For The Long Run®

WOODWAY®

PPS Medical Series

Owners Manual: 01.01.24 OM-EN-V5

PPS 43 Bari-Mill
PPS 55 Bari-Mill
PPS 70 Bari-Mill

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

User's Manual

01.01.24 OM-EN-V5

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MY WOODWAY:_____ **ARRIVED:**_____

WOODWAY History

WOODWAY's history begins in Germany in 1974. Willi Schoenberger, a technical director in charge of planning a fitness center, noticed that the most important piece of equipment, the treadmill, didn't meet the most important requirements: a mechanically sound machine that is designed to meet human needs.

He envisioned a comfortable walking surface that didn't interfere with the natural biomechanics of running or walking. Also, he wanted a transportation system which eliminated the friction associated with conventional conveyor-belt treadmills. After intensive research, and trial and error (and in cooperation with the Deutsche Sporthochschule in Cologne, Germany), Willi developed and patented a very unique and revolutionary treadmill design.

In 1975, WOODWAY GmbH was founded in Weil am Rhein, Germany. The name "WOODWAY" is derived from the German "Waldweg" ("Wald" = wood and "Weg"= way), the feel of running on a soft pine needle covered path in the forest.

In 1983, a manufacturing license was awarded to Sakai Medical, for the use of WOODWAY technology in the Japanese marketplace.

In 1988, a U.S. license was granted to a small, well-established manufacturing company in Waukesha, Wisconsin. WOODWAY USA was formed when the U.S. incarnation of the WOODWAY was developed and completed in 1990. WOODWAY USA is proud to be the primary manufacturer of WOODWAY Treadmills worldwide, exporting treadmills for international distribution, in addition to serving our domestic customers and clients.

Today, WOODWAY's design and manufacturing facilities in the United States, Germany, and Japan make WOODWAY the largest specialized treadmill manufacturer in the world. Constant enhancements in quality, design, and function are shared and implemented by all three WOODWAY manufacturers.

As WOODWAY moves forward, attention to product quality, innovation, and customer service are at the forefront of our efforts. Along with our treadmills, other products, services, and strategic relationships are being developed so as to keep WOODWAY on the leading edge as we meet fitness training, testing, and rehabilitation needs.

1 Safety

1.1 Important Safety Information

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 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. Replace the stickers if they become damaged or illegible.

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

Read all instructions before using the treadmill.

DANGER: To reduce the risk of electrical shock:

- Do not modify the plug provided with the treadmill. It is equipped with a grounded power cord. If it will not fit in the outlet, have a proper outlet installed by a qualified electrician.
- The power cord should not come in contact with any heating surfaces or sharp edges.
- Never operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged. Contact WOODWAY or authorized service agent for servicing or assistance.
- Do not use any adapters, especially those without grounding provisions. Doing so could potentially result in electrical shock.
- Do not operate motorized treadmills in damp or wet locations.
- Do not operate the heart rate monitor transmitter in conjunction with an electrical heart pacemaker. The transmitter may cause electrical disturbances.
- Always unplug the treadmill immediately after using and before cleaning or servicing.
- Do not soak the treadmill surfaces with any liquid; use a sprayer or damp cloth for cleaning.
- Keep all electric components (e.g. motor, power cord, power switch) away from water.
- Do not place any open liquid containers on any part of the treadmill. The use of sport bottles with closeable tops is acceptable.
- Do not attempt to service your treadmill yourself without first contacting WOODWAY Service.
- Always keep the running surface clean and clear of obstructions.

CAUTION:

- Consult your physician before beginning any exercise program, especially if any of the following pertain to you: history of heart disease, high blood pressure, diabetes, chronic respiratory disease, elevated cholesterol, smoker, or experiencing any other chronic disease or physical impairments.
- Pregnant women should consult their physician before beginning an exercise program.
- If you experience dizziness, chest pain, nausea, or any other abnormal symptoms while using the treadmill, stop training immediately. Consult a physician before continuing.
- A qualified mechanic should perform any service or repair work. It is preferable that mechanics have successfully completed WOODWAY factory-authorized service school or equivalent.
- Fuses may only be replaced by fuses of the same time and rated output to provide permanent fire protection.

WARNING: To reduce the risk of injury to you and others:

- Set up and operate the treadmill on a solid, level surface.
- Use this device only for its intended purpose as described in the manual. Do not use attachments not specified by the manufacturer.
- The treadmill should never be left unattended when plugged in and/or running. Unplug the treadmill from the outlet when not in use and before cleaning or servicing.
- Do not operate the treadmill outside.
- To disconnect the treadmill, turn all controls to OFF position then remove the plug from the outlet.
- Connect the treadmill to a properly grounded outlet only. See Grounding Instructions.
- Keep all loose clothing and towels away from the running surface. It is also important that shoe laces do not extend beyond the bottom of the shoe.
- Keep the area behind the treadmill clear and at least 6.5 ft. (2 m) from walls or furniture. If the treadmill has reverse functionality, the safe fall area must be in front of the treadmill, as well.
- Keep hands away from all moving parts.
- Never leave children or physically/mentally disabled patients unsupervised while on or near the treadmill.
- Inspect the treadmill for worn or loose components prior to use. Tighten or replace any worn or loose components if necessary.
- Read, understand, and test all emergency stop procedures.
- Always use the emergency stop pull-cord supplied with the treadmill. It can be clipped to an article of clothing while training. This is for the user's safety in case of an emergency.
- WOODWAY treadmills are built to handle runners weighing up to 800 lbs. (360 kg) at speeds between 0-4 MPH (0-6.5 km/h) and 400 lbs. (180 kg) at speeds up to 18 MPH (29 km/h).
- The treadmill running belt might not stop immediately if an object becomes caught in the belt or rollers.

- Care should be taken when mounting and dismounting the treadmill. Never mount or dismount the treadmill while the running belt is moving. Use the handrails and handlebar whenever practical or necessary.
- Wear proper athletic shoes with rubber or high-traction soles. Do not use shoes with heels or leather soles. Ensure no stones are embedded in the profile of the soles.
- Allow several minutes to bring your heart rate into the training zone depicted in the manual. Walk slowly after your workout to allow your body sufficient time to cool down and your heart rate to decrease.
- The safety and integrity designed for the machine can only be maintained when the treadmill is regularly examined for damage and/or wear, paying special attention to areas susceptible to wear, and repaired if necessary. It is the sole responsibility of the user/owner or facility operator to ensure that regular maintenance is performed.
- Worn or damaged components should be replaced immediately or the treadmill should be removed from service until the repair is made. Only manufacturer-supplied or approved components should be used to maintain and repair the treadmill.
- Do not mount the treadmill during the initialization process (i.e. the display is not fully initialized)
- Handicapped users (e.g. fragile, mentally handicapped, etc.) should never mount the treadmill without the help of the therapist. The therapist and attending physician must weigh the risks and benefits of using the treadmill.

SAVE THESE INSTRUCTIONS

1.2 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.

1.2.1 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 ► Further measures…

1.2.2 Classification

NOTE	NOTE (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, serious accident possible with the possibility of injury or death
⚠ DANGER	DANGER (with danger symbol), In the event of an accident, immediate danger or death or serious injury

1.3 Safety Notices on Device

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

Protective Ground Wire Connection

PPS Series devices are electrical devices with protection class I.

This symbol indicates operational ground connections inside the device. It is located inside the base of the treadmill.

Note: Grounding reliability can only be achieved when this equipment is connected to an earth-grounded receptacle marked "HOSPITAL GRADE".

Danger Due to Electric Voltage

This symbol warns the user of dangerous voltage inside the device. It is located inside the base of the treadmill.

CAUTION!

- To reduce the risk of fire, replace only with same type and rating of fuse. Disconnect power before replacing fuse (located by fuse inside base of treadmill).

WARNING!

- Disconnect from supply circuit before opening (located on power cord and AC bracket on base of treadmill).

WARNING!

- Remove emergency stop lanyard when not in use and store out of reach of children (located on emergency stop lanyard)

CAUTION!

- There is risk of injuries to persons. To avoid injury, stand on side rails before starting treadmill. Read instructions before using (sticker located on WUS display).

Emergency Stop

This indicates an emergency stop. It is located on the emergency stop button.

Potential Equalization

This indicates the connection of a potential equalization cable. It is located inside the base of the treadmill.

1.4 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 recommends the use of a training record (see Section 13 Page 109) for proof of instruction.

1.4.1 Representative

The representative is the person or company that is responsible for setting up, using, and maintaining 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 recommends the training be carried out by a trained and authorized WOODWAY dealer or service partner.

1.4.2 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 a therapist, sports physician, or any other supervisor. The operator of a medical device is any person who - regardless of 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.

1.5 Intended Use

⚠ WARNING

Danger due to 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 (locomotion therapy)

1.5.1 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.

1.5.2 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 users have of an increased risk of falling.

- ► Use a fall protection system, support belt, or 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.

1.5.3 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.

1.6 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 the device or be left near the device unattended (Exception: see "Application Options for Children" Section 7.3 Page 60).
- The use of the treadmill under the influence of alcohol, 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 "Setup and Installation" (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 following 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.
    - Never set the stress level (speed) too high.

1.7 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, anti-epileptics, etc.).

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
- Chronic illnesses
- Cancer
- Acute myocardial infarction or unstable angina pectoris (determined by a stress test)
- Cardiovascular diseases (e.g. severe high blood pressure at rest, carditis, congestive heart failure, severe valvular heart disease, dangerous heart arrhythmias at rest, or aortic aneurysm)

If the patient is experiencing acute illness, febrile condition (i.e. fever), or newly occurring pain, this represent an absolute contraindication for physical stress. In such situations, it is necessary to postpone training until the patient’s health has improved sufficiently.

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. In such situations, an exercise ECG is essential and training is only possible under medical supervision.

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.

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.

1.8 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 60601-1-2:2014 (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, causing treadmill malfunctions.

ATTENTION

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

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.

2 Introduction

2.1 Operating Instructions Information

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

The only 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.

2.1.1 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.

2.1.2 Observe the Instructions

WOODWAY 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 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
- Unauthorized modifications to the device or accessories

WOODWAY 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 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.

2.4 Replacement Parts

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

- Developed for specific use with the device
- Manufactured for high quality and excellence
- Ensure 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 does not accept liability for damages resulting from this.

2.5 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 15 Page 114.

2.6 Customer Service

For service questions contact the following:

WOODWAY USA, Inc.
W229 N591 Foster Ct.
Waukesha, WI 53186
USA

Tel: 1 (262) 548-6235
Fax: 1 (262) 522-6235
Email: service@woodway.com
Web: www.woodway.com

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

- Information on the name plate (specific model/serial number)
- An accurate description of the circumstances
- Customer number (if available)
- What action has already been taken?

2.6.1 Servicing

The address of your local service center can be obtained from the manufacturer. After repair or re-installation, the actions listed under in Section 6 on page 42 are to be performed as during installation.

2.7 EC Declaration of Conformity

EC Declaration of Conformity
EG Konformitätserklärung

Manufacturer:
Hersteller:
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Phone: +1 262-548-6235
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E-Mail: info@woodway.de
Web: http://www.woodway.de
SRN: DE-AR-000009530

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:

Regulation (EU) 2017/745	*Verordnung (EU) 2017/745*
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)*
Directive 2012/19/EU	*Richtlinie 2012/19/EU)*

Product designation: *Produktbezeichnung:*	WOODWAY PPS SERIES Treadmillsdesignation *WOODWAY PPS SERIE Laufbandergometer*
Product type: *Typenbezeichnung:*	PPS 43 / PPS 55 / PPS 70/Continuum
Models: *Ausführungen:*	Ortho / Med / Plus
Classification: *Klassifizierung:*	I (per Annex VII Ruel 13 Regulation (EU) 2017/745) *I (gemäß Anhang VIII Regal 1 der Verordnung (EU) 2017/745)*
Conformity Assessment Process: *Konformitätsbewertungsprozess:*	Annex II and III Regulation (EU) 2017/745 *Anhang II und III der Verordnung (EU) 2017/745*
Basic UDI-DI: *Basis UDI-DI:Basic*	42624390300287

Used standards:
Angewandte Normen:

IEC 60601-1:2005 + Cor. :2006 + Cor. :2007 + A1:2012

IEC 60601-1-2:2014	EN ISO 10993-1: 2020
EN 957-6:2010+A1:2014 (Class A, S)	EN ISO 13485: 2016
EN 60601-1-6: 2010	EN ISO 14971:2019
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 01 January 2024 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 01 January 2024 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
January
1st 2024

Douglas Bayerlein
Präsident / President WOODWAY USA, Inc.

Fig. 1 EC Declaration of Conformity

3 Technical Data

3.1 Turning the Treadmill ON/OFF

- The main power switch with the universal power symbol (⏻) is located at the base of the treadmill near the treadmill's power cord.
- "I" position: Treadmill is turned on and the belt is held tight. Turn the display on to operate the treadmill.
- "O" position: Treadmill is turned off and the belt is free moving.

3.2 Name Plate

The nameplate contains the device's main technical details.

For service questions, the technical information on the name plate must be kept handy.

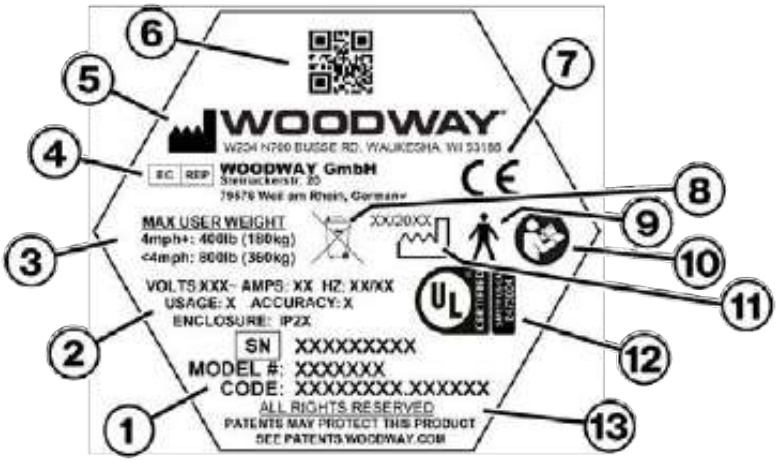


Fig. 2 Name Plate

1. Serial Number, Model Number, and Model Code Number
2. Power Requirements: Voltage, Amperage, and Hz, Accuracy and usage classifications, and
3. Max User Weight (Speed Specific)
4. European Representative
5. Manufacturer - WOODWAY logo and address
6. 2D Universal Identification Code for Internal Product classification
7. Device CE Label
8. Do Not Discard Warning
9. Medical Use Icon
10. Note to Read and Observe operating instructions
11. Number of notified body if applicable, and year manufactured
12. UL Certification
13. Patent Notice

PPS Series slat belt treadmills are Medical Devices in accordance with European Directive EU 2017/745, European Standard EN 60601-1:2012, and ISO 13485:2016.

3.3 RS-232 Interface

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

3.3.1 Control Lines

The control only needs TxD and RxD lines. The RS-232 control lines are bridged in such a way that there should not be any problems in communicating with a PC running under DOS or Windows. Galvanic separation rules out the risk of any interference in the PC from the treadmill. A crossed zero modem cable is required (as used) to connect 2 PCs with normal standard pin configuration.

The interface is configured to the following parameters:

9600 Bd / 8 Bit / no parity / 1 Stopbit

3.3.2 Software

Interface is provided with 256 byte buffer for transmitting and receiving (take place interrupt-controlled). Commands are not interpreted until fully present in the buffer. The interpretation proceeds with full control of the command format (commands must be correct to be executed).

Interface responds to faults with 0Dh (multiple responses if necessary) and is not blocked by incorrect commands; the beginning of the next correct command is also recognized. Valid commands refresh the TIME OUT (if mode is activated). Excessive values for individual parameters are reduced to the max. tolerable levels without producing fault messages.

The configuration of the buffer means that several commands can be transmitted to the interface in direct succession. They can be executed in sequence at max. possible speed (normal interpretation times are in the ms range).

PC programmer is responsible for preventing overflow of transmission/reception buffer. Ensure that no overflows occur during successive transmission of several commands which do not wait for a response (add telegram lengths of command/response; total must always be less than 256).

3.4 Technical Specifications

Parameters	PPS 43	PPS 55	PPS 70
Overall Dimensions	36" W x 73" L x 59" H (91 x 185 x 150 cm)	41" W x 73" L x 59" H (104 x 185 x 150 cm)	46" W x 73" L x 59" H (117 x 185 x 59 cm)
Walking Surface	17" W x 68" L (43 x 173 cm)	22" W x 68" L (55 x 173 cm)	28" W x 68" L (70 x 173 cm)
Weight *	465 lbs. (210 kg)	490 lbs. (220 kg)	520 lbs. (235 kg)
Technology Hardness / Lateral Play	60 slats (replaceable), rubber on aluminum T-sections 38-43 Shore A / 4 mm lateral tolerance		
Drive System	116 ball bearings, 10 roller guides		
Max. User Weight	Running: 400 lbs. (180 kg) Walking: 800 lbs. (360 kg)		
Walking Surface (above floor)	13" (32 cm)		
Ambient Conditions (operation)	Temperature: 50°F to 104°F (+10°C to +40°C) Relative humidity: 15 - 85% (not condensed) Air pressure: 700 - 1060hPa		
RS-232 Interface	Yes, standard		
Interface Cable	Shielded null modem cable, max. length 16.5 ft. (5 m)		
Pulse Measurement	1-channel ECG accurate, chest strap POLAR® T34 (in scope of delivery)		
PC-Software	WOODWAY treadmill control software Vers. 3.0 (in scope of delivery)		
Power Connection	Grounded plug Rated voltage: 230 VAC Rated current: 16 A, 50/60 Hz Cord length: 6.5 ft. (2 m)		
Classification	Safety class I device, type B application part Enclosure rating: IP2X		
Drive Motor	Brushless DC motor, power 1500 W (maximum 4000 W)		
Lift Motor	DC motor, power 150 W		
Power Consumption	1.1kVA		
Speed **** Accuracy / Resolution	0 - 12.5 MPH (20 km/h) standard +/- 0.05 MPH (+/- 0.1 km/h)		
Tolerance	Less than +/- 1%		
Incline **** Accuracy/Resolution	0 - 25% (Germany: 0 – 20%) +/- 0.4% / +/- 0.1%		

* *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, 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*

**** *Model-specific options available, including Reverse directionality, 0 to -6 MPH (-10 km/h); Top Speed upgrade, 0 to 15 MPH (24 km/h); and Incline upgrade, 25%. We reserve the right to make technical changes.*

3.5 Dimensions

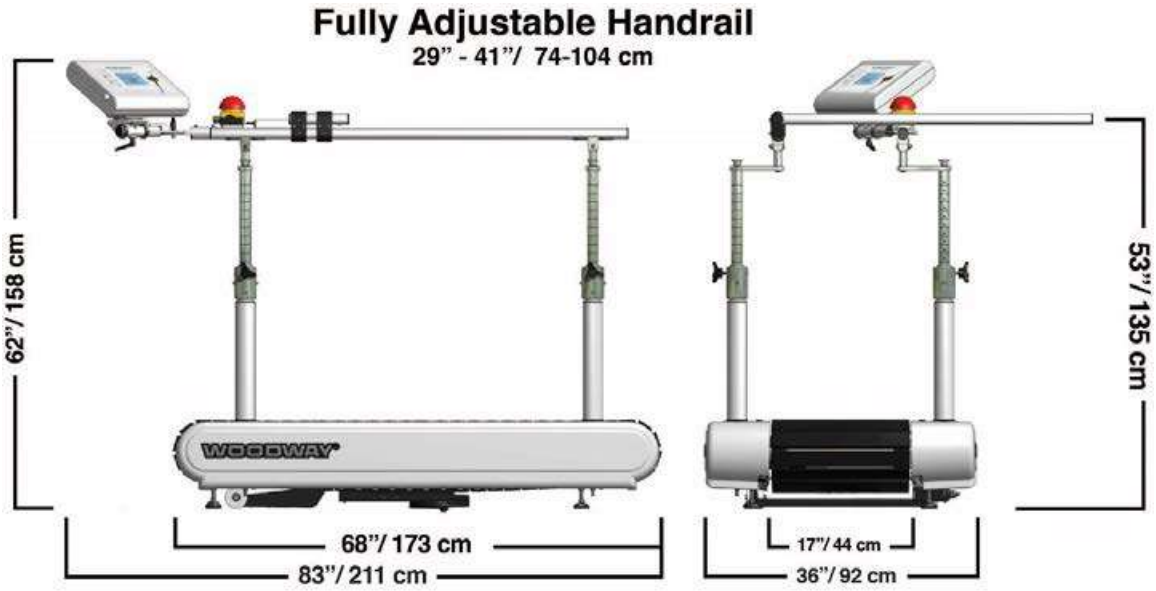


Fig. 3 Device dimensions, PPS Bari-Mill 43

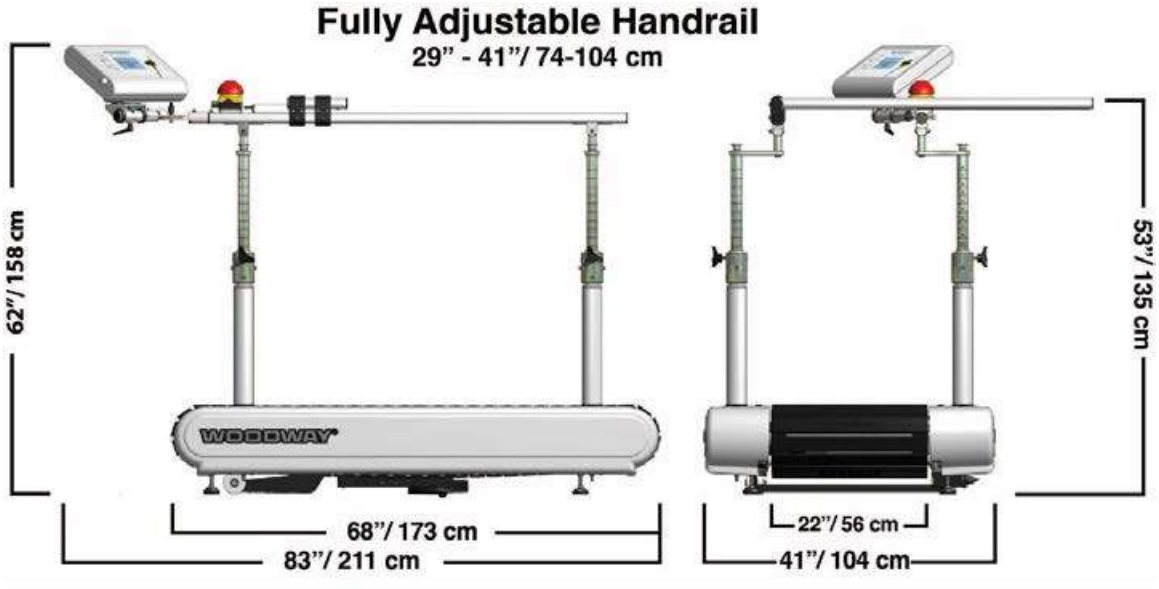


Fig. 4 Device dimensions, PPS Bari-Mill 55

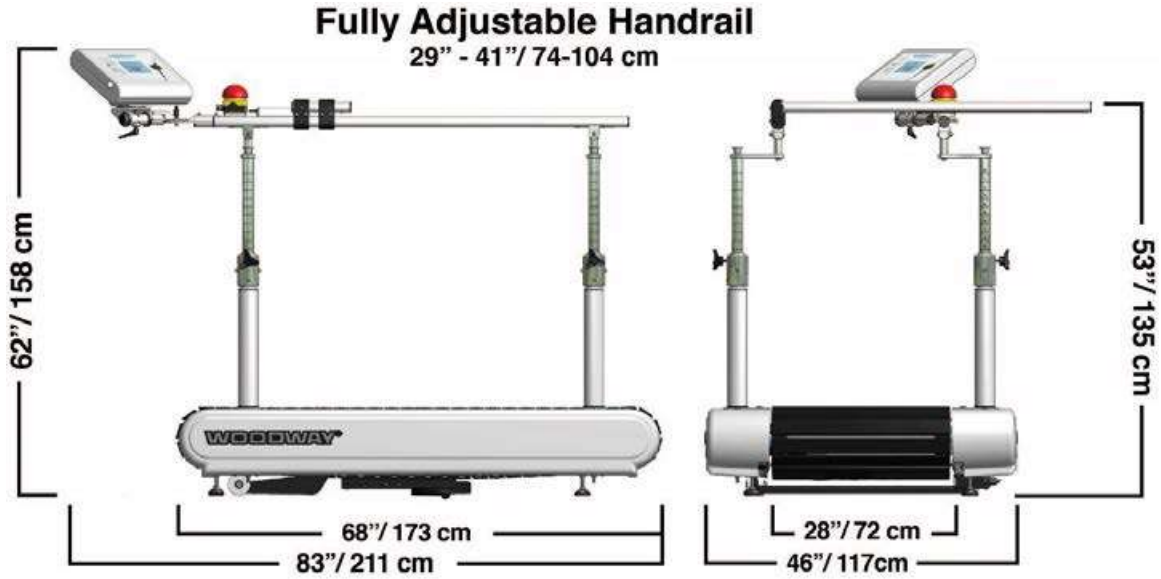


Fig. 5 Device dimensions, PPS Bari-Mill 70

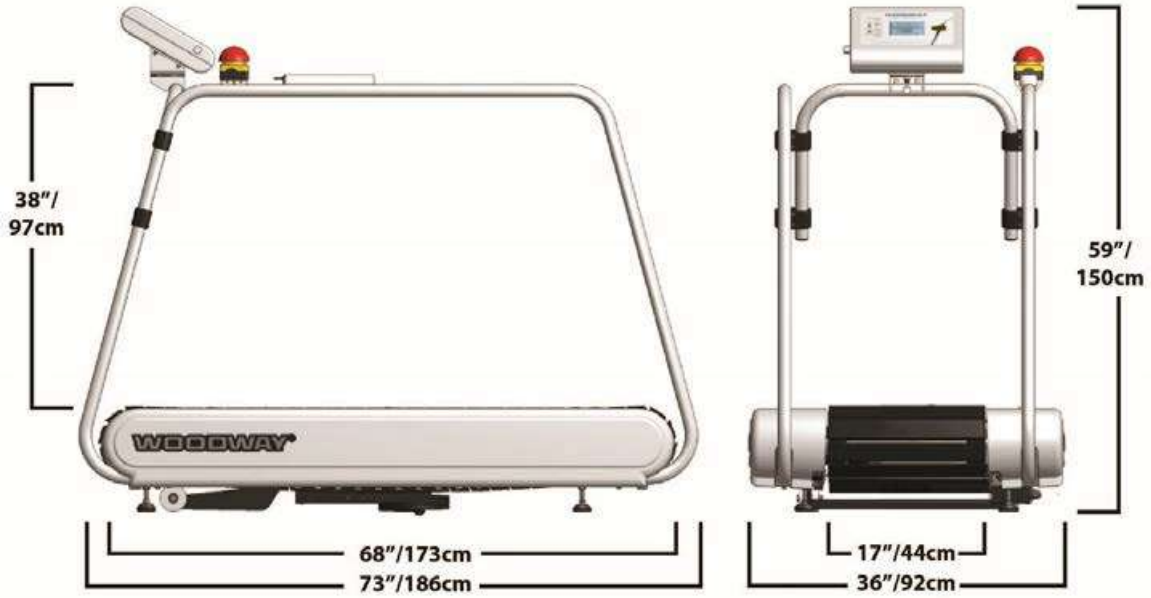


Fig. 6 Device dimensions, PPS Med 43

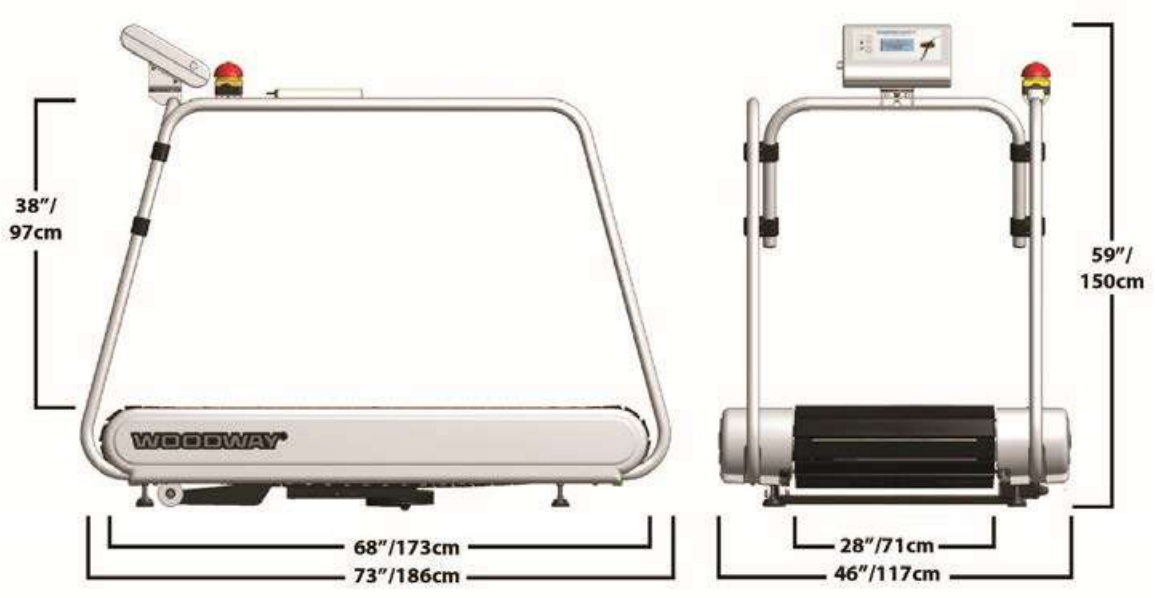


Fig. 7 Device dimensions, PPS Med 55

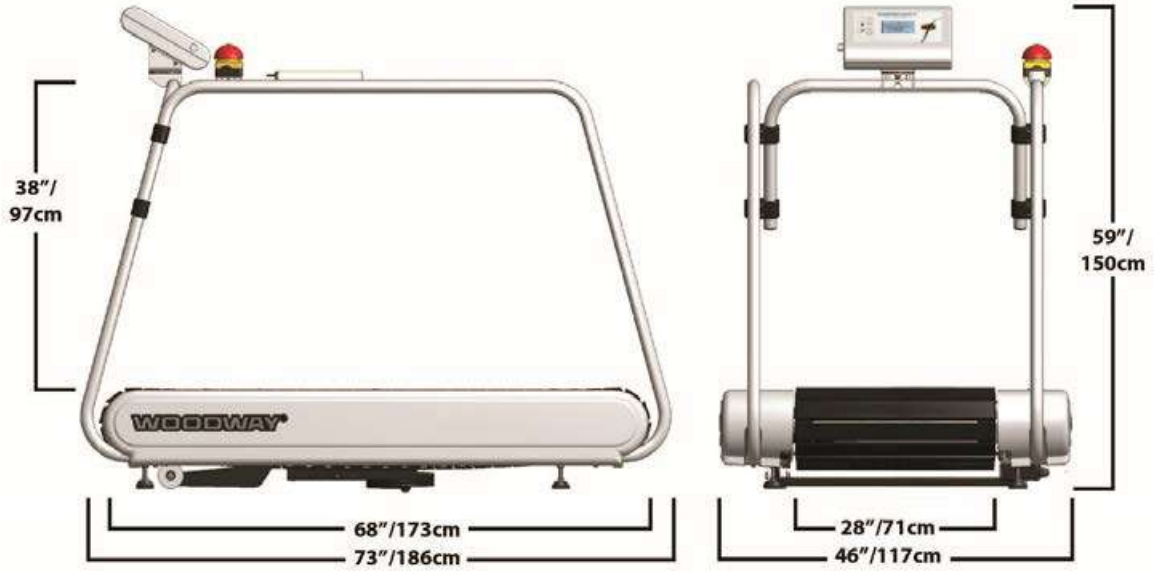


Fig. 8 Device dimensions, PPS Med 70

Note: The PPS Ortho is structurally identical to the PPS Med with the exceptions of the color (PPS Ortho is standard black) and handrail.

3.6 Electrical Connection

IMPORTANT- The power cord must be properly protected at all times, both when in use and storage.

Below are the standard electrical requirements by region. There are different options depending on which model you own. If you have a different electrical configuration, please contact your sales representative.

Ungrounded outlets or power-strips may NOT be used.

DO NOT BEND OR REMOVE PRONGS. The plugs are polarized, meaning the prongs are different sizes and the plug can only fit in the outlet one way. If other power cord plugs are required, please contact WOODWAY.

Before connecting the treadmill to the power supply, the information on main voltage and frequency (found on the name plate) is to be compared with the on-site connection values. Only connect the device if the values match. Power surges or voltage drops can cause malfunctions or defects in the device.

⚠ 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.

⚠ 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.

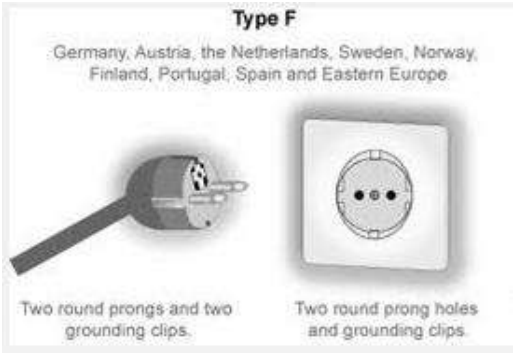
- ► In order to avoid malfunctions, all data on the name plate must correspond with the actual terminal values.

⚠ WARNING

Danger of Injury by Tripping Over Wires!

Improperly installed wires present a tripping hazard and danger of injury. Safely lay power cords, interface cable, etc. outside of walking areas.

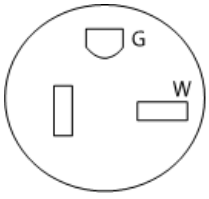
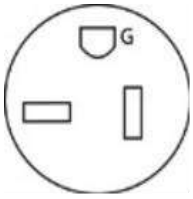
3.6.1 Germany

Description	Parameters
	230 VAC
Voltage	Requires at least 230 V from wall outlet. If voltage falls 10% below 230 V, treadmill will shut off and reset.
Frequency	50 Hz
Current	16 Amp *Dedicated line required (cannot share neutral line)*
Wall Outlet Requirements	
Outlet Compatibility	F / "Schuko" plug
Fuse	Supply: 16A type C ("slow") Device: 10A, 250V~, 20 x 5 mm, type C ("slow") Lift fuse: 5A, 20 x 5 mm, type C ("slow")

3.6.2 UK

Description	Parameters
	230 VAC
Voltage	Requires at least 230 V from wall outlet. If voltage falls 10% below 230 V, treadmill will shut off and reset.
Frequency	50 Hz
Current	13 Amp *Dedicated line required (cannot share neutral line)*
Wall Outlet Requirements	
Outlet Compatibility	G/BS 1363 plug
Fuse	Supply: 13 A Device: Time delay fuse, 1500 A breaking capacity, 250 V, 10 A Lift fuse: Time delay fuse, 250 V, 6.3 A

3.6.3 North America

Description	Parameters	
	115 VAC	**208/230 VAC**
Voltage	Requires at least 115 V from wall outlet. If voltage falls 10% below 115 V, treadmill will shut off and reset.	Requires at least 208/230 V from wall outlet. If voltage falls 10% below 208/230 V, treadmill will shut off and reset.
Wall Outlet Requirements	 NEMA 5-20 R *(dedicated circuit required)*	 NEMA 6-20 R *(dedicated circuit required)*
Outlet Compatibility	Standard 3-prong, hospital grade plug (NEMA 5-20 P) Will only fit a NEMA 5-20 R outlet	3-prong plug (NEMA 6-20 P) Will only fit a NEMA 6-20 R outlet
Fuse	**Supply:** 20 A Circuit **Device:** Time delay fuse, 1500 A breaking capacity, 250V, 15 A **Lift fuse**: Time delay fuse, 250 V, 6.3 A	**Supply:** 20 A Circuit **Device:** Time delay fuse, 1500 A breaking capacity, 250V, 10 A **Lift fuse:** Time delay fuse, 250 V, 6.3 A
Hospital-Grade Low Leakage	For grounding reliability, only connect to proper receptacle marked “Hospital Grade” when using for medical use.	
Frequency	50/60 Hz	
Current	20 Amp *Dedicated line required (cannot share neutral line)*	

4 Transportation and Storage

4.1 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. The treadmill is heavy and can cause injury if lifted incorrectly.

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

4.1.1 WOODWAY Service

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

For further information, please contact WOODWAY Customer Service.

4.2 Flat Transportation

The treadmill can be easily transported on a flat surface using 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 incline system.

4.3 Upright Transportation

For narrow transport routes it is possible to transport the treadmill vertically (e.g. narrow door width or for climbing stairs). For this handrails and side panels must be removed beforehand (see Sections 6.5.1 and 6.5.3).

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

ATTENTION

The treadmill must not rest on the "electronics" side.

4.4 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 in the treadmill frame (see Fig. 9 and Fig. 10).

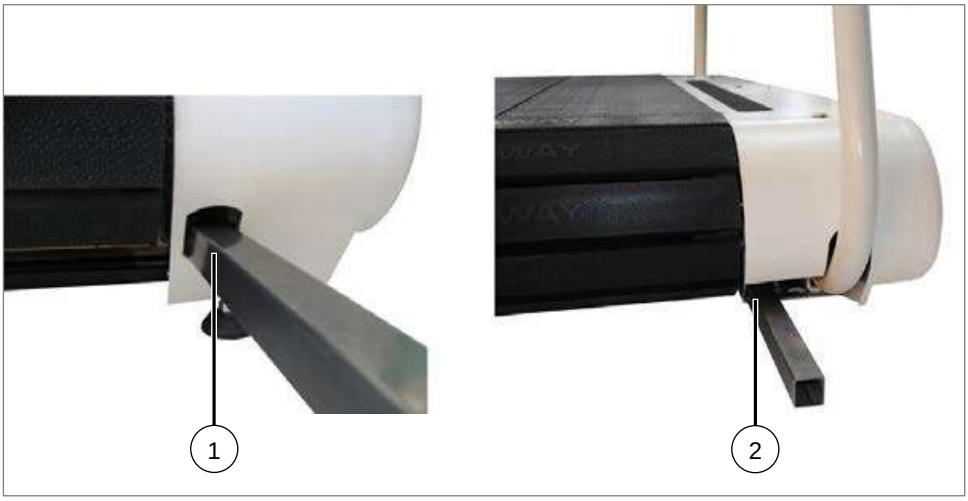


Fig. 9 Carrying poles

1. Carrying poles, PPS Bari-Mill
2. Carrying poles, PPS Med / PPS Ortho

The treadmill may only be lifted at the indicated points.

Fig. 10 Treadmill transportation with carrying poles

The side panels and railings can be removed to facilitate transport (see Section 6.5.1 Page 46).

4.5 Storage

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: 0°F to 120°F (-18°C to +49°C)
- Relative humidity: 15 - 85% (not condensed)
- Air pressure: 700 - 1060hPa

5 Product Description

5.1 Overview of Models

Figure	Description
	**WOODWAY PPS Med / PPS Med-i** • First choice for use in hospitals around the world • 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 (e.g. continuous medical railings) offer patient maximum support and safety
	**WOODWAY PPS Bari-Mill** • Ideal device for patients who require a higher level of assistance during therapy • Wooden parallel rails variably height/width adjustable to meet the individual needs of your patients • Possibility of reverse direction of travel and therapy at an incline (suited for many specific training methods) • Extensive functionality of PPS Bari-Mill provides maximum comfort and flexibility for use in therapy and diagnostics
	**WOODWAY PPS Ortho** • Specifically developed for application of video-based analysis in orthopedics and rehabilitation • Open railing version ideal for gait and running analysis • Reversing direction of movement to allow 2 cameras to capture views from 4 perspectives without having to change camera positions • Absence of a display (optionally available as an external option) to reduce external distractions during therapy or diagnosis • Control system functions via serial interface and PC connection or magnetic keyboard

5.2 Equipment and Options

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

- 17″ (43 cm)
- 22″ (55 cm)
- 28″ (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 Bari-Mill
Speed 0-12.5 MPH (20 km/h)	■	■	■
Speed 0-15 MPH (24 km/h)	□	□	□
Incline 0-20%	□	□	**x**
Incline 0-25%	■	□	■
Display, DaMo	□	□	**x**
Display, WUS	■	□	■
Display, external version	□	□	□
Railing, both sides standard	■	**x**	**x**
Railing, Ortho	**x**	■	**x**
Railing, adjustable parallel	□	□	■
Reverse 0-6 MPH (10 km/h)	■	■	■
Wheel Chair Ramp	□	□	□
Special Color	□	□	□
Special Design	□	□	□
POLAR® Chest Strap Set	□	□	□
Protective Floor Mat	□	□	□

■ Standard / □ Option available / **x** Not available

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

5.3 Main Components

The main components are shown using the **PPS Bari-Mill model**:

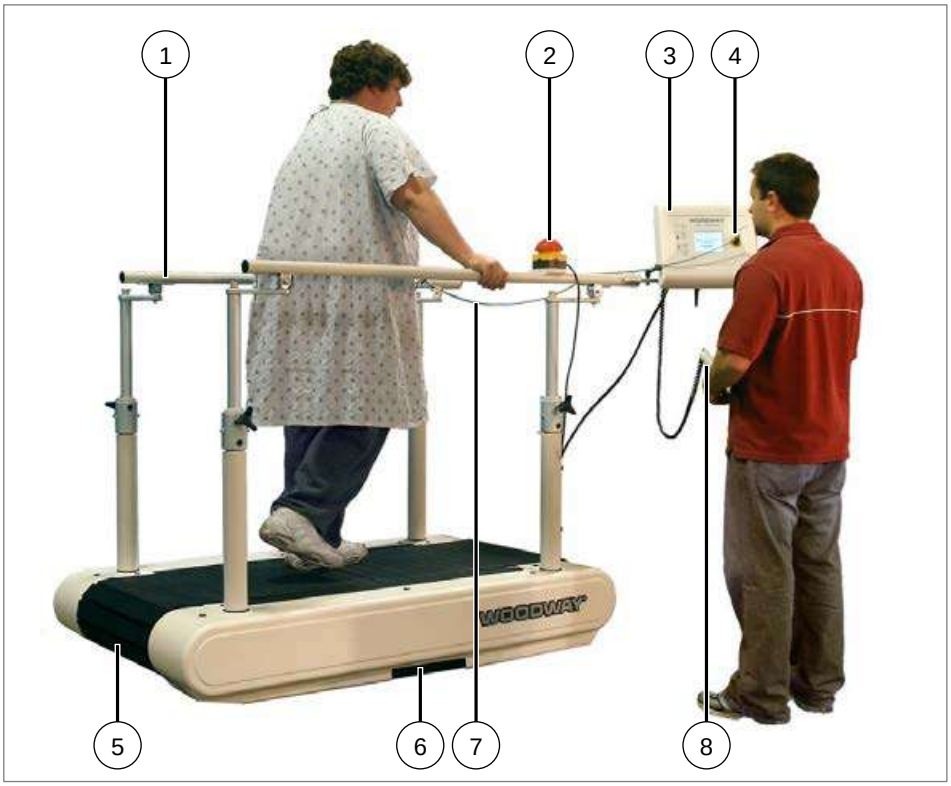


Fig. 11 Device components, PPS Bari-Mill model

1. Wooden parallel rails, adjustable
2. Emergency stop button, magnetic mount (PPS Med mounted to railing)
3. Display (WUS or DaMo)
4. Emergency stop magnet
5. Walking surface belt
6. Main connection box: fuses, power switch, RS-232 interface (model specific)
7. Emergency pull-cord (lanyard) with clip
8. Remote control (keypad with magnetic mount)

5.4 Description of Components

5.4.1 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 the gear wheel. The teeth prevent slipping 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 is comprised of a high-traction rubber compound. The combination makes it "the softest treadmill in the world".

The approx. ½" (1.2 cm) thick rubber surface significantly reduces the impact energy, thus making WOODWAY treadmills much easier on the joints than conventional treadmills.

5.4.2 Transport Systyem

The support system consists of 2 supporting/secondary rails, which are equipped with high-performance bearings. V-belt guides (6) on each rail ensure lateral stability. The rollers transfer the load to and from the motor and prevent the running belt from slipping through.

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 form-fitted drive pulleys on the front and back. The device can even be used without external drive, simply by pushing the treadmill to start the belt moving. The combination of running surface, secondary bearing rails, and drive pulleys gives this slat system unique characteristics:

- Low friction (energy saving)
- Low wear (approx. 150,000 mile [240,000 km] functional service life)
- 100% power transfer through the form-fitted, toothed V-belt system
- High service life (one running surface belt for one treadmill life)

5.4.3 Incline System

The PPS Series treadmills have lifting scissors with casters. This makes a maximum incline of 25% possible (incline capabilities depend on the model). The lifting system is driven by a linear DC motor which changes the angle of the scissors, thus changes the incline of the running belt and absorbs a large proportion of the weight of the treadmill and the body weight of the user during an incline run.

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

The end switches limit the distance covered by the lifting system and are constantly in use. The Data Monitor (DaMo) recognizes when the treadmill has triggered the 0% end switch.

5.4.4 Power Console

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

Fig. 12 Power console

1. Power cord
2. 2 x fuses (to change, see Section 0 Page 103)
3. Power switch

5.5 Control and Display Elements

5.5.1 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'' (12.5 cm) screen (diagonal) clearly displays current training information.

Fig. 13 WOODWAY User-System (WUS)

5.5.2 WOODWAY Data Monitor

The WOODWAY Data Monitor (DaMo) display offers an alternative with reduced functionality. Note that the DaMo display only offers metric measurements.

The following information is displayed with LEDs:

- Current speed (m/s or km/h)
- Training time (min:sec and hr:min)
- Current incline (%)
- Pulse rate (heart rate, BPM)
- Distance (m or km)
- Calories burned (kcal)
- Control mode (remote control / manual control / stop mode)

Fig. 14 WOODWAY Data Monitor (DaMo)

5.5.3 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 (therapist, sports physician, or other supervisor).

The external WOODWAY User-System is also available as a supplement to the PPS Ortho.

Fig. 15 WOODWAY User-System (WUS)

5.5.4 Keypad

Keypad for PPS Ortho (spiral wire for PPS Med or PPS Bari-Mill)

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

- Speed [+][-]
- Incline [↑][↓]
- Stop the treadmill

Fig. 16 WOODWAY keypad

5.6 Safety Equipment

The PPS Medical Series treadmills are equipped with different safety equipment depending on model and design. When needed, they serve to prevent dangerous situations and 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 on the display or on the emergency stop button on the railing
- Fall protection (safety harness with fall-stop, optional)
- Non-slip coating on side panels (allows emergency dismount by straddling)

⚠ WARNING

Dangerous Situations During Operation Can Cause Injury!

Conditions during use of the device that do not correspond to the normal function and require an immediate stop can cause injury. 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 emergency stopping of the device/drive
► Switching off the device (power button) and pulling the power cord from the socket
► Clarification and elimination of causes of dangerous situations only by the WOODWAY Customer Service
► Only restart the device after approval by WOODWAY Customer Service

5.6.1 Emergency Stop Button

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

Fig. 17 Emergency stop button, functions

1. Trigger the emergency stop function by pressing down the red mushroom
2. Release 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 button in any situation.

⚠ 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 on the runner's right side. Otherwise, the magnet cannot release correctly, limiting the function of the safety device.

- ► 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).

After pressing the emergency stop button, it initially remains locked and the treadmill cannot be used for 10 to 15 seconds. 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.

5.6.2 Emergency Stop Pull-Cord

The emergency stop switch is a magnetic contact switch, which is attached in the running direction on the display (WUS or DaMo) or on the railing (Ortho). The circuit is closed through a magnet. As soon as the magnet tears off the contact-free surface, an interruption of the 230 VAC supply will initiate an emergency stop.

The magnet is secured to the runner's clothing by a clip on a lanyard/pull-cord. It should be fixed to a tight piece of clothing (e.g. waistband).

The safety magnet can also be used to immobilize the treadmill and prevent a third party from using the device. To prevent the use of the treadmill, for example when not supervised, the safety magnet with pull-cord can be stored in a safe place and the treadmill cannot be put into operation.

⚠ 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 attach clip to tight clothing before starting the workout.
- ► Adjust the length of the pull-cord with rope stopper to the shortest possible setting, while ensuring that movement is still unrestricted.

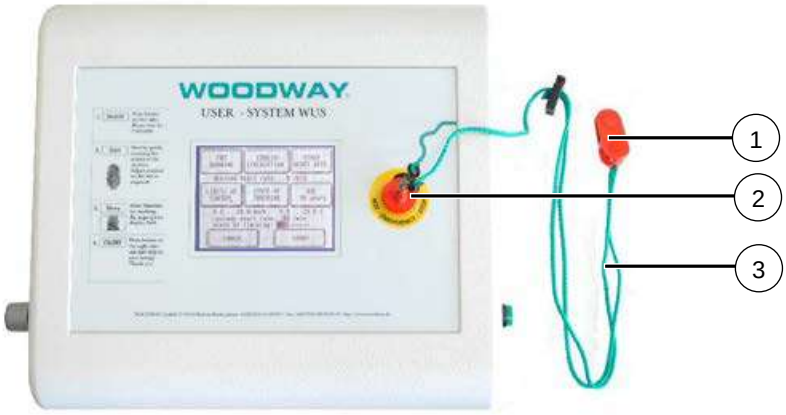


Fig. 18 Emergency stop magnet, WUS display

1. Clothing clip
2. Emergency stop magnet
3. Pull-cord, adjustable length

Fig. 19 Emergency stop magnet, railing emergency stop button

Depending on the model, the magnet is either fixed in the position indicated on the display (Fig. 18 Pos. 2), or on the railing emergency stop button (Fig. 19).

The pull-cord is not 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 disconnected from the power and an emergency stop is initiated.

5.6.3 Chest Harness and 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 pull-cord clip must not be connected to the runner. The magnet must still be attached to the indicated point so that the treadmill is operational.

5.6.4 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, as falls are associated with a potentially increased risk of injury.

It also increases safety when running on the wide running surface (≥ 28″ [70 cm]). For most users, a controlled dismount by straddling and standing securely on the side panels is not possible on these running surfaces.

There is an increased risk of falling (e.g. during performance diagnostics, 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.

5.6.5 Belt Drive Current Limiting

The PPS Series treadmills are equipped with a current limit control function which reduces power consumption and increases safety. The main safety feature is the current limiter after time overflow.

If the running belt is blocked for more than 10 seconds, the motor current will be reduced to 6A. This is always recommended in case something gets caught in the belt, as it stops the belt automatically. Once the current limit control has been triggered, the motor torque is reduced to a minimum to prevent damage to the motor and electric system.

5.6.6 Dismounting in Emergency Situations

WOODWAY PPS Series treadmills have a 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 onto and straddle the side panels.
- 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 chest harness/waist strap 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.

⚠ WARNING

Components Must Not Interfere With Use of Device!

Adjustment and safety components (e.g. emergency stop pull-cord, video railing, connected devices) must be secured properly so as not to interfere with the proper use and movement of the treadmill and user.

6 Setup and Installation

6.1 General

Installation is the initial intended use of the device (see Section 1.5 Page 8). Ensure that the conditions applicable to basic safety and health requirements are met.

Read these operating instructions completely before installing.

Before installing the device, operational and functional safety are to be tested. This includes correct installation, electrical connection, and operator training.

In most cases, your WOODWAY treadmill will be delivered completely assembled.

ATTENTION

Installing after Storage or Transport

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

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

6.2 Grounding Information

This treadmill must be properly grounded. If it should malfunction or break down, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. The product is equipped with a grounded power cord.

⚠ WARNING

Connect Treadmill to Properly Grounded Outlet Only!

The treadmill plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local and national codes and ordinances.

► The supplied plug should not be manipulated in any way.
► If necessary, a qualified electrician may fit a suitable mains socket.
► Adapters may not be used because of the risk of electric shock.

6.3 Installation

It is recommended that transport, installation, and assembly of the treadmill are 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 an additional base plate/floorboard.

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 any other heat source.
- Due to the moving parts on the underside, the device must not be placed directly on thick or high-pile carpeting. In this case, a mat should be placed under the device. This will prevent lint from entering into the treadmill and at the same time reduce carpet wear. WOODWAY has appropriate mats available. For more information, call WOODWAY Customer Service.
- 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.

6.3.1 Safe Fall Area

When using the treadmill, especially fast movements (fast running, etc.) increase the risk of falling. For this reason, a safe fall area of at least 3 ft. x 6.5 ft. (1 x 2 m) must be maintained behind the treadmill (see Fig. 20).

No obstacles may be located in this safe fall area. Objects (e.g. furniture, plants, training materials, ladders, etc.) may not be placed in this area, and sloping ceilings may not extend into the safety area. For treadmills with the reverse option, the safety area must also be provided in front of the treadmill.

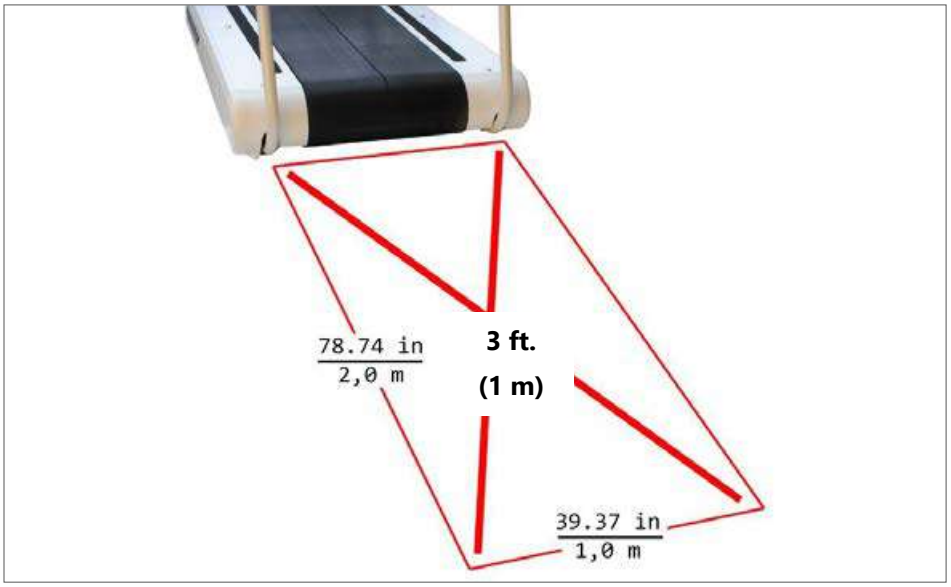


Fig. 20 Safe fall area behind treadmill

6.3.2 Adjust Leveling Feet

After positioning the device at the installation site, adjust the horizontal height using a level. The height of the 4 leveling feet can be adjusted.

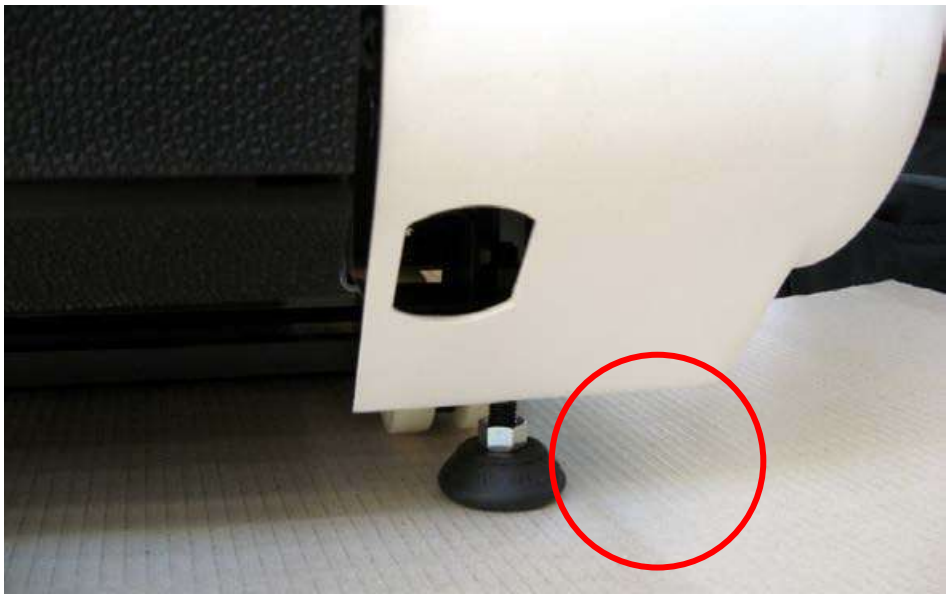


Fig. 21 Adjusting leveling feet

1. Loosen the counter nut with a ¾" (19 mm) open-end wrench.
2. Turn the foot up or down until the desired height has been reached
3. Retighten the counter nut

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

The treadmill frame can deform slightly during transportation. This can be seen on an even and level surface if 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.

6.4 Completion of Installation

Prior to starting operation, installation 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.

6.4.1 Checklist for Before Starting Operation

- Check sturdiness of the device
- Check electrical connections
- Protect all live components against touch
- Ensure that safety equipment is intact and functional
- Check emergency stop switch and all control functions
- Perform a malfunction-free trial run
- Ensure all operators have received complete and proper instruction

6.5 Replacing Parts

NOTE

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

⚠ 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.

6.5.1 Side Covers Removal

Disconnect the treadmill from the power supply and remove the 2 large screws from the outer cover using a Phillips head screwdriver. The covers can then be lifted up from the frame of the treadmill.

6.5.2 Replacement

Position the 2 outer coverings on both sides of the frame. Then re-tighten the large screws.

- Check whether the treadmill scrapes on the covering panels by moving the mat backwards and forwards.
- If the treadmill scrapes, loosen the screws and move the covers away from the mat.

6.5.3 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.

6.5.4 Remove Handrails

Side Panels

Loosen the screws on both side panels (3 per side) with a Phillips screwdriver.

On PPS Bari-Mill models, the cutout for the railing is covered with an additional panel. Loosen the fixing screws on the panels (2 per side). See the following figure for the placement of side panel fixing screws and note that there are fixing screws on both sides of the device.

Fig. 22 Side panel fixing screws

1. PPS Bari-Mill 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.

To remove the metal cover (shield) loosen the 4 fixing screws.

Fig. 23 Remove electronics shielding panel

Disconnect Cables

Once the metal cover has been removed, disconnect cables from display cable, emergency stop cable, and ground.

- Remove the cable ties that secure the wiring harness to the frame.
- Ensure that the wires are not damaged.
- Loosen the nut of the grounded star point.

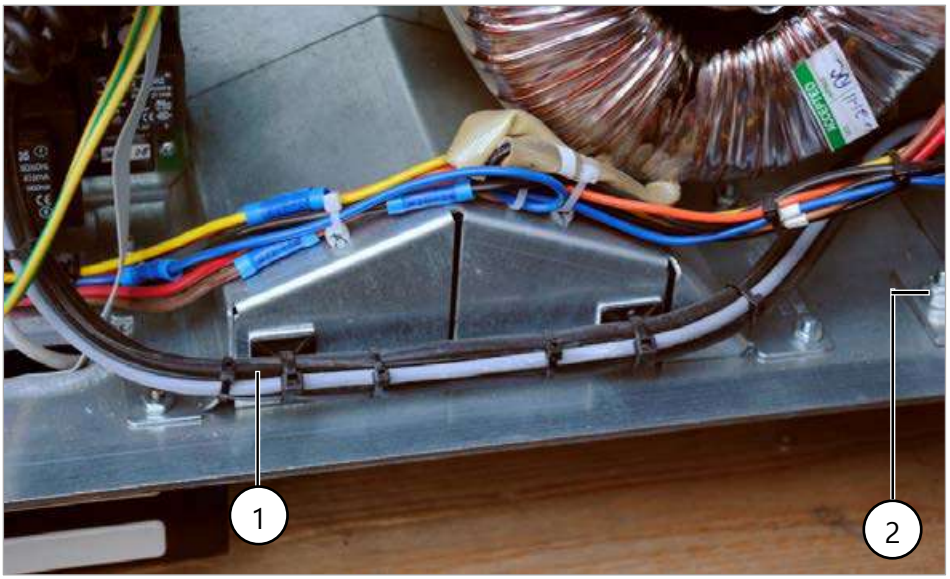


Fig. 24 Fixing wiring harness to frame

1. Cable ties
2. Grounded star point nut

- Remove both 25-pin D-SUB plugs, each fixed with 2 small Phillips screws.

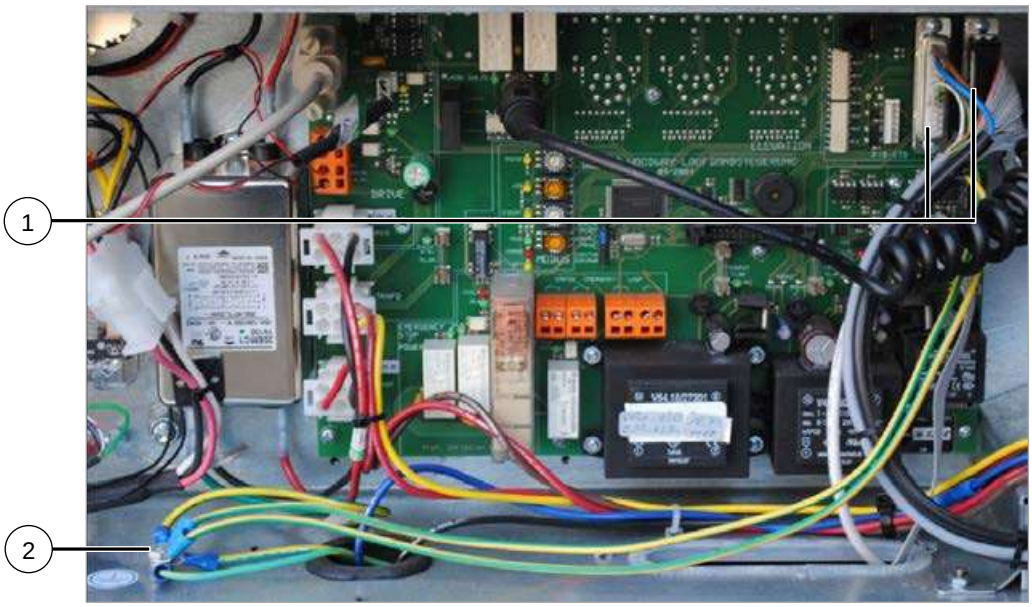


Fig. 25 Treadmill controls (WLS)

1. 25-pin D-SUB plugs, x 2
2. Grounding wires (should already have been disconnected)

- Carefully pull the wiring harness through the hole below the toroidal transformer.

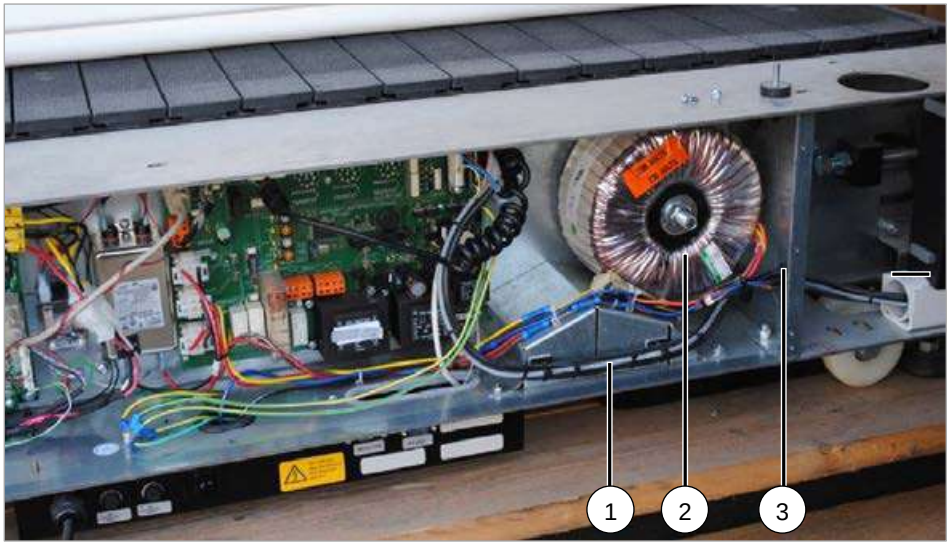


Fig. 26 Wiring harness layout

1. Wiring harness
2. Toroidal transformer
3. Hole for wiring harness

Remove the railing mount and the railing.

Removing the Railing Mount

PPS Med or PPS Ortho

- Loosen the upper fixing screw (front and rear) with a 13/64" (5 mm) Allen wrench.
- Remove the fixing screw at the bottom with a ½" (13 mm) box wrench. The screws engage small metal plates (inserted into the railing stabilizer).
- After the mounts are released on both sides of the railing, spread the railing slightly to remove the mount from the treadmill.

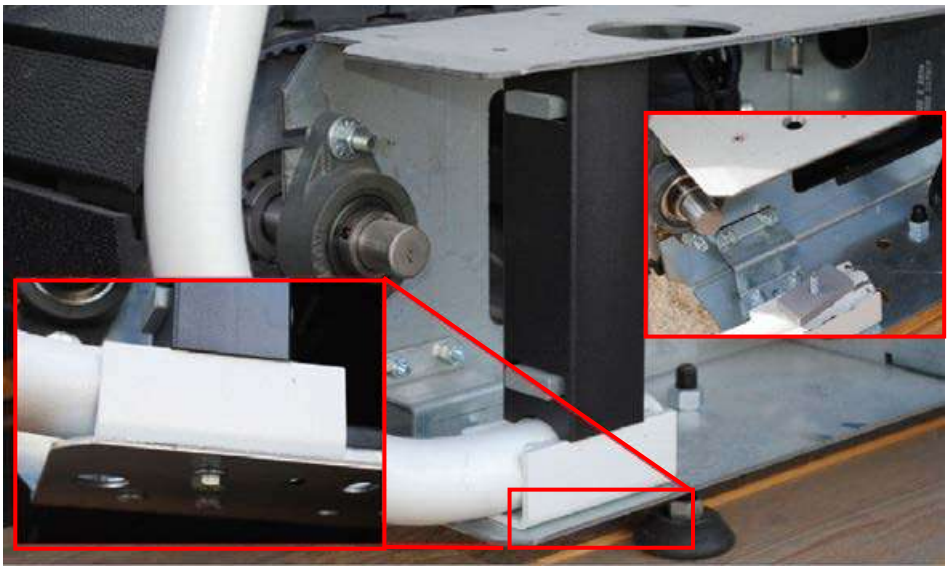


Fig. 27 Fixing screws in railing mount, PPS Ortho/PPS Med

PPS Bari-Mill

- Loosen the base frame mount using a 43/64" (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.

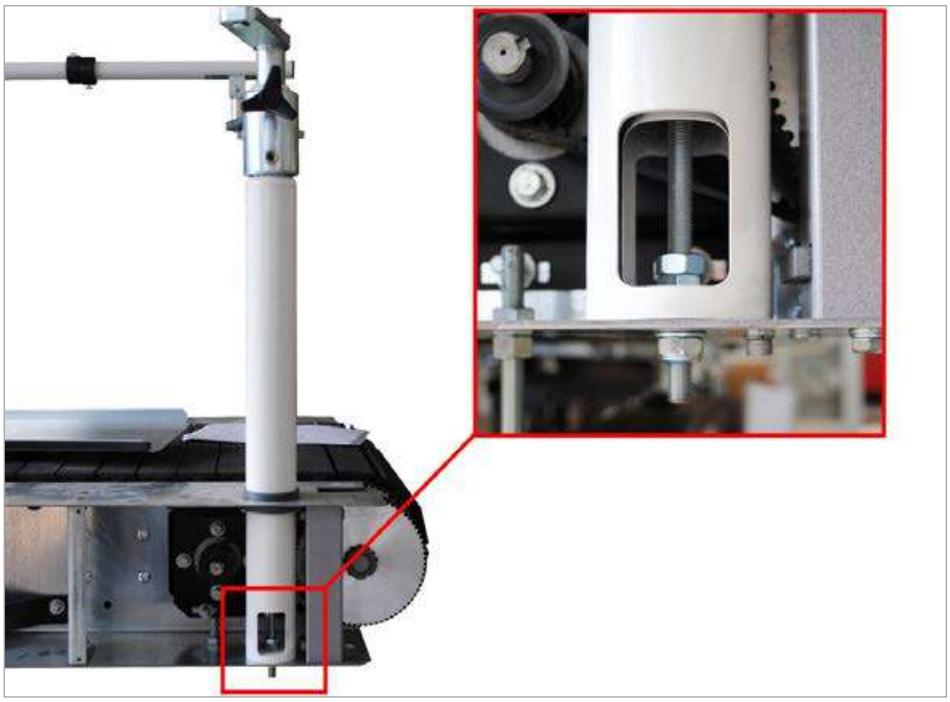


Fig. 28 Fixing screws in railing mount, PPS Bari-Mill

Mounting the Railing

1. Mounting of the railing is carried out in the opposite order.
2. The following points must be checked during mounting:
   - Are all cables in good condition?
   - Are all bolts tight?
   - Have any other plugs been accidentally pulled out?
   - Are all plugs properly inserted and screwed tight?
   - 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 1/8" to 3/16" (3 to 5 mm). Sizes greater than 5 mm are not allowed for safety reasons. Let the treadmill run at about 0.4 MPH (0.5 km/h) and check the clearances for at least one full revolution. The walking surface belt play must not exceed 1/16" (2mm).
4. Perform a function test. Special attention must be paid to the safety equipment.

6.5.5 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 during disassembly.

When transporting the railings, the cables must be adequately protected. Now the treadmill can be transported vertically. Always follow the safety instructions in this section exactly.

6.5.6 Manual Display

Required Tools

- Cross-recess wrench, 10 mm
- Ring forked wrench, 10 mm

Removal

If the manual display on the treadmill is damaged and needs to be replaced, remove the display by the following steps:

1. Unscrew the fastening screws on the back of the plastic housing until the front section can be removed and lift the entire unit out of the housing.
2. Disconnect the BUS cable by pulling the plug only (NEVER pull the cable).

Replacement

Once the manual display has been removed, authorized replacement parts can be installed as follows:

1. Re-connect the cable and plug.
2. Carefully insert the complete display, taking care not to crush any cables.
3. Insert the small screws through the back of the housing.
4. Switch the power supply ON and check that the treadmill works properly.

6.5.7 Drive Belt

Required Tools

- 2 x Ring forked wrench, #17
- Socket nut, 17/10
- Ratchet

Removal

If the treadmill drive belt needs to be replaced, remove the drive belt by the following steps:

1. Disconnect the treadmill from the power supply.
2. Mark the position of the right-hand bearing support. This bearing holds the front shaft on the frame.
3. Measure the distance between the upper and lower part of the treadmill belt (in the middle). This measurement is made exactly between the inner edges of the belt teeth. Keep the measurement for future reference.
4. Unscrew the 2 bearing support screws, but DO NOT REMOVE.
5. Remove the drive belt from the drive motor.
6. Remove the outer bearing screw and pull the drive belt out from under the bearing support.
7. Replace the outer bearing screw and nut. The nut must sit firmly on the screw.
8. Remove the inner bearing screw and pull the drive belt out from under the bearing support (alternatively, cut the old belt).
9. Place the new drive belt under the bearing support (with teeth upwards).

Replacement

Once the drive belt has been removed, authorized replacement belts can be installed as follows:

1. Install the inner bearing block.
2. Remove the outer bearing block and pull drive belt out from under the block.
3. Position the drive belt in the front shaft pulley, checking that the teeth engage correctly. Replace the screw and all other parts.
4. Using a rod or C-clamp, pull the front shaft to tighten the running belt. Measure the clearance between the running surfaces and adjust the value measured and noted previously. This should be approx. 8″ (20.5 cm).
5. Tighten the bearing block screws to approx. 50 ft-lbs.
6. Check that the drive belt runs correctly in both pulleys and can be moved easily in the middle by a width of 1 - 2 fingers.
7. Move the running surface by hand and ensure that it runs smoothly and is not blocked anywhere.
8. Turn the treadmill ON and let it run at various speeds. If any unusual vibrations or noises occur, switch the treadmill OFF and check the dimensions. If noises and/or vibrations persist, contact the WOODWAY Service Center or your local representative.
9. Replace the outer covers.

6.5.8 Individual Slats

Required Tools

- T20 TORX element, 10”
- And/or electric screwdriver

Removal

If individual slats on the running belt need to be replaced, remove the slat(s) by the following steps:

1. Disconnect the treadmill from the power supply and remove the side cover.
2. Move the running surface until the slat to be replaced is at the front underneath the treadmill. The screws are most easily accessible from this position.
3. Remove the two screws and plates on either side.
4. Then remove the slat crosswise off the belt.

⚠ WARNING

Use New Parts When Replacing Slats!

When replacing the slats, it is vital that only new parts are used. Re-using old screws can cause the new slat to come loose from the running surface which can cause severe injury.

Replacement

Once the individual slat has been removed, authorized replacement slats can be installed as follows:

1. Place the new slat on the running surface crosswise.
2. Screw in 2 NEW screws on either side. (*Note: All 4 screws must be positioned in the slat before tightening individual screws.)*
3. Re-mount the side covers.

6.5.9 Bearing Guide

Required Tools

- Socket wrench with 3" extension, #17
- Wrench, ½"
- Ring fork wrench, #17

Removal

If the bearing guide is damaged and needs to be replaced, remove the guide by the following steps:

1. Disconnect the treadmill from the power source.
2. Remove the side covers (see Section 6.5.1 Page 46).
3. Remove the bearing guide fastening screws.
4. Unscrew the threaded pins from the bearing sleeve.
5. Using an extractor device, pull the bearing guide from the side of the unit.

Replacement

Once the bearing guide has been removed, an authorized replacement guide can be installed as follows:

1. Replace the bearing guide in the reverse order of removal.
2. Tighten the screws to approx. 54 ft-lbs. (screw the studs tight).

6.5.10 Belt Roller Guide and Track Rollers

Required Tools

- Socket wrench with 3" extension, #13

Removal

Ring fork wrench, #13

If the belt roller guide or track rollers are damaged and need to be replaced, remove them by the following steps:

1. Disconnect the treadmill from the power source and remove the side cover.
2. Remove the roller unit, screw, and nut.

Replacement

Once the guide or rollers have been removed, authorized replacement parts can be installed as follows:

1. Replace the new guide or roller in the reverse order of removal. It is acceptable to use the old screw and nut.
2. Tighten the screw and nut to 18.8 ft-lbs.

6.5.11 End Switches

Removal

If the end switches are damaged and need to be replaced, remove them by the following steps:

1. Disconnect the treadmill from the power supply then remove the right-hand side cover (in running direction).

2. Disconnect the cable from the old end switch unit (switch to be replaced).
3. Remove the bracket and end switch.

Replacement

Once the bracket and end switch have been removed, an authorized replacement switch can be installed as follows:

1. Install the new end switch unit.
2. Replace the side cover.

6.5.12 Incline Motor

Required Tools

- Socket wrench, 10 mm

Removal

If the incline motor is damaged or faulty and needs to be replaced, remove the motor by the following steps:

1. Disconnect the treadmill from the power supply and remove the side cover (see Section 6.5.1 Page 46).
2. Loosen the motor cable and disconnect it from the control unit.
3. Unscrew the 4 incline motor attachment screws and remove the motor from the unit.
4. Remove the motor screws and pull the motor from the frame of the treadmill.

Replacement

Once the motor has been removed, an authorized replacement motor can be installed as follows:

1. Replace the new motor in the reverse order of removal.
2. Make sure to tighten the screws to 12.3 ft-lbs.

7 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.

► Ensure that the user does not step on the rounded part of the running surface when mounting and dismounting.

7.1 Area of Application for Endurance Training

Medical PPS Series slat belt treadmills allow speeds of up to 15 MPH (24 km/h), allowing users to reach their personal limits.

Using Fall Protection

For intense sprints of about 12.5 MPH (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.

⚠ WARNING

Risk of Injury Through Increased Risk of Falling!

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

► We strongly recommend the use of a fall protection system, support belt, or 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.

Consult a Doctor

Approval from a medical professional is required before starting an intensive training program, especially for users who are over 40, have heart disease, are overweight, or are out of shape. It is advisable to develop an overall fitness evaluation/wellness program. Avoid excessive exercise and overload.

Warm-Up and Cool-Down

Warm up sufficiently before each training session to avoid injury. Carry out stretching exercises before and after exercise to prevent injury or soreness.

Training Frequency

At the beginning of training, allow yourself enough time to get into shape. After a break from training, you should also allow sufficient time to rebuild physical condition.

The priority is regularity and persistence of training- not intensity. Fitness experts recommend in the beginning training 3 - 4 times per week within your target heart rate for at least 20 minutes per workout. Your primary objective should be, step-by-step, to reach a level of fitness with which you can easily keep your heart rate in the target range for 50 to 60 minutes, 4 - 5 times per week.

Running Shoes

In order to prevent sore feet and sore muscles caused by incorrect footwear, the use of high quality running or jogging shoes is recommended. Ensure there is adequate heel and arch support.

7.2 Calculating Maximum Heart Rate

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 4 to determine the beats per minute (BPM).

Maximum Heart Rate

To determine your maximum heart rate, subtract your age from the number 220 *[general formula from the American Heart Association (AHA) and the American College of Sports Medicine (ACSM)]*. Your actual max. heart rate is determined by a medically-administered stress test. The American Heart Association recommends undergoing a stress test if you have a history of heart disease or if you are over 40 years old and starting a training program.

During training it is recommended to not exceed a value of 85% of your maximum heart rate. WOODWAY programs are designed so that the heart rate remains within the target range. Your target heart rate should be between 60 and 75% of your max. heart rate. If you find that your heart rate is above 75%, you are probably running too fast. Reduce your speed or briefly stop training to bring your heart rate back to the target range.

Use the following chart to determine your heart rate range.

Age	Maximum heart rate [BPM*]	60% of the maximum heart rate [BPM]	75% of the maximum heart rate [BPM]	85% of the maximum heart rate [BPM]
20	200	120	150	170
25	195	120	150	160
30	190	110	140	160
35	185	110	130	150
40	180	100	130	150
45	175	100	130	140
50	170	100	120	140
55	165	90	120	130
60	160	90	120	130
65	155	90	110	130
70	150	90	110	120
75	145	80	100	120

**** BPM**: Beats per minute, source: American College of Sports Medicine*

7.3 Application Options for Children

Due to their design and operation, PPS Series slat belt treadmills are only for limited use by children. An exception can be made using special accessories and in compliance with strict safety regulations, especially within the scope of movement therapy in rehabilitation.

⚠ WARNING

Special Hazards Associated with Treadmill Use by Children!

There is an increased risk of injury through the use of treadmills by children. The following special instructions apply to 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 sports therapist.

7.4 Before Each Use

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

- Running surface belt (dirt and damage to slats)
- Mechanical function of the bar railing (clamping screw must be hand-tight)
- Emergency stop magnet with pull-cord and clip attachment (damage)
- Fall protection equipment e.g. ropes, carabiners, waist belt, etc. (wear and functionality)

⚠ WARNING

Danger of Being Pulled into Moving Parts!

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

- ► Remove jewelry and tie up long hair before using the device.
- ► Ensure shoe laces do not extend beyond soles of running shoes.

7.5 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 (0% incline). 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.

To turn the device on, switch the power switch on the side of device frame (on the right) from position "0" to "I". The treadmill is now in STAND-BY mode.

- Switching the Data Monitor (DaMo) on: Press the green ON (Symbol: ⏻) switch, after 5-6 seconds the display will switch on.
- 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.
- Switching PPS Ortho on: Press the green ON button on the emergency stop mushroom

After this the treadmill will run through a short initializing phase. As soon as the display indicator light turns green (DaMo) or the START button appears in the display (WUS), the treadmill is ready to be used.

When training is finished, switch the treadmill off again via the switch on the display (switch on the emergency stop mushroom, 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 (e.g. by pressing the STOP button, emergency stop, or by power failure) when set at an incline, the weight of the user (gravity) may cause the running surface to accelerate.

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

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

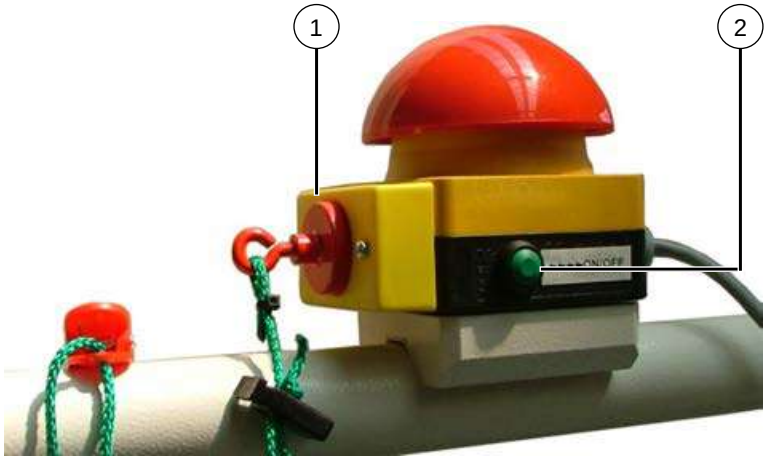


Fig. 29 ON switch, PPS Ortho

1. Emergency stop switch with magnet and pull-cord
2. ON switch

ATTENTION

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

- ► Never step on the running surface during the initialization phase.
- ► Do not leave the device until it switches back into STAND-BY mode.

NEVER LEAVE THE TREADMILL UNATTENDED WHILE IT IS SWITCHED ON.

7.6 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. 30 Keypad with magnetic mount

Switch device on as described in Section 7.5. 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.

7.6.1 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.

[+] [-] Buttons

With these buttons, the user can increase or decrease the 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 and release the button at the desired speed.

[↑] [↓] Buttons

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 gradual braking of the running surface speed is comfortable, so the user still travels a few meters before the unit stops (depends on the previous speed). If the running surface belt is stopped, the treadmill goes to the STOP mode. The 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.

7.7 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 with compatible measuring device)
- Treadmill control mode (remote control / manual mode / stop mode)

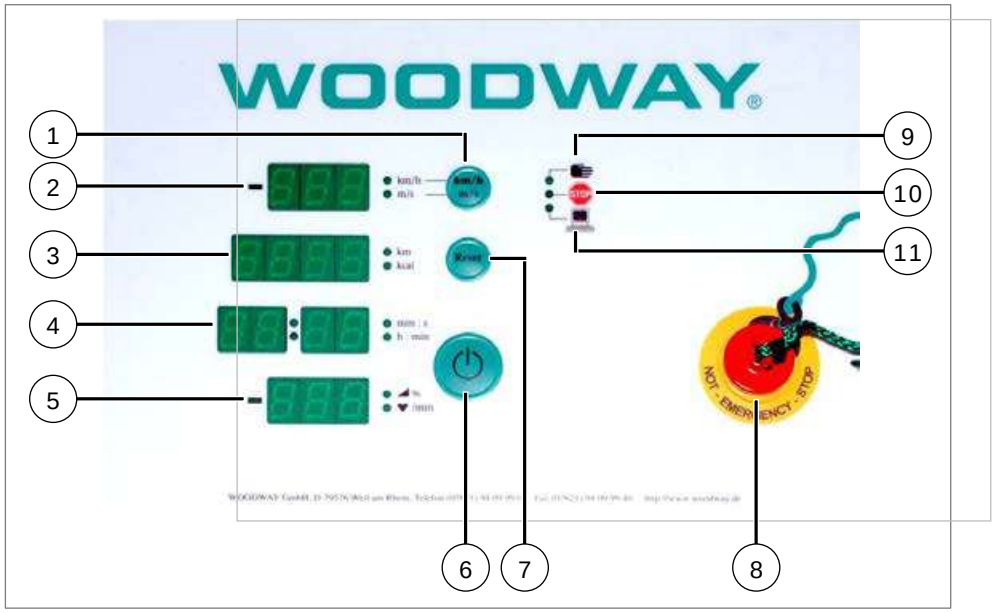


Fig. 31 Data monitor (DaMo) control panel

1. Button to change the unit of measurement
2. Speed display
3. Distance/calories display (alternating)
4. Training time display
5. Display incline/pulse (alternating)
6. STAND-BY button
7. RESET button
8. Emergency stop pull-cord magnetic switch
9. Indicator light "manual control via railing keypad"
10. Indicator light "treadmill in stop mode"
11. Indicator light "external operation active"

The LEDs to the right of the display (Pos. 9 to 11) indicate the unit of measurement of the displayed value. It is also possible to choose between parameters that are displayed on the same screen. The data monitor is a display device without the ability to control the treadmill.

Speed

The 3-digit display (Pos. 2), displays the current speed of the treadmill in km/h or m/s and is adjusted using a button next to the display. The sign in front of the displayed value can be used to indicate a reverse running belt (if treadmill offers the function).

Distance and Calories Burned

In the display (Pos. 3) the distance 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. *Calories are calculated using the ACSM formula, ([Workout METs] * 3.5 * [User's weight in kg.] / 200). If no weight is entered, the calories are calculated based on a standard weight of 150 lbs. (70 kg).*

Training Duration

The training duration (Pos. 4) is reset with each restart of the treadmill. The display shows the time elapsed since the start of the treadmill in 00:00 format. 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. 5) are also indicated with the same display. A symbol indicates the incline as well as the speed. A negative 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 to 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. If the slope remains unchanged, the display will switch to the current pulse frequency of the runner after this period of 5 seconds. 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. 9 to 11).

The LEDs have the following meanings:

- Pos. 9: The manual control via the keypad on the railing is active.
- Pos. 10: The treadmill is being used in 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. 11: The remote control (running/pulse program) is started via a PC or other peripheral device.

Data Monitor (DaMo) Control Unit

The data monitor has 3 buttons (Pos. 1, 6, 7) and an emergency stop magnetic switch (Pos. 8).

The button in Pos. 1 is used to select the unit of measurement.

With the button in Pos. 7, all indicators are reset after pressing the RESET button.

With the button in 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. 8) 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.

Note: After an emergency stop, the treadmill must be turned OFF and then ON again for a restart.

7.8 Operation with WOODWAY User-System (WUS)

The WOODWAY User-System (WUS) is used to display the current parameters and control modes and to operate the treadmill. In addition, 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.

System Control

The system allows for complex control sequences and the carrying out of safety and monitoring functions together with pulse measurement. The hardware consists of a micro-controller system based on SAB80C537 with peripheral switching to the motor control, sensory components, and control interfaces.

Control Units

The following control units can be connected as options for parallel operation with the treadmill:

- Function buttons (FASTER/SLOWER/UP/DOWN/EMERGENCY STOP)
- LED display for speed, incline, time, distance, pulse
- WUS (LCD touch display with menu guide and access to complex functions)
- Chip card connection component in WUS
- PC/ECG equipment (or similar) via serial interface (implementing various protocols)

Control Modes

Once the system has been switched on, the control is in the initial status. Here, it can be switched to 4 different control modes:

- Manual mode (WOODWAY standard protocol)
- External protocol (e.g. ECG appliance)
- Program control
- Pulse control (interactive)

Each of these control modes has a STOP and a RUN status.

Transition between the control modes can be triggered by RS-232 commands or from the railing panel. The WOODWAY standard protocol allows for remote controlled manual mode for direct specification of speed and incline, as well as for a query to display all measured values and some parameters (see command list).

Access to the more complex control procedures of the program and pulse controls or internal treadmill parameters is not possible.

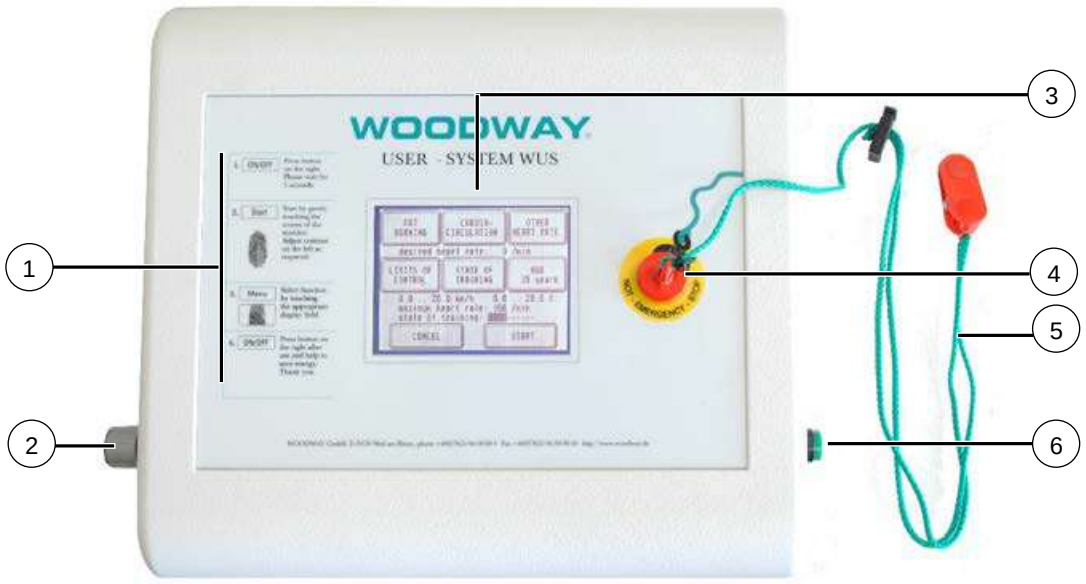


Fig. 32 WUS control panel

1. Quick start guide
2. Contrast control for touch screen
3. Touch screen
4. Emergency stop pull-cord magnetic switch
5. Emergency stop pull-cord
6. ON/STAND-BY button

The touch screen 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 display fields. After switching it on, the display goes through a short initialization phase.

Fig. 33 WUS initialization phase

By pressing the green button on the right side of the display (Pos. 6), 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.

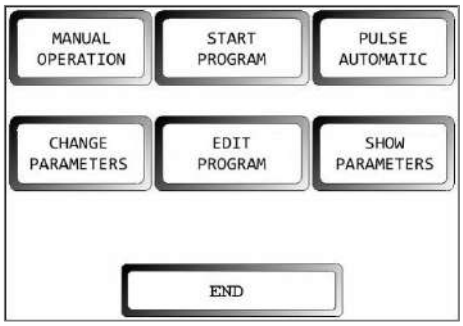


Fig. 34 WUS main menu

7.8.1 Manual Operation

For manual input of speed and incline press the MANUAL OPERATION button at the top left.

In MANUAL mode the following values appear in the display:

- Speed: km/h, MPH, or m/s
- Incline: %
- Distance: km, miles, or m
- Training duration: hh:mm:ss
- Heart rate, indicated with a heart symbol: BPM (beats per minute)
- Power/energy: watts, kcal

Speed

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

To stop, press and hold the [-] button.

Incline

The incline adjustment is carried out in the same way as the speed adjustment. The adjustment is made with the [↑] button to go uphill and the [↓] button to lower the device again.

Stop

To stop the device, press the lower part of the screen. How quickly it stops depends on how fast the running surface was moving. The faster the running surface is moving, the longer it takes to stop.

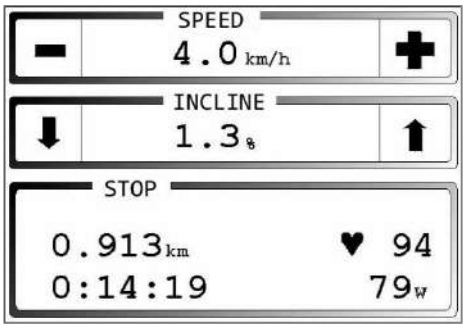


Fig. 35 WUS manual operation

Regardless of the current control status, it is always possible to query current measured values for SPEED, INCLINE, TIME, DISTANCE, and PULSE. WOODWAY standard protocol commands are only accepted when they are permitted in the current control mode. The only command which is also valid in the program control status, external control status, and pulse control status is the RS-232 command "STOP treadmill".

Initial Status

In the initial status, SPEED and INCLINE are both set to zero. Current time and distance are maintained (set to zero when restarting).

To return to initial status of WOODWAY standard protocol from all RUN modes:

- Enter command "treadmill STOP".
- Repeat command once treadmill has stopped (STOP status, current speed = 0)

To return to initial status of WOODWAY standard protocol from STOP mode:

- In STOP mode, press the STOP button.
- Alternately, enter RS-232 command "STOP treadmill" to return to initial status.

STOP Mode

The manual STOP mode can be reached from the RUN mode in one of the following ways:

- Press the STOP button.
- Enter the RS-232 "STOP treadmill" command (interruption).

No speed commands are accepted in STOP mode. Current time, incline, and distance are maintained. Restart is only possible once the treadmill has come to a standstill (press the [+] button or enter the RS-232 command "release treadmill" and then enter speed value).

To return to initial status from STOP mode, press the STOP button or enter RS-232 command "STOP treadmill".

RUN Mode

To reach the manual RUN mode from either initial status or STOP mode, enter RS-232 command "release treadmill".

The treadmill recognizes 4 different possibilities for changing speed (separate allocated acceleration rates).

- [+][-] buttons (buttons or RS-232 command "set buttons!")
- Speed setting command (RS-232 command "set speed!")
- Normal stop (STOP button or RS-232 command "STOP treadmill")
- Fast stop (only by FAST STOP button) with max. acceleration

The max., buttons, and RS-232 acceleration can be queried and the RS-232 acceleration can be set in the WOODWAY standard protocol (manual mode).

TIME-OUT Mode

TIME-OUT Mode can be activated to monitor correct RS-232 communication. This is useful when ongoing cyclical data exchange takes place.

- Mode offers additional safety should PC program fail or if extension lead is disconnected.
- If a correct and complete message is not received within a set time, the speed is set to zero and the treadmill is stopped (effective STOP button).
- TIME-OUT can be changed via RS-232.
- Functionality is initially inactive in WOODWAY standard protocol.
- Mode can be activated at any time by entering a time greater than zero seconds (0.1 to 9.9 seconds).
- Mode can be deactivated again by setting the time to zero.

7.8.2 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" (see Fig. 34) button:

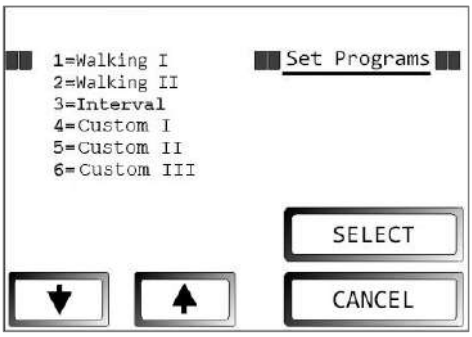


Fig. 36 WUS program selection

Arrow Buttons

These buttons move 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

The SELECT button loads the desired/indicated program; a new screen appears with the program structure.

CANCEL

Pressing the CANCEL button will return you to the main menu.

After the program starts, the following information is displayed on the screen:

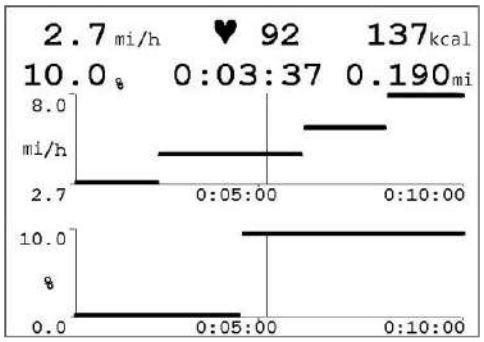


Fig. 37 WUS program information

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

- Speed: km/h, MPH, or m/s
- Incline: %
- Distance: km, miles, or m
- Training duration: hh:mm:ss
- Heart rate: beats per minute (BPM)

If a compatible heart rate monitoring device 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:

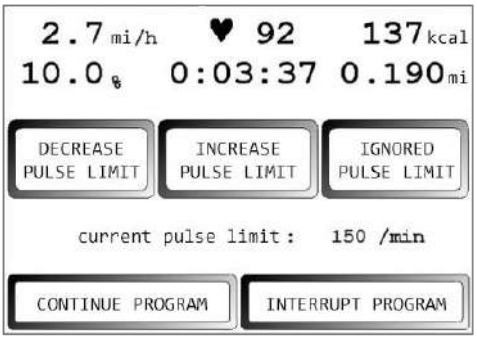


Fig. 38 WUS program interruption

CONTINUE PROGRAM

Program continues exactly where it was interrupted.

CANCEL PROGRAM

Program ends and user returns to main menu.

DEC/INC PULSE LIMIT

Enter new limit via touch screen.

IGNORE PULSE LIMIT

Program continues.

7.8.3 Edit Program

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

SELECT PROGRAM

Go to the treadmill program menu to select new program.

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:

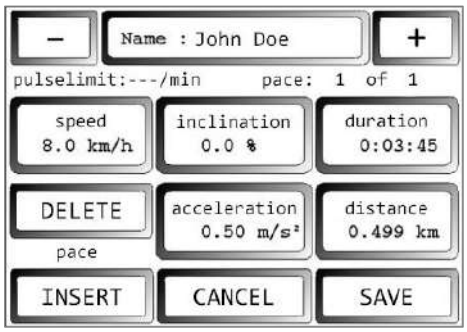


Fig. 39 WUS edit program

[+] [-] Buttons

These buttons change the respective program steps.

SPEED

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

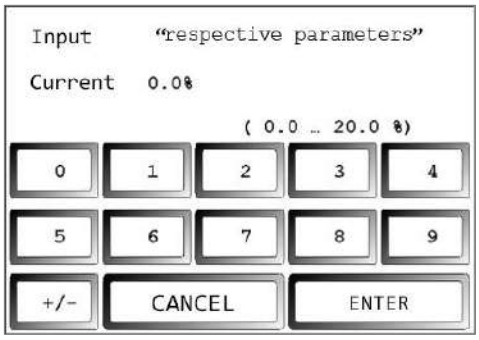


Fig. 40 WUS change program parameters

CONFIRM

Accept the entered values.

CANCEL

Return to previous menu.

After confirmation, the edit program menu appears (see Fig. 39). Here program editing is continued or ended.

SAVE

Save the edited program.

DELETE

Delete the displayed program.

INSERT

Insert a new program step.

7.8.4 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 (see Fig. 34). 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 into the following screen:

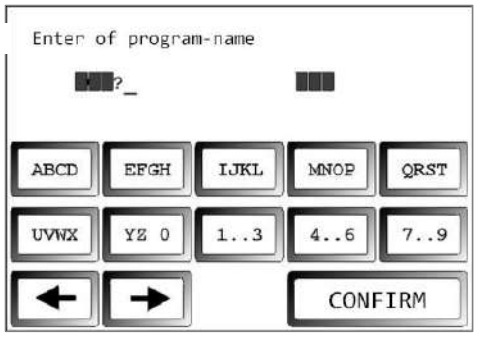


Fig. 41 WUS create program

After entering all data, press the SAVE button. In the screen that follows, 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 be selected from the list of treadmill programs and started.

EDIT NAME

Edit the program name.

PULSE LIMIT

Enter a pulse limit for the program. See the following menu button: PULSE CONTROL

CANCEL

Return to previous menu.

7.8.5 Pulse Control

The treadmill is equipped with a pulse control function. This function enables the treadmill operation to be pulse controlled. After selecting a program, the following screen appears:

⚠ WARNING

Danger of Injury Through Improper Application!

The pulse measurement device 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.

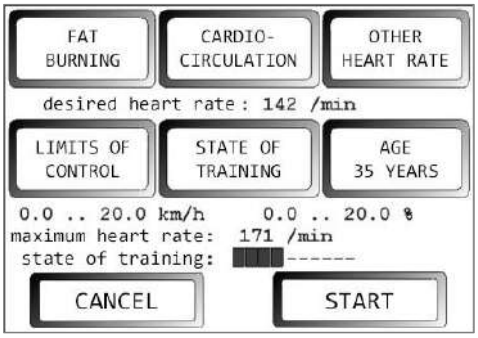


Fig. 42 WUS pulse control

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 same manner as when editing a program.

Fat Burning

This program suggests a pulse limit for a fat burning workout based on the entered age and physical condition.

Cardio-Circulation

This program suggests a pulse limit for a cardiovascular training workout based on the entered age and physical condition.

Edit Target Pulse

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. For example, with limit control 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.

7.8.6 Edit/Show Parameters

EDIT PARAMETERS

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

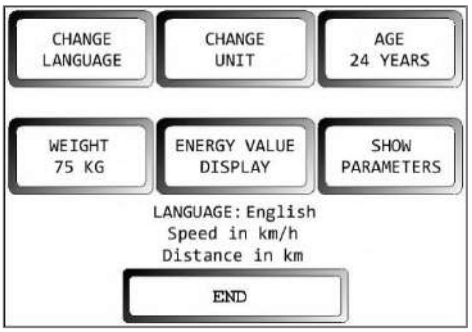


Fig. 43 WUS edit parameters

The desired values can be set by pressing the respective buttons. The set values appear on the screen, for example, Language: English, 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.

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.

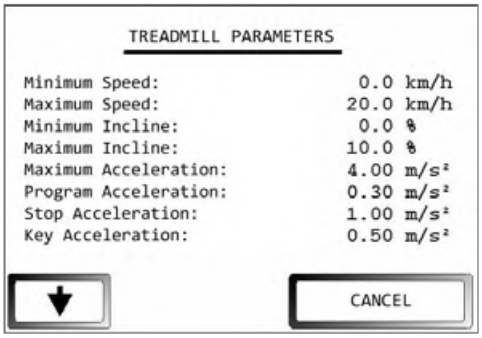


Fig. 44 WUS show parameters

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

7.9 Adjustment of Bar Rails

PPS Bari-Mill type treadmills are equipped with a bar railing. The PPS Ortho and PPS Med 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 needs of the individual user. The adjustment ranges are:

Height	29″ - 41″ (74 - 104 cm)
Width	PPS 43: 11″ - 35″ (28 - 88 cm) PPS 55: 16″ - 40″ (40 - 100 cm) PPS 70: 22″ - 45″ (55 – 115 cm)

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

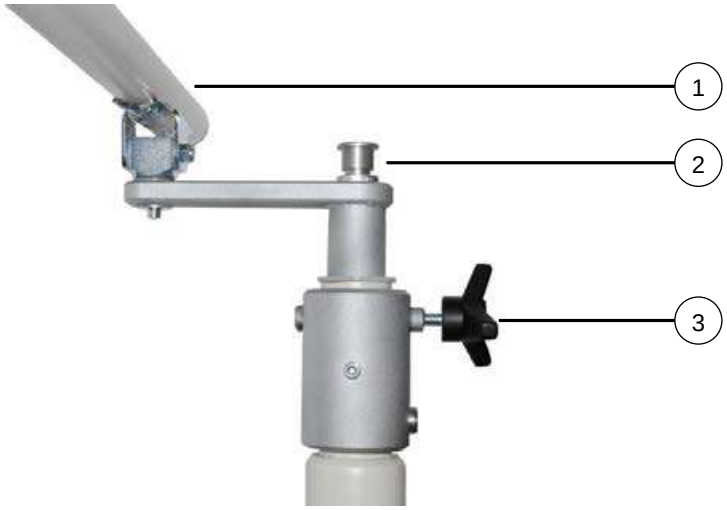


Fig. 45 Adjustment of gas-spring parallel bar rails

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

Adjustment

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

- Loosen clamping screw on one or both sides (Pos. 3).
- Set the railing width by moving/rotating the rail (Pos. 1) horizontally to the desired position.
- Adjust the height by pressing the knob (Pos. 2) and positioning the railing at the desired height.
- 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 a warning label.
► Do not touch the danger zones when making adjustments.

7.10 Reverse Directionality

Depending on the model, the treadmill may have a reverse direction function, or may be retrofitted if necessary. Information is available at a reliable WOODWAY dealer or through 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 is connected via the serial communication interface (RS-232, COM port).

ATTENTION

Provide a Safety Area IN FRONT OF and BEHIND the Device.

When using the reverse direction function, the necessary safety area of at least 3 ft. W x 6.5 ft. L (1 x 2 m) is to be observed IN FRONT OF and BEHIND the treadmill (see Section 0 Page 43).

WOODWAY User-System (WUS)

When using reverse direction with the WOODWAY User-System, position the emergency stop switch (as described in Section 5.6 Page 37) and fix the clip with magnet with pull-cord. Switch the device on using the STAND-BY 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 in manual operation mode with the software, a Manual Operation rider appears in the main window. Below the speed control is the REVERSE DIRECTION key, and the status indicator for the selected direction (see Fig. 46). 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 where the reverse direction must be activated. 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. 46 Manual operation with WOODWAY Treadmill Control Software

For more information, see the separate operating instructions for the WOODWAY Treadmill Control Software.

7.11 Body Weight Support Systems

Depending on the patient’s illness or physical/mental limitations, it may be necessary to use a body weight support system for the treadmill therapy in motor rehabilitation.

For more information, see the separate operating manual for the LokoStation Body Weight Support System.

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

8 Options and Accessories

8.1 Order Numbers

The following accessories and options can be obtained from a WOODWAY dealer or WOODWAY Service Center.

Suitable Accessories

Depending on the year and equipment, it should be determined in advance whether the particular unit is suitable for the selected accessories/options. For this, contact an authorized WOODWAY dealer or WOODWAY Service Center before ordering.

Description	Order no.
Incline PPS Ortho only	2020
Incline 0-25%; PPS 43/55 Ortho / Med only	2021
Reverse (direction reverse) Option for PPS and PPS Med Med-i; only in connection with a conversion of railing (PPS Ortho or railing bars); WUS display or software control of the treadmill required	2026
Gas Spring Bar Railing Height and width adjustable	2029
Optional External Display (WUS or DaMo)	2031
WOODWAY Data Monitor (DaMo) Display Designed for mounting on railings	2037
Special Design (e.g. child design)	2111
POLAR® Chest Strap For heart rate measurement (consisting of POLAR® T34 chest strap, transmitter)	2112
USB-to-Serial Converter (RS-232)	3083
Emergency Stop Magnet with Pull-Cord	3124
WOODWAY User-System (WUS) Display Designed for mounting on railings	3400
Serial Interface Wire (RS-232)	3722
Additional Brake Recommended for use / treatment of obese patients, required in connection with LokoStation and LokoBasic	3848
Mounting Aid Simplifies the mounting of WOODWAY slat belt treadmills	4026
Video Railing Railings, front cross brace removable with quick disconnect; PPS Ortho only	Standard (PPS Ortho only)

8.2 Video Railing for PPS Ortho

If necessary, the crossbar on the front part of the PPS Ortho handrail can be removed using two quick releases. The unblocked view/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 using in reverse mode.

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 not so far that the screw falls out.

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

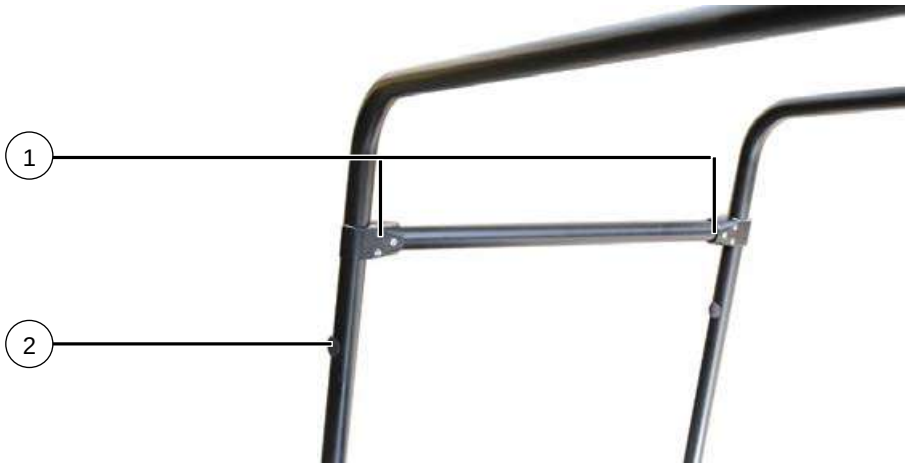


Fig. 47 Video railing, PPS Ortho

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 handles of quick disconnects are positioned parallel to crossbar. The levers are equipped with a spring mechanism, which allows the handle to be unlatched and moved into the right position without having to loosen the screw.

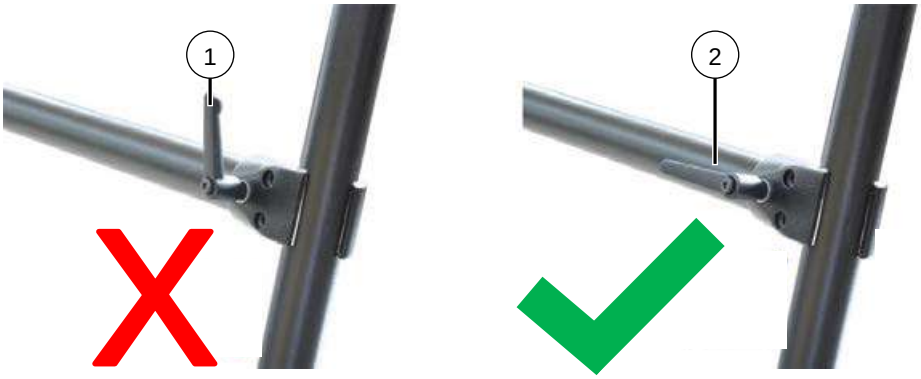


Fig. 48 Video railing lever position, PPS Ortho

1. Incorrect lever position for the quick disconnect; danger of injury
   To correct, pull out lever, rotate 90°, and release
2. Correct lever position for the quick disconnect; lever rests on the crossbar

8.3 Mounting Aid

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

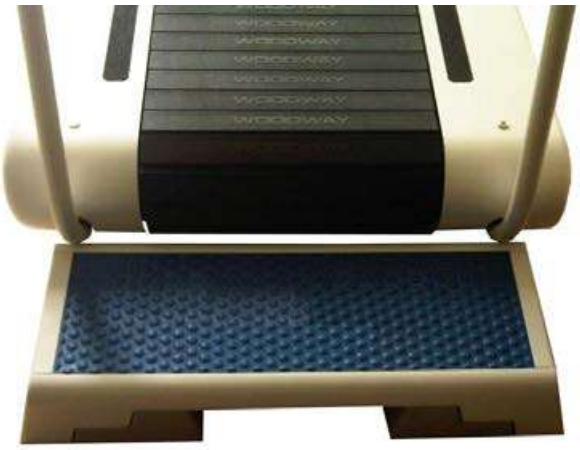


Fig. 49 Mounting aid

⚠ 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.

The following further safety measures must be considered:

- Before using the treadmill, the mounting aid must be removed from behind the treadmill, so that the safety area behind the treadmill is met (i.e. clear fall area of at least 3 ft. W x 6.5 ft. L [1 x 2 m]).
- To prevent damage to the treadmill and the mounting aid, the mounting aid must never come in contact with the running surface. Observe the mounting aid manufacturer's instructions.
- The mounting aid may only be used when the treadmill is not running.
- In order to prevent patients from falling when mounting the treadmill, the supervising person (e.g. physician, therapist, qualified supervisor) must provide help during mounting in the application areas of movement therapy / rehabilitation training. The supervisor must be capable of stopping of the patient from possibly falling when mounting the treadmill.

8.4 Heart Rate Monitors

WOODWAY treadmills are equipped with a heart rate measurement system. This can be used with numerous compatible heart rate transmitters, i.e. POLAR® measuring device (GymLink compatible). In order to display the user's heart rate accurately, the built-in receiver must receive a stable heart rate signal from the transmitter.

Heart rate measuring systems consists of three main elements:

- Sensor/transmitter
- Chest strap/belt or sport watch
- Measuring device/console

The receiver for the wireless system is installed in the measuring device assembly or the console display. When in operation the display shows the heart's activity in beats per minute (BPM).

⚠ WARNING

Danger of Electrical Disturbance!

Using the transmitter from the heart rate monitor in conjunction with an electric pacemaker may cause electrical interference and influence the functionality. This could cause a health hazard.

► **Never** use the heart rate monitor together with an electric pacemaker.

8.4.1 Applying the Chest Strap

The transmitter should be applied centrally below the chest muscles. After the belt is fastened, pull it away from the chest by stretching the strap and moistening the conductive electrode strips which are located below the buttons. The transmitter operates automatically while it is worn. It does not work if the connection between the transmitter and the body is broken.

Fig. 50 Chest strap with POLAR® transmitter

Positioning

The sensor/transmitter is to be worn below the chest and above the abdomen, preferably directly on the skin (not over clothing), 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, taking care not to bend the electrodes. Wash the strap and electrodes with warm water and mild soap. Do not machine wash the electrodes and do not use alcohol or other harsh cleaning solvents. Since the transmitter can be activated by moisture, it should be wiped dry after cleaning. Never use force to clean the transmitter.

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

8.4.2 Transmitter Function

The transmitter has a reach of about 3 ft. (1 m). 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 runners.

NOTE
It is possible that the heart rate measurement reception is irregular or completely disrupted when the measuring device is too close to strong sources of electromagnetic radiation, for example, in the vicinity of overhead power lines, televisions, computers, electric motors, or other fitness equipment.

8.5 USB-to-Serial Converter

A USB-to-Serial converter allows the connection of devices with serial interface (RS-232), (e.g. modem, mouse etc.) to a free USB port on your PC/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 converter of the brand ATEN (Model UC-232A), which can be obtained from WOODWAY Customer Service, can be recommended as a reliable model.

Fig. 51 USB-to-Serial converter, 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 12" (31 cm)
- Data rate up to 230 Kbps
- No own IRQ required

System requirements:

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

For trouble-free operation always use the latest driver for the adapter available for download at www.WOODWAY.com/software.html.

The drivers for the most common operating systems are included on the CD-ROM or can be downloaded at http://www.aten.com/download/download_dv.php.

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.

8.6 Interface Wire

To control the treadmill via PC/notebook, the serial interface of the treadmill must be connected with the computer via a null-modem cable with 2 x D-SUB connectors (9-pin, female). This interface wire must be shielded and must not exceed a length of 16.5 ft. (5 m). The cable is commercially available or can be obtained from WOODWAY Customer Service.

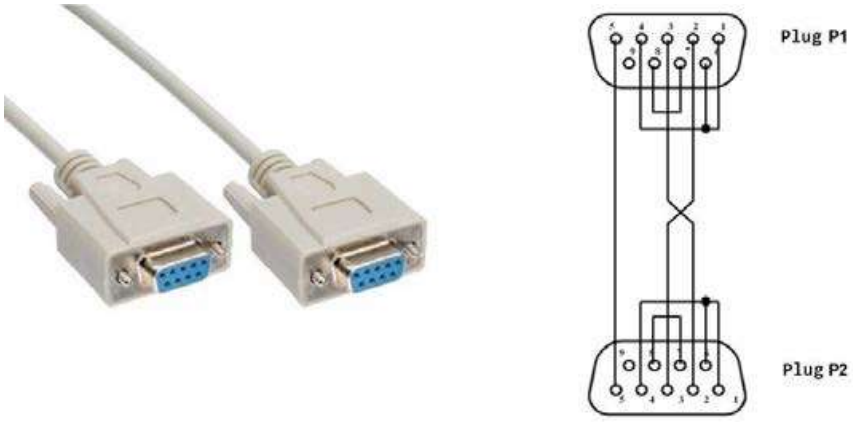


Fig. 52 USB interface wire RS-232

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, 6, as well as 7 and 8 should be connected (see Fig. 52).

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

9 Cleaning and Maintenance

⚠ WARNING

Danger of Injury due to Lack of Qualifications!

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

- ► 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 WOODWAY Customer Service or dealer.
- ► The manufacturer is not liable for personal injury and material damage caused by a lack of qualifications.

9.1 Cleaning

Periodic cleaning and inspection of your WOODWAY treadmill will help lengthen its life while keeping it looking like new. With this preventative maintenance it will be easier to identify possible issues that might otherwise be overlooked.

Below is a guideline of recommended cleaning and maintenance intervals.

⚠ DANGER

Danger of Death by Electric Shock!

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

- ► No liquids may come in contact with electrical parts such as motor, power cord, power switch, and 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.

Remove light dirt and dust with a soft cloth. Dirt can be removed with damp cloth and mild soapy water. After cleaning, dry with a dry cloth.

Cleaning Notes

- Do not use abrasive brushes or abrasive cleaners, as the paint and plastic surfaces can be scratched.
- Do not use sharp tools (e.g. knife, metal scraper) or aggressive cleaning solvents for cleaning.
- Clean all surfaces with a mild, non-abrasive detergent.
- To avoid damage to component surfaces, observe the instructions for detergent use.
- 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.

9.2 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 covers with a damp cloth.
- Disinfect railings and controls.
- Clean the running surface with a damp, lint-free cloth.
- Visually check the power cord for damage.
- Check the treadmill for mechanical damage.
- Check mounting of all controls (display, emergency stop mushroom, keypad with magnetic mount, side panels)
- Clean the area under the treadmill (vacuum and mop).

⚠ CAUTION

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.

Monthly Maintenance

A complete function test of 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.	Use the treadmill for a short time at speed of 3.5 - 6 MPH (6 - 10 km/h). Do unusual noises occur?
2.	Turn up treadmill to max. speed for a short time. Does the treadmill reach the specified max. speed? Do unusual noises occur?
3.	Does the display correctly show the distance traveled at top speed?
4.	Stop the treadmill and move it to max. incline. Does the treadmill reach the desired incline?
5.	Do unusual noises occur while the treadmill is running at max. incline?
6.	Check the emergency stop magnetic switch function. Is an emergency stop initiated?
7.	Check the function of the emergency stop mushroom and/or button.
8.	Set the treadmill to STAND-BY mode. Though slight movement is normal, the running surface must be very difficult to move. Is the running surface stopped correctly?

ATTENTION

If there are defects or deviations in the control function, notify 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.

Before starting any maintenance, remove the side panels (NOT electronics covers).

Preventative 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.).
- Visually check the drive unit toothed belt (drive belt) for cracks and other wear and missing or broken teeth.
- Inspect the aluminum profiles of the slats for damage.
- Visually inspect 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).
- 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 in the following situations:

- Liquid has gotten into the device
- Damaged power cord (cable, plug)
- Defective drive system toothed belt
- Suspected bearing damage
- Suspected/established device defect
- Bucking, sudden stopping, or accelerating of the running surface
- Buttons fail to function
- Burning smell, smoke, or unusual noises
- Malfunction (failure) of the emergency stop button
- Malfunction (failure) of the emergency stop magnet
- Damage to the running surface belt
- All other defects which may affect the safety of the device

Semi-Annual Maintenance

- Vacuum inside the treadmill (unplug device and remove side covers).
- Inspect all nuts and bolts. Tighten if necessary.
- Clean running surface and spray with anti-static spray.
- Check drive belt (replace if shredding or if teeth are missing).

Annual Maintenance

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

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 Report (see Section 12 Page 108).

Significant measures for inspection of the treadmill:

- Treadmill installation
- Running surface belt
- Drive unit and the lifting system
- Nuts and bolts
- Secondary bearing and guide rollers
- Electronics

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

9.3 Technical Safety Checks (TSC)

PPS Medical 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 country-specific regulations are to be observed.

Checks and Measurements

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

Manufacturer's Recommendations

Prior to the tests, the 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 product manufacturer's recommendations are 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 Section 3:22 of standard EN 62353:2008 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

A Technical Safety Check (TSC) must be performed annually by qualified personnel (electricians). These are "repeated safety checks" in accordance with Section 4.3 of EN 62353:2008.

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

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 TSC inspection intervals must be re-evaluated when the frequency/intensity of treadmill use increases.
4. The qualified inspector must consider the environmental conditions and the frequency of past device malfunctions.

Visual Inspection

According to Section 5.2 of the standard EN 62353, a visual inspection is to be carried out 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 users 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 Name Plate:** Are all labels on the device legible and complete (name plate, fuse identification, interface 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? Was a visual inspection of mechanism (see Section 9.2 Page 91) properly performed?
6.	**Use of the Emergency Stop Magnetic Switch:** Is the emergency stop magnet available with pull-cord and clip, and is this 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 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.	**Safe Fall Area:** Is the safety area of 3 ft. W x 6.5 ft. L (1 x 2 m) 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 protect 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 62353:2008

The values determined in these tests are to be documented together with the measurement method and evaluated as the basis for comparison for future standards. Measurements are to be carried out in accordance with Section 5.3 of the standard. The protective conductor resistance (Section 5.3.2), and device leakage current (Section 5.3.3) are to be measured. A measurement of the leakage current from the applied part according to Section 5.3.3.3 of the standard is not necessary. For the measurement of the device leakage current, the direct measurement methods or the difference in 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.

A measurement of the insulation resistance in accordance with Section 5.3.4 of the standard may NOT be performed.

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 and 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	100 mΩ
Device leakage current - direct measurement or differential current measurement Measuring procedure defined in Section 5.3.3 of EN 62353	0.5 mA

Function Test

After the examination (inspection and measurement) a functional test must be performed in accordance with the Function Test found in Section 9.2 on Page 91 of this manual; 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 (see Section 6.1 and Appendix G.1 of the standard).

A final safety evaluation of the appliance must be carried out and the deadline for the next TSC set. In accordance with Section 6.2 of the standard this review can only be carried out by one or more qualified electricians (as defined in IEC 61140), 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) must 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, the representative can provide efficient and reliable support.

If technical safety inspections are required by the manufacturer, the operator must carry these out or have them 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 and if it is in good condition. 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 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 out about the entire safety inspection. 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.

9.4 Lubrication

Bearings

Almost all of the bearings used in the treadmill are pre-lubricated and do not need to be greased initially. On a yearly basis, lubricate the 4 bearings (front and rear shaft).

Running Belt

The teeth on the bottom of the running belt are pre-lubricated to aid in reducing noise. There is no need to lubricate the teeth. If the belt is rubbing against the side of the drive pulleys, a small amount of grease (i.e. Molykote or equal) on the edges of the belt slats will help reduce noise.

Drive Belt

As in the case of the running belt, the application of grease on the edge of the drive belt is only needed to reduce belt squeak and should be used sparingly.

Incline System

The incline systems on WOODWAY treadmills are greased at the factory. If utilized for many hours or in a very dusty environment, the system will need to be checked. If necessary, apply a small amount of grease on the chains.

Note: Use a minimal amount of lubricant to prevent excess dirt and debris from sticking to the machine after cleaning.

9.5 Adjustments and Calibration

Incline System

WOODWAY uses a linear DC motor driven lifting system. The motor drives the lifting scissors with casters. This makes a maximum incline of 25% possible.

Running Belt

The running belt should not require adjustment. However, if the running belt or associated parts have been changed, then belt tension should be checked and set to 8.5" (22 cm).

Mounting Feet

Tools needed: 2 ft. level, ¾" wrench (2 cm)

If the treadmill wobbles or seems unstable, mounting feet must be checked. Using the level, check both ends of the treadmill. Loosen the tensioning nut and turn the foot until it is at the correct level. Tighten the tensioning nut.

Note: When moving the treadmill, the frame may flex. If the treadmill wobbles, push the handrail to one side or the other. This may straighten the frame without needing to adjust the mounting feet.

9.6 Disabling the Treadmill

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

A device must be disabled if 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
- Other symptoms/situations which could cause danger to the user/operator

Disabling can also be requested of 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 an unintentional and/or unauthorized restart can be ruled out and that the name of person who is authorized to put the treadmill back into operation can be seen.

The representative is to disable medical treadmills in the following situations:

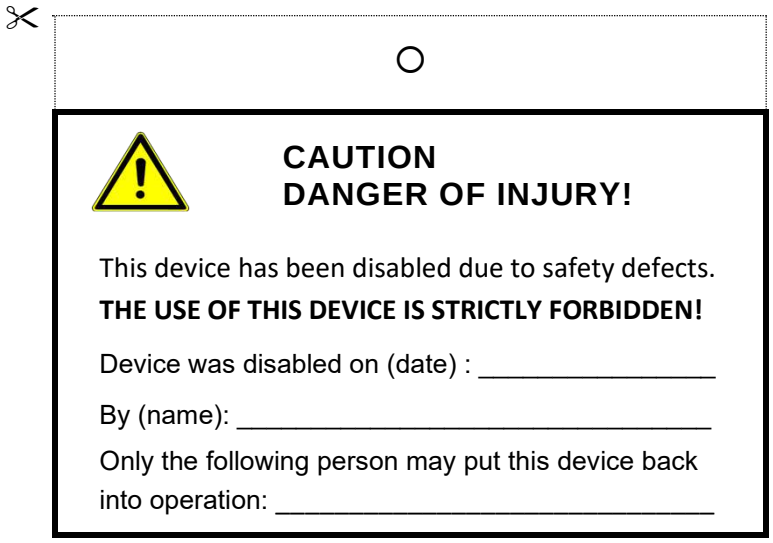
- There is reasonable suspicion of danger to the health and safety of patients, employees, or third parties
- Defects exist that could endanger patients, employees, or third parties

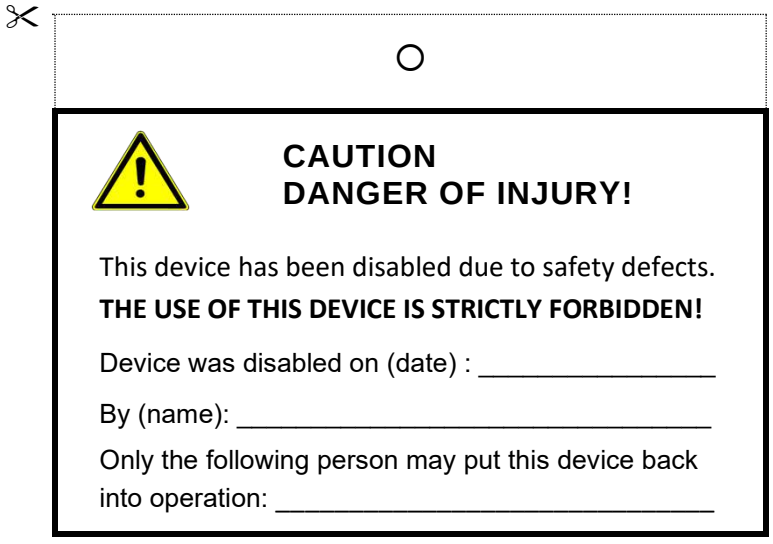
The removal of the power plug from the outlet alone is not sufficient for the disabling of the treadmill, since third persons who have not been informed about the disabling could plug the treadmill back into the power supply and use it.

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 (disconnected).
2. The treadmill must be marked "disabled" in a clear manner such as: "CAUTION DANGER OF INJURY" and 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 - 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 one of the following safety labels to the treadmill power supply fuse box.
5. Apply the second safety label to the plug of the power cord.

Labels for Disabling a Treadmill





9.7 Device Fuses

The fuses must comply with the published technical specifications (see Section 3.5 Page 20). Bridging the fuses is prohibited, due to the risk of electric shock and fire.

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 from the power junction box. Change the fuse and screw the fuse holder into the terminal box.

Fig. 53 Device fuses

10 Warranty Information

Frame	Drive, Belt, Motor	Remaining Parts	Labor
10 years	5 years	3 years	1 year

WOODWAY warrants that all products and accessories will be free from manufacturing defects according to the applications/terms listed above. The warranty period commences on the original date of purchase (with the exception of the running belt component, which is warranted for a period of five [5] years from the original date of purchase). This warranty is given only to the original purchaser. This warranty does not cover damage or equipment failure resulting from misuse, abuse, or failure to comply with electrical codes. Further, this warranty shall not apply if there is any modification to the products or accessories or if there is a failure to provide maintenance as outlined in the Owner's Manual.

WOODWAY GIVES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. THE WARRANTY OF FITNESS FOR A PARTICULAR USE IS HEREBY DISCLAIMED.

The buyer's remedy for breach of the expressed warranties contained herein shall be limited to the return of the product and accessories and repayment of the original purchase price. However, provided at WOODWAY selection, it may repair and replace the non-conforming goods or parts. WOODWAY shall not be liable for any incidental or consequential damages.

Our Guarantee

WOODWAY guarantees the repurchase of WOODWAY treadmill products for a period of up to five [5] years after original installation. A direct payment, or credit toward the purchase of a new WOODWAY, of 20% of the purchase price of the treadmill will be made to the original owner of a WOODWAY treadmill. This guarantee is limited to the original owner. Contact WOODWAY for further details.

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, contact an authorized WOODWAY dealer or WOODWAY Service Center.

If you have problems with your treadmill, please consider the answers to the following questions before calling WOODWAY Customer Service:

- What are the make, model, and serial number?
- What happened before the problem occurred?
- Did the problem occur suddenly or slowly over time?
- Was the treadmill in use when the problem occurred?
- Was the running surface ENGAGED or was it in DYNAMIC MODE?
- Explain all the other information that you consider relevant.

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, or 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. If this is the case, correct the gaps between the 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 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 leads to an 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. If this is the 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 on 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?
- Is the main switch on the power connector box switched on?
- Did the device blow/melt a fuse(s)?
- Can the fan that is used to cool the servo controller (on the runner's 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)?
- Is the emergency stop magnet placed on the magnetic switch? Try to reposition.

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:

- Ensure the emergency stop magnet is in place. Try to reposition the magnet.
- Turn off the power at the main switch and unplug the power cord.
- Check if the running surface belt is blocked by an object and if so, remove.

Wait at least 60 seconds and put the device 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 used 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 (i.e. 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 might be a defective short circuit relay or a broken wire.

If the treadmill is turned on by 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 Incline Does Not Work

Possible causes:

- Sticking break or stalled motor (noise coming from incline motor)
- Tripped incline limit switch
- Broken chain or chain jumped off a sprocket
- Incorrectly-adjusted potentiometer

11.6 Faulty or Flashing Display

Probable causes:

- Power supply too low
- Too much load on same line
- Defective display power supply on interface board
- Possible static problem (to correct, spray with staticide)

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.

11.7 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 (e.g. treadmill, PC, EKG, Spiroergometry)
- Improperly configured connection settings between the components (COM Port)

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 Maintenance Report

DATE	MAINTENANCE MEASURES	FROM	REMARKS

13 Record of Instruction

Once the slat belt treadmill is delivered, installed, and a function test takes place, instruction is to be carried out by a competent WOODWAY employee or authorized WOODWAY dealer. All persons who will work with the device in the future must participate in the instruction. As soon as the installation and training have taken place, the instruction record must be signed by the instructor and all participants, and a copy must be sent back to WOODWAY.

Step	Description	Done
1	Transfer of operating and maintenance instructions • Manual is always to be kept within easy reach of users. • 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 • Indicate specific slat belt hazard statements according to area of application (benefit/risk assessment by the therapist, etc.). • Assist frail/disabled persons when using the LokoStation and/or a PPS Series treadmill.	☐
3	Special note on the prescribed "safe fall area" (area clear of objects and walls) • Note use of the safety strap with harness fall protection.	☐
4	Switching the unit ON/OFF with the power switch • Explain the different functional states of the device (OFF, STAND-BY, READY).	☐
5	Instruction on initialization phase • After turning on the treadmill with the WOODWAY User-System (WUS) or Data Monitor (DaMo), the device goes through an initialization phase (3-4 seconds). • User/patient should not get on the treadmill during initialization.	☐
6	Explanation and demonstration of the various safety devices on the machine (emergency stop magnet with pull-cord, emergency stop mushroom) • Note use of safety devices to stop the machine in an emergency. • Instruct user on correct attachment of the safety clip to the waistband.	☐

Step	Description	Done
7	Explanation of the keys on the keypad (railing) • Explain difference in functionality between short button push and long pressing/holding for setting speed or incline. • Note double pressing the STOP button to return the treadmill to 0% after use.	☐
8	Demonstration of treadmill in MANUAL mode • Specially note operation for devices with reverse functionality.	☐
9	Explanation of the indicators in the display	☐
10	Operation of the treadmill via customized programs (WUS only)	☐
11	Operation of the treadmill with pulse control (WUS only)	☐
12	Instructions for correct heart rate measurement and limitations • Demonstrate correct wearing of the chest strap. • Instruct proper behavior in case of problems/malfunctions, possible causes/sources (e.g. computers, quartz watches, monitors, power lines, etc.).	☐
13	Notice to the RS-232 port and CD-ROM with Treadmill Control Software, as well as the accompanying user guide	☐
14	Instructions on cleaning the treadmill with reference to the manual • When cleaning the unit always pull the power plug before the start. • Maintenance and repair of medical devices and electrical equipment may only be performed by authorized personnel (WOODWAY service technicians, authorized WOODWAY service partner, or medical technician).	☐
15	Notice on regular/recurring maintenance intervals with regard to safety checks (TSC) • Offer maintenance contract.	☐
16	Final photographs of the device from two different perspectives (include with the instruction record)	☐

Step	Description	Done
17	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 • Malfunctioning (defective) emergency stop magnet • Damage to treadmill running surface	☐

Confirmation of Installation and Training Record

With the signing of the instruction record, the instructor and the customer confirm the carrying out of qualified instruction and installation. 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 role) (Signature)

_____ _____
(Name and role) (Signature)

_____ _____
(Name and role) (Signature)

_____ _____
(Name and role) (Signature)

Remarks: _____

_____

_____

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

14 Declaration of Conformity with Technical Regulations

WOODWAY hereby confirms that the medical device **"WOODWAY PPS Series Medical Slat Belt Treadmill"** complies with the applicable generally accepted rules of technology and the requirements of occupational safety and is designed and manufactured so that users, patients, and third parties are protected against all kinds of hazards to health and safety.

1. The medical device bears the stamp of "0470" the test laboratory "NEMKO AS", Norway (Notified Body, see also EC-Declaration of Conformity).
2. The intended use is described in Section 1.5 Page 8, "Intended Use".
3. An instruction manual in the language of the country of use is included.
4. Control elements and indicators are identified in the user language.
5. Circuit diagrams and the service manual may be issued only upon request to individuals and institutions that can demonstrate appropriate qualifications.
6. Technical specifications and special instructions (installation, safety equipment, safety notices, maintenance, etc.) are detailed in the manual.
7. The operating manual contains the necessary information regarding cleaning and inspection. These activities may be performed by the user.
8. Technical safety checks (TSC) and maintenance are to be carried out in 12 - 18 month intervals (see Sections 9.2 and 9.3). These tasks may only be performed by trained and qualified personnel (e.g. WOODWAY contract partners).

15 Disposal

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.

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.

16 Table of Figures