pulse frequency of the runner is shown after this period of 5 seconds, if the slope remains unchanged; this status is indicated with the lower LED. If the incline is not changed, the incline value is only shown in the display again when the wireless connection to the pulse sensor on the runner's body is interrupted. The incline value is displayed in the monitor if the treadmill does not have a pulse sensor.

Treadmill control modes: The control mode is indicated by three LEDs on the right side of the monitor (Pos. 1 to 3).

The LEDs have the following meanings:

- The manual control via the keypad on the railing is active (Pos. 1).
- The treadmill is being used in the so-called "stop mode". In this mode the direction can only be changed with a PC, and running or pulse programs can only be started with the PC (Pos. 2).
- The remote control (running/pulse program) is started via a PC or other peripheral device (Pos. 3).

Data monitor control unit: The data monitor has three buttons (Pos. 5, 6, 11) and an emergency stop magnetic switch (Pos. 4).

The button Pos. 11 is used to select the unit of speed.

With the button Pos. 5 all indicators are reset after pressing the stop function (Reset).

With the button Pos. 6 (Symbol: ⏻) the treadmill is switched off. If pressed during training, the treadmill will stop, i.e. the speed will reduce slowly until the treadmill has stopped. If the treadmill is still at an incline, it will return to its original position (0% slope). Then the treadmill switches to stand-by mode.

When the red emergency stop button is pressed or when the magnetic switch is triggered (Pos. 4) the electronic control system is bypassed and the treadmill performs an emergency stop immediately (Emergency stop function). The emergency stop stops the treadmill immediately in contrast to the normal stop.

This safety feature is only to be used in case of emergency!

8.7 Operation with Woodway User System (WUS)

The WOODWAY user system (WUS) is used to display the current parameters, the control modes and to operate the treadmill. In addition, in the WUS housing contains the stand-by button (on the right side of the housing), the contact surface for the emergency stop magnet with integrated pull cord and clip or an emergency stop button (external display), which the operator can trigger.

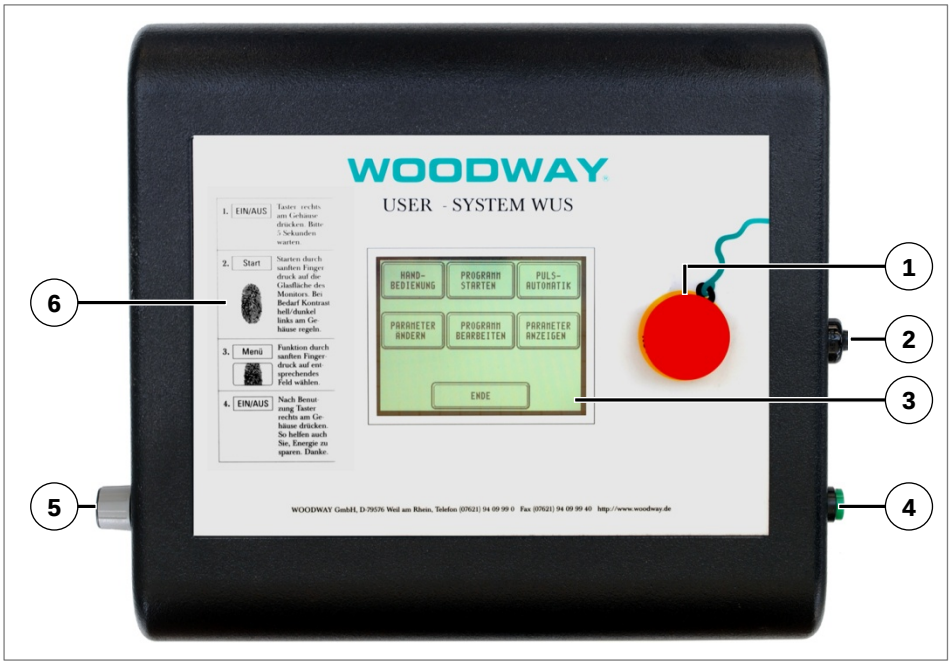

Fig. 29 WUS control panel

1. Emergency stop pull cord magnetic switch
2. Wire
3. Touch screen
4. On/Standby button
5. Contrast control for touch screen
6. Quick start guide

The touch screen (Pos. 3) is used as an input keypad, information can be read and at the same time, the treadmill will be operated.

It is operated with a light finger touch on the framed fields ("button"). After switching it on, the display goes through a short initialization phase.

Fig. 30 WUS initialization phase

By pressing the green button on the right side of the display (Pos. 4), the treadmill is turned on. After the initialization the „START“ button appears in the display.

The device is now ready for operation. By pressing the „START“ button the main menu is opened.

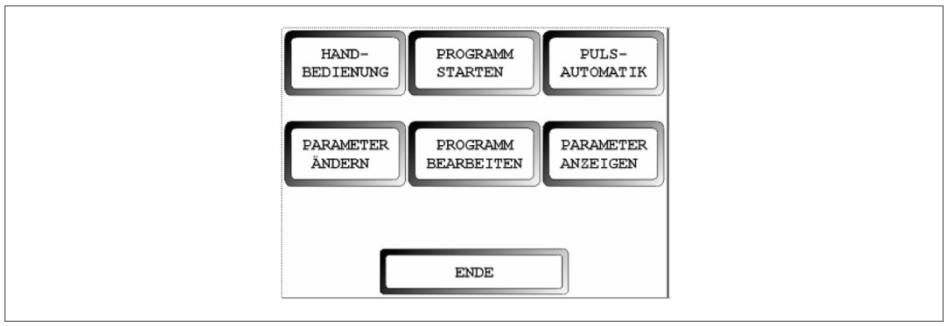

Fig. 31 WUS main menu

8.7.1 Manual Operation

For manual input of speed and incline press the MANUAL button at the top left. The following display appears:

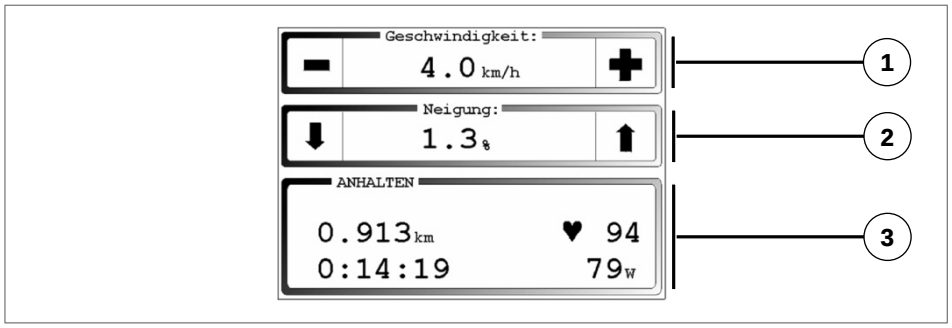

Fig. 32 WUS manual

7. Speed control and display
8. Incline control and display
9. „Stop“ field with information about the current training

Speed: (Pos. 1) Start the device by pressing the [+] button. The belt starts to run slowly. To increase the speed, press the [+] button repeatedly or hold it down until the desired speed has been reached.

To stop press and hold the [-] button. The speed will reduce slowly. To reduce the speed, press the [-] button repeatedly or hold it down until the desired speed has been reached.

Incline: (Pos. 2) The incline adjustment is carried out analog to the speed adjustment. The adjustment is made with the „↑ button“ uphill and the „↓ button“ to lower the device again.

Stop: (Pos. 3) To stop the device, press the lower part of the Touch screen. How quickly it stops depends on how fast the treadmill was running. The faster the treadmill is running, the longer it takes to stop.

In manual mode the following values appear in the display.

- Speed, in either km/h or miles/h or m/s
- Current incline in %
- Distance, either in kilometers (km) or miles
- Training duration in hh:mm:ss
- Heart rate in bpm (beats per minute), indicated with a heart symbol
- Power in watts or energy in kcal
- Current treadmill speed, either in km/h or miles/h or m/s or an indication of the power in watts vs. energy value in kcal can be adjusted in the start menu by selecting the unit (see CHANGE PARAMETERS).

8.7.2 Start Program

With this function the treadmill programs can be called up.

Treadmill programs can be permanently installed WOODWAY fixed programs or customized programs. A program is called up directly from the main menu via the "START PROGRAM" (Fig. 31 Page 49) button:

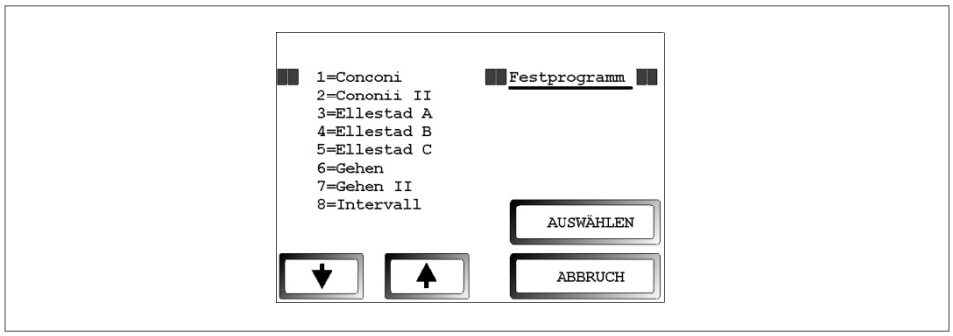

Fig. 33 WUS program selection

Arrow button: Moves the cursor up and down, until the desired program is marked. Behind the program name an indication of whether it is a fixed program or a customized program appears.

Select: Loads the desired / indicated program, a new screen appears with the program structure.

Cancel: Returns to the main menu.

After the program start you see the following information on the screen:

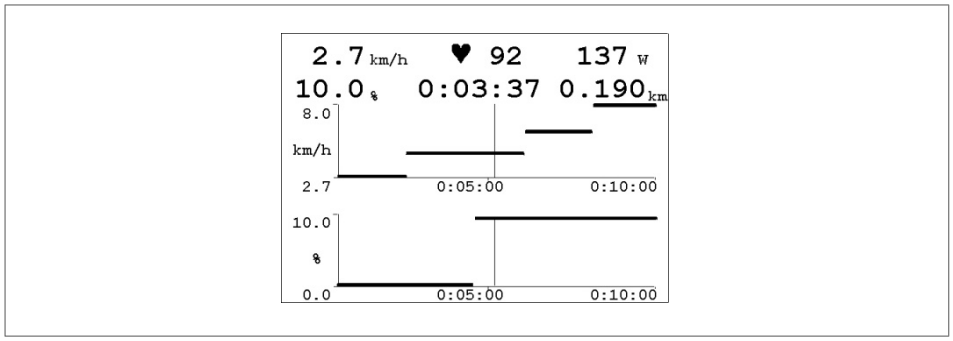

Fig. 34 WUS program information

A vertical line moves from left to right and shows you your position in the program. In addition, you see the following information:

- Current speed of the treadmill, either in km/h or miles/h or m/s, select the unit
- Current incline in %
- Distance, in either km/h or miles/h or m/s
- Training duration in hh.mm.ss
- Heart rate in bpm (beats per minute)

If the Polar chest strap is used, the pulse rate is displayed in beats per minute (bpm). While the program is running control adjustments can be made to the program at any time. After the manually changed part of the program has run, the program continues again as programmed.

By pressing the stop button on the railing, by touching the touch screen or exceeding a predetermined pulse limit the treadmill is stopped and the program is interrupted. The following information is displayed:

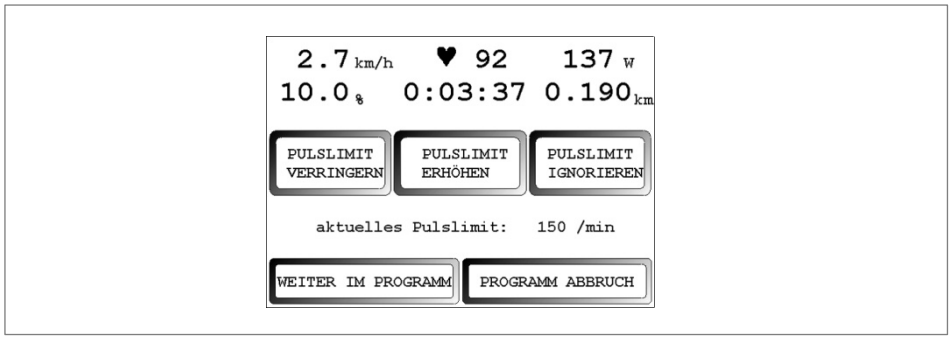

Fig. 35 WUS program interruption

Continue program: Program continues exactly where it was interrupted.

Cancel program: Return to main menu.

Low./Inc. pulse limit: Enter new limit via touch screen.

Ignore pulse limit: Program continues.

8.7.3 Edit Program

With this program point customized programs can be edited and saved and entered programs can be deleted. The storage capacity is approximately 2,000 steps, for example, 200 programs with 10 program steps or 20 programs with 100 program steps. The respective free storage capacity is displayed.

The "Edit program" in the main menu must be selected. On the screen that appears shows the following options:

Select program: Go to the treadmill programs menu.

DELETE PROGRAM: Deletes the program that was selected as described above. A pop-up automatically appears asking whether the program should be deleted.

EDIT PROGRAM: The selected program can be edited here:

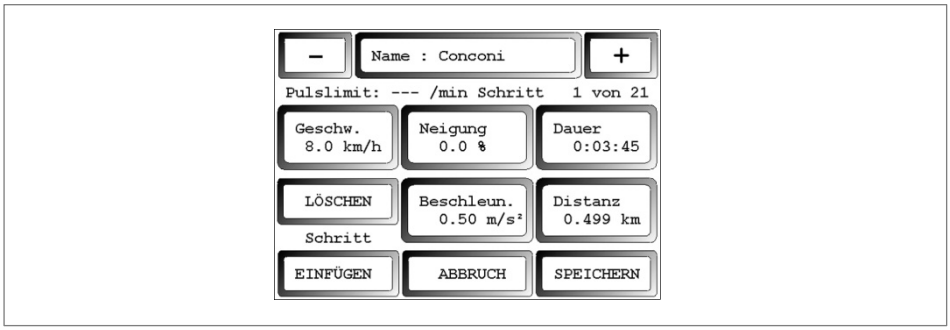

Fig. 36 WUS edit program

- and + BUTTON: Changes the respective program steps

SPEED etc.: The parameter to be changed is selected. Then the new values are entered as shown below:

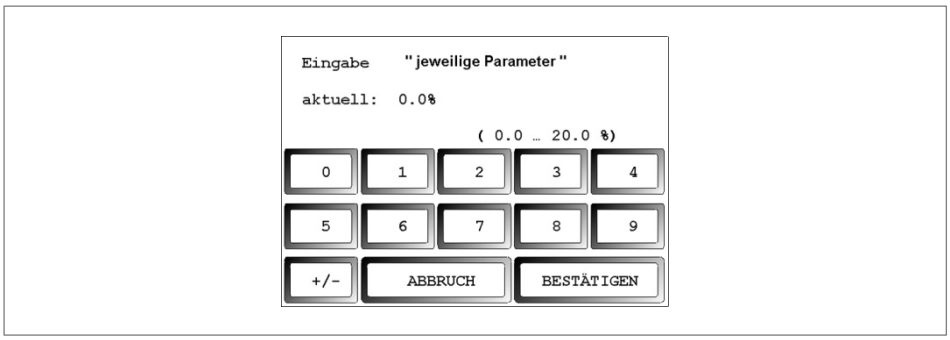

Fig. 37 WUS change program parameters

Confirm: Accept the entered values.

Cancel: Return to previous menu.

After confirmation the edit program menu appears, Fig. 36. Here program editing is continued or ended:

Save: Saves the edited program.

Delete: Deletes the displayed program.

Insert: Inserts a new program step.

Cancel: Return to previous menu.

8.7.4 Create Program

The process for creating a new program corresponds to the process for editing an existing program.

Select the EDIT PROGRAM button in the main menu (Fig. 31). Then select the CREATE PROGRAM button.

Now proceed exactly as when editing a program by changing the individual parameters. The program name can be freely defined by pressing the NAME button. Enter the program name by entering it into the following screen:

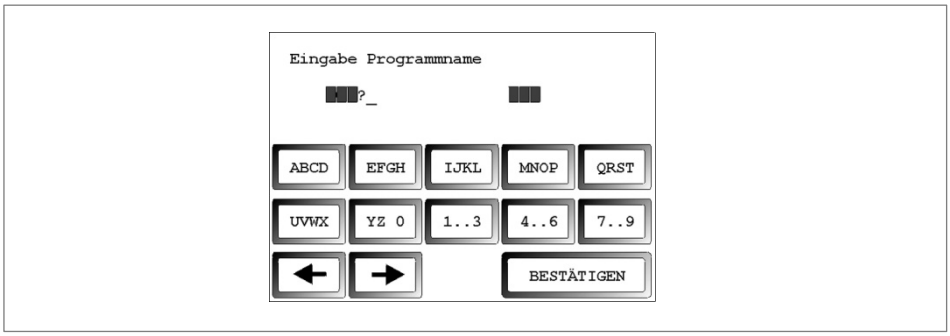

Fig. 38 WUS enter program

After entering all data, press the SAVE button.

In the following screen you will be asked if you really want to save the program..

Save: Saves the program in the list of workout programs. The new program can then - as described above - to be selected from the list of treadmill programs and started.

EDIT NAME: You can edit the program name.

PULSE LIMIT: You can enter a pulse limit for the program. See the following menu button: "PULSE CONTROL".

Cancel: Return to previous menu.

8.7.5 Pulse Control

The treadmill is equipped with a pulse control function. This function enables the treadmill operation to be pulse controlled.

⚠ WARNING

Danger of Injury Through Improper Application!

The POLAR pulse measurement provides exact data. However, the heart rate monitor is only a rough orientation and is not intended for diagnosis or medicinal purposes.

► Diagnostics and medical applications must only be carried out with approved ECG devices.

After selecting a program, the following screen appears:

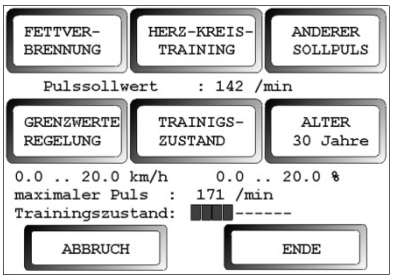

Fig. 39 WUS pulse control

Here, you must first enter the age using the "Age" button and the physical condition using the "physical condition" button. Enter the information in the following screen:

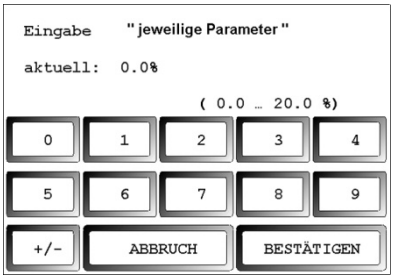

Fig. 40 WUS enter program parameters

FAT BURNING: Suggests a pulse limit for a fat burning workout based on the entered age and physical condition.

CARDIOVASCULAR TRAINING: Suggests a pulse limit for a cardiovascular workout based on the entered age and physical condition.

EDIT TARGET PULSE: Can be specified.

LIMIT CONTROL: Here the speed and incline limits can be entered. Usually the treadmill selects a combination of speed and incline. With limit control e.g. the incline can be switched off or the speed can be limited.

END: Parameters are loaded; treadmill with pulse control can be started.

Cancel: Return to main menu.

8.7.6 Edit / Show Parameters

Edit parameters: To change parameters select the "EDIT PARAMETERS" option in the start menu. Fields with adjustable parameters will be displayed:

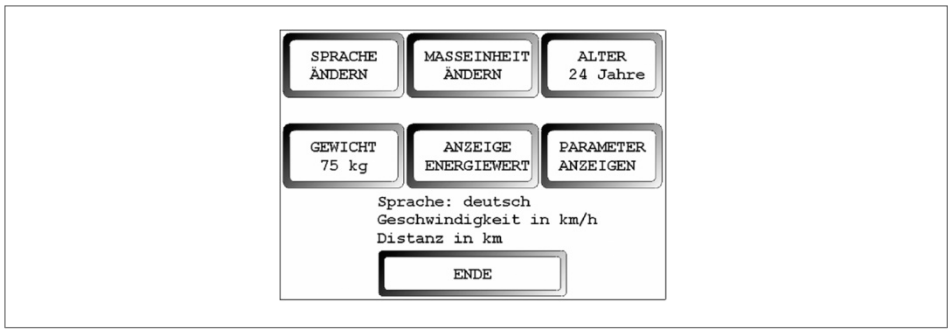

Fig. 41 WUS edit parameters

The desired values can be set by pressing the respective buttons. The set values appear on the screen, for example, Language: German, speed in km/h. By pressing the END button the set values are accepted and the main menu is displayed again.

In some cases, a virtual keypad will appear to input parameters. Enter the desired value and press the CONFIRM button.

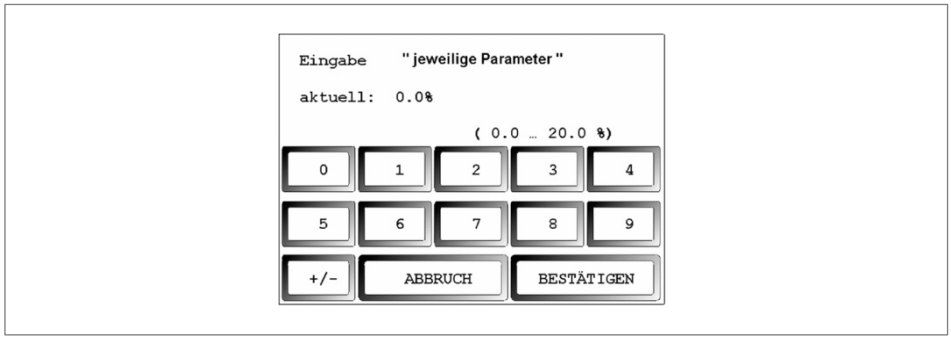

Fig. 42 WUS virtual keypad

Show parameters: By selecting the "SHOW PARAMETERS" option in the overview, the treadmill performance parameters appear. The display is for information only; the specified parameters cannot be changed at this point.

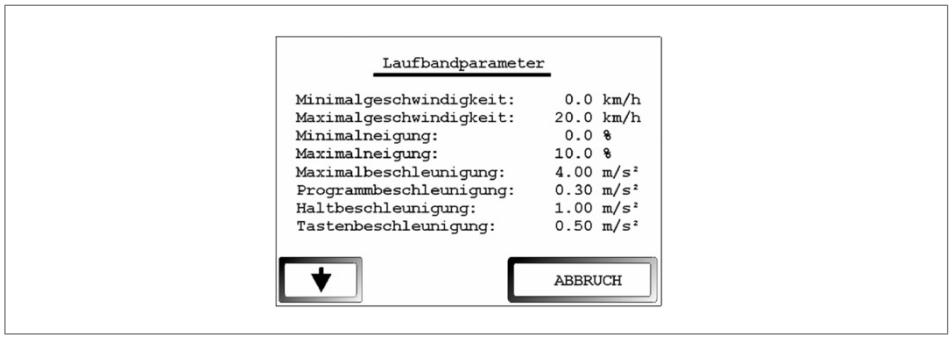

Fig. 43 WUS show parameters

By pressing the "arrow" button further technical information can be retrieved. With the CANCEL button, the main menu appears again.

8.8 Adjustment of Bar Rails

PPS Plus type treadmills are equipped with bar railing. The PPS and PPS Med Ortho models are optionally available with a bar railing.

Depending on the design, the flexible handrail allows it to be adapted to the height and width of the individual user. The adjustment ranges are:

Height: 74 - 104 cm (all models)

Width: 34 - 93 cm (PPS 43) / 46 - 105 cm (PPS 55) / 61 – 120 cm (PPS 70)

The gas springs integrated into the parallel rails, combined with an easy-to-use device for locking the bar rails allow for easy adjustment.

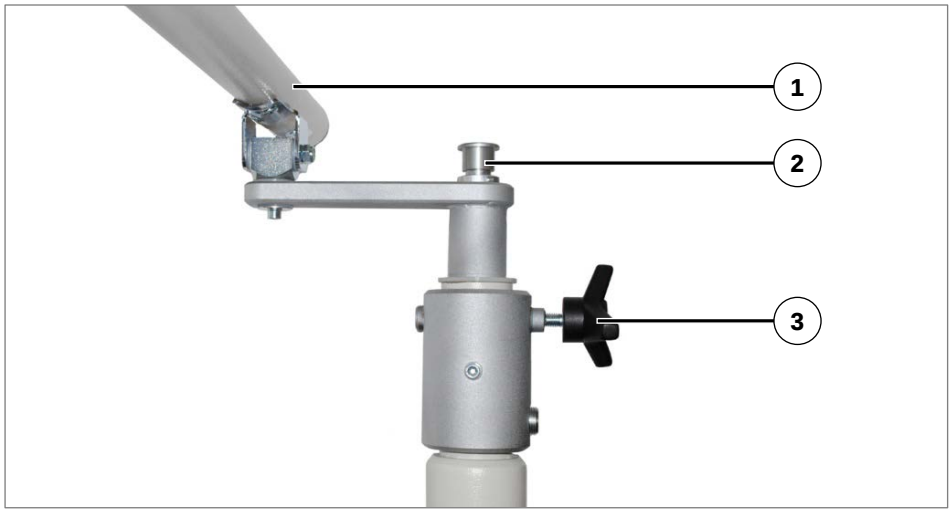

Fig. 44 Adjustment of gas spring parallel bar rails

1. Bar rail
2. Press knob
3. Clamping screw

Adjustment: The height and width of the bar railings are adjusted is as follows:

- Loosen clamping screw on one or both sides (Pos. 3),
- Set the railing width by moving the rail (Pos. 1) horizontally (rotation) to the desired position,
- Adjust the height by pressing the press knob (Pos. 2) and positioning of the railing at the desired height,
- Then re-tighten clamping screws.

⚠ WARNING

Danger of Being Pinched

In the entry area of the gas spring and the gap between moving parts fingers and hands can be pinched.

► Danger zone is marked with warning label,
► Do not touch the danger zones when making adjustments.

8.9 Reversing the Direction

Depending on the model, the treadmill has a reversing direction function, or can be retrofitted if necessary. Information available at WOODWAY dealer WOODWAY Customer Service.

If the treadmill is equipped with the reverse mode, it can be activated in two different ways. Either the WOODWAY user system (WUS) is required or a PC / laptop with installed WOODWAY treadmill control software, with which the PPS treadmill via the serial communication interface (RS-232, COM port) is connected.

ATTENTION

Provide for a Safety Area IN FRONT OF and BEHIND the Device!

When using the reverse direction function the necessary safety area of at least 200 x 100 cm (length x width) is to be observed IN FRONT OF and BEHIND the treadmill.

For set-up details see sec. 7.2 Page 35.

WOODWAY User-System:

When using reverse direction with the WOODWAY user system, position the emergency stop switch as described in section 6.6 Page 31 and fix the clip with magnet with pull cord. Switch the device on using the standby button. In the event that a workout is already running, stop the treadmill using the stop button. Then press the [-] button on the touch panel.

WOODWAY treadmill control software:

When the treadmill is operated in manual operation mode with the software, a "Manual operation" rider appears in the main window. Below the speed control is the key for "reverse direction", and the status indicator for the selected direction, see Fig. 45 Page 57. Before activating the reverse direction ensure that the emergency stop switch magnet has been positioned and that the runner has fixed clip with pull cord correctly.

In manual operation there is a [+/-] button on the start screen, the reverse direction must be activated there. Subsequently forward or reverse appears in the display. After that the treadmill speed can be increased using the [+] button and decreased using the [-] button.

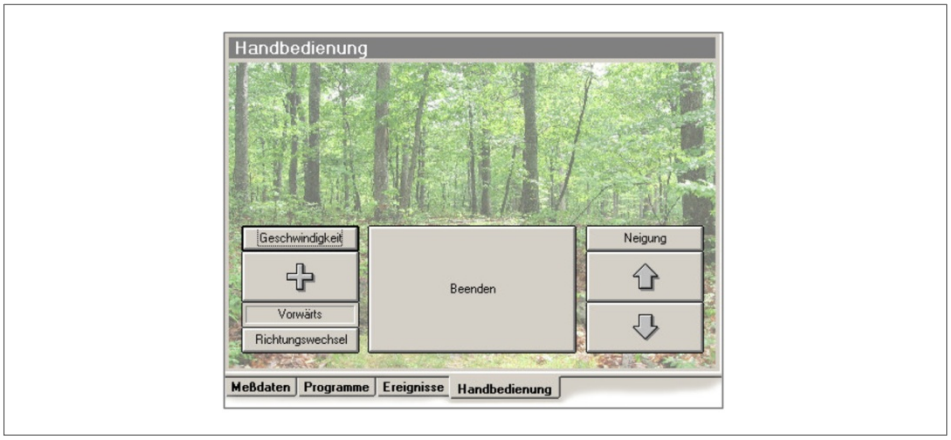

Fig. 45 Manual operation with the WOODWAY treadmill control software

For more information, see the separate operating instructions for the WOODWAY treadmill control software.

8.10 Body Weight Support Systems

Depending on the illness may be necessary to use a body weight support system for the treadmill therapy in motor rehabilitation.

NOTE

A separate manual is supplied with the body weight support system!

For information on the use of body weight support systems please contact your WOODWAY local dealer or service center.

ATTENTION

When using the body weight support system, PPS series treadmills must be equipped with an additional brake (retrofitting possible).

It should be noted that the braking behavior changes due to the additional brake, i.e. the braking performance is slightly "harder". One must become accustomed to the changed braking behavior!

9 Options and Accessories

9.1 Order Numbers

The following accessories and options can be obtained from a WOODWAY dealer or WOODWAY service center.

Will the accessories fit?

Depending on year and equipment, it should be checked in advance whether the particular unit is suitable for the selected accessories/options. For this contact the WOODWAY dealer or WOODWAY service center before ordering.

Description	Order No.
Video railing for PPS Ortho Railings, front cross brace removable with quick disconnect	is supplied as standard (PPS Ortho only)
Reverse (direction reverse) Option for PPS Med and PPS Med-i is only available in connection with a conversion of railing (PPS Ortho or railing bars), for which the WUS display or software control of the treadmill is required, or in combination with the Fall Protection System.	161500007
Mounting aid Simplifies the mounting of WOODWAY slat-belt treadmills.	4026
POLAR chest strap For heart rate measurement (consisting of Polar T34 chest strap + transmitter)	11500320/321
USB-to-Serial Converter (RS-232)	111500281
Serial interface wire RS-232	111500323
Display WOODWAY User System (WUS) (designed for mounting on railings)	please enquire
Display WOODWAY Data monitor (DaMo) (designed for mounting on railings)	please enquire
Option external display (WUS or DaMo)	please enquire
Fall protection system with harness and emergency stop (According to the PPS model, the associated fall protection must be used)	Order no. according to the PPS model, please enquire
Emergency stop magnet with pull cord	please enquire
Incline (0-25%, only PPS 43/55 Ortho / Med)	161500003
Incline (only PPS Ortho)	161500002
Gas spring bar railing (height and width adjustable)	161500004
Special design (e.g. child design)	161500009
Potential Equalization Kit Potential equalization cable (1, 3 or 6 m) and pin	Order no. according to the length of the cable, please enquire
Rear Stabilization Kit For all PPS models	111500799

9.2 Video Railing for PPS Ortho

The cross member on the front part of the PPS Ortho handrail can be removed if required using two quick releases. The unblocked view or video analysis of patients is possible from the front and from behind.

⚠ WARNING

Danger of Injury by Falling!

In the event of a fall in reverse mode when the crossbar is mounted serious injury can occur.

► Remove the crossbar BEFORE use in reverse direction!

Disassembly: Release the quick disconnect on the cross bar on both sides - DO NOT fully unscrew! Only unscrew the clamp to the extent that the opening is slightly larger than the diameter of the railing tube, but that the screw does not fall out.

Grasp the tube with both hands and move back and forth slightly to the release clamps from the rubberized surface. Remove the crossbar.

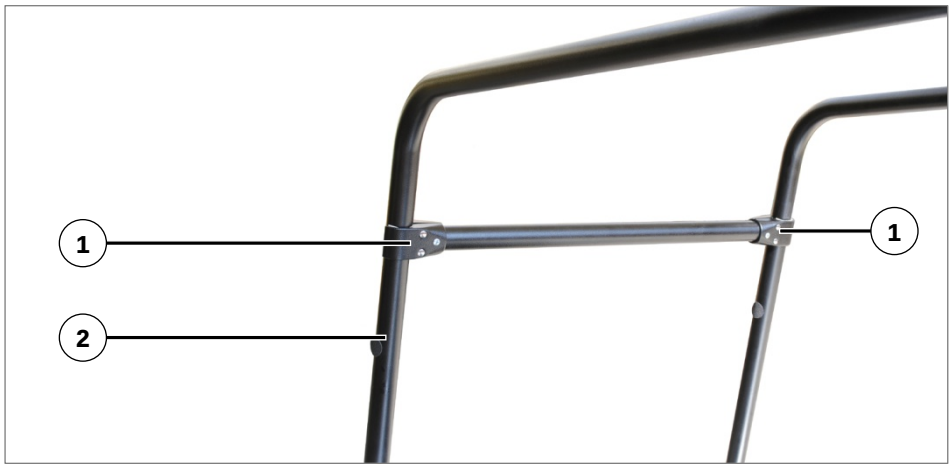

Fig. 46 PPS Ortho video railing

1. Quick disconnect right/left
2. Video railing

Installation: The quick disconnects must be open before installation. Only unscrew the clamp to the extent that the opening is slightly larger than the diameter of the railing tube, but that the screw does not fall out. Place the crossbar diagonally between both handrails so that both clamps grip the railing. The quick disconnects must face outwards. Then align the crossbar horizontally and hand tighten the quick disconnects.

NOTE

Ensure that the handles of the quick disconnects are positioned parallel to the crossbar.

The levers are equipped with a spring mechanism, which allows the handle to be unlatched and to move it into the right position without having to loosen the screw.

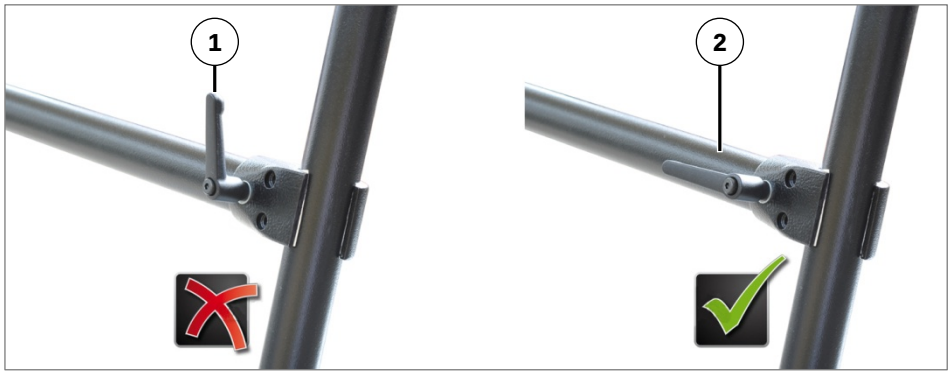

Fig. 47 PPS Ortho video railing

1. Incorrect lever position of the quick disconnect, danger of injury!
   → Pull out the lever, turn it 90° and release it again
2. Correct lever position for the quick disconnect, the lever rests on the crossbar!

9.3 Rear Stabilization Kit

To provide an additional support when the treadmill is inclined and set at high speeds. This option improves stability and reduces vibration during usage; it is optimal for high performance sessions.

The main components of the Rear Stabilization Kit are wider feet (ø100mm - M12) and cylindrical spacers. This accessory can be mounted on all PPS series models and can be obtained from the WOODWAY customer service.

Fig. 48 Rear Stabilization Kit

9.4 Mounting Aid

To ensure safe mounting on the treadmill, patients with physical limitations may have to depend on expert personnel for support. Mounting the device may be further facilitated using a commercial climbing aid.

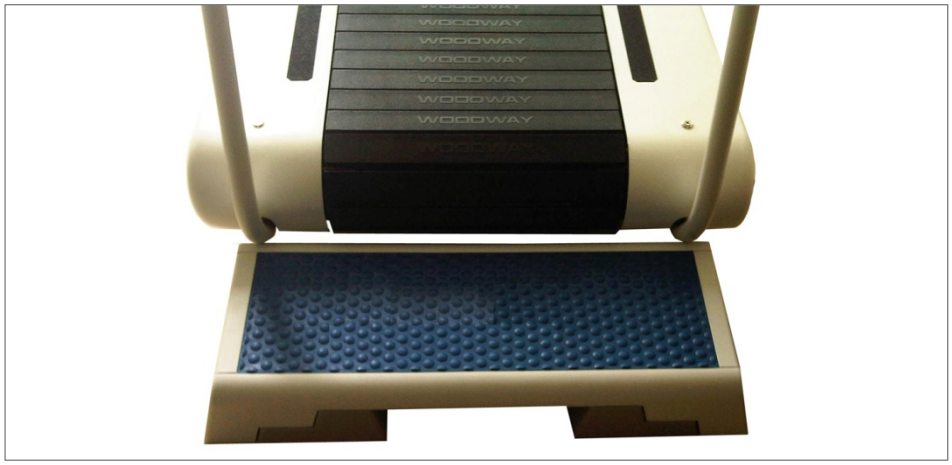

Fig. 49 Mounting aid

⚠ WARNING

Danger of Injury from Using Mounting Aid!

When mounting aids are not removed from the device before training, it can lead to serious injury.

- ► After mounting remove mounting aid from the device!
- ► Store mounting aid in a safe place.

Following further safety measures must be considered:

1. Before using the treadmill, the mounting aid must be removed from behind the treadmill, so that the requirements on the safety area (clear "fall area") of at least 2.00 x 1.00 m (length x width) behind the treadmill are met.
2. To prevent damage to the treadmill and the mounting aid, this must never come in contact with the running surface. Observe the mounting aid manufacturer's instructions!
3. The climbing aid may only be used when the treadmill is not running.
4. In order to prevent patients from falling when mounting the treadmill, the supervising person (physician, therapist, qualified supervisor) must provide help during mounting in the application areas of "movement therapy / rehabilitation training in rehabilitation." The supervisor must be capable of stopping of the patient from possibly falling when mounting the treadmill.

9.5 POLAR Heart Rate Measurement

WOODWAY treadmills are equipped with a Polar heart rate measurement system. This can be used with numerous POLAR transmitters.

Fig. 50 Chest strap with POLAR transmitter

The transfer of data transmission between transmitter and receiver is always "uncoded" (a coded transmission is not supported). If the supplied POLAR heart rate chest strap used, the pulse rate is displayed in beats per minute (bpm). The chest strap is only active when it is applied directly to the body (see figure). The strap length can be adjusted via the flexible band on the chest strap. Adjust the belt length so that it fits snugly but does not constrict. If the chest strap becomes loose during training, a reliable heart rate can no longer be measured.

Positioning: The transmitter should be positioned so that it is below the pectoralis (chest muscle) at the height of the sternum (breastbone), logo to the outside. Moisten the contact surface of the transmitter in order to transmit the best signal possible from the body to the measuring device.

Cleaning: The chest strap can be washed. Remove belt from the transmitter, the electrodes must not be bent. Wash the strap and the electrodes with warm water and mild soap. Do not machine wash the electrodes and do not use alcohol.

Transmission signal: The transmitter has a reach of about 60 cm. Depending on the model the receiver is located in the display of the device or below the emergency-off switch on the railing. When positioning several treadmills next to each other ensure that a minimum distance between the devices is kept in order to avoid the interference of the transmission signals between the runners.

ATTENTION

The treadmill-pulse measurement is not intended for diagnosis or medical purposes, it is only used as an orientation value!

9.6 USB to Serial Converter

A "USB to Serial" adapter allows the connection of devices with serial interface (RS-232), e.g. modem, mouse etc. to a free USB port on your PC or notebook.

Depending on the manufacturer, in rare cases there can be communication problems between the PC / notebook and the treadmill.

The industrial USB-to-serial adapter of the brand ATEN (Model UC-232A), which can be obtained from the WOODWAY customer service can be recommended as a proven model.

Fig. 51 USB to serial adapter, manufacturer: ATEN, Model: UC-232A

Technical data (USB-to-Serial Converter, brand ATEN, model UC-232A):

- USB specification v1.1
- RS-232 connection with one DB9 plug (male)
- Plug with nuts
- Wire length 31cm
- Data rate up to 230 Kbps
- No own IRQ required

System requirements:

- XP/Vista/Windows 7 (32/64-bit)
- Windows 98SE/ME/2000
- Mac OS 9 (or higher)
- Notebook with a free USB port

For trouble-free operation always use the latest driver for the adapter download at www.woodway.de/support.html.

The drivers for the most common operating systems are included on CD-ROM or can be downloaded at www.aten.com.

NOTE

For the initial installation of the adapter in the operating system administrator rights are required. Installation under a limited user account will be terminated with an error message!

9.7 Interface Wire

To control the treadmill via PC or laptop the serial interface of the treadmill must be connected with the computer via a so-called null-modem cable with two D-SUB connectors (9-pin, female). This interface wire must be shielded and must not exceed a length of 5 meters. The cable is commercially available or can be obtained from the WOODWAY customer service.

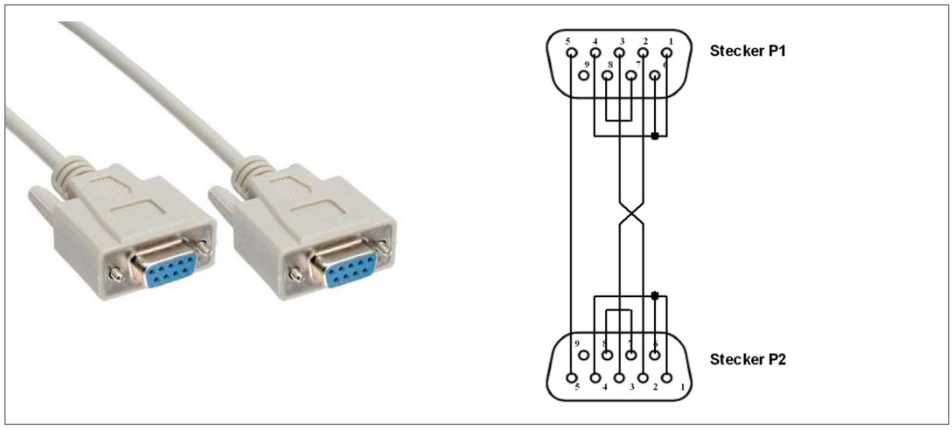

Fig. 52 USB Interface wire RS-232 (2 × D-SUB 9-pin), configuration "minimum" null-modem wire

There are null-modem cables with different configurations (depending on whether a "hardware handshake" and/or "hardware flow control" is desired). A typical configuration is shown in the following table. For controlling a WOODWAY treadmill usually only the signals GND, TxD and RxD are required. If a "minimal" null-modem cable is used, within the respective connector the pins 1, 4 and 6 as well as 7 and 8 should be connected (see illustration).

Plug 1 (D-SUB, 9 pin) Pin (Function)	**Plug 2 (D-SUB, 9 pin) Pin**
1 (DCD)	7 + 8
2 (RxD)	3
3 (TxD)	2
4 (DTR)	6
5 (GND)	5
6 (DSR)	4
7 + 8 (RTS + CTS)	1

Parameters: The WOODWAY standard software uses the following interface parameters:

- 9600 Bd (baud) / 8 bits / no parity / 1 stop bit

10 Maintenance and Cleaning

⚠ WARNING

Danger of Injury due to Lack of Qualifications!

If maintenance or repairs are not carried out by professionally qualified personnel, this may cause material damage and serious injury.

- ► Maintenance and repair work may only be performed by qualified personnel!
- ► It is the sole responsibility of the representative to assign qualified personnel for maintenance and repair work.
- ► In case of doubt or questions, always contact the WOODWAY customer service or dealer!
- ► The manufacturer is not liable for personal injury and material damage caused by a lack of qualifications!

For maintenance (servicing, inspection, repairs) of medical products only to persons, companies or entities who have the expertise prerequisites and the resources necessary for proper execution of this task may be assigned by the representative.

The requirements for persons, firms or entities are considered fulfilled if because of their training and practical work on the required area, in the maintenance of medical devices and the installation areas necessary, including their characteristics, size, equipment and facilities and the required equipment other working assets and are capable to carrying the work out properly and comprehensibly.

After maintenance or repair of medical devices structural and functional features that are essential for the safety and functionality must be checked, insofar as they may have been affected by the maintenance measures.

10.1 Cleaning

⚠ DANGER

Danger of Death by Electric Shock!

The use of water and liquid detergents as part of cleaning work can cause serious or fatal electrical shock.

- ► No liquids may come in contact with electrical parts such as motor, power cord and power switch, control monitors.
- ► Do not spray the device with a water jet.
- ► Pull power plug before cleaning, equipment must not be connected to power! Ensure the device cannot be switched back on.

The slat-belt treadmill should be thoroughly cleaned at regular intervals, depending on the intensity of use.

Cleaning agent

For cleaning and disinfection of parts that are touched (handrail, display, controls, etc.) a formaldehyde-free rapid disinfectant such as "Bacillol plus" or "Descosept" is recommended. For cleaning, never use sharp brushes or abrasive cleaning agents, paint and plastic surfaces can be damaged.

10.2 Maintenance Intervals

DANGER

Danger of Death by Electric Shock!

Maintenance and inspection work on the unit may cause serious or fatal electrical shock.

► Pull the power plug prior to any maintenance and inspection work on the equipment. The device must not be connected to the power!
► Ensure the device cannot be switched back on.

Weekly maintenance

- Clean handrails, display and side panels with a damp cloth.
- Disinfect railings and controls
- Clean the running surface with a damp, lint-free cloth
- Visual check the power cord for damage
- Check the wires to the controls.
- Inspection of the treadmill for mechanical damage (incline scissor rollers, feet, side panels, display, control elements)
- Checking mounting of all controls (display, emergency stop mushroom, keypad with magnetic mount, side panels)
- Clean the area under the treadmill (vacuum and mop). For this the treadmill can be lifted to the maximum incline.

ATTENTION

Worn or damaged components must be replaced immediately. If the observed deficiency can cause danger to the user or operator of the treadmill, it needs to be taken out of service until repaired.

Maintenance every 2-4 weeks

A complete function test the treadmill must be carried out every 2-4 weeks depending on the duration and intensity of use.

The function test includes the following:

1.	Using the treadmill for a short time at speeds between 6 and 10 km/h. Do unusual noises occur?
2.	Stand next to the treadmill and turn it up to maximum speed for a short time. Does the treadmill reach the specified maximum speed? Do unusual noises occur?
3.	Does the display show the traveled distance at top speed correctly?
4.	Stop the treadmill and move it to maximum incline. Does the treadmill reach the desired incline?
5.	Do unusual noises occur while the treadmill is running at maximum incline?
6.	Check the emergency stop magnetic switch function. Is an emergency stop is initiated?
7.	Check the function of the emergency stop mushroom (or the button on the external display).
8.	Set the treadmill in the "standby" mode. The running surface must be very difficult to move. (However, slight movement of the belt in "standby" mode is normal). Is the sunning surface stopped correctly?

ATTENTION

If there are deficiencies or deviations in the control function, notify the WOODWAY customer service immediately.

The device must be taken out of service and disabled until repaired. Repairs may only be carried out by trained and authorized personnel.

Maintenance every 6-10 months

Before starting any maintenance, the side panels are to be removed (NOT the electronics covers).

Preventive maintenance consists of the following measures:

- Clean the inside of the treadmill with a vacuum cleaner. Do not touch the electrical components (cables, transformers, connectors, etc.).
- Check the drive unit toothed belt (drive belt) for cracks and other wear and missing or broken teeth (visual inspection).
- Check the aluminum profiles of the slats with a flashlight for damage (visual inspection).
- Check all mechanical components for damage (lifting mechanism, welded frame, side panels, treadmill feet, rollers on the lifting scissors, railings, display, emergency stop mushroom emergency stop magnetic switch) (visual inspection).
- In rare cases there may be bearing damage. Under certain circumstances this can be detected through excessive grease leakage from the bearing housing.
- Have the time limits prescribed by the manufacturer for the maintenance and safety checks been complied with?

A repair must take place:

- if liquid has gotten into the device,
- with damaged power cord (cable, plug)
- if the drive system toothed belt of the shows deficiencies
- in case of suspected bearing damage,
- if a defect on the device is suspected or has already been established,
- in case of bucking, sudden stopping or accelerating of the running surface,
- if buttons fail to function,
- in case of burning smell, smoke, or unusual noises,
- in case of malfunction (failure) of the emergency stop button,
- in case of malfunction (failure) of the emergency stop magnet,
- in case of damage to the running surface belt and
- for all other defects which may affect the safety of the device.

Annual inspection

The proper maintenance of the treadmill must take place annually in conjunction with the technical safety checks (TSC).

In exceptional cases the maintenance interval may be adapted to the extended inspection intervals in accordance with "Technical safety checks (TSC)" Maintenance and repairs may only be carried out by trained and authorized personnel.

NOTE
It is recommended to enter maintenance and repairs in the maintenance and repair log, see Appendix.

Significant measures for inspection of the treadmill:

- Inspection of the treadmill installation
- Inspection of the running surface belt
- Inspection of the drive unit and the lifting system
- Inspection of nuts and bolts
- Inspection of secondary carrier and guide rollers
- Inspection of electronics
- Technical safety checks (TSC)

For further information on maintenance procedures, refer to separate the service manual.

10.3 Technical Safety Checks (TSC)

Medical PPS series treadmills are devices in protection class I and have an application part in type B (railing). The power cord is normally not removable.

Permanent connection

PPS Series devices are usually not intended for permanent connection. The installation of a permanent connection must be performed by suitably trained personnel. For the safety checks on permanently connected equipment, the applicable regulations in the country of use are to be observed.

Checks and measurements

Tests and measurements shall be carried out in a properly functional device. Any repairs must be performed by qualified personnel before the technical safety inspection.

Country-specific requirements

When carrying out the prescribed measurements and checks, country-specific regulations, instructions and test steps are to be observed.

Manufacturer's recommendations

Prior to the tests, manufacturer's recommendations for the maintenance of the treadmill are to be considered in accordance with EN 62353. For this reason these instructions are to be read completely and carefully. If accessories are used, the manufacturer of the product's recommendations is to be observed accordingly. Measurement technology checks are not intended for PPS series treadmills.

Multiple devices

If the treadmill is used along with other medical electrical equipment (e.g. for the ergospirometry or with PC control software), the requirements set out on the Medical Electrical system ("ME-System") in accordance with EN 62353 apply.

Data lines (RS-232) and functional grounds are to be separated (potential equalization) for the duration of the measurements, along with other connections to other devices.

ATTENTION

For safety reasons, the use of power strips and the simultaneous operation of other equipment on the same supply line are prohibited.

An exception can be made for the use of spirometry systems. In this case, the requirements for technical safety inspection of ME systems according to EN 62353 need to be considered.

Inspection intervals

Technical Safety Check (TSC) must be performed annually by qualified personnel (electricians). These are "repeated safety checks" in accordance with EN 62353.

If the treadmill rarely used, under certain conditions, the test interval of 18 months may be increased to a maximum of 24 months (see EN 62353). These conditions are:

1. The device may not be older than 10 years,
2. the representative must confirm the estimated average weekly use of the treadmill in writing,
3. the representative must be informed in writing that the inspection interval for the next TSC must be re-evaluated when the intensity of use of the treadmill increases, and
4. The qualified inspector must consider the environmental conditions and the frequency of device malfunctions in the past.

Visual inspection

According to the standard EN 62353, an inspection is carried out visually prior to the measurements. The following points must be checked on PPS series devices:

1.	Treadmill operating manual. Is the operating manual for the device immediately available for the user, and it is valid for the tested treadmill model?
2.	Accessory operating manuals. Are the operating manuals for accessories and options available?
3.	Labels and nameplate. Are all labels on the device legible and complete (nameplate, fuse identification, interfaces labels, labels on the operating and display elements)?
4.	Fuses. Do the rated values and meltdown characteristics of the inserted fuses match with the following values: Fuse, operational voltage 250VAC, size 5x20mm (diameter x length), 10A, time-lag (10 AT)?
5.	Visual condition of the treadmill: Is the device undamaged and properly cleaned? Are slats possibly broken / cracked? Visual inspection of mechanism according to the section "Treadmill maintenance".
6.	Use of the emergency stop magnetic switch: Is the emergency stop magnet available with pull cord and clip, and is this always is used every time the treadmill is used in accordance with the manufacturer (Determined by asking the operating personnel)?
7.	Condition of pull cord, clip and cord stopper: Are the ripcord ("pull cord") of the emergency stop magnet, the fixing clip and the cord stopper for adjusting the length of the cord undamaged and fully functional?
8.	2 meter safety area: Is the safety area of 2.00 x 1.00 meters behind the treadmill provided?
9.	Power strips: Are power strips used? For safety reasons the use of power strips is forbidden.
10.	Room circuit breaker: Is a line circuit breaker with the following properties used to protection the line: Rated voltage 250V, rated current 16A and tripping characteristic "C" (slow)?
11.	Power supply: Are other devices on the same supply line? For safety reasons the treadmill must be used on a room connection with a separate line circuit breaker.

Measurements i.a. EN 62353

The values determined in these tests are to be documented together with the measurement method and evaluated (as basis for comparison for future standards). Measurements are to be carried out in the standard. The protective conductor resistance, and the device leakage current are to be measured. A measurement of the leakage current from the applied part according to the standard is not necessary. For the measurement of the device leakage current, the direct measurement methods or the difference current measurement can be used.

The replacement measuring method may not be used for measuring the device leakage current.

For the measurement of protective conductor resistance, the side panels of the treadmill must be removed. During the measurement the power cable must be moved over the entire length. If changes in resistance are observed during movement, it must be assumed that the ground wire is damaged or has a bad connection.

If the measured values are between 90% and 100% of the allowable limit, the previously measured values (reference values) for the evaluation of the electrical safety of the appliance shall be considered. Note that the measured values of the factory test may differ slightly from the measured values at each treadmill location due to different test conditions.

The measured values must not exceed the permissible limits specified in the following table:

Measurement	Limit value
Protective conductor resistance - non-removable power cord Resistance between the protective conductor of the power cord and the protective conductor connected, exposed conductive parts of the unit (treadmill frame + railing):	300 mΩ
Protective conductor resistance - removable power cord Resistance between the protective conductor of the power cord and the protective conductor connected, exposed conductive parts of the unit (treadmill frame + railing):	200 mΩ
Resistance between the protective conductor contacts at each end of the detachable power cord itself:	100 mΩ
Device leakage current - direct measurement or differential current measurement Measuring procedure defined in the standard EN 62353:	0.5 mA

Function test

After the examination (inspection and measurement) a functional test must be performed in accordance with paragraph "Function test"; this is to ensure that the treadmill has been restored to its necessary Condition for "Intended use", i.e. that it is operational and safe.

Test report

The results report (test report) must meet the requirements the standard EN 62353.

A final safety evaluation of the appliance must be carried out and the deadline for the next TSC set. In accordance with the standard this review can only be carried out by one or more qualified electricians, who have adequate training on the inspected device.

The tested treadmill must be marked with the test date (inspection sticker).

The examiner and the person responsible for maintenance of the treadmill (usually the representative or a person appointed by the representative) sign the test report. This document is prepared in three versions, wherein a copy remains with the representative of the treadmill and one for the tester's records. The third copy should be sent to WOODWAY customer service (WOODWAY maintains a file on each treadmill). In this way, they can provide efficient and reliable support.

If technical safety inspections are required by the manufacturer, the operator must carry these out or have these carried out according to the generally recognized rules of technology and within the time specified by the manufacturer.

The reason for the safety checks is to determine if a medical device is operational at the time of the audit, if it is in good condition and it is also expected to correspond to safety inspection requirements until the next safety inspection.

For other medical devices, accessories, software and other items used for the aforementioned medical devices, connected by the representative, the safety checks apply accordingly.

Technical safety checks (after repeat tests or testing after maintenance and repair) may only be performed by, one who has the responsibility for the proper implementation of safety controls due to their training, knowledge and experience gained by practical activities, is not subject to instructions with reference to the inspection activities (i.e. is not subject to directives with his professional judgment during the

implementation and evaluation of the tests) and has the appropriate measuring and testing equipment.

Personnel requirements

The operator may only appoint persons that meet the above conditions for the implementation of safety-related controls. The fulfillment of the prerequisites must be presented at the request of the competent authority.

A report must be filled about the entire safety inspection, which is kept at least until the next TSC. The following information should be contained therein:

- Date the technical safety checks were carried out
- Results of the technical safety checks
- Indication of the measured values
- Measuring procedure
- other test results

The representative shall keep the report at least until the next safety inspection.

10.4 Disabling the Treadmill

Disabling is required if the safety of the treadmill is not guaranteed, or if is suggested that this could be the case.

A device must be disabled if e.g. the following symptoms occur: unusual noises, appearance of smoke, uncontrolled stopping or accelerating of the treadmill, rocking of the running surface belt, damage to slats or other mechanical damage, spilling of liquid on the treadmill, etc.

Disabling can also be to the WOODWAY Customer Service by telephone. In this case, the treadmill representative is obliged to carry out the disabling and to confirm with WOODWAY customer service in writing.

Exceeding the test periods by several months (see previous chapter) also makes temporary disabling of the treadmill necessary.

ATTENTION

The representative is responsible for property damage or personal damages caused by incorrectly disabling or not disabling the treadmill!

The disabling of the treadmill must be such that (i) an unintentional and/or unauthorized restart can be ruled out and (ii) that the name of person who is authorized to put the treadmill back into operation can be seen.

The removal of the power plug from the outlet alone is not sufficient for the disabling of the treadmill, since third persons who have not been informed about the disabling can plug the treadmill back into the power supply and use it.

The following measures must therefore be taken to disable a PPS series treadmill:

1. The unit must be turned off and the power plug must be unplugged from the wall socket (disconnection).
2. The treadmill must be marked "disabled" in a clear manner such as: "CAUTION DANGER OF INJURY" the notice must be clearly displayed. In addition, the date of disabling, reason for disabling and name of the person/organization that disabled must be specified.
3. It must be determined which (authorized) person the treadmill - possibly after maintenance and repairs - may start up the treadmill again.
4. The fuses must be removed from the power supply box and kept in a safe place. Attach the label below to the treadmill power supply box so that the fuse box is covered.
5. Apply the safety label below to the plug of the power cord.

Sample Label for Disabling a Treadmill:

✂

ATTENTION
DANGER OF INJURY!

This device has been disabled due to safety defects.

The use of this device is strictly forbidden.

Device was disabled on: _____

by: _____

Only the following person may put this device back into operation:

_____

The representative is to disable medical treadmills when:

- reasonable suspicion of danger to the health and safety of patients, employees or third parties,
- defects that could endanger patients, employees or third parties exist.

10.5 Device Fuses

The fuses must comply with the published technical specifications, see sec. 4.3 Page 17. Bridging the fuses is prohibited (risk of electric shock, fire risk).

When replacing a fuse, turn off the power using the main power switch and unplug the power cord from the outlet. Using a screwdriver, unscrew the fuse holder out of the power junction box. Change the fuse and screw the fuse holder into terminal box.

Fig. 53 Device fuses

11 Troubleshooting

ATTENTION

With the exception of the maintenance work described in this chapter, the treadmill can only be checked and repaired by qualified personnel.

If necessary the WOODWAY dealer or service center is to be contacted!

For inquiries have the following information handy:

- Device designation, model and serial number of the relevant treadmill
- What happened just before the defect?
- Did the fault occur at once or gradually?
- For unusual noises – where do the noises come from?
- Was someone training on the treadmill at the time of the defect?
- Describe any other relevant symptoms
- Have any accidents occurred on the treadmill?
- Was anyone injured?

11.1 Unusual Noises

Visual inspection

Perform a visual inspection of the running surface belt and verify that the running surface is not obstructed by an object under/in front of/near the device. Remove any obstacles that could obstruct or damage the running surface.

Check whether the running surface inadvertently brushes against the side panel and leads to excessive wear. In this case correct the gaps between running surface and side panel.

Toothed V-belt running surface belt

The teeth on the bottom of the tread belt are sufficiently lubricated in the factory to minimize the noise. In certain cases it may occur that the combination toothed V-belt (also see "running surface belt") rubs against the pulley guides, thus producing whistling sounds. In this case, the use of a small amount of lubricant (Molykote or similar product) applied to the edges of the endless belt can contribute to noise reduction. Do not use too much grease, as this only leads to unnecessary accumulation of dust and dirt.

Toothed belt drive system

As with the running surface belt, the use of a small amount of lubricant on the edge of the belt is only necessary to reduce a "whistling" of the belt. Lubricant should always be used sparingly.

Bearings

When noises come from the bearings, bearing damage is to be expected In this case the bearing must be replaced by a trained and authorized technician.

11.2 No Display

If the display is not lit when you turn the treadmill, check the following points:

- Is the emergency stop mushroom released (or emergency stop button on the external display)?
- Is the treadmill connected to the power source?
- If the main switch on the power connector box switched on?
- Fuse (s) blown? (Replace fuse)
- Can the fan is to cool the servo controller (on the right) be heard?
- Does the socket to which the treadmill is connected supply power (e.g. could the circuit breaker for the supply line have been triggered)?
- Has one of the device fuses melted?
- Is the emergency stop magnet placed on the magnetic switch?

11.3 Belt does not move

If the display and/or lifting mechanism works but the treadmill does not accelerate when the [+] button is pressed, do the following:

- Turn off the power at the main switch and unplug the power cord.
- Check if the running surface belt is be blocked by an object and if so, remove.

Wait about 60 seconds and put the unit back into operation.

11.4 Free Moving Running Surface Belt

It is always possible to rotate the running surface belt slowly when the drive is not engaged. The more energy you expend to move the running surface, the greater the motor's braking effect ("short circuit brake"). This behavior is normal.

When the drive is not engaged ("Stand-by" mode) the running surface belt is slowed down by short circuit of the three motor phases. A totally free moving running surface belt in this case, however, might be defective short circuit relay or a broken wire.

If the treadmill is turned on with the switch on the display and the indicator in the display is active, this is a sign that the motor is defective or it is a failure of the servo controller.

In both cases the treadmill must be disabled immediately according to the instructions in this manual.

11.5 Faulty or Flashing Display

Probable causes: Power supply too low

An excessive load or excessive consumption on the same line may be causing problems. Connect the device to a specially fused power supply line or remove the other power consuming devices from the mains.

11.6 Serial RS-232 Interface

Possible causes of a serial interface malfunction are:

- Defective wire connection in adequate pin allocation for the components
- Incorrectly set component protocols (Treadmill, PC, EKG, Spiroergometry)
- Improperly configured connection settings between the components (COM Port)

11.7 Electrostatic Discharge

By running on the device the runner can become electrostatically charged. If they touch a metal part of the device in this state, it can cause an electrostatic discharge from the user. Under certain circumstances an electrostatic discharge may cause a malfunction of the device. However, such discharges are normally harmless for the user and the device. The most common cause of static electricity lies in the choice of clothing, the condition of the shoe soles and very dry air.

Try other clothing and other footwear and moisten the room with commercial humidifier if you measured very dry air.

11.8 Sources of Electromagnetic Interference

Close proximity to, for example, X-ray equipment, powerful motors or isolating transformers must be avoided because of possible electromagnetic interference.

Electromagnetic interference can affect the operation of your treadmill.

11.9 Interference of the POLAR Heart Rate Monitor

During the transfer of data from the transmitter to the receiver the POLAR heart rate monitoring may receive interference, which is triggered by other devices in the proximity of the treadmill. The most common causes for this are:

- PC screens, computers, radio systems of all kinds
- High tension power lines
- Intense light exposure
- Strong magnetic fields

12 Disposal

The disposal of the equipment must be in accordance with the respective national regulations.

Electrical and electronic devices must be disposed of separately from normal household waste.

An appropriate waste disposal company should be contacted. Properly dispose of the device at the end of its service life
(e.g. the local collection point for waste separation):

- The device packaging is disposed of through resource recycling.
- The metal parts of the machine go to scrap metal disposal.
- Plastic parts are given to plastic recycling.
- Electric components and printed circuit boards are disposed of as electronic scrap.
- Rubber parts are disposed of as hazardous waste.

	This symbol indicates electrical and electronic equipment that cannot be disposed of with as standard waste, but must be handled separately. Disposal must be carried out to prevent problems with heavy metals and flame retardants in accordance with relevant waste management. Please contact the manufacturer's authorized representative in order to obtain information concerning disposal of your equipment.
	The disposal of the equipment must be in accordance with the respective national regulations. Wear parts are considered hazardous waste! After being replaced wear parts must be disposed of according to country-specific waste laws.

13 Instruction Record

Once the introduction, installation and functional check of the slat belt treadmill has been completed, the competent WOODWAY employee or the authorized WOODWAY dealer carries out the instruction for the device. All persons who will be working with the unit in the future (user) must receive the instructions. After successful commissioning and instructions the instruction record is signed by the instructor all persons trained and a copy must be sent to WOODWAY GmbH.

Step	Description	Conducted
1	Transfer of operating and maintenance instructions. **Important notice:** The manual is always to be kept within easy reach of users! The availability of the manual is required and will be checked at each inspection.	☐
2	Reference to the general hazard statements and safety requirements according to the manual. Thereby indication of specific treadmill hazard statements according to area of application (benefit/risk assessment by the therapist, etc.). **Assistance in mounting the treadmill for frail/disabled persons.**	☐
3	Special note on the prescribed clear area/safety distance to objects and walls of at least 200 cm x 100 cm (L x W). Note on using the safety strap with harness and fall protection in case of increased risk.	☐
4	Potential equalization cable connected to the pin on the handrails and to the potential compensation bar.	☐
5	Switching the unit on and off with the power switch. Explanation of the different functional states of the device (off, standby, ready).	☐
6	Important safety notices: After turning on the treadmill with the WOODWAY user system (WUS) or data monitor the device goes through an initialization phase, which lasts about 3-4 seconds. **The user / patient should not get on the treadmill during initialization!**	☐
7	Explanation and demonstration of the various safety devices on the machine (emergency stop magnet with rip cord, emergency stop mushroom). Note on using of safety devices to stop the machine in an emergency. Correct attachment of the safety clip on the waistband.	☐
8	Explanation of the Keys on the keypad on the railing. Notice on function for short button push and long pressing for speed or incline setting. Notice on double pressing the stop button to return the treadmill to the zero position after use.	☐
9	Demonstrate operation of the treadmill in manual mode. Special notes for devices with the "reverse" function.	☐
10	Explanation of the indicators in the display.	☐
11	Operation of the treadmill via customized programs possible (only with WUS).	☐
12	Operation of the treadmill with pulse control (only with WUS).	☐

Step	Description	Conducted
13	Instructions for correct heart rate measurement and limitations: Correct wearing of the chest strap, behavior in case of problems, malfunctions, possible causes and sources (computers, quartz watches, monitors, power lines, etc.).	☐
14	Notice to the RS232 port and CD with treadmill control software, as well as the accompanying user guide.	☐
15	Instructions on cleaning the treadmill with reference to the manual. **Important notices:** • When cleaning the unit always pull the power plug before the start. • Maintenance and repair of medical devices and electrical equipment only by authorized personnel (WOODWAY service technicians, authorized WOODWAY service partner or medical technician).	☐
16	Notice on regular and recurring maintenance intervals with regard to safety checks (TSC). Maintenance contract offer.	☐
17	Final photographs of the device from two different perspectives. (Documentation WOODWAY GmbH)	☐
18	Explanation of possible malfunctions that must lead to a disabling of the treadmill: • Bucking, sudden stopping or sudden acceleration of the treadmill • Failure of buttons • Burning smell, smoke, or unusual noises, • Damage / loss of the emergency stop magnet with pull cord • Malfunction (defect) of the emergency stop magnet, • Damage to the running surface belt	☐

Instruction Record

Confirmation of commissioning and training record

With the signing of the instruction record, the instructor and the customer confirm the carrying out of qualified instruction and commissioning. Disregarding of warnings, safety requirements, intended and the prohibited use, as well as unauthorized or improper maintenance and/or repair and/or technical safety inspection can cause injury or even death, and/or may damage the device and/or lead to loss of all material defect liability claims and any other liability claims. Please fill out the instruction protocol completely and return it to WOODWAY.

WOODWAY slat-belt treadmill **Serial no.:** _____

Model: _____

The above treadmill was properly set up / installed on: _____
(Date)

Technical instruction was completed on: _____
(Date)

Place of transfer / instruction: _____

_____

_____

The following persons received instructions:

_____ _____
(Name and function) (Signature)

_____ _____
(Name and function) (Signature)

_____ _____
(Name and function) (Signature)

_____ _____
(Name and function) (Signature)

Remarks: _____

_____

_____

_____

_____ _____
(Location, Date) Name (printed capital letters) and signature
Instructor (Medical device consultant)

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